AGENDA

ALISO VIEJO CITY COUNCIL
REGULAR MEETING
WEDNESDAY, OCTOBER 21, 2026
7:00 PM

CITY HALL
COUNCIL CHAMBERS
12 JOURNEY ALISO VIEJO, CA

Mayor Max Duncan
Mayor Pro Tem Mike Munzing
Councilmember Tiffany Ackley
Councilmember Tim Zandbergen
Councilmember Garrett Dwyer

WELCOME to the City of Aliso Viejo City Council meeting. Persons wishing to address the City Council may submit a **Request to Address City Council** form to the City Clerk prior to the item being heard. Public comments are limited to **three (3) minutes per speaker**. Members of the public may also participate remotely as authorized by law. Instructions for virtual participation, including the meeting link and procedures for providing public comment and the SB707 Disruption Policy, are available on the City's website at: https://avcity.org/470/Public-Comments-and-Disruption-Policy-Pu

The City complies with the **Americans with Disabilities Act (ADA)**. If you need reasonable accommodations to participate in the meeting, please contact Human Resources at (949) 425-2511 at least 48 hours prior to the meeting.

Regular meetings are held on the first and third Wednesday of the month at the City Hall Council Chambers, 12 Journey, Aliso Viejo. Agendas are available by the Friday preceding a regularly scheduled City Council meeting. Communications and supplemental materials received by the City relating to agenda items are presented at the dais and in the Public Copy agenda binder at the time of the meeting or contact the City Clerk's office to review or obtain a copy. Council proceedings are recorded.

Meetings are broadcast live on Cox Communications Channel 851, AT&T U-Verse Channel 99 and the City's website. By attending the City Council Meeting, you consent to be recorded and televised. Meetings are rebroadcast on Wednesday at 7:00 p.m. cable channels, and can be viewed on the City's website.

BRETT CHANNING	**SCOTT C. SMITH**	**MARIA KENDIG**
CITY MANAGER	**CITY ATTORNEY**	**CITY CLERK**

PLEASE SILENCE ALL CELL PHONES AND OTHER ELECTRONIC EQUIPMENT WHILE CITY COUNCIL IS IN SESSION

CALL TO ORDER: Convene Regular Meeting

ROLL CALL

PLEDGE OF ALLEGIANCE:

1. SPECIAL PRESENTATIONS:

1.1 PROCLAMATION - BREAST CANCER AWARENESS MONTH

1.2 BUSINESS SPOTLIGHT - VOX KITCHEN

2. ADDITIONS, DELETIONS, REORDERING TO THE AGENDA:

3. COMMUNITY INPUT:

Members of the public wishing to address the City Council in person are requested to complete and submit a Request to Address City Council form to the City Clerk. Forms are available at the entrance to the City Council Chambers. In compliance with the Brown Act, the City Council may not discuss or take action on items not appearing on the agenda, except as authorized by law. The City Council may briefly respond to statements made or questions posed. Public comments are generally limited to three (3) minutes per speaker.

Members of the public may also observe and participate remotely using Teams Meeting.

Instructions for remote participation, including how to join the meeting online or by telephone, request to speak during public comment, participate by telephone, submit written comments, and the City's SB 707 Technology Disruption Policy, are available at: https://avcity.org/470/Public-Comments-and-Disruption-Policy-Pu

Join Online: https://teams.microsoft.com/meet/257876176705929?p=7EebJ4ATObyl6INjsV

Join by Telephone: (+1 323-694-9789 **Conference ID:** 118 228 149#

Members of the public wishing to provide remote public comment should follow the participation instructions available at the link above.

4. CONSENT CALENDAR:

All matters listed on the Consent Calendar will be acted upon by one vote unless members of the City Council, or staff request a matter to be discussed and/or removed from the Consent Calendar for separate action. Items removed from the Consent Calendar will be discussed and voted upon immediately following City Council action on the remainder of the Consent Calendar.

4.1 WAIVE THE READING OF ALL ORDINANCES AND RESOLUTIONS

Recommended Action: Approve the reading by title only of all ordinances and resolutions wherein the titles appear on the public agenda; said titles shall be determined to have been read by title, and further reading is waived.

4.2 APPROVAL OF MINUTES

Recommended Action: Approve the minutes as submitted.

Draft Minutes 2026-10-07

4.3 ACCOUNTS PAYABLE

Recommended Action: Ratify accounts payable checks and electronic funds transfers issued between September 25, 2026, and October 8, 2026, for $1,330,999.84.

Staff Report

Attachment 1 - Accounts Payable Report

4.4 TREASURER'S STATEMENT – AUGUST 2026

Recommended Action: Receive and file the August 2026 Treasurer's Statement.

Staff Report

Attachment 1 August 2026 Treasurer Statement

4.5 SECOND READING AND ADOPTION OF AN ORDINANCE APPROVING A ZONE CHANGE FROM BUSINESS PARK 2 TO MEDIUM DENSITY RESIDENTIAL DISTRICT FOR PROPERTY LOCATED AT 15 ARGONAUT

Recommended Action: Conduct a second reading and adopt an Ordinance entitled: ORDINANCE NO. 2026-255: AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ALISO VIEJO, CALIFORNIA, APPROVING A ZONE CHANGE FROM BUSINESS PARK 2 TO MEDIUM DENSITY RESIDENTIAL DISTRICT FOR THE DEVELOPMENT OF A 58-UNIT RESIDENTIAL TOWNHOME COMMUNITY LOCATED AT 15 ARGONAUT (623-093-10 AND 623-093-11)

Staff Report

Attachment 1 - Proposed Ordinance ZC

4.6 SECOND READING AND ADOPTION OF AN ORDINANCE APPROVING A DEVELOPMENT AGREEMENT WITH BRANDYWINE HOMES FOR PROPERTY LOCATED AT 15 ARGONAUT

Recommended Action: Conduct a second reading and adopt an Ordinance entitled: ORDINANCE NO. 2026-256: AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ALISO VIEJO, CALIFORNIA, APPROVING A DEVELOPMENT AGREEMENT BETWEEN THE CITY AND BRANDYWINE HOMES FOR THE DEVELOPMENT OF PRESIDIO AT PACIFIC PARK, A 58-UNIT RESIDENTIAL TOWNHOME COMMUNITY LOCATED AT 15 ARGONAUT (APN: 623-093-10 & 623-093-11)

Staff Report

Attachment 1 - Proposed Ordinance DA

4.7 APPROVAL OF COOPERATIVE AGREEMENT WITH THE CITIES OF ALISO VIEJO, LAGUNA NIGUEL, LAGUNA HILLS, AND MISSION VIEJO FOR THE LA PAZ ROAD REGIONAL TRAFFIC SIGNAL SYNCHRONIZATION PROGRAM PROJECT

Recommended Action:

1. Approve the Cooperative Agreement by and between the City of Laguna Niguel and the cities of Aliso Viejo, Laguna Hills, and Mission Viejo for the La Paz Road Regional Traffic Signal Synchronization Program Project;
2. Appropriate an additional $86,133.76 in Measure M2 funds to the fiscal year 2026-27 Capital Improvement Plan budget;
3. Authorize the Mayor and the City Clerk to execute the agreement; and
4. Authorize the City Manager to execute future amendments to the agreement.

Staff Report
Attachment 1 - Vicinity Map
Attachment 2 - Cooperative Agreement

4.8 COMMUNITY FACILITIES DISTRICT NO. 2005-01 (GLENWOOD AT ALISO VIEJO) LOCAL AGENCY SPECIAL TAX AND BOND ACCOUNTABILITY ACT COMPLIANCE (SB 165) REPORT FOR FISCAL YEAR ENDED JUNE 30, 2026

Recommended Action: For the City Council to accept and file the Community Facilities District No. 2005-01 (Glenwood at Aliso Viejo) Local Agency Special Tax and Bond Accountability Act Compliance ("SB 165") Report for Fiscal Year ended June 30, 2026.

Staff Report
Attachment 1 - SB 165 Report for Fiscal Year Ended June 30, 2026

5. PUBLIC HEARINGS:

5.1 GENERAL PLAN AMENDMENT GPA-2026-01004, ZONE CHANGE ZA-2026-01003, VESTING TENTATIVE TRACT MAP 19442, SITE DEVELOPMENT PERMIT SDP-2025-00004, DEVELOPMENT AGREEMENT DA-2026-01001 AND A MITIGATED NEGATIVE DECLARATION FOR THE DEVELOPMENT OF A 137-UNIT RESIDENTIAL TOWNHOME COMMUNITY AT 27081 ALISO CREEK ROAD

Recommended Actions:

Conduct a public hearing and:

1. Adopt a Resolution entitled: A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ALISO VIEJO, CALIFORNIA, ADOPTING A MITIGATED NEGATIVE DECLARATION AND A MITIGATION MONITORING AND REPORTING PROGRAM PURSUANT TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT FOR GENERAL PLAN AMENDMENT GPA-2026-01004, ZONE CHANGE ZA-2026-01003, VESTING TENTATIVE TRACT MAP 19442, SITE DEVELOPMENT PERMIT SDP-2025-00004, AND DEVELOPMENT AGREEMENT DA-2026-01001 TO ALLOW THE DEVELOPMENT OF A 137-UNIT RESIDENTIAL TOWNHOME COMMUNITY LOCATED AT 27081 ALISO CREEK ROAD (APN: 632-124-08);
2. Adopt a Resolution entitled: A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ALISO VIEJO, CALIFORNIA, APPROVING AN AMENDMENT TO THE GENERAL PLAN LAND USE DESIGNATION AND ASSOCIATED LAND USE MAP FROM PROFESSIONAL OFFICE TO MEDIUM DENSITY

RESIDENTIAL FOR THE DEVELOPMENT OF A 137-UNIT RESIDENTIAL TOWNHOME COMMUNITY LOCATED AT 27081 ALISO CREEK ROAD (APN: 632-124-08);

3. Introduce for first reading an Ordinance entitled: A ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ALISO VIEJO, CALIFORNIA, APPROVING A ZONE CHANGE FROM PROFESSIONAL OFFICE TO RESIDENTIAL MEDIUM DENSITY DISTRICT FOR THE DEVELOPMENT OF A 137-UNIT RESIDENTIAL TOWNHOME COMMUNITY LOCATED AT 27081 ALISO CREEK ROAD (APN: 632-124-08);
4. Adopt a Resolution entitled: A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ALISO VIEJO, CALIFORNIA, APPROVING VESTING TENTATIVE TRACT MAP 19442 FOR SUBDIVISION INTO CONDOMINIUM PURPOSES AND SITE DEVELOPMENT PERMIT (SDP-2025-00004) TO ALLOW THE DEVELOPMENT OF A 137-UNIT RESIDENTIAL TOWNHOME COMMUNITY LOCATED AT 27081 ALISO CREEK ROAD (APN: 632-124-08); and
5. Introduce for first reading an Ordinance entitled: AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ALISO VIEJO, CALIFORNIA, APPROVING A DEVELOPMENT AGREEMENT DA-2026-01001 BETWEEN THE CITY AND SHEA HOMES LIMITED PARTNERSHIP FOR THE DEVELOPMENT OF A 137-UNIT RESIDENTIAL TOWNHOME COMMUNITY LOCATED AT 27081 ALISO CREEK ROAD (APN: 632-124-08).

Staff Report
Attachment 1 - Resolution (MND)
Attachment 1 - Exhibit A for MND
Attachment 1 - Exhibit B Response to Comments
Attachment 2 - Resolution (GPA)
Attachment 3 - Ordinance (ZA)
Attachment 4 - Resolution (VTTM and SDP)
Attachment 4 - Exhibit B Proposed Plans
Attachment 4 - Exhibit C VTTM 19442
Attachment 5 - Ordinance (DA)
Attachment 5 - Exhibit A - Dev Agrmt
Attachment 5 - Exhibit D on Dev Agrmt - Density Bonus Housing Agreement
Attachment 6 - Presentation

6. DISCUSSION:

6.1 CONSIDERATION OF AN ORDINANCE ADOPTING CHAPTER 11.14 TO TITLE 11 OF THE ALISO VIEJO MUNICIPAL CODE RELATING TO THE PROTECTION, PLANTING, MAINTENANCE, AND REMOVAL OF TREES ON PUBLIC PROPERTY; AND FINDING THE ACTION TO BE EXEMPT FROM CEQA UNDER CEQA GUIDELINES

Recommended Action:

1. Find that the ordinance is exempt from review under the California Environmental Quality Act (CEQA) pursuant to Title 14 of the California Code of Regulations, Section 15061(b)(3); and
2. Introduce for first reading by title only an ordinance entitled: AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ALISO VIEJO, CALIFORNIA,

ADOPTING CHAPTER 11.14 TO TITLE 11 OF THE ALISO VIEJO MUNICIPAL CODE RELATING TO THE PROTECTION, PLANTING, MAINTENANCE, AND REMOVAL OF TREES ON PUBLIC PROPERTY; AND FINDING THE ACTION TO BE EXEMPT FROM CEQA UNDER CEQA GUIDELINES; and

3. Authorize the City Manager to execute a Tree City Memorandum of Understanding with the Aliso Viejo Community Association; and
4. Authorize Staff to submit an application to the Arbor Day Foundation for Tree City USA recognition.

Staff Report
Attachment 1 - Proposed Ordinance
Attachment 2 - Exhibit A to Ordinance
Attachment 3 - MOU with AVCA
Attachment 4 - Presentation

7. CITY MANAGER' S REPORT:

8. ANNOUNCEMENTS / COUNCIL COMMENTS / COMMITTEE UPDATES:

9. ADJOURNMENT:

The Regular City Council Meeting scheduled for November 4, 2026, has been cancelled. The next Regular City Council Meeting will be held on Wednesday, November 18, 2026, at 7:00 p.m. in the City Council Chambers, 12 Journey, Aliso Viejo, California.

CITY OF ALISO VIEJO
CITY COUNCIL MINUTES
REGULAR MEETING
October 7, 2026
Council Chambers, City Hall,
12 Journey, Aliso Viejo, California

CALL TO ORDER: Mayor Duncan called the regular meeting of the City Council of the City of Aliso Viejo to order at 7:02 p.m.

ROLL CALL:

PRESENT: MAYOR MAX DUNCAN
MAYOR PRO TEM MIKE MUNZING
COUNCILMEMBER TIFFANY ACKLEY
COUNCILMEMBER GARRETT DWYER
COUNCILMEMBER TIM A. ZANDBERGEN

ABSENT: None

STAFF PRESENT: BRETT CHANNING, CITY MANAGER
HONGDAO NGUYEN, ASSISTANT CITY ATTORNEY
MARIA KENDING, DIRECTOR OF GOVERNMENT SERVICES / CITY CLERK
SO KIM, DIRECTOR OF COMMUNITY DEVELOPMENT
SHAUN PELLETIER, DIRECTOR OF PUBLIC WORKS
LIZZY MENDOZA, RECREATION & COMMUNITY SERVICES MANAGER
ISAAC AZIZ, INFORMATION TECHNOLOGY MANAGER
RYAN BUHR, ALISO VIEJO POLICE SERVICES CAPTAIN
REID GIBSON, FIRE DIVISION CHIEF

PLEDGE OF ALLEGIANCE: Mark Dowling led the Pledge of Allegiance.

1. SPECIAL PRESENTATIONS:

1.1 RECOGNITION OF ALISO VIEJO CITIZENS OF THE YEAR

Mayor Duncan presented the 2025 and 2026 Civic Service Awards, Citizen of the Year Awards, and Keys to the City to recognize individuals and organizations for their contributions and service to the community. The recipients were:

- 2025 Civic Service Award: Orange County Sheriff's Department – E-Bike Response, represented by Deputy Aaron Barragan
- 2026 Civic Service Award: Ionut Breb
- 2025 Citizen of the Year: Leilani Harwood

- 2026 Citizen of the Year: Carol Caito
- 2025 Key to the City: Michael Avramidis
- 2026 Key to the City: Lisa Naegele

The honorees were recognized for their public safety efforts, community leadership, volunteer service, and longstanding contributions to Aliso Viejo. Their names will be added to the City's Wall of Fame at City Hall. Following the presentations, the meeting was recessed for a plaque unveiling and photo opportunity.

MAYOR DUNCAN RECESSED THE MEETING AT 7:31 P.M. AND RECONVENED AT 7:40 P.M.

1.2 YEAR-END LEGISLATIVE UPDATE FROM ASSEMBLYMEMBER DIANE DIXON

Assemblymember Diane Dixon provided a legislative update on her work representing the 72nd Assembly District, including legislation enacted during her tenure addressing e-bike safety, suicide prevention, and oversight of rehabilitation facilities. She also discussed recent e-bike regulations and presented California State Assembly resolutions recognizing the Mayor and City Council.

1.3 PROCLAMATION - FIRE PREVENTION WEEK

The City Council recognized Fire Prevention Week, observed October 4–10. Milton Neira, representing the Orange County Fire Authority (OCFA), provided fire safety information, with an emphasis on lithium-ion battery safety and recommended practices for preventing and responding to battery fires.

2. ADDITIONS, DELETIONS, REORDERING TO THE AGENDA:

None.

3. COMMUNITY INPUT:

1. Sebastian addressed bicycle and traffic safety, requesting a bike lane on Aliso Creek Road between Enterprise and Pacific Park and commenting on campaign statements regarding bike lanes, speed limits, and traffic safety.
2. Sujata Achiplunkar provided information about her vegetarian cooking classes offered through the City's Recreation program and her spice products, encouraging residents to learn more through her website.

3. CONSENT CALENDAR:

Motion: Councilmember Ackley moved, and Councilmember Dwyer seconded, approval of Consent Calendar Items 4.1 through 4.5 as recommended. The motion carried 5-0.

4.1 WAIVE THE READING OF ALL ORDINANCES AND RESOLUTIONS

Recommended Action: Approve the reading by title only of all ordinances and resolutions wherein the titles appear on the public agenda; said title shall be determined to have been read by title, and further reading is waived.

4.2 APPROVAL OF MINUTES

Recommended Action: Approve the minutes as submitted.

4.3 ACCOUNTS PAYABLE

Recommended Action: Ratify accounts payable checks and electronic funds transfers issued between August 28, 2026, and September 24, 2026, for $4,742,423.48.

4.4 FIRST AMENDMENT TO THE PROFESSIONAL SERVICES AGREEMENT WITH DAVIS FARR LLP FOR AUDITING SERVICES

Recommended Actions:

1. Approve the First Amendment to the Agreement with Davis Farr LLP for professional auditing services, extending the term through June 30, 2027, increasing compensation by $36,000 to a total contract amount not to exceed $165,000, and
2. Authorizing the City Manager to execute the amendment.

4.5 SECOND AMENDMENT TO THE AGREEMENT WITH DE NOVO PLANNING GROUP FOR ON-CALL CEQA SERVICES

Recommended Action: Approve and authorize the City Manager to execute the Second Amendment to the professional services agreement with De Novo Planning Group for on-call CEQA services, increasing compensation by $100,000 for a total of $250,000 and extending the agreement term to June 30, 2027.

5. PUBLIC HEARINGS:

5.1 AMENDMENT TO OBJECTIVE DESIGN STANDARDS MANUAL

Director of Community Development So Kim provided an overview of proposed amendments to the City's Objective Design Standards (ODS). Staff reviewed the City Council's prior direction to remove the Modern Ranch and Modern architectural styles and presented the option of adding the Craftsman architectural style, including its defining features and proposed design requirements. The two options were to remove the Modern Ranch and Modern styles, or to remove those styles and add the Craftsman style. Staff requested Council direction on whether to include the Craftsman style in the ODS manual.

Mayor Duncan opened the public hearing. The following spoke on the matter:

1. Art Camoia recommended incorporating solar design standards into the Objective Design Standards (ODS) to accommodate solar installations and support energy requirements for affordable housing developments.

There were no other speakers, and Mayor Duncan closed the public hearing. Council discussion followed.

Recommended Actions:

1. Find that the amendment to the ODS is exempt from the California Environmental Quality Act (CEQA) pursuant to Section 15061(b)(3) of the State CEQA Guidelines.
2. Selection one:
   - Adopt a resolution amending the Objective Design Standards manual to remove the Modern Ranch and Modern architectural styles; or
   - Adopt a resolution amending the Objective Design Standards manual to remove the Modern Ranch and Modern architectural styles and add the Craftsman architectural style.

Motion: Mayor Pro Tem Munzing moved to approve:

1. **Find that the amendment to the ODS is exempt from the California Environmental Quality Act (CEQA) pursuant to Section 15061(b)(3) of the State CEQA Guidelines.**
2. **Adopt Resolution No. 2026-25 entitled: : A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ALISO VIEJO, CALIFORNIA, AMENDING THE OBJECTIVE DESIGN STANDARDS MANUAL TO REMOVE THE MODERN RANCH AND MODERN ARCHITECTURAL STYLED, ADD CRAFTSMAN ARCHITECTURAL STYLE, AND DETERMINE THE ACTION TO EXEMPT FROM CEQA**

Mayor Duncan seconded the motion. The motion carried 4-1, with Councilmember Zandbergen dissenting.

5.2 CONDITIONAL USE PERMIT TO EXPAND THE FLOOR AREA OF ALISO CROSSFIT AT 6 JOURNEY, SUITES 300 AND 325

Director of Community Development So Kim provided an overview of the request for approval of a Conditional Use Permit to allow Aliso CrossFit, located at 6 Journey, Suite 300, to expand its existing facility from approximately 2,500 to 5,000 square feet by occupying the adjacent suite. Staff reported that the business has operated at the location since 2011 and that a parking study confirmed sufficient parking for existing businesses and the proposed expansion, with a surplus of 111 parking spaces during peak hours. Staff recommended approval, finding that all required Conditional Use Permit findings could be met.

Mayor Duncan opened the public hearing. There were no speakers, and Mayor Duncan closed the public hearing. Council discussion followed.

Recommended Action: Adopt Resolution No. 2026-26 entitled: A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ALISO VIEJO, CALIFORNIA, APPROVING A CONDITIONAL USE PERMIT TO ALLOW ALISO CROSSFIT TO EXPAND ITS FLOOR AREA TO 4,911 SQUARE FEET AT 6 JOURNEY, SUITES 300 AND 325 (USE-2026-01011).

Motion: Councilmember Zandbergen moved, and Councilmember Dwyer seconded, approval of the recommended action. The motion carried 5-0.

5.3 GENERAL PLAN AMENDMENT GPA-2026-01002, ZONE CHANGE ZC-2026-01001, VESTING TENTATIVE TRACT MAP 19489, SITE DEVELOPMENT PERMIT SDP-2026-01001, DEVELOPMENT AGREEMENT DA-2026-01002, AND ADOPTION OF MITIGATED NEGATIVE DECLARATION CEQA-2026-01004 FOR THE DEVELOPMENT OF A 58-UNIT RESIDENTIAL TOWNHOME COMMUNITY AT 15 ARGONAUT

Principal Planner Rose Rivera presented the proposed 58-unit townhome development at 15 Argonaut. The project includes a General Plan Amendment, Zone Change, Vesting Tentative Tract Map, Site Development Permit, Development Agreement, and associated California Environmental Quality Act (CEQA) documentation. Rivera outlined the five recommended actions before the Council.

The applicant, Emmanuel Robinson of Brandywine Homes, highlighted the development's architectural design, all-electric homes, solar panels, electric-vehicle charging capability, landscaped common areas, and preservation of approximately 1.94 acres of existing hillside. He also discussed the 24 guest parking spaces, private patio areas for 31 units, three very low-income affordable units, garage use, guest parking, and homeowners association (HOA) enforcement. The applicant confirmed that the all-electric homes would include solar panels and that garage parking requirements would be addressed in the association documents.

Staff and the applicant responded to questions regarding parking requirements, street parking, garage use, HOA enforcement, and the qualification, marketing, and selection process for the affordable homeownership units.

Mayor Duncan opened the public hearing. The following spoke on the matter:
1. Elizabeth Hansburg, of People for Housing, spoke in support of the development.
2. Art Camoia spoke in support of the development project.

There were no other speakers, and Mayor Duncan closed the public hearing. Council discussion followed.

Recommended Actions:

1. Adopt Resolution No. 2026-27 entitled: A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ALISO VIEJO, CALIFORNIA, ADOPTING A MITIGATED NEGATIVE DECLARATION AND A MITIGATION MONITORING AND REPORTING PROGRAM (CEQA-2026-01004) PURSUANT TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT FOR GENERAL PLAN AMENDMENT GPA-2026-01002, ZONE CHANGE ZC-2026-01001, VESTING TENTATIVE TRACT MAP 19489, AND DEVELOPMENT AGREEMENT DA-2026-01002 TO ALLOW THE DEVELOPMENT OF A 58-UNIT RESIDENTIAL TOWNHOME COMMUNITY LOCATED AT 15 ARGONAUT (APN: 623-093-10 & 623-093-11);
2. Adopt Resolution No. 2026-28 entitled: A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ALISO VIEJO, CALIFORNIA, APPROVING AN AMENDMENT TO THE GENERAL PLAN LAND USE DESIGNATION AND ASSOCIATED LAND USE MAP FROM BUSINESS PARK TO MEDIUM DENSITY RESIDENTIAL FOR THE DEVELOPMENT OF A 58-UNIT RESIDENTIAL TOWNHOME COMMUNITY LOCATED AT 15 ARGONAUT (APN: 623-093-10 & 623-093-11);
3. Introduce for first reading Ordinance No. 2026-255 entitled: AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ALISO VIEJO, CALIFORNIA, APPROVING A ZONE CHANGE FROM BUSINESS PARK 2 TO MEDIUM DENSITY RESIDENTIAL DISTRICT FOR THE DEVELOPMENT OF A 58-UNIT RESIDENTIAL TOWNHOME COMMUNITY LOCATED AT 15 ARGONAUT (APN: 623-093-10 & 623-093-11);
4. Adopt Resolution No. 2026-29 entitled: A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ALISO VIEJO, CALIFORNIA, APPROVING VESTING TENTATIVE TRACT MAP 19489 FOR SUBDIVISION INTO CONDOMINIUM PURPOSES AND SITE DEVELOPMENT PERMIT (SDP-2026-01001) TO ALLOW THE DEVELOPMENT OF A 58-UNIT RESIDENTIAL TOWNHOME COMMUNITY LOCATED AT 15 ARGONAUT (APN: 623-093-10 & 623-093-11); and
5. Introduce for first reading Ordinance No. 2026-256 entitled: AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ALISO VIEJO, CALIFORNIA, APPROVING DEVELOPMENT AGREEMENT DA-2026-01002 BETWEEN THE CITY AND BRANDYWINE ACQUISITION GROUP, LLC, FOR THE DEVELOPMENT OF A 58-UNIT RESIDENTIAL TOWNHOME COMMUNITY LOCATED AT 15 ARGONAUT (APN: 623-093-10 & 623-093-11).

Motion: Councilmember Dwyer moved, and Councilmember Ackley seconded, approval of the five recommended actions. The motion carried 5-0.

6. DISCUSSION:

None.

7. CITY MANAGER'S REPORT:

City Manager Channing provided updates on the City's 25 Businesses for 25 Years program and registration for fall recreation classes. He also announced Family Movie Night on October 16, 2026, beginning at 5:30 p.m. at Aliso Viejo Ranch, and the Artisans Market on Sunday, November 8, 2026, from 11:00 a.m. to 3:00 p.m. at Aliso Viejo Ranch.

8. ANNOUNCEMENTS / COUNCIL COMMENTS / COMMITTEE UPDATES:

Councilmember Ackley:

- Expressed concern regarding recent statements by the President of the United States referencing Los Angeles and San Diego, emphasizing the impact such remarks could have on residents and communities throughout Southern California. She noted that the statements remained concerning regardless of context and chose to focus her comments on this issue rather than provide updates on meetings and events attended.

Councilmember Dwyer:

- Congratulated Mayor Duncan on a successful State of the City event.
- Recognized the successful launch of the student financial literacy program in partnership with Aliso Niguel High School, and announced the next financial literacy session, scheduled for October 15, focusing on spending and budgeting, and encouraged high school students to participate.
- Attended OC Vector Control District Board meeting and provided update on mosquito activity.
- Thanked the Aliso Niguel High School ASB for hosting Community Night at their football game, which included breast cancer awareness activities, and congratulated the Wolverines on their 23–10 victory.
- Promoted the Boys & Girls Club Great Futures Market, held Wednesdays at 9:30 a.m., which provides grocery assistance to approximately 80–85 families weekly.
- Recognized Councilmember Zandbergen for attending the Boys & Girls Club Youth of the Month event and congratulated the students and families recognized.
- Expressed anticipation for the upcoming Principal for a Day event and encouraged Council participation.

Councilmember Zandbergen:

- Commended the successful State of the City event and expressed appreciation for the strong community attendance.
- Attended Boys & Girls Club Youth of the Month event.
- Announced plans to participate in Principal for a Day at Canyon Vista Elementary School the following Friday.
- Acknowledged community feedback and expressed appreciation for the support of the proposed development at 15 Argonaut.

- Reported being sworn in as the District 4 Director of the League of California Cities, representing Aliso Viejo and neighboring cities, and highlighted the League's role in advocating for local government interests and influencing state legislation.
- Noted an upcoming Transportation Corridor Agencies (TCA) meeting to discuss toll road matters.
- Thanked attendees for their participation in the meeting.

Mayor Pro Tem Munzing:

- Thanked City staff, Mayor Duncan, and the Chamber of Commerce for organizing a successful State of the City event.
- Expressed appreciation for renewed efforts to promote volunteerism and encouraged expanding opportunities for community involvement in the coming year.
- Attended Orange County Fire Authority (OCFA) Board meeting and noted that the recruitment process for a permanent Fire Chief was ongoing.
- Attended the local high school community football game and praised the team's performance and the community's participation in breast cancer awareness activities.
- Expressed appreciation for the community's spirit and encouraged residents to stay safe.

Mayor Duncan:

- Expressed appreciation to everyone involved in organizing the State of the City event, particularly the Chamber of Commerce, and praised the event as an impressive and meaningful experience

9. **ADJOURNMENT:** Mayor Duncan adjourned the meeting at 9:06 p.m. The next regularly scheduled City Council meeting is Wednesday, October 21, 2026, at 7:00 p.m.

Respectfully submitted:

_____
MARIA KENDIG
CITY CLERK

Approved by:

_____
MAX DUNCAN
MAYOR

City of Aliso Viejo
AGENDA ITEM

DATE: October 21, 2026

TO: Mayor and City Council

FROM: Ann Eifert, Director of Financial Services

SUBJECT: ACCOUNTS PAYABLE

Recommended Action:

Ratify accounts payable checks and electronic funds transfers issued between September 25, 2026, and October 8, 2026, for $1,330,999.84.

Fiscal Impact:

Expenditures in the amount of $1,330,999.84.

Background:

The City issues accounts payable checks on a bi-weekly basis and presents them to the City Council for ratification at its next regularly scheduled City Council meeting.

Discussion:

The attached registers containing checks and electronic funds transfers issued between September 25, 2026, and October 8, 2026, for $1,330,999.84, are being presented for ratification. All payments have been made in compliance with the City's purchasing policy and procedures. Payments have been reviewed and approved by the appropriate departmental staff. The issued accounts payable checks and electronic funds transfers have been reviewed and deemed in accordance with the fiscal year budget by the Director of Financial Services.

Attachment:

1. Accounts Payable Report

Accounts Payable

Vendor Name	Description (Item)	Amount
101 - GENERAL FUND		
CALIFORNIA NEWSPAPERS PARTNERSHIP	REF0011805343 - 8/6 PH 6 JOURNEY 350&375-RYSK CUP	916.46
CALIFORNIA NEWSPAPERS PARTNERSHIP	REF0011808165 - 8/21 NOI MND 15 ARGONAUT	2,115.30
CALIFORNIA NEWSPAPERS PARTNERSHIP	REF0011808980 - 8/28 NOI MND-400-700 FREEDOM LANE	2,159.44
BEST BEST & KRIEGER	AUG'26 BBK CEQA & ENVIRONMENTAL (SPECIALIZED)-SHEA	608.60
BEST BEST & KRIEGER	AUG'26 BBK CEQA&ENVIRONMENTAL(SPECIALIZED)-POLARIS	143.20
BEST BEST & KRIEGER	AUG'26 APPLICANT-INITIATED/REIMBAIR)-MERITAGE	1,919.00
BEST BEST & KRIEGER	AUG'26 APPLICANT-INITIATED/REIMB(AIR)-95 ARGONAUT	2,088.50
BEST BEST & KRIEGER	AUG'26 APPLICANT-INITIATED/REIMB(AIR)-BRANDYWINE	2,198.00
BEST BEST & KRIEGER	AUG'26 APPLICANT-INITIATED/REIMB(AIR)-SHEA	4,896.50
BEST BEST & KRIEGER	AUG'26 APPLICANT-INITIATED/REIMB(AIR)-LENNAR	15,214.50
BEST BEST & KRIEGER	AUG'26 APPLICANT-INITIATED/REIMB(AIR)-CITYSIDE	1,629.50
RICOH USA	OCT'26 RICOH COPY ROOM LEASE (2624)- INT PAYABLE	(0.38)
RYAN BIRD	25-08-084_POOL2025-00011_1 LINDENGROVE_RYAN BIRD	3,000.00
JOE HUNT	26-05-053_POOL-2026-01007_43 ROCKROSE_JOE HUNT	3,000.00
GOLDEN K CONSTRUCTION LLC	CD-2026-01012_1 DEERWOOD_GOLDEN K CONSTRUCTION	500.00
MADE BUILDING COMPANY	CD-2026-01016_16 FRANCHESHI PL_MADE BUILDING CO	500.00
JOE HUNT	CD-2026-01061_43 ROCKROSE_JOE HUNT	750.00
ROOF PRO	CD2026-01069_29 SILVEROAK_ROOF PRO	500.00
ROOF PRO	CD2026-01070_26 28 30 32 SILVEROAK_ROOF PRO	500.00
PAUL JENSEN TERRA TEC LANDSCAPE	CD2026-01078_48 SUMMERLAND CIR_PAUL JENSEN TERRA T	500.00
ROOF PRO	CD-2026-01091_2-4-6-8 SILVEROAK_ROOF PRO	500.00
		43,638.62
CITY COUNCIL		
AT&T	6/17/26-7/16/26 CITY COUNCIL PHONES	240.00
AT&T	7/17/26-8/16/26 CITY COUNCIL PHONES	240.00
AT&T	8/17/26-9/16/26 CITY COUNCIL PHONES	246.45
	CITY COUNCIL TOTAL:	**726.45**
CITY MANAGER		
AT&T	6/17/26-7/16/26 CITY MANAGER PHONE	120.73
AT&T	7/17/26-8/16/26 CITY MANAGER PHONE	227.98
AT&T	8/17/26-9/16/26 CITY MANAGER PHONE	181.83
	CITY MANAGER TOTAL:	**530.54**
ECONOMIC DEVELOPMENT		
ERIC WINTER	SEP'26 BUS SPOTLIGHT - FS8 AV	822.97
	ECONOMIC DEVELOPMENT TOTAL:	**822.97**
HUMAN RESOURCES		
AT&T	6/17/26-7/16/26 HR PHONE	53.48
AT&T	7/17/26-8/16/26 HR PHONE	53.48
AT&T	8/17/26-9/16/26 HR PHONE	54.77
US BANK PURCHASING CARD PROGRAM	CS 9/02 COSTCO - TRAINING	160.27
US BANK PURCHASING CARD PROGRAM	CS 9/07 AMAZON - PROF TRAINING SUPPLIES	77.40
HEALTH AND HUMAN RESOURCE CENTER INC	NOV'26 EAP PROGRAM	102.90
	HUMAN RESOURCES TOTAL:	**502.30**
CITY CLERK		
CALIFORNIA NEWSPAPERS PARTNERSHIP	REF0011805342-8/16 PN STUDY/REF0011806237-8/13 NIP	1,350.44
CALIFORNIA NEWSPAPERS PARTNERSHIP	REF0011808349 - 8/27 PN NOMINEES 11/3 ELEC.SPANISH	822.28
CALIFORNIA NEWSPAPERS PARTNERSHIP	REF0011807176 - 8/14 PN INSUF NOMINEES-DISTRICT 4	1,599.58
CALIFORNIA NEWSPAPERS PARTNERSHIP	REF0011808353 - 8/27 PN NOMINEES 11/3 ELEC.VIETNMS	1,215.24
CALIFORNIA NEWSPAPERS PARTNERSHIP	REF0011808348 - 8/27 PN NOMINEES 11/3 ELEC.ENGLISH	834.43
CALIFORNIA NEWSPAPERS PARTNERSHIP	REF0011808354 - 8/27 PN NOMINEES 11/3 ELEC.ARABIC	1,119.77
CALIFORNIA NEWSPAPERS PARTNERSHIP	REF0011808350 - 8/27 PN NOMINEES 11/3 ELEC.CHINESE	854.43
CALIFORNIA NEWSPAPERS PARTNERSHIP	REF0011808352 - 8/27 PN NOMINEES 11/3 ELEC.KOREAN	1,059.20
IPROMOTEU.COM INC	RECOGNITION CERTIFICATES - QTY 500	288.22
US BANK PURCHASING CARD PROGRAM	LL 9/01 AMAZON-CERT FOLDERS	57.84
US BANK PURCHASING CARD PROGRAM	LL 9/22 CMCA-VIRTUAL WKSHP 10/21/26 - M.KENDIG	125.00

Vendor Name	Description (Item)	Amount
US BANK PURCHASING CARD PROGRAM	LL 9/22 CMCA-MBSHP JUL'26-JUN'27 - M.KENDIG	300.00
	CITY CLERK TOTAL:	**9,626.43**
CITY ATTORNEY		
BEST BEST & KRIEGER	AUG'26 BBK GENERAL RETAINER LEGAL SERVICES	26,617.00
BEST BEST & KRIEGER	AUG'26 BBK CELLULAR	143.20
BEST BEST & KRIEGER	AUG'26 BBK GENERAL PLAN/TOWN CENTER SPECIFIC PLAN	30.90
	CITY ATTORNEY TOTAL:	**26,791.10**
FINANCE		
STAPLES ADVANTAGE	SEP'26 FIN OFFICE SUPPLIES	197.82
HINDERLITER DE LLAMAS & ASSOCIATES	JUL-SEP'26 SALES TAX CONTRACT SERVICE	2,658.94
HINDERLITER DE LLAMAS & ASSOCIATES	JUL-SEP'26 SALES TAX RECOVERY SERVICE	474.40
	FINANCE TOTAL:	**3,331.16**
INFORMATION TECHNOLOGY		
AT&T	8/22/26-9/21/26 AT&T CALNET CH-ALARM/POTS LINE	577.49
COX COMMUNICATIONS, INC	SEP-OCT'26 ACCT#4801 RSM 12 JOURNEY 1G FIBER	1,650.40
AT&T	JUN'26 CH AT&T FIBER INTERNET SERVICE	1,385.24
AT&T	JUN'26 CH AT&T FIBER ADJUSTMENT	1.27
AT&T	SEP'26 CH AT&T FIBER ADJUSTMENT	40.81
AT&T	SEP'26 CH AT&T FIBER INTERNET SERVICE	1,385.24
AT&T	6/17/26-7/16/26 FLEET COMPLETE GPS	207.72
AT&T	6/17/26-7/16/26 CH MIFI	121.04
AT&T	6/17/26-7/16/26 EOC PHONES	(1,389.15)
AT&T	6/17/26-7/16/26 EOC MIFI	154.60
AT&T	PHONE PURCHASE	1,400.00
AT&T	7/17/26-8/16/26 FLEET COMPLETE GPS	207.72
AT&T	7/17/26-8/16/26 CH MIFI	121.04
AT&T	7/17/26-8/16/26 EOC MIFI	154.60
AT&T	7/17/26-8/16/26 EOC PHONES	72.76
AT&T	8/17/26-9/16/26 EOC PHONES	77.92
AT&T	8/17/26-9/16/26 FLEET COMPLETE GPS	213.92
AT&T	8/17/26-9/16/26 EOC MIFI	158.60
AT&T	8/17/26-9/16/26 CH MIFI	124.04
AT&T	JUL'26 CH AT&T FIBER ADJUSTMENT	10.19
AT&T	JUL'26 CH AT&T FIBER INTERNET SERVICE	1,385.24
AT&T	AUG'26 CH AT&T FIBER ADJUSTMENT	1.28
AT&T	AUG'26 CH AT&T FIBER INTERNET SERVICE	1,385.24
	INFORMATION TECHNOLOGY TOTAL:	**9,447.21**
NON-DEPARTMENTAL		
RICOH USA	OCT'26 RICOH COPY ROOM LEASE (2624) - PRINCIPAL	647.76
RICOH USA	OCT'26 RICOH COPY ROOM LEASE (2624) - INTEREST	46.82
BATTERY CONNECTION INC	BATTERY REPLACEMENT - TRUCK 1-49811	244.44
BATTERY CONNECTION INC	BATTERY REPLACEMENT - CORE CREDIT 1-49812	(54.00)
IPROMOTEU.COM INC	LOGO ENVELOPES - QTY OF 1000	541.12
IPROMOTEU.COM INC	BUS CARDS-M.DUNCAN	70.76
RICOH USA	SEP'26 RICOH RSI CLOUD SUBSCRIPTION (SW1860708)	25.53
STAPLES ADVANTAGE	AUG'26 - COPY&BREAKROOM SUPPLIES NON DEPARTMENTAL	362.18
QUADIENT FINANCE USA, INC	QUADIENT POSTAGE - ADDED 9/01/26	500.00
QUADIENT FINANCE USA, INC	QUADIENT POSTAGE - PAST FEE REVERSALS CREDITED	(134.00)
NIEVES LANDSCAPE INC	AUG'26 LANDSCAPE MAINTENANCE VISTA PARK	1,135.32
NIEVES LANDSCAPE INC	SEP'26 LANDSCAPE MAINTENANCE VISTA PARK	1,135.32
VOYAGER FLEET SYSTEMS INC	SEP'26 VEHICLE FUEL	882.86
US BANK PURCHASING CARD PROGRAM	CS 8/26 STARBUCKS - EE SOCIAL COMMITTEE PURCHASE	100.00
US BANK PURCHASING CARD PROGRAM	JNL 8/26 SMARTANDFINAL-EMP APPREC LUNCHEON DRINKS	41.55
US BANK PURCHASING CARD PROGRAM	LL 8/26 PRIMO BRANDS-WATER SERVICE	63.87
US BANK PURCHASING CARD PROGRAM	LL 9/16 PANDA EXPRESS-CC MTG 9/16 DINNER	280.15
US BANK PURCHASING CARD PROGRAM	LL 9/02 RALPHS-SODAS SEP'26 CC MTGS	71.34
US BANK PURCHASING CARD PROGRAM	LL 9/02 RALPHS-SODAS SEP'26 CC MTGS (CREDIT)	(5.38)
US BANK PURCHASING CARD PROGRAM	LL 9/02 TONY PEPPERONIS-CC MTG 9/02 DINNER5	294.90
US BANK PURCHASING CARD PROGRAM	LL 9/02 PRIMO BRANDS-WATER SERVICE	86.89
US BANK PURCHASING CARD PROGRAM	LL 9/16 NEKTER JUICE BAR-CC MTG 9/16 DINNER	12.69
MOULTON NIGUEL WATER DIST	ACCT#64101 VISTA WATER SVC	1,391.48
	NON-DEPARTMENTAL TOTAL:	**7,741.60**

Vendor Name	Description (Item)	Amount
C. S. ADMINISTRATION		
DP TRADING INC	2026 VETERANS PINS	295.50
BAKER GROUP INC	10/16/26 MOVIE NIGHT SCREEN/EQUIP & MOVIE LICENSE	1,300.00
ADVANTAGE MAILING, LLC	ARTISANS MARKET ACRYLIC SIGNAGE	103.71
THE GLENNWOOD FOUNDATION, INC	FY26-27 CAS GRANT- THE GLENWOOD FOUNDATION	2,500.00
US BANK PURCHASING CARD PROGRAM	EM RCS 9/16 FIVE STAR-CITIZEN OF THE YEAR PLAQUES	808.13
US BANK PURCHASING CARD PROGRAM	EM RCS 9/18 HOMEGOODS-TROPHIES FOR PET FAIR EVENT	15.16
US BANK PURCHASING CARD PROGRAM	JB 9/02 FUNEXPRESS-TREE LIGHTING CRAFTS PT2	529.03
US BANK PURCHASING CARD PROGRAM	JB 9/02 FUNEXPRESS-TREE LIGHTING CRAFTS	144.49
US BANK PURCHASING CARD PROGRAM	JB 9/01 COSTCO-BREAKROOM & CLEANING SUPPLIES	28.00
US BANK PURCHASING CARD PROGRAM	JB 9/02 COSTCO-BREAKROOM & CLEANING SUPPLIES	51.70
US BANK PURCHASING CARD PROGRAM	JB 9/02 COSTCO-BREAKROOM & CLEANING SUPPLIES	65.16
US BANK PURCHASING CARD PROGRAM	JB 9/01COSTCO-BREAKROOM & CLEANING SUPPLIES	79.15
US BANK PURCHASING CARD PROGRAM	JNL 9/16 FACEBK-BOOSTED IG POST	2.87
US BANK PURCHASING CARD PROGRAM	JNL 9/18 BESTOFSIGNS.COM-STEP & REPEAT	807.32
US BANK PURCHASING CARD PROGRAM	LL 9/01 FACEBK-META ADS	105.00
US BANK PURCHASING CARD PROGRAM	LL 9/8 FACEBK-META ADS	105.00
	C. S. ADMINISTRATION TOTAL:	**6,940.22**
IGLESIA PARK		
EL TORO WATER DISTRICT	8/11/26-9/10/26 MTR#4114 IGLESIA PARK WATER	1,384.68
EL TORO WATER DISTRICT	8/11/26-9/10/26 MTR#3499 IGLESIA PARK WATER	1,571.24
DAVID HAUPTMAN CO., INC	SOCCER NETS FOR IGLESIA PARK (2)	668.05
NIEVES LANDSCAPE INC	AUG'26 LANDSCAPE MAINTENANCE IGLESIA PARK	7,553.66
NIEVES LANDSCAPE INC	SEP'26 LANDSCAPE MAINTENANCE IGLESIA PARK	7,553.66
NIEVES LANDSCAPE INC	AUG'26 LANDSCAPE MAINTENANCE-IRRIGATION IGLESIA	352.33
NIEVES LANDSCAPE INC	AUG'26 LANDSCAPE MAINTENANCE-IRRIGATION IGLESIA	200.42
NIEVES LANDSCAPE INC	SEP'26 LANDSCAPE MAINTENANCE-FENCE IGLESIA	117.29
	IGLESIA PARK TOTAL:	**19,401.33**
IGLESIA BUILDING		
EL TORO WATER DISTRICT	8/11/26-9/10/26 MTR#5016 IGLESIA PARK BLDG WATER	354.79
	IGLESIA BUILDING TOTAL:	**354.79**
IGLESIA PARK COMMUNITY CENTER		
BOYS & GIRLS CLUB OF CAPISTRANO VALLEY	JUL'26 B&GCCV	20,000.00
	IGLESIA PARK COMMUNITY CENTER TOTAL:	**20,000.00**
PLANNING		
LG2WB ENGINEERS,INC	JUL'26 EVACUATION ASSESSMENT-SAFETY ELEMENT	11,466.00
LG2WB ENGINEERS,INC	AUG'26 EVACUATION ASSESSMENT-SAFETY ELEMENT	10,982.00
US BANK PURCHASING CARD PROGRAM	SK 8/25 OC CLERK RECORDER - FEE FOR CC&RS	109.00
	PLANNING TOTAL:	**22,557.00**
BUILDING		
STAPLES ADVANTAGE	AUG'26 BLDG/PLNG OFFICE SUPPLIES	12.11
	BUILDING TOTAL:	**12.11**
ENGINEERING (GENERAL)		
QUANG LE	9/15/26 SOUTH OC CITY ENG MEETING REIMB - QL	36.00
SHAUN PELLETIER	9/21/26 SOUTH OC CITY ENG MEETING REIMB - SP	36.00
MURPHY SWITCH OF CA	OCT'26 MURCAL IOT SMARTCOMMAND MONITORING SERVICE	450.00
AT&T	6/17/26-7/16/26 PUBLIC WORKS TABLETS	121.43
AT&T	7/17/26-8/16/26 PUBLIC WORKS TABLETS	118.96
AT&T	8/17/26-9/16/26 PUBLIC WORKS TABLETS	103.62
RICHARD FISHER ASSOCIATES	JUL'26 LANDSCAPE INSPECTION GENERAL	3,748.49
RICHARD FISHER ASSOCIATES	AUG'26 LANDSCAPE INSPECTION GENERAL	4,313.63
COUNTY OF ORANGE	NPDES WATER QUALITY IMPLEMENTATION 26-27	1,022.82
US BANK PURCHASING CARD PROGRAM	SP 8/29 UBER - APWA CONF AIRPORT TRANSFER	27.93
US BANK PURCHASING CARD PROGRAM	SP 8/29 MARRIOTT - APWA CONF HOTEL	1,215.04
US BANK PURCHASING CARD PROGRAM	SP 8/29 SD PARK SHUTTL - APWA CONF AIRPORT PARKING	99.50
US BANK PURCHASING CARD PROGRAM	SP 8/29 DOORDASH - APWA CONF DINNER	33.66
US BANK PURCHASING CARD PROGRAM	SP 8/29 UBER - APWA CONF AIRPORT TRANSFER	30.94
US BANK PURCHASING CARD PROGRAM	SP 8/29 MARRIOTT - APWA CONF DINNER	29.90
US BANK PURCHASING CARD PROGRAM	SP 8/29 DOORDASH - APWA CONF DINNER	27.72
US BANK PURCHASING CARD PROGRAM	SP 8/29 UBER - APWA CONF AIRPORT TRANSFER	7.00
US BANK PURCHASING CARD PROGRAM	SP 8/29 HOU AIRP KILLENS BBQ - APWA CONF DINNER	29.47
US BANK PURCHASING CARD PROGRAM	SP 8/29 UBER - APWA CONF AIRPORT TRANSFER	7.00

Vendor Name	Description (Item)	Amount
US BANK PURCHASING CARD PROGRAM	SP 8/29 UBER - APWA CONF AIRPORT TRANSFER	7.00
	ENGINEERING (GENERAL) TOTAL:	**11,466.11**
STREET MAINTENANCE		
RICHARD FISHER ASSOCIATES	JUL'26 LANDSCAPE INSPECTION MEDIANS	330.12
RICHARD FISHER ASSOCIATES	AUG'26 LANDSCAPE INSPECTION MEDIAN	1,010.66
	STREET MAINTENANCE TOTAL:	**1,340.78**
LAW ENFORCEMENT-CONTRACT		
COUNTY OF ORANGE	OCT'26 LAW ENFORCEMENT CONTRACT	929,124.00
COUNTY OF ORANGE	OCT'26 BWC/TASER	1,597.20
COUNTY OF ORANGE	OCT'26 MOTORCYCLE REPLACEMENT COSTS	88.06
COUNTY OF ORANGE	OCT'26 ML.E. EARLY PAYMENT DISCOUNT - 0.25%	(2,389.71)
COUNTY OF ORANGE	OCT'26 BODY WORN CAMERA	7,878.36
COUNTY OF ORANGE	OCT'26 IN CAR VIDEO	3,781.89
	LAW ENFORCEMENT-CONTRACT TOTAL:	**940,079.80**
LAW ENFORCEMENT-OTHER		
STAPLES ADVANTAGE	AUG'26 POLICE SERVICES OFFICE SUPPLIES	626.89
COUNTY OF ORANGE	AUG'26 TECH CHARGES/RADIO REPAIRS	82.25
	LAW ENFORCEMENT-OTHER TOTAL:	**709.14**
EOC		
US BANK PURCHASING CARD PROGRAM	LL 9/14 EXTRA SPACE-OFFSITE STORAGE #A1554	384.00
	EOC TOTAL:	**384.00**
	GENERAL FUND TOTAL:	**1,126,403.66**

102 - GEN. FD-CITY HALL

NON-DEPARTMENTAL		
THURSTON ELEVATOR CONCEPTS INC	OCT'26 ELEVATOR MAINTENANCE CH	143.00
UNITED BUILDING AND DEVELOPMENT SERVICES LLC	AUG'26 BATHROOM LEAK REPAIR/DRYWALL & PAINT-CH	5,560.00
SO CAL EDISON	SEP'26 ACCT#7189 CH ELECTRICITY	9,747.71
NIEVES LANDSCAPE INC	APR'26 LANDSCAPE MAINTENANCE-PLANTS CH	95.20
NIEVES LANDSCAPE INC	AUG'26 LANDSCAPE MAINTENANCE CH	748.08
NIEVES LANDSCAPE INC	SEP'26 LANDSCAPE MAINTENANCE CH	748.08
NIEVES LANDSCAPE INC	SEP'26 LANDSCAPE MAINTENANCE-DEAD TREE CH	242.44
US BANK PURCHASING CARD PROGRAM	KB 8/28 AMAZON - WIRE CONNECTION TERMINALS CH	21.54
US BANK PURCHASING CARD PROGRAM	KB 9/08THE HOME DEPOT-TERMINAL CRIMP HVAC REPAIRCH	36.60
US BANK PURCHASING CARD PROGRAM	KB 9/08 THE HOME DEPOT-PLUMBING REPAIR CH	74.68
MOULTON NIGUEL WATER DIST	ACCT#65408/65407/65406 CH WATER SVC	860.78
	NON-DEPARTMENTAL TOTAL:	**18,278.11**
	GEN. FD-CITY HALL TOTAL:	**18,278.11**

103 - GF-AV RECREATION SERVICES

RAMSEY YUNIS	REFUND FACILITY RENTAL_REC115193222_RAMSEY YUNIS	5,600.00
RAMSEY YUNIS	REFUND FEE 91+DAYS_REC115193222_RAMSEY YUNIS	(250.00)
		5,350.00
RECREATION SERVICES		
AT&T	8/22/26-9/21/26 AT&T CALNET AVR-ALARM/POTS LINE	192.49
JENNIFER BALES	FALL2026-ATM018 STORYTIME-5 PARTICIPANTS	75.00
GARDAWORLD	OCT'26 AVR - CASH COURIER SERVICE	553.60
AT&T	JUN'26 AVR AT&T INTERNET SERVICE	1,165.25
AT&T	SEP'26 AVR AT&T INTERNET SERVICE	1,165.25
AT&T	6/17/26-7/16/26 RECREATION TABLETS	40.74
AT&T	6/17/26-7/16/26 RECREATION PHONES	91.96
AT&T	7/17/26-8/16/26 RECREATION TABLETS	40.74
AT&T	7/17/26-8/16/26 RECREATION PHONES	91.96
AT&T	8/17/26-9/16/26 RECREATION PHONES	94.54
AT&T	8/17/26-9/16/26 RECREATION TABLETS	41.74
AT&T	JUL'26 AVR AT&T INTERNET SERVICE	1,165.25
CINTAS CORPORATION NO. 2	SEP'26 AVR FIRST AID SUPPLIES	164.26
STAPLES ADVANTAGE	AUG'26 RCS OFFICE SUPPLIES	93.28
STAPLES ADVANTAGE	SEP'26 RCS OFFICE SUPPLIES	375.79
AT&T	AUG'26 AVR AT&T INTERNET SERVICE	1,165.25
RUIHONG LI	FALL2026-ATM236/239 YOGA+PILATES-5 PARTICIPANTS	304.80
BREAKTHROUGH SPORTS HOLDCO, LLC	FALL2026-ATM047/350/123 SPORTS-17 PARTICIPANTS	918.00

Vendor Name	Description (Item)	Amount
NIEVES LANDSCAPE INC	APR'26 LANDSCAPE MAINTENANCE-PLANTS AVR	140.60
NIEVES LANDSCAPE INC	AUG'26 LANDSCAPE MAINTENANCE AVR	2,496.56
NIEVES LANDSCAPE INC	SEP'26 LANDSCAPE MAINTENANCE AVR	2,496.56
US BANK PURCHASING CARD PROGRAM	JNL 9/08 SPOTIFY-RCS DEPARTMENT ACCOUNT	18.99
US BANK PURCHASING CARD PROGRAM	JNL 8/24 WAYFAIR-GREENROOM FURNITURE RETURN	(459.00)
US BANK PURCHASING CARD PROGRAM	KB 9/04 THE HOME DEPOT-BATTS BATHROOM FIXTURES AVR	84.53
US BANK PURCHASING CARD PROGRAM	KB 9/06 EBAY - KEYS FOR FIRE PANEL AVR	51.25
US BANK PURCHASING CARD PROGRAM	KB 9/21 KEYBLANKS - BLANK KEYS AVR	71.21
MOULTON NIGUEL WATER DIST	ACCT#105234/104936/104935/104986 RANCH WATER SVC	1,862.10
MOULTON NIGUEL WATER DIST	ACCT#104515/104519 FARM WATER SVC	447.80
	RECREATION SERVICES TOTAL:	**14,950.50**
	GF-AV RECREATION SERVICES TOTAL:	**20,300.50**

203 - GAS TAX

TRAFFIC ENGINEERING

ITERIS, INC	AUG'26 TRAFFIC SIGNAL OPS	6,071.72
RK ENGINEERING GROUP INC	AUG'26 SILKWOOD & CANYON VISTAS ALL-WAY-STOP ANAL	1,567.00
	TRAFFIC ENGINEERING TOTAL:	**7,638.72**

STREET MAINTENANCE

EL TORO WATER DISTRICT	8/11/26-9/10/26 MTR#5675 CALLE CORTEZ MEDIAN WATER	210.43
BEAR ELECTRICAL SOLUTIONS INC	AUG'26 TRAFFIC SIGNAL MAINTENANCE ROUTINE	3,225.90
BEAR ELECTRICAL SOLUTIONS INC	AUG'26 TRAFFIC SIGNAL MAINTENANCE RESPONSE	10,677.64
SO CAL EDISON	SEP'26 ACCT#7241 LS1 ST LIGHTS ELECTRICITY	18,762.52
SO CAL EDISON	SEP'26 ACCT#6377 LS2 ST LIGHTS ELECTRICITY	1,258.14
NIEVES LANDSCAPE INC	AUG'26 LANDSCAPE MAINTENANCE MEDIANS	1,749.94
NIEVES LANDSCAPE INC	SEP'26 LANDSCAPE MAINTENANCE MEDIANS	1,749.94
UNDERGROUND SERVICE ALERT OF SOUTHERN CA	SEP'26 USA DATABASE MAINT + 40 TICKETS	95.25
SAN DIEGO GAS & ELECTRIC	AUG'26 ST LIGHTS & TRAFFIC CTRLRS	2,598.12
SCA OF CA LLC	SEP'26 STREET SWEEPING SERVICES	11,297.00
MOULTON NIGUEL WATER DIST	ACCT#64613/64615/65346 MEDIANS WATER SVC	1,559.06
	STREET MAINTENANCE TOTAL:	**53,183.94**
	GAS TAX TOTAL:	**60,822.66**

215 - PUBLIC SAFETY GRANTS

LAW ENFORCEMENT-OTHER

COUNTY OF ORANGE	OCT'26 E-CITATION REPLACEMENT COSTS	195.31
COUNTY OF ORANGE	OCT'26 E-CITATION RECURRING COSTS	465.27
COUNTY OF ORANGE	OCT'26 MDC REPLACEMENT COSTS	1,637.19
COUNTY OF ORANGE	OCT'26 MDC RECURRING COSTS	5,018.94
COUNTY OF ORANGE	OCT'26 MOTORCYCLE	3,443.42
	LAW ENFORCEMENT-OTHER TOTAL:	**10,760.13**
	PUBLIC SAFETY GRANTS TOTAL:	**10,760.13**

231 - OTHER GRANTS

OTHER GRANTS

HARBOR STATION MAINTENANCE	AUG'26-JUN'27 35 PLAYA CIR HOA FEES	2,145.00
COUNTY OF ORANGE	OCT'26 BEHAVIORAL HEALTH BUREAU - PLHA GRANT	2,652.50
	OTHER GRANTS TOTAL:	**4,797.50**
	OTHER GRANTS TOTAL:	**4,797.50**

241 - TECHNOLOGY FUND

GEN-TECHNOLOGY GRANTS

COX COMMUNICATIONS, INC	SEP-OCT'26 ACCT#4801 RSM METRO	150.00
GRANICUS LLC	OCT-DEC'26 GRANICUS WEBCASTING	5,059.52
ERIC WINTER	SEP'26-CC MTGS 9/2 & 9/16 SPORTSZONE 2-6 & ADMIN	1,543.12
ERIC WINTER	STATE OF THE CITY VIDEO - 09/23/26	4,088.35
	GEN-TECHNOLOGY GRANTS TOTAL:	**10,840.99**
	TECHNOLOGY FUND TOTAL:	**10,840.99**

Vendor Name	Description (Item)	Amount
251 - FEDERAL GRANTS		
GEN-FEDERAL GRANT		
CALIFORNIA NEWSPAPERS PARTNERSHIP	REF0011808251 - 8/27 PN CDBG CAPER	1,256.66
	GEN-FEDERAL GRANT TOTAL:	**1,256.66**
	FEDERAL GRANTS TOTAL:	**1,256.66**
261 - CITY FAC.-AQUATIC CENTER		
PREMIER AQUATIC SERVICES	OCT'26 AQC MANAGEMENT FEE RETENTION	(1,208.30)
		-1,208.30
GEN-AQUATIC CENTER		
UNITED BUILDING AND DEVELOPMENT SERVICES LLC	JUL'26 UNCLOG DRAINS AND INSTALL NEW TRAPS-AQC	1,568.00
NIEVES LANDSCAPE INC	APR'26 LANDSCAPE MAINTENANCE-PLANTS AQC	95.20
NIEVES LANDSCAPE INC	JUL'26 LANDSCAPE MAINTENANCE-IRRIGATION AQC	284.46
NIEVES LANDSCAPE INC	AUG'26 LANDSCAPE MAINTENANCE AQC	1,006.80
NIEVES LANDSCAPE INC	SEP'26 LANDSCAPE MAINTENANCE AQC	1,006.80
NIEVES LANDSCAPE INC	AUG'26 LANDSCAPE MAINTENANCE-IRRIGATION AQC	115.40
NIEVES LANDSCAPE INC	SEP'26 LANDSCAPE MAINTENANCE-IRRIGATION AQC	1,187.83
NIEVES LANDSCAPE INC	SEP'26 LANDSCAPE MAINTENANCE-STRAWBERRY TREE AQC	350.19
US BANK PURCHASING CARD PROGRAM	KB 9/18 THE HOME DEPOT-TIMER WALL PLATE REPAIR AQC	6.14
PREMIER AQUATIC SERVICES	OCT'26 AQC MANAGEMENT FEES	12,083.00
MOULTON NIGUEL WATER DIST	ACCT#64095/64096 AQC WATER SVC	1,832.87
	GEN-AQUATIC CENTER TOTAL:	**19,536.69**
	CITY FAC.-AQUATIC CENTER TOTAL:	**18,328.39**
311 - STREET IMPROVEMENTS		
STREETS & HIGHWAYS		
GMU GEOTECHNICAL INC	JUL'26 CEDARBROOK PAVEMENT REHAB GEOTECH	2,904.84
GMU GEOTECHNICAL INC	AUG'26 ALISO VIEJO PARKWAY REHAB GEOTECH	18,013.34
GMU GEOTECHNICAL INC	AUG'26 CEDARBROOK PAVEMENT REHAB GEOTECH	11,922.52
SOUTHERN CALIFORNIA PRECISION CONCRETE INC	SEP'26 CEDARBROOK SIDEWALK REHAB	18,775.54
RK ENGINEERING GROUP INC	JUL'26 CITYWIDE BIKE LANE STRIPING PLAN-DESIGN	3,685.00
RK ENGINEERING GROUP INC	AUG'26 CITYWIDE BIKE LANE STRIPING PLAN-DESIGN	2,910.00
	STREETS & HIGHWAYS TOTAL:	**58,211.24**
	STREET IMPROVEMENTS TOTAL:	**58,211.24**
721 - COMMUNITY TRUST		
TRUST FUND		
US BANK PURCHASING CARD PROGRAM	JB 9/02 FUNEXPRESS-TREE LIGHTING CRAFTS	1,000.00
	TRUST FUND TOTAL:	**1,000.00**
	COMMUNITY TRUST TOTAL:	**1,000.00**
	GRAND TOTAL:	**1,330,999.84**

Fund Summary

Fund	Expense Amount	Payment Amount
101 - GENERAL FUND	1,126,403.66	1,126,403.66
102 - GEN. FD-CITY HALL	18,278.11	18,278.11
103 - GF-AV RECREATION SERVICES	20,300.50	20,300.50
203 - GAS TAX	60,822.66	60,822.66
215 - PUBLIC SAFETY GRANTS	10,760.13	10,760.13
231 - OTHER GRANTS	4,797.50	4,797.50
241 - TECHNOLOGY FUND	10,840.99	10,840.99
251 - FEDERAL GRANTS	1,256.66	1,256.66
261 - CITY FAC.-AQUATIC CENTER	18,328.39	18,328.39
311 - STREET IMPROVEMENTS	58,211.24	58,211.24
721 - COMMUNITY TRUST	1,000.00	1,000.00
Grand Total:	**1,330,999.84**	**1,330,999.84**

Report Summary

Fund Summary

Fund	Payment Amount
101 - GENERAL FUND	1,126,403.66
102 - GEN. FD-CITY HALL	18,278.11
103 - GF-AV RECREATION SERVICES	20,300.50
203 - GAS TAX	60,822.66
215 - PUBLIC SAFETY GRANTS	10,760.13
231 - OTHER GRANTS	4,797.50
241 - TECHNOLOGY FUND	10,840.99
251 - FEDERAL GRANTS	1,256.66
261 - CITY FAC.-AQUATIC CENTER	18,328.39
311 - STREET IMPROVEMENTS	58,211.24
721 - COMMUNITY TRUST	1,000.00
Grand Total:	**1,330,999.84**

Account Summary

Account Number	Account Name	Payment Amount
101-2104-000	INTEREST PAYABLE	-0.38
101-2601-000	REFUNDABLE DEPOSIT	6,000.00
101-2602-000	PLANNING DEPOSIT	32,259.50
101-2603-000	ENGINEERING DEPOSIT	1,629.50
101-2606-000	C & D DEPOSIT	3,750.00
101-4-1101-4511-000	COMMUNICATION	726.45
101-4-1501-4511-000	COMMUNICATION	530.54
101-4-1502-4302-000	ECONOMIC DEVELOPM…	822.97
101-4-1503-4309-000	OTHER CONTRACTUAL S…	264.63
101-4-1503-4520-000	MTGS/CONF./TRNG & D…	237.67
101-4-1601-4303-000	LEGAL NOTICES	1,350.44
101-4-1601-4502-000	AWARDS & RECOGNITI…	346.06
101-4-1601-4520-000	MTGS/CONF./TRNG & D…	125.00
101-4-1601-4521-000	MEMBERSHIP & DUES	300.00
101-4-1601-4525-000	ELECTION	7,504.93
101-4-2101-4304-000	LEGAL SERVICES	26,617.00
101-4-2101-4532-000	SPECIAL PROJECTS	143.20
101-4-2101-4731-000	GENERAL PLAN	30.90
101-4-2501-4301-000	PROFESSIONAL SERVICES	3,133.34
101-4-2501-4601-000	SUPPLIES	197.82
101-4-3101-4305-000	TECHNOLOGY SERVICES	8,047.21
101-4-3101-4481-000	COMPUTER EXPENSE	1,400.00
101-4-3501-4422-000	EQUIP RENTAL LEASE - P…	647.76
101-4-3501-4431-000	BUILDING & GROUND M…	3,662.12
101-4-3501-4512-000	POSTAGE	366.00
101-4-3501-4513-000	PRINTING	637.41
101-4-3501-4516-000	FUEL	882.86
101-4-3501-4517-000	VEHICLE MAINTENANCE	190.44
101-4-3501-4542-000	INTEREST EXPENSE - LEA…	46.82
101-4-3501-4601-000	SUPPLIES	362.18
101-4-3501-4612-000	OPERATING SUPPLIES	946.01
101-4-4101-4501-000	ADVERTISING & PROMO…	212.87
101-4-4101-4527-000	REC-CITY SPECIAL EVENTS	4,003.34
101-4-4101-4533-000	COMMUNITY ASSISTAN…	2,500.00
101-4-4101-4601-000	SUPPLIES	224.01
101-4-4102-4411-000	UTILITIES	2,955.92
101-4-4102-4431-000	BUILDING & GROUND M…	16,445.41
101-4-4103-4411-000	UTILITIES	354.79
101-4-4104-4529-000	REC-YOUTH PROGRAMS	20,000.00
101-4-4401-4513-000	PRINTING	109.00
101-4-4401-4731-000	GENERAL PLAN	22,448.00
101-4-4402-4612-000	OPERATING SUPPLIES	12.11

Account Summary

Account Number	Account Name	Payment Amount
101-4-4501-4520-000	MTGS/CONF/TRNG & D…	1,587.16
101-4-4501-4562-000	PERMITS	1,022.82
101-4-4501-4612-000	OPERATING SUPPLIES	344.01
101-4-4501-4701-000	NPDES	450.00
101-4-4501-4741-000	C.S-CITY ENGINEERING	8,062.12
101-4-4503-4771-000	C.S-STREET MAINTENAN…	1,340.78
101-4-5101-4308-000	LAW ENFORCEMENT	940,079.80
101-4-5102-4462-000	EQUIP MAINT-800MHZ …	82.25
101-4-5102-4612-000	OPERATING SUPPLIES	626.89
101-4-5401-4471-000	RENT	384.00
102-4-3501-4411-000	UTILITIES	10,608.49
102-4-3501-4431-000	BUILDING & GROUND M…	7,669.62
103-34130	FACILITY RENTAL	5,600.00
103-34169	REFUNDS	-250.00
103-4-4105-4305-000	TECHNOLOGY SERVICES	4,872.48
103-4-4105-4309-000	OTHER CONTRACTUAL S…	1,297.80
103-4-4105-4411-000	UTILITIES	1,862.10
103-4-4105-4431-000	BUILDING & GROUND M…	5,340.71
103-4-4105-4451-000	FARM OPERATING EXPE…	447.80
103-4-4105-4511-000	COMMUNICATION	401.68
103-4-4105-4561-000	TAXES/FEES/PERMITS	553.60
103-4-4105-4601-000	SUPPLIES	633.33
103-4-4105-4620-000	MINOR EQUIPMENT	-459.00
203-4-4502-4301-000	PROFESSIONAL SERVICES	7,638.72
203-4-4503-4411-000	UTILITIES	24,388.27
203-4-4503-4771-000	C.S-STREET MAINTENAN…	17,498.67
203-4-4503-4772-000	C.S-STREET SWEEPING	11,297.00
215-4-5102-4803-000	PUBLIC SAFETY EQUIPM…	10,760.13
231-4-6131-4309-000	OTHER CONTRACTUAL S…	4,797.50
241-4-6141-4309-000	OTHER CONTRACTUAL S…	5,631.47
241-4-6141-4481-000	IT/COMPUTER EQUIPM…	5,209.52
251-4-6151-4309-000	OTHER CONTRACTUAL S…	1,256.66
261-2103-000	RETENTIONS PAYABLE	-1,208.30
261-4-6161-7411-000	UTILITIES	1,832.87
261-4-6161-7421-000	BUILDING & GROUND M…	5,620.82
261-4-6161-7451-000	MANAGEMENT FEES	12,083.00
311-4-8301-5501-000	DESIGN	6,595.00
311-4-8301-5601-000	CONSTRUCTION MANA…	32,840.70
311-4-8301-5701-000	CONSTRUCTION	18,775.54
721-4-7501-6103-000	COLLABORATIVE EVENTS…	1,000.00
	Grand Total:	**1,330,999.84**

Project Account Summary

Project Account Key	Payment Amount
None	1,229,004.26
1002FALL	1,297.80
10044309	4,797.50
1005-IDDE	1,022.82
1005-MUNI OPS	450.00
1385601	18,013.34
1405601	14,827.36
1405701	18,775.54
1425501	6,595.00
9014612	653.70
9934527	673.52
9936103	1,000.00
ENG 5081	1,629.50
GPA-2026-01003	15,214.50

Project Account Summary

Project Account Key		Payment Amount
GRA-2025-00005		2,088.50
SDP-2024-00002		4,078.44
SDP-2025-00004		5,505.10
SDP-2026-01000		143.20
SDP-2026-01001		4,313.30
USE-2026-01006		916.46
	Grand Total:	**1,330,999.84**

City of Aliso Viejo
AGENDA ITEM

DATE: October 21, 2026

TO: Mayor and City Council

FROM: Ann Eifert, Director of Financial Services/City Treasurer

SUBJECT: TREASURER'S STATEMENT – AUGUST 2026

Recommended Action:

Receive and file the August 2026 Treasurer's Statement.

Fiscal Impact:

No Fiscal Impact.

Background:

Per City policy, the Finance Department presents the monthly Treasurer's Statement for the City Council's review. This statement shows the cash balance for all City funds, a breakdown of bank account balances, investment account balances and the effective yield earned from investments.

Discussion:

The City's portfolio consists of investments in Certificates of Deposits, US Treasuries, US Federal Agencies, Corporate Bonds, and Local Agency Investment Fund (LAIF). All funds invested with LAIF are available for withdrawal within 24 hours.

The Treasurer's Statement provides information regarding the City's investment portfolio and activity during the reporting month. The City's investment portfolio is in compliance with all government codes as well as the City's investment policy. Interest is credited to the City's bank account monthly and allocated among the City's funds. The current portfolio provides sufficient cash flow liquidity to meet the upcoming operating expenses and spending requirements for the next 6 months.

Attachment:

Attachment 1 – August 2026 Treasurer's Statement

CITY OF ALISO VIEJO
TREASURER'S MONTHLY CASH STATEMENT

August 31, 2026

	BEGINNING BALANCE	RECEIPTS	DISBURSEMENTS	ENDING BALANCE
CASH BALANCE (ALL FUNDS)	$ 11,903,546.29	$ 4,395,733.60	$ 3,045,006.98	$ 13,254,272.91
CITY TRUST FUNDS:				
AV RANCH FOUNDATION	$ 100.00			100.00
CFD 2005-01	$ (2,372.00)		1,640.00	(4,012.00)
COMMUNITY TRUST	$ 8,618.48	1,000.00	3,000.00	6,618.48
CASH BALANCE TOTALS	**$ 11,909,892.77**	**$ 4,396,733.60**	**$ 3,049,646.98**	**$ 13,256,979.39**

SUMMARY OF CASH:

DEMAND DEPOSITS:	GENERAL ACCOUNT	$ 649,426.93	
INVESTMENTS:	LOCAL AGENCY INVESTMENT FD	$ 12,514,997.01	
	MONEY MARKET/SWEEP ACCOUNT	$ 92,555.45	
	TOTAL CASH		**$ 13,256,979.39**

Years to Maturity for August 2026	1.90
Weighted Average Yield for August 2026	3.970%

All investments are placed in accordance with the City of Aliso Viejo's Investment Policy.

The above summary provides sufficient cash flow liquidity to meet the next six month's estimated expenditures.

Other monies held include Cash with Fiscal Agent, Investments, Payroll and AV Center.			**$ 52,128,517.22**
Cash With Fiscal Agent	COPS/CFD 2005-01	2,983,913.55	
Cash With Investment Advisor	City Investments	47,900,376.84	
AV Center		1,167,152.96	
PR Account		75,153.61	
Petty Cash		1,920.26	
	GRAND TOTAL OF CITY FUNDS		**$ 65,385,496.61**

CITY OF ALISO VIEJO
AUGUST 31, 2026

Portfolio Summary

3.97
Weighted Average Yield to Maturity

1.90
Weighted Average Maturity (Years)

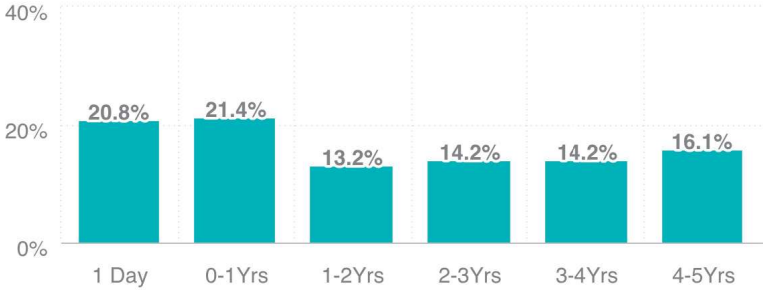
1.75
Portfolio Effective Duration (Years)

1.90
Weighted Average Life (Years)

AA-
Average Credit Rating

MEEDER PUBLIC FUNDS

Maturity Distribution



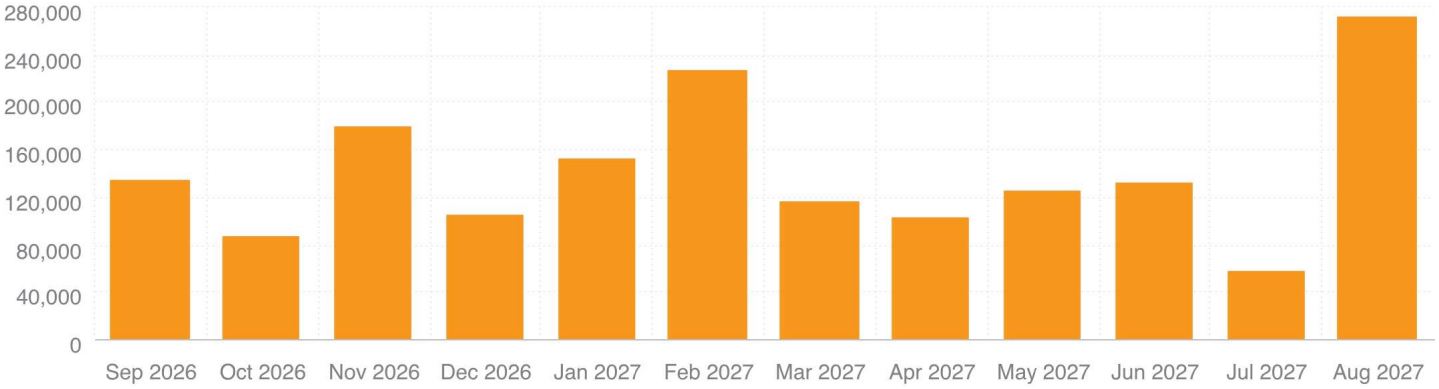
Sector Allocation

U.S. Treasuries	35.06%
Corporate Bonds	22.24%
LGIP	20.67%
U.S. Agencies	11.59%
Commercial Paper	8.68%
Negotiable CD's	1.61%
Money Market Funds	0.15%

Custodial Reconciliation

	CURRENT MONTH
Beginning	**47,868,251.13**
Contributions/Withdrawals	0.00
Management Fees	0.00
Custodian Fees	(299.34)
Realized Gains Losses	0.00
Purchased Interest	(458.06)
Interest Received	125,438.56
ENDING	**47,992,932.29**

Projected Monthly Income Schedule



MEEDER PUBLIC FUNDS

Position Statement

CUSIP	DESCRIPTION	TRADE DATE SETTLE DATE	PAR VALUE	PRINCIPAL COST PURCHASED INTEREST	TOTAL COST	YIELD TO MATURITY	MATURITY DATE	DAYS TO MATURITY	MARKET PRICE MARKET VALUE	UNREALIZED GAIN/LOSS BOOK VALUE	% OF MV	MOODY'S S&P RATING
CITY OF ALISO VIEJO												
LGIP												
CALAIF	California LAIF	08/31/2026 08/31/2026	12,514,997.01	12,514,997.01 0.00	12,514,997.01	3.86		1	1.00 12,514,997.01	0.00 12,514,997.01	20.67	 NA
LGIP TOTAL			**12,514,997.01**	**12,514,997.01** **0.00**	**12,514,997.01**	**3.86**		**1**	**1.00** **12,514,997.01**	**0.00** **12,514,997.01**	**20.67**	**NA**
MONEY MARKET FUNDS												
31846V567	FIRST AMER:GVT OBLG;Z	08/31/2026 08/31/2026	92,555.45	92,555.45 0.00	92,555.45	3.56		1	1.00 92,555.45	0.00 92,555.45	0.15	Aaa AAA
MONEY MARKET FUNDS TOTAL			**92,555.45**	**92,555.45** **0.00**	**92,555.45**	**3.56**		**1**	**1.00** **92,555.45**	**0.00** **92,555.45**	**0.15**	**AAA**
COMMERCIAL PAPER												
62479MJJ3	MUFG BANK NY 09/18/26	04/13/2026 04/13/2026	1,005,000.00	988,018.29 0.00	988,018.29	3.92	09/18/2026	18	99.82 1,003,172.85	15,154.56 988,018.29	1.66	P-1 A-1
22533UK69	CREDIT AGRI NY 10/06/26	01/09/2026 01/09/2026	1,300,000.00	1,264,022.50 0.00	1,264,022.50	3.80	10/06/2026	36	99.64 1,295,336.25	31,313.75 1,264,022.50	2.14	P-1 A-1
8923A1ND9	TOYO CRD PUE RIC 01/13/27	05/08/2026 05/11/2026	1,500,000.00	1,461,303.33 0.00	1,461,303.33	3.86	01/13/2027	135	98.60 1,479,006.67	17,703.34 1,461,303.33	2.44	P-1 A-1+
53948BNS4	LLOYDS BK NY BR 01/26/27	05/08/2026 05/11/2026	1,500,000.00	1,458,400.01 0.00	1,458,400.01	3.95	01/26/2027	148	98.43 1,476,480.00	18,079.99 1,458,400.01	2.44	P-1 A-1
COMMERCIAL PAPER TOTAL			**5,305,000.00**	**5,171,744.13** **0.00**	**5,171,744.13**	**3.88**		**92**	**99.04** **5,253,995.77**	**82,251.64** **5,171,744.13**	**8.68**	**AA-**
U.S. TREASURIES												
91282CJP7	US TREASURY 4.375 12/15/26	05/06/2025 05/08/2025	1,000,000.00	1,007,695.31 0.00	1,007,695.31	3.87	12/15/2026	106	100.14 1,001,367.19	(6,328.12) 1,007,695.31	1.65	Aa1 AA+
91282CJT9	US TREASURY 4.000 01/15/27	01/22/2024 01/22/2024	1,000,000.00	996,718.75 0.00	996,718.75	4.12	01/15/2027	137	100.03 1,000,312.50	3,593.75 996,718.75	1.65	Aa1 AA+
912828X88	US TREASURY 2.375 05/15/27	06/29/2022 06/29/2022	1,000,000.00	962,851.56 0.00	962,851.56	3.20	05/15/2027	257	98.79 987,851.56	25,000.00 962,851.56	1.63	Aa1 AA+
9128282R0	US TREASURY 2.250 08/15/27	01/13/2023 01/13/2023	1,050,000.00	990,322.27 0.00	990,322.27	3.60	08/15/2027	349	98.16 1,030,681.64	40,359.37 990,322.27	1.70	Aa1 AA+
9128284N7	US TREASURY 2.875 05/15/28	09/18/2024 09/19/2024	1,000,000.00	979,882.81 0.00	979,882.81	3.47	05/15/2028	623	97.63 976,328.13	(3,554.68) 979,882.81	1.61	Aa1 AA+
91282CCR0	US TREASURY 1.000 07/31/28	09/18/2024 09/19/2024	1,000,000.00	910,507.81 0.00	910,507.81	3.50	07/31/2028	700	93.91 939,140.63	28,632.82 910,507.81	1.55	Aa1 AA+
91282CCV1	US TREASURY 1.125 08/31/28	12/21/2023 12/21/2023	1,000,000.00	878,750.00 0.00	878,750.00	3.98	08/31/2028	731	93.90 938,984.38	60,234.38 878,750.00	1.55	Aa1 AA+
91282CDF5	US TREASURY 1.375 10/31/28	12/21/2023 12/21/2023	1,500,000.00	1,328,906.25 0.00	1,328,906.25	3.98	10/31/2028	792	93.89 1,408,359.38	79,453.13 1,328,906.25	2.33	Aa1 AA+
91282CJR3	US TREASURY 3.750 12/31/28	01/22/2024 01/22/2024	1,000,000.00	987,695.31 0.00	987,695.31	4.03	12/31/2028	853	98.63 986,250.00	(1,445.31) 987,695.31	1.63	Aa1 AA+

MEEDER PUBLIC FUNDS

Position Statement

CUSIP	DESCRIPTION	TRADE DATE SETTLE DATE	PAR VALUE	PRINCIPAL COST PURCHASED INTEREST	TOTAL COST	YIELD TO MATURITY	MATURITY DATE	DAYS TO MATURITY	MARKET PRICE MARKET VALUE	UNREALIZED GAIN/LOSS BOOK VALUE	% OF MV	MOODY'S S&P RATING
9128286T2	US TREASURY 2.375 05/15/29	11/17/2025 11/18/2025	700,000.00	671,179.69 0.00	671,179.69	3.64	05/15/2029	988	94.90 664,289.07	(6,890.62) 671,179.69	1.10	Aa1 AA+
91282CLC3	US TREASURY 4.000 07/31/29	07/14/2025 07/15/2025	1,000,000.00	1,002,304.69 0.00	1,002,304.69	3.94	07/31/2029	1,065	98.90 988,984.38	(13,320.31) 1,002,304.69	1.63	Aa1 AA+
91282CLR0	US TREASURY 4.125 10/31/29	11/25/2024 11/26/2024	1,000,000.00	996,445.31 0.00	996,445.31	4.21	10/31/2029	1,157	99.13 991,250.00	(5,195.31) 996,445.31	1.64	Aa1 AA+
91282CGB1	US TREASURY 3.875 12/31/29	02/07/2025 02/10/2025	1,000,000.00	978,828.13 0.00	978,828.13	4.36	12/31/2029	1,218	98.27 982,734.38	3,906.25 978,828.13	1.62	Aa1 AA+
91282CMG3	US TREASURY 4.250 01/31/30	05/06/2025 05/08/2025	1,000,000.00	1,015,507.81 0.00	1,015,507.81	3.89	01/31/2030	1,249	99.41 994,062.50	(21,445.31) 1,015,507.81	1.64	Aa1 AA+
91282CGS4	US TREASURY 3.625 03/31/30	11/18/2025 11/19/2025	700,000.00	698,851.56 0.00	698,851.56	3.67	03/31/2030	1,308	97.30 681,078.13	(17,773.44) 698,851.56	1.12	Aa1 AA+
91282CMZ1	US TREASURY 3.875 04/30/30	05/06/2025 05/08/2025	1,000,000.00	998,867.19 0.00	998,867.19	3.90	04/30/2030	1,338	98.09 980,937.50	(17,929.69) 998,867.19	1.62	Aa1 AA+
91282CNK3	US TREASURY 3.875 06/30/30	10/20/2025 10/21/2025	600,000.00	607,898.44 0.00	607,898.44	3.57	06/30/2030	1,399	97.98 587,859.38	(20,039.06) 607,898.44	0.97	Aa1 AA+
91282CPN5	US TREASURY 3.500 11/30/30	02/13/2026 02/17/2026	500,000.00	497,382.81 0.00	497,382.81	3.62	11/30/2030	1,552	96.24 481,210.94	(16,171.87) 497,382.81	0.79	Aa1 AA+
91282CJQ5	US TREASURY 3.750 12/31/30	02/02/2026 02/03/2026	600,000.00	597,843.75 0.00	597,843.75	3.83	12/31/2030	1,583	97.14 582,843.75	(15,000.00) 597,843.75	0.96	Aa1 AA+
91282CPW5	US TREASURY 3.750 01/31/31	06/01/2026 06/02/2026	200,000.00	196,367.19 0.00	196,367.19	4.18	01/31/2031	1,614	97.09 194,187.50	(2,179.69) 196,367.19	0.32	Aa1 AA+
91282CPW5	US TREASURY 3.750 01/31/31	02/02/2026 02/03/2026	600,000.00	597,867.19 0.00	597,867.19	3.83	01/31/2031	1,614	97.09 582,562.50	(15,304.69) 597,867.19	0.96	Aa1 AA+
91282CQD6	US TREASURY 3.500 02/28/31	04/16/2026 04/17/2026	625,000.00	613,793.95 0.00	613,793.95	3.91	02/28/2031	1,642	96.06 600,390.63	(13,403.33) 613,793.95	0.99	Aa1 AA+
91282CQU8	US TREASURY 4.125 05/31/31	06/10/2026 06/11/2026	1,500,000.00	1,490,976.56 1,859.63	1,492,836.19	4.26	05/31/2031	1,734	98.45 1,476,796.88	(14,179.69) 1,490,976.56	2.44	Aa1 AA+
91282CRA1	US TREASURY 4.375 07/31/31	07/28/2026 07/31/2026	1,175,000.00	1,175,963.87 0.00	1,175,963.87	4.36	07/31/2031	1,795	99.48 1,168,849.62	(7,114.25) 1,175,963.87	1.93	Aa1 AA+
U.S. TREASURIES TOTAL			**21,750,000.00**	**21,183,408.21 1,859.63**	**21,185,267.84**	**3.89**		**1,020**	**97.64 21,227,312.54**	**43,904.33 21,183,408.21**	**35.06**	**AA+**
U.S. AGENCIES												
880591EU2	TVA 2.875 02/01/27	05/06/2025 05/08/2025	1,000,000.00	983,560.00 0.00	983,560.00	3.86	02/01/2027	154	99.51 995,060.00	11,500.00 983,560.00	1.64	Aa1 AA+
3130ASD63	FHLBANKS 3.250 06/28/27	06/28/2022 06/28/2022	1,000,000.00	1,000,000.00 0.00	1,000,000.00	3.25	06/28/2027	301	99.09 990,890.00	(9,110.00) 1,000,000.00	1.64	Aa1 AA+
3133EPAU9	FED FARM CR BNKS 3.875 07/14/27	02/16/2023 02/16/2023	1,000,000.00	990,390.00 0.00	990,390.00	4.12	07/14/2027	317	99.67 996,650.00	6,260.00 990,390.00	1.65	Aa1 AA+
3133EWGK0	FED FARM CR BNKS 3.630 03/09/28 '27	07/01/2026 07/02/2026	1,150,000.00	1,138,902.50 13,103.29	1,152,005.79	4.23	03/09/2028	556	98.82 1,136,418.50	(2,484.00) 1,138,902.50	1.88	Aa1 AA+
3130AMX98	FHLBANKS 2.000 06/30/28	07/10/2025 07/11/2025	1,000,000.00	947,446.00 0.00	947,446.00	3.89	06/30/2028	669	95.67 956,680.00	9,234.00 947,446.00	1.58	Aa1 AA+
3133EMSX1	FED FARM CR BNKS 1.550 03/15/29 '26	02/06/2025 02/07/2025	500,000.00	447,120.00 0.00	447,120.00	4.39	03/15/2029	927	92.72 463,590.00	16,470.00 447,120.00	0.77	Aa1 AA+

MEEDER PUBLIC FUNDS

Position Statement

CUSIP	DESCRIPTION	TRADE DATE SETTLE DATE	PAR VALUE	PRINCIPAL COST PURCHASED INTEREST	TOTAL COST	YIELD TO MATURITY	MATURITY DATE	DAYS TO MATURITY	MARKET PRICE MARKET VALUE	UNREALIZED GAIN/LOSS BOOK VALUE	% OF MV	MOODY'S S&P RATING
3130B2GZ2	FHLBANKS 4.200 08/13/29 '26	08/21/2024 08/23/2024	250,000.00	250,000.00 0.00	250,000.00	4.20	08/13/2029	1,078	98.48 246,207.50	(3,792.50) 250,000.00	0.41	Aa1 AA+
3133EL6D1	FED FARM CR BNKS 1.230 09/10/29 '26	02/06/2025 02/07/2025	500,000.00	434,525.00 0.00	434,525.00	4.41	09/10/2029	1,106	90.48 452,390.00	17,865.00 434,525.00	0.75	Aa1 AA+
880591FE7	TVA 3.875 08/01/30	09/18/2025 09/19/2025	800,000.00	804,848.00 0.00	804,848.00	3.74	08/01/2030	1,431	97.70 781,600.00	(23,248.00) 804,848.00	1.29	Aa1 AA+
U.S. AGENCIES TOTAL			**7,200,000.00**	**6,996,791.50 13,103.29**	**7,009,894.79**	**3.94**		**620**	**97.57 7,019,486.00**	**22,694.50 6,996,791.50**	**11.59**	**AA+**
NEGOTIABLE CD'S												
254673N44	CAPITL ONE NA 3.500 07/29/27	08/03/2022 08/03/2022	245,000.00	245,000.00 0.00	245,000.00	3.50	07/29/2027	332	98.86 242,213.68	(2,786.32) 245,000.00	0.40	NA NA
87164XN93	SYNCHRONY BANK 3.500 08/05/27	08/05/2022 08/05/2022	245,000.00	245,000.00 0.00	245,000.00	3.50	08/05/2027	339	99.35 243,407.50	(1,592.50) 245,000.00	0.40	NA NA
02589ADQ2	AM EX BK 3.450 08/10/27	08/12/2022 08/12/2022	245,000.00	243,775.00 0.00	243,775.00	3.56	08/10/2027	344	99.29 243,270.30	(504.70) 243,775.00	0.40	NA NA
58404DVV0	MEDALLION BANK 3.800 08/30/29	08/21/2024 08/30/2024	245,000.00	245,000.00 0.00	245,000.00	3.80	08/30/2029	1,095	100.00 245,000.00	0.00 245,000.00	0.40	NA NA
NEGOTIABLE CD'S TOTAL			**980,000.00**	**978,775.00 0.00**	**978,775.00**	**3.59**		**529**	**99.38 973,891.48**	**(4,883.52) 978,775.00**	**1.61**	**NA**
CORPORATE BONDS												
14913UAR1	CTRPLLR FIN SERV 4.400 10/15/27 MTN	11/25/2024 11/26/2024	500,000.00	498,865.00 0.00	498,865.00	4.48	10/15/2027	410	99.98 499,910.00	1,045.00 498,865.00	0.83	A1 A
69353RFG8	PNC BANK 3.100 10/25/27 '27 MTN	04/09/2026 04/10/2026	1,000,000.00	985,110.00 0.00	985,110.00	4.11	10/25/2027	420	98.49 984,900.00	(210.00) 985,110.00	1.63	A2 A
24422EWR6	JOHN DEERE CAP 4.750 01/20/28 MTN	11/25/2024 11/26/2024	500,000.00	504,235.00 0.00	504,235.00	4.46	01/20/2028	507	100.43 502,160.00	(2,075.00) 504,235.00	0.83	A1 A
023135DB9	AMAZON.COM 3.850 03/13/28	04/16/2026 04/17/2026	750,000.00	748,035.00 2,727.08	750,762.08	3.99	03/13/2028	560	99.06 742,950.00	(5,085.00) 748,035.00	1.23	A1 AA
931142FB4	WALMART 3.900 04/15/28 '28	11/25/2024 11/26/2024	325,000.00	320,619.00 0.00	320,619.00	4.33	04/15/2028	593	99.22 322,478.00	1,859.00 320,619.00	0.53	Aa2 AA
931142ES8	WALMART 1.500 09/22/28 '28	07/10/2025 07/11/2025	1,000,000.00	925,020.00 0.00	925,020.00	4.02	09/22/2028	753	94.32 943,230.00	18,210.00 925,020.00	1.56	Aa2 AA
14913UBD1	CTRPLLR FIN SERV 3.950 11/14/28 MTN	11/17/2025 11/18/2025	700,000.00	699,804.00 0.00	699,804.00	3.96	11/14/2028	806	98.58 690,053.00	(9,751.00) 699,804.00	1.14	A1 A
58933YBD6	MERCK & CO 1.900 12/10/28 '28	11/25/2024 11/26/2024	500,000.00	452,905.00 0.00	452,905.00	4.47	12/10/2028	832	94.32 471,605.00	18,700.00 452,905.00	0.78	Aa3 A+
17275RBR2	CISCO SYSTEMS 4.850 02/26/29 '29	11/01/2024 11/04/2024	500,000.00	506,060.00 0.00	506,060.00	4.53	02/26/2029	910	100.49 502,470.00	(3,590.00) 506,060.00	0.83	A1 AA-
023135CG9	AMAZON.COM 3.450 04/13/29 '29	11/01/2024 11/04/2024	500,000.00	481,580.00 0.00	481,580.00	4.37	04/13/2029	956	97.03 485,140.00	3,560.00 481,580.00	0.80	A1 AA
30303M8S4	META PLATFORMS 4.300 08/15/29 '29	11/01/2024 11/04/2024	500,000.00	496,070.00 0.00	496,070.00	4.48	08/15/2029	1,080	99.17 495,825.00	(245.00) 496,070.00	0.82	Aa3 AA-
857449AE2	STATE STR BK TR 4.782 11/23/29	11/25/2024 11/26/2024	500,000.00	502,115.00 0.00	502,115.00	4.69	11/23/2029	1,180	100.21 501,035.00	(1,080.00) 502,115.00	0.83	Aa2 AA-

MEEDER PUBLIC FUNDS

Position Statement

CUSIP	DESCRIPTION	TRADE DATE SETTLE DATE	PAR VALUE	PRINCIPAL COST PURCHASED INTEREST	TOTAL COST	YIELD TO MATURITY	MATURITY DATE	DAYS TO MATURITY	MARKET PRICE MARKET VALUE	UNREALIZED GAIN/LOSS BOOK VALUE	% OF MV	MOODY'S S&P RATING
713448GB8	PEPSICO 4.600 02/07/30 '30	02/05/2025 02/07/2025	500,000.00	499,160.00 0.00	499,160.00	4.64	02/07/2030	1,256	99.73 498,645.00	(515.00) 499,160.00	0.82	A1 A+
717081EY5	PFIZER 1.700 05/28/30 '30	08/21/2025 08/22/2025	625,000.00	556,418.75 0.00	556,418.75	4.27	05/28/2030	1,366	89.26 557,856.25	1,437.50 556,418.75	0.92	A2 A
713448GH5	PEPSICO 4.300 07/23/30 '30	08/21/2025 08/22/2025	625,000.00	626,756.25 0.00	626,756.25	4.24	07/23/2030	1,422	98.91 618,168.75	(8,587.50) 626,756.25	1.02	A1 A+
58933YBQ7	MERCK & CO 4.150 09/15/30 '30	09/22/2025 09/23/2025	800,000.00	803,696.00 0.00	803,696.00	4.05	09/15/2030	1,476	97.59 780,720.00	(22,976.00) 803,696.00	1.29	Aa3 A+
166756BJ4	CHEVRON USA 4.300 10/15/30 '30	10/20/2025 10/21/2025	500,000.00	506,945.00 0.00	506,945.00	3.98	10/15/2030	1,506	98.56 492,790.00	(14,155.00) 506,945.00	0.81	Aa2 AA-
02079KBK2	ALPHABET 4.100 02/15/31 '31	02/20/2026 02/23/2026	600,000.00	601,350.00 0.00	601,350.00	4.05	02/15/2031	1,629	96.68 580,104.00	(21,246.00) 601,350.00	0.96	Aa2 AA+
24422EYL7	JOHN DEERE CAP 4.200 03/10/31 MTN	03/09/2026 03/10/2026	1,000,000.00	1,004,170.00 0.00	1,004,170.00	4.11	03/10/2031	1,652	97.16 971,590.00	(32,580.00) 1,004,170.00	1.60	A1 A
30303MAF9	META PLATFORMS 4.550 05/15/31 '31	06/01/2026 06/02/2026	1,000,000.00	995,440.00 3,538.89	998,978.89	4.65	05/15/2031	1,718	97.73 977,290.00	(18,150.00) 995,440.00	1.61	Aa3 AA-
69371RU61	PACCAR 4.850 08/10/31 MTN	08/13/2026 08/14/2026	850,000.00	855,304.00 458.06	855,762.06	4.71	08/10/2031	1,805	99.76 847,917.50	(7,386.50) 855,304.00	1.40	A1 A+
CORPORATE BONDS TOTAL			**13,775,000.00**	**13,569,658.00 6,724.03**	**13,576,382.03**	**4.29**		**1,122**	**97.83 13,466,837.50**	**(102,820.50) 13,569,658.00**	**22.24**	**A+**
CITY OF ALISO VIEJO TOTAL			**61,617,552.46**	**60,507,929.30 21,686.95**	**60,529,616.25**	**3.97**		**696**	**60,549,075.75**	**41,146.45 60,507,929.30**	**100.00**	**AA-**
GRAND TOTAL			**61,617,552.46**	**60,507,929.30 21,686.95**	**60,529,616.25**	**3.97**		**696**	**60,549,075.75**	**41,146.45 60,507,929.30**	**100.00**	**AA-**

MEEDER PUBLIC FUNDS

Transaction Statement

CITY OF ALISO VIEJO

	TRADE DATE	SETTLE DATE	CUSIP	DESCRIPTION	PAR VALUE	PRINCIPAL COST	PURCHASED INTEREST	TOTAL	PURCHASE YIELD
BUY									
	08/13/2026	08/14/2026	69371RU61	PACCAR 4.850 08/10/31 MTN	850,000.00	855,304.00	458.06	(855,762.06)	4.71
BUY TOTAL					**850,000.00**	**855,304.00**	**458.06**	**(855,762.06)**	**4.71**

	TRADE DATE	SETTLE DATE	CUSIP	DESCRIPTION	PAR VALUE	BOOK VALUE	TOTAL	NET REALIZED GAIN/LOSS
MATURITY								
	08/04/2026	08/04/2026	02007GXG3	Ally Bank 3.45 08/04/2026	(245,000.00)	245,000.00	245,000.00	0.00
	08/11/2026	08/11/2026	38149MYB3	Goldman Sachs Bank USA 1.0 08/11/2026	(245,000.00)	245,000.00	245,000.00	0.00
	08/11/2026	08/11/2026	90348JR93	UBS Bank USA, National Association 0.95 08/11/2026	(245,000.00)	245,000.00	245,000.00	0.00
MATURITY TOTAL					**(735,000.00)**	**735,000.00**	**735,000.00**	**0.00**

Official website of the State of California

State of California
Office of the
State Treasurer

LAIF Monthly Statements

LAIF Monthly Statement

CITY OF ALISO VIEJO
DIRECTOR OF FINANCIAL SVCS/ CITY TREAS
12 JOURNEY, #100
ALISO VIEJO, CA 92656

LAIF Account #: 98-30-007
August 2026 Statement

Effective Date	TXN Date	TXN Type	Confirm Number	Web Confirm Number	Authorized Caller	Amount
8/5/2026	8/5/2026	RW	1805516	1766218	ANN EIFERT	-200,000.00
8/11/2026	8/11/2026	RW	1805722	1766436	ANN EIFERT	-200,000.00
8/27/2026	8/26/2026	RD	1806355	1767067	ANN EIFERT	2,000,000.00

Account Summary

Beginning Balance:	10,914,997.01
Total Deposit:	2,000,000.00
Total Withdrawal:	-400,000.00
Ending Balance:	12,514,997.01

PMIA/LAIF Performance Report as of 09/16/26

Quarterly Performance Quarter Ended 06/30/26

LAIF Apportionment Rate[2]:	3.92
LAIF Earnings Ratio[2]:	0.00010743238142967
LAIF Administrative Cost[1]*:	.22
LAIF Fair Value Factor[1]:	0.998872382
PMIA Daily[1]:	3.83
PMIA Quarter to Date[1]:	3.81
PMIA Average Life[1]:	269

PMIA Average Monthly Effective Yields[1]

August	**3.863**
July	3.840
June	3.816
May	3.810
April	3.811
March	3.826

Pooled Money Investment Account Monthly Portfolio Composition [1] 07/31/26 $179.8 billion

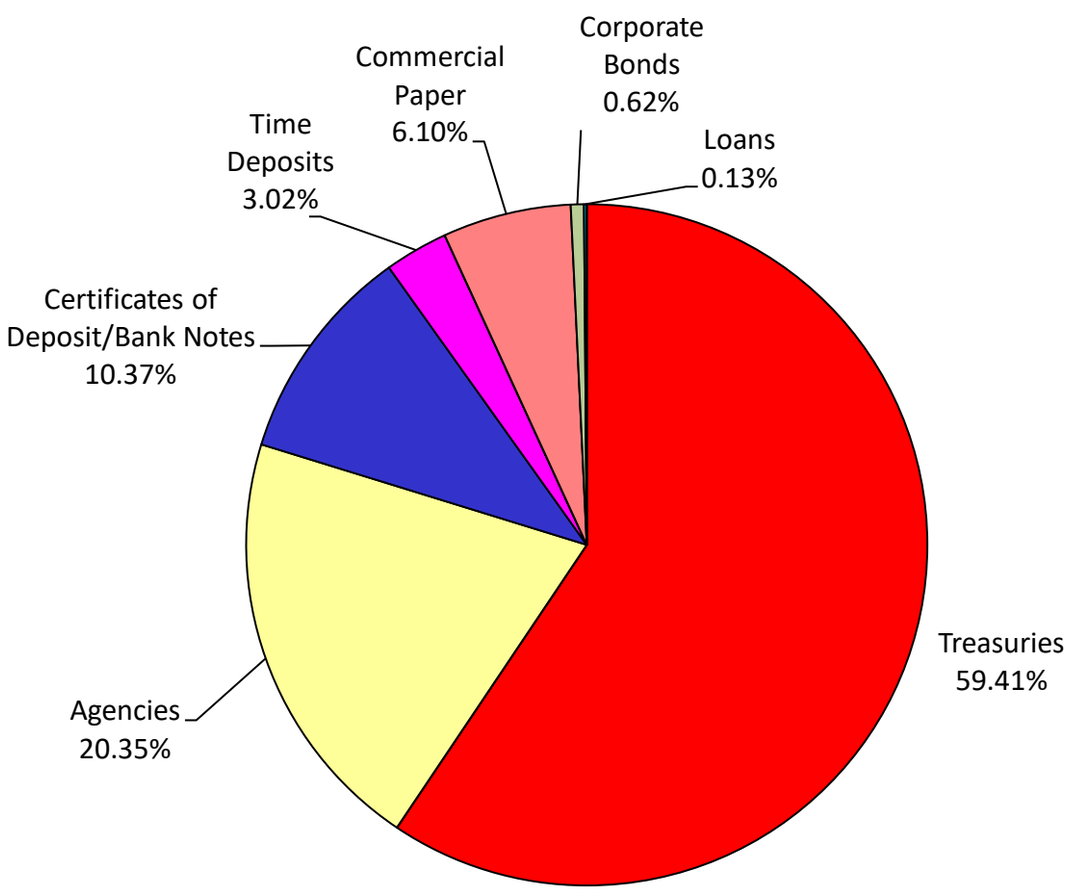


Chart does not include $722,000.00 in mortgages, which equates to 0.0004%. Percentages may not total 100% due to rounding.

Daily rates are now available here. **View PMIA Daily Rates**

Notes: The apportionment rate includes interest earned on the CalPERS Supplemental Pension Payment pursuant to Government Code 20825 (c)(1) .

**The percentage of administrative cost equals the total administrative cost divided by the quarterly interest earnings. The law provides that administrative costs are not to exceed 5% of quarterly EARNINGS of the fund. However, if the 13-week Daily Treasury Bill Rate on the last day of the fiscal year is below 1%, then administrative costs shall not exceed 8% of quarterly EARNINGS of the fund for the subsequent fiscal year.*

Source:
[1] State of California, Office of the Treasurer
[2] State of California, Office of the Controller

City of Aliso Viejo
AGENDA ITEM

DATE: October 21, 2026

TO: Mayor and City Council

FROM: Maria Kendig, Director of Government Services/City Clerk

SUBJECT: SECOND READING AND ADOPTION OF AN ORDINANCE APPROVING A ZONE CHANGE FROM BUSINESS PARK 2 TO MEDIUM DENSITY RESIDENTIAL DISTRICT FOR PROPERTY LOCATED AT 15 ARGONAUT

Recommended Action:

Conduct a second reading and adopt an Ordinance entitled:

> ORDINANCE NO. 2026-255: AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ALISO VIEJO, CALIFORNIA, APPROVING A ZONE CHANGE FROM BUSINESS PARK 2 TO MEDIUM DENSITY RESIDENTIAL DISTRICT FOR THE DEVELOPMENT OF A 58-UNIT RESIDENTIAL TOWNHOME COMMUNITY LOCATED AT 15 ARGONAUT (623-093-10 AND 623-093-11)

Fiscal Impact:

None.

Discussion:

On October 7, 2026, the City Council approved the introduction and first reading of Ordinance No. 2026-255 by a 5-0 vote. The Council is now being asked to conduct the second reading and consider adoption of the Ordinance approving a zone change for the property at 15 Argonaut.

The proposed zone change would change the zoning designation of the two parcels at 15 Argonaut from Business Park 2 to Medium Density Residential District. The change is associated with the proposed Presidio at Pacific Park project, which would replace an existing office building with a 58-unit townhome community in 10 buildings. The project description identifies three units restricted to very low-income households, enclosed two-car garages for the homes, 24 guest parking spaces, and common landscaped areas that include barbecue and seating areas and a dog park. The project also proposes to preserve the existing landscaped slopes along Glenwood Drive and Aliso Creek Road. Additional project information and plans are available on the City's 15 Argonaut project webpage: https://avcity.org/426/15-Argonaut.

A zone change amends the zoning designation that applies to a property and determines the land uses allowed under the City's zoning regulations. If adopted, this Ordinance would change the zoning designation for the subject property from Business Park 2 to Medium Density Residential District. The Ordinance concerns the zone change; please refer to the City's project webpage and the other applicable project documents for additional information about the proposed development.

The ordinance summary was posted on the City's Legal Notices webpage (https://avcity.org/299/Legal-Notices) and published in the Laguna Niguel News on October 15, 2026.

If adopted, the Ordinance will take effect 30 days after adoption. This item is limited to the second reading and adoption of the zone-change Ordinance. The recommended action is to adopt the Ordinance as presented.

Attachment:

Proposed Ordinance

ORDINANCE NO. 2026-255

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ALISO VIEJO, CALIFORNIA, APPROVING A ZONE CHANGE FROM BUSINESS PARK 2 TO MEDIUM DENSITY RESIDENTIAL DISTRICT FOR THE DEVELOPMENT OF A 58-UNIT RESIDENTIAL TOWNHOME COMMUNITY LOCATED AT 15 ARGONAUT (623-093-10 AND 623-093-11)

WHEREAS, on April 15, 2026, Brandywine Acquisition Group, LLC. ("Applicant") submitted a general plan amendment, zone change, vesting tentative tract map, site development permit, and a development agreement application to demolish an existing office building and accommodate the construction of a multi-family residential community at 15 Argonaut ("Project");

WHEREAS, pursuant to section 21067 of the Public Resources Code, and section 15367 of the State CEQA Guidelines (Cal. Code Regs., tit. 14, § 15000 et seq.), the City is the lead agency for the proposed Project and has prepared an Initial Study/Mitigated Negative Declaration (SCH #2026080753) ("IS/MND") and a Mitigation Monitoring and Reporting Program ("MMRP") for the Project;

WHEREAS, on October 7, 2026, the City Council held a duly noticed public hearing to receive and consider public testimony and evidence regarding the Project;

WHEREAS, on September 15, 2026, the City gave public notice of the City Council public hearing for consideration of Mitigated Negative Declaration CEQA-2026-01004, General Plan Amendment GPA-2026-01002, Zone Change ZC-2026-00001, Vesting Tentative Tract Map 19489, Site Development Permit SDP-2026-01001 and Development Agreement DA-2026-01002 for the Project by publishing in a newspaper of general circulation; by posting notices at City Hall and the Project site; and by mailing notices to owners of property within 300 feet, to the project applicant, and to local agencies that provide water, sewage, electricity and schools;

WHEREAS, on October 7, 2026, the City Council held a duly noticed public hearing as prescribed by law and considered written and verbal public testimony that was submitted prior to the hearing and during the hearing, and evidence and recommendations presented by staff in the agenda report and oral presentation and introduced the Ordinance; and

WHEREAS, all legal prerequisites to the adoption of this Ordinance have occurred.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF ALISO VIEJO DOES ORDAIN AS FOLLOWS:

Section 1. **Incorporation of Recitals.** The City Council hereby finds and determines that all of the recitals set forth above are true and correct. The above recitals are hereby incorporated as substantive findings of this Ordinance.

Section 2. **CEQA.** Pursuant to the California Environmental Quality Act (Public Resources Code, § 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations, title 14, § 15000 et seq.) (Collectively, "CEQA"), the City Council adopted Resolution No.2026-27, determining that there is no substantial evidence that the approval of the Project would result in a significant adverse effect on the environment, provided appropriate mitigation measures, as identified in the MMRP, are imposed on the Project;

Section 3. **Findings for Zone Change ZC-2026-00001**. Pursuant to AVMC 15.78.040 (Zone Change and Prezoning), the City Council hereby makes the following findings of fact and approves the Zone Change ZC-2026-00001 from Business Park 2 to Medium Density Residential, as set forth in Exhibit "A", which is attached hereto and incorporated herein by reference.

1. Public Welfare. Approval of the zone change will not create conditions materially detrimental to the public health, safety and general welfare. While the Site is located within a larger business park area, it is situated in proximity to the recently approved 95 Argonaut residential development, which also involved the redevelopment of a business park use for residential use. Similar to 95 Argonaut, the proposed Project would introduce a three-story attached townhome development at a scale compatible with existing residential neighborhoods that are located directly north of the Site across Glenwood Drive, including both multi-family and single-family residential development. The proposed Project incorporates similar architectural features as 95 Argonaut and adjacent residential communities such as stucco exteriors, tile roofs, wrought-iron balconies, recessed entries, and shared open-space areas. As proposed, the Project incorporates architectural and site design elements that are generally consistent with the character of nearby residential development and would provide a transition between the surrounding residential neighborhoods and the remaining business park uses in the area. Both projects feature multi-story attached residential units with comparable architectural character, private garages, guest parking, landscaped common open space, and enhanced site entries. Additionally, the Site is situated in an area with established infrastructure, including roads, utilities, and public services, that can adequately support residential development. As part of the environmental assessment, the Project required comprehensive studies addressing air quality, energy, greenhouse gas emissions, biological resources, cultural resources, geotechnical conditions, hydrology and water quality, noise, and transportation impacts. As discussed further in the Environmental Assessment section below, these studies concluded that the Project would result in less-than-significant impacts with the implementation of proposed mitigation measures. The Project plans also cleared preliminary review by the Orange County Fire Authority (OCFA). Furthermore, the Project aligns with the City's housing goals by facilitating the development of new

housing opportunities. Future construction on the Site will be subject to plan check review and inspection process to ensure full compliance with applicable building and safety standards.

2. General Plan Consistency. The amendment is internally consistent with those goals, objectives, and policies of the general plan that are not being amended. The proposed amendment is consistent with the goals and policies of the General Plan listed below in that it incorporates landscaping aligned with the City Council-approved plant palette, emphasizing low-water, drought-tolerant species; features building materials, colors, and architectural design that are compatible with the surrounding residential communities; public benefit fees ; proposes three affordable housing units restricted to very low-income households, thereby enhancing housing diversity and affordability; and introduces rezoning to facilitate residential development that includes affordable units in support of the City's housing objectives. In the General Plan, 'COS' refers to Conservation and Open Space policies, 'H' for Housing policies and goals, and 'LU' for Land Use policies.

   - Policy COS-1.2 Reduce the amount of water used for landscaping and increase use of native and low water plants. Maximize use of native, low-water plants for landscaping of areas adjacent to sidewalks or other impermeable surfaces.
   - Policy COS-4.2 Encourage and maintain high-quality architectural and landscaping designs that enhance or complement the community's visual character.
   - Policy COS-7.5 Ensure that new development provides park land and/or improvements at a fair share ratio, pursuant to the City's Parkland Ordinance.
   - Goal H-1: Encourage a diversity of housing types and provide affordability levels within Aliso Viejo to meet the needs of community residents.
   - Policy H-1.1 Identify sites appropriate for the development of a variety of housing types and price ranges to meet the needs of all socioeconomic segments of the community through the disbursement of affordable units in projects.
   - Policy H-1.2 Encourage through the use of density bonuses and rezoning to allow for residential development, development of affordable housing opportunities throughout the community, as well as development of housing for elderly and low- and moderate-income households near public transportation services.
   - Policy H-1.4 Ensure that a portion of future residential development is affordable to low- and very-low-income households by designating certain sites as having the potential to be used for residential uses.
   - Policy H-3.8 Review existing zoning policies and explore zoning changes to facilitate the development of affordable housing.
   - Policy LU-12.2 As a condition upon new development, require payment of park fees and/or dedication and provision of parkland, recreation facilities and/or multi-use trails that improve the public and private recreation system.

3. Land Use Compatibility. The zone change is compatible with the zoning and land use on nearby properties. The Site is located at the edge of a larger business park and directly across from established multi-family and single-family residential neighborhoods. The proposed project is similar to a recently approved development at 95 Argonaut project, which is located on the same street within the same business park area. Both projects involve the conversion of an office property to a residential townhome community and introduce a land use that is compatible with nearby residential neighborhoods. The adjacent multi-family development shares several characteristics with the Project, including large attached-unit buildings, stucco exteriors, tile roofing, wrought iron balconies, recessed entryways, and shared open space without private driveways. These similarities ensure architectural and functional continuity between the Project and existing residential uses. The proposed land use designation therefore complements the surrounding residential character.

4. Property Suitability. The zone change is suitable for the location, access, visual character and topography of the subject property. The property is located along established roadways with adequate vehicular and pedestrian access and is supported by existing infrastructure, including utilities and public services, sufficient to accommodate residential development. The Site is generally flat within the developed portion, with sloped areas adjacent to Glenwood Drive and Aliso Creek Road. The proposed Project would retain the existing slope, utilize existing access from Argonaut, and incorporate site improvements consistent with applicable engineering and design standards. The proposed residential development includes architectural, landscaping, and site design elements that are similar to those found in nearby residential communities north of the Site, including attached residential development across Glenwood Drive and also the recently approved residential townhomes at 95 Argonaut. In addition, the Site is located between existing residential neighborhoods and surrounding business park uses, making it suitable for the proposed Medium Density Residential land use designation.

Section 4. **Severability.** If any provision of this Ordinance or its application to any person or circumstance is held to be invalid by a court of competent jurisdiction, such invalidity has no effect on the other provisions or applications of the Ordinance that can be given effect without the invalid provision or application, and to this extent, the provisions of this Ordinance are severable. The City Council declares that it would have adopted this Ordinance irrespective of the invalidity of any portion thereof.

Section 5. **Location of Documents.** The administrative record for the Project is maintained at City Hall located at 12 Journey, Suite 100, Aliso Viejo, CA 92656. The custodian of records is the City Clerk.

Section 6. **Effective Date.** This Zone Change Ordinance shall not take effect unless and until General Plan Amendment 2026-01002, Vesting Tentative Tract Map 19489, Site Development Permit SDP-2026-01001 and Development Agreement 2026-

01002 are each approved by the City Council and have become effective, and the associated Development Agreement is approved by the City Council and executed by both parties thereto.

Section 7. **City Clerk's Certification.** The City Clerk shall certify to the adoption of this Ordinance and cause a summary thereof to be published five days prior to the date of adoption of this Ordinance, and, within 15 days after adoption, the City Clerk shall cause to be published the aforementioned summary and shall post a certified copy of this Ordinance, together with the vote for and against the same, in the Office of the City Clerk.

PASSED, APPROVED AND ADOPTED this 21st day of October, 2026.

_____
Max Duncan
Mayor

APPROVED AS TO FORM:

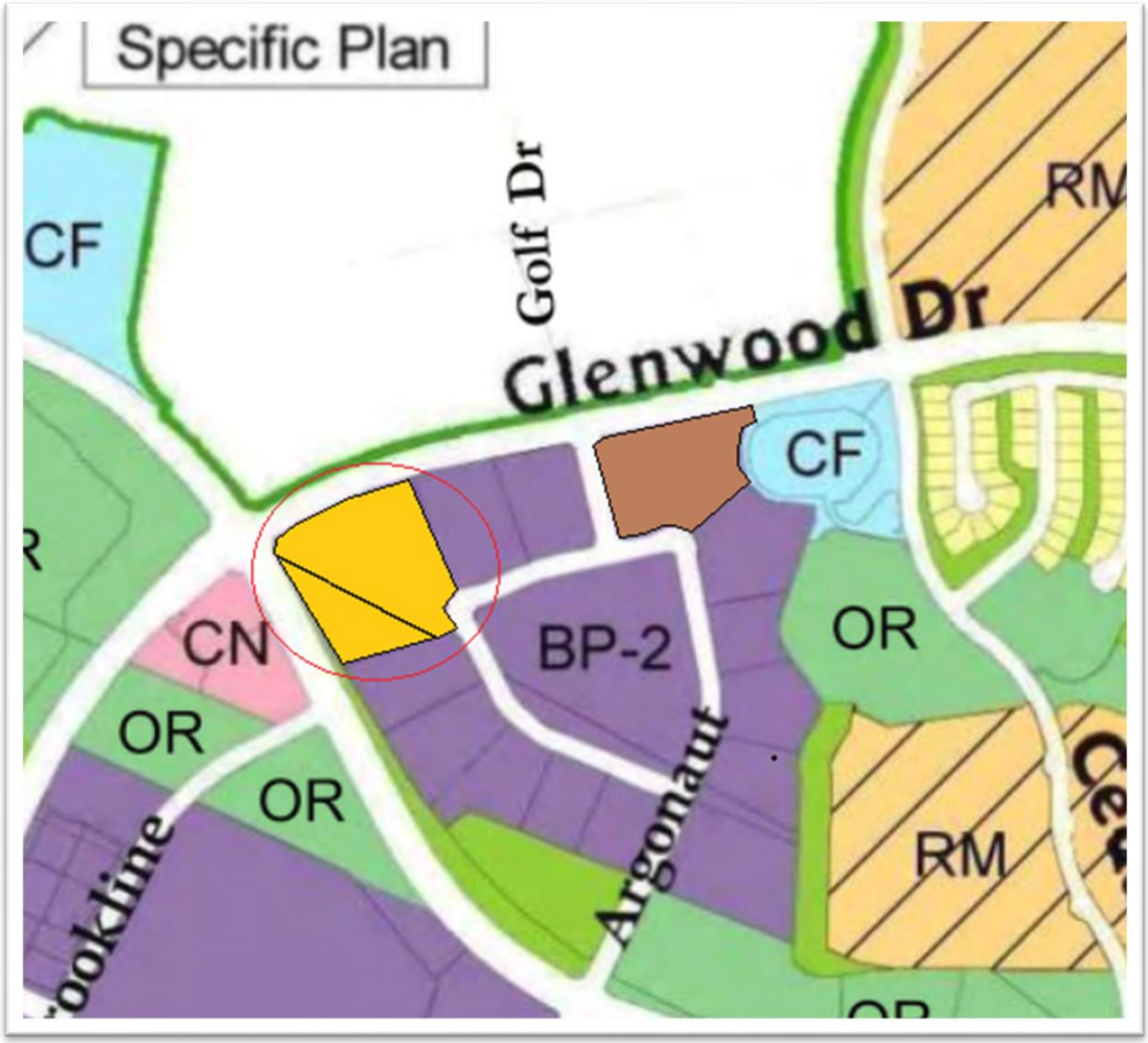
_____
Scott C. Smith,
City Attorney

ATTEST:

_____
Maria Kendig,
City Clerk

Exhibit "A"
Zone Change Map
Case No. ZC-2026-01001

Property Location – 15 Argonaut (see red-circled area below)
Existing Zoning District Designation – Business Park 2 ("BP-2")
Proposed Zoning District Designation – Medium Density Residential (Max. 18 units/acre) ("MDR")



City of Aliso Viejo
AGENDA ITEM

DATE: October 21, 2026

TO: Mayor and City Council

FROM: Maria Kendig, Director of Government Services/City Clerk

SUBJECT: SECOND READING AND ADOPTION OF AN ORDINANCE APPROVING A DEVELOPMENT AGREEMENT WITH BRANDYWINE HOMES FOR PROPERTY LOCATED AT 15 ARGONAUT

Recommended Action:

Conduct a second reading and adopt an Ordinance entitled:

> ORDINANCE NO. 2026-256: AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ALISO VIEJO, CALIFORNIA, APPROVING A DEVELOPMENT AGREEMENT BETWEEN THE CITY AND BRANDYWINE HOMES FOR THE DEVELOPMENT OF PRESIDIO AT PACIFIC PARK, A 58-UNIT RESIDENTIAL TOWNHOME COMMUNITY LOCATED AT 15 ARGONAUT (APN: 623-093-10 & 623-093-11)

Fiscal Impact:

None.

Discussion:

On October 7, 2026, the City Council approved the introduction and first reading of Ordinance No. 2026-256 by a 5-0 vote. The Council is now being asked to consider the second reading and adoption of the Ordinance approving a Development Agreement between the City and Brandywine Homes for Presidio at Pacific Park.

The proposed project at 15 Argonaut would replace an existing office building with a 58-unit townhome community in 10 buildings. The project description identifies three units restricted to very low-income households, enclosed two-car garages for the homes, 24 guest parking spaces, and common landscaped areas that include BBQ and seating areas and a dog park. The project also proposes to preserve the existing landscaped slopes along Glenwood Drive and Aliso Creek Road. Additional project information and plans are available on the City's 15 Argonaut project webpage: https://avcity.org/426/15-Argonaut.

A development agreement establishes contractual terms between the City and the project applicant for the development described in the agreement. The specific terms and obligations

are set out in the proposed agreement attached to the Ordinance. Councilmembers and the public should refer to the attachment for the complete agreement.

The ordinance summary was posted on the City's Legal Notices webpage (https://avcity.org/299/Legal-Notices) and published in the Laguna Niguel News on October 15, 2026.

If adopted, the Ordinance will take effect 30 days after adoption. This item is the second reading of the Ordinance; the recommended action is to adopt the Ordinance as presented.

Attachment:

Proposed Ordinance, including Development Agreement

ORDINANCE NO. 2026-256

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ALISO VIEJO, CALIFORNIA, APPROVING A DEVELOPMENT AGREEMENT BETWEEN THE CITY AND BRANDYWINE HOMES FOR THE DEVELOPMENT OF PRESIDIO AT PACIFIC PARK, A 58-UNIT RESIDENTIAL TOWNHOME COMMUNITY LOCATED AT 15 ARGONAUT (APN: 623-093-10 & 623-093-11)

WHEREAS, the City of Aliso Viejo ("City") has found that development agreements strengthen the public planning process, encourage private participation in comprehensive planning by providing a greater degree of certainty in that process, reduce the economic costs of development, allow for the orderly planning of public improvements and services, allocate costs to achieve maximum utilization of public and private resources in the development process, and ensure that appropriate measures to enhance and protect the environment are achieved;

WHEREAS, pursuant to California Government Code section 65864 et seq. and Aliso Viejo Municipal Code ("AVMC") section 15.82.010, the City is authorized to enter into development agreements providing for the development of land under terms and conditions set forth therein;

WHEREAS, on April 15, 2026, Brandywine Homes ("Applicant") submitted applications for a general plan amendment, zone change, vesting tentative tract map, site development permit, and a development agreement application to demolish an existing office building and construct the construction of a multi-family residential community at 15 Argonaut ("Project");

WHEREAS, because of the logistics, magnitude of the expenditure and considerable lead time prerequisite to planning and developing the Project, Developer has proposed to enter into a development agreement concerning the Project ("Development Agreement") to provide assurances that the Project can proceed without disruption caused by a change in the City's planning policies and requirements except as provided in the Development Agreement, which assurance will thereby reduce the actual or perceived risk of planning for and proceeding with development of the Project;

WHEREAS, the City Council has determined that by entering into the Development Agreement: (i) the City will promote orderly growth and quality development on the Property in accordance with the goals and policies set forth in the General Plan; and (ii) the Project will provide public benefits, including 58 for-sale homes, three units restricted to very low-income households, pedestrian walkways, landscaped open spaces, and recreational amenities;

WHEREAS, it is the intent of the City and Applicant to establish certain conditions and requirements related to review and development of the Project which are or will be the subject of subsequent development applications and land use entitlements for the Project as well as the Development Agreement;

WHEREAS, the City and Applicant have reached mutual agreement and desire to voluntarily enter into the Development Agreement to facilitate development of the Project subject to the conditions and requirements set forth therein;

WHEREAS, the Development Agreement contains, including, without limitation, property owner's vested right to complete development of the Project with governing land use regulations applicable at the time of approval; defines the scope of the Project; and identifies the public benefit obligations of the Applicant;

WHEREAS, the public benefits include, among other things, park in-lieu fees, as authorized by law and the City's ordinances, to rehabilitate and improve existing open space and recreational facilities in the City, including but not limited to, the Aquatic Center, Iglesia Community Center and Park, and the Ranch ("Facilities") in order to maintain the City's high standard of recreation and community services while accommodating a growing population, including future residents of the proposed subdivision;

WHEREAS, residents throughout the City regularly use the Facilities due to the variety of programs and services offered. Although the Facilities are located outside of the subdivision, future residents of the subdivision will undoubtedly use and benefit from use of the Facilities as well;

WHEREAS, on March 4, 2026, the City Council held a duly noticed public review to receive and provide initial feedback on concept plans for the Project;

WHEREAS, on September 15, 2026, the City gave public notice of the City Council public hearing for consideration of Mitigated Negative Declaration CEQA-2026-01004, General Plan Amendment GPA-2026-01002, Zone Change ZC-2026-00001, Vesting Tentative Tract Map 19489, Site Development Permit SDP-2026-01001 and Development Agreement DA-2026-01002 for the Project by publishing in a newspaper of general circulation; by posting notices at City Hall and the Project site; and by mailing notices to owners of property within 300 feet, to the project applicant, and to local agencies that provide water, sewage, electricity and schools;

WHEREAS, on October 7, 2026, the City Council held a duly noticed public hearing, discussed the parameters of the public benefit contributions of the Development Agreement;

WHEREAS, all legal prerequisites to the adoption of this Ordinance have occurred.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF ALISO VIEJO DOES ORDAIN AS FOLLOWS:

Section 1: **Incorporation of Recitals.** The City Council hereby finds and determines that all of the recitals set forth above are true and correct. The above recitals are hereby incorporated as substantive findings of this Ordinance.

Section 2. **CEQA.** Pursuant to the California Environmental Quality Act (Public Resources Code, § 21000 et seq.) and State CEQA Guidelines (California Code of Regulations, title 14, § 15000 et seq.) (collectively, "CEQA"), the City Council adopted Resolution No. 2026-27, adopting a Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program for the Project and determining that the Project, with implementation of the identified mitigation measures, will not have a significant effect on the environment.

Section 3. **Findings.** Pursuant to AVMC 15.82.010 (Development Agreement and Other Actions), the City Council determined that approving the Development Agreement is in the best interest of the City and for the common benefit of residents and hereby makes the following findings of fact and approves the Development Agreement between the City and the Applicant as set forth in Exhibit "A", which are attached hereto and incorporated herein by reference.

1. Public Welfare. The Project is consistent with the policies and regulations of the proposed Medium-Density Residential zoning district. The DA includes provisions to ensure compliance with applicable land use regulations, defines the scope of the Project, and identifies the public benefit obligations of the Applicant. The Project is compatible with the existing and recently approved multi-family and single-family communities in terms of layout, architectural style, materials, and open space; the site is served by existing infrastructure, including roads, utilities, and public services sufficient to support residential development; that the environmental assessment determined impacts would be less than significant with mitigation; the Project advances the City's housing goals by creating new housing opportunities; and future construction will be subject to plan check review and inspection to ensure compliance with all applicable building and safety standards.

    A. General Plan Consistency. The development agreement is consistent with the goals, objectives, and policies of the General Plan and any applicable specific plan. The Project is consistent with the goals and policies of the Conservation and Open Space (COS), Housing (H), and Land Use element (LU) listed below in that the Project promotes orderly growth, provides a compatible transition between non-residential and residential uses, supports housing objectives by creating new residential opportunities, and utilizes existing infrastructure in a manner consistent with the community's long-term vision and planning framework. The Project is also subject to mitigation measures and conditions of approval that address potential impacts related to traffic, noise, air quality, and emergency access. There is no applicable Specific Plan for the Project site.

- Policy COS-1.2 Reduce the amount of water used for landscaping and increase use of native and low water plants. Maximize use of native, low-water plants for landscaping of areas adjacent to sidewalks or other impermeable surfaces.
- Policy COS-4.2 Encourage and maintain high-quality architectural and landscaping designs that enhance or complement the community's visual character.
- Policy COS-7.5 Ensure that new development provides park land and/or improvements at a fair share ratio, pursuant to the City's Parkland Ordinance.
- Goal H-1: Encourage a diversity of housing types and provide affordability levels within Aliso Viejo to meet the needs of community residents.
- Policy H-1.1 Identify sites appropriate for the development of a variety of housing types and price ranges to meet the needs of all socioeconomic segments of the community through the disbursement of affordable units in projects.
- Policy H-1.2 Encourage through the use of density bonuses and rezoning to allow for residential development, development of affordable housing opportunities throughout the community, as well as development of housing for elderly and low- and moderate-income households near public transportation services.
- Policy H-1.4 Ensure that a portion of future residential development is affordable to low- and very-low-income households by designating certain sites as having the potential to be used for residential uses.
- Policy H-3.8 Review existing zoning policies and explore zoning changes to facilitate the development of affordable housing.
- Policy LU-12.2 As a condition upon new development, require payment of park fees and/or dedication and provision of parkland, recreation facilities and/or multi-use trails that improve the public and private recreation system.

Section 4. **Minor Modifications.** The City Council hereby approves the Development Agreement attached hereto as Exhibit "A" and authorizes the Community Development Director to make any further minor, non-substantive changes and modifications thereto.

Section 5. **Effective Date.** This Ordinance shall not take effect unless and until the General Plan Amendment GPA-2026-01002, Zone Change ZC-2026-01001, Vesting Tentative Tract Map 19489 and Site Development Permit SDP-2026-01001 and approvals under State Density Bonus Law for the Project are each approved by the City Council and have become effective, and the Development Agreement is executed by both parties.

Section 6. **Severability.** If any provision of this Ordinance or its application to any person or circumstance is held to be invalid by a court of competent jurisdiction, such invalidity has no effect on the other provisions or applications of the Ordinance that can be given effect without the invalid provision or application, and to this extent, the

provisions of this Ordinance are severable. The City Council declares that it would have adopted this Ordinance irrespective of the invalidity of any portion thereof.

Section 7. **City Clerk's Certification.** The City Clerk shall certify to the adoption of this Ordinance and cause a summary thereof to be published five days prior to the date of adoption of this Ordinance, and, within 15 days after adoption, the City Clerk shall cause to be published the aforementioned summary and shall post a certified copy of this Ordinance, together with the vote for and against the same, in the Office of the City Clerk.

Section 8. The Mayor, City Manager, and City Clerk, or their designees, are authorized to take such actions as may be necessary to effect the execution, recordation, and enforcement of this Ordinance and the Development Agreement.

PASSED, APPROVED AND ADOPTED this 21st day of October, 2026.

_____
Max Duncan
Mayor

APPROVED AS TO FORM:

_____
Scott C. Smith,
City Attorney

ATTEST:

_____
Maria Kendig,
City Clerk

Exhibit “A”
Development Agreement

RECORDED AT REQUEST OF
AND WHEN RECORDED RETURN TO:

City of Aliso Viejo
12 Journey, Suite 100
Aliso Viejo, CA 92656-5335
Attn: City Manager

Fee Exempt - Gov't Code §6103

(Space above for Recorder's Use)

DEVELOPMENT AGREEMENT

between

THE CITY OF ALISO VIEJO,
a California municipal corporation

and

BRANDYWINE ACQUISITION GROUP, LLC.

THIS DEVELOPMENT AGREEMENT ("Agreement") is entered into by and between THE CITY OF ALISO VIEJO, a California municipal corporation ("City"), and BRANDYWINE ACQUISITION GROUP, LLC. ("Owner") with reference to the following facts:

RECITALS.

A. To strengthen the public planning process, encourage private participation in comprehensive planning and reduce the economic risk of development, the Legislature of the State of California adopted the "Development Agreement Statute," Sections 65864 et seq., of the Government Code. City, a general law city, is authorized by the Development Agreement Statute to enter into development agreements with persons and entities having legal or equitable interests in real property for the purpose of establishing predictability for both City and the property owner in the development process. Owner has requested that City enter into a development agreement for the development of the Property, as defined below. City enters into this Agreement pursuant to the provisions of the California Government Code, the City's General Plan, the City Municipal Code, and applicable City policies.

B. Owner has a legal or equitable interest in that certain real property consisting of approximately 4.4 acres of land located in the City of Aliso Viejo, County of Orange, State of California, more particularly described in Exhibit "A" (the "Property"). Owner desires to develop the Property for residential uses of 58 for-sale residential Units, including 55 for sale market-rate units and three (3) affordable for-sale units, as further described herein.

C. This Agreement is intended to ensure that Owner has provided funding sufficient to provide the adequate and appropriate public recreational facilities and services required by the development of the Property.

D. This Agreement also assures that the development will assist the City in meeting its goals for the provisions of affordable housing by contributing to the City's affordable housing stock.

E. This Agreement further assures that development of the Property may occur in accordance with City's General Plan, as amended by the General Plan Amendment and Zone Change. The development of the Property pursuant to the Existing Land Use Regulations, this Agreement, the Subsequent Land Use Regulations to which Owner has consented in writing, and Subsequent Development Approvals (as each of those terms and phrases is defined within this Agreement) shall be referred to as the "Development Plan."

F. This Agreement constitutes a current exercise of City's police powers to provide predictability to Owner in the development approval process by vesting the permitted use, density, intensity of use, and timing and phasing of development consistent with the Development Plan in exchange for Owner's commitment to provide significant public benefits to City (the "Public Benefits") as set forth in Section 9.

G. The provision by Owner of the Public Benefits allows the City to realize significant economic, recreational, park, open space, educational, social, and public facilities benefits. The Public Benefits will advance the interests and meet the needs of Aliso Viejo's residents and visitors.

H. In return for Owner's participation and commitment to these significant contributions of private resources for public purposes, City is willing to exercise its authority to enter into this Agreement and to make a commitment of predictability for the development process for the Property. Absent City's willingness to make such a commitment, Owner would be unwilling to enter into this Agreement or make the significant investment of resources identified in this Agreement.

AGREEMENT

City and Owner agree as follows:

1. INTEREST OF OWNER. Owner represents that it has a legal or equitable interest in the Property and is authorized to enter into this Agreement.

2. PUBLIC HEARINGS.

   2.1 On October 7, 2026, after providing notice as required by law, the City Council held a public hearing on this Agreement and made the findings set forth in Section 3.

3. CITY COUNCIL FINDINGS. The City Council finds that:

   3.1 Subject to the approval of the General Plan Amendment and Zone Change becoming effective on or before the Effective Date, this Agreement is consistent with City's General Plan.

   3.2 This Agreement ensures a desirable and functional community environment, provides effective and efficient development of public facilities, infrastructure, and services appropriate for the development of the Project, enhances effective utilization of resources within the City, provides assurances to the developer in an effort to control the cost of housing and development to the consumer, and provides other significant benefits to the City and its residents.

   3.3 This Agreement provides public benefits beyond those which are necessary to mitigate the development of the Project.

   3.4 This Agreement strengthens the public planning process, encourages private participation in comprehensive planning, particularly with respect to the implementation of the City's General Plan, and reduces the economic costs of development and government.

3.5 The best interests of the citizens of the City and the public health, safety, and welfare will be served by entering into this Agreement.

4. CONTINUING OBLIGATIONS. This Agreement binds the City now and in the future. By approving this Agreement, the City Council has elected to exercise certain governmental powers at the time of entering into this Agreement rather than deferring its actions to some undetermined future date. The terms and conditions of this Agreement have undergone extensive review by the City staff and the City Council and have been found to be fair, just, and reasonable. City has concluded that the Project will serve the best interests of its citizens and that the public health, safety, and welfare will be best served by entering into this Agreement.

5. DEFINITIONS. In this Agreement, unless the context otherwise requires, the following terms and phrases shall have the following meanings:

5.1 "Agreement" shall mean this Development Agreement between the City and Owner. The term "Agreement" shall include any amendment properly approved and executed pursuant to Section 7.5.

5.2 "Approval Date" means the date on which the City Council conducted the second reading of the ordinance adopting this Agreement. That date is October 21, 2026.

5.3 "City" shall mean the City of Aliso Viejo, a California municipal corporation.

5.4 "City Council" shall mean the governing body of the City.

5.5 "City Municipal Code" shall mean the Aliso Viejo Municipal Code. However, changes to the Aliso Viejo Municipal Code occurring between the Approval Date and the Effective Date shall not be considered part of the City Municipal Code for purposes of this Agreement without Owner's prior written consent.

5.6 "Day" refers to a calendar day unless specifically stated as a "business day."

5.7 "Default" shall refer to a Major Default or Minor Default as defined herein.

5.8 "Development" shall mean the improvement of the Property for the purposes of completing the structures, improvements, and facilities comprising the Project including, but not limited to: grading; the construction of infrastructure and private facilities related to the Project whether located within or outside the Property; the construction of buildings and structures; the installation of landscaping; and other improvements.

5.9 "Development Approvals" shall mean all permits and other entitlements approved or issued by the City for the use of, construction upon, and/or development of the Property. For the purposes of this Agreement,

Development Approvals shall be deemed to include, but are not limited to, the following actions, including revisions, addenda, amendments, and modifications to these actions:

a. this Agreement;

b. amendments to this Agreement;

c. amendments to the General Plan;

d. tentative and final subdivision and tract maps;

e. site development permit;

f. zoning;

g. grading and building permits;

h. certificates of compliance;

i. street, drainage, utility, stormwater, and landscape permits;

j. occupancy permits; and

k. environmental review documents for the Project.

5.10 "Development Impact Fees" shall mean all fees established and imposed upon the Project by the City and this Agreement.

5.11 "Development Plan" means the Existing Land Use Regulations, the Development Approvals, this Agreement, the Subsequent Land Use Regulations to which Owner has consented in writing, and Subsequent Development Approvals.

5.12 "Effective Date" shall mean the later of: (i) date the ordinance adopting this Agreement becomes effective; or (ii) expiration of the period provided by applicable law, including but not limited to Government Code Section 65009, for challenging the General Plan Amendment and/or the Zone Change.

5.13 "Existing Land Use Regulations" means all Land Use Regulations in effect on the Effective Date, including the General Plan Amendment and Zone Change (including the number of Units approved for the Project by the General Plan Amendment). However, changes to Land Use and Zoning Regulations occurring between the Approval Date and the Effective Date shall not be considered part of the Existing Land Use or Zoning Regulations without Owner's prior written consent. Owner has consented to the General

Plan Amendment and Zone Change, which shall be considered part of the Existing Land Use and Zoning Regulations.

5.14 "Final Map" refers to the final map which may be filed with respect to any Tentative Map, including the First Tentative Map, as set forth in Section 66456 et seq. of the Subdivision Map Act.

5.15 "First Tentative Map" shall mean the first Tentative Map for the Project which is approved by the City prior to or concurrent with the Effective Date of this Agreement. Owner may submit more than one Tentative Map to be considered concurrently as the First Tentative Map.

5.16 "First Tentative Map Submittal Package" shall mean the package of materials to be submitted with the Owner's application for the First Tentative Map, which shall include the site development permit for the Project.

5.17 "General Plan" shall mean the general plan of the City.

5.18 "General Plan Amendment" shall refer to the amendment of the City's General Plan on October 7, 2026, for the Property. A copy of the General Plan Amendment is attached as Exhibit "B".

5.19 "Implementing Agreement" refers to any agreement entered into by Owner and the City for the implementation of obligations established in this Agreement.

5.20 "Land Use Regulations" shall mean all ordinances, resolutions, codes, rules, regulations and official policies of the City governing the development and use of land, including, without limitation, the permitted use of land, the density or intensity of use, subdivision requirements, timing and phasing of development, the maximum height and size of buildings, the provisions for reservation or dedication of land for public purposes, and the design, improvement, construction, and initial occupancy standards and specifications applicable to the Project. Land Use Regulations do not include any City ordinance, resolution, code, rule, regulation or official policy governing:

- The conduct or taxation of businesses, professions, and occupations applicable to all businesses, professions, and occupations in the City;

- Taxes and assessments of general application upon all residents of the City, provided that the taxes and assessments are not imposed for the purpose of taxing the right, power or privilege of developing or improving land (e.g., excise tax) or to directly finance the acquisition or dedication of open space or any other public improvement in respect of which the Owner is paying any fee

(directly or through a Financing District) or providing any improvement pursuant to this Agreement;

- The control and abatement of nuisances.

5.21 "Major Default" refers to the material and substantial failure by (1) Owner to timely meet Owner's Public Benefit obligations, or (2) City's failure to issue Subsequent Development Approvals in accordance with its obligations under this Agreement, or (3) either Party to provide the agreed upon cooperation needed to implement the Public Benefits and/or the development of the Property pursuant to the Development Plan, including but not limited to a failure to comply with the terms of any Implementing Agreement. This definition is not intended to expand or limit the legal definition of "materiality," but only to establish the agreement of the Parties as to the nature of a default which could lead to an early termination of this Agreement.

5.22 "Minor Default" means a failure by Owner or City to comply with the terms and conditions of this Agreement which is not a "Major Default" as defined herein.

5.23 "Mortgagee" means a mortgagee of a mortgage, a beneficiary under a deed of trust or any other security-device, a lender, and their successors and assigns.

5.24 "Owner" refers to Brandywine Acquisition Group, LLC., and Owner's successors and assigns as set forth in Section 14.14.

5.25 "Owner's Vested Right" refers to Owner's guaranteed right to develop the Property as set forth in this Agreement, with particular reference to Section 8.

5.26 "Paragraph" means a lettered or numbered paragraph of an Exhibit to this Agreement, unless specifically stated to refer to another document or matter. (Note below that "Section" means a lettered or numbered section of the main body of this Agreement.) A reference to a Paragraph includes all subparagraphs of that Paragraph.

5.27 The "Parties" means the City and Owner. A "Party" refers to either the City or the Owner.

5.28 "Project" means the development of the Property as set forth in the Development Plan.

5.29 "Property" means the real property described in Exhibit "A".

5.30 "Public Benefits" refers to those benefits provided to the City and the community by Owner pursuant to Section 9 and Exhibit "C" below.

5.31 "Reservation of Authority" means the rights and authority specifically reserved to City which limits the assurances and rights provided to the Owner under this Agreement. The Reservation of Authority is described in Section 8.6.

5.32 "Section" refers to a numbered section of this Agreement, unless specifically stated to refer to another document or matter.

5.33 "Subsequent Development Approvals" means all Development Approvals and permits approved, granted, or issued after the Effective Date for the Project which are required or permitted by the Existing Land Use Regulations, the Subsequent Land Use Regulations to which Owner has consented in writing, and this Agreement. Subsequent Development Approvals include, without limitation, all development review approvals required under the Subdivision Map Act, the City's subdivision ordinance and/or other provisions of the City Municipal Code, site development permits, excavation, grading, building, construction, encroachment or street improvement permits, occupancy certificates, utility connection authorizations, drainage, landscape, or other permits or approvals necessary for the grading, construction, marketing, use and occupancy of the Project.

5.34 "Subsequent Land Use Regulations" means those Land Use Regulations which are both adopted and effective after the Approval Date and which are not included within the definition of Existing Land Use Regulations. "Subsequent Land Use Regulations" include any Land Use Regulations adopted by moratorium by initiative, City action, or otherwise

5.35 "Tentative Map" shall mean any tentative map, as defined in the Subdivision Map Act and the City Municipal Code, for the Project, including the First Tentative Map. With the approval of any Tentative Map, the City shall identify the conditions that shall be satisfied to process the map.

5.36 "Term" means the term of this Agreement as set forth in Section 7.2 of this Agreement.

5.37 "Unit" means a residential dwelling unit within the Project. This definition is provided solely for the purposes of determining the uses which may be built as a part of the Project and, if applicable, for calculating the City Fee described in Exhibit "C", and is not intended to allow for conversion of non-residential uses to residential uses.

5.38 "Very Low Income Household" means persons and families whose income does not exceed fifty percent (50%) of the then-current area median income of the County of Orange adjusted for family size by the State Department of Housing and Community Development in accordance with adjustment factors adopted and amended from time to time by the United States

Department of Housing and Urban Development pursuant to Section 8 of the United States Housing Act of 1937, as amended, and California Health and Safety Code Section 50105, as it may be amended from time-to-time. In no event, however, shall the maximum annual income for a Very Low Income Household be, for purposes of this Agreement, less than fifty percent (50%) of the then-current area median income of the County of Orange.

6. EXHIBITS. All exhibits attached to this Agreement are incorporated as a part of this Agreement. Those exhibits are:

Exhibit	Description
"A"	Legal Description of the Property
"B"	General Plan Amendment
"C"	Public Benefits
"D"	Density Bonus Housing Agreement
"E"	Assignment and Assumption Agreement

7. GENERAL PROVISIONS.

7.1 Binding Effect of Agreement. This Agreement shall be recorded against the Property and shall run with the land. The Development shall be carried out only in accordance with the terms of this Agreement. Until released or terminated pursuant to the provisions of this Agreement or until Owner has fully performed its obligations arising out of this Agreement, no portion of the Property shall be released from this Agreement.

7.2 Term of Agreement. The Term shall commence on the Effective Date. The Term shall continue for a period of ten (10) years from the Effective Date, subject to the following:

7.2.1 *Extensions of Term*. The Term shall be extended for periods equal to the time during which:

7.2.1.1 Litigation is pending which challenges any matter, including compliance with CEQA or any other local, state, or federal law, related in any way to the approval or implementation of all or any part of the Development Plan. Any such extension shall be equal to the time between the filing of litigation, on the one hand, and the entry of final judgment or dismissal, on the other. All such extensions shall be cumulative.

7.2.1.2 Any application by Owner for state or federal regulatory permits and/or approvals required for the Project has been pending more than one year after its submittal, beginning on the 366th day following its submittal for approval.

7.2.1.3 Any other delay occurs which is beyond the control of the Parties, as described in Section 14.10.

7.2.2 During the Term, certain portions of the Property may be released from this Agreement as provided elsewhere in this Agreement.

7.2.3 As provided in Section 7.3 and elsewhere within this Agreement, the Term may end earlier than the end of the Term specified in this Section.

7.3 Termination. This Agreement shall be deemed terminated and of no further effect upon the earlier occurrence of any of the following events:

7.3.1 Expiration of the Term as set forth in Section 7.2;

7.3.2 Entry of a final judgment setting aside, voiding, or annulling the adoption of the ordinance approving this Agreement;

7.3.3 The adoption of a referendum measure overriding or repealing the ordinance approving this Agreement;

7.3.4 Completion of the Project in accordance with the terms of this Agreement, including issuance of all required occupancy permits and acceptance, as required by state law, by City, or the applicable public agency, of all required dedications and the satisfaction of all of Owner's obligations under this Agreement; or

7.3.5 As may be provided by other specific provisions of this Agreement.

7.4 Effect of Termination. Subject to Section 8.9, upon any termination of this Agreement, the only rights or obligations under this Agreement which either Party shall have are:

7.4.1 The completion of obligations which were to have been performed prior to termination, other than those which are separately addressed by Section 12;

7.4.2 The performance and cure rights set forth in Section 12; and

7.4.3 Those obligations that are specifically set forth as surviving this Agreement, such as those described in Section 9 and in Sections 11.1 through 11.7 and Section 14.15.

7.5 Amendment or Cancellation of Agreement. This Agreement may be amended from time to time or canceled only by the written consent of both City and Owner in the same manner as its adoption, as set forth in California Government Code Section 65868. Any amendment or cancellation shall be in a form suitable for recording in the Official Records of Orange County, California. An amendment or other modification of this Agreement will continue to relate back to the Effective Date of this Agreement (as opposed to the effective date of the amendment or modification), unless the amendment or modification expressly states otherwise.

7.6 Release of Obligations With Respect to Individual Unit Upon Certification of Occupancy. Notwithstanding any other provision of this Agreement:

7.6.1 When any individual unit has been finally subdivided and sold, leased, or made available for lease to a member of the public or any other ultimate user, and a certificate of occupancy has been obtained for the building(s) on the lot, that unit and its owner shall have no further obligations under and shall be released from this Agreement.

7.6.2 Upon the conveyance of any lot, parcel, or other property, whether residential, commercial, or open space, to a homeowners' association, property owners' association, or public or quasi-public entity, that lot, parcel, or property and its owner shall have no further obligations under and shall be released from this Agreement, provided that this paragraph shall not be deemed to release any transferee (including a good faith purchaser) from obligations to pay assessments imposed in connection with a Financing District.

No formal action by the City is required to effect this release, but, upon Owner's request, City shall sign an estoppel certificate or other document to evidence the release.

7.7 Minor Changes. The provisions of this Agreement require a close degree of cooperation between the Parties and "Minor Changes" to the Project may be required from time to time to accommodate design changes, engineering changes, and other refinements related to the details of the Parties' performance. "Minor Changes" shall mean changes to the Project that are otherwise consistent with the Development Plan, and which do not result in a change in the type of use, an increase in density or intensity of use, significant new or increased environmental impacts that cannot be mitigated, or violations of any applicable health and safety regulations in effect on the Effective Date.

Accordingly, the Parties may mutually consent to adopting "Minor Changes" through their signing of an "Operating Memorandum" reflecting the Minor

Changes. Neither the Minor Changes nor any Operating Memorandum shall require public notice or hearing. The City Attorney and City Manager shall be authorized to determine whether proposed modifications and refinements are "Minor Changes" subject to this Section 7.7 or more significant changes requiring amendment of this Agreement. The City Manager may execute any Operating Memorandum without City Council action.

7.8 Term of Map(s) and Other Project Approvals.

7.8.1 Subdivision Maps. Pursuant to Government Code Section 66452.6, the term of all subdivision or tract maps that are approved for all or any portion of the Property shall be extended to a date coincident with the Term and, where not prohibited by State law, with any extension of the Term.

7.8.2 Site Development Permits. Site Development Permits for the Project shall have terms that coincide with the term of the subdivision or tract map for the portion of the Property to which a particular Site Development Permit pertains.

7.8.3 Other Development Approvals. Pursuant to Government Code Section 65863.9, any and all other Development Approvals for any portion of the Project shall automatically be extended for a term ending concurrently with the applicable tentative maps for the Project. Pursuant to Section 7.8.1, those terms shall be the same as the Term of this Agreement.

7.8.4 Decisions of Community Development Director. Any decision of the Community Development Director with respect to Subsequent Development Approvals may be appealed to the City's City Council pursuant to Section 15.70.080 of the Aliso Viejo Municipal Code.

7.9 Relationship of City and Owner. The contractual relationship between City and Owner arising out of this Agreement is one of independent contractor and not agency. This Agreement does not create any third-party beneficiary rights.

7.10 Notices. All notices, demands, and correspondence required or permitted by this Agreement shall be in writing and delivered in person, overnight delivery (e.g. Fedex) or mailed by first class and certified mail, return receipt requested, postage prepaid, addressed as follows:

If to City, to:
City of Aliso Viejo
12 Journey, Suite 100
Aliso Viejo, CA 92656

Attn: City Manager

With a copy to:
Scott C. Smith
18101 Von Karman Avenue
Suite 1000
Irvine, CA 92612

If to Owner, to:
Brandywine Acquisition Group, LLC.
2355 Main Street, Suite 220
Irvine, CA 92614

With a copy to:
Cox, Castle & Nicholson LLP
2029 Century Park East, Suite 2100
Los Angeles, CA 90067
Attn: Andrew K. Fogg, Esq.

City or Owner may change its address by giving notice in writing to each of the other names and addresses listed above. Thereafter, notices, demands, and correspondence shall be addressed and transmitted to the new address. Notice shall be deemed given upon personal delivery or, notices shall be deemed given upon receipt as evidenced by the customary receipt provided by the delivery service.

7.11 Waiver of Right to Protest. Execution of this Agreement is made by Owner without protest. Owner knowingly and willingly waives any rights it may have under Government Code Section 66020 or any other provision of law to protest the imposition of any fees, dedications, reservations, or other exactions imposed on the Project as authorized by this Agreement.

8. DEVELOPMENT OF THE PROPERTY.

8.1 Owner's Vested Right. Owner shall have the vested right to complete Development of the Property in accordance with the Development Plan as provided in this Agreement ("Owner's Vested Right"). To enable Owner to complete the Project, Owner's Vested Right shall include, but not be limited to, the rights to (1) develop 58 for-sale residential Units, including fifty five (55) for-sale market-rate units and three (3) affordable for-sale units, all in accordance with the Development Plan, (2) the timely issuance by the City of all Subsequent Development Approvals, and (3) the timely taking by the City of such other actions that are (i) requested by Owner, and (ii) consistent with the terms of this Agreement, including, but not limited, to the vested rights afforded pursuant to Section 8.9 of this Agreement.

Owner's Vested Right shall be subject to the Reservation of Authority set forth in Section 8.6 and all provisions of this Agreement and may not be modified or terminated except as expressly provided by this Agreement.

8.2 Governing Land Use Regulations. The Land Use Regulations applicable to the Project and the Property shall be those contained in the Development Plan. An amendment or other modification of this Agreement will not change these applicable Land Use Regulations unless the amendment or modification expressly provides otherwise. Subsequent Land Use Regulations shall not apply to the Property except as authorized in Section 8.6 of this Agreement, unless the Owner and the City mutually agree in writing that the Project will be subject to one or more Subsequent Land Use Regulations. To the extent of any inconsistency between this Agreement and any provision of the City's subdivision ordinance (comprising Title 14 of the Aliso Viejo Municipal Code), this Agreement shall control.

Nothing contained in this Section shall be deemed to authorize City to withhold any building permit, approval, and/or certificate of occupancy based on Owner's failure to comply with any Land Use Regulation that is not applicable to the Project because of this Agreement.

8.3 Permitted Uses. Except as otherwise provided within this Agreement, the permitted uses on the Property shall be as provided in the Development Plan.

8.4 Density and Intensity; Requirement for Reservation and Dedication of Land. Except as otherwise provided within this Agreement, the density and intensity of use for all Development on the Property, and the requirements for reservation and dedication of land, shall be as provided in the Development Plan.

8.5 Unit Counts to be Determined with First Tentative Map Approval. The City Council will, concurrently with the approval of the First Tentative Map, determine the specific number of Units which may be built as part of the Project in accordance with Owner's Vested Right set forth in Section 8.1 of this Agreement. In order for the City to make this determination, Owner shall submit the First Tentative Map Submittal Package, concurrently with its application for the First Tentative Map. Under no circumstances may the City reduce the number of units permitted under the Development Plan in conjunction with the First Tentative Map Approval without consent of Owner.

8.6 Reservation of Authority. The following Land Use Regulations or Subsequent Land Use Regulations shall apply to the Property and the Project:

8.6.1 Processing fees and charges imposed by the City to cover the City's estimated or actual costs of reviewing and processing

applications for the Project, providing inspections, conducting annual reviews, providing environmental analysis, or for monitoring compliance with this Agreement or any Development Approvals granted or issued, provided such fees and charges are in force and effect on a general basis on the date of filing such applications with the City. This Section shall not be construed to limit the authority of City to charge its then-current, normal and customary application, processing, and permit fees for Subsequent Development Approvals, building permits and other similar permits, which fees are designed to reimburse City's expenses attributable to such application, processing, and permitting and are in force and effect on a City-wide basis at such time as the Subsequent Development Approvals and permits are granted by City, notwithstanding the fact that such fees may have been increased by City subsequent to the Effective Date;

8.6.2 Procedural regulations relating to hearing bodies, petitions, applications, notices, findings, records, hearings, reports, recommendations, appeals, and any other matter of procedure;

8.6.3 The following, provided that (i) they are uniformly applied to all development projects within the City and (ii) are not applied retroactively to any Development Approval issued before their adoption or amendment:

8.6.3.1 Uniform codes governing engineering and construction standards and specifications adopted by the City pursuant to state law. Such codes include, without limitation, the City's Municipal Code, adopted version of the California Building Code, California Plumbing Code, California Mechanical Code, California Electrical Code, California Energy Code, California Green Building Standards Code, California Residential Code, and California Fire Code;

8.6.3.2 Local amendments to those uniform codes which are adopted by the City pursuant to state law, provided they pertain exclusively to the preservation of life and safety; and

8.6.3.3 The City's standards and procedures regarding the granting of encroachment permits and the conveyance of rights and interests which provide for the use of or the entry upon public property.

8.6.4 Regulations which may be in conflict with this Agreement, but which are objectively required (and there are no available

reasonable alternatives) to protect the public health and safety in the event of a sudden, unexpected occurrence involving a clear and imminent danger, and demanding immediate action to prevent or mitigate loss of, or damage to, life, health, property, or essential public services within the immediate community. Such regulations must be a valid exercise of the City's police power and must be applied and construed so as to provide Owner, to the maximum extent possible, with the rights and assurances provided in this Agreement. To apply to the Property, such regulations must be adopted after a public hearing and must be based upon findings of necessity established by a preponderance of the evidence. Any regulations, including moratoria, enacted by City and imposed on the Property to protect the public health and safety in the circumstances described above shall toll the Term and any time periods for performance by Owner and City set forth in this Agreement;

8.6.5 Owner shall be issued building permits for the Project after permit applications are reviewed and approved by City in the City's customary fashion for such review and approval; and

8.6.6 The exercise of the power of eminent domain.

8.7 County-Mandated Impact Fees. Nothing in this Agreement shall relieve Owner of the responsibility to pay any impact fees established by the County of Orange or associated with any County program and for which Owner is legally responsible. Owner shall pay any such fees the City is required to collect or otherwise collects on behalf of the County of Orange. Owner understands and acknowledges that Exhibit "C" reflects only the City's estimate of fees paid and fees owed, and may not accurately reflect Owner's County fee obligations. The omission of any fee from Exhibit "C" which is due to the County or any other public agency shall not invalidate or otherwise affect Owner's obligation to pay that fee.

8.8 Adequacy of Required Infrastructure. The City acknowledges and agrees that there will be sufficient capacity to accommodate the Project in the infrastructure and services owned, operated, outsourced, controlled, and/or provided by the City, including, without limitation, traffic circulation, storm drainage, trash collection, and flood control. Where City renders or outsources such services or owns such infrastructure, City shall serve the Project and there shall be no restrictions placed upon Owner concerning hookups or service for the Project, except for reasons beyond City's control. Notwithstanding the foregoing, City does not warrant the adequacy of, and City shall not be responsible or liable for any infrastructure or services that are not owned, operated, outsourced, controlled, and/or provided by City.

8.9 Vested Rights Upon Termination. Termination of the Agreement shall not invalidate any Land Use Regulations or terminate any Subsequent Development Approvals obtained prior to the date of termination. Upon any termination of this Agreement, Owner's vested rights, if any, shall be determined by this Agreement to the extent development has occurred hereunder, and as to the remainder of the Project, by state and federal statutes and case law and then current factual state of the Development. Subject to that determination of rights and all other applicable law, Owner's right to continue development of the Project pursuant to some or all of the Development Plan shall be subject to the ordinary exercise of the City's police power, including the adoption of a general plan amendment, zoning change, or other Land Use Regulations applicable to the Property. Owner acknowledges that following termination or expiration of this Agreement, except as to any development that has vested, City may amend the general plan designation of the Property and/or the zoning designation applicable to the Property.

8.10 Waiver of Density Bonus. While this Agreement is in effect, Owner waives any right Owner may have to a density bonus under Government Code Sections 65915 through 65917.5 or the Aliso Viejo Municipal Code. Densities vested hereunder include all densities available as density bonuses under the Aliso Viejo Municipal Code and Government Code Sections 65915 through 65917.5; Owner shall not be entitled to further density bonuses. Nothing in this section limits Owner's right to seek incentives, concessions, and/or waivers under the state Density Bonus Law, as applicable, all of which are expressly reserved.

8.11 Staffing and Expedited Processing. City shall employ all lawful actions capable of being undertaken by City to (i) promptly receive and, when complete, accept all applications for Subsequent Development Approvals and related environmental analysis, if any (collectively, "Applications"), and (ii) expeditiously process and take action upon the Applications in accordance with applicable law.

8.12 Changes in Federal and State Law. The Property may be subject to subsequently enacted state or federal laws or regulations that preempt local regulations or mandate the adoption of local regulations that conflict with the Development Plan. Upon discovery of such a subsequently enacted federal or state law, City or Owner shall provide the other Party with written notice, a copy of the state or federal law or regulation, and a written explanation of the legal or regulatory conflict created. Within ten (10) days thereafter, City and Owner shall meet and confer in good faith in a reasonable attempt to modify this Agreement, as necessary, to comply with such federal or state law or regulation. In such negotiations, City and Owner agree to preserve the terms of this Agreement and the rights of Owner and City as derived from this Agreement to the maximum feasible extent while resolving the conflict. City agrees to cooperate with Owner in resolving the

conflict in a manner which minimizes any financial impact of the conflict upon Owner or City. City also agrees to process, in the same expedited manner as set forth for Applications in Section 8.11, Owner's proposed changes to the Development Plan as needed to comply with such federal or state law, and to process those changes in accordance with City procedures. Any delays caused by such changes in state or federal law shall toll the term of this Agreement and the time periods for performance by Owner and City set forth in this Agreement.

8.13 Cooperation in Securing Other Governmental Approvals and Permits. City agrees to make its staff available, at Owner's cost, to assist Owner in securing permits and approvals required by other governmental agencies to assure Owner's ability to (i) implement the Development Plan and (ii) perform its obligations under this Agreement in a timely manner. City does not warrant or represent that any other governmental permits or approvals will be granted.

8.14 Compliance with CEQA. Where the California Environmental Quality Act requires that an environmental analysis be performed in connection with a future discretionary approval granted by the City for the Project, the City, consistent with Section 8.13, shall provide the cooperation needed to expeditiously complete those actions.

8.15 Timing of Development. Because the California Supreme Court held in *Pardee Construction Co. v. City of Camarillo*, 37 Cal. 3d 465 (1984), that the failure of the parties in that case to provide for the timing of development resulted in a later-adopted initiative restricting the timing of development to prevail over the parties' agreement, it is the specific intent of the Parties to provide for the timing of the Project in this Agreement. To do so, the Parties acknowledge and provide that Owner shall have the right, but not the obligation, to complete the Project in such order, at such rate, at such times, and in as many development phases and sub-phases as Owner deems appropriate in its sole subjective business judgment but subject to Section 9.4 of this Agreement.

8.16 Conditions, Covenants and Restrictions. Owner shall have the ability to reserve and record such covenants, conditions, and restrictions ("CC&Rs") against the Property as Owner deems appropriate, in its sole and absolute discretion. Such CC&Rs may not conflict with this Agreement or the General Plan. Before recording any CC&Rs, Owner shall provide a copy of the CC&Rs to the City for review and approval by the City Attorney. The City Attorney's review shall be limited to determining if the CC&Rs substantially comply with this Agreement. Within forty-five (45) days after receiving a copy of the proposed CC&Rs from Owner, the City Attorney shall provide Owner with either (i) a statement that the CC&Rs comply with this Agreement ("CC&R Approval") or (ii) written comments identifying each aspect of the CC&Rs which the City Attorney believes not to be in

compliance with this Agreement (a "Statement of Non-Compliance"). If the City Attorney fails to provide Owner with either CC&R Approval or a Statement of Non-Compliance within forty-five (45) days following a written request by Owner, City shall be deemed to have approved the CC&Rs and Owner may record the CC&Rs against the Property. If the City Attorney provides a Statement of Non-Compliance, Owner shall have thirty (30) days in which to respond to the Statement of Non-Compliance. Upon submittal of Owner's response, the procedure described above for the initial submittal and City Attorney review of proposed CC&Rs shall again be followed. This procedure shall be followed until Owner either (1) receives CC&R Approval, (2) submits the compliance issues to binding arbitration pursuant to the rules of the American Arbitration Association, (3) files an action for declaratory relief in Orange County Superior Court seeking a judicial determination of the compliance of the proposed CC&Rs, or (4) agreement is otherwise reached between the Parties allowing for the recording of the CC&Rs. The CC&Rs may run with the land and bind Owner's successors and assigns. Except as provided above, any dispute between the Parties regarding the City's approval or rejection of the CC&Rs shall be subject to immediate and binding arbitration pursuant to the rules of the American Arbitration Association.

9. PUBLIC BENEFITS.

9.1 Intent. This Agreement is entered into by the City in consideration of, and in exchange for, Owner's agreement to contribute to the development and rehabilitation of public recreational facilities, affordable housing, and other services.

9.2 Public Benefits. Owner's development and financial obligations related to public benefits are set forth in this Section 9 and Exhibit "C". This Section 9 and Exhibit "C" shall survive the termination, cancellation, or expiration of this Agreement.

9.3 Independent Nature of Obligations. Owner's Public Benefit obligations are independent of the obligations of any other landowner or any other property which the City intends to participate in providing some or all of the Public Benefits. Provided that Owner satisfies its Public Benefit obligations and is not in Material Default, Owner's Vested Right to complete the full development of the Project shall not be limited, diminished, or otherwise adversely affected by the failure of any other landowner or property to participate in providing the Public Benefits as anticipated by the City. Similarly, the City's obligations to Owner and the Property are independent of the City's obligations to any other property or landowner. Owner acknowledges that the provisions of this paragraph shall not apply to any fee the amount of which is not controlled by the City, including but not limited to fees paid to the Capistrano Unified School District, the County of Orange, and/or any other government agency.

9.4 Affordable Housing Obligations. Owner recognizes the policy stated in the Housing Element of the Aliso Viejo General Plan to encourage the provision of affordable housing in new development. Owner agrees to satisfy its obligation to provide for affordable housing by constructing three (3) units restricted to Very Low Income Households. All affordable housing Units must be developed on-site at the Property. The affordable Units shall be constructed concurrently with the market rate Units in the Project.

Owner shall enter into a Density Bonus Housing Agreement with the City, in the form attached hereto as Exhibit "D", which shall set forth the terms, conditions, and restrictions governing the development, affordability, and occupancy of the affordable housing Units. Execution of the Density Bonus Housing Agreement shall be completed prior to the issuance of any building permit for the Project. The City shall have no obligation to issue any building permit for the Project until the fully executed Density Bonus Housing Agreement has been submitted to and accepted by the City. Any delay in the issuance of building permits resulting from the Owner's failure to timely submit the executed agreement shall be solely the responsibility of the Owner.

10. ANNUAL REVIEW.

10.1 Timing of Annual Review. Pursuant to Government Code Section 65865.1, at least once during every twelve (12) month period of the Term, City shall review the good faith compliance of Owner with the terms of this Agreement ("Annual Review").

10.2 Standards for Annual Review. During the Annual Review, Owner shall be required to demonstrate good faith compliance with the terms of this Agreement. "Good faith compliance" shall be established if Owner is in compliance with every term and condition of this Agreement. If the City Council or its designee finds and determines, based on substantial evidence, that Owner is not in good faith compliance, then City may proceed in accordance with Section 12 pertaining to the potential Default of Owner and the opportunities for cure. Owner shall pay a reasonable fee to cover the costs incurred by City (*i.e.*, staff time and necessary consultant costs) in connection with the Annual Review.

10.3 Procedures for Annual Review. The Annual Review shall be conducted by the City Council or its designee. Owner shall be given a minimum of thirty (30) days' notice of any date scheduled for an Annual Review. Owner shall not be limited in the information it presents to the City Council for the Annual Review and may, if needed, provide information to the City Council in the first instance at the City Council hearing on the Annual Review. Should the City Council designate a party other than itself to conduct the Annual Review, these same notice and procedural requirements shall apply to the conduct by the designee of the Annual Review.

11. THIRD PARTY LITIGATION.

11.1 General Plan Litigation. City has determined that this Agreement is consistent with its General Plan. Owner has reviewed the General Plan and concurs with City's determination. Neither Owner nor City shall have any liability under this Agreement or otherwise for any failure of City to perform under this Agreement, or for the inability of Owner to develop the Property as contemplated by the Development Plan or this Agreement, if such failure or inability is the result of a judicial determination that part or all of the General Plan is invalid, inadequate, or not in compliance with law.

11.2 Third Party Litigation Concerning Agreement. Owner shall, at Owner's expense (including attorneys' fees), defend, indemnify, and hold City, its officials, officers, employees, agents, and independent contractors, harmless from any third-party claim, action or proceeding against City, its officials, officers, employees agents, or contractors to attack, set aside, void, or annul the approval of this Agreement. City shall promptly notify Owner of any such claim, action or proceeding, and City shall cooperate in the defense at Owner's cost. Owner reserves the right to withdraw its Project application or request that City repeal or rescind Project approvals. If Owner requests such application withdrawal or Project repeal or rescission, Owner shall also pay all costs related to processing those requests and bringing them to City Council for hearing. Notwithstanding the foregoing, Owner shall continue to pay for any and all litigation costs and fees until such litigation has been resolved by a Court (*i.e.*, obtaining a dismissal of the City from the case). For the avoidance of doubt, any damages or judgment shall also solely be paid for by Owner. To the extent that Owner withdraws its Project application or requests that the City rescind or repeal Project approvals, City reserves the right to reduce or abandon its defense of any litigation.

11.3 Indemnity. In addition to the provisions of Section 11.2, Owner shall indemnify and hold City, its officials, officers, agents, employees and independent contractors free and harmless from liability whatsoever or claims based or alleged upon any act or omission of Owner, its officers, agents, employees, subcontractors and independent contractors, for property damage, bodily injury or death (Owner's employees included) or any other element of damage of any kind or nature, relating to or arising from development of the Project, except for claims for damages arising through active negligence or willful misconduct of City, its officials, officers, agents, employees and independent contractors. Owner shall defend, at Owner's expense, including attorneys' fees, City, its officials, officers, agents, employees and independent contractors in any legal action based upon such alleged acts or omissions of Owner, its officers, agents, employees, subcontractors, and independent contractors, in connection with the development of the Project, this Agreement, or the Development

Approvals. For the avoidance of doubt, any damages or judgments shall also solely be paid for by Owner.

11.4 Environmental Contamination. Owner shall indemnify and hold City, its officers, agents, employees, and contractors free and harmless from any liability, based or alleged, upon any act or omission of Owner, its officers, agents, employees, subcontractors, predecessors in interest, successors, assigns, and independent contractors, resulting in any violation of any federal, state or local law, ordinance or regulation relating to industrial hygiene or to environmental conditions on, under, or about the Property, including, but not limited to, soil and groundwater conditions, and Owner shall defend, at its expense, including attorneys' fees, City, its officials, officers, agents and employees in any action based or asserted upon any such alleged act or omission. Notwithstanding anything to the contrary set forth in this Section, Owner shall not be responsible for clean-up and removal of groundwater contamination migrating to or from an adjacent property not owned by Owner.

11.5 City to Reasonably Approve Counsel; Conduct of Litigation. With respect to Sections 11.2 through 11.4, City reserves the right to either (a) reasonably approve the attorney(s) that Owner selects, hires, or otherwise engages to defend City, which approval shall not be unreasonably withheld or delayed, or (b) conduct its own defense, provided, however, that if City elects to conduct its own defense, Owner shall reimburse City for any and all reasonable expenses incurred for such defense, including attorneys' fees, upon billing and accounting therefore. To the extent that Owner does not timely pay its full share of attorneys' fees and court costs, in addition to any other remedy, the City reserves the right to reduce or abandon its defense of any litigation. To the extent that Owner has failed to timely pay its full share of attorneys' fees and court costs under this section, Owner shall be deemed to have waived any right to participate in the selection of counsel and/or be involved in establishing and implementing litigation strategy, and Owner's rights under this Agreement shall be suspended until Owner has fully reimbursed the City to make up a funding shortfall created by Owner's failure to timely pay. Owner shall have the right to audit all billings for such fees and expenses. City shall not have the right to approve counsel selected by Owner to represent Owner's interests in any litigation. In any joint defense between the City and Owner of matters arising under this Agreement, City shall cooperate fully with Owner's counsel.

11.6 Processing During Third Party Litigation. The filing of any third party lawsuit(s) against City or Owner relating to this Agreement, the General Plan, any Development Approvals, including Subsequent Development Approvals, or other development issues affecting the Property shall not delay or stop the development, processing, or construction of the Project, approval of Subsequent Development Approvals, or issuance of "Ministerial Approvals," unless the third party obtains a court order preventing the

activity or invalidating this Agreement or any provision thereof. City shall not stipulate to the issuance of any such order without Owner's prior written consent. For purposes of this Section, the term "Ministerial Approvals" shall mean the issuance of approvals or permits requiring the determination of conformance with Land Use Regulations and Development Approvals, including, without limitation, site plans, site development permits, area plans, design review, development plans, land use plans, grading plans, improvement plans, building plans and specifications, ministerial issuance or approval of one or more final maps, zoning clearances, grading permits, improvement permits, stormwater management plans, wall permits, building permits, lot line adjustments, conditional and temporary use permits, certificates of use and occupancy, approvals, entitlements, and related matters as may be necessary for the completion of the Project.

11.7 Survival. The provisions of Sections 11.1 through 11.7 inclusive, shall survive the termination, cancellation, or expiration of this Agreement.

12. DEFAULTS AND REMEDIES.

12.1 Major Default Defined. A Major Default, as defined in Section 5.21 of this Agreement, may establish cause for early termination of this Agreement. This provision does not limit the right of either Party to pursue other non-termination remedies permitted by this Section 12 for Minor Defaults.

12.2 Notice and Termination. Before either Party may declare a Major Default or termination of this Agreement or bring a legal action to terminate this Agreement, the procedures of this Section must be followed. In the case of a Major Default arising from the conduct of an Annual Review, the procedures of this Section shall be strictly followed and shall constitute a second and independent review of the good faith compliance of Owner.

The Party asserting a Default (the "Non-Defaulting Party") may elect to do so by providing written notice to the Party alleged to be in Default (the "Defaulting Party") setting forth the nature of the Default and the actions, if any, required by the Defaulting Party to cure the Default. The Defaulting Party shall be deemed in Default if the Defaulting Party fails to cure the Default within thirty (30) business days after the date of such notice (for monetary defaults) or within sixty business (60) days after the date of such notice (for non-monetary defaults) ("cure periods"). If the nature of the alleged Default is such that it cannot reasonably be cured within the applicable cure period, the Defaulting Party shall not be deemed to be in Default if it has commenced efforts to cure the Default within the applicable cure period and continues to diligently pursue completion of the cure.

12.3 Default Remedies. A Party who complies with the notice of Default and opportunity to cure requirements of Section 12.2 may, at its option, institute legal action to cure, correct, or remedy the alleged Default, enjoin any

threatened or attempted violation, enforce the terms of this Agreement by specific performance, or pursue any other legal or equitable remedy. These remedies shall be cumulative rather than exclusive, except as otherwise provided by law.

Furthermore, the City, after first following the procedures set forth in Section 12.2, may give notice of its intent to terminate or modify this Agreement for an uncured Major Default, in which event the matter shall be scheduled for consideration and review by the City Council, using the notice and procedure provisions set forth in Section 10.3 for an Annual Review. The "preponderance of evidence" standard of review set forth in Section 12.4, however, shall be employed rather than the "substantial evidence" standard set forth in Section 10.2.

12.4 Standard of Review. Any determination by City that Owner is in Default shall be based on the preponderance of evidence before the City. In any legal action by Owner challenging the City's determination of Default, the court shall conduct a de novo review of Owner's compliance based on the administrative record and determine if the preponderance of evidence supports the City's determination.

12.5 Owner's and City's Exclusive Remedy. City and Owner acknowledge that neither City nor Owner would have entered into this Agreement if it were to be liable for damages under or with respect to all or any part of the Development Plan. Accordingly, except as stated below, neither Party shall sue the other for damages or monetary relief for any matter related to the Development Plan. City may, however, sue Owner for the payment of sums due from Owner to City under provisions of this Agreement which are expressly stated to survive termination of this Agreement. With these exceptions, Owner's and City's litigation remedies shall be limited to declaratory and injunctive relief, mandate, and specific performance.

12.6 Waiver; Remedies Cumulative. All waivers of performance must be in a writing signed by the Party granting the waiver. There are no implied waivers. Failure by City or Owner to insist upon the strict performance of any provision of this Agreement, irrespective of the length of time for which such failure continues, shall not constitute a waiver of the right to demand strict compliance with this Agreement in the future.

A written waiver affects only the specific matter waived and defines the performance waived and the duration of the waiver. Unless expressly stated in a written waiver, future performance of the same or any other condition is not waived.

A Party who complies with the notice of Default and opportunity to cure requirements of Section 12.2, where applicable, and elects to pursue a legal or equitable remedy available under this Agreement does not waive its right

to pursue any other remedy available under this Agreement, unless prohibited by statute, court rules, or judicial precedent.

Delays, tolling, and other actions arising under Section 14.10 shall not be considered waivers subject to this Section 12.6.

12.7 Alternative Dispute Resolution. Any dispute between the Parties may, upon the mutual agreement of the Parties, be submitted to mediation, binding arbitration, or any other mutually agreeable form of alternative dispute resolution. While an alternative dispute process is pending, the statute of limitation shall be tolled for any claim or cause of action which either of the Parties may have against the other.

13. ENCUMBRANCES, ASSIGNMENTS, AND RELEASES.

13.1 Discretion to Encumber. This Agreement shall not prevent or limit Owner, in any manner, at Owner's sole discretion, from encumbering some or all of the Property or any improvement on the Property by any mortgage, deed of trust, or other security device to secure financing related to the Property or the Project.

13.2 Mortgagee Protection. City acknowledges that the Lender(s) providing financing secured by the Property and/or its improvements may require certain Agreement interpretations and modifications. City shall, at any time requested by Owner or the lender, meet with Owner and representatives of such lender(s) to negotiate in good faith any such interpretation or modification. City will not unreasonably withhold or delay its consent to any requested interpretation or modification provided such interpretation or modification is consistent with the intent and purposes of this Agreement. Any Mortgagee of the Property shall be entitled to the following rights and privileges:

13.2.1 Neither entering into this Agreement nor a breach of this Agreement shall defeat, render invalid, diminish, or impair the lien of any mortgage or deed of trust on the Property made in good faith and for value.

13.2.2 If City timely receives a request from a Mortgagee requesting a copy of any notice of Default given to Owner under the terms of this Agreement, City shall provide a copy of that notice to the Mortgagee within ten (10) days of sending the notice of Default to Owner. The Mortgagee shall have the right, but not the obligation, to cure the Default during the remaining cure period allowed Owner under Section 12.2 of this Agreement.

13.2.3 Except as otherwise provided within this Agreement, any Mortgagee who comes into possession of some or all of the

Property pursuant to foreclosure of a mortgage or deed of trust, or deed in lieu of such foreclosure or otherwise, shall:

13.2.3.1 Take that property subject to the terms of this Agreement and as Owner's successor;

13.2.3.2 Have the rights and obligations of an Assignee as set forth in Sections 13.3 and 13.4;

13.2.3.3 Have the right to rely on the provisions of Section 8 of this Agreement, provided that any development proposed by the Mortgagee is in substantial conformance with the terms of this Agreement; and

13.2.3.4 Not be liable for any defaults, whether material or immaterial, or monetary obligations of Owner arising prior to acquisition of title to the Property by the Mortgagee, except that the Mortgagee may not pursue development pursuant to this Agreement until all delinquent and current fees and other monetary obligations due under this Agreement for the portions of the Property acquired by the Mortgagee have been paid to City.

13.3 Transfer or Assignment. Subject to Section 13.5, Owner shall have the right to sell, transfer, or assign its rights and obligations under this Agreement (collectively, an "Assignment") in connection with a transfer of Owner's interest in all, any portion of, or any interest in the Property (the "Transferred Property"). No Assignment shall be made unless made together with the sale, transfer, or assignment of all or any portion of Owner's interest in the Property.

Concurrent with any Assignment, Owner shall notify City in writing of the Assignment and shall provide City with an executed Assignment and Assumption Agreement, in a form substantially similar to Exhibit "E", executed by the purchaser, transferee, or assignee (collectively, the "Assignee") to expressly and unconditionally assume all duties and obligations of Owner under this Agreement remaining to be performed at the time of the Assignment. Any Assignment not made in strict compliance with the foregoing conditions shall constitute a default by Owner under this Agreement. Notwithstanding the failure of any Assignee to execute the agreement required herein this Subsection 13.3, the burdens of this Agreement shall be binding upon such Assignee, but the benefits of this Agreement shall not inure to such Assignee until and unless such agreement is executed.

13.4 Effect of Assignment. Subject to Section 13.5 and unless otherwise stated within the Assignment, upon an Assignment:

13.4.1 The Assignee shall be liable for the performance of all obligations of Owner with respect to Transferred Property, but shall have no obligations with respect to the portions of the Property, if any, not transferred (the "Retained Property").

13.4.2 The owner of the Retained Property shall be liable for the performance of all obligations of Owner with respect to the Retained Property, but shall have no further obligations with respect to the Transferred Property.

13.4.3 The Assignee's exercise, use, and enjoyment of the Transferred Property shall be subject to the terms of this Agreement to the same extent as if the Assignee were the Owner.

13.5 City's Consent. The City's consent shall not be required to a transfer between Owner and any other entity controlling, controlled by, or under common control with Owner, except an assignment and assumption agreement must be executed between the two entities in a form substantially conforming to Exhibit "E". Moreover, the City's consent shall not be required unless, at the time of the Assignment, Owner has been determined to be in Major Default pursuant to Section 12 and the Major Default has not been cured. If Owner is in Major Default, City shall consent to any Assignment which provides adequate security to City, in the reasonable exercise of City's discretion, to guarantee the cure of the Major Default upon completion of the Assignment.

14. MISCELLANEOUS PROVISIONS.

14.1 Rules of Construction. The singular includes the plural; the masculine gender includes the feminine; "shall" is mandatory; "may" is permissive.

14.2 Entire Agreement. This Agreement constitutes the entire understanding and agreement of City and Owner with respect to the matters set forth in this Agreement. This Agreement supersedes all negotiations or previous agreements between City and Owner respecting the subject matter of this Agreement including, without limitation, the Original City Agreement.

14.3 Recorded Statement Upon Termination. Upon the completion of performance of this Agreement or its cancellation or termination, a statement evidencing completion, cancellation, or termination signed by the appropriate agents of City, shall be recorded in the Official Records of Orange County, California.

14.4 Project as a Private Undertaking. It is specifically understood by City and Owner that (i) the Project is a private development; (ii) City has no interest

in or responsibilities for or duty to third parties concerning any improvements to the Property unless City accepts the improvements pursuant to the provisions of this Agreement or in connection with subdivision map approvals; and (iii) Owner shall have the full power and exclusive control of the Property, subject to the obligations of Owner set forth in this Agreement.

14.5 Incorporation of Recitals. Each of the Recitals set forth at the beginning of this Agreement are part of this Agreement.

14.6 Captions. The captions of this Agreement are for convenience and reference only and shall not define, explain, modify, construe, limit, amplify, or aid in the interpretation, construction, or meaning of any of the provisions of this Agreement.

14.7 Consent. Where the consent or approval of City or Owner is needed to implement Development under this Agreement, the consent or approval shall not be unreasonably withheld, delayed, or conditioned.

14.8 Covenant of Cooperation. City and Owner shall cooperate and deal with each other in good faith and assist each other in the performance of the provisions of this Agreement.

14.9 Execution and Recording. The City Clerk shall cause a copy of this Agreement to be signed by the appropriate representatives of the City and recorded with the Office of the County Recorder of Orange County, California, within six months following the effective date of Ordinance No. _____, the ordinance adopting this Agreement, or prior to building permit issuance, whichever comes first. The failure of the City to sign and/or record this Agreement shall not affect the validity of and binding obligations set forth within this Agreement.

14.10 Delay for Events Beyond the Parties' Control. Performance by either Party of its obligations under this Agreement shall be excused, and the Term shall be extended, for periods equal to the time during which (1) litigation is pending which challenges any matter, including compliance with CEQA or any other local, state, or federal law, related in any way to the approval or implementation of all or any part of the Development Plan. Any such extension shall be equal to the time between the filing of litigation, on the one hand, and the entry of final judgment or dismissal, on the other. All such extensions shall be cumulative; (2) any application by Owner for state or federal regulatory permits and/or approvals required for the Project has been pending more than one year after its submittal; or (3) a delay is caused by reason of any event beyond the control of City or Owner which prevents or delays performance by City or Owner of obligations under this Agreement. Such events shall include, by way of example and not limitation, acts of nature, enactment of new conflicting federal or state laws or

regulations (example: listing of a species as threatened or endangered), judicial actions such as the issuance of restraining orders and injunctions, delay in the issuance of bonds or formation of any Financing Districts, and riots, strikes, or damage to work in process by reason of fire, mud, rain, floods, earthquake, or other such casualties.

If City or Owner seeks excuse from performance, it shall provide written notice of such delay to the other within thirty (30) days of the commencement of such delay. If the delay or default, whether material or immaterial, is beyond the control of City or Owner it shall be excused, and an extension of time for such cause shall be granted in writing for the period of the enforced delay, or longer as may be mutually agreed upon. Any disagreement between the Parties with respect to whether this Section 14.10 applies to a particular delay or default is subject to the filing by either Party of an action for judicial review of the matter, including requests for declaratory and/or injunctive relief.

14.11 Interpretation and Governing Law. In any dispute regarding this Agreement, the Agreement shall be governed and interpreted in accordance with the laws of the State of California. Venue for any litigation concerning this Agreement shall be in Orange County, California.

14.12 Time of Essence. Time is of the essence in the performance of the provisions of this Agreement as to which time is an element.

14.13 Estoppel Certificate. Within ten (10) business days following a written request by either of the Parties, the other Party shall execute and deliver to the requesting Party a statement certifying that (i) either this Agreement is unmodified and in full force and effect or there have been specified (date and nature) modifications to the Agreement, but it remains in full force and effect as modified; and (ii) either there are no known current uncured Major Defaults under this Agreement or that the responding Party alleges that specified (date and nature) Major Defaults exist. The statement shall also provide any other reasonable information requested. The failure to timely deliver this statement shall constitute a conclusive presumption that this Agreement is in full force and effect without modification, except as may be represented by the requesting Party and that there are no uncured Major Defaults in the performance of the requesting Party, except as may be represented by the requesting Party. Owner shall pay to City all reasonable administrative costs incurred by City in connection with the issuance of estoppel certificates under this Section 14.13 prior to City's issuance of such certificates.

14.14 Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the Parties and their respective successors and assigns.

14.15 Future Litigation Expenses.

14.15.1 Payment to Prevailing Party. If either Party brings a legal or equitable proceeding against the other Party which arises in any way out of this Agreement, the prevailing Party shall be entitled to recover its reasonable attorneys' fees and all other reasonable costs and expenses incurred in that proceeding.

14.15.2 Scope of Fees. Attorneys' fees under this Section shall include attorneys' fees on any appeal and in any post-judgment proceedings to collect or enforce the judgment. The provisions in 14.15.1 through 14.15.3 are separate and several and shall survive the termination of this Agreement.

14.15.3 Limitation of Liability. Owner's obligations under this Agreement are solely those of Owner. In no event shall any present, past or future officer, director, shareholder, member, employee, partner, affiliate, manager, representative or agent of Owner (a "Related Party") have any personal liability, directly or indirectly, under this Agreement. Recourse in any way connected with or arising from this Agreement shall not be available against any Related Party.

Owner and City have executed this Agreement on the dates set forth below.

CITY	OWNER
City of Aliso Viejo	Brandywine Acquisition Group, a limited-liability company
By:_____ Max Duncan Mayor	By: _____ Its:
Date:	Date:
ATTEST:	OWNER:
By: _____ City Clerk	By: _____
APPROVED AS TO FORM:	Date:
By:_____ Scott C. Smith City Attorney	By: _____ Name: Title:

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of_____)

On _____ before me, _____
(insert name and title of the officer)

personally appeared _____
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____(Seal)

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of_____)

On _____ before me, _____
(insert name and title of the officer)

personally appeared _____
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____(Seal)

EXHIBIT "A"
LEGAL DESCRIPTION

EXHIBIT "B"
GENERAL PLAN AMENDMENT
GPA-2026-01002

Property Location – 15 Argonaut, Aliso Viejo, CA
Existing Land Use Designation – Business Park ("BP")
Proposed Land Use Designation – Medium Density Residential (RM)

EXHIBIT "C"
PUBLIC BENEFITS

In addition to complying with the Project conditions of approval, Owner has committed by this Agreement to contribute to the City for, among other things, certain "Public Benefits." Owner shall make contributions to the City, as follows:

1. City Public Benefit Fee. Owner shall pay a one-time City Public Benefit Fee in the amount of Two Million Fifty-Seven Thousand, Six Hundred Fifty-One Dollars and No Cents ($2,057,651.00). This fee is inclusive of any and all park in-lieu fee required under the Quimby Act and/or Aliso Viejo Municipal Code Chapter 14.16. Because this fee is an obligation arising from a Development Agreement, it is not subject to the Mitigation Fee Act. This Agreement does not limit the purposes for which the City may use City Public Benefit Fees, and the use and timing of such use of City Public Benefit Fees shall be entirely within the City's sole and absolute discretion.

2. Payment of the full City Public Benefit Fee shall be made to the City prior to the issuance of any permit for the Project. No permit shall be issued until the City has received the full payment and has confirmed compliance with all applicable fee requirements. The City shall have no obligation to issue any permit until and unless such payment is received in full, and any delay resulting from non-payment shall be solely the responsibility of the Owner.

3. To the extent that Owner not has paid to City the entirety of the Public Benefit Fee within the first three years of this Agreement, for any reason, any and all remaining portion of the City Public Benefit Fee shall be increased, annually, on the anniversary date of the Agreement starting in the fourth year of the Agreement and continuing every subsequent year of the Agreement's term. The City Public Benefit Fee shall be increased by a percentage set by the Consumer Price Index, which is defined at the Consumer Price Index for all Urban Consumers (CPI-U), published by the Bureau of Labor Statistics of the United States Department of Labor for Los-Angeles-Riverside-Orange County, All Items (1982-84=100) and utilizing the prior calendar year's average as the annual average. If this Index is discontinued, the Parties shall use any other renamed national index covering the Aliso Viejo metropolitan areas or any other successor or substitute index appropriately adjusted. In no event shall the City Public Benefit Fee be reduced.

EXHIBIT "D"
DENSITY BONUS HOUSING AGREEMENT

RECORDING REQUESTED BY:

AND WHEN RECORDED MAIL TO:

City of Aliso Viejo
12 Journey, Suite 100
Aliso Viejo, CA 92656-5335
Attn: City Manager

Free Recording pursuant to
Government Code 6103 & 27383

DENSITY BONUS HOUSING AGREEMENT

BRANDYWINE ACQUISITION GROUP, LLC
15 Argonaut, Aliso Viejo, CA

This DENSITY BONUS HOUSING AGREEMENT ("**Agreement**") is made and entered into this [date], by and between the City of Aliso Viejo ("**City**"), a California municipal corporation, and BRANDYWINE ACQUISITION GROUP, LLC, a California limited liability company ("**Developer**"). City and Developer are sometimes referred to collectively as the "**Parties**" and individually as a "**Party**."

RECITALS

A. Developer owns that certain real property located within the City of Aliso Viejo, County of Orange, State of California, commonly known as 15 Argonaut, Aliso Viejo, CA (APNs 623-093-10 and 623-093-11) more particularly described in the legal description attached as Exhibit A and more particularly depicted in Exhibit B ("**Property**").

B. Developer is proposing the construction of 58 units on the Property, with related amenities and improvements, as further set forth in Resolution Nos. 2026-27, 28 and 29 and Ordinance Nos. 2025-256 approving the project ("**Project**").

C. The Project qualifies for a density bonus under California Government Code section 65915 *et seq*. ("**State Density Bonus Law**"). Under the State Density Bonus Law, the Project will provide 3 residential units for sale to Very Low Income Households ("**Affordable Units**"), as set forth in this Agreement.

D. In accordance with State Density Bonus Law, Developer has requested, and City has granted, certain concessions, incentives, and waivers more particularly set forth herein.

E. This Agreement, including the attached exhibits, sets forth the terms and conditions for implementing the Project's requirement to provide the Affordable Units in exchange for receiving the concessions, incentives and waivers, as set forth herein.

NOW, THEREFORE, in consideration of the above recitals, which are incorporated herein by this reference, and of the mutual covenants contained herein, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

1. DEFINITIONS AND EXHIBITS

1.1 Definitions. In addition to the terms that may be defined elsewhere in this Agreement, the following terms when used in this Agreement shall be defined as follows:

1.1.1 "**Adjusted for family size appropriate to the unit**" has the meaning provided in California Health and Safety Code section 50052.5(h).

1.1.2 "**Affordable Housing Cost**" means the maximum purchase price that results in an affordable housing cost, adjusted for family size appropriate to the unit, for a Very Low Income Household, as determined pursuant to Health and Safety Code section 50052.5(b) and applicable HCD regulations.

1.1.3 "**Affordable Units**" means the 3 Units within the Project to be sold by Developer to Qualified Purchasers in accordance with this Agreement. An "**Affordable Unit**" means one of the Affordable Units.

1.1.4 "**AMI**" means the Orange County, California, area median income, as periodically published by HCD.

1.1.5 "**City**" means the City of Aliso Viejo, California.

1.1.6 "**City Attorney**" means the City Attorney for the City.

1.1.7 "**City Council**" means the City Council of the City.

1.1.8 "**City Deed of Trust**" means a Deed of Trust and Security Agreement executed by a Qualified Purchaser and recorded as a lien against the Affordable Unit acquired by that Qualified Purchaser as required by the terms of the Equity Sharing Agreement, the form of which is attached to the Equity Sharing Agreement.

1.1.9 "**City Manager**" means the City Manager for the City.

1.1.10 "**City Note**" means the promissory note executed by a Qualified Purchaser in favor of City pursuant to the Equity Sharing Agreement, the form of which is attached to the Equity Sharing Agreement.

1.1.11 "**Developer**" means BRANDYWINE ACQUISITION GROUP, LLC, a California limited liability company, and its successors and assigns to all or any part of the Property, the Project, or this Agreement. "Developer" does not include an ultimate purchaser of an individual Unit in a retail sale.

1.1.12 "**Effective Date**" means the date that City executes this Agreement.

1.1.13 "**Equity Sharing Agreement**" means that certain Owner Occupancy and Equity Sharing Agreement to be entered into by and between City and each Qualified Purchaser that purchases an Affordable Unit, which shall be recorded against each Affordable Unit in the form attached hereto as Exhibit C.

1.1.14 "**HCD**" means the California Department of Housing and Community Development.

1.1.15 "**Household**" means all persons residing in a Unit.

1.1.16 "**Income Verification Materials**" means those materials specified in Section 4.5 to verify the income of a proposed purchaser of an Affordable Unit.

1.1.17 "**Market Rate Units**" means the Units within the Project to be sold by Developer to a household without restriction.

1.1.18 "**Project**" means that certain residential development as more particularly described in the Recitals above and Section 2 below.

1.1.19 "**Project Approvals**" means the Project's approved entitlements pursuant to Resolution Nos. 2026-27, 28 and 29 and Ordinance Nos. 2025-256 and all terms and conditions stated therein. The Project Approvals include, but are not limited to, that certain Development Agreement dated [insert], between Developer and City governing the development of the Project on the Property.

1.1.20 "**Property**" means that certain real property more particularly described in the legal description in Exhibit A.

1.1.21 "**Qualified Purchaser**" means a person or family who complies with the requirements of Sections 4.5 and 4.6 and qualifies as a Very Low Income Household.

1.1.22 "**State Density Bonus Law**" means Government Code section 65915 *et seq*., as of the Effective Date.

1.1.23 "**Unit**" means a residential dwelling unit within the Project to be constructed by Developer pursuant to the Project Approvals. The Project contains a total of 58 Units, with 3 Affordable Units and 55 Market Rate Units.

1.1.24

"Very Low Income Household" means persons and families whose income does not exceed 50 percent of the AMI, adjusted for household size, as determined for the County of Orange in accordance with California Health and Safety Code section 50105, and implementing regulations published by HCD.

1.2 Exhibits. The following documents are attached hereto and incorporated herein by this reference:

Exhibit "A" – Legal Description of Property

Exhibit "B" – Map Showing Property and its Location

Exhibit "C" – Equity Sharing Agreement (and attachments)

2. DEVELOPMENT OF THE PROPERTY

2.1 Project. Developer shall develop the Project on the Property in accordance with this Agreement and the Project Approvals.

2.2 No Increase in Density. Developer acknowledges and agrees that Developer has not requested, and the Project is not receiving, an increase in density under State Density Bonus Law.

2.3 Market Rate Units. The Project shall have no more than 55 Market Rate Units with unit sizes as may be determined by Developer in accordance with the Project Approvals. Developer may alter the unit distribution of the Market Rate Units in Developer's discretion, provided that the Project has the minimum number of Affordable Units and the minimum distribution thereof as specified in this Agreement.

2.4 Affordable Units. The Project shall have no less than 3 Affordable Units pursuant to the terms and conditions of this Agreement. The Affordable Units shall be consistent in terms of type, design, and number of bedrooms with the Market Rate Unit types as depicted in the Project Approvals. The Affordable Units shall be located throughout the Project and not clustered in one area or building.

2.5 Minimum Development Standards for Affordable Units; Access and Restrictions. The Affordable Units shall be constructed with the same exterior appearance and standard interior features, fixtures, and amenities, and shall use the same type and quality of materials as provided for the Market Rate Units of the same model and size. City acknowledges that purchasers of Market Rate Units may elect to purchase optional upgrades and such optional upgrades may not be available for the Affordable Units. Except as otherwise authorized by City in writing, the Affordable Units shall be constructed concurrently with the Market Rate Units. The Affordable Units, and their occupants, shall have access to all common areas of the Project to the same extent as occupants of the Market Rate Units.

2.6 Development Concessions, Incentives, and Waivers. In accordance with State Density Bonus Law, the Project is hereby granted the following: one concession from otherwise applicable minimum boundary landscaping requirement, one waiver from otherwise applicable setback requirements, and one waiver from otherwise applicable height requirements.

2.7 Parking Requirements. The Project's onsite parking shall be provided in compliance with Government Code sections 65915(p)(1)(A)-(B). The Project will provide 140 total onsite parking spaces.

2.8 No Increase in Density or Further Concessions, Incentives, or Waivers. Developer acknowledges and agrees that the concessions, incentives, and waivers set forth in Section 2.6 and 2.7 fully satisfy City's duty to grant a density bonus and any other incentive, concession, or waiver of any building, zoning, or other requirement in connection with the Project, State Density Bonus Law, and the City's Density Bonus Ordinance. Additionally, Developer acknowledges and agrees that Developer has not requested, and the Project is not receiving, an increase in density under State Density Bonus Law or City's Density Bonus Ordinance. By way of this Agreement, Developer releases any and all claims Developer may have against City in any way relating to or arising from City's satisfaction of its obligations under Government Code section 65915 with respect to the Project.

2.9 Permits and Processing; Compliance with Laws. Developer, at its sole cost and expense, or as otherwise set forth in a separate written agreement, shall secure or cause to be secured any and all permits that may be required for development of the Project by City or any other federal, state, or local governmental entity having or claiming jurisdiction over the Property or Project. Upon securing any and all permits, Developer shall carry out and perform the development of the Project, or cause the performance of the development of the Project, in conformity with all applicable federal, state, and local laws and regulations, and all conditions of approval issued by City, including the Project Approvals. If any changes to the Project materially alter Developer's ability to comply with any terms of this Agreement, in City's reasonable determination, then City and Developer shall meet and confer to address amendments and revisions to this Agreement as necessary.

2.10 Relocation Prior to Development of Project. If relocation is required prior to the completion of development of the Project, Developer shall have the sole and exclusive responsibility for providing relocation assistance and paying all relocation costs as may be required to comply with applicable federal and state laws and regulations. In addition to any other indemnity provided by Developer under this Agreement, Developer shall indemnify, defend (with counsel of City's choosing and the consent of Developer, which shall not be unreasonably withheld, and which may be joint defense counsel upon City's and Developer's consent), and hold harmless City and all of its officials, officers, employees, representatives, volunteers and agents from any and all alleged or actual claims, causes of action, liabilities, and damages from any third party for relocation assistance, benefits and costs prior to the completion of the development of the Project.

2.11 Mechanic's Liens; Indemnification. Prior to the closing of the sale of an Affordable Unit, Developer shall take all actions necessary to remove any then-existing mechanic's liens or other similar liens (including design professional liens) against the Property, the Project, or any part thereof, by reason of work, labor, services, or materials supplied or claimed to have been supplied to Developer or caused by, at the direction of, or on behalf of Developer. Prior to the recording of this Agreement pursuant to Section 3.1 below, Developer shall provide evidence from a reputable title company of any new recordings against the Property or Project. City hereby reserves all rights to post notices of non-responsibility and any other notices as may be appropriate upon a filing of a mechanic's lien. In addition to any other indemnity provided by Developer under this Agreement, Developer shall indemnify, defend (with counsel of Developer's choosing and reasonably approved by City), and hold harmless City and all of its officials, officers, employees, representatives, volunteers and agents from any and all alleged or actual claims, causes of action, liabilities, and damages from any third party by reason of a mechanic's lien or work, labor, services,

or materials supplied or claimed to have been supplied to Developer or caused by, at the direction of, or on behalf of Developer. The provisions of this Section 2.11 survive termination of this Agreement.

3. RECORDING OF AGREEMENT

3.1 Recording. Prior to the issuance of any building permit for the Project, Developer shall record or shall cause to be recorded in the Official Records for Orange County, California, an executed original of this Agreement. City shall cooperate with Developer in promptly executing this Agreement in recordable form.

4. SALE OF UNITS

4.1 Conveyance of Units. Developer may construct and convey title to the Units at any time after the Effective Date, in accordance with this Agreement, the Project Approvals, and any and all federal, state, and local laws and regulations. Developer may offer to sell some or all Units in phases or all at once in Developer's discretion, provided Developer's sale complies with applicable federal, state, and local laws and regulations. Developer shall convey title to each Affordable Unit through a purchase and sale agreement to be processed through an escrow. Upon City's request, Developer shall deliver to City a copy of the purchase and sale agreement and preliminary title report for the conveyance of an Affordable Unit.

4.2 Notice to City. Developer shall provide City with no less than 60 days written notice prior to the date that Developer intends to commence activities to market, offer, or sell the Affordable Units.

4.3 Designation of Affordable Units. Prior to commencement of any activities to market, offer, or sell the Units, Developer shall designate the 3 Units as Affordable Units. Developer's notice to City under Section 4.2 above shall disclose to City which Units Developer has designated as the Affordable Units. [NOTE: AS AN ALTERNATIVE, WE CAN PREDESIGNATE NOW AND CHANGE THIS SECITON TO READ AS FOLLOWS: "Developer has designated Units 53, 54, and 55 as Affordable Units."]

4.4 Sale of Affordable Units. Developer shall sell each Affordable Unit at no more than the Affordable Housing Cost and only to a buyer that qualifies as a Qualified Purchaser. So that City may verify the amount is not more than the Affordable Housing Cost, Developer shall provide written notice to City of the sale price of each Affordable Unit prior to offering for sale the Affordable Unit. City verification shall be provided within 30 days of City's receipt of Developer's written notice of the proposed sale price. Developer shall sell each Affordable Unit only to those who qualify as a Qualified Purchaser, as determined pursuant to Sections 4.5 and 4.6. Developer shall not knowingly convey title to any Affordable Unit to a Household that does not qualify as a Very Low Income Household, and Developer shall not convey fee title to any Affordable Unit to a Very Low Income Household at a price that exceeds the Affordable Housing Cost for that Affordable Unit.

4.5 Income Verification. The proposed purchaser of an Affordable Unit shall provide and certify, for the purpose of City approval, the following information: the Social Security Number of the proposed purchaser; copies of the federal and state income tax returns filed

by the proposed purchaser for the prior two calendar years; preceding six months of bank statements of the proposed purchaser; background documentation of any income (e.g., Social Security award letter, stock interest forms, court statement regarding support payments, retirement or pension benefit statement, etc.); copies of the two most current wage earning statements of the proposed purchaser; the purchase price that the proposed purchaser intends to pay for the Affordable Unit; and any other information that City may reasonably require to verify the income of the proposed purchaser. The proposed purchaser of an Affordable Unit shall also provide, for the purpose of City approval, a written statement signed by the proposed purchaser (in a form acceptable to City) that authorizes City to inspect, use, and rely on the information provided by the proposed purchaser, and waives and releases any right or claim that said proposed purchaser might otherwise have in the absence of such written authorization to maintain the privacy or confidentiality of such information. The information, statements, agreements, and other documents that a proposed purchaser is required to provide pursuant to this section 4.5 are collectively the "Income Verification Materials." Developer shall have the obligation to collect and compile all Income Verification Materials from a proposed purchaser of an Affordable Unit. Developer shall be responsible for working with the proposed purchaser to compile all required Income Verification Materials to be submitted to the City for approval, which may be accomplished by Developer contracting with a third-party consultant to provide such services.

4.6 City Verification. Developer shall not convey fee title to any Affordable Units to a proposed purchaser until such time as City has determined (i) the proposed purchaser intends to occupy the Affordable Unit as a principal residence; (ii) the proposed purchaser is a Very Low Income Household; (iii) the purchase price for the Affordable Unit does not exceed the Affordable Housing Cost; (iv) the proposed purchaser and City have executed the Equity Sharing Agreement, the proposed purchaser has executed the City Note and the City Deed of Trust, and the Equity Sharing Agreement and City Deed of Trust are both in a recordable form; and (v) the proposed conveyance will not otherwise violate the terms and conditions of this Agreement. Developer shall reasonably cooperate with City in its determination of the matters set forth in clauses (i)-(v) herein and Developer shall be entitled to conclusively rely on any City determination regarding Developer's compliance with this Section 4.6. City shall respond to a request from Developer for verification of the matters in clauses (i)-(v) herein by written notice, which shall be delivered to Developer within 30 days of City's receipt of all Income Verification Materials and all other information and documents reasonably required by City to make the determinations described in clauses (i) through (v). If City is unable to verify the proposed purchaser's income as provided herein, then the prospective purchaser's income shall be deemed to exceed the maximum allowable limit for a Very Low Income Household. If City determines a proposed conveyance would violate this Agreement, City shall specify the reasons for the violation. If the proposed violation is not corrected to the satisfaction of City within 30 days after the date of the notice specifying the violation, or within such further time as City determines in its sole and absolute discretion is necessary to correct said violation, Developer shall not convey title to the proposed purchaser. City may apply to a court of competent jurisdiction for specific performance of this Agreement, for a declaration that the proposed conveyance is void, or for any such relief as may be appropriate under law or equity.

4.7 Quality Standards for Affordable Units. At the time of conveyance of an Affordable Unit from Developer to a Qualified Purchaser, the physical condition and quality of the Affordable Unit shall be in the same physical condition and of the same quality (as to standard features, but

not upgrades) as the other Market Rate Units of the same model and size that Developer has offered for sale.

4.8 Execution of Equity Sharing Agreement and City Note; Recording the Equity Sharing Agreement and City Deed of Trust. Developer shall cause the Equity Sharing Agreement, the City Note, and the City Deed of Trust, together with all attachments thereto, to be duly executed with the Equity Sharing Agreement and City Deed of Trust executed in recordable form. At the close of escrow, the escrow agent handling the conveyance shall record, or cause to be recorded, the instruments effectuating the conveyance of the Affordable Unit in the Official Records of Orange County, California, including the grant deed conveying title to the Qualified Purchaser, the Equity Sharing Agreement, the City Deed of Trust, and any other instruments necessary to consummate the conveyance and establish the intended priority of liens and encumbrances under this Agreement, the Equity Sharing Agreement, and the City Deed of Trust. Upon recordation, the Equity Sharing Agreement shall run with the Affordable Unit and the City Deed of Trust shall constitute a lien against the Affordable Unit. City shall cooperate with Developer and each Qualified Purchaser in executing the Equity Sharing Agreement and any other documents requiring City's execution so that such documents may be delivered into escrow for recording at the close of escrow.

4.9 Sale of Units; Indemnification. In addition to any other indemnification provided in this Agreement, Developer shall indemnify, defend (with counsel of Developer's choosing and reasonably approved by City), and hold harmless City and its officials, officers, employees, representatives, agents, and volunteers (collectively, "Indemnitees") from and against any claims, liabilities, damages, or losses alleged or made against Indemnitees by any person or entity for any alleged or actual violation by Developer of any federal, state, or local law or regulation in connection with the sale by Developer of the Units or otherwise arising from any act or omission of Developer in violation of this Section 4, except in each instance to the extent caused by the gross negligence or willful misconduct of any of the Indemnitees. The provisions of this Section 4.9 survive termination of this Agreement.

4.10 Qualified Purchaser Marketing and Orientation. Developer shall be responsible for marketing the Affordable Units to potential Qualified Purchasers. Developer shall coordinate with designated City staff for the marketing plan of any Affordable Units. As part of the marketing plan, before the Qualified Purchaser executes the Equity Sharing Agreement and in all events before the close of escrow for the applicable Affordable Unit, City shall provide to the Qualified Purchaser of the Affordable Unit an in-person, informational session that will explain, in plain and simple language, the resale restrictions and other provisions of the Equity Sharing Agreement. Upon completion of the informational session, City shall cause the Qualified Purchaser to execute an agreement, in a form approved by City, acknowledging the Qualified Purchaser's attendance at the informational session and providing for the Qualified Purchaser's waiver and release of Developer and City from any claims or causes of action related to the restrictions on the marketability of the Affordable Unit, provided that the Qualified Purchaser represents that they understand the restrictions on marketability.

4.11 Transfer to Qualified Nonprofit Housing Corporation. If, despite bona fide good faith documented marketing efforts, Developer is unable to locate a Qualified Purchaser to purchase an Affordable Unit within 180 calendar days after the issuance of a certificate of

occupancy for such Affordable Unit, Developer may sell or otherwise transfer such Affordable Unit to a qualified nonprofit housing corporation that meets all of the requirements set forth in Government Code section 65915(c)(2)(A)(ii) and any other applicable provisions of state law, which sale or transfer shall satisfy the requirements of this Agreement applicable to Developer. If Developer sells or otherwise transfers an Affordable Unit pursuant to this Section 4.11, City and Developer shall reasonably cooperate in executing such amendments to this Agreement, and any other documents executed in connection herewith, as may be reasonably necessary to reflect such sale or transfer and to implement the requirements of Government Code section 65915 applicable thereto.

5. TERM

5.1 Term. The term of this Agreement commences on the Effective Date and will continue until all of the Affordable Units have been conveyed to Qualified Purchasers and (i) each Qualified Purchaser has entered into a fully executed Equity Sharing Agreement with City in recordable form; (ii) each Qualified Purchaser has executed a City Note and City Deed of Trust in favor of City; and (iii) all of the Equity Sharing Agreements and City Deeds of Trust for all Affordable Units have been recorded. Developer shall provide, upon City's request, evidence that Equity Sharing Agreements and the City Deeds of Trust have been recorded for all of the Affordable Units. Termination of this Agreement shall not affect the continued validity or enforceability of any Equity Sharing Agreement, City Note, or City Deed of Trust executed in connection with an Affordable Unit. Nor shall termination of this Agreement affect any rights or remedies arising from a breach occurring before termination.

6. DEFAULT AND TERMINATION; INDEMNIFICATION

6.1 Default. Failure or delay by any Party to perform any term or provision of this Agreement that is not cured within 30 days after receipt of notice from the other Party specifying the default (or such other period specifically provided herein) constitutes a default under this Agreement; provided, however, if such default is of the nature requiring more than 30 days to cure, the defaulting Party shall avoid default hereunder by commencing to cure within such 30 day period, and thereafter diligently pursuing such cure to completion within an additional 60 days following the conclusion of such 30 day period (for a total of 90 days). Except as required to protect against further damages, the injured Party may not institute proceedings against the Party in default until the time for cure has expired. Failure or delay in giving such notice shall not constitute a waiver of any default, nor shall it change the time of default.

6.2 Rights and Remedies Cumulative. The rights and remedies of the Parties are cumulative, and the exercise by either Party of one or more of its rights or remedies shall not preclude the exercise by it, at the same or different times, of any other rights or remedies for the same default or any other default by the other Party.

6.3 Indemnification. In addition to any other indemnity specifically provided in this Agreement, Developer agrees to defend (with counsel of Developer's choosing and reasonably approved by City), indemnify and hold harmless the Indemnitees from and against any loss, liability, claim, or judgment arising from or related to any act or omission of Developer in connection with its obligations under this Agreement, except to the extent caused by the gross

negligence or willful misconduct of any of the Indemnitees. The provisions of this Section 6.3 survive the termination of this Agreement.

7. ASSIGNMENT; COVENANTS RUN WITH THE LAND

7.1 Assignment by Developer. Developer will comply with the Project Approvals in connection with any sale, transfer, or assignment of the Property or Project in whole or part, or any transfer or assignment of Developer's rights and obligations under this Agreement.

7.2 Covenants Run with the Land. The Property shall be used, occupied, and improved subject to the covenants, conditions, and restrictions set forth herein. The covenants, conditions, restrictions, reservations, equitable servitudes, liens and charges set forth in this Agreement shall run with the Property and shall be binding upon Developer and all persons having any right, title or interest in the Property, or any part thereof, their heirs, and successive owners and assigns, and shall inure to the benefit of City and its successors and assigns, and may be enforced by City and its successors and assigns. The covenants established in this Agreement shall, without regard to technical classification and designation, be binding for the benefit and in favor of City and its successors and assigns, and the parties hereto expressly agree that this Agreement and the covenants herein shall run in favor of City. City is deemed the beneficiary of the terms and provisions of this Agreement and of the covenants running with the land, for and in its own right and for the purposes of protecting the interests of the community and other parties, public or private, in whose favor and for whose benefit this Agreement and the covenants running with the land have been provided. Developer hereby declares its understanding and intent that the burden of the covenants set forth herein touch and concern the land and that Developer's interest in the Property may be rendered less valuable thereby. Developer hereby further declares its understanding and intent that this Agreement provides a public benefit and that the covenants set forth herein touch and concern the Property by furthering the health, safety, and welfare of the residents of the City. Notwithstanding anything in this Agreement to the contrary: (a) in the event that Developer transfers its interest in the Property to a successor, Developer shall have no further obligation or liability under this Agreement except to the extent arising out of a default by Developer under this Agreement that existed at the time of such transfer; and (b) this Agreement shall automatically terminate and be of no further force or effect, without any additional instrument or other action required, as to each of the Market Rate Units upon the closing of the sale of each such Market Rate Unit to the initial purchaser thereof.

8. MISCELLANEOUS

8.1 Entire Agreement. This Agreement, including all of its exhibits and attachments, contains the Parties' entire understanding and agreement with respect to the matters set forth herein, and there are no oral or written representations, understandings or ancillary covenants, undertakings or agreements which are not contained or expressly referred to herein. No testimony or evidence of any such representations, understandings or covenants shall be admissible in any proceeding of any kind or nature to interpret or determine this Agreement's terms or conditions.

8.2 Notices.

8.2.1 Delivery. As used in this Agreement, "notice" includes, but is not limited to, the communication of notice, request, demand, approval, statement, report, acceptance, consent, waiver, appointment or other communication required or permitted hereunder. All notices shall be in writing and shall be considered given either: (i) when delivered in person to the recipient named below; or (ii) on the date of delivery shown on the return receipt, after deposit in the United States mail in a sealed envelope as either registered or certified mail with return receipt requested, and postage and postal charges prepaid, and addressed to the recipient named below; or (iii) on the date of delivery shown on the delivery receipt, after deposit with a known and reliable next-day document delivery service (such as FedEx), charges prepaid and addressed to the recipient named below. All notices shall be addressed as follows:

If to City: City of Aliso Viejo
12 Journey, Suite 100
Aliso Viejo, CA 92656-5335
Attn: City Manager

With a copy to: Best Best & Krieger LLP
18101 Von Karman Ave.
Unit 1000
Irvine, CA 92612
Attn: Scott Smith

If to Developer: Brandywine Acquisition Group, LLC
2355 Main Street, Suite 220
Irvine, CA 92614

With a copy to: Cox, Castle & Nicholson LLP
2029 Century Park East, Suite 2100
Los Angeles, CA 90067
Attn: Andrew K. Fogg, Esq.

8.2.2 Change of Address. Either Party may, by notice given at any time, require subsequent notices to be given to another person or entity, whether a party or an officer or representative of a party, or to a different address, or both. Notices given before actual receipt of notice of change shall not be invalidated by the change.

8.3 Severability. If any term, provision, covenant or condition of this Agreement shall be determined invalid, void or unenforceable by a court of competent jurisdiction, the remainder of this Agreement shall not be affected thereby to the extent such remaining provisions are not rendered impractical to perform, taking into consideration the purposes of this Agreement.

8.4 Interpretation and Governing Law. This Agreement and any dispute hereunder shall be governed and interpreted in accordance with the laws of the State of California without regard to conflict of law principles. This Agreement shall be construed as a whole according to its fair language and common meaning to achieve the objectives and purposes of the Parties hereto, and the rule of construction to the effect that ambiguities are to be resolved against the drafting Party shall not be employed in interpreting this Agreement, all Parties having been represented by counsel in the negotiation and preparation hereof.

8.5 Section Headings. All section headings and subheadings are inserted for convenience only and shall not affect any construction or interpretation of this Agreement.

8.6 Singular and Plural. As used herein, the singular of any word includes the plural, and vice versa, as context so dictates. Masculine, feminine, and neuter forms of any word include the other as context so dictates.

8.7 Joint and Several Obligations. If at any time during the term of this Agreement the Property or Project is owned, in whole or in part, by more than one party developing or selling the Units to the initial purchasers thereof, then all obligations of the Developer under this Agreement shall be joint and several as to such parties, and the default of any one of such Developers shall be the default of all such Developers.

8.8 Time of Essence. Time is of the essence in the performance of the provisions of this Agreement as to which time is an element.

8.9 Computation of Days. Unless otherwise specified in this Agreement or any exhibit attached hereto, use of the term "days" shall mean calendar days. For purposes of this Agreement and all exhibits attached hereto, "business days" means every day of the week except Saturdays, Sundays, official State holidays as recognized in Government Code section 19853(a) or successor statute, and any days in which City is closed for business.

8.10 Waiver. Failure by a Party to insist upon the strict performance of any of the provisions of this Agreement by the other Party, or the failure by a Party to exercise its rights upon the default of the other Party, shall not constitute a waiver of such Party's right to insist and demand strict compliance by the other Party with the terms of this Agreement thereafter.

8.11 Non-Discrimination. In performing its obligations under this Agreement, Developer shall not discriminate because of race, color, religion, sex, gender, gender identity, gender expression, sexual orientation, marital status, national origin, ancestry, familial status, disability, veteran or military status, source of income, or genetic information, as defined and prohibited by applicable law. Developer affirms that it is an equal opportunity employer and shall comply with all applicable federal, state and local laws and regulations.

8.12 Counterparts. This Agreement may be executed by the Parties in counterparts, which counterparts shall be construed together and have the same effect as if all of the Parties had executed the same instrument.

8.13 Jurisdiction and Venue. Any action at law or in equity under this Agreement or brought by a Party hereto for the purpose of enforcing, construing or determining the validity of

any provision of this Agreement shall be filed and tried in the Superior Court of the County of Orange, State of California, and the Parties hereto waive all provisions of law providing for the filing, removal or change of venue to any other court.

8.14 Attorneys' Fees and Costs. If any party to this Agreement institutes any action, suit, counterclaim, appeal or arbitration for any relief against another party, declaratory or otherwise (collectively an "Action"), to enforce the terms hereof or to declare rights hereunder or with respect to any inaccuracies or material omissions in connection with any of the terms, conditions, representations or warranties on the part of the other party to this Agreement, then the prevailing party in such Action, whether by arbitration or final judgment, shall be entitled to have and recover from the other party all costs and expenses of the Action, including reasonable attorneys' fees and costs incurred in bringing and prosecuting such Action and/or enforcing any judgment, order, ruling or award granted therein, all of which shall be deemed to have accrued on the commencement of such Action. For purposes of this section, costs shall include, without limitation, in addition to costs incurred in prosecution or defense of the underlying action, reasonable attorneys' fees, costs, expenses and expert fees and costs incurred in the following: (a) post judgment motions and collection actions; (b) discovery; and (c) appeals of any order or judgment. For the purposes of this Agreement the term "prevailing party" shall have the meaning set forth in California Code of Civil Procedure section 1032(a)(4).

8.15 Project as a Private Undertaking. It is specifically understood and agreed by and between the Parties hereto that the development of the Project is a private development, that neither Party is acting as the agent of the other in any respect hereunder, and that each Party is an independent contracting entity with respect to the terms, covenants and conditions contained in this Agreement. No partnership, joint venture or other association of any kind is formed by this Agreement. The only relationship between City and Developer is that of a government entity regulating the development of private property and the development of such property.

8.16 Further Actions and Instruments. Each of the Parties shall cooperate with and provide reasonable assistance to the other to the extent contemplated hereunder in the performance of all obligations under this Agreement and in the satisfaction of the Project and conditions of this Agreement. Upon the request of either Party at any time, the other Party shall promptly execute, with acknowledgment or affidavit if reasonably required, and file or record such required instruments and writings and take any actions as may be reasonably necessary under the terms of this Agreement to carry out the intent and to fulfill the provisions of this Agreement or the Project or to evidence or consummate the transactions contemplated by this Agreement. City hereby authorizes City Manager to take such other actions and negotiate and execute any additional agreements as may be reasonably necessary or proper to fulfill City's obligations under this Agreement. The City Manager may delegate their powers and duties under this Agreement to an authorized management level employee of City.

8.17 Amendment. Any alteration, change, or modification of or to this Agreement, in order to become effective, shall be made in writing and in each instance approved by the City Council and signed on behalf of each Party. Any requested alteration, change, or modification of this Agreement by Developer shall require the payment of fees or deposit by Developer to City, as applicable, for City's review of the request. Each alteration, change, or modification to this

Agreement shall be recorded against the Property in the Official Records of Orange County, California.

{Signatures on following page}

IN WITNESS WHEREOF, the parties hereto have caused this Density Bonus Housing Agreement to be executed on the date set forth at the beginning of this Agreement.

DEVELOPER:

BRANDYWINE ACQUISITION GROUP,
LLC, a California limited liability company

By: _____

Name: _____

Title: _____

CITY:

City of Aliso Viejo,
a California municipal corporation

By: _____
Brett Chaning
City Manager

ATTEST:

_____
City Clerk

APPROVED AS TO FORM:

_____
City Attorney

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of _____)

On _____ before me, _____, Notary Public
(insert name and title of the officer)

personally appeared _____
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ **(Seal)**

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of _____)

On _____ before me, _____, Notary Public
(insert name and title of the officer)

personally appeared _____
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ **(Seal)**

EXHIBIT A

LEGAL DESCRIPTION OF THE PROPERTY

EXHIBIT B

MAP SHOWING PROPERTY AND ITS LOCATION

EXHIBIT C

EQUITY SHARING AGREEMENT (AND ATTACHMENTS)

(Attached behind this cover page)

RECORDING REQUESTED BY:

AND WHEN RECORDED MAIL TO:

City of Aliso Viejo
12 Journey, Suite 100
Aliso Viejo, CA 92656-5335
Attn: City Manager

Free Recording pursuant to Government Code 6103 & 27383

OWNER OCCUPANCY AND EQUITY SHARING AGREEMENT (DENSITY BONUS UNIT)

Owner:	_____
Property:	_____
Purchase Price:	$_____
Original Fair Market Value:	$_____
City Subsidy Amount:	$_____

This Owner Occupancy and Equity Sharing Agreement ("**Equity Sharing Agreement**") is entered into as of this [date], by and between the City of Aliso Viejo, California, ("**City**") and [name(s)] (referred to herein as "**Buyer**" and sometimes as "**Owner**").

RECITALS

A. BRANDYWINE ACQUISITION GROUP, LLC, a California limited liability company, ("**Developer**"), applied for and received development entitlements from City for the development of a 58 unit residential project ("**Project**"). 3 units within the Project will be designated affordable units for Very Low Income Households ("**Affordable Units**").

B. Pursuant to Government Code section 65915 *et seq*. ("**State Density Bonus Law**"), projects that include specified levels of affordable housing are entitled to receive certain density bonuses and other incentives to facilitate the economic feasibility of those projects.

C. In accordance with State Density Bonus Law, Developer has proposed to sell 3 dwelling units in the Project to Very Low Income Households and requested 2 concessions and 1 waiver in order to accommodate the Project.

D. On [date], City and Developer entered into that certain "**Density Bonus Housing Agreement**" pursuant to which Developer agreed to provide the Affordable Units.

E. Buyer intends to purchase the property located at 25 Argonaut in the City of Aliso Viejo, California, County of Orange ("**Property**"). The Property, which is one of the Affordable Units, is more particularly described in Exhibit A-1.

F. To comply with the requirements of the Density Bonus Housing Agreement, Developer agrees to sell the Property to Buyer for a purchase price of $[insert] ("**Original Purchase Price**"). Buyer and City agree that the fair market value of the Property at time of purchase is $[insert] ("**Original Fair Market Value**"), which price is based on an appraisal conducted at the time of the purchase of the Property by Buyer, or such other method as agreed to by City and Buyer. The Original Purchase Price has been reduced from fair market value as a direct result of the requirements imposed by City on the Project pursuant to the Density Bonus Housing Agreement. City and Buyer acknowledge that the difference between the Original Fair Market Value and the Original Purchase Price, which is equal to $[insert], is a subsidy from City that has enabled Buyer to acquire the Property at an affordable price ("**City Subsidy**").

G. State Density Bonus Law requires City to enter into an agreement with the purchaser of any affordable dwelling unit constructed and sold in exchange for such density bonus that allows City to recapture any initial subsidy and its proportionate share of appreciation. Buyer has agreed to execute and comply with this Equity Sharing Agreement in compliance with such requirements in consideration of the opportunity to purchase the Property at an affordable price, which is below the fair market value of the Property.

H. The purpose of this Equity Sharing Agreement is to: (i) place controls on ownership and occupancy of the Property; (ii) provide City with a First Option when Owner intends to Transfer the Property and preserve City's rights in the event of foreclosure; and (iii) require payment of the City Subsidy and a share of the Property's appreciation to City in accordance with the State Density Bonus Law. In accordance with the foregoing, Owner shall execute a promissory note in favor of City ("**City Note**") to ensure the repayment of the City Subsidy and the City Shared Appreciation, as defined in Section 8(a). The form of the City Note is attached hereto as Exhibit B-1.

I. Buyer is receiving a first mortgage loan ("**First Mortgage Loan**") from [lender name] ("**First Lender**"). The First Mortgage Loan is secured by a deed of trust dated [insert], executed by Buyer in favor of First Lender and recorded in the County of Orange concurrently herewith ("**First Mortgage Deed of Trust**").

J. This Equity Sharing Agreement and the City Note shall be secured by a deed of trust on the Property ("**City Deed of Trust**"). The form of the City Deed of Trust is attached hereto as Exhibit C-1. This Equity Sharing Agreement and the City Deed of Trust shall be subordinate to the lien of the First Mortgage Deed of Trust.

NOW, THEREFORE, in consideration of the benefits received by Buyer and City hereunder, Buyer and City agree as follows:

AGREEMENT

1. DEFINITIONS

The following terms are specially defined for this Equity Sharing Agreement and their definitions can be found in the sections indicated below:

a. "Affordable Housing Cost" — Same meaning as provided in the Density Bonus Housing Agreement.

b. "Buyer" or "Owner" — First sentence on page 1 of this Equity Sharing Agreement

c. "City" — First sentence on page 1 of this Equity Sharing Agreement

d. "City Deed of Trust" — Recital J

e. "City Note" — Recital H

f. "City Shared Appreciation" — Section 8.a

g. "City Subsidy" — Recital F

h. "Default" — Section 9

i. "Density Bonus Housing Agreement" – Recital D

j. "Eligible Capital Improvements" — Section 8.b

k. "Fair Market Value" — Section 6

l. "First Lender" — Recital I

m. "First Mortgage Deed of Trust" — Recital I

n. "First Mortgage Loan" — Recital I

o. "Original Fair Market Value" — Recital F

p. "Original Purchase Price" — Recital F

q. "Owner's Notice of Intent to Transfer" — Section 6

r. "Property" — Recital E and Section 2

s. "Transfer" — Section 5

t. "Very Low Income Household" – same meaning as provided in the Density Bonus Housing Agreement.

2. DESCRIPTION OF PROPERTY

This Agreement concerns the real property commonly known as 25 Argonaut, which is more fully described in Exhibit A-1 ("**Property**").

3. BUYER CERTIFICATIONS; OWNER OCCUPANCY REQUIREMENT

a. Owner Occupancy Requirement. The purpose of the City assistance provided pursuant to this Equity Sharing Agreement is to provide Buyer with the opportunity to become a homeowner. Investment in real estate is not the primary purpose of this Equity Sharing Agreement. Therefore, Buyer shall occupy the Property as Buyer's principal place of residence for at least 10 months during each 12-month period. City may grant a temporary waiver of this occupancy requirement for good cause in its sole discretion.

b. Buyer Certifications. Buyer certifies that the financial and other information previously provided in order to qualify to purchase the Property is true and correct as of the date first written above.

4. INSURANCE REQUIREMENTS

Buyer shall maintain insurance on the Property in accordance with Section 5 of the City Deed of Trust.

5. RESTRICTIONS ON RESALE OF THE PROPERTY

Any Transfer of the Property will be subject to the provisions of this Agreement. "**Transfer**" means any sale, assignment or transfer, voluntary or involuntary, of any interest in the Property, including, but not limited to, a fee simple interest, a joint tenancy interest, a life estate, a leasehold interest, an interest evidenced by a land contract by which possession of the Property is transferred and Owner retains title, or a deed of trust. Any Transfer without satisfaction of the provisions of this Agreement is prohibited and shall constitute a default by Owner for which City may exercise any and all remedies under this Agreement, the City Note and the City Deed of Trust. A Transfer shall not include a conveyance: (i) to an existing spouse or domestic partner; (ii) by an Owner to a spouse or domestic partner where the spouse or domestic partner becomes the co-owner of the Property; (iii) between spouses as part of a marriage dissolution proceeding; (iv) by Owner into an *inter vivos* trust in which Owner is the beneficiary; or (v) refinance of the First Mortgage Loan meeting the requirements of Section 17; provided, however, that Owner shall provide written notice to City of all such conveyances within 30 days of the conveyance and Owner shall continue to occupy the Property as Owner's principal place of residence (except where the conveyance occurs pursuant to subsection (iii) above, in which event the new owner shall occupy the Property and affirmatively assume Owner's obligations under this Agreement, the City Note, and the City Deed of Trust).

6. NOTICE OF INTENDED TRANSFER; CITY'S FIRST OPTION; PREPARATION OF PROPERTY FOR SALE

a. Notice of Intent to Transfer. If Owner intends to Transfer the Property, Owner shall promptly give City written notice of such intent ("**Owner's Notice of Intent to Transfer**"). Owner shall give City the Owner's Notice of Intent to Transfer prior to notifying real estate brokers or lenders of Owner's intent to Transfer the Property and prior to listing of the Property on the Multiple Listing Service. The Owner's Notice of Intent to Transfer shall be sent to City by certified

mail, return receipt requested at the address provided in Section 22 below. The Owner's Notice of Intent to Transfer shall include the information necessary for City to determine the City Shared Appreciation of the Property, including the following information:

(1) The address of the Property;

(2) The date of purchase of the Property by Owner;

(3) The Original Fair Market Value of the Property at the time of Owner's purchase as determined by City and Owner and set forth on the first page of this Equity Sharing Agreement;

(4) A copy of the HUD-1 Settlement Statement or equivalent document from the close of escrow on Owner's purchase of the Property;

(5) If Owner has made capital improvements to the Property that Owner wishes to have recognized as Eligible Capital Improvements for purposes of determining the amount payable to City under Section 8, Owner shall provide a description of the improvements, the date the improvements were made, a copy of City's prior written approval of the improvements (if obtained), evidence of the cost of the improvements, and an appraisal documenting the value added to the Property by the Eligible Capital Improvements. If Owner did not obtain City's prior written approval before making the Capital Improvements, Owner may nevertheless identify such capital improvements in the Notice of Intent to Transfer and request that City recognize them as Eligible Capital Improvements. City shall recognize the improvements as Eligible Capital Improvements if City reasonably determines, based upon documentation provided by Owner, that the improvements satisfy the requirements of Section 8.b. The value of any improvements recognized by City as Eligible Capital Improvements shall be determined pursuant to Section 8.b;

(6) The date the Property will be placed on the market;

(7) The name and phone number of the person to contact to schedule inspection of the Property by City; and

(8) The proposed sale price and other material terms upon which Owner proposes to sell the Property.

b. Fair Market Value Appraisal. Prior to the Transfer of the Property, the Fair Market Value of the Property at the time of Transfer shall be determined by a certified MAI or other qualified real estate appraiser approved in advance by City. If possible, the appraisal shall be based upon the sales prices of comparable properties sold in the market area during the preceding three month period. The cost of the appraisal shall be paid by Owner, unless the appraisal is obtained from a new purchaser. Further, in the event that Owner has made Eligible Capital Improvements, the value of which Owner wishes to retain, the appraisal shall determine the value of such Eligible Capital Improvements in accordance with Section 8.b below. Nothing in this section precludes

Owner and City from establishing the Fair Market Value of the Property at the time of Transfer by mutual agreement in lieu of an appraisal pursuant to this section.

c. City's First Option. Upon receipt of a complete Owner's Notice of Intent to Transfer, City shall have the first right to purchase the Property. The purchase price payable by City shall equal the Fair Market Value of the Property determined pursuant to subsection (b), less the City Subsidy and City Shared Appreciation that would be payable to City under Section 8 if the Property were Transferred to a person other than City (the "**Option Purchase Price**"). Except for the determination and payment of the Option Purchase Price as provided herein, City shall purchase the Property on the material terms specified in the Owner's Notice of Intent to Transfer, to the extent those terms are applicable to City's purchase and are not inconsistent with this Equity Sharing Agreement. City shall have such right and option ("**First Option**") for 45 days after City receives a complete Owner's Notice of Intent to Transfer. If not timely exercised, the First Option shall terminate. If City exercises the First Option, the purchase shall close through escrow within 60 days after City's exercise, or on such other date as City and Owner may agree in writing. Upon the closing of City's purchase pursuant to the First Option, the City Subsidy and City Shared Appreciation shall be credited against the Fair Market Value of the Property in determining the Option Purchase Price and shall be deemed paid and satisfied through the credit. The parties intend that the Option Purchase Price permit Owner to retain the value of any Eligible Capital Improvements, Owner's downpayment, and Owner's proportionate share of appreciation, while permitting City to recapture its initial subsidy and proportionate share of appreciation, in accordance with Government Code section 65915(c)(2)(C).

7. SALE OF PROPERTY BY OWNER

a. Subject to Section 6.c above, Owner may Transfer the Property to a person of Owner's choosing at an unrestricted price (supported by an MAI or other qualified appraisal), and City shall release the Equity Sharing Agreement and cause the City Deed of Trust to be reconveyed from the Property, provided that Owner pays the full amount owed under the City Note to the City pursuant to Section 8 below. Owner shall provide City with the following documentation associated with such a Transfer:

(1) The name and address of the purchaser;

(2) The final sales contract and all other related documents which shall set forth all the terms of the sale of the Property, including a HUD-1 Settlement Statement or equivalent document. Said documents shall include at least the following terms: (a) the sales price; and (b) the price to be paid by the purchaser for Owner's personal property, if any, for the services of Owner, if any, and any credits, allowances or other consideration, if any.

(3) A written certification, from Owner and the purchaser in a form acceptable to City that the sale shall be closed in accordance with the terms of the sales contract and other documents submitted to and approved by City. The certification shall also provide that the purchaser or any other party has not paid and will not pay to Owner, and Owner has not received and will not

receive from the purchaser or any other party, money or other consideration, including personal property, in addition to what is set forth in the sales contract and documents submitted to City. The written certification shall also include a provision that in the event a Transfer is made in violation of the terms of this Equity Sharing Agreement or false or misleading statements are made in any documents or certification submitted to City, City shall have the right to foreclose on the Property or file an action at law or in equity as may be appropriate. In any event, any costs, liabilities or obligations incurred by Owner and the purchaser for the return of any moneys paid or received in violation of this Equity Sharing Agreement or for any costs and legal expenses, shall be borne by Owner and/or the purchaser and they shall hold City and its designee harmless and reimburse their expenses, legal fees and costs for any action they reasonably take in good faith in enforcing the terms of this Equity Sharing Agreement.

(4) A copy of the MAI or other qualified appraisal prepared for the Property in accordance with Section 6.b.

(5) Upon the close of the proposed sale, a copy of the final sales contract, HUD-1 Settlement Statement or equivalent document, escrow instructions, and any other documents which City may reasonably request.

8. PAYMENT TO CITY OF CITY SUBSIDY AND SHARED APPRECIATION

a. Upon a Transfer of the Property to a person other than City pursuant to Section 7, Owner shall pay to City the City Subsidy plus the City Shared Appreciation. The "**City Subsidy**," as defined in Recital F, is equal to the amount by which the Original Fair Market Value of the Property exceeds the Original Purchase Price of the Property. For purposes of this Section 8, "**Adjusted Fair Market Value**" means the Fair Market Value of the Property at the time of Transfer, less the value of any Eligible Capital Improvements determined pursuant to Section 8.b. "**City Shared Appreciation**" shall be calculated pursuant to the City Note but by way of information the following sets forth the method for determining the City Shared Appreciation. If there is any inconsistency between the City Note and this Equity Sharing Agreement with respect to the determination of City Shared Appreciation, the City Note shall control. City Shared Appreciation shall be calculated by dividing the City Subsidy by the Original Fair Market Value of the Property. The resulting percentage, rounded to the closest one-tenth of a percentage point, shall be multiplied by the amount, if any, by which the Adjusted Fair Market Value exceeds the Original Fair Market Value, and the resulting product shall equal the City Shared Appreciation. Notwithstanding the foregoing, if the Adjusted Fair Market Value is lower than the Original Fair Market Value, the amount payable to City shall instead be determined in accordance with subsection (d).

b. The value of any Eligible Capital Improvements shall be the value of any substantial structural or permanent fixed improvements that Owner has made to the Property after acquiring the Property, provided that such improvements are: (i) made or installed by Owner in conformity with applicable building codes at the time of installation; and (ii) approved or recognized by City in writing, either before construction or pursuant to Section 6.a.5. The value of

Eligible Capital Improvements shall be limited to the appraised increase in the value of the Property attributable to the improvements, as determined by the appraisal performed pursuant to 6.b, taking into account any depreciation in value since the installation, and shall not be based on the actual cost of constructing the improvements.

c. The City Subsidy and the City Shared Appreciation shall be a debt of Owner to City, evidenced by this Equity Sharing Agreement and the City Note, and secured by the City Deed of Trust. Owner acknowledges that City shall have no obligation to release this Equity Sharing Agreement or reconvey the City Deed of Trust until the City Subsidy and the City Shared Appreciation are paid to City. City shall utilize the repayment of the City Subsidy and the City Shared Appreciation within five years of receipt of such funds for any of the purposes described in subdivision (e) of section 33334.2 of the Health and Safety Code that promote homeownership.

d. Notwithstanding anything to the contrary in this Section 8, if the Adjusted Fair Market Value is lower than the Original Fair Market Value, the Adjusted Fair Market Value shall be used as the initial market value for purposes of determining the City Subsidy, and the amounts payable to City shall otherwise be calculated in accordance with Government Code section 65915(c)(2)(C), as amended from time to time. In no event shall the amount payable to City under this subsection be less than zero.

9. DEFAULTS

a. The following events shall constitute a "Default" by Owner under this Equity Sharing Agreement:

(1) City determines that Owner has made a misrepresentation to obtain the benefits of purchase of the Property or in connection with its obligations under this Equity Sharing Agreement;

(2) Owner fails to occupy the Property as required pursuant to Section 3 above;

(3) Owner makes a Transfer in violation of this Equity Sharing Agreement;

(4) Owner otherwise fails to comply with the requirements of this Equity Sharing Agreement, the City Note, or the City Deed of Trust and such violation is not corrected to the satisfaction of City within 10 days after the date of written notice by City to Owner of such violation;

(5) A lien is recorded against the Property other than the First Mortgage Deed of Trust, the City Deed of Trust, a lien in favor of City, a lien for nondelinquent taxes or assessments, or any other lien approved by City in writing;

(6) Owner places a mortgage on the Property in violation of Section 17 below;

(7) Owner declares a bankruptcy or makes an assignment of assets for the benefit of creditors.

b. Upon a declaration of Default by City under this Equity Sharing Agreement, City may pursue any or all of the following remedies:

(1) Subject to all applicable notice and cure requirements under the City Note and the City Deed of Trust, declare the City Subsidy and City Shared Appreciation immediately due and payable without further demand, declare a default under the City Note, and invoke the power of sale under the City Deed of Trust;

(2) Apply to a court of competent jurisdiction for any such relief at law or in equity as may be appropriate including, but not limited to, the collection of damages from Owner, which damages shall include City's costs associated with administering City's affordable housing program and the cost to City of providing sufficient assistance to a **Very Low Income** Household to acquire a market rate home at an affordable housing cost as that term is defined in Health and Safety Code section 50052.5; and

(3) Declare a Default under the City Note and City Deed of Trust and pursue all City remedies thereunder.

10. NOTICE OF DEFAULT AND FORECLOSURE

a. City may record a request for copies of any notice of default and notice of sale under any mortgage encumbering the Property. City may declare a Default under this Equity Sharing Agreement upon receipt of any notice given to City pursuant to Civil Code section 2924b, and may exercise its rights as provided in Section 9.

b. In the event of default and foreclosure, City shall have the same right as Owner to cure defaults and redeem the Property prior to the foreclosure sale. Nothing herein shall be construed as creating any obligation of City to cure any such default, nor shall this right to cure and redeem operate to extend any time limitations in the default provisions of the underlying deed of trust or mortgage.

c. Whether or not City has recorded a request pursuant to subsection (a), City may exercise its rights under this Section upon City's actual receipt of written notice of the foreclosure proceedings from Owner, the First Lender, or any other source. Nothing in this Section shall limit City's right to bid at, acquire, or otherwise protect its interest in the Property through any foreclosure sale or any other remedy available under applicable law.

11. NON-LIABILITY OF CITY

a. Non-liability for Negligence, Loss, or Damage. Owner acknowledges, understands and agrees that the relationship between Owner and City is solely that of an owner and an administrator of a City affordable housing program, and that City does not undertake or assume any responsibility for or duty to Owner to select, review, inspect, supervise, pass judgment on, or inform Owner of the quality, adequacy or suitability of the Property or any other matter. City owes no duty of care to protect Owner against negligent, faulty, inadequate or defective building or

construction or any condition of the Property and Owner agrees that neither Owner, or Owner's heirs, successors or assigns shall ever claim, have or assert any right or action against City for any loss, damage or other matter arising out of or resulting from any condition of the Property and will hold City harmless from any liability, loss or damage for these things.

b. Indemnity. Owner agrees to defend, indemnify, and hold City harmless from all losses, damages, liabilities, claims, actions, judgments, costs, and reasonable attorney's fees that City may incur as a direct or indirect consequence of: (1) Owner's default, performance, or failure to perform any obligations as and when required by this Equity Sharing Agreement or the City Deed of Trust; or (2) the failure at any time of any of Owner's representations to City to be true and correct.

12. RESTRICTIONS ON FORECLOSURE PROCEEDS

Subject to the rights of senior lienholders, any proceeds arising from a foreclosure, deed in lieu of foreclosure, or other involuntary Transfer that would otherwise be payable to Owner shall first be applied to the amounts owed to City under the City Note, and only the remaining balance, if any, shall be payable to Owner.

13. RESTRICTION ON INSURANCE PROCEEDS

If the Property is damaged or destroyed and Owner elects not to rebuild or repair the Property, Owner shall pay City the portion of any insurance proceeds received by Owner for such destruction or damage which is equal to the City Subsidy plus the City Shared Appreciation calculated pursuant to Section 8 above, with the total amount of insurance proceeds serving as the Fair Market Value upon Transfer of the Property, provided that in no event shall City receive insurance proceeds in an amount that results in the amount of insurance proceeds available to Owner being less than the Original Purchase Price for the Property as set forth above.

14. TERM OF AGREEMENT

All the provisions of this Equity Sharing Agreement, including the benefits and burdens, run with the Property and this Equity Sharing Agreement shall bind, and the benefit hereof shall inure to, Owner, Owner's heirs, legal representatives, executors, successors in interest and assigns, and to City and its successors, until the earliest to occur of: (i) the Transfer of the Property and payment to City of the City Subsidy and the City Shared Appreciation in accordance with this Agreement and the City Note, (ii) the closing of City's purchase of the Property pursuant to City's exercise of the First Option under Section 6.c, or (iii) termination under Section 16 following foreclosure or deed in lieu.

15. SUPERIORITY OF AGREEMENT

Owner covenants that Owner has not, and will not, execute any other agreement with provisions contradictory to or in opposition to the provisions hereof, and that, in any event, except as otherwise provided herein, this Equity Sharing Agreement is controlling as to the rights and obligations between and among Owner and City and their respective successors.

16. SUBORDINATION

a. Notwithstanding any provision herein, this Equity Sharing Agreement shall not diminish or affect the rights of the First Lender under the First Mortgage Deed of Trust or any subsequent First Lender deeds of trust hereafter recorded against the Property in compliance with Section 17 below.

b. Notwithstanding any other provision hereof, the provisions of this Equity Sharing Agreement and the City Deed of Trust shall be subordinate to the lien of the First Mortgage Deed of Trust and shall not impair the rights of the First Lender, or such First Lender's assignees or successors in interest to exercise their remedies under the First Mortgage Deed of Trust in the event of default under the First Mortgage Deed of Trust by Owner. Such remedies under the First Mortgage Deed of Trust include the right of foreclosure or acceptance of a deed or assignment in lieu of foreclosure. After such foreclosure or acceptance of a deed in lieu of foreclosure, this Equity Sharing Agreement and the City Deed of Trust shall be forever terminated and shall have no further effect as to the Property or any transferee thereafter; provided, however, if the holder of such First Mortgage Deed of Trust acquires title to the Property pursuant to a deed or assignment in lieu of foreclosure, this Equity Sharing Agreement and the City Deed of Trust shall automatically terminate upon such acquisition of title only if: (i) City has been given written notice of the default under the First Mortgage Deed of Trust and a 60-day opportunity to cure such default; and (ii) City has not cured the default within such 60-day period or commenced to cure the default and provided a firm commitment, in form and substance reasonably acceptable to the First Lender, to complete such cure.

17. REFINANCE OF MORTGAGE LOAN

The outstanding principal on the City Note shall not be due upon prepayment and refinancing of the First Mortgage Loan, and this Agreement and the City Deed of Trust shall be subordinated to the refinanced First Mortgage Loan, provided that following such refinance, the principal amount of the refinanced First Mortgage Loan will not exceed the original principal amount of the First Mortgage Loan unless some other amount is approved by City in writing, in City's sole and absolute discretion. Mortgage loans or equity lines of credit junior in lien priority to the City Deed of Trust are not permitted. City and Owner agree that the requirements of this Section 17 are necessary to ensure the continued affordability of the Property to Owner and to minimize the risk of loss of the Property by Owner through default and foreclosure of mortgage loans. Owner further acknowledges that violation of the provisions of this Section 17 shall constitute a Default under this Equity Sharing Agreement.

18. NONDISCRIMINATION

Owner covenants by and for itself and its successors and assigns that there shall be no discrimination against or segregation of a person or of a group of persons on account of race, color, religion, creed, age, disability, sex, sexual orientation, marital status, ancestry or national origin in the sale, transfer, use, occupancy, tenure or enjoyment of the Property, nor shall Owner or any person claiming under or through Owner establish or permit any such practice or practices of

discrimination or segregation with reference to the use, occupancy, or transfer of the Property. The foregoing covenant shall run with the land.

19. INVALID PROVISIONS

If any one or more of the provisions contained in this Equity Sharing Agreement shall for any reason be held to be invalid, illegal or unenforceable by a court of competent jurisdiction, then such provision or provisions shall be deemed severable from the remaining provisions contained in this Equity Sharing Agreement, and this Equity Sharing Agreement shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

20. CONTROLLING LAW

The terms of this Equity Sharing Agreement shall be interpreted under the laws of the State of California. The venue for any legal action pertaining to this Agreement shall be Orange County, California.

21. NO WAIVER

No delay or omission in the exercise of any right or remedy of City upon any default by Owner shall impair such right or remedy or be construed as a waiver. City's failure to insist in any one or more instance upon the strict observance of the terms of this Equity Sharing Agreement shall not be considered a waiver of City's right thereafter to enforce the provisions of the Equity Sharing Agreement. City shall not waive its rights to enforce any provision of this Equity Sharing Agreement unless it does so in writing, signed by an authorized agent of City.

22. NOTICES

a. All notices required herein shall be sent by certified mail, return receipt requested or express delivery service with a delivery receipt and shall be deemed to be effective as of the date received or the date delivery was refused as indicated on the return receipt as follows:

To Owner:
_____
_____
_____
_____

At the address of the Property:
_____
_____
_____
Aliso Viejo, CA 9____

To City:
City of Aliso Viejo
12 Journey, Suite 100
Aliso Viejo, CA 92656-5335
Attn: [insert]

With Copy to:

b. The parties may subsequently change addresses by providing written notice of the change in address to the other parties in accordance with this Section.

23. INTERPRETATION OF AGREEMENT

The terms of this Equity Sharing Agreement shall be interpreted so as to avoid speculation on the Property and to ensure to the extent possible that its sales price and mortgage payment remain affordable to Very Low Income Households.

24. EXHIBITS

Any exhibits referred to in this Equity Sharing Agreement are hereby incorporated herein by this reference.

25. ATTORNEYS FEES

If any action is filed in a court of competent jurisdiction related to this Equity Sharing Agreement, the prevailing party shall be entitled to recover reasonable attorneys' fees and costs from the non-prevailing party.

26. TAX RETURNS

Owner shall execute such documents as are necessary to provide City with access to Owner's filed federal income tax returns.

27. ACKNOWLEDGEMENT OF TERMS

Owner hereby acknowledges that, prior to Owner's execution of this Equity Sharing Agreement, City provided Owner with an in-person, informational session during which City explained, in plain and simple language, the resale restrictions and other material provisions of this Equity Sharing Agreement.

28. ENTIRE AGREEMENT

This Equity Sharing Agreement (along with the City Note and City Deed of Trust) sets forth the entire understanding and agreement of City and Owner and any amendment, alteration or interpretation of this Equity Sharing Agreement must be in writing signed by both City and Owner.

IN WITNESS WHEREOF, the parties have executed this Equity Sharing Agreement on or as of the date first written above.

CITY:	BUYER
[insert], City Manager City of Aliso Viejo	_____

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of _____)

On _____ before me, _____, Notary Public
(insert name and title of the officer)

personally appeared _____
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ **(Seal)**

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of _____)

On _____ before me, _____, Notary Public
(insert name and title of the officer)

personally appeared _____
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ **(Seal)**

EXHIBIT A-1

Legal Description of Property

[insert]

EXHIBIT B-1

City Note

[Attached behind this cover page]

CITY OF ALISO VIEJO PROMISSORY NOTE

Secured by Deed of Trust

$_____ _____, 202_
And City Shared Appreciation

FOR VALUE RECEIVED, the undersigned [name(s)] ("**Borrower**") promises to pay to the City of Aliso Viejo, a California municipal corporation ("**City**"), at 12 Journey, Suite 100, Aliso Viejo, CA 92656-5335, or such other place as City may designate in writing: (i) a principal amount of $[amount] ("**City Subsidy**"), which amount constitutes a subsidy provided by City to Borrower pursuant to that certain Owner Occupancy and Equity Sharing Agreement entered into by and between Borrower and City dated [date] ("**Equity Sharing Agreement**") for purchase of the Property located at [address] in the City of Aliso Viejo, California ("**Property**"); and (ii) the City Shared Appreciation, as defined herein.

1. Purpose of Loan. Borrower is purchasing the Property, which is being sold by BRANDYWINE ACQUISITION GROUP, LLC, a California limited liability company ("**Developer**"), pursuant to that certain Density Bonus Housing Agreement entered into by and between City and Developer to ensure that a certain number of the housing units being constructed by Developer are sold at an affordable housing cost to Very Low Income Households. The purchase price of the Property has been set substantially below the market value so that the Property will be affordable for purchase by Very Low Income Households. Because the purchase price has been set below the market value, Borrower is required and has agreed to enter into the Equity Sharing Agreement with City, which requires Borrower to pay the City Subsidy and the City Shared Appreciation to City. This Note evidences the obligation of Borrower to pay the City Subsidy and the City Shared Appreciation to City pursuant to the Equity Sharing Agreement.

2. Definitions. The terms set forth in this section shall have the following meanings in this Note.

a. "Borrower" has the meaning set forth in the introductory paragraph on page 1 of this Note.

b. "City" means the City of Aliso Viejo, California.

c. "City Deed of Trust" means the deed of trust and security agreement that secures the Equity Sharing Agreement and this Note on the Property.

d. "City Subsidy" has the meaning provided in the introductory paragraph on page 1 of this Note.

e. "City Shared Appreciation" means and shall be calculated by dividing the City Subsidy by the Original Fair Market Value of the Property. The resulting percentage, rounded to the closest one-tenth of a percentage point, shall be multiplied by the

amount, if any, by which the Adjusted Fair Market Value exceeds the Original Fair Market Value, and the resulting product shall equal the City Shared Appreciation. "Adjusted Fair Market Value" has the meaning provided in Section 8.a of the Equity Sharing Agreement. City Shared Appreciation shall not be less than zero.

f. "Developer" has the meaning provided in Section 1 of this Note.

g. "Eligible Capital Improvements" has the meaning provided in Section 8.b of the Equity Sharing Agreement.

h. "Equity Sharing Agreement" has the meaning provided in the introductory paragraph on page 1 of this Note.

i. "Fair Market Value at the time of Transfer" has the meaning provided in Section 6.b of the Equity Sharing Agreement.

j. "First Mortgage Loan" has the meaning provided in Recital I of the Equity Sharing Agreement.

k. "First Option" has the meaning provided in Section 6.c of the Equity Sharing Agreement.

l. "Original Fair Market Value" has the meaning set forth in Recital F of the Equity Sharing Agreement.

m. "Original Purchase Price" has the meaning set forth in Recital F of the Equity Sharing Agreement.

n. "Note" means this promissory note.

o. "Property" means the dwelling, and the real property on which the dwelling is located, which secure the City Deed of Trust executed in connection with this Note. The Property's location is provided in the introductory paragraph on page 1 of this Note.

p. "Transfer" has the meaning provided in Section 5 of the Equity Sharing Agreement.

3. Term. The term of this Note commences on the date of this Note and expires upon the earliest to occur of: (i) the date of Transfer of the Property and the payment to City of the City Subsidy and the City Shared Appreciation; (ii) the closing of City's purchase of the Property pursuant to City's exercise of the First Option in accordance with Section 6.c of the Equity Sharing Agreement; or (iii) termination of the Equity Sharing Agreement and City Deed of Trust pursuant to Section 16 of the Equity Sharing Agreement following foreclosure or acceptance of a deed or assignment in lieu of foreclosure by the First Lender. Notwithstanding the foregoing, termination of this Note following foreclosure or a deed or assignment in lieu of foreclosure shall not affect City's rights to receive any surplus or other proceeds otherwise payable to Borrower, subject to

the rights of senior lienholders, as provided in Section 12 of the Equity Sharing Agreement. Nothing herein shall release Borrower from liability arising from fraud, intentional misrepresentation, waste, or a Transfer made in violation of the Equity Sharing Agreement, except to the extent prohibited by applicable law.

4. Payment.

a. Subject to Subsections 4.b and 4.c below, the total amount of the City Subsidy and the City Shared Appreciation shall immediately become due and payable upon the occurrence of any of the following: (i) an uncured Borrower default (after the applicable notice and cure periods) under this Note, the Equity Sharing Agreement, the City Deed of Trust, or the First Mortgage Loan; (ii) upon a Transfer of the Property as set forth in Section 8 of the Equity Sharing Agreement; or (iii) Borrower ceases to occupy the Property in violation of Section 3 of the Equity Sharing Agreement. For purposes of clauses (i) and (iii), if no Transfer has occurred, the Adjusted Fair Market Value used to calculate City Shared Appreciation shall be determined in accordance with Section 8(a) of the Equity Sharing Agreement, using the Fair Market Value of the Property as of the date of acceleration, as determined by an appraiser selected or approved by City in accordance with Section 6(b) of the Equity Sharing Agreement, less the value of any Eligible Capital Improvements determined pursuant to Section 8(b) of the Equity Sharing Agreement.

b. Upon a Transfer of the Property, if the Adjusted Fair Market Value is lower than the Original Fair Market Value, the amounts payable under this Note shall be determined in accordance with Section 8(d) of the Equity Sharing Agreement.

c. If City's purchase of the Property pursuant to the First Option closes, this Note shall immediately terminate and Borrower shall not be liable for payment of the City Subsidy or the City Shared Appreciation.

5. Security. This Note is secured by the City Deed of Trust, which also secures the Equity Sharing Agreement.

6. No Assumption of Note by Subsequent Buyers; Acceleration. Borrower acknowledges that this Note is given in connection with the purchase of the Property as part of a City program to assist in the purchase of homes by Very Low Income Households. Consequently, this Note is not automatically assumable, but is subject to section 711.5 of the California Civil Code, which allows City to accelerate all amounts due under this Note if any subsequent sale or transfer of the Property of any kind does not comply with the provisions of the Equity Sharing Agreement.

7. Refinance of First Mortgage Loan. The outstanding principal on this Note shall not be due upon prepayment and refinance of the First Mortgage Loan, and the City Deed of Trust and Equity Sharing Agreement shall be subordinated, provided that such refinancing meets the requirements of Section 17 of the Equity Sharing Agreement.

8. Default. Borrower shall be in default under this Note if Borrower is in default under any mortgage loan on the Property (including the First Mortgage Loan) following the expiration

of applicable cure periods, or if, after the notice and cure period provided by City to Borrower pursuant to the notice and cure provisions of the City Deed of Trust, Borrower (i) fails to pay any money when due under this Note; (ii) breaches any representation or covenant made in this Note or the Equity Sharing Agreement in any material respect; or (iii) breaches any provision of the City Deed of Trust or the Equity Sharing Agreement.

9. Acceleration. Subject to Section 4 and following the expiration of all applicable notice and cure periods, upon the occurrence of a default under this Note, the Equity Sharing Agreement, the City Deed of Trust, or the First Mortgage Loan, City shall have the right to declare the City Subsidy and the City Shared Appreciation immediately due and payable.

10. Non-liability for Negligence, Loss, or Damage. Borrower acknowledges, understands and agrees that the relationship between Borrower and City is solely that of borrower and lender, and that City neither undertakes nor assumes any responsibility for or duty to Borrower to select, review, inspect, supervise, pass judgment on, or inform Borrower of the quality, adequacy or suitability of the Property or any other matter. City owes no duty of care to protect Borrower against negligent, faulty, inadequate or defective building or construction or any condition of the Property and Borrower agrees that neither Borrower, or Borrower's heirs, successors or assigns shall ever claim, have or assert any right or action against City for any loss, damage or other matter arising out of or resulting from any condition of the Property and will hold City harmless from any liability, loss or damage for these things.

11. Indemnity. Borrower agrees to defend, indemnify, and hold City harmless from all losses, damages, liabilities, claims, actions, judgments, costs, and reasonable attorney's fees that City may incur as a direct or indirect consequence of:

a. Borrower's default or failure to perform any obligations as and when required by this Note, the City Deed of Trust, and the Equity Sharing Agreement; or

b. The failure at any time of any of Borrower's representations or warranties to be true and correct.

12. No Waiver by City. Failure by City to pursue its legal and equitable remedies upon Borrower's default shall not constitute a waiver of City's right to declare a default and exercise all of its rights under this Note, the City Deed of Trust and the Equity Sharing Agreement. Failure to declare amounts due shall not constitute a waiver on the part of City of the right to declare them due in the event of any subsequent Transfer. Nor shall acceptance by City of any payment provided for herein constitute a waiver of City's right to require prompt payment of any remaining principal owed. A waiver of any term of the Note must be made in writing, signed by an authorized agent of City, and shall be limited to the express written terms of such waiver.

13. Interest. Notwithstanding any other provision of this Note, or any instrument securing the obligations of Borrower under this Note, if, for any reason whatsoever, the payment of any sums by Borrower pursuant to the terms of this Note would result in the payment of interest which would exceed the amount that City may legally charge under the laws of the State of California, then the amount by which payments exceed the lawful interest rate shall automatically

be deducted from the principal balance owing on this Note, so that in no event shall Borrower be obligated under the terms of this Note to pay any interest which would exceed the lawful rate.

14. Attorney's Fees and Costs. Borrower agrees that if any amounts due under this Note are not paid when due, to pay in addition to the City Subsidy and City Shared Appreciation, all costs and expenses of collection and reasonable attorneys' fees paid or incurred by City in connection with the collection or enforcement of this Note, whether or not suit is filed.

15. Joint and Several Obligations. This Note is the joint and several obligation of all makers, sureties, guarantors and endorsers, and shall be binding upon them and their successors and assigns.

16. No Offset. Borrower hereby waives any rights of offset it now has or may hereafter have against City, its successors and assigns, and agrees to make the payments called for herein in accordance with the terms of this Note.

17. Borrower's Waiver. Borrower and any endorsers or guarantors of this Note, for themselves, their heirs, legal representatives, successors and assigns, respectively, severally waive diligence, presentment, protest, and demand, and notice of protest, notice of dishonor and notice of nonpayment of this Note, and expressly waive any rights to be released by reason of any extension of time or change in terms of payment, or change, alteration or release of any security given for the payments hereof, and expressly waive the right to plead any and all statutes of limitations as a defense to any demand on this Note or agreement to pay the same, and jointly and severally agree to pay all costs of collection when incurred, including reasonable attorneys' fees.

18. Notices. All notices required in this Note shall be sent by certified mail, return receipt requested, or express delivery service with a delivery receipt, or personally delivered with a delivery receipt obtained and shall be deemed to be effective as of the date shown on the delivery receipt as the date of delivery, the date delivery was refused, or the date the notice was returned as undeliverable as follows:

To Borrower:

_____

_____

At the address of the Property:

_____

_____

Aliso Viejo, CA _____

To City:

City of Aliso Viejo

12 Journey, Suite 100
Aliso Viejo, CA 92656-5335
Attn: City Manager

The parties may subsequently change addresses by providing written notice of the change in address to the other parties in accordance with this section.

19. Controlling Law. This Note shall be construed in accordance with and be governed by the laws of the State of California.

20. Assignment by City. City may assign its right to receive the proceeds under this Note to any person and upon notice to Borrower by City all payments shall be made to the assignee.

21. Severability. If any provision of this Note shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions hereof shall not in any way be affected or impaired thereby.

22. Entire Agreement. This Note (along with the Equity Sharing Agreement and the City Deed of Trust) sets forth the entire understanding and agreement of City and Borrower and any amendment, alteration or interpretation of this Note must be in writing signed by both City and Borrower.

BORROWER:

_____

_____

EXHIBIT C-1

City Deed of Trust

[Attached behind this cover page]

RECORDING REQUESTED BY:

AND WHEN RECORDED MAIL TO:

City of Aliso Viejo
12 Journey, Suite 100
Aliso Viejo, CA 92656-5335
Attn: [ ]

Free Recording pursuant to
Government Code 6103 & 27383

DEED OF TRUST
AND SECURITY AGREEMENT
(DENSITY BONUS UNIT)

Note to Borrower:
This Deed of Trust Contains
Provisions Restricting Assumptions

THIS DEED OF TRUST AND SECURITY AGREEMENT ("**Deed of Trust**") is made this [date], among the trustor, [name(s)] ("**Borrower**"), whose address is [address], Aliso Viejo, California, [name] Title Company ("**Trustee**") and the City of Aliso Viejo, California ("**City**") as Beneficiary.

Borrower, in consideration of the promises herein recited and the trust herein created, irrevocably grants, transfers, conveys and assigns to Trustee, in trust, with power of sale, the property located in the City of Aliso Viejo, County of Orange, State of California, described in the attached Exhibit "1" and more commonly known as: [address], Aliso Viejo, California [zip code] ("**Property**").

TOGETHER with all the improvements now or hereafter erected on the Property, and all easements, rights, appurtenances, and all fixtures now or hereafter attached to the Property, all of which, including replacements and additions thereto, shall be deemed to be and remain a part of the Property covered by this Deed of Trust; and TOGETHER with all articles of personal property or fixtures now or hereafter attached to or used in and about the building or buildings now erected or hereafter to be erected on the Property which are necessary to the complete and comfortable use and occupancy of such building or buildings for the purposes for which they were or are to be erected, including all other goods and chattels and personal property as are ever used or furnished in operating a building, or the activities conducted therein, similar to the one herein described and referred to, and all renewals or replacements thereof or articles in substitution therefor, whether or not the same as, or shall be attached to said building or buildings in any manner; and all of the foregoing, together with the Property, is herein referred to as the "**Security**;"

To have and to hold the Security together with appurtenances to Trustee, its successors and assigns forever;

TO SECURE to City the performance of the covenants and agreements of Borrower contained in the Owner Occupancy and Equity Sharing Agreement executed by and between Borrower and City ("**Equity Sharing Agreement**");

TO SECURE to City the repayment of the sums evidenced by a promissory note executed by Borrower in favor of City dated [insert] ("**Note**"), which note provides for repayment of a City Subsidy in the amount of $[insert], and City's share of appreciation in the value of the Property, based on City's proportionate assistance to Borrower, as more particularly described in the Note and the Equity Sharing Agreement; and

TO SECURE the payment of all other sums, with interest thereon, advanced in accordance herewith to protect the security of this Deed of Trust; and the performance of the covenants and agreements of Borrower herein contained.

BORROWER AND CITY COVENANT AND AGREE AS FOLLOWS:

1. Borrower's Estate. Borrower is lawfully seized of the estate hereby conveyed and has the right to grant and convey the Security, that other than this Deed of Trust, the Security is encumbered only by: (1) a deed of trust executed by Borrower in connection with a loan made to Borrower by [lender name] ("**First Lender**"), dated [date], executed by Borrower in favor of First Lender, securing a first mortgage loan ("**First Mortgage Loan**") to assist in the purchase of the Property ("**First Mortgage Deed of Trust**"); (2) the Equity Sharing Agreement; and (3) any other deeds of trust or encumbrances approved by City. Borrower agrees to warrant and defend generally the title to the Security against all claims and demands, subject to any declarations, easements or restrictions listed in a schedule of exceptions to coverage in any title insurance policy insuring City's interest in the Security. As used in this Deed of Trust, the term "First Lender" shall include all successors and assigns of First Lender.

2. Repayment. Borrower will promptly repay, when due, all amounts due under the Note. The Note contains the following provisions concerning repayment under certain conditions:

> Borrower acknowledges that this Note is given in connection with the purchase of the Property as part of a City program to assist in the purchase of homes by Very Low Income Households. Consequently, this Note is not automatically assumable, but is subject to section 711.5 of the California Civil Code, which allows the City to accelerate all amounts due under this Note if any subsequent sale or transfer of the Property of any kind does not comply with the provisions of the Equity Sharing Agreement.

3. Equity Sharing Agreement. Borrower will observe and perform all of the covenants and agreements of the Equity Sharing Agreement.

4. Charges; Liens. Borrower will pay all taxes, assessments and other charges, fines and impositions attributable to the Security which may attain a priority over this Deed of Trust, by

making any payment, when due, directly to the payee thereof. Borrower will promptly furnish to City all notices of amounts due under this paragraph, and in the event Borrower makes payment directly, Borrower will promptly discharge any lien which has priority over this Deed of Trust; provided, that Borrower will not be required to discharge the lien of the First Mortgage Deed of Trust (securing the First Mortgage Loan) or any other lien described in this paragraph so long as Borrower will agree in writing to the payment of the obligation secured by such lien in a manner acceptable to City, or will, in good faith, contest such lien by, or defend enforcement of such lien in, legal proceedings which operate to prevent the enforcement of the lien or forfeiture of the Security or any part thereof.

5. Hazard Insurance.

NOTICE REQUIRED BY CALIFORNIA CIVIL CODE SECTION 2955.5: NO LENDER SHALL REQUIRE A BORROWER, AS A CONDITION OF RECEIVING OR MAINTAINING A LOAN SECURED BY REAL PROPERTY, TO PROVIDE HAZARD INSURANCE COVERAGE AGAINST RISKS TO THE IMPROVEMENTS ON THAT REAL PROPERTY IN AN AMOUNT EXCEEDING THE REPLACEMENT VALUE OF THE IMPROVEMENTS ON THE PROPERTY.

BORROWER ACKNOWLEDGES THAT THE FOREGOING DISCLOSURE WAS PROVIDED IN WRITING BEFORE BORROWER EXECUTED THE NOTE, THIS DEED OF TRUST, OR ANY OTHER SECURITY DOCUMENT RELATING TO THE CITY LOAN.

Borrower will keep the improvements on the Security insured under a standard fire and extended coverage insurance policy in at least such amounts and for such periods as City may reasonably require; provided, however, that City shall not require hazard insurance coverage in an amount exceeding the replacement value of the improvements on the Security. Subject to that limitation, the required coverage shall not be less than the amount necessary to prevent Borrower from becoming a co-insurer under the terms of the policy.

The insurance carrier providing this insurance shall be licensed to do business in the State of California and be chosen by Borrower subject to approval by City; provided, that such approval will not be withheld if the insurer is also approved by the First Lender.

All insurance policies and renewals thereof will be in a form acceptable to City and will include a standard mortgagee clause with standard lender's endorsement in favor of the holder of the First Mortgage Loan and City as their interests may appear and in a form acceptable to City. City shall have the right to hold, or cause its designated agent to hold, the policies and renewals thereof, and Borrower shall promptly furnish to City, or its designated agent, the original insurance policies or certificates of insurance, all renewal notices and all receipts of paid premiums. In the event of loss, Borrower will give prompt notice to the insurance carrier and City or its designated agent. City, or its designated agent, may make proof of loss if not made promptly by Borrower.

City shall receive 30 days advance notice of cancellation of any insurance policies required under this section.

Unless City and Borrower otherwise agree in writing, insurance proceeds, subject to the rights of the First Lender, will be applied to restoration or repair of the Security damaged, provided such restoration or repair is economically feasible and the Security of this Deed of Trust is not thereby impaired. If such restoration or repair is not economically feasible or if the Security of this Deed of Trust would be impaired, the insurance proceeds will be used to repay the loan under this Deed of Trust, with the excess, if any, paid to Borrower. If the Security is abandoned by Borrower, or if Borrower fails to respond to City, or its designated agent, within 30 days from the date notice is mailed by either of them to Borrower that the insurance carrier offers to settle a claim for insurance benefits, City, or its designated agent, is authorized to collect and apply the insurance proceeds at City's option either to restoration or repair of the Security or to repay the amounts due under the Note.

If the Security is acquired by City, all right, title and interest of Borrower in and to any insurance policy and in and to the proceeds thereof resulting from damage to the Security prior to the sale or acquisition will pass to City to the extent of the sums secured by this Deed of Trust immediately prior to such sale or acquisition subject to the rights of First Lender.

6. Preservation and Maintenance of Security. Borrower will keep the Security in good repair and will not commit waste or permit impairment or deterioration of the Security.

7. Protection of City's Security. If Borrower fails to perform the covenants and agreements contained in this Deed of Trust or if any action or proceeding is commenced which materially affects City's interest in the Security, including, but not limited to, default under the First Mortgage Deed of Trust securing the First Mortgage Loan, eminent domain, insolvency, code enforcement, or arrangements or proceedings involving a bankrupt or decedent, then City, at City's option, upon notice to Borrower, may make such appearances, disburse such sums and take such action as it determines necessary to protect City's interest, including but not limited to, disbursement of reasonable attorneys' fees and entry upon the Security to make repairs.

Any amounts disbursed by City pursuant to this paragraph shall become indebtedness of Borrower secured by this Deed of Trust. Unless Borrower and City agree to other terms of payment, such amount shall be payable upon notice from City to Borrower requesting payment thereof and shall bear interest from the date of disbursement at the maximum rate permitted by applicable law. Nothing contained in this paragraph will require City to incur any expense or take any action hereunder.

8. Inspection. City may make or cause to be made reasonable entries upon and inspections of the Security; provided that City will give Borrower reasonable notice of inspection.

9. Forbearance by City Not a Waiver. Any forbearance by City in exercising any right or remedy will not be a waiver of the exercise of any such right or remedy. The procurement of insurance or the payment of taxes or other liens or charges by City will not be a waiver of City's right to accelerate the maturity of the indebtedness secured by this Deed of Trust.

10. Remedies Cumulative. All remedies provided in this Deed of Trust are distinct and cumulative to any other right or remedy under this Deed of Trust or any other document, or afforded by law or equity, and may be exercised concurrently, independently or successively.

11. Successors and Assigns Bound. The covenants and agreements herein contained shall bind, and the rights hereunder shall inure to, the respective successors and assigns of City and Borrower subject to the provisions of this Deed of Trust.

12. Joint and Several Liability. All covenants and agreements of Borrower shall be joint and several.

13. Notice. Except for any notice required under applicable law to be given in another manner: (a) any notice to Borrower provided for in this Deed of Trust will be given by certified mail, addressed to Borrower at the address shown in the first paragraph of this Deed of Trust or such other address as Borrower may designate by notice to City as provided herein; and (b) any notice to City will be given by express delivery, return receipt requested, to City at 12 Journey, Suite 100, Aliso Viejo, CA, 92656-5335, Attn: City Manager, or to such other address as City may designate by notice to Borrower as provided above. Notice shall be effective as of the date received by the recipient as shown on the return receipt.

14. Governing Law. This Deed of Trust shall be governed by the laws of the State of California.

15. Severability. If any provision or clause of this Deed of Trust, the Note, or the Equity Sharing Agreement conflict with applicable law, such conflicts will not affect other provisions of this Deed of Trust, the Note, or the Equity Sharing Agreement which can be given effect without the conflicting provision, and to this end the provisions of the Deed of Trust, the Note, and the Equity Sharing Agreement are declared to be severable.

16. Captions. The captions and headings in this Deed of Trust are for convenience only and are not to be used to interpret or define the provisions hereof.

17. Acceleration; Remedies. Upon Borrower's breach of any covenant or agreement of Borrower in this Deed of Trust, including, but not limited to, the covenants to pay, when due, any sums secured by this Deed of Trust, City, prior to acceleration, will mail by express delivery, return receipt requested notice to Borrower specifying: (1) the breach; (2) the action required to cure such breach; (3) a date, not less than 30 days from the date the notice is received by Borrower as shown on the return receipt, by which such breach is to be cured; and (4) that failure to cure such breach on or before the date specified in the notice may result in acceleration of the sums secured by this Deed of Trust and sale of the Security. The notice will also inform Borrower of Borrower's right to reinstate after acceleration and the right to bring a court action to assert the nonexistence of default or any other defense of Borrower to acceleration and sale. If the breach is not cured on or before the date specified in the notice, City, at City's option, may: (a) declare all of the sums secured by this Deed of Trust to be immediately due and payable without further demand and may invoke the power of sale and any other remedies permitted by California law; (b) either in person

or by agent, with or without bringing any action or proceeding, or by a receiver appointed by a court, and without regard to the adequacy of its security, enter upon the Security and take possession thereof (or any part thereof) and of any of the Security, in its own name or in the name of Trustee, and do any acts which it deems necessary or desirable to preserve the value or marketability of the Security, or part thereof or interest therein, increase the income therefrom or protect the security thereof. The entering upon and taking possession of the Security shall not cure or waive any breach hereunder or invalidate any act done in response to such breach and, notwithstanding the continuance in possession of the Security, City shall be entitled to exercise every right provided for in this Deed of Trust, or by law upon occurrence of any uncured breach, including the right to exercise the power of sale; (c) commence an action to foreclose this Deed of Trust as a mortgage, appoint a receiver, or specifically enforce any of the covenants hereof; (d) deliver to Trustee a written declaration of default and demand for sale, pursuant to the provisions for notice of sale found at California Civil Code Sections 2924, et seq., as amended from time to time; or (e) exercise all other rights and remedies provided herein, in the instruments by which Borrower acquires title to any Security, or in any other document or agreement now or hereafter evidencing, creating or securing all or any portion of the obligations secured hereby, or provided by law.

City shall be entitled to collect all reasonable costs and expenses incurred in pursuing the remedies provided in this paragraph, including, but not limited to, reasonable attorney's fees and costs.

18. Borrower's Right to Reinstate. Notwithstanding City's acceleration of the sums secured by this Deed of Trust, Borrower will have the right to have any proceedings begun by City to enforce this Deed of Trust discontinued at any time prior to five business days before sale of the Security pursuant to the power of sale contained in this Deed of Trust or at any time prior to entry of a judgment enforcing this Deed of Trust if: (a) Borrower pays City all sums that would then be due under the Note and this Deed of Trust had no acceleration occurred; (b) Borrower cures all breaches of any other covenants or agreements of Borrower contained in this Deed of Trust; (c) Borrower pays all reasonable expenses incurred by City and Trustee in enforcing the covenants and agreements of Borrower contained in this Deed of Trust, and in enforcing City's and Trustee's remedies, including, but not limited to, reasonable attorney's fees; and (d) Borrower takes such action as City may reasonably require to assure that the lien of this Deed of Trust, City's interest in the Security and Borrower's obligation to pay the sums secured by this Deed of Trust shall continue unimpaired. Upon such payment and cure by Borrower, this Deed of Trust and the obligations secured hereby will remain in full force and effect as if no acceleration had occurred.

19. Reconveyance. Upon payment or forgiveness of all sums secured by this Deed of Trust, City will request Trustee to reconvey the Security and will surrender this Deed of Trust and the Note to Trustee. Trustee will reconvey the Security without warranty and without charge to the person or persons legally entitled thereto. Such person or persons will pay all costs of recordation, if any.

20. Substitute Trustee. City, at City's option, may from time to time remove Trustee and appoint a successor trustee to any Trustee appointed hereunder. The successor trustee will succeed to all the title, power and duties conferred upon the Trustee herein and by applicable law.

21. Superiority of First Lender Documents. Notwithstanding any provision herein, this Deed of Trust shall not diminish or affect the rights of First Lender under the First Mortgage Deed of Trust or any subsequent First Lender deeds of trust hereafter recorded against the Security in compliance with the requirements of Section 17 of the Equity Sharing Agreement.

Notwithstanding any other provision hereof, the provisions of this Deed of Trust shall be subordinate to the lien of the First Mortgage Deed of Trust and shall not impair the rights of the First Lender, or such lender's assignee or successor in interest, to exercise its remedies under its First Mortgage Deed of Trust in the event of default under its First Mortgage Deed of Trust by Borrower. Such remedies under the First Mortgage Deed of Trust include the right of foreclosure or acceptance of a deed or assignment in lieu of foreclosure. After such foreclosure or acceptance of a deed in lieu of foreclosure, this Deed of Trust shall be forever terminated and shall have no further effect as to the Property or any transferee thereafter; provided, however, if the holder of such First Mortgage Deed of Trust acquires title to the Property pursuant to a deed or assignment in lieu of foreclosure, this Deed of Trust shall automatically terminate upon such acquisition of title, only if: (i) City has been given written notice of the default under the First Mortgage Deed of Trust and a 60-day opportunity to cure such default; and (ii) City has not cured the default within such 60-day period or commenced to cure the default and provided a firm commitment, in a form and substance reasonably acceptable to First Lender, to complete such cure.

22. Request for Notice. Pursuant to Civil Code section 2924b, City requests that a copy of any notice of default and notice of sale under any deed of trust or mortgage senior to this Deed of Trust be mailed to City at the address set forth in Section 13 of this Deed of Trust.

IN WITNESS WHEREOF, Borrower has executed this Deed of Trust as of the date first written above.

BORROWER:

_____

_____

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of _____)

On _____ before me, _____, Notary Public
(insert name and title of the officer)

personally appeared _____
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ **(Seal)**

EXHIBIT 1

Legal Description of Property

EXHIBIT "E"
ASSIGNMENT AND ASSUMPTION AGREEMENT

ASSIGNMENT AND ASSUMPTION OF DEVELOPMENT AGREEMENT BETWEEN CITY OF ALISO VIEJO AND _____, WHICH WILL DO BUSINESS IN CALIFORNIA AS _____.,

THIS ASSIGNMENT AND ASSUMPTION OF DEVELOPMENT AGREEMENT BETWEEN CITY OF ALISO VIEJO AND _____ WHICH WILL DO BUSINESS IN CALIFORNIA AS _____.**("Assignment")** is made as of the ___ day of _____, 20___ (**"Effective Date"**), by and among [ENTITY] ("[ENTITY]") a [LEGAL DESIGNATION] and _____ ("**Assignee**") with reference to the following facts:

RECITALS

A. [ENTITY] has entered into that certain Development Agreement, dated _____, 2026, by and between the City of Aliso Viejo ("**City**"), on the one hand, and [ENTITY], on the other hand ("**Agreement"**) for certain real property consisting of approximately 4.4 acres of land located in the City, more particularly described in Exhibit "A" ("**Property**").

B. [ENTITY] desires to assign and delegate, and Assignee desires to accept and assume, all of [ENTITY'S] rights and obligations under the Agreement in accordance with the terms and conditions set forth herein.

C. City has approved the Assignment in accordance with the terms and conditions set forth herein and in the Agreement.

AGREEMENT

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, [ENTITY] and Assignee do hereby agree as follows:

1. Assignment and Assumption. Effective as of the Effective Date, [ENTITY] hereby assigns, transfers, and conveys to Assignee all of [ENTITY'S] rights, interest, duties, liabilities, and obligations in, to, and under the Agreement, and Assignee hereby accepts and assumes all such rights, interests, duties, liabilities, and obligations under the Agreement from [ENTITY] for [the Property or a portion of the Property] ("Assigned Property") [, except to the extent [ENTITY] has retained a portion of the Property (the "Retained Property")].

2. City Consent to Assignment. Effective as of the Effective Date, City hereby consents to the Assignment and hereby fully releases and forever discharges [ENTITY] from any and all obligations to City under the Agreement for the Assigned Property, [except [ENTITY'S] obligations with respect to the Retained Property].

3. Entire Agreement. This Agreement represents the final and entire agreement between the parties in connection with the subject matter hereof, and may not be modified except by a written agreement signed by both [ENTITY] and Assignee.

4. Governing Law. This Agreement has been prepared, negotiated, and executed in, and shall be construed in accordance with, the laws of the State of California, without regard to conflict of law rules.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the date first above written.

[ENTITY]**:**

[ENTITY]
a [LEGAL DESIGNATION]

By: _____
Name:
Its:

Assignee:

_____
_____

By: _____
Name:
Its:

City:

City of Aliso Viejo,
a California Municipal Corporation

By: _____
Name:
Its: City Manager

City of Aliso Viejo
AGENDA ITEM

DATE: October 21, 2026

TO: Mayor and City Council

FROM: Shaun Pelletier, City Engineer

SUBJECT: APPROVAL OF COOPERATIVE AGREEMENT WITH THE CITIES OF ALISO VIEJO, LAGUNA NIGUEL, LAGUNA HILLS, AND MISSION VIEJO FOR THE LA PAZ ROAD REGIONAL TRAFFIC SIGNAL SYNCHRONIZATION PROGRAM PROJECT

Recommended Actions:

1. Approve the Cooperative Agreement by and between the City of Laguna Niguel and the cities of Aliso Viejo, Laguna Hills, and Mission Viejo for the La Paz Road Regional Traffic Signal Synchronization Program Project;

2. Appropriate an additional $86,133.76 in Measure M2 funds to the fiscal year 2026-27 Capital Improvement Plan budget;

3. Authorize the Mayor and the City Clerk to execute the agreement; and

4. Authorize the City Manager to execute future amendments to the agreement.

Fiscal Impact:

Aliso Viejo's match will be $86,133.76. An additional $86,133.76 in Measure M2 funds will be appropriated to the fiscal year 2026-27 Capital Improvement Plan budget.

Background:

As part of Renewed Measure M (M2), the Orange County Transportation Authority (OCTA) is responsible for implementing traffic signal coordination projects under the Regional Traffic Signal Synchronization Program (RTSSP), also known as Project "P". These projects will improve traffic flow by providing traffic signal infrastructure improvements and synchronization on major corridors that cross several jurisdictions totaling over 2,000 signalized intersections across Orange County. The project corridor is La Paz Road between Olympiad Road/Felipe Road to Crown Valley Parkway and is approximately 8 miles long and spans four agencies, crossing both the 1-5 freeway and

the SR-73 toll road, and includes 33 traffic signals, 6 of which are located in Aliso Viejo, including La Paz/SR73 ramps that are maintained by Caltrans. A vicinity map is attached.

The project will install new fiber optic communications, traffic signal cabinets, traffic signal controllers, and hybrid video/radar vehicle detection equipment along the corridor within Aliso Viejo.

All participating agencies within the project corridor are required to enter into a Cooperative Agreement with the lead agency. In the past, the City of Aliso Viejo entered into similar Cooperative Agreements with OCTA, which served as the lead agency for traffic signal synchronization projects such as Los Alisos and Aliso Creek Road.

Discussion:

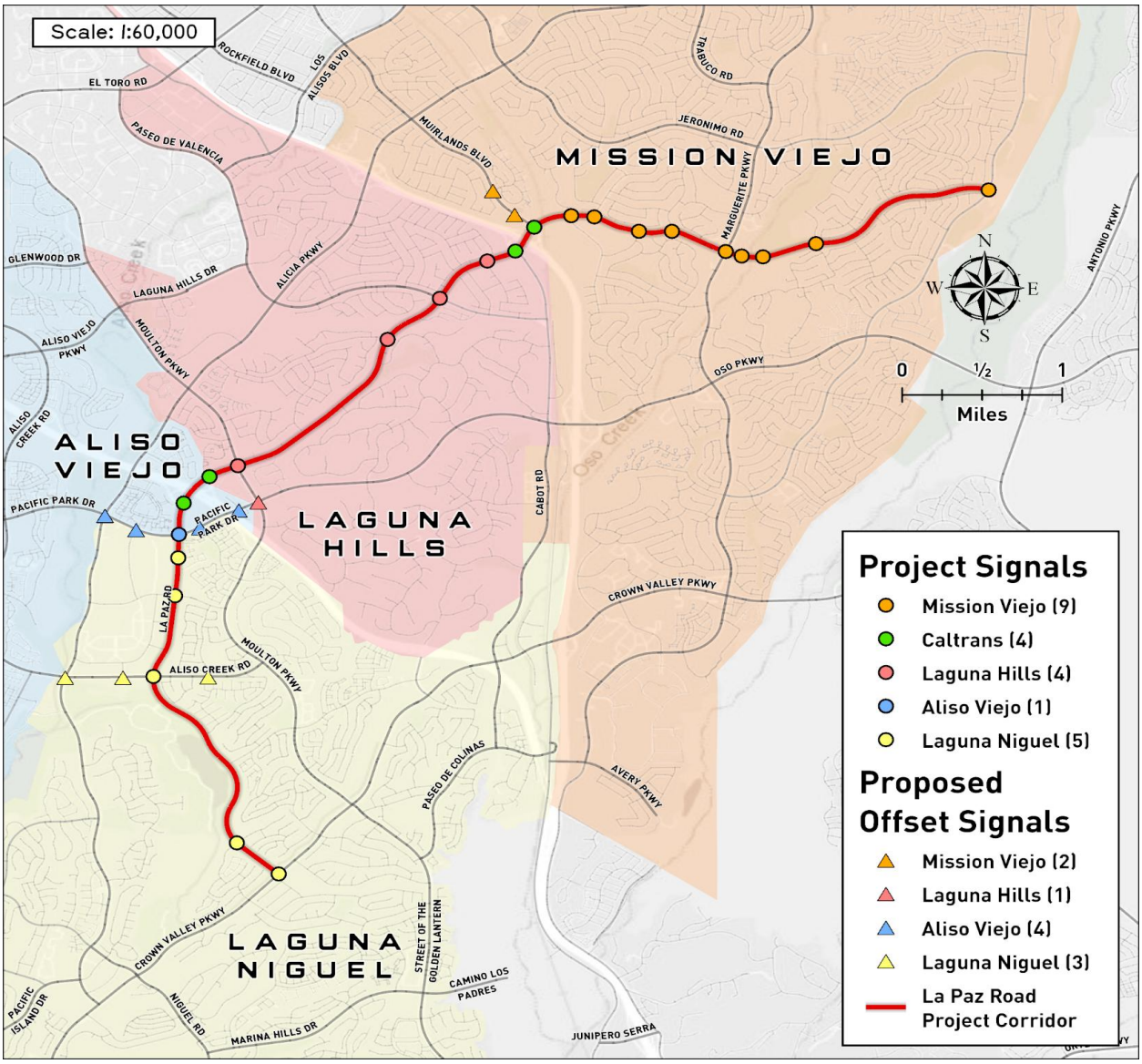
The total project cost is approximately $2.4 million, of which about $415,000 is within the City of Aliso Viejo.

The Cooperative Agreement describes the scope of work and responsibilities for each agency on this project. Laguna Niguel is the lead agency and will be responsible for managing the design, construction, and maintenance phases of the project as well as seeking reimbursement payments from OCTA and the participating agencies for completed work. The Cooperative Agreement specifies the dollar match amounts that would be invoiced by the City of Laguna Niguel to each participating agency, and the participating agencies would be responsible for making payments within 30 days of receipt of invoices.

Attachments:

1. Vicinity Map
2. Cooperative Agreement

La Paz Road Vicinity Map



COOPERATIVE AGREEMENT

BY AND BETWEEN

THE CITY OF LAGUNA NIGUEL

AND

THE CITIES OF ALISO VIEJO, LAGUNA HILLS, AND MISSION VIEJO

FOR THE

LA PAZ ROAD REGIONAL TRAFFIC SIGNAL SYNCHRONIZATION PROGRAM PROJECT

This La Paz Road Regional Traffic Signal Synchronization Program Project Cooperative Agreement ("AGREEMENT") is entered into as of _____, 2026 ("Effective Date") by and between the CITY OF LAGUNA NIGUEL, hereinafter referred to as "LAGUNA NIGUEL", and the Cities of Aliso Viejo, Laguna Hills, and Mission Viejo, hereinafter referred to as "ALISO VIEJO", "LAGUNA HILLS", AND "MISSION VIEJO" respectively, jointly referred to as "AGENCIES". LAGUNA NIGUEL and AGENCIES are sometimes referred to herein individually as a "PARTY" or collectively as the "PARTIES".

RECITALS:

WHEREAS, La Paz Road between Olympiad Road/Felipe Road and Crown Valley Parkway, is geographically located in the Cities of Laguna Niguel, Aliso Viejo, Laguna Hills, and Mission Viejo; and

WHEREAS, La Paz Road between Olympiad Road/Felipe Road and Chrisanta Drive is maintained by MISSION VIEJO; and

WHEREAS, La Paz Road between Interstate 5 Northbound Off-Ramp/Muirlands Boulevard and Interstate 5 Southbound Off-Ramp/Cabot Road and between State Route 73 Northbound Ramps/Merienda and State Route 73 Southbound Ramps/Aliso Viejo Plaza are maintained by the State of California, hereinafter referred to as "STATE" or "CALTRANS"; and

WHEREAS, La Paz Road between McIntyre Street and Moulton Parkway is maintained by LAGUNA HILLS; and

WHEREAS, La Paz Road at Pacific Park Drive is maintained by ALISO VIEJO; and

WHEREAS, La Paz Road between Plaza Del La Paz/Avenida Breve and Crown Valley Parkway is maintained by LAGUNA NIGUEL; and

WHEREAS, the Measure M2 Regional Traffic Signal Synchronization Program (RTSSP) targets over 2,000 signalized intersections across Orange County to maintain traffic signal synchronization, improve traffic flow and reduce congestion across jurisdictions; and

WHEREAS, LAGUNA NIGUEL and AGENCIES are committed to implementing multi-jurisdictional signal synchronization to enhance countywide traffic flow and reducing congestion; and

WHEREAS, LAGUNA NIGUEL has been awarded Project P funds based on the application ("APPLICATION") prepared by LAGUNA NIGUEL for the implementation of signal synchronization of traffic signals along the La Paz Road Corridor between Olympiad Road/Felipe Road and Crown Valley Parkway (hereinafter, "PROJECT"); and

WHEREAS, LAGUNA NIGUEL and AGENCIES will provide matching funds as required by the Orange County Comprehensive Transportation Funding Programs; and

WHEREAS, LAGUNA NIGUEL agrees to act as the lead agency for design, construction and management of PROJECT; and

WHEREAS, the PROJECT will include twenty-three (23) traffic signals along La Paz Road, between Olympiad Road/Felipe Road and Crown Valley Parkway,, and located in the Cities of Laguna Niguel, Aliso Viejo, Laguna Hills, and Mission Viejo. Additionally, ten (10) offset signalized intersections are included, for a total of thirty-three (33) signals, as shown in Attachment A; and

WHEREAS, the PROJECT will include Intelligent Transportation System (ITS) elements identified in the Application and other associated systems ("ITS Elements"), that will be constructed and/or installed and implemented as part of the PROJECT; and

WHEREAS, the PROJECT Scope of Work also includes the ongoing monitoring and maintenance of the coordinated signal system's operation, including system communication/detection upkeep, for two years; and

WHEREAS, LAGUNA NIGUEL agrees to work with AGENCIES to coordinate

the inclusion of other ITS elements that must be installed before or at the same time as the construction of the PROJECT and are not part of this Agreement; and

WHEREAS, all costs associated with the inclusion of these other elements, if any, are the sole responsibility of the PARTY owning each and any of those other elements; and

WHEREAS, LAGUNA NIGUEL and each other respective PARTY acknowledge and understand that in-house resources (staff hours) from each PARTY will provide various services for the PROJECT per the Application; and

WHEREAS, LAGUNA NIGUEL and each other respective PARTY acknowledge and understand that PROJECT costs for various types of additional work required by each respective PARTY may not have been included in the original application and therefore those costs are not included in the PROJECT allocation; and

WHEREAS, LAGUNA NIGUEL and each other respective PARTY agree that these additional costs will be paid by the PROJECT only with written approval by LAGUNA NIGUEL, which may result in additional dollar match; and

WHEREAS, LAGUNA NIGUEL agrees to implement the PROJECT as referenced on the Application; and

WHEREAS, the PARTIES desire to enter into this Agreement to implement the PROJECT in support of Project P as part of M2; and

WHEREAS, the PARTIES agree to contribute the share of the PROJECT as set forth in the Application, shown in Attachment B and incorporated herein by reference; and

WHEREAS, in the event the cost of the PROJECT exceeds the estimates as submitted in the Application prepared by LAGUNA NIGUEL, the PARTIES agree to meet and determine revisions to the PROJECT to satisfy the budget(s) or revised funding proposal(s) by the PARTIES, which shall be documented and submitted in writing as an amendment to the Agreement. Any cost overruns shall be the financial responsibility of the jurisdiction where the work improvement occurs or as the case may be, causes the required improvement; and

WHEREAS, this AGREEMENT defines the roles, specific terms, conditions and responsibilities between LAGUNA NIGUEL and AGENCIES; and

WHEREAS, the City of ALISO VIEJO's City Council approved this AGREEMENT on the _____ day of _____, 2026; and

WHEREAS, the City of LAGUNA HILLS's City Council approved this AGREEMENT on the _____ day of _____, 2026; and

WHEREAS, the City of MISSION VIEJO's City Council approved this AGREEMENT on the _____ day of _____, 2026; and

WHEREAS, the City of LAGUNA NIGUEL's City Council approved this AGREEMENT on the _____ day of _____, 2026; and

AGREEMENT

NOW, THEREFORE, it is mutually understood and agreed by LAGUNA NIGUEL and AGENCIES as follows:

ARTICLE 1. COMPLETE AGREEMENT

A. This AGREEMENT, including any attachments incorporated herein and made applicable by reference, constitutes the complete and exclusive statement of the term(s) and condition(s) of the agreement between LAGUNA NIGUEL and AGENCIES concerning the PROJECT and it supersedes all prior representations, understandings and communications between the PARTIES. The invalidity in whole or in part of any term or condition of this AGREEMENT shall not affect the validity of other term(s) or condition(s) of the AGREEMENT. The above referenced Recitals are true and correct and are incorporated by reference herein.

B. LAGUNA NIGUEL's failure to insist on any instance(s) of AGENCIES' performance of any term(s) or condition(s) of this AGREEMENT shall not be construed as a waiver or relinquishment of LAGUNA NIGUEL's right to such performance or to future performance of such term(s) or condition(s), and AGENCIES' obligation in respect thereto shall continue in full force and effect. Changes to any portion of this Agreement shall not be binding upon LAGUNA NIGUEL except when specifically confirmed in writing by an authorized representative of LAGUNA NIGUEL by way of a written amendment to this Agreement and issued in accordance with the provisions of this Agreement.

C. AGENCIES' failure to insist on any instance(s) of LAGUNA NIGUEL'S performance of any term(s) or condition(s) of this AGREEMENT shall not be construed as a waiver or relinquishment of AGENCIES' right to such performance or to future

performance of such term(s) or condition(s), and LAGUA NIGUEL's obligation in respect thereto shall continue in full force and effect. Changes to any portion of this AGREEMENT shall not be binding upon AGENCIES except when specifically confirmed in writing by an authorized representative of AGENCIES by way of a written amendment to this AGREEMENT and issued in accordance with the provisions of this AGREEMENT.

ARTICLE 2. SCOPE OF AGREEMENT

This AGREEMENT specifies the roles and responsibilities of the PARTIES as they pertain to the subjects and PROJECT addressed herein. Both LAGUNA NIGUEL and AGENCIES agree that each will cooperate and coordinate with the other in all activities covered by this AGREEMENT and any other supplemental agreements that may be required to facilitate purposes thereof.

ARTICLE 3. RESPONSIBILITIES OF LAGUNA NIGUEL

LAGUNA NIGUEL as the Lead Agency agrees to the following responsibilities for the implementation of the PROJECT:

A. LAGUNA NIGUEL shall serve as lead agency for design, construction and construction management of PROJECT and shall provide oversight by establishing PROJECT milestones and overseeing the PROJECT development to ensure compliance with all standards and requirements set forth in this AGREEMENT.

B. LAGUNA NIGUEL shall be responsible for completing the PROJECT in accordance with the funding guidelines and any and all other federal, state, and Orange County Transportation Authority (OCTA) requirements related to these funding programs, as well as any and all applicable statutes and regulations including, but not limited to, bidding laws, prevailing wage and other labor laws, provisions of the California Building Standards Code, and the California Environmental Quality Act (CEQA) and the Guidelines thereunder.

C. LAGUNA NIGUEL shall provide AGENCIES with a copy of all design documents for AGENCIES' approval of work to be performed in AGENCIES' jurisdictions prior to LAGUNA NIGUEL advertising for bids.

D. LAGUNA NIGUEL shall provide staff, consultants, and contractors deemed necessary and appropriate to manage, administer, coordinate and oversee engineering design and construction management of the PROJECT. LAGUNA NIGUEL shall require

all such consultants and contractors to obtain and maintain comprehensive general liability, automobile liability, workers' compensation and employers' liability, and professional liability insurance policies meeting the applicable requirements of the Consultant Contract and Bidders Specifications for the PROJECT and to indemnify, defend and hold each of the AGENCIES and their respective elected officials, officers, employees, agents and volunteers ("Indemnitees") free and harmless, including payment of attorneys' and experts' fees, with respect to any and all claims and liabilities of any kind arising out of each such contractor's acts or omissions in the performance of work on the PROJECT, to the maximum extent permitted by law. LAGUNA NIGUEL shall require all such contractors to name the Indemnitees as additional insureds on all commercial general and automobile liability policies required by LAGUNA NIGUEL for the PROJECT.

E. The budget for the PROJECT is Two Million Four Hundred Sixteen Thousand Four Hundred Twenty-Five Dollars And Eighty Cents ($2,416,425.80). One Million Nine Hundred Thirty-Three Thousand One Hundred Forty Dollars And Sixty-Four Cents ($1,933,140.64) is funded by the OCTA Project P/Regional Traffic Signal Synchronization Program. Minimum PROJECT matching funds of twenty percent (20%) amount to Four Hundred Eighty-Three Thousand Two Hundred Eighty-Five Dollars And Sixteen Cents ($483,285.16). LAGUNA NIGUEL's share of the match amounts to One Hundred Thirty-Three Thousand Six Hundred Twenty-Two Dollars And Forty Cents ($133,622.40).

F. LAGUNA NIGUEL shall maintain coordination with AGENCIES for construction of the PROJECT.

G. LAGUNA NIGUEL specifically shall coordinate construction activity for the PROJECT within AGENCIES and provide a schedule of the construction activity for the PROJECT within AGENCIES that is acceptable to AGENCIES. In the event of planned street closures, LAGUNA NIGUEL shall provide prior notice to, and receive approval from, the responsible AGENCY, prior to the execution of the street closure.

H. LAGUNA NIGUEL shall require AGENCIES and its officers and employees to be named as additional insured on the construction contractors' liability insurance policies.

I. LAGUNA NIGUEL shall collect manual intersection turning movement and automated machine traffic counts for the Caltrans-owned locations of Interstate 5 Northbound Off-Ramp, Interstate 5 Southbound Off-Ramp, State Route 73 Northbound Ramps, and State Route 73 Southbound Ramps.

J. LAGUNA NIGUEL shall implement required signal improvements at the locations set forth in the Application.

K. LAGUNA NIGUEL shall implement the PROJECT based on the intent of the usage in the Application, prepared by LAGUNA NIGUEL in accordance with the policies and procedures contained in the CTFP Guidelines.

L. LAGUNA NIGUEL shall provide formats, templates, and guidance in reporting requirements as described in the CTFP Guidelines.

M. LAGUNA NIGUEL shall manage, procure, implement, and complete all aspects of the PROJECT as identified in the Application.

N. LAGUNA NIGUEL shall cooperate with the OCTA and coordinate outreach efforts for the Primary Implementation (design and construction) phase of the PROJECT.

O. LAGUNA NIGUEL shall prepare a Project Final Report (Measure M2 Ordinance No. 3, Section B.III.9) for the PROJECT. LAGUNA NIGUEL shall provide the Project Final Report for the PROJECT to AGENCIES in draft and final formats for comment, and comments shall be noted in the final study and incorporated as mutually agreed by all PARTIES.

P. LAGUNA NIGUEL shall provide ongoing maintenance and operation of optimized signal timing after the Primary Implementation phase of the PROJECT is completed and to continue such maintenance until the end of the three (3) year grant period.

Q. LAGUNA NIGUEL shall provide updates to AGENCIES on the PROJECT as part of the semi-annual review process until completion of the three (3) year grant period for the PROJECT. Documents to be provided include, but are not limited to, contracts pertinent to the PROJECT and purchase orders pertinent to the PROJECT.

R. LAGUNA NIGUEL shall invoice AGENCIES for dollar match amounts due as identified in Attachment B, at the end of each phase.

ARTICLE 4. RESPONSIBILITIES OF AGENCIES

AGENCIES agree to the following responsibilities:

A. AGENCIES shall be responsible for providing the required documentation and funding commitments for PROJECT implementation on the STATE portions of La Paz Road within their respective geographical jurisdictions.

B. AGENCIES shall remit to LAGUNA NIGUEL within thirty (30) calendar days of receipt of an acceptable invoice, the PROJECT matching funds as required by the Orange County Comprehensive Transportation Funding Programs.

a. ALISO VIEJO'S share of the minimum twenty percent (20%) PROJECT match amounts to Eighty-Six Thousand One Hundred Thirty-Three Dollars And Seventy-Six Cents ($86,133.76).
b. LAGUNA HILLS' share of the minimum twenty percent (20%) PROJECT match amounts to One Hundred Twenty-Four Thousand Four Hundred Sixty-Two Dollars And Sixteen Cents ($124,462.16).
c. MISSION VIEJO'S share of the minimum twenty percent (20%) PROJECT match amounts to One Hundred Thirty Thousand Eight Hundred Twenty-Six Dollars And Eighty-Four Cents ($130,826.84), including up to Eight Thousand Two Hundred Forty Dollars And Zero Cents ($8,240.00) of in-kind services.

Documentation of AGENCIES' in-kind services, such as administrative or construction inspection services, shall meet OCTA CTFP Guidelines.

C. At no cost to LAGUNA NIGUEL, AGENCIES shall provide LAGUNA NIGUEL with current intersection, local field master and/or central system timing plans and related data no later than thirty (30) calendar days subsequent to the execution of this AGREEMENT, and updates as they occur within seven (7) calendar days of the event.

D. At no cost to LAGUNA NIGUEL, AGENCIES shall provide to LAGUNA NIGUEL appropriate documents to utilize in the design and construction of infrastructure required to implement the desired coordinated and synchronized system and operations no later than thirty (30) calendar days subsequent to the execution of this AGREEMENT, and updates as they occur within seven (7) calendar days of the update.

E. AGENCIES shall waive all costs and fees related to any and all AGENCIES

required encroachment and inspection permits required by the AGENCY for the construction phase of the PROJECT.

F. At no cost to LAGUNA NIGUEL, AGENCIES shall be responsible for coordinating the construction and/or installation of traffic control elements and other items within AGENCIES' own jurisdictions that are not requested by the AGENCIES and are NOT a part of the PROJECT Scope of Work but, by necessity, must be built concurrent with the PROJECT.

G. Any additional work determined to be outside the PROJECT Scope of Work shall require prior written agreement by the PARTIES, and all associated costs shall be funded in full by the responsible PARTY or PARTIES. Such funds shall be provided upfront, prior to the commencement of any related construction activities.

H. In the event of an unanticipated cost overrun, LAGUNA NIGUEL shall meet with all AGENCIES to resolve the cost overrun. Should the PARTIES be unable to come to a resolution of the cost overrun, the AGREEMENT will terminate.

I. AGENCIES shall provide a technical representative to meet and participate as a member of the PROJECT'S Traffic Forums.

J. AGENCIES shall authorize LAGUNA NIGUEL to manage, procure, implement, and complete all aspects of the PROJECT.

K. AGENCIES shall support the PROJECT'S implementation within the timeframe outlined in the Application and consistent with the CTFP Guidelines adopted by OCTA.

L. AGENCIES shall provide LAGUNA NIGUEL all current intersection as-built drawings, all current intersections controller assembly plans as provided by the manufacturer and modified by Party since original installation, local field master, local controller, and Advanced Traffic Management System timing plans and other ITS related data upon request.

M. AGENCIES shall provide updates to LAGUNA NIGUEL on the PROJECT as part of the semi-annual review process until completion of the three (3) year grant period for the PROJECT. Documents to be provided include, but are not limited to, payroll records, contracts pertinent to the PROJECT, and purchase orders pertinent to the PROJECT.

N. AGENCIES shall provide LAGUNA NIGUEL with a combined dollar and in-kind services match, totaling at least twenty percent (20%) of actual PROJECT costs. The Application estimate this amount to be as shown in Attachment B. PARTIES shall work with LAGUNA NIGUEL to address and mitigate budget impacts. Failure to provide local dollar match and/or evidence of in-kind services match may result in the ineligibility of future participation in competitive funding opportunities.

O. AGENCIES shall provide payment for the dollar match to LAGUNA NIGUEL within thirty (30) calendar days of receipt of an invoice.

P. AGENCIES shall provide documentation of conformance as part of the semi-annual review process or as requested by LAGUNA NIGUEL, or agents of LAGUNA NIGUEL, if included an in-kind services match, as identified in Attachment B.

Q. AGENCIES shall waive all cost and fees related to any and all permits that may be required of the consultant, subconsultants, and/or service or equipment providers, if such permits are required to perform any PROJECT related work within its jurisdiction.

R. To review and approve in writing the traffic synchronization signal PS&E package within the respective jurisdiction within ten working days of receipt.

ARTICLE 5. MUTUAL RESPONSIBILITIES OF THE PARTIES

The PARTIES agree to the following mutual responsibilities:

A. The PARTIES shall cooperate and coordinate their staff, contractors and consultants, in providing the services and responsibilities required under this AGREEMENT to the extent practicable with respect to the performance of the PROJECT.

B. The PARTIES agree to work together in good faith, using reasonable efforts to resolve any unforeseen issues and disputes arising out of the performance of this AGREEMENT.

C. The PARTIES shall be responsible for obtaining required STATE permits for requested improvements for their agency’s jurisdiction that are a part of the PROJECT Scope of Work on the STATE portions of La Paz Road within their respective geographic jurisdictions.

D. This AGREEMENT may only be modified or amended upon written agreement

of all PARTIES. All modifications, amendments, changes and revisions of this AGREEMENT in whole or in part, and from time to time, shall be binding upon the PARTIES, so long as the same shall be in writing and executed by the PARTIES. No waiver of any term or conditions of this AGREEMENT shall be a continuing waiver thereof.

E. Applicable Laws and Regulations: This AGREEMENT shall be governed by all applicable federal, state and local laws and regulations. The PARTIES warrant that in the performance of this AGREEMENT, each shall comply with all applicable federal, state and local laws, statutes and ordinances and all lawful orders, rules and regulations promulgated there under.

F. Any notice sent by first class mail, postage paid, to the address and addressee, shall be deemed to have been received three (3) business days after deposit in the U.S. Mail. The representatives of the PARTIES who are primarily responsible for the administration of this AGREEMENT, and to whom notices, demands and communications shall be given are as follows:

City of Laguna Niguel – Lead Agency
30111 Crown Valley Parkway
Laguna Niguel, CA 92677

Attention: Jason Jung
TITLE: Principal Civil Engineer
Tel: 949-362-4317
Email: jjung@cityoflagunaniguel.org

City of Aliso Viejo
12 Journey
Aliso Viejo, CA 92656

Attention: Quang Le
TITLE: Principal Civil Engineer
Tel: (949) 425-2531
Email: Qle@avcity.org

City of Laguna Hills
24035 El Toro Rd
Laguna Hills, CA 92653

Attention: Joe Ames
TITLE: Assistant City Manager
Tel: (949) 707-2655
Email: james@lagunahillsca.gov

City of Mission Viejo
200 Civic Center
Mission Viejo, CA 92691

Attention: Mario Gutierrez
TITLE: Transportation Engineer
Tel: (949) 470-3068
Email: mgutierrez@cityofmissionviejo.org

ARTICLE 6. DELEGATED AUTHORITY

The actions required to be taken by AGENCIES in the implementation of this AGREEMENT are delegated to their respective City Managers, Directors of Public Works, or designees, and the actions required to be taken by LAGUNA NIGUEL in the implementation of this AGREEMENT are delegated to its City Manager, Director of Public Works, or designee. AGENCIES acknowledges this designation of authority is authorized under their respective local rules and regulations.

ARTICLE 7. AUDIT AND INSPECTION

LAGUNA NIGUEL and AGENCIES shall maintain a complete set of records in accordance with generally accepted accounting principles. Upon reasonable notice, AGENCIES shall permit the authorized representatives of the LAGUNA NIGUEL to inspect and audit all work, materials, payroll, book, accounts, and other data and records of AGENCIES for a period or five (5) years after final payment, final closeout, or until any on-going audit is completed, whichever is later. For purposes of audit, the date of completion of this Agreement shall be the date of the LAGUNA NIGUEL'S payment of consultant's final billing (so noted on the paid invoice) under this AGREEMENT.

LAGUNA NIGUEL shall have the right to reproduce any such books, records, and accounts. The above provision with respect to audits shall extend to and/or be included in contracts with AGENCIES' contractors.

ARTICLE 8. INDEMNIFICATION

A. To the fullest extent permitted by Law, AGENCIES shall defend (at AGENCIES' sole cost and expense with legal counsel reasonably acceptable to LAGUNA NIGUEL), indemnify, protect, and hold harmless LAGUNA NIGUEL, and its officers, directors, employees, and agents (collectively the "Indemnified Parties"), from and against any and all liabilities, actions, suits, claims, demands, losses, costs, judgements, arbitration awards, settlements, damages, demands, orders, penalties, and expenses including legal costs and attorney fees (collectively "Claims"), including but not limited to Claims arising from injuries to or death of persons (AGENCIES employees included), for damage to property, including property owned by LAGUNA NIGUEL, or from any violation of any federal, state, or local law or ordinance, alleged to

be caused by the negligent acts, omissions or willful misconduct of AGENCIES its officers, directors, employees or gents in connection with or arising out of the performance of this AGREEMENT.

B. To the fullest extent permitted by law, LAGUNA NIGUEL shall defend (at LAGUNA NIGUEL'S sole cost with legal counsel reasonably acceptable to AGENCIES), indemnify protect, and hold harmless AGENCIES, including their officers, directors, employees, and agents (collectively the "Indemnified Parties"), from and against any an all liabilities, actions, suits, claims, demands, losses, costs, judgements, arbitration awards, settlements, damages, demands, orders, penalties, and expenses including legal costs and attorney fees (collectively "Claims"), including but not limited to Claims arising from injuries to or deaths by AGENCIES, or from any violation of federal, state, or local law or ordinance, alleged to be caused by the negligent acts, omissions or willful misconduct of LAGUNA NIGUEL, its officers, directors, employees or agents in connection with or arising out of the performance of this AGREEMENT.

C. The indemnification and defense obligations of this AGREEMENT shall survive its expiration or termination.

ARTICLE 9. ADDITIONAL PROVISIONS

A. Term of AGREEMENT: This AGREEMENT shall continue in full force and effect through June 30, 2028.

B. Amendment: This AGREEMENT may be extended or amended at the mutual consent of all PARTIES hereto. No amendment shall have any force or effect unless executed in writing and approved as to form by each AGENCIES' City Attorney and the City Attorney for LAGUNA NIGUEL.

C. Termination: In the event any PARTY defaults in the performance of their respective obligations under this agreement or breaches any of the provisions of the AGREEMENT, a non-defaulting PARTY(s) shall have the option to terminate the AGREEMENT upon thirty (30) calendar days prior written notice to the PARTY in default

D. Termination for Convenience: Any PARTY may terminate this AGREEMENT for convenience by providing thirty (30) calendar days prior written notice of its intent to terminate for convenience to the other PARTY.

E. The PARTIES shall comply with all applicable federal, state and local laws,

statutes, ordinances and regulations of any governmental authority having jurisdiction over the PROJECT.

F. Legal Authority: The PARTIES hereto consent that they are authorized to execute this AGREEMENT on behalf of said PARTIES and that, by so executing this AGREEMENT, the PARTIES hereto are formally bound to the provisions of this AGREEMENT.

G. Severability: If any term, provision, covenant or condition of this AGREEMENT is held to be invalid, void or otherwise unenforceable, to any extent, by any court of competent jurisdiction, the remainder of this AGREEMENT shall not be affected thereby, and each term, provision, covenant or condition of this AGREEMENT shall be valid and enforceable to the fullest extent permitted by law.

H. Counterparts of AGREEMENT: This AGREEMENT may be executed and delivered in any number of counterparts, each of which, when executed and delivered shall be deemed an original and all of which together shall constitute the same AGREEMENT. Facsimile signatures will be permitted.

I. Assignment: Neither this AGREEMENT, nor any of the PARTIES' rights, obligations, duties, or authority hereunder may be assigned in whole or in part by any PARTY without the prior written consent of the other PARTY hereto in its sole and absolute discretion. Any such attempt of assignment shall be deemed void and of no force and effect. Consent to one (1) assignment shall not be deemed consent to any subsequent assignment, nor the waiver of any right to consent to such subsequent assignment.

J. Governing Law: The laws of the State of California and applicable local and federal laws, regulations and guidelines shall govern this AGREEMENT. Any action brought relating to this AGREEMENT shall be adjudicated in a court of competent jurisdiction in the County of Orange, State of California.

K. Litigation Fees: Should litigation arise out of this AGREEMENT for the performance thereof, the court shall award costs and expenses, including attorney's fees, to the prevailing PARTY.

L. Force Majeure: Either PARTY shall be excused from performing its obligations under this AGREEMENT during the time and to the extent that it is prevented

from performing by an unforeseeable cause beyond its control, including but not limited to; any incidence of fire, flood; acts of God; commandeering of material, products, plants or facilities by the federal, state or local government; national fuel shortage; or a material act or omission by the other PARTY; when satisfactory evidence of such cause is presented to the other PARTY, and provided further that such nonperformance is unforeseeable, beyond the control and is not due to the fault or negligence of the PARTY not performing.

M. Disputes: The PARTIES agree to work together in good faith, using reasonable efforts to resolve any unforeseen issues and disputes arising out of the performance of this AGREEMENT.

N. Obligations to Comply with Law: Nothing herein shall be deemed or construed to authorize or require any PARTY to issue bonds, notes or other evidences of indebtedness under the terms, in amounts, or for purposes other than as authorized by local, state or federal law.

O. Notices: Any notices, requests, or demands made between the PARTIES pursuant to this AGREEMENT are to be directed to the contacts noted in Article 5, Paragraph E.

(Signature Page Follows)

This Agreement shall be made effective upon execution by both PARTIES.

IN WITNESS WHEREOF, the PARTIES hereto have caused this AGREEMENT to be executed on the date of the last signature below.

CITY OF LAGUNA NIGUEL

By: _____

Gene Johns, Mayor

Dated: _____

CITY OF ALISO VIEJO

By: _____

Max Duncan, Mayor

Dated: _____

ATTEST:

By: _____

Marissa J. Asistin, City Clerk

Dated: _____

By: _____

Maria Kendig, City Clerk

Dated: _____

APPROVED AS TO FORM:

By: _____

Scott C. Smith, City Attorney

Dated: _____

APPROVED AS TO FORM:

By: _____

HongDao Nguyen, City Attorney

Dated: _____

This Agreement shall be made effective upon execution by both PARTIES.

IN WITNESS WHEREOF, the PARTIES hereto have caused this AGREEMENT to be executed on the date of the last signature below.

CITY OF LAGUNA NIGUEL

By: _____

Gene Johns, Mayor

Dated: _____

CITY OF LAGUNA HILLS

By: _____

Don Caskey, Mayor

Dated: _____

ATTEST:

By: _____

Marissa J. Asistin, City Clerk

Dated: _____

ATTEST:

By: _____

Joshua Stevenson, City Clerk

Dated: _____

APPROVED AS TO FORM:

By: _____

Scott C. Smith, City Attorney

Dated: _____

APPROVED AS TO FORM:

By: _____

Colin Burns, Interim City Attorney

Dated: _____

This Agreement shall be made effective upon execution by both PARTIES.

IN WITNESS WHEREOF, the Parties hereto have caused this AGREEMENT to be executed on the date of the last signature below.

CITY OF LAGUNA NIGUEL

By: _____

Gene Johns, Mayor

Dated: _____

CITY OF MISSION VIEJO

By: _____

Wendy Bucknum, Mayor

Dated: _____

ATTEST:

By: _____

Marissa J. Asistin, City Clerk

Dated: _____

ATTEST:

By: _____

Alison Walker, City Clerk

Dated: _____

APPROVED AS TO FORM:

By: _____

Scott C. Smith, City Attorney

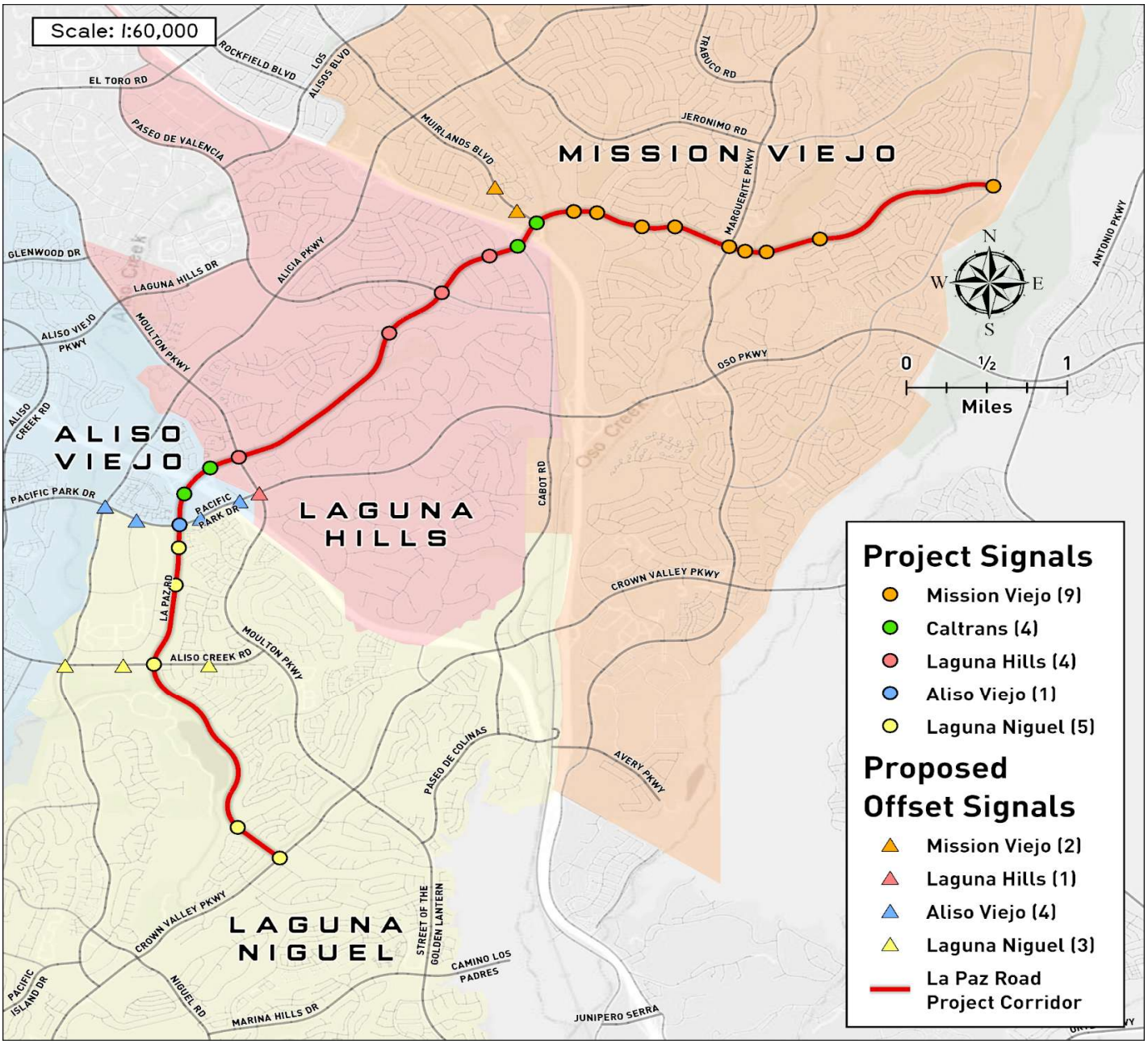
Dated: _____

APPROVED AS TO FORM:

By: _____

Tarquin Preziosi, City Attorney

Dated: _____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MISSION VIEJO
ALISO VIEJO
LAGUNA HILLS
LAGUNA NIGUEL
ROCKFIELD BLVD
LOS ALISOS BLVD
EL TORO RD
PASEO DE VALENCIA
MUIRLANDS BLVD
TRABUCO RD
JERONIMO RD
MARGUERITE PKWY
ANTONIO PKWY
GLENWOOD DR
LAGUNA HILLS DR
ALICIA PKWY
ALISO VIEJO PKWY
MOULTON PKWY
OSO PKWY
ALISO CREEK RD
PACIFIC PARK DR
CABOT RD
LA PAZ RD
CROWN VALLEY PKWY
PASEO DE COLINAS
AVERY PKWY
STREET OF THE GOLDEN LANTERN
CAMINO LOS PADRES
NIGUEL RD
MARINA HILLS DR
JUNIPERO SERRA
PACIFIC ISLAND DR
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Miles
Project Signals
Mission Viejo (9)
Caltrans (4)
Laguna Hills (4)
Aliso Viejo (1)
Laguna Niguel (5)
Proposed Offset Signals
Mission Viejo (2)
Laguna Hills (1)
Aliso Viejo (4)
Laguna Niguel (3)
La Paz Road Project Corridor

The following two pages provide a comprehensive snapshot of the project across all agencies. In the subsequent sections, tables are presented for each individual agency.

COOPERATIVE AGREEMENT
2026 LA PAZ ROAD RTSSP PROJECT
ATTACHMENT B

ESTIMATED LOCAL MATCH COMMITMENT

SECTION 1: AGENCY TOTAL MATCH SUMMARY

AGENCY	CASH MATCH		IN-KIND MATCH*		TOTAL MATCH	
	PI	O & M	PI	O & M	PI	O & M
City of Aliso Viejo	$80,493.76	$5,640.00			$80,493.76	$5,640.00
	$86,133.76		**$0.00**		**$86,133.76**	
City of Laguna Hills	$117,882.16	$6,580.00			$117,882.16	$6,580.00
	$124,462.16		**$0.00**		**$124,462.16**	
City of Laguna Niguel	$126,102.40	$7,520.00			$126,102.40	$7,520.00
	$133,622.40		**$0.00**		**$133,622.40**	
City of Mission Viejo	$119,546.84	$11,280.00	$8,240.00		$127,786.84	$11,280.00
	$130,826.84		**$8,240.00**		**$139,066.84**	
TOTAL MATCH	**$444,025.16**	**$31,020.00**	**$8,240.00**	**$0.00**	**$452,265.16**	**$31,020.00**
	$475,045.16		**$8,240.00**		**$483,285.16**	

**In-kind match may be converted to cash match if agency does not satisfy in-kind match commitment by the end of the respective phase. However, Cash Match is NOT allowed to be converted to in-kind match.*

SECTION 2: MATCH BREAKDOWN (CASH VS IN-KIND SERVICES)

A. Cash Match

AGENCY	FUNDING SOURCE	AMOUNT OF CASH DISTRIBUTION
City of Aliso Viejo	General Funds	$86,133.76
City of Laguna Hills	General Funds	$124,462.16
City of Laguna Niguel	General Funds	$133,622.40
City of Mission Viejo	General Funds	$130,826.84
TOTAL CASH MATCH:		**$475,045.16**

B. In-Kind Services

i. Specific Improvements (List Items and Cost):

AGENCY	IMPROVEMENT	DATE OF CONSTRUCTION	EXPENDITURE
N/A			
TOTAL FOR SPECIFIC IMPROVEMENTS (i):			**N/A**

ii. Staffing Commitment:

AGENCY	STAFF POSITION	TYPE OF SERVICE TO PROJECT	NO. OF HOURS	FULLY BURDENED HOURLY RATE	TOTAL**
City of Mission Viejo	Traffic Engineer	Project Admin, Signal Design Review, Construction Management	40	$100	$4,000.00
	Transportation Analyst	Signal Design Review, Construction Management, System Integration	40	$75	$3,000.00
	PW Inspector	Project Inspection	8	$90	$720.00
	Information Technology Specialist	System Integration	8	$65	$520.00
				Total for City of Mission Viejo:	***$8,240.00***
				TOTAL STAFFING COMMITMENT (ii):	***$8,240.00***

TOTAL IN-KIND MATCH* (i + ii):	***$8,240.00***

***Total amount is the required participation by the identified agency. The number of hours and hourly rate will be based on each agency's actual fully burdened billing rates, which must collectively equal the same value of the assigned "Total" dollars. Each agency will be responsible for keeping detailed records of hours worked and description of work. An accounting record of personnel hours at fully burdened rate is expected to be included with the final submittal. Records will be subject to auditing.*

Begin Aliso Viejo's version of Attachment B

COOPERATIVE AGREEMENT
2026 LA PAZ ROAD RTSSP PROJECT
ATTACHMENT B

ESTIMATED LOCAL MATCH COMMITMENT

SECTION 1: AGENCY TOTAL MATCH SUMMARY

AGENCY	CASH MATCH		IN-KIND MATCH*		TOTAL MATCH	
	PI	O & M	PI	O & M	PI	O & M
City of Aliso Viejo	$80,493.76	$5,640.00			$80,493.76	$5,640.00
	$86,133.76		**$0.00**		**$86,133.76**	

**In-kind match may be converted to cash match if agency does not satisfy in-kind match commitment by the end of the respective phase. However, Cash Match is NOT allowed to be converted to in-kind match.*

SECTION 2: MATCH BREAKDOWN (CASH VS IN-KIND SERVICES)

A. Cash Match

AGENCY	FUNDING SOURCE	AMOUNT OF CASH DISTRIBUTION
City of Aliso Viejo	General Funds	$86,133.76

B. In-Kind Services

i. Specific Improvements (List Items and Cost):

AGENCY	IMPROVEMENT	DATE OF CONSTRUCTION	EXPENDITURE
N/A			
TOTAL FOR SPECIFIC IMPROVEMENTS (i):			**N/A**

ii. Staffing Commitment:

AGENCY	STAFF POSITION	TYPE OF SERVICE TO PROJECT	NO. OF HOURS	FULLY BURDENED HOURLY RATE	TOTAL**

***Total amount is the required participation by the identified agency. The number of hours and hourly rate will be based on each agency's actual fully burdened billing rates, which must collectively equal the same value of the assigned "Total" dollars. Each agency will be responsible for keeping detailed records of hours worked and description of work. An accounting record of personnel hours at fully burdened rate is expected to be included with the final submittal. Records will be subject to auditing.*

Begin Laguna Hills' version of Attachment B

COOPERATIVE AGREEMENT
2026 LA PAZ ROAD RTSSP PROJECT
ATTACHMENT B

ESTIMATED LOCAL MATCH COMMITMENT

SECTION 1: AGENCY TOTAL MATCH SUMMARY

AGENCY	CASH MATCH		IN-KIND MATCH*		TOTAL MATCH	
	PI	O & M	PI	O & M	PI	O & M
City of Laguna Hills	$117,882.16	$6,580.00			$117,882.16	$6,580.00
	$124,462.16		**$0.00**		**$124,462.16**	

**In-kind match may be converted to cash match if agency does not satisfy in-kind match commitment by the end of the respective phase. However, Cash Match is NOT allowed to be converted to in-kind match.*

SECTION 2: MATCH BREAKDOWN (CASH VS IN-KIND SERVICES)

A. Cash Match

AGENCY	FUNDING SOURCE	AMOUNT OF CASH DISTRIBUTION
City of Laguna Hills	General Funds	$124,462.16

B. In-Kind Services

i. Specific Improvements (List Items and Cost):

AGENCY	IMPROVEMENT	DATE OF CONSTRUCTION	EXPENDITURE
N/A			
TOTAL FOR SPECIFIC IMPROVEMENTS (i):			**N/A**

ii. Staffing Commitment:

AGENCY	STAFF POSITION	TYPE OF SERVICE TO PROJECT	NO. OF HOURS	FULLY BURDENED HOURLY RATE	TOTAL**

***Total amount is the required participation by the identified agency. The number of hours and hourly rate will be based on each agency's actual fully burdened billing rates, which must collectively equal the same value of the assigned "Total" dollars. Each agency will be responsible for keeping detailed records of hours worked and description of work. An accounting record of personnel hours at fully burdened rate is expected to be included with the final submittal. Records will be subject to auditing.*

Begin Mission Viejo's version of Attachment B

COOPERATIVE AGREEMENT
2026 LA PAZ ROAD RTSSP PROJECT
ATTACHMENT B

ESTIMATED LOCAL MATCH COMMITMENT

SECTION 1: AGENCY TOTAL MATCH SUMMARY

AGENCY	CASH MATCH		IN-KIND MATCH*		TOTAL MATCH	
	PI	O & M	PI	O & M	PI	O & M
City of Mission Viejo	$119,546.84	$11,280.00	$8,240.00		$127,786.84	$23,500.00
	$130,826.84		**$8,240.00**		**$139,066.84**	

**In-kind match may be converted to cash match if agency does not satisfy in-kind match commitment by the end of the respective phase. However, Cash Match is NOT allowed to be converted to in-kind match.*

SECTION 2: MATCH BREAKDOWN (CASH VS IN-KIND SERVICES)

A. Cash Match

AGENCY	FUNDING SOURCE	AMOUNT OF CASH DISTRIBUTION
City of Mission Viejo	General Funds	$130,826.84

B. In-Kind Services

i. Specific Improvements (List Items and Cost):

AGENCY	IMPROVEMENT	DATE OF CONSTRUCTION	EXPENDITURE
N/A			
TOTAL FOR SPECIFIC IMPROVEMENTS (i):			**N/A**

ii. Staffing Commitment:

AGENCY	STAFF POSITION	TYPE OF SERVICE TO PROJECT	NO. OF HOURS	FULLY BURDENED HOURLY RATE	TOTAL**
City of Mission Viejo	Traffic Engineer	Project Admin, Signal Design Review, Construction Management	40	$100	$4,000.00
	Transportation Analyst	Signal Design Review, Construction	40	$75	$3,000.00

		Management, System Integration			
	PW Inspector	Project Inspection	8	$90	$720.00
	Information Technology Specialist	System Integration	8	$65	$520.00
				Total for City of Mission Viejo:	***$8,240.00***
				TOTAL STAFFING COMMITMENT (ii):	***$8,240.00***

TOTAL IN-KIND MATCH* (i + ii):	***$8,240.00***

***Total amount is the required participation by the identified agency. The number of hours and hourly rate will be based on each agency's actual fully burdened billing rates, which must collectively equal the same value of the assigned "Total" dollars. Each agency will be responsible for keeping detailed records of hours worked and description of work. An accounting record of personnel hours at fully burdened rate is expected to be included with the final submittal. Records will be subject to auditing.*

City of Aliso Viejo
AGENDA ITEM

DATE: October 21, 2026

TO: Mayor and City Council

FROM: Ann Eifert, Director of Financial Services/Treasurer

SUBJECT: COMMUNITY FACILITIES DISTRICT NO. 2005-01 (GLENWOOD AT ALISO VIEJO) LOCAL AGENCY SPECIAL TAX AND BOND ACCOUNTABILITY ACT COMPLIANCE (SB 165) REPORT FOR FISCAL YEAR ENDED JUNE 30, 2026

Recommended Action:

For the City Council to accept and file the Community Facilities District No. 2005-01 (Glenwood at Aliso Viejo) Local Agency Special Tax and Bond Accountability Act Compliance ("SB 165") Report for Fiscal Year ended June 30, 2026.

Fiscal Impact:

There is no fiscal impact.

Background:

Community Facilities District No. 2005-01 was formed by the City on March 16, 2005, for the purpose of financing the acquisition and/or construction of certain public improvements to be owned by the City, the County of Orange and Moulton Niguel Water District. On December 6, 2007, the City issued the CFD No. 2005-01 (Glenwood at Aliso Viejo) 2007 Special Tax Bonds in the amount of $34,070,000. Proceeds of the Bonds were used to finance the acquisition and construction of the authorized public facilities. On February 13, 2014, the City issued for CFD No. 2005-01 the 2014 Special Tax Refunding Bonds in the aggregate amount of $32,270,000.

On December 5, 2023, the City issued for CFD No. 2005-01 the 2023 Special Tax Refunding Bonds in the aggregate amount of $23,430,000.

Discussion:

The SB 165 Report includes information prepared in compliance with the Local Agency Special Tax and Bond Accountability Act, which was enacted to provide accountability

measures for any local special tax and/or bond measure subject to voter approval on or after January 1, 2001. According to the requirements of the Accountability Act (Sections 50075.1 and 53410 of the Government Code of the State of California), an annual report must be filed by the local agency levying the special tax and or issuing a bond measure and shall contain a description of the following:

(1) The amount of funds collected and expended.
(2) The status of any project required or authorized to be funded by the special tax and/or bond measure.

The table below summarizes the amount of annual special taxes collected and the authorized expenditures for Fiscal Year 2025-26 as outlined in the SB165 Report.

Item	Balance
Beginning Balance as of July 1, 2025	**$1,483,442.88**
Sources of Funds:	
Special Tax Receipts	$2,018,960.49
Interest Accrued	44,514.65
Miscellaneous Transfers In	0.00
Subtotal: Sources of Funds	*$2,063,475.14*
Uses of Funds:	
Transfers to Administrative Expense Fund	($43,704.00)
Transfers to Bond Fund (Debt Service)	(1,959,750.00)
Miscellaneous Transfers (Out)	0.00
Subtotal: Uses of Funds	*($2,003,454.00)*
Ending Balance as of June 30, 2026	**$1,543,464.02**

There are no status updates as the projects have been completed.

Attachment:

1. SB 165 Report for Fiscal Year Ended June 30, 2026

ALISO VIEJO
Live Life Inspired

City of Aliso Viejo
Community Facilities District No. 2005-01
(Glenwood at Aliso Viejo)

Local Agency Special Tax and Bond Accountability Act Compliance Report (SB 165)
Fiscal Year Ended June 30, 2026

Prepared for:
City of Aliso Viejo
12 Journey, Suite 100
Aliso Viejo, CA 92656
949-425-2500

KOPPEL & GRUBER
PUBLIC FINANCE
334 Via Vera Cruz, Suite 256
San Marcos, California 92078
760-510-0290
info@kgpf.net

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Section I. Background 1
Section II. Bond Proceeds 2
Section III. Collection of Special Taxes 3
Section IV. Authorized Facilities 4
Section V. Expenditures to Fund Authorized Facilities 5

SECTION I. BACKGROUND

The Local Agency Special Tax and Bond Accountability Act ("Accountability Act") was enacted by California State Legislature through Senate Bill 165 to provide accountability measures for any local special tax and/or bond measure subject to voter approval on or after January 1, 2001. According to the requirements of the Accountability Act *(Sections 50075.1 and 53410 of the Government Code of the State of California)*, an annual report must be filed by the local agency levying a special tax and/or issuing a bond measure on or before each January 1, commencing January 1, 2002, and shall contain a description of the following:

(1) The amount of funds collected and expended to fund authorized facilities.

(2) The status of any project required or authorized to be funded by the special tax and/or bond measure.

The information contained in this Report has been compiled and is being presented to and in accordance with the requirements outlined in the Accountability Act for Fiscal Year 2025/2026 for the City of Aliso Viejo ("City") and their Community Facilities District No. 2005-01 (Glenwood at Aliso Viejo) ("CFD No. 2005-01" or "CFD").

SECTION II. BOND PROCEEDS

On December 6, 2007, the City issued 2007 Special Tax Bonds ("2007 Bonds") in the aggregate principal amount of $34,070,000, the proceeds of which were used to pay the costs of acquisition and construction of certain public facilities within CFD No. 2005-01. The City issued 2014 Special Tax Refunding Bonds ("2014 Refunding Bonds") on February 13, 2014 in the aggregate principal amount of $32,270,000. A portion of the proceeds of the 2014 Refunding Bonds, together with certain existing funds on hand, were used to defease and refund the City's 2007 Bonds. On December 5, 2023, the City issued 2023 Special Tax Refunding Bonds ("2023 Refunding Bonds") in the aggregate principal amount of $23,430,000. A portion of the proceeds of the 2023 Refunding Bonds, together with certain existing funds on hand, were used to defease and refund the City's 2014 Refunding Bonds. The table below summarizes the application of the 2023 Refunding Bond proceeds:

Fund/Account/Subaccount	Bond Proceeds
Costs of Issuance Fund	$392,059.57
Reserve Fund	1,269,210.59
Redemption of 2014 Refunding Bonds	26,924,966.56
Total[1]	**$28,586,236.72**

[1] The difference between the 2023 Refunding Bond issue amount of $23,430,000 and the total Bond proceeds deposited is the Original Issue Premium less the Underwriter's Discount, plus funds on hand from the 2014 Refunding Bonds.

SECTION III. COLLECTION OF SPECIAL TAXES

In accordance with the FAA, all Special Taxes collected by the City shall be deposited into the Special Tax Fund. The table below provides a summary of the Special Taxes deposited, interest accrued, transfers, and other transactions within the Special Tax Fund established under the FAA for the 2023 Refunding Bonds for Fiscal Year ended June 30, 2026.

Item	Balance
Beginning Balance as of July 1, 2025	**$1,483,442.88**
Sources of Funds:	
Special Tax Receipts	$2,018,960.49
Interest Accrued	44,514.65
Miscellaneous Transfers In	0.00
Subtotal: Sources of Funds	*$2,063,475.14*
Uses of Funds:	
Transfers to Administrative Expense Fund	($43,704.00)
Transfers to Bond Fund (Debt Service)	(1,959,750.00)
Miscellaneous Transfers (Out)	0.00
Subtotal: Uses of Funds	*($2,003,454.00)*
Ending Balance as of June 30, 2026	**$1,543,464.02**

SECTION IV. AUTHORIZED FACILITIES

CFD No. 2005-01 is authorized to finance the acquisition and construction and engineering design of certain facilities to be owned by the City, the County of Orange, and the Moulton Niguel Water District (the "Facilities").

Details of the authorized Facilities are as follows:

- The Community Conference Center;
- The Aquatic Center;
- The Public Park;
- The Public Parking Lot;
- Golf Drive;
- Water and sewer facilities to be owned, operated and maintained by the Moulton Niguel Water District (the "Water District") as are necessary to serve the proposed development within CFD No. 2005-01;
- Water and sewer facilities to be owned, operated and maintained by the Water District that would otherwise be financed from the proceeds of the connection fees payable to the Water District for the development within CFD No. 2005-01;
- Storm water facilities that will replace existing storm facilities for collection and transport of off-site storm water to be owned, operated and maintained by the City;
- Street improvements to be owned, operated and maintained by the County that would otherwise be financed from the proceeds of fees payable to the County as part of the county's Coastal Area Road Improvement and Moulton Parkway and Laguna Niguel Road Programs for the development within CFD No. 2005-01;
- Those public facilities authorized to be financed from the proceeds of the Community Enhancement Fee as required pursuant to the Development Agreement dated September 1, 2004 ("Development Agreement");
- Offsite traffic mitigation improvements as required to be provided pursuant to the Development Agreement; and
- Offsite park enhancement improvements as required to be provided pursuant to the Development Agreement.

SECTION V. EXPENDITURES TO FUND AUTHORIZED FACILITIES

The improvement fund established for the 2007 Bonds to pay for authorized facilities (the "2007 Improvement Fund") had a balance remaining of approximately $662,337 at June 30, 2013. Approximately $30,000 of the total amount remaining in the 2007 Improvement Fund was transferred to the Improvement Fund under the FAA to finance remaining obligations for the construction of the City's aquatic center facilities. The net amount, plus interest, following the transfer of funds to the Improvement Fund, was combined with other sources of funding and used to defease and fully refund the 2007 Bonds.

The following table shows the amount deposited in the Improvement Fund, interest accrued, transfers and expenditures made to fund the authorized facilities from bond issuance. The final expenditures were paid from the Improvement Fund during the fiscal year ended June 30, 2015 and the fund was subsequently closed.

Item	Balance
Sources of Funds:	
Deposit into the Improvement Fund[1]	$30,000.00
Interest Accrued	5.52
Total Sources of Funds	***$30,005.52***
Expenditures:	
Aquatic Center Improvements	($21,386.23)
Transfer to Bond Fund[2]	(8,619.29)
Total Expenditures	***($30,005.52)***

[1] Transferred from the 2007 Improvement Fund.

[2] Transferred remaining balance to Bond Fund.

City of Aliso Viejo
AGENDA ITEM

DATE: October 21, 2026

TO: Mayor and City Council

FROM: So Kim, Community Development Director

SUBJECT: GENERAL PLAN AMENDMENT GPA-2026-01004, ZONE CHANGE ZA-2026-01003, VESTING TENTATIVE TRACT MAP 19442, SITE DEVELOPMENT PERMIT SDP-2025-00004, DEVELOPMENT AGREEMENT DA-2026-01001 AND A MITIGATED NEGATIVE DECLARATION FOR THE DEVELOPMENT OF A 137-UNIT RESIDENTIAL TOWNHOME COMMUNITY AT 27081 ALISO CREEK ROAD

Recommended Actions:

Conduct a public hearing and:

1. Adopt a Resolution entitled: A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ALISO VIEJO, CALIFORNIA, ADOPTING A MITIGATED NEGATIVE DECLARATION AND A MITIGATION MONITORING AND REPORTING PROGRAM PURSUANT TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT FOR GENERAL PLAN AMENDMENT GPA-2026-01004, ZONE CHANGE ZA-2026-01003, VESTING TENTATIVE TRACT MAP 19442, SITE DEVELOPMENT PERMIT SDP-2025-00004, AND DEVELOPMENT AGREEMENT DA-2026-01001 TO ALLOW THE DEVELOPMENT OF A 137-UNIT RESIDENTIAL TOWNHOME COMMUNITY LOCATED AT 27081 ALISO CREEK ROAD (APN: 632-124-08);

2. Adopt a Resolution entitled: A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ALISO VIEJO, CALIFORNIA, APPROVING AN AMENDMENT TO THE GENERAL PLAN LAND USE DESIGNATION AND ASSOCIATED LAND USE MAP FROM PROFESSIONAL OFFICE TO MEDIUM DENSITY RESIDENTIAL FOR THE DEVELOPMENT OF A 137-UNIT RESIDENTIAL TOWNHOME COMMUNITY LOCATED AT 27081 ALISO CREEK ROAD (APN: 632-124-08);

3. Introduce for first reading an Ordinance entitled: A ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ALISO VIEJO, CALIFORNIA, APPROVING A ZONE CHANGE FROM PROFESSIONAL OFFICE TO RESIDENTIAL MEDIUM DENSITY DISTRICT FOR THE DEVELOPMENT OF A 137-UNIT RESIDENTIAL TOWNHOME COMMUNITY LOCATED AT 27081 ALISO CREEK ROAD (APN: 632-124-08);

4. Adopt a Resolution entitled: A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ALISO VIEJO, CALIFORNIA, APPROVING VESTING TENTATIVE TRACT MAP 19442 FOR SUBDIVISION INTO CONDOMINIUM PURPOSES AND SITE DEVELOPMENT PERMIT (SDP-2025-00004) TO ALLOW THE DEVELOPMENT OF A 137-UNIT RESIDENTIAL TOWNHOME COMMUNITY LOCATED AT 27081 ALISO CREEK ROAD (APN: 632-124-08); and

5. Introduce for first reading an Ordinance entitled: AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ALISO VIEJO, CALIFORNIA, APPROVING A DEVELOPMENT AGREEMENT DA-2026-01001 BETWEEN THE CITY AND SHEA HOMES LIMITED PARTNERSHIP FOR THE DEVELOPMENT OF A 137-UNIT RESIDENTIAL TOWNHOME COMMUNITY LOCATED AT 27081 ALISO CREEK ROAD (APN: 632-124-08).

Background:

On March 20, 2025, Shea Homes ("Applicant") submitted a pre-application to obtain feedback on concept plans for a development proposal involving the demolition of three existing office buildings to accommodate the construction of a 137-unit, residential community at 27081 Aliso Creek Road.

May 7, 2025, the City Council held a duly noticed public review and provided initial feedback on concept plans for the Project.

July 1, 2025, the Applicant submitted a general plan amendment, zone change, vesting tentative tract map, site development permit, and a Development Agreement DA-2026-01001 application to demolish existing office buildings to construct a multi-family residential community at 27081 Aliso Creek Road ("Project").

The Initial Study/Mitigated Negative Declaration (IS/MND) was prepared pursuant to the California Environmental Quality Act (CEQA) and the State CEQA Guidelines and was circulated for public review and comment from June 18 through July 8, 2026. The City received and responded to the three comments from Orange County Transportation Authority (OCTA), California Department of Transportation (Caltrans), and Orange County Fire Authority (OCFA).

Discussion:

Existing Site

The 8.44-acre site is currently developed with three two-story office buildings totaling approximately 125,166 square feet, with individual buildings that measure 41,722 square feet in average. The remainder of the site consists of surface parking, outdoor seating areas, and ornamental landscaping. The site is accessed from an unsignalized driveway on Pacific Park Drive and by a shared internal drive along the southern property boundary that provides connections to Aliso Creek Road and Journey. The site is generally flat, with

slopes located along the eastern and western property boundaries and is generally at grade with Pacific Park Drive and the adjoining office development to the south. The existing General Plan land use and Zoning designations are both Professional Office.

Surrounding land uses are detailed in Table 1 below.

Table 1	**Existing Uses**
North	Pacific Park Drive and commercial uses within the Aliso Viejo Town Center
West	Fire Station, library, restaurant, City Hall, offices, training facilities, and medical office uses.
East	Gas station, Aliso Creek Road, and multi-family residential uses
South	Commercial uses within Pacific Park Plaza

Proposed Project

The Applicant is proposing to redevelop the Site by demolishing three existing office buildings to construct a 137-unit, three-story, for-sale attached townhome community on approximately 8.44 acres. Project details are provided in Table 2 below:

Table 2	**Project Details**
Number of Units	• 137 units of which 7 of these units (5%) will be deed restricted for very low-income households. • Two- to four-bedroom units measuring 1,102 to 2,207 square feet in size.
Building	Three-story attached residential buildings consisting of two housing types: Row Townhomes and Garden Courts. Row Townhome buildings range from four to six dwelling units per building, while Garden Court buildings contain five units organized around a central courtyard. The buildings will measure 41' max. height and include articulated stucco facades, varied building massing, recessed entries, decorative balconies with metal railings, enhanced window trim, and a combination of gable and hip roof forms with concrete tile roofing.
Parking	Each unit will have two enclosed private garages at ground floor level. Each garage will include additional areas for trash bins, water heater, and private storage. Driveways are not proposed. An additional 83 guest parking spaces are provided on site. The total parking count of 343 complies with the City's parking ratio of 2.5 spaces per unit (343 spaces) and exceeds the minimum required by State Density Bonus Law (308 spaces).
Common Space	34.7% or 127,400 square feet (25% required) consisting of: • 7,000 square foot central park, 51,400 square feet of pedestrian paseos, landscaped courtyards, walkways, perimeter landscaping, and two community amenity areas that provide

Table 2	Project Details
	opportunities for passive recreation, social gathering, and pedestrian connectivity. • Preservation of 69,000 square feet of landscaped slope areas. Exterior utility and mechanical equipment will be screened through a combination of architectural treatments and landscaping.
Miscellaneous	The project will retain the existing north and south access points, incorporate enhanced landscaping throughout the site, entrance to the site will be enhanced with paving, signage, and accent trees. Streetlights, bollards, and shade structure lighting will be designed with recessed, downward-facing light sources. The internal streets and accessways shall remain open and accessible and not gated as a private community.
Grading	13,700 cubic yards ("CY") of grading is proposed, 4,200 CY cut and 3,900 CY fill, with a net export of 5,600 CY. The maximum depth of cut is 8' with 6' fill to level the property.
Infrastructure	Construction of new onsite water, sewer, storm drain, fire protection, and dry utility infrastructure to serve the residential community, including water lines, sewer lines, storm drainage facilities, fire hydrants, utility connections, and associated site improvements.

Entitlements

The Project requires approval of a General Plan Amendment, Zone Change, Vesting Tentative Tract Map, Mitigated Negative Declaration, Site Development Permit, and Development Agreement. Additionally, the Project qualifies for the State Density Bonus Program, and the Applicant is requesting specific waivers and concessions. Each of these components is discussed in detail below.

General Plan Amendment

The Applicant requests to change the existing office use to residential use to develop the Project. This requires an amendment to the General Plan land use designation from Professional Office to Medium Density Residential. Pursuant to Aliso Viejo Municipal Code ("AVMC") Section 15.78.020 (General Plan Amendments), the City Council must make the following findings prior to approving the general plan amendment:

1. Public Welfare. Approval of the amendment will not create conditions materially detrimental to the public health, safety and general welfare.

   The project would replace the existing office development with a 137-unit residential community that includes onsite parking, internal circulation improvements, utility infrastructure, landscaped open space, and access from existing site driveways. The project consists of three-story attached Row Townhome and Garden Court residential buildings with stucco façades, tile roofs,

decorative metal balcony railings, recessed entries, and articulated building elevations. The project also provides approximately 127,400 square feet of open space, including a central park, landscaped paseos and garden courts, and landscaped slope areas. Although the site is currently designated and zoned for Professional Office uses, it is located at the intersection of Pacific Park Drive and Aliso Creek Road, where it serves as a transition between commercial and office uses and existing residential neighborhoods. The proposed residential design, architectural character, landscaping, and open-space amenities are consistent with surrounding residential development patterns, and the project retains the existing site access points and circulation system, supporting compatibility with the surrounding urban environment. Therefore, this finding can be made.

Additionally, as part of the environmental assessment, the Project required comprehensive studies addressing air quality, energy, greenhouse gas emissions, biological resources, cultural resources, geotechnical conditions, hydrology and water quality, noise, and transportation impacts. As discussed further in the Environmental Assessment section below, these studies concluded that the Project would result in less-than-significant impacts with the implementation of proposed mitigation measures. The Project plans also cleared preliminary review by the Orange County Fire Authority (OCFA).

Furthermore, the Project aligns with the City's housing goals by facilitating the development of new housing opportunities. Future construction on the Site will be subject to plan check review and inspection process to ensure full compliance with applicable building and safety standards. Therefore, this finding can be made.

2. Internal General Plan Consistency. The amendment is internally consistent with those goals, objectives, and policies of the general plan, that are not being amended.

   The proposed amendment is consistent with the goals and policies of the General Plan listed below in that it incorporates landscaping aligned with the City Council-approved plant palette, emphasizing low-water, drought-tolerant species; features building materials, colors, and architectural design that are compatible with the surrounding residential communities; includes a public benefit fee; proposes three affordable housing units restricted to very low-income households, thereby enhancing housing diversity and affordability; and introduces rezoning to facilitate residential development that includes affordable units in support of the City's housing objectives. Therefore, this finding can be made.

   In the General Plan, 'COS' refers to Conservation and Open Space policies, 'H' for Housing policies and goals, and 'LU' for Land Use policies.

   - Policy COS-1.2 Reduce the amount of water used for landscaping and increase use of native and low water plants. Maximize use of native, low-water plants for landscaping of areas adjacent to sidewalks or other impermeable surfaces.

- Policy COS-4.2 Encourage and maintain high-quality architectural and landscaping designs that enhance or complement the community's visual character.
- Policy COS-7.5 Ensure that new development provides park land and/or improvements at a fair share ratio, pursuant to the City's Parkland Ordinance.
- Goal H-1: Encourage a diversity of housing types and provide affordability levels within Aliso Viejo to meet the needs of community residents.
- Policy H-1.1 Identify sites appropriate for the development of a variety of housing types and price ranges to meet the needs of all socioeconomic segments of the community through the disbursement of affordable units in projects.
- Policy H-1.2 Encourage through the use of density bonuses and rezoning to allow for residential development, development of affordable housing opportunities throughout the community, as well as development of housing for elderly and low- and moderate-income households near public transportation services.
- Policy H-1.4 Ensure that a portion of future residential development is affordable to low- and very-low-income households by designating certain sites as having the potential to be used for residential uses.
- Policy H-3.8 Review existing zoning policies and explore zoning changes to facilitate the development of affordable housing.
- Policy LU-12.2 As a condition upon new development, require payment of park fees and/or dedication and provision of parkland, recreation facilities and/or multi-use trails that improve the public and private recreation system.

3. Land Use Compatibility. In the case of amendments to the General Plan land use policy map, the new designation is compatible with the designations on nearby properties.

   The site is located at the intersection of Pacific Park Drive and Aliso Creek Road and is surrounded by a mix of residential, commercial, office, and community facility uses. Properties to the east are designated Medium and High Density Residential and developed with attached multifamily residential uses, while properties to the north also include similar residential neighborhoods in proximity to the Aliso Viejo Town Center. The proposed residential designation therefore extends an existing residential land use pattern in the surrounding area and provides a transition between residential neighborhoods and nearby commercial and office uses. The project's three-story Row Townhome and Garden Court buildings, residential architectural design, landscaped open-space network, and retention of existing access and circulation patterns further support compatibility with adjacent developments. Accordingly, the proposed Medium Density Residential designation is compatible with the land use designations and development pattern of nearby properties. Therefore, this finding can be made.

4. Property Suitability. In the case of amendments to the general plan land use policy map, the new designation is suitable for the location, access, visual character and topography of the subject property.

   The property is located at the intersection of Pacific Park Drive and Aliso Creek Road, with access provided from existing driveways connecting to Pacific Park Drive, Aliso Creek Road, and Journey through an established internal circulation system. The site is surrounded by a mix of residential, commercial, office, and community facility uses and is immediately adjacent to existing attached residential development, making it well suited for residential use. The project site is generally flat, with limited slopes along the eastern and western property boundaries, and can accommodate residential development with proposed grading, circulation, utility, and drainage improvements. The proposed development consists of three-story Row Townhome and Garden Court buildings designed around landscaped courtyards, paseos, and open-space areas totaling approximately 127,400 square feet, or 34.7% of the site. The proposed building style and design elements exist in adjacent residential neighborhoods. Therefore, this finding can be made.

Zone Change

In addition to the proposed General Plan amendment, the Project requires a zoning designation change for the Site from Professional Office 2 to Medium Density Residential. Pursuant to AVMC Section 15.78.040 (Zone Change and Prezoning), the City Council must make the following findings prior to approving the zone change. All these findings can be made as evidenced in the above General Plan Amendment Findings.

1. Public Welfare. Approval of the zone change will not create conditions materially detrimental to the public health, safety and general welfare.

2. General Plan Consistency. The zone change is consistent with the goals, objectives, and policies of the general plan and any applicable specific plan.

3. Land Use Compatibility. The zone change is compatible with the zoning and land use on nearby properties.

4. Property Suitability. The zone change is suitable for the location, access, visual character and topography of the subject property.

Vesting Tentative Tract Map

Pursuant to the requirements of the California Subdivision Map Act (Gov. Code §§ 66410 et seq.) and Title 14 of the Aliso Viejo Municipal Code, no tentative map shall be approved unless the following findings of consistency with the General Plan and compliance with CEQA have been made.

1. The proposed map is consistent with the applicable General and Specific Plans. The Site has a General Plan land use designation of Professional Office.

   The Applicant proposes a General Plan Amendment to re-designate the property for Medium Density Residential, which allows for residential development of 9 to 18 dwelling units per acre. The Vesting Tentative Tract Map proposes 137 multi-family homes on 8.44 acres, resulting in a density of 16.2 dwelling units per acre. As conditioned, the Vesting Tentative Tract Map will not take effect unless the General Plan Amendment, Zone Change, Site Development Permit, and Development Agreement take effect. Accordingly, the proposed map would be consistent with the applicable General Plan Land Use designation. There is no applicable Specific Plan for the Site. Therefore, this finding can be made.

2. The design or improvement of the proposed subdivision is consistent with the General and Specific Plans.

   The Project is consistent with the goals and policies of the Conservation and Open Space, Housing, and Land Use element in that the Project promotes orderly growth, provides a compatible transition between non-residential and residential uses, supports housing objectives by creating new residential opportunities, and utilizes existing infrastructure in a manner consistent with the community's long-term vision and planning framework. The Project is also subject to mitigation measures and conditions of approval that address potential impacts related to air quality, biological resources, geology/soils, hazards and hazardous materials, hydrology/water quality, tribal cultural resources, and utilities/service systems. There is no applicable Specific Plan for the Project site. Therefore, this finding can be made.

3. The site is physically suitable for the type of development.

   The Site is generally level, has adequate access from existing public streets, and is served by established infrastructure systems including water, sewer, storm drainage, and utilities. The Site's size, configuration, and surrounding land use context are appropriate to accommodate the Project consistent with applicable zoning and General Plan designations. No unusual topographic, geologic, or environmental conditions have been identified that would render the site unsuitable for residential use. Therefore, this finding can be made.

4. The site is physically suitable for the proposed density of development.

   The Project includes a General Plan Amendment to re-designate the property to Medium Density Residential, which permits residential development at a range of 9 to 18 dwelling units per acre. The Vesting Tentative Tract Map proposes 137 multi-family homes on 8.44 acres, resulting in a density of approximately 16.2 dwelling units per acre. This proposed density falls within the allowable range for the Medium-Density Residential designation. Therefore, this finding can be made.

5. The design of the subdivision and the proposed improvements are not likely to cause substantial environmental damage or substantial and avoidable injury to fish or wildlife or their habitat.

   The Project site is fully developed, contains no special-status plant or wildlife species, no riparian habitat, wetlands, sensitive natural communities, or wildlife corridors, and is not located within or adjacent to any habitat conservation reserve area. While the Site provides limited nesting habitat for common avian species protected under the Migratory Bird Treaty Act, implementation of Mitigation Measure BIO-1, including pre-construction nesting bird surveys, avoidance buffers, monitoring, and seasonal construction restrictions, would reduce potential impacts to nesting birds to a less-than-significant level.

6. The design of the subdivision or type of improvements is not likely to cause serious public health problems.

   The Project will be served by existing off-site infrastructure, with new on-site water, sewer, and storm drain facilities designed to connect to and extend those systems. All facilities have adequate capacity to accommodate the proposed residential use. The Project site is not listed on any hazardous materials sites pursuant to Government Code Section 65962.5, the subdivision design incorporates standard improvements, including paved streets, sidewalks, street lighting, and utility connections that will be constructed in compliance with applicable building codes and City engineering standards. The Initial Study prepared for the Project did not identify any conditions that would result in significant public health impacts, and all potentially significant effects have been mitigated to less-than-significant levels.

7. The design of the subdivision or the type of improvements will not conflict with existing easements, acquired by the public at large, for access through or use of property within the subdivision.

   The Project as conditioned requires the Applicant to obtain easement holders' authorization for any improvements or encroachments prior to building permit issuance.

8. The advisory agency shall determine whether the discharge of waste from the proposed subdivision into an existing sanitary sewer system would result in or add to a violation of existing requirements prescribed by either the Santa Ana or San Diego Regional Water Quality Control Boards.

   The project site's wastewater will be conveyed through the existing Moulton Niguel Water District (MNWD) wastewater collection system and treated at existing regional wastewater treatment facilities. The project's Initial Study/Mitigated Negative Declaration (IS/MND) concluded that implementation of the proposed residential development would not violate any water quality standards or waste discharge requirements and would not substantially degrade surface water or

groundwater quality. MNWD provides wastewater collection and treatment services throughout its service area and has existing treatment capacity to serve anticipated development within the district. In addition, the project will be required to comply with all applicable federal, State, regional, and local water quality regulations, including National Pollutant Discharge Elimination System (NPDES) requirements, implementation of the approved Water Quality Management Plan (WQMP), and all applicable Regional Water Quality Control Board regulations.

9. If the advisory agency approves or conditionally approves a tentative map which deviates from any standard of design as allowed by AVMC, the advisory agency shall make a finding that each such deviation has been individually considered and found to be justified based upon specific special circumstances.

   No deviations from the subdivision design standards are proposed as part of the Vesting Tentative Tract Map. Accordingly, no deviations require consideration or justification based on special circumstances.

Site Development Permit

The purpose of a site development permit ("SDP") is to ensure that new development conforms to the development and design provisions of the AVMC, including but not limited to permitted uses, development standards, and supplemental regulations. Pursuant to AVMC Section 15.74.020 (Site Development Permits), the City Council must make the following findings prior to approving the SDP:

1. Consistency with General Plan. The Project is consistent with the general plan and any applicable specific plan.

   The Project includes a General Plan Amendment ("GPA"). As detailed in the preceding GPA section, all required findings to support the amendment can be made.

2. Consistency with Zoning Code. The land use and associated development conform to the permitted use provisions and development standards of this zoning code and is consistent with this code and any applicable specific plan.

   The proposed zone change to Medium Density Residential, together with the associated development, is compatible with surrounding land uses, providing a transition that complements the existing neighborhood character. The project site is located at the intersection of Pacific Park Drive and Aliso Creek Road and is surrounded by a mix of residential, commercial, office, and community facility uses. Properties to the east and north are designated and developed with attached multifamily residential neighborhoods, and the proposed residential development extends this existing residential land use pattern while providing an appropriate transition between adjacent residential neighborhoods and nearby commercial and

office uses. The site is well suited for residential development based on its location, established access and circulation system, visual character, and generally flat topography. The proposed three-story Row Townhome and Garden Court buildings incorporate residential architectural design, landscaped courtyards, paseos, and open-space amenities that are compatible with surrounding residential development and neighborhood character.

The Project incorporates reduced perimeter landscape setbacks, an increase in maximum building height, and an increase in retaining wall height along the western property line, all of which are requested as waivers under the State Density Bonus Law (Government Code Section 65915). Because the Project provides the required percentage of affordable housing units for very low-income households, it is eligible for these waivers, which the City is required to grant upon making the applicable statutory findings. In addition, the Project qualifies for a reduced parking ratio under the State Density Bonus Law, which requires a minimum of 308 parking spaces. The Applicant proposes 343 parking spaces, consisting of 260 private residential spaces and 83 guest spaces. Although the Project qualifies for a reduced parking requirement, the proposed parking supply exceeds the minimum parking required under State law and fully complies with the City's parking standard of 2.5 spaces per dwelling unit, which requires 343 parking spaces. Accordingly, the Project conforms to the permitted use provisions and applicable development standards of the Zoning Code. Therefore, this finding can be made.

3. Compliance with CEQA. Processing and approval of the permit application are in compliance with the requirements of the California Environmental Quality Act. This finding can be made as evidenced in the Environmental Analysis below.

4. Architectural Design. The architectural design of the Project, including but not limited to the architectural style, scale, building mass, materials, colors, architectural details, and roof style, is compatible with surrounding development.

   The Project consists of three-story Row Townhome and Garden Court residential buildings that are consistent with the scale and intensity of existing multifamily residential developments located immediately east of the site and across Pacific Park Drive on both sides of the Aliso Viejo Town Center. The proposed residential building forms, architectural character, and site design reflect the development pattern established in these surrounding residential neighborhoods and provide a compatible transition between the adjacent residential, commercial, and office uses. The Row Townhome buildings contain four- to six-unit configurations organized along landscaped paseos, while the Garden Court buildings are arranged around central courtyards, creating a residential character similar to nearby attached housing communities. The proposed architecture incorporates features common throughout Aliso Viejo residential neighborhoods, including stucco exterior finishes, tile roofing, enhanced entry features, varied building elevations, articulated facades, recessed balconies, decorative trim elements, and

a combination of roof forms that reduce building mass and provide visual interest. In addition, the Project includes courtyards, paseos, and community gathering areas that complement the design character of surrounding residential development. The building placement, architectural detailing, material palette, and overall site design provide a cohesive residential environment that is compatible with adjacent residential neighborhoods and serves as an appropriate transition to nearby commercial and office uses. Accordingly, the architectural design of the Project is compatible with surrounding development, and this finding can be made

5. Site Design. The site design of the Project, including but not limited to project entries, interior circulation, pedestrian and bicycle access, pedestrian amenities, screening of equipment and trash enclosures, exterior lighting, and other site design elements, is compatible with surrounding development.

   Based on the Project plans and supporting documentation, the Project will retain the existing site access configuration, with primary entry and exit points provided from Pacific Park Drive and Aliso Creek Road. The Traffic Impact Analysis concluded that the Project will maintain acceptable traffic operations within the surrounding roadway network and that site access is adequate to accommodate project traffic safely and efficiently. To improve circulation and vehicular safety, the existing driveway on Aliso Creek Road will be modified to a full-ingress/right-turn-out configuration through the installation of a channelized right-turn island. The analysis also recommends signage, pavement markings, and HOA provisions within the shared access area between the Project and Pacific Park Plaza to discourage cut-through traffic and reinforce the intended circulation pattern. The internal private roadway network, including emergency and service access, was reviewed and accepted by the Orange County Fire Authority. Each dwelling unit will be served by enclosed private garage parking, while guest parking is distributed throughout the site to support visitor access. Approximately 127,400 square feet of landscaped open space, including courtyards, paseos, recreation areas, and perimeter landscaping, is provided throughout the development to enhance the residential character of the site. Utility equipment and other service elements are integrated into the site design and screened from public view through building placement and landscaping. Exterior lighting will be designed to provide safe illumination for vehicular and pedestrian areas while minimizing off-site glare and light spill. These site design elements are compatible with the character and development pattern of the surrounding residential, commercial, and office uses; therefore, this finding can be made.

6. Landscape Design. Project landscaping, including but not limited to the location, type, size, color, texture, and coverage of plant materials, has been designed so as to provide visual relief, complement buildings, visually emphasize prominent design elements and vistas, screen undesirable views, provide a harmonious transition between adjacent land uses and between development and open space, and provide an overall unifying influence to enhance the visual continuity of the Project.

The Project incorporates a landscape plan that enhances the overall visual continuity of the site and complements the architectural character of the development. Approximately 127,400 square feet, or 34.7% of the site, is devoted to landscaped open space, including courtyards, paseos, recreation areas, community gathering spaces, perimeter landscaping, and enhanced streetscape improvements. Landscaping is strategically located throughout the development to define pedestrian corridors, frame project entries, provide visual separation between land uses, soften building massing, and screen utilities from public view. The landscape palette includes a variety of trees, shrubs, groundcovers, and accent plantings that comply with City landscape requirements, emphasizing low-water, drought-tolerant species. The proposed landscape design and planting palette enhances landscaping throughout the site, providing visual buffering and transition between the proposed development and surrounding properties. Therefore, this finding can be made.

Development Agreement DA-2026-01001

This Project requires a land use and zoning change from office to residential, which requires a Development Agreement DA-2026-01001 ("DA") to ensure the Project is implemented as approved, minimize potential adverse impacts, and secure long-term community benefits. Under the DA (Attachment 5, Exhibit A), the Applicant has agreed to provide a public benefit contribution to the City totaling approximately $3,663,548.

Pursuant to AVMC 15.82.010 (Development Agreement DA-2026-01001s and Other Actions), the City Council must make the following findings prior to approving the DA:

1. Public Welfare. Approval of the Development Agreement DA-2026-01001 will not create conditions materially detrimental to the public health, safety and general welfare.

   The Project is consistent with the policies and regulations of the proposed Medium-Density Residential zoning district. The DA includes provisions to ensure compliance with applicable land use regulations, defines the scope of the Project, and identifies the public benefit obligations of the Applicant. The Project is compatible with adjacent multi-family communities in terms of layout, architectural style, materials, and open space; the site is served by existing infrastructure, including roads, utilities, and public services sufficient to support residential development; that the environmental assessment determined impacts would be less than significant with mitigation; the Project advances the City's housing goals by creating new housing opportunities; and future construction will be subject to plan check review and inspection to ensure compliance with all applicable building and safety standards. Therefore, this finding can be made.

2. General Plan Consistency. The Development Agreement DA-2026-01001 is consistent with the goals, objectives, and policies of the general plan and any applicable specific plan.

The Project is consistent with the goals and policies of the Conservation and Open Space, Housing, and Land Use elements in that the Project promotes orderly growth, provides a compatible transition between non-residential and residential uses, supports housing objectives by creating new residential opportunities, and utilizes existing infrastructure in a manner consistent with the community's long-term vision and planning framework, as evidenced in General Plan Amendment Finding No. 2. The Project is also subject to mitigation measures and conditions of approval that address potential impacts related to air quality, biological resources, geology/soils, hazards and hazardous materials, hydrology/water quality, tribal cultural resources, and utilities/service systems. The DA incorporates, among other provisions, the scope of the Project, compliance with governing regulations, and the Applicant's public benefit obligations, ensuring that this finding can be made.

Environmental:

Pursuant to the California Environmental Quality Act ("CEQA") and the State CEQA Guidelines, the City prepared an Initial Study/Mitigated Negative Declaration ("IS/MND") to evaluate the potential environmental impacts of the proposed Project. The analysis concluded that the Project could result in potentially significant environmental impacts; however, all such impacts can be reduced to less-than-significant levels through the implementation of mitigation measures. As a result, the City also prepared a Mitigation Monitoring and Reporting Program ("MMRP") in compliance with CEQA.

The IS/MND determined that the Project would not result in significant impacts to aesthetics, agricultural and forestry resources, cultural resources, energy, greenhouse gas emissions, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation/traffic, or wildfire. However, it identified potentially significant impacts to air quality, biological resources, geology/soils, hydrology/water quality, tribal cultural resources, and utilities/service systems. With the implementation of mitigation measures, these impacts would be reduced to less than significant levels. The mitigation measures are detailed in the Mitigation Monitoring and Reporting Program (MMRP) (Attachment 1, Exhibit A, Section 6.0) and have been incorporated into the Conditions of Approval (Attachment 4, Exhibit A) for the Project.

The IS/MND was circulated for a 20-day public review period, from June 18, 2026 to July 8, 2026. Distribution included the State Clearinghouse, required public agencies, property owners within a 300-foot radius of the Project site, and interested parties. Three comment letters were received during the public review period from the California Department of Transportation (Caltrans), the Orange County Transportation Authority (OCTA), and the Orange County Fire Authority (OCFA). OCTA requested minor revisions to the transit service descriptions contained in the IS/MND, and the document was revised accordingly to accurately reflect OCTA Routes 177 and 90. Caltrans provided recommendations related to bicycle parking, pedestrian accessibility, transit connectivity, internal circulation, package delivery facilities, and construction traffic management. The Applicant

responded that the Project already incorporates bicycle parking, sidewalks, internal circulation improvements, and access provisions, while other recommendations were either not warranted based on project conditions, did not apply to the Project, or would be addressed through subsequent permit review and construction requirements. OCFA concluded that the Project would result in a less-than-significant impact related to fire protection services. None of the comments identified new significant environmental impacts or resulted in changes to the IS/MND's environmental conclusions.

City Staff recommends that the City Council adopt the IS/MND and MMRP based on the findings set forth in the accompanying resolution. If the Project is approved, a Notice of Determination must be filed with the County Clerk and the State Clearinghouse within five working days of approval.

Attachments:

1. Resolution (Mitigated Negative Declaration)
   a. Exhibit A – Initial Study/Mitigated Negative Declaration
   b. Exhibit B – Response to Comments

2. Resolution (General Plan Amendment)
   a. Exhibit A – Amendment to the General Plan Land Use Map

3. Ordinance (Zone Change)
   a. Exhibit A – Zone Change Map

4. Resolution (Vesting Tentative Tract Map and Site Development Permit)
   a. Exhibit A – Conditions of Approval
   b. Exhibit B – Proposed Plans
   c. Exhibit C – Vesting Tentative Tract Map 19442

5. Ordinance (Development Agreement DA-2026-01001)
   a. Exhibit A – Development Agreement DA-2026-01001

6. Presentation

RESOLUTION NO. 2026-___

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ALISO VIEJO, CALIFORNIA, ADOPTING A MITIGATED NEGATIVE DECLARATION AND A MITIGATION MONITORING AND REPORTING PROGRAM PURSUANT TO THE CALIFORNIA ENVIRONMENTAL QUALITY ACT FOR GENERAL PLAN AMENDMENT GPA-2026-01004, ZONE CHANGE ZA-2026-01003, VESTING TENTATIVE TRACT MAP 19442, SITE DEVELOPMENT PERMIT SDP-2025-00004 AND DEVELOPMENT AGREEMENT DA-2026-01001 TO ALLOW THE DEVELOPMENT OF A 137-UNIT RESIDENTIAL TOWNHOME COMMUNITY LOCATED AT 27081 ALISO CREEK ROAD (APN: 632-124-08).

WHEREAS, on March 20, 2025, Shea Homes ("Applicant") submitted a pre-application to obtain feedback on concept plans for a development proposal involving the demolition of three existing office buildings to accommodate the construction of a 137-unit, residential community at 27081 Aliso Creek Road;

WHEREAS, on May 7, 2025, the City Council held a duly noticed public review and provided initial feedback on the concept plans for the Project;

WHEREAS, on July 1, 2025, the Applicant submitted a general plan amendment, zone change, vesting tentative tract map, site development permit, and a development agreement application to demolish existing office buildings and construct a multi-family residential community at 27081 Aliso Creek Road ("Project");

WHEREAS, pursuant to the California Environmental Quality Act (Public Resources Code, § 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations, title 14, § 15000 et seq.) (Collectively, "CEQA"), the City is the lead agency for the proposed of the Project;

WHEREAS, in accordance with State CEQA Guidelines section 15063, the City prepared an Initial Study to analyze whether the proposed Project may cause a potentially significant effect on the environment;

WHEREAS, based on the information contained in the Initial Study, which concluded that the proposed Project could have potentially significant impacts but that those impacts could be reduced to less than significant levels with implementation of proposed mitigation measures, the City determined that a Mitigated Negative Declaration ("MND") should be prepared for the proposed Project;

WHEREAS, the Initial Study/Mitigated Negative Declaration (IS/MND) (State Clearinghouse Number [SCH] 2026060921) was prepared pursuant to CEQA and the State CEQA Guidelines;

WHEREAS, pursuant to CEQA, the City prepared a program for reporting on or monitoring the changes which it has either required in the proposed Project or made a condition of approval to mitigate or avoid potential significant environmental effects (the "Mitigation Monitoring and Reporting Program" or "MMRP");

WHEREAS, in accordance with State CEQA Guidelines sections 15072 and 17073, the IS/MND was circulated for public review from June 18, 2026 to July 8, 2026;

WHEREAS, during the public review and comment period, copies of the IS/MND were available for review and inspection at the City of Aliso Viejo, Community Development Department and on the City's website;

WHEREAS, the City received and responded to three comments from Orange County Transportation Authority (OCTA), California Department of Transportation (Caltrans), and Orange County Fire Authority (OCFA);

WHEREAS, the City has reviewed the final IS/MND, and relevant information contained in the record regarding the Project, and determined that all legal prerequisites to the adoption of the resolution have been met;

WHEREAS, on October 1, 2026, the City gave public notice of the City Council public hearing for consideration of a Mitigated Negative Declaration, General Plan Amendment GPA-2026-01004, Zone Change ZC-2026-01003, Vesting Tentative Tract Map 19442, Site Development Permit SDP-2025-00004, and Development Agreement DA-2026-01001 for the Project by advertising in a newspaper of general circulation; posting notices at City Hall and the Project site; and mailing notices to owners of property within 300 feet, Applicant, and local agencies that provide water, sewage, electricity and schools;

WHEREAS, on October 21, 2026, the City Council held a public hearing as prescribed by law and considered written and verbal public testimony that was submitted prior to the hearing and during the hearing, and evidence and recommendations presented by staff in the agenda report and oral presentation;

WHEREAS, no comments made in the public hearing conducted by the City, and no additional information submitted to the City, have resulted in substantial new information requiring substantial revisions that would trigger recirculation of the IS/MND or additional environmental review of the proposed Project under State CEQA Guidelines section 15073.5; and

WHEREAS, all other legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF ALISO VIEJO AS FOLLOWS:

Section 1. **Incorporation of Recitals.** The City Council hereby finds and determines that all of the recitals set forth above are true and correct. The above recitals are hereby incorporated as substantive findings of this Resolution.

Section 2: **Compliance with CEQA.** The City Council has reviewed and considered the information contained in the IS/MND, comments received, and other documents contained in the administrative record for the Project. The City Council finds that the IS/MND has been completed in compliance with CEQA, the State CEQA Guidelines, and the City's Local CEQA Guidelines.

Section 3. **Findings.** Based on the whole record before it, including the IS/MND, the administrative record and all other written and oral evidence presented to the City Council, the City Council finds that all environmental impacts of the Project are either less than significant or can be mitigated to less than significant levels with the mitigation measures outlined in the IS/MND, and the Mitigation Monitoring and Reporting Program. The City Council finds that there is no substantial evidence in the administrative record supporting a fair argument that the Project may result in any significant environmental impact. The City Council finds that the IS/MND contains complete, objective, and accurate reporting of the environmental impacts associated with the Project and reflects the independent judgment and analysis of the City.

Section 4. **Adoption of The Mitigated Negative Declaration**. The City hereby approves and adopts the IS/MND, which is hereby attached to this Resolution as Exhibit "A".

Section 5. **Adoption of The Mitigation Monitoring And Reporting Program.** The City hereby adopts the MMRP, which is hereby attached to this Resolution as Exhibit "A", Section 6.0. In the event of any inconsistencies between the mitigation measures as set forth in the IS/MND and the MMRP, the MMRP shall control.

Section 6. **Notice of Determination**. The City directs Staff to prepare, execute, and file a Notice of Determination with the County Clerk and the State Clearinghouse within five (5) working days of the passage and adoption of this Resolution.

Section 7: **Location of Documents.** The administrative record for the Project is maintained at City Hall located at 12 Journey, Suite 100, Aliso Viejo, CA 92656. The custodian of records is the City Clerk.

Section 8. **Execution of Resolution**. The Mayor shall sign this Resolution and the City Clerk shall attest and certify to the passage and adoption thereof.

PASSED, APPROVED AND ADOPTED this 21st day of October 2026.

_____
Max Duncan
Mayor

APPROVED AS TO FORM:

_____
Scott C. Smith, City Attorney

ATTEST:

_____
Maria Kendig, City Clerk

STATE OF CALIFORNIA)
COUNTY OF ORANGE) ss.
CITY OF ALISO VIEJO)

I, Maria Kendig, City Clerk of the City of Aliso Viejo, California, DO HEREBY CERTIFY that the foregoing is the original of Resolution No. 2026-__ duly passed and adopted by the City Council of the City of Aliso Viejo at their regular meeting held on the 21st day of October 2026, by the following roll call vote, to wit:

AYES:

NOES:

ABSENT:

_____
MARIA KENDIG,
CITY CLERK

(SEAL)

Exhibit “A”
Initial Study/Mitigated Negative Declaration

Exhibit “B”
Response to Comments

Aliso Creek Residential Development Project

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION
NO. CEQA-2026-01000

ALISO VIEJO
Live Life Inspired

Lead Agency:
City of Aliso Viejo
Community Development Department
12 Journey, Suite 100
Aliso Viejo, CA 92656
Contact: So Kim, Director of Community Development

Prepared by:
Carlson Strategic Land Solutions
27134A Paseo Espada, Suite 323
San Juan Capistrano, CA 92675
Contact: Peter Carlson, President

Date:
June 2026

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Appendix B Pacific Park Drive Townhome Project Biological Resource Assessment in the City of Aliso Viejo

Appendix C Cultural Resources Study for the Journey and Pacific Park Drive (Shea Aliso Viejo) Project

Appendix D Preliminary Geotechnical Investigation and Review of Vesting Tentative Tract Map 19442, Proposed Residential Redevelopment

Appendix E Paleontological Assessment for the Journey and Pacific Park Drive (Shea Aliso Viejo) Project

Appendix F Phase I Environmental Site Assessment Report and Shallow Soil Sampling Report

Appendix G Preliminary Hydrology & Hydraulics Report

Appendix H Water Quality Management Plan

Appendix I Pacific Park Drive Townhome Project Noise Impact Study

Appendix J Pacific Park Drive Townhomes Project Vehicle Miles Traveled (VMT) Screening Analysis, City of Aliso Viejo

Appendix K Moulton Niguel Water District Engineering Feasibility Letter

Appendix L Fire Master Plan

Initial Study/Mitigated Negative Declaration No. CEQA-2026-01000

Project Title:
Aliso Creek Residential Development Project

Reference Application Numbers:
General Plan Amendment GPA-2026-01004, Zone Change ZA-2026-01003, Development Agreement DA-2026-01001, Tentative Tract Map No. 19442, Site Development Permit SDP-2025-00004, and Density Bonus Application.

Lead Agency:
City of Aliso Viejo

Contact Person and Telephone No.:
So Kim, Director of Community Development
SKim@avcity.org
949.425.2527

Project Proponent and Address:
Shea Homes
2 Ada, Suite 200
Irvine, CA 92618

Contact Person and Telephone No.:
Emilie Simard, Director of Forward Planning
emilie.simard@sheahomes.com
949.244.7172

Project Location:
The Project site address is 27081 Aliso Creek Road. The site is located south of Pacific Park Drive, west of Aliso Creek Road, and north of Journey.

Existing General Plan Designation:
Professional Office

Existing Zoning Classification:
Professional Office (PO)

SECTION 1.0 INTRODUCTION

The City of Aliso Viejo (City), as the lead agency under the California Environmental Quality Act (CEQA), has prepared this Initial Study (IS) for the Aliso Creek Residential Development Project (Project). The information contained in the IS was used by the City of Aliso Viejo to evaluate and determine potential impacts associated with the proposed Project as required by CEQA and the State CEQA Guidelines.

This IS assesses the environmental effects of the proposed Aliso Creek Residential Development Project, located on approximately 8.44 acres of land currently developed with three two-story office buildings. The Project site is located at 27081 Aliso Creek Road, which is generally south of Pacific Park Drive, west of Aliso Creek Road, and north and east of Journey.

The Project proposes a General Plan Amendment, Zone Change, Development Agreement, Tentative Tract Map, Density Bonus, and Site Development Permit to develop the site as a for-sale residential community with 137 three-story attached residential units.

The preparation of an IS/Mitigated Negative Declaration (MND) is governed by two principal sets of documents: CEQA (Public Resources Code [PRC] Section 21000, et seq.) and the State CEQA Guidelines (California Code of Regulations [CCR] Section 15000, et seq.). Specifically, State CEQA Guidelines Section 15063 ("Initial Study") and Sections 15070–15075 ("Negative Declaration Process") guide the process for the preparation of an IS/MND. Where appropriate and supportive to an understanding of the issues, reference is made either to the statute, the State CEQA Guidelines, or appropriate case law. As mandated by CEQA Guidelines Section 15105, affected public agencies and the interested public may submit comments on the Draft IS/MND. Comments will be responded to in writing.

This IS/MND and its appendices have been prepared in compliance with State CEQA Guidelines Section 15071. This IS/MND contains (1) a brief description of the proposed Project, (2) the proposed Project location, (3) proposed findings that the proposed Project would not have a significant effect on the environment, (4) a copy of the IS/Environmental Checklist documenting support for the findings, and (5) all mitigation measures to be implemented. When combined with the Notice of Intent to Adopt a Mitigated Negative Declaration, this serves as the environmental document for the proposed Project pursuant to the provisions of CEQA (Public Resources Code 21000 et seq.) and the CEQA Guidelines (California Code of Regulations Section 15000, et seq.).

SECTION 2.0 EXISTING SETTING

2.1 Regional Setting

The approximately 8.44-acre site (Assessor's Parcel Number (APN) 632-124-08) is located in the City of Aliso Viejo on the U.S. Geological Survey (USGS) Map *San Juan Capistrano* Quadrangle topographic map within Section 16, Township 7 south, and Range 8 west. The Project site is located south of Pacific Park Drive, west of Aliso Creek Road, and north and east of Journey in the City of Aliso Viejo (Figures 1 and 2).

2.2 Existing Site Conditions

The site is currently developed with three two-story office buildings. The three office buildings measure approximately 35,568, 49,538, and 40,060 square feet in size. The remaining areas of the Project site consist of paved parking, outdoor seating areas, and ornamental landscaping.

Direct access currently occurs to the Project site from an unsignalized driveway at Pacific Park Drive. Additional access to the Project site occurs from an internal drive along the southern Project boundary that connects to and extends west from Aliso Creek Road at an unsignalized driveway and south through the adjoining office campus to Journey, also at an unsignalized driveway. The shared internal drive along the southern Project boundary includes a center round-about with a landscaped median and decorative paving, which is a defining feature of the internal circulation system. An access easement is recorded over this drive, allowing the Project site to retain access to both Aliso Creek Road and Journey.

The Project site is generally flat; however, slopes occur on the western and eastern Project boundaries. The Project site is generally at grade with Pacific Park Drive at the drive entry and at grade with the adjoining office complex to the south.

The existing General Plan land use designation for the Project site is Professional Office (Figure 3). The existing Zoning classification is Professional Office (Figure 4). The proposed Project seeks approval of a General Plan Amendment and Zone Change from Professional Office to Residential Medium Density.

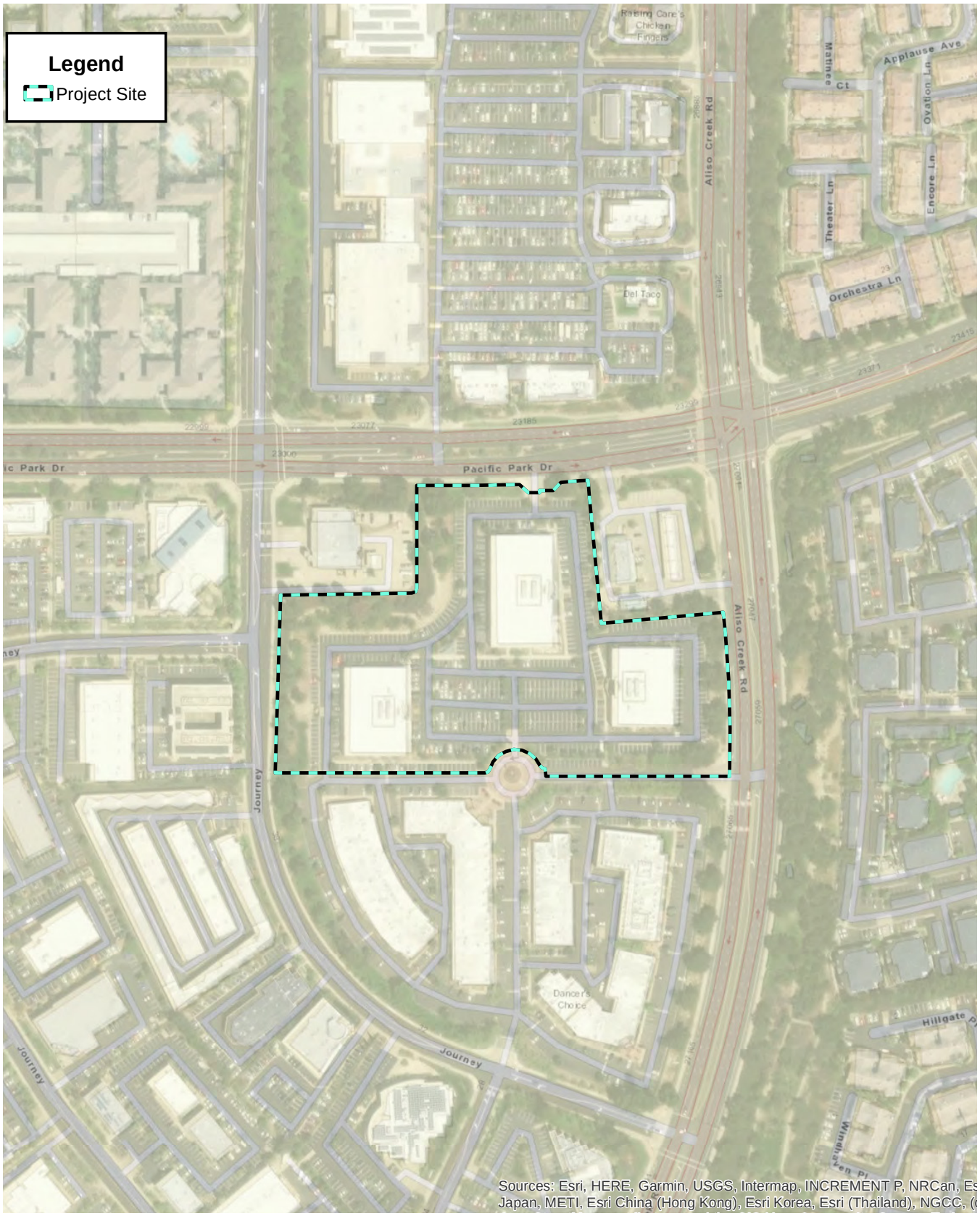
2.3 Surrounding Land Uses

The Project site is bordered by a fire station, library and medical office to the west; a gas station, Aliso Creek Road and attached residential uses to the east; Pacific Park Drive and commercial uses within the Aliso Viejo Town Center to the north; and commercial uses within Pacific Park Plaza to the south. The surrounding General Plan land use designations are Community Facilities to the west, Town Center Commercial to the north, High Density Residential to the east, and Business Park to the south.

N.T.S.

Source: World Street Imagery.

FIGURE 1
Regional Location Map

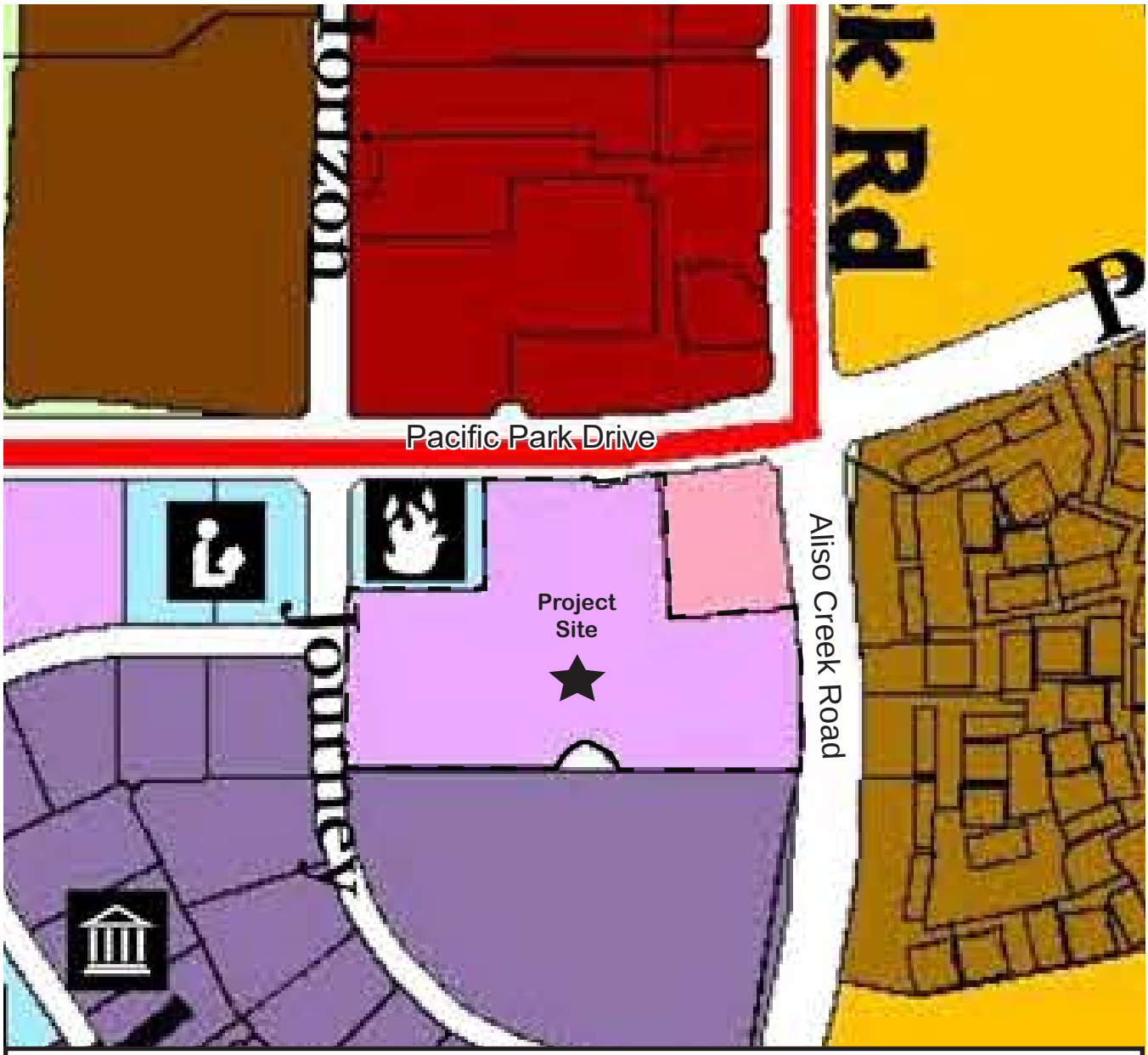


N

N.T.S.

Source: WorldImagery.

FIGURE 2
Project Location Map



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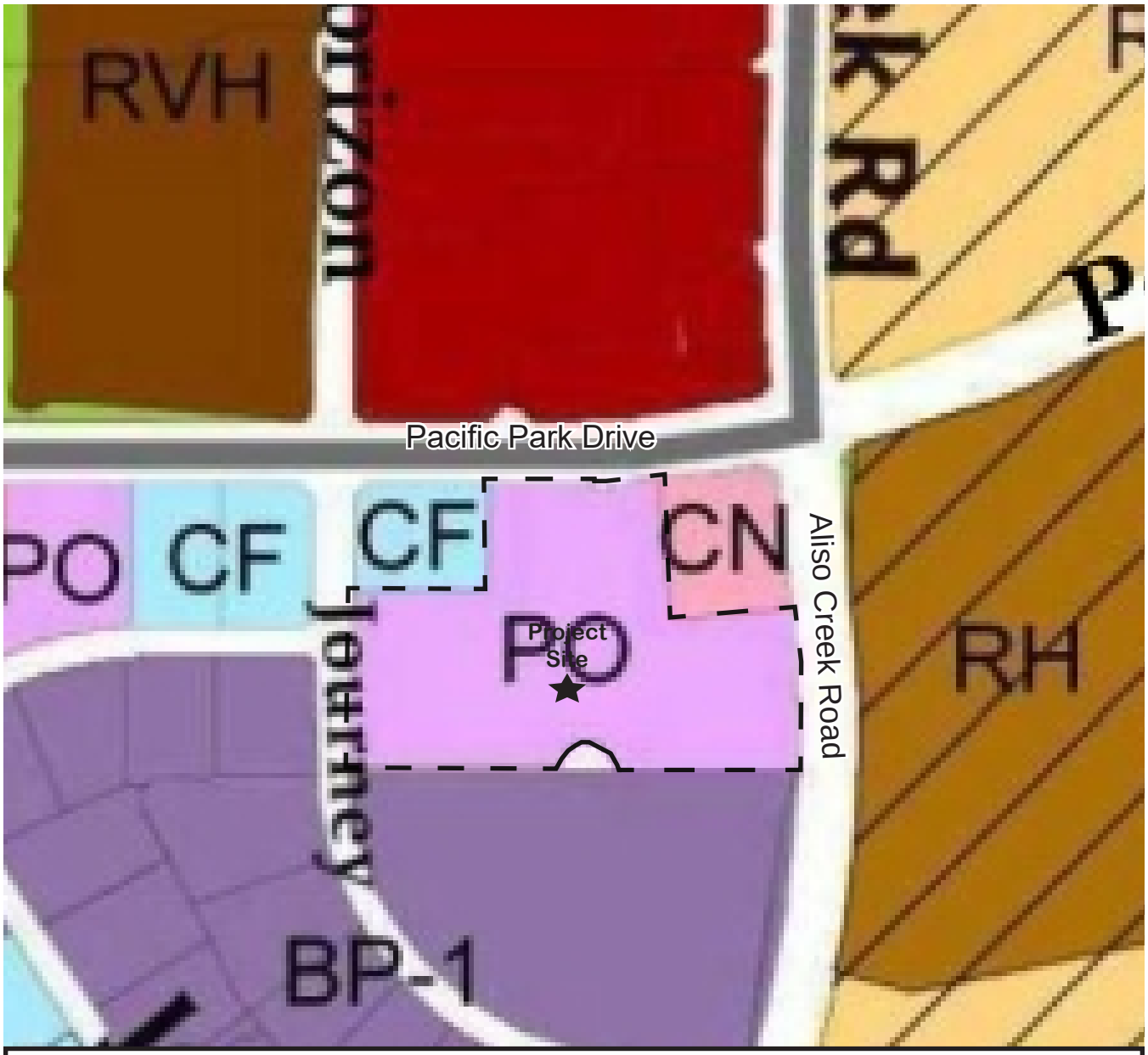
N.T.S.

Source: City of Aliso Viejo (2004).

FIGURE 3
General Plan Land Use Designation



Source: City of Aliso Viejo (2025).

FIGURE 4
Zoning Classification

SECTION 3.0 PROJECT DESCRIPTION

The Project proposes a General Plan Amendment, Zone Change, Development Agreement, Tentative Tract Map, Density Bonus, and Site Development Permit in order to construct 137 three-story for-sale attached residential, landscape, streets and drive aisles on approximately 8.44 acres. Two residential housing types are proposed, Three-Story Townhomes and Three-Story Garden Courts.

As required by CEQA for the preparation of a Mitigated Negative Declaration (Public Resources Code Section 21064.5), after the Project application was submitted, the City has evaluated the Project as originally proposed and recommended to the applicant that changes to the Project proposal be made to "*avoid the effects or mitigate the effects to a point where clearly no significant effect on the environment would occur.*" Prior to the circulation of this MND, the applicant has accepted those recommendations. Therefore, all Project features and actions identified in this MND as either Project Design Features or Mitigation Measures have been agreed to and incorporated into the Project as required by Public Resources Code Section 21064.5.

3.1 Site Plan

The Project proposes to retain the existing circulation pattern, which provides access to the Project site from an unsignalized driveway at Pacific Park Drive, as well as access to Aliso Creek Road and Journey. Pacific Park Drive would provide primary access to the Project site, and this entrance would be enhanced with accent paving, enhanced landscaping, and community signage.

The internal backbone streets would measure 26 – 28 feet wide without parking and 31 feet wide with parallel parking. Alleys that serve garages would measure 24 feet in width.

The site plan generally provides a 20-foot perimeter setback from the property line to proposed residential uses, except along the southern property boundary where encroachments into the 20-foot setback occur. Retaining walls are proposed on both the west and east sides of the property. The walls along the west side of the property would be at the toe of the slope and measure up to approximately 8 feet in height. The remainder of the slope would be landscaped and the walls would not be visible from surrounding properties or Journey. The retaining walls along the eastern boundary would occur at the top of the slope and measure up to approximately 5-feet in height. The walls would be separated from Aliso Creek Road by more than 20 feet of landscaped area, which would screen the walls from public view.

The proposed Site Plan and Tentative Tract Map are provided in Figures 5 and 6.

3.1.1 Recreation and Open Space

The Site Plan provides for a central recreation area featuring a pool, BBQ area, and lounge seating. Additionally, a tot lot and playground, with play equipment, benches, and shaded

areas are provided in the western portion of the site adjacent to the slope. The central recreation area totals approximately 7,000 square feet.

Each of the dwelling units includes private open space areas in the form of patios and balconies. Private open space totals approximately 34,372 square feet. Additionally, throughout the community are courtyards with seating and accent landscaping, providing passive green spaces as well as paved walkways with trees and specimen plantings, enhancing the community's visual appeal and walkability. The paseos and green courts total approximately 43,900 square feet. The perimeter slopes would also include landscaping consisting of trees and understory. The total private landscaping is approximately 69,000 square feet.

3.1.2 Residential Uses

The Project proposes two different residential building types, Three-Story Rowtowns (70 dwelling units) and Three-Story Garden Courts (67 dwelling units). The Rowtowns provide side-by-side dwelling units (dus) with front door access from a landscape paseo. Buildings range from four to six dwelling units, measure 41 feet tall, and are primarily located in the south-central and south-east portion of the site. The Garden Courts consist of generally five dwellings in a building separated by a central courtyard. Some configurations include buildings with two to five dwellings. The Garden Courts are located in the northern portion of the Project site and the south-western corner of the site.

Tables 1 and 2 below provide a summary of the two residential housing types.

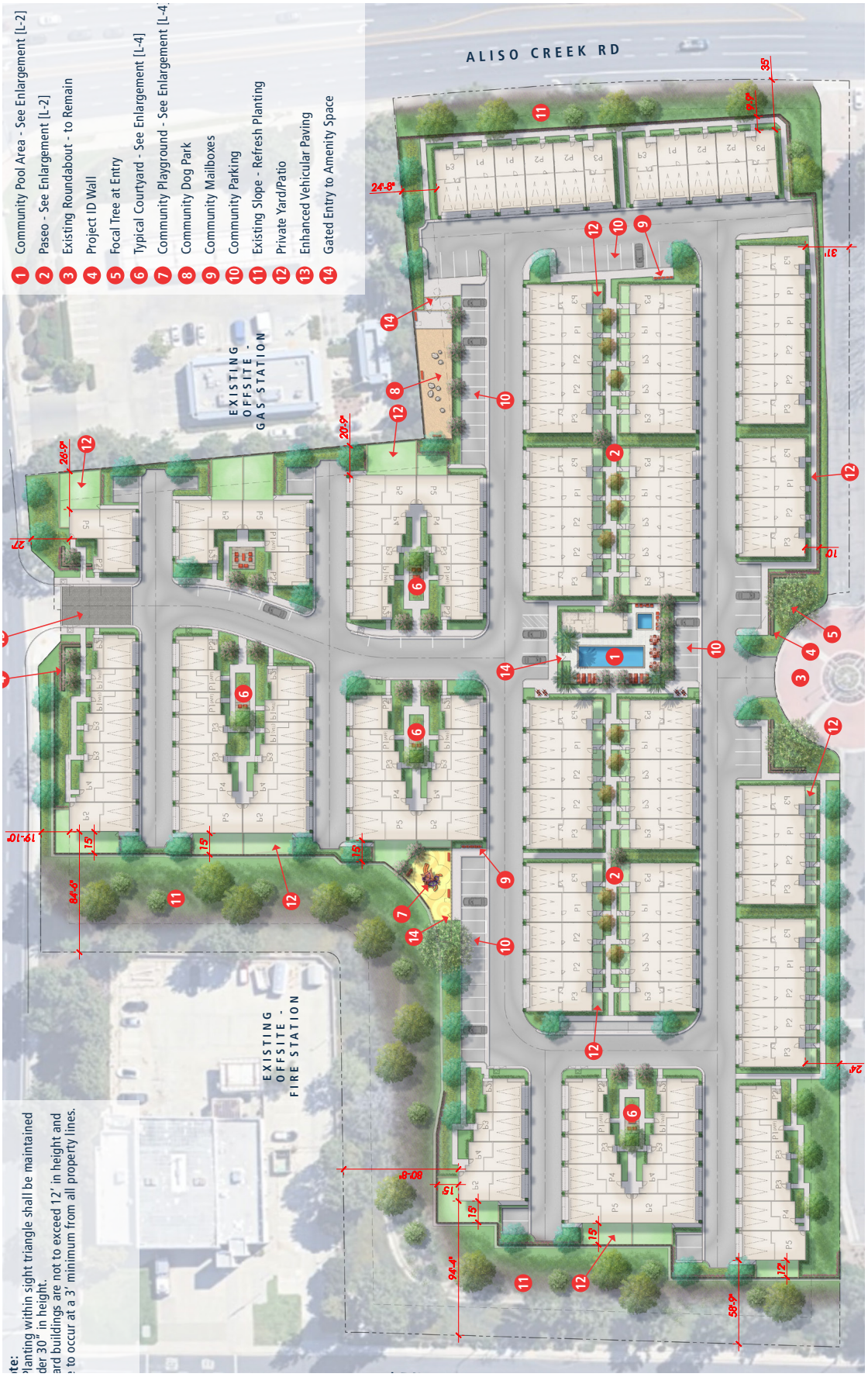
Table 1. Three-Story Rowtowns

Plan	# of Units	Square Footage (sf)	Stories	Garage Count	Bedrooms	Bathrooms
Plan 1	16	2,019	3-story	2-car	3 bdrm	3 bath
Plan 2	26	2,207	3-story	2-car	4 bdrm	4 bath
Plan 3	28	2,249	3-story	2-car	4 bdrm	4 bath
Total	70					

Table 2. Three-Story Garden Courts

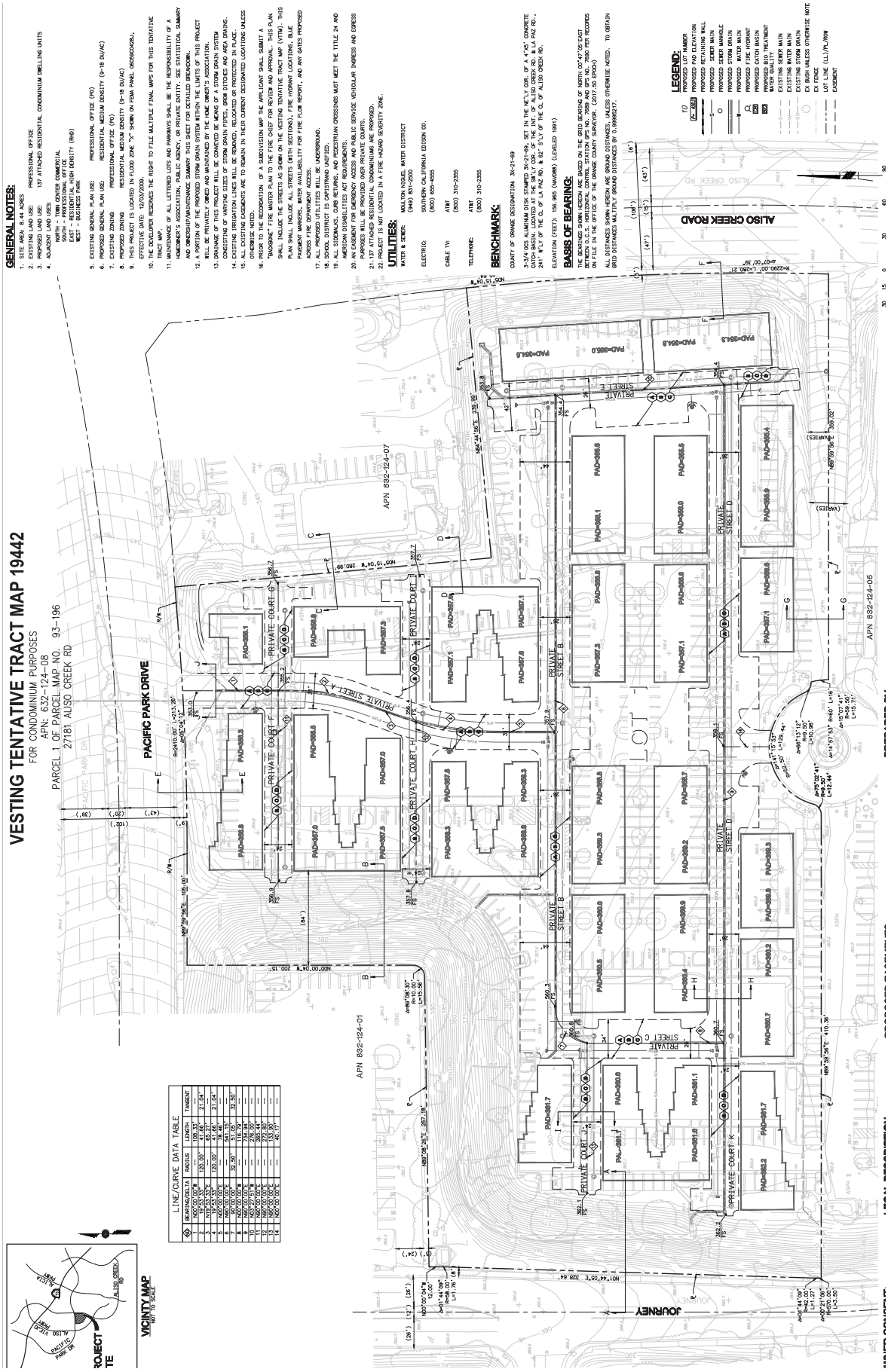
Plan	# of Units	Square Footage (sf)	Stories	Garage Count	Bedrooms	Bathrooms
Plan 1*	14	1,102	3-story	1-car	2 bdrm	3 bath
Plan 2	14	1,456	3-story	2-car	3 bdrm	3 bath
Plan 3	14	1,626	3-story	2-car	3 bdrm	3 bath
Plan 4	11	1,804	3-story	2-car	3 bdrm	4 bath
Plan 5	14	2,186	3-story	2-car	4 bdrm	4 bath
Total	67					

** The Project proposes 5% Very Low Income affordable dwelling units, which totals 7 dwelling units. The affordable units would be provided in the Garden Courts, where 7 of the 14 Plan 1 units would be deed restricted for Very Low Income qualified buyers.*



N.T.S.
Source: C2Collaboration (10.22.2025)

FIGURE 5
Conceptual Site Plan



	BEARING/DELTA	RADIUS	LENGTH	TANGENT
1	N00°00'00"W	—	109.33'	—
2	19°43'33"	120.00'	41.66'	21.04'
3	N19°43'33"E	—	69.27'	—
4	19°43'33"	120.00'	41.66'	21.04'
5	N19°43'33"E	—	141.18'	—
6	N00°00'00"E	—	241.19'	—
7	90°00'00"	30.50'	47.12'	30.50'
8	N90°00'00"W	—	51.26'	—
9	N00°00'00"E	—	734.84'	—
10	N90°00'00"E	—	265.40'	—
11	N00°00'00"E	—	278.80'	—
12	N90°00'00"E	—	65.27'	—
13	N00°00'00"E	—	45.17'	—
14	N00°00'00"E	—	—	—

N.T.S.
Source: ProActive Engineering&Surveying (August 2025)

FIGURE 6
Tentative Tract Map

3.1.3 Architecture

The Project architectural style includes rowtown and garden courtyards, which includes transitional architectural style, balancing traditional forms with contemporary details. Materials include smooth stucco, horizontal siding, and stone veneer, creating contrast and visual interest. Architectural elevations are provided in Figures 7 through 11. To enhance the street presence, buildings along Pacific Park, Aliso Creek, and the southern boundary are oriented forward, to promote walkability and strong urban design. The garden courts open inward, softening building mass and maximizing landscape views, providing a more intimate neighborhood feel.

3.1.4 Parking

Each unit includes a two-car enclosed garage with side-by-side parking, except for the Plan 1 garden courts, which are designated as affordable dwelling units, which have a one-car garage. Garages are designed to accommodate parked cars plus three individual trash carts per unit. Additionally, surface parking areas are provided throughout the Project site with 83 guest parking spaces. The parking ratio totals 2.5 spaces per dwelling unit.

3.1.5 Grading and Construction

The existing improvements on the Project site would be demolished and hauled off-site. Recyclable construction materials would be taken to an approved recycling facility. The remaining construction materials would be hauled to an approved landfill. The estimated amount of demolition includes:

- Building = 125,166 sf
- Asphalt Concrete (AC) = 217,550 sf
- Landscape =41,200 sf

The Project site would be graded following demolition. Remedial grading would prepare the site for residential development. Grading quantity estimates in cubic yards (cy) include:

- Raw cut = 4,200 cy
- Raw fill = 9,800 cy
- Remedial = 5,500 cy

Since the amount of raw fill exceeds the amount of raw cut, the Project would require import of approximately 5,600 cubic yards.

3.1.6 Density Bonus Waivers

Under State Density Bonus Law, projects are afforded waivers of development standards as an incentive for providing affordable housing. The proposed Project includes the following three waivers to development standards.

- Building Height: The Project proposes a waiver to increase the height of the residential buildings from 35 feet to 41 feet.
- Landscape Buffer: The Project proposes a waiver to encroach into the 20-foot landscape buffer along the southern property line.

- Retaining Wall Height: The Project proposes a waiver to permit a retaining wall up to 8 feet in height along the west property line below the fire station.

3.1.7 Infrastructure and Utilities

The proposed grading plan would maintain existing drainage patterns by incorporating a series of high and low points, as well as utilizing existing v-ditches, effectively channeling stormwater to catch basins to a primary outlet to the north in Pacific Park Drive. Construction of a new public lateral storm drain would be required to connect to the existing storm drain in Pacific Park Drive. There would be a secondary storm drain outlet to the south, discharging to Aliso Creek Road. Stormwater treatment is proposed by underground flow-based treatment systems, such as modular wetlands. The on-site stormwater system includes an underground detention vault measuring approximately 28 feet by 130 feet by 5 feet deep. The vault is designed to capture and hold stormwater, released through an orifice opening sized to meet the South Orange County Hydromodification Management Plan (SOCHM) criteria.

Utility connections are planned within Pacific Park Drive and at the roundabout south of the subject property. The Project site would be served by a looped water main with connections in Pacific Park Drive and the roundabout at the south property line. Each home is expected to have an individual water meter with private service connections. The sewer mainline is planned to connect in Aliso Creek Road following the replacement of the existing sewer line in the shared drive. The point of connection to service the residential development would occur in the roundabout at the south property line.

3.2 Intended Use of the IS/MND

The Project proposes the following entitlements:

- General Plan Amendment No. GPA-2026-01004
- Zone Change No. ZA-2026-01003
- Development Agreement No. DA-2026-01001
- Tentative Tract Map No. 19442
- Site Development Permit No. SDP-2025-00004
- Density Bonus

4-Unit Building Rowtown

Front Elevation

Rear Elevation

Left Elevation

Right Elevation

N.T.S.
Source: Woodley Architectural Group (10.22.25)

FIGURE 7
Proposed Elevation - 4-Unit Building Rowtowns

5-Unit Building Rowtown

Front Elevation

Rear Elevation

Left Elevation

Right Elevation

N.T.S.
Source: Woodley Architectural Group (10.22.25)

FIGURE 8
Proposed Elevation - 5-Unit Building Rowtowns

6-Unit Building Rowtown

Front Elevation

Rear Elevation

Left Elevation

Right Elevation

N.T.S.
Source: Woodley Architectural Group (10.22.25)

FIGURE 9
Proposed Elevation - 6-Unit Building Rowtowns

6-Unit Building Garden Courts

Front Elevation

Rear Elevation

Left Elevation

Right Elevation

N.T.S.

Source: Woodley Architectural Group (10.22.25)

FIGURE 10

Proposed Elevation - 10-Unit Building Garden Courts

6-Unit Building Garden Courts

Front Elevation

Rear Elevation

Left Elevation

Right Elevation

N.T.S.
Source: Woodley Architectural Group (10.22.25)

FIGURE 11
Proposed Elevation - 6-Unit Building Garden Courts

SECTION 4.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" or "Less than Significant with Mitigation Incorporated" as indicated by the checklist on the following pages.

☐ Aesthetics	☒ Hazards & Hazardous Materials	☐ Transportation / Traffic
☐ Agriculture & Forest Resources	☒ Hydrology / Water Quality	☒ Tribal Cultural Resources
☒ Air Quality	☐ Land Use / Planning	☒ Utilities / Service Systems
☒ Biological Resources	☐ Mineral Resources	☐ Wildfire
☐ Cultural Resources	☐ Noise	
☐ Energy	☐ Population / Housing	
☒ Geology / Soils	☐ Public Services	☒ Mandatory Findings of Significance
☐ Greenhouse Gas Emissions	☐ Recreation	

4.1 DETERMINATION

On the basis of this initial evaluation:

☐ I find that the proposed project **COULD NOT** have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.
☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made or agreed to by the project proponent. **A MITIGATED NEGATIVE DECLARATION** will be prepared.
☐ I find that the proposed project MAY have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.
☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.
☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier **EIR** or **NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier **EIR** or **NEGATIVE DECLARATION**, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Signature Date

SECTION 5.0 ENVIRONMENTAL CHECKLIST

5.1 Aesthetics

Issues:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
AESTHETICS. Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) In nonurbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

Impact Analysis

The Project site constitutes an infill site currently developed with existing office buildings, associated parking lot and scattered ornamental vegetation. The Project site is not located on a ridgeline or an area of visual prominence. There are no rock outcroppings or other unique geologic features. The scattered ornamental trees on the Project site are common to the area.

The City's General Plan Conservation/Open Space Element defines scenic resources as unique hillsides, ridgelines, canyons and view corridors. While there are a number of scenic resources within the City, the Project site does not have the elements to meet the definition of scenic resource. Policy COS-4.1 of the General Plan Open Space/Conservation Element directs the City to protect scenic landform features such as hillsides, ridgelines, canyons, and view corridors through designation of key areas as open space and use of other land use planning tools. While scenic vistas are not specifically identified in the General Plan, the General Plan identifies a number of scenic resources in the City, including canyon views and scenic highways, which are cited as examples of scenic qualities benefiting the community.

Several roadways within Aliso Viejo have scenic qualities and are designated as viewscape and landscape corridors by the City. Viewscape corridors are defined as "[a] route that traverses a corridor within which unique or unusual scenic resources and aesthetic values are found. This designation is intended to minimize the impact of the

highway and land development upon the significant scenic resources along the route." Landscape corridors are defined as "[a] corridor that traverses developed or developing areas and has been designated for special treatment to provide a pleasant driving environment as well as community enhancement." The closest viewscape corridor to the Project site is Wood Canyon Drive, located south of the Project site. The Project site is located adjacent to Aliso Creek Road, which is designated a landscape corridor.

Findings of Fact

a) Less than Significant. The Project site is not identified as a scenic vista and does not contain any unique or distinguishing features that would qualify the site for designation as a scenic vista. The Project site is located within an area that is generally developed and urbanized. The Project site is currently developed with office buildings, surface parking, landscaping, and improvements.

Views from the Project site include short- to middle-range views of parking, landscaping, and commercial structures, parking, ornamental landscaping to the north, west and south; and residential uses and Aliso Creek Road to the east. There are no public views from the Project site of scenic resources. Furthermore, there are no established public views of a scenic vista surrounding the Project site. Journey is elevated above the Project site to the west and provides glimpses of territorial views to the east. However, there are no established vista points from Journey. Furthermore, the views from Journey are interrupted by existing street trees planted along Journey. Future development of the Project site would increase the development pad elevations in the eastern portion of the site approximately two feet above existing conditions. However, the building heights of the proposed residential development at approximately 41 feet would remain well below the current Professional Office height limit of 65 feet.

A small portion of the eastern Project boundary is adjacent to Aliso Creek Road, which is identified as a Landscape Corridor. The General Plan Conservation / Open Space Element defines Landscape Corridor as "A corridor that traverses developed or developing areas and has been designated for special treatment to provide a pleasant driving environment as well as community enhancement." The area of the Project site adjacent to Aliso Creek Road would be landscaped in accordance with the objectives of the Landscape Corridor. The minor encroachment into the landscape setback associated with the proposed density bonus waiver would occur along the southern property line along a driveway and not adjacent to surrounding public streets. The existing landscaped slope along Aliso Creek Road will be preserved and enhanced with additional low water, drought tolerant plantings. Therefore, impacts would be less than significant.

b) No Impact. The Project site is not located within a state scenic highway corridor. The Project site is not located near any designated scenic highways, significant ridgelines, or other identified scenic resources, and would not result in any impacts related to

having an adverse impact on a scenic vista. The closest officially designated scenic highway to the Project site is the SR-91 located approximately 20 miles north and outside of the City. Highway 74, located in San Juan Capistrano approximately 7 miles southeast of the Project site is designated as an eligible scenic highway. Since the Project site does not contain any scenic resources, such as significant trees, rock outcroppings, or historic buildings, or is located within a state scenic highway, no impacts would occur.

c) Less than Significant. The Project site is located in an urbanized area as defined by Public Resources Code Section 21071(a). The definition of an urbanized area is either an incorporated city that has a population of at least 100,000 persons, or a city of less than 100,000 persons plus one or two contiguous incorporated cities with a combined population of at least 100,000 persons. The City of Aliso Viejo has an estimated population of 50,457 (Census July 2024), however combined with Laguna Niguel (64,185 people) and Laguna Hills (30,378 people), the City of Aliso Viejo meets the definition of urbanized area.

The Project site is surrounded by commercial uses to the north, west, and south; and bounded by Aliso Creek Road to the east, followed by residential uses. Therefore, the applicable threshold of significance is whether the proposed Project would conflict with applicable zoning and other regulations governing scenic quality.

The proposed Project requests approval of a General Plan Amendment to change the land use designation from Professional Office to Residential Medium Density. A Zone Change is also requested to change the zoning classification from Professional Office to Residential Medium Density.

The Project requires approval of a Site Development Permit and Development Agreement. The Site Development Permit would allow for discretionary review of the Project's appropriateness, scale, architecture, site design, and compatibility with the surrounding area. The decision-making authority would be required to make findings for approval including consistency with the General Plan, consistency with the Zoning Code, compliance with CEQA, architectural design and site design that is compatible with surrounding development, and landscape design that provides a unifying influence to enhance the visual continuity of the Project. Pursuant to California Government Code Sections 65864 et seq. and Section 15.82.010 of the City's Municipal Code, the Development Agreement assures the City of specified public benefits and provides the landowner with certainty for ten years in the ongoing application of the City's ordinances and regulations in effect at the time of the approval of the Project. The Development Agreement references, but does not expand or modify, the scope of the Project or the Project approvals which are evaluated by this MND and does not propose or authorize any additional physical improvements.

The Project would be required to undergo design review, in accordance with Municipal Code Chapter 15.62, *Design Standards*. The design standards would ensure high quality physical design for the Project, including visual compatibility with existing development. Additionally, the Project would be subject to the development standards of the Site Development Permit as modified by State Density Bonus Law waivers, which would ensure the physical design of the development is consistent with the overall vision for the site. The Project requests three waivers of development standards consistent with State Density Bonus Law. One waiver would permit an increase in building height from 35 feet to 41 feet. However, this height increase remains less than the 65-foot heigh limit of the existing Professional Office zone and would not extend above and block views from Journey. A second waiver would permit minor encroachments into the 20-foot landscape buffer along the southern property boundary, which does not occur along a public roadway. The third waiver would permit an eight-foot-high retaining wall along the toe of the slope below the existing fire station, which would not be readily visible from surrounding properties or public roadways. Therefore, the proposed Project would not conflict with applicable zoning and other regulations governing scenic quality. Impacts would be less than significant.

d) Less than Significant. The Project site is located in an urban area with numerous nearby light sources, as well as office and residential structures with glass windows. The proposed Project would not create a new source of glare. The construction materials used for the residential structures would be common to other residential structures and include composite roofs, stucco and sided exteriors, and standard residential windows. The construction materials for typical residential construction do not create a new source of glare.

The existing development of the Project site includes wall-mounted lighting, security lighting, and parking lot lighting. Existing light sources surrounding the Project site include streetlights, existing residential neighborhoods, and existing commercial uses. The Project would include light sources typical of residential developments, which are less intensive than the surrounding commercial property lighting. Internal roadways would have streetlights and each residence would have typical wall lighting associated with residential uses. The Aliso Viejo Municipal Code (AVMC) regulates exterior lighting. Specifically AVMC Section 15.62.070 states, "All properties shall be subject to the outdoor lighting standards of this section. This section provides standards which allow adequate outdoor lighting for public safety and decorative purposes while minimizing the adverse effects of excessive lighting on adjacent properties and the community." The section provides standards for light spillage, visibility of light sources, and shielding requirements. The light sources included in the proposed Project will comply with AVMC regulations and have the same character and intensity as existing surrounding light sources, therefore, impacts would be less than significant.

Sources: City of Aliso Viejo General Plan Conservation/Open Space Element and Land Use Element; California State Scenic Highway System Map; Google Earth; and site visit.

5.2 Agriculture and Forestry Resources

Issues:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
AGRICULTURE AND FOREST RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

Impact Analysis

The Project site is currently developed with three office buildings totaling approximately 125,166 square feet and associated parking lots. The Project site is not being actively farmed or used for forest use and there is no recent history of such uses on the Project site.

Findings of Fact

a) No Impact. The Project site is not designated Prime Farmland, Unique Farmland, or Farmland of Statewide Importance based on mapping by the Department of Conservation. The Project site is mapped as "Urban and Built-Up Land." Therefore, no impact would occur.

b) No Impact. The proposed Project site is zoned Professional Office and is not subject to a Williamson Act contract. Therefore, no impact would occur.

c) No Impact. The Project site is zoned Professional Office. While the proposed Project includes a request for a General Plan Amendment and Zone Change, the request does not include rezoning of agricultural or forest land. No impact would occur.

d) No Impact. The proposed Project site does not have forested land or land that was used for the harvesting of timber. Therefore, no impact would occur.

e) No Impact. The Project site is not located on a site dedicated as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. Thus, implementation of the Project would not result in changes in the environment that would result in the conversion of farmland to nonagricultural use. Furthermore, the proposed Project does not contain forestland, timberland, or land zoned Timberland Production as defined by California Public Resources Code Section 51104(g) and therefore, would not result in the conversion of existing forest land to non-forest land. No impact would occur.

Sources: Department of Conservation Important Farmland Finder, DLRP Important Farmland Finder (DLRP Important Farmland Finder); Title Report; City of Aliso Viejo General Plan Land Use Map; City of Aliso Viejo Zoning Map; and Google Earth.

5.3 Air Quality

Issues:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☒	☐	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☒	☐	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

Impact Analysis

The proposed Project site is located within the South Coast Air Basin (also referred to as "Basin"), for which the South Coast Air Quality Management District (SCAQMD) is responsible for controlling emissions primarily from stationary sources and to a lesser extent, mobile sources. Additionally, SCAQMD, in coordination with the Southern California Association of Governments (SCAG) is responsible for creating, updating, and implementing the Air Quality Management Plan (AQMP), which is a regional air quality strategy program. While air quality has improved dramatically over the past years, the South Coast Air Basin continues to exceed federal public health standards for ozone and particulate matter (PM).

The City relies on the SCAQMD for establishing significance thresholds for criteria air pollutants, shown in Table 3 below. By complying with the thresholds of significance, the Project would also be in compliance with the SCAQMD AQMP and the federal and state air quality standards.

Table 3. SCAQMD Air Quality Significance Thresholds

Pollutant	Construction (Lbs /Day)	Operation (Lbs/Day)
NO_X	100	55
VOC	75	55
PM_{10}	150	150
$PM_{2.5}$	55	55
SO_X	150	150
CO	550	550

Source:http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significancethresholds.pdf
Lbs/Day = pounds per day

Furthermore, Localized Significance Thresholds (LST) are used to determine whether a project may generate significant adverse localized air quality impacts. LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard. LSTs are developed based on the ambient concentrations of four applicable air pollutants for source receptor area (SRA) 20 – Central Orange County Coastal. Table 4, below, provides the LST threshold of significance developed by AQMD.

Table 4. SCAQMD Localized Significance Thresholds (LST)

Pollutant	Construction (Lbs /Day)[1]	Operation (Lbs/Day)[2]
NO_X	161.1	197.0
CO	1,325.2	1,711.0
PM_{10}	10.4	4.0
$PM_{2.5}$	6.9	2.0

1 Source: SCAQMD Mass Rate Localized Significance Thresholds for 3.5 acres/day in SRA-20 at 25 meters.
2 Source: SCAQMD Mass Rate Localized Significance Thresholds for 5 acres/day in SRA-20 at 25 meters.

The report, *Pacific Park Drive Townhome Project Air Quality, Greenhouse Gas, and Energy Impact Study* dated May 19, 2026, and prepared by RK Engineering Group, Inc. (Appendix A), analyzes potential air quality impacts from construction and operations of the proposed Project. The report analyzes grading of the Project site, including the import of approximately 5,600 cubic yards of fill material and the demolition of the existing office structures and parking lot. The report also analyzes operational impacts from construction of 137 dwelling units.

The analysis of air quality impacts included in the *Pacific Park Drive Townhome Project Air Quality, Greenhouse Gas, and Energy Impact Study* assumes implementation of standard air quality rules and requirements and design features designed to reduce emissions. These commitments are defined as Project Design Features (PDFs), which will be included in the Mitigation Monitoring and Reporting Program as PDFs to ensure

implementation. The following PDFs were included in the air quality analysis and are hereby incorporated into the Project.

Project Design Features:

PDF AQ-1 The project will follow the SCAQMD rules and requirements for fugitive dust control, which include, but are not limited to the following:

1. Pre-water active grading or trenching areas.
2. Water all active construction areas as frequently as needed (at least twice daily) to prevent visible dust plumes from extending more than 100 feet.
3. Maintain a stabilized surface or apply dust suppressants to inactive areas, disturbed surfaces, staging areas, haul routes, and unpaved roads.
4. Limit on-site vehicle speeds to 15 mph on unpaved areas.
5. Maintain all haul trucks with covered loads and ≥6 inches of freeboard (CVC §23114).
6. Stabilize stockpiles with water or covers and restrict height if near occupied structures.
7. Use a gravel pad at egress points (minimum 30' x 50', 1" washed gravel, 6" depth), or alternatively a wheel shaker or wheel washing station.
8. Remove track-out extending ≥25 feet onto public roadways immediately and clean daily.
9. Suspend dust-generating activities and implement contingency measures during high wind events (wind gusts >25 mph).
10. Re-vegetate or stabilize disturbed areas within 21 days of inactivity.
11. Limit construction vehicle traffic to designated haul routes only.

PDF AQ-2 Construction equipment shall be maintained in proper tune.

PDF AQ-3 All construction vehicles shall be prohibited from excessive idling. Excessive idling is defined as five (5) minutes or longer.

PDF AQ-4 Minimize the simultaneous operation of multiple construction equipment units, to the maximum extent feasible.

PDF AQ-5 The use of heavy construction equipment and earthmoving activity shall be suspended during Air Alerts when the Air Quality Index reaches the "Unhealthy" level.

PDF AQ-6 Establish staging areas for the construction equipment that are as distant as possible from adjacent residential homes.

PDF AQ-7 Utilize zero VOC and low VOC paints, coatings, and solvents consistent with the requirements of SCAQMD Rules 1113 and 1143.

PDF AQ-8 The project will comply with the mandatory requirements of the California Building Standards Code, Title 24, Part 6 (Energy Code) and Part 11 (CALGreen), including, but not limited to:

1. Install low flow fixtures and toilets, water efficient irrigation systems, drought tolerant/native landscaping, and reduce the amount of turf.
2. Provide the necessary infrastructure to support electric vehicle charging.
3. Provide solar installations/solar readiness zones per the prescribed Energy Design Ratings.

PDFAQ-9 Participate in the local waste management recycling and composting programs.

Findings of Fact

a) Less than Significant. The Project site is located within the South Coast Air Basin, which includes all of Orange County and portions of Los Angeles, Riverside, and San Bernardino Counties. Air quality within the Basin is under the jurisdiction of the SCAQMD. The SCAQMD adopted the 2022 Air Quality Management Plan (2022 AQMP) in December 2022.

Consistency with the 2022 AQMP is determined based on evaluating a project against two criteria. These criteria are:

(1) Whether the project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.

(2) Whether the project will exceed the assumptions in the AQMP in 2016 or increments based on the year of project buildout and phase.

The Project's consistency with the 2022 AQMP is evaluated below using Criterion 1 and 2.

Criterion 1 – Increase in the Frequency or Severity of Violations

As identified within the *Pacific Park Drive Townhome Project Air Quality, Greenhouse Gas, and Energy Impact Study* (Appendix A), the Project construction and operational emissions are compared to SCAQMD regional and localized significance thresholds. As shown and discussed in checklist item b) below, the Project's short-term construction emissions and long-term operational emissions would not exceed applicable SCAQMD regional emission thresholds for criteria pollutants. In addition, the Project's emissions would not exceed localized significance thresholds at nearby sensitive receptors. Because the proposed Project's emissions would remain below the applicable regional significance thresholds, project-related emissions would not be cumulatively

considerable and would not contribute to an exceedance of an ambient air quality standard.

Accordingly, the proposed Project would not increase the frequency or severity of existing violations, cause or contribute to new federal or State violations, or delay timely attainment of applicable air quality standards in the 2022 AQMP. Therefore, the Project would not conflict with or obstruct implementation of the 2022 AQMP attainment strategy and is consistent with Criterion 1.

Criterion 2 – Exceed Assumptions in the AQMP

The 2022 AQMP relies on regional population, housing, and employment growth forecasts prepared by Southern California Association of Governments (SCAG) in its Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). Regional population, housing, and employment projections developed by SCAG are based, in part, on cities' general plan land use designations. These projections form the foundation for the emissions inventory of the AQMP. These demographic trends are incorporated into SCAG's regional transportation plan/sustainable communities strategy to determine priority transportation projects and vehicle miles traveled in the SCAG region. The AQMP strategy is based on projections from local general plans.

The Project proposes 137 residential dwelling units and approximately 348 new residents on a site designated and zoned for Professional Office. The Project proposes a General Plan Amendment from Professional Office to Residential Medium Density. While the proposed Project is not consistent with the land use designation assumed in the AQMP, the AQMP assumed development of the Project site as Professional Office, with associated emissions from employment. As discussed in Section 5.14 Population and Housing, the proposed Project's population growth would be within SCAG's forecast growth projections for the City. Additionally, the proposed Project would address the need for additional housing to accommodate population growth in the City.

Finally, the long-term emissions generated by the proposed Project would not cause criteria air pollutants to exceed the SCAQMD significance thresholds for Project operations. South Coast AQMD's significance thresholds identify whether or not a project has the potential to cumulatively contribute to the air basin's nonattainment designations. Because the proposed Project would not exceed the South Coast AQMD's regional significance thresholds and growth is consistent with regional growth projections, the proposed Project would not interfere with SCAQMD's ability to achieve the long-term air quality goals identified in the AQMP.

Therefore, the proposed Project would be consistent with the AQMP, and impacts would be less than significant.

b) Less than Significant with Mitigation. Criteria pollutant emissions from the proposed Project would be generated by both construction emissions and operational emissions. As shown in **Table 5** below, the daily construction emissions would be less than the SCAQMD air quality standards and thresholds of significance. The analysis shown in **Table 5** below includes implementation of **Mitigation Measure (MM) AQ-1**, which requires the use of Tier 4 off-road grading equipment to the extent feasible. **MM AQ-1** has been agreed to by the Project Applicant and included in the air quality modeling, which demonstrates consistency with SCAQMD air quality standards.

Table 5. Daily Construction Emissions

Maximum Daily Emissions (lbs/day)[1]						
Activity	VOC	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Demolition	2.50	34.62	25.69	0.11	13.24	3.18
Site Preparation	3.20	29.22	29.60	0.05	9.14	5.14
Grading	1.73	18.04	19.42	0.04	4.29	2.19
Building Construction	1.41	10.69	18.04	0.03	1.80	0.69
Paving	1.04	6.99	10.59	0.01	0.49	0.32
Architectural Coating	46.83	0.89	1.96	0.00	0.28	0.08
Maximum[1]	**46.83**	**34.62**	**29.60**	**0.11**	**13.24**	**5.14**
SCAQMD Threshold	75	100	550	150	150	55
Exceeds Threshold (?)	**No**	**No**	**No**	**No**	**No**	**No**

[1] Maximum daily emission during summer or winter; includes both onsite and offsite Project emissions.

Table 6 below summarizes the analysis of operational emissions. As shown in **Table 6,** operational emissions would also be below the SCAQMD thresholds.

Table 6. Daily Operational Emissions

Maximum Daily Emissions (lbs/day)[1]						
Activity	VOC	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Mobile Sources	3.67	2.82	34.84	0.09	9.19	2.36
Energy Sources	4.19	2.35	8.74	0.01	0.19	0.19
Area Sources	0.04	0.71	0.30	0.00	0.06	0.06
Maximum[1]	**7.90**	**5.88**	**43.88**	**0.10**	**9.44**	**2.61**
SCAQMD Threshold	55	55	550	150	150	55
Exceeds Threshold (?)	**No**	**No**	**No**	**No**	**No**	**No**

[1] Maximum daily emission during summer or winter; includes both onsite and offsite Project emissions.

With implementation of the Project Design Features (PDFs) and **MM AQ-1**, the proposed Project would not contribute to a cumulatively considerable net increase of any criteria pollutant for which the region is in non- attainment under an applicable Federal or State ambient air quality standard (including releasing emissions that exceed

quantitative thresholds for ozone precursors). Therefore, impacts from criteria pollutant emissions would be less than significant with mitigation.

MM AQ-1 *All off-road diesel construction equipment over 100 horsepower will have Tier 4 low emission "clean diesel" engines (OEM or retrofit) that include diesel oxidation catalysts and diesel particulate filters that meet the latest CARB best available control technology.*

c) Less than Significant with Mitigation. Sensitive receptors surrounding the Project site include neighboring residential uses, preschool and day care uses, medical uses, and Orange County Fire Station 57. Exposure of pollutant concentrations on sensitive receptors can occur from construction and operation of the proposed Project. While project construction would generate less than significant criteria pollutant emissions, construction operations could cause fugitive dust impacts and impacts from diesel particulate matter. Operation of the proposed Project could also result in localized concentration of emissions.

As indicated in the *Pacific Park Drive Townhome Project Air Quality, Greenhouse Gas, and Energy Impact Study*, the Project would generate diesel particulate matter (DPM) during construction from off-road diesel equipment and trucks. The California Office of Environmental Health Hazard Assessment (OEHHA) adopted guidelines for preparation of Health Risk Assessments (HRAs). The guidelines provide risk factors based on exposure to toxic substances over a 30-year lifetime span. The proposed Project's construction activity would not be a long-term (i.e., 30 years) source of toxic air contaminant emissions, and short-term risk factors have not been developed. Due to the significantly reduced risk from short-term exposure, SCAQMD does not typically require the evaluation of long-term health risks for short-term construction activities from a project such as the proposed Project. Previously listed PDFs and MM AQ-1 have been applied to the Project to reduce Project construction diesel exhaust emissions and associated exposure to adjacent sensitive receptors to less than significant.

Localized Significance Thresholds (LST) are used to determine whether a project may generate significant adverse localized air quality impacts. LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard. LSTs are developed based on the ambient concentrations of four applicable air pollutants for source receptor area (SRA) 20 – Central Orange County Coastal.

With implementation of the PDFs and MM AQ-1, localized construction emissions are summarized in Table 7, which demonstrates that emissions have been mitigated below the SCAQMD threshold. Operational emissions are summarized in Table 8, which also demonstrates less than significant operational emissions.

Table 7. Localized Construction Emissions

Emissions Sources	Pollutant Emissions (lbs/day)[1]			
	NOx	CO	PM_{10}	$PM_{2.5}$
On-Site Emissions	29.16	28.81	9.93	5.08
SCAQMD Threshold[2]	161.1	1,325.2	10.4	6.9
Exceed Threshold?	No	No	No	No

1. Maximum daily emission during summer or winter; includes on-site Project emissions only.
2. Source: SCAQMD Mass Rate Localized Significance Thresholds for 3.5 acres/day in SRA-20 at 25 meters.

Table 8. Localized Operational Emissions

Emissions Sources	Pollutant Emissions (lbs/day)[1]			
	NOx	CO	PM_{10}	$PM_{2.5}$
On-Site Emissions[2]	4.41	10.79	0.70	0.36
SCAQMD Threshold[3]	197.0	1,711.0	4.0	2.0
Exceed Threshold?	No	No	No	No

1. Maximum daily emission during summer or winter; includes on-site Project emissions only.
2. Source: SCAQMD Mass Rate Localized Significance Thresholds for 3.5 acres/day in SRA-20 at 25 meters.

As shown in the prior tables, emissions from the proposed Project would not exceed LSTs for the nearest sensitive receptors for construction and operational emissions. Therefore, impacts are less than significant with mitigation.

d) Less than Significant. Substantial odor-generating sources include land uses such as agricultural activities (farming and livestock), chemical plants, composting operations, dairies, fiberglass molding facilities, food processing plants, landfills, refineries, rail yards, and wastewater treatment facilities. The proposed Project does not include any of these uses that result in significant odor impacts. Some objectionable odors may occur during construction from diesel engines, paving, and architectural coatings/paint. However, these odors are temporary, limited only to specific construction activities, and dissipate quickly. In addition, the Project would be required to comply with standard building code requirements related to exhaust ventilation, as well as comply with SCAQMD Rule 402. Since residential uses do not typically generate objectionable odors and the Project site is surrounded by existing commercial and residential uses on all sides, no new objectionable odors would be created. Impacts would be less than significant.

Sources: *Pacific Park Drive Townhome Project Air Quality, Greenhouse Gas, and Energy Impact Study* dated May 19, 2026, and prepared by RK Engineering Group, Inc. (Appendix A).

5.4 Biological Resources

Issues:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
BIOLOGICAL RESOURCES. Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☒	☐	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

Impact Analysis

Biological resources on the Project site were evaluated and presented in *The Pacific Park Drive Townhome Project Biological Resource Assessment in the City of Aliso Viejo*, dated December 5, 2025, by Carlson Strategic Land Solutions, and included in Appendix B. The Project site is classified as entirely developed. Non-native and ornamental vegetation consist of glossy privet (*Ligustrum lucidum*), southern magnolia tree (*Magnolia grandiflora*), carrotwood tree (*Cupaniopsis anacardioides*), century plant (*Agave americana*), crimson fountain grass (*Pennisetum setaceum*), Peruvian peppertree (*Schinus molle*), bottlebrush tree (*Melaleuca quinquenervia*), and Chinese

elm (*Ulmus parvifolia*) which are scattered throughout the parking lot and observed on the adjacent slope to the west. No blue line drainages or drainages that qualify as jurisdictional Waters of the U.S. or Waters of the State were identified on the Project site.

The Project site is located within the Orange County NCCP/HCP; however, the Project site is not located within the boundaries of the NCCP/HCP reserve system.

Findings of Fact

a) Less than Significant with Mitigation. No special status plant or wildlife species were identified on the Project site, nor were any observed offsite within the buffer area. The proposed Project includes the removal of all buildings, ornamental trees and shrubs, and the parking lot area. Since the project site does not contain special status plant or wildlife species, impacts would be less than significant, and no mitigation is required.

The Project site consists of developed habitat and lacks suitable habitat for sensitive wildlife species. The Project site provides limited suitable habitat for some common avian species in the form of ornamental species and existing building eaves. While none of the common species carry a Federal or State listing as threatened or endangered, they are all protected under the Migratory Bird Treaty Act (MBTA). Therefore, a pre-construction survey is required in compliance with the MBTA. Implementation of Mitigation Measure (MM) BIO-1 would reduce potential impacts to the avian species to a less than significant level, if nesting individuals are present.

With implementation of MM BIO-1 impacts to sensitive wildlife species would be mitigated to less than significant.

MM BIO-1 *Prior to ground disturbances that would impact potentially suitable nesting habitat for avian species, the Project Applicant shall adhere to the following:*

1. *Vegetation removal activities shall be scheduled outside the nesting season (September 1 to February 14 for songbirds; September 1 to January 14 for raptors) to the extent feasible to avoid potential impacts to nesting birds and/or ground nesters.*

2. *Any construction activities that occur during typical nesting season (February 15 to August 31 for songbirds; January 15 to August 31 for raptors) will require that all suitable habitat, on-site and within 300-feet surrounding the site (as feasible), be thoroughly surveyed for the presence of nesting birds by a qualified biologist before*

commencement ground disturbances. If active nests are identified, the biologist would establish buffers around the vegetation (500 feet for raptors and sensitive species, 200 feet for non-raptors/non-sensitive species). All work within these buffers would be halted until the nesting effort is finished (i.e. the juveniles are surviving independent from the nest). The onsite biologist would review and verify compliance with these nesting boundaries and would verify the nesting effort has finished. Work can resume within these areas when no other active nests are found. Alternatively, a qualified biologist may determine that construction can be permitted within the buffer areas and would develop a monitoring plan to prevent any impacts while the nest continues to be active (eggs, chicks, etc.). Upon completion of the survey and any follow-up construction avoidance management, a report shall be prepared and submitted to City for mitigation monitoring compliance record keeping.

b and c) No Impact. There is no riparian habitat or other sensitive natural community identified on the Project site. Additionally, no jurisdictional non-wetland or wetland waters regulated under Section 404 of the Clean Water Act occur on the Project site. Therefore, no impacts would occur, and no mitigation is required.

d) Less than Significant with Mitigation. The Project site is surrounded by existing residential and commercial development and roadways that serve the area. The Project site does not function as a wildlife corridor.

The Project site provides limited suitable habitat for some common avian species in the form of ornamental species and existing building eaves. While not considered a wildlife corridor, the potential exists for avian species to nest on the Project site. Nesting activity typically occurs from January 15 through August 31 for raptors and February 15 through August 31 for all other avian species. Disturbing or destroying active nests is a violation of the Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703 et seq.). In addition, nests and eggs are protected under Fish and Wildlife Code Section 3503. As such, direct impacts to breeding birds (e.g. through nest removal) or indirect impacts (e.g. by noise causing abandonment of the nest) is considered a potentially significant impact. Compliance with the MBTA through MM BIO-1 would reduce impacts to a less than significant level.

e) No Impact. The Project is not subject to any local policies, such as a tree preservation ordinance, which protects biological resources. In addition, the Project site consists primarily of disturbed/developed habitat communities. Furthermore, the Project site does not contain unique vegetation or wildlife habitats; significant scenic, ecological, or recreational value; or contain endangered or threatened species. Therefore, no impacts would occur, and no mitigation is necessary.

f) No Impact. As indicated in the Aliso Viejo General Plan FEIR, portions of the City lie within the Coastal subregion of the Orange County Natural Community Conservation Plan and Habitat Conservation Plan (NCCP/HCP); however, the Project site is not located within or adjacent to designated Non-Reserve Open Space or NCCP Habitat Reserve within the NCCP/HCP. The Project site is currently developed and located within an urbanized area, and is not located within the boundaries of the NCCP/HCP reserve system. As such, the proposed Project would not conflict with the NCCP/HCP or other approved local, regional, or State habitat conservation plan. No impact would occur in this regard.

Sources: *The Pacific Park Drive Townhome Project Biological Resource Assessment in the City of Aliso Viejo,* dated December 5, 2025, by Carlson Strategic Land Solutions, and included in **Appendix B**.

5.5 Cultural Resources

Issues:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
CULTURAL RESOURCES. Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	☐	☐	☒	☐
c) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

Impact Analysis

The potential for cultural resources to occur on the Project site was assessed in the *Cultural Resources Study for the Journey and Pacific Park Drive (Shea Aliso Viejo) Project*, prepared by BFSA Environmental Services, dated June 30, 2025, and included in Appendix C. The analysis included a review of archaeological records at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton. A Sacred Lands File (SLF) search was also requested from the Native American Heritage Commission (NAHC). Additionally, a field survey was also conducted on the Project site.

The results of the records search indicate that six resources have been recorded within one-half mile of the Project site, none of which occur on the Project site. The record search also identified 18 previous studies conducted within one mile, three of which overlap on the Project site.

BFSA also requested a Sacred Land File (SLF) search from the Native American Heritage Commission (NAHC) to search for the presence of any recorded Native American sacred sites or locations of religious or ceremonial importance. The SLF search indicated the positive presence of sacred sites or locations of religious or ceremonial importance within the vicinity of the Project site. In accordance with the recommendations of the NAHC, BFSA contacted all Native American Tribes listed in the NAHC response letter.

A field survey was conducted on July 10, 2025, by BFSA and did not locate any cultural resources within the Project.

The City of Aliso Viejo as the Lead Agency notified registered Native American Tribes of the proposed Project under Assembly Bill (AB) 52 and Senate Bill (SB) 18 on November 14, 2025. Notification letters were sent to the following tribes according to the consultation list provided by the Native American Heritage Commission:

- Cahuilla Band of Indians
- Gabrieleno Band of Mission Indians – Kizh Nation
- Gabrieleno/Tongva San Gabriel Band of Mission Indians
- Juaneno Band of Mission Indians Acjachemen Nation
- La Jolla Band of Luiseno Indians
- Pala Band of Mission Indians
- Pauma Band of Luiseno Indians
- Santa Rosa Band of Cahuilla Indians
- Soboba Band of Luiseno Indians

On November 25, 2025, the Juaneño Band of Mission Indians, Acjachemen Nation-Belardes responded to the City's notice and requested consultation. During consultation agreement was reached on mitigation measures and consultation closed on April 6, 2026.

On December 18, 2025, the City held a consultation meeting with the Gabrieleno Band of Mission Indians – Kizh Nation. The City followed up with emails to the Kizh Nation on January 13, February 19, and May 11, 2026 without response from the Kizh Nation to the emails. Thus, consultation stalled and is presumed complete. Further discussion is included within *Section 5.18 Tribal Cultural Resources*.

Findings of Fact

a) No Impact. Based on the historic map and aerial, the Project site was cleared and graded during 1988 when the surrounding community was graded. Prior to 1976, the Project site was part of the Moulton Ranch, which operated as a large-scale sheep and cattle ranch. Between 1988 and 1992, the area was further developed, and the roads surrounding the Project site, which include Journey, Aliso Creek Road, and Pacific Park Drive, were built. Additionally, by 1992, a commercial building located directly northwest of the Project site was constructed. The 1999 historic aerial demonstrates that development of the Project site had began and was completed by 2000, with the three commercial buildings and associated parking lot. The existing buildings on the Project site were constructed from 1999 to 2000 and are therefore not of historic age. No impact would occur to historic resources.

b) Less than Significant. The records search from SCCIC indicated that six resources, all prehistoric in age, are located within a one-mile radius of the Project site. The results of the SCCIC records search also indicate that 18 archaeological investigations have been conducted within a one-mile radius of the Project, three of which overlap the Project site. The other investigations did not identify any potential resources within the Project site.

A field survey was conducted of the Project site. However, no records indicate pre-historic resources on the Project site and the field survey did not identify any evidence of resources on the Project site. A SLF search was also requested from NAHC to identify

any sacred sites or locations of religious or ceremonial importance on or near the Project site. The search indicated the positive presence of sacred sites or locations of religious or ceremonial importance within the vicinity of the Project site. The NAHC recommends contacting local Native American groups, specifically the Juaneño Band of Mission Indians Acjachemen Nation for further information. The request for further information was included in the AB52 and SB18 notification and additional information is included within Section 5.18 Tribal Cultural Resources.

Given the disturbed nature of the Project site resulting from previous agricultural use, development of the property, and the results of the field survey, impacts would be less than significant.

c) Less than Significant. No conditions exist that suggest human remains are likely to be found on the Project site. However, if human remains are found, those remains would be required to conduct proper treatment, in accordance with applicable laws. State of California Public Resources Health and Safety Code Sections 7050.5 to 7055 describe the general provisions for human remains. Specifically, Health and Safety Code Section 7050.5 describes the requirements if any human remains are accidentally discovered during excavation of a site. As required by State law, the requirements and procedures set forth in Section 5097.98 of the California Public Resources Code would be implemented, including notification of the County Coroner, notification of the NAHC and consultation with the individual identified by the NAHC to be the "most likely descendant (MLD)." The MLD would have 48 hours to make recommendations to landowners for the disposition of any Native American human remains and grave goods found. If human remains are found during excavation, excavation must stop in the vicinity of the find and any area that is reasonably suspected to overlay adjacent remains until the County coroner has been called out, and the remains have been investigated, and appropriate recommendations have been made for the treatment and disposition of the remains. Since the treatment of human remains is governed by state law, no mitigation measures are necessary, and impacts would be less than significant.

Sources: *Cultural Resources Study for the Journey and Pacific Park Drive (Shea Aliso Viejo) Project,* prepared by BFSA Environmental Services, dated June 30, 2025, and included in Appendix C.

5.6 Energy

Issues:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
ENERGY. Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

Impact Analysis

An analysis of energy consumption is provided in the report, *Pacific Park Drive Townhome Project Air Quality, Greenhouse Gas, and Energy Impact* dated May 19, 2026, and prepared by RK Engineering Group, Inc. *(*Appendix A*)*.

Findings of Fact

a) Less than Significant. Construction of the Project consists of demolition, site preparation and grading, building construction, paving, and architectural coatings. Construction activities primarily consume energy in the form of motor vehicle fuel (gasoline and diesel) for off-road construction equipment and on-road vehicle trips. The Project is expected to use approximately 37,444 gallons of fuel during construction for off-road equipment and 24,576 gallons of fuel during construction for on-road equipment. Energy consumption constitutes a substantial portion of construction costs and therefore, energy consumption and efficiency is closely monitored. Therefore, construction of the Project site would not result in wasteful, inefficient, or unnecessary consumption of energy resources.

Operation of the Project is anticipated to consume energy from electricity, natural gas, and petroleum. Based on the energy consumption projections, the Project would consume a total of 26,184 million British Thermal Units per year. The majority of the energy consumption would occur from operational petroleum consumption, essentially automobiles and trucks traveling to and from the Project site.

The proposed Project has been designed and would comply with California's Building Energy Efficiency Standards (Title 24, Part 6) to reduce energy consumption. California's building standards are some of the strictest in the nation and the project's compliance with the Building Code will ensure that wasteful, inefficient or unnecessary consumption of energy is minimized. The California Building Code is designed to reduce the amount of energy needed to heat or cool a building, reduce energy usage for lighting and appliances and promote usage of energy from renewable sources to reduce energy consumption. California's building standards are some of the strictest in the nation, and

the project's compliance with the California Building Code will ensure that wasteful, inefficient or unnecessary consumption of energy is minimized. The California Building Code is designed to reduce the amount of energy needed to heat or cool a building, reduce energy usage for lighting and appliances and promote usage of energy from renewable sources. In addition, the Project is expected to comply with Section 110.10 of the California Building Code regarding mandatory requirements for solar readiness and/or rooftop solar zones. By virtue of compliance with these codes, the proposed Project would not cause wasteful, inefficient, or unnecessary consumption of energy resources and impacts would be less than significant.

b) Less than Significant. The Project will purchase electricity through Southern California Edison which is subject to the requirements of California SB 100. SB 100 is the most stringent and current energy legislation in California; requiring that renewable energy resources and zero-carbon resources supply 100% of retail sales of electricity to California end-use customers and 100% of electricity procured to serve all state agencies by December 31, 2045. Furthermore, the Project would comply with California's Building Energy Efficiency Standards (Title 24, Part 6) and Green Building Standards (CALGreen, Title 24, Part 11) to reduce energy consumption.

Therefore, the proposed Project would not conflict with or obstruct a state or local plan, and by virtue of compliance with state and local plans, the proposed Project would not cause wasteful, inefficient, or unnecessary consumption of energy resources. Therefore, impacts would be less than significant.

Sources: *Pacific Park Drive Townhome Project Air Quality, Greenhouse Gas, and Energy Impact Study* dated May 19, 2026, and prepared by RK Engineering Group, Inc. (Appendix A).

5.7 Geology and Soils

Issues:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
GEOLOGY AND SOILS. Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☒	☐	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☒	☐	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☒	☐	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☒	☐	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☒	☐	☐

Impact Analysis

Preliminary Geotechnical evaluation of the Project site was conducted by NMG Geotechnical, Inc. in the *Preliminary Geotechnical Investigation and Review of Vesting Tentative Tract Map 19442, Proposed Residential Redevelopment, Aliso Viejo, California*, dated November 25, 2025 (Appendix D). In addition, this analysis relied on

the report, *Paleontological Assessment for the Journey and Pacific Park Drive (Shea Aliso Viejo) Project* prepared by BSFA Environmental Services dated June 30, 2025 (Appendix E).

The Geotechnical investigation included six hollow-stem-auger borings to a depth of 51 feet below ground surface (bgs). In addition, four geotechnical test pits were advanced with a backhoe at the toe of the slope ascending to the fire station located at the northwest corner of the Project site to evaluate the limits of compacted fill and bedrock conditions exposed in the lower portion of the slope.

The Project site is generally flat with site elevations ranging from approximately 346 to 388 feet above mean sea level (MSL) generally descending to the southeast. The Project site is mostly underlain primarily by a thin veneer of compacted fill placed over sandstone and siltstone bedrock over a majority of the site. Quaternary-age alluvium was encountered in the southeast corner of the site at a depth of 40 feet. The existing compacted fills range from 2.5 to 40 feet thick. The deeper fills are generally located in the southern portion of the site. No groundwater was encountered to the boring depth of 51.5 feet.

Percolation testing was not performed since the site consists of compacted fill over siltstone and sandstone bedrock and is not suitable for infiltration.

The Project site is not located within a State mapped Earthquake Fault Hazard Zone (Alquist-Priolo Earthquake Zoning Act) or a mapped liquefaction hazard area.

Findings of Fact

a.i) Less than Significant. The Project site is not located within an Alquist-Priolo Earthquake Fault Zone and no faults were identified on the site during the geotechnical evaluation conducted by NMG Geotechnical, Inc. The closest active fault to the Project site is the San Joaquin Hills Thrust Fault, which is mapped approximately 2.5 miles to the northeast. Additionally, the Inglewood-Rose Canyon Fault Zone (Dana Point Section) is located approximately 6.1 miles to the southwest and the Glen Ivy section of the Elsinore Fault Zone is located 19.2 miles to the northeast. The possibility of damage due to ground rupture is considered low since no active faults are known to cross the site. Therefore, impacts would be less than significant.

a.ii) Less than Significant with Mitigation. The Project site, like many areas in Southern California, is subject to strong seismic ground shaking. While the Project site does not have any faults on the property, the closest fault to the Project site is the San Joaquin Hills Thrust Fault, which is mapped approximately 2.5 miles northeast, which have the potential to generate strong ground shaking.

The construction of three-story attached residential homes is common in earthquake prone areas like Southern California, including the Project site. The geotechnical

analysis included in Appendix D included an evaluation of site seismic design parameters in accordance with the 2025 California Building Code (CBC) and American National Standards Institute (ASCE) 7-22. Based on the site's seismic characteristics, the geotechnical study provides seismic design parameters to minimize the effects of seismic ground shaking. With adherence to the seismic design parameters, impacts associated with seismic ground shaking would be less than significant within implementation of Mitigation Measure (MM) GEO-1. MM GEO-1 is consistent with Aliso Viejo Municipal Code Section 13.08.170, which requires preparation of geotechnical reports and inclusion of geotechnical recommendations on construction drawings.

MM GEO-1 *The Project Applicant shall implement the recommendations contained in the Preliminary Geotechnical Investigation and Review of Vesting Tentative Tract Map 19442, Proposed Residential Redevelopment, Aliso Viejo, California, dated November 25, 2025, by NMG Geotechnical, Inc. (Appendix D) to reduce geologic hazards during implementation of the proposed Project. Included in the reports are site-specific recommendations involving such topics as grading and earthwork, slope stability, retaining walls, seismic design, construction materials, geotechnical observation, and testing and plan reviews.*

a.iii) Less than Significant. The Project site does not have earthquake faults on the property, therefore, the potential for seismic rupture is very low. While the Project site does not have any faults on the property, the closest fault to the Project site is the San Joaquin Hills Thrust Fault, which is mapped approximately 2.5 miles northeast of the Project site.

The Project site is not located within a liquefaction hazard zone, as mapped by the State of California Seismic Hazard Zone mapping. The Preliminary Geotechnical Investigation evaluated the liquefaction potential and determined that based on the lack of high groundwater and given the presence of dense/stiff alluvium, the potential for liquefaction or significant dynamic settlement is negligible; therefore, impacts associated with seismic-related ground failure, including liquefaction, would be less than significant.

a.iv) Less than Significant with Mitigation. The Project site and the immediate area consist of generally flat topography, which is not prone to landsliding. Therefore, the potential for landsliding is negligible and impacts would be less than significant.

Secondary types of ground failure that might occur from a large seismic event include ground subsidence, ground lurching, and lateral spreading. Based on the proposed grading and the flat topography across the site, landsliding, ground subsidence and lateral spreading are considered unlikely at the Project site. Ground lurching could occur during a major seismic event, however, the remedial grading described in Section

(c) and compliance with the seismic building standards in the California Building Code and MM GEO-1, would reduce the potential impact to less than significant.

b) Less than Significant. The Project site and surrounding properties are essentially flat, without large steep slopes on or adjacent to the property that would be conducive to soil erosion or loss of topsoil. The Project site was previously graded and developed with commercial use. Furthermore, the Project site is surrounded by existing development and arterial roadways. Given current site conditions, the potential for soil erosion or loss of topsoil is low.

During construction, the Project would be required to comply with Aliso Viejo Municipal Code Chapter 13.08, Grading and Excavation Code, which requires implementation of erosion and siltation control measures. Furthermore, during grading when the highest risk of loss of topsoil and/or erosion would occur, the Project would be subject to compliance with the National Pollutant Discharge Elimination System (NPDES) General Permit for Stormwater Discharges Associated with Construction and Land Disturbance Activities (Order No. 2009-0009DWQ, and all subsequent amendments) (Construction General Permit). The Construction General Permit requires development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) and monitoring plan, which must include erosion and sediment control BMPs that would meet or exceed measures required by the Construction General Permit to control potential construction-related pollutants. Following compliance with the established regulatory framework, including Municipal Code Chapter 13.08 and Chapter 13.08.170 and the Construction General Permit, potential impacts concerning soil erosion and loss of topsoil would be less than significant.

c) Less than Significant with Mitigation. The Project site is not located on a geologic unit that is unstable or could become unstable. The Project site is mostly underlain primarily by a thin veneer of compacted fill placed over sandstone and siltstone bedrock over a majority of the site. There are no mapped earthquake faults or landslides. The potential for liquefaction is very low given the underlying dense sandstone and siltstone bedrock and lack of shallow groundwater, and the Project site has very low to low expansive soil potential.

The Project site was evaluated for geotechnical feasibility pursuant to CEQA and determined to be feasible, without causing significant impacts, with implementation of design standards presented in the geotechnical report included in Appendix D. An example of a design standard included in the Preliminary Geotechnical Report is the remedial 5-foot-deep removals in the fill areas and 5-foot-deep over excavation in order to provide uniform compacted fill blanket for structural support. Furthermore, prior to grading, a final geotechnical report must be prepared to accompany the construction level documents and the final geotechnical report will ensure all design recommendations have been incorporated. While standard practice, the requirement for a final geotechnical report has been included as a mitigation measure for further

disclosure and tracking. Therefore, implementation of Mitigation Measures MM GEO-1 and MM GEO-2 would reduce impacts to less than significant.

MM GEO-2 *Prior to the issuance of a grading permit, the Applicant shall prepare a final geotechnical report based on the final rough grading plans and the final geotechnical report shall incorporate all of the recommendations included in Preliminary Geotechnical Investigation and Review of Vesting Tentative Tract Map 19442, Proposed Residential Redevelopment, Aliso Viejo, California dated November 25, 2025, by NMG Geotechnical Inc (**Appendix D**). The geotechnical report included in **Appendix D** has established that the site is geotechnically suitable for development and a final geotechnical report is required to ensure all construction-level geotechnical recommendations and design parameters are included on the final rough grading plans.*

d) Less than Significant with Mitigation. Based on test results, the on-site soils have "low" to "Very Low" expansion potential. However, should highly expansive soils be encountered at the site, the Geotechnical Report outlines recommendations for handling soils with expansive qualities, if encountered, such as additional mixing and blending of fill materials. Lastly, any required imported fill material should be very low to low expansion potential. Adherence of MM GEO-1, which is to comply with the recommendation of the Geotechnical Report, would ensure the expansion potential would be low. Impacts would be less than significant.

e) No Impact. The Project site is currently developed with commercial development that relies on municipal sewer system connections. The proposed Project would also rely on municipal sewer connections, and no septic systems or alternative wastewater disposal systems are proposed. Since no new septic is proposed, no impact would occur.

f) Less than Significant with Mitigation. The Project site was evaluated for paleontological resources by BFSA Environmental Services and documented in the report *Paleontological Assessment for the Journey and Pacific Park Drive (Shea Aliso Viejo) Project*, dated June 30, 2025 (Appendix E). Based on the prepared report, there is high potential for paleontological resources to occur on the Project site due to the Niguel and Monterey formations (bedrock) mapped onsite.

A paleontological literature review was conducted by the Parks Divisions of Orange County, which identified 66 fossil localities within one mile of the Project site from the Niguel, Monterey, and other formations.

The existence of Niguel and Monterey formations mapped on the Project site, the high paleontological resource sensitivity assigned to these sediments, and the presence of previously recorded fossil specimens from the similar deposits less than five miles of the Project site, result in the potential for significant impacts. To mitigate that potential

impact, a Paleontological Resource Impact Mitigation Program (PRIMP) as outlined in MM PALEO-1 shall be prepared prior to the start of grading. Therefore, implementation of MM PALEO-1 would reduce impacts to a less than significant level.

MM PALEO-1 *Prior to the issuance of a grading permit, the Applicant shall prepare for City review and approval a Paleontological Mitigation Monitoring Plan, as follows:*

1. *All mitigation programs shall be performed by a qualified professional (Project) paleontologist, defined as an individual with a master's or doctorate in paleontology or geology who has proven experience and is knowledgeable in professional paleontological procedures and techniques. Fieldwork may be conducted by a qualified paleontological monitor, defined as an individual who has experience in the collection and salvage of fossil materials. The paleontological monitor shall always work under the direction of a qualified paleontologist.*
2. *Starting at one foot above the artificial fill/bedrock interface, full-time monitoring shall be conducted in areas of grading or excavation within the Niguel and Monterey formations. Monitoring of artificial fill or disturbed deposits that may be present otherwise is not required.*
3. *Paleontological monitors shall be equipped to salvage fossils as they are unearthed to avoid construction delays. The monitor must be empowered to temporarily halt or divert equipment to allow for the removal of abundant or large specimens in a timely manner. Monitoring may be reduced if the potentially fossiliferous units are not present in the subsurface, or, if present, are determined upon exposure and examination by qualified paleontological personnel to have low potential to contain fossil resources. The monitor shall notify the project paleontologist, who will then notify any concerned parties of the discovery.*
4. *Fossils shall be collected and placed in cardboard flats or plastic buckets and identified by field number, collector, and date collected. Before the site is vacated and the fossils are moved to a safe place, notes are taken on the map location and stratigraphy of the site. On mass grading projects, discovered fossil sites are protected by flagging to prevent them from being overrun by earthmovers (scrapers) before salvage begins. Fossils shall be collected in a similar manner, with notes and photographs being taken before removing the fossils. Precise location of the site is determined through use of handheld Global Positioning System units. If a large terrestrial vertebrate, such as a large bone or a mammoth tusk, is too large to be easily removed by a single monitor, a fossil recovery crew shall excavate around the find(s), encase the find(s) within a plaster and*

burlap jacket, and remove the find(s) after the plaster is set. For large fossils, use of the contractor's construction equipment may be solicited to help move the jacket to a safe location.

5. *In the laboratory, individual fossils shall be cleaned of extraneous matrix, any breaks repaired, and the specimen, if needed, shall be stabilized by soaking in an archivally approved acrylic hardener (e.g., a solution of acetone and Paraloid B-72).*
6. *Recovered specimens shall be prepared to a point of identification and permanent preservation (not display), including screen-washing sediments to recover small invertebrates and vertebrates.*
7. *Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage (e.g., the Orange County Parks' Cooper Center) shall be conducted. The paleontological program should include a written repository agreement prior to initiating mitigation activities. Prior to curation, the lead agency (the City of Aliso Viejo) shall be consulted on the repository/museum to receive the fossil material.*
8. *A final report of findings and significance shall be prepared, including lists of all fossils recovered and necessary maps and graphics to accurately record their original location(s). The report, when submitted to and accepted by the appropriate lead agency, shall signify satisfactory completion of the project program to mitigate impacts to any potential nonrenewable paleontological resources (i.e., fossils) that might have been lost or otherwise adversely affected without such a program in place.*

Sources: *Preliminary Geotechnical Investigation and Review of Vesting Tentative Tract Map 19442, Proposed Residential Redevelopment, Aliso Viejo, California,* dated November 25, 2025 by NMG Geotechnical, Inc. (Appendix D); and *Paleontological Assessment for the Journey and Pacific Park Drive (Shea Aliso Viejo) Project* prepared by BFSA Environmental Services, dated June 30, 2025 (Appendix E).

5.8 Greenhouse Gas Emissions

Issues:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
GREENHOUSE GAS EMISSIONS. Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emission of greenhouse gases?	☐	☐	☒	☐

An analysis of greenhouse gas emission is provided in the report*, Pacific Park Drive Townhome Project Air Quality, Greenhouse Gas, and Energy Impact Study* dated May 19, 2026, and prepared by RK Engineering Group, Inc. *(*Appendix A*)*.

Impact Analysis

Greenhouse gases (GHG) comprise less than 0.1 percent of the total atmospheric composition, yet they play an essential role in influencing climate. Greenhouse gases include naturally occurring compounds such as carbon dioxide (CO_2), methane (CH_4), water vapor (H_2O), and nitrous oxide (N_2O), while others are synthetic. Man-made GHGs include chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs), as well as sulfur hexafluoride (SF_6).

The State of California has adopted extensive foundational legislation to reduce GHG emissions across all sectors of the economy. Some of the foundational key climate change legislation includes AB 32 – the California Global Warming Solutions Act of 2006, SB 375 – the Sustainable Communities & Climate Protection Act of 2008, and SB 100 – the California Renewables Portfolio Standard Program. Other legislation has followed that has expanded the range of laws intended to reduce GHG emissions. Most notably are changes that have been made to the CBC Title 24 and Title 20 energy standards. These obligatory construction and appliance/lighting standards, originally adopted for other purposes such as energy and water conservation, include requirements that ensure all development in California implement mandatory energy-efficient design, enable or install solar and EV infrastructure, increase density, and reduce vehicle miles traveled resulting in GHG reductions at a project level and consistency with applicable GHG reduction plans. The key climate legislation and regulation in the State includes the following:

- Assembly Bill (AB) 32, California Global Warming Solutions Act of 2006. AB 32 set the stage for the State's transition to a sustainable, low-carbon future. AB 32

was the first program in the country to take a comprehensive, long-term approach to addressing climate change.

- Senate Bill (SB) 375, Sustainable Communities & Climate Protection Act of 2008. SB 375 requires the Air Resources Board to develop regional greenhouse gas emission reduction targets for passenger vehicles GHG reduction targets for 2020 and 2035 for each region covered by the State's 18 metropolitan planning organizations.

- Senate Bill (SB) 100, California Renewables Portfolio Standard Program. SB 100 established a landmark policy requiring renewable energy and zero-carbon resources supply 100 percent of electric retail sales to end-use customers by 2045.

- California Building Standards Code – Title 24. The California Building Standards Code Title 24 Part 6 (Energy Code) and Title 24 Part 11 (CALGreen) requires multiple building provisions to reduce energy usage and GHG emissions and is updated on a triennial basis.

SCAQMD convened a GHG CEQA Significance Threshold Working Group (Working Group). At its last meeting in September 2010, the Working Group established for non-exempt projects, such as the proposed Project, a screening level threshold of 3,000 metric tons of CO_2e ($MTCO_2e$) and land use specific thresholds, which for residential projects, was established at 3,000 $MTCO_2e$. GHG emissions occur from the following four sources for residential projects: construction; gas, electricity, and water uses; solid waste disposal; and motor vehicle use. Since construction operations are temporary, short-term emissions, the total construction emissions are amortized over 30 years per Working Group guidance.

Findings of Fact

a) Less Than Significant. The proposed Project would generate greenhouse gas emissions through the construction and operation of the proposed residences.

As documented in the report, *Pacific Park Drive Townhome Project Air Quality, Greenhouse Gas, and Energy Impact Study*, dated May 19, 2026, and prepared by RK Engineering Group, Inc. (Appendix A), total GHG emissions for the proposed Project would be less than the screening level threshold of 3,000 $MTCO_2e$ and the land use specific threshold of 3,500 $MTCO_2e$, as shown in the following tables.

Table 9. Construction Greenhouse Gas Emissions

Emission Source	On-site ($MTCO_2e$)[1]	Off-site ($MTCO_2e$)[1]	Total ($MTCO_2e$)[1]
Demolition	54.59	190.71	245.30
Site Preparation	24.11	1.01	25.12
Grading	26.94	25.00	51.95
Building Construction	250.94	177.85	428.79
Paving	13.76	1.70	15.46
Architectural Coating	1.22	2.22	3.44
Total	371.56	398.49	770.06
Amortized over 30 years[2]	12.39	13.28	25.67

Source: *Air Quality and Greenhouse Gas Impact Study (Appendix A)*
[1] $MTCO_2e$ is metric tons of carbon dioxide equivalent (includes carbon dioxide, methane, nitrous oxide, and/or hydrofluorocarbon)
[2] The emissions are amortized over 30 years and added to the operational emissions, pursuant to SCAQMD recommendations.

Table 10. Operational and Total Greenhouse Gas Emissions

Emission Source	GHG Emissions ($MTCO_2e$)[1]
Mobile Source	1,284.00
Area Source	35.11
Energy Source	322.02
Water	19.25
Waste	31.61
Refrigerant	0.17
Construction 30-yr Amortization	25.67
Total	1,717.83
SCAQMD Tier 3 Screening Threshold[2]	3,000
Exceed Tier 3 Threshold?	No

Source: *Air Quality and Greenhouse Gas Impact Study (Appendix A)*
[1] $MTCO_2e$ is metric tons of carbon dioxide equivalent (includes carbon dioxide, methane, nitrous oxide, and/or hydrofluorocarbon)
[2] Per South Coast Air Quality Management District (SCAQMD) Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold, October 2008.

Since the proposed Project would generate less than 3,000 $MTCO_2e$, which is the emission threshold established by SCAQMD and relied upon by the City, the Project would have a less than significant impact.

b) Less than Significant. The proposed Project will be required to comply with the mandatory requirements of the latest 2022 California Building Standards Code, including Title 24, Part 11, CALGreen, and Title 24, Part 6, Energy Code. The purpose

of the building standards is to reduce negative impacts on the environment through improved planning and design, energy efficiency, water efficiency and conservation, and material and resource conservation. The California Building Standards were developed to help meet the requirements of the Global Warming Solutions Act (AB 32).

The California Air Resources Board's Climate Change Scoping Plan (2022 Scoping Plan) outlines statewide strategies to reduce greenhouse gas emissions consistent with the targets established under AB 32, SB 32, and AB 1279. The Scoping Plan is applicable to State agencies and is not directly applicable to individual development projects or local land use approvals. However, the Scoping Plan provides the primary framework used to inform performance-based and efficiency-based CEQA criteria and greenhouse gas reduction targets implemented through regional and local planning efforts.

The 2022 Scoping Plan identifies a range of statewide strategies to reduce greenhouse gas emissions, including transportation electrification, reductions in vehicle miles traveled, building decarbonization, expansion of renewable energy, low-carbon fuel standards, and implementation of energy efficiency and clean technology standards. Many of these strategies are implemented through State regulations that apply to new development, including vehicle emission standards, Building Energy Efficiency Standards, and CALGreen requirements.

Table 11, *Project Consistency with the 2022 Scoping Plan Priority Areas*, summarizes the proposed Project's consistency with the priority areas identified in the 2022 Scoping Plan that are applicable at the project level. As shown in the table, the proposed Project would be consistent with applicable priority areas related to transportation electrification, vehicle miles traveled reduction, and building energy efficiency and decarbonization through compliance with adopted State and local requirements.

Table 11. Project Consistency with 2022 Scoping Plan Priority Areas

Priority Area	Priority Area Attributes	Project Consistency
Transportation Electrification	Provide EV charging infrastructure that, at a minimum, meets the most ambitious voluntary standards in the California Green Building Standards Code at the time of project approval.	Consistent: The proposed Project would be subject to State and local transportation-related greenhouse gas reduction requirements, including vehicle fuel efficiency standards, zero-emission vehicle regulations, and electric vehicle charging infrastructure requirements. The Project includes electric vehicle charging infrastructure in accordance with applicable codes and would rely on increasingly cleaner vehicle technologies over time. Consistent

Priority Area	Priority Area Attributes	Project Consistency
		with adopted transportation electrification strategies, the Project would not interfere with implementation of greenhouse gas reduction measures related to transportation emissions.
VMT Reduction	Meets local jurisdiction adopted SB 743 threshold for VMT.	Consistent: Pursuant to CEQA Guidelines Section 15064.3(b), the proposed Project would "*decrease vehicle miles traveled in the project area compared to existing conditions"* and, therefore*, "should be presumed to have a less than significant transportation impact." The proposed Project would reduce total daily VMT by 4,779 Daily VMT and reduce the VMT/Service Population for the Project site from 25.91 to 18.46*.
Building Decarbonization	Uses all electric appliances without any natural gas connections and does not use propane or other fossil fuels for space heating, water heating, or indoor cooking.	Consistent: The proposed Project would comply with current California Building Energy Efficiency Standards (Title 24) and California Green Building Standards Code (CALGreen), which are designed to reduce building energy consumption and associated greenhouse gas emissions. Furthermore, the Project would have an all-electric design and would therefore comply with the building decarbonization goal.

Source: CARB 2022a.

By complying with the California Building Standards Code requirements, the Project would result in consistency with the intent of the Global Warming Solutions Act and CARB's current 2022 Scoping Plan. The Project would not conflict with an applicable plan, policy, or regulation for the purpose of reducing the emissions of greenhouse gases, and the impact is considered less than significant.

Therefore, the proposed Project's generation of GHG emissions would not cause a project-specific or cumulatively considerable contribution that would conflict with an applicable plan, policy or regulation for the purposes of reducing the emissions of greenhouse gases. Therefore, the proposed Project's impact would be less than significant.

Sources: *Pacific Park Drive Townhome Project Air Quality, Greenhouse Gas, and Energy Impact Study* dated May 19, 2026, and prepared by RK Engineering Group, Inc. (Appendix A).

5.9 Hazards and Hazardous Materials

Issues:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
HAZARDS AND HAZARDOUS MATERIALS. Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code § 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☒	☐

Impact Analysis

A Phase I Environmental Site Assessment was prepared to analyze the history of the site and the potential for encountering hazardous materials. The report, *Phase I Environmental Site Assessment Report and Shallow Soil Sampling Report,* dated February 6, 2025, by Farallon Consulting is included in Appendix F.

The Project site was previously vacant, undeveloped land in 1931 and from 1947 through 1994. Small white objects in an organized pattern, which could have been an orchard, were present on the eastern adjacent property in the 1938 aerial photograph,

a small portion of which may have been present on the southeastern corner of the Project site. The potential orchard may have been in use as early as 1932 and as late as 1946. Wide-spread grading was apparent on the Project site and vicinity in the 1988 aerial photograph, and the retaining wall and perimeter landscaping were observed in the 1994 aerial photograph. The Project site buildings were constructed in 1999 and appear relatively unchanged to the present. City directory listings for the Project addresses included various commercial office tenants, including health care, computer, financial, insurance, real estate, and management service companies, since as early as 2001.

Due to the lack of evidence that the adjacent potential orchard was present on a substantial portion of the Project site in the 1930s, the relatively short duration of the potential orchard use, the lack of evidence of storage or mixing areas on or near the Project site, and extensive grading of the hilltop and reworking of the soil conducted to redevelop this area, it is unlikely that historical pesticide use (if any) would represent a recognized environmental condition.

The Project site is not listed within the Environmental Risk Information Services (ERIS). Additionally, no regulatory records were found for the subject property parcel.

On December 4, 2024, Farallon personnel conducted a reconnaissance to physically observe the Project site. Farallon conducted a walk around the entire perimeter of the Project site and inspected interior portions of the buildings, including representative areas of first floor offices, the SpyGlass Pharma laboratory (27061 building), American Association of Critical Care Nurses (AACN) warehouse (27081 building), and the janitorial and elevator rooms of each building. No indication of any potential adverse environmental impact to the Project site was observed during the reconnaissance visit.

No above or below ground storage tanks or other Recognized Environmental Condition (REC) were identified in the record search and site investigation.

Findings of Fact

a) Less than Significant. Residential projects are not operators or generators of hazardous materials. Thus, operation of the proposed Project would not involve the use, transport, or disposal of hazardous materials, nor would it generate hazardous emissions, materials, or waste. Grading and construction activities may involve limited transport, use, and disposal of hazardous materials such as fuel for construction equipment. However, construction activities are short-term and hazardous materials used during construction would be transported, used, and disposed of according to federal, State, and local health and safety requirements. Impacts would be less than significant.

b) Less than Significant. The Phase I Environmental Site Assessment (Appendix F) includes results from database searches to determine the potential for release of

hazardous materials from the Proposed Project site. No RECs, Controlled Recognized Environmental Conditions (CREC), Significant data gaps (SDG), or Historical Recognized Environmental Conditions (HREC) occur on the Project site. Furthermore, residential projects are not operators or generators of hazardous materials. The proposed Project would not involve the use, transport, or disposal of hazardous materials, nor would it generate hazardous emissions, materials, or waste during operations. Hazardous materials used during construction would be used in accordance with federal, State, and local regulations, such as the NPDES Construction General Permit, which requires the implementation of BMPs to control runoff from the Project site, which would control a spill of construction materials, such as oil, solvents, etc., if one were to accidentally occur.

Neither the Project site conditions, nor Project activities, would result in a reasonably foreseeable accident condition, given the minimal use of hazardous materials during the limited construction phase of the Project. Therefore, no potential for release of hazardous materials was identified and impacts would be less than significant.

c) Less than Significant. No Schools are located within one-quarter mile of the Project site. While no schools are located within one-quarter mile, a childcare facility is located on the south-adjoining property.

Residential projects are not operators or generators of hazardous materials. Thus, operation of the proposed Project would not involve the use, transport, or disposal of hazardous materials, nor would it generate hazardous emissions, materials, or waste. Grading and construction activities may involve limited transport, use, and disposal of hazardous materials such as fuel for construction equipment. However, construction activities are short-term and hazardous materials used during construction would be transported, used, and disposed of according to federal, State, and local health and safety requirements.

Therefore, no potential for release or emissions of hazardous materials was identified in general or within one-quarter mile of an existing or proposed school and impacts would be less than significant.

d) No Impact. The Phase I Environmental Site Assessment (Appendix F) includes results from database searches to determine if the Project site is on a list of hazardous materials sites. The Phase I searched the California Environmental Protection Agency (CalEPA), Orange County Health Care Agency (OCHCA), SCAQMD, Regional Water Quality Control Board (RWQCB), Department of Toxic Substances Control (DTSC), Moulton Niguel Water District, City of Aliso Viejo building and planning departments, and California Geologic Energy Management Division (CalGEM). The Project site is not listed on any of the regulatory databases and no other sites listed on the databases pose a significant threat to the Project site. No oil wells are located on the Project site.

Therefore, no RECs were identified on or near the Project site and no impact would occur.

e) No Impact. The Project site is not located within an airport land use plan, nor within two miles of a private airstrip or public airport. The closest airport is John Wayne Airport, located in Santa Ana, approximately 10 miles from the Project site. Therefore, no impact would occur.

f) Less than Significant. The Project site is bordered by Pacific Park Drive, Aliso Creek Road, and Journey. According to the City's General Plan Public Safety Element, Figure S-1, the closest emergency evacuation routes to the Project site is Aliso Creek Road, adjacent to the Project site. The emergency access route would remain unchanged by the proposed Project and the proposed Project would not interfere with an emergency response plan.

On-site circulation and emergency access would conform to applicable City regulations that require 26 to 28-foot-wide street widths without parking and 31-foot-wide street widths with parallel parking. Alleys that serve garages would measure 24 feet in width. All street widths include designated fire truck turnarounds and key staging areas throughout the Project area. The on-site circulation was presented in the FMP and reviewed and approved by OCFA.

The proposed Project would not require the full closure of any public or private streets or roadways during construction or operations and would not impede access of emergency vehicles to the Project or any surrounding areas. For any construction in the public right-of-way, the Project would implement a traffic control plan to ensure continued access through the area. This traffic control plan is required by City standards and imposed as a condition of approval for projects that involve improvements within a right-of-way and would be subject to approval by the City Traffic Engineer.

All emergency access routes would remain unchanged by the proposed Project and the proposed Project would not interfere with an emergency response plan. Therefore, impacts would be less than significant.

g) Less than Significant. According to Cal Fire – Fire and Resource Assessment Program, the Project site is not located within a State Responsibility or Local Responsibility Fire Hazard Severity Zone.

The Project site is surrounded by existing developed and urban conditions and is not located near wildlands. Therefore, the proposed Project would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

As part of the City's standard development review process, the OCFA reviews preliminary project plans in their role as the citywide fire protection and emergency service provider. A project-specific Fire Master Plan (FMP) was prepared by Dudek, dated October 4, 2025 (Appendix L) to ensure a project's comprehensive fire safety strategies comply with the California Fire Code as amended by City code. Key components include detailed site plans showing fire apparatus access roads, hydrant locations/spacing, building construction features, water supply details, and fuel modification plans if needed for wildfire protection. Through review of the Project plans and the FMP, OCFA determined that the change from commercial to residential would not expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires.

Therefore, impacts would be less than significant.

Sources: *Phase I Environmental Site Assessment Report and Shallow Soil Sampling Report,* dated February 6, 2025 by Farallon Consulting (Appendix F); City of Aliso Viejo General Plan Public Safety Element; Cal Fire – Fire and Resource Assessment Program; Fire Hazard Severity Zones (ca.gov); and *Fire Master Plan*, prepared by Dudek, dated October 4, 2025 (Appendix L).

5.10 Hydrology and Water Quality

Issues:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
HYDROLOGY AND WATER QUALITY. Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) result in substantial erosion or siltation on- or off-site;	☐	☐	☒	☐
ii) substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☒	☐	☐
iii) create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☒	☐	☐
iv) impede or redirect flood flows?	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☒	☐

Impact Analysis

The hydraulic and water quality analysis is based on the technical reports, *Preliminary Hydrology & Hydraulics Report*, dated September 2025, by Proactive Engineering Consultants included as Appendix G, and the Preliminary *Water Quality Management Plan (PWQMP)*, dated January 12, 2026, by Proactive Engineering (Appendix H).

Currently, the Project site primarily flows to a low spot in the eastern portion of the Project site. The western edge of the property is an existing landscaped 2:1 slope. The runoff from the slopes is picked up by a series of v-ditches and downdrains, which in turn tie into the private on-site storm drain system. There are a series of onsite inlets that

take the site surface drainage and run it to the point of connection at the eastern edge of the site. No offsite run-on drainage or cross lot drainage is entering the site.

Once the runoff reaches Aliso Creek Road, it flows north to Pacific Park Drive. From Pacific Park Drive it flows east to Woodfield where it ultimately outlets into Aliso Creek Channel. The drainage flows along Aliso Creek Channel, through Aliso Creek (mouth), and ultimately discharging to the Pacific Ocean.

The existing site conditions consist of 72% impervious surfaces due to the commercial/office building and surface parking. With implementation of the Project, a total of 62% of the Project site would be impervious due to the increase of landscaped areas and parks throughout the Project site. Runoff in the proposed condition would follow existing drainage patterns.

Findings of Fact

a) Less than Significant. Water quality treatment is further discussed in the Preliminary Water Quality Management Plan (PWQMP), included in Appendix H. The Project site is located within the jurisdiction of the San Diego Regional Water Quality Control Board (RWQCB) and would be subject to compliance with the Regional Municipal Separate Storm Sewer System (MS4) permit. The Regional MS4 permit (Order No. R9-2013-0001, as amended), requires co-permittees, including the City of Aliso Viejo, to control and reduce the discharge of pollutants in stormwater from new development and significant redevelopment to the maximum extent practicable. The San Diego RWQCB requirements are further clarified by the Orange County Drainage Area Management Plan (DAMP), which requires the preparation and implementation of Water Quality Management Plans (WQMPs) for development projects. The DAMP reduces the pollution content of stormwater to the Maximum Extent Practicable (MEP). While all development projects are required to implement source control and site design practices, the Regional MS4 Permit has additional requirements for Priority Development Projects (PDPs), which are required to incorporate structural BMPs to reduce the discharge of pollutants and address potential hydromodification impacts from changes in flow and sediment supply. Per the MS4 Permit requirements for redevelopment, the proposed Project will include Low Impact Development (LID) elements into the site design as well as implementation of BMPs to the extent practicable.

Project Construction Impacts

Project construction activities are required to comply with water quality measures included in the City's Water Quality Ordinance (Municipal Code Chapter 7.35, Stormwater Management). The Water Quality Ordinance prohibits non- stormwater discharges into storm sewers, reduces discharge of pollutants, and achieves compliance with the Clean Water Act and the Porter-Cologne Water Quality Control Act. In accordance with Section 7.35.080, Control of Urban Runoff–New Development and Redevelopment Projects, issuance of a grading or building permit for the proposed

Project would be subject to submittal and approval of project plans demonstrating compliance with applicable local ordinances, California Stormwater Quality Association (CASQA) standards, and the City's water quality manual, which includes the City's jurisdictional urban runoff management plan or local implementation plan, the Orange County DAMP, and the City's NPDES permit. In addition to the requirements of Municipal Code Section 7.35.080, project construction activities would be required to comply with Municipal Code Section 7.35.070, Control of Urban Runoff – Construction Projects, which requires the project applicant to submit a pollution control plan, construction BMP plan, and/or an erosion and sediment control plan meeting the requirements of the water quality manual to the maximum extent practicable (MEP) and to submit evidence of coverage under the Construction General Permit prior to issuance of a permit involving ground-disturbing activities.

Compliance with the above regulations would ensure that impacts related to water quality during construction of the proposed Project would be less than significant. The proposed Project would comply with the NPDES requirement through implementation of the WQMP and with the Orange County DAMP. Therefore, construction of the proposed Project would not violate water quality standards or degrade surface or groundwater quality.

Project Operation Impacts

After construction, water quality treatment for the proposed Project would be provided by a Modular Wetlands System (MWS) to remove the Project's storm water pollutants. The biofiltration system would include 10 MWS Linear units (one in each Drainage Management Area (DMA)). The units would provide decentralized treatment to collect street, common area and roof drain flows. Treated flows would then be conveyed to the main storm drain system at the eastern edge of the site.

Additionally, the PWQMP documents the various BMPs that would be implemented as part of the Project, which include structural, source control, and site design BMPs to address water quality conditions associated with the proposed Project. Proposed non-structural source control BMPs include education for property owners, tenants, and occupants; activity restrictions; common area landscape management; common area litter control; common area catch basin inspection; and street sweeping. Proposed structural source control BMPs include the modular wetlands system; storm drain system stenciling and signage; use of efficient irrigation systems and landscape design to protect slopes and channels and provide energy dissipation; and hillside landscaping.

The Project would be subject to federal, State, and local regulations related to water quality, including the City's Water Quality Ordinance. Implementation of the proposed on-site stormwater system and PWQMP requirements, including water quality operational BMPs, would reduce pollutants of concern associated with the stormwater runoff from the Project site in compliance with the Regional MS4 Permit and ensure the

proposed Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. Therefore, impacts would be less than significant.

b) Less than Significant. The geology and geotechnical analysis (see *Section 5.7*) determined the Project site is underlain by a thin veneer of compacted fill placed over sandstone and siltstone bedrock. Drilling to 51 feet below ground surface (bgs) did not encounter groundwater. Furthermore, percolation testing was not performed since the site consists of compacted fill over siltstone and sandstone bedrock and is not suitable for infiltration. Without feasible infiltration, the Project site does not provide groundwater recharge.

The Project does not include drilling a well for drinking water and therefore does not rely directly on groundwater supplies. Water is supplied to the existing commercial use on the Project site by the Moulton Niguel Water District (MNWD), and water would continue to be supplied to the proposed Project by MNWD. MNWD does not utilize groundwater resources and therefore, indirect impacts from the Project's use of groundwater would not occur. Therefore, impacts would be less than significant.

C.i Less than Significant. Approximately 76 percent of the developed site is currently covered by impervious surfaces and upon completion of the Project approximately 63 percent of the site will be covered by impervious surfaces. Development of the Project site would therefore decrease the amount of impervious surfaces compared to existing conditions. Despite the decrease in impervious surfaces, the proposed Project site will generate a higher quantity of peak stormwater runoff compared to existing conditions as discussed below. The peak stormwater flows would not result in substantial erosion or siltation on- or off-site because the proposed Project would be subject to the project specific NPDES permit requirements that will implement BMPs and LID elements identified in the Project's hydrology and water quality reports to reduce runoff and erosion. Stormwater treatment is proposed by underground flow-based treatment systems, such as modular wetlands. With implementation of the BMPs contained in the WQMP ensuring compliance with the County NPDES Stormwater Program and adherence to Chapter 13.08 of the City's Municipal Code provisions related to erosion control, impacts from erosion or siltation on- or off-site would be less than significant.

C.ii - Ciii. Less than Significant with Mitigation. Despite the decrease in impervious surfaces, the proposed Project will generate a higher quantity of site peak runoff compared to existing conditions. Development of the Project site would therefore increase stormwater runoff that could exceed existing conditions, leading to on or offsite flooding or that would exceed the capacity of the stormwater drainage systems or provide substantial additional sources of polluted runoff.

The *Hydrology & Hydraulics Report* included in Appendix G calculated pre- and post-project stormwater flows for the Project site. Table 12 below compares the existing runoff in the 10 and 25-year storm events to the proposed Project conditions.

Table 12. Peak Discharge Rates 10 Year and 25 Year Storms for Existing Conditions and Proposed Conditions

	Tributary Area (acres)	10 Year Peak Flow (cfs)	25 Year Peak Flow (cfs)
Existing Conditions	7.4	15.6	18.8
Proposed Conditions	7.9	17.2	20.8
Difference	+0.5	+1.6	+2.0

As outlined within the Table above, the proposed Project would increase the peak flow leaving the site by approximately 2 cfs or 11%. The primary reason for this increase is the slight change in total tributary area. The existing condition tributary area is only 7.4 acres compared to the proposed condition, which would be 7.9 acres. The main difference in the drainage areas occurs along the southern boundary. In the existing condition, parking spaces occur along the southern boundary, which drain away from the Project site. In the proposed condition the runoff from this area would be captured in the onsite storm drain system. A slight increase in drainage area would also occur along the eastern edge where retaining walls are planned to increase the flat developable space. Overall, the slight increase in flow can be attributed to the slight increase in drainage area.

As discussed previously, Municipal Code Chapter 13.08, Grading and Excavation Code, requires compliance with erosion and siltation control measures. During grading when the highest risk of loss of topsoil and/or erosion would occur, silt fencing, sandbags, waddles, and other BMPs would be installed as part of the SWPPP. Construction impacts would be less than significant.

In order to mitigate the increase in peak storm flow discharge, Mitigation Measure (MM) HYD-1 requires that a section of the onsite storm drain pipe be upsized to sufficiently capture and store the increased volume. The outlet of the storm drain pipe would be restricted in order to regulate the rate of discharge to match the existing peak flow. Reducing the peak discharge rates to existing conditions would reduce the risk of downstream erosion and/or flooding, resulting in less than significant impacts.

MM HYD-1 *Prior to the issuance of building permits, the storm drain plans shall demonstrate that the storm drain pipes are sufficiently sized to capture and store storm runoff volume in the developed condition in order to discharge the storm runoff at or below the existing peak flow rate leaving the Project site.*

C.iv. Less than Significant. Development of the Project would substantively maintain the existing site and off site drainage patterns by utilizing existing v-ditches, and channeling a majority of stormwater to the proposed onsite catch basins that outlet north to the Pacific Park Drive storm drain. A secondary storm drain will outlet south to the Aliso Creek Road storm drain. Stormwater treatment is proposed by underground flow-based treatment systems, such as modular wetlands. Drainage would generally mimic the existing condition to the maximum extent possible and flood flows would not be impeded or redirected. A less than significant impact would occur.

d) No Impact. The Project site is not located in a flood hazard area. Furthermore, the Project site is approximately 4 miles from the Pacific Ocean, and approximately 3 miles from the Sulphur Creek Reservoir, both of which are located at a lower elevation than the Project site. Therefore, no impacts from tsunami or seiche would occur.

e) Less than Significant. The Project has been designed with water quality and hydromodification features to be comply with Regional MS4 Requirements and the City of Aliso Viejo Municipal Code. Stormwater flows will be detained in an underground vault to reduce stormwater flows to the natural condition in compliance with the South Orange County Hydromodification Management Plan. Percolation testing was not performed since the site consists of compacted fill over siltstone and sandstone bedrock and is not suitable for infiltration. Furthermore, no groundwater was encountered to exploratory depth of 51 feet.

The proposed Project will implement the BMPs contained in the WQMP to capture, treat, and infiltrate stormwater runoff consistent with LID principles that prioritize on-site retention and infiltration. To ensure water quality on the Project site, the proposed Project includes a Modular Wetland System for treatment and implementation of BMPs. The Project would be subject to federal, State, and local regulations related to water quality, including the City's Water Quality Ordinance. Implementation of the proposed on-site stormwater system and water quality operational BMPs identified in the PWQMP, would reduce pollutants of concern associated with stormwater runoff from the Project site in compliance with the Regional MS4 Permit and ensure the proposed Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality. Therefore, impacts to water quality are less than significant and the proposed Project is consistent with water quality regulations.

Sources: *Preliminary Hydrology & Hydraulics Report,* dated September 2025, by Proactive Engineering Consultants (Appendix G); *and the Water Quality Management Plan (SWQMP)* dated January 12, 2026, by Proactive Engineering (Appendix H).

5.11 Land Use and Planning

Issues:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
LAND USE AND PLANNING. Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

Impact Analysis

The Project proposes to change the General Plan and Zoning designations for the Project site as follows:

	General Plan	Zoning
Existing:	Professional Office (PO)	Professional Office (PO)
Proposed:	Medium Density Residential (MDR)	Medium Density Residential (RM)

Findings of Fact

a) No Impact. The proposed Project plans to demolish an existing commercial development including three structures and associated accessory uses, such as parking lots, landscaping, etc. The Project site is surrounded by existing roads and development on all four sides. The proposed Project is not gated and includes pedestrian walkways through the Project site that would be available to existing surrounding residents.

The proposed Project would require a General Plan Amendment and Zone Change. However, these changes would not divide an existing community. The Project site is currently developed, and the proposal would only change the land use and not create a barrier that would divide the community. Therefore, no impact would occur.

b) Less than Significant. The proposed Project is inconsistent with the adopted land use plan and zoning for the site and both a General Plan Amendment and Zone Change would be required, requiring a change in land use and zoning from Professional Office (PO) to Medium Density Residential (MDR). Land uses to the north are the Aliso Viejo Town Center, to the south a business park, to the east a gas station with convenience market and multi-family condominiums, and to the west a fire station, a library, and medical offices. The proposed Project would be consistent with the existing surrounding land uses, and with the approval of the GPA, the proposed Project would

not conflict with any applicable land use plan, policy, or regulation adopted for the purposes of avoiding or mitigating an environmental effect. Table 13 provides an analysis of the proposed Project's consistency with relevant policies of the Aliso Viejo General Plan adopted for the purpose of avoiding or mitigating an environmental effect. As shown in Table 13, the proposed Project is consistent with all applicable General Plan policies.

Table 13. Project Consistency with Applicable General Plan Policies

Aliso Viejo General Plan Policies and Actions	Project Consistency
Policy LU-2.1: Preserve the current pattern of development that encourages more intense and higher density development at the core of the community (near Grand Park and Aliso Viejo Town Center) and less intense uses radiating from the central core.	Consistent. The proposed Project includes redevelopment of an underutilized office space in the City located across from the Aliso Viejo Town Center. The proposed Project includes a total of 137 attached residential dwelling units on 8.44 acres, 70 Rowtowns and 67 Garden Courts. This medium-density development is consistent with Policy LU-2.1. Therefore, the proposed Project would provide an appropriate density, consistent with this policy.
Policy LU-2.4: Encourage land uses that complement (in type, size, scale and design) the community's topography, scenic vistas, and natural resources.	Consistent. The proposed Project includes the construction of Rowtowns and Garden Courts in an area that is developed and urbanized. Redevelopment of the site would be generally consistent with existing surrounding uses, including commercial uses to the north, west, and south; and bounded by Aliso Creek Road to the east and residential uses further east. As discussed in Section 5.1, *Aesthetics*, the proposed Project would not adversely affect or damage a scenic vista or natural resources. The proposed Project is consistent with this policy.
Policy LU-4.1: Encourage environmentally sensitive development patterns, promote public education, and enforce infrastructure criteria that protect residents and property from hazards related to slope stability and flooding.	Consistent. The proposed redevelopment Project is located in a multi-use, urbanized area and would not degrade environmentally sensitive areas. The proposed Project is not located near a flood zone. The proposed Project would comply with all recommendations in the project-specific geotechnical review, per

Aliso Viejo General Plan Policies and Actions	Project Consistency
	MM GEO-1. On-site drainage and water quality improvements would provide protection from localized flooding. The proposed Project is consistent with this policy.
Policy LU-4.2: In areas where residential and business park or office land uses abut each other, use buffering techniques employing water-conserving landscaping, setbacks, screening, and appearance standards to improve compatibility.	Consistent. The proposed Project would be buffered from adjacent business park uses by setbacks, landscaping, and retaining walls. The proposed Project is consistent with this policy.
Policy LU-4.4: Reduce the discharge of pollutants and runoff flow from urban development to the maximum extent practicable.	Consistent. As discussed in Section 5.10, Hydrology and Water Quality, the proposed Project includes an on-site stormwater system that would reduce on-site runoff and pollutants. Stormwater flows would be routed to two modular wetland systems for water quality treatment prior to entering a subsurface detention basin. BMPs identified in the WQMP would reduce operational pollutant discharges of concern in compliance with the MS4 Permit and ensure the proposed project would not violate any water quality standards or waste discharge requirements. The proposed Project is consistent with this policy.
Policy LU-5.3: Ensure that new development is consistent with City and service provider plans to complete needed improvements	Consistent. As discussed in Section 5.15, *Public Services* and Section 5.19, *Utilities and Service Systems*, existing public and utility services are anticipated to be adequate to serve the proposed Project. Any improvements would be constructed in compliance with City and service provider standards and the applicant would pay all applicable fees as required. The proposed project is consistent with this policy.
Policy LU-8.2: Require recycling, composting, source reduction and education efforts throughout the community, including residential, businesses, industries, and institutions, within the construction industry, and in all City-sponsored activities.	Consistent. As discussed in Section 5.19, *Utilities and Service Systems*, the proposed Project would be required to comply with applicable federal, State, and local regulations regarding the recycling, composting, source reduction, and

Aliso Viejo General Plan Policies and Actions	Project Consistency
	education efforts. The proposed Project is consistent with this policy.
Policy LU-11.1: Ensure that new development contributes its fair share to the timely construction of new school facilities, to the extent permitted by law, and compatible with other City land use objectives.	Consistent. As discussed in Section 5.15, *Public Services*, the Project applicant would be required to pay all statutory fees in place at the time in compliance with SB 50 and demonstrate proof of payment to the City for approval of a building permit. Payment of school fees under SB 50 would provide consistency with this policy.
Policy LU-12.2: As a condition upon new development, payment of park fees and/or dedication and provision of parkland, recreation facilities and/or multi-use trails that improve the public and private recreation system.	Consistent. As discussed in Section 5.15, *Public Services*, the Project applicant would be required to pay all public benefits fees in accordance with the Municipal Code Chapter 14.16, which would satisfy the City's parkland requirement. The proposed Project would also partially offset impacts to park facilities by providing onsite amenities including: a common recreation area featuring a pool, BBQ area, and lounge seating; a tot lot and playground; private open space totaling approximately 34,372 SF including patios and balconies; community courtyards with seating and accent landscaping providing passive green spaces totaling approximately 43,900 SF feet; and perimeter slope landscaping consisting of trees and understory totaling approximately 69,000 SF. The proposed Project is consistent with this policy.
Conservation/Open Space Element	
Policy COS-1.2: Reduce the amount of water used for landscaping and increase use of native and low water plants. Maximize use of native, low water plants for landscaping of areas adjacent to sidewalks or other impermeable surfaces.	Consistent. The proposed Project would be required to comply with the City's landscaping requirements, including Chapter 7.30, Water Efficient Landscape Regulations, which would increase water efficiency. The Project proposes landscaping that includes native and/or low water plants. The proposed Project is consistent with this policy.
Policy COS-1.4: Promote water conservation measures, reduce urban runoff, and prevent	Consistent. As discussed in Section 5.10, *Hydrology and Water Quality*, the

Aliso Viejo General Plan Policies and Actions	Project Consistency
groundwater pollution within development projects, property maintenance, City operations and all activities requiring City approval.	proposed Project would implement structural, source control, and site design BMPs identified in the WQMP that address water quality associated with the proposed Project. The Project would adhere to WQMP requirements, which would reduce stormwater pollutants from the Project site in compliance with the Regional MS4 Permit and ensure the Project would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade ground water quality. The Project is consistent with this policy.
Policy C-4.2: Provide safe and convenient pedestrian and bicycle connections to and from Aliso Viejo Town Center, other commercial districts, office complexes, neighborhoods, schools, other major activity centers, and surrounding communities.	Consistent. The Project would include construction of internal walkways and adequate internal driveway widths to accommodate internal pedestrian circulation. These pedestrian routes provide connections to public sidewalks on Pacific Park Drive, Aliso Creek Road, and Journey enabling pedestrian and bicycle travel to Aliso Viejo Town Center to the north located on the northwest corner of the Aliso Creek Road/Pacific Park Drive intersection. The Project is consistent with this policy.
Policy COS-5.1: Integrate air quality planning with City land use, economic development, and transportation planning efforts.	Consistent. As discussed in Section 5.3, *Air Quality*, the Project would not generate pollutant emissions in excess of applicable significance thresholds. The Project is consistent with this policy.
Policy COS-5.3: Support alternative transportation modes and technologies and develop bike- and pedestrian-friendly neighborhoods to reduce emissions associated with automobile use.	Consistent. The Project would provide internal walkways and adequate internal driveway widths to accommodate internal pedestrian and bike travel and connections to Pacific Park Drive, Aliso Creek Road, and Journey enabling pedestrian and bicycle travel on public sidewalks and bike lanes. The Project would also provide electric vehicle (EV) charging infrastructure consistent with the latest CALGreen requirements, enabling

Aliso Viejo General Plan Policies and Actions	Project Consistency
	residents to charge electric vehicles and in turn reducing air pollution emissions. The Project is consistent with this policy.
Policy COS-6.1: Encourage green building designs for new construction and renovation projects within the City.	Consistent. The Project is required to comply with 2022 Title 24 standards and CALGreen. Consistent with the 2022 Building Energy Efficiency Standards, the Project will be "all electric" (mandatory high-efficiency electric heat pumps for HVAC and water heating; 240-volt circuits for electric ranges/cooktops and clothes dryers; 200-amp main electrical panel minimum with space for future solar and battery storage; EV ready; and solar photovoltaic systems required with electrical readiness for future battery storage. The Project is consistent with this policy.
Policy COS-7.5: Ensure that new development provides park land and/or improvements at a fair share ratio, pursuant to the City's Parkland Ordinance.	Consistent. Refer to response to Land Use Element Policy LU-12-2. The Project is consistent with this policy.
Policy COS-8.1: Balance the benefits of development with a project's potential impacts to cultural resources.	Consistent. As discussed in Section 5.5, *Cultural Resources*, the Project site does not contain known cultural resources. The Project was cleared and graded in 1988 and developed between 1999 and 2000. The SCCIC records search revealed six prehistoric resources within one mile of the Project site with none located on the site. The field survey did not identify evidence of onsite cultural resources. A SLF search was also requested from NAHC. The search identified presence of sacred sites or locations of religious or ceremonial importance within the vicinity of the Project site, recommended contact with the Juaneño Band of Mission Indians Acjachemen Nation for further information. The request for further information was included in the AB52 and SB18 notification and additional information is included within Section 5.18 Tribal Cultural Resources. As concluded in

Aliso Viejo General Plan Policies and Actions	Project Consistency
	Section 5.5 Cultural Resources, given the disturbed nature of the site resulting from previous agricultural use, development of the property, and the results from the field survey, impacts would be less than significant. The Project is consistent with this policy.
Safety Element	
Policy S-1.1: Avoid development in areas susceptible to erosion and sediment loss.	Consistent. As discussed in Section 5.7, *Geology and Soils*, grading and earthwork activities associated with Project construction would expose soils to potential short-term erosion by wind and water. However, Project construction activities would be required to comply with applicable City requirements to control erosion and reduce or eliminate stormwater runoff containing sediment, including Aliso Viejo Municipal Code Chapter 13.08, Article XIII, Erosion Control, which requires the implementation of erosion and sediment control measures. Project construction activities would also be required to comply with applicable water quality measures, including the City's Water Quality Ordinance (Municipal Code Chapter 7.35, Stormwater Management) and the BMPs identified in the project-specific WQMP, which include conditions and requirements established by the City related to the reduction or elimination of stormwater runoff pollutants during construction and operational phases of the Project. The Project is consistent with this policy.
Policy S-1.2: Investigate specific geologic conditions underlying all new development or redevelopment proposals in areas where potential fault rupture, liquefaction, slope instability or other geological hazards are suspected.	Consistent. As discussed in Section 5.7, *Geology and Soils*, the Project site is not susceptible to potential fault rupture or liquefaction. The Project would be required to comply with site-specific geotechnical recommendations associated with potential earthquake ground shaking, slope instability, or other

Aliso Viejo General Plan Policies and Actions	Project Consistency
	geological hazards. The Project is consistent with this policy.
Policy S-2.3: Ensure adequate fire equipment access and fire suppression resources to all developed and open space areas within the City.	Consistent. The Project would include a total of 6 new fire hydrants internal to the Project site on internal driveways that would connect to existing water lines. The Project would be required to comply with all City and Orange County Fire Authority (OCFA) requirements for fire prevention and safety measures including site access as contained in the project-specific Fire Master Plan (FMP). These requirements will be included in the Project construction plans as part of standard review by the City and OCFA. The Project is consistent with this policy.
Policy S-3.1: Require that new development and redevelopment minimize stormwater and urban runoff into drainage facilities by incorporating on-site design features such as detention basins, water features, or other suitable strategies. Where feasible, support the use of common detention facilities serving more than one development.	Consistent. Refer to response to Land Use Element Policy LU-4.4 and Conservation/Open Space Element Policy COS-1.4. The Project is consistent with this policy.
Noise Element	
Policy N-3.1: Ensure stationary noise impacts on sensitive receptors and noise emanating from construction activities, private developments/residences, landscaping activities and special events are minimized.	Consistent. As discussed in Section 5.13, *Noise*, the Project would result in less than significant impacts related to noise. The Project is consistent with this policy.

Therefore, the Project would not cause a significant environmental impact by conflicting with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect resulting in a less than significant impact.

Sources: City of Aliso Viejo General Plan Land Use Map; and City of Aliso Viejo General Plan Land Use Element.

5.12 Mineral Resources

Issues:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
MINERAL RESOURCES. Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

Impact Analysis

a and b) No Impact. The California Department of Conservation has classified the State into Mineral Resources Zones (MRZs) which designate lands that contain mineral deposits. The Project site and surrounding area are designated as MRZ-3, defined as areas likely containing mineral deposits, the significance of which cannot be evaluated from available data. The Aliso Viejo General Plan does not designate any lands within the City as mineral resources deposit areas. There are no existing mineral resource recovery operations on the Project site or surrounding area. Therefore, the Project would not result in the loss of availability of known mineral resources of value to the region or result in the loss of a locally-important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan. No impact would occur.

In addition, within the City's General Plan Land Use Element the Project site is currently designated Professional Office (PO) and not Resource Areas or Open Space, the proposed Project would not impact a site that has been historically used for the extraction of mineral resources, nor would the proposed Project conflict with areas designated by the General Plan for mineral resource extraction. Therefore, no impact associated with the loss of availability of a known or locally-important mineral resource or mineral resource recovery site would occur.

Sources: City of Aliso Viejo General Plan Land Use Element; California Department of Conservation Website.

5.13 Noise

Issues:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
NOISE. Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

Impact Analysis

Noise impacts can occur from construction operations and long-term operations of a project, which for residential consists of vehicle traffic noise, and stationary sources, such as air conditioning noise. Potential construction and operational noise impacts from these sources were analyzed in the report, *Pacific Park Drive Townhome Project Noise Impact Study* (Noise Impact Study), prepared by RK Engineering Group, Inc., dated May 19, 2026, and included in Appendix I.

Noise is regulated by the City of Aliso Viejo General Plan and Chapter 8.12 of the Aliso Viejo Municipal Code. For construction noise, Chapter 8.12.070 of the Aliso Viejo Municipal Code states that construction activity is exempt from exterior noise standards provided construction activities take place between the hours of 7 a.m. and 8 p.m. on any day except for Sunday or a Federal holiday, or between the hours of 9 a.m. and 8 p.m. on Sunday or a Federal holiday. Noise generated outside of those hours is subject to the standards in Table 4.13-2.

The standards for stationary noise sources are defined in Table N-1 of the Aliso Viejo General Plan Noise Element. During the daytime (7am – 10 pm), hourly noise levels shall not exceed 55 dBA with a maximum of 75 dBA. During the nighttime (10 pm – 7 am), hourly noise levels shall not exceed 50 dBA, with a maximum of 70 dBA.

The Aliso Viejo General Plan Noise Element also provides land use compatibility standards in Table N-2. For residential neighborhoods, the land use compatibility noise

standard is 60 dBA Community Noise Equivalent Level (CNEL) and below. The CNEL noise metric is a 24-hour weighted average noise measurement.

The analysis of noise impacts included in the Noise Impact Study assumes compliance with standard noise regulations, including the City's noise ordinance, which restricts construction during nighttime, Sundays and holidays, and the California Building Code standards, which regulate interior noise levels.

Findings of Fact

a) Less than Significant. Noise impacts can occur from construction operations and long-term operations of a project, which for residential projects consists of vehicle traffic noise and stationary sources, such as air conditioning noise. As noted previously, potential noise impacts from these sources were analyzed in the Noise Impact Study and included in Appendix I.

While construction noise levels are exempt from the City's noise standards, construction noise levels were calculated for the different phases of construction, including demolition, site preparation, grading, building construction, paving, and architectural coating. The City of Aliso Viejo does not have established thresholds for construction-related noise. Consequently, construction levels were measured against the Federal Transportation Administration General Assessment Construction Noise Criteria for the purposes of construction noise impact significance.

Noise levels for each stage of construction are shown in Table 14 below.

Table 14. Project Construction Noise Levels

Stage	Equipment	Combined Noise Level (dBA)
Demolition	Concrete/Industrials saws, rubber tired dozers	76.3
Site Preparation	Tractors/Loaders/Backhoes	73.0
Grading	Graders, Tractors/Loaders/Backhoes	73.6
Building Construction	Tractors/Loaders/Backhoes	73.0
Paving	Rollers	69.0
Arch Coating	Air compressors	63.7
Worst Case Construction Phase Noise Level – Leq (dBA)		76.3
FTA Daytime General Assessment Construction Noise Criteria – Leq (dBA)		90.0
Noise Level exceeds criteria?		No

Source: Federal Transit Administration (FTA). Transit Noise and Vibration Impact Assessment Manual, Section 7: Noise and Vibration During Construction.

As shown in Table 14, construction operations remain below the 90 dBA threshold of significance. Consequently, construction noise impacts would be less than significant.

Operational noise impacts were analyzed by combining equipment noise from HVAC equipment, road noise from additional vehicle trips and ambient conditions to determine noise impacts from the operation of the proposed Project. To help ensure onsite noise levels do not exceed the City of Aliso Viejo General Plan and Municipal Code noise standards, the following stationary noise impact analysis has been prepared. The analysis assumes that onsite HVAC units will be operating continuously during daytime hours (7:00 a.m. to 10:00 p.m.) and nighttime hours (10:00 p.m. to 7:00 a.m.).

The Noise Impact Study addresses potential operational noise impacts at six sensitive receptor locations (see Noise Impact Study, Exhibit A Location Map) located adjacent to the Project site. The closest potential daytime HVAC location to the adjacent sensitive receptors would be near the southern boundary of the Project site, approximately 70 feet from Receptor-3, which consists of educational land uses. Although the City of Aliso Viejo Municipal Code does not include stationary noise thresholds for educational buildings, these land uses are considered sensitive for the purposes of this analysis. Therefore, potential noise impacts are conservatively estimated at a distance of 70 feet from the nearest potential HVAC location and are compared with the City's stationary noise thresholds for residential land uses. It is assumed that the educational land use located at Receptor-3 is only occupied and operational during daytime hours. Therefore, this analysis only compares the worst-case noise levels at Receptor-3 to the City's daytime noise level threshold because all other sensitive receptors are located farther away from any of the proposed HVAC locations and would therefore experience lower noise levels.

Potential noise level impacts during nighttime hours are assessed at the property line of Receptor-5, identified as the existing Orange County Fire Station 57, which is the nearest adjacent receptor that is assumed to be occupied and operational during nighttime hours and represents the worst-case noise level location because it is closest to proposed HVAC locations and therefore would experience the highest stationary source noise levels. Receptor-5 is located approximately 125 feet from the nearest potential onsite HVAC location.

Tables 15 and 16 below summarize the results for Project noise levels during daytime and nighttime hours at the nearest adjacent receptors. Modeling of the nearest receptors was conducted first and once it was determined that noise levels would not exceed the thresholds of significance, no further noise modeling was performed because receptors located farther from the Project site would experience less noise.

Table 15. Daytime Hours Stationary Noise Impacts

Noise Source	Receptor Distance from Noise Source (feet)	Noise Level at Receptor (dBA Leq) Daytime (Leq / Lmax 7 a.m. – 10 p.m.)
HVAC[1]	70.0	51.1 / 51.1
Noise Level Threshold		55.0 / 75.0
Noise Level Exceeds Threshold?		No /No

1. Noise level is indicative of five (5) units.
Source: *Noise Study Report*, RK Engineering, Table 6-1.

Table 16. Nighttime Hours Stationary Noise Impacts

Noise Source	Receptor Distance from Noise Source (feet)	Noise Level at Receptor (dBA Leq) Nighttime (Leq / Lmax 10 p.m. – 7 a.m.)
HVAC[1]	125.0	48.6 / 48.6
Noise Level Threshold		50.0 / 70.0
Noise Level Exceeds Threshold?		No /No

1. Noise level is indicative of five (5) units.
Source: *Noise Study Report*, RK Engineering, Table 6-2.

As shown in the tables above, noise levels generated by the Project are not expected to exceed the City's daytime or nighttime noise standards at any of the adjacent sensitive receptor locations, therefore impacts are less than significant.

The Project is not expected to cause a substantial increase in ambient noise levels in the vicinity of the site as a result of increased traffic volumes along adjacent roadways. Typically, a doubling of traffic volume along a roadway is required to cause a significant increase in ambient noise levels of more than 3 dBA[1].

Per 2024 Streetlight data, the segment of Pacific Park Drive adjacent to the Project site has an existing annual average daily traffic (ADT) volume of approximately 16,074 vehicles. The segment of Aliso Creek Road adjacent to the Project site has an existing annual average daily traffic (ADT) volume of approximately 16,664 vehicles.

Based on the *ITE Trip Generation Manual, 11th Edition* trip generation rates for Land Use 215: Single-Family Attached Housing, the Project is forecast to generate approximately 986 daily trips[2]. Therefore, discounting the traffic generated by the existing office use on the Project site, the amount of traffic generated by the proposed

[1] Source: Technical Noise Supplement to the Traffic Noise Analysis Protocol, California Department of Transportation, (Caltrans), September 2013.
[2] The noise study was prepared prior to the release of the 12th Edition of the ITE Trip Generation Manual, which was used for the VMT and traffic analysis. The noise analysis was not updated because use of the 11th Edition results in more trips (980 daily trips) than use of the 12th Edition (900 daily trips)

Project would not double the amount of traffic along Pacific Park Drive or Aliso Creek Road, either directly or cumulatively, and impacts would be less than significant.

b) Less than Significant. The construction of the Project is not expected to require the use of substantial vibration-inducing equipment or activities, such as pile drivers or blasting. The main source of vibration impacts during the construction of the Project would be the operation of equipment such as bulldozer activity during site preparation and loading trucks during grading and excavation. The evaluation of an impact's significance can be determined by reviewing both the likelihood of annoyance to individuals as well as the potential for damage to existing structures. The construction vibration assessment utilizes the referenced vibration levels and methodology set forth within the Transit Noise and Vibration Impact Assessment Manual, Federal Transit Administration, September 2018.

According to the Transit Noise and Vibration Impact Assessment Manual, Federal Transit Administration, September 2018, the appropriate threshold for damage to modern residential structures is a PPV of 0.5 inches/second. Annoyance is assessed based on levels of perception, with a PPV of 0.01 being considered "barely perceptible," 0.04 inches/second as "distinctly perceptible," 0.1 inches/second as "strongly perceptible," and 0.4 inches/second as "severe."

The nearest location of grading equipment to occupied residences is approximately 215 feet. At this distance, the PPV from a large bulldozer would be approximately 0.008 inches/second; from loaded trucks would be approximately 0.007 inches/second; and from a vibratory roller would be approximately 0.020 inches/second. This level of vibration falls below the building damage PPV criteria of 0.5 inches/second. In terms of annoyance, the impact would be "barely perceptible" to "distinctly perceptible."

The nearest location of grading equipment to commercial structures is approximately 30 feet. At this distance, the PPV from a large bulldozer would be approximately 0.073 inches/second; from loaded trucks would be approximately 0.062 inches/second; and from a vibratory roller would be approximately 0.172 inches/second. This level of vibration falls below the building damage PPV criteria of 0.5 inches/second. In terms of annoyance, the impact would be "barely perceptible" to "distinctly perceptible."

Since construction vibration would not cause damage to off-site commercial or residential buildings and the majority of the grading would be barely perceptible to off-site receivers, impacts would be less than significant.

c) No Impact. The Project site is not located within an airport land use plan, nor within two miles of a private airstrip or public airport. The closest airport is John Wayne Airport, located in Santa Ana, approximately 10 miles from the Project site. No impact would occur.

Sources: *Pacific Park Drive Townhome Project Noise Impact Study,* prepared by RK Engineering Group, Inc., dated May 19, 2026, and included in Appendix I; City of Aliso Viejo General Plan; and City of Aliso Viejo Municipal Code.

5.14 Population and Housing

Issues:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
POPULATION AND HOUSING. Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Impact Analysis

The California Department of Finance (DOF) provides demographic data for cities, such as Aliso Viejo. The DOF defines a "household" as all persons who occupy a housing unit, which may include single persons living alone, families related through marriage or blood, or unrelated persons sharing living quarters. Persons living in retirement or convalescent homes, dormitories, or other group living situations are not considered households.

As of January 1, 2025, DOF estimates the total population of the City of Aliso Viejo as 50,213 persons with 20,189 households and an average size of 2.54 people per household[3]. Based on the proposed 137 units, the Project would result in an increase of approximately 348 new residents.

Findings of Fact

a) Less than Significant. The proposed Project residential land use would directly generate population growth beyond that planned for the Project site in the City's General Plan due to the conversion of commercial use to residential use. However, the proposed Project would not indirectly encourage population growth in other areas of the City or exceed the City's overall projected population growth.

The proposed Project does not include any infrastructure that could indirectly cause growth in other portions of the City. The proposed Project is located on an already developed site and bordered by existing roadways, existing commercial and residential land uses. The proposed Project would connect to existing water and sewer service within surrounding streets, including the domestic water main along Pacific Park, with

[3] California Department of Finance, E-5 Population and Housing Estimates for Cities, Counties, and the State, 2021- 2025, November 2025.

no required upsizing. Therefore, the proposed Project does not include any infrastructure, such as roadways, water, sewer or other facilities, sized beyond what is necessary to serve only the proposed Project; therefore, no growth-inducing impacts would occur.

At 2.54 persons per household, the additional 137 residential units would generate approximately 348 additional residents for the City that would exceed General Plan projections for the Project site. The current population of Aliso Viejo is approximately 50,213 residents. The addition of 348 residents above the General Plan projections represents approximately 0.0069% of the current population. A less than 1/10 of 1% increase is not considered a substantial unplanned population increase and the very small population increase would not cause impacts to public services. Furthermore, the addition of 137 dwelling units would contribute toward meeting the City's Regional Needs Assessment (RHNA) obligation of 1,195 dwelling units[4]. Based on the RHNA obligation, population growth from the Proposed project would not exceed SCAG's overall projected population growth for the City.

Furthermore, this IS/MND has analyzed the additional 137 dwelling units in its analysis of the operational topics that are sensitive to density and the number of dwelling units, such as air quality, greenhouse gas, noise, energy, public services, traffic, and utilities. This IS/MND has found Project impacts related to each of those environmental topics would be either less than significant or can be mitigated to less than significant levels. Therefore, potential impacts associated with growth beyond General Plan projections would be less than significant.

b) No Impact. The Project site currently contains an underutilized commercial development. No existing residences or residents would be displaced. Redevelopment of the Project site would not displace people or housing and would not necessitate the construction or replacement of housing elsewhere. Therefore, no impact would occur with the loss of existing residential units and displacement of people.

Sources: California Department of Finance, E-5 Population and Housing Estimates for Cities, Counties, and the State, 2021- 2025 https://dof.ca.gov/forecasting/demographics/estimates/e-5-population-and-housing-estimates-for-cities-counties-and-the-state-2020-2025/.

[4] City of Aliso Viejo General Plan Housing Element, Page CP-24

5.15 Public Service

Issues:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
PUBLIC SERVICES.				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☒	☐
Police protection?	☐	☐	☒	☐
Schools?	☐	☐	☒	☐
Parks?	☐	☐	☒	☐
Other public facilities?	☐	☐	☒	☐

Impact Analysis

a) Less than Significant.

Fire Protection. The proposed Project site is served by the Orange County Fire Authority (OCFA), which provides fire protection and emergency service throughout the City. The closest fire station to the proposed Project site is Station #57 located directly northwest of the Project site at 57 Journey, approximately 125 feet from the Project site. The next closest station is Station #39 located at 24241 Avila Road, Laguna Niguel, approximately 2.3 miles from the Project site.

Although the building is partially occupied, OCFA currently serves the approximately 125,166 square foot commercial use building. Redevelopment of the property would not change OCFA's ability to provide service. The additional 137 residential units and approximately 348 residents would incrementally change the demand for Fire Department services from commercial to residential.

As part of the City's standard development review process, the OCFA reviews preliminary project plans in their role as the citywide fire protection and emergency service provider. A project-specific Fire Master Plan (FMP) was prepared by Dudek,

dated October 4, 2025 (Appendix L) to ensure a Project's comprehensive fire safety strategies comply with the California Fire Code as amended by City Code. Key components include detailed site plans showing fire apparatus access roads, hydrant locations/spacing, building construction features, water supply details, and fuel modification plans if needed for wildfire protection. Through review of the Project plans and the FMP, OCFA determined that the change from commercial to residential service of 348 residential units could be served by OCFA without any significant reduction in level or service, response times, or the need for additional equipment, personnel, or facilities.

Compliance with existing regulations and OCFA conditions of approval would ensure the availability of adequate fire protection without construction of new or expanded fire facilities. Therefore, environmental impacts associated with construction of new or expanded fire facilities would not occur and impacts would be less than significant.

Police Protection. The Orange County Sheriff Department (OCSD) currently provides police protection throughout the City and serves the Project site. The closest OCSD substation is located at 11 Journey, approximately 0.6 mile west of the Project site. However, police officers are routinely on patrol throughout the City; therefore, response times can vary.

The Project site is currently being served by the OCSD and the redevelopment of the property would not change the OCSD's ability to provide service. An additional 137 residential units and 348 residents would exceed the General Plan projections for the Project site. However, the Project site is currently being served by OCSD as an office use. As part of the City's standard development review process, the OCSD reviews preliminary project plans in their role as the citywide police protection and first responder. Through review of the Project plans, OCSD determined that the change from commercial to residential service of 348 residential units could be served by OCSD without any significant reduction in level of service, response times, or the need for additional equipment, personnel, or facilities.

Furthermore, using design strategies and added security measures from various stakeholders may help reduce the number of times OCSD responds to the proposed Project. To ensure adequate services are provided and to minimize the demands on police services, security and design strategies which employ defensible space concepts have been utilized throughout the development and construction plans. These measures incorporate the concepts of Crime Prevention through Environmental Design (CPTED) in accordance with Aliso Viejo Municipal Section 15.50.020, which involves the placement, and orientation of structures, access and visibility of common areas, placement of doors, windows, addressing, lighting and landscaping. CPTED promotes public safety, physical security and allows citizens the ability to monitor activity. Final plans depicting CPTED strategies which are included as part of the Project would be reviewed by OCSD.

Therefore, the proposed Project would not cause any significant reduction in level of service, response times, or the need for additional equipment, personnel, or facilities. Environmental impacts associated with construction of new or expanded police facilities would not occur and impacts would be less than significant.

Schools. The Project site falls within the boundaries of the Capistrano Unified School District (CUSD). CUSD provides 5 TK – 8 schools, 30 elementary schools, 8 middle schools, 6 high schools, 8 charter schools, and 8 alternative schools/programs. Students from the proposed Project would likely attend Wood Canyon for grades TK-5, Don Juan Avila Middle School for grades 6-8, and Aliso Niguel High School for grades 9-12.

Student generation from the additional 137 residential units is anticipated to be 31 elementary students, 11 middle school students, and 14 high school students for a total of 56 additional students[5]. The addition of 56 students would place additional demands on the public school system not previously planned. However, the additional number of students generated by the proposed Project would be a small fraction of the overall student population of the school district and would not cause an impactful growth[2].

Based on the student generation rates, the Project Applicant would be required to pay Level 1 development impact fees to CUSD per SB 50. The fees would be collected by the school districts at the time building permits are issued. As stated in Government Code Section 65995(h):

> *The payment or satisfaction of a fee, charge, or other requirement levied or imposed … are hereby deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization …on the provision of adequate school facilities.*

Payment of these fees would offset impacts from the increased demand for school services associated with the proposed Project by providing an adequate financial base to construct and equip new and existing schools as needed. Therefore, CUSD would be able to provide adequate school facilities for the additional 56 students as a result of the proposed Project, and payment of development impact fees would ensure that impacts would be less than significant.

Parks. The City owns and manages Vista Park and Iglesia Park, which are a total of 7.4 acres. Additionally, Aliso Viejo Community Association (AVCA) is responsible for an estimated 179 acres of parkland[6]. The closest park to the Project site is Grand Park, approximately 0.3 mile north of the project site, across Pacific Park Drive, along City

[5] Correspondence with Clark Hampton of the Capistrano Unified School District on November 21, 2025, provided student generation rates, determined the project would require Level 1 Developer Fees, and concluded that CUSD does not have concerns related to the proposed development.
[6] 95 Argonaut Residential Project Initial Study/Mitigated Negative Declaration, October 2, 2025.

Lights Drive. Crosswalks and traffic lights are available to cross Pacific Park Drive, allowing for pedestrian access to Grand Park. Woodfield Park, which has multiple ballfields, is located approximately 0.5 mile east of the Project site.

The proposed Project would construct homes with private balconies/patio, provide a central recreation area featuring a pool, BBQ area, lounge seating, a tot lot and playground, complete with play equipment, benches, and shaded areas within a central recreation area, courtyards throughout the community with seating and accent landscaping, offering serene passive green spaces as well as paved walkways with trees and specimen plantings, and enhancing the community's visual appeal and walkability.

However, the proposed Project would add new residents to the City who would increase the demand for park facilities. The new proposed residential units would incrementally exceed the City's General Plan projections for the Project site, resulting in an additional 137 dwelling units and approximately 348 new residents on a site currently designated and developed as Professional Office. However, the growth proposed for the Project site would not exceed the City's overall planned growth. Therefore, while the proposed Project would add population growth to a property currently developed with office uses, the population growth represents approximately 0.0069% of the City's overall population. The corresponding additional demand for park facilities represents a very small fraction of the overall City population and therefore, demand on park facilities.

According to the City of Aliso Viejo General Plan Natural Resources Element the City's park objective is to reach 5 acres per 1,000 residents. As stated on Page COS-20,

> *The City will adopt by ordinance a development standard of 5.0 acres of community or neighborhood parkland per 1,000 residents. As of 2003, Aliso Viejo residents enjoyed a ratio of 5.37 acres of parkland per 1,000 residents. New residential development will be required to provide land and/or fees necessary to maintain the City's adopted parkland standard, consistent with the California Subdivision Map Act.*

Based on the City's requirement of 5.0 acres of park area per 1,000 persons, the Project would result in the need for approximately 1.74-acres of usable park area. The Project proposes the creation of 1.33 acres of parks and paseos.

In addition to the provision of on-site residential amenities, the Project Applicant would be required to pay all development impact fees and park fees to the extent required by the City's Municipal Code. With the provision of on-site amenities and the payment of these fees, the Project would not result in the construction of new or expanded park facilities which could have adverse effects on the physical environment. Impacts would be less than significant.

Other Public Facilities. The proposed Project would place additional demands on other public facilities. These facilities range from the County's library to City streets, storm drains, and other public facilities such as City Hall, etc. When a residential development project is newly constructed in an established city, often that project would rely on, and impact, established infrastructure. In those situations, the impacts would be often offset by payment of development impact fees.

Payment of the fees, which are a condition of approval, enable the City to collect funds to construct new public facilities and enhance existing facilities. The Project's additional growth represents a small fraction of the overall City population. Consequently, the Project would not directly place additional demand on other public facilities that would cause the construction or expansion of those facilities, which could have adverse effects on the physical environment. Impacts would be less than significant.

Sources: City of Aliso Viejo General Plan Community Facilities Element; City of Aliso Viejo General Plan Public Safety Element; City of Aliso Viejo Municipal Code Section 15.50.020; and *Fire Master Plan*, prepared by Dudek, dated October 4, 2025 (Appendix L).

5.16 Recreation

Issues:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
RECREATION. Would the project:				
b) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
c) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐

Impact Analysis

Existing public park facilities in the vicinity of the proposed Project include Foxborough Park, approximately 0.9 mile southeast of the Project site, the Grand Park, approximately 1.0 mile north, and Woodfield Park and Springdale Park located 0.9 mile to the northeast of the Project site.

The Site Plan provides for a central recreation area featuring a pool, BBQ area, and lounge seating. Additionally, a tot lot and playground, with play equipment, benches, and shaded areas are provided in the western portion of the site adjacent to the slope. The central recreation area totals approximately 7,000 square feet.

Each of the dwelling units includes private open space areas in the form of patios and balconies. Private open space totals approximately 34,372 square feet.

Additionally, throughout the community are courtyards with seating and accent landscaping, providing passive green spaces as well as paved walkways with trees and specimen plantings, enhancing the community's visual appeal and walkability. The paseos and green courts total approximately 43,900 square feet.

The perimeter slopes would also include landscaping consisting of trees and understory. The total landscaping is approximately 69,000 square feet. The common open space areas would be owned and maintained by a newly formed homeowner's association.

Findings of Fact

a) Less than Significant. The proposed Project would construct homes with private balconies/patio, provide a central recreation area featuring a pool, BBQ area, lounge seating, a tot lot and playground, complete with play equipment, benches, and shaded areas within a central recreation area, courtyards throughout the community with

seating and accent landscaping, offering passive green spaces as well as paved walkways with trees and specimen plantings, and enhancing the community's visual appeal and walkability.

However, the proposed Project would add new residents to the City who could increase the demand for park facilities. The new proposed residential units would exceed the City's General Plan projections for the Project site, resulting in an additional 137 dwelling units and approximately 348 new residents. This unplanned growth in population represents approximately 0.0069% of the City's overall population. The unplanned growth that would exceed General Plan projections for the Project site would not exceed overall growth projections for the City and represents a very small fraction of the overall City population, and therefore, demand on park facilities.

According to the City of Aliso Viejo General Plan Natural Resources Element the City's park objective is to reach 5 acres per 1,000 residents. As stated on Page COS-20,

> *The City will adopt by ordinance a development standard of 5.0 acres of community or neighborhood parkland per 1,000 residents. As of 2003, Aliso Viejo residents enjoyed a ratio of 5.37 acres of parkland per 1,000 residents. New residential development will be required to provide land and/or fees necessary to maintain the City's adopted parkland standard, consistent with the California Subdivision Map Act.*

Based on the City's requirement of 5.0 acres of park area per 1,000 persons, the Project would result in the need for approximately 1.74-acres of usable park area. The Project proposes the creation of 1.33 acres of parks and paseos.

In addition to the provision of on-site residential amenities, the Project Applicant would be required to pay all development impact fees and park fees to the extent required by the City's Municipal Code. With the provision of on-site amenities and the payment of these fees, the Project would not result in the construction of new or expanded park facilities which could have adverse effects on the physical environment. Impacts would be less than significant.

b) Less than Significant. The proposed Project is not of sufficient size to require, and does not propose to construct new park facilities, or expand existing park facilities, located outside of the Project site. As described in *Response a)* above, extensive parks are provided within the City and available to new residents of the Project. Furthermore, the proposed Project provides an on-site park for use by residents of the proposed Project, and the Project would pay park fees in accordance with the City of Aliso Viejo Municipal Code. Consequently, the Project would not result in the construction of new or expanded park facilities which could have adverse effects on the physical environment. Impacts would be less than significant.

Sources: City of Aliso Viejo General Plan Community Facilities Element; City of Aliso Viejo General Plan Public Safety Element; and City of Aliso Viejo Municipal Code Section 15.50.020.

5.17 Transportation/Traffic

Issues:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
TRANSPORTATION/TRAFFIC. Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	☒	☐
b) Conflict or be inconsistent with CEQA Guidelines § 15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d) Result in inadequate emergency access?	☐	☐	☒	☐

Impact Analysis

On September 27, 2013, Senate Bill (SB) 743 was signed into law. The legislature found that with the adoption of the Sustainable Communities and Climate Protection Act of 2008 (SB 375), the state had signaled its commitment to encourage land use and transportation planning decisions and investments that reduce vehicle miles traveled and thereby contribute to the reduction of greenhouse gas emissions, as required by the California Global Warming Solutions Act of 2006 (Assembly Bill 32).

SB 743 started a process that fundamentally changes transportation impact analysis as part of CEQA compliance. Changes include the elimination of auto delay, Level of Service (LOS), and similar measures of vehicular capacity or traffic congestion as the basis for determining significant impacts. As part of the CEQA Guidelines, the new criteria were designed to promote the reduction of greenhouse GHG emissions, the development of multimodal transportation networks, and a diversity of land uses. The Governor's Office of Land Use and Climate Innovation (LCI), previously known as the Office of Planning and Research (OPR), developed alternative metrics and thresholds based on Vehicle Miles Traveled (VMT). The guidelines were certified by the Secretary of the Natural Resources Agency in December 2018, and automobile delay, as described solely by LOS or similar measures of vehicular capacity or traffic congestion, could not be considered a significant impact on the environment.

The City of Aliso Viejo adopted *Transportation Impact Guidelines for CEQA and General Plan Consistency*, dated May 2020, to specify the methodology to assess project-related VMT impacts.

The report, *Pacific Park Drive Townhomes Project Vehicle Miles Traveled (VMT) Screening Analysis, City of Aliso Viejo,* prepared by RK Engineering Group, Inc., dated November 24, 2025, and included in Appendix J, has been prepared in accordance with the City's VMT Guidelines.

Findings of Fact

a) Less than Significant. The following provides an analysis of the proposed Project's consistency with programs, plans, ordinances and policies addressing the City's circulation system including transit, roadway, bicycle and pedestrian facilities.

The City's General Plan Circulation and Mobility Element includes "Goal C-1", and numerous related policies, to "Provide for convenient and safe local travel throughout Aliso Viejo." The proposed Project is consistent with that goal by providing a residential neighborhood in a location adjacent to existing roadways that facilitate both automobile and pedestrian movement. The proposed Project would replace existing commercial/office use and provide residential housing within close proximity to commercial uses, facilitating pedestrian mobility between commercial and residential uses.

Transit Facilities

Public transportation services within the Project site and surrounding area are provided by Orange County Transportation Authority (OCTA). The primary OCTA bus routes serving the Project area are Routes 177 and 90. Route 177 provides service between Foothill Ranch and Laguna Hills, traveling via Alicia Parkway with key stops serving the Aliso Viejo Town Center to the north of the Project across Pacific Park. Route 90 connects Tustin to Dana Point, passing through Aliso Viejo along Aliso Creek Road. There are no existing or planned transit facilities adjacent to the Project site. Project implementation would not conflict with a program plan, ordinance, or policy addressing transit facilities.

Roadway Facilities

The City's General Plan Circulation and Mobility Element includes "Goal C-1", and numerous related policies, to "Provide for convenient and safe local travel throughout Aliso Viejo." The proposed Project is consistent with that goal by providing a residential neighborhood in a location adjacent to existing roadways that facilitate both automobile and pedestrian movement. The proposed Project would replace existing commercial/office use and provide residential housing within close proximity to commercial uses, facilitating pedestrian mobility between commercial and residential uses.

Primary vehicular access to the Project would be provided at an unsignalized driveway on Pacific Park Drive, as well as secondary access from Aliso Creek Road via a shared driveway. Internal private driveways would provide two-way access to each unit's

parking garage as well as to guest parking spaces that would be distributed throughout the site. Roadway facilities would continue to serve the Project site and surrounding development. The proposed Project would not involve modifications to any roadways and, thus, would not conflict with a program, plan, ordinance, or policy addressing roadway facilities.

Bicycle Facilities

The Aliso Viejo General Plan Circulation Element (Figure C-2) identifies existing bicycle facilities within the City. According to the General Plan Circulation Element, Aliso Creek Road and Pacific Park have Class II on-road bicycle lanes. There are no planned bicycle facilities near the Project site. The proposed Project would not involve modifications to any of these roadways or bicycle lanes and, thus, would not conflict with a program, plan, ordinance, or policy addressing bicycle facilities.

Pedestrian Facilities

Pedestrian facilities, including crosswalks, sidewalks, and traffic lights are currently available along both sides of Aliso Creek Road and Pacific Park. Non-signalized crosswalks are available at the intersections of Aliso Creek Road and Journey and the southern driveway. Pedestrians would circulate within the site via proposed internal pedestrian walkways and concrete sidewalks.

The proposed Project would not conflict with any program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, or pedestrian facilities. Therefore, impacts would be less than significant.

b) Less than Significant. The proposed Project has been evaluated to determine if, pursuant to either CEQA Guidelines Section 15064.3(b)(1) and/or the VMT screening provisions of the City's *Transportation Impact Guidelines for CEQA and General Plan Consistency (City Guidelines)*, the Project is presumed to have less than a significant impact on transportation.

VMT Analysis Pursuant to CEQA Guidelines Section 15064.3(b)(1). Section 15064.3(b)(1) states that "*Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be presumed to have a less than significant transportation impact.*" In accordance with the City Guidelines, VMT analysis is based on the Orange County Traffic Analysis Model (OCTAM) and the City relies on VMT per Service Population, which accounts for residents and employees. The City is divided into Traffic Analysis Zones (TAZ), and the Project site falls within TAZ 1553. Land use data are used to create Socio-Economic Data (SED) for each TAZ. As shown in the following excerpt from the OCTAM model, the 2019 data represent the baseline condition for the TAZ. Below within **Table 17** is data from the OCTAM model for TAZ 1553, which includes the Project site.

Table 17. SED Data for TAZ 1553

Scenario Year	2019	2050	Total Model Growth (2050-2019)
Zone	1553	1553	-
Total Population	0	18	18
Household Population	0	18	18
Employment Population	0	10	10
Total Household	0	8	8
Median Income	0	62,571	62,571
Retail Employment	51	58	7
Service Employment	1,823	1,720	-103
Basic Employment	662	774	112
School Enrollment	0	0	0
University Enrollment	0	0	0

Source: OCTAM model. Data extracted and reformatted into a new table format for legibility.

The data indicates that within TAZ 1553 in 2019, there is no population and 51 retail employees, 1,823 service employees (such as office), and 662 basic employees. OCTAM includes conversion rates from SED to land use and vice versa. For residential townhomes, the conversion rate is 2.599 residents per dwelling unit (DU), which is sourced from the Southern California Association of Governments (SCAG) dated April 2021. The conversion rate for office use is 3.5 employees per thousand square feet (TSF), which is sourced from the Orange County Transportation Authority (OCTA) dated October 2020.

Of the 1,823 service employees identified in TAZ 1553, 438 employees are attributed to the Project site. This calculation is based on the existing 125,166 square feet of office at 3.5 employees per TSF. The OCTAM model has determined that for TAZ 1553, the VMT per service population equals 25.91 VMT/Service Population. Therefore, the existing office buildings on the Project site generate 11,349 Daily VMT (438 employees * 25.91 VMT/service population) as reported within OCTAM. Furthermore, the Institute of Traffic Engineers (ITE) Trip Generation Manual, 12th Edition, establishes trip generation rates for different land uses, including office. The trip generation rate for office use is 7.83 daily trips per TSF. Therefore, the Project site has a current trip generation rate of 980 daily trips based on the existing office land use and those trips are imbedded within the OCTAM model.

To confirm that the reduction in daily trips would result in a reduction in VMT, the average trip lengths, which are the basis for VMT, were compared for residential and office uses.

The OCTAM model has determined that for TAZ 1553, the VMT per service population is 25.91. Based on 438 employees generated by the existing office buildings, the

OCTAM model has determined that the existing office buildings generate 11,349 daily VMT. TAZ 1553 does not have any residential uses, therefore, the 25.91 VMT per service population would not apply. Therefore, residential trip lengths in surrounding TAZs were used to create an average trip length. Table 18 below shows the residential trip lengths in the five TAZs surrounding the Project site.

Table 18. Residential Trip Lengths By TAZ

TAZ ID	Average Trip Length (miles)
1545	6.1
1546	4.7
1549	6.5
1552	7.3
1554	6.4

The longest trip length of 7.3 miles can conservatively be applied to the Project site with TAZ 1553. Based on the trip generation of 900 daily trips at 7.3 miles per trip, the Project would generate a total of 6,570 daily VMT. Applied to the SED projection of 356 residents, the Project would generate 18.46 VMT/Service Population.

The proposed transition from office to residential associated with the Project must first include the removal of VMT/Service Population in OCTAM for the existing office use and replacement with the proposed 137 DU residential use. The addition of the residential use SED without first removing the office use SED would result in double counting VMT within TAZ 1553.

Therefore, the proposed transition from office to residential use on the Project site would result in the following changes to VMT within TAZ 1553, as summarized in Table 19 below.

Table 19. VMT Comparison – Existing to Proposed

Land Use	Quantity	Residents	Employees	VMT/Service Pop	Daily VMT
Office	125,166		438	25.91	11,349
Townhomes	137	356		18.46	6,570
Difference					(4,779)

As shown in Table 19, the transition from office to residential use would reduce the total daily VMT within TAZ 1553 by 4,779 Daily VMT and reduce the VMT/Service Population for the Project site from 25.91 to 18.46.

Therefore, pursuant to CEQA Guidelines Section 15064.3(b), the proposed Project would "*decrease vehicle miles traveled in the project area compared to existing conditions*" and, therefore, *"should be presumed to have a less than significant transportation impact."*

Since the proposed Project reduces both Daily VMT and VMT/Service Population, a full VMT analysis is not required and in accordance with CEQA Guidelines Section 15064.3(b)(1), a project that reduces VMT would have a less than significant impact.

VMT Screening under the City Guidelines. Separate from the above analysis under CEQA Guidelines Section 15064.3(b)(1), the City Guidelines state that the first step in preparing a VMT assessment is to determine if the project meets any of the three (3) types of screening criteria outlined in the City's VMT Guidelines[7]. The screening criteria are identified below:

- Step 1: Transit Priority Area (TPA) Screening
- Step 2: Low VMT Area Screening
- Step 3: Project Type Screening

The proposed Project is not located within a Transit Priority Area (TPA) or a Low VMT Area, therefore, neither Step 1 nor Step 2 screening criteria apply to the Project.

Step 3 of the screening criteria screens out "Projects generating less than 110 daily vehicle trips." For clarification, the City Guidelines includes the following footnote providing an example of the application of these criteria, with the portions highlighted to emphasize the intent of the City Guidelines:

> *"This threshold ties directly to the OPR technical advisory and notes that CEQA provides a categorical exemption for existing facilities, including additions to existing structures of up to 10,000 square feet, so long as the project is in an area where public infrastructure is available to allow for maximum planned development and the project is not in an environmentally sensitive area. (CEQA Guidelines, § 15301, subd. (e)(2).) Typical project types for which* ***trip generation increases*** *relatively linearly with building footprint (i.e., general office building, single tenant office building, office park, and business park) generate or attract* ***an additional*** *110-124 trips per 10,000 square feet. Therefore, absent substantial evidence otherwise, it is reasonable to conclude that* ***the addition of*** *110 or fewer trips could be considered not to lead to a significant impact."* [8]

As clarified by the example contained in this footnote, the calculation of "Projects generating less than 110 daily vehicle trips" refers to "trip generation increases," projects which "generate or attract an additional" number of trips, and "the addition of

[7] The *City of Aliso Viejo Traffic Impact Analysis Guidelines for CEQA and General Plan Consistency, May 2020, pages 17 – 20.*

[8] *City of Aliso Viejo Traffic Impact Analysis Guidelines for CEQA and General Plan Consistency,* May 2020, pages 19-20.

110 or fewer trips," each refers to a net calculation of trips, consistent with CEQA's standard evaluation of impacts.

The proposed transition from office to residential associated with the Project must first include the removal of daily trips in OCTAM for the existing office buildings, otherwise the addition of the proposed residential trips without first removing the office trips would result in double counting daily trips within TAZ 1553. According to the ITE Trip Generation Manual, 12th Edition, attached residential housing generates 6.57 daily trips per dwelling unit. Therefore, the 137 proposed dwelling units would generate 900 daily trips.

The VMT study provides detailed information showing that the proposed Project would have a trip generation that would reduce daily peak hour trips, with a forecast of 91 fewer AM Peak Hour trips, 78 fewer PM Peak Hour trips, and 80 fewer average daily trips compared to the existing office use.

Since the proposed Project would generate 80 fewer weekday trips, pursuant to "Step 3: Project Type Screening," the Project is screened from further VMT analysis and impacts would be less than significant.

c) Less than Significant. The Project proposes to redevelop an existing commercial/office building. More specifically, the Project proposes to demolish the existing buildings, surface parking, landscaping, and improvements and construct 137 residential units, and associated parking and improvements. The Project would not introduce an incompatible use to the site. Further, the Project would not provide any off-site roadway improvements that could substantially increase hazards due to a design feature.

The Project site would continue to be accessed by existing driveways that currently provide access to the Project site from Pacific Park Drive and Aliso Creek Road. Therefore, redevelopment of the Project site would not create new turning movements or geometric roadway design features resulting in new hazardous roadway conditions. As part of the City's Site Development Permit process required under Aliso Viejo Municipal Code Section 15.74.020, Site Development Permits, the Project would be reviewed and only approved after finding the proposed development conforms with applicable roadway and driveway requirements and standards set forth in the Aliso Viejo Municipal Code and General Plan, including the Circulation Element, thereby verifying that the Project would comply with applicable driveway, sight-distance, and internal circulation standards.

Therefore, the proposed Project would not conflict with any transportation program, plan, ordinance, or policy; create an increase in hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections); or create incompatible uses. Impacts would be less than significant.

d) Less than Significant. The Project site is bordered by Pacific Park Drive, Aliso Creek Road, and Journey. According to the City's General Plan Public Safety Element, Figure S-1, the closest emergency evacuation routes to the Project site is Aliso Creek Road, adjacent to the Project site. The emergency access route would remain unchanged by the proposed Project and the proposed Project would not interfere with an emergency response plan.

On-site circulation and emergency access would conform to applicable City regulations that require 26 – 28-foot-wide street widths without parking and 31-foot-wide street widths with parallel parking. Alleys that serve garages would measure 24 feet in width. All street widths include designated fire truck turnarounds and key staging areas throughout the Project area. The on-site circulation was presented in the FMP and reviewed and approved by OCFA.

The proposed Project would not require the full closure of any public or private streets or roadways during construction or operations and would not impede access of emergency vehicles to the Project or any surrounding areas. For any construction in the public right-of-way, the Project would implement a traffic control plan to ensure continued access through the area. This traffic control plan is required by City standards and imposed as a condition of approval for projects that involve improvements within a right-of-way and would be subject to approval by the City.

All emergency access routes would remain unchanged by the proposed Project and the proposed Project would not interfere with any existing emergency response plans. Therefore, the emergency response plan has already accounted for a similar intensity of development as the proposed Project and impacts would be less than significant.

Sources: *Pacific Park Drive Townhomes Project Vehicle Miles Traveled (VMT) Screening Analysis, City of Aliso Viejo,* dated November 24, 2025, prepared by RK Engineering Group, Inc. (Appendix J); and Fire Master Plan, Dudek, October 4, 2025 (Appendix L).

5.18 Tribal Cultural Resources

Issues:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
TRIBAL CULTURAL RESOURCES. Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code § 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☒	☐
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code § 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code § 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☒	☐	☐

Impact Analysis

The potential for tribal cultural resources to occur on the Project site was assessed in *Cultural Resources Study for the Journey and Pacific Park Drive (Shea Aliso Viejo) Project*, prepared by BFSA Environmental Services, dated June 30, 2025, and included in Appendix C.

Pursuant to AB 52 and SB18, the City provided notification of the proposed Project to the Native American Historical Commission (NAHC) and notification letters were sent to the following tribes on November 14, 2025:

- Cahuilla Band of Indians
- Gabrieleno Band of Mission Indians – Kizh Nation
- Gabrieleno/Tongva San Gabriel Band of Mission Indians
- Juaneno Band of Mission Indians Acjachemen Nation
- La Jolla Band of Luiseno Indians
- Pala Band of Mission Indians
- Pauma Band of Luiseno Indians
- Santa Rosa Band of Cahuilla Indians

- Soboba Band of Luiseno Indians

On November 25, 2025, the Juaneño Band of Mission Indians, Acjachemen Nation-Belardes responded to the City's notice and requested consultation. During consultation agreement was reached on mitigation measures and consultation closed on April 6, 2026.

On December 18, 2025, the City held a consultation meeting with the Gabrieleno Band of Mission Indians – Kizh Nation. The City followed up with emails to the Kizh Nation on January 13, February 19, and May 11, 2026 without response from the Kizh Nation to the emails. Thus, consultation stalled and is presumed complete.

Findings of Fact

a) Less than Significant. Based on archival research and aerial photographs, the Project site is disturbed and developed. Historic aerial photographs illustrate that between 1988 and 2000, the entire Project site was cleared, graded, and developed.

Based on the historic map and aerial, the Project site was cleared and graded during 1988 when the surrounding community was graded. Prior to 1976, the Project site was part of the Moulton Ranch, which operated as a large-scale sheep and cattle ranch. Between 1988 and 1922, the area was further developed, and roads surrounding the Project, which include Journey, Aliso Creek Road, and Pacific Park Drive, were built. Additionally, by 1992, a commercial building located directly northwest of the Project site was constructed. The 1999 historic aerial demonstrates that development of the Project site began and was completed by 2000, with the three commercial buildings and associated parking lot. The buildings are not associated with any significant events or individuals and are not likely to provide any information important to the history of the region.

The threshold of significance is whether any buildings or structures on the Project site are listed on the California Register of Historical Resources or on a local register of historic resources, which pursuant to Public Resources Code section 5020.1(k) includes, "A list of properties officially designated or recognized as historically significant by a local government pursuant to a local ordinance or resolution." None of the buildings located on the Project site are listed on the California Register of Historical Resources and the City has not adopted a local list of historic buildings. A records search conducted at the SCCIC, and a pedestrian survey failed to identify any structures that would meet the definitions presented in the threshold of significance. Furthermore, during consultation, the buildings on site were not identified as tribal cultural resources.

Therefore, impacts would be less than significant.

b) Less than Significant with Mitigation. Pursuant to AB 52 and SB18, the City sent notification letters via email on November 14, 2025 to the following Tribes:

- Cahuilla Band of Indians
- Gabrieleno Band of Mission Indians – Kizh Nation
- Gabrieleno/Tongva San Gabriel Band of Mission Indians
- Juaneno Band of Mission Indians Acjachemen Nation
- La Jolla Band of Luiseno Indians
- Pala Band of Mission Indians
- Pauma Band of Luiseno Indians
- Santa Rosa Band of Cahuilla Indians
- Soboba Band of Luiseno Indians

On November 25, 2025, the Juaneño Band of Mission Indians, Acjachemen Nation-Belardes responded to the City's notice and requested consultation. During consultation agreement was reached on mitigation measures and consultation closed on April 6, 2026.

On December 18, 2025, the City held a consultation meeting with the Gabrieleno Band of Mission Indians – Kizh Nation. The City followed up with emails to the Kizh Nation on January 13, February 19, and May 11, 2026 without response from the Kizh Nation to the emails. Thus, consultation stalled and is presumed complete.

As a result of tribal consultation, Mitigation Measures (MM) TCR-1 through MM TCR-3 shall be implemented.

MM TCR-1 Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities. The project applicant shall retain a Native American Monitor from or approved by the consulting tribe(s). The Monitor shall be retained prior to the commencement of any "ground-disturbing activity" for the subject project at all project locations (i.e., both onsite and any off-site locations included in the project description/definition and/or required in connection with the project, such as public improvement work). "Ground disturbing activity" shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching in areas of previously disturbed soil.

A copy of the executed monitoring agreement shall be submitted to the Director of Community Development prior to the earlier date of either: (1) the commencement of any ground-disturbing activity, or (2) the issuance of any permit required to commence any ground-disturbing activity.

The Monitor shall complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribes. Monitor logs shall identify and describe any discovered Tribal Cultural Resources (TCRs), including, but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, Tribal Cultural Resources, or TCRs), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of Monitor logs shall be provided to the project applicant and the Director of Community Development upon written request to the Tribe.

On-site Tribal monitoring shall conclude upon the latter of the following: (1) written confirmation to the Monitor and the Lead Agency that all ground-disturbing activities and phases that may involve ground-disturbing activities on the project site or in connection with the project are complete; or (2) a determination and written notification by the Monitor to the Director of Community Development that no future planned construction activity and/or development/construction phase at the project site possesses the potential to impact to TCRs.

MM TCR-2 Unanticipated Discovery of Tribal Cultural Resource Objects (Nonfunerary/Non-ceremonial). Upon discovery of any Tribal Cultural Resources (TCRs), all construction activities in the immediate vicinity of the discovery (i.e., not less than the surrounding 50 feet) shall cease. The City shall consult with the project Archaeologist and initiate Native American consultation procedures with the project's consulting Tribes (Gabrieleño Band of Mission Indians-Kizh Nation and the Juaneño Band of Mission Indians, Acjachemen Nation). The consultation effort is intended to be a meaningful and timely process of seeking, discussing, and considering carefully the views of others in a manner that is cognizant of all parties' cultural values and, where feasible, seeking agreement on the appropriate treatment and disposition of TCRs discovered. A Cultural Resources and Monitoring and Treatment Plan shall be created by the Archaeologist in coordination with the consulting Tribes (Gabrieleño Band of Mission Indians-Kizh Nation and the Juaneño Band of Mission Indians, Acjachemen Nation) and all subsequent finds shall be subject to this plan. Project construction shall not resume within the immediate vicinity of the discovery (i.e., not less than the surrounding 50 feet) until a Cultural Resources and Monitoring Treatment Plan is prepared and implemented. The plan may include, but would not be limited to, reburying, relocating, recording, and/or another culturally appropriate treatment. If it is determined that mutual agreement cannot be reached within 30 days of

the initial consultation meeting, the TCR(s) under review shall be reinterred on-site in a location free from future ground-disturbing construction activities. This measure does not apply to the finding of human remains, which must comply with California Health and Safety Code Section 7050.5.

MM TCR-3 Unanticipated Discovery of Human Remains and Associated Funerary or Ceremonial Objects.

A. Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute.
B. If Native American human remains and/or grave goods are discovered or recognized on the project site, then Public Resource Code 5097.9 as well as Health and Safety Code Section 7050.5 shall be followed.
C. Human remains and grave/burial goods shall be treated alike per California Public Resources Code Section 5097.98(d)(1) and (2).
D. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods.
E. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.

Implementation of MM TCR -1, MM TCR-2, and MM TCR -3 would reduce impacts to tribal cultural resources to less than significant.

Sources: *Cultural Resources Study for the Journey and Pacific Park Drive (Shea Aliso Viejo) Project,* prepared by BFSA Environmental Services, dated June 30, 2025 (Appendix C); and *Paleontological Assessment for the Journey and Pacific Park Drive (Shea Aliso Viejo) Project* prepared by BFSA Environmental Services, dated June 30, 2025 (Appendix E).

5.19 Utilities and Service Systems

Issues:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
UTILITIES AND SERVICE SYSTEMS. Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☒	☐	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

Impact Analysis

The proposed Project is currently being served, and would continue to be served, by Moulton Niguel Water District (MNWD) for water and sewer water service. MNWD has completed a preliminary review of the proposed Project and indicates the proposed Project could be adequately served (Appendix K). Wastewater within the Project site is treated by MNWD's wastewater collection system and sent to the Regional Treatment Plant operated by the South Orange County Wastewater Authority (SOCWA).

Utility connections are planned within Pacific Park Drive and at the roundabout south of the subject property. The Project site would be served by a looped water main with connections in Pacific Park Drive and the roundabout at the south property line. Each home is expected to have an individual water meter with private service connections. The sewer mainline is planned to connect in Aliso Creek Road following the replacement of the existing sewer line in the shared drive. The point of connection to service the residential development would occur in the roundabout at the south property line.

Findings of Fact

a) Less than Significant with Mitigation. The proposed Project would connect to existing water and sewer facilities located within the adjacent streets.

Utility connections are planned within Pacific Park Drive and at the roundabout south of the subject property. The Project site would be served by a looped water main with connections in Pacific Park and the roundabout at the south property line. Each home is expected to have an individual water meter with private service connections. The sewer mainline is planned to connect in Aliso Creek Road following the replacement of the existing sewer line in the shared drive. The point of connection to service this development would connect in the roundabout at the south property line.

Based on the preliminary letter from MNWD, both the water and wastewater treatment systems have sufficient capacity to accommodate the proposed Project. MNWD issued a Will Serve letter on February 5, 2025, committing to serve the proposed Project.

As discussed in detail previously in Section 5.10 Hydrology and Water Quality, the proposed Project would increase the peak storm flows leaving the site by approximately 2 cfs or 11%. The primary reason for this increase is the slight change in total tributary area. The existing condition tributary area is only 7.4 acres compared to the proposed condition, which would be 7.9 acres. The main difference in the drainage areas occurs along the southern boundary. In the existing condition, parking spaces occur along the southern boundary, which drain away from the Project site. In the proposed condition the runoff from this area would be captured in the onsite storm drain system. A slight increase in drainage area would also occur along the eastern edge where retaining walls are planned to increase the flat developable space. Overall, the slight increase in flow can be attributed to the slight increase in drainage area.

Mitigation Measure (MM) HYD-1 would mitigate the increase in peak storm flow discharge by requiring a section of the onsite storm drain pipe to be upsized to sufficiently capture and store the increased volume. The outlet of the storm drain pipe would be restricted in order to regulate the rate of discharge to match the existing peak flow. Furthermore, to address hydromodification conditions, underground storage has been included within the Project design to detain peak flows to match historic undeveloped conditions. Therefore, the existing storm drain system surrounding the Project site has sufficient capacity to convey storm flows from the Project site.

Electric service is currently provided to the Project site to serve the existing office buildings. Unlike the existing office buildings, the proposed residential uses would include solar panels on the new buildings. Installation of solar panels would offset the proposed Project's demand for electricity. Furthermore, the Project must comply with the CBC and Title 24, which requires energy efficient appliances. Therefore, the proposed Project would not warrant expansion of existing electrical facilities offsite to serve the Project site.

Natural gas is available to serve the Project site from surrounding adjacent streets. The Project must comply with the CBC and Title 24, which requires energy efficient appliances and substantially restricts the use of natural gas. Therefore, expansion of natural gas facilities offsite is not anticipated.

Telecommunications services are available within adjacent streets and wirelessly and available to serve the proposed Project. No expansion of telecommunications facilities is anticipated to serve the Project. Therefore, impacts would be less than significant.

b) Less than Significant. MNWD provides potable water to residents and would serve the proposed Project. In order to determine MNWD's full buildout demands, MNWD coordinates with the cities within its service area on the respective cities' general planning, which takes into consideration future growth of undeveloped areas. In compliance with the Urban Water Management Planning Act, MNWD's 2020 Urban Water Management Plan (UWMP) demonstrates water supply reliability in a normal, single-dry, and multiple-dry years over a 25-year planning period. According to MNWD's 2020 UWMP (Tables 7-1, 7-2, 7-3 and 7-4), water supplies would meet the service area's water demands for normal, single-dry, and multiple dry-year conditions through 2045.

Per the MNWD's 2020 UWMP generation rates, offices use planning demand factor is 65 gallons per day (gpd)/thousand square feet (ksf) and multifamily residential has a planning demand factor of 180 gpd/dwelling unit (DU). The generation rates were confirmed with MNWD staff[9] to ensure the most current rates were being utilized. The current office square footage is 125,166 square feet therefore the water demand is 8,136 gpd. The proposed Project, which consists of 137 units, would have a water demand of 24,660 gpd. This amount does not take into account MNWD's water conservation programs and incentives that are projected to occur and would likely reduce the Project's water consumption. While the water demand of the proposed residential use exceeds that of the current use, the will serve letter from MNWD indicates that adequate water supply would be available to serve future water demands during normal, dry and multiple dry years. Impacts would be less than significant.

c) Less than Significant. Wastewater treatment services for the majority of the City, including the Project site, are provided by MNWD. Wastewater within the Project site would be conveyed to the Regional Treatment Plant operated by the South Orange County Wastewater Authority (SOCWA). According to SOCWA, the Regional Treatment Plant typically experiences liquid waste flows of 7.3 million gallons per day (mgd) and has the current capacity to treat 12 mgd of liquid waste, with an ultimate capacity (both liquid and solid waste) of 32 mgd.

[9] Correspondence with Sheldon Yu, Senior Engineer, on October 20, 2025, and phone conversation on October 23, 2025.

Per the MNWD's generation rates, the wastewater demand factor for office use is 60 gallons per day (gpd)/thousand square feet (ksf). Multifamily residential has a planning demand factor of 170 gpd/dwelling unit (DU). The current office square footage is 125,166 square feet; therefore, the wastewater demand is 7,510 gpd. The proposed Project, which consists of 137 units, would have a sewer demand of 23,290 gpd. While the residential uses exceed that of the current use, MNWD indicated during their preliminary review of the proposed Project that available sewer capacity exists to support the Project. Therefore, impacts would be less than significant.

d) Less than Significant. The City contracts with CR&R for waste and recycling services. CR&R and the City have an extensive program designed to recycle trash consistent with state regulations. The California Integrated Waste Management Act of 1989 (AB 939), which emphasizes resource conservation through reduction, recycling, and reuse of solid waste. The City achieves waste reduction through resident curbside recycling, which includes separate carts for refuse, recyclables, and green waste.

Each residential dwelling would be supplied with three trash carts (refuse, recyclables, and green waste). The Project's Conditions, Covenants, and Restrictions (CC&Rs) would require that each resident store trash carts in the garage or in a fenced yard area, out of sight of other residences and Association Property, until scheduled collection times. Residents are therefore responsible for separating waste into the three bins, including yard waste from the private outdoor space of each dwelling. Waste generated from the common area, which is maintained by the Association, would generally include trash and green waste. The Association's contractors, generally landscape contractors, would collect the green waste and refuse from common area (Association) property and dispose of the green waste at a green waste recycling facility and the refuse at a landfill.

Waste that cannot be disposed of would likely be taken to the Prima Deshecha Sanitary Landfill in San Juan Capistrano. The Orange County Integrated Waste Management Department (IWMD) owns and operates the landfills. According to the CalRecycle Solid Waste Information System (SWIS), the Prima Deshecha Landfill has a maximum daily capacity of 4,000 tons per day and a remaining capacity of 128,800,000 cubic yards. The facility's maximum permitted capacity is 172,100,000 cubic yards. The Prima Deshecha landfill has capacity until approximately 2102.

CalRecycle provides a solid waste generation factor to estimate the amount of solid waste generated by residential projects. Using the generation rate of 12.23 pounds (lbs) per household per day for residential development, the proposed Project would generate approximately 1675.5 lbs per day of solid waste, or approximately 0.84 tons per day (based on 137 townhomes), which represents less than 0.01 percent of the maximum daily capacity of the Prima Deshecha Sanitary Landfill. This estimate does not include the existing uses on the Project site and therefore is a slightly inflated estimate.

Construction activities, including demolition of existing structures, would generate waste. The proposed Project would be required to comply with AVMC Section 7.15, which requires recycling applicable construction waste.

Therefore, the Prima Deshecha Landfill would have sufficient capacity to serve the proposed Project and solid waste generated during construction and operations would represent a negligible increase compared to the daily permitted tonnage. The proposed project would also include recycling, reuse, and/or salvage programs to reduce solid waste and comply with all applicable regulations for solid waste. Impacts would be less than significant.

e) Less than Significant. The California Integrated Waste Management Act of 1989, also known as AB 939, mandates jurisdictions to meet a diversion goal of 50 percent by the year 2000, and thereafter. SB 1383 sets goals to reduce disposal of organic waste in landfills, including edible food. The bill's purpose is to reduce greenhouse gas emissions, such as methane, and address food insecurity in California.

The City implements programs applicable to the proposed Project that comply with these statutes. In the City of Aliso Viejo Municipal Code Chapter 7.05, *Solid Wase Disposal*, this includes strategies for solid waste disposal, including recycling and organic waste. One strategy required of residents of residential communities, such as the proposed Project, is curbside separation of trash into recyclable, green waste, and solid waste. The City also implements Christmas tree collection, household hazardous waste centers, and used oil collection centers. Furthermore, the City's Green Building Program's requires recycling and diversion from landfills, which would apply during construction of the proposed Project.

Therefore, the proposed Project would not conflict with federal, state, and local ordinances in place designed to reduce solid waste generation. Impacts would be less than significant.

Sources: City of Aliso Viejo General Plan; City of Aliso Viejo Municipal Code; CalRecycle, New Statewide Mandatory Organic Waste Collection - CalRecycle Home Page; Moulton Niguel Water District 2020 Urban Water Management Plan; and Moulton Niguel Water District Preliminary Letter dated February 5, 2025 (Appendix K).

5.20 Wildfire

Issues:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
WILDFIRE. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☐	☒
c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	☒
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☐	☒

Impact Analysis

The Project site is developed and located within an urbanized area. The Project site is not located in or near a State Responsibility Areas (SRA) or lands classified as a Very High Fire Hazard Severity Zone (VHFHSZ).

Findings of Fact

a) No Impact. According to Cal Fire – Fire and Resource Assessment Program, the Project site is not located within or near an SLA or within a VHFHSZ. Neither the City of Aliso Viejo General Plan Public Safety Element nor the Cal Fire – Fire and Resource Assessment Program list the Project site as being located within a VHFHSZ. Furthermore, as detailed in *Section 5.9*, the proposed Project would not conflict with or interfere with an emergency evacuation plan. Therefore, no impact would occur.

b) No Impact. According to Cal Fire – Fire and Resource Assessment Program, the Project site is not located within or near an SLA or VHFHSZ. The proposed Project is located within an urban area surrounded by residential and commercial development, and arterial roadways. All new structures would comply with current building standards, including fire sprinklers. Therefore, the proposed Project would not exacerbate a fire risk to surrounding properties or to the new residents of the Project site. Fires in the

general Aliso Viejo and County of Orange areas could expose occupants to smoke during a wildfire. This risk is temporary and would not be exacerbated by the proposed Project. Therefore, no impact would occur.

c) No Impact. According to Cal Fire – Fire and Resource Assessment Program, the Project site is not located within or near an SLA or VHFHSZ. As such, the proposed Project does not include infrastructure, including construction and maintenance, that could exacerbate fire risk. The proposed Project is located within an urban area surrounded by residential and commercial development, and arterial roadways. All new infrastructure would comply with current City standards, including the undergrounding of all electrical lines. Therefore, no impact would occur.

d) No Impact. According to Cal Fire – Fire and Resource Assessment Program, the Project site is not located within or near an SLA or VHFHSZ. Furthermore, the Project site is not located to adjacent wildland areas that could be subject to wildfire risk. The Project site currently consists of a nearly flat area in an urbanized area. The Project site is surrounded by existing streets and residential and commercial development is approximately the same elevation as the Project site. The Project site is not located adjacent to any large hillsides that could cause flooding, mudflows, landslides, or significant erosion after a fire. Therefore, no impact would occur.

Sources: City of Aliso Viejo General Plan Public Safety Element; and Cal Fire – Fire and Resource Assessment Program, Fire Hazard Severity Zones (ca.gov).

5.21 Mandatory Findings of Significance

Issues:	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☒	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

Impact Analysis

a) Less than Significant with Mitigation. As discussed in the Biological Resources Section, the proposed Project has no potential to impact special status species or habitat supporting special status species. The Project would, however, potentially result in significant impacts to biological resources from impacts to nesting birds and jurisdictional features. As such, the proposed Project would incorporate MM BIO-1, to reduce the potential impact to nesting birds to a less than significant level. Additionally, as discussed in the Cultural Resources Section, no newly recorded historic sites were identified within the Project site as a result of the records search, archival research, or the intensive-level pedestrian survey. In addition, due to the high sensitivity of a paleontological resource occurring onsite within the Niguel and Monterey formations, the proposed Project would incorporate MM PALEO-1. Through consultation with the Native American tribes, a potential for tribal cultural resources exists on the Project site. Implementation of MM TCR-1, TCR-2, and TCR-3 would reduce all tribal cultural resource impacts to a less than significant level. Therefore, with implementation of mitigation, the proposed Project would not substantially degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or

wildlife populations to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory. Impacts would be less than significant with mitigation incorporated.

b) Less than Significant with Mitigation. As concluded throughout this IS/MND, the proposed Project would result in either no impact, less-than-significant impact, or a less-than-significant impact with mitigation incorporated with respect to all environmental impact areas outlined in the CEQA Guidelines Appendix G Environmental Checklist. Reasonably foreseeable projects have been incorporated into traffic, air quality, noise, and greenhouse gas studies, all of which have shown that impacts can be reduced to less than significant. Furthermore, no significant resources, such as cultural, geotechnical, or biotic, exist on the Project site and therefore no cumulative impact would occur. The proposed Project would detain and treat storm runoff from the proposed Project onsite; therefore, no cumulative impacts would occur.

Therefore, the proposed Project would not create individually limited but cumulatively considerable impacts. Impacts would be less than significant with mitigation incorporated.

c) Less than Significant with Mitigation. As evaluated throughout this document, the proposed Project would have no impact, less-than-significant impact, or a less-than-significant with mitigation incorporated with respect to all environmental impact areas. Therefore, the proposed Project would not directly or indirectly cause substantial adverse effects on human beings. Impacts would be less than significant with mitigation incorporated.

SECTION 6.0 MITIGATION MONITORING AND REPORTING PROGRAM

MITIGATION MONITORING AND REPORTING PROGRAM

PROJECT NAME: Aliso Creek Residential Development Project

PROJECT LOCATION: The Project site is located south of Pacific Park Drive, west of Aliso Creek Road, and north of Journey in the City of Aliso Viejo.

PROJECT DESCRIPTION: The Project proposes to construct 137 three-story for-sale attached residential, landscape, streets and drive aisles on approximately 8.44 acres. Two residential housing types are proposed, Three-Story Rowtowns and Three-Story Garden Courts.

LEAD AGENCY: City of Aliso Viejo
CONTACT PERSON/ TELEPHONE NO.: So Kim | 949.425.2527

APPLICANT: Shea Homes

CONTACT PERSON/ TELEPHONE NO.: Emilie Simard | 949.244.7172

No.	Mitigation Measure	Time Frame for Implementation	Responsible Agency/Party	Verification of Compliance		
				Initials	Date	Remarks
Air Quality						
PDF AQ-1	The project will follow the SCAQMD rules and requirements for fugitive dust control, which include, but are not limited to the following: 1. Pre-water active grading or trenching areas. 2. Water all active construction areas as frequently as needed (at least twice daily) to prevent visible dust plumes from extending more than 100 feet. 3. Maintain a stabilized surface or apply dust suppressants to inactive areas, disturbed	During Grading	Project Applicant/Project Contractor			

No.	Mitigation Measure	Time Frame for Implementation	Responsible Agency/Party	Verification of Compliance		
				Initials	Date	Remarks
	surfaces, staging areas, haul routes, and unpaved roads. 4. Limit on-site vehicle speeds to 15 mph on unpaved areas. 5. Maintain all haul trucks with covered loads and ≥6 inches of freeboard (CVC §23114). 6. Stabilize stockpiles with water or covers and restrict height if near occupied structures. 7. Use a gravel pad at egress points (minimum 30' x 50', 1" washed gravel, 6" depth), or alternatively a wheel shaker or wheel washing station. 8. Remove track-out extending ≥25 feet onto public roadways immediately and clean daily. 9. Suspend dust-generating activities and implement contingency measures during high wind events (wind gusts >25 mph). 10. Re-vegetate or stabilize disturbed areas within 21 days of inactivity. 11. Limit construction vehicle traffic to designated haul routes only.					
PDF AQ-2	Construction equipment shall be maintained in proper tune.	During Grading	Project Applicant/Project Contractor			
PDF AQ-3	All construction vehicles shall be prohibited from excessive idling. Excessive idling is defined as five (5) minutes or longer.	During Grading	Project Applicant/Project Contractor			
PDF AQ-4	Minimize the simultaneous operation of multiple construction equipment units, to the maximum extent feasible.	During Grading	Project Applicant/Project Contractor			

No.	Mitigation Measure	Time Frame for Implementation	Responsible Agency/Party	Verification of Compliance		
				Initials	Date	Remarks
PDF AQ-5	The use of heavy construction equipment and earthmoving activity shall be suspended during Air Alerts when the Air Quality Index reaches the "Unhealthy" level.	During Grading	Project Applicant/Project Contractor			
PDF AQ-6	Establish staging areas for the construction equipment that are as distant as possible from adjacent residential homes.	During Grading	Project Applicant/Project Contractor			
PDF AQ-7	Utilize zero VOC and low VOC paints and solvents, where feasible.	During Construction	Project Applicant/Project Contractor			
PDF AQ-8	The project will comply with the mandatory requirements of the California Building Standards Code, Title 24, Part 6 (Energy Code) and Part 11 (CALGreen), including, but not limited to: 1. Install low flow fixtures and toilets, water efficient irrigation systems, drought tolerant/native landscaping, and reduce the amount of turf. 2. Provide the necessary infrastructure to support electric vehicle charging. 3. Provide solar installations/solar readiness zones per the prescribed Energy Design Ratings.	During Construction	Project Applicant/Project Contractor			
PDF AQ-9	Participate in the local waste management recycling and composting programs.	During Grading	Project Applicant/Project Contractor			
MM AQ-1	All off-road diesel construction equipment over 100 horsepower will have Tier 4 low emission "clean diesel" engines (OEM or retrofit) that include diesel	During Grading	Project Applicant/Project Contractor			

No.	Mitigation Measure	Time Frame for Implementation	Responsible Agency/Party	Verification of Compliance		
				Initials	Date	Remarks
	oxidation catalysts and diesel particulate filters that meet the latest CARB best available control technology.					
Biological Resources						
MM BIO-1	Prior to ground disturbances that would impact potentially suitable nesting habitat for avian species, the Project Applicant shall adhere to the following: 1. Vegetation removal activities shall be scheduled outside the nesting season (September 1 to February 14 for songbirds; September 1 to January 14 for raptors) to the extent feasible to avoid potential impacts to nesting birds and/or ground nesters. 2. Any construction activities that occur during typical nesting season (February 15 to August 31 for songbirds; January 15 to August 31 for raptors) will require that all suitable habitat, on-site and within 300-feet surrounding the site (as feasible), be thoroughly surveyed for the presence of nesting birds by a qualified biologist before commencement ground disturbances. If active nests are identified, the biologist would establish buffers around the vegetation (500 feet for raptors and sensitive species, 200 feet for non-raptors/non-sensitive species). All work within these buffers would	Prior to Ground disturbance	Project Applicant/Project Biologist			

No.	Mitigation Measure	Time Frame for Implementation	Responsible Agency/Party	Verification of Compliance		
				Initials	Date	Remarks
	be halted until the nesting effort is finished (i.e. the juveniles are surviving independent from the nest). The onsite biologist would review and verify compliance with these nesting boundaries and would verify the nesting effort has finished. Work can resume within these areas when no other active nests are found. Alternatively, a qualified biologist may determine that construction can be permitted within the buffer areas and would develop a monitoring plan to prevent any impacts while the nest continues to be active (eggs, chicks, etc.). Upon completion of the survey and any follow-up construction avoidance management, a report shall be prepared and submitted to City for mitigation monitoring compliance record keeping. .					
Geology and Soils						
MM GEO-1	The Project Applicant shall implement the recommendations contained in the Preliminary Geotechnical Investigation and Review of Vesting Tentative Tract Map 19442, Proposed Residential Redevelopment, Aliso Viejo, California, dated November 25, 2025, by NMG Geotechnical, Inc. (Appendix D) to reduce geologic hazards during implementation of the proposed Project. Included in	During Grading	Project Geologist/ Public Works Department			

No.	Mitigation Measure	Time Frame for Implementation	Responsible Agency/Party	Verification of Compliance		
				Initials	Date	Remarks
	the reports are site-specific recommendations involving such topics as grading and earthwork, slope stability, retaining walls, seismic design, construction materials, geotechnical observation, and testing and plan reviews.					
MM GEO-2	Prior to the issuance of a grading permit, the Applicant shall prepare a final geotechnical report based on the final rough grading plans and the final geotechnical report shall incorporate all of the recommendations included in Preliminary Geotechnical Investigation and Review of Vesting Tentative Tract Map 19442, Proposed Residential Redevelopment, Aliso Viejo, California dated November 25, 2025, by NMG Geotechnical Inc (Appendix D). The geotechnical report included in Appendix D has established that the site is geotechnically suitable for development and a final geotechnical report is required to ensure all construction-level geotechnical recommendations and design parameters are included on the final rough grading plans.	Prior to Grading Permit	Project Geologist/ Public Works Department			
MM PALEO-1	Prior to the issuance of a grading permit, the Applicant shall prepare for City review and approval a Paleontological Mitigation Monitoring Plan, as follows: 1. All mitigation programs shall be performed by a qualified professional (Project) paleontologist, defined as an individual with a master's or doctorate in paleontology or geology who has proven experience and is	Prior to Grading	Project Applicant/Cultural Consultant			

No.	Mitigation Measure	Time Frame for Implementation	Responsible Agency/Party	Verification of Compliance		
				Initials	Date	Remarks
	knowledgeable in professional paleontological procedures and techniques. Fieldwork may be conducted by a qualified paleontological monitor, defined as an individual who has experience in the collection and salvage of fossil materials. The paleontological monitor shall always work under the direction of a qualified paleontologist. 2. Starting at one foot above the artificial fill/bedrock interface, full-time monitoring shall be conducted in areas of grading or excavation within the Niguel and Monterey formations. Monitoring of artificial fill or disturbed deposits that may be present otherwise is not required. 3. Paleontological monitors will be equipped to salvage fossils as they are unearthed to avoid construction delays. The monitor must be empowered to temporarily halt or divert equipment to allow for the removal of abundant or large specimens in a timely manner. Monitoring may be reduced if the potentially fossiliferous units are not present in the subsurface, or, if present, are determined upon exposure and examination by qualified paleontological personnel to have low					

No.	Mitigation Measure	Time Frame for Implementation	Responsible Agency/Party	Verification of Compliance		
				Initials	Date	Remarks
	potential to contain fossil resources. The monitor shall notify the project paleontologist, who will then notify any concerned parties of the discovery. 4. Paleontological salvage during trenching and boring activities is typically from the generated spoils and will not delay trenching or drilling activities. Fossils will be collected and placed in cardboard flats or plastic buckets and identified by field number, collector, and date collected. Before the site is vacated and the fossils are moved to a safe place, notes are taken on the map location and stratigraphy of the site. On mass grading projects, discovered fossil sites are protected by flagging to prevent them from being overrun by earthmovers (scrapers) before salvage begins. Fossils will be collected in a similar manner, with notes and photographs being taken before removing the fossils. Precise location of the site is determined through use of handheld Global Positioning System units. If a large terrestrial vertebrate, such as a large bone or a mammoth tusk, is too large to be easily removed by a single monitor, a fossil recovery crew shall excavate around the					

No.	Mitigation Measure	Time Frame for Implementation	Responsible Agency/Party	Verification of Compliance		
				Initials	Date	Remarks
	find(s), encase the find(s) within a plaster and burlap jacket, and remove the find(s) after the plaster is set. For large fossils, use of the contractor's construction equipment may be solicited to help move the jacket to a safe location. 5. In the laboratory, individual fossils will be cleaned of extraneous matrix, any breaks will be repaired, and the specimen, if needed, will be stabilized by soaking in an archivally approved acrylic hardener (e.g., a solution of acetone and Paraloid B-72). 6. Recovered specimens will be prepared to a point of identification and permanent preservation (not display), including screen-washing sediments to recover small invertebrates and vertebrates. Preparation of individual vertebrate fossils is often more time-consuming than for accumulations of invertebrate fossils. 7. Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage (e.g., the Orange County Parks' Cooper Center) shall be conducted. The					

No.	Mitigation Measure	Time Frame for Implementation	Responsible Agency/Party	Verification of Compliance		
				Initials	Date	Remarks
	paleontological program should include a written repository agreement prior to initiating mitigation activities. Prior to curation, the lead agency (the City of Aliso Viejo) will be consulted on the repository/museum to receive the fossil material. 8. A final report of findings and significance will be prepared, including lists of all fossils recovered and necessary maps and graphics to accurately record their original location(s). The report, when submitted to and accepted by the appropriate lead agency, will signify satisfactory completion of the project program to mitigate impacts to any potential nonrenewable paleontological resources (i.e., fossils) that might have been lost or otherwise adversely affected without such a program in place.					
Hydrology						
MM HYD-1	Prior to the issuance of building permits, the storm drain plans shall demonstrate that the storm drain pipes are sufficiently sized to capture and store storm runoff volume in the developed condition in order to discharge the storm runoff at or below the existing peak flow rate leaving the Project site.	Prior to Building Permits	Project Applicant/Project Engineer			
Tribal Cultural Resources						

No.	Mitigation Measure	Time Frame for Implementation	Responsible Agency/Party	Verification of Compliance		
				Initials	Date	Remarks
MM TRC-1	**Retain a Native American Monitor Prior to Commencement of Ground-Disturbing Activities.** The project applicant shall retain a Native American Monitor from or approved by the consulting tribe(s). The Monitor shall be retained prior to the commencement of any "ground-disturbing activity" for the subject project at all project locations (i.e., both onsite and any off-site locations included in the project description/definition and/or required in connection with the project, such as public improvement work). "Ground disturbing activity" shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching in areas of previously disturbed soil. A copy of the executed monitoring agreement shall be submitted to the Director of Community Development prior to the earlier date of either: (1) the commencement of any ground-disturbing activity, or (2) the issuance of any permit required to commence any ground-disturbing activity. The Monitor shall complete daily monitoring logs that will provide descriptions of the relevant ground-disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribes. Monitor logs shall identify	Prior to Grading Permit	Project Applicant/ Project Archaeologist/ Native American Monitor			

No.	Mitigation Measure	Time Frame for Implementation	Responsible Agency/Party	Verification of Compliance		
				Initials	Date	Remarks
	and describe any discovered Tribal Cultural Resources (TCRs), including, but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, Tribal Cultural Resources, or TCRs), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of Monitor logs shall be provided to the project applicant and the Director of Community Development upon written request to the Tribe. On-site Tribal monitoring shall conclude upon the latter of the following: (1) written confirmation to the Monitor and the Lead Agency that all ground-disturbing activities and phases that may involve ground-disturbing activities on the project site or in connection with the project are complete; or (2) a determination and written notification by the Monitor to the Director of Community Development that no future planned construction activity and/or development/construction phase at the project site possesses the potential to impact to TCRs.					
MM TRC-2	**Unanticipated Discovery of Tribal Cultural Resource Objects (Nonfunerary/Non-ceremonial).** Upon discovery of any Tribal Cultural Resources (TCRs), all construction activities in the immediate vicinity of the discovery (i.e., not less than the surrounding 50 feet) shall cease. The City shall consult with the project Archaeologist and initiate Native American consultation procedures with the project's consulting	Prior to Grading Permit	Project Applicant/ City/ Native American Monitor			

No.	Mitigation Measure	Time Frame for Implementation	Responsible Agency/Party	Verification of Compliance		
				Initials	Date	Remarks
	Tribes (Gabrieleño Band of Mission Indians-Kizh Nation and the Juaneño Band of Mission Indians, Acjachemen Nation). The consultation effort is intended to be a meaningful and timely process of seeking, discussing, and considering carefully the views of others in a manner that is cognizant of all parties' cultural values and, where feasible, seeking agreement on the appropriate treatment and disposition of TCRs discovered. A Cultural Resources and Monitoring and Treatment Plan shall be created by the Archaeologist in coordination with the consulting Tribes (Gabrieleño Band of Mission Indians-Kizh Nation and the Juaneño Band of Mission Indians, Acjachemen Nation) and all subsequent finds shall be subject to this plan. Project construction shall not resume within the immediate vicinity of the discovery (i.e., not less than the surrounding 50 feet) until a Cultural Resources and Monitoring Treatment Plan is prepared and implemented. The plan may include, but would not be limited to, reburying, relocating, recording, and/or another culturally appropriate treatment. If it is determined that mutual agreement cannot be reached within 30 days of the initial consultation meeting, the TCR(s) under review shall be reinterred on-site in a location free from future ground-disturbing construction activities. This measure does not apply to the finding of human remains, which must comply with California Health and Safety Code Section 7050.5.					

No.	Mitigation Measure	Time Frame for Implementation	Responsible Agency/Party	Verification of Compliance		
				Initials	Date	Remarks
MM TRC-3	**Unanticipated Discovery of Human Remains and Associated Funerary or Ceremonial Objects.** A. Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute. B. If Native American human remains and/or grave goods are discovered or recognized on the project site, then Public Resource Code 5097.9 as well as Health and Safety Code Section 7050.5 shall be followed. C. Human remains and grave/burial goods shall be treated alike per California Public Resources Code Section 5097.98(d)(1) and (2). D. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods. E. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.	During Grading	Project Applicant/ Project Archaeologist/ Native American Monitor			

Appendix A:

Pacific Park Drive Townhome Project Air Quality, Greenhouse Gas, and Energy Impact Study

Pacific Park Drive Townhome Project
Air Quality, Greenhouse Gas, and Energy Impact Study

Aliso Viejo, California
May 19, 2026

rkengineer.com

RK ENGINEERING GROUP INC.

Pacific Park Drive Townhome Project Air Quality, Greenhouse Gas, and Energy Impact Study

City of Aliso Viejo, California

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1.0 Introduction

1.1 Purpose of Report & Study Objectives

The purpose of this air quality, greenhouse gas (GHG), and energy impact study is to determine whether the estimated energy usage and criteria air pollutants and greenhouse gas emissions generated from the construction and operation of the Pacific Park Drive Townhome Project (hereinafter referred to as "project") would cause significant impacts to air resources.

This assessment was conducted within the context of the California Environmental Quality Act (CEQA, California Public Resources Code Sections 21000, et seq.). The methodology follows the California Air Resources Board (CARB), the SCAQMD, and City of Aliso Viejo recommendations for quantification of emissions and evaluation of potential impacts.

This study also evaluates the potential impact on energy conservation pursuant to CEQA Guidelines, Appendix F, Energy Conservation Analysis, and the use of renewable energy sources.

1.2 Site Location & Project Description

The proposed project site is generally located south of Pacific Park Drive, between Journey and Aliso Creek Road, in the City of Aliso Viejo. The project site is approximately 8.44 acres and is currently occupied by three (3) 2-story commercial office buildings and associated parking lots. **Exhibit A** shows the location map of the proposed project.

The proposed project consists of demolishing the existing commercial buildings and constructing 137 residential townhome dwelling units.

During construction, the project will demolish approximately 125,166 square feet of building area, 217,550 square feet of hardscape, and 41,200 square feet of landscaping. The project will require the import of approximately 5,700 cubic yards of earthwork material for grading purposes.

Exhibit B shows the proposed site plan used for this analysis. **Table 1-1** summarizes the land use assumptions used for this analysis.

Table 1-1 | Project Land Use Summary

Project Land Use	CalEEMod Land Use Category	Quantity	Metric[1]
Single-Family Attached Housing	Condo/Townhouse	137	DU
Onsite Paved Surfaces	Parking Lot	85	Spaces

[1] DU = Dwelling unit.
Spaces = Outdoor Parking Spaces

1.3 Sensitive Receptors

Sensitive receptors are considered land uses or other types of population groups that are more sensitive to air pollution exposure. Sensitive population groups include children, the elderly, the acutely and chronically ill, and those with cardio-respiratory diseases.

For CEQA purposes, the SCAQMD considers a sensitive receptor to be a location where a sensitive individual could remain for 24 hours or longer, such as residences, hospitals, and schools (etc.), as described in the Localized Significance Threshold Methodology (SCAQMD 2008a, page 3-2). There are several sensitive land uses adjacent to the project site, including the following.

A project site location map, including sensitive receptor locations, is provided in **Exhibit A**.

Receptor-1 Existing multifamily residential land uses located to the northeast of the project site. The nearest point of Receptor-1 (marked as circle "1" on **Exhibit A**) is located approximately 400 feet (~122 meters) northeast of the northeastern corner of the project site.

Receptor-2 Existing multifamily residential land uses located to the east of the project site. The point of Receptor-2 (marked as circle "2" on **Exhibit A**) is located approximately 210 feet (~64 meters) east of the project site's eastern boundary.

Receptor-3 Existing educational land uses located to the south of the project site, including the Preschool of Aliso Viejo and the Alive Church Orange County's daycare services. The nearest point of Receptor-3 (marked as circle "3" on **Exhibit A**) is located approximately 50 feet (~15 meters) south of the project site's southern boundary.

Receptor-4 Existing medical office land uses located to the west of the project site. The nearest point of Receptor-4 (marked as circle "4" on **Exhibit A**) is located approximately 80 feet (~24 meters) west of the project site's western boundary.

Receptor-5 Existing Orange County Fire Station 57 located to the west-northwest of the project site. The nearest point of Receptor-5 (marked as circle "5" on **Exhibit A**) is located directly adjacent to the project site's western boundary.

Receptor-6 Existing multifamily residential land uses located to the northwest of the project site. The nearest point of Receptor-6 (marked as circle "6" on **Exhibit A**) is located approximately 375 feet (~114 meters) northwest of the northwestern corner of the project site.

For conservative localized analysis purposes, sensitive receptors are considered to be approximately 25 meters from the project site.

1.4 Summary of Analysis Results

Table 1-2 provides a summary of the CEQA air quality impact analysis results.

Table 1-2 | CEQA Air Quality Impact Criteria

Air Quality Impact Criteria	Potentially Significant	Potentially Significant Unless Mitigated	Less Than Significant	No Impact
Would the project:				
a) Conflict with, or obstruct the implementation of, the applicable air quality plan?			X	
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable Federal or State ambient air quality standard?			X	
c) Expose sensitive receptors to substantial pollutant concentrations?			X	
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?			X	

Table 1-3 provides a summary of the CEQA GHG impact criteria analysis results.

Table 1-3 | CEQA GHG Impact Criteria

Greenhouse Gas Impact Criteria	Potentially Significant	Potentially Significant Unless Mitigated	Less Than Significant	No Impact
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of greenhouse gases?			X	

Table 1-4 provides a summary of the CEQA energy impact criteria analysis results.

Table 1-4 | CEQA Energy Impact Criteria

Energy Impact Criteria	Potentially Significant	Potentially Significant Unless Mitigated	Less Than Significant	No Impact
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			X	
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing emissions of greenhouse gases?			X	

1.5 Recommended Mitigation Measure (MM)

The following mitigation measure is recommended to ensure that project-generated noise levels do not exceed the applicable thresholds at adjacent sensitive receptors.

MM AQ-1 All diesel construction equipment over 100 horsepower will have Tier 4 low emission "clean diesel" engines (OEM or retrofit) that include diesel oxidation catalysts and diesel particulate filters that meet the latest CARB best available control technology.

Legend

(1) = Sensitive Receptor Location

= Project Site Boundary

Exhibit A

Location Map

Exhibit B

Site Plan

2.0 Air Quality Setting

The Federal Clean Air Act (§ 7602) defines air pollution as any agent or combination of such agents, including any physical, chemical, biological, or radioactive substance which is emitted into or otherwise enters the ambient air. Household combustion devices, motor vehicles, industrial facilities and forest fires are common sources of air pollution. Air pollution can cause disease, allergies and death. It affects soil, water, crops, vegetation, manmade materials, animals, wildlife, weather, visibility, and climate. It can also cause damage to and deterioration of property, present hazards to transportation, and negatively impact the economy.

This section provides background information on criteria air pollutants, the applicable federal, state and local regulations concerning air pollution, and the existing physical setting of the project within the context of local air quality.

2.1 Description of Air Pollutants

The following section describes the air pollutants of concern related to the project. Criteria air pollutants are defined as those pollutants for which the federal and state governments have established air quality standards for outdoor or ambient concentrations to protect public health. The following descriptions of criteria air pollutants have been provided by the SCAQMD.

- **Carbon Monoxide (CO)** is a colorless, odorless, toxic gas produced by incomplete combustion of carbon-containing fuels (e.g., gasoline, diesel fuel, and biomass). Sources include motor vehicle exhaust, industrial processes (metals processing and chemical manufacturing), residential wood burning, and natural sources. CO is somewhat soluble in water; therefore, rainfall and fog can suppress CO conditions. CO enters the body through the lungs, dissolves in the blood, and competes with oxygen, often replacing it in the blood, thus reducing the blood's ability to transport oxygen to vital organs in the body. The ambient air quality standard for carbon monoxide is intended to protect persons whose medical condition already compromises their circulatory system's ability to deliver oxygen. These medical conditions include certain heart ailments, chronic lung diseases, and anemia. Persons with these conditions have reduced exercise capacity even when exposed to relatively low levels of CO. Fetuses are at risk because their blood has an even greater affinity to bind with CO. Smokers are also at risk from ambient CO levels because smoking increases the background level of CO in their blood. The South Coast basin has recently achieved attainment status for carbon monoxide by both USEPA and CARB.

- **Nitrogen Dioxide (NO_2)** is a byproduct of fuel combustion. The principal form of nitrogen oxide produced by combustion is nitric oxide (NO), but NO reacts quickly to form NO_2, creating the mixture of NO and NO_2 commonly called NO_x. NO_2 acts as an acute irritant and, in equal concentrations, is more injurious than NO. At atmospheric concentrations, however, NO_2 is only potentially irritating. There is some indication of a relationship between NO_2 and chronic pulmonary fibrosis. Some increase in bronchitis in young

children has also been observed at concentrations below 0.3 parts per million (ppm). NO_2 absorbs blue light which results in a brownish red cast to the atmosphere and reduced visibility. Although NO_2 concentrations have not exceeded national standards since 1991 and the state hourly standard since 1993, NO_x emissions remain of concern because of their contribution to the formation of O_3 and particulate matter.

- **Ozone (O_3)** is one of a number of substances called photochemical oxidants that are formed when volatile organic compounds (VOC) and NO_x react in the presence of ultraviolet sunlight. O_3 concentrations in the South Coast basin are typically among the highest in the nation, and the damaging effects of photochemical smog, which is a popular name for a number of oxidants in combination, are generally related to the concentrations of O_3. Individuals exercising outdoors, children, and people with preexisting lung disease, such as asthma and chronic pulmonary lung disease, are considered to be the subgroups most susceptible to O_3 effects. Short-term exposures (lasting for a few hours) to O_3 at levels typically observed in southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes. In recent years, a correlation between elevated ambient O_3 levels and increases in daily hospital admission rates, as well as mortality, has also been reported. The South Coast Air Basin is designated by the USEPA as an extreme non-attainment area for ozone. Although O_3 concentrations have declined substantially since the early 1990s, the South Coast basin continues to have peak O_3 levels that exceed both state and federal standards.

- **Fine Particulate Matter (PM_{10})** consists of extremely small suspended particles or droplets 10 microns or smaller in diameter that can lodge in the lungs, contributing to respiratory problems. PM_{10} arises from such sources as re-entrained road dust, diesel soot, combustion products, tire and brake abrasion, construction operations, and fires. It is also formed in the atmosphere from NO_x and SO_2 reactions with ammonia. PM_{10} scatters light and significantly reduces visibility. Inhalable particulates pose a serious health hazard, alone or in combination with other pollutants. More than half of the smallest particles inhaled will be deposited in the lungs and can cause permanent lung damage. Inhalable particulates can also have a damaging effect on health by interfering with the body's mechanism for clearing the respiratory tract or by acting as a carrier of an absorbed toxic substance. The South Coast basin has recently achieved federal attainment status for PM_{10}, but is non-attainment based on state requirements.

- **Ultra-Fine Particulate Matter ($PM_{2.5}$)** is defined as particulate matter with a diameter less than 2.5 microns and is a subset of PM_{10}. $PM_{2.5}$ consists mostly of products from the reaction of NO_x and SO_2 with ammonia, secondary organics, finer dust particles, and the combustion of fuels, including diesel soot. $PM_{2.5}$ can cause exacerbation of symptoms in sensitive patients with respiratory or cardiovascular disease, declines in pulmonary function growth in children, and increased risk of premature death from heart or lung diseases in the elderly. Daily fluctuations in $PM_{2.5}$ levels have been related to hospital admissions for acute

respiratory conditions, school absences, and increased medication use in children and adults with asthma. The South Coast basin is designated as non-attainment for $PM_{2.5}$ by both federal and state standards.

- **Sulfur Dioxide (SO_2)** is a colorless, pungent gas formed primarily by the combustion of sulfur-containing fossil fuels. Health effects include acute respiratory symptoms and difficulty in breathing for children. Individuals with asthma may experience constriction of airways with exposure to SO_2. Though SO_2 concentrations have been reduced to levels well below state and federal standards, further reductions in SO_2 emissions are needed because SO_2 is a precursor to sulfate and PM_{10}. The South Coast basin is considered a SO_2 attainment area by USEPA and CARB.

- **Lead (Pb)** is a toxic heavy metal that can be emitted into the air through some industrial processes, burning of leaded gasoline and past use of lead-based consumer products. Lead is a neurotoxin that accumulates in soft tissues and bones, damages the nervous system, and causes blood disorders. It is particularly problematic in children, in that permanent brain damage may result, even if blood levels are promptly normalized with treatment. Concentrations of lead once exceeded the state and federal air quality standards by a wide margin, but as a result of the removal of lead from motor vehicle gasoline, ambient air quality standards for lead have not been exceeded since 1982. Though special monitoring sites immediately downwind of lead sources recorded localized violations of the state standard in 1994, no violations have been recorded since. Consequently, the South Coast basin is designated as an attainment area for lead by both the USEPA and CARB. This report does not analyze lead emissions from the project, as it is not expected to emit lead in any significant measurable quantity.

- **Volatile Organic Compounds (VOCs)**, although not actually a criteria air pollutant, VOCs are regulated by the SCAQMD because they cause chemical reactions which contribute to the formation of ozone. VOCs are also transformed into organic aerosols in the atmosphere, contributing to higher PM_{10} and lower visibility levels. Sources of VOCs include combustion engines, and evaporative emissions associated with fuel, paints and solvents, asphalt paving, and the use of household consumer products such as aerosols. Although health-based standards have not been established for VOCs, health effects can occur from exposures to high concentrations of VOC. Some hydrocarbon components classified as VOC emissions are hazardous air pollutants. Benzene, for example, is a hydrocarbon component of VOC emissions that are known to be a human carcinogen. The term reactive organic gases (ROG) are often used interchangeably with VOC.

- **Toxic Air Contaminants (TACs)** are defined as air pollutants which may cause or contribute to an increase in mortality or serious illness, or which may pose a hazard to human health, and for which there is no concentration that does not present some risk. This contrasts with the criteria pollutants, in that there is no threshold level for TAC exposure below which adverse health impacts are not expected to occur. The majority of the

estimated health risk from TACs can be attributed to a relatively few compounds, the most common being diesel particulate matter (DPM) from diesel engine exhaust. In addition to DPM, benzene and 1,3-butadiene are also significant contributors to overall ambient public health risk in California.

2.2 Federal and State Ambient Air Quality Standards

The Federal Clean Air Act, which was last amended in 1990, requires the EPA to set National Ambient Air Quality Standards (NAAQS) for criteria pollutants considered harmful to public health and the environment. The State of California has also established additional and more stringent California Ambient Air Quality Standards (CAAQS) in addition to the seven criteria pollutants designated by the federal government.

AAQS are designed to protect the health and welfare of the populace with a reasonable margin of safety. The standards are divided into two categories, primary standards and secondary standards. Primary standards are implemented to provide protection for the "sensitive" populations such as those with asthma, or the children and elderly. Secondary standards are to provide protection against visible pollution as well as damage to the surrounding environment, including animals, crops, and buildings.

Table 2-1 shows the Federal and State Ambient Air Quality Standards.

Table 2-1 | Federal and State Ambient Air Quality Standards (AAQS)[1]

Air Pollutant	Averaging Time[2]	Federal Standard (NAAQS)[2]	California Standard (CAAQS)[2]
Ozone	1 Hour	--	0.09 ppm
	8 Hour	0.07 ppm	0.07 ppm
Carbon Monoxide (CO)	1 Hour	35 ppm	20 ppm
	8 Hour	9 ppm	9 ppm
Nitrogen Dioxide (NO_2)	1 Hour	0.100 ppm	0.18 ppm
	Annual	0.053 ppm	0.030 ppm
Sulfur Dioxide (SO_2)	1 Hour	0.075 ppm	0.25 ppm
	3 Hour	0.5 ppm[3]	--
	24 Hour	0.14 ppm	0.04 ppm
Fine Particulate Matter (PM_{10})	24 Hour	150 µg/m^3	50 µg/m^3
	Annual Mean	--	20 µg/m^3
Ultra-Fine Particulate Matter ($PM_{2.5}$)	24 Hour	35 µg/m^3	--
	Annual Mean	9.0 µg/m^3	12.0 µg/m^3
Lead (Pb)	30 Day Average	--	1.5 µg/m^3
	Calendar Quarter	1.5 µg/m^3	--
	Rolling 3 Month Average	0.15 µg/m^3	--
Visibility Reducing Particles	8 Hour	--	0.23/km extinction coefficient (10-mile visibility standard)
Sulfates	24 Hour	--	25 µg/m^3
Hydrogen Sulfide	1 Hour	--	0.03 µg/m^3
Vinyl Chloride	24 Hour	--	0.01 ppm

[1] Source: CARB. https://ww2.arb.ca.gov/sites/default/files/2024-08/AAQS%20Table_ADA_FINAL_07222024.pdf.
[2] ppm = parts per million of air by volume.
µg/m^3 = micrograms per cubic meter.
[3] Secondary standards.

Several pollutants listed in **Table 2-1** are not addressed in this analysis. Lead is not included because the project is not anticipated to emit lead. Visibility-reducing particles are not explicitly addressed in this analysis because particulate matter is addressed. The project is not expected to generate or be

exposed to vinyl chloride because proposed project uses do not utilize the chemical processes that create this pollutant and there are no such uses in the project vicinity. The proposed project is not expected to cause exposure to hydrogen sulfide because it would not generate hydrogen sulfide in any substantial quantity.

2.3 Attainment Status

The Clean Air Act requires states to prepare a State Implementation Plan (SIP) to ensure air quality meets the NAAQS. The California Air Resources Board (CARB) provides designations of attainment for air basins where AAQS are either met or exceeded. If the AAQS are met, the area is designated as being in "attainment", if the air pollutant concentrations exceed the AAQS, then the area is designated as being "nonattainment". If there is inadequate or inconclusive data to make a definitive attainment designation, the area is considered "unclassified."

National nonattainment areas are further designated as marginal, moderate, serious, severe, or extreme as a function of deviation from standards. Each standard has a different definition, or 'form' of what constitutes attainment, based on specific air quality statistics. For example, the Federal 8-hour CO standard is not to be exceeded more than once per year; therefore, an area is in attainment of the CO standard if no more than one 8-hour ambient air monitoring values exceeds the threshold per year. In contrast, the federal annual $PM_{2.5}$ standard is met if the three-year average of the annual average $PM_{2.5}$ concentration is less than or equal to the standard.

When a state submits a request to the EPA to re-designate a nonattainment area to attainment, the Clean Air Act (CAA) section 175A(a) requires that the state (or states, if the area is a multi-state area) submit a maintenance plan ensuring the area can maintain the air quality standard for which the area is to be re-designated for at least 10 years following the effective date of re-designation. **Table 2-2** lists the attainment status for the criteria pollutants in the South Coast Air Basin (SCAB).

Table 2-2 | South Coast Air Basin Attainment Status[1]

Pollutant	State Status	National Status
Ozone	Nonattainment	Nonattainment (Extreme)[2]
Carbon Monoxide	Attainment	Attainment (Maintenance)
Nitrogen Dioxide	Attainment	Attainment (Maintenance)
PM_{10}	Nonattainment	Attainment (Maintenance)
$PM_{2.5}$	Nonattainment	Nonattainment
Lead	Attainment	Nonattainment (Partial)[3]

[1] Source: CARB. https://ww2.arb.ca.gov/resources/documents/maps-state-and-federal-area-designations.
[2] 8-Hour Ozone.
[3] Partial Nonattainment designation for Los Angeles County portion of Basin only.

2.4 South Coast Air Quality Management District (SCAQMD)

The agency responsible for air pollution control for the South Coast Air Basin (SCAB) is the South Coast Air Quality Management District (SCAQMD). SCAQMD is responsible for controlling emissions primarily from stationary sources. SCAQMD maintains air quality monitoring stations throughout the SCAB. SCAQMD, in coordination with the Southern California Association of Governments, is also responsible for developing, updating, and implementing the Air Quality Management Plan (AQMP) for the SCAB. An AQMP is a plan prepared and implemented by an air pollution district for a county or region designated as nonattainment of the federal and/or California ambient air quality standards. The term nonattainment area is used to refer to an air basin where one or more ambient air quality standards are exceeded.

The latest version is the 2022 AQMP, adopted in December 2022. The 2022 AQMP is a regional blueprint for achieving the federal air quality standards and healthful air. While air quality has dramatically improved over the years, the SCAB still exceeds federal public health standards for both ozone and particulate matter (PM) and experiences some of the worst air pollution in the nation. The 2022 AQMP includes both stationary and mobile source strategies to ensure that rapidly approaching attainment deadlines are met, that public health is protected to the maximum extent feasible, and that the region is not faced with burdensome sanctions if the Plan is not approved or if the NAAQS are not met on time.

According to the 2022 AQMP, the most significant air quality challenge in the SCAB is to reduce nitrogen oxide (NO_x) emissions sufficiently to meet the upcoming ozone standard deadlines. Based

on the inventory and modeling results, the 2022 AQMP projects that 184 tons per day (tpd) of NO_x will be emitted in the year 2037 as a result of continued implementation of already adopted regulatory actions ("baseline emissions"). The analysis suggests that in order to meet the ozone standard of 60 tpd, NO_x emissions need to be reduced about 67 percent beyond the projected 2037 baseline emissions and about 83 percent below current levels[1].

2.4.1 SCAQMD Rules and Regulations

The SCAQMD establishes a program of rules and regulations to obtain attainment of the state and federal standards in conjunction with the AQMP. Several of the rules and regulations that may be applicable to this project include, but are not limited to, the following:

- **SCAQMD Rule 402** prohibits a person from discharging from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

- **SCAQMD Rule 403** governs emissions of fugitive dust during construction and operation activities. Compliance with this rule is achieved through application of standard Best Management Practices, such as application of water or chemical stabilizers to disturbed soils, covering haul vehicles, restricting vehicle speeds on unpaved roads to 15 miles per hour, sweeping loose dirt from paved site access roadways, cessation of construction activity when winds exceed 25 mph, and establishing a permanent ground cover on finished sites.

- **SCAQMD Rule 445** restricts wood burning devices from being installed into any new development and is intended to reduce the emissions of particulate matter for wood burning devices.

- **SCAQMD Rule 1113** governs the sale, use, and manufacturing of architectural coating and limits the VOC content in paints and paint solvents. This rule regulates the VOC content of paints available during construction. Therefore, all paints and solvents used during construction and operation of project must comply with Rule 1113.

- **SCAQMD Rule 1143** governs the manufacture, sale, and use of paint thinners and solvents used in thinning of coating materials, cleaning of coating application equipment, and other solvent cleaning operations by limiting their VOC content. This rule regulates the VOC content of solvents used during construction. Solvents used during the construction phase must comply with this rule.

[1] Source: South Coast Air Quality Management District. *2022 Air Quality Management Plan*. Adopted December 2, 2022.

- **SCAQMD Rule 1186** limits the presence of fugitive dust on paved and unpaved roads and sets certification protocols and requirements for street sweepers that are under contract to provide sweeping services to any federal, state, county, agency or special district such as water, air, sanitation, transit, or school district.

The proposed project would be required to comply with the above South Coast Air Quality Management District rules and regulations, as well as all applicable federal, state, regional, and local regulations related to air quality. The following list summarizes applicable regulatory compliance requirements for the project. The project actions listed below represent standard regulatory compliance obligations and are not considered mitigation measures.

1. During construction, the project will follow the SCAQMD rules and requirements for fugitive dust control, including the following:
    - Pre-water active grading or trenching areas.
    - Water all active construction areas as frequently as needed (at least twice daily) to prevent visible dust plumes from extending more than 100 feet.
    - Maintain a stabilized surface or apply dust suppressants to inactive areas, disturbed surfaces, staging areas, haul routes, and unpaved roads.
    - Limit on-site vehicle speeds to 15 mph on unpaved areas.
    - Maintain all haul trucks with covered loads and ≥6 inches of freeboard (CVC §23114).
    - Stabilize stockpiles with water or covers and restrict height if near occupied structures.
    - Use a gravel pad at egress points (minimum 30' x 50', 1" washed gravel, 6" depth), or alternatively a wheel shaker or wheel washing station.
    - Remove track-out extending ≥25 feet onto public roadways immediately and clean daily.
    - Suspend dust-generating activities and implement contingency measures during high wind events (wind gusts >25 mph).
    - Re-vegetate or stabilize disturbed areas within 21 days of inactivity.
    - Limit construction vehicle traffic to designated haul routes only.
2. The project will utilize low-VOC or zero-VOC paints, coatings, and solvents consistent with the requirements of SCAQMD Rules 1113 and 1143.

2.5 Local Climate and Meteorology

The weather station closest to the project site is the National Weather Service Cooperative – Laguna Beach, CA (044647) station. Climatological data from the National Weather Service at this station is summarized in **Table 2-3**.

Table 2-3 | Meteorological Summary[1]

Month	Temperature (°F)			Mean Precipitation (inches)
	Max.	Min.	Mean	
January	65.1	43.0	54.1	2.43
February	66.1	44.1	55.1	2.77
March	67.1	45.8	56.5	2.01
April	69.0	48.4	58.7	0.98
May	70.9	53.0	62.0	0.25
June	73.1	56.1	64.6	0.10
July	76.5	59.3	67.9	0.03
August	78.1	59.6	68.9	0.07
September	77.5	58.2	67.9	0.26
October	74.5	53.7	64.1	0.47
November	70.4	47.5	59.0	1.24
December	66.1	43.4	54.8	1.92
Annual	**71.2**	**51.0**	**61.1**	**12.52**

[1] Source: Western Regional Climate Center. Averages derived from measurements recorded between 1928 and 2016 at Laguna Beach, CA (044647).

2.6 Local Air Quality

The air quality at any site is dependent on the regional air quality and local pollutant sources. Regional air quality is determined by the release of pollutants throughout the air basin.

The SCAQMD has divided the SCAB into fourteen general forecasting areas and thirty-eight Source Receptor Areas (SRAs) for monitoring and reporting local air quality. The SCAQMD provides daily reports of the current air quality conditions in each general forecast area and SRA. The monitoring areas provide a general representation of the local meteorological, terrain, and air quality conditions within the SCAB.

The project is located within the Coastal general forecasting area and Central Orange County Coastal air monitoring area (SRA-20). The SCAQMD has not published air quality monitoring data for SRA-20. Therefore, pollutant data for the most recent three-year period is derived from the nearest adjacent stations available (i.e., Saddleback Valley/SRA-19 and Central Orange County/SRA-17). These pollutant levels were used to comprise a "background" for the project location and existing local air quality.

Table 2-4 | Local Air Quality[1]

Air Pollutant Location	Averaging Time	Item[2]	2022	2023	2024
Carbon Monoxide -- Saddleback Valley	1 Hour	Max 1-Hour (ppm)	1.2	--	--
		Exceeded State Standard (20 ppm)	No	--	--
		Exceeded National Standard (35 ppm)	No	--	--
	8 Hour	Max 8 Hour (ppm)	1.0	--	--
		Days > State Standard (9 ppm)	No	--	--
		Days >National Standard (9 ppm)	No	--	--
Ozone -- Saddleback Valley	1 Hour	Max 1-Hour (ppm)	0.110	--	--
		Days > State Standard (0.09 ppm)	1.0	--	--
	8 Hour	Max 8 Hour (ppm)	0.088	--	--
		Days > State Standard (0.070 ppm)	6	--	--
		Days >National Standard (0.070 ppm)	5	--	--
Nitrogen Dioxide -- Central Orange County	1 Hour	Max 1-Hour (ppm)	0.053	0.051	0.053
		Exceeded State Standard (0.18 ppm)	No	No	No
	Annual	Annual Average (ppm)	0.012	0.011	0.011
		Exceeded State Standard (0.030 ppm)	No	No	No
		Exceeded National Standard (0.053 ppm)	No	No	No
Sulfur Dioxide -- Saddleback Valley	1 Hour	Max 1 Hour (ppm)	--	--	--
		Exceeded State Standard (0.25 ppm)	--	--	--
		Exceeded National Standard (0.075 ppm)	--	--	--
PM10 -- Central Orange County	24 Hour	Max 24-Hour (µg/m³)	--	146	118
		Days > State Standard (50 µg/m³)	--	7	6
		Days >National Standard (150 µg/m³)	--	0	0 (0%)
	Annual	Annual Average (µg/m³)	--	24.00	26.50
		Exceeded State Standard (20 µg/m³)	--	Yes	Yes
PM2.5 -- Central Orange County	24 Hour	Max 24-Hour (µg/m³)	--	33.20	49.70
		Days >National Standard (35 µg/m³)	--	0	4
	Annual	Annual Average (µg/m³)	--	9.07	10.31
		Exceeded State Standard (12 µg/m³)	--	No	No
		Exceeded National Standard (15 µg/m³)	--	No	No

[1] Source: https://www.aqmd.gov/home/air-quality/historical-air-quality-data/historical-data-by-year.

[2] ppm = parts per million.
µg/m³ = micrograms per cubic meter.

3.0 Global Climate Change Setting

Global climate change is the change in the average weather of the earth that is measured by such things as alterations in temperature, wind patterns, storms, and precipitation. Current data shows that the recent period of warming is occurring more rapidly than past geological events. The average global surface temperature has increased by approximately 1.4° Fahrenheit since the early 20th Century. 1.4° Fahrenheit may seem like a small change, but it's an unusual event in Earth's recent history, and as we are seeing, even small changes in temperature can cause enormous changes in the environment.

The planet's climate record, preserved in tree rings, ice cores, and coral reefs, shows that the global average temperature has been stable over long periods of time. For example, at the end of the last ice age, when the Northeast United States was covered by more than 3,000 feet of ice, average global temperatures were only 5° to 9° Fahrenheit cooler than today. The Intergovernmental Panel on Climate Change (IPCC), which includes more than 1,300 scientists from the United States and other countries, forecasts a temperature rise of 2.5° to 10° Fahrenheit over the next century. Therefore, significant changes to the environment are expected in the near future.

The consequences of global climate change include more frequent and severe weather, worsening air pollution by increasing ground level ozone, higher rates of plant and animal extinction, more acidic and oxygen depleted oceans, strain on food and water resources, and threats to densely populated coastal and low-lying areas from sea level rise.

The impacts of climate change are already visible in the Southwest United States. In California, the consequences of climate change include:

- A rise in sea levels resulting in the displacement of coastal businesses and residencies;
- A reduction in the quality and supply of water from the Sierra snowpack;
- Increased risk of large wildfires;
- Exacerbation of air quality problems;
- Reductions in the quality and quantity of agricultural products;
- An increased temperature and extreme weather events; and
- A decrease in the health and productivity of California's forests.

3.1 Greenhouse Gases (GHGs)

GHGs comprise less than 0.1 percent of the total atmospheric composition, yet they play an essential role in influencing climate. Greenhouse gases include naturally occurring compounds such as carbon

dioxide (CO_2), methane (CH_4), water vapor (H_2O), and nitrous oxide (N_2O), while others are synthetic. Man-made GHGs include the chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs) and Perfluorocarbons (PFCs), as well as sulfur hexafluoride (SF_6). Different GHGs have different effects on the Earth's warming. GHGs differ from each other in their ability to absorb energy (their "radiative efficiency") and how long they stay in the atmosphere, also known as the "lifetime".

The Global Warming Potential (GWP) was developed to allow comparisons of the global warming impacts of different gases. Specifically, it is a measure of how much energy the emissions of 1 ton of a gas will absorb over a given period of time, relative to the emissions of 1 ton of CO_2. The larger the GWP, the more that a given gas warms the Earth compared to CO_2 over that time period. The time period usually used for GWPs is 100 years. GWPs provide a common unit of measure, which allows analysts to add up emissions estimates of different gases and allows policymakers to compare emissions reduction opportunities across sectors and gases.

Table 3-1 lists the 100-year GWP of GHGs from the Intergovernmental Panel on Climate Change (IPCC) fifth assessment report (AR5) and IPCC sixth (6th) assessment report (AR6).

Table 3-1 | Global Warming Potential of Greenhouse Gases[1, 2]

Gas Name	Formula	Lifetime (Years)	GWP
Carbon Dioxide	CO_2	--	1
Methane	CH_4 (Fossil Origin)	12	29.8
	CH_4 (Non-Fossil Origin)		27.2
Nitrous Oxide	N_2O	114	273
Sulphur Hexafluoride	SF_6	3200	23,500
Nitrogen Trifluoride	NF_3	740	16,100
Chlorofluorocarbon (CFC-11)	CFC-11	52	8,321
Hexafluoroethane (PFC-116)	C_2F_6	10,000	11,100
Octafluoropropane (PFC-218)	C_3F_8	2,600	8,900
Octafluorocyclobutane (PFC-318)	C_4F_8	3,200	9,540
Tetrafluoromethane (PFC-14)	CF_4	50,000	5,301
Hydrofluorocarbon 125	HFC-125	29	3,170
Hydrofluorocarbon 134a	HFC-134a	14	1,526
Hydrofluorocarbon 143a	HFC-143a	52	4,800
Hydrofluorocarbon 152a	HFC-152a	1	138
Hydrofluorocarbon 227ea	HFC-227ea	34	3,350
Hydrofluorocarbon 23	HFC-23	270	12,400
Hydrofluorocarbon 236fa	HFC-236fa	240	8,060
Hydrofluorocarbon 245fa	HFC-245fa	8	858
Hydrofluorocarbon 32	HFC-32	5	771
Hydrofluorocarbon 365mfc	HFC-365mfc	9	804
Hydrofluorocarbon 43-10mee	HFC-43-10mee	16	1,650

[1] Source: IPCC Sixth Assessment Report (AR6). https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Full_Report.pdf and https://www.ipcc.ch/site/assets/uploads/2018/02/WG1AR5_Chapter08_FINAL.pdf.

[2] GWPs are used to convert GHG emission values to "carbon dioxide equivalent" (CO_2e) units.

3.2 GHG Regulatory Setting – State of California

The State of California has been a leader in climate change legislation and has passed numerous bills to reduce greenhouse gas emissions across all sectors of the economy. Some of the key climate legislation and regulation in the State include the following:

- **Assembly Bill (AB) 32, California Global Warming Solutions Act of 2006.** AB 32 set the stage for the State's transition to a sustainable, low-carbon future. AB 32 was the first program in the country to take a comprehensive, long-term approach to addressing climate change.
- **Senate Bill (SB) 375, Sustainable Communities & Climate Protection Act of 2008.** SB 375 requires the Air Resources Board to develop regional greenhouse gas emission reduction targets for passenger vehicles GHG reduction targets for 2020 and 2035 for each region covered by the State's 18 metropolitan planning organizations.
- **Senate Bill (SB) 100, California Renewables Portfolio Standard Program.** SB 100 established a landmark policy requiring renewable energy and zero-carbon resources supply 100 percent of electric retail sales to end-use customers by 2045.
- **California Building Standards Code – Title 24.** The California Building Standards Code Title 24 Part 6 (Energy Code) and Title 24 Part 11 (CALGreen) requires multiple building provisions to reduce energy usage and GHG emissions and is updated on a triennial basis.

3.3 GHG Emissions Inventory

Table 3-2 shows the latest GHG emission inventories at the national, state, regional, and local levels.

Table 3-2 | GHG Emissions Inventory [1]

United States (2019)[2]	State of California (2019)[3]	SCAG (2020)[4]
6,558 $MMTCO_2e$	418 $MMTCO_2e$	216.4 $MMTCO_2e$

[1] MMTCO2e = million metric tons of carbon dioxide equivalents.
[2] https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks.
[3] Source: California Air Resources Board (CARB). *Current California GHG Emission Inventory Data.* https://ww2.arb.ca.gov/ghg-inventory-data.
[4] SCAG – Regional GHG Inventory and Reference Case Projections, 1990 – 2035. May 30, 2012. http://www.scag.ca.gov/programs/Pages/GreenhouseGases.aspx.

4.0 Modeling Parameters and Assumptions

The California Emissions Estimator Model Version 2022.1.1 (CalEEMod) was used to calculate criteria air pollutants and GHG emissions from the construction and operation of the project. CalEEMod is a statewide land use emissions computer model designed to provide a uniform platform for government agencies, land use planners, and environmental professionals to quantify criteria air pollutant and GHG emissions.

The model quantifies direct emissions from construction and operation activities (including vehicle use), as well as indirect emissions, such as GHG emissions from off-site energy generation, solid waste disposal, vegetation planting and/or removal, and water use. The model also identifies design features to reduce criteria pollutant and GHG emissions. The model was developed for the California Air Pollution Control Officers Association (CAPCOA) in collaboration with the California air districts.

4.1 Construction Assumptions

Construction of the project is estimated to begin in the year 2026. Construction activities are expected to consist of demolition, site preparation, grading, building construction, paving, and architectural coating. The project will require the import of up to 5,700 net cubic yards of earthwork material for grading purposes. For the purposes of this analysis, construction phases are not expected to overlap.

The CalEEMod default construction equipment list is based on survey data and the size of the site. The parameters used to estimate construction emissions, such as the worker and vendor trips and trip lengths, utilize the CalEEMod defaults.

Construction-related emissions were modeled using the default CalEEMod construction equipment list. However, all excavators included in the default equipment mix were replaced in the model with crawler tractors to better reflect anticipated construction activities. In addition, two scrapers were added to the grading phase of construction to account for the expected earthmoving requirements of the project. The construction equipment list used in the model is shown in **Table 4-1**.

The project will be required to comply with several standard fugitive dust control measures, per SCAQMD Rule 403. The following key inputs are utilized in CalEEMod and are based upon data provided from SCAQMD:

- Water exposed area – 61% PM10 and PM2.5 reduction.
- Water unpaved roads twice daily – 55% PM10 and PM2.5 reduction.
- Limit vehicle speeds on unpaved roads to 25 mph – 44% PM10 and PM2.5 reduction.
- Sweep paved roads once per month – 9% PM10 and PM2.5 reduction.

Table 4-1 | Construction Equipment Assumptions [1]

Phase	Equipment	Number	Hours Per Day	Soil Disturbance Rate (Acres/8-Hour Day)	Off-Road Equipment Daily Disturbance Footprint (Acres)	Total Daily Disturbance Footprint (Acres)
Demolition	Rubber Tired Dozers	2	8	0.50	1.00	2.50
	Concrete/Industrial Saws	1	8	0.00	0.00	
	Crawler Tractors	3	8	0.50	1.50	
Site Preparation	Rubber Tired Dozers	3	8	0.50	1.50	1.50
	Tractors/Loaders/Backhoes	4	8	0.00	0.00	
Grading	Graders	1	8	0.50	0.50	3.50
	Tractors/Loaders/Backhoes	3	8	0.00	0.00	
	Rubber Tired Dozers	1	8	0.50	0.50	
	Crawler Tractors	1	8	0.50	0.50	
	Scrapers	2	8	1.00	2.00	
Building Construction	Forklifts	3	8	0.00	0.00	0.00
	Generator Sets	1	8	0.00	0.00	
	Cranes	1	7	0.00	0.00	
	Welders	1	8	0.00	0.00	
	Tractors/Loaders/Backhoes	3	7	0.00	0.00	
Paving	Pavers	2	8	0.00	0.00	0.00
	Paving Equipment	2	8	0.00	0.00	
	Rollers	2	8	0.00	0.00	
Architectural Coating	Air Compressors	1	6	0.00	0.00	0.00

[1] CalEEMod defaults.

4.2 Localized Construction Analysis Modeling Parameters

CalEEMod calculates construction emissions based on the number of equipment hours and the maximum daily disturbance activity possible for each piece of equipment. This report identifies the

following parameters in the project design or applicable mitigation measures in order to compare CalEEMod reported emissions against the localized significance threshold lookup tables:

1. The off-road equipment list (including type of equipment, horsepower, and hours of operation) assumed for the day of construction activity with maximum emissions.
2. The maximum number of acres disturbed on the peak day.
3. Any emission control devices added onto off-road equipment.
4. Specific dust suppression techniques used on the day of construction activity with maximum emissions.

4.3 Operational Assumptions

Operational emissions occur over the life of the project and are considered "long-term" sources of emissions. Operational emissions include both direct and indirect sources. This section briefly describes the operational sources of emissions analyzed for the project.

4.3.1 Mobile Source Emissions

Mobile source emissions are the largest source of long-term air pollutants from the operation of the project. Mobile sources are direct sources of project emissions that are primarily attributed to tailpipe exhaust and road dust (tire, brake, clutch, and road surface wear) from motor vehicles traveling to and from the site.

Estimates of mobile source emissions require information on four parameters: trip generation, trip length, vehicle/fleet mix, and emission factors (quantity of emission for each mile traveled or time spent idling by each vehicle).

The trip generation rates used for this analysis are based on the *Institute of Transportation Engineers (ITE) Trip Generation Manual, 11th Edition*. The proposed project consists of constructing 137 townhome dwelling units. As such, ITE Land Use 215: Single-Family Attached Housing accurately reflects the proposed project land use. For trip lengths, the CalEEMod defaults are used.

The Emission Factors (EMFAC2021) 2021 model and off-model adjustments factors to account for the SAFE Vehicle Rule is used to estimate the mobile source emissions are embedded in the CalEEMod emissions model. No adjustments have been made to default emission factors.

The project's total vehicle miles traveled is shown in **Table 4-2**.

Table 4-2 | Operational Vehicle Miles Traveled [1]

Land Use	Annual Home-Based Vehicle Miles Traveled (VMT)
Condo/Townhouse	4,002,671

[1] CalEEMod defaults.

To be conservative, this analysis has assumed that 2% of the total trips associated with the project will be heavy trucks with a gross vehicle weight rating (GVWR) of 10,000 pounds or greater. This includes LHD2, MHD, HHD, OBUS, UBUS, and SBUS vehicles. The adjusted vehicle mix is proportioned according to the default CalEEMod vehicle mix.

Table 4-3 summarizes the adjusted vehicle mix used for the project.

Table 4-3 | Operational Vehicle Mix [1]

Vehicle Type	Vehicle Mix
Light Duty Automobile (LDA)	50.19%
Light Duty Truck (LDTI)	4.06%
Light Duty Truck (LDT2)	23.94%
Medium Duty Truck (MDV)	14.74%
Light Heavy Truck (LHD1)	2.82%
Light Heavy Truck (LHD2)	0.43%
Medium Heavy Truck (MHD)	0.91%
Heavy Heavy Truck (HHD)	0.34%
Other Bus (OBUS)	0.04%
Urban Bus (UBUS)	0.02%
Motorcycle (MCY)	2.25%
School Bus (SBUS)	0.06%
Motor Home (MH)	0.21%
Total	**100.00%**

[1] Adjusted fleet mix to include 2% total trucks over 10,000 lbs. GVWR (LHD2, MHD, HHD, OBUS, UBUS, SBUS, MH).

4.3.2 Energy Source Emissions

Energy usage includes both direct and indirect sources of emissions. Direct sources of emissions include on-site energy usage, while indirect emissions include electricity generated by offsite power plants. The proposed project will be powered exclusively by electricity, with no use of natural gas. As a result, this analysis evaluates all project-related energy consumption solely in terms of electricity usage.

CalEEMod divides building electricity use into uses that are subject to Title 24 standards and those that are not. Lighting electricity usage is also calculated as a separate category in CalEEMod. For electricity, Title 24 uses include the major building envelope systems covered by Part 6 (California Energy Code) of Title 24, such as space heating, space cooling, water heating, and ventilation. Non-Title 24 uses include all other end uses, such as appliances, electronics, and other miscellaneous plug-in uses. Because some lighting is not considered as part of the building envelope energy budget, and since a separate mitigation measure is applicable to this end use, CalEEMod makes lighting a separate category.

The baseline values are based on the California Energy Commission (CEC) sponsored California Commercial End Use Survey (CEUS) and Residential Appliance Saturation Survey (RASS) studies.

The project will be required to provide on-site renewable energy photovoltaic installations (solar panels), as prescribed by the 2022 Building Energy Efficiency Standards for Residential and Nonresidential Buildings.

In order to assess the project's future energy usage, RK has performed a quantitative energy impact analysis using CEQA energy impact criteria. The energy impact analysis is provided in **Section 8.0** of this report.

4.3.3 Area Source Emissions

Area source emissions are direct sources of emissions that fall under four categories: hearths, consumer products, architectural coatings, and landscaping equipment. Per SCAQMD Rule 445, no wood burning devices are allowed in new developments; therefore, no wood hearths are included in this project.

Consumer products are various solvents used in non-industrial applications which emit ROGs during their product use. These typically include cleaning supplies, kitchen aerosols, cosmetics, and toiletries.

4.3.4 Other Sources of Operational Emissions

- **Water.** Greenhouse gas emissions are generated from the upstream energy required to supply and treat the water used on the project site. Indirect emissions from water usage are counted as part of the project's overall impact.

- **Waste.** CalEEMod calculates the indirect GHG emissions associated with waste that is disposed of at a landfill. The program uses annual waste disposal rates from the California Department of Resources Recycling and Recovery (CalRecycle) data for individual land uses. The program quantifies the GHG emissions associated with the decomposition of the waste which generates methane based on the total amount of degradable organic carbon.

The project's estimated water usage and waste generation is reported in **Table 4-4**.

Table 4-4 | Operational Water Usage and Waste Generation [1]

Land Use	Water Usage (gallons/yr)			Waste Generation (tons/yr)
	Indoor	Outdoor	Total	
Condo/Townhouse	5,141,014.05	2,018,073.99	7,159,088.04	101.24
Parking Lot	--	--	--	--
Total	**5,141,014.05**	**2,018,073.99**	**7,159,088.04**	**101.24**

[1] CalEEMod defaults.

5.0 Significance Thresholds

5.1 Air Quality Regional Significance Thresholds

The SCAQMD has established air quality emissions thresholds for criteria air pollutants for the purposes of determining whether a project may have a significant effect on the environment per Section 15002(g) of the Guidelines for implementing CEQA. By complying with the thresholds of significance, the project would be in compliance with the SCAQMD Air Quality Management Plan (AQMP) and the federal and state air quality standards.

Table 5-1 lists the air quality significance thresholds for the six air pollutants analyzed in this report. Lead is not included as part of this analysis as the project is not expected to emit lead in any significant measurable quantity.

Table 5-1 | SCAQMD Regional Significance Thresholds[1]

Pollutant	Construction (lbs/day)	Operation (lbs/day)
NO_X	100	55
VOC	75	55
PM_{10}	150	150
$PM_{2.5}$	55	55
SO_X	150	150
CO	550	550

[1] Source: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf.

5.2 Air Quality Localized Significance Thresholds

Air quality emissions were analyzed using the SCAQMD's Mass Rate Localized Significance Threshold (LST) Look-up Tables.

Table 5-2 lists the Localized Significance Thresholds (LST) used to determine whether a project may generate significant adverse localized air quality impacts. LSTs represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standard. LSTs are developed based on the ambient concentrations of four applicable air pollutants for SRA-20 (Central Orange County Coastal).

The nearest existing sensitive receptor is located to the south of the project site, at a distance of approximately 15 meters. Although receptors are located closer than 25 meters to the site, SCAQMD

LST methodology states that projects with boundaries located closer than 25 meters to the nearest receptor should use the LSTs for receptors located at 25 meters.

The daily disturbance area during construction is calculated to be 3.5 acres, however, LST thresholds are only based on 1, 2, and 5-acre sites. To be conservative, a linear trend was used to estimate the construction thresholds for 3.5-acre sites based on the established LST thresholds.

The proposed project site is approximately 8.44 acres. Therefore, the operational LST thresholds for 5-acre sites have been utilized

Table 5-2 | SCAQMD Localized Significance Thresholds (LSTs)

Pollutant	Construction (lbs/day)[1]	Operation (lbs/day)[2]
NO_X	161.1	197.0
CO	1,325.2	1,711.0
PM_{10}	10.4	4.0
$PM_{2.5}$	6.9	2.0

[1] Source: SCAQMD Mass Rate Localized Significance Thresholds for 3.5 acres/day in SRA-20 at 25 meters.
[2] Source: SCAQMD Mass Rate Localized Significance Thresholds for 5 acres/day in SRA-20 at 25 meters.

5.3 GHG Significance Thresholds

5.3.1 SCAQMD GHG Interim Significance Thresholds

The SCAQMD has published the Interim CEQA Greenhouse Gas (GHG) Significance Thresholds, December 2008, to assist local agencies with determining the impact of a project's GHG emissions. SCAQMD's objective in providing the GHG guidelines is to establish a performance standard that will ultimately contribute to reducing GHG emissions below 1990 levels, and thus achieve the requirements of the California Global Warming Solutions Act (AB 32).

In the absence of a formal threshold established by the State, SCAQMD's interim GHG threshold has been established for use by lead agencies in determining significance of GHG emissions in CEQA. SCAQMD guidance describes a five-tiered approach for determining significance. Tier 3 is the primary method used for development projects of this size and is the approach used in this analysis. The Tier 3 approach limits the amount of GHG emissions from residential and commercial development projects to 3,000 metric tons of CO2 equivalents per year (MTCO2e/yr).

If the project exceeds 3,000 MTCO2e/yr, then the impact is considered significant, and mitigation measures would be required to reduce emissions below the threshold.

6.0 Air Quality Impact Analysis

6.1 Short-Term Air Quality Impacts – Construction

6.1.1 Regional Emissions – Construction

Regional air quality emissions include both on-site and off-site emissions associated with construction of the project. As shown in **Table 6-1**, regional daily emissions of criteria pollutants are expected to be below the allowable thresholds of significance.

CalEEMod emissions outputs are provided in **Appendix A**.

Table 6-1 | Regional Construction Emissions

Activity	Maximum Daily Emissions (lbs./day)[1]					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Demolition	3.03	39.34	30.00	0.11	13.66	3.57
Site Preparation	3.20	29.22	29.60	0.05	9.14	5.14
Grading	3.33	32.10	32.11	0.08	6.01	2.89
Building Construction	1.41	10.69	18.04	0.03	1.80	0.69
Paving	1.04	6.99	10.59	0.01	0.49	0.32
Architectural Coating	46.83	0.89	1.96	0.00	0.28	0.08
Maximum[1]	**46.83**	**39.34**	**32.11**	**0.11**	**13.66**	**5.14**
SCAQMD Threshold	75	100	550	150	150	55
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

[1] Maximum daily emissions during summer or winter; includes both onsite and offsite project emissions.

The project must follow mandatory SCAQMD rules and requirements with regards to fugitive dust control, as described in **Section 6.1.3**.

Table 6-1 shows that the project's daily construction emissions will be below the applicable SCAQMD air quality standards and thresholds of significance. As a result, the project would not contribute substantially to an existing or projected air quality violation.

Furthermore, by complying with the SCAQMD standards, the project would not contribute to a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

Therefore, the project's short-term construction impact on regional air resources will be less than significant.

6.1.2 Localized Emissions – Construction

Table 6-2 illustrates the construction-related localized emissions and compares the results to SCAQMD LST thresholds. As shown in **Table 6-2**, the emissions will be below the SCAQMD thresholds of significance for localized construction emissions. The project must follow all standard SCAQMD rules and requirements with regards to fugitive dust control, as described in **Section 6.1.3**.

Therefore, the project's short-term construction impact on localized air resources will be less than significant.

Table 6-2 | Localized Construction Emissions

Activity	Maximum Daily Emissions (lbs./day)[1]			
	NO_X	CO	PM_{10}	$PM_{2.5}$
On-site Emissions	29.16	29.90	10.35	5.08
SCAQMD Construction Threshold[2]	161.1	1,325.2	10.4	6.9
Exceeds Threshold?	**No**	**No**	**No**	**No**

[1] Maximum daily emissions during summer or winter; includes both onsite and offsite project emissions.
[2] Source: SCAQMD Mass Rate Localized Significance Thresholds for 3.5 acres/day in SRA-20 at 25 meters.

6.1.3 Fugitive Dust – Construction

The Project is required to comply with standard SCAQMD rules that assist in reducing short-term air pollutant emissions associated with suspended particulate matter, also known as fugitive dust. Fugitive dust emissions are commonly associated with land clearing activities, cut-and-fill grading operations, and exposure of soils to the air and wind. SCAQMD Rule 403 requires that fugitive dust is controlled with best-available control measures so that the presence of such dust does not remain visible in the atmosphere beyond the property line of the emission source. In addition, SCAQMD Rules 402 and 403 require implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off site.

6.1.4 Odors – Construction

Heavy-duty equipment in the project area during construction will emit odors; however, the construction activity would cease to occur after individual construction is completed. The project is required to comply with Rule 402 during construction, which states that a person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which

endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. No other sources of objectionable odors have been identified for the proposed Project.

Therefore, the project impact from odor emissions will be less than significant.

6.1.5 Asbestos – Construction

Asbestos is a carcinogen and is categorized as a hazardous air pollutant by the Environmental Protection Agency (EPA) and regulated through the National Emissions Standards for Hazardous Air Pollutants (NESHAP). Asbestos fibers imbedded within construction materials become a health hazard once they are disturbed and rendered airborne, such as through physical contact like building renovation and demolition activities.

SCAQMD is the local enforcement authority for asbestos. SCAQMD Rule 1403 establishes the survey requirements, notification, and work practices to prevent asbestos emissions from emanating during building renovation and demolition activities. The project proposes to demolish the existing buildings and hardscape on the project site during construction. Compliance with Rule 1403 will ensure that the project does not result in asbestos emissions that would adversely affect a substantial number of people.

Asbestos also occurs naturally in serpentine and ultramafic rock. Based on the California Division of Mines and Geology General Location Guide for Ultramafic Rocks in California - Areas More Likely to Contain Naturally Occurring Asbestos, naturally occurring asbestos has not been shown to occur within in the vicinity of the project site. Therefore, the potential risk for naturally occurring asbestos (NOA) during project construction is small. However, in the event NOA is found on the site, the project will be required to comply with SCAQMD and NESHAP standards.

By following the required asbestos abatement protocols, the project impact will be less than significant.

6.1.6 Diesel Particulate Matter – Construction

The project will generate diesel particulate matter (DPM) during construction from off-road diesel equipment and trucks. The California Office of Environmental Health Hazard Assessment (OEHHA) adopted the Guidance Manual for Preparation of Health Risk Assessments (HRA Guidelines) to provide procedures for use in the Air Toxics Hot Spots Program or for the permitting of existing, new, or modified stationary sources[2].

[2] OEHHA. Air Toxics Hot Spots Program. Risk Assessment Guidelines. Guidance for Preparation of Health Risk Assessments. February 2015.

The HRA Guidelines provide risk factors based on exposure to toxic substances over a 30-year lifetime span. The proposed project's construction activity is not expected to be a long-term (i.e., 30 years) source of toxic air contaminant emissions and short-term risk factors have not been developed. Due to the significantly reduced risk from short-term exposure, SCAQMD does not typically require the evaluation of long-term cancer risk or chronic health impacts for construction operations from a project such as the one being proposed.

The following mitigation measure will reduce diesel exhaust emissions and are recommended to be included as part of the conditions of approval. With the recommended mitigation measure, the potential DPM exposure to adjacent sensitive receptors is considered less than significant.

MM AQ-1 All diesel construction equipment over 100 horsepower will have Tier 4 low emission "clean diesel" engines (OEM or retrofit) that include diesel oxidation catalysts and diesel particulate filters that meet the latest CARB best available control technology.

6.2 Long-Term Air Quality Impacts – Operation

6.2.1 Regional Emissions – Operation

Long-term unmitigated operational air pollutant impacts from the project are shown in **Table 6-3**. CalEEMod emissions outputs are provided in **Appendix A**.

The project's daily unmitigated operational emissions will be below the applicable SCAQMD regional air quality standards and thresholds of significance, and the project would not contribute substantially to an existing or projected air quality violation. Furthermore, by complying with the SCAQMD standards, the project would not contribute to a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

Therefore, the project's long-term regional air quality impacts will be less than significant.

Table 6-3 | Regional Operational Emissions

Activity	Maximum Daily Emissions (lbs./day)[1]					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
Mobile Sources	3.67	2.82	34.84	0.09	9.19	2.36
Area Sources	4.19	2.35	8.74	0.01	0.19	0.19
Energy Sources	0.04	0.71	0.30	0.00	0.06	0.06
Total	**7.90**	**5.88**	**43.88**	**0.10**	**9.44**	**2.61**
SCAQMD Threshold	55	55	550	150	150	55
Exceeds Threshold?	**No**	**No**	**No**	**No**	**No**	**No**

[1] Maximum daily emissions during summer or winter; includes both onsite and offsite project emissions.

6.2.2 Localized Emissions – Operations

Table 6-4 shows the localized operational emissions and compares the results to SCAQMD LST thresholds of significance. As shown in **Table 6-4**, the emissions will be below the SCAQMD thresholds of significance for localized operational emissions.

Therefore, the project's long-term localized air quality impacts will be less than significant.

Table 6-4 | Localized Operational Emissions

Activity	Maximum Daily Emissions (lbs./day)[1]			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Onsite Emissions	4.41	10.79	0.70	0.36
SCAQMD Localized Threshold[2]	197.0	1,711.0	4.0	2.0
Exceeds Threshold?	**No**	**No**	**No**	**No**

[1] Maximum daily emissions during summer or winter.

[2] Source: SCAQMD Mass Rate Localized Significance Thresholds for 5 acres/day in SRA-20 at 25 meters.

6.2.3 Odors – Operation

Land uses that commonly receive odor complaints include agricultural uses (farming and livestock), chemical plants, composting operations, dairies, fiberglass molding facilities, food processing plants, landfills, refineries, rail yards, and wastewater treatment plants. The proposed residential project does not contain land uses that would typically be associated with significant odor emissions.

The project will be required to comply with standard building code requirements related to exhaust ventilation, as well as comply with SCAQMD Rule 402. Rule 402 requires that a person may not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property. Project related odors are not expected to meet the criteria of being a nuisance.

Therefore, the project's operation would result in less than significant odor impacts.

6.2.4 Toxic Air Contaminants – Operations

The proposed project consists of residential land use and does not include major sources of toxic air contaminants (TAC) emissions that would result in significant exposure of sensitive receptors to substantial pollutant concentrations. Examples of land uses that are major sources of TACs include distribution centers with heavy truck traffic, rail yards, ports, refineries, chrome plating facilities, dry cleaners, and gasoline dispensing stations. The project does not include any of these uses, **hence the project impact is considered less than significant.**

6.3 SCAQMD Air Quality Management Plan Consistency

The purpose of this discussion is to evaluate the proposed project's consistency with the assumptions, growth projections, and control measures set forth in the 2022 South Coast Air Quality Management District (SCAQMD) Air Quality Management Plan (AQMP). The 2022 AQMP serves as the regional attainment plan for achieving and maintaining the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) within the South Coast Air Basin. Accordingly, this analysis evaluates whether the proposed project would interfere with the AQMP's attainment strategy for federal and state air quality standards.

The SCAQMD CEQA Air Quality Handbook states that new or amended General Plan Elements, including land use zoning and density amendments, Specific Plans, and significant projects must be analyzed for consistency with the AQMP. Full conformity with every individual control measure in the AQMP is not required for a project-level consistency determination. Rather, a project is considered consistent if it does not conflict with or obstruct implementation of the AQMP control strategy and does not undermine the attainment demonstrations for applicable ambient air quality standards.

The SCAQMD CEQA Air Quality Handbook identifies two key indicators of consistency:

1. Whether the project will result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations or delay timely attainment of air quality standards or the interim emission reductions specified in the AQMP.

2. Whether the project will exceed the assumptions in the AQMP in 2016 or increments based on the year of project buildout and phase.

Consistency with the AQMP is evaluated below using these indicators.

6.3.1 Criterion 1 – Increase in the Frequency or Severity of Violations

Construction and operational emissions associated with the proposed project were quantified and compared to the SCAQMD regional and localized significance thresholds. As shown in the sections above, the project's short-term construction emissions and long-term operational emissions would not exceed applicable SCAQMD regional mass emission thresholds for criteria pollutants. In addition, localized significance thresholds would not be exceeded at nearby sensitive receptors.

SCAQMD's regional thresholds are designed to identify projects whose emissions would be cumulatively considerable and could interfere with attainment of the National Ambient Air Quality Standards (NAAQS) or California Ambient Air Quality Standards (CAAQS). Because the proposed project's emissions would remain below the applicable regional significance thresholds, project-related emissions would not be cumulatively considerable and would not contribute to an exceedance of an ambient air quality standard.

Accordingly, the proposed project would not increase the frequency or severity of existing violations, cause or contribute to new violations of the NAAQS or CAAQS, or delay timely attainment of applicable air quality standards as demonstrated in the 2022 AQMP. The project therefore would not conflict with or obstruct implementation of the AQMP attainment strategy and is consistent with Criterion 1 of the SCAQMD CEQA Air Quality Handbook.

6.3.2 Criterion 2 – Exceed Assumptions in the AQMP

The 2022 AQMP relies on regional population, housing, and employment growth forecasts prepared by the Southern California Association of Governments (SCAG) in its adopted Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). These regional forecasts form the basis of the AQMP's future year emissions inventories and attainment demonstrations for the NAAQS and CAAQS. The AQMP growth projections are developed at the regional level and are not based on parcel-specific land use designations. The AQMP incorporates projected increases in population, housing, and employment within the South Coast Air Basin consistent with SCAG regional forecasts.

The proposed project includes a General Plan Amendment and Zone Change to allow residential development on a site that is currently designated for Professional Office land uses. While the existing land use designation differs from the proposed residential use, the AQMP does not allocate growth at the parcel level. Therefore, a change in land use designation at a specific site does not indicate inconsistency with the AQMP, provided that overall regional growth assumptions are not exceeded.

As a result, project consistency with this criterion is demonstrated by evaluating whether the population growth associated with the project would be consistent with the growth projections incorporated into the RTP/SCS and AQMP, as well as by evaluating whether the project would generate emissions that exceed the SCAQMD regional mass emission thresholds for criteria pollutants.

The proposed project consists of constructing 137 residential dwelling units. Based on default CalEEMod occupancy rates, the project would result in an increase of approximately 408 residents. SCAG's 2024 RTP/SCS projects that the County of Orange's population will increase from approximately 3,188,000 in the year 2020 to approximately 3,439,000 by the year 2050, reflecting an increase of approximately 251,000 residents over the planning horizon. Per the City of Aliso Viejo Housing Element, the City had a population of approximately 50,044 in the year 2020. The addition of approximately 408 residents would represent approximately 0.16 percent of the total projected County population growth through 2050, and an approximately 0.82 percent increase in the City of Aliso Viejo's 2020 population. In this context, the addition of approximately 408 residents represents a small increment of growth relative to the demographic increases assumed in the RTP/SCS and incorporated into the 2022 AQMP.

Furthermore, as discussed in **Section 6** above, regional emissions generated by the project would not exceed the SCAQMD regional mass emission thresholds for criteria air pollutants. In addition, project-generated emissions would not be cumulatively considerable and would not interfere with attainment of the NAAQS or CAAQS.

Therefore, the proposed project would not exceed the growth assumptions used in the 2022 AQMP and would not conflict with or obstruct implementation of the AQMP attainment strategy. As such, the proposed project is consistent with Criterion 2 of the SCAQMD CEQA Air Quality Handbook.

7.0 Greenhouse Gas Impact Analysis

7.1 Greenhouse Gas Emissions – Construction

Greenhouse gas emissions are estimated for on-site and off-site construction activity using CalEEMod. **Table 7-1** shows the construction greenhouse gas emissions, including equipment and worker vehicle emissions for all phases of construction.

CalEEMod GHG output calculations are provided in **Appendix A**.

Table 7-1 | Construction Greenhouse Gas Emissions

Activity	Emissions ($MTCO_2e$)[1]		
	Onsite	Offsite	Total
Demolition	64.49	190.71	255.20
Site Preparation	24.11	1.01	25.12
Grading	63.31	25.58	88.89
Building Construction	250.94	177.85	428.79
Paving	13.76	1.70	15.46
Architectural Coating	1.22	2.22	3.44
Total	**417.82**	**399.07**	**816.90**
Amortized Over 30 Years[2]	**13.93**	**13.30**	**27.23**

[1] $MTCO_2e$ = metric tons of carbon dioxide equivalents (includes carbon dioxide, methane, nitrous oxide, and/or hydrofluorocarbons).

[2] The emissions are amortized over 30 years and added to the operational emissions, pursuant to SCAQMD recommendations.

Because impacts from construction activities occur over a relatively short period of time, they contribute a relatively small portion of the overall lifetime project GHG emissions. Therefore, the SCAQMD recommends assessing construction GHG impacts by amortizing emissions over a 30-year project lifetime and adding them to the overall project operational emissions. Pursuant to SCAQMD recommendations, this study assesses construction related GHG emissions along with the project's operational emissions, as further discussed in the section below.

7.2 Greenhouse Gas Emissions – Operations

Greenhouse gas emissions are estimated for on-site and off-site operational activity using CalEEMod. **Table 7-2** shows the project's operational greenhouse gas emissions, along with the project's amortized construction emissions.

Appendix A provides the CalEEMod emissions outputs for this study.

Table 7-2 | Operational Greenhouse Gas Emissions

Emission Source	Unmitigated GHG Emissions ($MTCO_2e/yr.$)[1]
Mobile Source	1,284.00
Area Source	35.11
Energy Source	322.02
Water	19.25
Waste	31.61
Refrigerant	0.17
Construction (30-year amortization)	27.23
Total Annual Emissions	**1,719.39**
SCAQMD Tier 3 Significance Threshold	3,000
Exceeds Threshold?	**No**

[1] $MTCO_2e/yr.$ = metric tons of carbon dioxide equivalents per year.

As shown in **Table 7-2**, the proposed project's GHG emissions are not expected to exceed the SCAQMD GHG emissions threshold of 3,000 $MTCO_2e$.

Additionally, the project will comply with the mandatory requirements of the California Building Standards Code, Title 24, Part 6 (Energy Code) and Part 11 (CALGreen), including, but not limited to:

- Install low flow fixtures and toilets, water efficient irrigation systems, drought tolerant/native landscaping, and reduce the amount of turf.
- Provide the necessary infrastructure to support electric vehicle charging.
- Provide solar installations/solar readiness zones per the prescribed Energy Design Ratings.

The project will also participate in the standard local waste management recycling and composting programs that will help further lower the project's GHG impact.

Therefore, the proposed project's impact from GHG emissions will be less than significant.

8.0 Energy Impact Analysis

8.1 Study Objectives

The purpose of this energy conservation analysis is to review the energy implications of the proposed project and provide recommendations to reduce wasteful, inefficient, and unnecessary consumption of energy during the operation of the project. This analysis has been prepared within the context of the California Environmental Quality Act (CEQA, California Public Resources Code Sections 21000, et seq.).

CEQA Guidelines, Appendix F, Energy Conservation, describes the framework within which energy conservation should be analyzed. Conserving energy implies the wise and efficient use of energy through decreasing overall per capita energy consumption, decreasing reliance on fossil fuels (such as coal, natural gas, and oil), and increasing reliance on renewable energy sources.

8.2 Utility Providers

The proposed project would be served by the utility providers shown in **Table 8-1** below.

Table 8-1 | Utility Providers

Utility	Provider
Electricity	Southern California Edison
Natural Gas	Southern California Gas Company

8.3 Project Energy Consumption

The three (3) main types of energy expected to be consumed by the project include electricity, natural gas, and petroleum products in the form of gasoline and diesel fuel. CalEEMod is used to calculate energy usage associated with the construction and operation of the project.

The CalEEMod calculation sheets for the project are provided in **Appendix A**. The EMFAC2025 vehicle fuel consumption data used for this analysis is provided in **Appendix B**.

8.3.1 Electricity Consumption

The project will use electricity for operational activities including, but not limited to, building heating and cooling, lighting, appliances, electronics, mechanical equipment, and parking lot lighting. Indirect electricity usage will also be required to supply, distribute, and treat water and wastewater. Electricity will be provided to the site by Southern California Edison.

Temporary electricity usage for construction activities may include lighting, electric equipment, and mobile office uses. However, CalEEMod does not calculate electricity usage during construction. Electricity usage during construction is expected to be short-term and relatively minor compared to the operational demand. Therefore, construction-related electricity usage is not included in this analysis.

Table 8-2 shows the project's estimated operational electricity consumption in kilowatt-hours per year (kWh/yr) and millions of BTU per year (MMBTU/yr).

Table 8-2 | Project Electricity Consumption[1]

Land Use/Activity	Electricity Consumption	
	(KWh/yr.)[2]	(MMBTU/yr.)[3]
Condo/Townhouse	565,721.60	1,930.24
Parking Lot	76,317.12	260.39
Water Supply and Treatment	48,731.91	166.27
Total	**690,770.63**	**2,356.90**

[1] CalEEMod defaults.
[2] KWHr/yr. = kilowatt hours per year.
[3] MMBTU/yr. = million British Thermal Units per year.

8.3.2 Natural Gas Consumption

The project will use natural gas for such things as building heating and cooling and gas water heaters. Natural gas is not expected to be used during construction in any significant quantities and is not included in the overall calculation of the project's natural gas consumption.

Table 8-3 shows the project's estimated operational natural gas consumption in MMBTU/yr.

Table 8-3 | Project Natural Gas Consumption[1]

Land Use/Activity	Natural Gas Consumption (MMBTU/yr.)[2]
Condo/Townhouse	2,817.37
Parking Lot	--
Total	**2,817.37**

[1] CalEEMod defaults.
[2] MMBTU/yr. = million British Thermal Units per year.

8.3.3 Petroleum Consumption

The project's energy consumption from petroleum products is primarily associated with transportation-related activities. This includes gasoline and diesel fuel usage for auto and truck trips during construction and operation and off-road equipment usage during construction.

8.3.3.1 Petroleum Consumption – Construction

Construction of the project is expected to consist of demolition, site preparation, grading, building construction, paving, and architectural coating phases. Construction activities will consume energy in the form of motor vehicle fuel (gasoline and diesel) for off-road construction equipment and on-road vehicle trips. Vehicle trips include workers and vendors traveling to and from the project site.

Table 8-4 and **Table 8-5** show the project's energy consumption for all off-road and on-road equipment during construction, respectively. For the purposes of this analysis, all off-road equipment is assumed to run on diesel fuel.

Table 8-4 | Construction Off-Road Equipment Energy Consumption

Phase[1]	Phase Duration (Days)[1]	Equipment[1]	Amount[1]	Hrs./Day[1]	Horsepower (HP)[1]	Load Factor[1]	HP-hrs.[2]	Fuel Consumption Rate (HP-hrs./gal.)[3]	Diesel Fuel Consumption (Gal.)	Diesel Fuel Consumption by Phase (Gal.)	MMBTU[4]
Demolition	35	Rubber Tired Dozers	2	8	367	0.40	82,208.00	18.5	4,443.68	6,506.90	893.92
		Concrete/Industrial Saws	1	8	33	0.73	6,745.20		364.61		
		Crawler Tractors	3	8	87	0.43	31,424.40		1,698.62		
Site Preparation	10	Rubber Tired Dozers	3	8	367	0.40	35,232.00		1,904.43	2,442.03	335.49
		Tractors/Loaders/Backhoes	4	8	84	0.37	9,945.60		537.60		
Grading	20	Graders	1	8	148	0.41	9,708.80		524.80	6,436.41	884.24
		Tractors/Loaders/Backhoes	3	8	84	0.37	14,918.40		806.40		
		Rubber Tired Dozers	1	8	367	0.40	23,488.00		1,269.62		
		Crawler Tractors	1	8	87	0.43	5,985.60		323.55		
		Scrapers	2	8	423	0.48	64,972.80		3,512.04		
Building Construction	230	Forklifts	3	8	82	0.20	90,528.00		4,893.41	25,359.30	3,483.89
		Generator Sets	1	8	14	0.74	19,062.40		1,030.40		
		Cranes	1	7	367	0.29	171,352.30		9,262.29		
		Welders	1	8	46	0.45	38,088.00		2,058.81		
		Tractors/Loaders/Backhoes	3	7	84	0.37	150,116.40		8,114.40		
Paving	20	Pavers	2	8	81	0.42	10,886.40		588.45	1,379.29	189.49
		Paving Equipment	2	8	89	0.36	10,252.80		554.21		
		Rollers	2	8	36	0.38	4,377.60		236.63		
Architectural Coating	20	Air Compressors	1	6	37	0.48	2,131.20		115.20	115.20	15.83
								Total Energy Requirements		**42,239.13**	**5,802.86**

[1] CalEEMod defaults.
[2] HP-hrs. = Horsepower hours.
[3] Source: Carl Moyer Program Guidelines. 2017 Revisions. Table D-21. https://www.arb.ca.gov/msprog/moyer/guidelines/current.htm.
[4] MMBTU = Millions of BTU, assuming 1 gallon of diesel fuel = 137,381 BTU.

Table 8-5 | Construction On-Road Equipment Energy Consumption

Phase[1]	Phase Duration (Days)[1]	Trips per Day[1]	Trip Length	Phase VMT	Vehicle Class[1]	Vehicle Mix[1]	Average Fuel Economy (MPG)[2]	Gasoline			Diesel			Total MMBTU[3]
								Fuel Split[2]	Fuel Consumption by Vehicle Class (Gal.)	Fuel Consumption by Phase (Gal.)	Fuel Split[2]	Fuel Consumption by Vehicle Class (Gal.)	Fuel Consumption by Phase (Gal.)	
Worker Trips														
Demolition	35	15	18.5	9,713	LDA	0.50	26.25	0.9987	184.77	402.20	0.0013	0.20	0.39	48.49
					LDT1	0.25	22.26	0.9998	109.05		0.0002	0.02		
					LDT2	0.25	22.37	0.9987	108.39		0.0013	0.12		
Site Preparation	10	18	18.5	3,330	LDA	0.50	26.25	0.9987	63.35	137.90	0.0013	0.08	0.14	16.63
					LDT1	0.25	22.26	0.9998	37.39		0.0002	0.01		
					LDT2	0.25	22.37	0.9987	37.16		0.0013	0.05		
Grading	20	15	18.5	7,400	LDA	0.50	26.25	0.9987	140.77	306.44	0.0013	0.18	0.30	36.95
					LDT1	0.25	22.26	0.9998	83.08		0.0002	0.01		
					LDT2	0.25	22.37	0.9987	82.58		0.0013	0.11		
Building Construction	230	99	18.5	421,245	LDA	0.50	26.25	0.9987	8,013.57	17,444.17	0.0013	10.29	17.13	2,103.14
					LDT1	0.25	22.26	0.9998	4,729.60		0.0002	0.77		
					LDT2	0.25	22.37	0.9987	4,701.00		0.0013	6.07		
Paving	20	15	18.5	5,550	LDA	0.50	26.25	0.9987	105.58	229.83	0.0013	0.14	0.23	27.71
					LDT1	0.25	22.26	0.9998	62.31		0.0002	0.01		
					LDT2	0.25	22.37	0.9987	61.94		0.0013	0.08		
Architectural Coating	20	20	18.5	7,400	LDA	0.50	26.25	0.9987	140.77	306.44	0.0013	0.18	0.30	36.95
					LDT1	0.25	22.26	0.9998	83.08		0.0002	0.01		
					LDT2	0.25	22.37	0.9987	82.58		0.0013	0.11		
Subtotal Worker Trips Energy Consumption								*Gasoline (Gal.)*		*18,750.37*	*Diesel (Gal.)*		*18.50*	*2,269.86*
Vendor Trips														
Building Construction	230	15	10.2	35,190	MHDT	0.50	7.62	0.3562	822.72	824.27	0.6438	1,486.80	4,238.96	681.62
					HHDT	0.50	6.39	0.0006	1.55		0.9994	2,752.16		
Subtotal Vendor Trips Energy Consumption								*Gasoline (Gal.)*		*824.27*	*Diesel (Gal.)*		*4,238.96*	*681.62*
Hauling Trips														
Demolition	35	165	20.0	115,500	HHDT	1.00	6.39	0.0006	10.18	10.18	0.9994	18,066.19	18,066.19	2,483.18
Grading	20	36	20.0	14,400	HHDT	1.00	6.39	0.0006	1.27	1.27	0.9994	2,252.41	2,252.41	309.59
Subtotal Hauling Trips Energy Consumption								*Gasoline (gal.)*		*11.45*	*Diesel (gal.)*		*20,318.61*	*2,792.77*
Total On-Road Construction Trips Energy Consumption								**Gasoline (Gal.)**		**19,662.70**	**Diesel (gal.)**		**24,576.07**	**5,744.25**

[1] CalEEMod defaults.

[2] HP-hrs. = Horsepower hours.

[3] Source: Carl Moyer Program Guidelines. 2017 Revisions. Table D-21. https://www.arb.ca.gov/msprog/moyer/guidelines/current.htm.

[4] MMBTU = Millions of BTU, assuming 1 gallon of diesel fuel = 137,381 BTU.

8.3.3.2 Petroleum Consumption – Operation

The project is expected to consume energy from auto and truck trips generated by the proposed land uses. Operational vehicle trips are associated with workers, customers, and vendors/non-workers (i.e., delivery, service, maintenance vehicles, etc.) traveling to and from the site. EMFAC2025 vehicle fuel consumption data is provided in **Appendix B**.

Table 8-6 shows the project's petroleum energy consumption for all operational trips generated by the project on an annual basis.

Table 8-6 | Operational Trips Energy Consumption - Annual

Vehicle Class	Vehicle Mix	Average Fuel Economy (MPG)	Annual VMT	Gasoline		Diesel		MMBTU
				Fuel Split	Fuel Consumption (Gal.)	Fuel Split	Fuel Consumption (Gal.)	
LDA	50.19%	26.25	4,002,671	0.9987	76,431.68	0.0013	98.14	9,218.07
LDT1	4.06%	22.26		0.9998	7,293.28	0.0002	1.19	878.49
LDT2	23.94%	22.37		0.9987	42,781.94	0.0013	55.24	5,159.78
MDV	14.74%	18.35		0.9749	31,342.61	0.0251	807.54	3,885.50
LHD1	2.82%	15.69		0.7513	5,414.22	0.2487	1,792.29	898.26
LHD2	0.43%	16.25		0.3741	394.38	0.6259	659.74	138.13
MHD	0.91%	7.62		0.3562	1,704.11	0.6438	3,079.62	628.31
HHD	0.34%	6.39		0.0006	1.19	0.9994	2,116.74	290.94
OBUS	0.04%	6.14		0.5706	130.81	0.4294	98.44	29.28
UBUS	0.02%	5.11		0.9847	160.88	0.0153	2.51	19.72
MCY	2.25%	39.10		1.0000	2,304.74	0.0000	0.00	277.56
SBUS	0.06%	8.50		0.6224	166.10	0.3776	100.78	33.85
MH	0.21%	5.72		0.8345	1,231.06	0.1655	244.21	181.81
Total Operational Trips Energy Usage				**Gasoline Consumption (gal.)**	**169,357.00**	**Diesel Consumption (gal.)**	**9,056.44**	**21,639.70**

8.4 Summary of Project Energy Consumption

Table 8-7 provides a summary of the project's annual operational energy consumption.

Table 8-7 | Total Annual Energy Consumption

Activity	Energy Consumption (MMBTU/yr.)[1]
Operational Electricity	2,356.90
Operational Natural Gas	2,817.37
Operational Petroleum	21,639.70
Total	**26,813.97**

[1] MMBTU/yr. = Million British Thermal Units per year.

8.5 Energy Impacts

This analysis has been prepared within the context of the CEQA Guidelines, Appendix F, Energy Conservation, and Appendix G, Environmental Checklist Form. According to CEQA, the goal of conserving energy implies the wise and efficient use of energy through decreasing overall per capita energy consumption, decreasing reliance on fossil fuels (such as coal, natural gas, and oil), and increasing reliance on renewable energy sources.

A significant environmental impact would result if the project would:

a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation; or

b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

8.5.1 Energy Impact – A

Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

The project will implement the mandatory requirements of California's Building Efficiency Standards (Title 24, Part 6) to reduce energy consumption. California's building standards are some of the strictest in the nation and the project's compliance with the Building Code will ensure that wasteful, inefficient or unnecessary consumption of energy is minimized. The California Building Code is designed to reduce the amount of energy needed to heat or cool a building, reduce energy usage for lighting and appliances and promote usage of energy from renewable sources.

In particular, the project is expected to comply with Section 110.10 of the building code regarding mandatory requirements for solar readiness and/or rooftop solar zones.

Hence, the project will not result in wasteful, inefficient, or unnecessary consumption of energy resources, and the impact is considered less than significant.

8.5.2 Energy Impact – B

Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

The project is not expected to conflict with or obstruct a state or local plan for renewable energy or energy efficiency.

The project will purchase electricity through San Diego Gas and Electric which is subject to the requirements of California Senate Bill 100 (SB 100). SB 100 is the most stringent and current energy legislation in California; requiring that renewable energy resources and zero-carbon resources supply 100% of retail sales of electricity to California end-use customers and 100% of electricity procured to serve all state agencies by December 31, 2045.[3]

The project will also comply with the mandatory requirements of California's Green Building and Building Energy Efficiency standards that promote renewable energy and energy efficiency.

Hence, the project will not conflict with or obstruct a state or local plan for renewable energy or energy efficiency, and the impact is considered less than significant.

[3] SB-100 California Renewables Portfolio Standard Program.
http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180SB100

Appendices

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CalEEMod Emissions Outputs

Pacific Park Drive Townhome Project Custom Report

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1. Basic Project Information

1.1. Basic Project Information

Data Field	Value
Project Name	Pacific Park Drive Townhome Project
Construction Start Date	10/1/2026
Operational Year	2027
Lead Agency	—
Land Use Scale	Project/site
Analysis Level for Defaults	County
Windspeed (m/s)	2.50000
Precipitation (days)	13.6000
Location	33.56952132382476, -117.72475938824789
County	Orange
City	Aliso Viejo
Air District	South Coast AQMD
Air Basin	South Coast
TAZ	6036
EDFZ	12
Electric Utility	San Diego Gas & Electric
Gas Utility	Southern California Gas
App Version	2022.1.1.41

1.2. Land Use Types

Land Use Subtype	Size	Unit	Lot Acreage	Building Area (sq ft)	Landscape Area (sq ft)	Special Landscape Area (sq ft)	Population	Description
Condo/Townhouse	137.000	Dwelling Unit	6.44000	145,220	127,400	—	408.000	—

Parking Lot	85.0000	Space	2.00000	0.00000	0.00000	—	—	—

1.3. User-Selected Emission Reduction Measures by Emissions Sector

No measures selected

2. Emissions Summary

2.1. Construction Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.59477	1.32092	10.1363	18.0389	0.02669	0.33987	1.41462	1.75449	0.31294	0.33683	0.64977	—	4,110.76	4,110.76	0.13321	0.12774	5.08256	4,157.24
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	46.8615	46.8280	39.3405	32.1102	0.11432	1.41283	12.2519	13.6648	1.31140	3.99357	5.13668	—	15,496.0	15,496.0	1.01799	1.82192	0.60802	16,065.0
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	2.53288	2.35174	6.82074	11.6613	0.01758	0.24180	1.64937	1.89117	0.22370	0.41831	0.64201	—	2,659.13	2,659.13	0.13002	0.20116	1.40506	2,687.08
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	0.46225	0.42919	1.24478	2.12819	0.00321	0.04413	0.30101	0.34514	0.04083	0.07634	0.11717	—	440.249	440.249	0.02153	0.03331	0.23262	444.876

2.2. Construction Emissions by Year

2.2.1. Total Construction Emissions by Year, Unmitigated

Includes both onsite and offsite emissions.

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO

Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.59477	1.32092	10.1363	18.0389	0.02669	0.33987	1.41462	1.75449	0.31294	0.33683	0.64977	—	4,110.76	4,110.76	0.13321	0.12774	5.08256	4,157.24
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	4.50224	3.33009	39.3405	32.1102	0.11432	1.41283	12.2519	13.6648	1.31140	3.99357	5.13668	—	15,496.0	15,496.0	1.01799	1.82192	0.60802	16,065.0
2027	46.8615	46.8280	10.1618	17.3612	0.02669	0.33987	1.41462	1.75449	0.31294	0.33683	0.64977	—	4,050.03	4,050.03	0.13506	0.12774	0.13206	4,091.60
2028	46.8521	46.8202	0.86773	1.90881	0.00173	0.01536	0.25786	0.27322	0.01413	0.06044	0.07457	—	369.614	369.614	0.00846	0.01043	0.01852	372.954
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.76713	0.56393	6.37003	5.48474	0.01678	0.24180	1.64937	1.89117	0.22370	0.41831	0.64201	—	2,173.84	2,173.84	0.13002	0.20116	1.12318	2,238.16
2027	2.53288	2.35174	6.82074	11.6613	0.01758	0.23043	0.89964	1.13007	0.21216	0.21405	0.42621	—	2,659.13	2,659.13	0.08859	0.08163	1.40506	2,687.08
2028	1.10025	1.09951	0.02038	0.04567	0.00004	0.00036	0.00600	0.00636	0.00033	0.00141	0.00174	—	8.75557	8.75557	0.00020	0.00025	0.00727	8.84082
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.14000	0.10292	1.16253	1.00096	0.00306	0.04413	0.30101	0.34514	0.04083	0.07634	0.11717	—	359.904	359.904	0.02153	0.03331	0.18595	370.553
2027	0.46225	0.42919	1.24478	2.12819	0.00321	0.04205	0.16418	0.20624	0.03872	0.03906	0.07778	—	440.249	440.249	0.01467	0.01352	0.23262	444.876
2028	0.20080	0.20066	0.00372	0.00833	0.00001	0.00007	0.00110	0.00116	0.00006	0.00026	0.00032	—	1.44958	1.44958	0.00003	0.00004	0.00120	1.46370

2.2.2. Onsite Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	1.23076	1.02988	9.39093	12.9379	0.02340	0.33657	0.00000	0.33657	0.30965	0.00000	0.30965	—	2,397.08	2,397.08	0.09724	0.01945	0.00000	2,405.30
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	3.84165	3.22805	29.1635	29.8995	0.06422	1.27400	9.08244	10.3504	1.17208	3.93995	5.08307	—	6,954.46	6,954.46	0.28210	0.05642	0.00000	6,978.32

2027	46.7959	46.7721	9.39093	12.9379	0.02340	0.33657	0.00000	0.33657	0.30965	0.00000	0.30965	—	2,397.08	2,397.08	0.09724	0.01945	0.00000	2,405.30
2028	46.7886	46.7660	0.80814	1.11833	0.00173	0.01536	0.00000	0.01536	0.01413	0.00000	0.01413	—	133.517	133.517	0.00542	0.00108	0.00000	133.975
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.63775	0.53560	4.84089	4.68941	0.00857	0.22618	1.28928	1.51546	0.20808	0.31918	0.52726	—	919.076	919.076	0.03728	0.00746	0.00000	922.230
2027	2.30081	2.16620	6.30574	8.70798	0.01552	0.22836	0.00000	0.22836	0.21009	0.00000	0.21009	—	1,592.78	1,592.78	0.06461	0.01292	0.00000	1,598.24
2028	1.09875	1.09822	0.01898	0.02626	0.00004	0.00036	0.00000	0.00036	0.00033	0.00000	0.00033	—	3.13543	3.13543	0.00013	0.00003	0.00000	3.14619
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.11639	0.09775	0.88346	0.85582	0.00156	0.04128	0.23529	0.27657	0.03797	0.05825	0.09622	—	152.164	152.164	0.00617	0.00123	0.00000	152.686
2027	0.41990	0.39533	1.15080	1.58921	0.00283	0.04168	0.00000	0.04168	0.03834	0.00000	0.03834	—	263.702	263.702	0.01070	0.00214	0.00000	264.607
2028	0.20052	0.20043	0.00346	0.00479	0.00001	0.00007	0.00000	0.00007	0.00006	0.00000	0.00006	—	0.51911	0.51911	0.00002	< 0.000005	0.00000	0.52089

2.2.3. Offsite Construction Emissions by Year, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Year	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily - Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2027	0.36402	0.29104	0.74532	5.10095	0.00329	0.00329	1.41462	1.41791	0.00329	0.33683	0.34013	—	1,713.68	1,713.68	0.03597	0.10829	5.08256	1,751.93
Daily - Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	1.14177	0.34182	13.9677	6.67972	0.07606	0.14488	3.16948	3.31436	0.14488	0.87986	1.02473	—	11,447.9	11,447.9	0.85379	1.78907	0.60802	12,003.0
2027	0.36369	0.28855	0.77083	4.42328	0.00329	0.00329	1.41462	1.41791	0.00329	0.33683	0.34013	—	1,652.95	1,652.95	0.03782	0.10829	0.13206	1,686.30
2028	0.06350	0.05415	0.05959	0.79048	0.00000	0.00000	0.25786	0.25786	0.00000	0.06044	0.06044	—	236.097	236.097	0.00304	0.00935	0.01852	238.978
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.12938	0.02833	1.52914	0.79533	0.00820	0.01562	0.36008	0.37571	0.01562	0.09913	0.11475	—	1,254.76	1,254.76	0.09274	0.19371	1.12318	1,315.93
2027	0.23206	0.18554	0.51500	2.95333	0.00207	0.00207	0.89964	0.90171	0.00207	0.21405	0.21612	—	1,066.35	1,066.35	0.02398	0.06871	1.40506	1,088.83
2028	0.00150	0.00128	0.00140	0.01941	0.00000	0.00000	0.00600	0.00600	0.00000	0.00141	0.00141	—	5.62014	5.62014	0.00007	0.00022	0.00727	5.(

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2026	0.02361	0.00517	0.27907	0.14515	0.00150	0.00285	0.06572	0.06857	0.00285	0.01809	0.02094	—	207.741	207.741	0.01535	0.03207	0.18595	217.867
2027	0.04235	0.03386	0.09399	0.53898	0.00038	0.00038	0.16418	0.16456	0.00038	0.03906	0.03944	—	176.547	176.547	0.00397	0.01138	0.23262	180.269
2028	0.00027	0.00023	0.00026	0.00354	0.00000	0.00000	0.00110	0.00110	0.00000	0.00026	0.00026	—	0.93048	0.93048	0.00001	0.00004	0.00120	0.94281

2.3. Operations Emissions Compared Against Thresholds

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Un/Mit.	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	8.47755	7.90101	5.63249	43.8890	0.11093	0.29540	9.13990	9.43531	0.29095	2.31801	2.60896	64.4150	14,234.6	14,299.0	7.01958	0.34046	30.5244	14,606.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.74040	7.19779	5.79996	33.3687	0.10686	0.29172	9.13990	9.43163	0.28816	2.31801	2.60617	64.4150	13,836.1	13,900.6	7.03299	0.35647	1.80453	14,184.4
Average Daily (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	7.34725	6.95918	3.32969	33.5958	0.08099	0.11536	7.67263	7.78799	0.11173	1.94614	2.05787	64.4150	9,880.78	9,945.20	6.92386	0.30406	11.8216	10,220.7
Annual (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Unmit.	1.34087	1.27005	0.60767	6.13124	0.01478	0.02105	1.40026	1.42131	0.02039	0.35517	0.37556	10.6646	1,635.88	1,646.54	1.14632	0.05034	1.95720	1,692.16

2.4. Operations Emissions by Sector, Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Sector	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.03785	3.67397	2.57431	34.8414	0.09155	0.05046	9.13990	9.19036	0.04689	2.31801	2.36491	—	9,316.42	9,316.42	0.35872	0.30161	29.4843	9,444.75

Area	4.35646	4.18543	2.34684	8.74493	0.01484	0.18744	—	0.18744	0.18654	—	0.18654	0.00000	2,905.44	2,905.44	0.05519	0.00560	—	2,908.49
Energy	0.08324	0.04162	0.71134	0.30270	0.00454	0.05751	—	0.05751	0.05751	—	0.05751	—	1,938.95	1,938.95	0.13796	0.00874	—	1,945.00
Water	—	—	—	—	—	—	—	—	—	—	—	9.85139	73.7536	83.6050	1.01428	0.02450	—	116.263
Waste	—	—	—	—	—	—	—	—	—	—	—	54.5636	0.00000	54.5636	5.45343	0.00000	—	190.899
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.04007	1.04007
Total	8.47755	7.90101	5.63249	43.8890	0.11093	0.29540	9.13990	9.43531	0.29095	2.31801	2.60896	64.4150	14,234.6	14,299.0	7.01958	0.34046	30.5244	14,606.4
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	4.02099	3.65297	2.81603	32.0990	0.08782	0.05047	9.13990	9.19037	0.04691	2.31801	2.36492	—	8,938.78	8,938.78	0.37301	0.31780	0.76446	9,043.57
Area	3.63617	3.50319	2.27259	0.96706	0.01451	0.18374	—	0.18374	0.18374	—	0.18374	0.00000	2,884.66	2,884.66	0.05432	0.00543	—	2,887.63
Energy	0.08324	0.04162	0.71134	0.30270	0.00454	0.05751	—	0.05751	0.05751	—	0.05751	—	1,938.95	1,938.95	0.13796	0.00874	—	1,945.00
Water	—	—	—	—	—	—	—	—	—	—	—	9.85139	73.7536	83.6050	1.01428	0.02450	—	116.263
Waste	—	—	—	—	—	—	—	—	—	—	—	54.5636	0.00000	54.5636	5.45343	0.00000	—	190.899
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.04007	1.04007
Total	7.74040	7.19779	5.79996	33.3687	0.10686	0.29172	9.13990	9.43163	0.28816	2.31801	2.60617	64.4150	13,836.1	13,900.6	7.03299	0.35647	1.80453	14,184.4
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	3.38221	3.07095	2.41184	27.8996	0.07522	0.04273	7.67263	7.71537	0.03972	1.94614	1.98585	—	7,656.26	7,656.26	0.31388	0.27033	10.7816	7,755.45
Area	3.88179	3.84661	0.20651	5.39354	0.00122	0.01512	—	0.01512	0.01451	—	0.01451	0.00000	211.813	211.813	0.00432	0.00049	—	212.067
Energy	0.08324	0.04162	0.71134	0.30270	0.00454	0.05751	—	0.05751	0.05751	—	0.05751	—	1,938.95	1,938.95	0.13796	0.00874	—	1,945.00
Water	—	—	—	—	—	—	—	—	—	—	—	9.85139	73.7536	83.6050	1.01428	0.02450	—	116.263
Waste	—	—	—	—	—	—	—	—	—	—	—	54.5636	0.00000	54.5636	5.45343	0.00000	—	190.899
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.04007	1.04007
Total	7.34725	6.95918	3.32969	33.5958	0.08099	0.11536	7.67263	7.78799	0.11173	1.94614	2.05787	64.4150	9,880.78	9,945.20	6.92386	0.30406	11.8216	10,220.7
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Mobile	0.61725	0.56045	0.44016	5.09168	0.01373	0.00780	1.40026	1.40805	0.00725	0.35517	0.36242	—	1,267.58	1,267.58	0.05197	0.04476	1.78501	1,284.00
Area	0.70843	0.70201	0.03769	0.98432	0.00022	0.00276	—	0.00276	0.00265	—	0.00265	0.00000	35.0680	35.0680	0.00071	0.00008	—	35.1101
Energy	0.01519	0.00760	0.12982	0.05524	0.00083	0.01050	—	0.01050	0.01050	—	0.01050	—	321.016	321.016	0.02284	0.00145	—	322.018

Water	—	—	—	—	—	—	—	—	—	—	—	1.63101	12.2108	13.8418	0.16793	0.00406	—	19.2487
Waste	—	—	—	—	—	—	—	—	—	—	—	9.03362	0.00000	9.03362	0.90288	0.00000	—	31.6056
Refrig.	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.17219	0.17219
Total	1.34087	1.27005	0.60767	6.13124	0.01478	0.02105	1.40026	1.42131	0.02039	0.35517	0.37556	10.6646	1,635.88	1,646.54	1.14632	0.05034	1.95720	1,692.16

3. Construction Emissions Details

3.1. Demolition (2026)

3.1.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.36047	2.82079	25.3728	23.3229	0.03826	1.26796	—	1.26796	1.16652	—	1.16652	—	4,048.06	4,048.06	0.16421	0.03284	—	4,061.95
Demolition	—	—	—	—	—	—	9.08244	9.08244	—	1.37534	1.37534	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.32224	0.27049	2.43301	2.23644	0.00367	0.12159	—	0.12159	0.11186	—	0.11186	—	388.170	388.170	0.01575	0.00315	—	389.502
Demolition	—	—	—	—	—	—	0.87092	0.87092	—	0.13188	0.13188	—	—	—	—	—	—	—

Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.05881	0.04936	0.44402	0.40815	0.00067	0.02219	—	0.02219	0.02041	—	0.02041	—	64.2659	64.2659	0.00261	0.00052	—	64.4865
Demolition	—	—	—	—	—	—	0.15894	0.15894	—	0.02407	0.02407	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.1.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.05159	0.05060	0.05241	0.68189	0.00000	0.00000	0.19606	0.19606	0.00000	0.04596	0.04596	—	185.890	185.890	0.00265	0.00711	0.01758	188.092
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	1.09019	0.15936	13.9153	5.99783	0.07606	0.14488	2.97342	3.11829	0.14488	0.83390	0.97878	—	11,262.0	11,262.0	0.85114	1.78196	0.59044	11,814.9
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00495	0.00482	0.00503	0.06797	0.00000	0.00000	0.01864	0.01864	0.00000	0.00437	0.00437	—	18.0691	18.0691	0.00025	0.00068	0.02810	18.3067
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.10523	0.01563	1.34962	0.57236	0.00729	0.01389	0.28318	0.29707	0.01389	0.07948	0.09337	—	1,079.70	1,079.70	0.08196	0.17087	0.94263	1,133.61
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00090	0.00088	0.00092	0.01240	0.00000	0.00000	0.00340	0.00340	0.00000	0.00080	0.00080	—	2.99154	2.99154	0.00004	0.00011	0.00465	3.03088
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Hauling	0.01921	0.00285	0.24631	0.10446	0.00133	0.00254	0.05168	0.05422	0.00254	0.01450	0.01704	—	178.756	178.756	0.01357	0.02829	0.15606	187.682

3.2. Site Preparation (2026)

3.2.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.74146	3.14387	29.1635	28.8082	0.04890	1.24251	—	1.24251	1.14311	—	1.14311	—	5,297.94	5,297.94	0.21491	0.04298	—	5,316.12
Dust From Material Movement	—	—	—	—	—	—	7.66623	7.66623	—	3.93995	3.93995	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.10251	0.08613	0.79900	0.78927	0.00134	0.03404	—	0.03404	0.03132	—	0.03132	—	145.149	145.149	0.00589	0.00118	—	145.647
Dust From Material Movement	—	—	—	—	—	—	0.21003	0.21003	—	0.10794	0.10794	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.01871	0.01572	0.14582	0.14404	0.00024	0.00621	—	0.00621	0.00572	—	0.00572	—	24.0311	24.0311	0.00097	0.00019	—	24.1135
Dust From Material Movement	—	—	—	—	—	—	0.03833	0.03833	—	0.01970	0.01970	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.2.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06019	0.05903	0.06115	0.79554	0.00000	0.00000	0.22874	0.22874	0.00000	0.05362	0.05362	—	216.872	216.872	0.00309	0.00829	0.02052	219.441
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00165	0.00161	0.00168	0.02266	0.00000	0.00000	0.00621	0.00621	0.00000	0.00146	0.00146	—	6.02302	6.02302	0.00008	0.00023	0.00937	6.10222
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00030	0.00029	0.00031	0.00413	0.00000	0.00000	0.00113	0.00113	0.00000	0.00027	0.00027	—	0.99718	0.99718	0.00001	0.00004	0.00155	1.01029
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.(

3.3. Grading (2026)

3.3.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	3.84165	3.22805	29.0102	29.8995	0.06422	1.27400	—	1.27400	1.17208	—	1.17208	—	6,954.46	6,954.46	0.28210	0.05642	—	6,978.32
Dust From Material Movement	—	—	—	—	—	—	3.80206	3.80206	—	1.44818	1.44818	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.21050	0.17688	1.58960	1.63833	0.00352	0.06981	—	0.06981	0.06422	—	0.06422	—	381.066	381.066	0.01546	0.00309	—	382.374
Dust From Material Movement	—	—	—	—	—	—	0.20833	0.20833	—	0.07935	0.07935	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	0.03842	0.03228	0.29010	0.29900	0.00064	0.01274	—	0.01274	0.01172	—	0.01172	—	63.0899	63.0899	0.00256	0.00051	—	63.3064
Dust From Material Movement	—	—	—	—	—	—	0.03802	0.03802	—	0.01448	0.01448	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.3.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06878	0.06746	0.06989	0.90919	0.00000	0.00000	0.26142	0.26142	0.00000	0.06128	0.06128	—	247.853	247.853	0.00353	0.00948	0.02345	250.790
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.23657	0.03458	3.01961	1.30153	0.01650	0.03144	0.64523	0.67667	0.03144	0.18096	0.21239	—	2,443.86	2,443.86	0.18470	0.38669	0.12813	2,563.84
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00377	0.00367	0.00383	0.05179	0.00000	0.00000	0.01420	0.01420	0.00000	0.00333	0.00333	—	13.7669	13.7669	0.00019	0.00052	0.02141	13.9479
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.01305	0.00194	0.16735	0.07097	0.00090	0.00172	0.03511	0.03684	0.00172	0.00986	0.01158	—	133.883	133.883	0.01016	0.02119	0.11689	140.568
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00069	0.00067	0.00070	0.00945	0.00000	0.00000	0.00259	0.00259	0.00000	0.00061	0.00061	—	2.27927	2.27927	0.00003	0.00009	0.00354	2.30924
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00238	0.00035	0.03054	0.01295	0.00017	0.00031	0.00641	0.00672	0.00031	0.00180	0.00211	—	22.1658	22.1658	0.00168	0.00351	0.01935	23.2726

3.4. Building Construction (2026)

3.4.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.27993	1.07101	9.85401	12.9664	0.02340	0.37865	—	0.37865	0.34836	—	0.34836	—	2,397.24	2,397.24	0.09724	0.01945	—	2,405.47
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00250	0.00210	0.01928	0.02537	0.00005	0.00074	—	0.00074	0.00068	—	0.00068	—	4.69127	4.69127	0.00019	0.00004	—	4.70737
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00046	0.00038	0.00352	0.00463	0.00001	0.00014	—	0.00014	0.00012	—	0.00012	—	0.77669	0.77669	0.00003	0.00001	—	0.77936
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.4.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.33924	0.33272	0.34468	4.48411	0.00000	0.00000	1.28932	1.28932	0.00000	0.30221	0.30221	—	1,222.41	1,222.41	0.01740	0.04675	0.11564	1,236.90
Vendor	0.03532	0.00911	0.48664	0.23925	0.00329	0.00329	0.12530	0.12860	0.00329	0.03462	0.03791	—	459.566	459.566	0.02292	0.06483	0.03080	479.490
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00066	0.00065	0.00067	0.00912	0.00000	0.00000	0.00250	0.00250	0.00000	0.00059	0.00059	—	2.42494	2.42494	0.00003	0.00009	0.00377	2.45683
Vendor	0.00007	0.00002	0.00096	0.00046	0.00001	0.00001	0.00024	0.00025	0.00001	0.00007	0.00007	—	0.89909	0.89909	0.00004	0.00013	0.00100	0.93903
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00012	0.00012	0.00012	0.00166	0.00000	0.00000	0.00046	0.00046	0.00000	0.00011	0.00011	—	0.40148	0.40148	0.00001	0.00002	0.00062	0.40676
Vendor	0.00001	< 0.000005	0.00017	0.00008	< 0.000005	< 0.000005	0.00004	0.00005	< 0.000005	0.00001	0.00001	—	0.14885	0.14885	0.00001	0.00002	0.00017	0.15547
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.5. Building Construction (2027)

3.5.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road Equipm	1.23076	1.02988	9.39093	12.9379	0.02340	0.33657	—	0.33657	0.30965	—	0.30965	—	2,397.08	2,397.08	0.09724	0.01945	—	2,405.30
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	1.23076	1.02988	9.39093	12.9379	0.02340	0.33657	—	0.33657	0.30965	—	0.30965	—	2,397.08	2,397.08	0.09724	0.01945	—	2,405.30
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.77314	0.64695	5.89920	8.12736	0.01470	0.21143	—	0.21143	0.19451	—	0.19451	—	1,505.80	1,505.80	0.06108	0.01222	—	1,510.96
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.14110	0.11807	1.07660	1.48324	0.00268	0.03859	—	0.03859	0.03550	—	0.03550	—	249.302	249.302	0.01011	0.00202	—	250.157
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.5.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Worker	0.32837	0.28162	0.29575	4.87772	0.00000	0.00000	1.28932	1.28932	0.00000	0.30221	0.30221	—	1,262.83	1,262.83	0.01305	0.04675	4.00409	1,281.09
Vendor	0.03565	0.00943	0.44957	0.22323	0.00329	0.00329	0.12530	0.12860	0.00329	0.03462	0.03791	—	450.851	450.851	0.02292	0.06154	1.07846	470.842
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.32837	0.27944	0.30227	4.19488	0.00000	0.00000	1.28932	1.28932	0.00000	0.30221	0.30221	—	1,201.86	1,201.86	0.01522	0.04675	0.10413	1,216.28
Vendor	0.03532	0.00911	0.46855	0.22840	0.00329	0.00329	0.12530	0.12860	0.00329	0.03462	0.03791	—	451.088	451.088	0.02260	0.06154	0.02793	470.020
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.20491	0.17554	0.21379	2.74784	0.00000	0.00000	0.80285	0.80285	0.00000	0.18808	0.18808	—	765.294	765.294	0.00956	0.02937	1.08779	775.374
Vendor	0.02239	0.00592	0.29624	0.14165	0.00207	0.00207	0.07813	0.08020	0.00207	0.02160	0.02367	—	283.279	283.279	0.01420	0.03866	0.29199	295.446
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.03740	0.03204	0.03902	0.50148	0.00000	0.00000	0.14652	0.14652	0.00000	0.03432	0.03432	—	126.703	126.703	0.00158	0.00486	0.18010	128.372
Vendor	0.00409	0.00108	0.05406	0.02585	0.00038	0.00038	0.01426	0.01464	0.00038	0.00394	0.00432	—	46.9000	46.9000	0.00235	0.00640	0.04834	48.9144
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.6. Paving (2027)

3.6.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Off-Road	0.87761	0.73744	6.94439	9.95313	0.01395	0.29813	—	0.29813	0.27428	—	0.27428	—	1,511.11	1,511.11	0.06130	0.01226	—	1,516.29
Paving	0.26200	0.26200	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.04809	0.04041	0.38051	0.54538	0.00076	0.01634	—	0.01634	0.01503	—	0.01503	—	82.8004	82.8004	0.00336	0.00067	—	83.0845
Paving	0.01436	0.01436	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00878	0.00737	0.06944	0.09953	0.00014	0.00298	—	0.00298	0.00274	—	0.00274	—	13.7085	13.7085	0.00056	0.00011	—	13.7556
Paving	0.00262	0.00262	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.6.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.04993	0.04249	0.04597	0.63791	0.00000	0.00000	0.19606	0.19606	0.00000	0.04596	0.04596	—	182.764	182.764	0.00231	0.00711	0.01583	184.957
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.(

Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00272	0.00233	0.00284	0.03645	0.00000	0.00000	0.01065	0.01065	0.00000	0.00249	0.00249	—	10.1513	10.1513	0.00013	0.00039	0.01443	10.2850
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00050	0.00042	0.00052	0.00665	0.00000	0.00000	0.00194	0.00194	0.00000	0.00046	0.00046	—	1.68066	1.68066	0.00002	0.00006	0.00239	1.70279
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.7. Architectural Coating (2027)

3.7.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.13715	0.11335	0.83116	1.12539	0.00173	0.01905	—	0.01905	0.01752	—	0.01752	—	133.513	133.513	0.00542	0.00108	—	133.971
Architectural Coatings	46.6587	46.6587	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00429	0.00355	0.02602	0.03524	0.00005	0.00060	—	0.00060	0.00055	—	0.00055	—	4.18044	4.18044	0.00017	0.00003	—	4.19478
Architectural Coatings	1.46094	1.46094	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00078	0.00065	0.00475	0.00643	0.00001	0.00011	—	0.00011	0.00010	—	0.00010	—	0.69212	0.69212	0.00003	0.00001	—	0.69449
Architectural Coatings	0.26662	0.26662	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.7.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06567	0.05589	0.06045	0.83898	0.00000	0.00000	0.25786	0.25786	0.00000	0.06044	0.06044	—	240.372	240.372	0.00304	0.00935	0.02083	243.255
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00204	0.00175	0.00213	0.02739	0.00000	0.00000	0.00800	0.00800	0.00000	0.00187	0.00187	—	7.62910	7.62910	0.00010	0.00029	0.01084	7.72958
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00037	0.00032	0.00039	0.00500	0.00000	0.00000	0.00146	0.00146	0.00000	0.00034	0.00034	—	1.26308	1.26308	0.00002	0.00005	0.00180	1.27972
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.8. Architectural Coating (2028)

3.8.1. Onsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.12985	0.10731	0.80814	1.11833	0.00173	0.01536	—	0.01536	0.01413	—	0.01413	—	133.517	133.517	0.00542	0.00108	—	133.975
Architectural Coatings	46.6587	46.6587	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00305	0.00252	0.01898	0.02626	0.00004	0.00036	—	0.00036	0.00033	—	0.00033	—	3.13543	3.13543	0.00013	0.00003	—	3.14619
Architectural Coatings	1.09570	1.09570	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Off-Road Equipment	0.00056	0.00046	0.00346	0.00479	0.00001	0.00007	—	0.00007	0.00006	—	0.00006	—	0.51911	0.51911	0.00002	< 0.000005	—	0.52089
Architectural Coatings	0.19997	0.19997	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Onsite truck	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

3.8.2. Offsite - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Location	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.06350	0.05415	0.05959	0.79048	0.00000	0.00000	0.25786	0.25786	0.00000	0.06044	0.06044	—	236.097	236.097	0.00304	0.00935	0.01852	238.978
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Average Daily	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00150	0.00128	0.00140	0.01941	0.00000	0.00000	0.00600	0.00600	0.00000	0.00141	0.00141	—	5.62014	5.62014	0.00007	0.00022	0.00727	5.69463
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Worker	0.00027	0.00023	0.00026	0.00354	0.00000	0.00000	0.00110	0.00110	0.00000	0.00026	0.00026	—	0.93048	0.93048	0.00001	0.00004	0.00120	0.94281
Vendor	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Hauling	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

4. Operations Emissions Details

4.1. Mobile Emissions by Land Use

4.1.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	4.03785	3.67397	2.57431	34.8414	0.09155	0.05046	9.13990	9.19036	0.04689	2.31801	2.36491	—	9,316.42	9,316.42	0.35872	0.30161	29.4843	9,444.75
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	4.03785	3.67397	2.57431	34.8414	0.09155	0.05046	9.13990	9.19036	0.04689	2.31801	2.36491	—	9,316.42	9,316.42	0.35872	0.30161	29.4843	9,444.75
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Condo/Townhou	4.02099	3.65297	2.81603	32.0990	0.08782	0.05047	9.13990	9.19037	0.04691	2.31801	2.36492	—	8,938.78	8,938.78	0.37301	0.31780	0.76446	9,043.57
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	4.02099	3.65297	2.81603	32.0990	0.08782	0.05047	9.13990	9.19037	0.04691	2.31801	2.36492	—	8,938.78	8,938.78	0.37301	0.31780	0.76446	9,043.57
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.61725	0.56045	0.44016	5.09168	0.01373	0.00780	1.40026	1.40805	0.00725	0.35517	0.36242	—	1,267.58	1,267.58	0.05197	0.04476	1.78501	1,284.00
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Total	0.61725	0.56045	0.44016	5.09168	0.01373	0.00780	1.40026	1.40805	0.00725	0.35517	0.36242	—	1,267.58	1,267.58	0.05197	0.04476	1.78501	1,284.00

4.2. Energy

4.2.1. Electricity Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	912.878	912.878	0.05115	0.00620	—	916.004
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	123.149	123.149	0.00690	0.00084	—	123.571
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,036.03	1,036.03	0.05805	0.00704	—	1,039.58
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	912.878	912.878	0.05115	0.00620	—	916.004

Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	123.149	123.149	0.00690	0.00084	—	123.571
Total	—	—	—	—	—	—	—	—	—	—	—	—	1,036.03	1,036.03	0.05805	0.00704	—	1,039.58
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	151.137	151.137	0.00847	0.00103	—	151.655
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	—	20.3888	20.3888	0.00114	0.00014	—	20.4586
Total	—	—	—	—	—	—	—	—	—	—	—	—	171.526	171.526	0.00961	0.00116	—	172.114

4.2.3. Natural Gas Emissions By Land Use - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.08324	0.04162	0.71134	0.30270	0.00454	0.05751	—	0.05751	0.05751	—	0.05751	—	902.925	902.925	0.07991	0.00170	—	905.430
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.08324	0.04162	0.71134	0.30270	0.00454	0.05751	—	0.05751	0.05751	—	0.05751	—	902.925	902.925	0.07991	0.00170	—	905.430
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	0.08324	0.04162	0.71134	0.30270	0.00454	0.05751	—	0.05751	0.05751	—	0.05751	—	902.925	902.925	0.07991	0.00170	—	905.430
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.08324	0.04162	0.71134	0.30270	0.00454	0.05751	—	0.05751	0.05751	—	0.05751	—	902.925	902.925	0.07991	0.00170	—	905.430
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Condo/T	0.01519	0.00760	0.12982	0.05524	0.00083	0.01050	—	0.01050	0.01050	—	0.01050	—	149.490	149.490	0.01323	0.00028	—	149.904
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000	0.00000	—	0.00000	—	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	0.01519	0.00760	0.12982	0.05524	0.00083	0.01050	—	0.01050	0.01050	—	0.01050	—	149.490	149.490	0.01323	0.00028	—	149.904

4.3. Area Emissions by Source

4.3.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Source	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.26594	0.13297	2.27259	0.96706	0.01451	0.18374	—	0.18374	0.18374	—	0.18374	0.00000	2,884.66	2,884.66	0.05432	0.00543	—	2,887.63
Consumer Products	3.11456	3.11456	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.25566	0.25566	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.72030	0.68223	0.07425	7.77787	0.00034	0.00369	—	0.00369	0.00280	—	0.00280	—	20.7812	20.7812	0.00087	0.00017	—	20.8543
Total	4.35646	4.18543	2.34684	8.74493	0.01484	0.18744	—	0.18744	0.18654	—	0.18654	0.00000	2,905.44	2,905.44	0.05519	0.00560	—	2,908.49
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.26594	0.13297	2.27259	0.96706	0.01451	0.18374	—	0.18374	0.18374	—	0.18374	0.00000	2,884.66	2,884.66	0.05432	0.00543	—	2,887.63
Consumer Products	3.11456	3.11456	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Architect Coatings	0.25566	0.25566	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	3.63617	3.50319	2.27259	0.96706	0.01451	0.18374	—	0.18374	0.18374	—	0.18374	0.00000	2,884.66	2,884.66	0.05432	0.00543	—	2,887.63
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Hearths	0.00332	0.00166	0.02841	0.01209	0.00018	0.00230	—	0.00230	0.00230	—	0.00230	0.00000	32.7115	32.7115	0.00062	0.00006	—	32.7452
Consumer Products	0.56841	0.56841	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Architectural Coatings	0.04666	0.04666	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Landscape Equipment	0.09004	0.08528	0.00928	0.97223	0.00004	0.00046	—	0.00046	0.00035	—	0.00035	—	2.35655	2.35655	0.00010	0.00002	—	2.36484
Total	0.70843	0.70201	0.03769	0.98432	0.00022	0.00276	—	0.00276	0.00265	—	0.00265	0.00000	35.0680	35.0680	0.00071	0.00008	—	35.1101

4.4. Water Emissions by Land Use

4.4.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	9.85139	73.7536	83.6050	1.01428	0.02450	—	116.263
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	9.85139	73.7536	83.6050	1.01428	0.02450	—	116.263

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	9.85139	73.7536	83.6050	1.01428	0.02450	—	116.263
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	9.85139	73.7536	83.6050	1.01428	0.02450	—	116.263
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	1.63101	12.2108	13.8418	0.16793	0.00406	—	19.2487
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	1.63101	12.2108	13.8418	0.16793	0.00406	—	19.2487

4.5. Waste Emissions by Land Use

4.5.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	54.5636	0.00000	54.5636	5.45343	0.00000	—	190.899
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	54.5636	0.00000	54.5636	5.45343	0.00000	—	190.899

Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	54.5636	0.00000	54.5636	5.45343	0.00000	—	190.899
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	54.5636	0.00000	54.5636	5.45343	0.00000	—	190.899
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	9.03362	0.00000	9.03362	0.90288	0.00000	—	31.6056
Parking Lot	—	—	—	—	—	—	—	—	—	—	—	0.00000	0.00000	0.00000	0.00000	0.00000	—	0.00000
Total	—	—	—	—	—	—	—	—	—	—	—	9.03362	0.00000	9.03362	0.90288	0.00000	—	31.6056

4.6. Refrigerant Emissions by Land Use

4.6.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.04007	1.04007
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.04007	1.04007
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Condo/Townhou	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.04007	1.04007
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1.04007	1.04007
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Condo/Townhouse	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.17219	0.17219
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	0.17219	0.17219

4.7. Offroad Emissions By Equipment Type

4.7.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.8. Stationary Emissions By Equipment Type

4.8.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.9. User Defined Emissions By Equipment Type

4.9.1. Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Equipment Type	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10. Soil Carbon Accumulation By Vegetation Type

4.10.1. Soil Carbon Accumulation By Vegetation Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Vegetation	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.2. Above and Belowground Carbon Accumulation by Land Use Type - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Land Use	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

4.10.3. Avoided and Sequestered Emissions by Species - Unmitigated

Criteria Pollutants (lb/day for daily, ton/yr for annual) and GHGs (lb/day for daily, MT/yr for annual)

Species	TOG	ROG	NOx	CO	SO2	PM10E	PM10D	PM10T	PM2.5E	PM2.5D	PM2.5T	BCO2	NBCO2	CO2T	CH4	N2O	R	CO2e
Daily, Summer (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Daily, Winter (Max)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Removed	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Annual	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Avoided	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Sequestered	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Remove	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Subtotal	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

5. Activity Data

5.1. Construction Schedule

Phase Name	Phase Type	Start Date	End Date	Days Per Week	Work Days per Phase	Phase Description
Demolition	Demolition	10/1/2026	11/18/2026	5.00000	35.0000	—
Site Preparation	Site Preparation	11/19/2026	12/2/2026	5.00000	10.00000	—
Grading	Grading	12/3/2026	12/30/2026	5.00000	20.0000	—
Building Construction	Building Construction	12/31/2026	11/17/2027	5.00000	230.000	—
Paving	Paving	11/18/2027	12/15/2027	5.00000	20.0000	—
Architectural Coating	Architectural Coating	12/16/2027	1/12/2028	5.00000	20.0000	—

5.2. Off-Road Equipment

5.2.1. Unmitigated

Phase Name	Equipment Type	Fuel Type	Engine Tier	Number per Day	Hours Per Day	Horsepower	Load Factor
Demolition	Rubber Tired Dozers	Diesel	Average	2.00000	8.00000	367.000	0.40000
Demolition	Concrete/Industrial Saws	Diesel	Average	1.000000	8.00000	33.0000	0.73000
Demolition	Crawler Tractors	Diesel	Average	3.00000	8.00000	87.0000	0.43000
Site Preparation	Rubber Tired Dozers	Diesel	Average	3.00000	8.00000	367.000	0.40000
Site Preparation	Tractors/Loaders/Backhoes	Diesel	Average	4.00000	8.00000	84.0000	0.37000
Grading	Graders	Diesel	Average	1.000000	8.00000	148.000	0.41000
Grading	Tractors/Loaders/Backhoes	Diesel	Average	3.00000	8.00000	84.0000	0.37000

Grading	Rubber Tired Dozers	Diesel	Average	1.000000	8.00000	367.000	0.40000
Grading	Crawler Tractors	Diesel	Average	1.000000	8.00000	87.0000	0.43000
Grading	Scrapers	Diesel	Average	2.00000	8.00000	423.000	0.48000
Building Construction	Forklifts	Diesel	Average	3.00000	8.00000	82.0000	0.20000
Building Construction	Generator Sets	Diesel	Average	1.000000	8.00000	14.0000	0.74000
Building Construction	Cranes	Diesel	Average	1.000000	7.00000	367.000	0.29000
Building Construction	Welders	Diesel	Average	1.000000	8.00000	46.0000	0.45000
Building Construction	Tractors/Loaders/Backhoes	Diesel	Average	3.00000	7.00000	84.0000	0.37000
Paving	Pavers	Diesel	Average	2.00000	8.00000	81.0000	0.42000
Paving	Paving Equipment	Diesel	Average	2.00000	8.00000	89.0000	0.36000
Paving	Rollers	Diesel	Average	2.00000	8.00000	36.0000	0.38000
Architectural Coating	Air Compressors	Diesel	Average	1.000000	6.00000	37.0000	0.48000

5.3. Construction Vehicles

5.3.1. Unmitigated

Phase Name	Trip Type	One-Way Trips per Day	Miles per Trip	Vehicle Mix
Demolition	Worker	15.0000	18.5000	LDA,LDT1,LDT2
Demolition	Vendor	—	10.2000	HHDT,MHDT
Demolition	Hauling	164.286	20.0000	HHDT
Demolition	Onsite truck	—	—	HHDT
Site Preparation	Worker	17.5000	18.5000	LDA,LDT1,LDT2
Site Preparation	Vendor	—	10.2000	HHDT,MHDT
Site Preparation	Hauling	0.00000	20.0000	HHDT
Site Preparation	Onsite truck	—	—	HHDT
Grading	Worker	20.0000	18.5000	LDA,LDT1,LDT2
Grading	Vendor	—	10.2000	HHDT,MHDT
Grading	Hauling	35.6500	20.0000	HHDT

Grading	Onsite truck	—	—	HHDT
Building Construction	Worker	98.6400	18.5000	LDA,LDT1,LDT2
Building Construction	Vendor	14.6453	10.2000	HHDT,MHDT
Building Construction	Hauling	0.00000	20.0000	HHDT
Building Construction	Onsite truck	—	—	HHDT
Paving	Worker	15.0000	18.5000	LDA,LDT1,LDT2
Paving	Vendor	—	10.2000	HHDT,MHDT
Paving	Hauling	0.00000	20.0000	HHDT
Paving	Onsite truck	—	—	HHDT
Architectural Coating	Worker	19.7280	18.5000	LDA,LDT1,LDT2
Architectural Coating	Vendor	—	10.2000	HHDT,MHDT
Architectural Coating	Hauling	0.00000	20.0000	HHDT
Architectural Coating	Onsite truck	—	—	HHDT

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

Control Strategies Applied	PM10 Reduction	PM2.5 Reduction
Water unpaved roads twice daily	55%	55%
Limit vehicle speeds on unpaved roads to 25 mph	44%	44%
Sweep paved roads once per month	9%	9%

5.5. Architectural Coatings

Phase Name	Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
Architectural Coating	294,071	98,023.5	0.00000	0.00000	5,227.20

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

Phase Name	Material Imported (Cubic Yards)	Material Exported (Cubic Yards)	Acres Graded (acres)	Material Demolished (Ton of Debris)	Acres Paved (acres)
Demolition	0.00000	0.00000	0.00000	23,000.0	0.00000
Site Preparation	0.00000	0.00000	15.0000	0.00000	0.00000
Grading	5,700.00	0.00000	70.0000	0.00000	0.00000
Paving	0.00000	0.00000	0.00000	0.00000	2.00000

5.6.2. Construction Earthmoving Control Strategies

Control Strategies Applied	Frequency (per day)	PM10 Reduction	PM2.5 Reduction
Water Exposed Area	2	61%	61%
Water Demolished Area	2	36%	36%

5.7. Construction Paving

Phase Name	Land Use	Area Paved (acres)	% Asphalt
Paving	Condo/Townhouse	—	0%
Paving	Parking Lot	2.00000	100%

5.8. Construction Electricity Consumption and Emissions Factors

kWh per Year and Emission Factor (lb/MWh)

Year	kWh per Year	CO2	CH4	N2O
2026	0.00000	588.983	0.03300	0.00400
2027	0.00000	588.983	0.03300	0.00400
2028	0.00000	588.983	0.03300	0.00400

5.9. Operational Mobile Sources

5.9.1. Unmitigated

Land Use Type	Trips/Weekday	Trips/Saturday	Trips/Sunday	Trips/Year	VMT/Weekday	VMT/Saturday	VMT/Sunday	VMT/Year
Condo/Townhouse	986.400	1,200.12	982.290	370,966	10,643.1	12,949.1	10,598.8	4,002,671
Parking Lot	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000

5.10. Operational Area Sources

5.10.1. Hearths

Land Use	Hearth Type	Unmitigated (number)	Mitigated (number)
Condo/Townhouse	Wood Fireplaces	0	0
Condo/Townhouse	Gas Fireplaces	137	137
Condo/Townhouse	Propane Fireplaces	0	0
Condo/Townhouse	Electric Fireplaces	0	0
Condo/Townhouse	No Fireplaces	0	0
Condo/Townhouse	Conventional Wood Stoves	0	0
Condo/Townhouse	Catalytic Wood Stoves	0	0
Condo/Townhouse	Non-Catalytic Wood Stoves	0	0
Condo/Townhouse	Pellet Wood Stoves	0	0
Parking Lot	Wood Fireplaces	0	0
Parking Lot	Gas Fireplaces	0	0
Parking Lot	Propane Fireplaces	0	0
Parking Lot	Electric Fireplaces	0	0
Parking Lot	No Fireplaces	0	0
Parking Lot	Conventional Wood Stoves	0	0
Parking Lot	Catalytic Wood Stoves	0	0
Parking Lot	Non-Catalytic Wood Stoves	0	0
Parking Lot	Pellet Wood Stoves	0	0

5.10.2. Architectural Coatings

Residential Interior Area Coated (sq ft)	Residential Exterior Area Coated (sq ft)	Non-Residential Interior Area Coated (sq ft)	Non-Residential Exterior Area Coated (sq ft)	Parking Area Coated (sq ft)
294,071	98,023.5	0.00000	0.00000	5,227.20

5.10.3. Landscape Equipment

Season	Unit	Value
Snow Days	day/yr	0.00000
Summer Days	day/yr	250.000

5.11. Operational Energy Consumption

5.11.1. Unmitigated

Electricity (kWh/yr) and CO2 and CH4 and N2O and Natural Gas (kBTU/yr)

Land Use	Electricity (kWh/yr)	CO2	CH4	N2O	Natural Gas (kBTU/yr)
Condo/Townhouse	565,722	588.983	0.0330	0.0040	2,817,368
Parking Lot	76,317.1	588.983	0.0330	0.0040	0.00000

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

Land Use	Indoor Water (gal/year)	Outdoor Water (gal/year)
Condo/Townhouse	5,141,014	2,018,074
Parking Lot	0.00000	0.00000

5.13. Operational Waste Generation

5.13.1. Unmitigated

Land Use	Waste (ton/year)	Cogeneration (kWh/year)
Condo/Townhouse	101.243	0.00000
Parking Lot	0.00000	0.00000

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

Land Use	Equipment Type	Refrigerant	GWP	Quantity (kg)	Operations Leak Rate	Service Leak Rate	Times Serviced
Condo/Townhouse	Average room A/C & Other residential A/C and heat pumps	R-410A	2,088.00	0.00225	2.50000	2.50000	10.00000
Condo/Townhouse	Household refrigerators and/or freezers	R-134a	1,430.00	0.11538	0.60000	0.00000	1.000000

5.15. Operational Off-Road Equipment

5.15.1. Unmitigated

5.16. Stationary Sources

5.16.1. Emergency Generators and Fire Pumps

5.16.2. Process Boilers

5.17. User Defined

5.18. Vegetation

5.18.1. Land Use Change

5.18.1.1. Unmitigated

Vegetation Land Use Type	Vegetation Soil Type	Initial Acres	Final Acres

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

Biomass Cover Type	Initial Acres	Final Acres

5.18.2. Sequestration

5.18.2.1. Unmitigated

Tree Type	Number	Electricity Saved (kWh/year)	Natural Gas Saved (btu/year)

8. User Changes to Default Data

8.1. Justifications

Screen	Justification
Land Use	Proposed project consists of building townhomes with 137 dwelling units, 127,400 square feet of landscaped area, and 85 outdoor parking spaces. The total proposed site area is approximately 8.44 acres.
Construction: Construction Phases	Demolition phase has been adjusted to reflect the proposed construction timeline.
Construction: Off-Road Equipment	The default construction equipment list has been modified to align with project conditions.
Operations: Vehicle Data	Trip generation rates are adjusted based on the ITE Trip Generation Manual, 11th Edition.
Operations: Fleet Mix	Fleet mix has been adjusted to reflect a total of 2% heavy trucks (GVWR > 10,000 lbs.).
Operations: Hearths	Per SCAQMD Rule 445, no woodburning devices shall be allowed.

8.3. Land Use

Model Parameter	Units	Default Value	New Value
Lot Area	acre	8.56250	6.44000
Landscape Area	sq. ft	—	127,400
Lot Area	acre	0.76500	2.00000
Landscape Area	sq. ft	—	0.00000

8.4. Construction

8.4.1. Construction Phases

Phase Type	Phase Name	Model Parameter	Default Value	New Value
Demolition	Demolition	End Date	10/29/2026	11/18/2026
Demolition	Demolition	Work Days per Phase	20.0000	35.0000
Site Preparation	Site Preparation	Start Date	10/30/2026	11/19/2026
Site Preparation	Site Preparation	End Date	11/13/2026	12/2/2026
Grading	Grading	Start Date	11/14/2026	12/3/2026
Grading	Grading	End Date	12/12/2026	12/30/2026
Building Construction	Building Construction	Start Date	12/13/2026	12/31/2026
Building Construction	Building Construction	End Date	10/31/2027	11/17/2027
Paving	Paving	Start Date	11/1/2027	11/18/2027
Paving	Paving	End Date	11/29/2027	12/15/2027
Architectural Coating	Architectural Coating	Start Date	11/30/2027	12/16/2027
Architectural Coating	Architectural Coating	End Date	12/28/2027	1/12/2028

8.4.2. Off-Road Equipment

Phase Name	Equipment Type	Model Parameter	Default Value	New Value
Grading	Scrapers	Number per Day	1.000000	2.00000

8.5. Operations

8.5.1. Mobile Sources

8.5.1.1. Vehicle Data

Land Use	Model Parameter	Units	Default Value	New Value
Condo/Townhouse	Weekday Trip Rate	size/day	7.32000	7.20000
Condo/Townhouse	Saturday Trip Rate	size/day	8.14000	8.76000
Condo/Townhouse	Sunday Trip Rate	size/day	6.28000	7.17000

8.5.1.2. Fleet Mix

Land Use	Season	Model Parameter	Units	Default Value	New Value
Condo/Townhouse	A	Heavy-Heavy-Duty Trucks	%	1%	< 0.5%
Condo/Townhouse	A	Passenger Cars	%	49%	50%
Condo/Townhouse	A	Light-Duty Trucks 1	%	4%	4%
Condo/Townhouse	A	Light-Duty Trucks 2	%	24%	24%
Condo/Townhouse	A	Light Heavy-Duty Trucks 1	%	3%	3%
Condo/Townhouse	A	Light Heavy-Duty Trucks 2	%	1%	< 0.5%
Condo/Townhouse	A	Motorcycles	%	2%	2%
Condo/Townhouse	A	Medium-Duty Trucks	%	15%	15%
Condo/Townhouse	A	Motor Homes	%	< 0.5%	< 0.5%
Condo/Townhouse	A	Medium-Heavy-Duty Trucks	%	2%	1%
Condo/Townhouse	A	Other Buses	%	< 0.5%	< 0.5%
Condo/Townhouse	A	School Buses	%	< 0.5%	< 0.5%
Condo/Townhouse	A	Urban Buses	%	< 0.5%	< 0.5%
Condo/Townhouse	S	Heavy-Heavy-Duty Trucks	%	1%	< 0.5%
Condo/Townhouse	S	Passenger Cars	%	49%	50%
Condo/Townhouse	S	Light-Duty Trucks 1	%	4%	4%

Condo/Townhouse	S	Light-Duty Trucks 2	%	24%	24%
Condo/Townhouse	S	Light Heavy-Duty Trucks 1	%	3%	3%
Condo/Townhouse	S	Light Heavy-Duty Trucks 2	%	1%	< 0.5%
Condo/Townhouse	S	Motorcycles	%	2%	2%
Condo/Townhouse	S	Medium-Duty Trucks	%	15%	15%
Condo/Townhouse	S	Motor Homes	%	< 0.5%	< 0.5%
Condo/Townhouse	S	Medium-Heavy-Duty Trucks	%	2%	1%
Condo/Townhouse	S	Other Buses	%	< 0.5%	< 0.5%
Condo/Townhouse	S	School Buses	%	< 0.5%	< 0.5%
Condo/Townhouse	S	Urban Buses	%	< 0.5%	< 0.5%
Condo/Townhouse	W	Heavy-Heavy-Duty Trucks	%	1%	< 0.5%
Condo/Townhouse	W	Passenger Cars	%	49%	50%
Condo/Townhouse	W	Light-Duty Trucks 1	%	4%	4%
Condo/Townhouse	W	Light-Duty Trucks 2	%	24%	24%
Condo/Townhouse	W	Light Heavy-Duty Trucks 1	%	3%	3%
Condo/Townhouse	W	Light Heavy-Duty Trucks 2	%	1%	< 0.5%
Condo/Townhouse	W	Motorcycles	%	2%	2%
Condo/Townhouse	W	Medium-Duty Trucks	%	15%	15%
Condo/Townhouse	W	Motor Homes	%	< 0.5%	< 0.5%
Condo/Townhouse	W	Medium-Heavy-Duty Trucks	%	2%	1%
Condo/Townhouse	W	Other Buses	%	< 0.5%	< 0.5%
Condo/Townhouse	W	School Buses	%	< 0.5%	< 0.5%
Condo/Townhouse	W	Urban Buses	%	< 0.5%	< 0.5%
Parking Lot	A	Heavy-Heavy-Duty Trucks	%	1%	< 0.5%
Parking Lot	A	Passenger Cars	%	49%	50%
Parking Lot	A	Light-Duty Trucks 1	%	4%	4%
Parking Lot	A	Light-Duty Trucks 2	%	24%	24%
Parking Lot	A	Light Heavy-Duty Trucks 1	%	3%	3%

Parking Lot	A	Light Heavy-Duty Trucks 2	%	1%	< 0.5%
Parking Lot	A	Motorcycles	%	2%	2%
Parking Lot	A	Medium-Duty Trucks	%	15%	15%
Parking Lot	A	Motor Homes	%	< 0.5%	< 0.5%
Parking Lot	A	Medium-Heavy-Duty Trucks	%	2%	1%
Parking Lot	A	Other Buses	%	< 0.5%	< 0.5%
Parking Lot	A	School Buses	%	< 0.5%	< 0.5%
Parking Lot	A	Urban Buses	%	< 0.5%	< 0.5%
Parking Lot	S	Heavy-Heavy-Duty Trucks	%	1%	< 0.5%
Parking Lot	S	Passenger Cars	%	49%	50%
Parking Lot	S	Light-Duty Trucks 1	%	4%	4%
Parking Lot	S	Light-Duty Trucks 2	%	24%	24%
Parking Lot	S	Light Heavy-Duty Trucks 1	%	3%	3%
Parking Lot	S	Light Heavy-Duty Trucks 2	%	1%	< 0.5%
Parking Lot	S	Motorcycles	%	2%	2%
Parking Lot	S	Medium-Duty Trucks	%	15%	15%
Parking Lot	S	Motor Homes	%	< 0.5%	< 0.5%
Parking Lot	S	Medium-Heavy-Duty Trucks	%	2%	1%
Parking Lot	S	Other Buses	%	< 0.5%	< 0.5%
Parking Lot	S	School Buses	%	< 0.5%	< 0.5%
Parking Lot	S	Urban Buses	%	< 0.5%	< 0.5%
Parking Lot	W	Heavy-Heavy-Duty Trucks	%	1%	< 0.5%
Parking Lot	W	Passenger Cars	%	49%	50%
Parking Lot	W	Light-Duty Trucks 1	%	4%	4%
Parking Lot	W	Light-Duty Trucks 2	%	24%	24%
Parking Lot	W	Light Heavy-Duty Trucks 1	%	3%	3%
Parking Lot	W	Light Heavy-Duty Trucks 2	%	1%	< 0.5%
Parking Lot	W	Motorcycles	%	2%	2%

Parking Lot	W	Medium-Duty Trucks	%	15%	15%
Parking Lot	W	Motor Homes	%	< 0.5%	< 0.5%
Parking Lot	W	Medium-Heavy-Duty Trucks	%	2%	1%
Parking Lot	W	Other Buses	%	< 0.5%	< 0.5%
Parking Lot	W	School Buses	%	< 0.5%	< 0.5%
Parking Lot	W	Urban Buses	%	< 0.5%	< 0.5%

8.5.2. Area Sources

8.5.2.1. Hearths

Land Use	Model Parameter	Units	Default Value	New Value
Condo/Townhouse	Wood Fireplaces	—	7	0
Condo/Townhouse	Gas Fireplaces	—	116	137
Condo/Townhouse	No Fireplaces	—	14	0
Condo/Townhouse	Wood Mass	lb/year	1,019	0
Condo/Townhouse	Catalytic Wood Stoves	—	7	0
Condo/Townhouse	Non-Catalytic Wood Stoves	—	7	0
Condo/Townhouse	Days/Year	—	25	0
Condo/Townhouse	Wood Mass	lb/year	1,000	0

Appendix B
EMFAC Vehicle Fuel Consumption Data

Source: EMFAC2025 (v2.0.0) Emissions Inventory
Region Type: Air District
Region: South Coast AQMD
Calendar Year: 2027
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Units: miles/day for Combustion VMT and Electric VMT, trips/day for Trips, tons/day for Emissions, 1000 gallons/day for Fuel Consumption, kWh/day for Energy Consumption, kg/day for Hydrogen Consumptio

Region	Calendar Year	Vehicle Category	Model Year	Speed	Fuel	Population	Total VMT	Fuel Consumption	Fuel Split (Gas:Diesel)	MPG, by Fuel Type	MPG, Average
South Coast AQMD	2027	HHDT	Aggregate	Aggregate	Gasoline	119.9786149	5039.865379	1.292650238	0.000563395	3.898862377	6.389554723
South Coast AQMD	2027	HHDT	Aggregate	Aggregate	Diesel	104694.0021	14655111.19	2293.100573	0.999436605	6.390958758	
South Coast AQMD	2027	LDA	Aggregate	Aggregate	Gasoline	4365511.132	122279941.4	4660.5255	0.998717608	26.23737203	26.24952527
South Coast AQMD	2027	LDA	Aggregate	Aggregate	Diesel	9374.916105	213725.4271	5.984296501	0.001282392	35.71437797	
South Coast AQMD	2027	LDT1	Aggregate	Aggregate	Gasoline	459882.6443	13188498.87	592.399392	0.999836848	22.26285011	22.26280131
South Coast AQMD	2027	LDT1	Aggregate	Aggregate	Diesel	100.2449672	2123.159791	0.096666669	0.000163152	21.96372145	
South Coast AQMD	2027	LDT2	Aggregate	Aggregate	Gasoline	2600590.744	87049580.58	3892.623714	0.998710425	22.36270109	22.37298592
South Coast AQMD	2027	LDT2	Aggregate	Aggregate	Diesel	4676.709905	152488.5502	5.026311659	0.001289575	30.3380611	
South Coast AQMD	2027	LHDT1	Aggregate	Aggregate	Gasoline	191914.015	6082376.492	432.8421995	0.751295699	14.05217998	15.68707413
South Coast AQMD	2027	LHDT1	Aggregate	Aggregate	Diesel	90403.37187	2955380.11	143.2854155	0.248704301	20.62582643	
South Coast AQMD	2027	LHDT2	Aggregate	Aggregate	Gasoline	39728.80291	1417530.56	108.3207185	0.374131726	13.08642132	16.2498921
South Coast AQMD	2027	LHDT2	Aggregate	Aggregate	Diesel	78414.06531	3287229.466	181.2048979	0.625868274	18.14095261	
South Coast AQMD	2027	MCY	Aggregate	Aggregate	Gasoline	254728.5887	1430122.847	36.57939924	1	39.09640062	39.09640062
South Coast AQMD	2027	MDV	Aggregate	Aggregate	Gasoline	1618820.697	53179824.35	2922.694912	0.974882352	18.19547573	18.34514026
South Coast AQMD	2027	MDV	Aggregate	Aggregate	Diesel	47020.27838	1818861.373	75.30264779	0.025117648	24.15401618	
South Coast AQMD	2027	MH	Aggregate	Aggregate	Gasoline	33466.17076	288683.0254	59.46696905	0.834461628	4.854510496	5.719692219
South Coast AQMD	2027	MH	Aggregate	Aggregate	Diesel	13701.47309	118924.4054	11.79690586	0.165538372	10.08098283	
South Coast AQMD	2027	MHDT	Aggregate	Aggregate	Gasoline	32148.25779	1407853.777	264.8952811	0.356230844	5.314755971	7.618466481
South Coast AQMD	2027	MHDT	Aggregate	Aggregate	Diesel	116061.9004	4257281.212	478.7104043	0.643769156	8.89322892	
South Coast AQMD	2027	OBUS	Aggregate	Aggregate	Gasoline	5068.871427	139612.4062	27.61773216	0.570608264	5.05517272	6.138127489
South Coast AQMD	2027	OBUS	Aggregate	Aggregate	Diesel	2755.436213	157476.1075	20.78277992	0.429391736	7.577239816	
South Coast AQMD	2027	SBUS	Aggregate	Aggregate	Gasoline	2717.237286	100365.3766	10.92072148	0.622377463	9.19036135	8.495522144
South Coast AQMD	2027	SBUS	Aggregate	Aggregate	Diesel	2489.694284	48703.69586	6.626060217	0.377622537	7.350324969	
South Coast AQMD	2027	UBUS	Aggregate	Aggregate	Gasoline	822.035363	51797.79747	10.18350243	0.984652985	5.086442295	5.106599399
South Coast AQMD	2027	UBUS	Aggregate	Aggregate	Diesel	13.70031546	1015.80099	0.158722274	0.015347015	6.399864143	

Appendix B:

Pacific Park Drive Townhome Project Biological Resource Assessment in the City of Aliso Viejo

Memorandum

Date: December 5, 2025

To: Emilie Simard, Shea Homes

From: Brianna Bernard

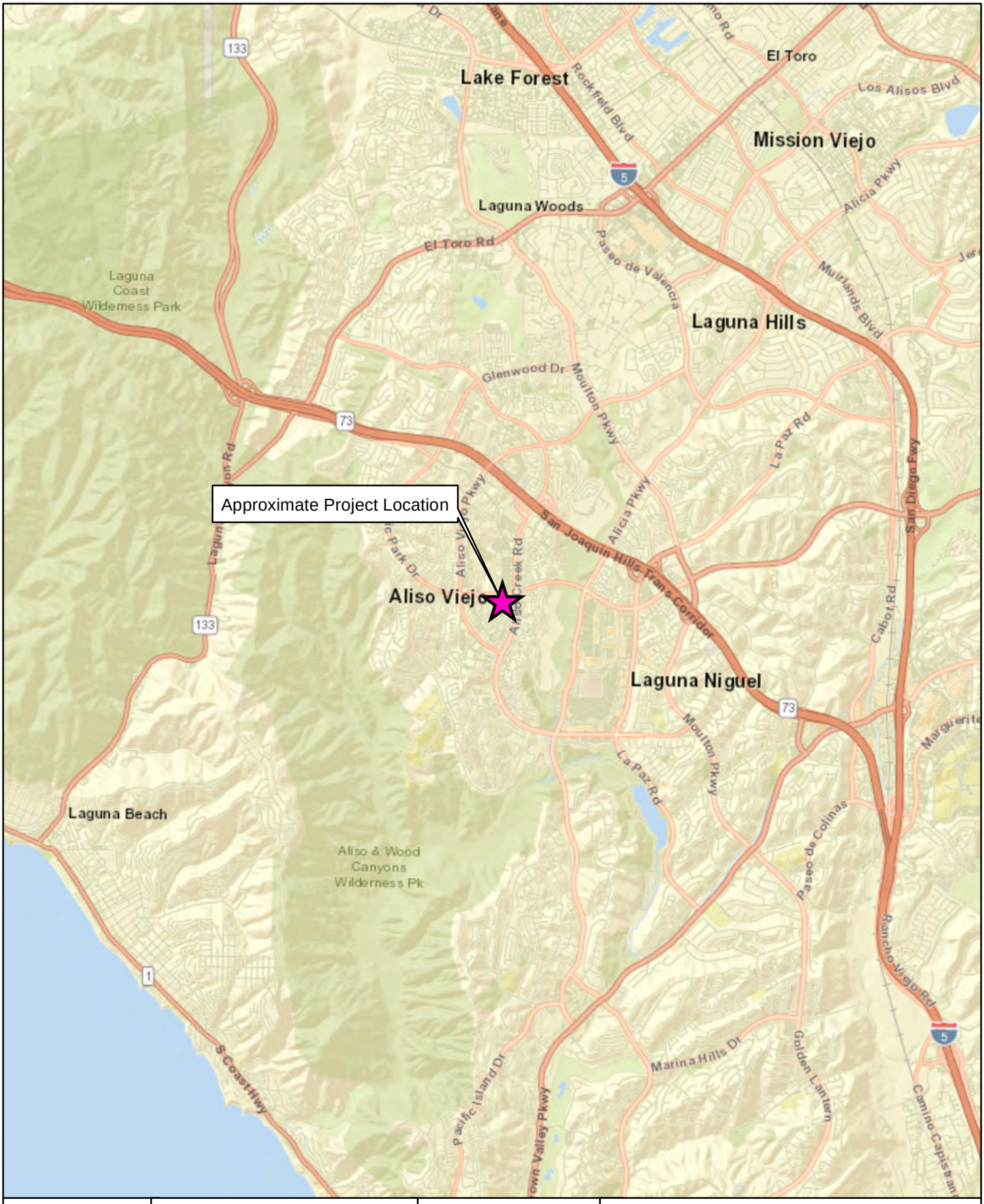
Subject: The Pacific Park Drive Townhome Project Biological Resource Assessment in the City of Aliso Viejo

Shea Homes (Applicant) requested Carlson Strategic Land Solutions (CSLS) prepare a Biological Resource Assessment memorandum and graphics documenting the finding of a field review for potential sensitive plants and wildlife for Pacific Park Drive Townhome Project (Project) located in the City of Aliso Viejo, California. In support of Project efforts CSLS biologist, Brianna Bernard, conducted an analysis of the biological resources onsite on December 5, 2025. This memorandum provides the results of the site visit.

1.0 Project Location and Description

The Project site is currently developed with three, two story office buildings and associated parking lot located southwest of the intersection of Aliso Creek Road and Pacific Park Drive in the City of Aliso Viejo (Figures 1 and 2). The approximately 8.44-acre Project site is bounded by a fire station to the northwest, a gas station to the north east and an office complex.

The proposed Project scope will include the demolition of the existing office buildings, along with surface parking lots, and proposes to construct of 137 three-story, for-sale residential units. A tentative tract map is provided on Figure 3.



GIS Prepared By:
Carlson SLS

Created: November 25, 2025

0 1,250 2,500 5,000 7,500 Feet

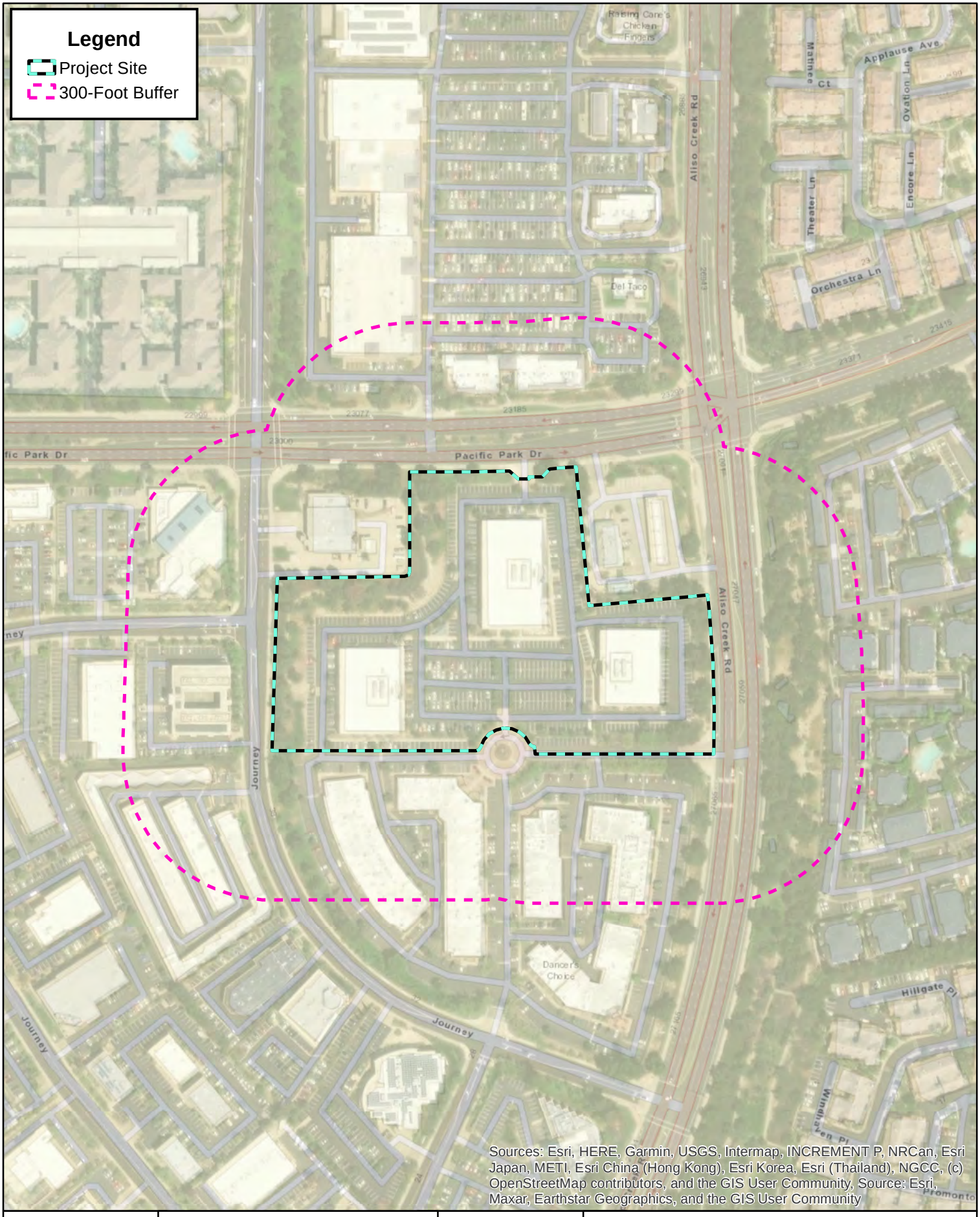
1 inch = 5,000 feet

Data Source: Bing Maps

Pacific Park Drive Townhome Project

Regional Location Map

FIGURE 1



GIS Prepared By:
Carlson SLS

Created: November 25, 2025

0 25 50 100 150 200 250 300 350 400 450 500 Feet

1 inch = 250 feet

Data Source: Bing Maps

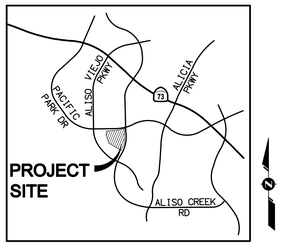
Pacific Park Drive Townhome Project

Project Location Map

FIGURE 2

VESTING TENTATIVE TRACT MAP 19442

FOR CONDOMINIUM PURPOSES
APN: 632-124-08
PARCEL 1 OF PARCEL MAP NO. 93-196
27181 ALISO CREEK RD



VICINITY MAP
NOT TO SCALE

LINE/CURVE DATA TABLE				
NO.	BEARING/DELTA	RADIUS	LENGTH	TANGENT
1	N00°00'00"W	--	108.33'	--
2	19°53'33"	120.00'	41.66'	21.04'
3	N19°53'33"E	--	65.27'	--
4	19°53'33"	120.00'	41.66'	21.04'
5	N00°00'00"E	--	78.46'	--
6	N90°00'00"E	--	541.15'	--
7	90°00'00"	32.50'	51.05'	32.50'
8	N00°00'00"W	--	116.79'	--
9	N90°00'00"E	--	734.94'	--
10	N03°27'51"W	--	276.00'	--
11	N90°00'00"E	--	265.44'	--
12	N90°00'00"E	--	272.80'	--
13	N90°00'00"E	--	133.90'	--
14	N00°00'00"E	--	40.17'	--

GENERAL NOTES:

1. SITE AREA: 8.44 ACRES
2. EXISTING LAND USE: PROFESSIONAL OFFICE
3. PROPOSED LAND USE: 137 ATTACHED RESIDENTIAL CONDOMINIUM DWELLING UNITS
4. ADJACENT LAND USES:
   NORTH - TOWN CENTER COMMERCIAL
   SOUTH - PROFESSIONAL OFFICE
   EAST - RESIDENTIAL HIGH DENSITY (RHD)
   WEST - BUSINESS PARK
5. EXISTING GENERAL PLAN USE: PROFESSIONAL OFFICE (PO)
6. PROPOSED GENERAL PLAN USE: RESIDENTIAL MEDIUM DENSITY (9-18 DU/AC)
7. EXISTING ZONING: PROFESSIONAL OFFICE (PO)
8. PROPOSED ZONING: RESIDENTIAL MEDIUM DENSITY (9-18 DU/AC)
9. THIS PROJECT IS LOCATED IN FLOOD ZONE "X" SHOWN ON FEMA PANEL 06059C0428J, EFFECTIVE DATE: 12/03/2009.
10. THE DEVELOPER RESERVES THE RIGHT TO FILE MULTIPLE FINAL MAPS FOR THIS TENTATIVE TRACT MAP.
11. MAINTENANCE OF ALL LETTERED LOTS AND PARKWAYS SHALL BE THE RESPONSIBILITY OF A HOMEOWNER'S ASSOCIATION, PUBLIC AGENCY, OR PRIVATE ENTITY. SEE STATISTICAL SUMMARY AND OWNERSHIP/MAINTENANCE SUMMARY THIS SHEET FOR DETAILED BREAKDOWN.
12. A PORTION OF THE PROPOSED STORM DRAIN SYSTEM WITHIN THE LIMITS OF THIS PROJECT WILL BE PRIVATELY OWNED AND MAINTAINED BY THE HOME OWNER'S ASSOCIATION.
13. DRAINAGE OF THIS PROJECT WILL BE CONVEYED BE MEANS OF A STORM DRAIN SYSTEM CONSISTING OF VARYING SIZES OF STORM DRAIN PIPES, BROW DITCHES AND AREA DRAINS.
14. EXISTING IRRIGATION LINES WILL BE REMOVED, RELOCATED OR PROTECTED IN PLACE.
15. ALL EXISTING EASEMENTS ARE TO REMAIN IN THEIR CURRENT DESIGNATED LOCATIONS UNLESS OTHERWISE NOTED.
16. PRIOR TO THE RECORDATION OF A SUBDIVISION MAP THE APPLICANT SHALL SUBMIT A "BACKBONE" FIRE MASTER PLAN TO THE FIRE CHIEF FOR REVIEW AND APPROVAL. THIS PLAN SHALL INCLUDE THE STREETS AS SHOWN ON THE VESTING TENTATIVE TRACT MAP (VTTM). THIS PLAN SHALL INCLUDE ALL STREETS (WITH SECTIONS), FIRE HYDRANT LOCATIONS, BLUE PAVEMENT MARKERS, WATER AVAILABILITY FOR FIRE FLOW REPORT, AND ANY GATES PROPOSED ACROSS FIRE DEPARTMENT ACCESS.
17. ALL PROPOSED UTILITIES WILL BE UNDERGROUND.
18. SCHOOL DISTRICT IS CAPISTRANO UNIFIED.
19. ALL SIDEWALKS, CURB RETURNS, AND PEDESTRIAN CROSSINGS MUST MEET THE TITLE 24 AND AMERICAN DISABILITIES ACT REQUIREMENTS.
20. AN EASEMENT FOR EMERGENCY ACCESS AND PUBLIC SERVICE VEHICULAR INGRESS AND EGRESS PURPOSES WILL BE PROVIDED OVER PRIVATE COURTS.
21. 137 ATTACHED RESIDENTIAL CONDOMINIUMS ARE PROPOSED.
22. PROJECT IS NOT LOCATED IN A FIRE HAZARD SEVERITY ZONE.

UTILITIES:

WATER & SEWER:	MOULTON NIGUEL WATER DISTRICT (949) 831-2500
ELECTRIC:	SOUTHERN CALIFORNIA EDISON CO. (800) 655-4555
CABLE TV:	AT&T (800) 310-2355
TELEPHONE:	AT&T (800) 310-2355

BENCHMARK:

COUNTY OF ORANGE DESIGNATION: 3X-21-69

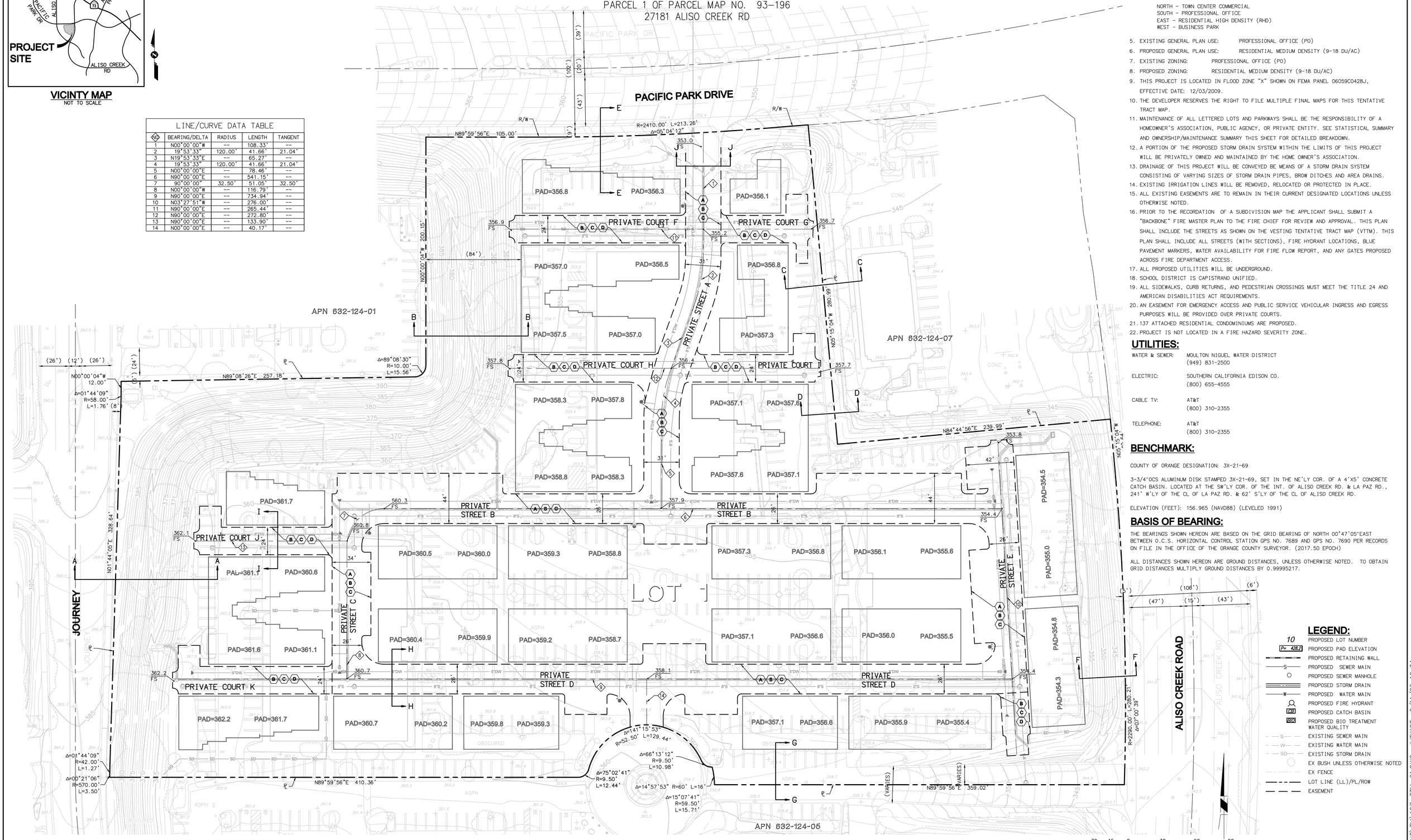
3-3/4"OCS ALUMINUM DISK STAMPED 3X-21-69, SET IN THE NE'LY COR. OF A 4'X5' CONCRETE CATCH BASIN. LOCATED AT THE SW'LY COR. OF THE INT. OF ALISO CREEK RD. & LA PAZ RD., 241' W'LY OF THE CL OF LA PAZ RD. & 62' S'LY OF THE CL OF ALISO CREEK RD.

ELEVATION (FEET): 156.965 (NAVD88) (LEVELED 1991)

BASIS OF BEARING:

THE BEARINGS SHOWN HEREON ARE BASED ON THE GRID BEARING OF NORTH 00°47'05"EAST BETWEEN O.C.S. HORIZONTAL CONTROL STATION GPS NO. 7689 AND GPS NO. 7690 PER RECORDS ON FILE IN THE OFFICE OF THE ORANGE COUNTY SURVEYOR. (2017.50 EPOCH)

ALL DISTANCES SHOWN HEREON ARE GROUND DISTANCES, UNLESS OTHERWISE NOTED. TO OBTAIN GRID DISTANCES MULTIPLY GROUND DISTANCES BY 0.99995217.



LEGEND:

10	PROPOSED LOT NUMBER
P= 428.2	PROPOSED PAD ELEVATION
	PROPOSED RETAINING WALL
S	PROPOSED SEWER MAIN
	PROPOSED SEWER MANHOLE
	PROPOSED STORM DRAIN
W	PROPOSED WATER MAIN
	PROPOSED FIRE HYDRANT
CB1	PROPOSED CATCH BASIN
BIO	PROPOSED BIO TREATMENT WATER QUALITY
-S-	EXISTING SEWER MAIN
-W-	EXISTING WATER MAIN
-SD-	EXISTING STORM DRAIN
	EX BUSH UNLESS OTHERWISE NOTED
	EX FENCE
	LOT LINE (LL)/PL/ROW
	EASEMENT

30 15 0 30 60 90
SCALE: 1"=30'

Figure 3

OWNER CONSENT:

AACN PROPERTY HOLDINGS, LLC GIVES CONSENT TO THE FILING OF THIS TENTATIVE MAP.

JAKKI FARR
JAKKI FARR, CFO DATE 09/23/2025

DEVELOPER:

SHEA HOMES
2 ADA, SUITE 200
IRVINE, CA 92618
(949) 526-8800

LEGAL DESCRIPTION:

PARCEL 1 OF PARCEL MAP NO. 93-196, IN THE CITY OF ALISO VIEJO, IN THE COUNTY OF ORANGE, STATE OF CALIFORNIA, AS SHOWN ON A MAP FILED IN BOOK 280 PAGES 26 TO 28 INCLUSIVE OF PARCEL MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA.

PROPOSED EASEMENTS

- (A) EASEMENT TO MNWD FOR SEWER AND WATER PURPOSES
- (B) EASEMENT FOR EMERGENCY ACCESS PURPOSES TO THE CITY OF ALISO VIEJO
- (C) EASEMENT FOR RECIPROCAL INGRESS/EGRESS FOR ALL UNITS
- (D) EASEMENT TO MNWD FOR WATER ONLY

PREPARED BY:

PROACTIVE ENGINEERING CONSULTANTS
27051 TOWNE CENTRE DRIVE, SUITE 270
FOOTHILL RANCH, CA 92610

ENGINEER'S STATEMENT

THIS MAP HAS BEEN PREPARED UNDER MY SUPERVISION AS DIRECTED BY THE RECORD OWNER AND DEVELOPER OF THE PROPERTY DESCRIBED HEREON.

REGISTERED PROFESSIONAL ENGINEER AMY L. JARAMILLO NO. 94608 CIVIL STATE OF CALIFORNIA

DATE
AMY L. JARAMILLO, R.C.E. NO. 94608

PREPARED FOR: Shea HOMES — SHEA HOMES, 2 ADA, SUITE 200, IRVINE, CA 92618, (949) 526-8800	PREPARED BY: PROACTIVE ENGINEERING & SURVEYING, 27051 Towne Centre Drive, Suite 270, Foothill Ranch, CA 92610 949.716.7460	VESTING TENTATIVE TRACT MAP — 27181 ALISO CREEK RD	PLAN PREPARATION: AUGUST 2025 — C-1 — SHEET 1 OF 3

N:\20.197.000\DLV\PLANS\ENT\TM\197-TTM-01.DWG JVTWIST 6/11/25 12:34 pm

2.0 Methodology

2.1 Biological Survey

Prior to the field survey, available literature, historical aerials, and databases were reviewed regarding sensitive habitats, special status plants, and wildlife species within the vicinity. CSLS reviewed and consulted literature and databases focused on Orange County, California, including the California Natural Diversity Database (CNDDB) and the U.S. Fish and Wildlife Service (USFWS) Critical Habitat database. The CNDDB is a California Department of Fish and Wildlife (CDFW) species account database that inventories status and locations of rare plants and wildlife in California. The CNDDB was used to identify any sensitive plant communities and special status plants and wildlife that have potential to occur within the Project site.

The USFWS's online service for information regarding Final Critical Habitat designation within California was reviewed to determine if the Study Area is within any species' designated Critical Habitat. The USFWS regulatory mapping process for the designation of critical habitat is an imprecise, broad-based, mapping exercise of areas that may or may not include constituent elements of the critical habitat designation. Due to this approach in mapping, large areas are designated as critical habitat regardless of the existing habitat, and as a result may include developed areas, such as buildings, roads, hardscape, and other such facilities, as well as natural habitats.

2.1.1 Plant Community Mapping

Plant communities were mapped in the field directly onto a 200-scale (1" = 200') focusing on dominant plant species. Plant species were identified using plant field and taxonomical guides, such as The Jepson Manual: Vascular Plants of California, second edition (Baldwin et al. 2012). Vegetation communities were characterized utilizing vegetation alliances in accordance with The Manual of California Vegetation, Second Edition (MCVII) (Sawyer et al. 2009). Where necessary, deviations were made on best professional judgment when areas did not fit into a specific habitat description provided by MCVII. After completing the fieldwork, the plant community polygons were digitized using Geographic Information System (GIS) technology to calculate acreages.

2.2 Orange County Natural Community Conservation Plan and Habitat Conservation Plan (NCCP/HCP)

The Orange County Natural Community Conservation Plan and Habitat Conservation Plan (NCCP/HCP) was prepared in cooperation with CDFW and USFWS. The NCCP/HCP focus' on creating a multiple-species, multiple-habitat subregional Reserve

System and implementing a long-term adaptive management program that will protect coastal sage scrub and other habitats and species located within the CSS habitat mosaic, while providing for economic uses that will meet the social and economic needs of the people of the subregion.

The primary goal of the NCCP/HCP is to protect and manage habitat supporting a broad range of plant and animal populations. To accomplish this goal, the NCCP/HCP creates a subregional habitat Reserve System and implements a coordinated program to manage biological resources within the habitat reserve.

2.3 Jurisdictional Waters

The Project site was assessed for jurisdictional Waters of the United States (U.S.) and Waters of the State. To determine the presence of a wetland, three indicators are required: (1) hydrophytic vegetation, (2) hydric soils, and (3) wetland hydrology. The methodology published in the *U.S. Army Corps of Engineers 1987 Wetland Delineation Manual* and the *Arid West Supplement* sets the standards for meeting each of the three indicators, which normally require that 50 percent or more dominant plant species typical of a wetland, soils exhibiting characteristics of saturation, and hydrological indicators be present.

Additionally, jurisdiction over non-wetland Waters of the U.S. is typically determined through the observation of an Ordinary High Water Mark (OHWM), which is defined as the "line on the shore established by the fluctuation of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas." Projects with impacts to Waters of the U.S. are regulated under Sections 401 and 404 of the Clean Water Act.

Waters of the State are regulated by the California Department of Fish and Wildlife (CDFW) through Section 1600 et seq. of the California Fish and Game Code. The limits of Waters of the State are defined as the "body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation." Therefore, the limits extend from the channel bed to the top of the bank, with the addition of the canopy of any riparian habitat associated with the watercourse.

3.0 Results

3.1 Biological Results

CSLS Biologist conducted a general biological survey within the Project site and surrounding 300-foot buffer, collectively referred to as the Study Area, on December 5, 2025. The survey was performed between 11:00 a.m. and 12:00 p.m. The temperature was 67° F during the field survey, with clear skies. Any inaccessible or restricted areas were surveyed using binoculars. The vegetation, trees, jurisdictional waters, and wildlife observed were documented. Representative photographs of the Study Area are included in Attachment A.

3.1.1 Vegetation Communities

The Project site is a developed lot and composed entirely of developed community (office/commercial buildings and parking lot) with scattered ornamental species in the parking lot and frontage of the building (Figure 4). A description of the vegetation community is found below.

Developed

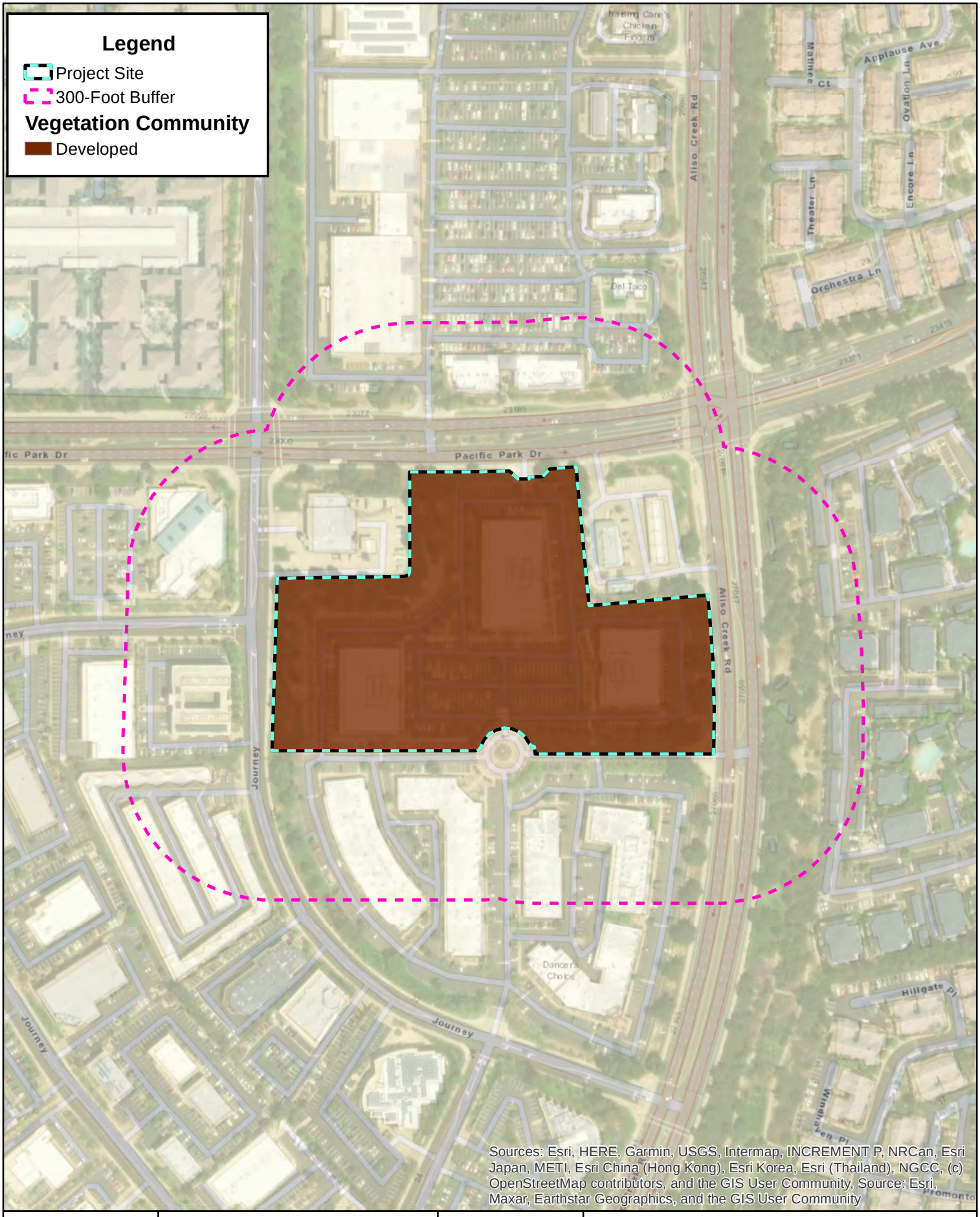
The entire Project site is developed with three existing office buildings and associated parking lots. Vegetation within this community include glossy privet (*Ligustrum lucidum*), southern magnolia tree (*Magnolia grandiflora*), carrotwood tree (*Cupaniopsis anacardioides*), century plant (*Agave americana*), crimson fountain grass (*Pennisetum setaceum*), Peruvian peppertree (*Schinus molle*), bottlebrush tree (*Melaleuca quinquenervia*), and Chinese elm (*Ulmus parvifolia*). This community includes the ornamental landscape slopes located along the western portion of the Project site.

3.1.2 Special Status Plant and Wildlife Species

The Project site contains no special-status vegetation type listed by the CNDDB and CDFW. Due to the developed environment of the Project site, it does not contain any suitable habitat for special status plants or wildlife. Several sensitive wildlife species were reported in the vicinity of the Project site based on the CNDDB and within the quadrangle search. No special status wildlife was identified or observed within the Project site during the field survey.

3.1.3 Critical Habitat

The Study Area is not located within any designated critical habitat. The closest mapped critical habitat occurs approximately 1.57 miles to the south for the thread-leaved brodiaea (*Brodiaea filifolia*) (Figure 5). The Project site does not contain any suitable habitat for these species.



GIS Prepared By:
Carlson SLS

Created: December 5, 2025

0 25 50 100 150 200 250 300 350 400 450 500 Feet

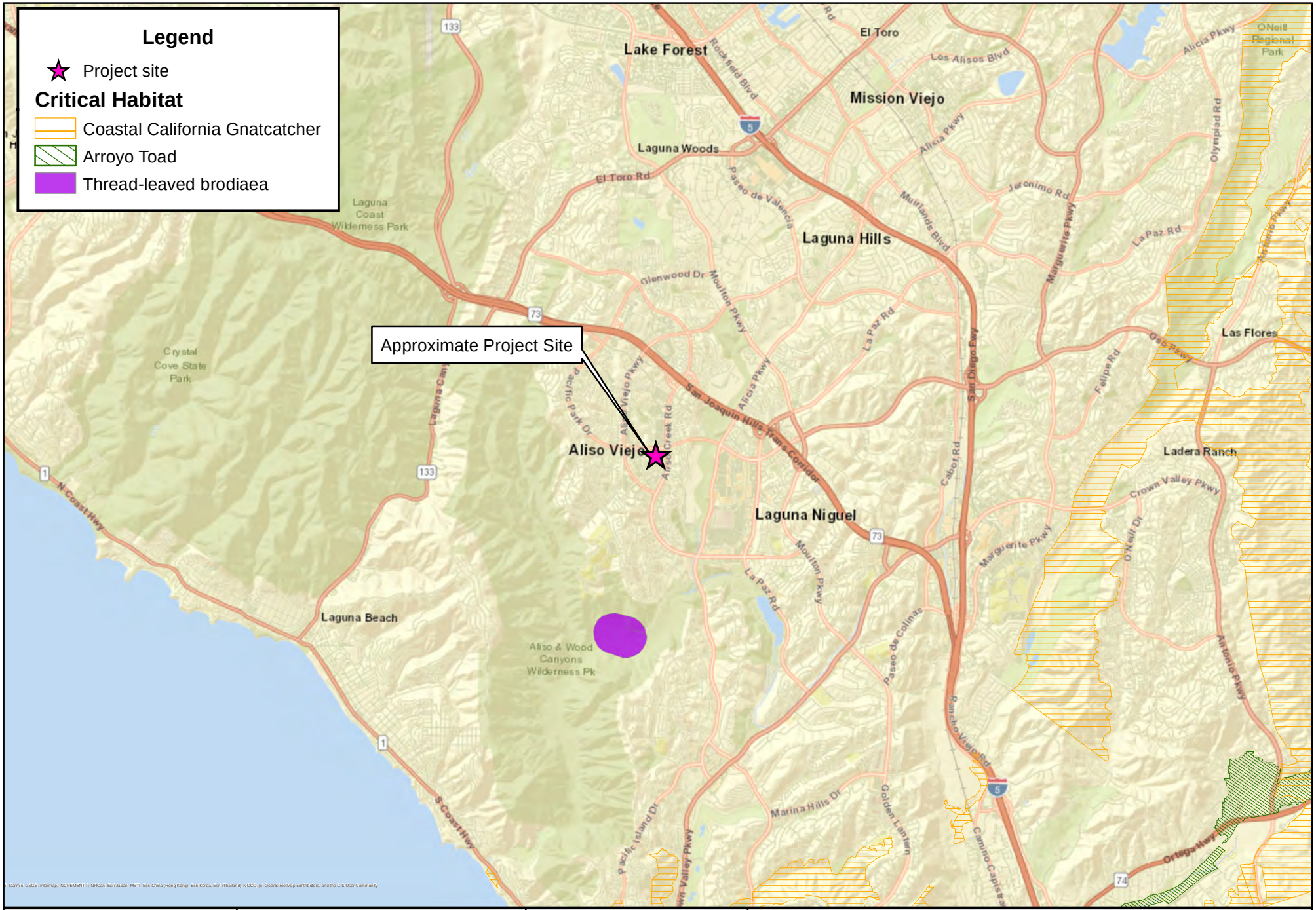
1 inch = 250 feet

Data Source: Bing Maps

Pacific Park Drive Townhome Project

Vegetation Map

FIGURE 4



GIS Prepared By:
Carlson SLS

Created: November 2025

0 1,625 3,250 6,500 9,750 13,000 Feet
1 inch = 6,500 feet

Data Source: CNDDB (11/2025)
CH (03/2015)

Pacific Park Drive Townhome Project
Critical Habitat

FIGURE 5

3.1.4 Wildlife Species

The Project site is located along a busy corridor along Pacific Park Drive and Aliso Creek Road. Due to this wildlife species observed onsite was low during the survey and consisted primarily of species accustomed to urban settings. Observed species include American crow (*Corvus brachyrhynchos*), black phoebe (*Sayornis nigricans*), Anna's hummingbird *(Calypte anna),* song sparrow (*Melospiza melodia*), and mourning dove (*Zenaida macroura*).

3.2 NCCP/HCP

Portions of the City lie within the Coastal subregion of the Orange County Natural Community Conservation Plan and Habitat Conservation Plan (NCCP/HCP); however, the Project site is not located within or adjacent to designated Non-Reserve Open Space or NCCP Habitat Reserve within the NCCP/HCP. The Project site is currently developed and located within an urbanized area, and is not located within the boundaries of the NCCP/HCP reserve system.

3.3 Jurisdictional Waters

Based on the literature review and USGS quadrangle topographic map, no blue line drainages were mapped on the Project site. During the field survey, the biologists paid special attention for any drainages meeting the regulatory definitions of waters.

The Project site is a developed condition with three, two story office/commercial buildings, associated parking lot, and scattered ornamental vegetation. Based on the field survey, there are no features identified on the Project site that meet the definition and are considered jurisdictional Waters of the United States or Waters of the State, pursuant to Section 1600-1603 of the California Fish and Game Code and Section 401 and 404 of the Clean Water Act, respectively.

4.0 Impacts

With the implementation of the Project 7.27 acres would be impacted. The western ornamental slope is not anticipated to be impacted (Figure 3).

4.1 Biological Results

4.1.1 Vegetation Communities

Development of the Project site would result in the direct removal of non-native species and hardscape, including buildings and parking lot. No special status or sensitive plant species were identified to occur onsite, nor were they observed onsite. The Project site

is developed with some ornamental species. The Project would include the removal of non-native ornamental species, which are abundant in the area; therefore, impacts would not be considered a significant impact and no mitigation is required.

4.1.2 Sensitive Wildlife Species

Development of the Project site would result in the disruption and removal of potential nesting habitat in the form of buildings, ornamental trees, and shrubs. Due to the built nature of the site, the busy intersection, and development within the vicinity (e.g., nearby commercial buildings), these impacts would not be expected to reduce the general wildlife populations below self-sustaining levels within the region and impacts to non-sensitive wildlife species do not meet the significance thresholds. Therefore, impacts to common wildlife species would not be considered a significant impact and no mitigation is required.

The Project site consists of developed habitat and lacks suitable habitat for sensitive wildlife species. The Project site provides limited suitable habitat for some common avian species in the form of ornamental species and existing building eaves. While none of the common species carry a Federal or State listing as threatened or endangered, they are all protected under the Migratory Bird Treaty Act (MBTA). Therefore, a pre-construction survey is required in compliance with the MBTA. Implementation of Mitigation Measure MM BIO-1 would reduce potential impacts to the avian species to a less than significant level, if nesting individuals are present.

MM BIO-1 *Prior to the issuance of any grading permit that would impact potentially suitable nesting habitat for avian species, the project applicant shall adhere to the following:*

1. *Vegetation removal activities shall be scheduled outside the nesting season (September 1 to February 14 for songbirds; September 1 to January 14 for raptors) to the extent feasible to avoid potential impacts to nesting birds and/or ground nesters.*

2. *Any construction activities that occur during typical nesting season (February 15 to August 31 for songbirds; January 15 to August 31 for raptors) will require that all suitable habitat, on-site and within 300-feet surrounding the site (as feasible), be thoroughly surveyed for the presence of nesting birds by a qualified biologist before commencement ground disturbances. If active nests are identified, the biologist would establish buffers around the vegetation (500 feet for*

raptors and sensitive species, 200 feet for non-raptors/non-sensitive species). All work within these buffers would be halted until the nesting effort is finished (i.e. the juveniles are surviving independent from the nest). The onsite biologist would review and verify compliance with these nesting boundaries and would verify the nesting effort has finished. Work can resume within these areas when no other active nests are found. Alternatively, a qualified biologist may determine that construction can be permitted within the buffer areas and would develop a monitoring plan to prevent any impacts while the nest continues to be active (eggs, chicks, etc.). Upon completion of the survey and any follow-up construction avoidance management, a report shall be prepared and submitted to City for mitigation monitoring compliance record keeping.

4.1.3 Wildlife Corridor

The Project site is surrounded by commercial buildings and does not function as a wildlife corridor. Furthermore, the Project site located on a busy intersection with consistent traffic and noise further deterring the use of the site as corridor. As such, no impacts would occur, and no mitigation is required.

4.2 Local Ordinances or Policies

The City does not have any local policies, such as a tree preservation ordinance, which protects biological resources. In addition, the Project site consists primarily of the disturbed/developed habitat community, with the western site boundary consisting of a landscaped slope with groundcover, shrubs, and trees. Therefore, no impacts would occur, and no mitigation is required.

4.3 Adopted Habitat Conservation Plan

Portions of the City lie within the Coastal subregion of the Orange County Natural Community Conservation Plan and Habitat Conservation Plan (NCCP/HCP); however, the Project site is not located within or adjacent to designated Non-Reserve Open Space or NCCP Habitat Reserve within the NCCP/HCP. The Project site is currently developed and located within an urbanized area and is not located within the boundaries of the NCCP/HCP reserve system. Therefore, no impacts would occur, and no mitigation is required.

4.4 Jurisdictional Features

No jurisdictional features occur on the Project site that meet the definition and are considered jurisdictional Waters of the United States or Waters of the State, pursuant to Section 1600-1603 of the California Fish and Game Code and Section 401 and 404 of the Clean Water Act, respectively. Therefore, no impacts would occur, and no mitigation is required.

5.0 Summary

The Project site consists of three, two story office buildings on a developed lot with scattered ornamental trees and shrubs. The Project site does not contain sensitive habitat or suitable habitat for sensitive species.

While the site is developed, the building and scattered ornamental species could provide suitable nesting habitat for avian species. Due to the suitable habitat, direct impacts could occur to nesting birds should construction activities and ground disturbances begin during the typical nesting season. However, adherence and implementation of MM BIO - 1 will ensure impacts to avian species or their habitats are minimized thus reducing the Project's impact to less than significant.

The Project site does not fall within the Orange County NCCP/HCP boundary. While the City does have an ordinance for trees, the Project does not meet the purpose or intent of the ordinance. However, the Project does propose landscaping as part of the final design.

No jurisdictional features are present onsite.

Please contact me at bbernard@carlsonsls.com or 949.542.7042, should you have any questions or comments.

Brianna Bernard
Project Manager

Enclosures:

- Attachment A: Representative Photographs

Attachment A

Representative Photographs

The Project site consists of existing buildings and associated parking lot.

The parking lot is asphalt with ornamental species.

Western slope would not be impacted and consists of ornamental vegetation.

The Project site includes existing buildings.

Ornamental species were observed in the parking lot islands.

Looking southeast across the Project site.

Looking southwest at the western landscaped slope.

Looking southwest at the western landscaped slope.

Appendix C:

Cultural Resources Study for the Journey and Pacific Park Drive (Shea Aliso Viejo) Project

CULTURAL RESOURCES STUDY FOR THE JOURNEY AND PACIFIC PARK DRIVE (SHEA ALISO VIEJO) PROJECT

CITY OF ALISO VIEJO, ORANGE COUNTY, CALIFORNIA

APN 632-124-08

Lead Agency:

City of Aliso Viejo
12 Journey, Suite 100
Aliso Viejo, California 92656

Preparer:

BFSA Environmental Services,
a Perennial Company
14010 Poway Road, Suite A
Poway, California 92064

Project Proponent:

Carlson Strategic Land Solutions
27134A Paseo Espada, Suite 323
San Juan Capistrano, California 92675

July 30, 2025

BFSA Environmental Services
A Perennial Company

Archaeological Database Information

Authors:	Kathleen A. Krogh, B.A. and Tracy A. Stropes, M.A., RPA
Consulting Firm:	BFSA Environmental Services, a Perennial Company 14010 Poway Road, Suite A Poway, California 92064 (858) 484-0915
Client/Project Proponent:	Carlson Strategic Land Solutions 27134A Paseo Espada, Suite 323 San Juan Capistrano, California 92675
Report Date:	July 30, 2025
Report Title:	Cultural Resources Study for the Journey and Pacific Park Drive (Shea Aliso Viejo) Project, City of Aliso Viejo, Orange County, California (APN 632-124-08)
Type of Study:	Phase I Cultural Resources Study
New Site(s):	None
Updated Site(s):	None
Assessor's Parcel Numbers:	632-124-08
USGS Quadrangle:	Township 7 South, Range 8 West of the San Bernadino Baseline and Meridian on the USGS *San Juan Capistrano, California* (7.5-minute) topographic quadrangle
Acreage:	8.44 acres
Key Words:	Survey; negative; no further archaeological study recommended.

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**Deleted for public review and bound separately in the Confidential Appendix*

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MANAGEMENT SUMMARY/ABSTRACT

In response to a request from the project applicant, a cultural resources study was conducted by BFSA Environmental Services, a Perennial Company (BFSA), for the proposed 8.44-acre Journey and Pacific Park Drive (Shea Aliso Viejo) Project, located at 27061, 27071, 27081 Aliso Creek Road, southwest of the intersection of Aliso Creek Road and Pacific Park Drive, in the city of Aliso Viejo, Orange County, California. The project includes Assessor's Parcel Number (APN) 632-124-08 and is situated within Township 7 South, Range 8 West of the San Bernardino Baseline and Meridian on the U.S. Geological Survey (USGS) 1:24,000-scale *San Juan Capistrano, California* (7.5-minute) topographic quadrangle map. The subject property is currently developed as the Pacific Corporate Plaza, a commercial business park that includes three commercial buildings and a parking lot with associated landscape, hardscape, and infrastructure. As proposed, the project applicant plans to demolish the existing buildings for the construction of a multi-family residential development, along with associated hardscape, landscape, and infrastructure.

The purpose of this investigation was to locate and record cultural resources present within the project and evaluate any resources that may be impacted by the development as part of the City of Aliso Viejo's environmental review process, conducted in compliance with the California Environmental Quality Act (CEQA) criteria. The cultural resources investigation included a review of an archaeological records search conducted at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton (CSU Fullerton), in order to assess previous archaeological studies and identify any previously recorded cultural resources within the project vicinity. The records search identified six resources within one mile of the project, none of which are located on the property. The records search also identified 18 previous studies conducted within one mile of the project, three of which overlap the subject property (Public Antiquities Salvage Team 1972; Archaeological Research, Inc. 1973; Archaeological Resource Management Corp. 1979). A Sacred Lands File (SLF) search was also requested from the Native American Heritage Commission (NAHC). The SLF search results for the presence of recorded Native American sacred sites or locations of religious or ceremonial importance within the project vicinity was received with positive results.

BFSA field archaeologist Mary Chitjian conducted a pedestrian survey of the property on July 10, 2025. The survey did not locate any cultural resources within the project. Further, based upon a review of historic aerial photographs, the entire subject property was cleared, graded, and developed between 1988 and 2000. Due to the previous ground-disturbing activities and the absence of identified cultural resources within the project boundaries, the potential for significant cultural resources to be present or impacted by the proposed development is minimal. As such, no further archaeological study or mitigation measures are recommended. A copy of this report will be permanently filed with the SCCIC at CSU Fullerton. All notes, photographs, and other materials related to this project will be curated at the BFSA archaeological laboratory in Poway, California.

1.0 INTRODUCTION

1.1 Project Description

The cultural resources study for the Journey and Pacific Park Drive (Shea Aliso Viejo) Project was conducted in order to comply with CEQA and the City of Aliso Viejo environmental requirements. The project is located southwest of the intersection of Aliso Creek Road and Pacific Park Drive in the city of Aliso Viejo, Orange County, California (Figure 1.1–1). On the USGS 1:24,000-scale *San Juan Capistrano, California* (7.5-minute) topographic quadrangle map, the project is situated within Township 7 South, Range 8 West of the San Bernardino Baseline and Meridian (Figure 1.1–2). The 8.44-acre project includes APN 632-124-08. The subject property is currently developed with the Pacific Corporate Plaza, a commercial business park that includes three commercial buildings and a parking lot with associated landscape, hardscape, and infrastructure. The three buildings are associated with addresses 27061, 27071, and 27081 Aliso Creek Road. As proposed, the project applicant plans to demolish the existing buildings for the construction of a new multi-family residential development, along with associated hardscape, landscape, and infrastructure (Figure 1.1–3).

The decision to request a cultural resources study was based upon the cultural resource sensitivity of the locality, as suggested by known site density and predictive modeling. Sensitivity for cultural resources in a given area is usually indicated by known settlement patterns which, in the Aliso Viejo region, were focused on freshwater resources and food supply.

1.2 Environmental Setting

The project is located in Aliso Viejo, which is situated east of the San Joaquin Hills. The San Joaquin Hills divide San Aliso from the city of Laguna Beach and the Pacific Coast, the latter of which is located approximately four miles southeast of the property. The project consists of the Pacific Corporate Plaza, a commercial business park comprising three commercial buildings and an extensive parking lot. The general area slopes eastward from the San Joaquin Hills towards Aliso Creek located to the east of the property. However, as the project is already completely developed, the majority of the property is relatively flat, with an average elevation of approximately 356 feet above mean sea level. The only exception to this is the periphery of the project, which primarily consists of commercial landscaping that slopes upwards towards Journey and Pacific Park Drive in the western half of the project and downwards towards Aliso Creek Road in the eastern half of the project. Since the project is completely developed, vegetation within the property consists entirely of maintained commercial landscaping.

Geologically, the subject property has been mapped within the Pleistocene to Pliocene-aged (approximately two to three million years old) Niguel Formation, which is described as marine deposits of interbedded, poorly sorted, coarse-grained sandstones and conglomerates by Morton and Miller (2006) and gray, fine-grained sandstones and siltstones by Tan (1999).

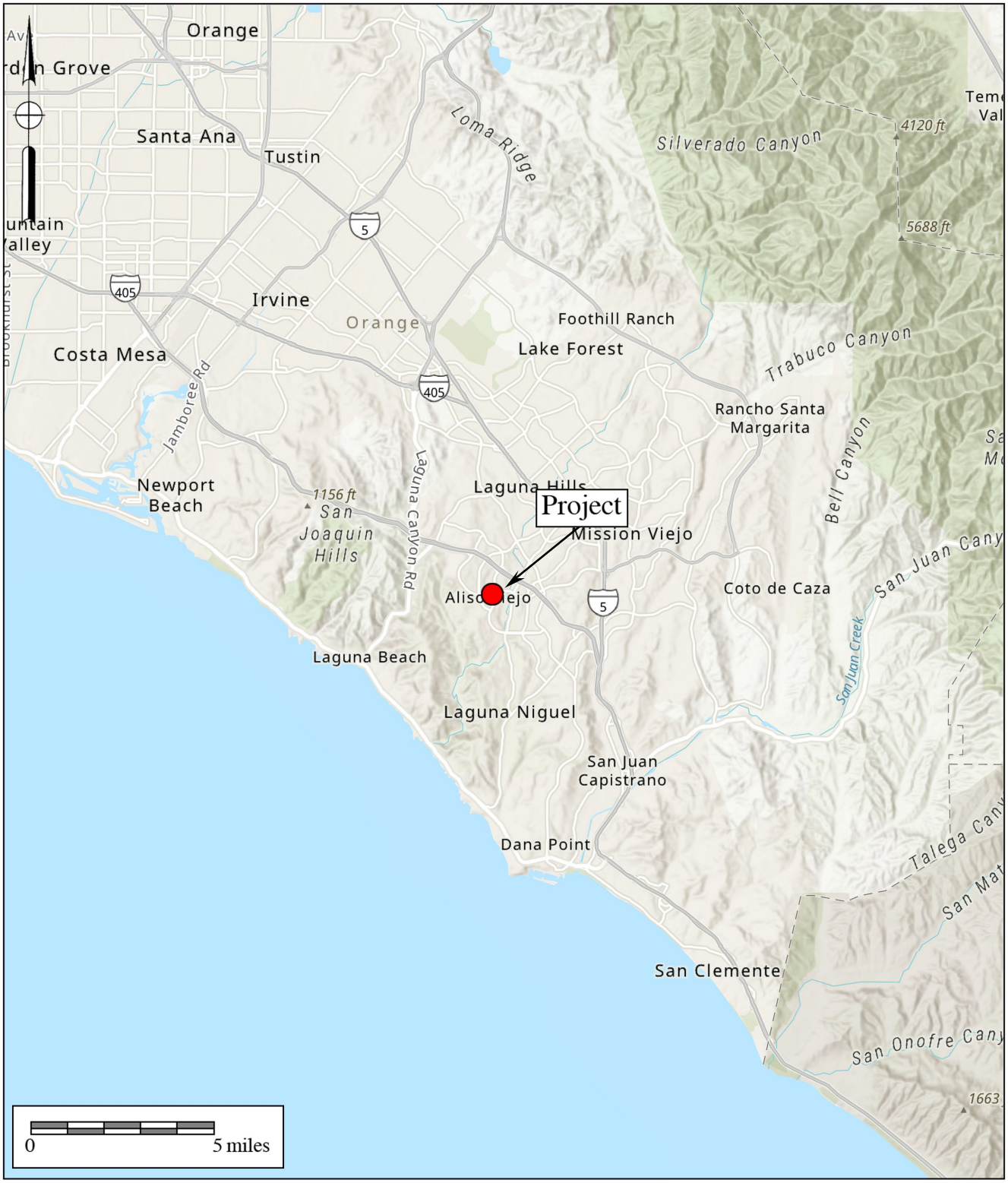

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Figure 1.1–1
General Location Map

The Journey and Pacific Park Drive (Shea Aliso Viejo) Project

ESRI Street Map

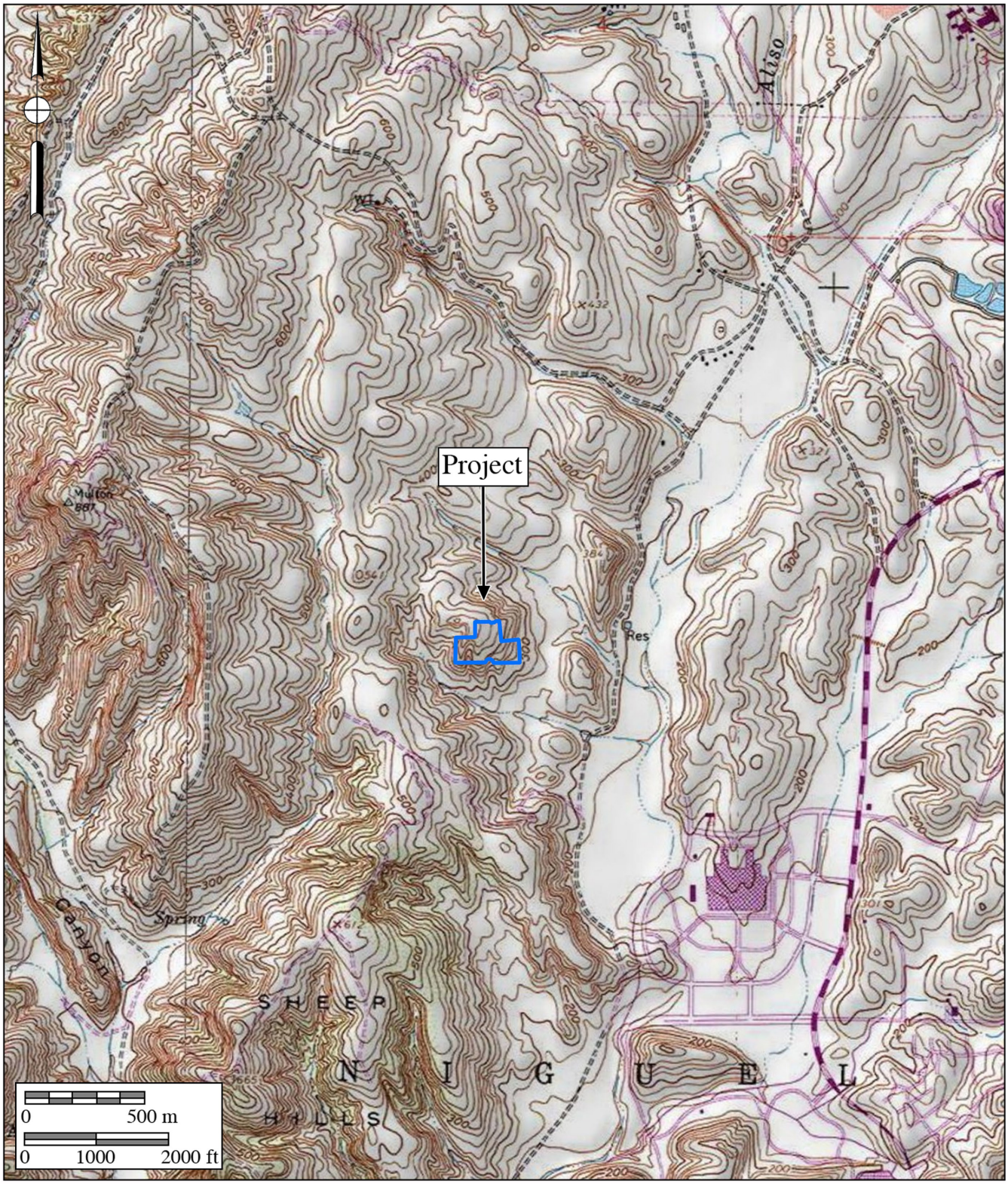

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Figure 1.1–2
Project Location Map

The Journey and Pacific Park Drive (Shea Aliso Viejo) Project
USGS *San Juan Capistrano* Quadrangle (7.5-minute series)

SITE DATA

GARDEN COURTS	**67**
PLAN 1 *(AFFORDABLE)*	14
PLAN 2	14
PLAN 3	14
PLAN 4	11
PLAN 5	14
ROWTOWNS	**70**
PLAN 1	15
PLAN 2	27
PLAN 3	28
TOTAL UNITS	**137**
PARKING	
GARAGE SPACES	260
STREET SPACES	85
TOTAL SPACES	**345** (343 REQ'D)
SPACES PER UNIT	*2.52 (2.5 REQ'D)*
OPEN SPACE	
TOTAL SITE AREA	**8.44 AC** (367,646 SQ.FT.)
CENTRAL PARK	7,000 SQ.FT.
PASEOS/GREEN COURTS	51,400 SQ.FT.
OPEN SPACE SUBTOTAL	**58,000 SQ.FT. (15.8%)**
SLOPE AREA	69,000 SQ.FT.
OPEN SPACE TOTAL	**127,400 SQ.FT. (34.7%)**

Legend
Project boundary

0 140 ft
0 40 m

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Figure 1.1–3
Project Development Map
The Journey and Pacific Park Drive (Shea Aliso Viejo) Project

Also mapped at the project is the Miocene-aged (approximately five- to 15-million-year-old) Monterey Formation, composed of siliceous and diatomaceous marine siltstones and sandstones (Wirths 2025). The specific soil types found within the property are characterized as Myford sandy loam (15 to 30 percent slopes), Rock Outcrop-Cieneba complex (30 to 175 percent slopes), and Cieneba sandy loam (30 to 75 percent slopes, eroded) (NRCS 2019). Aliso Creek is located approximately 0.3 miles east of the subject property. The creek would have provided freshwater resources for both prehistoric and historic peoples as well as an environment conducive for hunting and foraging. Common animal species found within the project vicinity include mammals such as rabbits, squirrels, gophers, mice, rats, deer, and coyotes, in addition to a variety of reptiles and amphibians.

1.3 Cultural Setting

1.3.1 Prehistoric Period

Archaeological investigations in southern California have documented a diverse and rich record of human occupation spanning the past 10,000 years. In northern San Diego, Orange, and Riverside Counties, most researchers organize prehistory into the Paleo Indian, Archaic, and Late Prehistoric Periods and history into the Mission, Rancho, and American Settlement Periods. The San Dieguito Complex, Milling Stone Horizon, La Jolla Complex, Pauma Complex, and San Luis Rey Complex are archaeological manifestations that have been used to describe the Archaic and Late Prehistoric periods in the region.

Paleo Indian Period (Late Pleistocene: 11,500 to circa 9,000 YBP)

The San Dieguito Complex/Paleo Indian Period is associated with the terminus of the late Pleistocene (11,500 to 9,000 years before the present [YBP]). The term "San Dieguito Complex" is a cultural distinction used to describe a group of people that occupied sites in the region between 11,500 and 7,000 YBP. Initially believed to have been big game hunters, the San Dieguito are better typified as wide-ranging hunter-gatherers. The earliest evidence of the San Dieguito Complex sites is known from San Diego County, the Colorado Desert, and further north along the California coast. These people abandoned the drying inland lakes of the present California desert and arrived in San Diego County circa 9,000 YBP, as documented at the Harris Site SDI-149 (Warren 1966); Rancho Park North Site SDI-4392 (Kaldenberg 1982); and Agua Hedionda Sites SDI-210/UCLJ-M-15 and SDI-10,965/SDM-W-131 (Moriarty 1967; Gallegos and Carrico 1984; Gallegos 1991). A San Dieguito component appears to have been present in the lower strata, "Malaga Cove I," at the Malaga Cove site, LAN-138, within the city of Palos Verdes Estates, Los Angeles County (Walker 1951). Other Paleo-Indian Period sites containing San Dieguito components in the coastal region of southern California have been identified at the Irvine Site (ORA-64) (Drover et al. 1983; Macko 1988), Ballona Creek, Angeles Mesa, and the Rancho La Brea sites (Wallace 1955: 215-218).

Diagnostic San Dieguito artifacts include finely crafted scraper planes, choppers, scrapers, crescentics, elongated bifacial knives, and intricate leaf-shaped points (Rogers 1939; Warren 1967). This tool assemblage resembles those of the Western Lithic Co-Tradition (Davis et al. 1969) and the Western Pluvial Lakes Tradition (Bedwell 1970; Moratto 1984). Typical San Dieguito sites lack ground stone tools. The San Dieguito Complex is the least understood of the cultures that occupied the southern California region. Debate continues as to whether the San Dieguito sites are actually different activity areas of the early Encinitas Tradition peoples (Bull 1987; Gallegos 1987), or whether the San Dieguito Complex peoples had a separate origin and culture from the Encinitas Tradition (Hayden 1987; Moriarty 1987; Smith 1987). According to this second scenario, the San Dieguito Complex peoples may have been assimilated into the dominant Encinitas Tradition culture (Kaldenberg 1982; Moriarty 1967). A third possibility is that the San Dieguito Complex gave rise to the Encinitas Tradition (Koerper et al. 1991).

Archaic Period (Early and Middle Holocene: circa 9,000 to 1,300 YBP)

The Archaic Period begins with the onset of the Holocene circa 9,000 YBP. The transition from the Pleistocene to the Holocene was a period of major environmental change throughout North America (Antevs 1953; Van Devender and Spaulding 1979). In southern California, the general climate at the beginning of the early Holocene is marked by cool/moist periods and an increase in warm/dry periods and rising sea levels. The warming trend and rising sea levels generally continued until the late Holocene. Archaeological research indicates that southern California was occupied between 9,000 YBP and 1,300 YBP by population(s) that utilized a wide range of both marine and terrestrial resources. A number of different archaeological manifestations based on geographical setting, tool kit, and/or chronology, are recognized during the Archaic Period, including the San Dieguito, La Jolla, Encinitas, Milling Stone, and Pauma Complexes. Archaic sites generally contain milling tools, especially manos and metates, cobble and flake tools, dart projectile points and the concomitant use of the atlatl, crescents, shell, fish bone, and animal bone representing large and small game. Additionally, Archaic groups buried their dead as flexed inhumations, a religious and cultural practice distinct from the succeeding Late Prehistoric groups.

The La Jolla Complex is regionally associated with the Encinitas Tradition (Warren 1968) and shared cultural components with the widespread Milling Stone Horizon (Wallace 1955). The coastal expression of this complex, with a focus on coastal resources and development of deeply stratified shell middens primarily located around bays and lagoons, appeared in the southern California coastal areas. Some of the older sites associated with this expression are located at Topanga Canyon, Newport Bay, Agua Hedionda Lagoon, and several of the Channel Islands. Radiocarbon dates from sites attributed to this complex span a period of more than 7,000 years in this region, beginning more than 9,000 YBP.

The Encinitas Tradition is best recognized for its pattern of large coastal sites characterized by shell middens, grinding tools closely associated with the marine resources of the area, cobble-

based tools, and flexed human burials (Shumway et al. 1961; Smith and Moriarty 1985). While ground stone tools and scrapers are the most recognized tool types, coastal Encinitas Tradition sites also contain numerous utilized flakes, which may have been used to pry open shellfish. Artifact assemblages at coastal sites indicate a subsistence pattern focused on shellfish collection and nearshore fishing, suggesting an incipient maritime adaptation with regional similarities to more northern sites of the same period (Koerper et al. 1986). Other artifacts associated with Encinitas Tradition sites include stone bowls, doughnut stones, discoidals, stone balls, and stone, bone, and shell beads.

By 5,000 YBP, an inland expression of the La Jolla Complex, which exhibits influences from the Campbell Tradition from the north, is evident in the archaeological record. These inland Milling Stone Horizon sites have been termed "Pauma Complex" (True 1958; Warren et al. 1961; Meighan 1954). By definition, Pauma Complex sites share a predominance of grinding implements (manos and metates), lack mollusk remains, have a greater tool variety (including atlatl dart points, quarry-based tools, and crescentics), and seem to express a more sedentary lifestyle with a subsistence economy based on the use of a broad variety of terrestrial resources. Although originally viewed as a separate culture from the coastal La Jolla Complex (True 1980), it appears that these inland sites may be part of a subsistence and settlement system utilized by the coastal peoples.

Late Prehistoric Period/San Luis Rey Period (Late Holocene: 1,300 YBP to 1790)

The Late Prehistoric period, sometimes referred to as San Luis Rey I and II, begins approximately 1,300 YBP. Cremation, ceramics, bow and arrow, small triangular points, use of Obsidian Butte obsidian, and reliance on the acorn as a main food staple are the defining characteristics of the Late Prehistoric period (Chartkoff and Chartkoff 1984; Gallegos 2002; Moratto 1984). These characteristics are thought to represent the movement of Shoshonean-speaking groups into northern San Diego, Orange, Riverside, and Los Angeles Counties. Economic systems diversified and intensified during this period with the continued elaboration of trade networks, the cremation of the dead, the use of shell-bead currency, and the appearance of more labor-intensive, but effective, milling technologies such as the bedrock mortar for use in acorn processing.

Protohistoric Period (Late Holocene: 1790 to Present)

The ethnographic period begins with the Hispanic intrusion into southern California and the founding of the Mission San Juan Capistrano, south of Aliso Viejo, in 1776. Ethnohistorical and ethnographic evidence indicates that three Shoshonean-speaking groups that occupied the southern and eastern portions of Orange County were the Luiseño, Gabrielino, and the Acjachemen (Juaneño), each culturally similar but possessing slight dialectic differences. Along the coast, the groups made use of the marine resources available by fishing and collecting mollusks for food. Seasonally available terrestrial resources, including acorns and game, were also sources of

nourishment for these groups. The elaborate kinship and clan systems between these groups facilitated a wide-reaching trade network that included trade of Obsidian Butte obsidian, resources from the eastern deserts, and steatite from the Channel Islands. All three groups also shared a distinct world view that stemmed from use of the hallucinogen datura, and an elaborate religion that included ritualized sand paintings of the sacred being, "Chingichngish" (Bean and Shipek 1978; Kroeber 1976). Some notable differences, however, can be seen in the material culture between the three groups. For example, the Gabrielino used containers made from steatite, which is a soapstone material from the Santa Catalina Islands, instead of pottery, which was the preferred material for the Juaneño and the Luiseño (Kroeber 1976).

The Luiseño, Gabrielino, and Juaneño occupied sedentary villages most often located in sheltered areas in valley bottoms, along streams, or along coastal strands near mountain ranges. Villages were located near water sources to facilitate acorn leaching and in areas that offered thermal and defensive protection. Villages were composed of areas that were both publicly and privately, or family, owned. Publicly owned areas included trails, temporary campsites, hunting areas, and quarry sites. Inland groups had fishing and gathering sites along the coast, which were particularly utilized from January to March, when inland food resources were scarce. During October and November, most of the village would relocate to mountain oak groves to harvest acorns. For the remainder of the year, most would remain at the village sites, where food resources were within a day's travel (Bean and Shipek 1978; Kroeber 1976).

The Aliso Creek watershed has been reported to be the ethnohistoric boundary between the Luiseño, Gabrielino, and Juaneño. The Gabrielino occupied territory northwest of Aliso Creek, the Juaneño occupied territory to the south, and the Luiseño occupied territory to the southeast and east. However, there is evidence indicating that the Juaneño territory extended farther north, possibly past the Santa Ana River into modern-day Huntington Beach (Boscana 1978 [1933]).

1.3.2 Historic Period

Juan Rodriguez Cabrillo, commanding two Spanish exploring vessels traveling north from Mexico, arrived in the area known then as Alta (or "Upper") California on September 28, 1542. Upon arrival, Cabrillo named the harbor to the south of San Clemente (now known as San Diego) "San Miguel" (Bolton 1959). The next European arrival to the southern California area was not for another 60 years, when an expedition commanded by Sebastian Vizcaíno made an extensive and thorough exploration of the Pacific coast, arriving in San Clemente in 1602 (Engstrand 1980; San Clemente Historical Society 2019). During this visit, Vizcaíno named San Clemente Island for St. Clement, the third pope (San Clemente Historical Society 2019), and renamed San Miguel as San Diego.

For the next 167 years following Vizcaíno's voyage, the Spanish made no other expeditions to Alta California. The Spanish eventually developed a plan for the occupation of the claimed territory of Alta California during the reign of King Carlos III of Spain. In 1769, a joint sea and land expedition set out from Mexico to meet up at San Diego Bay. Captain Vicente Vila led three

ships, and Gaspar de Portolá and Father Junípero Serra commanded the land expedition (Rolle 1969). Portolá left the San Diego area on July 14 and arrived at what would later become San Clemente on July 22. It was on this date that the first recorded baptism took place in California (Historic Resources Group 2006). However, the area remained virtually uninhabited until 1776, when Father Junipero Serra established Mission San Juan Capistrano less than six miles south of present-day Aliso Viejo (San Clemente Historical Society 2019; Rolle 1969).

Mission San Juan Capistrano was the seventh California mission and is located in what is now the city of San Juan Capistrano (City of San Juan Capistrano n.d.). The native Juaneño people were conscripted to work for the mission, which resulted in an increase in nearby settlements for both Native Americans and Spaniards. The rise in population would soon prove fatal, however, as the new mission church at San Juan Capistrano was destroyed by an earthquake in 1812. As a result of the earthquake, 40 Native Americans attending mass were killed by the collapsing bell tower (Engelhardt 1922).

As settlers arrived in the area over time, land grants were deeded to those who filed an application, but many tracts reverted back to the government due to lack of use. By 1821, Mexico had gained independence from Spain, and in the ensuing 25 years, 700 land grants were formalized throughout southern California. Don Juan (John) Forster, an English sea captain who became a Mexican citizen in 1837, obtained a land grant of over 100,000 acres from California Governor Pio Pico in 1845, which included Mission San Juan Capistrano (San Clemente Historical Society 2019). The region of Aliso Viejo was granted to Juan Avila in 1842, and the area was primarily used for sheep herding during the Rancho period (Aliso Viejo General Plan).

The signing of the Treaty of Guadalupe Hidalgo in 1848 resulted in the incorporation of California as a United States territory (City of San Juan Capistrano n.d.). In 1874, American settler Lewis Fenno Moulton arrived in southern California, and by 1890, Moulton had purchased 21,723 acres of land north of San Juan Capistrano, including present-day Laguna Hills, Laguna Niguel, Laguna Woods, and Aliso Viejo (City of San Juan Capistrano n.d.; Moulton Museum n.d.). This purchase established the Moulton Ranch, which operated a sheep and cattle herding business. Over time, portions of the ranch were sold, leading to the development of new cities within southern Orange County. In 1976, the last remaining portion of the Moulton Ranch was sold to the Mission Viejo Company, and plans were prepared for the development of the Aliso Viejo community (City of San Juan Capistrano n.d.). The master-planned community was approved by the county in 1979 (City of San Juan Capistrano n.d.).

1.4 Results of the Archaeological Records Search

BFSA conducted an archaeological records search at the SCCIC at CSU Fullerton on June 24, 2025 (Appendix B). The SCCIC records search identified six resources within a half-mile radius of the project, none of which are located on the subject property (Table 1.4–1). Of the six recorded resources, all were prehistoric. The prehistoric resources included five lithic scatters and one site with a lithic and artifact scatter.

Table 1.4–1
Cultural Resources Recorded Within One-Half Mile
of the Journey and Pacific Park Drive (Shea Aliso Viejo) Project

Site Number(s)	Resource Type
ORA-390	Prehistoric lithic and artifact scatter
ORA-408, ORA-409, ORA-416, ORA-425, and ORA-1211	Prehistoric lithic scatters

The records search also identified 18 previous studies conducted within one mile of the project, three of which overlap the subject property (Public Antiquities Salvage Team 1972; Archaeological Research, Inc. 1973; Archaeological Resource Management Corp. 1979). The Archaeological Research, Inc. (1973) and Archaeological Resource Management Corp. (1979) studies are large overviews conducted during the initial development planning for the City of Aliso Viejo that did not directly address the subject property. Likewise, the Public Antiquities Salvage Team (1972) study was a large overview for the assessment of the Hansom Ranch and did not directly address the subject property.

In addition, BFSA reviewed the following historic sources:

- The National Register of Historic Places Index
- The Office of Historic Preservation (OHP), Archaeological Determinations of Eligibility
- The OHP, Built Environment Resource Directory
- The Bureau of Land Management General Land Office records
- 1942 *Santiago Peak, California* (15-minute) USGS map
- 1948, 1949, 1968, and 1974 *San Juan Capistrano, California* (7.5-minute) USGS maps
- Historic aerial photographs (1938 to 2025)

These sources did not identify any potential resources within the property. Based upon historic maps and aerial photographs, the entire property was vacant until the development of the surrounding community in 1988. Prior to 1976, the community of Aliso Viejo was part of the Moulton Ranch, which operated as a large-scale sheep and cattle ranch. The 1938 historic aerial photograph demonstrates that agricultural activities were taking place within the surrounding area, and the majority of the subject property was left undisturbed. The property continued to remain vacant until the 1980s. In the 1987 historic aerial photograph, dirt pathways are visible within the northern half of the project. By 1988, the entire subject property, in addition to the neighboring parcels, had been cleared and graded. Between 1988 and 1922, the area was further developed, and the roads surrounding the project, which include Journey, Aliso Creek Road, and Pacific Park Drive, were built. Additionally, by 1992, a commercial building directly northwest of the project

had been constructed. Subsequent aerial photographs demonstrate that vegetation was permitted to grow until 1998, when the property was cleared again. The 1999 historic aerial photograph demonstrates that the development of the project had begun during this time, and by 2000, the existing Pacific Corporate Plaza, which includes the three commercial buildings and an associated parking lot at 27061, 27071, and 27081 Aliso Creek Road, had been constructed on the subject property. Since the development of the Pacific Corporate Plaza, historic aerial photographs show that little to no change has occurred within the property since its initial development.

BFSA also requested a SLF search from the NAHC. The SLF search results for the presence of recorded Native American sacred sites or locations of religious or ceremonial importance within the project vicinity were received with positive results. The NAHC suggested contacting local Native American groups, specifically the Juaneño Band of Mission Indians Acjachemen Nation, for further information. This request is not part of any Assembly Bill (AB) 52 Native American consultation. All correspondence is provided in Appendix C.

1.5 Applicable Regulations

Resource importance is assigned to districts, sites, buildings, structures, and objects that possess exceptional value or quality illustrating or interpreting the heritage of Orange County in history, architecture, archaeology, engineering, and culture. A number of criteria are used in demonstrating resource importance. Specifically, the criteria outlined in CEQA provide guidance for making such a determination. The following sections detail the criteria that a resource must meet in order to be determined important.

1.5.1 California Environmental Quality Act

According to CEQA (§15064.5a), the term "historical resource" includes the following:

1) A resource listed in, or determined to be eligible by the State Historical Resources Commission for listing in the California Register of Historical Resources (CRHR) (Public Resources Code [PRC] SS5024.1, Title 14 CCR [California Code of Regulations]. Section 4850 et seq.).
2) A resource included in a local register of historical resources, as defined in Section 5020.1(k) of the PRC or identified as significant in an historical resource survey meeting the requirements of Section 5024.1(g) of the PRC, shall be presumed to be historically or culturally significant. Public agencies must treat any such resource as significant unless the preponderance of evidence demonstrates that it is not historically or culturally significant.
3) Any object, building, structure, site, area, place, record, or manuscript, which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California may be considered to be an historical resource, provided

the lead agency's determination is supported by substantial evidence in light of the whole record. Generally, a resource shall be considered by the lead agency to be "historically significant" if the resource meets the criteria for listing on the CRHR (PRC SS5024.1, Title 14, Section 4852) including the following:

a) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
b) Is associated with the lives of persons important in our past;
c) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
d) Has yielded, or may be likely to yield, information important in prehistory or history.

4) The fact that a resource is not listed in or determined eligible for listing in the CRHR, not included in a local register of historical resources (pursuant to Section 5020.1(k) of the PRC), or identified in an historical resources survey (meeting the criteria in Section 5024.1(g) of the PRC) does not preclude a lead agency from determining that the resource may be an historical resource as defined in PRC Section 5020.1(j) or 5024.1.

According to CEQA (§15064.5b), a project with an effect that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect upon the environment. CEQA defines a substantial adverse change as:

1) Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.
2) The significance of an historical resource is materially impaired when a project:

a) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in or eligibility for inclusion in the CRHR; or
b) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to Section 5020.1(k) of the PRC or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the PRC, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically

or culturally significant; or,

c) Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its eligibility for inclusion in the CRHR as determined by a lead agency for purposes of CEQA.

Section 15064.5(c) of CEQA applies to effects upon archaeological sites and contains the following additional provisions regarding archaeological sites:

1. When a project will impact an archaeological site, a lead agency shall first determine whether the site is an historical resource, as defined in subsection (a).
2. If a lead agency determines that the archaeological site is an historical resource, it shall refer to the provisions of Section 21084.1 of the PRC, Section 15126.4 of the guidelines, and the limits contained in Section 21083.2 of the PRC do not apply.
3. If an archaeological site does not meet the criteria defined in subsection (a) but does meet the definition of a unique archaeological resource in Section 21083.2 of the PRC, the site shall be treated in accordance with the provisions of Section 21083.2. The time and cost limitations described in PRC Section 21083.2 (c-f) do not apply to surveys and site evaluation activities intended to determine whether the project location contains unique archaeological resources.
4. If an archaeological resource is neither a unique archaeological nor historical resource, the effects of the project upon those resources shall not be considered a significant effect upon the environment. It shall be sufficient that both the resource and the effect upon it are noted in the Initial Study or Environmental Impact Report, if one is prepared to address impacts upon other resources, but they need not be considered further in the CEQA process.

Sections 15064.5 (d) and (e) contain additional provisions regarding human remains. Regarding Native American human remains, paragraph (d) provides:

(d) When an Initial Study identifies the existence of, or the probable likelihood of, Native American human remains within the project, a lead agency shall work with the appropriate Native Americans as identified by the NAHC as provided in PRC SS5097.98. The applicant may develop an agreement for treating or disposing of, with appropriate dignity, the human remains and any items associated with Native American burials with the appropriate Native Americans as identified by the NAHC. Action implementing such an agreement is exempt from:

1) The general prohibition on disinterring, disturbing, or removing human remains from any location other than a dedicated cemetery (Health and Safety Code Section 7050.5).
2) The requirements of CEQA and the Coastal Act.

2.0 RESEARCH DESIGN

The primary goal of the research design is to attempt to understand the way in which humans have used the land and resources within the project through time, as well as to aid in the determination of resource significance. For the current project, the study area under investigation is in western Orange County. The scope of work for the cultural resources study conducted for the Journey and Pacific Park Drive (Shea Aliso Viejo) Project included a survey of the 8.44-acre property. Given the area involved, the research design for this project was focused upon realistic study options. Since the main objective of the investigation was to identify the presence of and potential impacts to cultural resources, the goal is not necessarily to answer wide-reaching theories regarding the development of early southern California, but to investigate the role and importance of identified resources. Nevertheless, the assessment of the significance of a resource must take into consideration a variety of factors, as well as the ability of a resource to address regional research topics and issues.

Although elementary resource evaluation programs are limited in terms of the amount of information available, several specific research questions were developed that could be used to guide the initial investigations of any observed cultural resources. The following research questions consider the size and location of the project discussed above.

Research Questions:

- Can located cultural resources be associated with a specific time period, population, or individual?
- Do the types of any located cultural resources allow a site activity/function to be determined from a preliminary investigation? What are the site activities? What is the site function? What resources were exploited?
- How do located sites compare to others reported from different surveys conducted in the area?
- How do located sites fit existing models of settlement and subsistence for valley environments of the region?

Data Needs

At the survey level, the principal research objective is a generalized investigation of changing settlement patterns in both the prehistoric and historic periods within the study area. The overall goal is to understand settlement and resource procurement patterns of the project occupants. Therefore, adequate information on site function, context, and chronology from an archaeological perspective is essential for the investigation. The fieldwork and archival research were undertaken with the following primary research goals in mind:

1) To identify cultural resources occurring within the project;
2) To determine, if possible, site type and function, context of the resource(s), and chronological placement of each cultural resource identified;
3) To place each cultural resource identified within a regional perspective; and
4) To provide recommendations for the treatment of each cultural resource identified.

3.0 ANALYSIS OF PROJECT EFFECTS

The cultural resources study of the project consisted of an institutional records search, an intensive cultural resources survey of the entire 8.44-acre project, and the preparation of this technical report. This study was conducted in conformance with the City of Aliso Viejo environmental requirements, Section 21083.2 of the California PRC, and the CEQA. Statutory requirements of CEQA (Section 15064.5) were followed for the identification and evaluation of resources. Specific definitions for archaeological resource type(s) used in this report are those established by the State Historic Preservation Office (1995).

3.1 Survey Methods

The survey methodology employed during the current investigation followed standard archaeological field procedures and was sufficient to accomplish a thorough assessment of the project. BFSA field archaeologist Mary Chitjian conducted an intensive pedestrian survey of the property on July 10, 2025. The field methodology employed for the project included walking evenly spaced survey transects set 15 meters apart, when not obstructed by existing development. Aerial photographs and maps permitted orientation and location of the project boundaries. The entire 8.44-acre project was covered by the survey process, and a survey form, field notes, and photographs documented the survey work undertaken.

3.2 Results of the Field Survey

The survey confirmed that the entire subject property has been graded and developed for commercial use (Plates 3.2–1 to 3.2–4). At present, the property contains three commercial buildings, a large parking lot, associated hardscape, and maintained commercial landscaping. The three commercial buildings are associated with the addresses 27061, 27071, and 27081 Aliso Creek Road and comprise the Pacific Corporate Plaza commercial business park. Given the current commercial development within the project, almost no exposed ground was visible. However, landscaped planters within the property and landscaped areas along the perimeter of the project were inspected for any archaeological materials. Vegetation within the project entirely consists of maintained commercial landscaping. The survey did not identify any archaeological resources within the project.

Plate 3.2–1: Overview of the project from the southern entrance into the Pacific Corporate Plaza, facing north.

Plate 3.2–2: Overview of the 27071 Aliso Creek Road building from the northern entrance into the Pacific Corporate Plaza, facing south.

Plate 3.2–3: Overview of the 27081 Aliso Creek Road building from the western portion of the project, facing southeast.

Plate 3.2–4: Overview of the 27061 Aliso Creek Road building from the eastern portion of the project, facing southwest.

4.0 RECOMMENDATIONS

The cultural resources study for the Journey and Pacific Park Drive (Shea Aliso Viejo) Project was completed in accordance with City of Aliso Viejo environmental policies and CEQA regulatory requirements. No cultural resources were identified within the project during the survey. Further, based upon a review of historic aerial photographs, the entire subject property was cleared, graded, and developed between 1988 and 2000. Due to the previous ground-disturbing activities and the absence of identified cultural resources within the project boundaries, the potential for any significant cultural resources to be present or impacted by the proposed project is minimal. Given that no archaeological sites, features, or artifacts have been identified within or directly adjacent to the project, no potential impacts to cultural resources associated with the proposed development are anticipated. Based upon the results of this study, no further archaeological study or mitigation measures are recommended. A copy of this report will be submitted to the SCCIC at CSU Fullerton.

5.0 LIST OF PREPARERS AND ORGANIZATIONS CONTACTED

The archaeological survey program for the Journey and Pacific Park Drive (Shea Aliso Viejo) Project was directed by Principal Investigator Tracy A. Stropes, M.A., RPA. The archaeological fieldwork was conducted by BFSA field archaeologist Mary Chitjian. The report text was prepared by Kathleen Krogh and Tracy Stropes. Emily Soong conducted the records search at the SCCIC at CSU Fullerton, and Kathleen Krogh created the report graphics. Technical editing and report production was conducted by Danielle Del Castillo.

6.0 CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this archaeological report, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

July 30, 2025

Tracy A. Stropes, M.A., RPA — Date
Director/Principal Archaeologist

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2025 Cultural Resources Study for the Journey and Pacific Park Drive (Shea Aliso Viejo) Project, City of Aliso Viejo, Orange County, California (APN 632-124-08). BFSA Environmental Services, a Perennial Company (BFSA). Report on file at BFSA, Poway, California.

APPENDIX A

Resumes of Key Personnel

Tracy A. Stropes, MA, RPA

Vice President of Cultural Resources/ Principal Archaeologist
BFSA Environmental Services, a Perennial Company
14010 Poway Road • Suite A •
Phone: (858) 484-0915 • Fax: (858) 679-9896 • Email: tstropes@bfsa.perennialenv.com

Education

Master of Arts, Anthropology, San Diego State University, California **2007**

Bachelor of Science, Anthropology, University of California, Riverside **2000**

Professional Memberships

Register of Professional Archaeologists
Society for California Archaeology
Archaeological Institute of America
Association of Oregon Archaeologists

Experience

Vice President of Cultural Resources/Principal Archaeologist **March 2009–Present**
BFSA Environmental Services, a Perennial Company
Poway, California

Tracy A. Stropes has over 33 years of experience in cultural resource management, with experience in project management, report authorship, lithic analysis, laboratory management, Native American consultation, and technical report editing for numerous projects throughout the western United States. Mr. Stropes has conducted cultural resource surveys, archaeological site testing and evaluations for National Register eligibility and CEQA compliance, mitigation of resources through data recovery for archaeological sites, budget and report preparation, and direction of crews of all sizes for projects ranging in duration from a single-day site visit to multiple years. Mr. Stropes is a Registered Professional Archaeologist (RPA) and is on the list of archaeological consultants qualified to conduct archaeological investigations in the city and county of San Diego, county of Riverside, State of Oregon, State of Arizona, and on Arizona and California BLM lands. He has served as project archaeologist for hundreds of projects and composed data recovery and preservation programs for sites throughout the western United States for both CEQA- and NEPA-level compliance.

Archaeological Principal Investigator **June 2008–February 2009**
TRC Solutions **Irvine, California**

Cultural resource segment of Natural Sciences and Permitting Division; management of archaeological investigations for private companies and local, state, and federal agencies, personnel management, field and laboratory supervision, lithic analysis, Native American consultation and reporting, NRHP and CEQA site evaluations, and authoring/coauthoring cultural resource management reports.

Principal Investigator and Project Archaeologist **June 2006–May 2008**
Archaeological Resource Analysts **Oceanside, California**

As a sub consultant, served as Principal Investigator and Project Archaeologist for several projects for SRS Inc., including field direction, project and personnel management, lab analysis, and authorship of company reports.

Project Archaeologist **September 1996–June 2006**
Gallegos & Associates **Carlsbad, California**

Project management, laboratory management, lithic analysis, field direction, Native American consultation, report authorship/technical editing, and composition of several data recovery/preservation programs for both CEQA and NEPA level compliance.

Project Archaeologist **September 1993–September 1996**
Macko Inc. **Santa Ana, California**

Project management, laboratory management, lithic analysis, field supervision, and report authorship/technical editing.

Archaeological Field Technician **January 1993–September 1993**
Chambers Group Inc. **Irvine, California**

Archaeological excavation, surveying, monitoring, wet screen facilities management, and project logistics.

Archaeological Field Technician **May 1992–September 1992**
John Minch and Associates **San Juan Capistrano, California**

Archaeological excavation, surveying, monitoring, wet screen facilities management, and project logistics.

Selected Reports/Papers

Principal Author

2023 A Section 106 (NHPA) Historic Resource Study for the Oak Creek Canyon Project, City of Wildomar, Riverside County, California. Prepared for Ambient Pacific OCC, LLC.

2023 A Section 106 (NHPA) Historic Resource Study for The Questhaven 76 Project, San Diego County, California (APNs 223-070-007, 223-070-008, and 223-080-046). Prepared for ColRich.

2023 A Phase I Cultural Resources Survey for the Bermuda Dunes Self Storage Project, PAR220053, Riverside County, California. Prepared for FAMA Dairy.

2023 A Cultural Resources Study for 4846 Pacifica Drive, City of San Diego. Prepared for Colliers International.

2023 A Section 106 (NHPA) Historical Resources Study for the Maison's Sierra Project, City of Lancaster, California (Tract No. 27099). Prepared for Ravello Holdings, Inc.

2023 Cultural Resource Survey and Evaluation Program for the Omni Hotel Driving Range/Parking Lot Project, City of Carlsbad, California. Prepared for TRT Holdings, Inc.

2022 A Class III Historic Resources Study for the Anna Avenue Project for Section 106 Compliance, City of San Diego, California. Prepared for John Smith Earthworks, Inc.

2022 A Section 106 (NHPA) Historic Resource Study for the Grand Avenue Project, Riverside County, California (APN 379-060-005). Prepared for TriPointe Homes

2022 A Section 106 (NHPA) Historic Resources Study for the Boulder Springs North Project, Riverside County, California (TTMs 31243, 31244, and 31245; APNs 321-020-027, -028, -029, and -030 and 321-130-047 and -048). Prepared for KB Home.

2022 A Section 106 (NHPA) Historical Resources Study for the Alpine Rancho Palo Verde Project, San Diego County, California (SPL-219-00698-CJA). Prepared for Schindler Real Estate Services, Inc.

2022 A Section 106 (NHPA) Historic Resource Study for the Cumming Ranch Project, San Diego County, California (APNs 282-010-08, -30, -34, and -43; 283-011-06; 283-021-01 and -02; 283-022-02; 283-041-25 and -26; and 283-051-01). Prepared for 805 Properties.

2021 A Section 106 (NHPA) Historic Resources Study for the Gatchell Road Project, San Diego County, California (Project No. 100203). Prepared for the National Park Service.

2021 A Section 106 (NHPA) Historic Resources Study for Site CA-SDI-11,934/H, San Diego County, California (APN 532-520-15). Prepared for the National Park Service.

2021 A Section 106 (NHPA) Historical Resources Study for the Renaissance Ranch Project, Riverside County, California (SPL-2004-01431-JPL). Prepared for Richland Developers, Inc.

2021 A Phase I Cultural Resource Survey for the Coppel Remodel & Addition Project, La Jolla, California. Prepared for Marengo Morton Architects, Inc.

2021 A Section 106 (NHPA) Historic Resources Study for CAB-20-1, San Diego County, California (APN 532-520-15). Prepared for the National Park Service.

2021 Cultural Resources Study for 7951 Paseo Del Ocaso, La Jolla, California. Prepared for Aidlin Darling Design.

2021 Cultural Resources Study for the Secret Hills Ranch Project, San Diego County, California (PDS2020-LDGRMJ-30253, APN 520-060-18)

2021 Cultural Resources Study for the UCLA Cedar Suites and Willow Creek Staff Housing Project, Lake Arrowhead, San Bernardino County, California. Prepared for T&B Planning, Inc.

2021 A Section 106 (NHPA) Historic Resources Study for CA-SDI-13,884, San Diego County, California (APN 532-520-13). Prepared for the National Park Service.

2021 A Cultural Resources Study for the UCLA Glamping Facility Project, Lake Arrowhead, San Bernardino County, California. Prepared for UCLA Capital Programs.

2021 Archaeological Test Results for 2596 Chalcedony Street, San Diego, California. Prepared for Colliers International.

2021 Cultural Resources Study for the 12247 Elliott Avenue Project, Los Angeles County, California. Prepared for EPD Solutions.

2021 A Section 106 (NHPA) Historic Resources Study for the Roquet Ranch Project, City of Colton, San Bernardino County, California (Tentative Tract Map No. 19983; APNs 116-701-101, -102, 116-702-101, -105, -121, -122, -123, and 116-703-118). Prepared for Sunmeadows, LLC.

2020 A Section 106 (NHPA) Historical Resources Study for the Ocean Breeze Ranch Project, Bonsall, San Diego County, California (SPL-2020-00176). Prepared for Ocean Breeze Ranch, LLC.

2020 Cultural Resource Monitoring Report for the Encinitas Beach Hotel Project, Encinitas, California. Prepared for JMI Realty, LLC

2020 A Section 106 (NHPA) Historic Resources Study for the Pacifica Estates Project, Fallbrook, San Diego County, California. Prepared for Jose Islas.

2020 A Section 106 (NHPA) Historic Resources Study for the Hidden Valley Ranch Project, SPL-2004-01124, City of Poway, California. Prepared for Barbara Malone.

2020 A Section 106 (NHPA) Historic Resource Study for The Farms in Poway Project, Poway, San Diego County, California (APNs 273-110-070, -080, and -180). Prepared for Kevin McNamara.

2020 A Phase I and II Cultural Resources Assessment for the Hansen Lot Split Project, TPM 37655, Riverside County, California. Prepared for Forest Hansen.

2020 Cultural Resources Study for the West Coast Cold Storage Project, City of Jurupa Valley, County of Riverside (APNs 178-140-010 and -018). Prepared for

2020 Cultural Resources Study for the 340 East Bradley Avenue Project, San Diego County, California (PDS2021-LDGRMJ-30346). Prepared for A N1-Mart, LLC.

2019 Archaeological Monitoring Report for the Atwell Phase 1A Project (formerly Butterfield Specific Plan), City of Banning, Riverside County, California. Prepared for Pardee Homes.

2019 A Cultural Resource Assessment for the Glen Circle Project, Poway, California. Prepared for MDD Homes.

2019 Cultural Resources Survey for the Highlands at Warner Springs and Off-Site Fire Access Road Project, Warner Springs, San Diego County, California. Prepared for Warner Springs Estates, LLC.

2019 A Cultural Resources Assessment for the 8801 East Marginal Way Project, City of Tukwila, King County, Washington. Prepared for CenterPoint Properties Trust.

2019 Cultural Resource Monitoring Report for the 7980 Park Village Road Emergency Repair Project, San Diego, California. Prepared for Orion Construction Corporation.

2019 Mitigation Monitoring and Reporting Program for the Harmony Grove Village, San Diego County, California. Prepared for Lennar – San Diego Division.

2019 Cultural Resource Monitoring Report for the Price-Cohen Residence Project, 2045 Lowry Place, La Jolla, California 92037. Prepared for Lena Price and Thomas Cohen.

2019 A Section 106 (NHPA) Historic Resources Study for the Melrose Drive Widening Project, City of Oceanside, California. Prepared for California West Communities.

2019 A Cultural Resources Study for the Majestic Chino Heritage Project, City of Chino, San Bernardino County, California. Prepared for T&B Planning, Inc.

2019 Cultural Resources Study for the Ocean Breeze Ranch Project, Bonsall, San Diego County, California. Prepared for Ocean Breeze Ranch, LLC.

2019 Mitigation Monitoring and Reporting Program for the Arthofer Residence Project, 1890 Viking Way, La Jolla, California. Prepared for Frank and Sharon Arthofer.

2019 A Phase I and II Cultural Resources Assessment for the Greentree Ranch Project, Riverside County, California. Prepared for T&B Planning, Inc.

2018 A Section 106 (NHPA) Historic Resources Study for the Escondido Country Club Project, SPL-2018-00135-CJA, City of Escondido, California. Prepared for New Urban West, Inc.

2018 A Phase I Cultural Resources Study for the North County Plaza Project, Carlsbad, California. Prepared for Planning Systems, Inc.

2018 Cultural Resources Addendum Report for the Ivey Palms Project, Thousand Palms, Riverside, California. Prepared for T&B Planning, Inc.

2017 Cultural Resource Monitoring Report for the Altman Residence Project, 9696 La Jolla Farms Road, La Jolla, California 92037. Prepared for Steve and Lisa Altman.

2017 Cultural Resources Study for the Escondido Country Club Project, City of Escondido, California. Prepared for New Urban West, Inc.

2017 A Class III Archaeological Study for the Tract 28859 Project for Section 106 Compliance. Prepared for Menifee 28859, LLC.

2016 A Section 106 (NHPA) Historic Resources Study for the Lake Ranch Project, TR 36730, Riverside County, California.

2016 Mitigation Monitoring and Reporting Program for the Imperial Beach Bikeway Village Project, 536 13th Street and 535 Florence Street, Imperial Beach, California. Prepared for Bikeway Village, LLC.

2015 Cultural Resource Data Recovery and Mitigation Monitoring Program for Site SDI-10,237 Locus F, Everly Subdivision Project, El Cajon, California. Prepared for Shea Homes.

2015 A Class III Historic Resource Study for the Miramar Clearwell Improvements Project, San Diego, California. Prepared for Global Environmental Permitting, Inc.

2015 A Class III Historic Resource Study for the College Boulevard Project, Carlsbad, California. Prepared for Bent West, LLC.

2015 A Class III Archaeological Study for the Parkside Project for Section 106 Compliance, Riverside County, California. Prepared for Lennar Corporation.

2015 A Cultural Resource Assessment for the Zhao Residence Project, Poway, California (275-240-66). Prepared for Pacific Sotheby's International Realty.

2014 Phase I Cultural Resources Survey for the Utah Trail Project, County of San Bernardino, California (APNs 621-281-22 through 621-281-25). Prepared for Ecos Energy, LLC.

2014 Phase I Archaeological Assessment for the Sky Canyon Project (PP25309), Riverside County, California. Prepared for Rocky Snider California Project Management Office.

2014 Phase I Cultural Resources Survey for the Shoshone Valley Road Project, County of San Bernardino, California (APNs 613-233-01, -02, -03, -04, -27, -28, -29, and -30). Prepared for Ecos Energy, LLC.

2014 Phase I Cultural Resources Survey for the Nuevo 055 Project, Community of Nuevo, County of Riverside. Prepared for Ecos Energy, LLC.

2014 A Phase I Cultural Resource Study for the Bourgeoios Project, Poway, California. Prepared for Bill Yen & Associates, Inc.

2014 A Cultural Resources Survey for the Aliso Canyon Major Subdivision Project, Rancho Santa Fe, San Diego County, California. Prepared for Zephyr Partners.

2014 Cultural Resource Monitoring Report for the Sewer Group 723 Project, San Diego, California. Prepared for
Ortiz Corporation.

2013 A Phase I Cultural Resource Study for the Rogers Tierra Bonita Project, Poway, California. Prepared for John D. Fitch & Associates.

2013 A Cultural Resource Assessment Update for the Girard Townhome Project, TR 35477, Riverside County, California. Prepared for G8 Development, Inc.

2013 Phase I Archaeological Assessment for the Ridge Park Project, City of Temecula, California. Prepared for Ambient Communities.

2013 A Phase I and Phase II Cultural Resource Study for the Citrus Heights/Fairway Drive Project, Riverside County, California. Prepared for CV Communities.

2013 Phase I Archaeological Assessment for the Bixby Highgrove Project (TTM 36437), Riverside County, California. Prepared for T&B Planning, Inc.

2013 A Class III Cultural Resources Study for the Ramona Ranch Affordable Housing Project for Section 106 Compliance, San Diego County, California. Prepared for AMCAL Multi-Housing, Inc.

2013 Phase I Archaeological Assessment for the Yates Road Project (TTM 36437), Riverside County, California. Prepared for CV Communities, LLC.

2013 A Cultural Resources Survey and Evaluation Program for the Warner Ranch Project, San Diego County, California. Prepared for HP Warner Ranch, LP.

2013 A Phase I Cultural Resource Assessment for TPM 36585, Riverside County, California. Prepared for GF Real Estate Services.

2013 A Class III Cultural Resources Study for TR 31597 and TR 32627, Riverside County, California. Prepared for Standard Pacific Homes.

2013 Phase I Cultural Resources Survey for the Sunny Cal Project, City of Beaumont, County of Riverside. Prepared for CV Communities, LLC.

2013 A Class III Cultural Resources Study for The Sierra Bella Project for Section 106 Compliance, Riverside County, California. Prepared for Forestar Corona, LLC.

2013 A Class III Cultural Resources Study for the Moosa Creek Mitigation Bank Project. Prepared for a Creek LLC.

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APPENDIX B

Archaeological Records Search Results

(Deleted for Public Review; Bound Separately)

APPENDIX C

NAHC Sacred Lands File Search

(Deleted for Public Review; Bound Separately)

Appendix D:

Preliminary Geotechnical Investigation and Review of Vesting Tentative Tract Map 19442, Proposed Residential Redevelopment

NMG Geotechnical, Inc.

Reviewed 12-15-2025
(Accepted for TTM stage, final report shall be submitted for review at grading permit stage)

November 25, 2025

Project No. 24074-02

To: Shea Homes
15261 Laguna Canyon Road, Suite 100
Irvine, California 92618

Attention: Ms. Danielle Prigmore

Subject: Preliminary Geotechnical Investigation and Review of Vesting Tentative Tract Map 19442, Proposed Residential Redevelopment, Aliso Viejo, California

EXECUTIVE SUMMARY

In accordance with your request and authorization, NMG Geotechnical, Inc. (NMG) has reviewed the Vesting Tentative Tract Map (VTTM) 19442 and Engineering Site Plan and performed a preliminary geotechnical investigation for the proposed redevelopment at the subject site. Our study focused on evaluating the existing geotechnical conditions with respect to the proposed residential development. The project will consist of the demolition of the existing office park, regrading of the site, and construction of 137 new residential homes. The project will require minor modification of the existing perimeter slopes and includes addition of retaining walls at the top of existing slopes up to 6 feet tall along the eastern and southeastern perimeter and retaining walls at the toe of slopes up to 8 feet tall along the western and northern perimeter. The project construction will also include new utility and interior street infrastructure. The VTTM reviewed for this report was prepared by Proactive Engineering Consultants (Proactive).

This geotechnical study included a review of background reports and maps, review of a prior geotechnical investigation report covering the subject site and surrounding area prepared by Jack G. Raub Company (1987), field reconnaissance, drilling of six hollow-stem-auger borings, excavation of four geotechnical test pits, laboratory testing, preliminary geotechnical analysis of the collected data, and preparation of this report.

The site is predominantly underlain by a thin mantle of compacted fill over sedimentary bedrock consisting of interbedded sandstone, siltstone and diatomaceous siltstone. Quaternary-age alluvial deposits were encountered in the southeast corner of the property, at depths of approximately 40 feet. The compacted fill thickness varies from about 2.5 to 5 feet over the majority of the site, with the thickest fills (20 to 40 feet thick) located in the southern portion of the site.

No active or potentially active faults are mapped beneath the property. The nearest known seismogenic source is the San Joaquin Hills blind thrust fault, located approximately 2.5 miles to the northeast. Furthermore, the site is not located within a mapped seismic hazard zone for

liquefaction or earthquake-induced landsliding (CDMG, 2001). The seismic design parameters were prepared in accordance with the 2025 California Building Code.

The main geotechnical issues impacting the project development include:

- Removal of the existing fill and weathered bedrock in the upper 5 feet to provide a uniform cap of certified engineered fill for the building pads. The demolition of existing structures and utilities may require deeper excavations and would result in additional loose, disturbed soil that will need to be removed and replaced as compacted fill.
- The finer grade bedrock (siltstone and claystone) is more plastic, expansive, corrosive, and generally poorer subgrade material than the existing fill and coarse-grained bedrock. Additional mixing and blending of fill materials may be needed to reduce the impact on the project design (i.e. building foundations). Additionally, deepened removals may be required where finer grained bedrock is exposed to mitigate differential expansion.
- Retaining wall backcuts into the existing ascending slopes should be mapped to document the existing bedrock conditions and determine the extent of the compacted fill cover for the slope.
- Deeper utility excavations into the bedrock may encounter siltstone and claystone layers with adverse bedding conditions which may adversely impact trench stability. This condition should be closely monitored during construction. Excess spoils from the siltstone bedrock should not be placed near the edge of the trench, especially on the up-dip side of the bedding.
- Potential for strong seismic shaking during an earthquake on a regionally active fault.
- Addition of design fill and retaining wall at the top of slope along the eastern perimeter may cause surcharge loading to the existing retaining wall for the gas station. This condition will require further evaluation once retaining wall plans are made available.
- The varying deep and shallow bedrock conditions will influence the seismic and foundation design and will also need to be taken into account during the site grading/earthwork operations and underground utility construction.
- Due to the presence of shallow bedrock, the site is considered unsuitable for stormwater infiltration.

This report presents our geotechnical findings, conclusions and preliminary recommendations for project planning and preliminary design related to the tentative tract plan. The report includes a Geotechnical Map (Plate 1) which depicts the boring and test pit locations by NMG, and the subsurface geologic conditions based on prior mapping by others. Cross section A-A' (Figure 4) depicts the existing and design conditions and was used for our preliminary slope stability analysis where a portion of the slope below the fire station exposed bedrock, and in a second location along the eastern perimeter where design fill is proposed above an existing slope with a retaining wall at the toe of slope. The geotechnical boring and trench logs and laboratory test data from our subsurface exploration are included in Appendices B and C, respectively. Appendix D includes

the code-based seismic analysis. The results of our slope stability analysis are presented in Appendix E. Appendix F includes NMG's general earthwork and grading specifications.

The proposed residential redevelopment at the site is considered geotechnically acceptable, providing the recommendations provided in this report and future reports are incorporated into the design, grading and construction. The recommendations in this report are preliminary and final geotechnical recommendations will be provided based on review of the future grading, foundation, and improvement plans. Additional testing of the subgrade and foundation soils will need to be performed after completion of the site grading for confirmation of the recommendations.

NMG's expertise and scope of services did not include assessment of potential subsurface environmental contaminants or environmental health hazards.

If you have any questions regarding this report, please contact us. We appreciate the opportunity to provide our services.

Respectfully submitted,

NMG GEOTECHNICAL, INC.

William Goodman, CEG 1577
Principal Geologist

Karlos Markouizos, RCE 50312
Principal Engineer

WG/KGM/je

Email Distribution: Addressee
Ms. Emilie Simard, Shea Homes
Mr. Peter Carlson, Carlson Strategic Land Solutions

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1.0 INTRODUCTION

1.1 Scope of Work

The purpose of our geotechnical study was to evaluate the existing subsurface conditions in light of the proposed residential redevelopment at the subject site. Our investigation and this report are based upon our review of the Vesting Tentative Tract Map and Engineering Site Plan prepared by Proactive Engineering (received November 14, 2025).

Our scope of work included the following:

- Background review of available published and unpublished reports and maps (Appendix A).
- Review of available historic aerial photographs and topographic maps pertinent to the site and surrounding area.
- Drilling, logging, sampling, and backfilling of six hollow-stem-auger borings (H-1 to H-6) to approximate depths ranging from 11 to 51 feet deep below ground surface (bgs). Approximate boring locations are shown on Plate 1, and the boring logs are included in Appendix B.
- Excavation of four geotechnical test pits to confirm the geologic and as-graded conditions of a portion of the perimeter slope below the fire station. Approximate test pit locations are shown on Plate 1, and the logs are included in Appendix B.
- Laboratory testing of relatively undisturbed ring and bulk soil samples. Test results are summarized in Appendix C. Soil test results from the prior investigation in the area were also utilized in our engineering assessment of the soil properties.
- Geotechnical evaluation and analysis of the compiled data with respect to the proposed residential development. This included seismic design analysis (Appendix D) and preliminary slope stability analysis (Appendix E).
- Preparation of this report including our findings, conclusions, recommendations, and accompanying illustrations. The report includes a Geotechnical Map (Plate 1) and geologic Cross-Section A-A' (Figure 4).

1.2 Site Location and Existing Conditions

The subject site is located in the city of Aliso Viejo, Orange County, California, south of Pacific Park Drive, west of Aliso Creek Road and bounded to the northwest by an existing fire station and Journey street, northeast by an existing gas station and south by an existing office complex (Figure 1).

The roughly 8.4-acre site consists of generally flat ground with elevations ranging between 346 mean sea level (msl) at the southeast corner to 388 msl in the northwest corner. This measurement includes slope areas within the property. The relief across the site for the building area is about 8 feet. A 25- to 35-foot ascending, vegetated slope is present on the west to northwest area of the site with a descending slope on the eastern area bordering Aliso Creek Road that is up to 16 feet tall. Along the northeast perimeter of the site, adjacent to the gas station, there is a combination of

descending slopes and retaining walls up to approximately 6 feet tall. These slopes are generally constructed at 2H:1V slope ratios. The majority of the site is developed as paved parking lots with three, two-story office buildings, with the exception of the ascending and descending slopes.

1.3 Site Reconnaissance

Our site reconnaissance was initially performed on November 26, 2024 and more recently on October 13, 2025. The site was accessed from Aliso Creek Road and the primary field observations are listed below:

- Three large two-story office buildings are present on the site. The majority of the site is covered in asphalt pavement and hardscape.
- An approximately 2:1 (H:V) descending slope up to 16 feet tall is present from the at-grade building and parking lot area down to Aliso Creek Road and a southern access street. The slopes are covered in vegetation and large trees.
- At the southeastern corner of the subject site, there is an existing 5-foot retaining wall that is tilting 13 degrees to the southeast.
- A retaining wall up to approximately 6 feet high is present on the northeastern boundary associated with the Shell gas station car wash facility.
- An ascending 2H:1V slope up to approximately 35 feet high is present on the northwestern and western boundary of the site. The slopes have one concrete stormwater v-ditch and are covered with vegetation and large trees. Bedding was observed dipping into slope at the surface in the northern portion of this slope. As the slope extends to the west, bedding was no longer visible at the surface and a subdrain outlet was observed at the slope face.
- Minor cracking was observed in the asphalt pavement across the site. Some cracking and separations were observed in the curbs and hardscape and were generally associated with root systems from nearby trees.

1.4 Site History

The following site history is based on available historic aerial photographs dating back to 1938.

- In 1938, the subject property was vacant natural hillside area with two canyons draining southward. This status continued until 1987-1988.
- In 1987, dirt roads are observed crossing the site with associated local drill pads.
- In 1988, mass grading at the site was in progress and both small canyons were being filled in.
- Between 1988 and 1991, the site became a finished mass graded pad, with a fire station constructed on the northwest border bounded by an ascending 25- to 35-foot-high slope, an office complex constructed on the southern border, a surface drainage detention basin at the

northeast corner, and both Pacific Park Drive, and Aliso Creek Road being constructed on the north and east borders.

- Between 1996 and 1997, the gas station was constructed on the northeast border of the site. The gas station was constructed approximately 10 feet below the elevations at the subject site, with a descending slope from the subject site.
- Construction of the office buildings began between 1998 and 1999 and was completed by 2000.
- Between 2011 and 2012, the eastern descending slope to the existing gas station was cut back, and an approximately 6-foot-high retaining wall was constructed for the addition of a driveway and carwash.
- The site has remained essentially unchanged since 2012.

1.5 Prior Geotechnical Work

The original geotechnical investigation that included this site was performed by the Jack G. Raub Company in 1987 (Appendix A). They provided the results of their subsurface exploration and geologic field mapping and provided recommendations for mass grading.

Based on our review of city files, the report of mass grading that occurred between 1988 and 1991 and the reports related to design, grading and construction for the existing commercial development were not available for review.

1.6 Proposed Development

According to the architectural site plan, prepared by Woodley Architectural Group, Inc., received November 17, 2025, and the tentative tract map prepared by Proactive Engineering received November 14, 2025, the proposed residential development consists of 3-story attached residential units, open space landscape areas, and an interior street network with parking stalls for guest parking. The total unit count for the development is 137 units with approximately 70 units consisting of a 3-story townhome row style product and the remaining 67 units consisting of a 3-story garden-court-style product. Retaining walls up to 8 feet high are planned at the toe of slopes descending from the fire station and from Journey Street along the west side of the project site, and at the top of slopes descending to the gas station and Aliso Creek Road along the northeastern perimeter. Primary access to the site will be from Pacific Park at the north end of the development and a secondary access from Aliso Creek Road at the southeast corner.

The preliminary cut-fill map prepared by Proactive, shows design grading to consist of 4,200 cubic yards (CY) of cut and 9,800 CY of fill, for a net import of 5,600 CY. We do not anticipate site grades to change significantly.

1.7 Subsurface Exploration

Our initial subsurface exploration was performed on December 6, 2024, and included excavation of six hollow-stem-auger borings (H-1 through H-6) to depths ranging from 11 to 51 feet below

ground surface (bgs). The hollow-stem borings were initially excavated with a hand-auger to 5 feet deep to confirm no conflicts with shallow utilities and then sampled and geotechnically surface-logged by a geologist to evaluate soil stratigraphy and groundwater conditions. Soil samples were taken at selected intervals with a 2.5-inch-inside-diameter California split-barrel sampler and were also used to obtain a measure of resistance of the soil to penetration (recorded as blows-per-foot on our geotechnical boring logs). Drive weights were with a 140-pound automatic hammer for all borings. Bulk samples of onsite soils were collected from the cuttings and used for additional soil identification purposes and laboratory testing. Soil samples were visually classified in accordance with the Unified Soil Classification System (USCS). The depths of the pavement sections were recorded with each boring and are presented on the logs in Appendix B. The approximate locations of the borings are shown on the Geotechnical Map (Plate 1).

Recently, NMG excavated four geotechnical test pits (T-1 through T-4) with a backhoe at the toe of the slope ascending to the fire station at the northwest corner of the site. The purpose of these excavations was to evaluate the limits of compacted fill and bedrock conditions exposed in the lower portion of the slope. The approximate location of the test pits is depicted on the geotechnical map (Plate 1), and the logs are provided in Appendix B.

1.8 Infiltration Potential

Percolation testing was not performed during subsurface exploration since the site consists of compacted fill over siltstone and sandstone bedrock. This condition is not suitable for infiltration.

1.9 Laboratory Testing

The laboratory testing performed is listed below. The test results provide soil engineering properties for the selected samples of the onsite soils. Existing laboratory test results from prior geotechnical studies in the area were also reviewed and utilized for this study.

- In-situ density and moisture content.
- Soluble sulfate
- Expansion index
- Atterberg limits
- Hydrometer
- Sieve analysis
- Maximum density
- Consolidation
- Direct shear
- Corrosion testing
- R-Value

Laboratory test results are included in Appendix C. In-situ density and moisture contents are presented on our boring logs in Appendix B.

2.0 GEOLOGIC CONDITIONS

The site is located within the San Joaquin Hills of the western Peninsular Ranges geomorphic province. This province is characterized by Cretaceous-age granitic bedrock and Mesozoic-age metamorphic rock overlain by various terrestrial and marine deposits. Structurally, the San Joaquin Hills are bounded by the Newport-Inglewood-Rose Canyon Fault Zone to the west and the Elsinore Fault Zone to the east.

According to mapping by (Morton and Miller, 2006; Raub Company, 1987), the primary geologic unit at the subject site is Miocene age deposits of the Monterey and Capistrano Formations.

2.1 Geologic Units

Based on available geologic maps (Morton and Miller, 2006; Raub Company, 1987), NMG site reconnaissance, and NMG hollow-stem borings (Appendix B), the site is covered by artificial fill and underlain by Miocene Monterey/Capistrano Formations. The northwestern ascending slope bordering Pacific Park Drive exposes diatomaceous siltstone bedrock of the Monterey Formation. Based on NMG hollow-stem borings, the artificial fill generally consists of light olive brown, grayish brown and light yellowish-brown silty/clayey sand and sand that is fine to coarse grained, medium dense to dense, and generally ranges in moisture content from 14.2 to 18.1 percent in the upper 6 feet. Locally, moisture was found to be as high as 34.6 percent. The underlying Miocene Monterey Formation generally consists of light grey to very dark grey diatomaceous siltstones and claystones that are moist to wet, hard and have trace fish scales. Locally, we observed light olive brown to pale yellow silty fine sandstones that were moist, dense/very dense and friable in the Monterey formation. The underlying Tertiary Capistrano Formation, Oso Member generally consists of light gray to pale olive clean fine sandstone that is moist, dense/very dense, micaceous and friable. Quaternary-aged alluvium was encountered in the southeast corner of the site in boring H-2, between 40 and 50 feet deep below the existing ground surface. The alluvium consists of olive gray clayey fine to medium sand that was damp to moist and very dense.

During our limited subsurface exploration, significant cementation was not encountered in the Capistrano or Monterrey Formations. However, it is not uncommon to encounter cemented beds within these formations. Thin cemented beds may be encountered locally in deeper excavations that may cause difficult ripping.

2.2 Geologic Structure/Faulting

Based on published mapping by the State of California (CGS, 2010), there are no active faults that transect the site, and the site is not located within an Alquist-Priolo Earthquake Zone of Required Investigation (CGS, 2018). Also, no evidence of active faulting was observed during the prior investigation by the Jack G. Raub Company (1987). The closest major active faults identified by the state are the San Joaquin Hills Thrust Fault located approximately 2.5 miles to the northeast and the Newport Inglewood-Rose Canyon Fault zone (Dana Point Section) located approximately 6.1 miles to the southwest and the Glen Ivy section of the Elsinore Fault Zone located 19.2 miles to the northeast.

Based on the California Geological Survey, there are no active faults in or near the subject site.

2.3 Seismic Hazards

Using the USGS computer program (USGS, 2025) and the site coordinates of 33.5695 degrees north latitude and 117.7247 degrees west longitude, the controlling fault at the site is the San Joaquin Hills Fault located 4.1 kilometers (2.5 miles) northeast of the site. The maximum Moment Magnitude for the Controlling Fault is 7.27 Mw. The other faults noted that can produce strong ground shaking at the site include the Newport-Inglewood (Offshore), and Elsinore (Glen Ivy section) Faults. Based on review of published maps, historic aerial photographs and topographic maps, the potential for primary ground rupture due to an earthquake is considered very low.

Seismicity: Properties in southern California are subject to seismic hazards of varying degrees depending upon the proximity, degree of activity, and capability of nearby faults. These hazards can be primary (i.e., directly related to the energy release of an earthquake, such as surface rupture and ground shaking) or secondary (i.e., related to the effect of earthquake energy on the physical world, which can cause phenomena such as liquefaction and ground lurching). The site is not located in a seismic hazard zone for liquefaction potential (CDMG, 2001), as shown in Figure 2. Liquefaction potential is discussed further in Section 2.5. Secondary seismic hazards, such as tsunami and seiche, need not be considered since the site is located approximately 4 miles from the ocean or any confined bodies of water and at elevations well above mean sea level.

As with the majority of sites in Southern California, the primary seismic hazard for this site is ground shaking due to a future earthquake on one of the major regional active faults, such as the San Joaquin Hills Blind Thrust, Newport-Inglewood, or the Elsinore-Glen Ivy Faults. We anticipate the site will be designated as Class CD. However, due to the lack of seismic data at depth, we are unable to determine the Vs (30) shear wave velocity at this time and the default category has been used to develop the preliminary seismic design parameters. The seismic design parameters are presented in the Conclusions and Recommendations section of this report. Seismic design parameters were calculated based on a computer program by the Structural Engineers Association/Office of Statewide Health Planning and Development (2025). The results are tabulated in Section 3.5 and the data is included in Appendix D.

2.4 Groundwater

Groundwater was not encountered by NMG during our subsurface exploration to a depth of 51.5 feet. Also, based on information on the GeoTracker website there were several borings excavated at the 76-gas station in 2009 that were drilled from 40 to 51 feet deep and did not encounter groundwater. This gas station is located approximately 800 feet north of the subject site.

Therefore, based on our subsurface investigation and publicly available well data groundwater is expected to be greater than 51.5 feet deep.

2.5 Engineering Soil Properties

Based on the borings at the site, the moisture content of the existing fill generally ranges from 14.2 to 18.1 percent and in-place dry density ranged from approximately 85.4 to 124.8 pcf. Locally, moisture was found to be as high as 34.6 percent. The near-surface fill material (upper 5 feet) is generally moist. The grain size testing indicates 30 to 59 percent fines content (passing No 200 sieve). Most of the soils are non-plastic however, some soils are clayey and had Liquid Limits of 28 to 41 percent and Plasticity Index of 9 to 16 percent. Maximum density testing was performed on one bulk samples collected from the upper 5 to 10 feet that consisted of clayey sand (USCS classification of SC). The maximum dry density test result was 114 pcf with optimum moisture content of 15.5 percent.

Based on the USCS classification, the existing fill consists of crudely layered SP, SC, CL, SM, and ML soils. The soil sample descriptions, classification (USCS group symbol), in-situ soil dry density and moisture content are presented on the boring logs (Appendix B).

Direct shear testing was performed on one sample remolded to 90 percent (based on ASTM Test Method D1557) to evaluate the strength of reworked onsite soils, to assess the strength of the future fill material. The selected sample was a clayey sand material sampled in the upper 5 feet. The test result indicated peak cohesion of 375 psf and a soil friction angle of 27 degrees, and ultimate cohesion of 180 psf and a soil friction angle of 26 degrees. The original direct shear testing of the bedrock in the area indicated friction angles of 27 to 47 degrees and cohesion of 80 to 625 psf.

Expansion index tests were performed on selected bulk samples from the existing fill to evaluate the expansion potential of onsite soils. Based on the laboratory test results, the expansion index (EI) varies from 9 to 23 which corresponds to "Very Low" to "Low" expansion potential. However, due to the presence of the Monterrey Formation bedrock in the shallow subsurface, higher expansive soils should be expected during demolition and grading.

R-value testing was performed on a sample of the clayey sand fill and indicated a minimum value of 29 (by expansion).

The direct shear, Atterberg Limit, and maximum density/optimum moisture content test results for the bedrock materials in the area included in the investigation report (JGR, 1987) were also reviewed and utilized.

2.6 Liquefaction Potential

The subject site is not located within a zone of liquefaction potential as mapped by the State (Figure 2). According to mapping by CDMG (2201) Historic high groundwater at the site is 20 feet below ground surface (bgs). However, groundwater was not encountered while drilling during prior investigations by others or during the current investigation to depths up to 51.5 feet bgs. Liquefaction potential at the subject site is considered very low to nil due to the significant depth to groundwater and relatively shallow bedrock across the majority of the site.

2.7 Settlement Potential

We anticipate the future compacted fill and underlying bedrock will have low compressibility. Based on the minor design grading and the light structural loads, we anticipate only minor settlement. The potential settlement due to seismic shaking should also be minor.

2.8 Slope Stability

The slopes around the perimeter of the site consist mainly of fill slopes or stabilization fill slopes with a limited window of exposed bedrock below the fire station. The bedrock bedding is generally favorable with respect to slope stability. The existing slopes are 2H:1V and up to 35 feet in height. Slope stability was performed utilizing Cross-Section A-A' (Figure 4) for the western perimeter ascending slope and the eastern descending slope. The western slope will have a proposed retaining wall cut into the toe of slope. This wall will have a maximum height of 8 feet. A temporary cut slope will be required for construction of the proposed retaining wall at toe of slope. The existing descending eastern slope has an existing retaining wall at the bottom next to the car wash. The height of the slope and retaining wall combination is 9 feet. To accommodate the design finish grades for the new development a retaining wall up to 6 feet in high is proposed at the top of slope.

The results of the preliminary slope stability indicate the revised slope with the new retaining walls have a global factor of safety greater than 1.5. The factor of safety for the pseudostatic slope stability analysis has a factor of safety greater than 1.1. The temporary slope for the new retaining wall construction is anticipated to expose competent bedrock. The results of the slope stability analysis is presented in Appendix E.

2.9 Existing Asphalt Pavement

The existing asphalt encountered during our subsurface exploration within the parking lot area varied from 3 to 4.5 inches of asphalt concrete (AC) over 5 to 9 inches of aggregate base (AB). The actual pavement section measurements were obtained during our subsurface exploration and are provided on the boring logs (Appendix B).

2.10 Corrosivity Testing

Corrosion testing was performed by Keegan Labs on three samples provided by NMG to evaluate Resistivity, pH, Sulfate content, and Chloride content. One of the soil samples was of the fine grained (silty) bedrock and the other two samples were of the existing fill (clayey sand/sandy clay). As a result of the varied soil types, the corrosion potential ranged from corrosive to severely corrosive to metals, negligible to severely corrosive to concrete, and low to moderate chloride exposure. Soil pH values indicate slight to medium alkalinity. The soil analysis lab test results are presented in Appendix C and summarized below.

Soil Corrosion Test	*Test Results*
Minimum Resistivity (ohm-cm)	322 -1660
pH	7.0-7.7
Sulfate Content (ppm)	96 – 5,220
Chloride Content (ppm)	44 – 1,061

2.11 Earthwork Factors

The loss or gain of volume (shrinkage or bulking, respectively) of excavated natural materials and re-compaction as fill varies according to earth material type and location. This volume change is represented as a percentage shrinkage (volume loss) and as a percentage bulking (volume gain) after re-compaction of a unit volume of cut in this same material in its natural state. We anticipate the existing fill materials and near-surface bedrock will vary from 2 percent bulk (bedrock) to 1 percent shrinkage (existing fill). The loss of volume due to demolition is not included in our earthwork factors. Due to prior site use, subsidence at the site is anticipated to be negligible.

3.0 CONCLUSION AND PRELIMINARY RECOMMENDATIONS

3.1 General Conclusion

Based on review of the VTTM and Engineering Site Plan, the proposed residential redevelopment at the site is considered geotechnically feasible. This report provides the collected site-specific subsurface information and preliminary recommendations that can be used for planning and initial design at the site. Specific geotechnical recommendations for design, grading, and construction will be provided in future reports based on review of the design plans for the project.

Our subsurface investigation confirmed that most of the site has between 2.5 and 5 feet of fill over bedrock. The southeastern and southwestern perimeter of the site have thicker compacted fills and alluvium where canyons were filled during prior grading. The variable as-graded and geologic subsurface conditions will influence the seismic design parameters, foundation design, grading and earthwork, and underground utility construction. The recommended remedial grading and deeper utility excavations will encounter bedrock across the majority of the site. Where bedrock is encountered, grading may require extra mixing and blending locally to produce a uniform fill and foundation soil conditions. Testing during and at the completion of grading will be required to confirm the engineering soil properties. Groundwater is in excess of 50 feet below ground surface and is not anticipated to impact the subject development.

3.2 Demolition of Existing Structures

Demolition of the three office buildings, existing utilities, walls and pavement will be performed prior to grading. We are anticipating a five-foot removal in the design fill areas and a five-foot over-excavation in the design cut areas. If any of the building foundations, underground utilities or retaining wall footings extend below the anticipated removal bottoms then the deeper areas need to be cleaned out of loose materials and replace with compacted fill to the depth of the anticipated removal bottom.

There will be large quantities of asphalt and concrete generated during demolition of the existing improvements. We understand this material will be exported offsite for disposal.

3.3 Site Preparation and Earthwork

General earthwork and grading specifications are provided below and in Appendix F. Grading will also have to satisfy the requirements of the City of Aliso Viejo. Prior to grading, deleterious material (highly organic topsoil, vegetation, trash, construction debris), if any, should be cleared from the site and disposed of offsite. The existing structures to be demolished and the buried utilities within the site should be removed, the loose soil cleaned out and the areas below the planned remedial removal bottoms be properly backfilled with compacted fill. The demolition operation should minimize disturbing/loosening existing soils and should protect existing improvements to remain.

Although not encountered during our limited exploration, there is the potential for cemented bedrock to be encountered locally in the deeper excavation that may be difficult to rip and may generate some oversize material (greater than 12 inches in diameter. Due to the shallow fills anticipated across the

site, any oversize material generated will need to be crushed onsite prior to placement in fill or exported offsite.

We recommend a minimum of 5-foot-deep remedial removals in the design fill areas and 5-foot-deep overexcavation in the design cut areas for the site to provide a new, uniform compacted fill blanket. Deeper remedial removals may be recommended during grading in areas where diatomaceous siltstone and claystone are encountered in removal bottoms to mitigate the potential for differential heave beneath building pads. The demolition operation and local variations in soil conditions may result in the need for deeper removals. Some of the existing utility lines may be locally deeper than the recommended remedial removals; therefore, special excavation for these lines may be necessary if encountered and backfilled accordingly with compacted fill.

Onsite materials that are relatively free of deleterious material should be suitable for use as compacted fill. Prior to placement of fill, the removal bottoms should be scarified a minimum of 6 inches, moisture-conditioned as needed, and compacted to minimum 90 percent relative compaction. The relative compaction should be based upon ASTM Test Method D1557-91.

The moisture content of the fill soil should be over optimum moisture content and consideration should be given to placing fill at higher moisture contents to facilitate the future presoaking process for slab-on-grade foundations. Fill material should be placed in loose lifts no greater than 8 inches in thickness and compacted prior to placement of the next lift. Ground sloping steeper than 5:1 (horizontal to vertical) should be prepared by benching into firm competent material as fill is placed. If diatomaceous soils are encountered, additional measures may be needed to achieve compaction.

3.4 Infiltration

Due to the subsurface conditions of compacted fill over shallow, low-permeability bedrock, stormwater infiltration is not feasible at this site.

3.5 Settlement Potential

For preliminary foundation design purposes, we estimate total consolidation (static) settlement would not exceed 1 inch and differential settlement on the order of 1 inch over a span of 40 feet. Additional evaluation of the settlement should be performed once a grading plan and structural loads become available.

3.6 Foundation and Slab Design Guidelines

Slab-on-grade foundations will be acceptable for the subject development. The design of shallow footings and slab-on-grade foundations will require collaboration between the geotechnical and structural engineers based on the anticipated structural loading conditions and considering the requirements of the 2025 CBC. For expansive soils, the CBC requires slab-on-grade foundations to be designed in accordance with the Post-Tension Institute (PTI) or Wire Reinforcement Institute (WRI) methodology. The foundation design for the shallow fill area will need to consider the potential for higher expansion and differential heave due to siltstone and claystone bedrock. This will be evaluated in more detail with the future design and during the site grading.

3.7 Foundation Setbacks

The footings of structures located above descending slopes should be set back from the slope face in accordance with the minimum requirements of the City of Aliso Viejo, County of Orange, and 2025 CBC criteria, whichever is greater. The setback distance is measured from the outside edge of the footing bottom along a horizontal line to the face of the slope.

The tables below summarize the minimum setback criteria for structures above descending slopes:

Structural Setback Requirements

Building and Retaining Wall Footings Above Descending Slopes	
Slope Height [H] (feet)	*Minimum Setback from Slope face (feet)*
Less than 10	5
10 to 20	½ * H
20 to 30	10
More than 30	⅓ * H (maximum of 40')

For freestanding walls and other structures that are sensitive to lateral movement (e.g., smooth stucco finish, glass screens, etc.), NMG recommends that the structural setback requirements above be followed or that additional design measures be used to help control the potential for cracking and displacements.

Additionally, foundations for the new retaining wall above the existing retaining wall will need further evaluation for potential surcharge loading.

3.8 Seismic Design Guidelines

The following table summarizes the seismic design criteria for the subject site. The seismic design parameters are developed in accordance with 2025 CBC and ASCE 7-22. Due to the variable depths to bedrock across the overall site and the lack of shear wave velocities at depth, the seismic parameters were determined using the Default Site Class per ASCE 7-22. A geophysical study may be warranted in the future in order to obtain shear wave velocities in the upper 100 feet (Vs (30)) and determine the seismic site class.

Selected Seismic Design Parameters from 2025 CBC/ASCE 7-22	*Seismic Design Values*	*Reference*
Latitude	33.5695 North	
Longitude	117.7247 West	
Controlling Seismic Source	San Joaquin Hills	USGS, 2025
Distance to Controlling Seismic Source	2.5 mi (4.1 km)	USGS, 2025
Site Class per Table 20.3 and 11.4.2 of ASCE 7-22	Default	SEA/OSHPD, 2025
Ss, Spectral Acceleration for Short Periods	1.41 g	SEA/OSHPD, 2025
S_1, Spectral Accelerations for 1-Second Periods	0.45 g	SEA/OSHPD, 2025
S_{DS}, Design Spectral Response Acceleration at Short Periods from Equation 11.4-1 of ASCE 7-22	1.09 g	SEA/OSHPD, 2025
S_{D1}, Design Spectral Response Acceleration at 1-Second Period from Equation 11.4-2 of ASCE 7-22	0.73 g	SEA/OSHPD, 2025
T_S, S_{D1}/ S_{DS}, Section 11.4.5.2 of ASCE 7-22	0.67 sec	SEA/OSHPD, 2025
T_L, Long-Period Transition Period	8 sec	SEA/OSHPD, 2025
PGA_M, Peak Ground Acceleration Corrected for Site Class Effects from Equation 11.8.3 of ASCE 7-22	0.64 g	SEA/OSHPD, 2025
Seismic Design Category, Section 11.6 of ASCE 7-22	D	SEA/OSHPD, 2025

3.9 Pavement Design

We anticipate the future subgrade soils for pavements will have a minimum R-value of 20. Final structural pavement sections should be based on R-value testing after the completion of grading.

The following preliminary pavement sections are for the assumed traffic indices (TIs). The final structural pavement design should be based on the actual design TIs and the actual subgrade soil once the grading and utilities are completed. Lower R-values could be present if the fine grained bedrock ends up near the design pavement subgrade elevation.

Minimum Structural Pavement Section (Preliminary)			
Location	***TI***	***Composite Section***	***Full-Depth Section***
Parking Stalls	4.5	0.25' AC over 0.50' AB*	0.50' AC
Private Courts	5.5	0.35' AC over 0.60' AB	0.55' AC
Drives	6.0	0.35' AC over 0.65' AB	0.60' AC
AC = Asphalt Concrete; AB = Aggregate Base			

*In accordance with County of Orange/City of Aliso Viejo design minimums.

Asphalt concrete should also be compacted to a minimum relative compaction of 95 percent. Please note that for two-stage paving operations, the initial based asphalt pavement layer should be a minimum of 0.25-foot AC and the final cap should be a minimum of 0.10 foot thick.

Prior to construction of pavement sections, the subgrade soils should be scarified to a minimum depth of 6 inches, moisture-conditioned as needed, and recompacted in place to a minimum of 90 percent relative compaction per ASTM D1557. The full-depth pavement area will require

subgrade to have a minimum of 95 percent relative compaction in the upper 1 foot. Subgrade for the proposed pavements should be uniform, firm, and unyielding.

AB materials can be crushed aggregate base or crushed miscellaneous base in accordance with the Greenbook (Section 200-2). The materials should be free of any deleterious materials. Aggregate base materials should be placed in 6- to 8-inch-thick loose lifts, moisture-conditioned as necessary, and compacted to a minimum of 95 percent relative compaction (per ASTM D1557).

3.10 Exterior Concrete

The recommendations provided below should be used for design and construction measures of the concrete pavements/hardscape. These recommendations are considered minimum and may be superseded by more stringent requirements/standards of the City of Aliso Viejo, the Standard Specifications for Public Work Construction "Greenbook" or other designers. The public pavements and other exterior concrete improvements (within the street right-of-way) should be constructed in accordance with City of Aliso Viejo standards.

3.11 Soil Corrosivity and Cement Type

The soil soluble sulfates exposures at the site as found to vary from "negligible" to "severe" per Table 19.3.1.1 of ACI-318-19. The existing sandy fill is generally classified as "S0" and the clayey fill is classified as "S2". Finer grained bedrock soil is generally classified as "S2". The chloride levels within the soils are classified as Class C1. The chloride content in the bedrock exceeded 500 ppm. The onsite soils are corrosive to severely corrosive to ferrous metals.

Concrete mix requirements for structural concrete will require additional sulfate testing once the project grading is complete. Otherwise, the concrete mix requirements for structural concrete should be based on the "S2" exposure class. Table 19.3.2.1 in ACI-318-19 lists the appropriate type of cement, maximum water-cement ratio, and minimum concrete compressive strength. The city or other agency may have additional concrete requirements.

Structural concrete elements in contact with soil include footings and building slabs-on-grade. Concrete improvements for streets, sidewalk and hardscape typically are not considered structural elements.

3.12 Pipelines, Trench Excavations, Temporary Shoring, and Backfill

Excavations should conform to the latest edition of OSHA requirements (shoring or layback of trench or wall excavations). The near-surface soils across most of the site are anticipated to be classified as Type B in compacted fill soils (upper 5 feet) and Type C in bedrock (below a depth of 5 feet) for CalOSHA trenching and shoring excavation requirements. Excavations deeper than approximately 5 feet below existing ground surface will encounter siltstone and sandstone bedrock. The bedding conditions may be adverse to the trench wall and shoring may be needed during utility installation. Trench spoils should not be placed immediately adjacent to the trenches, especially on the up-dip side.

The existing fill should generally be suitable for use as trench backfill. Excavations into bedrock may have chunky siltstone and cemented sandstone fragments and may need to be broken down to comply with trench backfill requirements. Backfill materials should not have rocks greater than 6 inches in the maximum dimension and should be compacted to a minimum relative compaction of 90 percent (per ASTM D1557). We recommend that moisture content of native backfill to be over optimum moisture content. Select backfill may be used in lieu of native soils.

If a high-density, polyethylene (HDPE) pipe is proposed for the development, then excavation, installation, bedding, shading, and backfilling should be in strict accordance with the project and manufacturer's requirements. HDPE pipe has specific requirements for the width of the trench excavation.

4.0 PLANNING AND DESIGN RECOMMENDATIONS

1. The future rough grading plan should be reviewed by the geotechnical consultant once available, and specific recommendations provided as necessary for the project. Additional subsurface exploration and laboratory testing may be needed based on final design.

2. A geophysical survey may be needed in the future in order to properly determine the seismic site class based on the 2025 California Building Code.

3. A geotechnical rough grading plan review report should be prepared for the site-specific conditions and submitted to the City for their review and approval.

4. The model and production precise grading plans should be reviewed, and reports prepared to provide geotechnical recommendations and foundation design parameters in accordance with the most recent CBC code.

5. The structural and foundation plans, once available, should be reviewed to confirm the geotechnical parameters pertinent to the site are used for design.

6. The retaining and perimeter wall plans, once available, should be reviewed and recommendations provided for future design, grading, and construction. The existing retaining wall in the southeast corner that is tilting will need further evaluation.

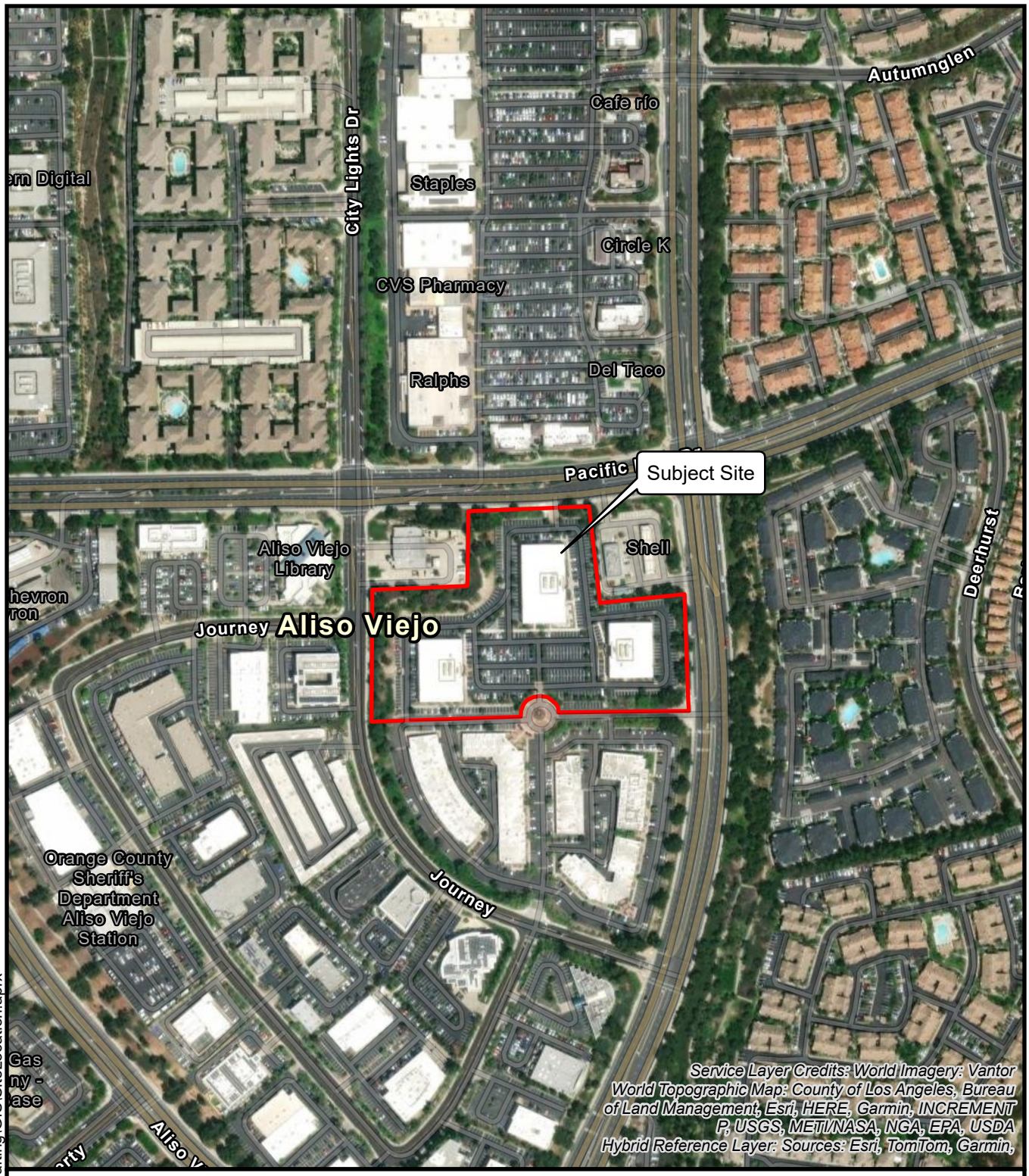
7. Additional soil testing should be performed to confirm the final soil conditions related to the foundation design parameters after the completion of rough grading.

8. The street improvement and utility plans should be reviewed, and recommendations provided as needed. Trench excavations in the native bedrock may encounter friable material and/or adverse bedding that should be evaluated for safety compliance.

5.0 LIMITATIONS

This report has been prepared for the exclusive use of our client, Shea Homes, within the specific scope of services requested by them for the subject residential development in Aliso Viejo, California. This report or its contents should not be used or relied upon for other projects or purposes or by other parties without the written consent of NMG and the involvement of a geotechnical professional. The means and methods used by NMG for this study are based on local geotechnical standards of practice, care, and requirements of governing agencies. No warranty or guarantee, express or implied is given.

The findings, conclusions, and recommendations herein are professional opinions based on interpretations and inferences made from geologic and engineering data from specific locations and depths, observed or collected at a given time. By nature, geologic conditions can vary from point to point, can be very different in between points, and can also change over time. Our conclusions and recommendations are subject to verification and/or modification during excavation and construction when more subsurface conditions are exposed.



SITE LOCATION MAP

PACIFIC CORPORATE PLAZA
27061 ALISO CREEK ROAD
SHEA HOMES DEVELOPMENT
CITY OF ALISO VIEJO, CALIFORNIA

Project Number: 24074-02 By: KGM/WG
Project Name: Shea Aliso Viejo
Date: 11/25/2025 Figure 1

NMG

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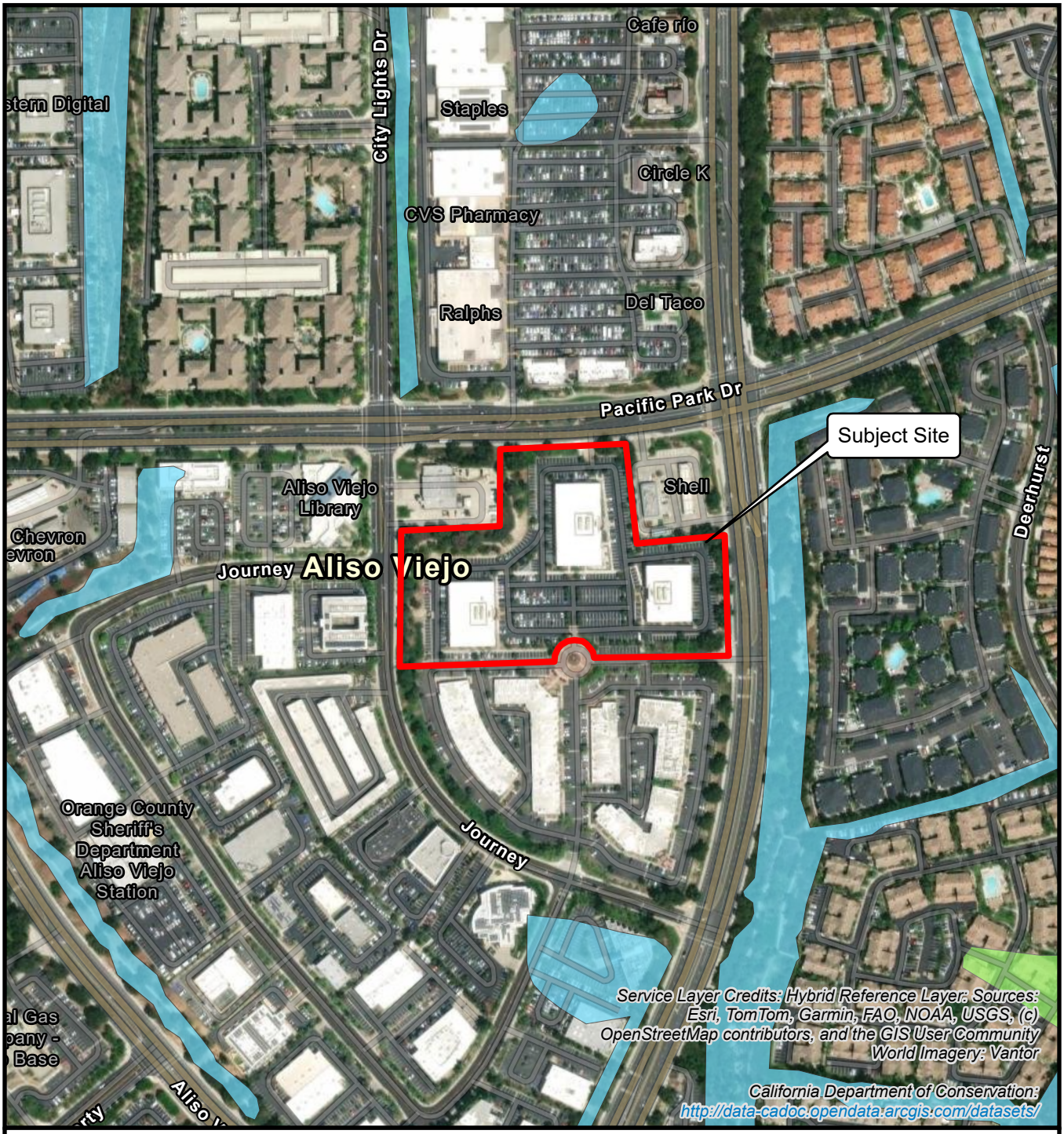


Legend

- Liquefaction Zones
- Landslide Zones

0 200 400 Feet

1 inch =400 feet

N

SEISMIC HAZARD ZONE MAP

Source: https://maps.conservation.ca.gov/cgs/informationwarehouse/eqzapp/

SHEA HOMES RESIDENTIAL DEVELOPMENT
27181 ALISO CREEK ROAD
TENTATIVE TRACK MAP 19442
CITY OF ALISO VIEJO, CALIFORNIA

Project Number: 24074-02 By: KGM/WG
Project Name: Shea Aliso Viejo
Date: 11/25/2025 Figure 2

NMG

P:\2024\24074-01 Shea Homes - DD\Drafting\GIS\SeismicHazards.aprx

Legend

- fault, approx. located
- fault, approx. located, queried
- fault, certain
- fault, concealed
- fault, concealed, queried
- fault, inferred, queried
- thrust fault, certain
- thrust fault, approx. located
- thrust fault, concealed

Regency of Movement

- Holocene
- Late Quaternary
- Quaternary

0 10,000 20,000 Feet

N

1 inch =20,000 Feet

REGIONAL FAULT ACTIVITY MAP

Base: California Geological Survey, Fault Activity Map of California, 2010

SHEA HOMES RESIDENTIAL DEVELOPMENT
27181 ALISO CREEK ROAD
TENTATIVE TRACK MAP 19442
CITY OF ALISO VIEJO, CALIFORNIA

Project Number: 24074-01 By: KGM/WG
Project Name: Shea Aliso Viejo
Date: 11/25/2025 Figure 3

NMG

O:\NMGIS\Templates\ArcGIS PRO Templates\RegionalFault_20230420.aprx

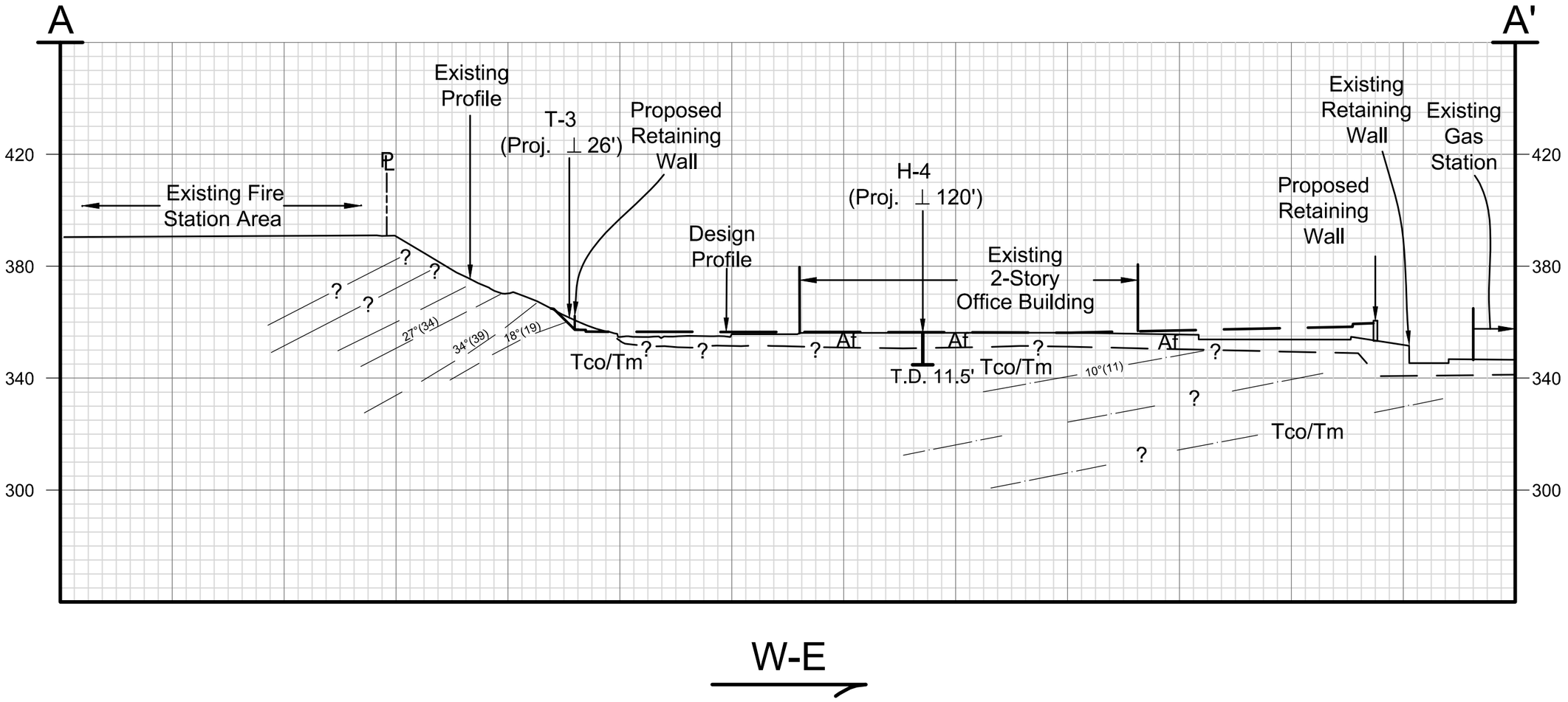
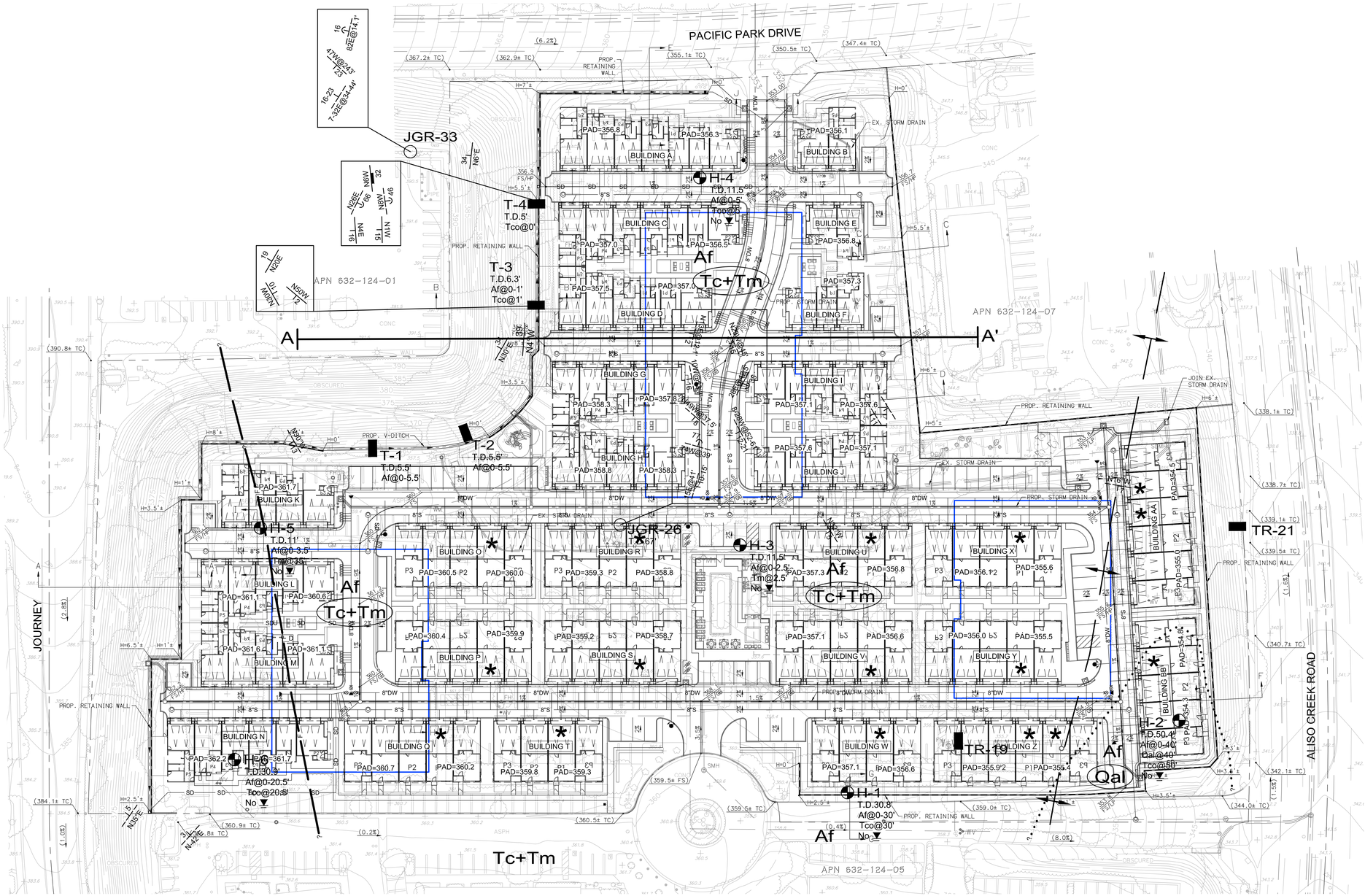


FIGURE 4

CROSS-SECTION A-A'

Project No.: 24074-02 BY:KGM/WG
Project Name: Shea Aliso Viejo
Date: 11/25/2025 SCALE: 1"-40'

NMG Geotechnical, Inc.



LEGEND

EARTH UNITS - CIRCLED WHERE BURIED

Af	ARTIFICIAL FILL
Qal	ALLUVIUM
Tc+Tm	INTERFINGERED CAPISTRANO AND MONTEREY FORMATION

SYMBOLS - LOCATIONS ARE APPROXIMATE, QUERIED WHERE UNCERTAIN

- GEOLOGIC CONTACT, DOTTED WHERE BURIED
- FAULT, DOTTED WHERE BURIED
- ANTICLINAL FOLD AXIS, SHOWING DIRECTION OF PLUNGE
- DESIGN CUT / FILL / EXISTING / NATURAL LINE

OTHER SYMBOLS - LOCATIONS ARE APPROXIMATE

- H-6 T.D.11' Af@0-3.5' Tm@3.5' No ▼ — HOLLOW-STEM AUGER BORING, SHOWING TOTAL DEPTH, DEPTH TO EARTH UNIT AND DEPTH TO GROUNDWATER
- JGR-33 T.D.67' — PRIOR BORING BY JGR (1987) SHOWING TOTAL DEPTH
- TR-21 — PRIOR GEOTECHNICAL TRENCH BY JGR (1987)

GEOLOGIC ATTITUDES- LOCATIONS ARE APPROXIMATE, DASHED WHERE BURIED

- 34 / N6°E — BEDDING ATTITUDE
- A — A' — CROSS-SECTION
- LIMITS OF EXISTING BULIDINGS (3 TOTAL)

GRAPHIC SCALE

40 0 20 40 80

(IN FEET)
1 inch = 40 ft.

PLATE 1

GEOTECHNICAL MAP
VESTING TENTATIVE TRACT MAP 19390
27181 ALISO CREEK ROAD
CITY OF ALISO VIEJO, CALIFORNIA

Project No.: 24074-02 By: KGM/WG
Project Name: Shea/Aliso Viejo DD
Date: 11/25/2025 SCALE: 1" = 40'

NMG Geotechnical, Inc.

BASE MAP: PROACTIVE ENGINEERING

Drawing: P:\2024\24074-02 Shea Aliso Viejo\Drafting_WP\24074-02 Geo Map.dwg Layout: Layout1 Last Saved: Wed Nov 19, 2025 – 4:26pm Last Plotted: Fri Nov 21, 2025 – 1:38pm By: xrodriguez

APPENDIX A

APPENDIX A

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APPENDIX B

Report: HOLLOW STEM; Project: 24074-01.GPJ; Data Template: NMG_GINT_2016.GDT; Printed: 11/18/25

Date(s) Drilled	12/6/24	Logged By	SHC
Drilling Company	2R Drilling	Drill Bit Size/Type	8"
Drill Rig Type	CME 75	Hammer Data	140 lbs @ 30 inch drop
Sampling Method(s)	Modified California, Bulk		
Approximate Groundwater Depth:	No Groundwater Encountered		
Comments	Hand Augered First 5 Feet.		

H- 1

Sheet 1 of 2

Total Depth Drilled (ft)	30.8
Approximate Ground Surface Elevation (ft)	359.0 msl

Elevation (ft)	Depth (ft)	SAMPLES Type	SAMPLES Number	SAMPLES Blows per foot	Graphic Log	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	OTHER TESTS and REMARKS
	0						Surface: Asphalt Pavement, 4.5" AC over 9" AB.			
						SC	**Artificial Fill (Af)** @ 1-5': Light olive brown clayey fine to coarse SAND, damp to moist, few sandstone/claystone clasts up to 1", trace roots, trace rusted metal, trace concrete, crystalline rock clast encountered @4.5'.			B-1 @ 1-5'
			B-1							
	5		D-1	39			@ 5': Light olive brown clayey fine SAND, damp to moist, medium dense, few sandstone/siltstone clasts up to 1", FeO staining in bedrock fragments.	14.2	110.1	
350										
	10		D-2	45			@ 10': Light olive brown clayey fine to medium SAND, damp to moist, medium dense to dense, few sandstone/siltstone clasts up to 1", FeO staining in bedrock fragments.	13.3	110.6	
	15		D-3	29			@ 15': Light olive brown clayey fine to medium SAND, moist, medium dense, few sandstone/siltstone clasts up to 1", FeO staining in bedrock fragments, some layers of more clay.	17.9	105.8	
340										
	20		D-4	26		ML-CL	@ 20': Grayish brown to yellowish brown clayey SILT to silty CLAY, moist to wet, very stiff, trace FeO and MnO staining, upper rings contain few sandstone/siltstone clasts up to 1/2".	22.2	99.5	
	25									

LOG OF BORING

Shea/ Aliso Viejo
Aliso Viejo, CA
PROJECT NO. 24074-01

NMG

Elevation (ft)	Depth (ft)	SAMPLES Type	SAMPLES Number	SAMPLES Blows per foot	Graphic Log	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	OTHER TESTS and REMARKS
	25									
330										
	30		D-5	90/10"		ML SC	**Tertiary Capistrano Formation, Oso Member (Tco)** @ 30': Upper: Grayish brown sandy SILTSTONE, damp, hard, trace clay laminations, trace MnO staining, minimal mica. Lower: Light gray clean fine SANDSTONE, damp, very dense, trace FeO staining.	4.9	107.6	
							Notes: Total Depth: 30.8 Feet. No Groundwater Encountered. Backfilled with Cuttings and Tamped. Upper 6" Patched with Quick-Set Concrete and Black Dye.			
	35									
320										
	40									
	45									
310										
	50									
	55									

LOG OF BORING

Shea/ Aliso Viejo
Aliso Viejo, CA

PROJECT NO. 24074-01

NMG

Report: HOLLOW STEM; Project: 24074-01.GPJ; Data Template: NMG_GINT_2016.GDT; Printed: 11/18/25

Report: HOLLOW STEM; Project: 24074-01.GPJ; Data Template: NMG_GINT_2016.GDT; Printed: 11/18/25

Date(s) Drilled	12/6/24	Logged By	SHC
Drilling Company	2R Drilling	Drill Bit Size/Type	8"
Drill Rig Type	CME 75	Hammer Data	140 lbs @ 30 inch drop
Sampling Method(s)	Modified California, Bulk		
Approximate Groundwater Depth:	No Groundwater Encountered		
Comments	Hand Augered First 5 Feet.		

H- 2

Sheet 1 of 2

Total Depth Drilled (ft)	50.9
Approximate Ground Surface Elevation (ft)	352.0 msl

Elevation (ft)	Depth (ft)	SAMPLES Type	SAMPLES Number	SAMPLES Blows per foot	Graphic Log	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	OTHER TESTS and REMARKS
	0						Surface: Asphalt Pavement, 4" AC over 7" AB.			
350						SC	**Artificial Fill (Af)** @ 1-5': Light grayish brown to olive yellow clayey fine to medium SAND , moist, few sandstone/siltstone clasts up to 1", trace FeO staining.			B-1 @ 1-5'
			B-1							
	5		D-1	34		CL	@ 5': Grayish brown fine sandy CLAY, wet, very stiff, few sandstone/siltstone clasts up to 1", trace FeO staining.	34.6	85.4	-200, AL, CN
	10		D-2	25			@ 10': Light olive brown to orange sandy silty CLAY, wet, very stiff, few sandstone/siltstone clasts up to 1", trace medium to coarse sand, trace FeO staining.	26.6	96.4	
340										
	15		D-3	61		SC	@ 15': Brownish yellow clayey fine to medium SAND, damp, dense, few sandstone/siltstone clasts up to 1", trace FeO and MnO staining.	9.2	116.1	
	20		D-4	50			@ 20': Light olive brown clayey fine SAND, damp, dense, trace to few sandstone/siltstone clasts up to 1", trace FeO staining.	9.6	109.3	
330										
	25									

LOG OF BORING

Shea/ Aliso Viejo
Aliso Viejo, CA
PROJECT NO. 24074-01

NMG

Elevation (ft)	Depth (ft)	SAMPLES Type	SAMPLES Number	SAMPLES Blows per foot	Graphic Log	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	OTHER TESTS and REMARKS
	25									
	30		D-5	65		ML-CL SC	@ 30':Upper: Black to dark Grayish brown silty CLAY to clayey SILT, damp to moist, hard, low plasticity, few sandstone/siltstone clasts up to 1", trace FeO and MnO staining. Lower: Yellowish brown clayey fine SAND, damp to moist, dense, trace to few sandstone/siltstone clasts up to 1", trace FeO staining.	12.4	124.8	
320										
	35									
	40		D-6	85/11"			**Quaternary Alluvium (Qal)** @ 40': Olive gray clayey fine to medium SAND, damp to moist, very dense, trace to few highly weathered sandstone/siltstone clasts up to 1", trace coarse sand, trace pinhole pores.	11.7	120.1	
310										
	45									
	50		D-7	70/11"		ML SM	**Tertiary Monterey Formation (Tm)** @ 50': Upper: Light gray diatomaceous SILTSTONE, wet, hard, trace joints, trace fish scales, well bedded. Lower: Light yellowish brown silty fine SANDSTONE, wet, very dense, trace FeO staining, minimal mica, friable. Notes: Total Depth: 50.9 Feet. No Groundwater Encountered. Backfilled with Cuttings and Tamped. Upper 6" Patched with Quick-Set Concrete and Black Dye.	40.5	82.8	
300										
	55									

LOG OF BORING

Shea/ Aliso Viejo
Aliso Viejo, CA

PROJECT NO. 24074-01

NMG

Report: HOLLOW STEM; Project: 24074-01.GPJ; Data Template: NMG_GINT_2016.GDT; Printed: 11/18/25

Date(s) Drilled	12/6/24	Logged By	SHC
Drilling Company	2R Drilling	Drill Bit Size/Type	8"
Drill Rig Type	CME 75	Hammer Data	140 lbs @ 30 inch drop
Sampling Method(s)	Modified California, Bulk		
Approximate Groundwater Depth:	No Groundwater Encountered		
Comments	Hand Augered First 5 Feet.		

H- 3

Sheet 1 of 1

Total Depth Drilled (ft)	11.5
Approximate Ground Surface Elevation (ft)	355.0 msl

Elevation (ft)	Depth (ft)	SAMPLES Type	SAMPLES Number	SAMPLES Blows per foot	Graphic Log	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	OTHER TESTS and REMARKS
	0						Surface: Asphalt Pavement, 3" AC over 5" AB.			
						SC	**Artificial Fill (Af)** @ 1-2.5': Yellowish brown silty clayey fine SAND, damp, few sandstone/siltstone clasts up to 1", trace FeO staining.			B-1 @ 1-2.5'
			B-1							
			D-1	18		CL	**Tertiary Monterey Formation (Tm)** @ 2.5': Grayish brown fine sandy CLAYSTONE, wet, stiff, moderately bedded, trace FeO staining, trace fish scales, diatomaceous.	32.9	86.4	
350	5		D-2	68		SC SP	@ 5' Upper: Grayish brown clayey fine SANDSTONE, wet, dense, moderately bedded, trace FeO and MnO staining, micaceous. Lower: Light grayish brown very fine clean SANDSTONE, wet, dense, trace FeO and MnO staining, friable.	27.7	90.1	
	10		D-3	56		CL	@ 10': Upper: Light grayish brown very fine clean SANDSTONE, dry to damp, dense, trace FeO and MnO staining, friable. Lower: Light grayish brown silty CLAYSTONE, damp, hard, low plasticity, trace fish scales, trace FeO and MnO staining.	4.2	112.7	
							Notes: Total Depth: 11.5 Feet. No Groundwater Encountered. Backfilled with Cuttings and Tamped. Upper 6" Patched with Quick-Set Concrete and Black Dye.			
340	15									
	20									
330	25									

LOG OF BORING

Shea/ Aliso Viejo
Aliso Viejo, CA
PROJECT NO. 24074-01

NMG

Report: HOLLOW STEM; Project: 24074-01.GPJ; Data Template: NMG_GINT_2016.GDT; Printed: 11/18/25

Date(s) Drilled	12/6/24	Logged By	SHC
Drilling Company	2R Drilling	Drill Bit Size/Type	8"
Drill Rig Type	CME 75	Hammer Data	140 lbs @ 30 inch drop
Sampling Method(s)	Modified California, Bulk		
Approximate Groundwater Depth:	No Groundwater Encountered		
Comments	Hand Augered First 5 Feet.		

H- 4

Sheet 1 of 1

Total Depth Drilled (ft)	11.5
Approximate Ground Surface Elevation (ft)	354.0 msl

Elevation (ft)	Depth (ft)	SAMPLES Type	SAMPLES Number	SAMPLES Blows per foot	Graphic Log	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	OTHER TESTS and REMARKS
	0						Surface: Asphalt Pavement, 3" AC oer 5" AB.			
						SM	**Artificial Fill (Af)** @ 1': Grayish brown silty fine SAND, damp.			B-1 @ 1-5'
350			B-1			SP	@ 2': Light gray clean fine SAND, damp, minimal mica, trace medium sand.			
	5		D-1	53		SP	**Tertiary Capistrano Formation, Oso member (Tco)** @ 5': Pale olive clean fine SANDSTONE, dense, dry to damp, minimal mica, friable.	2.1	110.8	
	10		D-2	38			@ 10': Pale olive clean fine to medium SANDSTONE, medium dense, dry to damp, trace coarse sand, minimal mica, trace FeO staining, friable.	2.3	108.2	
340							Notes: Total Depth: 11.5 Feet. No Groundwater Encountered. Backfilled with Cuttings and Tamped. Upper 6" Patched with Quick-Set Concrete and Black Dye.			
	15									
	20									
330										
	25									

LOG OF BORING

Shea/ Aliso Viejo
Aliso Viejo, CA
PROJECT NO. 24074-01

NMG

Report: HOLLOW STEM; Project: 24074-01.GPJ; Data Template: NMG_GINT_2016.GDT; Printed: 11/18/25

Report: HOLLOW STEM; Project: 24074-01.GPJ; Data Template: NMG_GINT_2016.GDT; Printed: 11/18/25

Date(s) Drilled	**12/6/24**	Logged By	**SHC**
Drilling Company	**2R Drilling**	Drill Bit Size/Type	**8"**
Drill Rig Type	**CME 75**	Hammer Data	**140 lbs @ 30 inch drop**
Sampling Method(s)	**Modified California, Bulk**		
Approximate Groundwater Depth:	**No Groundwater Encountered**		
Comments	**Hand Augered First 5 Feet.**		

H- 5

Sheet 1 of 1

Total Depth Drilled (ft)	**11.0**
Approximate Ground Surface Elevation (ft)	**360.0 msl**

Elevation (ft)	Depth (ft)	SAMPLES Type	SAMPLES Number	SAMPLES Blows per foot	Graphic Log	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	OTHER TESTS and REMARKS
360	0						Surface: Asphalt Pavement, 4" AC over 9" AB.			
						SP	**Artificial Fill (Af)** @ 1': Light olive brown fine SAND, damp, trace clay.			B-1 @ 1-5', GS, AL,MD, EI, CC, DS
			B-1			SC ML	@ 3': Light olive brown silty clayey fine SAND, damp, trace sandstone/siltstone clasts up to 1".			
							Tertiary Monterey Formation (Tm) @ 3.5': Thinly bedded very dark gray SILTSTONE clasts in cuttings, damp.			
	5		D-1	62		SM-ML	@ 5': Upper: Very dark gray clayey SILTSTONE, wet, hard, moderately bedded, diatomaceous.	32.4	93.0	
							Lower: Light olive brown very fine sandy SILTSTONE/silty very fine SANDSTONE, moist to wet, hard/dense, minimal mica.			
							@ 8.5 Increase in clay content.			
350	10		D-2	63		ML SC	@ 10': Upper: Very dark gray cemented SILTSTONE, moist, hard, highly oxidized w/ FeO staining, 3" claystone layer in upper three rings.	15.0	101.2	
							Lower: Pale yellow silty very fine SANDSTONE, dense to very dense, moist, moderately bedded, trace FeO and MnO staining, minimal mica.			
							Notes: Total Depth: 11 Feet. No Groundwater Encountered. Backfilled with Cuttings and Tamped. Upper 6" Patched with Quick-Set Concrete and Black Dye.			
	15									
340	20									
	25									

LOG OF BORING

Shea/ Aliso Viejo
Aliso Viejo, CA
PROJECT NO. 24074-01

NMG

Report: HOLLOW STEM; Project: 24074-01.GPJ; Data Template: NMG_GINT_2016.GDT; Printed: 11/18/25

Date(s) Drilled	12/6/24	Logged By	SHC
Drilling Company	2R Drilling	Drill Bit Size/Type	8"
Drill Rig Type	CME 75	Hammer Data	140 lbs @ 30 inch drop
Sampling Method(s)	Modified California, Bulk		
Approximate Groundwater Depth:	No Groundwater Encountered		
Comments	Hand Augered First 5 Feet.		

H- 6

Sheet 1 of 2

Total Depth Drilled (ft)	30.9
Approximate Ground Surface Elevation (ft)	361.0 msl

Elevation (ft)	Depth (ft)	SAMPLES Type	SAMPLES Number	SAMPLES Blows per foot	Graphic Log	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	OTHER TESTS and REMARKS
	0						Surface: Asphalt Pavement, 4" AC over 8" AB.			
360						SC	**Artificial Fill (Af)** @ 1-5': Light brown to light gray clayey fine SAND, moist, few sandstone/siltstone clasts up to 1".			B-1 @ 1-5', GS, AL, EI, CC
			B-1							
	5		D-1	39			@ 5': Olive yellow clayey fine to medium SAND, moist, medium dense, few siltstone clasts up to 1", trace FeO and MnO staining.	18.1	109.4	
	10		D-2	28			@ 10': Mottled yellowish brown and light olive gray clayey medium to coarse SAND, damp to moist, medium dense, orange clayey coarse sand in upper rings.	12.7	113.8	
350										
	15		D-3	28		SM	@15': Light yellowish brown silty fine to medium SAND, moist to wet, medium dense, few siltstone clasts up to 1", trace FeO staining.	22.8	101.6	
	20		D-4	75/11"		SC SP	@ 20': Upper: Light yellowish brown clayey SAND, damp, dense, few siltstone clasts up to 1". **Tertiary Capistrano Formation, Oso Member (Tco)** Lower: Light gray clean fine SANDSTONE, damp, very dense, abundant FeO staining, trace MnO staining, friable, minimal mica.	6.1	105.9	
340										
	25									

LOG OF BORING

Shea/ Aliso Viejo
Aliso Viejo, CA
PROJECT NO. 24074-01

NMG

Elevation (ft)	Depth (ft)	SAMPLES Type	SAMPLES Number	SAMPLES Blows per foot	Graphic Log	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	OTHER TESTS and REMARKS
	25									
	30		D-5	84/11"		SP	@ 30': Light gray clean fine SANDSTONE, dry to damp, very dense, abundant FeO staining, minimal mica, friable.	3.5	108.6	
330							Notes: Total Depth: 30.9 Feet. No Groundwater Encountered. Backfilled with Cuttings and Tamped. Upper 6" Patched with Quick-Set Concrete and Black Dye.			
	35									
	40									
320										
	45									
	50									
310										
	55									

LOG OF BORING

Shea/ Aliso Viejo
Aliso Viejo, CA

PROJECT NO. 24074-01

NMG

Report: HOLLOW STEM; Project: 24074-01.GPJ; Data Template: NMG_GINT_2016.GDT; Printed: 11/18/25

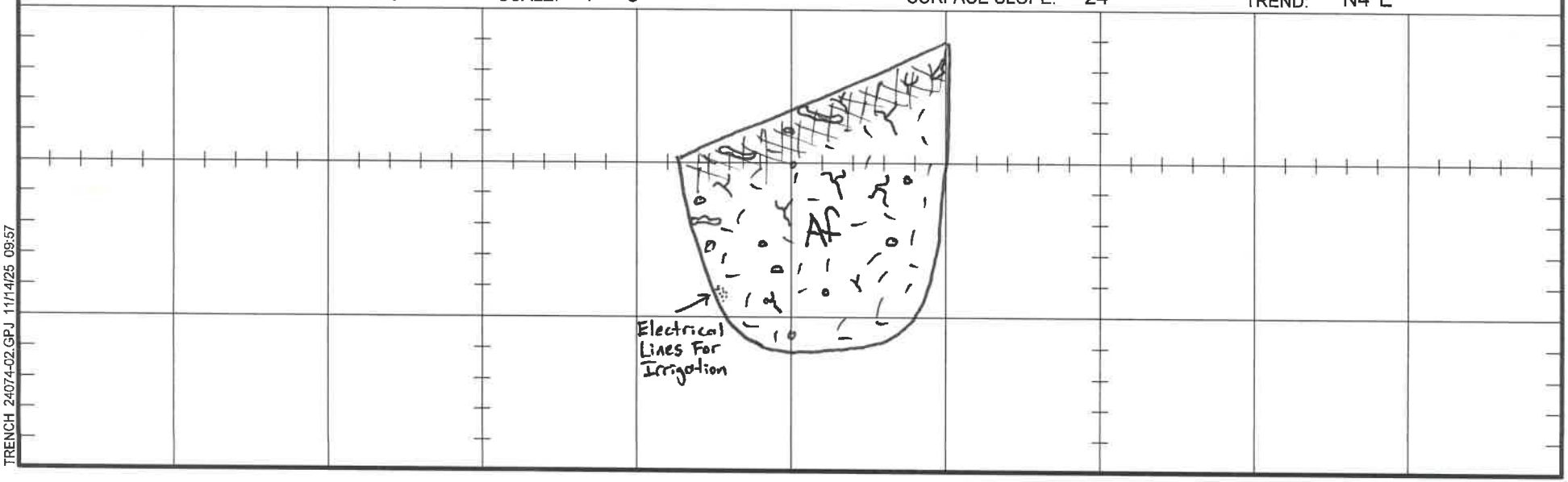
NMG Geotechnical, Inc.

Project Name:	Shea - Aliso Viejo	Logged By:	ASC
Project Number:	24074-02	Elevation:	361
Equipment:	John Deere 310SL	Location:	Northeast of Building K

TRENCH NO.: **T-1**

GEOLOGIC ATTITUDES	DESCRIPTION: DATE: 11/7/25	GEOLOGIC UNIT	ENGINEERING PROPERTIES: U.S.C.S.	SAMPLE NO.	MOISTURE CONTENT (%)	DRY DENSITY (pcf)
	Surface: Fill Slope **Artificial Fill (Af)** @ 0-2': Olive gray and very dark gray clayey sandy SILT, damp, stiff, abundant roots up to 1.5-inches in diameter, abundant rootlets, scattered bedrock clasts comprised of siltstone and sandstone, weathered in the upper foot.		ML			
	@ 2'-5.5': Alternating layers of yellowish brown to olive brown clayey SAND and very dark brown sandy CLAY, moist, medium dense to dense/very stiff to hard, scattered rootlets and root hairs, abundant bedrock clasts up to 2-inches in diameter.		SC/CL			
	Notes: Total Depth 5.5 Feet. Partially Backfilled with Cuttings and Tamped. Portion of Trench Left Open for Landscapers to Repair Electrical Lines for Irrigation.					

GRAPHIC REPRESENTATION: West Wall SCALE: 1" = 3' SURFACE SLOPE: 24° TREND: N4°E



LOG OF TRENCH NO: T-1

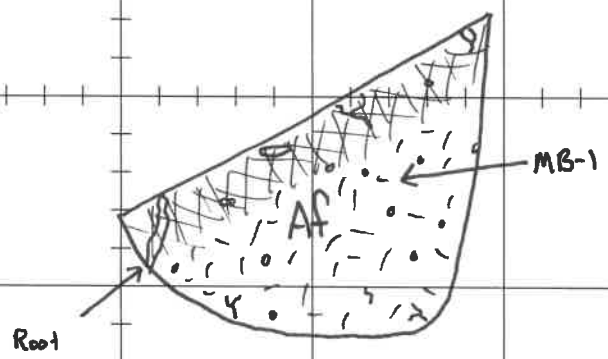
TRENCH 24074-02.GPJ 11/14/25 09:57

NMG Geotechnical, Inc.

Project Name: Shea - Aliso Viejo	Logged By: ASC	TRENCH NO.:	ENGINEERING PROPERTIES
Project Number: 24074-02	Elevation: 363	T-2	
Equipment: John Deere 310SL	Location: West of Building H		

GEOLOGIC ATTITUDES	DESCRIPTION:	DATE: 11/7/25	GEOLOGIC UNIT	U.S.C.S.	SAMPLE NO.	MOISTURE CONTENT (%)	DRY DENSITY (pcf)
	Surface: Fill Slope **Artificial Fill (Af)** @ 0-1.5': Yellowish brown to olive brown silty fine SAND, damp, medium dense, trace roots up to 1/4-inch in diameter, abundant root hairs and rootlets, scattered bedrock clasts composed of mostly sandstone with some siltstone, highly weathered with trace			SM			
	@ 1.5'-5.5': Yellowish brown to olive brown silty SAND and grayish brown fine sandy SILT, damp to moist, medium dense/stiff, scattered rootlets and roothairs, scattered bedrock clasts.			SM/ML	MB-1		
	Notes: Total Depth 5.5 Feet. Backfilled with Cuttings and Compacted with Backhoe-Mounted Compaction Wheel.						

GRAPHIC REPRESENTATION: West Wall SCALE: 1" = 3' SURFACE SLOPE: 30° TREND: N25°W



LOG OF TRENCH NO: T-2

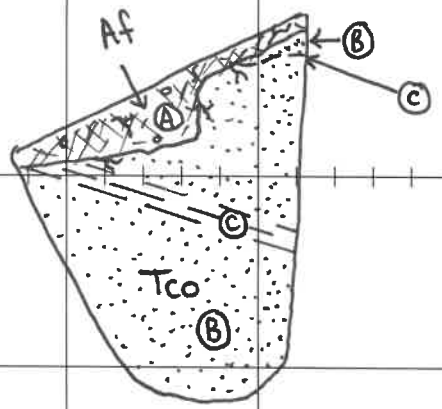
TRENCH 24074-02.GPJ 11/14/25 09:57

NMG Geotechnical, Inc.

Project Name: Shea - Aliso Viejo	Logged By: ASC	TRENCH NO.: T-3	
Project Number: 24074-02	Elevation: 363		
Equipment: John Deere 310SL	Location: West of Building D		

GEOLOGIC ATTITUDES	DESCRIPTION: DATE: 11/7/25	GEOLOGIC UNIT	ENGINEERING PROPERTIES: U.S.C.S.	SAMPLE NO.	MOISTURE CONTENT (%)	DRY DENSITY (pcf)
1: Bedding- N30°W/10°NE (N Wall) 2: Bedding- N50°W/2°SW (S Wall) 3: Bedding- N20°E/19°NW	Surface: Fill Slope **Artificial Fill (Af)** **A**: Very dark brown clayey sandy SILT, dry to damp, medium stiff, abundant roots and rootlets, highly weathered.		SM			
	Capistrano Formation, Oso Member (Tco) **B**: Reddish yellow silty fine SANDSTONE, Damp to moist, abundant FeO staining, bioturbations infilled with gray fine sandstone and highlighted with FeO staining.		SM			
	C: Thinly bedded Olive gray SILTSTONE with trace fine reddish yellow SANDSTONE laminations, moist, very stiff to hard, Siltstone beds generally between 1/2- and 1-inch thick. Locally, Siltstone bed is undulatory in the upper foot.		ML			
	Notes: Total Depth 6.3 Feet. Backfilled with Cuttings and Compacted with Backhoe-Mounted Compaction Wheel.					

GRAPHIC REPRESENTATION: South Wall SCALE: 1" = 3' SURFACE SLOPE: 25° TREND: N85°E



LOG OF TRENCH NO: T-3

TRENCH 24074-02.GPJ 11/14/25 09:57

NMG Geotechnical, Inc.

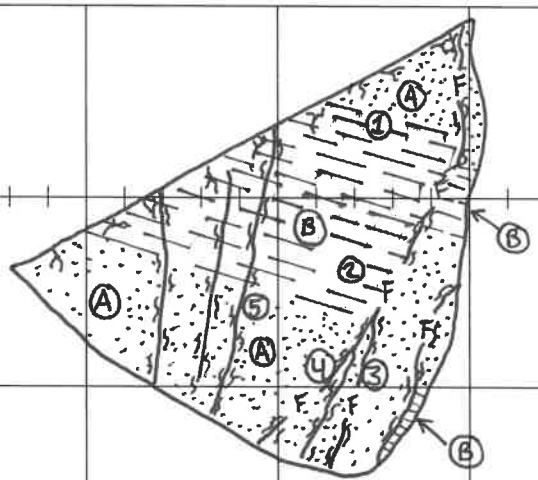
Project Name:	Shea - Aliso Viejo	Logged By:	ASC
Project Number:	24074-02	Elevation:	362
Equipment:	John Deere 310SL	Location:	West of Building C

TRENCH NO.: **T-4**

DATE: 11/7/25

GEOLOGIC ATTITUDES	DESCRIPTION:	GEOLOGIC UNIT	ENGINEERING PROPERTIES: U.S.C.S.	SAMPLE NO.	MOISTURE CONTENT (%)	DRY DENSITY (pcf)
1: Bedding- N4°E/16°NW 2: Bedding- N1°W/15°SW 3: Fault- N26°E/66°SE 4: Fault- N8°W/46°NE 5: Joint- N6°W/82°NE	Surface: Cut Slope **Capistrano Formation, Oso Member (Tco)** **A**:Pale brownish yellow silty fine SANDSTONE, damp, dense, slightly micaceous, trace FeO staining. **B**: Pale brownish gray to olive gray thinly bedded SILTSTONE, damp, very stiff to hard, trace laminations of pale gray fine SANDSTONE. **Faulting and Joints**:Steeply dipping faults and joints were observed in the excavation. The faults were generally highlighted with FeO staining and had abundant rootlets and roothairs lining the surface. SILTSTONE within the trench had an apparen		SM ML			
	Notes: Total Depth 5 Feet. Backfilled with Cuttings and Compacted with Backhoe-Mounted Compaction Wheel.					

GRAPHIC REPRESENTATION: South Wall SCALE: 1" = 2' SURFACE SLOPE: 29° TREND: N85°E



LOG OF TRENCH NO: T-4

TRENCH 24074-02.GPJ 11/14/25 12:44

APPENDIX C

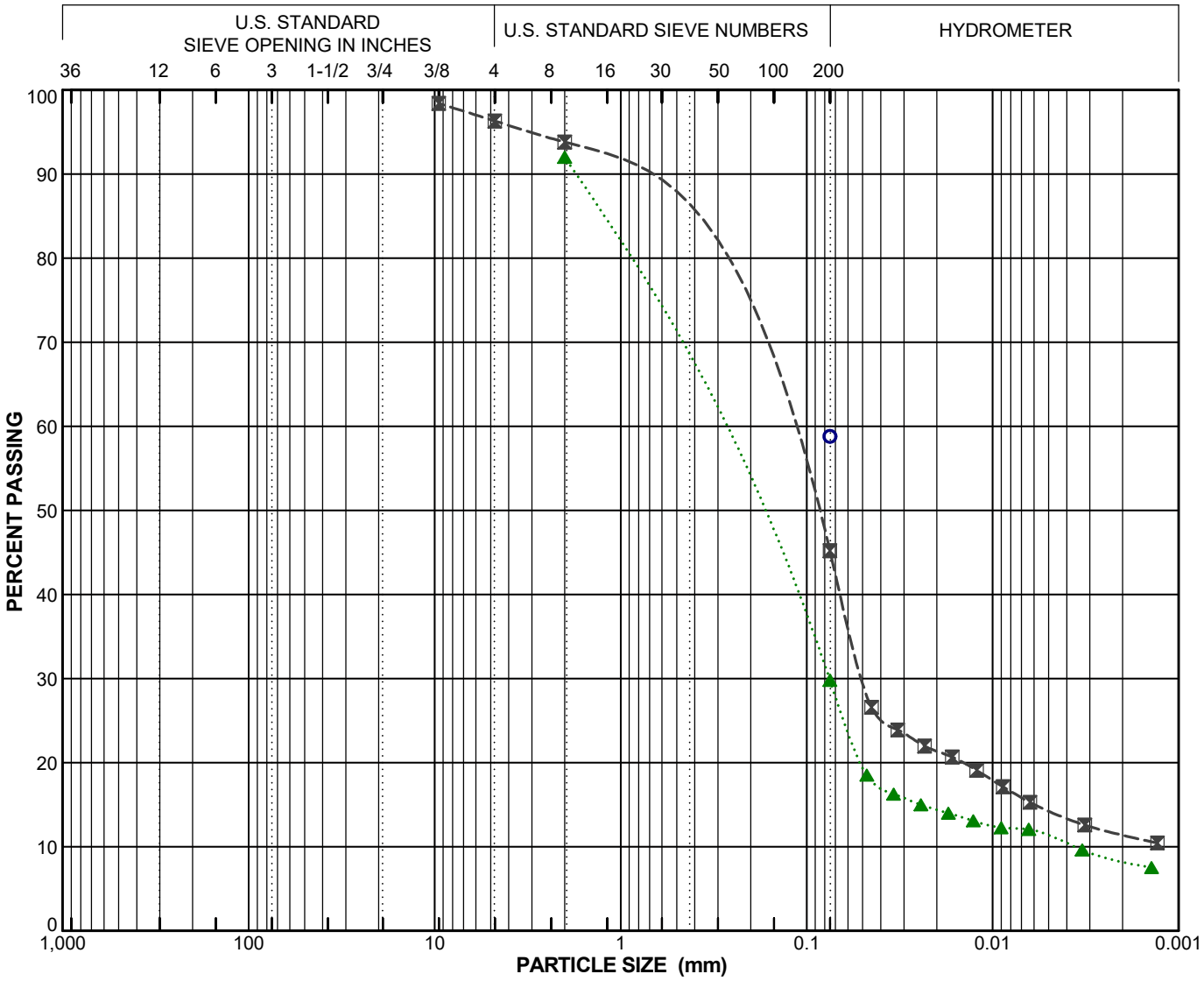
Shea/ Aliso Viejo DD
Project Number: 24074-01

APPENDIX C
SUMMARY OF SOIL LABORATORY DATA

Aliso Viejo, CA

Boring/Sample Information						Field Wet Density (pcf)	Field Dry Density (pcf)	Field Moisture Content (%)	Degree of Sat. (%)	Sieve/ Hydrometer		Atterberg Limits		USCS Group Symbol	Direct Shear				Compaction		Expansion Index	R-Value	Soluble Sulfate Content (% by wt)	Remarks
															Ultimate		Peak		Maximum Dry Density (pcf)	Optimum Moisture Content (%)				
Boring No.	Sample No.	Depth (feet)	End Depth (feet)	Elevation (feet)	Blow Count (N)					Fines Content (% pass. #200)	Clay Content (% pass. 2μ)	LL (%)	PI (%)		Cohesion (psf)	Friction Angle (°)	Cohesion (psf)	Friction Angle (°)						
H- 1	D-1	5.0		354.0	39	125.8	110.1	14.2	72.4															
H- 1	D-2	10.0		349.0	45	125.2	110.6	13.3	68.4															
H- 1	D-3	15.0		344.0	29	124.7	105.8	17.9	81.6															
H- 1	D-4	20.0		339.0	26	121.6	99.5	22.2	86.5															
H- 1	D-5	30.0		329.0	90/10"	112.9	107.6	4.9	23.2															
H- 2	D-1	5.0		347.0	34	115.0	85.4	34.6	96.1	59		41	16	CL										CN
H- 2	D-2	10.0		342.0	25	122.1	96.4	26.6	96.2															
H- 2	D-3	15.0		337.0	61	126.8	116.1	9.2	55.0															
H- 2	D-4	20.0		332.0	50	119.8	109.3	9.6	47.8															
H- 2	D-5	30.0		322.0	65	140.2	124.8	12.4	95.3															
H- 2	D-6	40.0		312.0	85/11"	134.2	120.1	11.7	78.4															
H- 2	D-7	50.0		302.0	70/11"	116.3	82.8	40.5	100.0															
H- 3	B-1	1.0	5.0	354.0																		29		CC
H- 3	D-1	2.5		352.5	18	114.7	86.4	32.9	93.3															
H- 3	D-2	5.0		350.0	68	115.0	90.1	27.7	86.0															
H- 3	D-3	10.0		345.0	56	117.5	112.7	4.2	23.1															
H- 4	D-1	5.0		349.0	53	113.1	110.8	2.1	11.1															
H- 4	D-2	10.0		344.0	38	110.7	108.2	2.3	11.2															
H- 5	B-1	1.0	5.0	359.0			102.6	26.7		45	11	32	11	SC	180	26	375	27.0	114.0	15.5	23		0.21	
H- 5	D-1	5.0		355.0	62	123.2	93.0	32.4	100.0															
H- 5	D-2	10.0		350.0	63	116.3	101.2	15.0	60.9															
H- 6	B-1	1.0	5.0	360.0						30	8	28	9	SC							6		0.05	CC
H- 6	D-1	5.0		356.0	39	129.2	109.4	18.1	90.5															
H- 6	D-2	10.0		351.0	28	128.3	113.8	12.7	71.3															
H- 6	D-3	15.0		346.0	28	124.8	101.6	22.8	93.4															
H- 6	D-4	20.0		341.0	75/11"	112.4	105.9	6.1	27.9															
H- 6	D-5	30.0		331.0	84/11"	112.4	108.6	3.5	17.2															
T-2	MB-1	3.0		360.0																				CC

BOULDERS	COBBLES	GRAVEL		SAND			SILT OR CLAY
		coarse	fine	coarse	medium	fine	

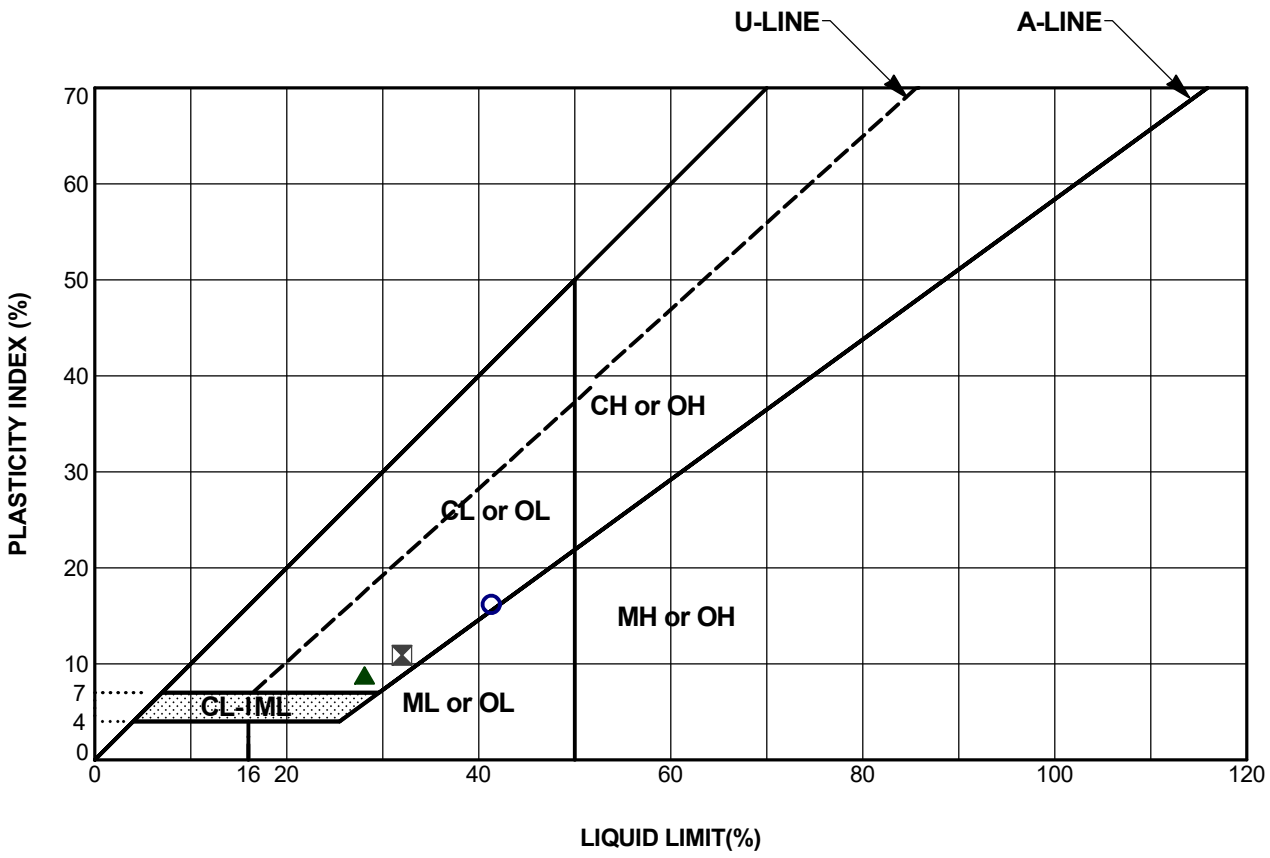


Symbol	Boring Number	Sample Number	Depth (feet)	Field Moisture (%)	LL	PI	Activity PI/-2μ	C_u	C_c	Passing No. 200 Sieve (%)	Passing 2μ (%)	USCS
○	H- 2	D-1	5.0	35	41	16				59		CL
⊠	H- 5	B-1	1.0 - 5.0		32	11	1.00			45	11	SC
▲	H- 6	B-1	1.0 - 5.0		28	9	1.13			30	8	SC

PARTICLE SIZE DISTRIBUTION

Shea/ Aliso Viejo DD
Aliso Viejo, CA
PROJECT NO. 24074-01

NMG Geotechnical, Inc.

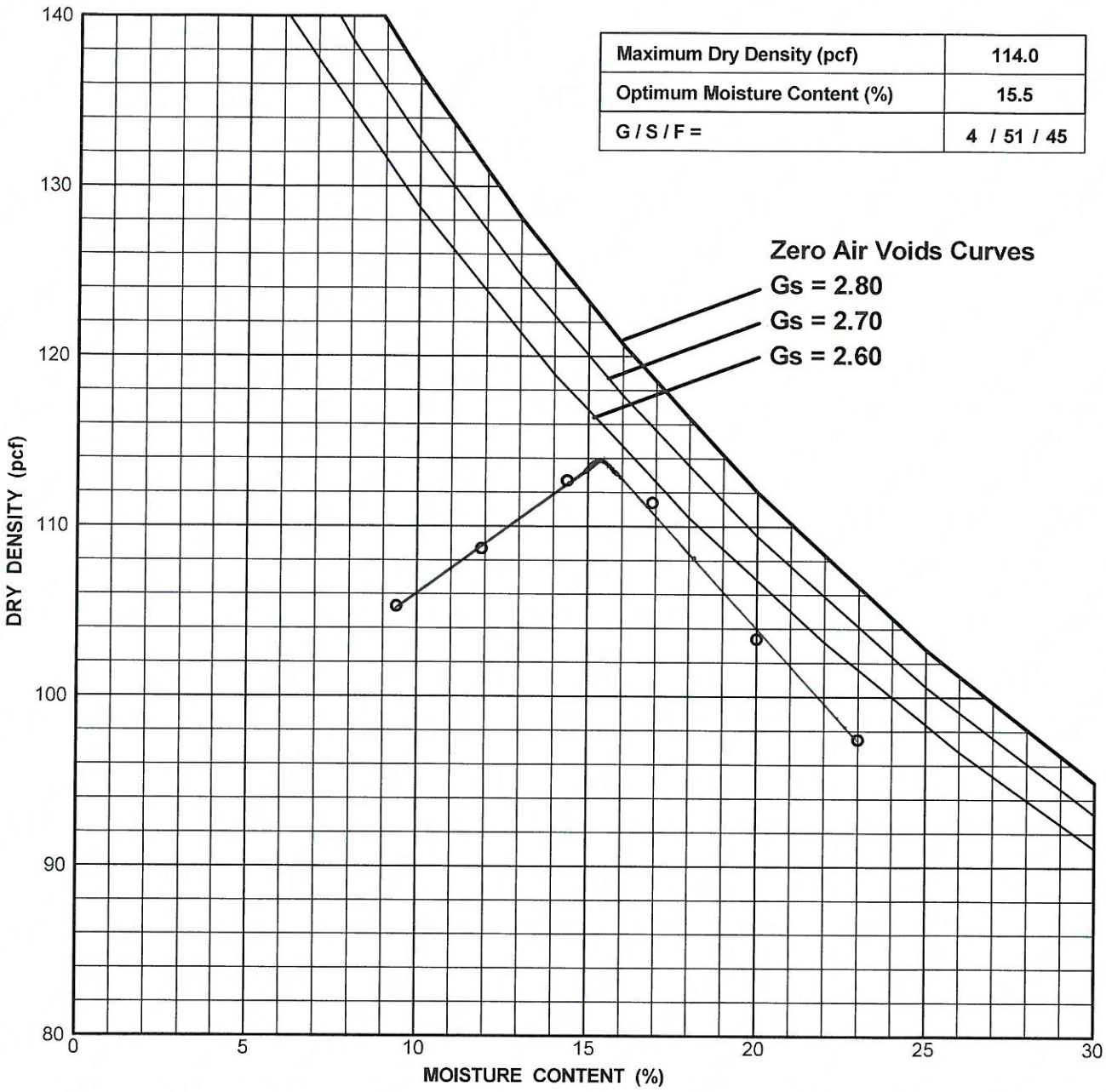


Symbol	Boring Number	Sample Number	Depth (feet)	Passing No. 200 Sieve (%)	LL	PI	USCS	Description
○	H- 2	D-1	5.0	59	41	16	CL	(Af) Pale gray sandy CLAY
⊠	H- 5	B-1	1.0 - 5.0	45	32	11	SC	(Af) Yellowish brown clayey SAND
▲	H- 6	B-1	1.0 - 5.0	30	28	9	SC	(Af) Light brown clayey SAND

PLASTICITY CHART

Shea/ Aliso Viejo DD
Aliso Viejo, CA
PROJECT NO. 24074-01

Maximum Dry Density (pcf)	114.0
Optimum Moisture Content (%)	15.5
G / S / F =	4 / 51 / 45



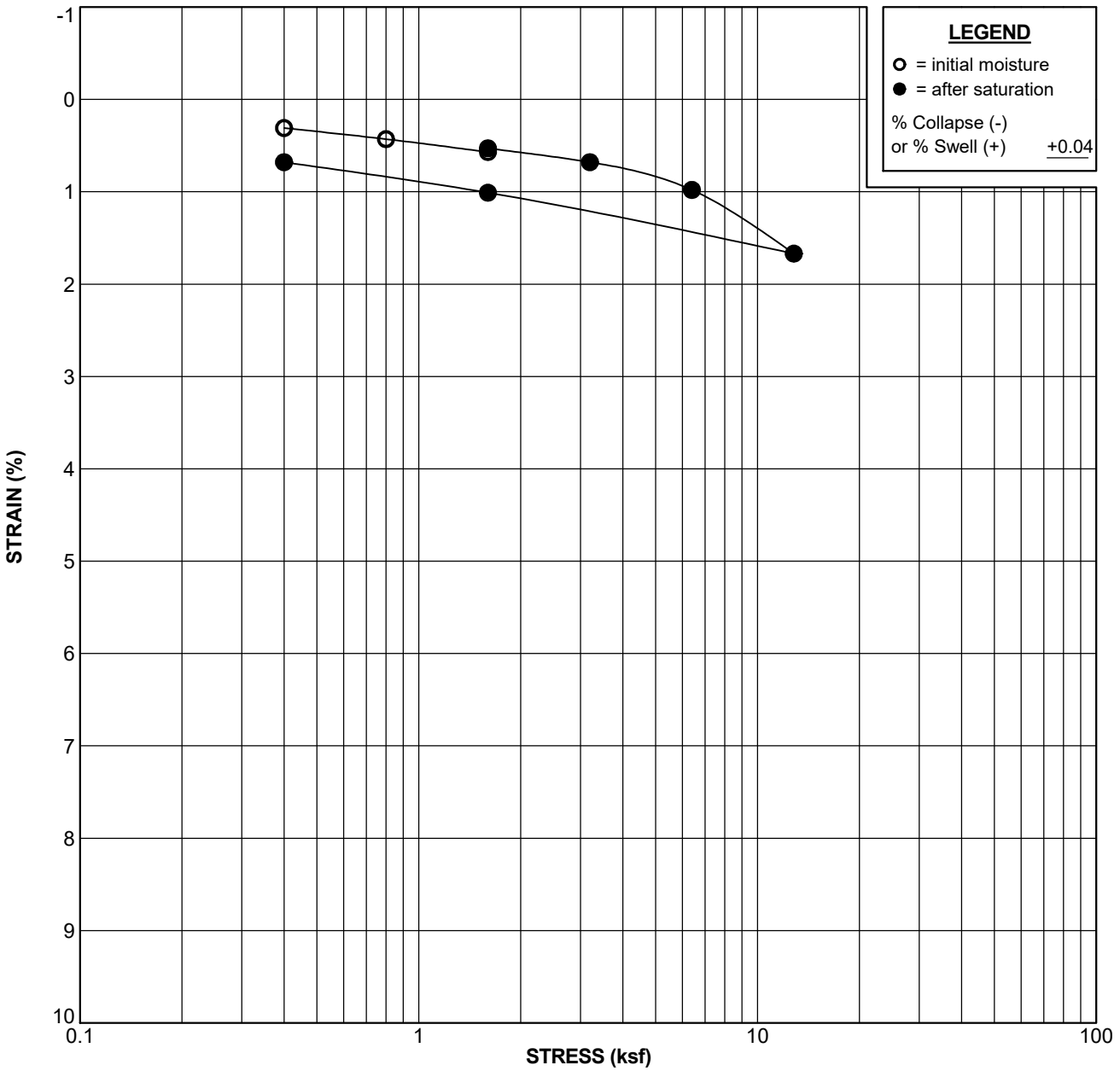
Boring No. H- 5	**Sample No. B-1**	**Depth: 1.0 - 5.0 ft**
Sample Description: (Af) Yellowish brown clayey SAND		**USCS:** SC
Liquid Limit: 32	**Plasticity Index:** 11	**Percent Passing No. 200 Sieve:** 45
Comments: 1557A		

COMPACTION TEST RESULTS

Shea Homes DD
Aliso Viejo, CA
PROJECT NO. 24074-01

NMG Geotechnical, Inc.

Template: NMCOMP_21; Prj ID: 24074-01.GPJ; Printed: 1/10/25



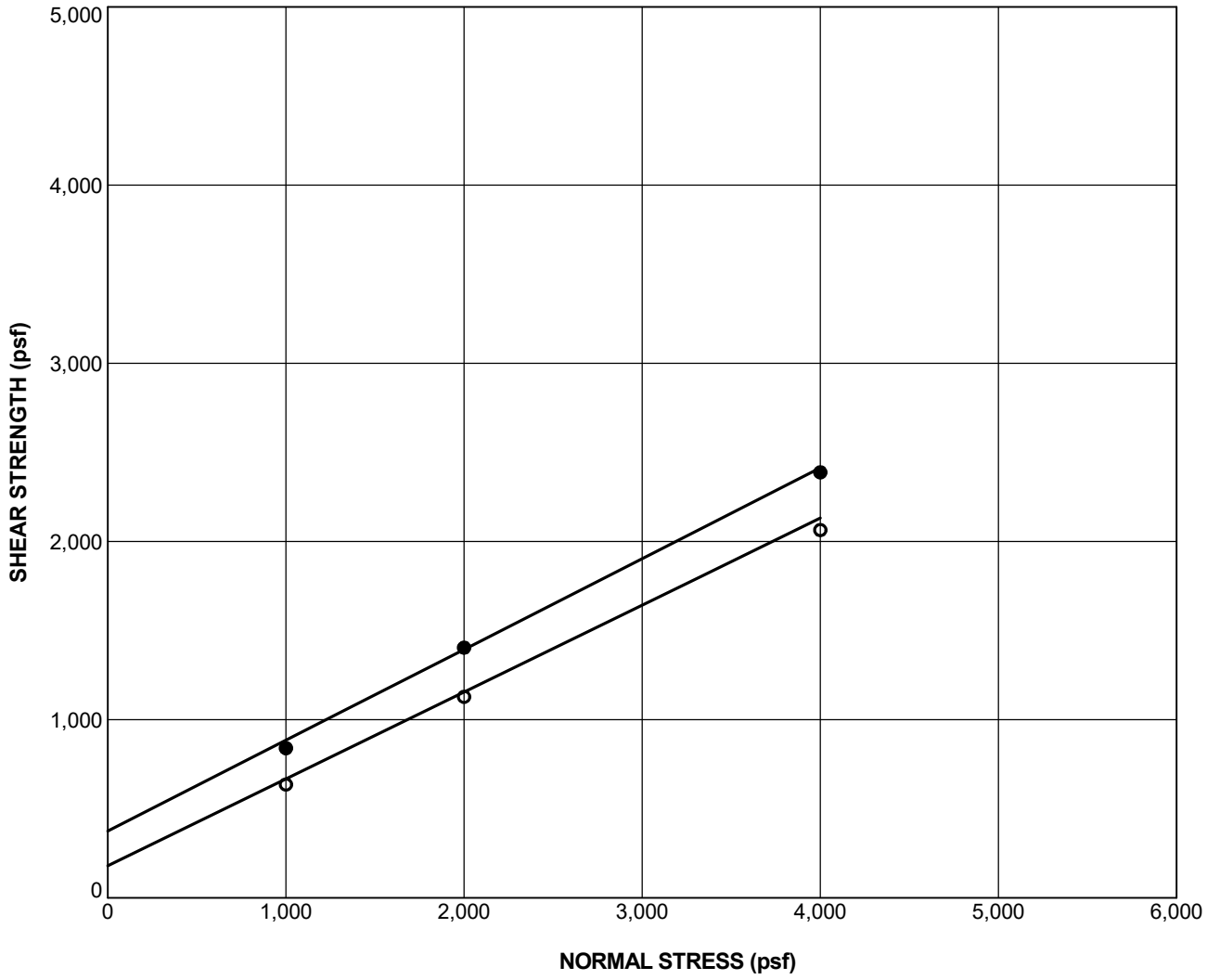
Boring No. H- 2	**Sample No. D-1**	**Depth: 5.0 ft**
Sample Description: (Af) Pale gray sandy CLAY		**USCS:** CL
Liquid Limit: 41	**Plasticity Index:** 16	**Percent Passing No. 200 Sieve:** 59

Test Stage	Moisture Content (%)	Dry Density (pcf)	Degree of Saturation (%)	Void Ratio
Initial	32.1	85.7	89.7	0.966
Final	34.8	86.3	98.7	0.952

CONSOLIDATION TEST RESULTS

Shea/ Aliso Viejo DD
Aliso Viejo, CA
PROJECT NO. 24074-01

NMG Geotechnical, Inc.



Boring No. H- 5	Sample No. B-1	Depth: 1.0 - 5.0 ft
Sample Description: (Af) Yellowish brown clayey SAND		**USCS:** SC
Liquid Limit: 32	**Plasticity Index:** 11	**Percent Passing No. 200 Sieve:** 45
Final Moisture Content (%): 26.7	**Final Dry Density (pcf):** 102.6	**Degree of Saturation (%):** 100
Sample Type: Remolded @ 90%RC	**Rate of Shear (in./min.):** 0.005	

SHEAR STRENGTH PARAMETERS

Parameter	Peak ●	Ultimate ○
Cohesion (psf)	375	180
Friction Angle (degrees)	27.0	26.0

DIRECT SHEAR TEST RESULTS

Shea/ Aliso Viejo DD
Aliso Viejo, CA
PROJECT NO. 24074-01

NMG Geotechnical, Inc.

Sample	*Compacted Moisture (%)*	*Compacted Dry Density (pcf)*	*Final Moisture (%)*	*Volumetric Swell (%)*	*Expansion Index[1] Value/Method*		*Expansive Classification[2]*	*Soluble Sulfate (%)*	*Sulfate Exposure[3]*
H-5 B-1 1-5'	15.0	97.0	23.7	2.07	23	B	Low	0.21	S2
H-6 B-1 1-5'	11.0	105.0	18.8	0.56	6	A	Very Low	0.05	S0

Test Method:
ASTM D4829

HACH SF-1 (Turbidimetric)

Notes:
1. Expansion Index (EI) method of determination*:*
   [A] E.I. determined by adjusting water content to achieve a 50 ±2% degree of saturation
   [B] E.I. calculated based on measured saturation within the range of 40% and 60%
2. ASTM D4829 *(Classification of Expansive Soil)*
3. ACI-318-14 Table 19.3.1.1 *(Requirement for Concrete Exposed to Sulfate-Containing Solutions)*

Expansion Index and Soluble Sulfate Test Results

(FRM001 Rev.5)

Project No. 24074-01

Project Name: Shea/ Aliso Viejo DD

NMG

Table 1 - Laboratory Tests on Soil Samples

NMG Geotechnical, Inc.
Shea/Aliso Viejo
Keegan Labs #25-0203, Your #24074-02
19-Nov-25

Sample ID			T-2, MB-1 @ 3'	H-3, B-1 @ 1-5'	H-6, B-1 @ 1-5'
Resistivity		Units			
saturated		ohm-cm	322	573	1,660
pH			7.0	7.6	7.7
Electrical Conductivity		mS/cm	2.04	0.51	0.10
Chemical Analyses (Total Salts)					
Cations					
sodium	Na^{1+}	mg/kg	1,051	459	89
ammonium	NH_4^{1+}	mg/kg	ND	ND	ND
potassium	K^{1+}	mg/kg	24	15	1.4
magnesium	Mg^{2+}	mg/kg	281	9.8	0
calcium	Ca^{2+}	mg/kg	898	31	ND
Anions					
carbonate	CO_3^{2-}	mg/kg	ND	ND	ND
bicarbonate	HCO_3^{1-}	mg/kg	21	92	43
fluoride	F^{1-}	mg/kg	5.4	5.6	7.0
chloride	Cl^{1-}	mg/kg	1,061	505	44
nitrate	NO_3^{1-}	mg/kg	7.0	15	7.1
phosphate	PO_4^{3-}	mg/kg	19	ND	ND
sulfate	SO_4^{2-}	mg/kg	5,220	437	96
Other Tests					
sulfide	S^{2-}	mg/kg	na	na	na
Redox		mV	na	na	na
% Moisture	H_2O	%	na	na	na

For test methods refer to Laboratory Test Methods attachment
Conductivity in millisiemens/cm and chemical analyses were made on a 1:5 soil-to-water extract.
mg/kg = milligrams per kilogram (parts per million) of dry soil.
ND = not detected
na = not analyzed

465 W Alvarado St., Pomona, CA 91768
Phone: 951-203-6581

APPENDIX D

Announcement
ASCE 7-22 is now available.

OSHPD

Latitude, Longitude: 33.5695, -117.7247

Date	11/13/2025, 2:47:14 PM
Design Code Reference Document	ASCE7-22
Risk Category	II
Site Class	Default

Type	Value	Description (Data)
S_S	1.41	The MCE_R spectral response acceleration at 0.2 seconds for Site Class BC, in units of g.
S_1	0.45	The MCE_R spectral response acceleration at 1 second for Site Class BC, in units of g.
S_{MS}	1.64	S_{MS} = 1.5 x S_{DS}, the Risk-Targeted Maximum Considered Earthquake (MCE_R) spectral response acceleration for short periods (of the two-period spectrum) and the user-specified Site Class.
S_{M1}	1.1	S_{M1} = 1.5 x S_{D1}, the MCE_R spectral response acceleration for 1 second (of the two-period spectrum) and the user-specified Site Class.
S_{DS}	1.09	The design spectral response acceleration for short periods (of the two-period spectrum) and the user-specified Site Class, in units of g.
S_{D1}	0.73	The design spectral response acceleration for 1 second (of the two-period spectrum) and the user-specified Site Class, in units of g

Type	Value	Description (Data Contd.)
SDC	D	Seismic design category
PGA_M	0.64	PGA_M, the Geometric-Mean Maximum Considered Earthquake (MCE_G) peak ground acceleration for the user-specified Site Class, in units of g
T_S	0.672	T_S = S_{D1}/S_{DS}, in seconds, for construction of the two-period design spectrum
T_0	0.134	T_0 = 0.2 x T_S, in seconds, for construction of the two-period design response spectrum
T_L	8	T_L, the long-period transition period, in seconds, for construction of the two-period design response spectrum

Type	Value	Description (Underlying Data and Metadata)
PGA_{uh}	See underlying data for Site Classes C, CD, and D	Probabilistic uniform-hazard (2%-in-50-years), geometric-mean peak ground acceleration, in units of g.
PGA_{84th}	See underlying data for Site Classes C, CD, and D	Deterministic 84th-percentile, geometric-mean peak ground acceleration (without deterministic lower limit), in units of g.
V_{S30}	260	The shear-wave velocity used for the user-specified Site Class, in units of m/s
Spatial Interpolation Method	linearloglinear	Identifier for spatial interpolation method used to obtain values for location of interest from underlying gridded values: "linearloglinear" for bilinear of natural logarithm of values.
PGA_{dFloor}		Deterministic lower limit peak ground acceleration (PGA_G) for the user-specified Site Class, in units of g.
riskTargetedSpectrum		Probabilistic risk-targeted, maximum direction response spectrum (for 1%-in-50-years collapse risk)
eightyFourthSpectrum		Deterministic 84th-percentile, maximum-direction response spectrum (without deterministic lower limit)

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Multi Period

Period T(s)	Design Spectrum Ordinates (g)	MCE_R Spectrum Ordinates (g)
0	0.48	0.72
0.01	0.48	0.72
0.02	0.48	0.73
0.03	0.51	0.76
0.05	0.62	0.93
0.075	0.8	1.2
0.1	0.93	1.4
0.15	1.07	1.61
0.2	1.15	1.73
0.25	1.18	1.77
0.3	1.21	1.82
0.4	1.19	1.78
0.5	1.13	1.69
0.75	0.9	1.35
1	0.73	1.1
1.5	0.51	0.77
2	0.38	0.57
3	0.24	0.36
4	0.17	0.25
5	0.13	0.19
7.5	0.077	0.12
10	0.052	0.079

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Two Period

Period T(s)	Design Spectrum Ordinates (g)	MCE_R Spectrum Ordinates (g)
0	0.44	0.66
0.025	0.56	0.84
0.05	0.68	1.02
0.1	0.93	1.39
0.13	1.09	1.64
0.15	1.09	1.64
0.2	1.09	1.64
0.25	1.09	1.64
0.3	1.09	1.64
0.35	1.09	1.64
0.4	1.09	1.64
0.45	1.09	1.64
0.5	1.09	1.64
0.55	1.09	1.64
0.6	1.09	1.64
0.65	1.09	1.64
0.67	1.09	1.64
0.7	1.05	1.57
0.75	0.98	1.47
0.8	0.92	1.38
0.85	0.86	1.3
0.9	0.82	1.22
0.95	0.77	1.16

Period T(s)	Design Spectrum Ordinates (g)	MCE_R Spectrum Ordinates (g)
1	0.73	1.1
1.05	0.7	1.05
1.1	0.67	1
1.15	0.64	0.96
1.2	0.61	0.92
1.25	0.59	0.88
1.3	0.56	0.85
1.35	0.54	0.82
1.4	0.52	0.79
1.45	0.51	0.76
1.5	0.49	0.73
1.55	0.47	0.71
1.6	0.46	0.69
1.65	0.44	0.67
1.7	0.43	0.65
1.75	0.42	0.63
1.8	0.41	0.61
1.85	0.4	0.6
1.9	0.39	0.58
1.95	0.38	0.56
2	0.37	0.55
2.05	0.36	0.54
2.1	0.35	0.52
2.15	0.34	0.51
2.2	0.33	0.5
2.25	0.33	0.49
2.3	0.32	0.48
2.35	0.31	0.47
2.4	0.31	0.46
2.45	0.3	0.45
2.5	0.29	0.44
2.55	0.29	0.43
2.6	0.28	0.42
2.65	0.28	0.42
2.7	0.27	0.41
2.75	0.27	0.4
2.8	0.26	0.39
2.85	0.26	0.39
2.9	0.25	0.38
2.95	0.25	0.37
3	0.24	0.37
3.05	0.24	0.36
3.1	0.24	0.36
3.15	0.23	0.35
3.2	0.23	0.34
3.25	0.23	0.34
3.3	0.22	0.33
3.35	0.22	0.33
3.4	0.22	0.32
3.45	0.21	0.32

Period T(s)	Design Spectrum Ordinates (g)	MCE_R Spectrum Ordinates (g)
3.5	0.21	0.31
3.55	0.21	0.31
3.6	0.2	0.31
3.65	0.2	0.3
3.7	0.2	0.3
3.75	0.2	0.29
3.8	0.19	0.29
3.85	0.19	0.29
3.9	0.19	0.28
3.95	0.19	0.28
4	0.18	0.28
4.05	0.18	0.27
4.1	0.18	0.27
4.15	0.18	0.27
4.2	0.17	0.26
4.25	0.17	0.26
4.3	0.17	0.26
4.35	0.17	0.25
4.4	0.17	0.25
4.45	0.16	0.25
4.5	0.16	0.24
4.55	0.16	0.24
4.6	0.16	0.24
4.65	0.16	0.24
4.7	0.16	0.23
4.75	0.15	0.23
4.8	0.15	0.23
4.85	0.15	0.23
4.9	0.15	0.22
4.95	0.15	0.22
5	0.15	0.22
5.05	0.15	0.22
5.1	0.14	0.22
5.15	0.14	0.21
5.2	0.14	0.21
5.25	0.14	0.21
5.3	0.14	0.21
5.35	0.14	0.21
5.4	0.14	0.2
5.45	0.13	0.2
5.5	0.13	0.2
5.55	0.13	0.2
5.6	0.13	0.2
5.65	0.13	0.19
5.7	0.13	0.19
5.75	0.13	0.19
5.8	0.13	0.19
5.85	0.13	0.19
5.9	0.12	0.19
5.95	0.12	0.19

Period T(s)	Design Spectrum Ordinates (g)	MCE_R Spectrum Ordinates (g)
6	0.12	0.18
6.05	0.12	0.18
6.1	0.12	0.18
6.15	0.12	0.18
6.2	0.12	0.18
6.25	0.12	0.18
6.3	0.12	0.17
6.35	0.12	0.17
6.4	0.11	0.17
6.45	0.11	0.17
6.5	0.11	0.17
6.55	0.11	0.17
6.6	0.11	0.17
6.65	0.11	0.17
6.7	0.11	0.16
6.75	0.11	0.16
6.8	0.11	0.16
6.85	0.11	0.16
6.9	0.11	0.16
6.95	0.11	0.16
7	0.1	0.16
7.05	0.1	0.16
7.1	0.1	0.16
7.15	0.1	0.15
7.2	0.1	0.15
7.25	0.1	0.15
7.3	0.1	0.15
7.35	0.1	0.15
7.4	0.099	0.15
7.45	0.099	0.15
7.5	0.098	0.15
7.55	0.097	0.15
7.6	0.097	0.14
7.65	0.096	0.14
7.7	0.095	0.14
7.75	0.095	0.14
7.8	0.094	0.14
7.85	0.094	0.14
7.9	0.093	0.14
7.95	0.092	0.14
8	0.092	0.14
8.05	0.091	0.14
8.1	0.09	0.13
8.15	0.088	0.13
8.2	0.087	0.13
8.25	0.086	0.13
8.3	0.085	0.13
8.35	0.084	0.13
8.4	0.083	0.12
8.45	0.082	0.12

Period T(s)	Design Spectrum Ordinates (g)	MCE_R Spectrum Ordinates (g)
8.5	0.081	0.12
8.55	0.08	0.12
8.6	0.079	0.12
8.65	0.078	0.12
8.7	0.078	0.12
8.75	0.077	0.12
8.8	0.076	0.11
8.85	0.075	0.11
8.9	0.074	0.11
8.95	0.073	0.11
9	0.073	0.11

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Probabilistic & Deterministic

Period T(s)	Risk Targeted Spectrum Ordinates (g)	84th Spectrum Ordinates(g)

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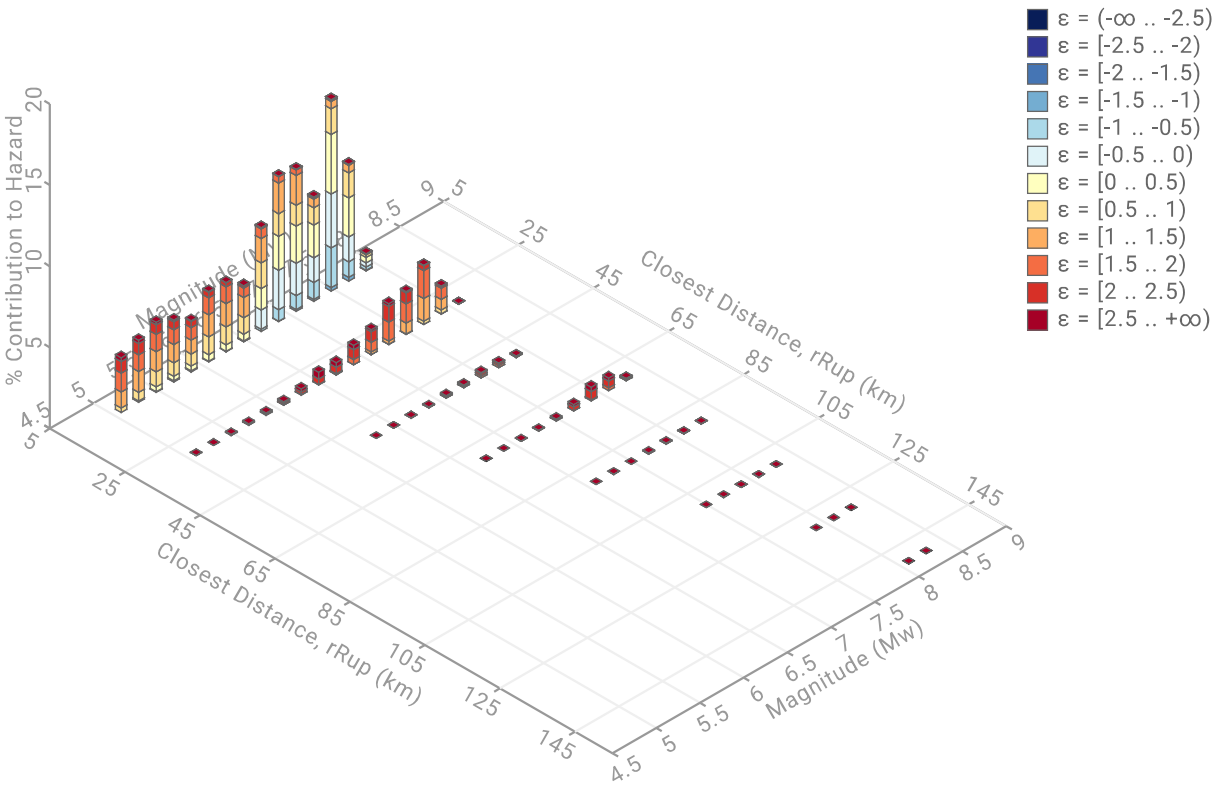
Disaggregation Report

Disaggregation



Geographical Disaggregation

Parameter Summary

Model: NSHM Conterminous U.S. 2023

Latitude: 33.5695 °

Longitude: -117.7247 °

Site Class: CD (Vs30 365)

Intensity Measure Type: PGA

Return Period: 2475 (2% in 50)

Component: Total

Disaggregation Summary: Total

Disaggregation targets

Return period : 2475 yrs

Exceedance rate : 4.040e-4 yr^{-1}

PGA ground motion : 6.223e-1 g

Recovered targets

Return period : 2456.129 yrs

Exceedance rate : 4.071e-4 yr^{-1}

Totals

Binned : 100 %

Residual : 0 %

Trace : 0.12 %

Mean (over all sources)

m : 6.83

r : 13.31 km

ε_0 : 0.91 σ

Mode (largest m-r bin)

m : 7.47

r : 5.35 km

ε_0 : 0.01 σ

Contribution : 11.79 %

Mode (largest m-r-ε_0 bin)

m : 7.47

r : 5.2 km

ε_0 : 0.17 σ

Contribution : 3.68 %

Discretization

r : min = 0.0, max = 1000.0, Δ = 20.0 km

m : min = 4.4, max = 9.4, Δ = 0.2

ε : min = -3.0, max = 3.0, Δ = 0.5 σ

Epsilon keys

ε0 : [-∞ .. -2.5)

ε1 : [-2.5 .. -2.0)

ε2 : [-2.0 .. -1.5)

ε3 : [-1.5 .. -1.0)

ε4 : [-1.0 .. -0.5)

ε5 : [-0.5 .. 0.0)

ε6 : [0.0 .. 0.5)

ε7 : [0.5 .. 1.0)

ε8 : [1.0 .. 1.5)

ε9 : [1.5 .. 2.0)

ε10 : [2.0 .. 2.5)

ε11 : [2.5 .. +∞]

Disaggregation Contributions: Total

Source Set ↳ Source	Type	r	m	ε_0	lon	lat	az	%
WUS Branch Average	FaultSystem							65.36
San Joaquin Hills (2)		4.08	7.27	-0.13	117.699°W	33.588°N	48.73	28.36
Newport - Inglewood (offshore) (3)		9.75	7.17	0.86	117.798°W	33.507°N	224.61	11.29
Elsinore (Glen Ivy) (1)		30.87	7.32	1.97	117.495°W	33.770°N	43.52	2.99
Chino (3)		29.55	7.43	1.70	117.571°W	33.821°N	26.88	2.94
Compton (0)		33.54	7.60	1.60	118.043°W	33.703°N	296.72	2.58
Lausuen Knoll (2)		11.17	7.27	0.47	117.896°W	33.421°N	223.96	2.42
San Joaquin Hills (1)		7.40	7.29	0.35	117.758°W	33.632°N	336.30	2.3
Palos Verdes (3)		33.58	7.30	2.06	118.019°W	33.394°N	234.54	1.94
Newport - Inglewood (offshore) (1)		11.11	6.92	1.16	117.837°W	33.535°N	249.95	1.79
Elsinore (stepover) (0)		35.07	7.35	2.07	117.373°W	33.685°N	68.36	1.01
WUS Branch Average (opt)	Grid							34.64
PointSourceFinite: -117.725, 33.628		7.44	5.76	1.17	117.725°W	33.628°N	0.00	1.4
PointSourceFinite: -117.725, 33.610		6.24	5.70	1.01	117.725°W	33.610°N	0.00	1.39
PointSourceFinite: -117.725, 33.637		8.04	5.80	1.24	117.725°W	33.637°N	0.00	1.29
PointSourceFinite: -117.725, 33.619		6.82	5.73	1.09	117.725°W	33.619°N	0.00	1.26
PointSourceFinite: -117.725, 33.610		7.20	5.71	1.05	117.725°W	33.610°N	0.00	1.23
PointSourceFinite: -117.725, 33.646		8.68	5.84	1.31	117.725°W	33.646°N	0.00	1.22
PointSourceFinite: -117.725, 33.628		8.49	5.77	1.22	117.725°W	33.628°N	0.00	1.21
PointSourceFinite: -117.725, 33.601		5.74	5.67	0.93	117.725°W	33.601°N	0.00	1.19
PointSourceFinite: -117.725, 33.583		4.88	5.68	0.77	117.725°W	33.583°N	0.00	1.17
PointSourceFinite: -117.725, 33.637		9.15	5.81	1.28	117.725°W	33.637°N	0.00	1.11
PointSourceFinite: -117.725, 33.583		5.52	5.69	0.80	117.725°W	33.583°N	0.00	1.1
PointSourceFinite: -117.725, 33.619		7.83	5.74	1.14	117.725°W	33.619°N	0.00	1.1
PointSourceFinite: -117.725, 33.655		9.29	5.90	1.36	117.725°W	33.655°N	0.00	1.07
PointSourceFinite: -117.725, 33.601		6.60	5.68	0.97	117.725°W	33.601°N	0.00	1.07
PointSourceFinite: -117.725, 33.646		9.82	5.85	1.35	117.725°W	33.646°N	0.00	1.06

Application Metadata

Application: Disaggregation
URL: https://earthquake.usgs.gov/nshmp/hazard/disagg

Repository: nshmp-apps
Version: 20.8.0
URL: https://code.usgs.gov/ghsc/nshmp/nshmp-apps

Repository : nshmp-haz
Version: 2.7.0
URL: https://code.usgs.gov/ghsc/nshmp/nshmp-haz

Repository : nshmp-lib
Version: 1.7.15
URL: https://code.usgs.gov/ghsc/nshmp/nshmp-lib

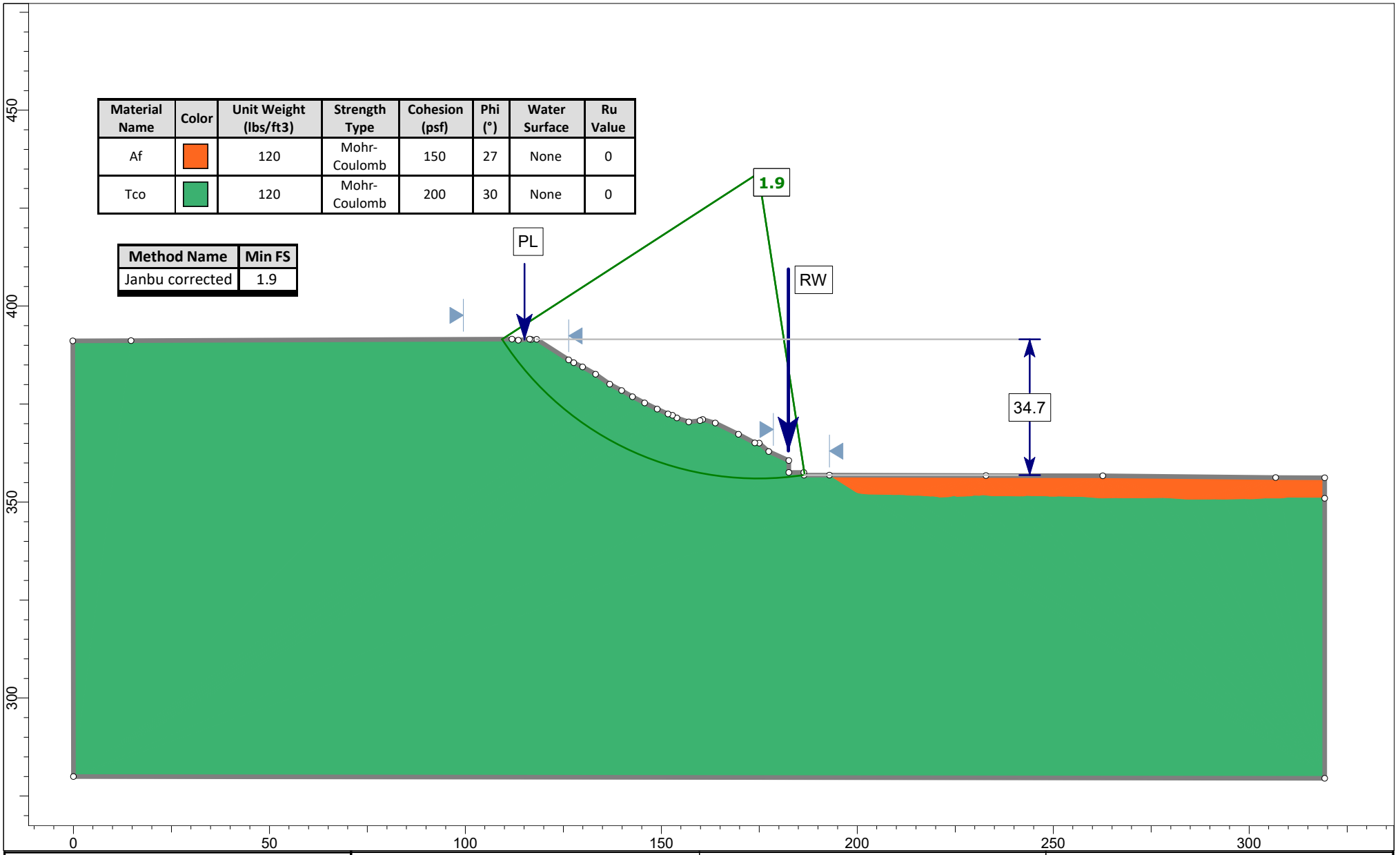
Repository : nshm-conus
Version: 6.1.1
URL: https://code.usgs.gov/ghsc/nshmp/nshms/nshm-conus

November 13, 2025, 02:41 PM

APPENDIX E

Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (°)	Water Surface	Ru Value
Af		120	Mohr-Coulomb	150	27	None	0
Tco		120	Mohr-Coulomb	200	30	None	0

Method Name	Min FS
Janbu corrected	1.9



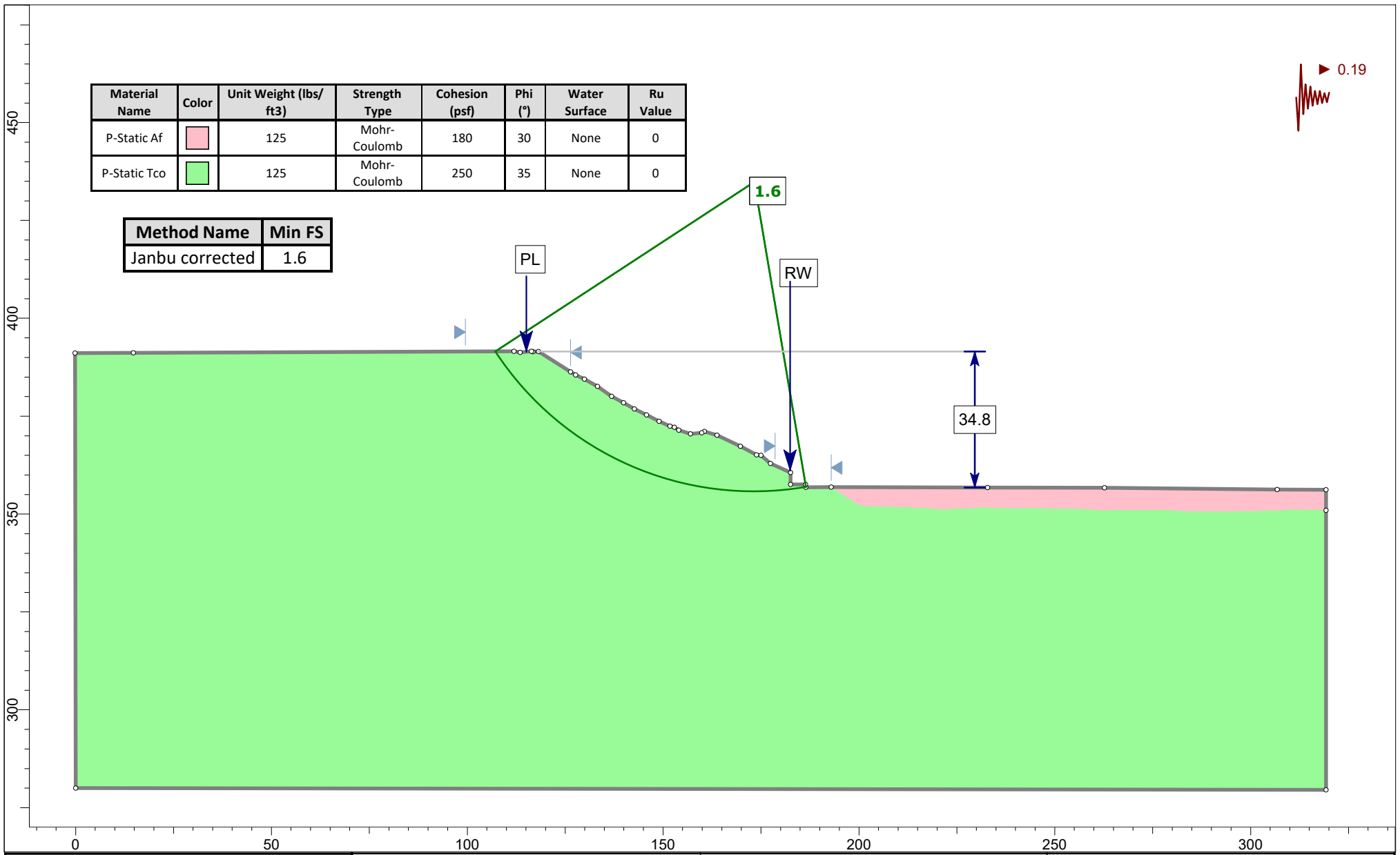
NMG Geotechnical, Inc.

SLIDEINTERPRET 9.038

Project Shea/Aliso Viejo	Project Number 24074-02	Cross Section Cross Section A-A', West Side
Analysis Static, Slope H=35', RW at Toe		*Analysis By* FEO/KGM
Date 11/25/2025		*File Path & Name* P:\2024\24074-02 Shea Aliso Viejo\Slide2\A-A" Design Slope.slmd

Material Name	Color	Unit Weight (lbs/ ft3)	Strength Type	Cohesion (psf)	Phi (°)	Water Surface	Ru Value
P-Static Af		125	Mohr-Coulomb	180	30	None	0
P-Static Tco		125	Mohr-Coulomb	250	35	None	0

Method Name	Min FS
Janbu corrected	1.6



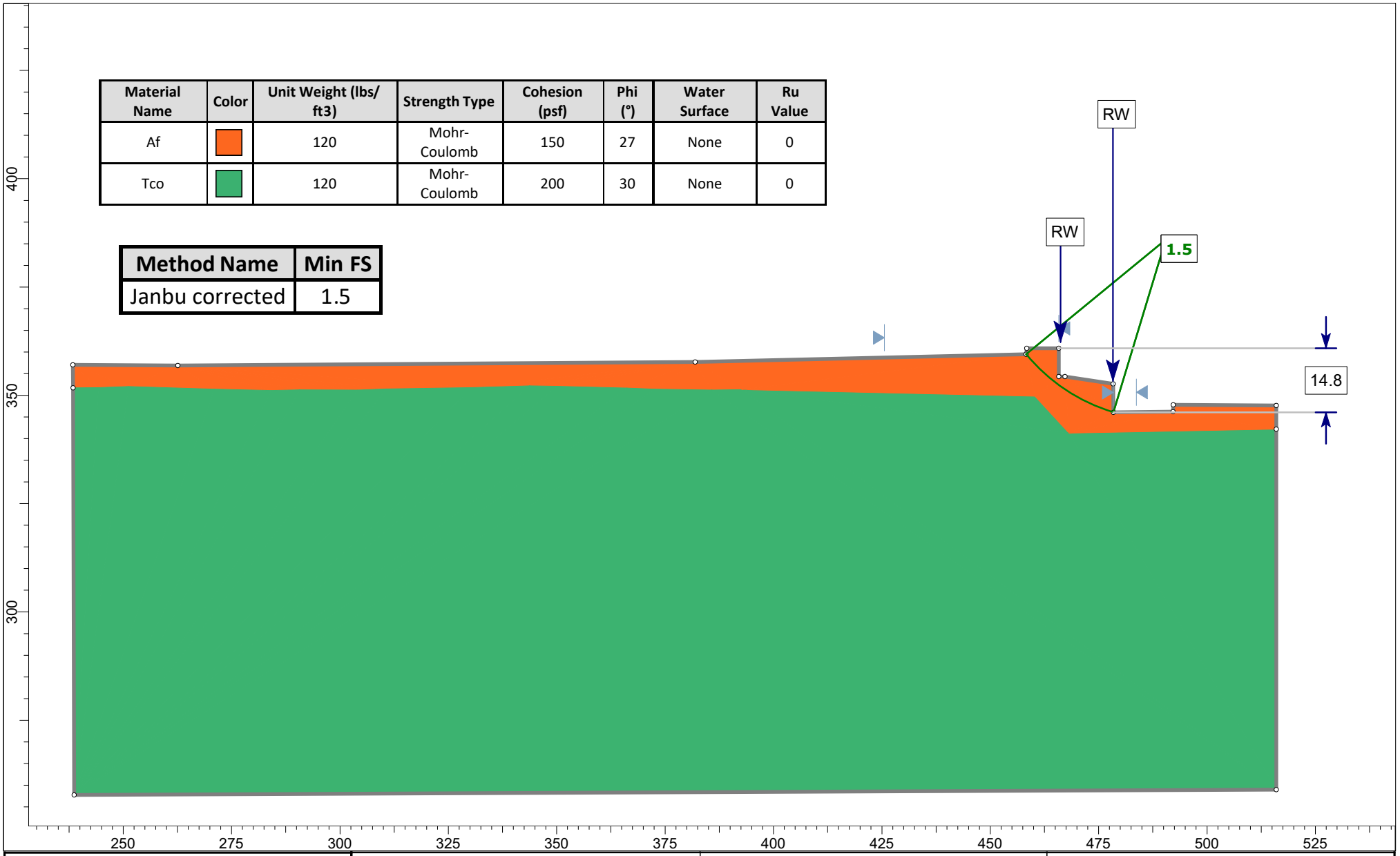
NMG Geotechnical, Inc.

SLIDEINTERPRET 9.038

Project: Shea/Aliso Viejo	Project Number: 24074-02	Cross Section: Cross Section A-A', West Side
Analysis: P-Static, Slope H=35', RW at Toe		Analysis By: FEO/KGM
Date: 11/25/2025		File Path & Name: P:\2024\24074-02 Shea Aliso Viejo\Slide2\A-A" Design Slope.slmd

Material Name	Color	Unit Weight (lbs/ ft3)	Strength Type	Cohesion (psf)	Phi (°)	Water Surface	Ru Value
Af		120	Mohr-Coulomb	150	27	None	0
Tco		120	Mohr-Coulomb	200	30	None	0

Method Name	Min FS
Janbu corrected	1.5



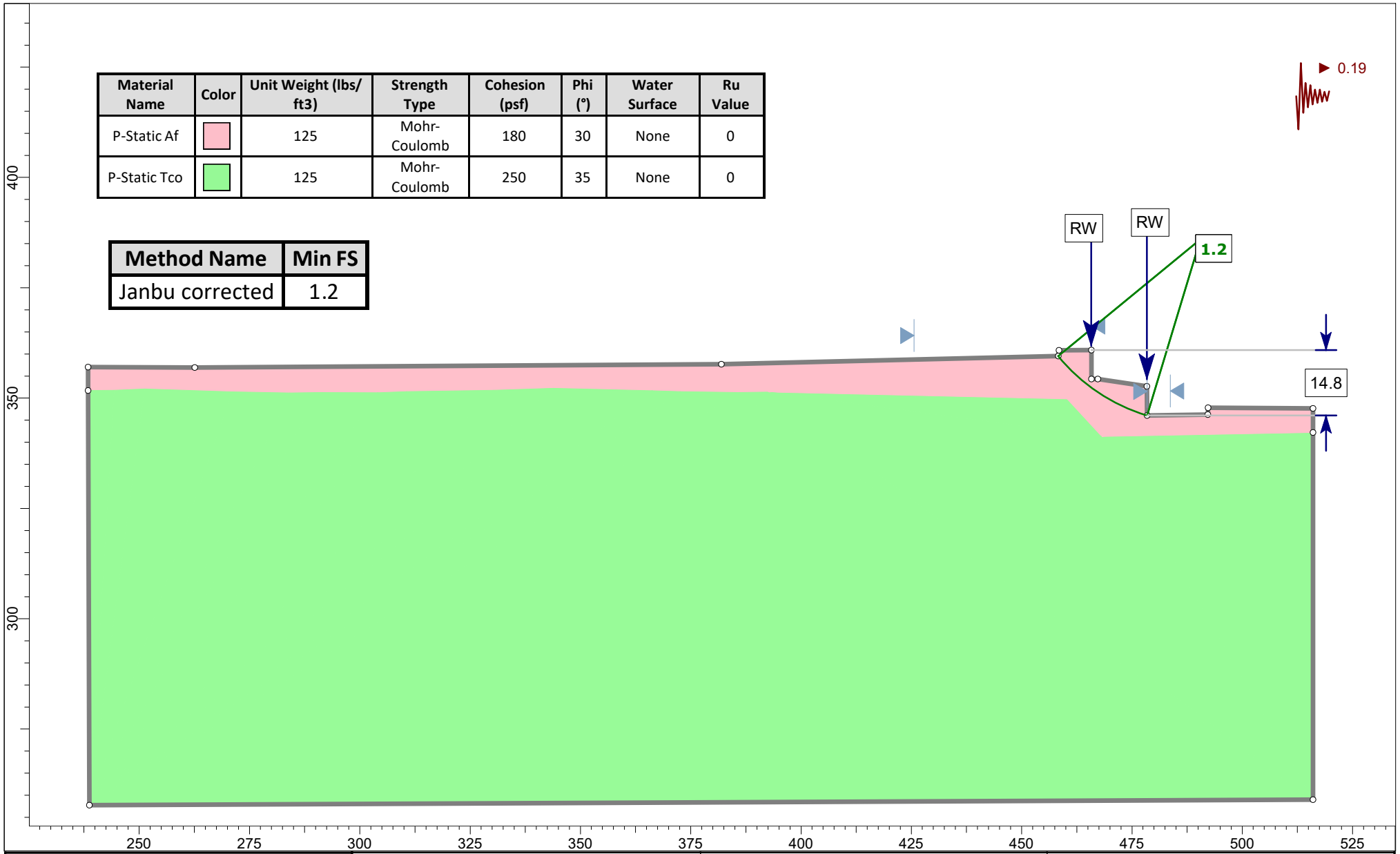
NMG Geotechnical, Inc.

SLIDEINTERPRET 9.038

Project Shea/Aliso Viejo	Project Number 24074-02	Cross Section Cross Section A-A' East Side
Analysis Static, Slope H=15', RW Top of Slope		*Analysis By* FEO/KGM
Date 11/25/2025		*File Path & Name* P:\2024\24074-02 Shea Aliso Viejo\Slide2\A-A" East Side - Design Slope.slmd

Material Name	Color	Unit Weight (lbs/ ft3)	Strength Type	Cohesion (psf)	Phi (°)	Water Surface	Ru Value
P-Static Af		125	Mohr-Coulomb	180	30	None	0
P-Static Tco		125	Mohr-Coulomb	250	35	None	0

Method Name	Min FS
Janbu corrected	1.2



NMG Geotechnical, Inc.

SLIDEINTERPRET 9.038

Project Shea/Aliso Viejo	Project Number 24074-02	Cross Section Cross Section A-A' East Side
Analysis P-Static, Slope H=15', RW Top of Slope		*Analysis By* FEO/KGM
Date 11/25/2025		*File Path & Name* P:\2024\24074-02 Shea Aliso Viejo\Slide2\A-A" East Side - Design Slope.slmd

APPENDIX F

APPENDIX F

GENERAL EARTHWORK AND GRADING SPECIFICATIONS

1.0 General

1.1 Intent: These General Earthwork and Grading Specifications are for the grading and earthwork shown on the approved grading plan(s) and/or indicated in the geotechnical report(s). These Specifications are a part of the recommendations contained in the geotechnical report(s). In case of conflict, the specific recommendations in the geotechnical report shall supersede these more general Specifications. Observations of the earthwork by the project Geotechnical Consultant during the course of grading may result in new or revised recommendations that could supersede these specifications or the recommendations in the geotechnical report(s).

1.2 Geotechnical Consultant: Prior to commencement of work, the owner shall employ a geotechnical consultant. The geotechnical consultant shall be responsible for reviewing the approved geotechnical report(s) and accepting the adequacy of the preliminary geotechnical findings, conclusions, and recommendations prior to the commencement of the grading.

Prior to commencement of grading, the Geotechnical Consultant shall review the "work plan" prepared by the Earthwork Contractor (Contractor) and schedule sufficient personnel to perform the appropriate level of observation, mapping, and compaction testing.

During the grading and earthwork operations, the Geotechnical Consultant shall observe, map, and document the subsurface exposures to verify the geotechnical design assumptions. If the observed conditions are found to be significantly different than the interpreted assumptions during the design phase, the Geotechnical Consultant shall inform the owner, recommend appropriate changes in design to accommodate the observed conditions, and notify the review agency where required. Subsurface areas to be geotechnically observed, mapped, elevations recorded, and/or tested include natural ground after it has been cleared for receiving fill but before fill is placed, bottoms of all "remedial removal" areas, all key bottoms, and benches made on sloping ground to receive fill.

The Geotechnical Consultant shall observe the moisture-conditioning and processing of the subgrade and fill materials and perform relative compaction testing of fill to determine the attained level of compaction. The Geotechnical Consultant shall provide the test results to the owner and the Contractor on a routine and frequent basis.

1.3 The Earthwork Contractor: The Earthwork Contractor (Contractor) shall be qualified, experienced, and knowledgeable in earthwork logistics, preparation and processing of ground to receive fill, moisture-conditioning and processing of fill, and compacting fill. The Contractor shall review and accept the plans, geotechnical report(s), and these Specifications prior to commencement of grading. The Contractor shall be solely responsible for performing the grading in accordance with the plans and specifications.

The Contractor shall prepare and submit to the owner and the Geotechnical Consultant a work plan that indicates the sequence of earthwork grading, the number of "spreads" of work and the estimated quantities of daily earthwork contemplated for the site prior to commencement of grading. The Contractor shall inform the owner and the Geotechnical Consultant of changes in work schedules and updates to the work plan at least 24 hours in advance of such changes so that appropriate observations and tests can be planned and accomplished. The Contractor shall not assume that the Geotechnical Consultant is aware of all grading operations.

The Contractor shall have the sole responsibility to provide adequate equipment and methods to accomplish the earthwork in accordance with the applicable grading codes and agency ordinances, these Specifications, and the recommendations in the approved geotechnical report(s) and grading plan(s). If, in the opinion of the Geotechnical Consultant, unsatisfactory conditions, such as unsuitable soil, improper moisture condition, inadequate compaction, insufficient buttress key size, adverse weather, etc., are resulting in a quality of work less than required in these specifications, the Geotechnical Consultant shall reject the work and may recommend to the owner that construction be stopped until the conditions are rectified.

2.0 Preparation of Areas to be Filled

2.1 Clearing and Grubbing: Vegetation, such as brush, grass, roots, and other deleterious material shall be sufficiently removed and properly disposed of in a method acceptable to the owner, governing agencies, and the Geotechnical Consultant.

The Geotechnical Consultant shall evaluate the extent of these removals depending on specific site conditions. Earth fill material shall not contain more than 1 percent of organic materials (by volume). No fill lift shall contain more than 5 percent of organic matter. Nesting of the organic materials shall not be allowed.

If potentially hazardous materials are encountered, the Contractor shall stop work in the affected area, and a hazardous material specialist shall be informed immediately for proper evaluation and handling of these materials prior to continuing to work in that area.

As presently defined by the State of California, most refined petroleum products (gasoline, diesel fuel, motor oil, grease, coolant, etc.) have chemical constituents that are considered to be hazardous waste. As such, the indiscriminate dumping or spillage of these fluids onto the ground may constitute a misdemeanor, punishable by fines and/or imprisonment, and shall not be allowed.

2.2 Processing: Existing ground that has been declared satisfactory for support of fill by the Geotechnical Consultant shall be scarified to a minimum depth of 6 inches. Existing ground that is not satisfactory shall be overexcavated as specified in the following section. Scarification shall continue until soils are broken down and free of large clay lumps or clods and the working surface is reasonably uniform, flat, and free of uneven features that would inhibit uniform compaction.

2.3 Overexcavation: In addition to removals and overexcavations recommended in the approved geotechnical report(s) and the grading plan, soft, loose, dry, saturated, spongy, organic-rich, highly fractured or otherwise unsuitable ground shall be overexcavated to competent ground as evaluated by the Geotechnical Consultant during grading.

2.4 Benching: Where fills are to be placed on ground with slopes steeper than 5:1 (horizontal to vertical units), the ground shall be stepped or benched. Please see the Standard Details for a graphic illustration. The lowest bench or key shall be a minimum of 15 feet wide and at least 2 feet deep, into competent material as evaluated by the Geotechnical Consultant. Other benches shall be excavated a minimum height of 4 feet into competent material or as otherwise recommended by the Geotechnical Consultant. Fill placed on ground sloping flatter than 5:1 shall also be benched or otherwise overexcavated to provide a flat subgrade for the fill.

2.5 Evaluation/Acceptance of Fill Areas: All areas to receive fill, including removal and processed areas, key bottoms, and benches, shall be observed, mapped, elevations recorded, and/or tested prior to being accepted by the Geotechnical Consultant as suitable to receive fill. The Contractor shall obtain a written acceptance from the Geotechnical Consultant prior to fill placement. A licensed surveyor shall provide the survey control for determining elevations of processed areas, keys, and benches.

3.0 Fill Material

3.1 General: Material to be used as fill shall be essentially free of organic matter and other deleterious substances evaluated and accepted by the Geotechnical Consultant prior to placement. Soils of poor quality, such as those with unacceptable gradation, high expansion potential, or low strength shall be placed in areas acceptable to the Geotechnical Consultant or mixed with other soils to achieve satisfactory fill material.

3.2 Oversize: Oversize material defined as rock, or other irreducible material with a maximum dimension greater than 12 inches, shall not be buried or placed in fill unless location, materials, and placement methods are specifically accepted by the Geotechnical Consultant. Placement operations shall be such that nesting of oversized material does not occur and such that oversize material is completely surrounded by compacted or densified fill. Oversize material shall not be placed within 10 vertical feet of finish grade or within 2 feet of future utilities or underground construction.

3.3 Import: If importing of fill material is required for grading, proposed import material shall meet the requirements of Section 3.1. The potential import source shall be given to the Geotechnical Consultant at least 48 hours (2 working days) before importing begins so that its suitability can be determined and appropriate tests performed.

4.0 Fill Placement and Compaction

4.1 Fill Layers: Approved fill material shall be placed in areas prepared to receive fill (per Section 3.0) in near-horizontal layers not exceeding 8 inches in loose thickness. The Geotechnical Consultant may accept thicker layers if testing indicates the grading procedures can adequately compact the thicker layers. Each layer shall be spread evenly and mixed thoroughly to attain relative uniformity of material and moisture throughout.

4.2 Fill Moisture Conditioning: Fill soils shall be watered, dried back, blended, and/or mixed, as necessary to attain a relatively uniform moisture content at or slightly over optimum. Maximum density and optimum soil moisture content tests shall be performed in accordance with the American Society of Testing and Materials (ASTM Test Method D1557-91).

4.3 Compaction of Fill: After each layer has been moisture-conditioned, mixed, and evenly spread, it shall be uniformly compacted to not less than 90 percent of maximum dry density (ASTM Test Method D1557-91). Compaction equipment shall be adequately sized and be either specifically designed for soil compaction or of proven reliability to efficiently achieve the specified level of compaction with uniformity.

4.4 Compaction of Fill Slopes: In addition to normal compaction procedures specified above, compaction of slopes shall be accomplished by backrolling of slopes with sheepsfoot rollers at increments of 3 to 4 feet in fill elevation, or by other methods producing satisfactory results acceptable to the Geotechnical Consultant. Upon completion of grading, relative compaction of the fill, out to the slope face, shall be at least 90 percent of maximum density per ASTM Test Method D1557-91.

4.5 Compaction Testing: Field tests for moisture content and relative compaction of the fill soils shall be performed by the Geotechnical Consultant. Location and frequency of tests shall be at the Consultant's discretion based on field conditions encountered. Compaction test locations will not necessarily be selected on a random basis. Test locations shall be selected to verify adequacy of compaction levels in areas that are judged to be prone to inadequate compaction (such as close to slope faces and at the fill/bedrock benches).

4.6 Frequency of Compaction Testing: Tests shall be taken at intervals not exceeding 2 feet in vertical rise and/or 1,000 cubic yards of compacted fill soils embankment. In addition, as a guideline, at least one test shall be taken on slope faces for each 5,000 square feet of slope face and/or each 10 feet of vertical height of slope. The Contractor shall assure that fill construction is such that the testing schedule can be accomplished by the Geotechnical Consultant. The Contractor shall stop or slow down the earthwork construction if these minimum standards are not met.

4.7 Compaction Test Locations: The Geotechnical Consultant shall document the approximate elevation and horizontal coordinates of each test location. The Contractor shall coordinate with the project surveyor to assure that sufficient grade stakes are established so that the Geotechnical Consultant can determine the test locations with sufficient accuracy. At a minimum, two grade stakes within a horizontal distance of 100 feet and vertically less than 5 feet apart from potential test locations shall be provided.

5.0 Subdrain Installation

Subdrain systems shall be installed in accordance with the approved geotechnical report(s), the grading plan, and the Standard Details. The Geotechnical Consultant may recommend additional subdrains and/or changes in subdrain extent, location, grade, or material depending on conditions encountered during grading. All subdrains shall be surveyed by a land surveyor/civil engineer for line and grade after installation and prior to burial. Sufficient time should be allowed by the Contractor for these surveys.

6.0 Excavation

Excavations, as well as over-excavation for remedial purposes, shall be evaluated by the Geotechnical Consultant during grading. Remedial removal depths shown on geotechnical plans are estimates only. The actual extent of removal shall be determined by the Geotechnical Consultant based on the field evaluation of exposed conditions during grading. Where fill-over-cut slopes are to be graded, the cut portion of the slope shall be made, evaluated, and accepted by the Geotechnical Consultant prior to placement of materials for construction of the fill portion of the slope, unless otherwise recommended by the Geotechnical Consultant.

7.0 Trench Backfills

7.1 Contractor shall follow all OHSA and Cal/OSHA requirements for safety of trench excavations.

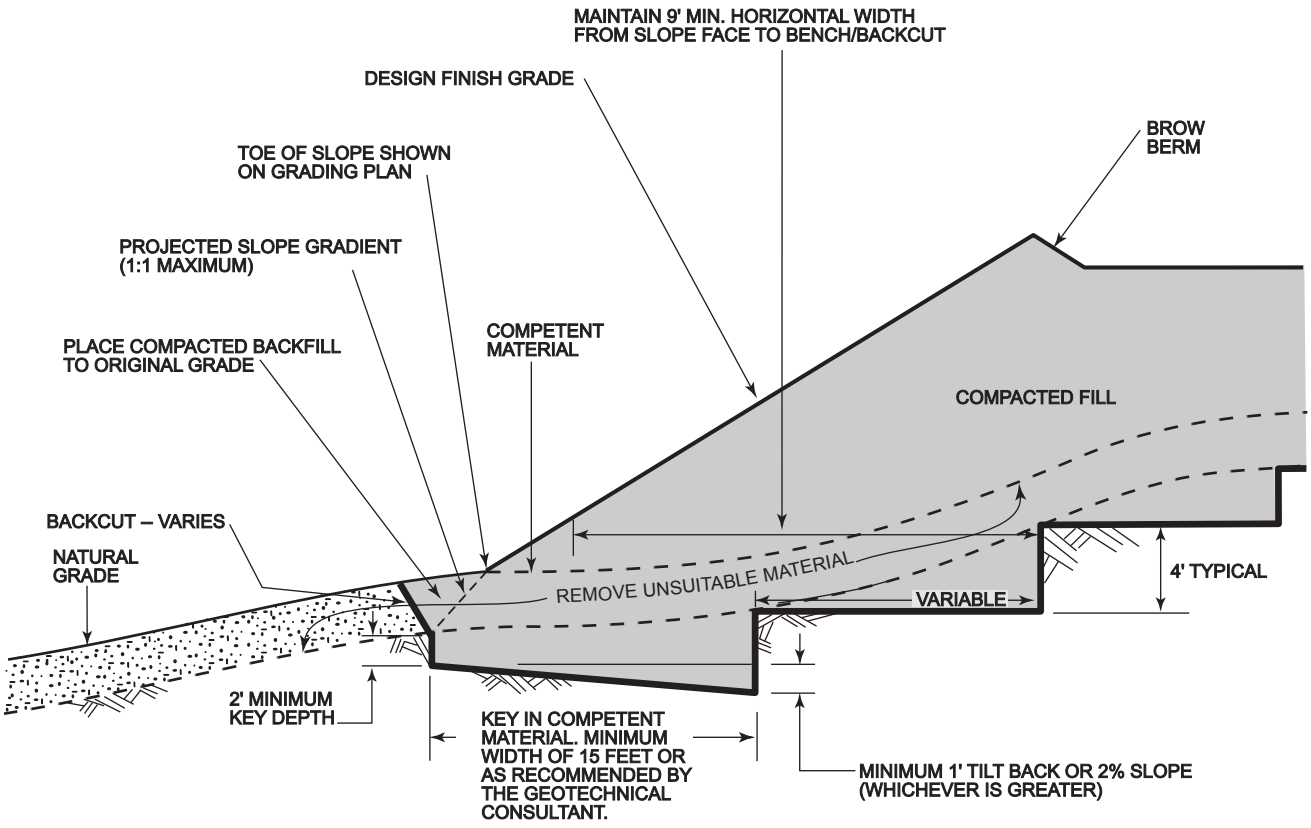
7.2 Bedding and backfill of utility trenches shall be done in accordance with the applicable provisions of Standard Specifications of Public Works Construction. Bedding material shall have a Sand Equivalent greater than 30 (SE>30). The bedding shall be placed to 1 foot over the top of the conduit and densified by jetting. Backfill shall be placed and densified to a minimum 90 percent of maximum from 1 foot above the top of the conduit to the surface, except in traveled ways (see Section 7.6 below).

7.3 Jetting of the bedding around the conduits shall be observed by the Geotechnical Consultant.

7.4 Geotechnical Consultant shall test the trench backfill for relative compaction. At least one test should be made for every 300 feet of trench and 2 feet of fill.

7.5 Lift thickness of trench backfill shall not exceed those allowed in the Standard Specifications of Public Works Construction unless the Contractor can demonstrate to the Geotechnical Consultant that the fill lift can be compacted to the minimum relative compaction by his alternative equipment and method.

7.6 Trench backfill in the upper foot measured from finish grade/subgrade within existing or future traveled way, shoulder, and other paved areas (or areas to receive pavement) should be placed to a minimum 95 percent relative compaction unless specified differently by the governing agency.

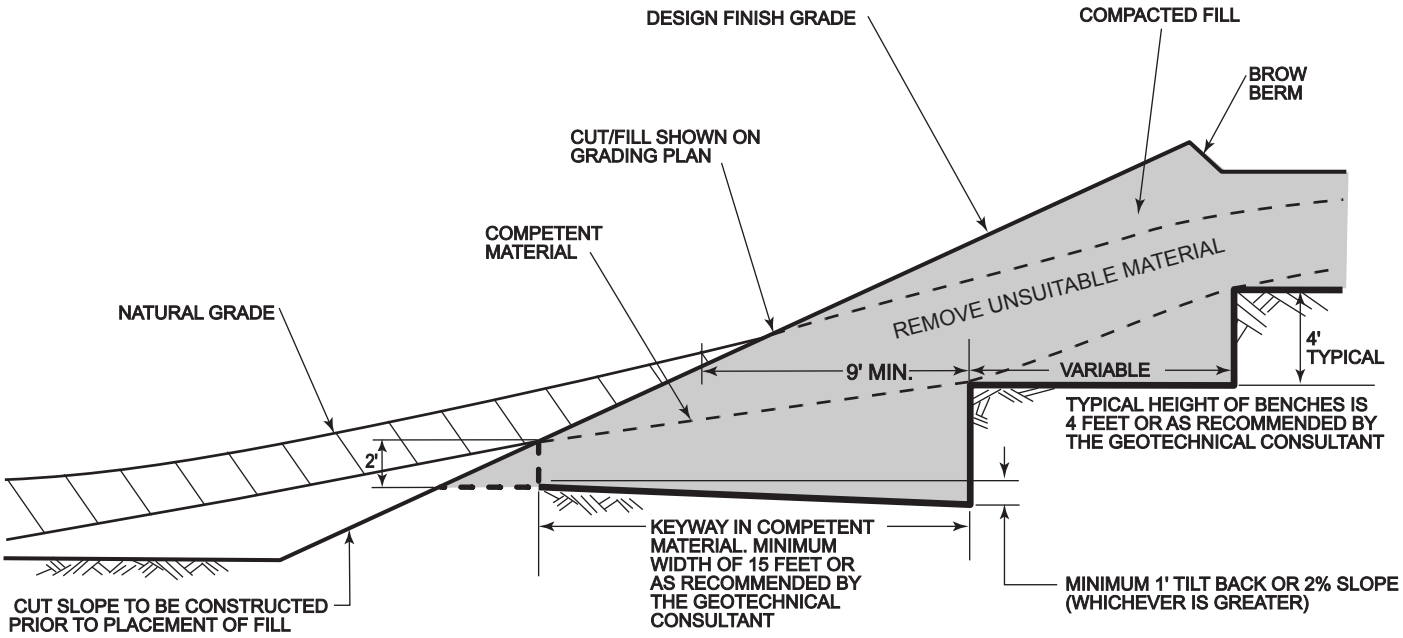


NOTE: BENCHING SHALL BE REQUIRED WHEN NATURAL SLOPES ARE EQUAL TO OR STEEPER THAN 5:1 OR WHEN RECOMMENDED BY THE SOIL ENGINEER. WHERE THE NATURAL SLOPE APPROACHES OR EXCEEDS THE DESIGN SLOPE RATIO, SPECIAL RECOMMENDATIONS WILL BE PROVIDED BY THE GEOTECHNICAL ENGINEER.

FIGURE 1

TYPICAL FILL KEY ABOVE NATURAL SLOPE MINIMUM STANDARD GRADING DETAILS

NMG Geotechnical, Inc.

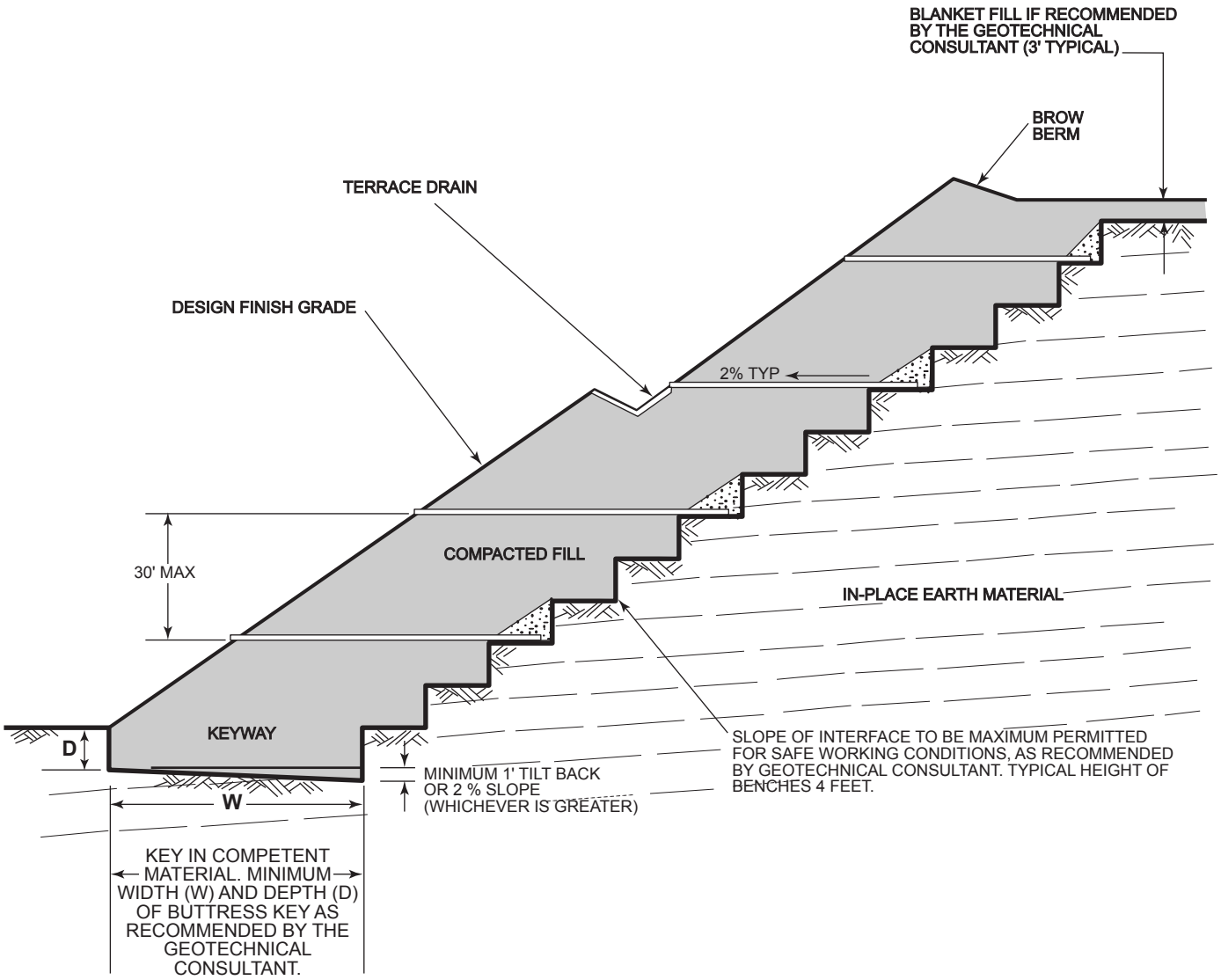


NOTE: THE FILL PORTION OF THE SLOPE SHALL BE COMPACTED AS STATED IN THE PROJECT SPECIFICATIONS.

FIGURE 2

TYPICAL FILL ABOVE CUT SLOPE
MINIMUM STANDARD GRADING DETAILS

NMG Geotechnical, Inc.



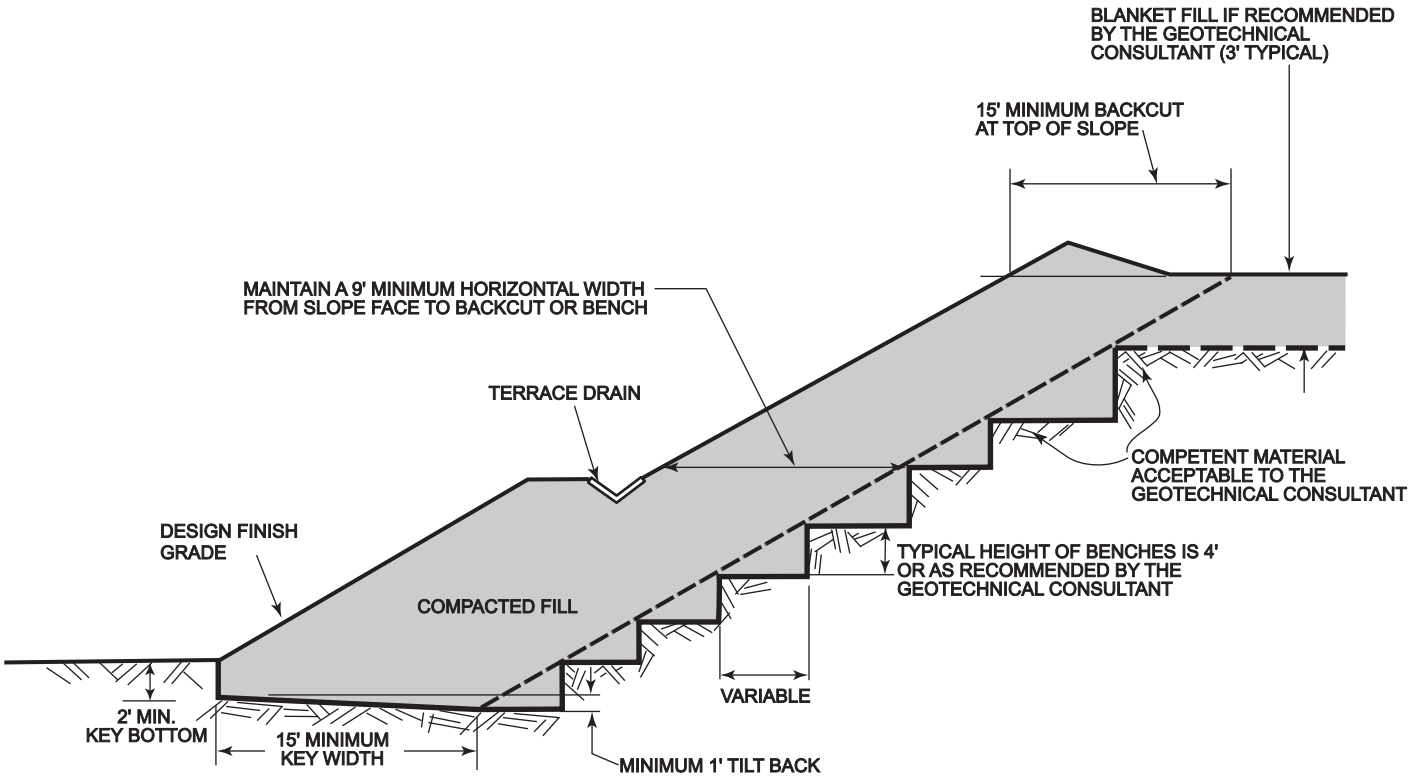
NOTE: SUBDRAIN DETAILS, SEE FIGURE 5.

FIGURE 3

TYPICAL BUTTRESS FILL
MINIMUM STANDARD GRADING DETAILS

NMG Geotechnical, Inc.

1/04 TYP BUTTRESS FILL.ai

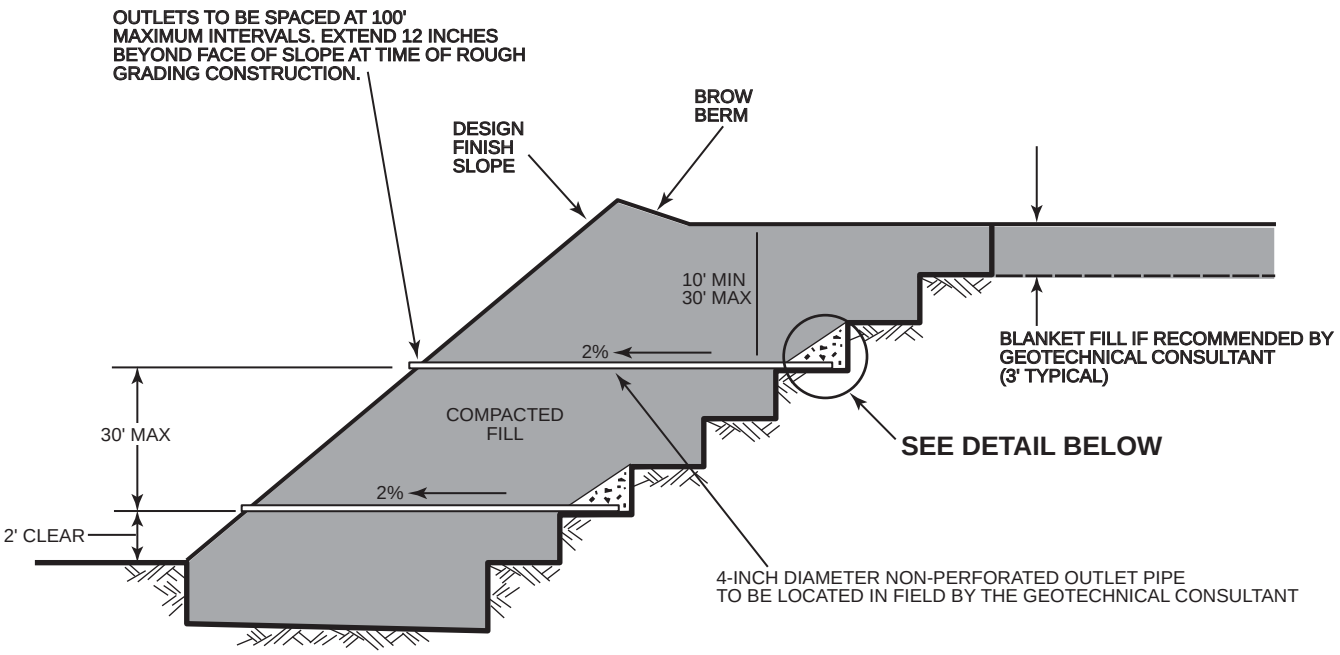


NOTE:
SEE FIGURE 5 FOR TYPICAL SUBDRAIN DETAILS FOR STABILIZATION FILLS

FIGURE 4

TYPICAL STABILIZATION FILL MINIMUM STANDARD GRADING DETAILS

NMG Geotechnical, Inc.



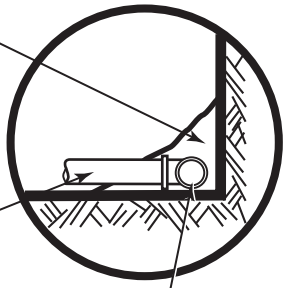
FILTER MATERIAL - MINIMUM OF THREE CUBIC FEET PER FOOT OF PIPE. SEE FILTER MATERIAL SPECIFICATION.

ALTERNATE: IN LIEU OF FILTER MATERIAL, THREE CUBIC FEET OF GRAVEL PER FOOT OF SUBDRAIN (WITHOUT PIPE) MAY BE ENCASED IN FILTER FABRIC. SEE GRAVEL SPECIFICATION, AND FIGURE 6 FOR FILTER FABRIC SPECIFICATION

"GRAVEL" TO CONSIST OF 1/2" TO 1" CRUSHED ROCK PER STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.

FILTER FABRIC SHALL BE LAPPED A MINIMUM OF 12 INCHES ON ALL JOINTS.

DETAIL



OUTLET PIPE TO BE CONNECTED TO SUBDRAIN PIPE WITH TEE OR ELBOW

MINIMUM 4-INCH DIAMETER SCHEDULE 40 ASTM D1527 OR D1785 OR SDR 35 ASTM D2751 OR D 3034. FOR FILL DEPTH OF 90 FEET OR GREATER, USE ONLY SCHEDULE 40 OR EQUIVALENT. THERE SHALL BE A MINIMUM OF 8 UNIFORMLY SPACED PERFORATIONS PER FOOT OF PIPE INSTALLED WITH PERFORATIONS ON BOTTOM OF PIPE. PROVIDE CAP AT UPSTREAM END OF PIPE. SLOPE AT 2 PERCENT TO OUTLET PIPE.

"FILTER MATERIAL" TO MEET FOLLOWING SPECIFICATION OR APPROVED EQUIVALENT.

SIEVE SIZE	PERCENTAGE PASSING
1"	100
3/4"	90-100
3/8"	40-100
NO. 4	25-40
NO. 8	18-33
NO. 30	5-15
NO. 50	0-7
NO. 200	0-3

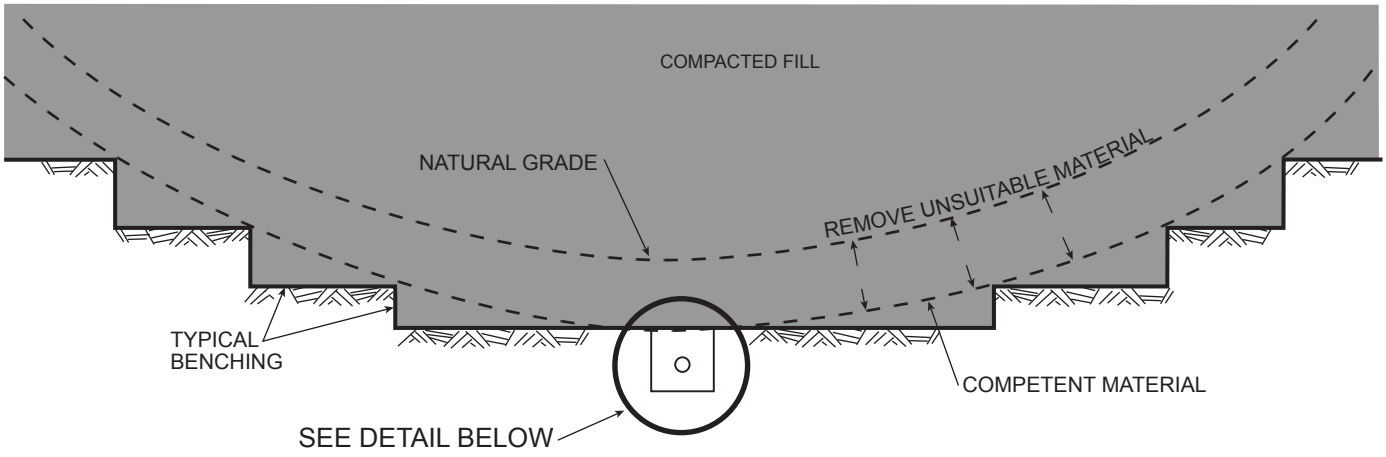
NOTE:
TRENCH FOR OUTLET PIPES TO BE BACKFILLED WITH ON-SITE SOIL.

FIGURE 5

TYPICAL STABILIZATION AND BUTTRESS FILL SUBDRAINS MINIMUM STANDARD GRADING DETAILS

NMG Geotechnical, Inc.

8/96 STAB. BUTTRESS FILL SUBDRAINS.ai



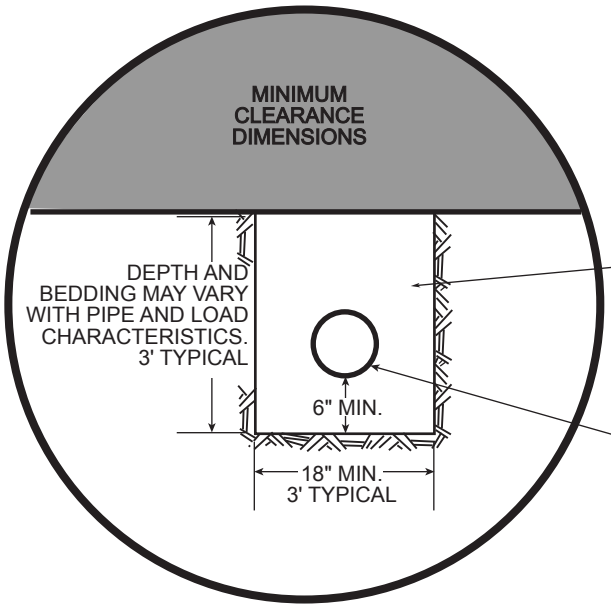
FILTER FABRICS SHALL BE PERMEABLE NON-WOVEN POLYESTER, NYLON, OR POLYPROPYLENE MATERIAL CONFORMING TO THE FOLLOWING:

1) GRAB TENSILE STRENGTH. POUNDS, MIN. ASTM D 4632.....90
2) ELONGATION, AT PEAK LOAD, PERCENT, MIN. ASTM D 4632.....50
3) PUNCTURE STRENGTH, LBS., MIN. ASTM D 3787.....45
4) COEFFICIENT OF WATER PERMITTIVITY, 1/SEC. ASTM D 4491.....>0.7
5) BURST STRENGTH, P.S.I., MIN. ASTM D 3786.....180

NOTES: DOWNSTREAM 20' OF PIPE AT OUTLET SHALL BE NON-PERFORATED AND BACKFILLED WITH FINE-GRAINED MATERIAL

PIPE SHALL BE A MINIMUM OF 4-INCH DIAMETER. FOR RUNS OF 500 FEET OR MORE, USE 6-INCH DIAMETER PIPE, OR AS RECOMMENDED BY THE GEOTECHNICAL CONSULTANT

DETAIL



FILTER MATERIAL - MINIMUM OF NINE CUBIC FEET PER FOOT OF PIPE. SEE FIGURE 5 FOR FILTER MATERIAL SPECIFICATIONS.

ALTERNATE: IN LIEU OF FILTER MATERIAL, NINE CUBIC FEET OF GRAVEL PER FOOT OF SUBDRAIN (WITHOUT PIPE) MAY BE ENCASED IN FILTER FABRIC. SEE FIGURE 5 TO GRAVEL SPECIFICATION. SEE ABOVE FOR FILTER FABRIC SPECIFICATION. FILTER FABRIC SHALL BE LAPPED MINIMUM OF 12 INCHES ON ALL JOINTS.

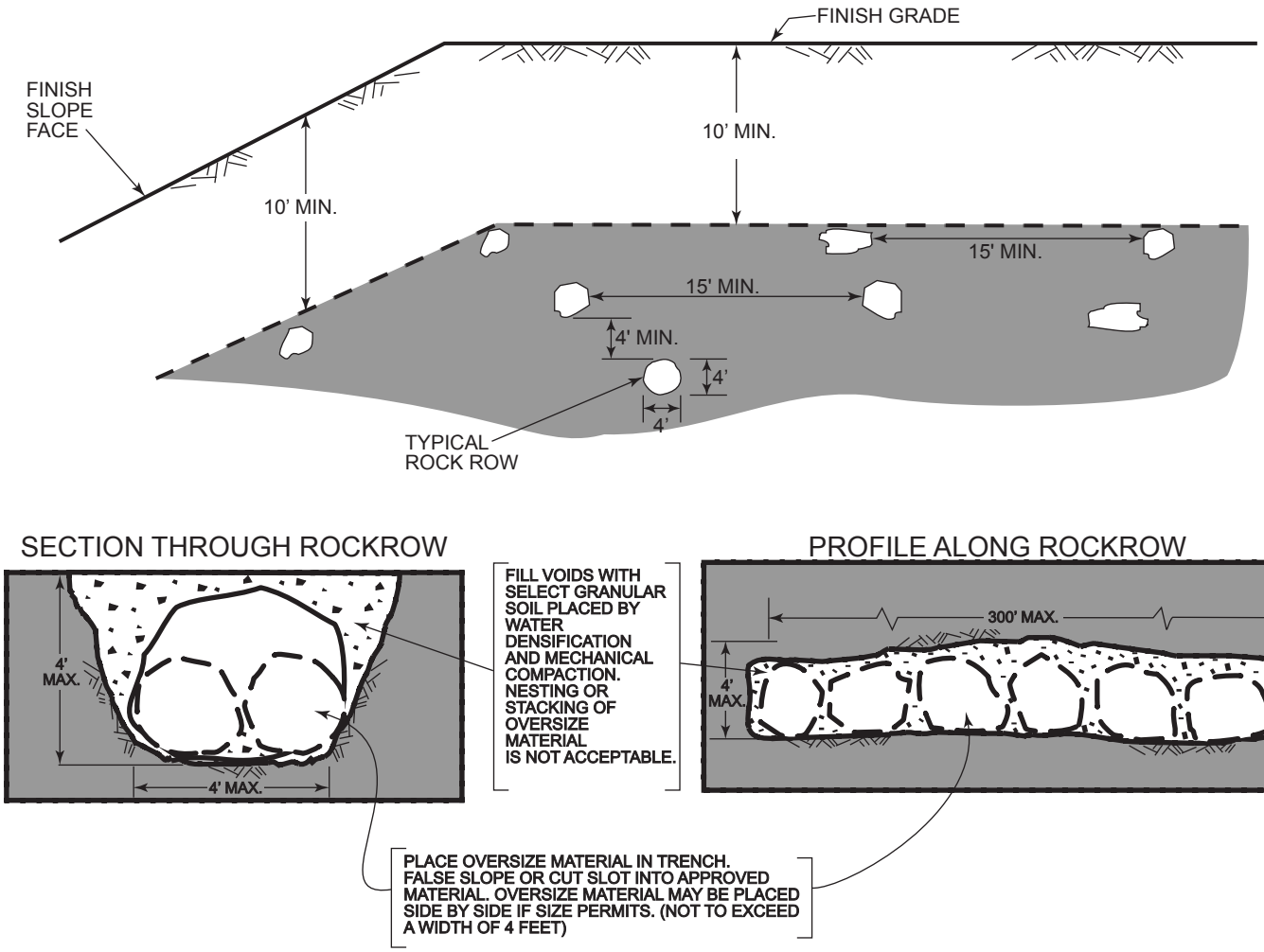
MINIMUM 4 INCH DIAMETER SCHEDULE 40 ASTM D 1527, OR D 1785, OR SDR 35 ASTM 2751 OR D 3034. FOR FILL DEPTH OF 90 FEET OR GREATER, USE ONLY SCHEDULE 40 OR APPROVED EQUIVALENT. THERE SHALL BE A MINIMUM OF 8 UNIFORMLY SPACED PERFORATIONS PER FOOT OF PIPE INSTALLED WITH PERFORATIONS ON BOTTOM OF PIPE.

FIGURE 6

TYPICAL CANYON SUBDRAIN MINIMUM STANDARD GRADING DETAILS

NMG Geotechnical, Inc.

Rev. 8/96 CANYON SUBDRAIN.ai



NOTES:

A) OVERSIZED ROCK IS DEFINED AS LARGER THAN 12" IN SIZE (IN GREATEST DIMENSION).

B) SPACE BETWEEN ROCKROWS SHOULD BE ONE EQUIPMENT WIDTH OR A MINIMUM OF 15 FEET.

C) THE WIDTH AND HEIGHT OF THE ROCKROW SHALL BE LIMITED TO FOUR FEET AND THE LENGTH LIMITED TO 300 FEET UNLESS APPROVED OTHERWISE BY THE GEOTECHNICAL CONSULTANT. OVERSIZE SHOULD BE PLACED WITH FLATEST SIDE ON THE BOTTOM.

D) OVERSIZE MATERIAL EXCEEDING FOUR FEET MAY BE PLACED ON AN INDIVIDUAL BASIS IF APPROVED BY THE GEOTECHNICAL CONSULTANT.

E) FILLING OF VOIDS WILL REQUIRE SELECT GRANULAR SOIL (SE > 20, OR LESS THAN 20 PERCENT FINES) AS APPROVED BY THE GEOTECHNICAL CONSULTANT. VOIDS IN THE ROCKROW TO BE FILLED BY WATER DENSIFYING GRANULAR SOIL INTO PLACE ALONG WITH MECHANICAL COMPACTION EFFORT.

F) IF APPROVED BY THE GEOTECHNICAL CONSULTANT, ROCKROWS MAY BE PLACED DIRECTLY ON COMPETENT MATERIALS OR BEDROCK, PROVIDED ADEQUATE SPACE IS AVAILABLE FOR COMPACTION.

G) THE FIRST LIFT OF MATERIAL ABOVE THE ROCKROW SHALL CONSIST OF GRANULAR MATERIAL AND SHALL BE PROOF-ROLLED WITH A D-8 OR LARGER DOZER OR EQUIVALENT.

H) ROCKROWS NEAR SLOPES SHOULD BE ORIENTED PARALLEL TO SLOPE FACE.

I) NESTING OR STACKING OF ROCKS IS NOT ACCEPTABLE.

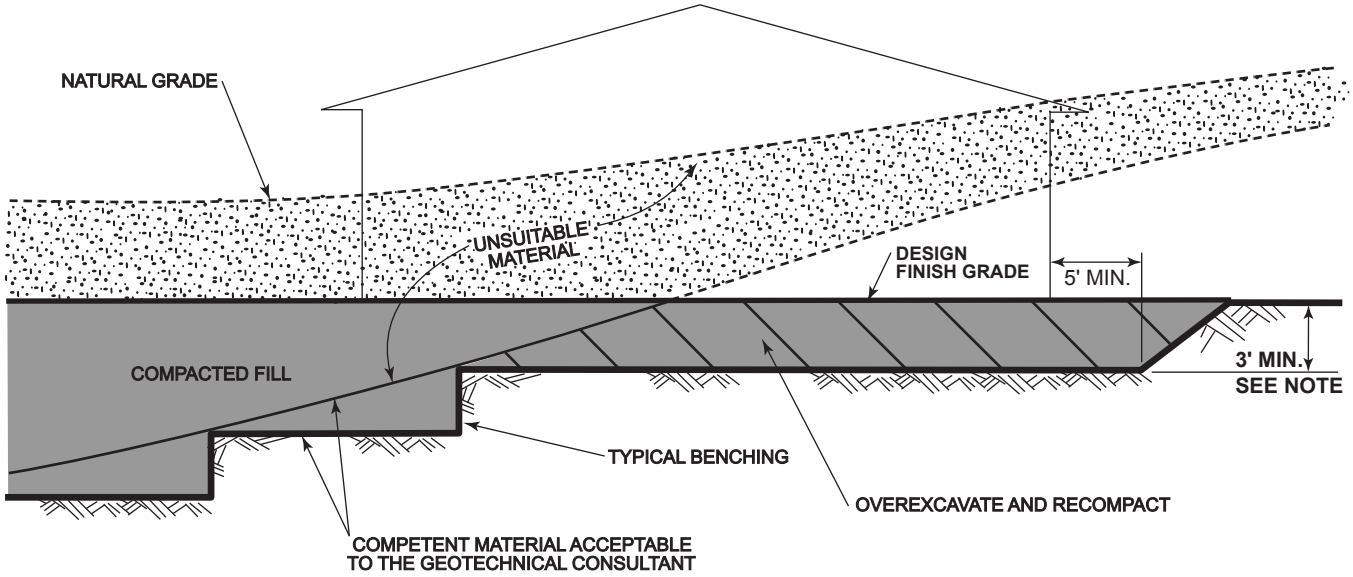
FIGURE 7

TYPICAL OVERSIZE ROCK PLACEMENT METHOD MINIMUM STANDARD GRADING DETAIL FOR STRUCTURAL FILL

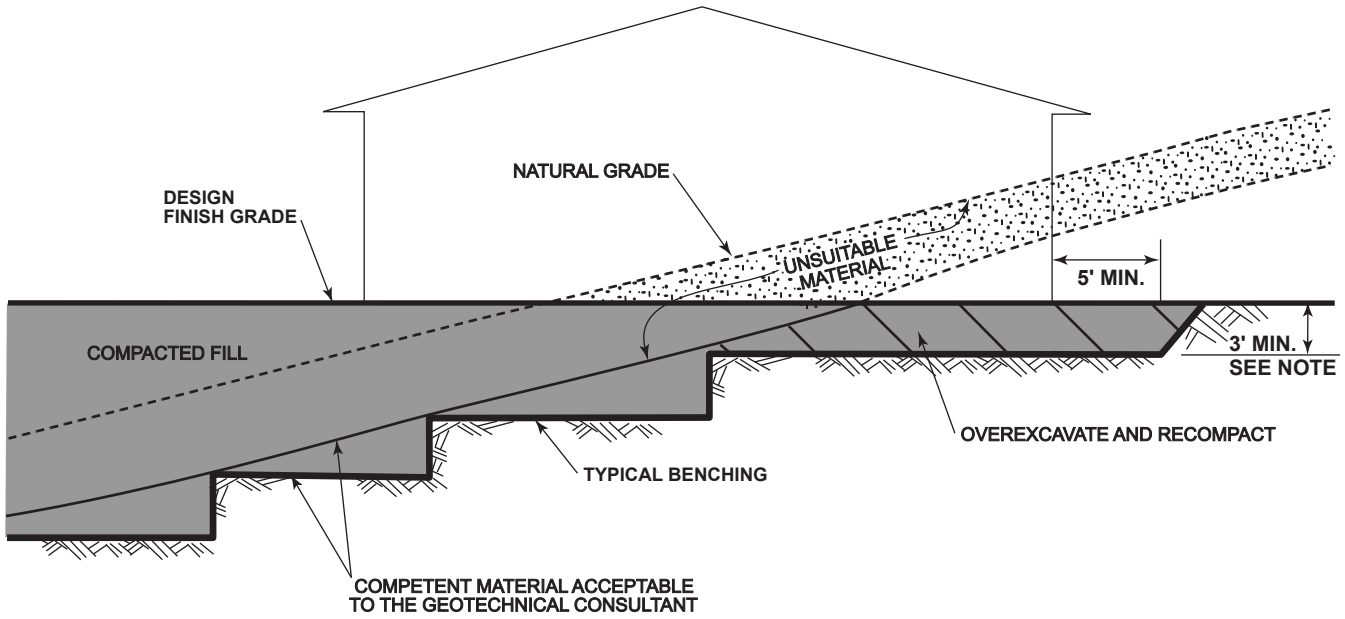
NMG Geotechnical, Inc.

3/04 TYP OVERSIZE ROCK PLACEMENT.ai

CUT LOT



CUT FILL LOT (TRANSITION)



NOTE: DEEPER THAN THE 3-FOOT OVEREXCAVATION MAY BE RECOMMENDED BY THE GEOTECHNICAL CONSULTANT IN STEEP TRANSITIONS.

FIGURE 8

TYPICAL OVEREXCAVATION OF DAYLIGHT LINE MINIMUM STANDARD GRADING DETAILS

NMG Geotechnical, Inc.

Appendix E:

Paleontological Assessment for the Journey and Pacific Park Drive (Shea Aliso Viejo) Project

PALEONTOLOGICAL ASSESSMENT FOR THE JOURNEY AND PACIFIC PARK DRIVE (SHEA ALISO VIEJO) PROJECT

CITY OF ALISO VIEJO
ORANGE COUNTY, CALIFORNIA

APN 632-124-08

Prepared on Behalf of:

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San Juan Capistrano, California 92675

Prepared for:

City of Aliso Viejo
12 Journey, Suite 100
Aliso Viejo, California 92656

Prepared by:

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Poway, California 92064

July 30, 2025

BFSA Environmental Services
A Perennial Company

Paleontological Database Information

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Prepared by:	BFSA Environmental Services, a Perennial Company 14010 Poway Road, Suite A Poway, California 92064
Report Date:	July 30, 2025
Report Title:	Paleontological Assessment for the Journey and Pacific Park Drive (Shea Aliso Viejo) Project, City of Aliso Viejo, Orange County, California, APN 632-124-08
Prepared on Behalf of:	Carlson Strategic Land Solutions 27134A Paseo Espada, Suite 323 San Juan Capistrano, California 92675
Prepared for:	City of Aliso Viejo 12 Journey, Suite 100 Aliso Viejo, California 92656
Assessor's Parcel Number:	632-124-08
USGS Quadrangle:	Township 7 South, Range 8 West on the USGS *San Juan Capistrano, California* (7.5-minute) topographic quadrangle
Study Area:	8.44 acres
Key Words:	Paleontological assessment; Niguel Formation; Monterey Formation; high paleontological sensitivity; monitoring recommended.

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I. INTRODUCTION AND LOCATION

A paleontological resource assessment has been completed for the Journey and Pacific Park Drive (Shea Aliso Viejo) Project to comply with the California Environmental Quality Act (CEQA) and City of Aliso Viejo environmental requirements. The project is located on the southern side of Pacific Park Drive between Journey and Aliso Creek Road in the city of Aliso Viejo, Orange County, California (Figures 1 and 2). The 8.44-acre project (Assessor's Parcel Number [APN] 632-124-08) is situated within an unsectioned area of Township 7 South, Range 8 West, on the U.S. Geological Survey (USGS) *San Juan Capistrano, California* (7.5-minute) topographic quadrangle map (see Figure 2). The subject property is currently developed with three professional buildings and a parking lot with associated landscape, hardscape, and infrastructure. As proposed, the project applicant plans to demolish the existing buildings for the construction of a 137-unit multi-family residential development, along with associated infrastructure (Figure 3). A remedial grading cut of five feet is estimated for the project (Goodman and Markouizos 2025).

According to Goodman and Markouizos (2025), the project property and surrounding area were rough graded by 1988, with two small canyons on the parcel filled in. Between 1988 and 1991, the site became a finished, mass-graded pad, with a fire station constructed on the northwest border, an office complex constructed on the southern border, and both Pacific Park Drive and Aliso Creek Road constructed on the northern and eastern borders.

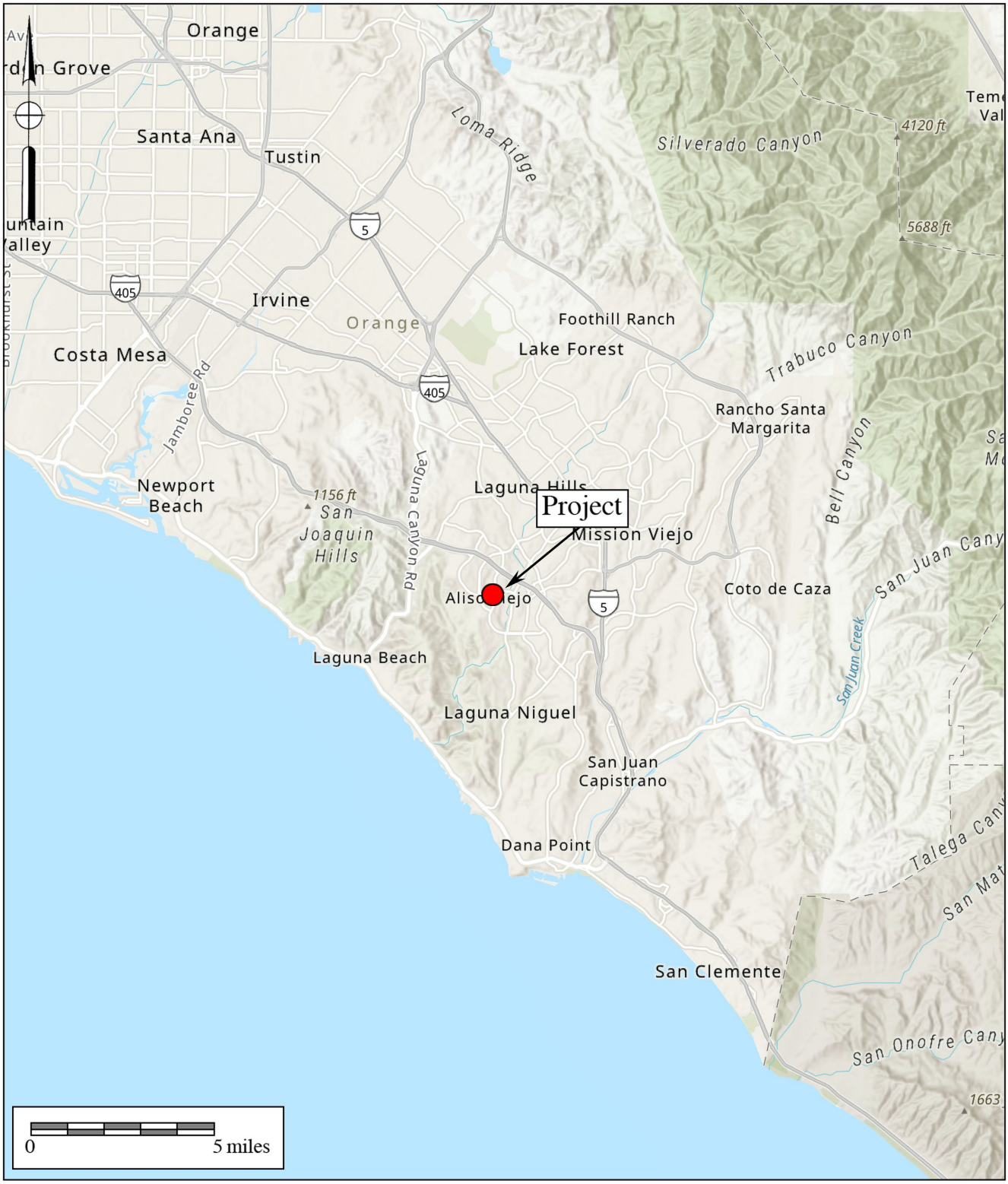
As the lead agency, the City of Aliso Viejo has required the preparation of a paleontological assessment to evaluate the project's potential to yield paleontological resources. The paleontological assessment of the project included a review of paleontological literature and fossil locality records in the area, a review of the underlying geology, and recommendations to mitigate impacts to potential paleontological resources, if necessary. A paleontological survey of the project was not performed, since the parcels are completely developed.

II. REGULATORY SETTING

CEQA, which is patterned after the National Environmental Policy Act, is the overriding regulation that sets the requirement for protecting California's cultural and paleontological resources. CEQA mandates that governing permitting agencies (lead agencies) set their own guidelines for the protection of nonrenewable paleontological resources under their jurisdiction.

State of California

Under "Guidelines for Implementation of the California Environmental Quality Act," as amended in December 2018 (California Code of Regulations [CCR] Title 14, Division 6, Chapter 3, Sections 15000 et seq.), procedures define the types of activities, persons, and public agencies required to comply with CEQA. Section 15063 of the CCR provides a process by which a lead agency may review a project's potential impact on the environment, determine whether the impacts are significant, and provide recommendations, if necessary.



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A Perennial Company

Figure 1

General Location Map

The Journey and Pacific Park Drive (Shea Aliso Viejo) Project

ESRI Street Map

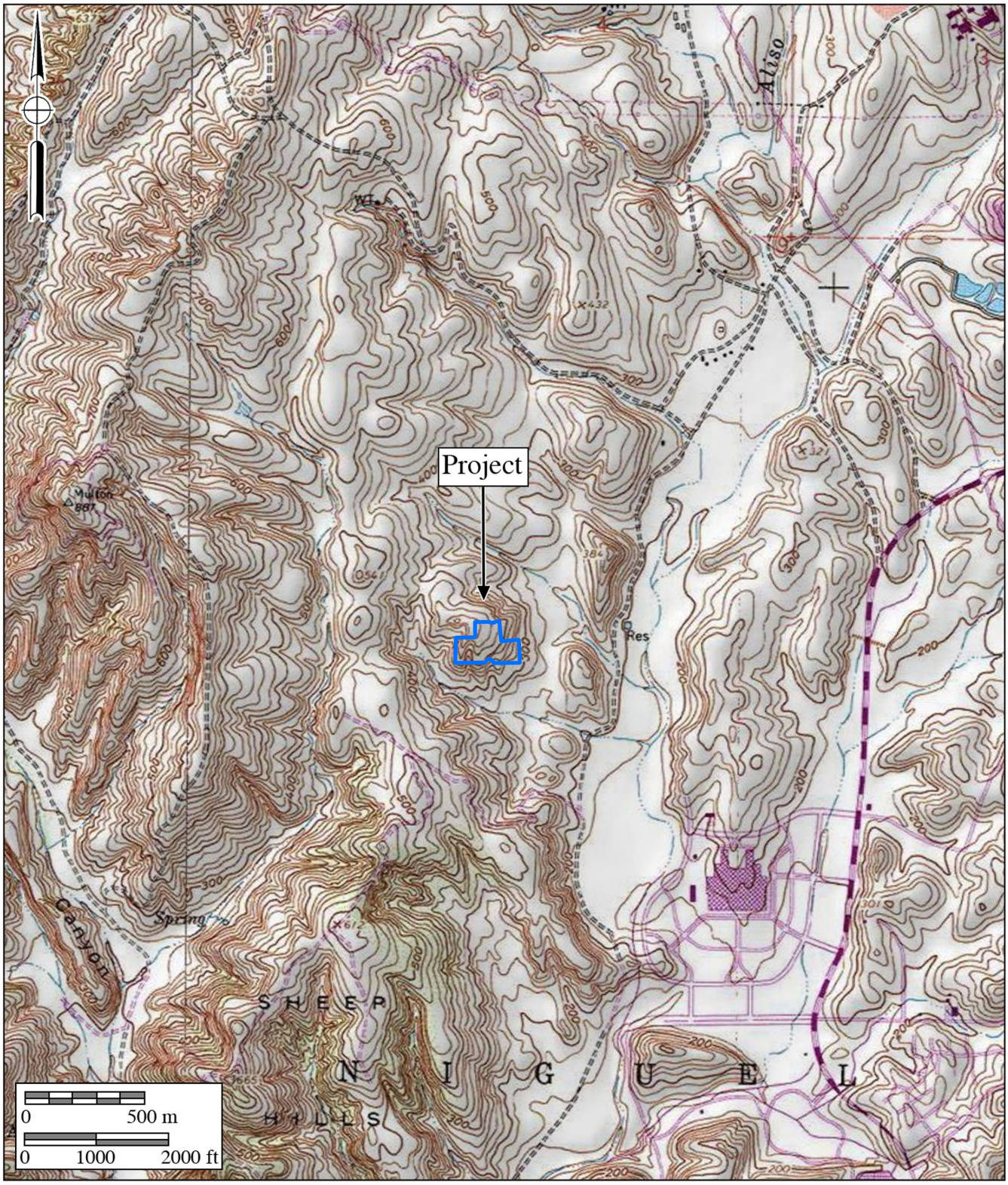

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Figure 2

Project Location Map

The Journey and Pacific Park Drive (Shea Aliso Viejo) Project

USGS *San Juan Capistrano* Quadrangle (7.5-minute series)

SITE DATA

GARDEN COURTS	**67**
PLAN 1 *(AFFORDABLE)*	14
PLAN 2	14
PLAN 3	14
PLAN 4	11
PLAN 5	14
ROWTOWNS	**70**
PLAN 1	15
PLAN 2	27
PLAN 3	28
TOTAL UNITS	**137**
PARKING	
GARAGE SPACES	260
STREET SPACES	85
TOTAL SPACES	**345** (343 REQ'D)
SPACES PER UNIT	*2.52 (2.5 REQ'D)*
OPEN SPACE	
TOTAL SITE AREA	**8.44 AC** (367,646 SQ.FT.)
CENTRAL PARK	7,000 SQ.FT.
PASEOS/GREEN COURTS	51,400 SQ.FT.
OPEN SPACE SUBTOTAL	**58,000 SQ.FT. (15.8%)**
SLOPE AREA	69,000 SQ.FT.
OPEN SPACE TOTAL	**127,400 SQ.FT. (34.7%)**

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Figure 3

Project Development Map

The Journey Parkway and Pacific Park Drive (Shea Aliso Viejo) Project

In CEQA's Environmental Checklist Form, a question to respond to is, "Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?" (Appendix G, Section VII, Part f). This is to ensure compliance with California Public Resources Code Section 5097.5, the law which protects nonrenewable resources including fossils, paraphrased below:

a) A person shall not knowingly and willfully excavate upon, or remove, destroy, injure or deface any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated on public lands, except with the express permission of the public agency having jurisdiction over such lands.
b) As used in this section, "public lands" means lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof.
c) A violation of this section is a misdemeanor.

City of Aliso Viejo

According to the General Plan of the City of Aliso Viejo, "the City will review future development proposals to ensure that cultural and historic [and paleontological] resources are conserved in compliance with this Element and the requirements of the CEQA" (City of Aliso Viejo 2004: COS-23).

III. GEOLOGY

The project lies within the San Joaquin Hills, a low mountain range characterized by multiple, mostly marine, Cenozoic geologic formations. The Pleistocene- to Pliocene-aged (approximately two to three million years old) Niguel Formation is partly mapped at the project, composed of marine deposits of interbedded, poorly sorted, coarse-grained sandstones and conglomerates (brown areas labeled "Tn" on Figure 4, after Morton and Miller 2006). However, in the Dana Point quadrangle, it consists of gray, fine-grained sandstones and siltstones (Tan 1999). Also mapped at the project is the Miocene-aged (approximately five- to 15-million-year-old) Monterey Formation, composed of siliceous and diatomaceous marine siltstones and sandstones (amber areas labeled "Tm"). The Niguel and Monterey Formations are fossiliferous (Eisentraut and Cooper 2002; Morton and Miller 2006; Kennedy and Tan 2007).

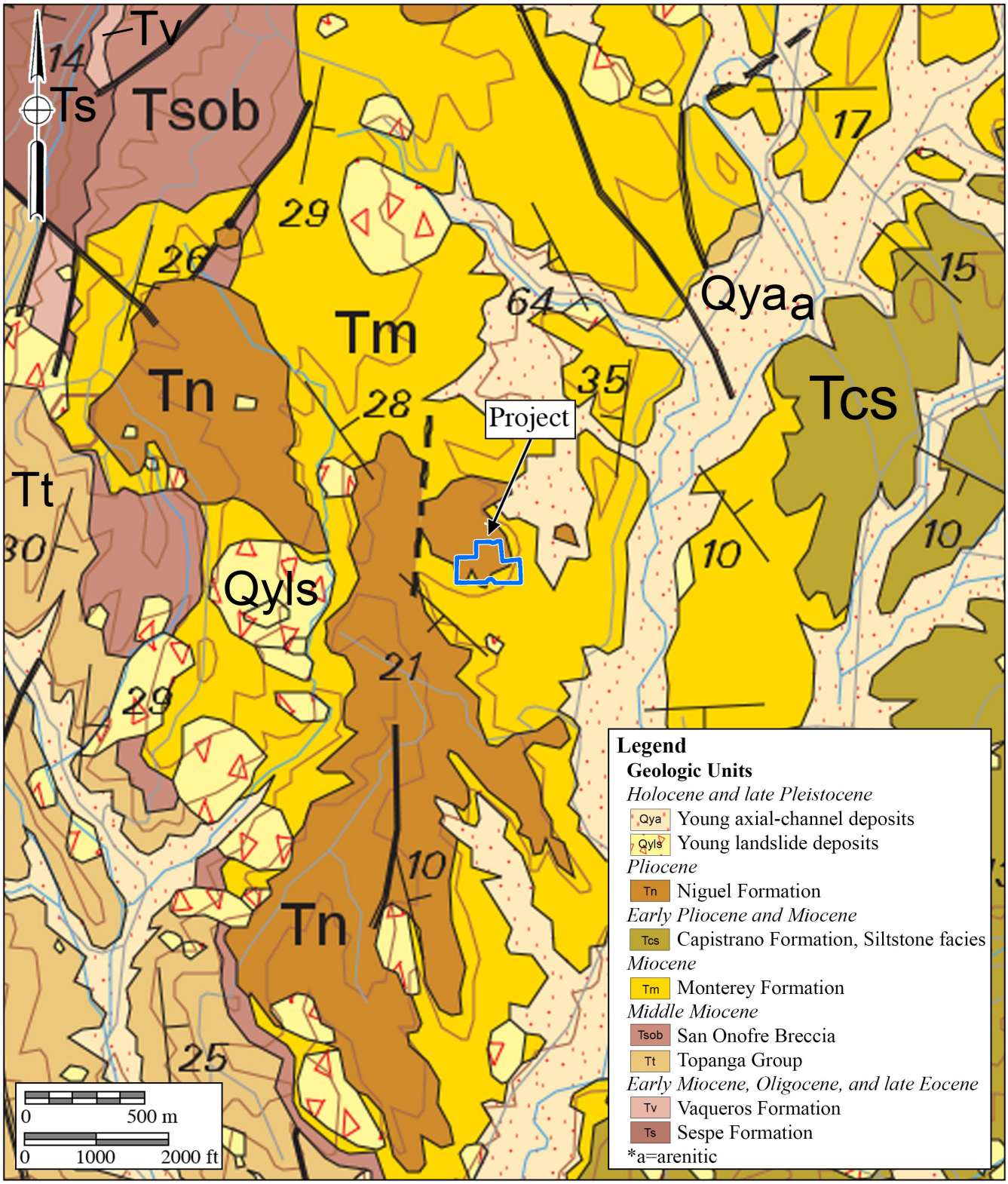

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Figure 4

Geologic Map

The Journey and Pacific Park Drive (Shea Aliso Viejo) Project

Geology after Morton and Miller (2006)

A due diligence geotechnical investigation was recently performed for the project by NMG Geotechnical, Inc. (Goodman and Markouizos 2025). The investigation found that the project is primarily covered by a thin veneer of compacted fill placed over sandstone and siltstone bedrock over most of the site. Quaternary-age alluvium was encountered in the southeast corner of the project at a depth of 40 feet. The existing compacted fills range from 2.5 to 40 feet thick. Deeper fills are generally located in the southern portion of the project.

IV. PALEONTOLOGICAL RESOURCES

Definition

Paleontological resources are the remains of prehistoric life that have been preserved in geologic strata. These remains are called fossils and include bones, shells, teeth, and plant remains (including their impressions, casts, and molds) in the sedimentary matrix, as well as trace fossils such as footprints and burrows. Fossils are considered older than 5,000 years of age (Society of Vertebrate Paleontology 2010) but may include younger remains (subfossils) when viewed in the context of local extinction of the organism or habitat. Fossils are considered a nonrenewable resource under state and local guidelines (see Section II of this report).

Paleontological Resource Records Search

A paleontological locality and records search was conducted by the OC Parks Division of Orange County for the project (Gelnaw 2025; Appendix B). The records search indicates that within one mile of the project, there are 66 fossil localities with 3,613 cataloged fossils, that represent mammals, birds, reptiles, and invertebrates from the Niguel, Monterey, and other formations.

V. PALEONTOLOGICAL SENSITIVITY

Overview

The degree of paleontological sensitivity of any particular area is based on a number of factors, including the documented presence of fossiliferous resources on a site or in nearby areas, the presence of documented fossils within a particular geologic formation or lithostratigraphic unit, and whether or not the original depositional environment of the sediments is one that might have been conducive to the accumulation of organic remains that may have become fossilized over time. As summarized in Gelnaw (Appendix B), the Niguel and Monterey formations have an extensive fossil record in Orange County and in the San Joaquin Hills.

Professional Standards

The Society of Vertebrate Paleontology (2010) has drafted guidelines that include four categories of paleontological sensitivity for geologic units (formations) that might be impacted by a proposed project, as paraphrased below:

- *High Potential:* Rock units from which vertebrate or significant invertebrate, plant, or trace fossils have been recovered.
- *Undetermined Potential:* Rock units for which little information is available concerning their paleontological content, geologic age, and depositional environment, and that further study is needed to determine the potential of the rock unit.
- *Low Potential:* Rock units that are poorly represented by fossil specimens in institutional collections or based on a general scientific consensus that only preserve fossils in rare circumstances.
- *No Potential:* Rock units that have no potential to contain significant paleontological resources, such as high-grade metamorphic rocks and plutonic igneous rocks.

Based upon these criteria, the Niguel and Monterey formations mapped at the project have a high potential to contain paleontological resources.

VI. CONCLUSIONS AND RECOMMENDATIONS

The Niguel and Monterey formations (bedrock) mapped at the project have a high potential to yield significant paleontological resources, based upon age, depositional environment, and extensive regional fossil records. Therefore, paleontological monitoring is recommended during earth disturbance activities within these formations, wherever they occur beneath artificial fill soils. Monitoring of artificial fill or disturbed deposits is not recommended.

Based upon the conclusions and recommendations above, a Paleontological Resource Impact Mitigation Program (PRIMP) is warranted. The following PRIMP is suggested and, when approved by the City of Aliso Viejo and implemented, would reduce adverse impacts to potential paleontological resources to a level below significant.

Suggested PRIMP

1. All mitigation programs shall be performed by a qualified professional (project) paleontologist, defined as an individual with a master's or doctorate in paleontology or geology who has proven experience and is knowledgeable in professional paleontological procedures and techniques. Fieldwork may be conducted by a qualified paleontological monitor, defined as an individual who has experience in the collection and salvage of fossil materials. The paleontological monitor shall always work under the direction of a qualified paleontologist.
2. Starting at one foot above the artificial fill/bedrock interface, full-time monitoring shall be conducted in areas of grading or excavation within the Niguel and Monterey formations. Monitoring of artificial fill or disturbed deposits that may be present otherwise is not required.
3. Paleontological monitors will be equipped to salvage fossils as they are unearthed to

avoid construction delays. The monitor must be empowered to temporarily halt or divert equipment to allow for the removal of abundant or large specimens in a timely manner. Monitoring may be reduced if the potentially fossiliferous units are not present in the subsurface, or, if present, are determined upon exposure and examination by qualified paleontological personnel to have low potential to contain fossil resources. The monitor shall notify the project paleontologist, who will then notify any concerned parties of the discovery.

4. Paleontological salvage during trenching and boring activities is typically from the generated spoils and will not delay trenching or drilling activities. Fossils will be collected and placed in cardboard flats or plastic buckets and identified by field number, collector, and date collected. Before the site is vacated and the fossils are moved to a safe place, notes are taken on the map location and stratigraphy of the site. On mass grading projects, discovered fossil sites are protected by flagging to prevent them from being overrun by earthmovers (scrapers) before salvage begins. Fossils will be collected in a similar manner, with notes and photographs being taken before removing the fossils. Precise location of the site is determined through use of handheld Global Positioning System units. If a large terrestrial vertebrate, such as a large bone or a mammoth tusk, is too large to be easily removed by a single monitor, a fossil recovery crew shall excavate around the find(s), encase the find(s) within a plaster and burlap jacket, and remove the find(s) after the plaster is set. For large fossils, use of the contractor's construction equipment may be solicited to help move the jacket to a safe location.
5. In the laboratory, individual fossils will be cleaned of extraneous matrix, any breaks will be repaired, and the specimen, if needed, will be stabilized by soaking in an archivally approved acrylic hardener (*e.g.,* a solution of acetone and Paraloid B-72).
6. Recovered specimens will be prepared to a point of identification and permanent preservation (not display), including screen-washing sediments to recover small invertebrates and vertebrates. Preparation of individual vertebrate fossils is often more time-consuming than for accumulations of invertebrate fossils.
7. Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage (*e.g.,* the Orange County Parks' Cooper Center) shall be conducted. The paleontological program should include a written repository agreement prior to initiating mitigation activities. Prior to curation, the lead agency (the City of Aliso Viejo) will be consulted on the repository/museum to receive the fossil material.
8. A final report of findings and significance will be prepared, including lists of all fossils recovered and necessary maps and graphics to accurately record their original location(s). The report, when submitted to and accepted by the appropriate lead agency, will signify satisfactory completion of the project program to mitigate impacts

to any potential nonrenewable paleontological resources (*i.e.,* fossils) that might have been lost or otherwise adversely affected without such a program in place.

VII. CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this paleontological report, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief and have been compiled in accordance with CEQA criteria.

July 30, 2025

Todd A. Wirths, M.S., P.G.
Principal Paleontologist
California Professional Geologist No. 7588

Date

VIII. REFERENCES

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Eisentraut, P.J. and Cooper, J.D. 2002. Final Report, Development of a model curation program for Orange County's Archaeological & Paleontological Collections. Unpublished report prepared for the County of Orange, Public Facilities and Resources Department, Harbors, Beaches and Parks, Santa Ana, Calif.

Gelnaw, W. 2025. Paleontological record search letter for the Journey and Pacific Park Drive Project. For BFSA Environnemental Services, Poway, California, by the OC Parks Division of Orange County.

Goodman, W., and Markouizos, K. 2025. Geotechnical Due Diligence Evaluation for the Pacific Corporate Plaza Site, 27081, Aliso Creek Road, City of Aliso Viejo, Orange County, California. Prepared for Shea Homes, LP, Irvine, California, by NMG Geotechnical, Inc., Irvine, California.

Kennedy, M.P. and Tan, S.S. 2007. Geologic map of the Oceanside 30' X 60' quadrangle, California. U.S. Geological Survey, Regional Geologic Map Series, scale 1:100,000.

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1:100,000.

Society of Vertebrate Paleontology. 2010. Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources; by the SVP Impact Mitigation Guidelines Revision Committee: https://vertpaleo.org/wp-content/uploads/2021/01/SVP_Impact_Mitigation_Guidelines.pdf.

Tan, S.S. 1999. Geologic map of the Dana Point Quadrangle, Orange County, California: A digital database. California Dept. of Conservation, Div. of Mines and Geology, v. 1.0, scale 1:24,000.

APPENDIX A

Qualifications of Key Personnel

Todd A. Wirths, MS, PG No. 7588

Principal Paleontologist

BFSA Environmental Services, a Perennial Company
14010 Poway Road • Suite A •
Phone: (858) 679-8218 • Fax: (858) 679-9896 • Email: twirths@bfsa.perennialenv.com

BFSA Environmental Services
A Perennial Company

Education

Master of Science, Geological Sciences, San Diego State University, California **1995**

Bachelor of Arts, Earth Sciences, University of California, Santa Cruz **1992**

Professional Certifications

California Professional Geologist #7588, 2003
Riverside County Approved Paleontologist
San Diego County Qualified Paleontologist
Orange County Certified Paleontologist
OSHA HAZWOPER 40-hour trained; current 8-hour annual refresher

Professional Memberships

Board member, San Diego Geological Society
San Diego Association of Geologists; past President (2012) and Vice President (2011)
South Coast Geological Society
Southern California Paleontological Society

Experience

Mr. Wirths has more than a dozen years of professional experience as a senior-level paleontologist throughout southern California. He is also a certified California Professional Geologist. At BFSA, Mr. Wirths conducts on-site paleontological monitoring, trains and supervises junior staff, and performs all research and reporting duties for locations throughout Los Angeles, Ventura, San Bernardino, Riverside, Orange, San Diego, and Imperial Counties. Mr. Wirths was formerly a senior project manager conducting environmental investigations and remediation projects for petroleum hydrocarbon-impacted sites across southern California.

Selected Recent Reports

2019 *Paleontological Assessment for the 10575 Foothill Boulevard Project, City of Rancho Cucamonga, San Bernardino County, California*. Prepared for T&B Planning, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2019 *Paleontological Assessment for the MorningStar Marguerite Project, Mission Viejo, Orange County, California.* Prepared for T&B Planning. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2019 *Paleontological Monitoring Report for the Nimitz Crossing Project, City of San Diego.* Prepared for Voltaire 24, LP. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2019 *Paleontological Resource Impact Mitigation Program (PRIMP) for the Jack Rabbit Trail Logistics Center Project, City of Beaumont, Riverside County, California.* Prepared for JRT BP 1, LLC. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2020 *Paleontological Monitoring Report for the Oceanside Beachfront Resort Project, Oceanside, San California.* Prepared for S.D. Malkin Properties. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2020 *Paleontological Resource Impact Mitigation Program for the Nakase Project, Lake Forest, Orange County, San California.* Prepared for Glenn Lukos Associates, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2020 *Paleontological Resource Impact Mitigation Program for the Sunset Crossroads Project, Banning, Riverside County*. Prepared for NP Banning Industrial, LLC. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2020 *Paleontological Assessment for the Ortega Plaza Project, Lake Elsinore, Riverside County*. Prepared for Empire Design Group. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2020 *Paleontological Resource Record Search Update for the Green River Ranch III Project, Green River Ranch Specific Plan SP00-001, City of Corona, California*. Prepared for Western Realco. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2020 *Paleontological Assessment for the Cypress/Slover Industrial Center Project, City of Fontana, San Bernardino County, California*. Prepared for T&B Planning, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2020 *Paleontological Monitoring Report for the Imperial Landfill Expansion Project (Phase VI, Segment C-2), Imperial County, California*. Prepared for Republic Services, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2021 *Paleontological Assessment for the Manitou Court Logistics Center Project, City of Jurupa Valley, Riverside County, California*. Prepared for Link Industrial. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2021 *Paleontological Resource Impact Mitigation Program for the Del Oro (Tract 36852) Project, Menifee, Riverside County*. Prepared for D.R. Horton. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2021 *Paleontological Assessment for the Alessandro Corporate Center Project (Planning Case PR-2020-000519), City of Riverside, Riverside County, California*. Prepared for OZI Alessandro, LLC. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

2021 *Paleontological Monitoring Report for the Boardwalk Project, La Jolla, City of San Diego*. Prepared for Project Management Advisors, Inc. Report on file at Brian F. Smith and Associates, Inc., Poway, California.

APPENDIX B

Paleontological Locality Records Search

DYLAN WRIGHT
DIRECTOR
OC COMMUNITY RESOURCES

CYMANTHA ATKINSON
ASSISTANT DIRECTOR
OC COMMUNITY RESOURCES

JOANNE VEEDOR
DIRECTOR
ADMINISTRATIVE SERVICES

MONICA SCHMIDT
DIRECTOR
OC ANIMAL CARE

JULIA BIDWELL
DIRECTOR
OC HOUSING & COMMUNITY DEVELOPMENT

RENEE RAMIREZ
DIRECTOR
OC COMMUNITY SERVICES

PAM PASSOW
DIRECTOR
OC PARKS

JULIE QUILLMAN
COUNTY LIBRARIAN
OC PUBLIC LIBRARIES

OCparks
13042 OLD MYFORD ROAD
IRVINE, CA 92602
PHONE: 866.OCPARKS

OC Community Resources

Brian F. Smith and Associates
14010 Poway Road
Poway, CA 92064

Todd Wirths,

I have thoroughly searched the Orange County Paleontology Collection (OCPC) records for locality and specimen data relevant to the project area at the corner of Journey and Pacific Park Dr, in Aliso Viejo, California. The project details, comprising a KMZ file with the project area outline, were sent to me via email on June 20, 2025. The proposed project area occupies approximately 34413 square meters of an existing office park. Our collection has no records of fossil localities within the proposed project area, but there are 66 known localities within a one-mile radius (Table 1), including several major bone beds. There are 3613 cataloged fossils from within a one-mile radius of the project area, representing a mammal-dominated assemblage that also includes many fish, reptiles, birds, and invertebrates.

The proposed project area occupies an existing development. The sediment there has likely been disturbed or compacted at the surface for structural support and stability. On-site assessment or reference to grading plans for the existing development in the project area would be necessary to determine if new excavations are likely to disturb native bedrock. Most of the project area is mapped as being underlain by the Niguel formation (Tn) and Monterey (Tm) formations[1] (Figure 1). The Niguel formation lies unconformably on top of the Monterey formation and the extent to which the Niguel formation remains after prior grading is uncertain. Within the one-mile radius, there are also outcrops of the siltstone facies of the Capistrano Formation to the east, and The Topanga formation to the west. The Capistrano formation should overly the Monterey formation, so it is unlikely to be encountered during excavation. Similarly, because of the thickness of the Monterey formation, the Topanga formation is also unlikely to be disturbed during excavation. There are quaternary fluvial deposits west of the project area, but also seem unlikely to be disturbed during excavation because shallow materials were previously disturbed during development of the office park.

Precise geographical data is provided for each locality in keeping with best practices for records searches[2]. However, geographic data provided by the Orange County Paleontology Collection may not be published in public reports or replicated for other projects without the express written permission of OC Parks. Several localities were originally reported with the same coordinates and may represent different stratigraphic levels, or an approximation based on the coordinates of a local landmark. Field notes associated with these localities does not clarify why they have the same coordinates. I am also providing the lists of taxa known in our collection from each of the relevant formations (Tables 2-3) and a breakdown of the relative abundance of different important taxa in each formation (Figures 3-4).

The Niguel formation in Orange County typically produces a mix of terrestrial and shallow marine fauna, with a roughly even mix of vertebrate and invertebrate remains (Figure 3, Table 2). Niguel formation fossils in the OCPC tend to be small, most recovered by screen washing. The Niguel formation correlates with

the Fernando formation in the west Los Angeles basin and are both treated the same here because there is inadequate lithostratigraphic distinction in Orange County to distinguish them [3, 4, 5].

The Monterey formation is the most fossiliferous stratigraphic unit in Orange County (Figure 2) and has produced a diverse Miocene assemblage of micro and macro fossils (Figure 4, Table 3). Of the 3613 catalog numbers within a one-mile buffer around the project area, 3262 are from the Monterey formation. The Monterey assemblage here is dominated by macro vertebrate remains, mostly from mammals. Of the 3613 catalog numbers associated with this area, approximately 49% are mammal remain, including several articulated skeletons of pinnipeds, whales and sirenians.

This records search covers only the Orange County Paleontology Collections curated at the Cooper Lab and Ralph B. Clark Regional Park. It is not intended to be an exhaustive paleontological survey of the proposed project area covering other institutional records, a literature survey, or any potential on-site survey. The Natural History Museum of Los Angeles County and the San Diego Museum of Natural History both have extensive collections originating from Orange County and should also be consulted to evaluate the paleontological impact risk.

Literature Cited:

1. Morton, D.M. and F.K. Miller. 2006. Geologic Map of the San Bernardino and Santa Ana 30' x60' quadrangles, California. U.S. Geological Survey Open File Report 2006-1217.
2. Murphey, P.C., G.E. Knauss, L.H. Fisk, T.A. Demere, R.E. Reynolds. 2019. Best practices in mitigation paleontology. Proceedings of the San Diego Society of Natural History 47: 1-43.
3. Davis, G.E. 1998. Systematic paleontology of a densely fossiliferous, upper Pliocene molluscan shell lens, 6th and Flower Streets, Los Angeles, California, with commentary on the stratigraphic nomenclature of the "Fernando Formation" [Ph.D. dissertation]: Northridge, California State University, 235 p.
4. Campbell, R.H., C.J. Wills, P.J. Irvine, B.J. Swanson, C.I. Gutierrez, and M.D. O'Neal. 2014. Preliminary geologic map of the Los Angeles 30' x 60' quadrangle, California.
5. Buczek, A. J., A.J.W. Hendy, M.J. Hopkins, and J.A. Sessa. 2021. On the reconciliation of biostratigraphy and strontium isotope stratigraphy of three southern Californian Plio-Pleistocene formations. GSA Bulletin; January/February 2021; v. 133 (1/2), p. 100-114; https://doi.org/10.1130/B35488.1

Best Regards,

07/22/2025

Dr. William Gelnaw, PhD
Paleontology Curator
OC Parks

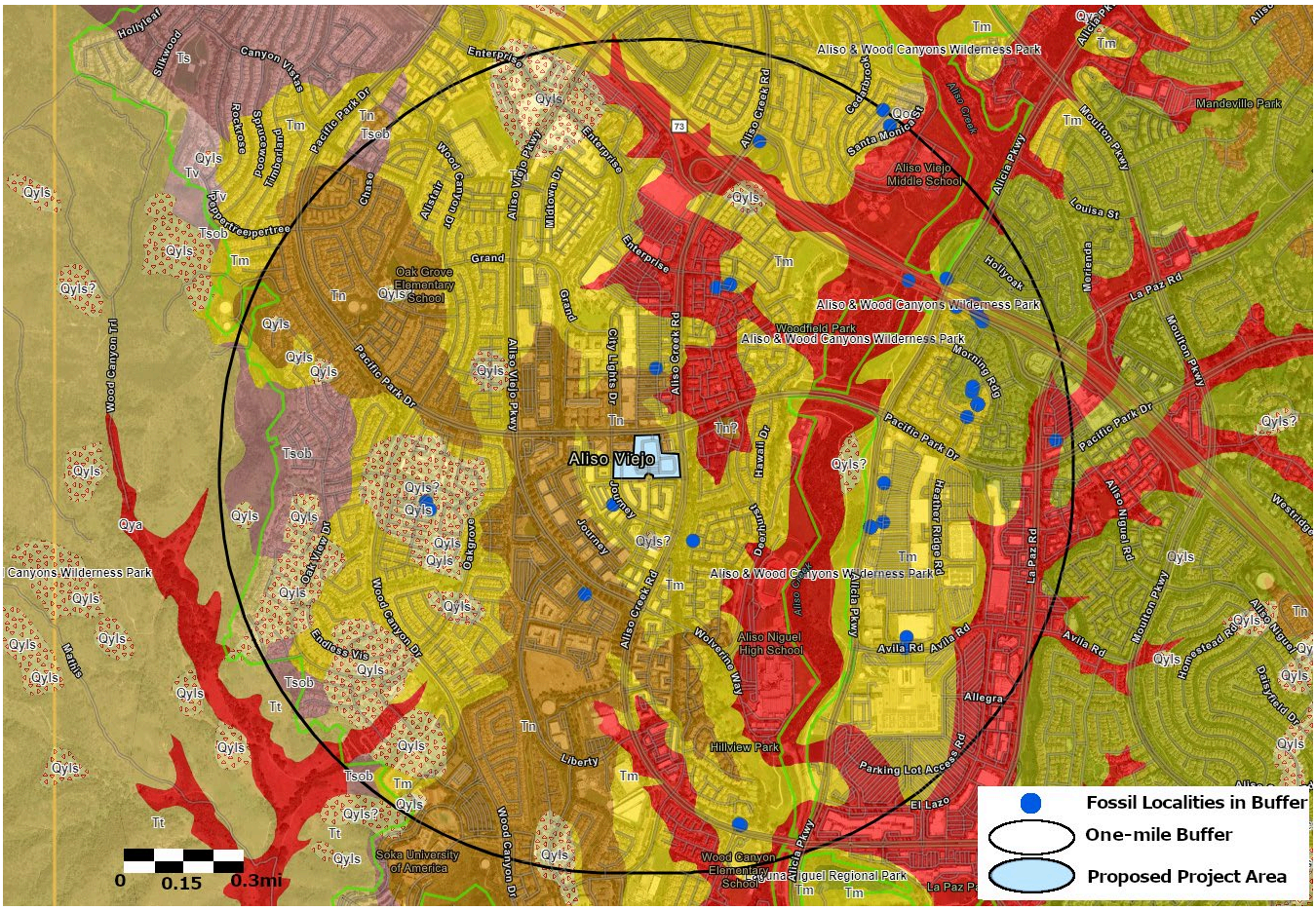

Figure 1. Geology and fossil localities in a one-mile radius (black ring) around the proposed project area (blue polygon), modified from Morton & Miller (2006).

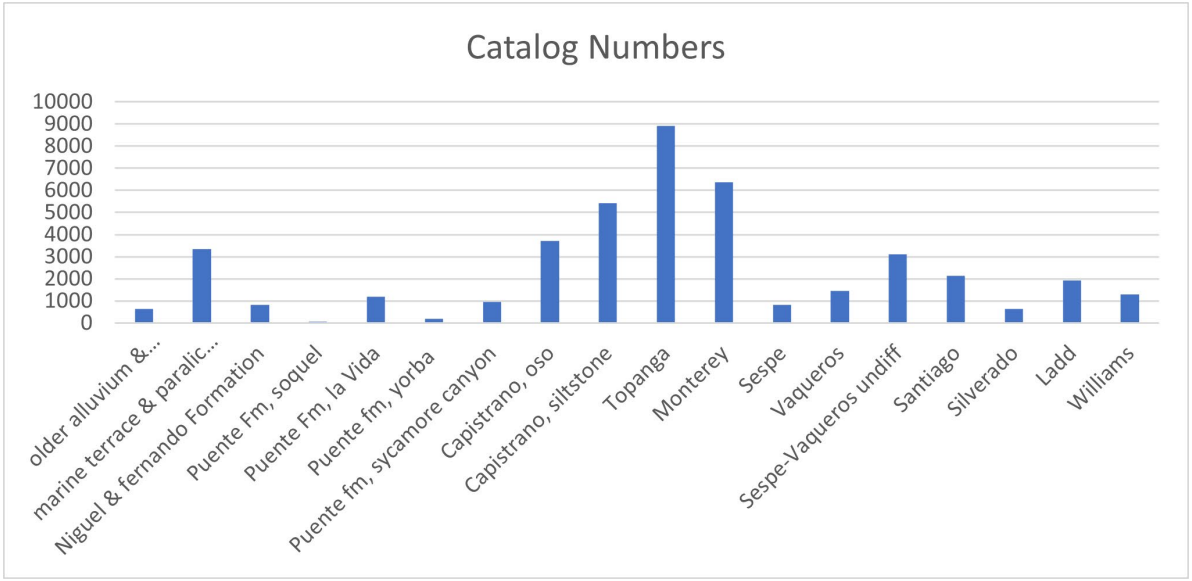

Figure 2. Plot of the abundance of fossils represented by the number of OCPC catalog entries from each formation.

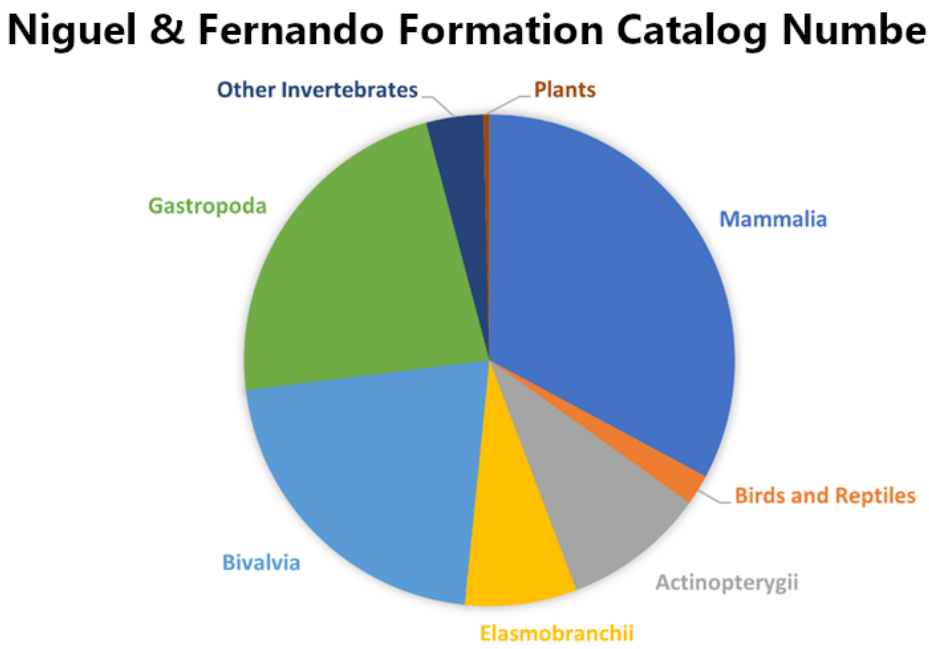

Figure 3. Distribution of taxa in the Niguel and Fernando formations in Orange County, based on number of cataloged specimens in OCPC.

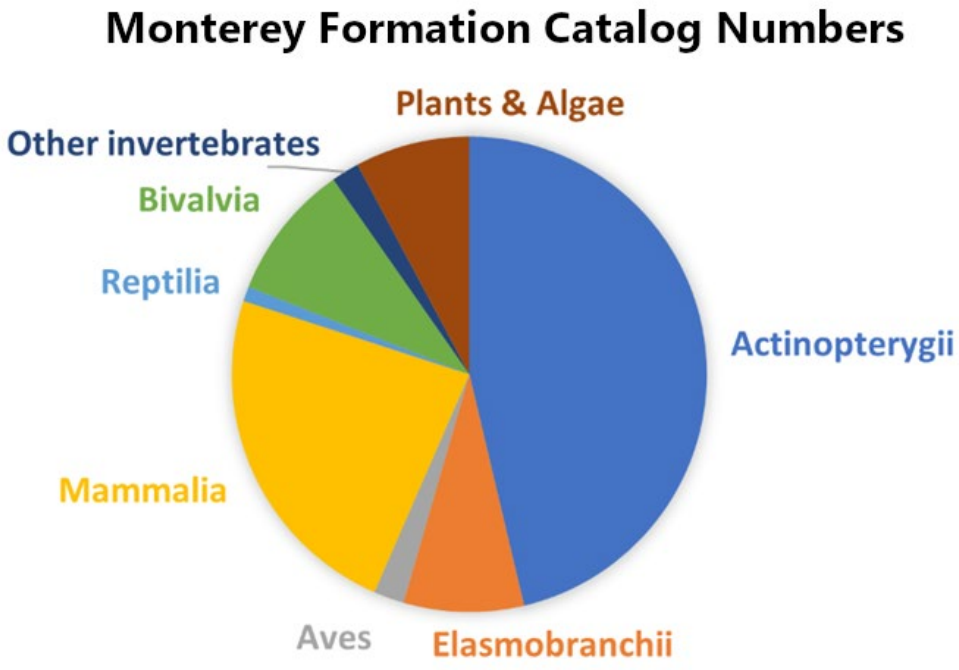

Figure 4. Distribution of taxa in the Monterey formation in Orange County, based on number of cataloged specimens in OCPC.

Table 1: Orange County Paleontology Collection Localities within a one-mile radius of the project area

Locality Number	Latitude	Longitude	Formation
01006	33.56715	-117.71499	Older Alluvium
03427	33.5762051	-117.7133056	Older Alluvium
00122	33.57119	-117.7107	Stream Terrace
00341	33.571666	-117.71027	Capistrano
00345	33.571666	-117.71027	Capistrano
03120	33.571666	-117.71027	Capistrano
03187	33.575334	-117.710372	Capistrano
03198	33.575334	-117.710372	Capistrano?
03931	33.5750261	-117.7103111	Capistrano
03932	33.5747141	-117.7100386	Capistrano
04007	33.5762888	-117.7116273	Capistrano
04013	33.5753321	-117.7105097	Capistrano
03137	33.566667	-117.722778	Monterey or Capistrano
03138	33.556225	-117.72068	Monterey or Capistrano
03139	33.556225	-117.72068	Monterey or Capistrano
03142	33.556249	-117.720761	Monterey or Capistrano
00134	33.58188	-117.71413	Monterey
00333	33.571666	-117.71027	Monterey
00334	33.571666	-117.71027	Monterey
00338	33.571666	-117.71027	Monterey
00339	33.571666	-117.71027	Monterey
00340	33.571666	-117.71027	Monterey
00344	33.571666	-117.71027	Monterey
00346	33.571666	-117.71027	Monterey
00360	33.571666	-117.71027	Monterey
00485	33.56732	-117.71439	Monterey
00486	33.56273	-117.71348	Monterey
00487	33.56312	-117.71338	Monterey
00499	33.570323	-117.706828	Monterey
00530	33.567962	-117.7263	Monterey
01002	33.56715	-117.71499	Monterey
01003	33.56715	-117.71499	Monterey
01004	33.56715	-117.71499	Monterey
01005	33.56877	-117.714354	Monterey
01007	33.56715	-117.71499	Monterey
01008	33.56715	-117.71499	Monterey
01009	33.56715	-117.71499	Monterey
01010	33.56715	-117.71499	Monterey
02353	33.56715	-117.71499	Monterey
03116	33.571666	-117.71027	Monterey

Locality Number	Latitude	Longitude	Formation
03117	33.571666	-117.71027	Monterey
03123	33.571666	-117.71027	Monterey
03125	33.572138	-117.710504	Monterey
03127	33.564699	-117.727564	Monterey
03130	33.582453	-117.714406	Monterey
03140	33.576065	-117.72114	Monterey
03141	33.572987	-117.724424	Monterey
03143	33.575964	-117.721748	Monterey
03144	33.576065	-117.72114	Monterey
03146	33.571666	-117.71027	Monterey
03178	33.572317	-117.710461	Monterey
03426	33.5813121	-117.7198448	Monterey
03933	33.5747831	-117.7100779	Monterey
04010	33.5752452	-117.7112022	Monterey
04125	33.568078	-117.734538	Monterey
04126	33.567817	-117.734388	Monterey
04136	33.56715	-117.71499	Monterey
04138	33.56715	-117.71499	Monterey
04139	33.56715	-117.71499	Monterey
04140	33.56715	-117.71499	Monterey
04141	33.56715	-117.71499	Monterey
04142	33.56715	-117.71499	Monterey
04143	33.56715	-117.71499	Monterey
04144	33.56715	-117.71499	Monterey
04145	33.56715	-117.71499	Monterey
04146	33.56715	-117.71499	Monterey

Table 2: Taxa found in Niguel & Fernando Formations in Orange County

Class	Order	Family	Taxa Present
Arthropoda			
Cirripedia	Sessilia	Balanidae	*Balanus, Megabalanus*
Malacostraca	Decapoda		Decapoda indet.
Maxillopoda			Maxillopoda indet.
Vertebrata			
Actinopterygii	Perciformes	Anarhichidadidae	
		Labridae	*Semicossyphus pulcher*
		Scaridae	Scaridae indet.
	Salmoniformes	Salmonidae	Oncorhynchus
	Uranoscopiformes	Ammodytidae	Ammodytidae indet.
Elasmobranchii	Carcharhiniformes	Carcharhinidae	*Carcharhinus, Caleocerdo, Hemipristis serra, Physogaleus*

		Sphyrnidae	*Sphyrna*
		Triakidae	*Galeorhinus*
	Heterodontiformes	Heterodontidae	*Heterodontus*
	Hexanchiformes	Hexanchidae	Hexanchidae indet.
	Lamniformes	Cetorhinidae	*Cetorhinus*
		Lamnidae	*Carcharodon carcharias, Isurus hastalis, I. oxyrinchus, Lamna,* aff. *Megachasma*
		Otodontidae	*Otodus megalodon*
	Myliobatiformes	Dasyatidae	*Dasyatis*
		Myliobatidae	*Myliobatis*
	Rajiformes	Rajidae	Rajidae indet.
	Squaliformes	Squalidae	*Etmopterus, Squalus, Squatina californica*
Aves	Anseriformes	Anatidae	*Chendytes lawi*
	Charadriiformes	Alcidae	*Mancalla*
Mammalia	Artiodactyla	Bovidae	*Bison latifrons*
		Camelidae	*Camelops*
		Delphinidae	Delphinidae indet.
		Physeteridae	Physeteridae indet.
			Mysticeti
	Carnivora	Otariidae	Otariidae indet.
		Felidae	Felidae indet.
	Lagomorpha	Leporidae	Leporidae indet.
	Perissodactyla	Equidae	*Equus occidentalis*
	Proboscidea	Elephantidae	*Mammuthus*
	Rodentia	Cricetidae	*Microtus cf. californicus*
		Geomyidae	*Thomomys*
	Sirenia	Dugongidae	*Dugongidae indet.*
Reptilia	Testudines	Democheliidae	*Dermochelys*
Echinodermata			
Echinoidea	Clypeasteroida		Clypeasteroida indet.
	Echinolampadacea	Dendrasteridae	*Dendraster*
Brachiopoda			
Brachiopoda	Rhynchonellata	Terebratulida	
Bryozoa			
Bryozoa			
Cnideria			
Anthozoa	Scleractinia	Caryophylliidae	*Paracyathus stearnsii*
Mollusca			
Bivalvia	Arcida	Arcidae	*Anadara, Glycymeris*
	Cardiida	Cardiidae	*Trachycardium procerum*
		Donacidae	*Donax gouldii*

		Tellinidae	*Tellina*
		Ungulinidae	*Diplodonta sericata*
	Carditida	Carditidae	*Cardita, Cyclocardia*
	Mytilida	Mytilidae	*Mytilus*
	Nuculanida	Nuculanidae	*Nuculana*
	Nuculida	Nuculidae	*Nucula*
	Ostreida	Ostreidae	*Dendostrea vespertina, Ostrea lurida, O. vespertina*
	Pandorida	Lyonsiidae	*Entodesma*
	Pectinida	Pectinidae	Pectinidae indet.
	Pholadida	Pholadidae	Pholadidae indet.
	Poromyida	Pormyidae	*Poromya*
	Venerida	Mactridae	*Mactra*
		Veneridae	*Amiantis callosa, Chione, Dosinia ponderosa, Tivela stultorum*
Gastropoda	Archaeogastropoda	Acmaeidae	*Acmaea*
		Trochidae	*Tegula*
		Turbinidae	*Astrea*
	Elobiida	Ellobiidae	*Melampus*
	Littorinimorpha	Calyptraeidae	*Crepidula fornicata, C. princeps*
		Naticidae	*Polinices reclusiana*
		Triviidae	*Trivia*
		Vermetidae	*Petaloconchus, Sperpulorbis, Thylaeodus*
		Cerithiidae	*Bittium*
		Epitoniidae	*Epitonium, Opalia*
	Mesogastropoda	Potamididae	*Cerithideopsis californica*
		Turritellidae	*Turritella*
	Neogastropoda	Conidae	*Californiconus californicus*
		Olividae	*Olivella baetica*
		Mitridae	Mitridae inet.
		Muricidae	*Ocenebra*
		Olividae	*Olivella baetica*
Scaphopoda	Dentaliidae	Dentaliidae	Dentalium
Porifera			
Demospongiae	Clionaida		Clionaida indet.
Plants and Algae			
Angiospermae	Arecales	Arecaceae	Arecaceae indet.
	Fagales	Fagaceae	*Quercus*
Traces			
Rhizolith			*Rhizolith*
Foraminifera			
			Foraminifera indet.

Table 3: Taxa found in the Monterey Formation in Orange County

Class	Order	Family	Taxa Present
Arthropoda			
Cirripedia	Sessilia	Balanidae	*Balanus*
Malacostraca	Amphipoda		Amphipoda indet.
	Decapoda	Callianassidae	*Callianassa*
	Stomatopoda		Stomatopoda indet.
Maxillopoda			Maxillopoda indet.
Brachiopoda			
			Brachiopoda indet.
Bryozoa			
Gymnolaemata	Cheilostomata	Gemelliporellidae	Gemelliporella punctata
Vertebrata			
Actinopterygii	Acipenseriformes	Acipenseridae	Acipenseridae indet.
	Anguilliformes (Apodes)		Anguilliformes (Apodes) indet.
	Argentiniformes	Bathylagidae	Bathylagidae indet.
	Atheriniformes	Atherinidae	Atherinidae indet.
	Clupeiformes	Clupeidae + Engraulidae + Dussumieriidae	*Etringus scintillans, Ganolytes cameo, Xyne grex*
	Gadiformes	Merulucciidae	*Eclipes santamonicae, Gadus*
	Myctophiformes	Myctophidae (Scopelidae)	*Lampanyctus bolini, L. petrolifer*
	Notacanthiformes	Halosauridae	*Laytonia californica*
	Perciformes	Carangidae (Seriolidae)	*Decapterus, Seriola*
		Clinidae	Clinidae indet.
		Euzaphlegidae	*Thyrsocles kriegeri*
		Labridae	Semicossyphus pulcher
		Oplegnathidae	Oplegnathidae indet.
		Scaridae	Scaridae indet.
		Sciaenidae	*Lompoquia retropes*
		Scombridae	*Acanthocybium, Sarda, Scomber*
		Serranidae	*Serranus*
		Sparidae	*Plectrites*
		Sphyraenidae	*Sphyraena*

	Pleuronectiformes	Bothidae	*Paralichthys*
	Salmoniformes	Salmonidae	*Oncorhynchus rastrosus*
	Scorpaeniformes	Agonidae	*Bathyagonus*
		Scorpaenidae	Scorpaenidae indet.
	Stomiiformes	Gonostomatidae	*Cyclothone*
		Chauliodontidae	*Chauliodus eximius*
	Syngnathiformes	Syngnathidae	*Syngnathus acus, S. emeritus*
	Tetradontiformes	Balistidae	*Balistes*
		Diodontidae	*Diodon*
		Tetraodontidae	Tetraodontidae indet.
Holocephali	Chimaeriformes	Chimaeridae	*Chimaera*
Elasmobranchii			*Batoidea*
	Galeomorpha	Carcharhinidae	*Carcharhinus, Galeocerdo aduncus, Hemipristis serra, Negaprion, Rhizoprionodon*
		Hexanchidae	*Hexanchus*
		Sphrynidae	*Sphyrna*
	Lamniformes	Alopiidae	*Alopias*
		Carchariidae	*Carcharias*
		Cetorhiniidae	*Cetorhinus*
		Lamnidae	*Carcharodon carcharias, Isurus hastalis, I. oxyrinchus, I. planus*
		Otodontidae	*Otodus megalodon*
	Myliobatiformes	Dasyatidae	*Dasytatis*
		Gymnuridae	*Gymnura, Pteroplatea lapislutosa*
		Mobulidae	*Mobula*
		Myliobatidae	*Myliobatis*
	Rajiformes	Rajidae	*Raja*
	Squalomorpha	Echinorhinidae	*Echinorhinus*
		Squalidae	*Squalus*
		Squatinidae (Rhinidae)	*Squatina*
Mammalia	Artiodactyla		Mysticeti
		Antracotheriidae	Octacodon
		Balaenopteridae	Balaenopteridae indt.

		Camelidae	Camelidae indet.
		Delphinidae	Delphinidae indet.
		Kentriodontidae	Kentriodontidae indet.
		Physeteridae	*Scaldicetus*
		Ziphiidae	Ziphiidae indet.
	Carnivora	Desmatophocidae	*Allodesmus*
		Mustelidae	*Enhydritherium*
		Odobenidae	*Imagotaria, Neotherium, Pontolis barroni*
		Otariidae	*Pithanotaria, Zalophus*
	Desmostylia	Desmostylidae	*Desmostylus*
		Paleoparadoxiidae	*Neoparadoxia cecilialina*
	Perissodactyla	Equidae	Equidae indet.
	Proboscidea	Gomphotheriidae	Gomphotheriidae indet.
	Rodentia		Rodentia indet.
	Sirenia	Dugongidae	*Dusisiren*
Aves	Anseriformes	Anatidae	Anatidae indet.
	Charadriiformes	Alcidae	*Cephus, Cerorhinca, Mancalla, Praemancalla, Uria paleohesperis*
	Gaviiformes	Gavidae	*Gavia*
	Pelecaniformes	Phalacrocoracidae	Phalacrocoracidae indet.
		Sulidae	*Morus lampocanus, M. magnus*
	Procellariiformes	Diomedeidae	*Diomedea*
		Procellariidae	*Puffinus*
Reptilia	Squamata		*Lacertilia*
	Testudines	Cheloniidae	Cheloniidae indet.
		Dermochelyidae	*Dermochelys, Psephophorus*
Echinodermata			
Echinoidea	Cidaroida	Cidaridae	*Eocidaris thouarsii*
	Clypeasteroida	Dendrasteridae	*Dendraster pacificus*
		Echinarachniidae	*Kewia blancoensis*
Mollusca			
Bivalvia	Arcida	Arcidae	*Anadara perdisperis*
	Cardiida	Cardiidae	*Trachycardium*
		Solecurtidae	*Tagelus*
		Tellinidae	*Tellina*
	Hilatellida	Hiatellidae	*Panomya, Panopea*
	Mytilida	Mytilidae	*Lithophaga plumula, Mytilus*
	Ostreida	Ostreidae	*Ostrea titan*

	Pectinida	Limidae	*Lima*
		Pectinidae	*Chlamys crassicardo, Cyclopecten alaskensis, Delectopecten peckhami, Lyropecten crassicardo, Pecten, Propeamussium*
	Venerida	Mactridae	*Spisula*
		Veneridae	*Chione, Dosinia ponderosa, Petricola, Saxidomus*
Gastropoda	Archaeogastropoda	Acmaeidae	*Acmaea*
		Trochidae	*Calliostoma*
	Littorinimorpha	Calyptraeidae	*Crepidula*
		Ficidae	*Ficus kerniana*
		Naticidae	*Polinices*
	Mesogastropoda	Turritellidae	*Turritella temblorensis*
	Neogastropoda	Conidae	*Conus*
		Muricidae	*Forreria*
Plants and Algae			
Angiospermae	Alismataceae	Typhaceae	*Typha*
	Apliales	Araliaceae	*Araliophyllum quina*
	Arecales	Arecaceae	*Sabalites*
	Berberidales	Berberidaceae	*Mahonia marginata*
	Ericales	Ericaceae	*Arbutus menziensii*
	Fabales	Fabaceae	*Mimosites, Robinia*
	Fagales	Betulaceae	*Alnus, Betula*
		Fagaceae	*Lithocarpus coatsi, Quercus dumosa, Q. hannibali*
	Graminales	Poaceae	*Phragmites*
	Hamamelidales	Hamamelidaceae	*Platanus racemosa*
	Laurales	Lauraceae	*Persea, Sassafras*
	Malpighiales	Salicaceae	*Populus, Populus, Salix*
	Ranales	Magnoliaceae	*Magnolia*
	Rosales	Rosaceae	*Prunus*
	Sapindales	Rutaceae	*Ptelea*
		Sapindaceae	*Acer tyrrelli, Cardiospermum*
Polypodiopsida			Polypodiopsida indet.
	Equisetales	Equisetaceae	*Equisetum*
Charophyta			Charophyta indet.
Phaeophyceae	Fucales	Cystoseiraceae	*Paleocystophora delicatula, Paleohalidrys liguliformis*
	Laminariales	Lessoniaceae	*Julescraneia grandicornis*

Florideophyceae	Ceramiales	Rhodomelaceae	*Chondrides ramulosa*
Foraminifera			
			Foraminifera indet.

Appendix F:

Phase I Environmental Site Assessment Report
and Shallow Soil Sampling Report

Phase I
Environmental Site Assessment Report and Shallow Soil Sampling Report

27061, 27071, and 27081 Aliso Creek Road
Aliso Viejo, California

Farallon PN: 2450-009

February 6, 2025

Prepared by:

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ENVIRONMENTAL PROFESSIONAL STATEMENT

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as established in Part 312.10 of Title 40 of the Code of Federal Regulations (40 CFR 312.10) and I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Subject Property. I have developed and performed all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR 312.

Name	Jared Eudell	Name	Kathy Lehnus, P.G.
Title	Associate Scientist	Title	Senior Geologist

Name	Martin Hamann, P.G.
Title	Principal Hydrogeologist

EXECUTIVE SUMMARY

Farallon Consulting, L.L.C. (Farallon) has prepared this Phase I Environmental Site Assessment (ESA) and Shallow Soil Sampling Report for the property at 27061, 27071, and 27081 Aliso Creek Road in Aliso Viejo, California (herein referred to as the Subject Property). The Phase I ESA was conducted by Jared Eudell and Kathy Lehnus and was reviewed and approved by Martin Hamann. The Phase I ESA Report was prepared for Shea Homes Limited Partnership (Client and User) in accordance with ASTM International Standard E1527-21, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E1527-21). There were no deviations from ASTM E1527-21 during this Phase I ESA.

The Subject Property consists of Orange County Parcel No. 632-124-08, which totals approximately 8.44 acres of land developed with three two-story commercial office buildings totaling 20,195, 25,951, and 18,092 square feet, constructed in 1999. Each building is serviced by a hydraulic elevator. Remaining areas of the Subject Property consist of paved parking, outdoor seating, and landscaped areas. The Subject Property is occupied by Spyglass Pharma, American Association of Critical Care Nurses, and GetDandy for commercial office space. Spyglass Pharma, an ophthalmic biotechnology company, additionally has operated a drug delivery research and development laboratory in the 27081 building since 2024.

Based on historical sources reviewed, the Subject Property appeared to be generally vacant, undeveloped land in 1931 and from 1947 through 1994. A potential orchard was present on the eastern adjacent property in the 1938 aerial photograph, a small portion of which may have been present on the southeastern corner of the Subject Property. The potential orchard may have been in use as early as 1932 and as late as 1946. Wide-spread grading was apparent at the Subject Property and vicinity in 1988, which appeared to terrace the hilltop into large developable tracts. The current Subject Property buildings were constructed in 1999, and the Subject Property has appeared relatively unchanged to the present in the historical records reviewed. City directory listings for the Subject Property addresses included various commercial office tenants, including health care, computer, financial, insurance, real estate, and management service companies, since as early as 2001.

Due to the lack of evidence that the adjacent potential orchard was present on a substantial portion of the Subject Property in the 1930s, the relatively short duration of the potential

orchard use, the lack of evidence of storage or mixing areas on or near the Subject Property, and the extensive grading of the hilltop and reworking of the soil conducted to redevelop this area, it is unlikely that historical pesticide use (if any) would represent a recognized environmental condition in connection with the Subject Property. However, at the request of the Client, Farallon collected three shallow soil samples from along the southwestern corner of the Subject Property in the vicinity of the former orchard use and submitted the samples for analysis for the presence of pesticides and arsenic. No pesticides were detected. Arsenic was detected at concentrations ranging from 4.3 to 6.0 milligrams per kilogram (mg/kg), below the background screening concentration of 12 mg/kg for arsenic in soil in southern California (Human Health Risk Assessment (HHRA) Note 11).

According to a previous environmental report dated 2011, the western transformer at the Subject Property spilled approximately 8 gallons of oil. At the time, a representative from Southern California Edison indicated that the oil did not affect soil and did not contain polychlorinated biphenyls. Due to the size of the release and the lack of secondary containment around the transformer, Farallon notes that a small amount oil may have impacted soil at less than what Southern California Edison considered a reportable quantity. If so, the impacts would be considered de minimis. At the request of the Client, Farallon collected two shallow soil samples from the vicinity of the transformer in areas where spills would be likely to accumulate. Farallon submitted the samples for analysis for the presence of polychlorinated biphenyls (PCBs) and total petroleum hydrocarbons (TPH). No PCBs were detected. TPH as diesel and oil were detected at low concentrations of 9.9 J and 24 mg/kg at SB-4-1', and TPH as oil was detected at a concentration of 4.5 J mg/kg in SB-5-1', below the DTSC-modified Regional Screening Levels for Residential Soil in HHRA Note 3.

The Environmental Risk Information Services (ERIS) *Database Report* dated November 25, 2024, prepared for the Subject Property (ERIS Report), did not identify the Subject Property address in the databases reviewed. Farallon searched the California State Water Resources Control Board GeoTracker database and the California Department of Toxic Substances Control EnviroStor database for the Subject Property, but found no listings.

Adjoining properties were developed commercially between 1994 and 2012. Notable occupants have included the Orange County Fire authority to the northwest, a gasoline station to the northeast, and dry cleaners to the north and south that might have historically used the dry cleaning solvent tetrachloroethene; however, it's usage was not reported. No releases have been reported from these facilities. Based on the regulatory oversight, relative

distance, depth to groundwater of over 50 feet below ground surface, and/or topographic gradient, these sites do not represent recognized environmental conditions in connection with the Subject Property at this time.

Based on review of the Subject Property history, interviews with persons knowledgeable about the Subject Property, reconnaissance of the Subject Property, and review of the ERIS Report, this Phase I ESA did not identify recognized environmental conditions in connection with the Subject Property. Shallow soil sampling conducted at the Subject Property did not identify releases of agricultural chemicals or transformer oil that would warrant further investigation or remediation. Although concentrations of arsenic exceeded screening levels, when the source is naturally occurring, agencies generally do not require any action as long as the detected concentrations are consistent with established background concentrations. Accordingly, the arsenic at the Subject Property is not considered a recognized environmental condition.

1.0 INTRODUCTION

Farallon Consulting, L.L.C. (Farallon) has prepared this Phase I Environmental Site Assessment (ESA) and Shallow Soil Sampling Report for the property at 27061, 27071, and 27081 Aliso Creek Road in Aliso Viejo, California (herein referred to as the Subject Property) (Figure 1). This section discusses the project authorization and scope of work, the qualifications of the Environmental Professionals who conducted and reviewed the Phase I ESA work, the project purpose and objective, the shelf life of records per the All Appropriate Inquiries (AAI) Final Rule established in Part 312.10 of Title 40 of the Code of Federal Regulations (40 CFR 312.10), deviations, and data gaps.

1.1 PROJECT AUTHORIZATION AND SCOPE OF WORK

This Phase I ESA Report was prepared for Shea Homes Limited Partnership (Shea Homes) (Client and User) in accordance with the Shea Homes Project Consultant Agreement Number: 42792 HN, executed by Danielle Prigmore and Brooke Doi of Shea Homes Limited Partnership and Martin Hamann of Farallon (Authorization). The scope of work for this Phase I ESA included a records review, literature research and review, a site reconnaissance, interviews with individuals familiar with the Subject Property, interviews with local governmental officials, and preparation of this report. The scope of work is consistent with ASTM International Standard E1527-21, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process* (ASTM E1527-21).

1.2 PROFESSIONAL QUALIFICATIONS

The Phase I ESA was conducted by Jared Eudell and Kathy Lehnus and was reviewed and approved by Martin Hamann. All have an understanding of surface and subsurface environmental conditions and the processes used to evaluate these conditions, and the ability to develop opinions regarding conditions indicative of a release or a threatened release of hazardous substances and petroleum products. AAI has been performed in conformance with the standards and practices set forth in 40 CFR 312.10. The professional qualifications of the Environmental Professionals are provided in Appendix A.

1.3 PROJECT PURPOSE AND OBJECTIVE

The purpose of the Phase I ESA was to identify, as practicable, recognized environmental conditions at the Subject Property and within the appropriate study area that have caused and/or may cause an adverse environmental impact. ASTM E1527-21 is intended to permit

a user to satisfy one of the requirements to qualify for protection from potential liability under the Comprehensive Environmental Response, Compensation, and Liability Act as the innocent landowner, contiguous property owner, or bona fide prospective purchaser. ASTM E1527-21 constitutes "all appropriate inquiry" into the previous ownership, uses, and environmental conditions of a property consistent with good commercial or customary practice, as defined in Section 9601(35)(B) of Title 42 of the U.S. Code.

The objective of the Phase I ESA was to perform an appropriate inquiry into past and present ownership and uses of the Subject Property, consistent with good commercial and/or customary practice. This Phase I ESA Report is to be used as a risk management tool to meet AAI Final Rule requirements and the Comprehensive Environmental Response, Compensation, and Liability Act liability defense. The Phase I ESA does not guarantee that there are no impacts to the Subject Property.

For the purpose of this Phase I ESA Report, the term "recognized environmental condition" is defined as (1) the presence of hazardous substances or petroleum products in, on, or at the Subject Property due to a release to the environment; (2) the likely presence of hazardous substances or petroleum products in, on, or at the Subject Property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the Subject Property under conditions that pose a material threat of a future release to the environment. A de minimis condition is not a recognized environmental condition.

The term "controlled recognized environmental condition" is defined as a recognized environmental condition affecting the Subject Property that has been addressed to the satisfaction of the applicable regulatory authority or authorities, with hazardous substances or petroleum products allowed to remain in-place subject to implementation of required controls.

The term "historical recognized environmental condition" is defined as a previous release of hazardous substances or petroleum products affecting the Subject Property that has been addressed to the satisfaction of the applicable regulatory authority or authorities and meeting unrestricted use criteria established by the applicable regulatory authority or authorities without subjecting the Subject Property to any controls (e.g., activity and use limitations or other property use limitations). A historical recognized environmental condition is not a recognized environmental condition.

1.4 SHELF LIFE OF ALL APPROPRIATE INQUIRIES RECORDS

The AAI Final Rule prepared by the U.S. Environmental Protection Agency (EPA)[1] specifies that AAI must be conducted within 1 year prior to the date of acquisition of the Subject Property. EPA has defined the date of acquisition as the date a person acquires title to the property. To ensure full coverage under the AAI Final Rule, a valid Phase I ESA Report must be completed within 1 year prior to the date of acquisition of title.

The following Phase I ESA Report components and supporting information sources must be updated if they were completed more than 6 months (180 days) prior to acquisition of title. The Phase I ESA components with a 180-day shelf life consist of:

- Site reconnaissance;
- Subject Property interview(s);
- User-provided information;
- Review of government regulatory records; and
- Declaration/signature of certifying Environmental Professional.

The date on the cover of this Phase I ESA Report is the production date of the written report. The dates various components of this Phase I ESA were completed are as follows:

- Site reconnaissance: December 5, 2024.
- Subject Property interviews: December 5, 2024.
- User-provided information: December 11, 2024.
- Review of government regulatory records: November 25, 2024.
- Declaration/signature of certifying Environmental Professional: February 6, 2025.

1.5 DEVIATIONS

There were no deviations from ASTM E1527-21 during this Phase I ESA.

[1] Part 312 of Subchapter J of Chapter I of Title 40 of the Code of Federal Regulations.

1.6 DATA GAPS

Data gaps may affect the ability to identify recognized environmental conditions and Farallon's ability to render opinions and conclusions for presentation in the Phase I ESA Report. Farallon did not identify significant data gaps during this Phase I ESA.

2.0 SUBJECT PROPERTY OVERVIEW

This section presents the Subject Property location, description, and operations. A description of adjoining and surrounding land use is also provided.

2.1 SUBJECT PROPERTY LOCATION

The Subject Property is south of Pacific Park Drive, east of Journey, and west of Aliso Creek Road at 27061, 27071, and 27081 Aliso Creek Road in Aliso Viejo, Orange County, California. The Subject Property is in a commercial and residential area. The Subject Property vicinity is shown on Figure 1.

2.2 SUBJECT PROPERTY DESCRIPTION

The Subject Property consists of Orange County Parcel No. 632-124-08, which totals approximately 8.44 acres of land developed with three two-story commercial office buildings totaling 20,195, 25,951, and 18,092 square feet, constructed in 1999. Each building is serviced by a hydraulic elevator. Remaining areas of the Subject Property consist of paved parking, outdoor seating, and landscaped areas. Access to the Subject Property is gained from Pacific Park Drive, north of the Subject Property, Aliso Creek Road, east of the Subject Property, and off-site parking areas to the south. According to a title report provided by the Client, the Subject Property owner is AACN Property Holdings, LLC, a California limited liability company. According to the Aliso Viejo City GIS Viewer, the Subject Property is zoned "PO" for Professional Office use.

Figure 2 presents a plan map of the Subject Property. Additional details pertaining to the Subject Property are provided in Section 9, Site Reconnaissance. Subject Property photographs are presented in Appendix B.

2.3 SUBJECT PROPERTY OPERATIONS

The building at 27061 Aliso Creek Road is occupied by Spyglass Pharma, an ophthalmic biotechnology company for office space and a laboratory for drug delivery research and development. The laboratory was reportedly built in the northwestern portion of the building in 2024.

The building at 27071 Aliso Creek Road is occupied by the American Association of Critical Care Nurses (AACN) for office space.

The building at 27081 Aliso Creek Road is occupied by Spyglass Pharma for office space, AACN for warehousing and shipping nursing-related books and supplies, and GetDandy, an internet-based company. Performance Racing Industry had occupied a suite on the first floor for office space and was in the process of moving out.

2.4 ADJOINING AND SURROUNDING LAND USE

Adjoining properties at the time of the site reconnaissance included Pacific Park Drive followed by a shopping center with restaurants, retail stores, a grocery store, and Bio-Safe Cleaners to the north; a Shell gasoline station and carwash to the northeast; Aliso Creek Road followed by a multi-family residential property to the east; commercial flex buildings to the south, including Pacific Plaza Cleaning (formerly Pacific Plaza Cleaners); Journey followed by Aliso Viejo Self Storage, a medical plaza, and the Aliso Viejo Library to the west; and the Orange County Fire Authority – Station 57 to the northwest.

Observations were restricted to areas readily observable from the Subject Property and to public rights-of-way. Although Farallon did not observe evidence of spills or releases at these properties during the reconnaissance, dry cleaner facilities, gasoline stations, fire stations, and occupants of commercial flex facilities are known to use hazardous substances. These properties and associated uses of hazardous substances are further discussed in Section 7.2, Adjoining Facility Listings.

3.0 PHYSICAL SETTING

The topography, geology, and hydrogeology of the Subject Property are described in this section. Farallon's assessment of sensitive receptors in the area is also discussed. Farallon reviewed the following physical setting sources as part of this Phase I ESA:

- U.S. Geological Survey (USGS) topographic maps of Santiago Peak, California dated 1942; and of San Juan Capistrano, California dated 1948, 1949, 1968, 1974 (aerial photograph), 1978, 1981, 2015, 2018, and 2022;
- The Environmental Risk Information Services (ERIS) *Physical Setting Report* dated November 22, 2024, prepared for the Subject Property (ERIS PSR); and/or
- Documentation of previous environmental studies referenced in Section 4.5, Previous Environmental Studies, and/or documents cited in Section 7, Records Review.

3.1 TOPOGRAPHY

Farallon reviewed the USGS topographic maps for the Subject Property area provided by ERIS. The topographic maps from 2015 to 2022 depict the Subject Property at an elevation of approximately 340 to 380 feet above mean sea level. The Subject Property topography slopes to the east. Regional topography slopes down to the east-southeast.

Historically, topographic maps from 1942 to 1981 depict the Subject Property on the southern side of a knoll and ranging in elevation from approximately 340 to 460 feet above mean sea level, indicating the leveling of the terrain in the 1980s or early-1990s in preparation for future development of the vicinity in the mid-1990s.

3.2 GEOLOGY AND HYDROGEOLOGY

According to the ERIS PSR, surface soil at the Subject Property consists primarily of sandstone and mudstone. Surface soil on the Subject Property consists of three types: Cieneba sandy loam, which is somewhat excessively drained; Myford sandy loam, which is moderately well drained; and rock outcrop-Cieneba complex, which is weathered bedrock.

According to the California State Water Resources Control Board GeoTracker database (GeoTracker database), the Subject Property is not located within a groundwater basin.

According to information reviewed for a nearby property approximately 650 feet north of the Subject Property, and at a similar elevation, groundwater was not encountered to a terminal drilling depth of 51 feet below ground surface (bgs). Based on the topography of the Subject Property vicinity, groundwater is expected to flow to the south to east-southeast. Farallon cannot determine the actual direction of groundwater flow or the depth to groundwater at the Subject Property without the installation of monitoring wells.

3.3 OIL AND GAS RECORDS

Farallon reviewed the California Department of Conservation, Geologic Energy Management Division (CalGEM) Well Finder online database for records pertaining to the presence of oil and gas fields and associated wells on the Subject Property and surrounding properties. According to the CalGEM Well Finder database, no oil or gas wells are located on or near the Subject Property.

3.4 SENSITIVE RECEPTORS

Sensitive receptors are areas such as hospitals, schools, day care facilities, and elderly housing or convalescent facilities where occupants are more susceptible to the adverse effects of exposure to toxic chemicals, pesticides, and other pollutants. Extra care must be taken when dealing with contaminants and pollutants proximate to areas recognized as sensitive receptors. Farallon's limited assessment for sensitive receptors on or adjoining the Subject Property consisted of a review of properties where occupants are more susceptible to adverse effects of exposure to toxic chemicals, pesticides, and other pollutants; observation of apparent features such as surface water bodies (e.g., low-lying wet areas, streams, ponds) and residential and recreational areas; and review of readily ascertainable information relating to the presence of private, semiprivate, public, and industrial water-supply wells on or in the vicinity of the Subject Property.

No sensitive receptors were identified on the Subject Property at the time of the site reconnaissance; however, childcare facilities were located on the south-adjoining property, potentially cross or downgradient from the Subject Property, depending on groundwater flow direction. No evidence of industrial activities or releases has been found for the Subject Property.

According to the ERIS PSR, the Subject Property is in an area of minimal flood hazard. The water body nearest the Subject Property was identified as Aliso Creek, approximately 0.3

mile east, which is also a federally designated wetland. A public water supply well was identified 0.45 mile southeast, potentially downgradient, of the Subject Property.

4.0 USER-PROVIDED INFORMATION

Farallon understands that the User of this report is seeking to follow the standards set forth in ASTM E1527-21 to complete an environmental assessment of the Subject Property. The User has specific responsibilities for fulfilling ASTM E1527-21 requirements to help identify the possibility of recognized environmental conditions in connection with the Subject Property. These responsibilities do not require the technical expertise of an Environmental Professional, and were not performed by Farallon.

To facilitate fulfillment of the ASTM E1527-21 requirements identified below, Farallon provided the User with a copy of the *Phase I Environmental Site Assessment User Questionnaire* (User Questionnaire) to complete. Information from the completed User Questionnaire is summarized below in Sections 4.1 through 4.3. The completed User Questionnaire is provided in Appendix C of this Phase I ESA Report.

4.1 TITLE AND LIEN RECORDS

The User was not aware of environmental liens against the Subject Property.

4.2 EXPERIENCE AND SPECIALIZED KNOWLEDGE

The User has no experience or specialized knowledge regarding the Subject Property.

4.3 COMMONLY KNOWN INFORMATION

The User is not aware of commonly known information that would lead to identification of recognized environmental conditions in connection with the Subject Property.

4.4 PHASE I ENVIRONMENTAL SITE ASSESSMENT REPORT USERS

The User will rely on this Phase I ESA Report.

4.5 PREVIOUS ENVIRONMENTAL STUDIES

Farallon was provided with the *Phase I Environmental Site Assessment, 27061, 27071, and 27081 Aliso Creek Road, Aliso Viejo, Orange County, California* dated April 25, 2011, prepared by Bureau Veritas North America, Inc. (2011 Phase I Report) and the *Phase I Environmental Site Assessment Report, Pacific Corporate Plaza property at 27061, 27071, and 27081 Aliso Creek Road, Aliso Viejo, California* dated December 19, 2018, prepared by Farallon Consulting (2018 Phase I Report). These reports are summarized below.

4.5.1 2011 Phase I Report

The 2011 Phase I Report described the Subject Property in its current configuration. According to the 2011 Phase I Report, the western transformer at the Subject Property had been recently replaced due to a spill of approximately 8 gallons of oil. According to a representative from Southern California Edison contacted by Bureau Veritas North America, Inc., the oil did not affect soil and did not contain polychlorinated biphenyls. No recognized environmental conditions were identified.

Due to the size of the release and the lack of secondary containment around the transformer, Farallon notes that a small amount oil may have impacted soil at less than what Southern California Edison considered a reportable quantity. If so, the impacts would be considered de minimis.

4.5.2 2018 Phase I Report

The 2018 Phase I Report described the Subject Property in its current configuration and summarized the 2011 Phase I ESA Report. No recognized environmental conditions were identified.

5.0 SUBJECT PROPERTY AND ADJOINING PROPERTY HISTORY

Farallon reviewed the historical sources listed below as part of this Phase I ESA. The historical sources documented were reasonably ascertainable and practically reviewable during this Phase I ESA. Farallon is not responsible for the accuracy or completeness of the historical sources reviewed.

- Aerial photographs of the Subject Property and its vicinity dated 1931, 1938, 1947, 1952, 1960, 1967, 1972, 1981, 1988, 1994, 2002, 2005, 2009, 2010, 2012, 2014, 2016, 2018, 2020, and 2023 obtained from ERIS;
- City directories dated 1955, 1959, 1964, 1970, 1975, 1981, 1986, 1991-1992, 1996-1997, 2001-2002, 2003, 2008, 2012, 2016, 2020, and 2023 obtained from ERIS; and
- USGS topographic maps of Santiago Peak, California dated 1942; and of San Juan Capistrano, California dated 1948, 1949, 1968, 1974 (aerial photograph), 1978, 1981, 2015, 2018, and 2022; obtained from ERIS.

A search for fire insurance maps resulted in notification that there was no coverage for the Subject Property.

Historical sources provided by ERIS are presented in Appendix D.

5.1 SUBJECT PROPERTY

The Subject Property appeared to be generally vacant, undeveloped land from in 1931 and from 1947 through 1994. Small white objects in an organized pattern, which could have been an orchard, were present on the eastern adjacent property in the 1938 aerial photograph, a small portion of which may have been present on the southeastern corner of the Subject Property. The potential orchard may have been in use as early as 1932 and as late as 1946. Wide-spread grading was apparent at the Subject Property and vicinity in the 1988 aerial photograph, and the retaining wall and perimeter landscaping were apparent in the 1994 aerial photograph. The current Subject Property buildings were constructed in 1999, and the Subject Property has appeared relatively unchanged to the present. City directory listings for the Subject Property addresses included various commercial office tenants, including health care, computer, financial, insurance, real estate, and management service companies, since as early as 2001.

Due to the lack of evidence that the adjacent potential orchard was present on a substantial portion of the Subject Property in the 1930s, the relatively short duration of the potential orchard use, the lack of evidence of storage or mixing areas on or near the Subject Property, and extensive grading of the hilltop and reworking of the soil conducted to redevelop this area, it is unlikely that historical pesticide use (if any) would represent a recognized environmental condition in connection with the Subject Property.

5.2 ADJOINING PROPERTIES

Adjoining properties appeared to be vacant, undeveloped land from at least 1931 through 1994, except for the possible orchard to the east as noted above. Wide-spread grading was apparent at the Subject Property and vicinity in the 1988 aerial photograph. The Orange County Fire Authority fire station to the northwest, residential communities to the east, and the commercial flex buildings to the south were present by 1994. The shopping center buildings to the north, gasoline station and carwash to the northeast, and self-storage facility and library to the west were present by 2002. The medical plaza to the west was present by 2012.

City directory listings for adjoining commercial properties included numerous retail, commercial and professional services listings since as early as 1996. Notably, the gasoline station northeast of the Subject Property was listed from 2001 to the present, and Pacific Plaza Cleaners south of the Subject Property was listed from 1996 to the present. Additionally, Bio Safe Cleaners (not listed in city directories) was present north of the Subject Property in the shopping center across Pacific Park Drive since at least 2015. Based on the operations during a period of environmental regulatory oversight, hazardous substances used by adjoining properties were inspected and documented by regulatory agencies and are discussed in Section 7.2. Adjoining Facility Listings. No releases were reported from these properties.

6.0 STATE AND LOCAL GOVERNMENT AGENCY INTERVIEWS

The objective of interviews with state and/or local government agencies is to obtain information related to recognized environmental conditions in connection with the Subject Property. The interviews consist of questions asked in person, or by email, telephone, and/or online request for records.

6.1 COUNTY AGENCIES

Farallon contacted Orange County on November 22, 2024 to request records from the Orange County Health Care Agency (the Certified Unified Program Agency for the Subject Property), and the Public Works Department regarding notices of violations and/or reported hazardous spills at the Subject Property and adjoining properties were on file, and regarding hazardous substances, clarifiers, wells, septic systems, and previous and current aboveground storage tanks (ASTs) and underground storage tanks (USTs) at the Subject Property. On January 15, 2025, Orange County fulfilled the request; no records for the Subject Property were provided.

6.2 CITY OF ALISO VIEJO

Farallon contacted the City of Aliso Viejo on November 22, 2024 to request building permits, fire records, and to inquire whether notices of violations and/or reported hazardous spills at the Subject Property were on file, and regarding previous and current wells, septic systems, ASTs, USTs, clarifiers, hazardous material storage, spills, release investigations, and closure reports at the Subject Property. On December 6, 2024, a representative of the City of Aliso Viejo stated that it had no responsive records associated with wells, septic systems, ASTs, USTs, clarifiers, hazardous material storage, spills, release investigations, and closure reports.

Farallon reviewed City of Aliso Viejo Building Department records, which included various tenant improvements dated between 2001 and 2009, with none of environmental significance.

6.3 SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Farallon searched the South Coast Air Quality Management District Facility INformation Detail (FIND) database on November 22, 2024 for air permits and indications of emissions of hazardous substances at the Subject Property or in the vicinity of the Subject Property. No

records were identified for the Subject Property addresses, nor environmentally significant records for the Subject Property vicinity.

6.4 LOCAL DRINKING WATER AUTHORITY

Farallon reviewed the 2023 Water Quality Report for the Moulton Niguel Water District, which provides drinking water to the Subject Property to determine whether drinking water is monitored for per- and polyfluoroalkyl substances (PFAS) and if there have been any detections of PFAS in the public drinking water system that supplies the Subject Property. The 2023 Water Quality Report indicated the drinking water is routinely monitored for PFAS and PFAS are not present in the drinking water system.

7.0 RECORDS REVIEW

ERIS conducted a review of environmental regulatory agency database listings to identify reported environmental issues related to the Subject Property and facilities in the Subject Property vicinity. Pertinent regulatory files and/or records associated with the listings were reviewed by Farallon. Farallon used the greater of each approximate minimum search distance from the Subject Property for each of the referenced federal and state environmental databases, as specified in ASTM E1527-21.

Farallon reviewed the ERIS *Database Report* dated November 25, 2024, prepared for the Subject Property (ERIS Report), to note reported facilities in the vicinity of the Subject Property that were considered to have a potential to adversely impact the Subject Property (i.e., are known to have resulted in or are expected to result in a recognized environmental condition). Reported facilities were evaluated with respect to the nature and extent of a given release, the distance of the reported facility from the Subject Property, the geology of the area, and the topographic position of a reported facility with respect to known or expected local and/or regional groundwater flow direction.

The complete database names for the abbreviations used in this Phase I ESA Report, the descriptions of the databases searched, and the associated search distances from the Subject Property are provided in the ERIS Report presented in Appendix E.

7.1 SUBJECT PROPERTY LISTINGS

The ERIS Report did not identify the Subject Property in the databases reviewed.

Farallon searched the GeoTracker and EnviroStor databases; no files were available.

7.2 ADJOINING FACILITY LISTINGS

ASTM defines “adjoining” as “any real property or properties the border of which is contiguous or partially contiguous with that of the Subject Property, or that would be contiguous or partially contiguous with that of the Subject Property but for a street, road, or other public thoroughfare separating them.” The ERIS Report identified the following adjoining facilities in the databases reviewed:

- **Orange County Fire Authority** and **Aliso Viejo Fire Station #57** at 57 Journey, northwest-adjoining to and in the presumed up-gradient direction of the Subject

Property and at a higher topographic elevation, was identified in the AST, ORANGE AST, CERS TANK, DELISTED TNK, HAZ GEN, and UST SWEEPS databases. According to the ERIS Report, a 2,000-gallon diesel AST and 180-gallon diesel day tank are used to fuel an emergency generator. Various administrative violations were documented but no spills or releases were reported. Waste oil was removed from the facility under manifest in 1997 and 2001, presumed to be associated with a clarifier used for vehicle washing that is typical at fire stations. The facility formerly operated a 1,000-gallon gasoline UST and a 1,000-gallon diesel UST. The USTs were potentially installed in the early to mid-1990s with the construction of the fire station and were reportedly removed prior to 2013 with oversight provided by the Orange County Health Care Agency. Based on the information provided in the ERIS Report, regulatory oversight, and the depth to groundwater of over 50 feet bgs, this facility does not represent a recognized environmental condition in connection with the Subject Property.

- A recyclables drop-off depot and numerous retail stores and restaurants located in the shopping center, north of and in the presumed up- to cross-gradient direction from the Subject Property across Pacific Park Drive and at a lower topographic elevation, were identified in various databases due to recycling collection activities, and normal retail and restaurant operations, including accumulation of damaged and returned household cleaners, storage of pharmaceuticals, and storage of compressed gases for beverage dispensing.

  Bio Safe Cleaners Inc at 26895 Aliso Creek Road, within the northern-adjoining shopping plaza, was identified in the CERS HAZ, DRYCLEANERS, FED DRYCLEANERS, HW ORANGE, RCRA NON GEN, and RCRA TSD databases. According to the ERIS Report, the facility has operated at this location from at least 2007 to the present, and has used a hydrocarbon-based cleaning solvent since at least 2015, and possibly earlier; however, the cleaning solution prior to 2015 was not reported since records prior to this date were purged by the Orange County Health Care Agency. No releases from this facility have been reported. Based on the information provided in the ERIS Report, regulatory oversight, and relative distance (at least 450 feet from the northern Subject Property border), this facility does not represent a recognized environmental condition in connection with the Subject Property.

- **Tesoro Shell, et al., Texaco,** and **7-Eleven Inc** at 27055 Aliso Creek Road, northeast-adjoining to and in the presumed up- to cross-gradient direction from the Subject Property and at a lower topographic elevation, was identified in the CERS TANK, DELISTED TNK, EMISSIONS, HW ORANGE, RCRA NON GEN, RCRA SQG, UST, AND UST ORANGE databases. According to the ERIS Report records, the gasoline station has been present since 1997 and operated one 20,000-gallon regular gasoline double-walled UST, and a 15,000-gallon premium gasoline double-walled UST. No releases are reported from this facility. Based on the information provided in the ERIS Report and regulatory oversight, this facility does not represent a recognized environmental condition in connection with the Subject Property at this time.

- **Numerous commercial, medical, and laboratory occupants** in the commercial plaza, south of and in the presumed down-gradient direction from the Subject Property and at a similar topographic elevation, were identified in various databases without environmental significance.

  Pacific Plaza Cleaners at 27131 Aliso Creek Road, Suite 115 within in the southern adjoining commercial plaza was identified in the DRYCLEANERS, FED DRYCLEANERS, HW ORANGE, RCRA NON GEN, and RCRA SQG databases. According to the ERIS Report, the facility has operated at this location since at least 1995. No additional information was provided; however, no releases from this facility have been reported. Based on the information provided in the ERIS Report, regulatory oversight, relative distance (at least 400 feet from the southern Subject Property border), and presumed down-gradient location, this facility does not represent a recognized environmental condition in connection with the Subject Property.

- **Pacific Bell Telephone Company DBA AT&T California** at 27151 Aliso Creek Road, geocoded at 0.08 mile from the Subject Property, was confirmed to be located in Laguna Niguel and not on the adjoining property.

- **Sea View Pediatrics** at 2 Journey, west-adjoining to and in the presumed up- to cross-gradient direction from the Subject Property and at a higher topographic elevation, was identified in the RCRA NON GEN database. According to the ERIS Report records, this facility does not generate hazardous waste, and no violations are reported. Based on the information provided in the ERIS Report and regulatory oversight, this facility does

not represent a recognized environmental condition in connection with the Subject Property.

- **AT&T California** at 53 ½ Journey, west-adjoining to and in the presumed up- to cross-gradient direction from the Subject Property and at a higher topographic elevation, was identified in the CERS HAZ database. According to the ERIS Report records, this facility stores nickel-cadmium batteries in an underground cabinet, and no violations are reported. Based on the information provided in the ERIS Report and regulatory oversight, this facility does not represent a recognized environmental condition in connection with the Subject Property.

7.3 SURROUNDING FACILITY LISTINGS

Reported facilities within 0.25 mile up-gradient or 0.125 mile cross-gradient of the Subject Property are considered to have a potential to have impacted the Subject Property, depending on the depth and the directional flow of groundwater. Facilities commonly known to be potential PFAS sources and that are within 1 mile up-gradient of the Subject Property were evaluated for the potential to impact the Subject Property. Facilities that were listed in the ERIS Report but not identified as a reported facility (e.g., a facility listed as a hazardous waste generator but not as having had a release), and facilities that were listed as "Closed" were not considered to have a potential to have impacted the Subject Property.

Based on the information provided in the ERIS Report and regulatory files, their topographic location and distance relative to the Subject Property, and/or known or presumed soil and groundwater conditions in the vicinity of the Subject Property, none of the surrounding facilities identified was considered to represent a recognized environmental condition in connection with the Subject Property.

7.4 UNPLOTTABLE LISTINGS

Listings or facilities that cannot be mapped due to inaccurate or inadequate address information are identified as "unplottable" in the ERIS Report.

No unplottable facilities were identified in the ERIS Report.

8.0 SUBJECT PROPERTY INTERVIEW(S)

Farallon attempted to interview individuals familiar with the Subject Property, including owners, operators, and occupants, to obtain additional Subject Property information. Interviews were conducted in person, in writing, or by telephone. The individual(s) interviewed, and their responses are discussed in the following sections.

8.1 INTERVIEW WITH SUBJECT PROPERTY REPRESENTATIVES

On December 4, 2024, Farallon interviewed Christopher Bosley of Cushman & Wakefield, a representative of the Subject Property ownership. The following information was obtained from this interview:

- The Subject Property is occupied by three two-story buildings with commercial office occupants. In addition to offices, one tenant, SpyGlass Pharma, built a research and development laboratory on the first floor of the 27061 building in 2024. A list of approved hazardous substances was provided for review and is provided in Appendix F. The hazardous substances are discussed in Section 9.2, Interior Observations.
- No known ASTs or USTs are present at the Subject Property.
- Except as noted above, no additional hazardous substances are present at the Subject Property except for janitorial cleaning supplies, building maintenance-related materials, and hydraulic oil for the hydraulic elevator systems.
- No reportable spills or releases have occurred at the Subject Property.

Christopher Bosley stated on behalf of the Subject Property owner that there have not been any pending, threatened, or past:

- Litigation relevant to hazardous substances or petroleum products in, on, or from the Subject Property;
- Administrative proceedings relevant to hazardous substances or petroleum products in, on, or from the Subject Property; or
- Notices from a governmental entity regarding violations of environmental laws or liability relating to hazardous substances or petroleum products.

On December 5, 2024, Farallon interviewed Robert Keys of Cushman & Wakefield, Building Engineer and a representative of the Subject Property ownership. The following information was obtained from this interview:

- The Subject Property is occupied by three two-story buildings with commercial office occupants. In addition to offices, one tenant, SpyGlass Pharma, recently established a research and development laboratory on the first floor of the 27061 building.
- No known ASTs or USTs are present at the Subject Property.
- A hydraulic elevator is present in each of the Subject Property buildings. The elevators are maintained on a regular basis by Liftech Elevator Services.
- Except as noted above, no additional hazardous substances are present at the Subject Property except for janitorial cleaning supplies, building maintenance-related materials, and hydraulic oil for the hydraulic elevator systems.
- Utilities are provided by the local municipality, Southern California Edison and SoCal Gas.
- Landscaping services are provided by a contractor, who does not store related materials at the Subject Property.
- No reportable spills or releases have occurred at the Subject Property.

9.0 SITE RECONNAISSANCE

Farallon conducted a site reconnaissance on December 5, 2024 to observe the Subject Property for physical evidence of recognized environmental conditions. The methodology used for the site reconnaissance and the observations made and limiting conditions encountered are discussed below. Photographs taken during the site reconnaissance are presented in Appendix B.

9.1 SITE RECONNAISSANCE METHODOLOGY

Weather conditions at the time of the reconnaissance were sunny, with a temperature of approximately 55 degrees Fahrenheit. Farallon conducted a walk around the entire perimeter of the Subject Property and inspected interior portions of the Subject Property buildings, including representative areas of first floor offices, the SpyGlass Pharma laboratory (27061 building), AACN warehouse (27081 building), and the janitorial and elevator rooms of each building.

9.1.1 Limiting Conditions

Limiting conditions encountered during this Phase I ESA were the presence of vehicles on exterior portions of the Subject Property that prevented Farallon from observing the entire ground surface of the Subject Property, and the presence of furniture and equipment in the Subject Property buildings that prevented Farallon from observing entire interior floor surfaces. In addition, Farallon did not enter all tenant spaces as noted above.

Based on information obtained from the Subject Property representative, historical sources, and previous environmental reports, these limiting conditions are not expected to affect the conclusions of this Phase I ESA Report.

9.2 INTERIOR OBSERVATIONS

Farallon's comments related to observations of the interior of the Subject Property buildings during the site reconnaissance are provided in Section 9.2.1.

INTERIOR OBSERVATIONS	YES	NO
Odor(s)		X
Heating/Cooling System(s)	X	
Drain(s) and/or Sump(s)	X	

INTERIOR OBSERVATIONS	YES	NO
Staining and/or Corrosion		X
Storage Tank(s), Vent Pipe(s), Fuel Port(s), and/or Fill Pipe(s)		X
Clarifier(s)		X
Drum(s) and/or Other Container(s)		X
Pool(s) of Liquid		X
Automobile Lift(s)		X
Well(s)		X
Hazardous Material(s) and/or Petroleum Product(s)	X	
Hazardous Waste(s)		X
Polychlorinated Biphenyl-Containing Item(s)		X

9.2.1 Interior Observation Comments

Heating/Cooling System(s)

The Subject Property building is heated by natural gas and electricity, which are provided by SoGal Gas and Southern California Edison, respectively.

Drain(s) and/or Sump(s)

Farallon observed mop sinks in a janitor's room adjacent to the elevator room in each building, which reportedly discharge to the sanitary sewer system.

Hazardous Material(s) and/or Petroleum Product(s)

Farallon observed minor amounts of hazardous substances, including janitorial cleaning supplies and building maintenance-related products. The substances generally appeared to be stored in labeled containers that were placed in designated areas of the Subject Property building.

A hydraulic elevator is present in each of the Subject Property buildings. The elevators are maintained on a regular basis by Liftech Elevator Services.

SpyGlass Pharma recently built a research and development laboratory on the first floor of the 27061 building. The substances generally appeared to be stored in labeled containers that were placed in designated areas. A list of hazardous substances used by SpyGlass Pharma is attached in Appendix F.

No staining or evidence of release was observed on or around the hazardous substances containers or the elevator hydraulic oil systems.

9.3 EXTERIOR OBSERVATIONS

Farallon's comments related to observations of the exterior of the Subject Property during the site reconnaissance are provided in Section 9.3.1.

EXTERIOR OBSERVATIONS	YES	NO
Odor(s)		X
Staining and/or Corrosion	X	
Storage Tank(s), Vent Pipe(s), and/or Fuel Port(s)		X
Clarifier(s)		X
Drum(s) and/or Other Container(s)		X
Pool(s) of Liquid		X
Hazardous Material(s) and/or Petroleum Product(s)		X
Hazardous Waste(s)		X
Pit(s), Pond(s), and/or Lagoon(s)		X
Stressed Vegetation		X
Solid (Nonhazardous) Waste(s)—Evidence of Dumping		X
Wastewater		X
Domestic Water	X	
Well(s)		X
Septic/Sewer System(s)	X	
Stormwater	X	
Polychlorinated Biphenyl-Containing Item(s)		X
Significant Amount of Fill Material		X

9.3.1 Exterior Observation Comments

Staining and/or Corrosion

Farallon observed de minimis petroleum staining throughout paved areas of the Subject Property that appeared to be from parked vehicles on the Subject Property.

Domestic Water

Domestic water is supplied to the Subject Property buildings by Moulton Niguel Water District. Additional information regarding the domestic water supply for the Subject Property is included in Section 6.4, Local Drinking Water Authority.

Septic/Sewer System(s)

Sanitary sewage generated at the Subject Property discharges to the municipal sanitary sewer system.

Stormwater

Stormwater on the Subject Property is directed into catch basins in the parking areas and adjoining streets, which discharge to the municipal stormwater system.

10.0 SHALLOW SOIL SAMPLING

At the request of the User, Farallon conducted additional environmental services beyond the scope of services required to satisfy ASTM E1527-21. Farallon conducted a screening level shallow soil sampling survey at the Subject Property to evaluate the potential presence of pesticides and arsenic associated with historical agricultural use at the Subject Property and PCBs and TPH associated with the former on-site transformer spill. This additional service is considered a deviation from ASTM E1527-21.

10.1 HEALTH AND SAFETY AND UTILITY CLEARANCE

Before field work was initiated, a Subject Property-specific Health and Safety Plan was prepared under Section 3202 of Title 8 of the California Code of Regulations (8 CCR 3202) due to the potential for exposure to hazardous substances. Additionally, Farallon contacted Dig Alert for public utility clearance, commissioned a private utility service mark out, and hand-cleared each sample location.

10.2 BORING ADVANCEMENT AND SOIL SAMPLING

Farallon originally attempted to advance three soil borings to 0.5 feet bgs in paved parking areas on the southwestern portion of the Subject Property, but had difficulty advancing hand tooling through the sub-base. Therefore, Farallon moved the boring locations to the landscaped areas adjacent to the parking areas (shown on Figure 2). Farallon advanced 3 shallow soil borings to 1.5 feet bgs, to avoid any potential pesticide use associated with current landscaping.

Additionally, Farallon advanced two soil borings to 1 foot bgs in the vicinity of the western transformer, which was subject to the reported historical spill. Farallon selected areas in the pavement adjacent to the transformer that would be the most likely migration pathway for leaking oil from the transformer (downslope and adjacent to a catch basin).

Farallon used stainless steel hand tools to advance borings and collect soil samples that were decontaminated between samples. The soil samples were visually inspected by a Farallon technician. Physical evidence of soil impacts, including staining and odors, was not observed.

The soil samples were collected into labeled laboratory-supplied jars, placed into an iced cooler, and submitted under standard chain-of-custody protocols to Environmental

Laboratory Accreditation Program (ELAP)-certified Enthalpy Analytical, Inc. for analysis. The three soil samples collected from the former orchard area were submitted for analysis for the presence of pesticides and arsenic with Environmental Protection Agency (EPA) Method 8081 and 6010B, respectively. The two soil samples collected from the transformer spill area were submitted for analysis for the presence of PCBs and TPH with EPA Method 8082 and 8015, respectively.

10.3 SUMMARY OF ANALYTICAL RESULTS

The analytical results for arsenic and pesticides detected in soil were compared to the DTSC-modified Regional Screening Levels (DTSC-SLs) developed by the DTSC Human and Ecological Risk Office and published in the Human Health Risk Assessment (HRRA) Note 3 in June 2020, Revised May 2022 (HRRA Note 3) and the Southern California Ambient Arsenic Screening Level published in HRRA Note 11 on December 28, 2020 (HRRA Note 11).

Results from this investigation are summarized below:

- Orchard Samples: No pesticides were detected. Arsenic was detected at concentrations ranging from 4.3 to 6.0 milligrams per kilogram (mg/kg), below the background screening concentration of 12 mg/kg for arsenic in soil in southern California (Human Health Risk Assessment (HHRA) Note 11).
- Transformer Samples: No PCBs were detected. Trace concentrations of TPH as diesel and oil were detected at concentrations of 9.9 J and 24 mg/kg at SB-4-1', and TPH as oil was detected at a concentration of 4.5 J mg/kg at SB-5-1'. These concentrations are well below the DTSC-SLs for Residential Soil of 2,400 and 97 mg/kg for TPH (C17-C32) and TPH(C9-C16), respectively. These concentrations were less than regulatory screening levels. The J qualifier indicates an estimated value.

10.4 SHALLOW SOIL SAMPLING CONCLUSIONS

Concentrations of TPH detected at the Subject Property were less than residential screening levels, indicating that no mitigation is not warranted in a residential use scenario. Arsenic was detected at concentrations but less than the accepted background concentration Screening Level for arsenic in soil in Southern California.

The laboratory analytical report is provided in Appendix G.

11.0 FINDINGS AND OPINIONS

Farallon performed a Phase I ESA in accordance with ASTM E1527-21 and the Authorization. Significant findings are identified below.

Four adjoining properties have used diesel, gasoline, or potentially tetrachloroethene. No releases have been reported from these facilities. Based on the regulatory oversight, relative distance, depth to groundwater of over 50 feet bgs, and/or topographic gradient, these sites do not represent recognized environmental conditions in connection with the Subject Property at this time.

12.0 CONCLUSIONS

Farallon conducted a Phase I ESA for the property at 27061, 27071, and 27081 Aliso Creek Road in Aliso Viejo, California in conformance with the scope and limitations of ASTM E1527-21. Any exceptions to or deletions from this practice are described in Section 1.5, Deviations.

This assessment identified no evidence of recognized environmental conditions in connection with the Subject Property. Shallow soil sampling conducted at the Subject Property did not identify releases of agricultural chemicals or transformer oil that would warrant further investigation or remediation. Although concentrations of arsenic exceeded screening levels, when the source is naturally occurring, agencies generally do not require any action as long as the detected concentrations are consistent with established background concentrations. Accordingly, the arsenic at the Subject Property is not considered a recognized environmental condition.

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14.0 LIMITATIONS

14.1 GENERAL LIMITATIONS

The conclusions contained in this report/assessment are based on professional opinions with regard to the subject matter. These opinions have been arrived at in accordance with currently accepted hydrogeologic and engineering standards and practices applicable to this location. The conclusions contained herein are subject to the following inherent limitations:

- **Accuracy of Information.** Farallon obtained, reviewed, and evaluated certain information used in this report/assessment from sources that were believed to be reliable. Farallon's conclusions, opinions, and recommendations are based in part on such information. Farallon's services did not include verification of its accuracy or authenticity. Should the information upon which Farallon relied prove to be inaccurate or unreliable, Farallon reserves the right to amend or revise its conclusions, opinions, and/or recommendations.
- **Reconnaissance and/or Characterization.** Farallon performed a reconnaissance and/or characterization of the Subject Property that is the subject of this report/assessment to document current conditions. Farallon focused on areas deemed more likely to exhibit hazardous materials conditions. Contamination may exist in other areas of the Subject Property that were not investigated or were inaccessible. Subject Property activities beyond Farallon's control could change at any time after the completion of this report/assessment.

For the foregoing reasons, Farallon cannot and does not warrant or guarantee that the Subject Property is free of hazardous or potentially hazardous substances or conditions, or that latent or undiscovered conditions will not become evident in the future. Farallon's observations, findings, and opinions can be considered valid only as of the date of the report.

This report/assessment has been prepared in accordance with the contract for services between Farallon and Shea Homes Limited Partnership, and currently accepted industry standards. No other warranties, representations, or certifications are made.

14.2 LIMITATION ON RELIANCE BY THIRD PARTIES

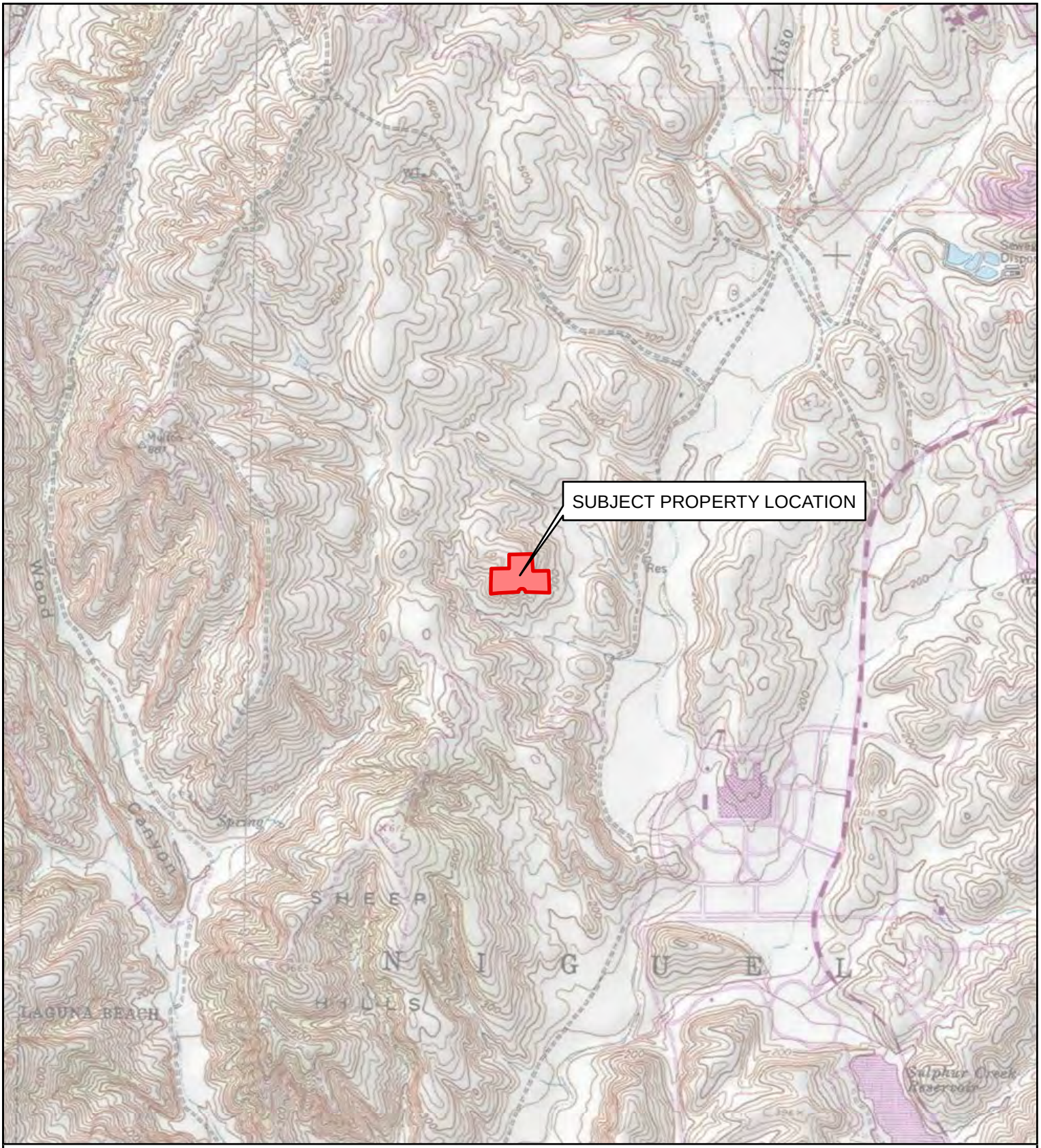
Reliance by third parties is prohibited. This report/assessment has been prepared for the exclusive use of Shea Homes Limited Partnership to address the unique needs of Shea Homes Limited Partnership at the Subject Property at a specific point in time.

This is not a general grant of reliance. No one other than Shea Homes Limited Partnership may rely on this report unless Farallon agrees in advance to such reliance in writing. Any unauthorized use, interpretation, or reliance on this report/assessment is at the sole risk of that party, and Farallon will have no liability for such unauthorized use, interpretation, or reliance.

FIGURES

PHASE I
ENVIRONMENTAL SITE ASSESSMENT REPORT
27061, 27071, and 27081 Aliso Creek Road
Aliso Viejo, California

Farallon PN: 2450-009



REFERENCE: 7.5 MINUTE USGS QUADRANGLE SAN JUAN CAPISTRANO, CALIFORNIA, DATED 2013

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SCALE IN FEET

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Washington
Bellevue | Bellingham | Seattle

Oregon
Portland | Baker City

California
Oakland | Irvine

FIGURE 1

SUBJECT PROPERTY VICINITY MAP
27061, 27071, AND 27081
ALISO CREEK ROAD
ALISO VIEJO, CALIFORNIA

FARALLON PN: 2450-009

Drawn By: aguse Checked By: JE Date: 12/16/2024 Disc Refer

Q:\Projects\2450 Shea Entities\009 Aliso Creek\Mapfiles\002\Figure-01_SubjectPropertyVicini...

LEGEND

- SAMPLING LOCATION
- DUMPSTER
- PAD-MOUNTED TRANSFORMER
- STORM DRAIN
- SUBJECT PROPERTY BOUNDARY
- ORANGE COUNTY PARCEL BOUNDARY

N

0 150

SCALE IN FEET

NOTES:
1. ALL LOCATIONS ARE APPROXIMATE.
2. FIGURES WERE PRODUCED IN COLOR. GRAYSCALE COPIES MAY NOT REPRODUCE ALL ORIGINAL INFORMATION.

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FIGURE 2

SUBJECT PROPERTY PLAN
AND SAMPLING LOCATIONS
27061, 27071, AND 27081
ALISO CREEK ROAD
ALISO VIEJO, CALIFORNIA

FARALLON PN: 2450-009

Drawn By: aguse | Checked By: KL | Date: 1/8/2025 | Disc Reference:

Path: Q:\Projects\2450 Shea Entities\009 Aliso Creek\Mapfiles\002\Figure-02_SubjectPropertyPlan_andSamplingLoc.mxd

APPENDIX A
PROFESSIONAL QUALIFICATIONS

PHASE I
ENVIRONMENTAL SITE ASSESSMENT REPORT
27061, 27071, and 27081 Aliso Creek Road
Aliso Viejo, California

Farallon PN: 2450-009

JARED EUDELL
Associate Scientist

BS Environmental Science
BS Marine Biology
MS Systems Science
22 years' experience

Jared Eudell has 22 years of experience in the environmental sector, with more than 16 years of experience as a consultant. He has been involved in over 1,500 Phase I Environmental Site Assessments and related due diligence projects across the United States. He has managed and provided technical assistance for numerous Phase II subsurface investigations involving soil, groundwater, soil gas and indoor air impacts, and has supported mitigation and remediation projects to meet client or regulatory cleanup goals. He also has provided regulatory compliance services for public and private clients involving National Pollution Discharge Elimination System compliance; Spill Prevention, Control, and Countermeasure Plan preparation; underground storage tank inspections; and solid- and hazardous waste-recycling program development.

KATHY LEHNUS, L.E.P., P.G.
Senior Geologist

BA Geology
BS Environmental Science
MS Applied Geology
28 years' experience

Kathy Lehnus has 28 years of experience in the environmental consulting industry. Her professional experience includes conducting Phase I and Phase II Environmental Site Assessments, managing investigation and remediation projects led by the California Department of Toxic Substances Control and California Regional Water Quality Control Boards, investigating environmental impacts on investment portfolios, and providing oversight for soil and groundwater assessments. Kathy's key skills include preparation of investigation and remediation work plans, regulatory navigation, and project quality and process improvement, including developing new policies and updating standard operating procedures.

MARTIN HAMANN, P.G., L.G., C.H.G.
Principal Hydrogeologist

BA Geology
MBA
35 years' experience

Martin Hamann has experience in hundreds of environmental health and safety programs, regulatory negotiations, sustainability issues, site investigations, environmental assessments, and remedial actions. He manages and works on numerous large environmental projects at industrial facilities, and has extensive experience with large-scale water development and environmental projects in the United States and developing countries. Martin also serves as a designated technical expert, providing litigation support services on complex soil and groundwater contamination projects and environmental health and safety issues.

APPENDIX B
SUBJECT PROPERTY PHOTOGRAPHS

PHASE I
ENVIRONMENTAL SITE ASSESSMENT REPORT
27061, 27071, and 27081 Aliso Creek Road
Aliso Viejo, California

Farallon PN: 2450-009

SITE PHOTOGRAPHS

Phase I Environmental Site Assessment Report
27061, 27071, and 27081 Aliso Creek Road
Aliso Viejo, California
Farallon PN: 2450-009

Photograph 1. Subject Property, looking northwest.
Photograph 2. 27061 Aliso Creek Road, looking east.
Photograph 3. SpyGlass laboratory in the 27061 Aliso Creek Road building.
Photograph 4. Elevator machine in 27061 Aliso Creek Road building.
Photograph 5. 27071 Aliso Creek Road, looking north.
Photograph 6. Janitorial supplies in the 27071 Aliso Creek Road building.
Photograph 7. Elevator machine in the 27071 Aliso Creek Road building.
Photograph 8. 27081 Aliso Creek Road, looking west.
Photograph 9. AACN warehouse in the 27081 Aliso Creek Road building.
Photograph 10. Elevator machine in the 27081 Aliso Creek Road building.
Photograph 11. Pad-mounted transformer on the Subject Property.
Photograph 12. Northwest-adjoining fire stations, looking northwest.
Photograph 13. Subject Property northern exterior, looking south.
Photograph 14. Subject Property southern exterior, looking west.
Photograph 15. Subject Property western exterior, looking south.
Photograph 16. Subject Property northwestern exterior, looking east.
Photograph 17. Northern-adjoining shopping center.
Photograph 18. Northeastern-adjoining gasoline station and carwash.
Photograph 19. Eastern-adjoining residential property across Aliso Creek Road.
Photograph 20. Southern-adjoining commercial flex buildings.
Photograph 21. Western-adjoining self-storage facility.
Photograph 22. Western-adjoining medical plaza.
Photograph 23. Western-adjoining library.

Photograph 1. Subject Property, looking northwest.

Photograph 2. 27061 Aliso Creek Road, looking east.

Photograph 3. SpyGlass laboratory in the 27061 Aliso Creek Road building.

Photograph 4. Elevator machine in 27061 Aliso Creek Road building.

Photograph 5. 27071 Aliso Creek Road, looking north.

Photograph 6. Janitorial supplies in the 27071 Aliso Creek Road building.

Photograph 7. Elevator machine in the 27071 Aliso Creek Road building.

Photograph 8. 27081 Aliso Creek Road, looking west.

Photograph 9. AACN warehouse in the 27081 Aliso Creek Road building.

Photograph 10. Elevator machine in the 27081 Aliso Creek Road building.

Photograph 11. Pad-mounted transformer on the Subject Property.

Photograph 12. Northwest-adjoining fire stations, looking northwest.

Photograph 13. Subject Property northern exterior, looking south.

Photograph 14. Subject Property southern exterior, looking west.

Photograph 15. Subject Property western exterior, looking south.

Photograph 16. Subject Property northwestern exterior, looking east.

Photograph 17. Northern-adjoining shopping center.

Photograph 18. Northeastern-adjoining gasoline station and carwash.

Photograph 19. Eastern-adjoining residential property across Aliso Creek Road.

Photograph 20. Southern-adjoining commercial flex buildings.

Photograph 21. Western-adjoining self-storage facility.

Photograph 22. Western-adjoining medical plaza.

Photograph 23. Western-adjoining library.

APPENDIX C
USER QUESTIONNAIRE

PHASE I
ENVIRONMENTAL SITE ASSESSMENT REPORT
27061, 27071, and 27081 Aliso Creek Road
Aliso Viejo, California

Farallon PN: 2450-009

PHASE I ENVIRONMENTAL SITE ASSESSMENT
USER QUESTIONNAIRE

To qualify for one of the Landowner Liability Protections (LLPs) offered by the Small Business Liability Relief and Brownfields Revitalization Act of 2001, the Phase I Environmental Site Assessment (Phase I ESA) Report user must provide the following information (if available) to the Environmental Professional (Farallon Consulting, L.L.C. [Farallon]). Failure to provide this information could result in the determination that "all appropriate inquiry" has not been completed.

This Phase I Environmental Site Assessment (ESA) was prepared in accordance with ASTM E1527 (herein defined as "the ASTM Standard"). Please state any additional scope items outlined in the Phase I ESA proposal, if applicable:

Farallon understands that the User of the Phase I ESA Report is seeking to follow the standards set forth in the ASTM Standard to complete an environmental assessment of the Subject Property. The User is defined as the party seeking to use the ASTM Standard to complete a Phase I ESA of the Subject Property. The User has specific responsibilities for fulfilling the ASTM Standard requirements to help identify the possibility of recognized environmental conditions in connection with the Subject Property. These responsibilities do not require the technical expertise of an Environmental Professional, and are to be provided by the User. The completed User Questionnaire will be included in the Phase I ESA Report.

■ DATE COMPLETED

■ USER INFORMATION

Client (**User**) Name: Shea Homes Limited Partnership

This User Questionnaire was completed by:

Name: Danielle Prigmore

Address: 2 Ada, Suite 200

Phone: 949-526-8802

Relationship to User:

☐ User ☐ Legal Counsel ☐ Lender ☐ Realtor/Broker

☒ Other (specify): Authorized Signer

■ SUBJECT PROPERTY INFORMATION

Subject Property Name (if any): 27081 Aliso Creek

Subject Property Address: 27081 Aliso Creek
Aliso Viejo, CA 92656

Parcel No(s).: 93-196

Client Project/Asset #:

Subject Property Contact Information	Phone:
Name: Chris Bosley Email: christopher.bosley@cushwake.com Relation to the Subject Property: Broker	

What is the reason this Phase I ESA is required?

Property Transaction: ☐ Sale ☒ Purchase ☐ Exchange

Other (specify):

The U.S. Environmental Protection Agency (EPA) All Appropriate Inquiries Final Rule (40 CFR Part 312) requires that the below tasks and questions be performed by or on behalf of a party (i.e., User) seeking to qualify for an LLP to the Comprehensive Environmental Response, Compensation, and Liability Act (CERLA) liability. This purpose of this questionnaire is to assist the User in gathering and providing information that may be material to identifying recognized environmental conditions. The User should provide the following information to the Environmental Professional. Failure to conduct these tasks and inquiries could result in a determination that All Appropriate Inquiries is not complete.

(1) Environmental cleanup liens that have been filed or recorded against the Subject Property (Part 312.25 of Title 40 of the Code of Federal Regulations [40 CFR 312.25])

Any environmental liens and activity and use limitations (AULs) known to the **User** should be reported to the Environmental Professional conducting a Phase I ESA. The **User** should either (1) engage a title company, real estate attorney, or title professional to undertake a review of reasonably ascertainable recorded land title records and lien records for environmental liens and AULs currently recorded against or relating to the Subject Property, or (2) negotiate such an engagement of a title company, real estate attorney, or title professional as an addition to the scope of work of the Environmental Professional.

A lien search obtained through a database company at the request of the User does not replace the User obligations to review Land Title and Judicial records for the Subject Property as described in ASTM E1527.

Are you aware of any environmental cleanup liens against the Subject Property that have been filed or recorded under federal, tribal, state, or local law? If yes, please provide details to the best of your knowledge.

No

(2) Activity and use limitations that are in place on the Subject Property or that have been filed or recorded in a registry against the Subject Property (40 CFR 312.26)

ASTM E1527 does not impose on the Environmental Professional the responsibility to undertake review of recorded land title records or judicial records for environmental liens and activity use limitations.

Are you aware of any activity and use limitation (such as engineering controls, land use restrictions, or institutional controls) that are in place at the Subject Property and/or have been

filed or recorded in a registry under federal, tribal, state, or local law? If yes, please provide details to the best of your knowledge.

No

(3) Specialized knowledge or experience of the person seeking to qualify for the LLP (40 CFR 312.28)

As the User of the Phase I ESA Report, please indicate any specialized knowledge or experience you have related to the Subject Property or nearby properties. For example, are you involved in the same line of business as the current or former occupant(s) of the Subject Property or an adjoining property so that you would have specialized knowledge of the chemicals and processes used by this type of business?

No

(4) Relationship of the purchase price to the fair market value of the Subject Property if it were not contaminated (40 CFR 312.29)

Does the purchase price being paid for this Subject Property reasonably reflect the fair market value of the Subject Property?

Yes

If you conclude that there is a difference between the purchase price and the fair market value, have you considered whether the lower purchase price is because contamination is known or believed to be present at the Subject Property?

No

(5) Commonly known or reasonably ascertainable information about the Subject Property (40 CFR 312.30)

Are you aware of commonly known or reasonably ascertainable information about the Subject Property that would help Farallon Consulting, L.L.C. to identify conditions indicative of a chemical or other release or threatened release? For example, as user of the Phase I ESA Report:

Do you know the past use(s) of the Subject Property? (If yes, please specify.)

No

Do you know of a specific chemical(s) present at the Subject Property, or present at one time? (If yes, please specify.)

No

Do you know of a chemical and/or other spill(s) or release(s) that has taken place at the Subject Property? (If yes, please specify.)

No

Do you know of any environmental cleanup(s) that has taken place at the Subject Property? (If yes, please specify.)

No

(6) **The degree of obviousness of the presence or likely presence of contamination at the Subject Property, and the ability to detect the contamination by appropriate investigation (40 CFR 312.31)**

Based on your knowledge and experience related to the Subject Property, is there any obvious indicator(s) that points to the presence or likely presence of contamination at the Subject Property? (If yes, please specify.)

No

Additional information about the Subject Property, if known.

■ OWNERS

Current Owner(s):
AACN Property Holdings, LLC

Previous Owner(s):

■ OCCUPANTS/TENANTS AND OPERATIONS

Current Occupant(s)/Tenant(s):
2 tenants, one is confidential.

Current Operations: Office retail

Previous Occupant(s)/Tenant(s):

Former Operations:

■ PREVIOUS INVESTIGATIONS

Have previous environmental investigations been conducted at Subject Property?
If yes, have they been provided to Farallon Consulting, L.L.C.?

Yes, there is a previous Phase I report by the seller that has been provided to Farallon.

■ SUBJECT PROPERTY ENVIRONMENTAL CONDITIONS

Are you aware of any of the following environmental conditions at the Subject Property, either current or former?

Environmental Condition/Issue	Response	Comment if Yes Response
Aboveground Storage Tank	☐ Yes ☐ No	
Underground Storage Tank	☐ Yes ☐ No	
Dump Area/Landfill	☐ Yes ☐ No	
Waste Treatment System	☐ Yes ☐ No	
Wastewater Discharge	☐ Yes ☐ No	
Air Stack/Vent/Odor	☐ Yes ☐ No	

Indoor Air Quality Complaint	☐ Yes ☐ No	
Floor Drain/Sump	☐ Yes ☐ No	
Pit, Pond, Lagoon	☐ Yes ☐ No	
Stained Soil/Vegetation Impact	☐ Yes ☐ No	

■ RELIANCE

Reliance: The Phase I ESA Report will be prepared for the sole use of the User. Please be advised that Farallon limits third parties' right to rely on the Phase I ESA Report. Farallon may issue a letter granting the right to rely on terms Farallon has pre-approved. However, in no case will Farallon grant reliance to the Small Business Administration.
Farallon is not obligated to provide reliance. All requests for the right to rely should be discussed prior to commencement of the Phase I ESA.

Please identify all parties who intend to use the Phase I ESA Report for informational purposes:
User & Seller

APPENDIX D
HISTORIC SOURCES

PHASE I
ENVIRONMENTAL SITE ASSESSMENT REPORT
27061, 27071, and 27081 Aliso Creek Road
Aliso Viejo, California

Farallon PN: 2450-009

HISTORICAL AERIALS

Project Property: 27081 Aliso Creek Road
27081 Aliso Creek Road
Aliso Viejo CA 92656

Project No: 2450-009

Requested By: Farallon Consulting, LLC

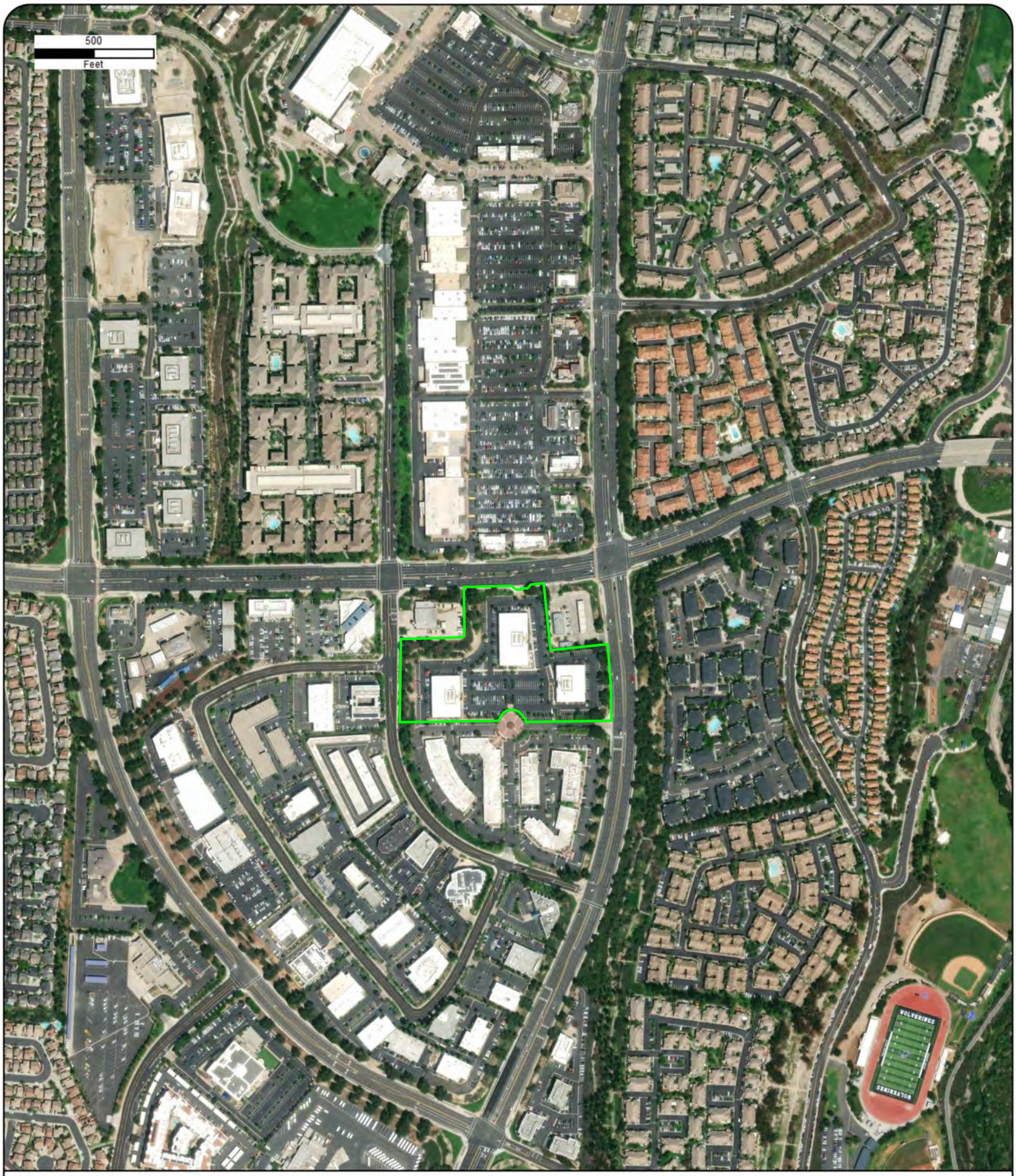
Order No: 24112101214

Date Completed: November 25,2024

Aerial Maps included in this report are produced by the sources listed above and are to be used for research purposes including a phase I report. Maps are not to be resold as commercial property. ERIS provides no warranty of accuracy or liability. The information contained in this report has been produced using aerial photos listed in above sources by ERIS Information Inc. (in the US) and ERIS Information Limited Partnership (in Canada), both doing business as 'ERIS'. The maps contained in this report do not purport to be and do not constitute a guarantee of the accuracy of the information contained herein. Although ERIS has endeavored to present information that is accurate, ERIS disclaims, any and all liability for any errors, omissions, or inaccuracies in such information and data, whether attributable to inadvertence, negligence or otherwise, and for any consequences arising therefrom. Liability on the part of ERIS is limited to the monetary value paid for this report.

Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 | info@erisinfo.com | erisinfo.com

Date	Source	Scale	Comments
2023	Maxar Technologies	1" = 500'	
2020	United States Department of Agriculture	1" = 500'	
2018	United States Department of Agriculture	1" = 500'	
2016	United States Department of Agriculture	1" = 500'	
2014	United States Department of Agriculture	1" = 500'	
2012	United States Department of Agriculture	1" = 500'	
2010	United States Department of Agriculture	1" = 500'	
2009	United States Department of Agriculture	1" = 500'	
2005	United States Department of Agriculture	1" = 500'	
2002	United States Geological Survey	1" = 500'	
1994	United States Geological Survey	1" = 500'	
1988	United States Geological Survey	1" = 500'	
1981	United States Geological Survey	1" = 500'	
1972	United States Geological Survey	1" = 500'	
1967	United States Geological Survey	1" = 500'	
1960	Fairchild	1" = 500'	
1952	Agricultural Stabilization & Conserv. Service	1" = 500'	
1947	United States Geological Survey	1" = 500'	
1938	Agricultural Stabilization & Conserv. Service	1" = 500'	
1931	Fairchild	1" = 500'	



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Source: MAXAR
Scale: 1" = 500'
Comment:

Address: 27081 Aliso Creek Road, Aliso Viejo, CA
Approx Center: -117.72483104,33.56957974

Order No: 24112101214

ERIS

Year: 2020
Source: USDA
Scale: 1" = 500'
Comment:

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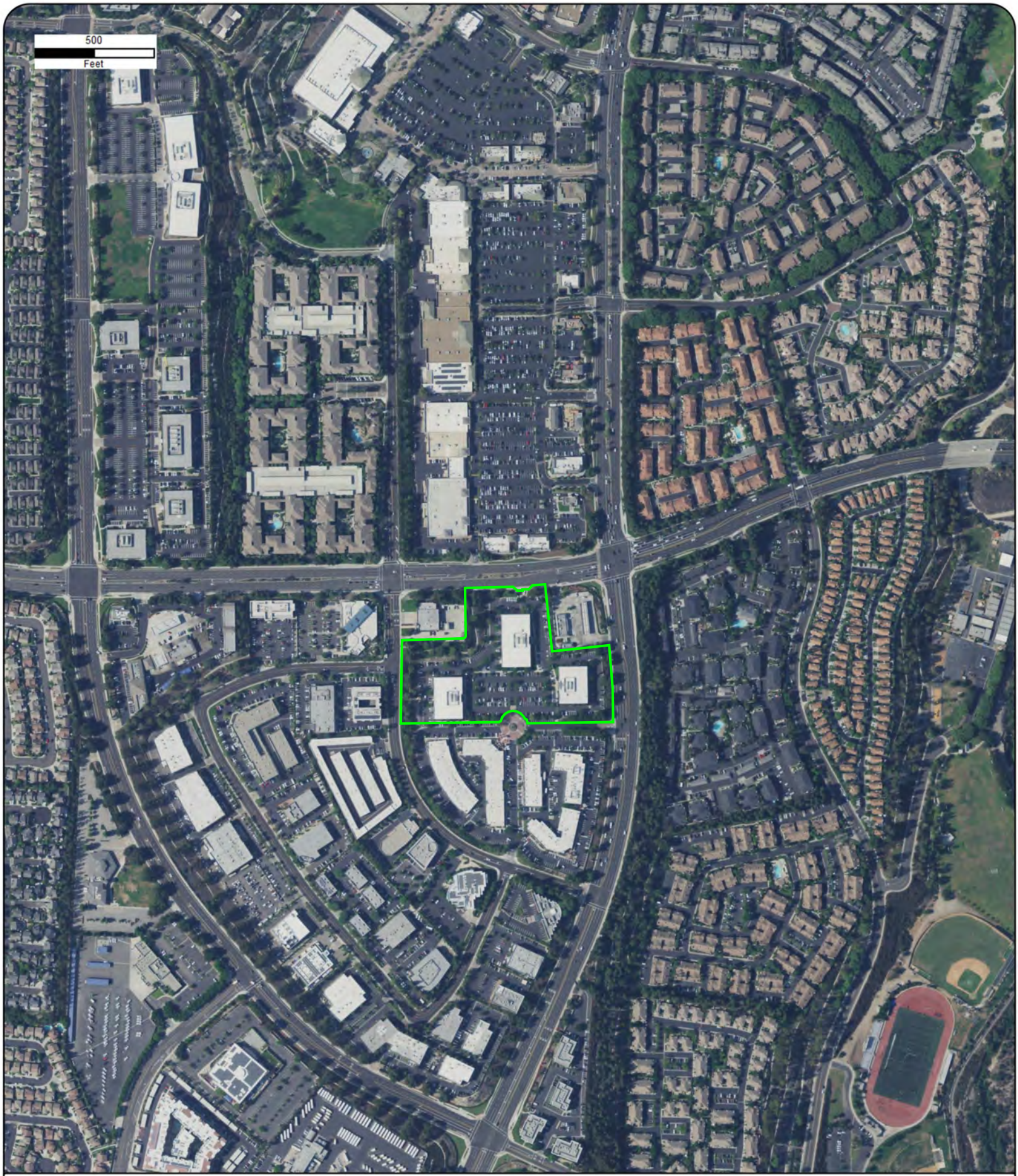
Approx Center: -117.72483104,33.56957974

Order No: 24112101214

ERIS



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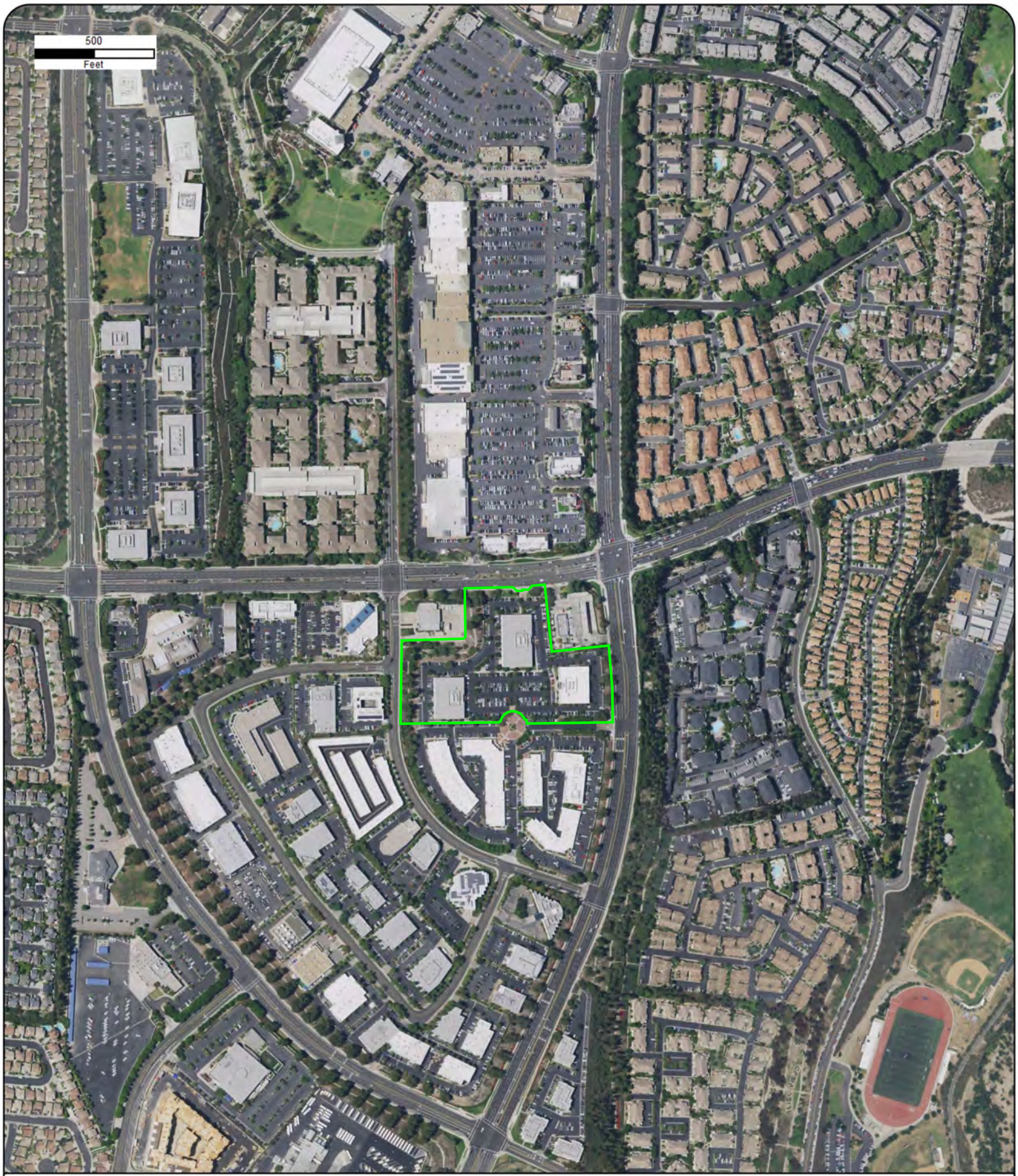
Source: USDA
Scale: 1" = 500'
Comment:

Address: 27081 Aliso Creek Road, Aliso Viejo, CA
Approx Center: -117.72483104,33.56957974

Order No: 24112101214

ERIS



Year: 2016
Source: USDA
Scale: 1" = 500'
Comment:

Address: 27081 Aliso Creek Road, Aliso Viejo, CA
Approx Center: -117.72483104,33.56957974

Order No: 24112101214

ERIS

Year: 2014
Source: USDA
Scale: 1" = 500'
Comment:

Address: 27081 Aliso Creek Road, Aliso Viejo, CA
Approx Center: -117.72483104,33.56957974

Order No: 24112101214

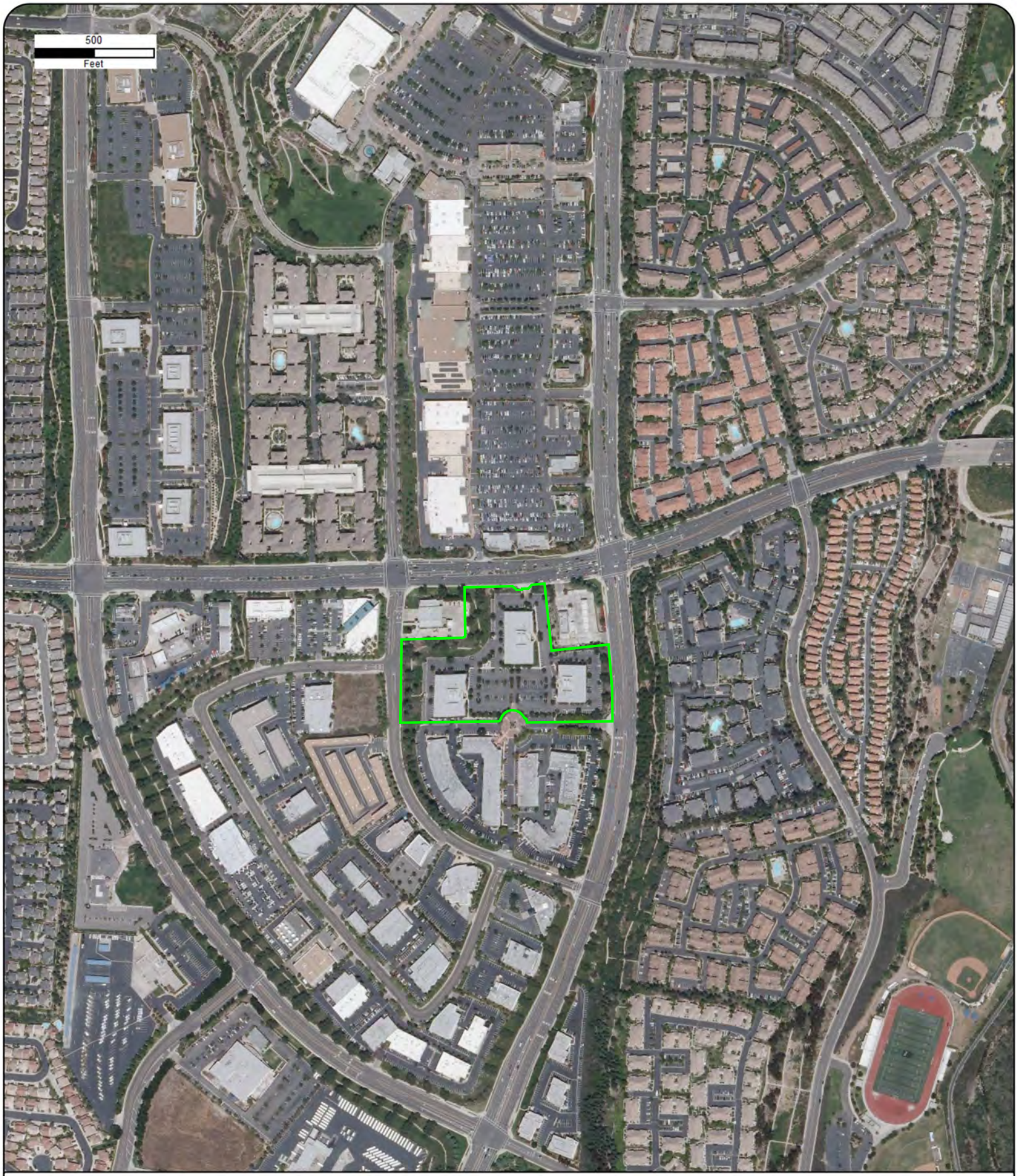
ERIS

Year: 2012
Source: USDA
Scale: 1" = 500'
Comment:

Address: 27081 Aliso Creek Road, Aliso Viejo, CA
Approx Center: -117.72483104,33.56957974

Order No: 24112101214

ERIS



Year: 2010
Source: USDA
Scale: 1" = 500'
Comment:

Address: 27081 Aliso Creek Road, Aliso Viejo, CA
Approx Center: -117.72483104,33.56957974

Order No: 24112101214

ERIS

Year: 2009
Source: USDA
Scale: 1" = 500'
Comment:

Address: 27081 Aliso Creek Road, Aliso Viejo, CA
Approx Center: -117.72483104,33.56957974

Order No: 24112101214

ERIS

Year: 2005
Source: USDA
Scale: 1" = 500'
Comment:

Address: 27081 Aliso Creek Road, Aliso Viejo, CA
Approx Center: -117.72483104,33.56957974

Order No: 24112101214

ERIS

Year: 2002
Source: USGS
Scale: 1" = 500'
Comment:

Address: 27081 Aliso Creek Road, Aliso Viejo, CA
Approx Center: -117.72483104,33.56957974

Order No: 24112101214

ERIS

Year: 1994
Source: USGS
Scale: 1" = 500'
Comment:

Address: 27081 Aliso Creek Road, Aliso Viejo, CA
Approx Center: -117.72483104,33.56957974

Order No: 24112101214

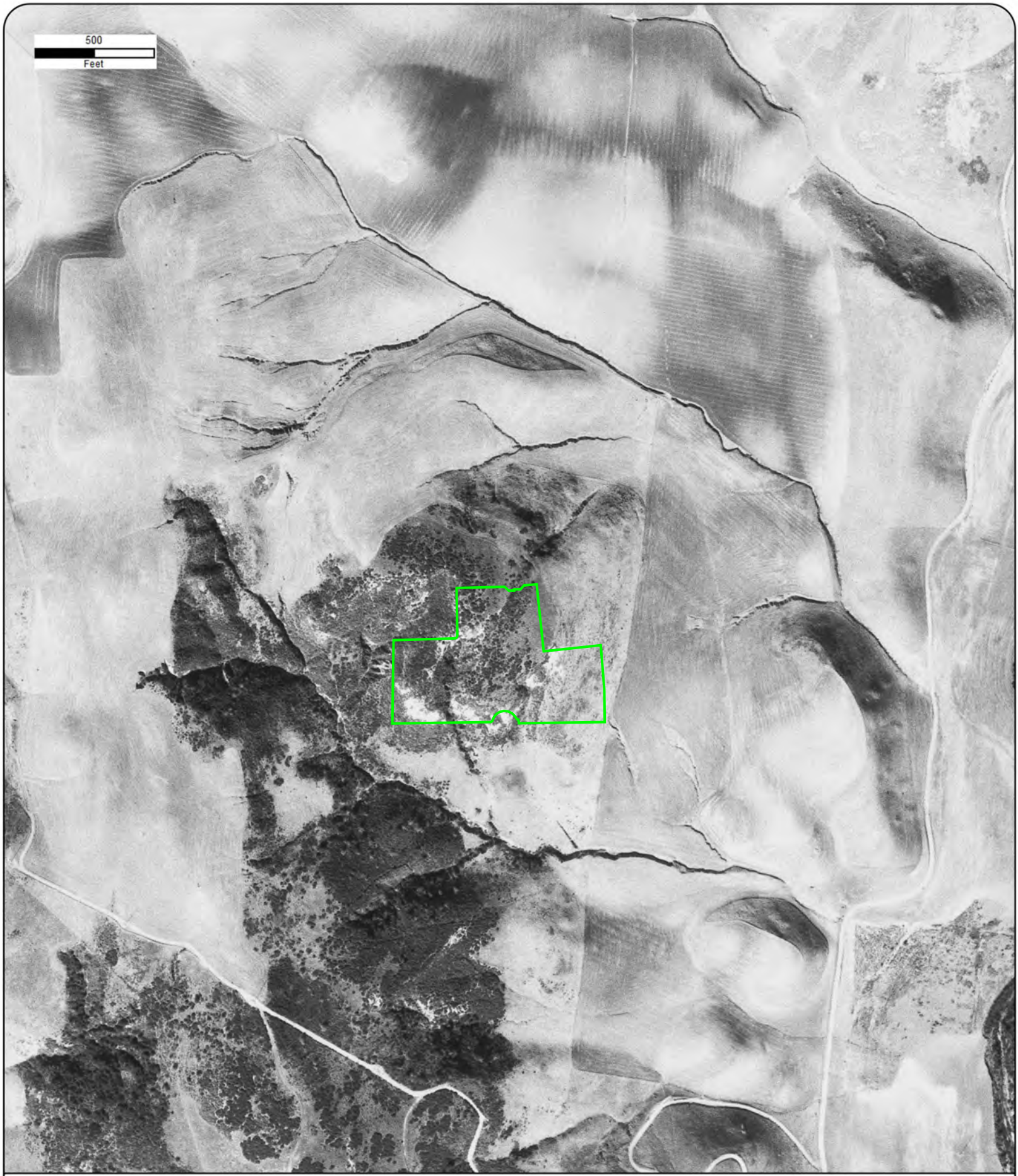
ERIS

Year: 1988
Source: USGS
Scale: 1" = 500'
Comment:

Address: 27081 Aliso Creek Road, Aliso Viejo, CA
Approx Center: -117.72483104,33.56957974

Order No: 24112101214

ERIS



Year: 1981
Source: USGS
Scale: 1" = 500'
Comment:

Address: 27081 Aliso Creek Road, Aliso Viejo, CA
Approx Center: -117.72483104,33.56957974

Order No: 24112101214

Year: 1972
Source: USGS
Scale: 1" = 500'
Comment:

Address: 27081 Aliso Creek Road, Aliso Viejo, CA
Approx Center: -117.72483104,33.56957974

Order No: 24112101214

Year: 1967
Source: USGS
Scale: 1" = 500'
Comment:

Address: 27081 Aliso Creek Road, Aliso Viejo, CA
Approx Center: -117.72483104,33.56957974

Order No: 24112101214

ERIS

Year: 1960
Source: FAIRCHILD
Scale: 1" = 500'
Comment:

Address: 27081 Aliso Creek Road, Aliso Viejo, CA
Approx Center: -117.72483104,33.56957974

Order No: 24112101214

ERIS

Year: 1952
Source: ASCS
Scale: 1" = 500'
Comment:

Address: 27081 Aliso Creek Road, Aliso Viejo, CA
Approx Center: -117.72483104,33.56957974

Order No: 24112101214

ERIS

Year: 1947
Source: USGS
Scale: 1" = 500'
Comment:

Address: 27081 Aliso Creek Road, Aliso Viejo, CA
Approx Center: -117.72483104,33.56957974

Order No: 24112101214

ERIS

Year: 1938
Source: ASCS
Scale: 1" = 500'
Comment:

Address: 27081 Aliso Creek Road, Aliso Viejo, CA
Approx Center: -117.72483104,33.56957974

Order No: 24112101214

ERIS

Year: 1931
Source: FAIRCHILD
Scale: 1" = 500'
Comment:

Address: 27081 Aliso Creek Road, Aliso Viejo, CA
Approx Center: -117.72483104,33.56957974

Order No: 24112101214

ERIS

CITY DIRECTORY

Project Property:	*27081 Aliso Creek Road* *27081 Aliso Creek Road* *Aliso Viejo,CA 92656*
Project No:	*2450-009*
Requested By:	*Farallon Consulting, LLC*
Order No:	*24112101214*
Date Completed:	*December 04, 2024*

Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 | info@erisinfo.com | erisinfo.com

December 04, 2024
RE: CITY DIRECTORY RESEARCH
27081 Aliso Creek Road
Aliso Viejo,CA 92656

Thank you for contacting ERIS for an City Directory Search for the site described above. Our staff has conducted a reverse listing City Directory search to determine prior occupants of the subject site and adjacent properties. We have provided the nearest addresses(s) when adjacent addresses are not listed. If we have searched a range of addresses, all addresses in that range found in the Directory are included.

Note: Reverse Listing Directories generally are focused on more highly developed areas. Newly developed areas may be covered in the more recent years, but the older directories will tend to cover only the "central" parts of the city. To complete the search, we have either utilized the ACPL, Library of Congress, State Archives, and/or a regional library or history center as well as multiple digitized directories. These do not claim to be a complete collection of all reverse listing city directories produced.

ERIS has made every effort to provide accurate and complete information but shall not be held liable for missing, incomplete or inaccurate information. To complete this search we used the general range(s) below to search for relevant findings. If you believe there are additional addresses or streets that require searching please contact us at 866-517-5204.

Search Criteria:
26950-27155 of Aliso Creek Rd
ALL of Journey
23000-23415 of Pacific Park Dr
Search Notes:

Search Results Summary

Date	Source	Comment
2023	DIGITAL BUSINESS DIRECTORY	
2020	DIGITAL BUSINESS DIRECTORY	
2016	DIGITAL BUSINESS DIRECTORY	
2012	DIGITAL BUSINESS DIRECTORY	
2008	DIGITAL BUSINESS DIRECTORY	
2003	DIGITAL BUSINESS DIRECTORY	
2001-2002	HAINES	
1996-1997	HAINES	
1996-1997	HAINES.JPG	
1991-1992	HAINES	
1986	HAINES	
1981	HAINES	
1975	PACIFIC TELEPHONE	
1970	PACIFIC TELEPHONE	
1964	PACIFIC TELEPHONE	
1959	PACIFIC TELEPHONE	
1955	PACIFIC TELEPHONE	

145 total records. Part 1 of 3

26951 **DEL TACO**...*RESTAURANTS*
27017 **POWERWAVE TECHNOLOGIES**...*NONCLASSIFIED ESTABLISHMENTS*
27055 **R & M SHELL**...*ALTERNATIVE FUELS*
27055 **R & M SHELL**...*CONVENIENCE STORES*
27055 **R & M SHELL**...*SERVICE STATIONS-GASOLINE & OIL*
27061 **BIG KAHUNA'S**...*WATER PARKS*
27061 **GALLAGHER BASSETT SVC**...*MANAGEMENT SERVICES*
27061 **GALLAGHER BASSETT SVC**...*INSURANCE*
27061 **GALLAGHER BASSETT SVC**...*INSURANCE-PLAN ADMINISTRATORS*
27061 **TRANCAS CAPITAL**...*FINANCIAL ADVISORY SERVICES*
27071 **CHERRYL BITTNER**...*RESIDENTIAL*
27071 **DELTEL INC**...*CONSULTANTS-BUSINESS NEC*
27071 **HOME CARE SVC**...*HOME HEALTH SERVICE*
27071 **HOME CARE SVC**...*HEALTH CARE ALTERNATIVES*
27071 **HUFFMAN WEST**...*REAL ESTATE DEVELOPERS*
27071 **IHEARTCOMMUNICATIONS INC**...*COMPUTER PROGRAMMING SERVICES*
27071 **LAN INTERNATIONAL**...*COMPUTER SOFTWARE*
27071 **LAN INTERNATIONAL**...*PUBLISHERS-COMPUTER SOFTWARE (MFRS)*
27071 **LAN INTERNATIONAL**...*COMPUTER SERVICES*
27071 **LAN INTERNATIONAL**...*DATA PROCESSING SOFTWARE*
27071 **QUAKER OATS CO**...*BEVERAGES (WHLS)*
27071 **REHABFOCUS HOME HEALTH INC**...*HOME HEALTH SERVICE*
27071 **SELECT THERAPIES**...*EXERCISE & PHYSICAL FITNESS PROGRAMS*
27071 **SELECT THERAPIES**...*NONPROFIT ORGANIZATIONS*
27071 **SELECT THERAPIES**...*PHYSICAL THERAPISTS*
27071 **SELECT THERAPIES**...*NURSING & CONVALESCENT HOMES*
27081 **NATIONWIDE AUCTION FINANCE**...*AUTOMOBILE DEALERS-USED CARS*
27081 **REAL ESTATE DIGITAL**...*REAL ESTATE*
27081 **REAL ESTATE DIGITAL**...*REAL ESTATE INSPECTION*
27081 **REAL ESTATE DIGITAL**...*TITLE COMPANIES*
27101 **ARTVENTURE**...*ART INSTRUCTION & SCHOOLS*
27101 **BRAZILIAN TOP TEAM ALISO VIEJO**...*NONCLASSIFIED ESTABLISHMENTS*
27101 **CENTER STAGE**...*DRAMATIC INSTRUCTION*
27101 **CENTER STAGE**...*PERFORMING ARTS*
27101 **CENTER STAGE STUDIO**...*MUSICAL PRODUCTIONS*
27101 **CENTER STAGE STUDIO**...*THEATRICAL SCHOOLS*
27101 **DOHENY DAYS INC**...*CARNIVALS*
27101 **DOHENY DAYS INC**...*FEDERAL GOVERNMENT CONTRACTORS*
27101 **GLISTENING PERFECTION**...*AUTOMOBILE DETAIL & CLEAN-UP SERVICE*
27101 **GREEK BABY**...*BOOK DEALERS-RETAIL*
27101 **GROUP IV INTL**...*NONCLASSIFIED ESTABLISHMENTS*
27101 **IMPULSE DANCE PRODUCTIONS**...*DANCE COMPANIES*
27101 **JENNY MASON PHOTOGRAPHY**...*PHOTOGRAPHERS-COMMERCIAL*
27101 **KATS ONLY**...*NONCLASSIFIED ESTABLISHMENTS*
27101 **KIDZ GOLF CLUB**...*GOLF INSTRUCTION*
27101 **KRISTIN'S KIDDIE LAND**...*CHILD CARE SERVICE*
27101 **LAGUNA IMPORTS INC**...*CERAMIC PRODUCTS-DECORATIVE*
27101 **NEWPORT RESEARCH INC**...*PHARMACEUTICAL CONSULTANTS*
27101 **NEWPORT RESEARCH INC**...*CONSULTANTSBUSINESS NEC*
27101 **PAWS N KLAWS ANIMAL SALON**...*PET SERVICES*
27101 **PAWS N KLAWS ANIMAL SALON**...*PET WASHING & GROOMING*
27101 **ROBERSON EPOXY FLOORING INC**...*FLOOR LAYING REFINISHING & RESURFACING*
27101 **RUAS MARTIAL ARTS**...*MARTIAL ARTS INSTRUCTION*
27101 **RUG FIRM**...*CARPET & RUG DEALERS-NEW*
27101 **STATE FARM INSURANCE**...*INSURANCE*
27111 **AGENTMARKETING**...*ADVERTISING-COMPUTER*
27111 **ASCI SECURITY**...*SECURITY GUARD & PATROL SERVICE*
27111 **BERKTREE LEARNING CTR**...*CHILD CARE SERVICE*
27111 **BRILL**...*NONCLASSIFIED ESTABLISHMENTS*
27111 **CARDIO VASCULAR SALES**...*PHYSICIANS & SURGEONS EQUIP & SUPLS-MFRS*
27111 **CITY HARVEST**...*PARTY SUPPLIES*
27111 **CITY HARVEST CHURCH**...*CHURCHES*
27111 **COLOR SIGN CO**...*SIGNS (MFRS)*
27111 **DEFEO, MARISSA**...*MARRIAGE & FAMILY COUNSELORS*
27111 **ECLIPSE LIQUIDS**...*CIGAR CIGARETTE & TOBACCO DEALERS-WHLS*
27111 **EPROPERTYSITES LLC**...*DATA PROCESSING SOFTWARE*
27111 **FIT2BEKIDS**...*NONCLASSIFIED ESTABLISHMENTS*

2023 ALISO CREEK RD
SOURCE: DIGITAL BUSINESS DIRECTORY

Part 2 of 3

27111 **HOME CREATIONS DESIGN INC**...*DRAPERIES & CURTAINS-RETAIL/CUSTOM MADE*
27111 **HOME CREATIONS DESIGN INC**...*UPHOLSTERERS*
27111 **INNOVATIVE BEVERAGE CONCEPTS**...*COFFEE & TEA PRODUCTS-MANUFACTURERS*
27111 **INNOVATIVE BEVERAGE CONCEPTS**...*COFFEE SHOPS*
27111 **JENNIFER DEFEO PHD**...*NONCLASSIFIED ESTABLISHMENTS*
27111 **KUMON MATH & READING CTR**...*TUTORING*
27111 **KUMON MATH & READING CTR**...*EDUCATIONAL CONSULTANTS*
27111 **MOCAFE**...*BOTTLERS (MFRS)*
27111 **MOCAFE**...*BEVERAGES (WHLS)*
27111 **O C BABY**...*BABY ACCESSORIES*
27111 **PERFECT IMPRESSION LLC**...*WESTERN APPAREL-WHOLESALE*
27111 **SCHUBERTH NORTH AMERICA**...*MOTORCYCLES & MOTOR SCOOTERSSUPPLIES*
27111 **SCHUBERTH NORTH AMERICA**...*MOTORCYCLES & MOTOR SCOOTERS-DEALERS*
27111 **SCHUBERTH NORTH AMERICA**...*MOTORCYCLES & MOTOR SCOOTERS-MFRS*
27111 **STONEMILL TRAVEL CO**...*TRAVEL AGENCIES & BUREAUS*
27111 **STONEMILL TRAVEL CO**...*CRUISES*
27111 **SWEDE CAL PROPERTIES INC**...*REAL ESTATE MANAGEMENT*
27111 **VISION CHIPS INC**...*PUBLISHERS-COMPUTER SOFTWARE (MFRS)*
27111 **VISION CHIPS INC**...*COMPUTER SOFTWARE*
27111 **XLR8 O P S**...*OFFICE FURNITURE & EQUIP-INSTLTN (WHLS)*
27121 **COMPUTER ECONOMICS INC**...*GENERAL MERCHANDISEWHOLESALE*
27121 **COMPUTER ECONOMICS INC**...*MARKETING PROGRAMS & SERVICES*
27121 **COMPUTER ECONOMICS INC**...*COMPUTER & EQUIPMENT DEALERS*
27121 **COMPUTER ECONOMICS INC**...*COMPUTERS-SYSTEM DESIGNERS & CONSULTANTS*
27121 **GROTTO CUSTOM WINE CELLARS**...*WINES-RETAIL*
27121 **LUISA HIMBING**...*RESIDENTIAL*
27121 **MICROMAC TECHNOLOGY INC**...*COMPUTERS-SERVICE & REPAIR*
27121 **STAAR SURGICAL CO**...*PHYSICIANS & SURGEONS EQUIP & SUPLSWHLS*
27121 **STAAR SURGICAL CO**...*PHYSICIANS & SURGEONS EQUIP & SUPLS-MFRS*
27121 **TOOBS DISTRIBUTION**...*DISTRIBUTION SERVICES*
27131 **ALAINE ANDERSON AT SALON PLTNM**...*BEAUTY SALONS*
27131 **BEAUTY BY TIERA**...*BEAUTY SALONS*
27131 **CALI PARTY PRODUCTIONS**...*PARTY SUPPLIES*
27131 **DANCERS CHOICE**...*GYMNASTIC EQUIPMENT & SUPPLIES (WHLS)*
27131 **DANCERS CHOICE**...*DANCING SUPPLIES*
27131 **DOMINO'S PIZZA**...*CAFES*
27131 **DOMINO'S PIZZA**...*HOTELS & MOTELS*
27131 **DOMINO'S PIZZA**...*FOODS-CARRY OUT*
27131 **DOMINO'S PIZZA**...*PIZZA*
27131 **FAMILY & SPORTS CHIROPRACTIC**...*MASSAGE THERAPISTS*
27131 **FAMILY & SPORTS CHIROPRACTIC**...*CHIROPRACTORS DC*
27131 **FAMILY SPORTS CHIROPRACTIC**...*CHIROPRACTORS DC*
27131 **GYMBOREE PLAY MUSIC**...*CHILD DEVELOPMENT PROGRAMS*
27131 **NAMASTE**...*RESTAURANTS*
27131 **PACIFIC PARK DENTAL CARE**...*DENTISTS*
27131 **PACIFIC PLAZA CLEANERS**...*CLEANERS*
27131 **PLATINUM LASH STUDIO**...*MEDICAL SPAS*
27131 **PLATINUM MEDICAL SPA**...*MEDICAL SPAS*
27131 **PLATINUM MEDICAL SPA**...*PHYSICIANS & SURGEONS*
27131 **SALON PLATINUM**...*BEAUTY SALONS*
27131 **SALON PLATINUM**...*HEALTH SPAS*
27141 **24 HOUR FITNESS**...*EXERCISE & PHYSICAL FITNESS PROGRAMS*
27141 **24 HOUR FITNESS**...*GYMNASIUMS*
27141 **24 HOUR FITNESS**...*HEALTH CLUBS STUDIOS & GYMNASIUMS*
27141 **24 HOUR FITNESS**...*PERSONAL TRAINERSFITNESS*
27141 **CAPISTRAN INSURANCE**...*INSURANCE*
27141 **CHEF MAREYA**...*PERSONAL CHEFS*
27141 **CHISHOLM & KLINE**...*ACCOUNTANTS*
27141 **ELIANT INC**...*HOME BUILDING CONSULTANTS*
27141 **ENGLER LOANS**...*REAL ESTATE LOANS*
27141 **HAMMERHEAD**...*NONCLASSIFIED ESTABLISHMENTS*
27141 **LPL FINANCIAL**...*STOCK & BOND BROKERS*
27141 **LPL FINANCIAL**...*FINANCIAL ADVISORY SERVICES*
27141 **PAC DATA**...*COMPUTERSOFTWARE DEVELOPERS*
27141 **PAC DATA**...*COMPUTER PROGRAMMING SERVICES*

Part 3 of 3

27141 **PAC DATA**...*DEPARTMENT STORES*
27141 **PAC DATA**...*DATA STORAGE EQUIPMENT & SYSTEMS*
27141 **PACIFIC ALLIANCE CAPITAL INC**...*CONSTRUCTION COMPANIES*
27141 **PACIFIC ALLIANCE CAPITAL INC**...*COMPUTERS-WHOLESALE*
27141 **PACIFIC ALLIANCE CAPITAL INC**...*FEDERAL GOVERNMENT CONTRACTORS*
27141 **PERIPHERAL DIRECT**...*NONCLASSIFIED ESTABLISHMENTS*
27141 **PROFESSIONAL RELOCATION**...*RELOCATION SERVICE*
27141 **SEAPORT INSURANCE**...*INSURANCE*
27141 **SZAR INTERNATIONAL**...*MARKETING CONSULTANTS*
27141 **TALENT MANAGERS OF HOLLYWOOD**...*TALENT AGENCIES & CASTING SERVICES*
27141 **WCT PERIPHERALS INC**...*NONCLASSIFIED ESTABLISHMENTS*
27141 **WEST COAST TECHNOLOGIES**...*COMPUTERS & COMPUTER EQUIPMENT WHLS/MFRS*
27141 **WEST COAST TECHNOLOGIES**...*COMPUTER & EQUIPMENT DEALERS*

220 total records. Part 1 of 4

1 **ALISO VIEJO LIBRARY**...*LIBRARIES-PUBLIC*
2 **AZIN, TINA DDS**...*DENTISTS*
2 **CHU, DAVID J OD**...*OPTOMETRISTS OD*
2 **KENNEDY CHIROPRACTIC HEALTH**...*CHIROPRACTORS DC*
2 **MATRIX REHABILITATION**...*CRISIS INTERVENTION SERVICE*
2 **MATRIX REHABILITATION**...*REHABILITATION SERVICES*
2 **MOSHARAF, MONI M DDS**...*DENTISTS*
2 **PRICKETT, MELISSA OD**...*OPTOMETRISTS OD*
2 **REFRESHED AESTHETIC SURGERY**...*SKIN TREATMENTS*
2 **REFRESHED AESTHETIC SURGERY**...*OFFICES OF PHYSICIANS (EXC MENTAL HEALTH SPECS)*
2 **SEA VIEW PEDIATRICS**...*PHYSICIANS & SURGEONS*
2 **SHUFFER, JUSTIN DDS**...*OFFICES OF DENTISTS*
2 **TURNER DENTAL CARE**...*DENTISTS*
2 **TURNER, JEFFREY DDS**...*DENTISTS*
2 **WELLNESS CENTER KENNEDY CHIRO**...*CHIROPRACTORS DC*
4 **ATC TAEKWONDO & HAPKIDO CTR**...*KARATE JUDO JIU-JITSU & KUNG FU INSTR*
4 **ATC TAEKWONDO & HAPKIDO CTR**...*MARTIAL ARTS INSTRUCTION*
4 **BERKTREE LEARNING CTR**...*CHILD CARE SERVICE*
4 **CONFIDENCE IN THE SPOTLIGHT**...*NONCLASSIFIED ESTABLISHMENTS*
4 **NATIONAL GYMNASTICS TRAINING**...*CAKE DECORATING*
4 **NATIONAL GYMNASTICS TRAINING**...*PARTY SUPPLIES*
4 **NATIONAL GYMNASTICS TRAINING**...*GYMNASTIC INSTRUCTION*
4 **NATIONAL GYMNASTICS TRAINING**...*DANCING INSTRUCTION*
4 **OUT OF THE BOX ARTS INC**...*ART INSTRUCTION & SCHOOLS*
4 **PLYOCITY LLC**...*NONCLASSIFIED ESTABLISHMENTS*
5 **ALISO RANCH PHYSICAL THERAPY**...*PHYSICAL THERAPISTS*
5 **AMANAT, SHIVA DMD**...*DENTISTS*
5 **BREWSTER, SHAWN B PA**...*PHYSICIANS ASSISTANTS*
5 **CHANG, JOHN MD**...*PHYSICIANS & SURGEONS*
5 **CHANG, JOHN MD**...*MEDICAL & SURGICAL SVC ORGANIZATIONS*
5 **CHIANG, CELIA H MD**...*PHYSICIANS & SURGEONS*
5 **CHIANG, CELIA H MD**...*MEDICAL & SURGICAL SVC ORGANIZATIONS*
5 **DELEHANTY, NICOLE NP**...*NURSES-PRACTITIONERS*
5 **ENG, STEVE M DPM**...*CLINICS*
5 **HASSON, MORRIS MD**...*PHYSICIANS & SURGEONS*
5 **HOLMES, AMANDA JUNE**...*NURSES-PRACTITIONERS*
5 **OC FAMILY MEDICINE**...*CLINICS*
5 **POURIA, MALEKI DDS**...*DENTISTS*
5 **SEAVIEW PEDS**...*PHYSICIANS & SURGEONS*
5 **SMITH, ALLISON J**...*MARRIAGE & FAMILY COUNSELORS*
5 **SOUTH MARINA PHARMACY**...*PHARMACIES*
5 **STADNYK, VICTORIA J NP**...*NURSES-PRACTITIONERS*
5 **TRAN, TAI T PA**...*PHYSICIANS ASSISTANTS*
5 **TRIEU, STEVEN DDS**...*DENTISTS*
6 **ABELLO, MARIA E DDS**...*DENTISTS*
6 **BANZAI RESEARCH INSTITUTE**...*DATA PROCESSING SOFTWARE*
6 **BANZAI RESEARCH INSTITUTE**...*WEBSITE DESIGN SERVICE*
6 **BANZAI RESEARCH INSTITUTE**...*ONLINE SERVICES*
6 **BIO LUCENT INC**...*MEDICAL, DENTAL/HOSPITAL EQUIP/SUPLS MRCHNT WHLSRS*
6 **BJORKMAN BROTHERS**...*NONCLASSIFIED ESTABLISHMENTS*
6 **BJORKMAN BROTHERS**...*PUBLISHERS-MAGAZINE (MFRS)*
6 **BROCKINGTON INTERIORS**...*INTERIOR DECORATORS DESIGN & CONSULTANTS*
6 **BROOKE INSURANCE & FINANCIAL**...*INSURANCE*
6 **CIANNA MEDICAL INC**...*DENTAL EQUIPMENT & SUPPLIESWHOLESALE*
6 **CIANNA MEDICAL INC**...*PHYSICIANS & SURGEONS EQUIP & SUPLS-WHLS*
6 **CONVERGENCE INC**...*INTERNET SERVICE*
6 **CONVERGENCE INC**...*FEDERAL GOVERNMENT CONTRACTORS*
6 **CONVERGENCE INC**...*INTERNET HOME PAGE DEV CONSULTING*
6 **CONVERGENCE INC**...*E-COMMERCE*
6 **CROSS FIT GYM**...*HEALTH CLUBS STUDIOS & GYMNASIUMS*
6 **EJUICE WHOLESALE**...*WHOLESALERS*
6 **FRESH LOGISTICS GLOBAL**...*WINERY TOURS*
6 **KATIE WAGNER SOCIAL MEDIA INC**...*MARKETING CONSULTANTS*
6 **LINEARCHIP INC**...*NONCLASSIFIED ESTABLISHMENTS*
6 **NAVIKA GOLF & TENNIS USA**...*GOLF PRACTICE RANGES*
6 **NAVIKA GOLF & TENNIS USA**...*GOLF EQUIPMENT & SUPPLIES-MANUFACTURERS*

2023 JOURNEY
SOURCE: DIGITAL BUSINESS DIRECTORY

Part 2 of 4

6 **NAVIKA USA INC**...*GIFT SHOPS*
6 **PARTNERS ART & FRAMING**...*ART GALLERIES & DEALERS*
6 **PARTNERS ART & FRAMING**...*PICTURE FRAMES-DEALERS*
6 **PREMIER AQUATICS SVC**...*COMMERCIAL & INSTITUTIONAL BUILDING CONSTRUCTION*
6 **SECURE LIVE SCAN**...*FINGERPRINTING*
6 **SEMIKRON**...*NONCLASSIFIED ESTABLISHMENTS*
6 **SIEMAN ENERGY AUTOMATION**...*PLUMBING HTG & AIR-CONDITIONING CONTRACTORS*
6 **SIEMENS AG**...*NONCLASSIFIED ESTABLISHMENTS*
6 **STEVE BJORKMAN ILLUSTRATION**...*MAGAZINES-DEALERS*
7 **CELEBRATION CHURCH**...*CHURCHES*
7 **LEW WEBB ENTERPRISES INC**...*HOLDING COMPANIES (NON-BANK)*
7 **LEW WEBB ENTERPRISES INC**...*ELECTRIC CONTRACTORS*
7 **LEW WEBB ENTERPRISES INC**...*REAL ESTATE INVESTMENTS*
8 **GLOBAL WAVE GROUP LLC**...*PREPACKAGED SOFTWARE*
9 **ALISO VIEJO ICE PALACE**...*PARTY SUPPLIES*
9 **ALISO VIEJO ICE PALACE**...*CAKE DECORATING*
9 **ALISO VIEJO ICE PALACE**...*SKATING RINKS*
9 **ALISO VIEJO ICE PALACE**...*STADIUMS ARENAS & ATHLETIC FIELDS*
9 **DUNPOL INVESTMENTS LLC**...*INVESTMENTS*
9 **MATT BEATY HOCKEY**...*ATHLETIC ORGANIZATIONS*
11 **ORANGE COUNTY SHERIFF**...*SHERIFF*
11 **ORANGE COUNTY SHERIFF**...*GOVERNMENT OFFICES-COUNTY*
11 **ORANGE COUNTY SHERIFF**...*FEDERAL GOVERNMENT CONTRACTORS*
11 **ORANGE COUNTY SHERIFF**...*COUNTY GOVERNMENTPUBLIC ORDER & SAFETY*
12 **ALISO VIEJO BUILDING & SAFETY**...*GOVERNMENT OFFICES-CITY, VILLAGE & TWP*
12 **ALISO VIEJO BUILDING & SAFETY**...*FEDERAL GOVERNMENT CONTRACTORS*
12 **ALISO VIEJO CITY CLERK**...*GOVERNMENT OFFICES-CITY, VILLAGE & TWP*
12 **ALISO VIEJO CITY CLERK**...*CITY GOVERNMENT-EXECUTIVE OFFICES*
12 **ALISO VIEJO CITY COUNCIL**...*GOVERNMENT OFFICES-CITY, VILLAGE & TWP*
12 **ALISO VIEJO CITY HALL**...*CONSTRUCTION COMPANIES*
12 **ALISO VIEJO CITY HALL**...*GOVERNMENT OFFICES-CITY, VILLAGE & TWP*
12 **ALISO VIEJO CITY HALL**...*CITY GOVERNMENT-EXECUTIVE OFFICES*
12 **ALISO VIEJO CITY HALL**...*FEDERAL GOVERNMENT CONTRACTORS*
12 **ALISO VIEJO CITY MANAGER**...*CITY GOVERNMENT-EXECUTIVE OFFICES*
12 **ALISO VIEJO CITY MANAGER**...*FEDERAL GOVERNMENT CONTRACTORS*
12 **ALISO VIEJO CITY PURCHASING**...*GOVERNMENT OFFICES-CITY, VILLAGE & TWP*
12 **ALISO VIEJO COMM ASSOC**...*ASSOCIATIONS*
12 **ALISO VIEJO FINANCE DEPT**...*CITY GOVERNMENT-FINANCE & TAXATION*
12 **ALISO VIEJO PLANNING DEPT**...*GOVERNMENT OFFICES-CITY, VILLAGE & TWP*
12 **ALISO VIEJO POLICE DEPT**...*POLICE DEPARTMENTS*
12 **CAL OLSON GOLF ARCHITECTURE**...*ARCHITECTS*
12 **CAL OLSON GOLF ARCHITECTURE**...*FEDERAL GOVERNMENT CONTRACTORS*
12 **PMZ PENSION**...*PENSION & PROFIT SHARING PLANS*
12 **PMZ PENSION**...*INSURANCEGROUP*
12 **VOLUNTARY EXCHANGE**...*EMPLOYEE BENEFIT CONSULTANTS*
14 **ACE TUBE BENDING**...*TUBE-BENDING & FABRICATING (MFRS)*
16 **BLUE WAVE MICRO**...*COMPUTER PARTS & SUPPLIES*
16 **FREEDMAN REALTY CAPITAL INC**...*REAL ESTATE*
16 **HEALTHCARE PLUS INSURANCE SVC**...*INSURANCE*
16 **HEALTHCARE PLUS INSURANCE SVC**...*CREDIT UNIONS*
16 **HFI LP**...*NONCLASSIFIED ESTABLISHMENTS*
16 **INLAND STAR DISTRIBUTION**...*WAREHOUSING-FIELD*
16 **INLAND STAR DISTRIBUTION**...*NONCLASSIFIED ESTABLISHMENTS*
16 **LINK HR GROUP INC**...*COMPUTER RELATED SERVICES NEC*
16 **MANA**...*FEDERAL GOVERNMENT CONTRACTORS*
16 **MANA**...*ASSOCIATIONS*
16 **METROLIGHT**...*LIGHTING SYSTEMS & EQUIPMENT (WHLS)*
16 **METROLIGHT**...*NONCLASSIFIED ESTABLISHMENTS*
16 **MEWA ASSOCIATION OF AMERICA**...*ASSOCIATIONS*
16 **NELSON BROTHERS PRO RL EST**...*REAL ESTATE*
16 **NPES**...*BUSINESS & TRADE ORGANIZATIONS*
16 **PARK CITY PRIVATE RENTALS LLC**...*REAL ESTATE*

Part 3 of 4

16 **PASKERIAN BLOCK MARTINDAL**...*ATTORNEYS*
16 **REVIVAL BROTHERS**...*CHURCHES*
16 **TECHOUNDS LLC**...*PERSONNEL CONSULTANTS*
16 **TECHOUNDS LLC**...*NONCLASSIFIED ESTABLISHMENTS*
16 **TUEREN INC**...*INTERNET MANAGEMENT & MAINTENANCE*
16 **VALUE RENDERINGS**...*NONCLASSIFIED ESTABLISHMENTS*
18 **ALI DYNAMIC CONCEPTS INC**...*COMPUTER SOFTWARE*
18 **ALI DYNAMIC CONCEPTS INC**...*COMPUTER SERVICES*
18 **BOB SOZA INSURANCE**...*INSURANCE*
18 **BRIDGEPORT PRODUCTS INC**...*HARDWARERETAIL*
18 **BRIDGEPORT PRODUCTS INC**...*FISHING TACKLEDEALERS*
18 **BRIDGEPORT PRODUCTS INC**...*GENERAL MERCHANDISE-RETAIL*
18 **BRIDGEPORT PRODUCTS INC**...*IMPORTERS (WHLS)*
18 **CARE MERIDIAN LLC**...*ADULT CARE FACILITIES*
18 **CARE MERIDIAN LLC**...*HOSPITALS*
18 **CARE MERIDIAN LLC**...*GUEST HOUSES*
18 **CARE MERIDIAN LLC**...*SCREEN PRINTING (MFRS)*
18 **CARE MERIDIAN LLC**...*DRUG ABUSE & ADDICTION INFO & TREATMENT*
18 **CARE MERIDIAN LLC**...*HEALTH CARE FACILITIES*
18 **DYNAMIC CONCEPTS INC**...*ECOMMERCE*
18 **DYNAMIC CONCEPTS INC**...*INTERNET SERVICE*
18 **DYNAMIC CONCEPTS INC**...*INTERNET HOME PAGE DEV CONSULTING*
18 **DYNAMIC CONCEPTS INC**...*WEBSITE HOSTING*
18 **FIRSTRAX UNITED PET GROUP**...*PET SUPPLIES & FOODS-RETAIL*
18 **FIRSTRAX UNITED PET GROUP**...*FEDERAL GOVERNMENT CONTRACTORS*
18 **GLOBAL ONE PET INC**...*FEED-MANUFACTURERS*
18 **GLOBALONE**...*BUSINESS MANAGEMENT CONSULTANTS*
18 **JOURNEY II**...*PROPERTY MAINTENANCE*
18 **MOBLELYNX INC**...*NONCLASSIFIED ESTABLISHMENTS*
18 **RESIDENTIAL WHOLESALE MORTGAGE**...*REAL ESTATE LOANS*
18 **RWM HOME LOANS ALISO VIEJO**...*REAL ESTATE LOANS*
18 **VISSLA**...*NONCLASSIFIED ESTABLISHMENTS*
19 **PET SUITES**...*PET SUPPLIES & FOODSRETAIL*
19 **PET SUITES**...*PET BOARDING SITTING & KENNELS*
19 **PET SUITES**...*PET WASHING & GROOMING*
19 **PET SUITES**...*PET TRAINING*
23 **ALDERSON PROPERTY MANAGEMENT**...*REAL ESTATE MANAGEMENT*
23 **FREED, GREGORY E MD**...*PHYSICIANS & SURGEONS*
25 **S J FRANCHISE LLC**...*PARTIES-CHILDRENS*
25 **S J FRANCHISE LLC**...*PARTY PLANNING SERVICE*
25 **SCOOTER'S JUNGLE WORLDWIDE**...*PARTY CENTERS*
25 **SCOOTER'S JUNGLE WORLDWIDE**...*AMUSEMENT & RECREATION NEC*
27 **CENTON ELECTRONICS INC**...*MEMORY SYSTEMS & COMPONENTS*
27 **CENTON ELECTRONICS INC**...*ELECTRONIC EQUIPMENT & SUPPLIES-RETAIL*
27 **CENTON ELECTRONICS INC**...*CELLULAR TELEPHONES (SERVICES)*
27 **KENNEDY PIPELINE CONSTRUCTION**...*PIPE LINE CONTRACTORS*
27 **NATIONAL SAFETY COMPLIANCE INC**...*DRUG DETECTION SERVICE & EQUIPMENT*
27 **NATIONAL SAFETY COMPLIANCE INC**...*SAFETY CONSULTANTS*
29 **ABRACON CORP**...*NONCLASSIFIED ESTABLISHMENTS*
29 **AUTOTECH SPORT TUNING**...*AUTOMOBILE PARTS & SUPPLIES-RETAIL-NEW*
29 **AUTOTECH SPORT TUNING**...*AUTOMOBILE RACING CAR EQUIPMENT*
29 **AUTOTECH SPORT TUNING**...*AUTOMOBILE REPAIRING & SERVICE*
29 **AUTOTECH SPORT TUNING**...*RACE TRACK EQUIPMENT & SUPPLIES*
29 **QUAIFE AMERICA**...*E-COMMERCE*
30 **DIAGEO NORTH AMERICA**...*LIQUORS-WHOLESALE*
31 **CARDIAC HEALTH SOLUTIONS**...*REHABILITATION SERVICES*
31 **CLARVISTA MEDICAL**...*PHYSICIANS & SURGEONS*
31 **COMMERCIAL GLOBAL INS SVC**...*INSURANCE*
31 **EPICUREN DISCOVERY**...*SKIN TREATMENTS*
31 **EPROPERTYSITES.COM**...*WEBSITE DESIGN SERVICE*
31 **PACIFIC WEST APPRAISAL SVC**...*APPRAISERS*
31 **PACIFIC WEST APPRAISAL SVC**...*REAL ESTATE APPRAISERS*
31 **PENSION PROFESSIONAL INC**...*INSURANCEGROUP*
31 **PENSION PROFESSIONAL INC**...*PENSION & PROFIT SHARING PLANS*
32 **AY DEE KAY LLC**...*NONCLASSIFIED ESTABLISHMENTS*
32 **AYDEEKAY**...*COMPUTER PROGRAMMING SERVICES*
32 **AYDEEKAY**...*COMPUTERS-SYSTEM DESIGNERS & CONSULTANTS*

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32 **DELTEL**...*COMPUTER SOFTWARE*
32 **DELTEL HOLDINGS LLC**...*HOLDING COMPANIES (NON-BANK)*
32 **EXAMNET**...*REAL ESTATE LOANS*
32 **MEASUREMENT SPECIALTIES INC**...*MEASURING/CONTROLLING DEVICES NEC (MFRS)*
32 **MEASUREMENT SPECIALTIES INC**...*MEASURING MACHINES (MFRS)*
32 **MEASUREMENT SPECIALTIES INC**...*INSTRSMEASURING/TESTING ELEC (MFRS)*
32 **MSI SENSORS**...*BURGLAR ALARM SYSTEMS (WHLS)*
32 **MSI SENSORS**...*SECURITY CONTROL EQUIP & SYSTEMS-WHLS*
32 **P C I GROUP**...*BUILDING CONSTRUCTION-CONSULTANTS*
33 **CHAMELEON DESIGN**...*BUSINESS SERVICES NEC*
33 **LAURA'S HOUSE**...*CONSTRUCTION COMPANIES*
33 **LAURA'S HOUSE**...*FEDERAL GOVERNMENT CONTRACTORS*
33 **LAURA'S HOUSE**...*SOCIAL SERVICE & WELFARE ORGANIZATIONS*
33 **LENSX LASERS**...*PHYSICIANS & SURGEONS*
33 **LENSX LASERS**...*OFFICES OF OPTOMETRISTS*
33 **MEASUREMENT SPECIALTIES**...*MANUFACTURERS*
33 **STONEY MILLER CONSULTANTS**...*FEDERAL GOVERNMENT CONTRACTORS*
33 **STONEY MILLER CONSULTANTS**...*ENGINEERS-GEOTECHNICAL*
33 **STONEY MILLER CONSULTANTS INC**...*OTHER MANAGEMENT CONSULTING SERVICES*
34 **HAMPTON RESEARCH**...*FEDERAL GOVERNMENT CONTRACTORS*
34 **HAMPTON RESEARCH**...*PHYSICIANS & SURGEONS EQUIP & SUPLS-MFRS*
34 **HAMPTON RESEARCH**...*PHYSICIANS & SURGEONS EQUIP & SUPLSWHLS*
34 **HAMPTON RESEARCH**...*CONSTRUCTION COMPANIES*
35 **NING ZHOU GALLERY**...*INTERNATIONAL BUSINESS SERVICES*
36 **ALISO VIEJO SELF STORAGE**...*STORAGE-HOUSEHOLD & COMMERCIAL*

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23412 **ALAN GELLER**...*RESIDENTIAL*
23412 **ALBERT PEREZ**...*RESIDENTIAL*
23412 **ALEXANDER OBUCHOWSKY**...*RESIDENTIAL*
23412 **ALLISON BREIG**...*RESIDENTIAL*
23412 **AMANDA SMITH**...*RESIDENTIAL*
23412 **ANDREW DELMUNDO**...*RESIDENTIAL*
23412 **ANGELA MURESAN**...*RESIDENTIAL*
23412 **ANN IVORY**...*RESIDENTIAL*
23412 **ANNA STARR**...*RESIDENTIAL*
23412 **ANNA ZARICKI**...*RESIDENTIAL*
23412 **ASHLEY SLIWA**...*RESIDENTIAL*
23412 **BLANCA RAIMONDO**...*RESIDENTIAL*
23412 **BRANDON ORMAN**...*RESIDENTIAL*
23412 **BRANDON VARGA**...*RESIDENTIAL*
23412 **BRIAN KATZ**...*RESIDENTIAL*
23412 **BRYAN HARRINGTON**...*RESIDENTIAL*
23412 **BRYAN SEMPRIE**...*RESIDENTIAL*
23412 **BRYAN SIMONIAN**...*RESIDENTIAL*
23412 **CAMRYN PHILLIPS**...*RESIDENTIAL*
23412 **CARLOS GALLO**...*RESIDENTIAL*
23412 **CARMEN KUYS**...*RESIDENTIAL*
23412 **CATHERINE DREWS**...*RESIDENTIAL*
23412 **CATHY DEBANO**...*RESIDENTIAL*
23412 **CHELSEA ROBB**...*RESIDENTIAL*
23412 **CHRISTINE VAUGHAN**...*RESIDENTIAL*
23412 **CINDY LIN**...*RESIDENTIAL*
23412 **CINDY STEWART**...*RESIDENTIAL*
23412 **CLIFFORD CHACON**...*RESIDENTIAL*
23412 **CORIE GOMEZ**...*RESIDENTIAL*
23412 **DALE EUTENEUER**...*RESIDENTIAL*
23412 **DANIEL PLUNKETT**...*RESIDENTIAL*
23412 **DANIELLE LEE**...*RESIDENTIAL*
23412 **DAVID STARCKS**...*RESIDENTIAL*
23412 **DAVID TRINH**...*RESIDENTIAL*
23412 **DAWN LEWIS**...*RESIDENTIAL*
23412 **DEBORAH GILLIS**...*RESIDENTIAL*
23412 **DEBORAH LASLO**...*RESIDENTIAL*
23412 **DEBORAH TADDEUCCI**...*RESIDENTIAL*
23412 **DIANA EDWARDS**...*RESIDENTIAL*
23412 **DINA TREIBEL**...*RESIDENTIAL*
23412 **DNAN WORSHAM**...*RESIDENTIAL*
23412 **DOUGLAS OATMAN**...*RESIDENTIAL*
23412 **EDIP ARAL**...*RESIDENTIAL*
23412 **EDWARD REARDON**...*RESIDENTIAL*
23412 **EILEEN DANIHER**...*RESIDENTIAL*
23412 **ELIZABETH EYERMAN**...*RESIDENTIAL*
23412 **ELIZABETH SHAFFER**...*RESIDENTIAL*
23412 **ELKE TOOLEY**...*RESIDENTIAL*
23412 **ELLIOTT FAULKNER**...*RESIDENTIAL*
23412 **ELVIS CARRILLO**...*RESIDENTIAL*
23412 **ERIK HILL**...*RESIDENTIAL*
23412 **ERIN VYBORNEY**...*RESIDENTIAL*
23412 **EVELYN LEWIS**...*RESIDENTIAL*
23412 **FARZIN HOUMANFAR**...*RESIDENTIAL*
23412 **FITNESS 1080**...*NONCLASSIFIED ESTABLISHMENTS*
23412 **FOROUGH PEYROVAN**...*RESIDENTIAL*
23412 **GENNA KUTYIN**...*RESIDENTIAL*
23412 **GERALD SCIPIONE**...*RESIDENTIAL*
23412 **GLENN FEDONICK**...*RESIDENTIAL*
23412 **GLENN WILKERSON**...*RESIDENTIAL*
23412 **GLORIA DEL MUNDO**...*RESIDENTIAL*
23412 **GLORIA KERN**...*RESIDENTIAL*
23412 **HEATHER PAYNE**...*RESIDENTIAL*
23412 **HUFFMAN, MARGARET DDS**...*DENTISTS*
23412 **HYE TOOLAN**...*RESIDENTIAL*
23412 **IRIS SWINEA**...*RESIDENTIAL*
23412 **JAMES WU**...*RESIDENTIAL*
23412 **JAMES ZAPALA**...*RESIDENTIAL*
23412 **JASON JARVIS**...*RESIDENTIAL*

Part 2 of 3

23412 **JEFFREY KOENIG**...*RESIDENTIAL*
23412 **JENIFER JOHNSON**...*RESIDENTIAL*
23412 **JENNIFER ENGEVIK**...*RESIDENTIAL*
23412 **JESSICA BALDY**...*RESIDENTIAL*
23412 **JESUS VASQUEZ**...*RESIDENTIAL*
23412 **JILL LYTLE**...*RESIDENTIAL*
23412 **JILL ROY**...*RESIDENTIAL*
23412 **JOHN ORTIZ**...*RESIDENTIAL*
23412 **JOSEPH RUSSO**...*RESIDENTIAL*
23412 **JUDY BOUCKE**...*RESIDENTIAL*
23412 **JULIA EVANS**...*RESIDENTIAL*
23412 **JULIE FLANAGAN**...*RESIDENTIAL*
23412 **JULIE HAN**...*RESIDENTIAL*
23412 **JULIE LOYA**...*RESIDENTIAL*
23412 **KAREN EMI**...*RESIDENTIAL*
23412 **KAREN NELSON**...*RESIDENTIAL*
23412 **KARIE MARTIN**...*RESIDENTIAL*
23412 **KATAYOUN MAHBOUBIAN**...*RESIDENTIAL*
23412 **KATHRYN YAKUSHIJI**...*RESIDENTIAL*
23412 **KEITH HEELEY**...*RESIDENTIAL*
23412 **KELLIE ANDERSON**...*RESIDENTIAL*
23412 **KEN JOHNSON**...*RESIDENTIAL*
23412 **KENNETH MASON III**...*RESIDENTIAL*
23412 **LACY HITMAN**...*RESIDENTIAL*
23412 **LAUREN BALLARD**...*RESIDENTIAL*
23412 **LEAH SAITZ**...*RESIDENTIAL*
23412 **LEVITY INSURANCE SVC**...*INSURANCE*
23412 **LISA BOURESTON**...*RESIDENTIAL*
23412 **LITA MANALO**...*RESIDENTIAL*
23412 **LORAL ANDERSON**...*RESIDENTIAL*
23412 **LORRAINE LEAL**...*RESIDENTIAL*
23412 **LORRAINE ZUSCHLAG**...*RESIDENTIAL*
23412 **MARIAM YEGANEH**...*RESIDENTIAL*
23412 **MARITES GOMEZ**...*RESIDENTIAL*
23412 **MARK ANAYA**...*RESIDENTIAL*
23412 **MARK KOURPANIDIS**...*RESIDENTIAL*
23412 **MATTHEW LIND**...*RESIDENTIAL*
23412 **MATTHEW MCCORMICK**...*RESIDENTIAL*
23412 **MATTHEW MILLER**...*RESIDENTIAL*
23412 **MEGAN WILLIAMS**...*RESIDENTIAL*
23412 **MELINDA HUGHIE**...*RESIDENTIAL*
23412 **MELISSA GALAWAY**...*RESIDENTIAL*
23412 **MICHAEL LARSON**...*RESIDENTIAL*
23412 **MICHAEL MONTENEGRO**...*RESIDENTIAL*
23412 **MICHAEL PETERSON**...*RESIDENTIAL*
23412 **MICHELLE AYRES**...*RESIDENTIAL*
23412 **MICHELLE IDLER**...*RESIDENTIAL*
23412 **NADEZDA NJEGO**...*RESIDENTIAL*
23412 **NANCY AKRIGHT**...*RESIDENTIAL*
23412 **NATALIE IMHOF**...*RESIDENTIAL*
23412 **NICK DELIS**...*RESIDENTIAL*
23412 **NICOLE BASTIO**...*RESIDENTIAL*
23412 **NORA AYALA**...*RESIDENTIAL*
23412 **OPT HIRES**...*NONCLASSIFIED ESTABLISHMENTS*
23412 **PAMELA OWENS**...*RESIDENTIAL*
23412 **PAMELA SMITH**...*RESIDENTIAL*
23412 **PARVIN BABAEI**...*RESIDENTIAL*
23412 **PATRICK REDDICK**...*RESIDENTIAL*
23412 **PATT CONCANNON**...*RESIDENTIAL*
23412 **PETER SAUERBORN**...*RESIDENTIAL*
23412 **PHILLIP MILLS**...*RESIDENTIAL*
23412 **PINTO ADAM**...*RESIDENTIAL*
23412 **RACHEAL MULLEN**...*RESIDENTIAL*
23412 **RAJA CHAUDHURI**...*RESIDENTIAL*
23412 **RAMONA UDINK**...*RESIDENTIAL*
23412 **REYNOLD KERN**...*RESIDENTIAL*
23412 **RICHARD COVEY**...*RESIDENTIAL*
23412 **RICHARD MINDES**...*RESIDENTIAL*
23412 **RILEY HALL**...*RESIDENTIAL*

2023 PACIFIC PARK DR
SOURCE: DIGITAL BUSINESS DIRECTORY

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23412 **ROBERT MEDRANO**...*RESIDENTIAL*
23412 **SAMUEL LANGIT**...*RESIDENTIAL*
23412 **SCOTT SMITH**...*RESIDENTIAL*
23412 **SEAN LYNCH**...*RESIDENTIAL*
23412 **SEW CUSTOM CURTAIN**...*SEWING CONTRACTORS (MFRS)*
23412 **SHANNON FEILER**...*RESIDENTIAL*
23412 **SHARMAN BROOKS**...*RESIDENTIAL*
23412 **SHARON WAIZENHOFER**...*RESIDENTIAL*
23412 **SHIRLEY WEAFER**...*RESIDENTIAL*
23412 **SRDJAN NJEGO**...*RESIDENTIAL*
23412 **STEPHEN LUDWIG**...*RESIDENTIAL*
23412 **STEPHEN WYCOFF**...*RESIDENTIAL*
23412 **STEVEN OATMAN**...*RESIDENTIAL*
23412 **TAMARA MCGREW**...*RESIDENTIAL*
23412 **TAMI LONG**...*RESIDENTIAL*
23412 **TED WILLIAMSON**...*RESIDENTIAL*
23412 **THINH TRUONG**...*RESIDENTIAL*
23412 **TIFFANY PEREZ**...*RESIDENTIAL*
23412 **TINA BRAYTON**...*RESIDENTIAL*
23412 **TWYLA SAURO**...*RESIDENTIAL*
23412 **VANESSA HARIKUL**...*RESIDENTIAL*
23412 **WARREN WONG**...*RESIDENTIAL*
23412 **WENDY ANTANAITIS**...*RESIDENTIAL*
23412 **WESLEY FARNER**...*RESIDENTIAL*
23412 **WILLIAM SCHULTZ**...*RESIDENTIAL*
23412 **WILLIAM WOOD**...*RESIDENTIAL*
23412 **ZACHARY SAYRE**...*RESIDENTIAL*
23412 **ZHIJUN HU**...*RESIDENTIAL*
23412 **ZINAT HABIBI**...*RESIDENTIAL*

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26951 **DEL TACO**...RESTAURANTS
27017 **POWERWAVE TECHNOLOGIES**...NONCLASSIFIED ESTABLISHMENTS
27055 **R & M SHELL**...CONVENIENCE STORES
27055 **R & M SHELL**...SERVICE STATIONS-GASOLINE & OIL
27055 **R & M SHELL**...ALTERNATIVE FUELS
27061 **BIG KAHUNA'S**...WATER PARKS
27061 **GALLAGHER BASSETT SVC**...INSURANCE
27061 **GALLAGHER BASSETT SVC**...MANAGEMENT SERVICES
27061 **GALLAGHER BASSETT SVC**...INSURANCE-PLAN ADMINISTRATORS
27061 **TRANCAS CAPITAL**...FINANCIAL ADVISORY SERVICES
27071 **AFFIRMA REHABILITATION INC**...REHABILITATION SERVICES
27071 **COVENANT CARE INC**...NURSING & CONVALESCENT HOMES
27071 **COVENANT CARE INC**...HEALTH CARE ALTERNATIVES
27071 **COVENANT CARE INC**...NONPROFIT ORGANIZATIONS
27071 **COVENANT CARE INC**...HOME HEALTH SERVICE
27071 **DELTEL INC**...CONSULTANTS-BUSINESS NEC
27071 **HUFFMAN WEST**...REAL ESTATE DEVELOPERS
27071 **IHEARTCOMMUNICATIONS INC**...COMPUTER PROGRAMMING SERVICES
27071 **LAN INTERNATIONAL**...COMPUTER SOFTWARE
27071 **LAN INTERNATIONAL**...PUBLISHERS-COMPUTER SOFTWARE (MFRS)
27071 **LAN INTERNATIONAL**...COMPUTER SERVICES
27071 **LAN INTERNATIONAL**...DATA PROCESSING SOFTWARE
27071 **QUAKER OATS CO**...BEVERAGES (WHLS)
27071 **SELECT THERAPIES**...NURSING & CONVALESCENT HOMES
27071 **SELECT THERAPIES**...PHYSICAL THERAPISTS
27071 **SELECT THERAPIES**...NONPROFIT ORGANIZATIONS
27071 **SELECT THERAPIES**...EXERCISE & PHYSICAL FITNESS PROGRAMS
27081 **DIGITAL RIVER INC**...COMPUTERS-SUPPLIES & PARTS-WHOLESALE
27081 **DIGITAL RIVER INC**...MARKETING PROGRAMS & SERVICES
27081 **NATIONWIDE AUCTION FINANCE**...AUTOMOBILE DEALERS-USED CARS
27081 **REAL ESTATE DIGITAL**...TITLE COMPANIES
27081 **REAL ESTATE DIGITAL**...REAL ESTATE INSPECTION
27081 **REAL ESTATE DIGITAL**...REAL ESTATE
27101 **ARTVENTURE**...ART INSTRUCTION & SCHOOLS
27101 **BRAZILIAN TOP TEAM ALISO VIEJO**...NONCLASSIFIED ESTABLISHMENTS
27101 **BUILDING BLOCKS PEDIATRIC HOME**...HOME HEALTH SERVICE
27101 **BUILDING BLOCKS PEDIATRIC HOME**...HEALTH CARE ALTERNATIVES
27101 **CENTER STAGE**...DRAMATIC INSTRUCTION
27101 **CENTER STAGE**...PERFORMING ARTS
27101 **CENTER STAGE STUDIO**...MUSICAL PRODUCTIONS
27101 **CENTER STAGE STUDIO**...THEATRICAL SCHOOLS
27101 **DOHENY DAYS INC**...CARNIVALS
27101 **DOHENY DAYS INC**...FEDERAL GOVERNMENT CONTRACTORS
27101 **GLISTENING PERFECTION**...AUTOMOBILE DETAIL & CLEAN-UP SERVICE
27101 **GREEK BABY**...BOOK DEALERS-RETAIL
27101 **GROUP IV INTL**...NONCLASSIFIED ESTABLISHMENTS
27101 **IMPULSE DANCE PRODUCTIONS**...DANCE COMPANIES
27101 **JENNY MASON PHOTOGRAPHY**...PHOTOGRAPHERS-COMMERCIAL
27101 **KATS ONLY**...NONCLASSIFIED ESTABLISHMENTS
27101 **KRISTIN'S KIDDIE LAND**...CHILD CARE SERVICE
27101 **LAGUNA IMPORTS INC**...CERAMIC PRODUCTS-DECORATIVE
27101 **LAGUNA YAMAHA MUSIC CTR**...MUSIC INSTRUCTION-INSTRUMENTAL
27101 **MERCI MI MINISTRIES**...SPIRITUAL ORGANIZATIONS
27101 **NEWPORT RESEARCH INC**...CONSULTANTSBUSINESS NEC
27101 **NEWPORT RESEARCH INC**...PHARMACEUTICAL CONSULTANTS
27101 **PAWS N KLAWS ANIMAL SALON**...PET WASHING & GROOMING
27101 **PAWS N KLAWS ANIMAL SALON**...PET SERVICES
27101 **ROBERSON EPOXY FLOORING INC**...FLOOR LAYING REFINISHING & RESURFACING
27101 **RUAS MARTIAL ARTS**...MARTIAL ARTS INSTRUCTION
27101 **STATE FARM INSURANCE**...INSURANCE
27111 **AGENTMARKETING**...ADVERTISING-COMPUTER
27111 **ASCI SECURITY**...SECURITY GUARD & PATROL SERVICE
27111 **BERKTREE LEARNING CTR**...CHILD CARE SERVICE
27111 **BRICK HUTT**...NONCLASSIFIED ESTABLISHMENTS
27111 **BRILL**...NONCLASSIFIED ESTABLISHMENTS
27111 **CARDIO-VASCULAR SALES**...PHYSICIANS & SURGEONS EQUIP & SUPLS-MFRS
27111 **CITY HARVEST**...PARTY SUPPLIES

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27111 **CITY HARVEST CHURCH**...CHURCHES
27111 **COLOR SIGN CO**...SIGNS (MFRS)
27111 **CONEXIS**...NONCLASSIFIED ESTABLISHMENTS
27111 **DEFEO, MARISSA**...MARRIAGE & FAMILY COUNSELORS
27111 **ECLIPSE LIQUIDS**...CIGAR CIGARETTE & TOBACCO DEALERS-WHLS
27111 **FIT2BEKIDS**...NONCLASSIFIED ESTABLISHMENTS
27111 **HOME CREATIONS DESIGN INC**...UPHOLSTERERS
27111 **HOME CREATIONS DESIGN INC**...DRAPERIES & CURTAINS-RETAIL/CUSTOM MADE
27111 **INNOVATIVE BEVERAGE CONCEPTS**...COFFEE SHOPS
27111 **INNOVATIVE BEVERAGE CONCEPTS**...COFFEE & TEA PRODUCTS-MANUFACTURERS
27111 **JENNIFER DEFEO PHD**...NONCLASSIFIED ESTABLISHMENTS
27111 **KINGSFIELD CHURCH**...CHURCHES
27111 **KUMON MATH & READING CTR**...EDUCATIONAL CONSULTANTS
27111 **KUMON MATH & READING CTR**...TUTORING
27111 **MOCAFE**...BEVERAGES (WHLS)
27111 **MOCAFE**...BOTTLERS (MFRS)
27111 **O C BABY**...BABY ACCESSORIES
27111 **PERFECT IMPRESSION LLC**...WESTERN APPAREL-WHOLESALE
27111 **SCHUBERTH NORTH AMERICA**...MOTORCYCLES & MOTOR SCOOTERSSUPPLIES
27111 **SCHUBERTH NORTH AMERICA**...MOTORCYCLES & MOTOR SCOOTERS-MFRS
27111 **SCHUBERTH NORTH AMERICA**...MOTORCYCLES & MOTOR SCOOTERS-DEALERS
27111 **STONEMILL TRAVEL CO**...TRAVEL AGENCIES & BUREAUS
27111 **STONEMILL TRAVEL CO**...CRUISES
27111 **SWEDE-CAL PROPERTIES INC**...REAL ESTATE MANAGEMENT
27111 **VISION CHIPS INC**...PUBLISHERS-COMPUTER SOFTWARE (MFRS)
27111 **VISION CHIPS INC**...COMPUTER SOFTWARE
27111 **XLR8 O P S**...OFFICE FURNITURE & EQUIP-INSTLTN (WHLS)
27121 **COMPUTER ECONOMICS INC**...COMPUTER & EQUIPMENT DEALERS
27121 **COMPUTER ECONOMICS INC**...GENERAL MERCHANDISEWHOLESALE
27121 **COMPUTER ECONOMICS INC**...COMPUTERS-SYSTEM DESIGNERS & CONSULTANTS
27121 **COMPUTER ECONOMICS INC**...MARKETING PROGRAMS & SERVICES
27121 **GROTTO CUSTOM WINE CELLARS**...WINES-RETAIL
27121 **LUISA HIMBING**...RESIDENTIAL
27121 **MICROMAC TECHNOLOGY INC**...COMPUTERS-SERVICE & REPAIR
27121 **PATIFINDERS LEARNING INC**...TUTORING
27121 **STAAR SURGICAL CO**...PHYSICIANS & SURGEONS EQUIP & SUPLS-MFRS
27121 **STAAR SURGICAL CO**...PHYSICIANS & SURGEONS EQUIP & SUPLSWHLS
27121 **TOOBS DISTRIBUTION**...DISTRIBUTION SERVICES
27131 **ALAINE ANDERSON AT SALON PLTNM**...BEAUTY SALONS
27131 **BEAUTY BY TIERA**...NONCLASSIFIED ESTABLISHMENTS
27131 **BEAUTY BY TIERA**...BEAUTY SALONS
27131 **CALI PARTY PRODUCTIONS**...PARTY SUPPLIES
27131 **DANCERS CHOICE**...DANCING SUPPLIES
27131 **DANCERS CHOICE**...GYMNASTIC EQUIPMENT & SUPPLIES (WHLS)
27131 **DOMINO'S PIZZA**...FOODS-CARRY OUT
27131 **DOMINO'S PIZZA**...CAFES
27131 **DOMINO'S PIZZA**...HOTELS & MOTELS
27131 **DOMINO'S PIZZA**...PIZZA
27131 **FAMILY SPORTS CHIROPRACTIC**...CHIROPRACTORS DC
27131 **FAMILY & SPORTS CHIROPRACTIC**...CHIROPRACTORS DC
27131 **FAMILY & SPORTS CHIROPRACTIC**...MASSAGE THERAPISTS
27131 **GYMBOREE PLAY MUSIC**...CHILD DEVELOPMENT PROGRAMS
27131 **NAMASTE**...RESTAURANTS
27131 **PACIFIC PARK DENTAL CARE**...DENTISTS
27131 **PACIFIC PLAZA CLEANERS**...CLEANERS
27131 **PLATINUM LASH STUDIO**...MEDICAL SPAS
27131 **PLATINUM MEDICAL SPA**...PHYSICIANS & SURGEONS
27131 **PLATINUM MEDICAL SPA**...MEDICAL SPAS
27131 **SALON PLATINUM**...HEALTH SPAS
27131 **SALON PLATINUM**...BEAUTY SALONS
27131 **SKIN RENEWAL**...SKIN TREATMENTS
27131 **SUGAR PLUM PARTIES**...PARTY PLANNING SERVICE
27141 **24 HOUR FITNESS**...EXERCISE & PHYSICAL FITNESS PROGRAMS
27141 **24 HOUR FITNESS**...PERSONAL TRAINERSFITNESS
27141 **24 HOUR FITNESS**...GYMNASIUMS

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27141 **24 HOUR FITNESS**...*HEALTH CLUBS STUDIOS & GYMNASIUMS*
27141 **ADVANCE PRECISION BILLING**...*BILLING SERVICE*
27141 **ALMENA KEYBOARD TRAINING**...*MUSICAL INSTRUMENTS-DEALERS*
27141 **CAPISTRAN INSURANCE**...*INSURANCE*
27141 **CHEF MAREYA**...*PERSONAL CHEFS*
27141 **CHISHOLM & KLINE**...*ACCOUNTANTS*
27141 **ELIANT INC**...*HOME BUILDING CONSULTANTS*
27141 **ENGLER LOANS**...*REAL ESTATE LOANS*
27141 **LAUGUNA CREST VIEW PROPERTIES**...*REAL ESTATE*
27141 **PAC DATA**...*DATA STORAGE EQUIPMENT & SYSTEMS*
27141 **PAC DATA**...*COMPUTERSOFTWARE DEVELOPERS*
27141 **PAC DATA**...*DEPARTMENT STORES*
27141 **PAC DATA**...*COMPUTER PROGRAMMING SERVICES*
27141 **PACIFIC ALLIANCE CAPITAL INC**...*CONSTRUCTION COMPANIES*
27141 **PACIFIC ALLIANCE CAPITAL INC**...*COMPUTERS-WHOLESALE*
27141 **PACIFIC ALLIANCE CAPITAL INC**...*FEDERAL GOVERNMENT CONTRACTORS*
27141 **PERIPHERAL DIRECT**...*NONCLASSIFIED ESTABLISHMENTS*
27141 **PROFESSIONAL RELOCATION**...*RELOCATION SERVICE*
27141 **SEAPORT INSURANCE**...*INSURANCE*
27141 **SEAPORT INSURANCE SVC INC**...*CREDIT UNIONS*
27141 **SEAPORT INSURANCE SVC INC**...*INSURANCE*
27141 **SZAR INTERNATIONAL**...*MARKETING CONSULTANTS*
27141 **WCT PERIPHERALS INC**...*NONCLASSIFIED ESTABLISHMENTS*
27141 **WEST COAST TECHNOLOGIES**...*COMPUTER & EQUIPMENT DEALERS*
27141 **WEST COAST TECHNOLOGIES**...*COMPUTERS & COMPUTER EQUIPMENT WHLS/MFRS*

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1 **ALISO VIEJO LIBRARY**...*LIBRARIES-PUBLIC*
2 **AZIN, TINA DDS**...*DENTISTS*
2 **MATRIX REHABILITATION**...*REHABILITATION SERVICES*
2 **MATRIX REHABILITATION**...*CRISIS INTERVENTION SERVICE*
2 **MOSHARAF, MONI M DDS**...*DENTISTS*
2 **REFRESHED AESTHETIC SURGERY**...*SKIN TREATMENTS*
2 **REFRESHED AESTHETIC SURGERY**...*OFFICES OF PHYSICIANS (EXC MENTAL HEALTH SPECS)*
2 **SEA VIEW PEDIATRICS**...*PHYSICIANS & SURGEONS*
2 **SHUFFER, JUSTIN DDS**...*OFFICES OF DENTISTS*
2 **TURNER DENTAL CARE**...*DENTISTS*
2 **TURNER, JEFFREY D S MD**...*DENTISTS*
2 **WELLNESS CENTER KENNEDY CHIRO**...*CHIROPRACTORS DC*
4 **ATC TAEKWONDO & HAPKIDO CTR**...*KARATE JUDO JIU-JITSU & KUNG FU INSTR*
4 **ATC TAEKWONDO & HAPKIDO CTR**...*MARTIAL ARTS INSTRUCTION*
4 **BERKTREE LEARNING CTR**...*CHILD CARE SERVICE*
4 **NATIONAL GYMNASTICS TRAINING**...*DANCING INSTRUCTION*
4 **NATIONAL GYMNASTICS TRAINING**...*PARTY SUPPLIES*
4 **NATIONAL GYMNASTICS TRAINING**...*CAKE DECORATING*
4 **NATIONAL GYMNASTICS TRAINING**...*GYMNASTIC INSTRUCTION*
4 **OUT OF THE BOX ARTS INC**...*FINE ART SCHOOLS*
4 **PLYOCITY LLC**...*NONCLASSIFIED ESTABLISHMENTS*
5 **ALISO RANCH PHYSICAL THERAPY**...*PHYSICAL THERAPISTS*
5 **ANTONISSEN, BRANDON DC**...*CHIROPRACTORS DC*
5 **BREWSTER, SHAWN B PA**...*PHYSICIANS ASSISTANTS*
5 **CHANG, JOHN MD**...*PHYSICIANS & SURGEONS*
5 **CHANG, JOHN MD**...*MEDICAL & SURGICAL SVC ORGANIZATIONS*
5 **CHIANG, CELIA H MD**...*PHYSICIANS & SURGEONS*
5 **CHIANG, CELIA H MD**...*MEDICAL & SURGICAL SVC ORGANIZATIONS*
5 **DELEHANTY, NICOLE NP**...*NURSES-PRACTITIONERS*
5 **ENG, STEVE M DPM**...*CLINICS*
5 **HASSON, MORRIS MD**...*PHYSICIANS & SURGEONS*
5 **HOLMES, AMANDA JUNE**...*NURSES-PRACTITIONERS*
5 **POURIA, MALEKI DDS**...*DENTISTS*
5 **SEAVIEW PEDS**...*PHYSICIANS & SURGEONS*
5 **SMITH, ALLISON J**...*MARRIAGE & FAMILY COUNSELORS*
5 **SOUTH MARINA PHARMACY**...*PHARMACIES*
5 **STADNYK, VICTORIA J NP**...*NURSES-PRACTITIONERS*
5 **TOTEN, MONICA LYNN**...*NURSES-PRACTITIONERS*
5 **TRAN, TAI T PA**...*PHYSICIANS ASSISTANTS*
5 **TRAN, TAI T PA**...*PHYSICIANS & SURGEONS*
5 **TRIEU, STEVEN DDS**...*DENTISTS*
6 **ABELLO, MARIA E DDS**...*DENTISTS*
6 **ALISO CROSS FIT**...*HEALTH CLUBS STUDIOS & GYMNASIUMS*
6 **ALISO CROSSFIT**...*UNCLASSIFIED ESTABLISHMENTS*
6 **BANZAI RESEARCH INSTITUTE**...*ONLINE SERVICES*
6 **BANZAI RESEARCH INSTITUTE**...*WEBSITE DESIGN SERVICE*
6 **BANZAI RESEARCH INSTITUTE**...*DATA PROCESSING SOFTWARE*
6 **BIO LUCENT INC**...*MEDICAL, DENTAL/HOSPITAL EQUIP/SUPLS MRCHNT WHLSRS*
6 **BJORKMAN BROTHERS**...*PUBLISHERS-MAGAZINE (MFRS)*
6 **BJORKMAN BROTHERS**...*NONCLASSIFIED ESTABLISHMENTS*
6 **BROOKE INSURANCE & FINANCIAL**...*INSURANCE*
6 **CHINA CABLES DIRECT**...*CABLE (MFRS)*
6 **CIANNA MEDICAL INC**...*PHYSICIANS & SURGEONS EQUIP & SUPLS-WHLS*
6 **CIANNA MEDICAL INC**...*DENTAL EQUIPMENT & SUPPLIESWHOLESALE*
6 **CONVERGENCE INC**...*FEDERAL GOVERNMENT CONTRACTORS*
6 **CONVERGENCE INC**...*INTERNET HOME PAGE DEV CONSULTING*
6 **CONVERGENCE INC**...*INTERNET SERVICE*
6 **CONVERGENCE INC**...*E-COMMERCE*
6 **CONVERGENCE LLC**...*E-COMMERCE*
6 **CROSS FIT GYM**...*HEALTH CLUBS STUDIOS & GYMNASIUMS*
6 **EJUICE WHOLESALE**...*WHOLESALERS*
6 **FRESH LOGISTICS GLOBAL**...*WINERY TOURS*
6 **LINEARCHIP INC**...*NONCLASSIFIED ESTABLISHMENTS*
6 **NAVIKA GOLF & TENNIS USA**...*GOLF PRACTICE RANGES*
6 **NAVIKA GOLF & TENNIS USA**...*GOLF EQUIPMENT & SUPPLIES-MANUFACTURERS*
6 **NAVIKA USA INC**...*GIFT SHOPS*

2020 JOURNEY
SOURCE: DIGITAL BUSINESS DIRECTORY

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6 **PARTNERS ART & FRAMING**...*ART GALLERIES & DEALERS*
6 **PARTNERS ART & FRAMING**...*PICTURE FRAMES-DEALERS*
6 **SECURE LIVE SCAN**...*FINGERPRINTING*
6 **SEMIKRON**...*NONCLASSIFIED ESTABLISHMENTS*
6 **SIEMAN ENERGY AUTOMATION**...*PLUMBING HTG & AIR-CONDITIONING CONTRACTORS*
6 **SIEMENS AG**...*NONCLASSIFIED ESTABLISHMENTS*
6 **STEVE BJORKMAN ILLUSTRATION**...*MAGAZINES-DEALERS*
6 **TRIBECA SALON**...*BEAUTY SALONS*
6 **TRIBECA SALON**...*HEALTH SPAS*
7 **CELEBRATION CHURCH**...*CHURCHES*
7 **DOUGLAS COCHRAN**...*RESIDENTIAL*
7 **LEW WEBB ENTERPRISES INC**...*HOLDING COMPANIES (NON-BANK)*
7 **LEW WEBB ENTERPRISES INC**...*REAL ESTATE INVESTMENTS*
7 **LEW WEBB ENTERPRISES INC**...*ELECTRIC CONTRACTORS*
8 **GLOBAL WAVE GROUP LLC**...*PREPACKAGED SOFTWARE*
9 **ALISO VIEJO ICE PALACE**...*CAKE DECORATING*
9 **ALISO VIEJO ICE PALACE**...*STADIUMS ARENAS & ATHLETIC FIELDS*
9 **ALISO VIEJO ICE PALACE**...*PARTY SUPPLIES*
9 **ALISO VIEJO ICE PALACE**...*SKATING RINKS*
9 **DUNPOL INVESTMENTS LLC**...*INVESTMENTS*
11 **ORANGE COUNTY SHERIFF**...*FEDERAL GOVERNMENT CONTRACTORS*
11 **ORANGE COUNTY SHERIFF**...*GOVERNMENT OFFICES-COUNTY*
11 **ORANGE COUNTY SHERIFF**...*SHERIFF*
11 **ORANGE COUNTY SHERIFF**...*COUNTY GOVERNMENTPUBLIC ORDER & SAFETY*
12 **ALISO VIEJO BUILDING & SAFETY**...*GOVERNMENT OFFICES-CITY, VILLAGE & TWP*
12 **ALISO VIEJO BUILDING & SAFETY**...*FEDERAL GOVERNMENT CONTRACTORS*
12 **ALISO VIEJO CITY CLERK**...*CITY GOVERNMENT-EXECUTIVE OFFICES*
12 **ALISO VIEJO CITY CLERK**...*GOVERNMENT OFFICES-CITY, VILLAGE & TWP*
12 **ALISO VIEJO CITY COUNCIL**...*GOVERNMENT OFFICES-CITY, VILLAGE & TWP*
12 **ALISO VIEJO CITY HALL**...*CITY GOVERNMENT-EXECUTIVE OFFICES*
12 **ALISO VIEJO CITY HALL**...*CONSTRUCTION COMPANIES*
12 **ALISO VIEJO CITY HALL**...*FEDERAL GOVERNMENT CONTRACTORS*
12 **ALISO VIEJO CITY HALL**...*GOVERNMENT OFFICES-CITY, VILLAGE & TWP*
12 **ALISO VIEJO CITY MANAGER**...*CITY GOVERNMENT-EXECUTIVE OFFICES*
12 **ALISO VIEJO CITY MANAGER**...*FEDERAL GOVERNMENT CONTRACTORS*
12 **ALISO VIEJO CITY PURCHASING**...*GOVERNMENT OFFICES-CITY, VILLAGE & TWP*
12 **ALISO VIEJO COMM ASSOC**...*ASSOCIATIONS*
12 **ALISO VIEJO FINANCE DEPT**...*CITY GOVERNMENT-FINANCE & TAXATION*
12 **ALISO VIEJO PLANNING DEPT**...*GOVERNMENT OFFICES-CITY, VILLAGE & TWP*
12 **ALISO VIEJO POLICE DEPT**...*POLICE DEPARTMENTS*
12 **CAL OLSON GOLF ARCHITECTURE**...*FEDERAL GOVERNMENT CONTRACTORS*
12 **CAL OLSON GOLF ARCHITECTURE**...*ARCHITECTS*
12 **PLATINUM DATA**...*REAL ESTATE*
12 **PMZ PENSION**...*PENSION & PROFIT SHARING PLANS*
12 **PMZ PENSION**...*INSURANCEGROUP*
12 **VALLI ARCHITECTURAL GROUP**...*ARCHITECTS*
12 **VALLI ARCHITECTURAL GROUP**...*CONSTRUCTION MANAGEMENT*
12 **VOLUNTARY EXCHANGE**...*EMPLOYEE BENEFIT CONSULTANTS*
14 **ACE TUBE BENDING**...*TUBE-BENDING & FABRICATING (MFRS)*
16 **BLUE WAVE MICRO**...*COMPUTER PARTS & SUPPLIES*
16 **FREEDMAN REALTY CAPITAL INC**...*REAL ESTATE*
16 **HEALTHCARE PLUS INSURANCE SVC**...*INSURANCE*
16 **HEALTHCARE PLUS INSURANCE SVC**...*CREDIT UNIONS*
16 **HFI LP**...*NONCLASSIFIED ESTABLISHMENTS*
16 **INLAND STAR DISTRIBUTION**...*NONCLASSIFIED ESTABLISHMENTS*
16 **INLAND STAR DISTRIBUTION**...*WAREHOUSING-FIELD*
16 **LINK HR GROUP INC**...*COMPUTER RELATED SERVICES NEC*
16 **MANA**...*ASSOCIATIONS*
16 **MANA**...*FEDERAL GOVERNMENT CONTRACTORS*
16 **METROLIGHT**...*LIGHTING SYSTEMS & EQUIPMENT (WHLS)*
16 **METROLIGHT**...*NONCLASSIFIED ESTABLISHMENTS*
16 **NELSON BROTHERS PRO REAL EST**...*OFFICES OF REAL ESTATE AGENTS & BROKERS*

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16 **NELSON BROTHERS PRO RL EST**...*REAL ESTATE*
16 **PASKERIAN BLOCK MARTINDAL**...*ATTORNEYS*
16 **REVIVAL BROTHERS**...*CHURCHES*
16 **TECHOUNDS LLC**...*PERSONNEL CONSULTANTS*
16 **TECHOUNDS LLC**...*NONCLASSIFIED ESTABLISHMENTS*
16 **VALUE RENDERINGS**...*NONCLASSIFIED ESTABLISHMENTS*
17 **DON KIM**...*RESIDENTIAL*
18 **ALI DYNAMIC CONCEPTS INC**...*COMPUTER SERVICES*
18 **ALI DYNAMIC CONCEPTS INC**...*COMPUTER SOFTWARE*
18 **BOB SOZA INSURANCE**...*INSURANCE*
18 **BRIDGEPORT PRODUCTS INC**...*GENERAL MERCHANDISE-RETAIL*
18 **BRIDGEPORT PRODUCTS INC**...*HARDWARERETAIL*
18 **BRIDGEPORT PRODUCTS INC**...*IMPORTERS (WHLS)*
18 **BRIDGEPORT PRODUCTS INC**...*FISHING TACKLEDEALERS*
18 **CARE MERIDIAN LLC**...*DRUG ABUSE & ADDICTION INFO & TREATMENT*
18 **CARE MERIDIAN LLC**...*HOSPITALS*
18 **CARE MERIDIAN LLC**...*ADULT CARE FACILITIES*
18 **CARE MERIDIAN LLC**...*HEALTH CARE FACILITIES*
18 **CARE MERIDIAN LLC**...*SCREEN PRINTING (MFRS)*
18 **CARE MERIDIAN LLC**...*GUEST HOUSES*
18 **DYNAMIC CONCEPTS INC**...*INTERNET HOME PAGE DEV CONSULTING*
18 **DYNAMIC CONCEPTS INC**...*ECOMMERCE*
18 **DYNAMIC CONCEPTS INC**...*WEBSITE HOSTING*
18 **DYNAMIC CONCEPTS INC**...*INTERNET SERVICE*
18 **FIRSTRAX UNITED PET GROUP**...*FEDERAL GOVERNMENT CONTRACTORS*
18 **FIRSTRAX UNITED PET GROUP**...*PET SUPPLIES & FOODS-RETAIL*
18 **GLOBAL ONE PET INC**...*FEED-MANUFACTURERS*
18 **GLOBALONE**...*BUSINESS MANAGEMENT CONSULTANTS*
18 **JOURNEY II**...*PROPERTY MAINTENANCE*
18 **LINDA HUMPHREY**...*RESIDENTIAL*
18 **MOBLELYNX INC**...*NONCLASSIFIED ESTABLISHMENTS*
18 **RESIDENTIAL WHOLESALE MORTGAGE**...*REAL ESTATE LOANS*
19 **PET SUITES**...*PET SUPPLIES & FOODSRETAIL*
19 **PET SUITES**...*PET TRAINING*
19 **PET SUITES**...*PET WASHING & GROOMING*
19 **PET SUITES**...*PET BOARDING SITTING & KENNELS*
21 **TARGA ACCESSORIES INC**...*MOTORCYCLES & MOTOR SCOOTERS-DEALERS*
21 **TARGA ACCESSORIES INC**...*MOTORCYCLES & MOTOR SCOOTERSDEALERS*
21 **TARGA ACCESSORIES INC**...*MOTORCYCLES & MOTOR SCOOTERS-SUPPLIES*
23 **ALDERSON PROPERTY MANAGEMENT**...*REAL ESTATE MANAGEMENT*
25 **S J FRANCHISE LLC**...*PARTY PLANNING SERVICE*
25 **S J FRANCHISE LLC**...*PARTIES-CHILDRENS*
25 **SCOOTER'S JUNGLE WORLDWIDE**...*AMUSEMENT & RECREATION NEC*
25 **SCOOTER'S JUNGLE WORLDWIDE**...*PARTY CENTERS*
27 **KENNEDY PIPELINE CONSTRUCTION**...*PIPE LINE CONTRACTORS*
27 **NATIONAL SAFETY COMPLIANCE INC**...*DRUG DETECTION SERVICE & EQUIPMENT*
27 **NATIONAL SAFETY COMPLIANCE INC**...*SAFETY CONSULTANTS*
29 **ABRACON CORP**...*NONCLASSIFIED ESTABLISHMENTS*
29 **AUTOTECH SPORT TUNING**...*AUTOMOBILE REPAIRING & SERVICE*
29 **AUTOTECH SPORT TUNING**...*AUTOMOBILE RACING CAR EQUIPMENT*
29 **AUTOTECH SPORT TUNING**...*RACE TRACK EQUIPMENT & SUPPLIES*
29 **AUTOTECH SPORT TUNING**...*AUTOMOBILE PARTS & SUPPLIES-RETAIL-NEW*
29 **QUAIFE AMERICA**...*E-COMMERCE*
30 **DIAGEO NORTH AMERICA**...*LIQUORS-WHOLESALE*
31 **CARDIAC HEALTH SOLUTIONS**...*REHABILITATION SERVICES*
31 **CLARVISTA MEDICAL**...*PHYSICIANS & SURGEONS*
31 **COMMERCIAL GLOBAL INS SVC**...*INSURANCE*
31 **EPICUREN DISCOVERY**...*SKIN TREATMENTS*
31 **EPROPERTYSITES.COM**...*WEBSITE DESIGN SERVICE*
31 **PACIFIC WEST APPRAISAL SVC**...*REAL ESTATE APPRAISERS*
31 **PACIFIC WEST APPRAISAL SVC**...*APPRAISERS*
31 **PENSION PROFESSIONAL INC**...*PENSION & PROFIT SHARING PLANS*
31 **PENSION PROFESSIONAL INC**...*INSURANCEGROUP*
32 **2ADVANCED STUDIOS**...*COMPUTER GRAPHIC DESIGN*
32 **2ADVANCED STUDIOS**...*WEBSITE DESIGN SERVICE*
32 **AY DEE KAY LLC**...*NONCLASSIFIED ESTABLISHMENTS*

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32 **AYDEEKAY**...*COMPUTERS-SYSTEM DESIGNERS & CONSULTANTS*
32 **AYDEEKAY**...*COMPUTER PROGRAMMING SERVICES*
32 **DELTEL**...*COMPUTER SOFTWARE*
32 **DELTEL HOLDINGS LLC**...*HOLDING COMPANIES (NON-BANK)*
32 **EXAMNET**...*REAL ESTATE LOANS*
32 **MEASUREMENT SPECIALTIES INC**...*INSTRSMEASURING/TESTING ELEC (MFRS)*
32 **MEASUREMENT SPECIALTIES INC**...*MEASURING/CONTROLLING DEVICES NEC (MFRS)*
32 **MEASUREMENT SPECIALTIES INC**...*MEASURING MACHINES (MFRS)*
32 **MSI SENSORS**...*BURGLAR ALARM SYSTEMS (WHLS)*
32 **MSI SENSORS**...*SECURITY CONTROL EQUIP & SYSTEMS-WHLS*
32 **P C I GROUP**...*BUILDING CONSTRUCTION-CONSULTANTS*
33 **CHAMELEON DESIGN**...*BUSINESS SERVICES NEC*
33 **LENSX LASERS**...*PHYSICIANS & SURGEONS*
33 **LENSX LASERS**...*OFFICES OF OPTOMETRISTS*
33 **MEASUREMENT SPECIALTIES**...*ALL OTHER MISCELLANEOUS MANUFACTURING*
33 **TOM POLLACK**...*RESIDENTIAL*
34 **HAMPTON RESEARCH**...*FEDERAL GOVERNMENT CONTRACTORS*
34 **HAMPTON RESEARCH**...*CONSTRUCTION COMPANIES*
34 **HAMPTON RESEARCH**...*PHYSICIANS & SURGEONS EQUIP & SUPLSWHLS*
34 **HAMPTON RESEARCH**...*PHYSICIANS & SURGEONS EQUIP & SUPLS-MFRS*
35 **NING ZHOU GALLERY**...*INTERNATIONAL BUSINESS SERVICES*
36 **ALISO VIEJO SELF STORAGE**...*STORAGE-HOUSEHOLD & COMMERCIAL*

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23412 **ALAN GELLER**...*RESIDENTIAL*
23412 **ALBERT PEREZ**...*RESIDENTIAL*
23412 **ALEXANDER OBUCHOWSKY**...*RESIDENTIAL*
23412 **ALICIA WILLIS**...*RESIDENTIAL*
23412 **ALLISON BREIG**...*RESIDENTIAL*
23412 **AMANDA SMITH**...*RESIDENTIAL*
23412 **ANDREW DELMUNDO**...*RESIDENTIAL*
23412 **ANGELA MURESAN**...*RESIDENTIAL*
23412 **ANN IVORY**...*RESIDENTIAL*
23412 **ANNA STARR**...*RESIDENTIAL*
23412 **ASHLEY SLIWA**...*RESIDENTIAL*
23412 **BARBARA BORGEN**...*RESIDENTIAL*
23412 **BRANDON ORMAN**...*RESIDENTIAL*
23412 **BRIAN KATZ**...*RESIDENTIAL*
23412 **BRYAN HARRINGTON**...*RESIDENTIAL*
23412 **BRYAN SIMONIAN**...*RESIDENTIAL*
23412 **CAMRYN PHILLIPS**...*RESIDENTIAL*
23412 **CARLOS GALLO**...*RESIDENTIAL*
23412 **CARMEN KUYS**...*RESIDENTIAL*
23412 **CINDY STEWART**...*RESIDENTIAL*
23412 **CLIFFORD CHACON**...*RESIDENTIAL*
23412 **DANIEL PLUNKETT**...*RESIDENTIAL*
23412 **DANIELLE LEE**...*RESIDENTIAL*
23412 **DAVID STARCKS**...*RESIDENTIAL*
23412 **DAVID TRINH**...*RESIDENTIAL*
23412 **DEBORAH GILLIS**...*RESIDENTIAL*
23412 **DEBORAH VAUGHN**...*RESIDENTIAL*
23412 **DINA TREIBEL**...*RESIDENTIAL*
23412 **DNAN WORSHAM**...*RESIDENTIAL*
23412 **DOUGLAS OATMAN**...*RESIDENTIAL*
23412 **EDIP ARAL**...*RESIDENTIAL*
23412 **EDWARD REARDON**...*RESIDENTIAL*
23412 **EILEEN DANIHER**...*RESIDENTIAL*
23412 **ELIZABETH SHAFFER**...*RESIDENTIAL*
23412 **ELKE TOOLEY**...*RESIDENTIAL*
23412 **ELLIOTT FAULKNER**...*RESIDENTIAL*
23412 **ERIK HILL**...*RESIDENTIAL*
23412 **EVELYN LEWIS**...*RESIDENTIAL*
23412 **FARZIN HOUMANFAR**...*RESIDENTIAL*
23412 **FITNESS 1080**...*NONCLASSIFIED ESTABLISHMENTS*
23412 **FOROUGH PEYROVAN**...*RESIDENTIAL*
23412 **GLENN WILKERSON**...*RESIDENTIAL*
23412 **GLORIA KERN**...*RESIDENTIAL*
23412 **HEATHER PAYNE**...*RESIDENTIAL*
23412 **HELEN ODONALD**...*RESIDENTIAL*
23412 **HOPE RILEY**...*RESIDENTIAL*
23412 **IRIS SWINEA**...*RESIDENTIAL*
23412 **JAMES WU**...*RESIDENTIAL*
23412 **JAMES ZAPALA**...*RESIDENTIAL*
23412 **JANET ECK**...*RESIDENTIAL*
23412 **JASON JARVIS**...*RESIDENTIAL*
23412 **JEFFREY KOENIG**...*RESIDENTIAL*
23412 **JENIFER JOHNSON**...*RESIDENTIAL*
23412 **JESUS VASQUEZ**...*RESIDENTIAL*
23412 **JILL LYTLE**...*RESIDENTIAL*
23412 **JILL ROY**...*RESIDENTIAL*
23412 **JOHN ORTIZ**...*RESIDENTIAL*
23412 **JOHN TOOLAN**...*RESIDENTIAL*
23412 **JOSEPH RUSSO**...*RESIDENTIAL*
23412 **JULIA EVANS**...*RESIDENTIAL*
23412 **JULIE HAN**...*RESIDENTIAL*
23412 **KAREN EMI**...*RESIDENTIAL*
23412 **KAREN NELSON**...*RESIDENTIAL*
23412 **KARIE MARTIN**...*RESIDENTIAL*
23412 **KATAYOUN MAHBOUBIAN**...*RESIDENTIAL*
23412 **KATHRYN YAKUSHIJI**...*RESIDENTIAL*
23412 **KEITH HEELEY**...*RESIDENTIAL*
23412 **KELLIE ANDERSON**...*RESIDENTIAL*
23412 **KENNETH MASON III**...*RESIDENTIAL*

Part 2 of 2

23412 **LAUREN BALLARD**...*RESIDENTIAL*
23412 **LEAH SAITZ**...*RESIDENTIAL*
23412 **LEVITY INSURANCE SVC**...*INSURANCE*
23412 **LISA BOURESTON**...*RESIDENTIAL*
23412 **LORAL ANDERSON**...*RESIDENTIAL*
23412 **LORRAINE LEAL**...*RESIDENTIAL*
23412 **LORRAINE ZUSCHLAG**...*RESIDENTIAL*
23412 **MARIAM YEGANEH**...*RESIDENTIAL*
23412 **MARITES GOMEZ**...*RESIDENTIAL*
23412 **MARK KOURPANIDIS**...*RESIDENTIAL*
23412 **MATTHEW MILLER**...*RESIDENTIAL*
23412 **MEGAN WILLIAMS**...*RESIDENTIAL*
23412 **MELINDA HUGHIE**...*RESIDENTIAL*
23412 **MELISSA GALAWAY**...*RESIDENTIAL*
23412 **MICHAEL LARSON**...*RESIDENTIAL*
23412 **MICHAEL PETERSON**...*RESIDENTIAL*
23412 **NADEZDA NJEGO**...*RESIDENTIAL*
23412 **NANCY AKRIGHT**...*RESIDENTIAL*
23412 **NATALIE IMHOF**...*RESIDENTIAL*
23412 **NICK DELIS**...*RESIDENTIAL*
23412 **NICOLE BASTIO**...*RESIDENTIAL*
23412 **NORA AYALA**...*RESIDENTIAL*
23412 **OPT HIRES**...*NONCLASSIFIED ESTABLISHMENTS*
23412 **PAMELA OWENS**...*RESIDENTIAL*
23412 **PARVIN BABAEI**...*RESIDENTIAL*
23412 **PATRICK REDDICK**...*RESIDENTIAL*
23412 **PATT CONCANNON**...*RESIDENTIAL*
23412 **PETER SAUERBORN**...*RESIDENTIAL*
23412 **PHILLIP MILLS**...*RESIDENTIAL*
23412 **PINTO ADAM**...*RESIDENTIAL*
23412 **RACHEAL MULLEN**...*RESIDENTIAL*
23412 **RAJA CHAUDHURI**...*RESIDENTIAL*
23412 **RAMONA UDINK**...*RESIDENTIAL*
23412 **RICHARD COVEY**...*RESIDENTIAL*
23412 **RICHARD MINDES**...*RESIDENTIAL*
23412 **RILEY HALL**...*RESIDENTIAL*
23412 **SCOTT SMITH**...*RESIDENTIAL*
23412 **SHANNON FEILER**...*RESIDENTIAL*
23412 **SHARMAN BROOKS**...*RESIDENTIAL*
23412 **SHARON WAIZENHOFER**...*RESIDENTIAL*
23412 **SHIRLEY WEAFER**...*RESIDENTIAL*
23412 **SOHRAB HASSAS**...*RESIDENTIAL*
23412 **SRDJAN NJEGO**...*RESIDENTIAL*
23412 **STEPHEN LUDWIG**...*RESIDENTIAL*
23412 **STEPHEN WYCOFF**...*RESIDENTIAL*
23412 **STEVEN OATMAN**...*RESIDENTIAL*
23412 **TAMARA MCGREW**...*RESIDENTIAL*
23412 **TAMI LONG**...*RESIDENTIAL*
23412 **TAYLOR SMITH**...*RESIDENTIAL*
23412 **TED WILLIAMSON**...*RESIDENTIAL*
23412 **TIFFANY PEREZ**...*RESIDENTIAL*
23412 **TINA BRAYTON**...*RESIDENTIAL*
23412 **TWYLA SAURO**...*RESIDENTIAL*
23412 **WARREN WONG**...*RESIDENTIAL*
23412 **WENDY ANTANAITIS**...*RESIDENTIAL*
23412 **WILLIAM SCHULTZ**...*RESIDENTIAL*
23412 **WILLIAM WOOD**...*RESIDENTIAL*

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26951 **DEL TACO**...*RESTAURANTS*
26951 **DEL TACO**...*FOODS-CARRY OUT*
27021 **SCHARF, KIMBERLY A NP**...*NURSES-PRACTITIONERS*
27055 **ATM**...*AUTOMATED TELLER MACHINES*
27055 **R & M SHELL**...*SERVICE STATIONS-GASOLINE & OIL*
27055 **R & M SHELL**...*CONVENIENCE STORES*
27061 **GALLAGHER BASSETT SVC**...*INSURANCE-PLAN ADMINISTRATORS*
27061 **MALDONADO, CAROLINE**...*INSURANCE ADJUSTERS*
27061 **TRANCAS CAPITAL**...*FINANCIAL ADVISORY SERVICES*
27061 **TRANCAS CAPITAL**...*INVESTMENT ADVICE*
27071 **COVENANT CARE INC**...*HOME HEALTH SERVICE*
27071 **DELTEL INC**...*CONSULTANTS-BUSINESS NEC*
27071 **HUFFMAN WEST**...*REAL ESTATE DEVELOPERS*
27071 **LAN INTERNATIONAL**...*COMPUTER SOFTWARE*
27071 **LAN INTERNATIONAL**...*PUBLISHERS-COMPUTER SOFTWARE (MFRS)*
27071 **QUAKER OATS CO**...*BEVERAGES (WHLS)*
27071 **SELECT THERAPIES**...*PHYSICAL THERAPISTS*
27071 **SELECT THERAPIES**...*NURSING & CONVALESCENT HOMES*
27081 **DIGITAL RIVER INC**...*MARKETING PROGRAMS & SERVICES*
27081 **NATIONWIDE AUCTION FINANCE**...*AUTOMOBILE DEALERS-USED CARS*
27081 **NATIONWIDE AUCTION VIEJO**...*FINANCIAL ADVISORY SERVICES*
27081 **REAL ESTATE DIGITAL**...*REAL ESTATE*
27101 **BUILDING BLOCKS PEDIATRIC HOME**...*HOME HEALTH SERVICE*
27101 **CENTER STAGE STUDIO**...*MUSICAL PRODUCTIONS*
27101 **CENTER STAGE STUDIO**...*OTHER SOUND RECORDING INDUSTRIES*
27101 **CENTER STAGE STUDIO**...*THEATRICAL SCHOOLS*
27101 **CHAISE & LOUNGE**...*FURNITURE-DEALERS-RETAIL*
27101 **GLISTENING PERFECTION**...*AUTOMOBILE DETAIL & CLEAN-UP SERVICE*
27101 **GREEK BABY**...*BOOK DEALERS-RETAIL*
27101 **IMPULSE DANCE PRODUCTIONS**...*DANCE COMPANIES*
27101 **JENNY MASON PHOTOGRAPHY**...*PHOTOGRAPHERS-COMMERCIAL*
27101 **KRISTIN'S KIDDIE LAND**...*CHILD CARE SERVICE*
27101 **LAGUNA IMPORTS INC**...*CERAMIC PRODUCTS-DECORATIVE*
27101 **LAGUNA YAMAHA MUSIC CTR**...*MUSIC INSTRUCTION-INSTRUMENTAL*
27101 **MY MUSIC STUFF**...*MUSICAL INSTRUMENTS-SUPPLIES & ACCES*
27101 **NATASHA STUDIO**...*ART GALLERIES & DEALERS*
27101 **NEWPORT RESEARCH INC**...*PHARMACEUTICAL CONSULTANTS*
27101 **PAWS N KLAWS ANIMAL SALON**...*PET WASHING & GROOMING*
27101 **PAWS N KLAWS ANIMAL SALON**...*PET SERVICES*
27101 **ROBERSON EPOXY FLOORING INC**...*FLOOR LAYING REFINISHING & RESURFACING*
27101 **RUAS MARTIAL ARTS**...*MARTIAL ARTS INSTRUCTION*
27101 **SOUTH COUNTY IMAGE EMBROIDERY**...*CLOTHING-PRINTING & LETTERING*
27101 **SOUTH COUNTY IMAGE EMBROIDERY**...*EMBROIDERY*
27101 **STATE FARM INSURANCE**...*INSURANCE*
27111 **CARDIO-VASCULAR SALES**...*PHYSICIANS & SURGEONS EQUIP & SUPLS-MFRS*
27111 **COLOR SIGN CO**...*SIGNS (MFRS)*
27111 **COMMERCEFINANCE.NET**...*FINANCING*
27111 **ECLIPSE LIQUIDS**...*CIGAR CIGARETTE & TOBACCO DEALERS-WHLS*
27111 **HOME CREATIONS DESIGN INC**...*UPHOLSTERERS*
27111 **HOME CREATIONS DESIGN INC**...*DRAPERIES & CURTAINS-RETAIL/CUSTOM MADE*
27111 **INNOVATIVE BEVERAGE CONCEPTS**...*COFFEE & TEA PRODUCTS-MANUFACTURERS*
27111 **KINGSFIELD CHURCH**...*CHURCHES*
27111 **KUMON MATH & READING CTR**...*TUTORING*
27111 **MAROON FISH SOFTWARE**...*COMPUTERS-SYSTEM DESIGNERS & CONSULTANTS*
27111 **MILKALICIOUS**...*BREASTFEEDING SUPPLIES & INFORMATION*
27111 **MOCAFE**...*BEVERAGES (WHLS)*
27111 **MR DRAIN PLUMBING**...*PLUMBING CONTRACTORS*
27111 **PERFECT IMPRESSION LLC**...*WESTERN APPAREL-WHOLESALE*
27111 **SCHUBERTH NORTH AMERICA**...*MOTORCYCLES & MOTOR SCOOTERS-DEALERS*
27111 **STONEMILL TRAVEL CO**...*TRAVEL AGENCIES & BUREAUS*
27111 **SWEDE-CAL PROPERTIES INC**...*REAL ESTATE MANAGEMENT*
27111 **VISION CHIPS INC**...*PUBLISHERS-COMPUTER SOFTWARE (MFRS)*
27111 **VODANA CORP**...*NONCLASSIFIED ESTABLISHMENTS*
27111 **XLR8 O P S**...*OFFICE FURNITURE & EQUIP-INSTLTN (WHLS)*
27121 **COMPUTER ECONOMICS INC**...*COMPUTERS-SYSTEM DESIGNERS & CONSULTANTS*

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27121 **COMPUTER ECONOMICS INC**...*MARKETING PROGRAMS & SERVICES*
27121 **LUISA HIMBING**...*RESIDENTIAL*
27121 **MICROMAC TECHNOLOGY INC**...*COMPUTERS-SERVICE & REPAIR*
27121 **PATHFINDERS LEARNING INC**...*UNCLASSIFIED ESTABLISHMENTS*
27121 **STAAR SURGICAL CO**...*PHYSICIANS & SURGEONS EQUIP & SUPLS-MFRS*
27131 **ALAINE ANDERSON AT SALON PLTNM**...*BEAUTY SALONS*
27131 **BEAUTY BY TIERA**...*NONCLASSIFIED ESTABLISHMENTS*
27131 **DANCERS CHOICE**...*DANCING SUPPLIES*
27131 **DANCERS CHOICE**...*GYMNASTIC EQUIPMENT & SUPPLIES (WHLS)*
27131 **DOMINO'S PIZZA**...*FOODS-CARRY OUT*
27131 **DOMINO'S PIZZA**...*PIZZA*
27131 **FAMILY & SPORTS CHIROPRACTIC**...*CHIROPRACTORS DC*
27131 **GYMBOREE PLAY & MUSIC CTR**...*CHILD DEVELOPMENT PROGRAMS*
27131 **GYMBOREE PLAY & MUSIC CTR**...*EDUCATION CENTERS*
27131 **HAIR DESIGN BY NYA MICHELE**...*BEAUTY SALONS*
27131 **LINDSEY DAVIS-SALON PLATINUM**...*BEAUTY SALONS*
27131 **MAX MUSCLE SPORTS NUTRITION**...*HEALTH & DIET FOODS-RETAIL*
27131 **MAX MUSCLE SPORTS NUTRITION**...*VITAMIN & FOOD SUPPLEMENTS*
27131 **MY WAY JUICERY**...*FRUIT & VEGETABLE MARKETS*
27131 **PACIFIC PARK DENTAL CARE**...*DENTISTS*
27131 **PACIFIC PLAZA CLEANERS**...*CLEANERS*
27131 **PLATINUM MEDICAL SPA**...*PHYSICIANS & SURGEONS*
27131 **PLATINUM MEDICAL SPA**...*MEDICAL SPAS*
27131 **S D REAL ESTATE**...*REAL ESTATE*
27131 **SALON PLATINUM**...*BEAUTY SALONS*
27131 **SKIN RENEWAL**...*SKIN TREATMENTS*
27131 **STARLITE TRAVEL**...*TRAVEL AGENCIES & BUREAUS*
27141 **24 HOUR FITNESS**...*HEALTH CLUBS STUDIOS & GYMNASIUMS*
27141 **24 HOUR FITNESS**...*EXERCISE & PHYSICAL FITNESS PROGRAMS*
27141 **ADVANCE PRECISION BILLING**...*BILLING SERVICE*
27141 **ALMENA KEYBOARD TRAINING**...*MUSICAL INSTRUMENTS-DEALERS*
27141 **CAPISTRAN INSURANCE**...*INSURANCE*
27141 **CHISHOLM & KLINE**...*ACCOUNTANTS*
27141 **ENGLER LOANS**...*REAL ESTATE LOANS*
27141 **LAUGUNA CREST VIEW PROPERTIES**...*REAL ESTATE*
27141 **MESA VERDE DEVELOPMENT INC**...*NEW SINGLE-FAMILY HSNG CONSTR (EXC FOR-SALE BLDRS)*
27141 **PAC DATA**...*COMPUTER PROGRAMMING SERVICES*
27141 **PAC DATA**...*DATA STORAGE EQUIPMENT & SYSTEMS*
27141 **PACIFIC ALLIANCE CAPITAL INC**...*FEDERAL GOVERNMENT CONTRACTORS*
27141 **PROFESSIONAL RELOCATION**...*RELOCATION SERVICE*
27141 **SEAPORT INSURANCE SVC INC**...*INSURANCE*
27141 **SZAR INTERNATIONAL**...*MARKETING CONSULTANTS*
27141 **WEST COAST TECHNOLOGIES**...*COMPUTERS & COMPUTER EQUIPMENT WHLS/MFRS*

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1 **ALISO VIEJO LIBRARY**...*LIBRARIES-PUBLIC*
1 **NEIGHBORHOOD CUP**...*RESTAURANTS*
1 **NEIGHBORHOOD CUP**...*COFFEE SHOPS*
2 **ALISO KIDS DENTAL & ORTHDNTCS**...*DENTISTS*
2 **AZIN, TINA DDS**...*DENTISTS*
2 **MOSHARAF, MONI M DDS**...*DENTISTS*
2 **REFRESHED AESTHETIC SURGERY**...*OFFICES OF PHYSICIANS (EXC MENTAL HEALTH SPECS)*
2 **SHUFFER, JUSTIN DDS**...*OFFICES OF DENTISTS*
2 **SPECIALTY DENTAL CAFE**...*DENTISTS*
4 **ATC TAEKWONDO & HAPKIDO CTR**...*KARATE JUDO JIU-JITSU & KUNG FU INSTR*
4 **ATC TAEKWONDO & HAPKIDO CTR**...*MARTIAL ARTS INSTRUCTION*
4 **BERKTREE LEARNING CTR**...*CHILD CARE SERVICE*
4 **BLAISE CASADO**...*RESIDENTIAL*
4 **BOOGIE WOOGIE BABY**...*NONCLASSIFIED ESTABLISHMENTS*
4 **DANCE PALACE**...*COUNSELING SERVICES*
4 **NATIONAL GYMNASTICS TRAINING**...*PARTY SUPPLIES*
4 **NATIONAL GYMNASTICS TRAINING**...*GYMNASTIC INSTRUCTION*
4 **O C POLE FITNESS**...*EXERCISE & PHYSICAL FITNESS PROGRAMS*
4 **O C POLE FITNESS**...*HEALTH CLUBS STUDIOS & GYMNASIUMS*
4 **OUT OF THE BOX ARTS INC**...*FINE ART SCHOOLS*
4 **PLYOCITY LLC**...*NONCLASSIFIED ESTABLISHMENTS*
5 **ALISO RANCH PHYSICAL THERAPY**...*PHYSICAL THERAPISTS*
5 **BREWSTER, SHAWN B PA**...*PHYSICIANS ASSISTANTS*
5 **CHIANG, CELIA H MD**...*PHYSICIANS & SURGEONS*
5 **DELEHANTY, NICOLE NP**...*NURSES-PRACTITIONERS*
5 **ENG, STEVE M DPM**...*CLINICS*
5 **HASSON, MORRIS MD**...*PHYSICIANS & SURGEONS*
5 **KIM, MIA D NP**...*NURSES-PRACTITIONERS*
5 **KOUWABUNPAT, DAN T MD**...*PHYSICIANS & SURGEONS*
5 **MARTIN, SCOTT M MD**...*PHYSICIANS & SURGEONS*
5 **MARTINEZ, KENNETH P MD**...*PHYSICIANS & SURGEONS*
5 **NEUROLOGY PAIN SPECIALTY CTR**...*PHYSICIANS & SURGEONS*
5 **PERLMAN, SHARONE**...*NURSES-PRACTITIONERS*
5 **POURIA, MALEKI DDS**...*DENTISTS*
5 **SEAVIEW PEDS**...*PHYSICIANS & SURGEONS*
5 **SMITH, ALLISON J**...*MARRIAGE & FAMILY COUNSELORS*
5 **STADNYK, VICTORIA J NP**...*NURSES-PRACTITIONERS*
5 **TRAN, TAI T PA**...*PHYSICIANS ASSISTANTS*
5 **TRIEU, STEVEN DDS**...*DENTISTS*
6 **ABELLO, MARIA E DDS**...*DENTISTS*
6 **ALISO CROSSFIT**...*UNCLASSIFIED ESTABLISHMENTS*
6 **ALVES HENRIQUE NOVAGA**...*RESIDENTIAL*
6 **BANZAI RESEARCH INSTITUTE**...*WEBSITE DESIGN SERVICE*
6 **BIO LUCENT INC**...*MEDICAL, DENTAL/HOSPITAL EQUIP/SUPLS MRCHNT WHLSRS*
6 **BJORKMAN BROTHERS**...*NONCLASSIFIED ESTABLISHMENTS*
6 **BROOKE INSURANCE & FINANCIAL**...*INSURANCE*
6 **CHINA CABLES DIRECT**...*CABLE (MFRS)*
6 **CIANNA MEDICAL INC**...*PHYSICIANS & SURGEONS EQUIP & SUPLS-WHLS*
6 **CIANNA MEDICAL INC**...*FEDERAL GOVERNMENT CONTRACTORS*
6 **CONVERGENCE INC**...*E-COMMERCE*
6 **CONVERGENCE INC**...*INTERNET SERVICE*
6 **CROSS FIT GYM**...*GYMNASIUMS*
6 **CROSS FIT GYM**...*HEALTH CLUBS STUDIOS & GYMNASIUMS*
6 **FRESH LOGISTICS GLOBAL**...*WINERY TOURS*
6 **GOTGOLFGIFTS.COM**...*SPORTING GOODS-RETAIL*
6 **LINEARCHIP INC**...*NONCLASSIFIED ESTABLISHMENTS*
6 **NAVIKA GOLF & TENNIS USA**...*GOLF EQUIPMENT & SUPPLIES-MANUFACTURERS*
6 **PARTNERS ART & FRAMING**...*PICTURE FRAMES-DEALERS*
6 **PV MAINTENANCE**...*MAINTENANCE CONTRACTORS*
6 **SECURE LIVE SCAN**...*FINGERPRINTING*
6 **SIEMAN ENERGY AUTOMATION**...*PLUMBING HTG & AIR-CONDITIONING CONTRACTORS*
6 **STEVE BJORKMAN ILLUSTRATION**...*MAGAZINES-DEALERS*
6 **TRIBECA SALON**...*BEAUTY SALONS*
6 **WOLF CABLING CONNECTIONS**...*TELEVISION-CABLE & CATV*
6 **WOLF CABLING CONNECTIONS**...*SATELLITE EQUIPMENT & SYSTEMS-RETAIL*

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SOURCE: DIGITAL BUSINESS DIRECTORY

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7 **DOUGLAS COCHRAN**...*RESIDENTIAL*
7 **LEW WEBB ENTERPRISES INC**...*REAL ESTATE INVESTMENTS*
9 **ALISO VIEJO ICE PALACE**...*PARTY SUPPLIES*
9 **ALISO VIEJO ICE PALACE**...*SKATING RINKS*
9 **ATM**...*AUTOMATED TELLER MACHINES*
9 **MATT BEATY HOCKEY**...*NONCLASSIFIED ESTABLISHMENTS*
11 **ORANGE COUNTY SHERIFF**...*SHERIFF*
11 **SOUTH ORANGE COUNTY SHERIFF**...*GOVERNMENT OFFICES-COUNTY*
12 **ALISO VIEJO BUILDING & SAFETY**...*GOVERNMENT OFFICES-CITY, VILLAGE & TWP*
12 **ALISO VIEJO CITY CLERK**...*CITY GOVERNMENT-EXECUTIVE OFFICES*
12 **ALISO VIEJO CITY HALL**...*CITY GOVERNMENT-EXECUTIVE OFFICES*
12 **ALISO VIEJO CITY HALL**...*FEDERAL GOVERNMENT CONTRACTORS*
12 **ALISO VIEJO CITY MANAGER**...*CITY GOVERNMENT-EXECUTIVE OFFICES*
12 **ALISO VIEJO CITY PUBLIC WORKS**...*PARKING AREA/LOTS MAINTENANCE & MARKING*
12 **ALISO VIEJO CITY PURCHASING**...*GOVERNMENT OFFICES-CITY, VILLAGE & TWP*
12 **ALISO VIEJO COMM ASSOC**...*ASSOCIATIONS*
12 **ALISO VIEJO COMMUNITY ASSN**...*REAL ESTATE MANAGEMENT*
12 **ALISO VIEJO FINANCE DEPT**...*CITY GOVERNMENT-FINANCE & TAXATION*
12 **ALISO VIEJO PLANNING DEPT**...*GOVERNMENT OFFICES-CITY, VILLAGE & TWP*
12 **ALISO VIEJO POLICE DEPT**...*POLICE DEPARTMENTS*
12 **CAL OLSON GOLF ARCHITECTURE**...*ARCHITECTS*
12 **CAL OLSON GOLF ARCHITECTURE**...*FEDERAL GOVERNMENT CONTRACTORS*
12 **CITY OF ALISO VIEJO**...*GOVERNMENT OFFICES-CITY, VILLAGE & TWP*
12 **PLATINUM DATA**...*REAL ESTATE*
12 **PMZ PENSION**...*PENSION & PROFIT SHARING PLANS*
12 **VALLI ARCHITECTURAL GROUP**...*ARCHITECTS*
12 **VOLUNTARY EXCHANGE**...*EMPLOYEE BENEFIT CONSULTANTS*
14 **ACE TUBE BENDING**...*TUBE-BENDING & FABRICATING (MFRS)*
14 **ACE TUBE BENDING**...*FEDERAL GOVERNMENT CONTRACTORS*
14 **ALISO VIEJO PAINTLESS DENT**...*NONCLASSIFIED ESTABLISHMENTS*
16 **AIMR**...*MANUFACTURERS-AGENTS & REPRESENTATIVES*
16 **HCP NATIONAL INSURANCE SVC INC**...*INSURANCE*
16 **HEALTHCARE PLUS INSURANCE SVC**...*INSURANCE*
16 **HFI LP**...*NONCLASSIFIED ESTABLISHMENTS*
16 **INLAND STAR DISTRIBUTION**...*NONCLASSIFIED ESTABLISHMENTS*
16 **MANA**...*ASSOCIATIONS*
16 **METROLIGHT**...*NONCLASSIFIED ESTABLISHMENTS*
16 **NELSON BROTHERS PRO REAL EST**...*OFFICES OF REAL ESTATE AGENTS & BROKERS*
16 **NELSON BROTHERS PRO RL EST**...*REAL ESTATE*
16 **NELSON BROTHERS PROPERTY MGMT**...*REAL ESTATE MANAGEMENT*
16 **PASKERIAN BLOCK MARTINDAL**...*ATTORNEYS*
17 **COX COMMUNICATIONS**...*TELEVISION-CABLE & CATV*
17 **DON KIM**...*RESIDENTIAL*
18 **ALI DYNAMIC CONCEPTS INC**...*COMPUTER SOFTWARE*
18 **BOB SOZA INSURANCE**...*INSURANCE*
18 **BRIDGEPORT PRODUCTS INC**...*IMPORTERS (WHLS)*
18 **BRIDGEPORT PRODUCTS INC**...*GENERAL MERCHANDISE-RETAIL*
18 **CARE MERIDIAN LLC**...*HOSPITALS*
18 **CARE MERIDIAN LLC**...*HEALTH CARE FACILITIES*
18 **DYNAMIC CONCEPTS INC**...*INTERNET SERVICE*
18 **DYNAMIC CONCEPTS INC**...*WEBSITE HOSTING*
18 **FIRSTRAX UNITED PET GROUP**...*PET SUPPLIES & FOODS-RETAIL*
18 **GLOBALONE**...*BUSINESS MANAGEMENT CONSULTANTS*
18 **JOURNEY II**...*PROPERTY MAINTENANCE*
18 **MOBLELYNX INC**...*NONCLASSIFIED ESTABLISHMENTS*
19 **PET SUITES**...*PET WASHING & GROOMING*
19 **PET SUITES**...*PET BOARDING SITTING & KENNELS*
21 **TARGA ACCESSORIES INC**...*MOTORCYCLES & MOTOR SCOOTERS-SUPPLIES*
21 **TARGA ACCESSORIES INC**...*MOTORCYCLES & MOTOR SCOOTERS-DEALERS*
25 **S J FRANCHISE LLC**...*PARTIES-CHILDRENS*
25 **S J FRANCHISE LLC**...*PARTY PLANNING SERVICE*
25 **SCOOTER'S JUNGLE**...*PARTY PLANNING SERVICE*
25 **SCOOTER'S JUNGLE WORLDWIDE**...*PARTY CENTERS*

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27 **NATIONAL SAFETY COMPLIANCE INC**...*DRUG DETECTION SERVICE & EQUIPMENT*
29 **ABRACON CORP**...*NONCLASSIFIED ESTABLISHMENTS*
29 **AUTOTECH SPORT TUNING**...*AUTOMOBILE RACING CAR EQUIPMENT*
29 **AUTOTECH SPORT TUNING**...*AUTOMOBILE PARTS & SUPPLIES-RETAIL-NEW*
30 **DIAGEO NORTH AMERICA**...*LIQUORS-WHOLESALE*
30 **NOLET SPIRITS USA**...*EXPORTERS (WHLS)*
30 **NOLET SPIRITS USA**...*DISTILLERS (MFRS)*
31 **APPLE LEARNING CO**...*EDUCATION CENTERS*
31 **APPLE LEARNING CO**...*TUTORING*
31 **CARDIAC HEALTH SOLUTIONS**...*REHABILITATION SERVICES*
31 **CLARVISTA MEDICAL**...*PHYSICIANS & SURGEONS*
31 **COMMERCIAL GLOBAL INS SVC**...*INSURANCE*
31 **DIGI GO**...*INTERACTIVE MEDIA*
31 **E PROPERTY SITES CORN LLC**...*WEBSITE HOSTING*
31 **EPROPERTYSITES.COM**...*WEBSITE DESIGN SERVICE*
31 **PACIFIC WEST APPRAISAL SVC**...*REAL ESTATE APPRAISERS*
31 **PENSION PROFESSIONAL INC**...*PENSION & PROFIT SHARING PLANS*
31 **STATE FARM ANTHONY ROBLES**...*INSURANCE*
32 **2 ADVANCED STUDIOS**...*WEBSITE DESIGN SERVICE*
32 **2 ADVANCED STUDIOS**...*ADVERTISING-AGENCIES & COUNSELORS*
32 **2ADVANCED STUDIOS**...*COMPUTER GRAPHIC DESIGN*
32 **AY DEE KAY LLC**...*NONCLASSIFIED ESTABLISHMENTS*
32 **DELTEL**...*COMPUTER SOFTWARE*
32 **DELTEL**...*LONG DISTANCE TELEPHONE SERVICE*
32 **EXAMNET**...*REAL ESTATE LOANS*
32 **MEASUREMENT SPECIALTIES INC**...*MEASURING/CONTROLLING DEVICES NEC (MFRS)*
32 **MSI SENSORS**...*ELECTRICAL APPARATUS/WIRING SUPLS/REL EQUIP WHLSRS*
32 **MSI SENSORS**...*SECURITY CONTROL EQUIP & SYSTEMS-WHLS*
32 **P C I GROUP**...*BUILDING CONSTRUCTION-CONSULTANTS*
32 **PLANETWIDE GAMES INC**...*ELECTRONIC STORES*
32 **WE POWER LLC**...*TURBINES-MANUFACTURERS*
33 **LENSX LASERS**...*OFFICES OF OPTOMETRISTS*
33 **MEASUREMENT SPECIALTIES**...*ALL OTHER MISCELLANEOUS MANUFACTURING*
33 **TOM POLLACK**...*RESIDENTIAL*
34 **HAMPTON RESEARCH**...*PHYSICIANS & SURGEONS EQUIP & SUPLS-MFRS*
34 **HAMPTON RESEARCH**...*FEDERAL GOVERNMENT CONTRACTORS*
35 **RUSSELL INFORMATION SCIENCES**...*INFORMATION & REFERRAL SVCS*
36 **ALISO VIEJO SELF STORAGE**...*STORAGE-HOUSEHOLD & COMMERCIAL*

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23412 ALBERT PEREZ...RESIDENTIAL
23412 ALEXANDER OBUCHOWSKY...RESIDENTIAL
23412 ALICIA WILLIS...RESIDENTIAL
23412 ALLISON BREIG...RESIDENTIAL
23412 AMANDA SMITH...RESIDENTIAL
23412 ANDREW DELMUNDO...RESIDENTIAL
23412 ANN IVORY...RESIDENTIAL
23412 ANNA STARR...RESIDENTIAL
23412 ANTHONY MENDOZA...RESIDENTIAL
23412 ASHLEY SLIWA...RESIDENTIAL
23412 BARBARA BORGEN...RESIDENTIAL
23412 BRETT ANDERSON...RESIDENTIAL
23412 BRYAN HARRINGTON...RESIDENTIAL
23412 BRYAN HOLMES...RESIDENTIAL
23412 BRYAN SIMONIAN...RESIDENTIAL
23412 CAMRYN PHILLIPS...RESIDENTIAL
23412 CANYON VILLAS CONDOMINUMS...APARTMENTS
23412 CARL B SKINNER JR...RESIDENTIAL
23412 CARL MARTIN...RESIDENTIAL
23412 CARLOS GALLO...RESIDENTIAL
23412 CARMELA GALLO...RESIDENTIAL
23412 CHRISTINE VAUGHAN...RESIDENTIAL
23412 CHRISTOPHER KAMEN...RESIDENTIAL
23412 CINDY LIN...RESIDENTIAL
23412 CLIFFORD CHACON...RESIDENTIAL
23412 COLIN SMITH...RESIDENTIAL
23412 DANIEL PLUNKETT...RESIDENTIAL
23412 DANIELLE LEE...RESIDENTIAL
23412 DAVID SWAN...RESIDENTIAL
23412 DAVID WILLIS...RESIDENTIAL
23412 DAWN LEWIS...RESIDENTIAL
23412 DEBORAH VAUGHN...RESIDENTIAL
23412 DNAN WORSHAM...RESIDENTIAL
23412 EDIP ARAL...RESIDENTIAL
23412 EDWARD REARDON...RESIDENTIAL
23412 EILEEN DANIHER...RESIDENTIAL
23412 ELIZABETH CANFIELD...RESIDENTIAL
23412 ELIZABETH SHAFFER...RESIDENTIAL
23412 ELLIOTT FAULKNER...RESIDENTIAL
23412 EVELYN LEWIS...RESIDENTIAL
23412 FARZIN HOUMANFAR...RESIDENTIAL
23412 FOROUGH PEYROVAN...RESIDENTIAL
23412 FREDDY ANVARI...RESIDENTIAL
23412 GARRETT CRANE...RESIDENTIAL
23412 GERALD SCIPIONE...RESIDENTIAL
23412 GLENN WILKERSON...RESIDENTIAL
23412 GLOBAL OPERATIONS CONSULTING...BUSINESS MANAGEMENT CONSULTANTS
23412 GLORIA DEL MUNDO...RESIDENTIAL
23412 GLORIA KERN...RESIDENTIAL
23412 GORDON CARLSON...RESIDENTIAL
23412 GREG CANFIELD...RESIDENTIAL
23412 GREG WOLFE...RESIDENTIAL
23412 HEATHER COLOVER...RESIDENTIAL
23412 HEATHER PAYNE...RESIDENTIAL
23412 HEATHER RUHL...RESIDENTIAL
23412 HOPE RILEY...RESIDENTIAL
23412 INNSBRUCK APARTMENTS...LESSORS OF RESIDENTIAL BUILDINGS & DWELLINGS
23412 INSTITUTE FOR LIFE & CAREER TR...CAREER & VOCATIONAL COUNSELING
23412 IRIS SWINEA...RESIDENTIAL
23412 J D T IMAGEWORKS...NONCLASSIFIED ESTABLISHMENTS
23412 JAMES WU...RESIDENTIAL
23412 JAMES ZAPALA...RESIDENTIAL
23412 JANET ECK...RESIDENTIAL
23412 JASON JARVIS...RESIDENTIAL
23412 JASON REBER...RESIDENTIAL
23412 JASON TERAN...RESIDENTIAL
23412 JASON ZANE...RESIDENTIAL

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SOURCE: DIGITAL BUSINESS DIRECTORY

Part 2 of 3

23412 JEFFREY KOENIG...RESIDENTIAL
23412 JENIFER JOHNSON...RESIDENTIAL
23412 JESUS VASQUEZ...RESIDENTIAL
23412 JILL LYTLE...RESIDENTIAL
23412 JMC ENTERPRISE...HEALTH SERVICES
23412 JOHN ORTIZ...RESIDENTIAL
23412 JONATHAN DELMUNDO...RESIDENTIAL
23412 JOSEPH RUSSO...RESIDENTIAL
23412 JULIE HAN...RESIDENTIAL
23412 JUSTIN GERMAIN...RESIDENTIAL
23412 KAREN EMI...RESIDENTIAL
23412 KATAYOUN MAHBOUBIAN...RESIDENTIAL
23412 KATHRYN YAKUSHIJI...RESIDENTIAL
23412 KATRINA KING...RESIDENTIAL
23412 KEITH HEELEY...RESIDENTIAL
23412 KERRY WU...RESIDENTIAL
23412 KIMBERLY TOLBERT...RESIDENTIAL
23412 LAUREE FRANCIS...RESIDENTIAL
23412 LAUREN BALLARD...RESIDENTIAL
23412 LAYLA YAGANEH...RESIDENTIAL
23412 LEAH SAITZ...RESIDENTIAL
23412 LISA BOURESTON...RESIDENTIAL
23412 LISA JOHNSON...RESIDENTIAL
23412 LISA RHODES...RESIDENTIAL
23412 LORAL ANDERSON...RESIDENTIAL
23412 MARITES GOMEZ...RESIDENTIAL
23412 MARK KOURPANIDIS...RESIDENTIAL
23412 MATTHEW MILLER...RESIDENTIAL
23412 MEGAN WILLIAMS...RESIDENTIAL
23412 MELINDA HUGHIE...RESIDENTIAL
23412 MELISSA GALAWAY...RESIDENTIAL
23412 MENANDRO DELMUNDO...RESIDENTIAL
23412 MICHAEL LARSON...RESIDENTIAL
23412 MICHELLE BEVIER...RESIDENTIAL
23412 MICHELLE MILLS...RESIDENTIAL
23412 NADEZDA NJEGO...RESIDENTIAL
23412 NANCY AKRIGHT...RESIDENTIAL
23412 NICHOLAS PRING...RESIDENTIAL
23412 NICK DELIS...RESIDENTIAL
23412 NORA AYALA...RESIDENTIAL
23412 OREN YOMORTA...RESIDENTIAL
23412 PACIFIC COAST CAD...DRAFTING SERVICES
23412 PAMELA OWENS...RESIDENTIAL
23412 PARVIN BABAEI...RESIDENTIAL
23412 PATRICK REDDICK...RESIDENTIAL
23412 PATT CONCANNON...RESIDENTIAL
23412 PETER SAUERBORN...RESIDENTIAL
23412 PETREE INSURANCE SVC...INSURANCE
23412 PHILIP HILL...RESIDENTIAL
23412 PINTO ADAM...RESIDENTIAL
23412 RACHEAL MULLEN...RESIDENTIAL
23412 RALPH MAGLIARO...RESIDENTIAL
23412 RAMONA UDINK...RESIDENTIAL
23412 RAYMONA CHIN...RESIDENTIAL
23412 REYNOLD KERN...RESIDENTIAL
23412 RICHARD COVEY...RESIDENTIAL
23412 RICHARD MINDES...RESIDENTIAL
23412 RILEY HALL...RESIDENTIAL
23412 ROSA AYALA...RESIDENTIAL
23412 ROSLYN KOURPANIDIS...RESIDENTIAL
23412 SHANNON FEILER...RESIDENTIAL
23412 SHARMAN BROOKS...RESIDENTIAL
23412 SHARON WAIZENHOFER...RESIDENTIAL
23412 SHIRLEY WEAFER...RESIDENTIAL
23412 SOHRAB HASSAS...RESIDENTIAL
23412 SRDJAN NJEGO...RESIDENTIAL
23412 ST JUDE CHILDRENS HOSPITAL...HOSPITALS
23412 STEPHEN HAYDU...RESIDENTIAL
23412 STEPHEN LUDWIG...RESIDENTIAL

Part 3 of 3

23412 **STEPHEN WYCOFF**...*RESIDENTIAL*
23412 **SUZANNE BROOKSBANK**...*RESIDENTIAL*
23412 **TAMI LONG**...*RESIDENTIAL*
23412 **TERRAL KING**...*RESIDENTIAL*
23412 **TIFFANY PEREZ**...*RESIDENTIAL*
23412 **TIMOTHY WHITING**...*RESIDENTIAL*
23412 **TINA BRAYTON**...*RESIDENTIAL*
23412 **TWYLA SAURO**...*RESIDENTIAL*
23412 **WARREN WONG**...*RESIDENTIAL*
23412 **WENDY ANTANAITIS**...*RESIDENTIAL*
23412 **WILLIAM SCHULTZ**...*RESIDENTIAL*
23412 **WILLIAM WOOD**...*RESIDENTIAL*
23412 **YVONNE LARSON**...*RESIDENTIAL*
23412 **ZHIJUN HU**...*RESIDENTIAL*

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26951 **DEL TACO**...*RESTAURANTS*
27055 **R & M SHELL**...*SERVICE STATIONS-GASOLINE & OIL*
27061 **ANDERSON, KAREEN**...*INSURANCE ADJUSTERS*
27061 **GALLAGHER BASSETT SVC**...*INSURANCE*
27061 **MALDONADO, CAROLINE**...*INSURANCE ADJUSTERS*
27071 **COVENANT CARE INC**...*HOME HEALTH SERVICE*
27071 **LAN INTERNATIONAL**...*PUBLISHERS-COMPUTER SOFTWARE (MFRS)*
27071 **SELECT THERAPIST**...*NURSING & CONVALESCENT HOMES*
27071 **TRANCAS CAPITAL**...*FINANCING*
27071 **WEST HUFFMAN**...*RESIDENTIAL*
27081 **DR GLOBALTECH**...*MARKETING PROGRAMS & SERVICES*
27101 **ADDUCTOR INC**...*NONCLASSIFIED ESTABLISHMENTS*
27101 **CHAISE & LOUNGE**...*FURNITURE-DEALERS-RETAIL*
27101 **IMPULSE DANCE PRODUCTIONS**...*DANCE COMPANIES*
27101 **JAMIE'S MUSIC STUDIO**...*MUSIC INSTRUCTION-INSTRUMENTAL*
27101 **JENNY MASON PHOTOGRAPHY**...*PHOTOGRAPHERS-COMMERCIAL*
27101 **LAGUNA IMPORTS INC**...*CERAMIC PRODUCTS-DECORATIVE*
27101 **LAGUNA YAMAHA MUSIC CTR**...*MUSIC INSTRUCTION-INSTRUMENTAL*
27101 **NEWPORT RESEARCH INC**...*PHARMACEUTICAL CONSULTANTS*
27101 **PAWS N KLAWS ANIMAL SALON**...*PET SERVICES*
27101 **RUAS MARTIAL ARTS**...*MARTIAL ARTS INSTRUCTION*
27101 **SOUTH COUNTY IMAGE EMBROIDERY**...*CLOTHING-PRINTING & LETTERING*
27101 **STATE FARM INSURANCE**...*INSURANCE*
27111 **A STITCH TO REMEMBER**...*EMBROIDERY*
27111 **CALVARY LAGUNA KINGSFIELD CHR**...*CHURCHES*
27111 **CARDIO-VASCULAR SALES**...*PHYSICIANS & SURGEONS EQUIP & SUPLS-MFRS*
27111 **DIRECT LOAN FUNDING**...*LOANS*
27111 **FYI**...*MANUFACTURERS-AGENTS & REPRESENTATIVES*
27111 **HOME CREATIONS DESIGN INC**...*UPHOLSTERERS*
27111 **KUMON MATH & READING CTR**...*TUTORING*
27111 **MAR WORLDWIDE**...*NONCLASSIFIED ESTABLISHMENTS*
27111 **MAROON FISH SOFTWARE**...*COMPUTERS-SYSTEM DESIGNERS & CONSULTANTS*
27111 **MILKALICIOUS**...*BREASTFEEDING SUPPLIES & INFORMATION*
27111 **PART MINER INC**...*ELECTRONIC EQUIPMENT & SUPPLIES-RETAIL*
27111 **STONEMILL TRAVEL CO**...*TRAVEL AGENCIES & BUREAUS*
27111 **SWEDE-CAL PROPERTIES INC**...*REAL ESTATE MANAGEMENT*
27111 **VODANA CORP**...*NONCLASSIFIED ESTABLISHMENTS*
27121 **3TERA INC**...*COMPUTER SOFTWARE APPLICATION SVC PRVDRS*
27121 **ADURA KANE INSURANCE SVC**...*INSURANCE*
27121 **CAPISTRANO COMMUNITY CHURCH**...*CHURCHES*
27121 **COMPUTER ECONOMICS INC**...*COMPUTERS-SYSTEM DESIGNERS & CONSULTANTS*
27121 **STAAR SURGICAL CO**...*LABORATORIES-RESEARCH & DEVELOPMENT*
27121 **TRAFFIC ENGINE INC**...*INTERNET SERVICE*
27131 **DANCERS CHOICE**...*DANCING SUPPLIES*
27131 **DOMINO'S PIZZA**...*PIZZA*
27131 **FAMILY & SPORTS CHIROPRACTIC**...*CHIROPRACTORS DC*
27131 **GYMBOREE PLAY & MUSIC CTR**...*CHILD DEVELOPMENT PROGRAMS*
27131 **LINDSEY DAVIS-SALON PLATINUM**...*BEAUTY SALONS*
27131 **MAX MUSCLE SPORTS NUTRITION**...*VITAMINS*
27131 **PACIFIC PARK DENTAL CARE**...*DENTISTS*
27131 **PACIFIC PLAZA CLEANERS**...*CLEANERS*
27131 **PLATINUM MEDICAL SPA**...*MEDICAL SPAS*
27131 **SALON PLATINUM**...*BEAUTY SALONS*
27131 **SKIN RENEWAL**...*SKIN TREATMENTS*
27131 **STACY THE ART OF HAIR**...*BEAUTY SALONS*
27141 **24 HOUR FITNESS**...*HEALTH CLUBS STUDIOS & GYMNASIUMS*
27141 **ALMENA KEYBOARD TRAINING**...*MUSICAL INSTRUMENTS-DEALERS*
27141 **CHISHOLM & KLINE**...*ACCOUNTANTS*
27141 **I BOB**...*RESIDENTIAL*
27141 **LAUGUNA CREST VIEW PROPERTIES**...*REAL ESTATE*
27141 **LIVE SCAN OC**...*FINGERPRINTING*
27141 **MC DANIEL CONSTRUCTION**...*CONSTRUCTION MANAGEMENT*
27141 **MC NALLY HOLDINGS**...*HOLDING COMPANIES (NON-BANK)*
27141 **MESA VERDE DEVELOPMENT INC**...*GENERAL CONTRACTORS*
27141 **MRI DIAGNOSTICS**...*DIAGNOSTIC IMAGING CENTERS*
27141 **NET APPLICATIONS**...*PUBLISHING CONSULTANTS*
27141 **PAC DATA**...*COMPUTER PROGRAMMING SERVICES*

Part 2 of 2

27141 **PROFESSIONAL RELOCATION**...*RELOCATION SERVICE*
27141 **TRAILOR DEVELOPMENT**...*NONCLASSIFIED ESTABLISHMENTS*

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1 **ALISO VIEJO LIBRARY**...*LIBRARIES-PUBLIC*
1 **NEIGHBORHOOD CUP**...*COFFEE SHOPS*
4 **ATC TAEKWONDO & HAPKIDO CTR**...*MARTIAL ARTS INSTRUCTION*
4 **DANCE PALACE**...*DANCING INSTRUCTION*
4 **NATIONAL GYMNASTICS TRAINING**...*GYMNASTIC INSTRUCTION*
4 **O C POLE FITNESS**...*EXERCISE & PHYSICAL FITNESS PROGRAMS*
5 **ALISO RANCH PHYSICAL THERAPY**...*PHYSICAL THERAPISTS*
5 **CHENG, JOHN MD**...*PHYSICIANS & SURGEONS*
5 **CHIANG, CELIA H MD**...*PHYSICIANS & SURGEONS*
5 **JOHNSON, JAN M MD**...*PHYSICIANS & SURGEONS*
5 **KOUWABUNPAT, DAN T MD**...*PHYSICIANS & SURGEONS*
5 **MARTINEZ, KENNETH P MD**...*PHYSICIANS & SURGEONS*
5 **MEISTER, ROBERT E DDS**...*DENTISTS*
5 **PETCHPUD, APIRADA DDS**...*DENTISTS*
5 **PUROHIT, SWATI MD**...*PHYSICIANS & SURGEONS*
5 **SEAVIEW PEDIATRIC MEDICAL SVC**...*PHYSICIANS & SURGEONS*
5 **SOUTH COAST MEDICAL GROUP**...*PHYSICIANS & SURGEONS*
5 **SOUTHCOAST DENTISTRY-WHITENING**...*DENTISTS*
5 **TORRES, REBEKAH**...*NURSES & NURSES' REGISTRIES*
5 **TRAN, HUNG MD**...*PHYSICIANS & SURGEONS*
5 **VOLLEBREGT, JESSICA A**...*PHYSICIANS ASSISTANTS*
6 **ABELLO, MARIA E DDS**...*DENTISTS*
6 **BANZAI RESEARCH INSTITUTE**...*WEBSITE DESIGN SERVICE*
6 **BJORKMAN BROTHERS**...*NONCLASSIFIED ESTABLISHMENTS*
6 **BROOKE INSURANCE & FINANCIAL**...*INSURANCE*
6 **BUILDING BLOCKS PEDIATRIC HOME**...*HOME HEALTH SERVICE*
6 **CIANNA MEDICAL INC**...*PHYSICIANS & SURGEONS EQUIP & SUPLS-WHLS*
6 **CONVERGENCE INC**...*E-COMMERCE*
6 **INDX SOFTWARE**...*ENERGY MANAGEMENT SYSTEMS & PRODUCTS*
6 **LINEARCHIP INC**...*NONCLASSIFIED ESTABLISHMENTS*
6 **NAVIKA GOLF & TENNIS USA**...*GIFT SHOPS*
6 **PARTNERS ART & FRAMING**...*PICTURE FRAMES-DEALERS*
6 **PV MAINTENANCE**...*MAINTENANCE CONTRACTORS*
6 **SECURE LIVE SCAN**...*FINGERPRINTING*
6 **STEVE BJORKMAN ILLUSTRATION**...*MAGAZINES-DEALERS*
6 **TRIBECA SALON**...*BEAUTY SALONS*
6 **WOLF CABLING CONNECTIONS**...*SATELLITE EQUIPMENT & SYSTEMS-RETAIL*
7 **LEW WEBB ENTERPRISES INC**...*REAL ESTATE INVESTMENTS*
9 **ALISO VIEJO ICE PALACE**...*SKATING RINKS*
11 **ORANGE COUNTY SHERIFF**...*SHERIFF*
11 **SOUTH ORANGE COUNTY SHERIFF**...*SHERIFF*
12 **ALISO VIEJO BUILDING & SAFETY**...*GOVERNMENT OFFICES-CITY, VILLAGE & TWP*
12 **ALISO VIEJO CITY CLERK**...*CITY GOVERNMENT-EXECUTIVE OFFICES*
12 **ALISO VIEJO CITY HALL**...*CITY GOVERNMENT-EXECUTIVE OFFICES*
12 **ALISO VIEJO CITY MANAGER**...*CITY GOVERNMENT-EXECUTIVE OFFICES*
12 **ALISO VIEJO CITY PUBLIC WORKS**...*PARKING AREA/LOTS MAINTENANCE & MARKING*
12 **ALISO VIEJO CITY PURCHASING**...*GOVERNMENT OFFICES-CITY, VILLAGE & TWP*
12 **ALISO VIEJO CODE ENFORCEMENT**...*GOVERNMENT OFFICES-CITY, VILLAGE & TWP*
12 **ALISO VIEJO COMM ASSOC**...*ASSOCIATIONS*
12 **ALISO VIEJO COMMUNITY SVC DEPT**...*GOVERNMENT OFFICES-CITY, VILLAGE & TWP*
12 **ALISO VIEJO FINANCE DEPT**...*CITY GOVERNMENT-FINANCE & TAXATION*
12 **ALISO VIEJO PLANNING DEPT**...*GOVERNMENT OFFICES-CITY, VILLAGE & TWP*
12 **ALISO VIEJO POLICE DEPT**...*POLICE DEPARTMENTS*
12 **AVCA**...*REAL ESTATE MANAGEMENT*
12 **PLATINUM DATA**...*REAL ESTATE*
12 **PMZ PENSION**...*PENSION & PROFIT SHARING PLANS*
12 **VALLI ARCHITECTURAL GROUP**...*ARCHITECTS*
14 **ACE TUBE BENDING**...*TUBE-BENDING & FABRICATING (MFRS)*
16 **AIMR**...*MANUFACTURERS-AGENTS & REPRESENTATIVES*
16 **ENGLER LOANS**...*REAL ESTATE LOANS*
16 **HEALTHCARE PLUS INSURANCE SVC**...*INSURANCE*
16 **MANA**...*ASSOCIATIONS*
16 **ROMAN FINANCIAL**...*FINANCIAL ADVISORY SERVICES*
17 **COX COMMUNICATIONS**...*TELEVISION-CABLE & CATV*

Part 2 of 2

18 **ALI DYNAMIC CONCEPTS INC**...*COMPUTER SOFTWARE*
18 **BOB SOZA INSURANCE**...*INSURANCE*
18 **BRIDGEPORT PRODUCTS INC**...*IMPORTERS (WHLS)*
18 **CAPISTRAN INSURANCE**...*INSURANCE*
18 **CARE MERIDIAN LLC**...*HEALTH SERVICES*
18 **DYNAMIC CONCEPTS INC**...*INTERNET SERVICE*
18 **FIRSTRAX**...*PET SUPPLIES & FOODS-RETAIL*
18 **JOURNEY II**...*PROPERTY MAINTENANCE*
18 **MOBLELYNX INC**...*NONCLASSIFIED ESTABLISHMENTS*
18 **POINT 4 DATA CORP**...*COMPUTER SOFTWARE*
18 **RHYTHM INTERACTIVE INC**...*COMPUTER INTEGRATED SYSTEMS DESIGN*
18 **TAFCO MANAGEMENT SVC INC**...*REAL ESTATE MANAGEMENT*
19 **PET SUITES**...*PET BOARDING SITTING & KENNELS*
21 **TARGA ACCESSORIES INC**...*MOTORCYCLES & MOTOR SCOOTERS-DEALERS*
22 **US POST OFFICE**...*POST OFFICES*
22 **US POST OFFICE ANNEX**...*POST OFFICES*
23 **USMAC**...*BUSINESS MANAGEMENT CONSULTANTS*
25 **AIRCRAFT BEARING**...*BEARINGS (WHLS)*
25 **S J FRANCHISE LLC**...*PARTY PLANNING SERVICE*
25 **SCOOTERS JUNGLE**...*PARTY SUPPLIES*
27 **NATIONAL SAFETY COMPLIANCE INC**...*DRUG DETECTION SERVICE & EQUIPMENT*
29 **AUTOTECH SPORT TUNING**...*AUTOMOBILE RACING CAR EQUIPMENT*
30 **NOLET SPIRITS USA**...*DISTILLERS (MFRS)*
31 **CARDIAC HEALTH SOLUTIONS**...*REHABILITATION SERVICES*
31 **E PROPERTY SITES CORN LLC**...*WEBSITE HOSTING*
31 **JOHNSON MATTEHY INC**...*ENGINEERS*
31 **PENSION PROFESSIONAL INC**...*PENSION & PROFIT SHARING PLANS*
31 **REVERSE MARKET INSIGHT INC**...*MARKET RESEARCH & ANALYSIS*
32 **2 ADVANCED STUDIOS**...*ADVERTISING-AGENCIES & COUNSELORS*
32 **2ADVANCED STUDIOS**...*COMPUTER GRAPHIC DESIGN*
32 **ABARIS INC**...*COMPUTERS-SYSTEM DESIGNERS & CONSULTANTS*
32 **DELTEL**...*LONG DISTANCE TELEPHONE SERVICE*
32 **E LENDER SVC LLC**...*REAL ESTATE LOANS*
32 **MEASUREMENT SPECIALTIES INC**...*MEASURING/CONTROLLING DEVICES NEC (MFRS)*
32 **PLANETWIDE GAMES INC**...*VIDEO GAMES*
32 **WE POWER LLC**...*TURBINES-MANUFACTURERS*
34 **HAMPTON RESEARCH**...*PHYSICIANS & SURGEONS EQUIP & SUPLS-MFRS*
35 **RUSSELL INFORMATION SCIENCES**...*INFORMATION & REFERRAL SVCS*

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23412 **ADAM NOON**...*RESIDENTIAL*
23412 **ALEXANDER OBUCHOWSKY**...*RESIDENTIAL*
23412 **AMY YOVAN**...*RESIDENTIAL*
23412 **ANGELA MURESAN**...*RESIDENTIAL*
23412 **ANGELA RUSU**...*RESIDENTIAL*
23412 **ANN LOPEZ**...*RESIDENTIAL*
23412 **ANNE HIBBARD**...*RESIDENTIAL*
23412 **AUGUSTIN RUSU**...*RESIDENTIAL*
23412 **BRAD CAUSEE**...*RESIDENTIAL*
23412 **BRAD HIBBARD**...*RESIDENTIAL*
23412 **BRANDON IVEY**...*RESIDENTIAL*
23412 **BRYAN HOLMES**...*RESIDENTIAL*
23412 **CARLOS GALLO**...*RESIDENTIAL*
23412 **CARMELA GALLO**...*RESIDENTIAL*
23412 **CHARLENE HUGHES**...*RESIDENTIAL*
23412 **CHARLES BLACK**...*RESIDENTIAL*
23412 **CHRIS HUDDLESTON**...*RESIDENTIAL*
23412 **DAVID STARCKS**...*RESIDENTIAL*
23412 **ELECTRICAL ENGINEERING & MGMT**...*ENGINEERS-ELECTRICAL*
23412 **ELIZABETH DELGADO**...*RESIDENTIAL*
23412 **ERNIE DELGADO**...*RESIDENTIAL*
23412 **EVA VERNAZA**...*RESIDENTIAL*
23412 **FRANCIS AOALIN**...*RESIDENTIAL*
23412 **GEORGE HIBBARD**...*RESIDENTIAL*
23412 **GEORGE HOWARD**...*RESIDENTIAL*
23412 **GLOBAL OPERATIONS CONSULTING**...*BUSINESS MANAGEMENT CONSULTANTS*
23412 **INSTITUTE FOR LIFE & CAREER TR**...*CAREER & VOCATIONAL COUNSELING*
23412 **JACQUELIN VETA**...*RESIDENTIAL*
23412 **JAMES DELGADO**...*RESIDENTIAL*
23412 **JASON BIOLOS**...*RESIDENTIAL*
23412 **JENNIFER DARNELL**...*RESIDENTIAL*
23412 **JENNIFER WALLACE**...*RESIDENTIAL*
23412 **JIM WING**...*RESIDENTIAL*
23412 **JMC ENTERPRISE**...*HEALTH SERVICES*
23412 **JOHN SCHULTZ**...*RESIDENTIAL*
23412 **JOLEE HIBBARD**...*RESIDENTIAL*
23412 **JOSEPH HAWES**...*RESIDENTIAL*
23412 **JULIA EVANS**...*RESIDENTIAL*
23412 **KARAN NAGEL**...*RESIDENTIAL*
23412 **KAREN KETCHAM**...*RESIDENTIAL*
23412 **KATHY DELGADO**...*RESIDENTIAL*
23412 **KEITH HEELEY**...*RESIDENTIAL*
23412 **KEVIN RISKE**...*RESIDENTIAL*
23412 **KHANH TRAN**...*RESIDENTIAL*
23412 **KIM HOANG**...*RESIDENTIAL*
23412 **KRISTINE ROSE**...*RESIDENTIAL*
23412 **L RHODES**...*RESIDENTIAL*
23412 **LACIDES VERNAZA**...*RESIDENTIAL*
23412 **LINDA LUTHER**...*RESIDENTIAL*
23412 **LINDY BERGMAN**...*RESIDENTIAL*
23412 **LITTLE TJ PRODUCTIONS**...*AUDIO-VISUAL PRODUCTION SERVICE*
23412 **LUCCA FOUNTAINS & STATUARY**...*FOUNTAINS-GARDEN DISPLAY ETC*
23412 **LY HOANG**...*RESIDENTIAL*
23412 **MARCO DELCHIARO**...*RESIDENTIAL*
23412 **MARY MILLER**...*RESIDENTIAL*
23412 **MELISSA GALAWAY**...*RESIDENTIAL*
23412 **MICHAE PETERSON**...*RESIDENTIAL*
23412 **MICHAEL EVANS**...*RESIDENTIAL*
23412 **MICHAEL MCGRATH**...*RESIDENTIAL*
23412 **NIKKI CHRISTIN**...*RESIDENTIAL*
23412 **PACIFIC COAST CAD**...*DRAFTING SERVICES*
23412 **REGINA BALDING**...*RESIDENTIAL*
23412 **RICHARD DELGADO**...*RESIDENTIAL*
23412 **ROBERT BOUCKE**...*RESIDENTIAL*
23412 **RONALD MONTOYA**...*RESIDENTIAL*
23412 **SABRINA IVEY**...*RESIDENTIAL*
23412 **SCOTT NCMILLAN**...*RESIDENTIAL*
23412 **SHAWN PONS**...*RESIDENTIAL*

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23412 **STEPHANIE REID**...*RESIDENTIAL*
23412 **STEPHEN BALDING**...*RESIDENTIAL*
23412 **STEPHEN LUDWIG**...*RESIDENTIAL*
23412 **STEVE DELGADO**...*RESIDENTIAL*
23412 **STEVEN HOFFMAN**...*RESIDENTIAL*
23412 **SUSAN MCGRATH**...*RESIDENTIAL*
23412 **SUSAN MILLER**...*RESIDENTIAL*
23412 **T KETCHAM**...*RESIDENTIAL*
23412 **TAMMY VALENCIA**...*RESIDENTIAL*
23412 **TODD KETCHAM**...*RESIDENTIAL*
23412 **VINAY SHARMA**...*RESIDENTIAL*
23412 **WARREN WONG**...*RESIDENTIAL*
23412 **WENDY GILBODY**...*RESIDENTIAL*
23412 **WILLIAM ONEILL**...*RESIDENTIAL*

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26951 **DEL TACO RESTAURANT**...*QUICK SERV MEXICAN*
27055 **SHELL**...*GASOLINE SV STATION*
27061 **RINNAI AMERICA CORP**...*HEATING EQ HYDRONIC*
27071 **ARHCON RESIDENTIAL MGMT**...*REAL ESTATE*
27071 **COVENANT CARE INC**...*HOME HEALTH CARE SV*
27071 **COVENANT CARE INC**...*HOME HEALTH SERVICE*
27071 **COVENANT CARE INDIANA**...*NURSING HOME*
27071 **EPIC BRAND GROUP**...*ADVERTISING AGENCY*
27071 **FHL FINANCIAL**...*MORTGAGE BANKERS*
27071 **HUFFMAN WEST**...*SUBDIVIDERS & DEVEL*
27071 **LAN INTERNATIONAL**...*CUSTOM COMPUTER PROGRAMING*
27071 **SELECT THERAPIES**...*SKILLED NURSING CARE FACILITY HEALTH PRACTITIONER'S OFF*
27081 **CHANNEL WAVE INC**...*MARKETING PROGRAMS & SERVICES*
27081 **MARIE CALLENDER PIESHOPS INC**...*EATING PLACE*
27101 **ALPHA TUTORING INC**...*TUTORING*
27101 **ALPHA TUTORING SVC INC**...*SCH,EDUCTL SV NEC*
27101 **BANKS & ASSOC**...*REAL ESTATE*
27101 **BANKS & ASSOC**...*REAL ESTATE AGT,MGR*
27101 **CENTER STAGE STUDIO**...*THEATRICAL PRODUCER*
27101 **CHAISE & LOUNGE**...*FURNITURE STORES*
27101 **DANCERS CHOICE**...*MISC APPAREL & ACC*
27101 **ELFWORKS KNITTING MILL INC**...*WHOL HOMEFURNISHINGS*
27101 **GREEK BABY**...*BOOK STORES*
27101 **IMPULSE DANCE PRODUCTIONS**...*THEATRICAL PRODUCER*
27101 **INSTANT IMPRINTS**...*MISC APPAREL & ACC*
27101 **INSTANT IMPRINTS**...*EMBROIDERY*
27101 **INSTANT IMPRINTS SOUTH COUNTY**...*LITHOGRAPHIC COMMERCIAL PRINTING*
27101 **LAGUNA IMPORTS INC**...*HOBBY,CRAFT SUPPS*
27101 **LAGUNA IMPORTS INC**...*RET GIFTS/NOVELTIES*
27101 **NEWPORT RESEARCH INC**...*DRUG,PROPRIETARY STR*
27101 **PAWS N KLAWS ANIMAL SALON**...*ANIMAL SPC SERVICES*
27101 **PRECISION CONSULTANTS INC**...*ENGINEERING SERVICE*
27101 **RUAS MARTIAL ARTS**...*MARTIAL ARTS*
27101 **SERVPRO**...*FAMILY HSNG CONSTR*
27101 **SOUTHERN CALIFORNIA BLDG MAINT**...*CARPET/UPHOLSTERY CLEANING*
27101 **STATE FARM INSURANCE**...*INSURANCE AGENTS,BRKR*
27101 **TRUST ONE COMPONENT**...*ELECTRICAL,ELECTRONIC*
27111 **ACCESS SECURITIES CONTROL**...*SECURITY CONTROL EQUIP & SYSTEMS-WHOL*
27111 **AMERICAN COMPUTER OPTICS**...*MFG COMPUTER PERIPHERAL OPTIC EQUIPMENT*
27111 **ASCI SECURITY**...*SECURITY SYSTEMS CONSULTANTS*
27111 **ASCI SECURITY**...*GUARD & PATROL SERV*
27111 **CALVARY CHAPEL-LAGUNA NIGUEL**...*CHURCHES*
27111 **CALVARY CHAPEL-LAGUNA NIGUEL**...*RELIGIOUS ORGANIZ*
27111 **CARDIO-VASCULAR SALES**...*PHYSICIANS & SURGEONS EQUIP & SUPLS-MFRS*
27111 **CARDIO-VASCULAR SALES**...*SURGICAL,MED INSTRS*
27111 **CHARLES RAMM ASSOCIATES INC**...*ARCHITECTURAL SERVICES WHOL COMMERCIAL EQUIPMENT REPAIR*
27111 **COAST REALTY**...*REAL ESTATE AGT,MGR*
27111 **CVS CARDIOVASCULAR SALES**...*SURGICAL,MED INSTRS*
27111 **HOME CREATIONS**...*UPHOLSTERY WORK*
27111 **INNOVATIVE BEVERAGE CONCEPTS**...*BOT,CAN SOFT DRINKS*
27111 **NEW DESTINY INTERNET GROUP LLC**...*ADVERTISING SERVICES TELEPHONE COMMUNICATIONS*
27111 **PACIFIC MORTGAGE FINANCIAL**...*MORTGAGE BANKERS*
27111 **STONEMILL TRAVEL CO**...*TRAVEL AGENCIES*
27111 **SWEDE-CAL PROPERTIES INC**...*REAL ESTATE MGMT*
27111 **WALKER MEDICAL SALES**...*MEDICAL EQUIP,SUPPS*
27121 **KLEEN AIR SYSTEMS INC**...*HOUSEHOLD APPL STRS*
27121 **STAAR SURGICAL CO**...*COML PHYSICAL RESCH*
27121 **STAAR SURGICAL COMPANY**...*MFG INTRAOCULAR LENSES*
27121 **STOCKPRO INC**...*ELCR PARTS & EQP*
27131 **DOMINOS PIZZA**...*RESTAURANTS*
27131 **DOMINOS PIZZA**...*QUICK SERV PIZZA PARLOR*
27131 **FAMILY & SPORTS CHIROPRACTIC**...*CHIROPRACTORS OFF*
27131 **FAMILY & SPORTS CHIROPRACTIC**...*CHIROPRACTORS DC*
27131 **HAIR BY JOLENE HAYS**...*BEAUTY SHOP*
27131 **MAX MUSCLE**...*HEALTH & DIET FD STRS*

Part 2 of 2

27131 **PACIFIC PARK DENTAL CARE**...*ENDODONTISTS (ROOT CANALS)*
27131 **PACIFIC PLAZA CLEANERS**...*GMT PRESSG,CLRS AGT*
27131 **SALON PLATINUM**...*HAIRDRESSERS*
27131 **STACY THE ART OF HAIR**...*HAIRDRESSERS*
27131 **STARLITE TRAVEL**...*HAIRDRESSERS*
27131 **SUPER SUPPERS**...*EATING PLACES*
27131 **SURF CITY SQUEEZE**...*EATING PLACE WHOL GROCERIES*
27131 **SURF CITY SQUEEZE**...*FRUIT & VEG MARKETS*
27141 **24 HOUR FITNESS**...*HEALTH CLUBS STUDIOS & GYMNASIUMS*
27141 **24 HOUR FITNESS**...*PHYSICAL FITNESS CT*
27141 **ALMENA KEYBOARD TRAINING**...*MUSICAL INSTRUMENTS-DEALERS*
27141 **ALMENA KEYBOARD TRAINING**...*MUSICAL INSTRUMENTS*
27141 **ARC INTEL**...*COMP SFTWRE & ACC*
27141 **BOB SOZA INSURANCE**...*INSURANCE AGENTS,BRKR*
27141 **BOB SOZA INSURANCE**...*INSURANCE*
27141 **CAPISTRAN INSURANCE**...*INSURANCE*
27141 **CHISHOLM & KLINE**...*ACCTG,AUDIT,BKKEEP*
27141 **CLEAR SCREENING INC**...*MISC PERSONAL SVS*
27141 **COAST SADDLEBACK REALTY**...*REAL ESTATE AGENT/MANAGER*
27141 **COLOR PRINTING OUTLET**...*PLATEMAKING,REL SVS*
27141 **EIX INSURANCE**...*INSURANCE*
27141 **EKEL LINK FINANCIAL**...*INVESTMENT ADVICE*
27141 **FARMERS INSURANCE**...*INSURANCE AGENT/BROKER*
27141 **GOEPOXY.COM**...*ADVERTISING SVS NEC*
27141 **LAUGUNA CREST VIEW PROPERTIES**...*REAL ESTATE AGT,MGR*
27141 **LIFE FITNESS INC**...*MFG SPORTING/ATHLETIC GOODS*
27141 **MC DANIEL CONSTRUCTION**...*GEN REMOD 1-FAM HOUSE*
27141 **MC NALLY HOLDINGS**...*HOLDING COMPANIES*
27141 **MRI DIAGNOSTICS**...*MEDICAL LABORATORY*
27141 **PAC DATA**...*COMPUTER,SOFTWR STR*
27141 **PRC RELOCATION & LOCATION SVC**...*REAL ESTATE AGT,MGR*
27141 **TALENT MANAGERS OF HOLLYWOOD**...*UNCLASSIFIED*
27141 **TY HANSCHE INSURANCE**...*INSUR AGTS,BRKS,SVS*
27141 **VINO BRAVO**...*WINE, DISTILLED BEV*
27141 **WEST COAST TECHNOLOGY**...*ELECTRONIC COMPUTER*

109 total records. Part 1 of 2

1 **ALISO VIEJO LIBRARY**...*LIBRARIES-PUBLIC*
1 **ALISO VIEJO LIBRARY**...*LIBRARIES*
1 **NEIGHBORHOOD CUP**...*COFFEE SHOP*
1 **PUBLIC LIBRARY**...*LIBRARY EXECUTIVE OFFICE*
4 **AMERICAN TAE KWON-DO CTR**...*MARTIAL ARTS INSTRUCTION*
4 **AMERICAN TAEKWONDO CTR INC**...*MARTIAL ARTS*
4 **NATIONAL GYMNASTICS TRAINING**...*AMUS, RECREATION SV*
4 **OCPOLE FITNESS**...*PERSONAL APEAR SVCS*
4 **TARA LYNNS PERFORMING ARTS**...*DANCE STUDIOS, SCHL*
4 **TARA PERFORMING ARTS CTR**...*DANCING INSTRUCTION*
4 **TUTORING PLUS**...*SCH,EDUCTL SV NEC*
5 **DANSK DENTAL CLINIC**...*DENTISTS OFF,CLINIC*
5 **JOHN CHENG MD**...*NATURAL GAS DISTRIBUTION*
5 **KENNETH P MARTINEZ MD**...*MEDICAL DOCTORS OFF*
5 **ROBERT E MEISTER DDS**...*DENTISTS OFF,CLINIC*
5 **SEAVIEW PEDIATRIC MEDICAL SVC**...*MEDICAL GRPS &CLNCS*
5 **SOUTH COAST HEALTH CTR REHAB**...*MEDICAL GRPS &CLNCS*
5 **SOUTH COAST MEDICAL GROUP**...*MEDICAL GRPS &CLNCS*
5 **SOUTHCOAST DENTISTRY-WHITENING**...*DENTISTS OFF,CLINIC*
5 **STEVEN D TRIEU DDS**...*DENTISTS OFF,CLINIC*
5 **X-RAY IMAGING**...*WHOL MEDICAL/HOSPITAL EQUIPMENT*
6 **A LOUSKY DESIGNS HAIR LAB**...*BEAUTY SALONS*
6 **BANZAI RESEARCH INSTITUTE**...*COMPUTER SYS DESIGN*
6 **BEBE MODE INC**...*CHILDRENS & INFANTS WEAR-WHOLESALE*
6 **BEBE MONDE INC**...*GIRLS',CHLD OUTERWR*
6 **BJORKMAN BROTHERS**...*NONCLASSIFIED ESTABLISHMENTS*
6 **BJORKMAN BROTHERS**...*NCLASSIFIABLE ESTAB*
6 **CAP DESIGN**...*ARCHITECTURAL SVS*
6 **CAP DESIGN**...*ARCHITECTS*
6 **CARLO CESTI**...*INSURANCE AGENTS,BRKR*
6 **CONVERGENCE INC**...*CATALOG,MAIL-ORDER*
6 **CONVERGENCE INC**...*E-COMMERCE*
6 **LA BOXING ALISO VIEJO INC**...*PERSONAL APEAR SVCS*
6 **MARIA E ABELLO DDS**...*DENTISTS OFF,CLINIC*
6 **MAXIM MARKETING**...*MRKTING CONSULT SVCS*
6 **NAVIKA GOLF & TENNIS USA**...*SPG,ATHLETIC GOODS*
6 **PV MAINTENANCE**...*NRESIDENTIAL CONSTR*
6 **SIEMAN ENERGY &ADOIMAINONCORP**...*MISC PUBLISHING*
6 **STEVE BJORKMAN ILLUSTRATION**...*NEWS DLR, NEWSSTAND*
6 **TRIBECA SALON**...*HAIRDRESSERS*
7 **CELEBRATION CHURCH**...*RELIGIOUS ORGANIZ*
7 **CELEBRATION KIDS CO**...*CHILD CARE SERVICE*
7 **LEW WEBB ENTERPRISES INC**...*NCLASSIFIABLE ESTAB*
9 **ALISO VIEJO ICE PALACE**...*SKATING RINKS*
9 **ALISO VIEJO ICE PALACE**...*DIRECT SELLING ESTB*
11 **ORANGE COUNTY SHERIFF**...*POLICE*
11 **SHERIFFS DEPT**...*PUBLIC ORDER/SAFETY*
11 **SOUTH ORANGE COUNTY CORONER**...*EXEC OFFS,STATE-LOCAL*
12 **ALISO VIEJO BUILDING & SAFETY**...*GOVERNMENT OFFICES-CITY, VILLAGE & TWP*
12 **ALISO VIEJO CITY CLERK**...*CITY GOVERNMENT-EXECUTIVE OFFICES*
12 **ALISO VIEJO CITY CLERK**...*EXEC OFFS,STATE-LOCAL*
12 **ALISO VIEJO CITY COUNCIL**...*EXEC OFFS,STATE-LOCAL*
12 **ALISO VIEJO CITY HALL**...*EXEC OFFS,STATE-LOCAL*
12 **ALISO VIEJO CITY HALL**...*CITY GOVERNMENT-EXECUTIVE OFFICES*
12 **ALISO VIEJO CITY MANAGER**...*CITY GOVERNMENT-EXECUTIVE OFFICES*
12 **ALISO VIEJO CITY OF**...*LOCAL GOVERNMENT*
12 **ALISO VIEJO CITY PUBLIC WORKS**...*HIGHWAY & ST CONSTR*
12 **ALISO VIEJO CODE ENFORCEMENT**...*EXEC OFFS,STATE-LOCAL*
12 **ALISO VIEJO COMMUNITY SVC DEPT**...*GOVERNMENT OFFICES-CITY, VILLAGE & TWP*
12 **ALISO VIEJO COMMUNITY SVC DEPT**...*EXEC OFFS,STATE-LOCAL*
12 **ALISO VIEJO FINANCE DEPT**...*CITY GOVERNMENT-FINANCE & TAXATION*
12 **ALISO VIEJO FINANCE DEPT**...*PUBLIC FIN,TAXATION*
12 **ALISO VIEJO PLANNING DEPT**...*EXEC OFFS,STATE-LOCAL*
12 **ALISO VIEJO PLANNING DEPT**...*GOVERNMENT OFFICES-CITY, VILLAGE & TWP*
12 **ALISO VIEJO POLICE DEPT**...*POLICE*
12 **PLATINUM WEST REAL ESTATE**...*REAL ESTATE AGT,MGR*

Part 2 of 2

12 **PMZ PENSION CORP**...*PENSION,HEALTH FUND*
14 **ACE TUBE BENDING**...*FAB PIPE & FITTINGS*
14 **ACE TUBE BENDING**...*TUBE-BENDING & FABRICATING*
16 **GRAPHIC COMMUNICATIONS**...*ART DESIGN SERVICES*
16 **MANUFACTURERS AGENTS NATIONAL**...*ASSOCIATIONS*
17 **COX COMMUNICATIONS**...*CABLE & PAY TV SVS*
17 **MTC COX COMMUNICATIONS**...*COMMUNICATIONS SVS*
18 **CARE MERIDIAN**...*HOME HEALTH CARE SV*
18 **DYNAMIC CONCEPTS INC**...*INTERNET HOSTING ASP SERVICES AND COMPUTER SOFTWARE DEV*
18 **FIRSTRAX**...*PETS,PET SUPPS*
18 **MEGASYS**...*NCLASSIFIABLE ESTAB*
18 **MOBLELYNX INC**...*NCLASSIFIABLE ESTAB*
18 **TAFCO MANAGEMENT SVC INC**...*REAL ESTATE MGMT*
19 **PET SUITES**...*ANIMAL SPC SERVICES*
19 **PET SUITES**...*ANIMAL SERVICES*
21 **TARGA ACCESSORIES INC**...*MOTORCYCLE PARTS,ACC*
23 **CITY WIDE MORTGAGE USMAC**...*MORTGAGE BANKERS*
23 **JSM MARKETING LLC**...*BUSINESS SVS NEC*
23 **PROBATION DEPT**...*EDUCATIONAL SVCS*
25 **AIRCRAFT BEARING**...*BEARINGS*
25 **AIRCRAFT BEARING**...*BEARINGS (WHOLESALE)*
25 **HONEYWELL**...*WHOL INDUSTRIAL SUPPLIES*
25 **S J FRANCHISE LLC**...*NCLASSIFIABLE ESTAB*
25 **SCOOTERS JUNGLE**...*PARTY SUPPLIES*
29 **ABRACON CORPORATION**...*MFG ELECTRIC COMPONENTS ELECTRIC COIL AND TRANSFRMRS MF*
29 **AUTOTECH SPORT TUNING**...*AUTOMOBILE RACING CAR EQUIPMENT*
30 **NOLET SPIRITS USA**...*DISTLR & BLENDED LQ*
31 **APPLIED UTILITY SYSTEMS INC**...*ENGINEERING SERVICE*
31 **CHERI GAYLORD**...*RESIDENTIAL*
31 **GERALD ATTY BLOCH**...*RESIDENTIAL*
31 **GILLINGS & ASSOC**...*ARCHITECTS*
31 **PENSION PROFESSIONAL INC**...*PENSION,HEALTH FUND*
32 **ABARAS INC**...*COMPUTERS-SYSTEM DESIGNERS & CONSULTANTS*
32 **E LENDER ESCROW INC**...*ESCROW SERVICE*
32 **PLANETWIDE GAMES INC**...*HOBBY,TOY, GAME STR*
33 **MSI SENSORS**...*MEASUR, CTRL DV NEC*
33 **SIERRA BUSINESS SOLUTIONS**...*WHL OFFICE EQP*
34 **HAMPTON RESEARCH**...*SURGICAL,MED INSTRS*
35 **RUSSELL INFORMATION SCIENCES**...*BUSINESS SVS NEC*
36 **ALISO VIEJO SELF STORAGE**...*WAREHOUSING SELF STOR*
36 **ALISO VIEJO SELF STORAGE**...*GENERAL WAREHOUSE/STORAGE*
36 **MISSION VJO RV STORAGE**...*UNCLASSIFIED*
57 **COUNTY FIRE STATION**...*FIRE PROTECTION*

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23412 **ALLEN HOLST**...*RESIDENTIAL*
23412 **ANNIKA BOESDAL**...*RESIDENTIAL*
23412 **ARDYCE FREEDMAN**...*RESIDENTIAL*
23412 **BOB & CLAUDIA TREMONTE**...*RESIDENTIAL*
23412 **BRENT FAYAD**...*RESIDENTIAL*
23412 **BYOUNG SONG**...*RESIDENTIAL*
23412 **CANYON VILLAS**...*USED CAR DEALERS*
23412 **CANYON VILLAS**...*LIMO RENT WITH DRIVER*
23412 **CANYON VILLAS**...*PERSONAL CREDIT INS*
23412 **CANYON VILLAS**...*INVESTMENT ADVICE*
23412 **CARMEN KUYS**...*RESIDENTIAL*
23412 **CAROL TOLE**...*RESIDENTIAL*
23412 **CATHY BASINSKI**...*RESIDENTIAL*
23412 **CHARLES LEWIS**...*RESIDENTIAL*
23412 **CHRISTOPHER ROGERS**...*RESIDENTIAL*
23412 **D L EARNEST**...*RESIDENTIAL*
23412 **D'NAN WORSHAM**...*RESIDENTIAL*
23412 **DAN BURKE**...*RESIDENTIAL*
23412 **DAVID & ELAINE KORN**...*RESIDENTIAL*
23412 **DAVID GRIFFITH**...*RESIDENTIAL*
23412 **DAVID H KORN**...*RESIDENTIAL*
23412 **DAVID NEISES**...*RESIDENTIAL*
23412 **DENNIS MC CALL**...*RESIDENTIAL*
23412 **ERIC E ERICKSON**...*RESIDENTIAL*
23412 **ERIC MILLS**...*RESIDENTIAL*
23412 **G M WALLACE**...*RESIDENTIAL*
23412 **GENNA KUTYIN**...*RESIDENTIAL*
23412 **GREG TERHARK**...*RESIDENTIAL*
23412 **GWEN JORDAN**...*RESIDENTIAL*
23412 **HAL FREELAND**...*RESIDENTIAL*
23412 **HENRY J MENDRALA**...*RESIDENTIAL*
23412 **INNSBRUCK APTS**...*APARTMENT BLD OPERS*
23412 **J J KULBA**...*RESIDENTIAL*
23412 **JAMES E KOPPLIN**...*RESIDENTIAL*
23412 **JAMES H HARRIS**...*RESIDENTIAL*
23412 **JAMES J LONG**...*RESIDENTIAL*
23412 **JANE E TRISTANY**...*RESIDENTIAL*
23412 **JAQUELINE PATTILLO**...*RESIDENTIAL*
23412 **JENNIFER MATTOX**...*RESIDENTIAL*
23412 **JESUS VASQUEZ**...*RESIDENTIAL*
23412 **JIM PETRIE**...*RESIDENTIAL*
23412 **JOHN JR FIERRO**...*RESIDENTIAL*
23412 **JOHN LYON**...*RESIDENTIAL*
23412 **JOORYUNG KANG**...*RESIDENTIAL*
23412 **JOSEPH PIERSON**...*RESIDENTIAL*
23412 **KARLYN KLEM**...*RESIDENTIAL*
23412 **KELLY YOUNG**...*RESIDENTIAL*
23412 **KEVIN LAFRANCE**...*RESIDENTIAL*
23412 **KRISTI MUNNS**...*RESIDENTIAL*
23412 **LARRY JENNINGS**...*RESIDENTIAL*
23412 **LAURENCE WEBB**...*RESIDENTIAL*
23412 **LEURENCE ZAHM**...*RESIDENTIAL*
23412 **LISA KALMIN**...*RESIDENTIAL*
23412 **LOREE R TROXEL**...*RESIDENTIAL*
23412 **LUIS E CORTES**...*RESIDENTIAL*
23412 **LYNN STEWART**...*RESIDENTIAL*
23412 **MARC HORTON**...*RESIDENTIAL*
23412 **MARCIAL DEJESUS**...*RESIDENTIAL*
23412 **MARIA D REYES**...*RESIDENTIAL*
23412 **MARSHA HOWARD**...*RESIDENTIAL*
23412 **MELINDA MCFADDEN**...*RESIDENTIAL*
23412 **MICHAEL & AYLAN FONTAINE**...*RESIDENTIAL*
23412 **MICHAEL & GWENDOLINE JARVIS**...*RESIDENTIAL*
23412 **MIKE J MAIR**...*RESIDENTIAL*
23412 **N AKRIGHT**...*RESIDENTIAL*
23412 **N J GONZALEZ**...*RESIDENTIAL*
23412 **NORMAN & JUTTA BURCH**...*RESIDENTIAL*
23412 **PATRICK LONCAR**...*RESIDENTIAL*
23412 **PHILIP D HILL**...*RESIDENTIAL*

2008 PACIFIC PARK DR

SOURCE: DIGITAL BUSINESS DIRECTORY

Part 2 of 2

23412 **RADINKA E ILSINK**...*RESIDENTIAL*
23412 **RAE L VELKER**...*RESIDENTIAL*
23412 **RATAN SURYADEVARA**...*RESIDENTIAL*
23412 **RAY & ANITA NICKEL**...*RESIDENTIAL*
23412 **RICHARD BISHOP**...*RESIDENTIAL*
23412 **ROBERT O EDMONDSON**...*RESIDENTIAL*
23412 **ROBERT PARRISH**...*RESIDENTIAL*
23412 **ROBERT SINGER**...*RESIDENTIAL*
23412 **RON & ELIZABETH GERSHONOVITCH**...*RESIDENTIAL*
23412 **RON GERSHONOVITCH**...*RESIDENTIAL*
23412 **RONALD E GOMEZ**...*RESIDENTIAL*
23412 **ROSS OEHLERS**...*RESIDENTIAL*
23412 **RUSSELL & ANGELA BAUR**...*RESIDENTIAL*
23412 **SALLY ANDERSON**...*RESIDENTIAL*
23412 **SARA LEBLANC**...*RESIDENTIAL*
23412 **SEO W CHOI**...*RESIDENTIAL*
23412 **SHAPOUR SHARAREH**...*RESIDENTIAL*
23412 **SHAUN GREENSLADE**...*RESIDENTIAL*
23412 **SHIRLEY MCNULTY**...*RESIDENTIAL*
23412 **SIDNEY HANSEN**...*RESIDENTIAL*
23412 **SIMON HAWKINS**...*RESIDENTIAL*
23412 **SONYA A CARPIO**...*RESIDENTIAL*
23412 **SRDJAN NJEGO**...*RESIDENTIAL*
23412 **TINA C COTE**...*RESIDENTIAL*
23412 **TOM NICHOLSON**...*RESIDENTIAL*
23412 **TOSHIE YAGI**...*RESIDENTIAL*
23412 **TRAVIS MITCHELL**...*RESIDENTIAL*
23412 **VICENTE NOVALES**...*RESIDENTIAL*
23412 **WENDY BRIGHT**...*RESIDENTIAL*

2003 ALISO CREEK RD

SOURCE: DIGITAL BUSINESS DIRECTORY

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26951 **DEL TACO**...*STEAK AND BARBECUE RESTAURANTS*
27055 **TEXACO STAR MART**
27061 **CHEYENNE VENTURES**
27061 **INTELAGENT SOFTWARE**
27071 **ARHCON RESIDENTIAL MGMT**
27071 **COVENANT CARE INC**
27071 **QUAKER OATS CO**
27071 **SELECT THERAPIES INC**
27081 **AQUEDUCT INC**
27101 **CLASSICAL BALLET ACADEMY**...*DANCE HALL SERVICES*
27101 **CORPUS CHRISTI CATHOLIC**
27101 **GRANDMA LUCYS**
27101 **GROUP IV INTL**
27101 **HABITAT RENTALS**
27101 **INTERNET 24-7**
27101 **LAGUNA IMPORTS INC**
27101 **LE POLYNESIA**...*DANCE HALL SERVICES*
27101 **NEWPORT RESEARCH INC**...*BIOLOGICAL RESEARCH*
27101 **OMEGA EVENTS**...*BEVERAGE SERVICES, DIRECT SALES*
27101 **SCBM CARPETS**
27111 **AMERICAN COMPUTER OPTICS**...*KEY-TAPE EQUIPMENT, EXCEPT DRIVES*
27111 **AZZAZY TECHNOLOGY INC**...*AIRCRAFT/AEROSPACE FLIGHT INSTRUMENTS AND GUIDANCE SYSTEMS*
27111 **CHARLES RAMM ASSOC**...*AGRICULTURAL BUILDING CONTRACTORS*
27111 **EQUIDYNE SYSTEMS INC**...*BIOLOGICAL RESEARCH*
27111 **GLOBAL MEMORY PROCUREMENT**
27111 **HDI LEADING EDGE SALES**
27111 **INTERNATIONAL RESTAURANT SUPL**
27111 **NEW DESTINY**
27111 **SWEDE-CAL PROPERTIES INC**
27111 **SWEDELINK CALIFORNIA**
27111 **TONERWORLD.COM**...*TYPEWRITER AND DICTATION EQUIPMENT*
27111 **VISION CHIPS**
27121 **BIOLUCENT INC**
27121 **CHIP GREEN**...*RESIDENTIAL*
27131 **ALPHA GRAPHICS PRINTSHOPS**...*PROMOTIONAL PRINTING, LITHOGRAPHIC*
27131 **CHRIS CATHCART**...*RESIDENTIAL*
27131 **COAST REALTY**
27131 **DAVE JACKSON**...*RESIDENTIAL*
27131 **DAVID DC SHMUKLER**...*RESIDENTIAL*
27131 **DOMINO'S PIZZA**
27131 **FAMILY & SPORTS CHIROPRACTIC**
27131 **GROUP REAL ESTATE**
27131 **HAIR DESIGNS**
27131 **LIEM LILIANI I DDS**...*SPECIALIZED DENTAL PRACTITIONERS*
27131 **MAX MUSCLE**...*HEALTH AND DIETETIC FOOD STORES*
27131 **PACIFIC MORTGAGE FINANCIAL**
27131 **PACIFIC PARK DENTISTRY**...*SPECIALIZED DENTAL PRACTITIONERS*
27131 **PACIFIC PLAZA CLEANERS**...*LAUNDRY AND DRYCLEANER AGENTS*
27131 **ROMA PIZZA**...*RESIDENTIAL*
27131 **SALON PLATINUM**
27131 **STATE FARM INSURANCE**
27131 **SURF CITY SQUEEZE**
27131 **WACHS LINDSAY**
27141 **24 HOUR FITNESS**...*PHYSICAL FITNESS CLUBS WITH TRAINING EQUIPMENT*
27141 **CHIROFITNESS RICCHIO**...*RESIDENTIAL*
27141 **CHISHOLM & KLINE**...*AUDITING SERVICES*
27141 **COMJET AVIATION**
27141 **DELTA ENVIRONMENTAL CONSLNTS**
27141 **EIX INSURANCE**
27141 **FARMERS INSURANCE GROUP**
27141 **LIFE FITNESS**
27141 **LIGHTNING TECHNOLOGY**...*COMPUTER SOFTWARE AND ACCESSORIES*
27141 **PACIFIC CROSSING**
27141 **PROFESSIONAL RELOCATION SVC**...*REAL ESTATE BROKERS AND AGENTS*
27141 **SIMPLE AUTO LOANS**...*AUTOMOBILE AND CONSUMER FINANCE COMPANIES*
27141 **TY HANCHE INSURANCE**

Part 2 of 2

27141 **WEST COAST TECHNOLOGIES**

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0 **CARE MERIDIAN**
0 **EPIC PARTNERS**...*COMPUTER PERIPHERAL EQUIPMENT*
0 **QUIGLEY INSURANCE SVC**
1 **ALISO VIEJO LIBRARY**
1 **LIBRARY CAFE**...*STEAK AND BARBECUE RESTAURANTS*
4 **ALISO VIEJO CMNTY ACTIVITY CTR**...*ICE SPORTS*
4 **AMAA TAI KWON DO**
4 **AMERICAN MARTIAL ARTS ACADEMY**
4 **AMERICAN TAE KWON-DO CTR**...*PHYSICAL FITNESS CLUBS WITH TRAINING EQUIPMENT*
4 **CELEBRATION CHRISTIAN CTR**
4 **NATIONAL GYMNASTICS TRAINING**
4 **TARA PERFORMING ARTS CTR**...*DANCE HALL SERVICES*
5 **ALISO VIEJO FAMILY MEDICINE**...*INTERNAL MEDICINE PRACTITIONERS*
5 **CHENG JOHN MD**...*INTERNAL MEDICINE PRACTITIONERS*
5 **COASTAL FERTILITY MEDICAL CTR**...*INTERNAL MEDICINE PRACTITIONERS*
5 **DANSK DENTAL CLINIC**...*SPECIALIZED DENTAL PRACTITIONERS*
5 **HANSEN MICHAEL R DDS**...*SPECIALIZED DENTAL PRACTITIONERS*
5 **KO JOSEPH H DDS**...*SPECIALIZED DENTAL PRACTITIONERS*
5 **LANE CARTER A DDS**...*SPECIALIZED DENTAL PRACTITIONERS*
5 **LANE COSMETIC & GENL DENTISTRY**...*SPECIALIZED DENTAL PRACTITIONERS*
5 **LEE JULIE MD**...*INTERNAL MEDICINE PRACTITIONERS*
5 **SEAVIEW PEDIATRIC MEDICAL SVC**...*INTERNAL MEDICINE PRACTITIONERS*
5 **SOUTH COAST DENTISTRY**...*SPECIALIZED DENTAL PRACTITIONERS*
5 **SOUTH COAST HEALTH CTR**
5 **SUNSHINE SAM MD**...*INTERNAL MEDICINE PRACTITIONERS*
5 **WELEBIR MATTHEW D DDS**...*SPECIALIZED DENTAL PRACTITIONERS*
5 **YEH LOIS B**
6 **BANZAI RESEARCH INSTITUTE**
6 **BEBE MODE INC**...*CHILDREN'S CULOTTES AND SHORTS*
6 **BENCHMARK ADVERTISING & PUB**...*NEWSLETTER PUBLISHING*
6 **BRADY CO**
6 **BRIT AM INDUSTRIES**...*VIDEO AND AUDIO EQUIPMENT*
6 **BRITISH AMERICAN**...*VIDEO AND AUDIO EQUIPMENT*
6 **C & C VISION**
6 **CONVERGENCE INC**...*STAMPS, COINS, AND OTHER COLLECTIBLES, MAIL ORDER*
6 **EZ-WARE CONSULTING**
6 **INDX SOFTWARE CORP**
6 **JMC CONCEPTS INC**
6 **MAXIM MARKETING**
6 **REMAX REAL ESTATE SVC**
6 **SANCHEZ KEVIN**
6 **TROJAN DESIGN-MARBLE & GRANITE**...*PLASTERING MATERIALS*
6 **UNDERHILL INTERNATIONAL**
6 **WZWARE CONSULTING**
7 **CELEBRATION KID'S CO**
7 **LEW WEBB ENTERPRISES INC**
9 **ICE PALACE**...*TENNIS SERVICES AND PROFESSIONALS*
9 **ULTIMATE SKATE & HOCKEY INC**
11 **SOUTH ORANGE COUNTY CORONER**
12 **PMZ PENSION CORP**...*UNION FUNDS*
12 **S C WALLACE ENGINEERING**
14 **ACE TUBE BENDING**
16 **GRAPHIC COMMUNICATIONS**
16 **INTELLI-MINE INC**
16 **MANAGE IT INC**
18 **DYNAMIC CONCEPTS INC**
18 **FULLER & ASSOC LTD**
19 **PET SUITES**
20 **ENCOMPASS ELECTRICAL TECH**...*ELECTRIC POWER SYSTEMS CONTRACTORS*
21 **TARGA ACCESSORIES INC**
25 **HONEYWELL HPG**
29 **ABRACON CORP**...*ELECTRONIC CIRCUITS*
30 **NOLET SPIRITS USA**
31 **BLOCH GERALD ATTY**
31 **CONNER FRANK A ATTY**

2003 JOURNEY

SOURCE: DIGITAL BUSINESS DIRECTORY

Part 2 of 2

31 **DAVID B WILSHIN**...*RESIDENTIAL*
31 **DONALD MUELLER ASSOC**
31 **FRANK A CONNER**...*RESIDENTIAL*
31 **FRANK CONNER**...*RESIDENTIAL*
31 **GERALD ATTY BLOCH**...*RESIDENTIAL*
31 **GERALD BLOCH**...*RESIDENTIAL*
31 **GILLINGS & GOODMAN ARCHITECTS**
31 **GOREN MICHAEL E ATTY**
31 **LARRY G BOYDSTUN**...*RESIDENTIAL*
31 **LIEBMAN SIEGEL**...*RESIDENTIAL*
31 **LINK4HOMES.COM**
31 **LOAN LINK**
31 **LOAN LINK FINANCIAL**
31 **MICHAEL E GOREN**...*RESIDENTIAL*
31 **PACIFIC WEST APPRAISAL SVC**
31 **PENSION PROFESSIONAL INC**...*UNION FUNDS*
31 **RICHARD S WORDES**...*RESIDENTIAL*
31 **TRACKMY DOT COM**
31 **TY HANSCHE**...*RESIDENTIAL*
31 **WILSHIN DAVID B ATTY**
31 **WILSHIN G & CONNER WORDES**...*RESIDENTIAL*
31 **WORDES WILSHIN GOREN & CONNER**
32 **ENTERTAINMENT SYSTEMS TECH**
32 **GRACE EQUITY IT**
33 **INTERNATIONAL DALECO CORP**
33 **NATIONAL CARDIO INC**
33 **NEOSYME INTERNATIONAL INC**
34 **WORLDNET COMPUTERS**
36 **ALISO VIEJO SELF STORAGE**

2003 PACIFIC PARK DR

SOURCE: DIGITAL BUSINESS DIRECTORY

23412 **ADVANCED TRAINING INTL**
23412 **ALAN & ANDREA KELLOGG**...*RESIDENTIAL*
23412 **BANG S YANG**...*RESIDENTIAL*
23412 **BRUCE ZIEPER**...*RESIDENTIAL*
23412 **CHRISTOPHER T BROWN**...*RESIDENTIAL*
23412 **CLASSIC LIMO**
23412 **CREATIVITY IN CONSULTING**
23412 **DAN YOUNG**...*RESIDENTIAL*
23412 **DEALER FINANCE SVC**
23412 **E MACHADO**...*RESIDENTIAL*
23412 **ERIC MILLS**...*RESIDENTIAL*
23412 **FAUNS FOLLIES**
23412 **FIT TO BE HEALTHY**
23412 **FLORENTINO SAENZ-DIEZ**...*RESIDENTIAL*
23412 **GUSTAVO DIMARTINO**...*RESIDENTIAL*
23412 **GUSTAVO GOMEZ**...*RESIDENTIAL*
23412 **INNSBRUCK APARTMENTS**
23412 **J R & I B WITHERS**...*RESIDENTIAL*
23412 **MABEL VELEZ**...*RESIDENTIAL*
23412 **MATTHEW TUCKER**...*RESIDENTIAL*
23412 **MIKE STAMPFER**...*RESIDENTIAL*
23412 **MONARCH TRADING CO**
23412 **PACIFIC SUN FUNDING**...*AUTOMOBILE AND CONSUMER FINANCE COMPANIES*
23412 **ROBERT RICHMOND**...*RESIDENTIAL*
23412 **ROBIN HALLUM**...*RESIDENTIAL*
23412 **ROY LOVE**...*RESIDENTIAL*
23412 **SCOTT E KOEPPEN**...*RESIDENTIAL*
23412 **SCOTT GINTHER**...*RESIDENTIAL*
23412 **WILSON ROJAS**...*RESIDENTIAL*

84 total records. Part 1 of 2

26921	AMER EXPRESS TRAVEL
26921	BRUEGGERS BAGEL BAKERIES
26921	BUILDING
26921	CHEHADE AMAL DDS
26921	JADE PALACE 2 CHINESE CUISINE
26921	JUICE IT UP
26921	SPRINT
26921	SUBWAY
26921	SUPERCUTS
26921	THAIBITE
26921	TRAVEL XPRESS
26921	Z PIZZA
26951	DEL TACO 937
27055	TEXACO STAR MART
27061	XXXX
27065	XXXX
27071	QUAKER OATS CO
27101	BUILDING
27101	CLASSICAL BALLET ACADEMY
27101	ECO BALANCED MATERIALS
27101	FIRST NATIONAL CREDIT
27101	GRANDMA LUCYS
27101	HABITAT RENTALS
27101	INTERNET 24-7
27101	LAGUNA IMPORTS INC
27101	MCBRIDE INTERNATIONAL
27101	NATIONS CAPITAL
27101	NEWPRT RESEARCH INC
27101	OMEGA EVENTS
27101	S C B M CARPETS
27111	AMER CMPTR OPTICS
27111	AZZAZY TECHNOLOGY INC
27111	BUILDING
27111	CHARLES RAMM ASSOCIATES
27111	EHOMES COM
27111	EQUIDYNE SYSTEMS INC
27111	GREEN CULTURE
27111	H D I LEADING EDGE SALES&MKTG
27111	INTL RESTAURANT SUPPLY
27111	LINKS MEDICAL PRODUCTS INC
27111	NEW DESTINY
27111	TONERWORLD COM
27111	VISION CHIPS
27111	WALKER MEDICAL SALES
27121	MOUNTJOY GORDON L&ASSOC INC
27131	ALPHA GRAPHICS
27131	BUILDING
27131	COASTAL COMPUTER SERVICES
27131	DU DEREK K DC
27131	FAMILY&SPORTS CHIROPRACTIC
27131	GROUP THE
27131	JACKSON DAVE
27131	LIEM LILIANI I DDS
27131	MAX MUSCLE
27131	PAC PARK DENTAL CARE
27131	PAC PLAZA CLEANERS
27131	PLATINUM SALON
27131	REILEY JAMES DC
27131	SALON PLATINUM
27131	SALON PLATINUM STYLIST
27131	STATE FARM INS
27131	SURF CITY SQUEEZE
27131	THE BOX
27141	24 HOUR FITNESS
27141	ALMENA INTERNATL USA INC
27141	ALMENA KEYBOARD TRAINING
27141	APPLIED GLOBAL TECHNOLOGY
27141	AUDIT GROUP LTD THE
27141	BUILDING

2001-2002 ALISO CREEK RD
SOURCE: HAINES

Part 2 of 2

27141	CHISHOLM&KLINE CPA
27141	COAST SADOLEBACK REALTY
27141	DELTA ENVIRN CNSLTS
27141	EIX INSURANCE AGENCY
27141	FARMERS INS AGENTS
27141	HANSCHE TY
27141	HANSCHE TY INSURANCE AGENCY
27141	LIFE FITNESS
27141	WEST CST TECHNOLOGIES
27141	WHY RUN OUT
27151	XXXX
27662	ALICANTE APTS
27662	ALICANTE LEASING OFFICE
27662	ALICANTE MAINT
27662	MULTI TENANT RESIDENTIAL

89 total records. Part 1 of 2

1	ALISO VIEJO LIBRARY
1	ORG CO LBRY
4	ALISO VIEJO
4	ALISO VIEJO COMMUNITY ACTIVITY
4	AMER MARTIAL ARTS K SPILLMANN
4	AMER TAE KWON - DO CENTERS
4	CELEBRATION CHRSTN CTR CMTY CH
4	CELEBRATION KID'S COMPANY
4	NATL GYMNASTICS TRAINING CNTR
4	SADDLBCK DANCE CENTER
5	ALISO PODIATRY GROUP
5	ALISO VIEJO MEDCNE & PEDTRC CARE
5	CHENG JOHN MD
5	JAMALI MEHRNAZ MD
5	JOHNSON JAN MD
5	LANE CARTER DDS
5	LEE JULIE MD
5	SAVRAN STEVEN H DPM FACFAS
5	SEAVIEW PEDIATRIC MEDICAL SRVS
5	SOUTH CST HEALTH CENTER
5	SUNSHINE SAM MD
5	WELEBIR & LANE DENTISTRY
5	WELEBIR AT LANE DENTISTRY
5	YEH LOIS B PSYD
6	BANZAI RESEARCH INSTITUTE
6	BANZAI RESEARCH INSTITUTE INC
6	BENCHMARK ADVERTISING & PUBLSHNG
6	BRADY CO
6	BRITISH AMERICAN
6	BUILDING
6	C & C VISION
6	EFINITY INC
6	EZWARE CONSULTING
6	EZWARE CONSULTING INC
6	GENISYS FINANCIAL CORP
6	GENISYS FINANCIAL CORPORATION
6	INC BEBE MODE
6	INDX SOFTWARE CORP
6	JMC CONCEPTS INC
6	LOANPAK COM
6	MAXIM MARKETING
6	REMAX REAL ESTATE SERVICES
6	SALYON INC
6	TROJAN DESIGN MARBLE & GRANITE
7	GLOBE TROTTER CLOTHING INC
7	LEW WEBB ENTERPRISES INC
9	ICE CHALET
9	MALISO VIEJO ICE CHALET
9	ULTIMATE SKATE & HOCKEY
11	ORG CO SHERIFF SO CO SUBSTA
14	ACE TUBE BENDING
16	GRAPHIC COMMUNICATIONS
17	XXXX
18	DYNAMIC CONCEPTS
19	GENTLE TOUCH DOG GROOMING
19	PET SUITES
21	TARGA ACCESSORY INC
21	WEEKS BARBARA
23	XXXX
25	ALLIED SIGNAL INC AIRCRFT BRNG
27	AMER IC EXCHANGE
29	ABRACON CORP
30	NOLET SPIRITS USA
31	BLOCH GERALD ATTY
31	CONNER FRANK A ATTY
31	GAYLORD CHERI
31	GILLINGS & ASSOCIATES
31	GILLINGS MUELLER ARCHITECTS
31	GOREN MICHL E ATTY

2001-2002 JOURNEY
SOURCE: HAINES

Part 2 of 2

31	LOAN LINK
31	MUELLER DONALD ASC
31	PAC WEST APPRAISAL SERVICES
31	PENSION PROFSNL INC
31	TRACKMY DOT COM
31	WILSHIN DAVID ATTY
31	WORDES RICHARD ATTY
31	WORDES WILSHIN GOREN & CONNER
32	GRACE EQUITY IT
33	DALECO SECURITIES
33	INTL DALECO CORP
33	NATL CARDIO INC
33	NEOZYME INTERNATIONAL INC
33	PAC DATA TECHNOLOGY
34	WORLDNET COMPUTERS
34	ZAKHOUR GIHAD
35	XXXX
36	ALISO VIEJO SELF STORAGE
36	ALISO VIEJO STORAGE & TRUCK RNTL
36	MISSION VJO STORAGE & RV PARK

2001-2002 PACIFIC PARK DR

SOURCE: HAINES

22972	ALISO AUTO CARE&TIRE
22972	FIRESTONE ALISO AUTO CARE&TIRE
22972	WINSTON TIRES
23412	INNSBRUCK APARTMENTS
23412	INNSBRUCK APTS
23412	MULTI TENANT RESIDENTIAL
24281	76 NORTHWOOD
24281	ALISO VIEJO 76 AUTO CARE CNTR
24281	NORTHWOOD 76 AUTO CARE CENTER
24281	UNION 76 NORTHWOOD

1996-1997 ALISO CREEK RD

SOURCE: HAINES

26501	BORICS
26501	KMART STORES PORTRAIT STUDIOS
26501	KMART SUPER CENTERS
26501	KMART SUPER CENTERS PHARMACY
26501	LITTLE CAESARS PIZZA IN KMART
27101	A C T A LABS
27101	ART STUDIOELENA ZASS
27101	BUILDING
27101	DIGIT
27101	EARTH COMPUTER TECHNOLOGIES
27101	EOZYME ENVIRONMENTAL
27101	EXCEL MARKETING
27101	FLOWERS LAGUNA NIGL
27101	HABITAT RENTALS
27101	J W E CORP
27101	LAGUNA IMPORTS INC
27101	MOLLY MAID
27101	NATASHA STUDIO
27101	QBIE KIDS WEAR INC
27101	STONEMAKER CORP
27101	TILLFORDS FLOWR&GFT

1996-1997 ALISO CREEK RD

SOURCE: HAINES.JPG

27101	WORLD CONSCS CORP
27101	XCEL MARKETING
27111	ALISO VIEJO CMNTY
27111	AMER CMPTR OPTICS
27111	ARMSTRONG PAUL H
27111	BRITISH AMER MDCL
27111	BUILDING
27111	DYNAMITE DATA SYSTM
27111	G G GENAL INC
27111	M C 2 SPORTSWR INC
27111	M C SQUARED SPORTWR
27111	MILLENIUM TECHNOLOGY
27111	PREMIER MAGNETICS
27111	R H A GROUP
27111	RAMIN CHARLES ASSOCIATES
27111	SOUZA WM J CPA
27111	TANNIN MARK ARCHITECTS
27121	GREEN CHIP
27121	MACUPGRADE SPCLSTS
27121	MICRO MAC TECH INC
27121	MOTO VIDEO
27121	ON TWO WHLS ENTERTN
27121	WONDERMATPOPCORN INTERNATL
27121	XTEK ELECTRONIC INC
27131	AARON BACK&NK PAIN
27131	DOLPHIN INVST CSTNG
27131	GROUP THE
27131	ICE BOX PRO SHOP THE
27131	JACKSON DAVE
27131	LIEM LULANI I DDS
27131	MANNYS MEXICAN FOOD
27131	MAX MUSCLE
27131	ORANGE HILLS INSURANCE AGENCY
27131	PAC PARK DENTISTRY
27131	PAC PLAZA CLEANERS
27131	PIZZA ROMA
27131	SHMUKLER DAVID DC
27131	STATE FARM INS
27131	SURF CITY SQUEEZE
27131	WEST TEC
27141	AUDIT GROUP LTD THE
27141	BIO FIT
27141	CA COMPONENTS
27141	DELTA ENVRN CNSLTS
27141	FAMILY FITNESS CNTR
27141	GRAPHIC SYSTEMS WEST
27141	ROSEN PRODUCT
27141	SPOT AWAY CRPT&UPHL
27151	XXXX
27717	PEPSI COLA

1996-1997 JOURNEY

SOURCE: HAINES

7	FIRST SOURCE INTL
7	PARAGON MEMORY
9	ALISO VIEJO ICE PLC
9	ICE PALACE
9	INTL SKATE CLUB
9	POLAR CLUB CONSESSIONS
11	XXXX
14	ACE TUBE BENDING
21	TARGA ACCESSORY INC
23	LETS PLAY BALL
25	AIRCRAFT BEARING CORP
27	XXXX
29	TRAMMEL CROW COMPANY
29	UPSONIC
31	BLOCH GERALD ATTY
31	BUILDING
31	CONNER FRANK A ATTY
31	CONNER FRANK ATTY
31	GOREN MICHL E ATTY
31	KIDS COMMUTE
31	LOAN LINK FINANCIAL
31	MICRO TRAX
31	MUELLER DONALD ASC
31	PENSION PROFSNL INC
31	SEABREEZE MANGMNT
31	SIEGEL LIEBMAN
31	WILSHIN DAVID ATTY
31	WORDES RICHARD ATTY
31	WORDES WILSHIN
35	GIBSON RSRCH CORP
35	RUSSELL INFORMATION SCIENCES

1996-1997 PACIFIC PARK DR

SOURCE: HAINES

22702	APARTMENTS
22702	MULTI TENANT RESIDENTIAL
22702	WOODPARK APARTMENTS
23412	INDIGO AMERICA INC
23412	INNSBRUCK APTS
23412	MULTI TENANT RESIDENTIAL
24281	ALISO PLAZA 76
24281	ALISO VIEJO 76NORTHWOOD UNOCAL
24281	NORTHWOOD UNOCAL
24281	UNOCAL
24502	BENCHMARK INC
24502	BRADLEY CYNTHIA L MFCC
24502	BROWNLEE RICHARD J MD
24502	BUILDING
24502	COMMNTY PSYCH CNTR
24502	D C I PACIFIC
24502	DOBRIN ROBT MD FAAP
24502	HUNTER RICHARD J MD
24502	NELSON C M PHD MFCC
24502	OCEAN HLS MEDICAL
24502	ROTHBARD RICHARD MD
24502	WEISBERG RICHD PHD
24541	ALISO NIGUEL DNTSTY
24541	BEVERLY DERMATOLOGY
24541	BEVERLY ROLAND S MD
24541	BRAUNSTEIN MARC DO
24541	BUILDING
24541	CASO RICHARD MD
24541	CRAMM GREGORY W DDS
24541	FOOT&ANKLE SURGEONS INC
24541	GRANNIS CHIROPRACTIC
24541	GRANNIS GORDON H DC
24541	MCGHEE JEFFRY DDS
24541	ORANGE CO HEART CTR
24541	ROBERSON ANDREA DO
24541	SMITHKLINE BEECHAM
24541	WANG SAMMIE DDS
24541	WILSON MARK J DDS
24562	C P C LAG HLS HSPTL
24562	COUNTERPOINT CENTER
24562	LAGUNA HLS HOSPITAL
24562	MATRIX CENTERS

1991-1992 ALISO CREEK RD

SOURCE: HAINES

0	E P A C HSNG CORP
24038	XXXX
24050	ARISTO REALTY
24050	CENTURY 21 EMERY RE
27550	VANDERWORK OWEN
27717	PEPSI COLA

1991-1992 JOURNEY

SOURCE: HAINES

STREET NOT LISTED

1991-1992 PACIFIC PARK DR

SOURCE: HAINES

RANGE NOT LISTED

1986 ALISO CREEK RD

SOURCE: HAINES

RANGE NOT LISTED

1986 JOURNEY

SOURCE: HAINES

STREET NOT LISTED

1986 **PACIFIC PARK DR**

SOURCE: HAINES

STREET NOT LISTED

1981 **ALISO CREEK RD**

SOURCE: HAINES

RANGE NOT LISTED

1981 JOURNEY

SOURCE: HAINES

STREET NOT LISTED

1981 PACIFIC PARK DR

SOURCE: HAINES

STREET NOT LISTED

1975 ALISO CREEK RD

SOURCE: PACIFIC TELEPHONE

STREET NOT LISTED

1975 JOURNEY

SOURCE: PACIFIC TELEPHONE

STREET NOT LISTED

1975 PACIFIC PARK DR

SOURCE: PACIFIC TELEPHONE

STREET NOT LISTED

1970 ALISO CREEK RD

SOURCE: PACIFIC TELEPHONE

STREET NOT LISTED

1970 JOURNEY

SOURCE: PACIFIC TELEPHONE

STREET NOT LISTED

1970 PACIFIC PARK DR

SOURCE: PACIFIC TELEPHONE

STREET NOT LISTED

1964 ALISO CREEK RD

SOURCE: PACIFIC TELEPHONE

STREET NOT LISTED

1964 JOURNEY

SOURCE: PACIFIC TELEPHONE

STREET NOT LISTED

1964 PACIFIC PARK DR

SOURCE: PACIFIC TELEPHONE

STREET NOT LISTED

1959 ALISO CREEK RD

SOURCE: PACIFIC TELEPHONE

STREET NOT LISTED

1959 JOURNEY

SOURCE: PACIFIC TELEPHONE

STREET NOT LISTED

1959 PACIFIC PARK DR

SOURCE: PACIFIC TELEPHONE

STREET NOT LISTED

1955 ALISO CREEK RD

SOURCE: PACIFIC TELEPHONE

STREET NOT LISTED

1955 JOURNEY

SOURCE: PACIFIC TELEPHONE

STREET NOT LISTED

1955 PACIFIC PARK DR

SOURCE: PACIFIC TELEPHONE

STREET NOT LISTED

PSR
PHYSICAL SETTING REPORT

Property Information

Order Number:		24112101214p
Date Completed:		November 22, 2024
Project Number:		2450-009
Project Property:		27081 Aliso Creek Road 27081 Aliso Creek Road Aliso Viejo CA 92656
Coordinates:		
	Latitude:	33.56957974
	Longitude:	-117.72483104
	UTM Northing:	3714668.8028 Meters
	UTM Easting:	432727.00752 Meters
	UTM Zone:	UTM Zone 11S
	Elevation:	355.01 ft
	Slope Direction:	SSE

Topographic Information....2
Hydrologic Information....4
Geologic Information....9
Soil Information....11
Wells and Additional Sources....35
Summary....36
Detail Report....37
Radon Information....45
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The ERIS ***Physical Setting Report - PSR*** provides comprehensive information about the physical setting around a site and includes a complete overview of topography and surface topology, in addition to hydrologic, geologic and soil characteristics. The location and detailed attributes of oil and gas wells, water wells, public water systems and radon are also included for review.

The compilation of both physical characteristics of a site and additional attribute data is useful in assessing the impact of migration of contaminants and subsequent impact on soils and groundwater.

Disclaimer

This Report does not provide a full environmental evaluation for the site or adjacent properties. Please see the terms and disclaimer at the end of the Report for greater detail.

Topographic Information

Current USGS Topo (2022)

Quadrangle(s): San Juan Capistrano,CA

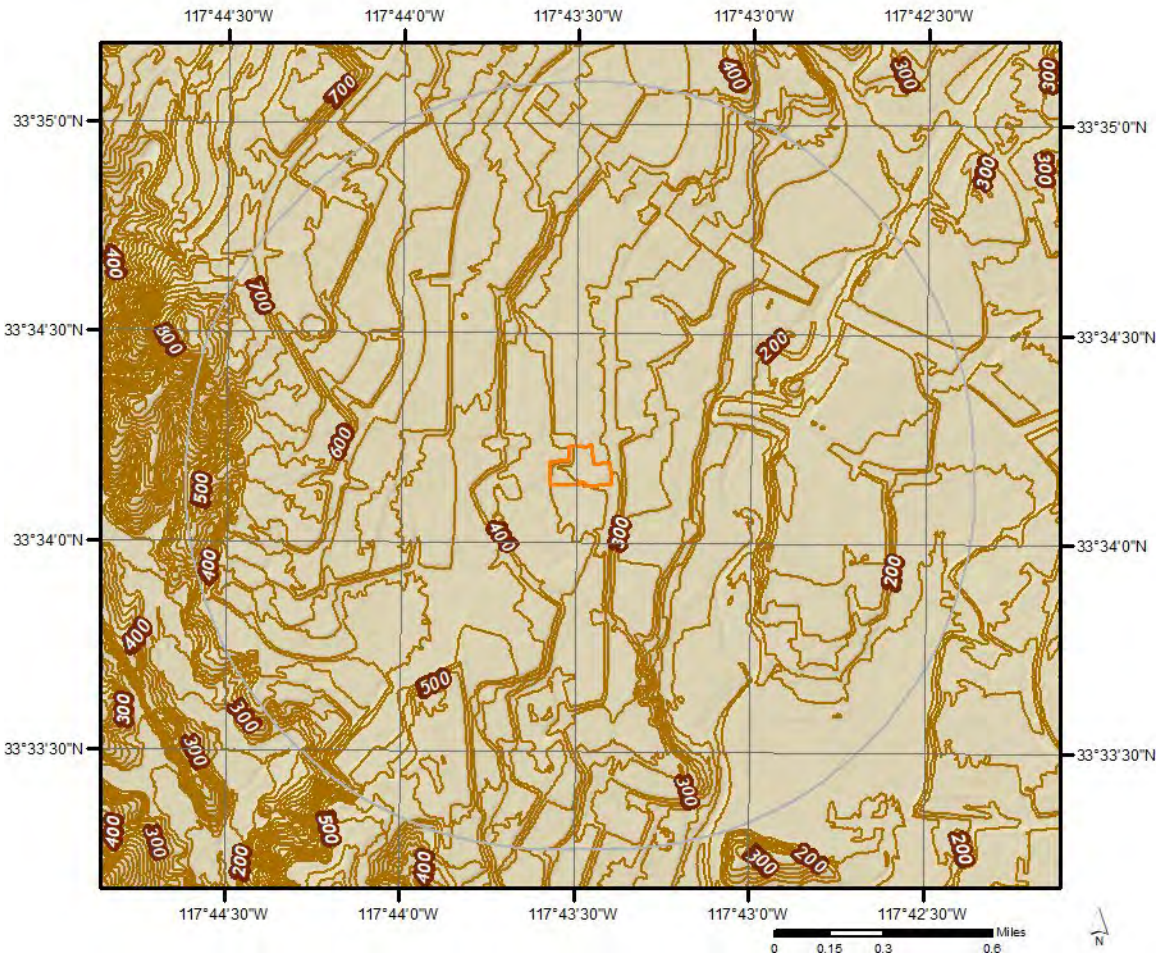
Source: USGS 7.5 Minute Topographic Map

Topographic Information

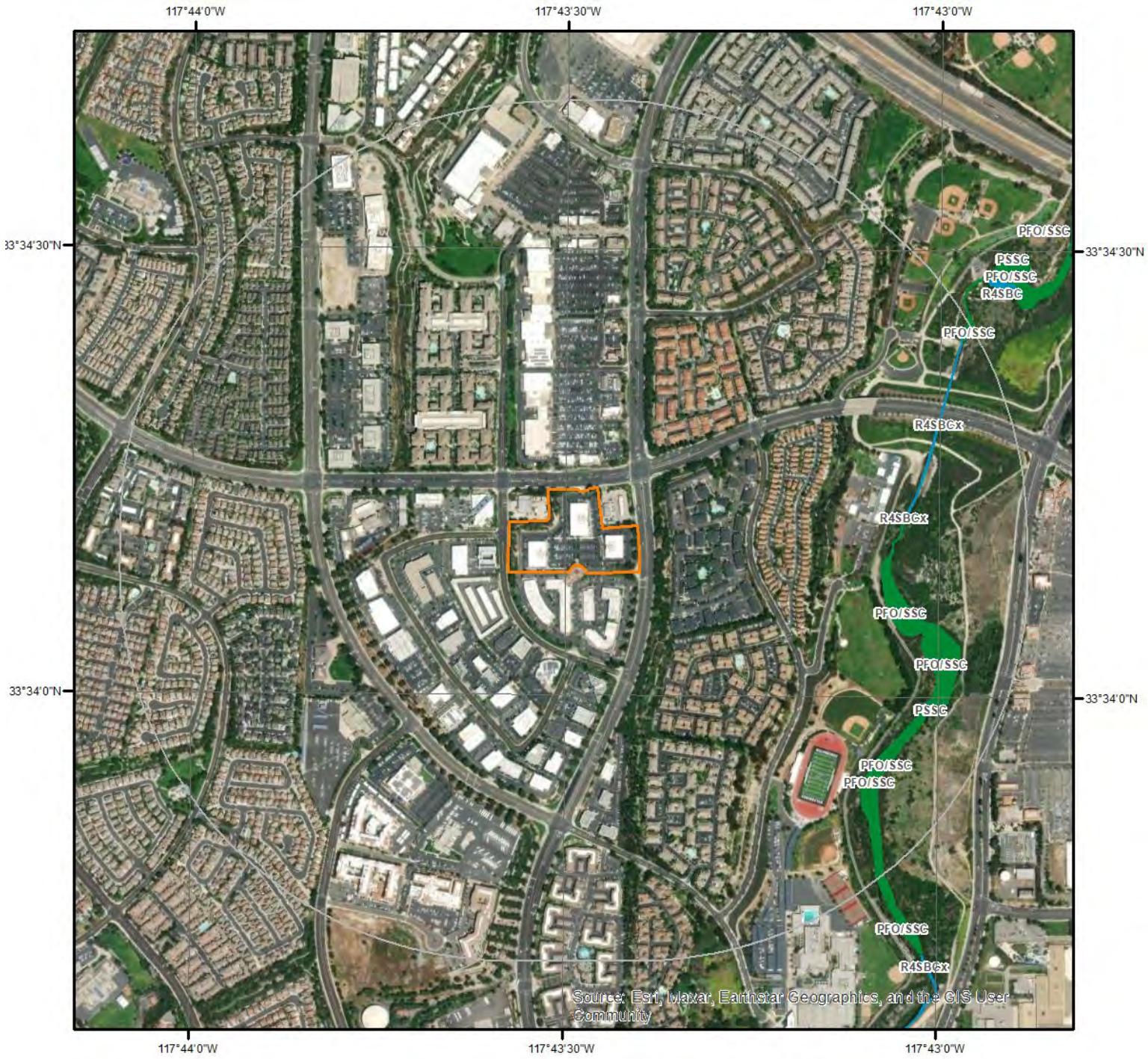
The previous topographic map(s) are created by seamlessly merging and cutting current USGS topographic data. Below are shaded relief map(s), derived from USGS elevation data to show surrounding topography in further detail.

Topographic information at project property:

Elevation:	355.01 ft
Slope Direction:	SSE



Hydrologic Information



Wetland

Miles
0 0.075 0.15 0.3

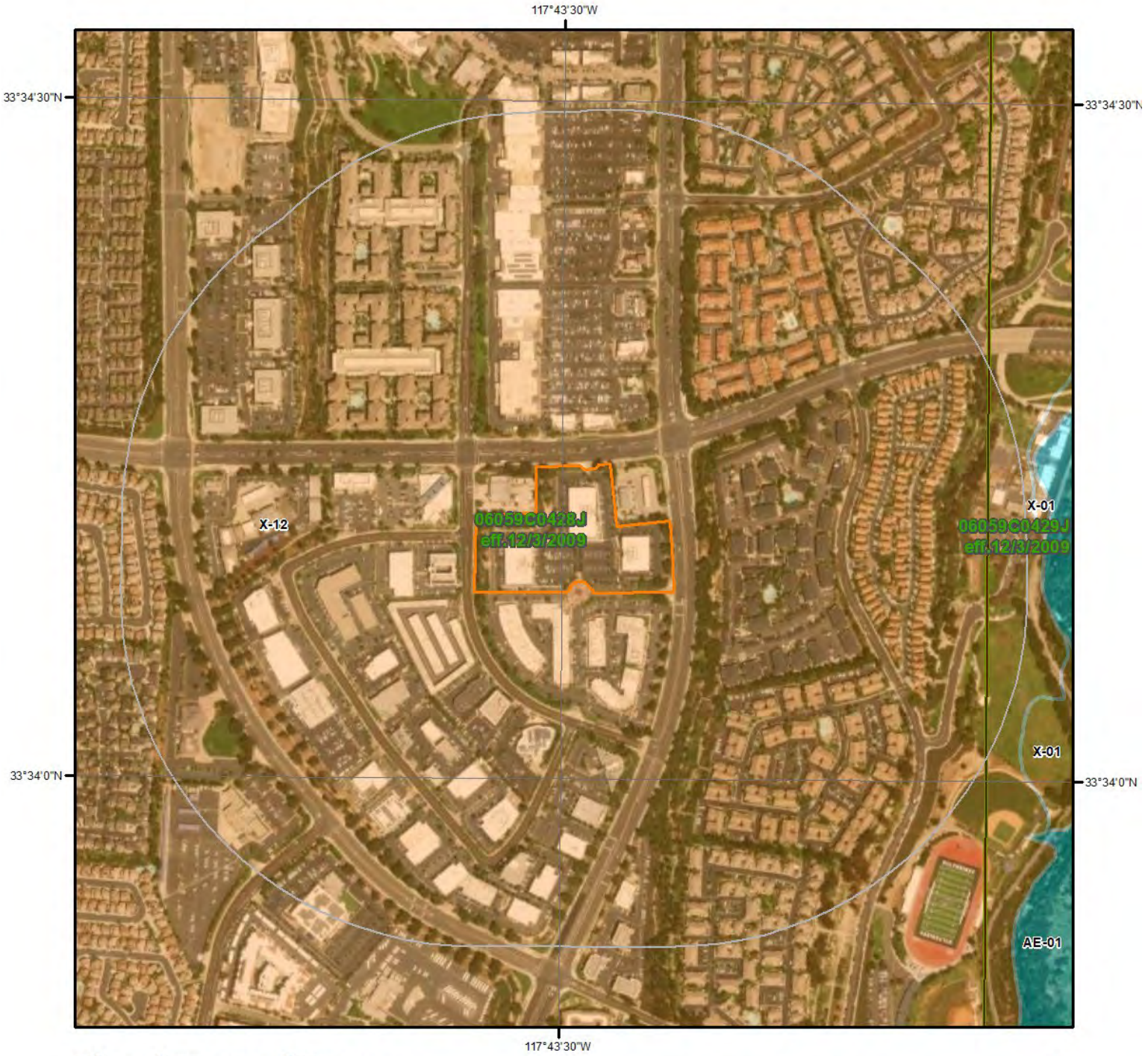
N

This map shows wetland existence using data from US Fish & Wildlife.
Data coverage is shown to the right. Gray indicates no data available in the area.

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

ERIS

Hydrologic Information



Flood Hazard Zones

This map shows FEMA flood hazard zones based on FEMA's National Flood Hazard Layer. FIRM Panels are overlayed. An absent FIRM panel represents no data available.

Miles
0 0.075 0.15

N

- 1% Annual Chance Flood Hazard
- Regulatory Floodway
- Special Floodway
- Area of Undetermined Flood Hazard
- 0.2% Annual Chance Flood Hazard
- Future Conditions 1% Annual Chance Flood Hazard
- Area with Reduced Risk Due to Levee
- Area with Risk Due to Levee
- Open Water

Quadrangle(s): San Juan Capistrano,CA

ERIS

Hydrologic Information

The Wetland Type map shows wetland existence overlaid on an aerial imagery. The Flood Hazard Zones map shows FEMA flood hazard zones overlaid on an aerial imagery. Relevant FIRM panels and detailed zone information is provided below.
For detailed Zone descriptions please click the link: https://floodadvocate.com/fema-zone-definitions

Available FIRM Panels in area:	06059C0429J(effective:2009-12-03) 06059C0428J(effective:2009-12-03)

Flood Zone X-12

Zone:	X
Zone subtype:	AREA OF MINIMAL FLOOD HAZARD

FEMA Flood Zone Definitions

Special Flood Hazard Areas – High Risk

Special Flood Hazard Areas represent the area subject to inundation by 1-percent-annual chance flood. Structures located within the SFHA have a 26-percent chance of flooding during the life of a standard 30-year mortgage. Federal floodplain management regulations and mandatory flood insurance purchase requirements apply in these zones.

ZONE	DESCRIPTION
A	Areas subject to inundation by the 1-percent-annual-chance flood event. Because detailed hydraulic analyses have not been performed, no Base Flood Elevations (BFEs) or flood depths are shown.
AE, A1-A30	Areas subject to inundation by the 1-percent-annual-chance flood event determined by detailed methods. BFEs are shown within these zones. (Zone AE is used on new and revised maps in place of Zones A1–A30.)
AH	Areas subject to inundation by 1-percent-annual-chance shallow flooding (usually areas of ponding) where average depths are 1–3 feet. BFEs derived from detailed hydraulic analyses are shown in this zone.
AO	Areas subject to inundation by 1-percent-annual-chance shallow flooding (usually sheet flow on sloping terrain) where average depths are 1–3 feet. Average flood depths derived from detailed hydraulic analyses are shown within this zone.
AR	Areas that result from the decertification of a previously accredited flood protection system that is determined to be in the process of being restored to provide base flood protection.
A99	Areas subject to inundation by the 1-percent-annual-chance flood event, but which will ultimately be protected upon completion of an under-construction Federal flood protection system. These are areas of special flood hazard where enough progress has been made on the construction of a protection system, such as dikes, dams, and levees, to consider it complete for insurance rating purposes. Zone A99 may be used only when the flood protection system has reached specified statutory progress toward completion. No BFEs or flood depths are shown.

Coastal High Hazard Areas – High Risk

Coastal High Hazard Areas (CHHA) represent the area subject to inundation by 1-percent-annual chance flood, extending from offshore to the inland limit of a primary front al dune along an open coast and any other area subject to high velocity wave action from storms or seismic sources. Structures located within the CHHA have a 26-percent chance of flooding during the life of a standard 30-year mortgage. Federal floodplain management regulations and mandatory purchase requirements apply in these zones.

ZONE	DESCRIPTION
V	Areas along coasts subject to inundation by the 1-percent-annual-chance flood event with additional hazards associated with storm-induced waves. Because detailed coastal analyses have not been performed, no BFEs or flood depths are shown.
VE, V1-V30	Areas along coasts subject to inundation by the 1-percent-annual-chance flood event with additional hazards due to storm-induced velocity wave action. BFEs derived from detailed hydraulic coastal analyses are shown within these zones. (Zone VE is used on new and revised maps in place of Zones V1–V30.)

Hydrologic Information

Moderate and Minimal Risk Areas

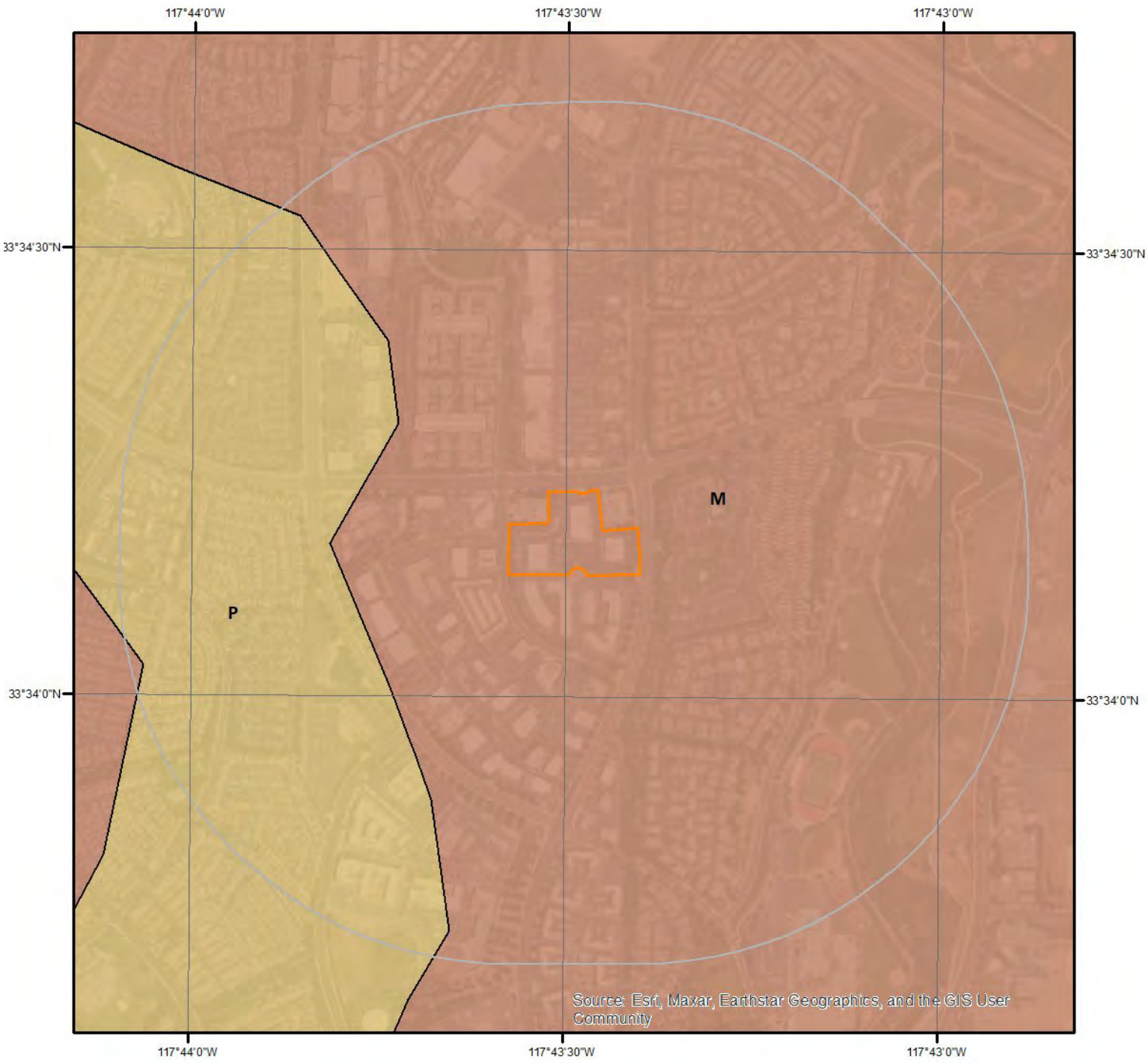
Areas of moderate or minimal hazard are studied based upon the principal source of flood in the area. However, buildings in these zones could be flooded by severe, concentrated rainfall coupled with inadequate local drainage systems. Local stormwater drainage systems are not normally considered in a community's flood insurance study. The failure of a local drainage system can create areas of high flood risk within these zones. Flood insurance is available in participating communities, but is not required by regulation in these zones. Nearly 25-percent of all flood claims filed are for structures located within these zones.

ZONE	DESCRIPTION
B, X (shaded)	Moderate risk areas within the 0.2-percent-annual-chance floodplain, areas of 1-percent-annual-chance flooding where average depths are less than 1 foot, areas of 1-percent-annual-chance flooding where the contributing drainage area is less than 1 square mile, and areas protected from the 1-percent-annual-chance flood by a levee. No BFEs or base flood depths are shown within these zones. (Zone X (shaded) is used on new and revised maps in place of Zone B.)
C, X (unshaded)	Minimal risk areas outside the 1-percent and .2-percent-annual-chance floodplains. No BFEs or base flood depths are shown within these zones. (Zone X (unshaded) is used on new and revised maps in place of Zone C.)

Undetermined Risk Areas

ZONE	DESCRIPTION
D	Unstudied areas where flood hazards are undetermined, but flooding is possible. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.

Geologic Information



Geologic Units

This maps shows geologic units in the area. Please refer to the report for detailed descriptions.

N

0 0.15 0.3 Miles

ERIS

Geologic Information

The previous page shows USGS geology information. Detailed information about each unit is provided below.

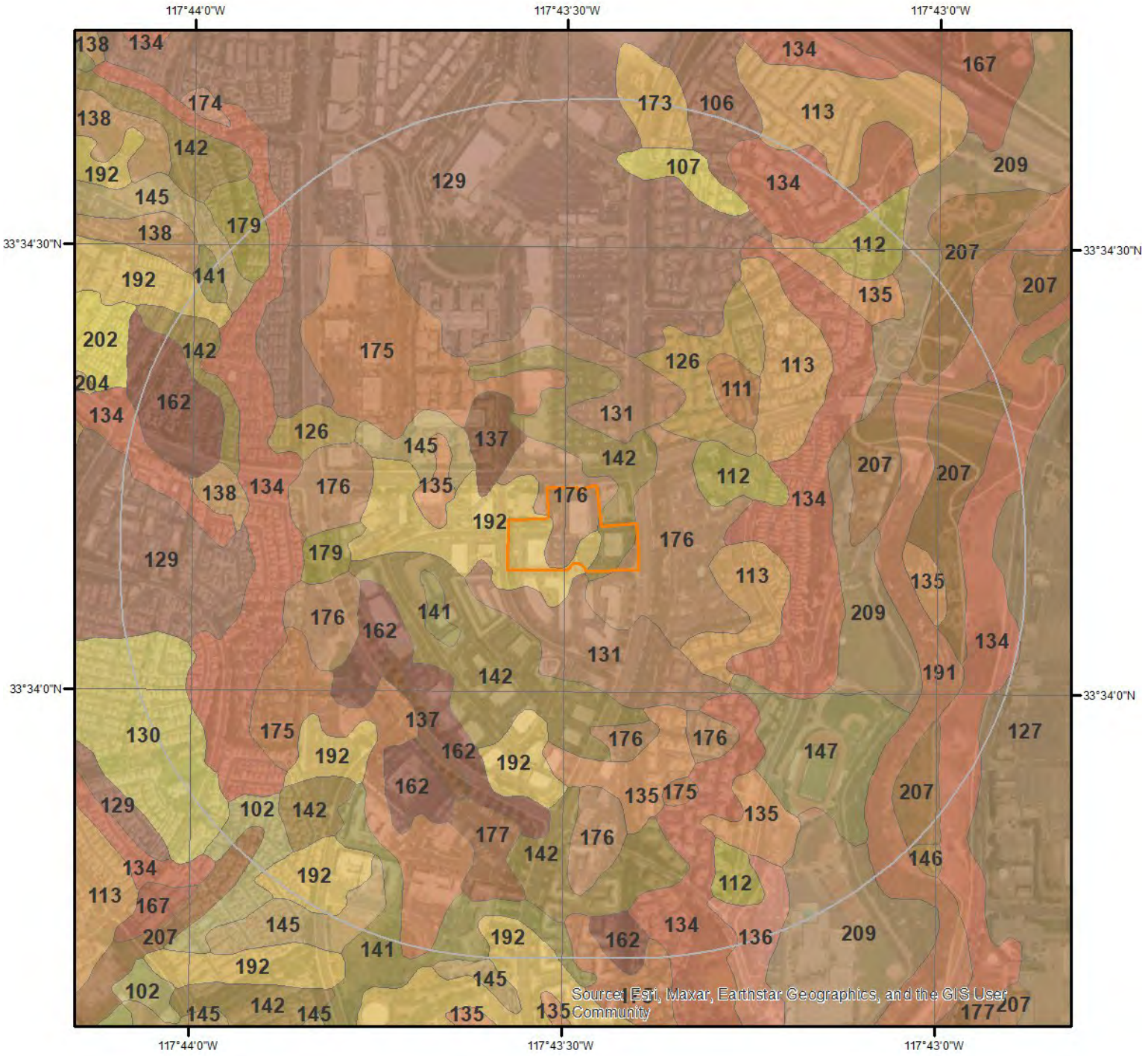
Geologic Unit M

Unit Name:	Miocene marine rocks
Unit Age:	Oligocene to Pliocene
Primary Rock Type:	Sandstone
Secondary Rock Type:	Mudstone
Unit Description:	Sandstone, shale, siltstone, conglomerate and breccia; in part Pliocene and Oligocene.

Geologic Unit P

Unit Name:	Pliocene marine rocks
Unit Age:	Miocene to Pleistocene
Primary Rock Type:	Sandstone
Secondary Rock Type:	Mudstone
Unit Description:	Sandstone, siltstone, shale, and conglomerate; in part Pleistocene and Miocene.

Soil Information



SSURGO Soils

N

0 0.15 0.3 Miles

This maps shows SSURGO soil units around the target property. Please refer to the report for detailed soil descriptions.

ERIS

Soil Information

The previous page shows a soil map using SSURGO data from USDA Natural Resources Conservation Service. Detailed information about each unit is provided below.

Map Unit 102 (0.34%)

Map Unit Name:	Alo clay, 30 to 50 percent slopes, warm MAAT, MLRA 20
Bedrock Depth - Min:	56cm
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	D - Soils in this group have high runoff potential when thoroughly wet. Water movement through the soil is restricted or very restricted.

Major components are printed below

Alo(85%)

horizon A(0cm to 38cm)	Clay
horizon Bkss(38cm to 56cm)	Clay
horizon Cr(56cm to 200cm)	Bedrock

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 102 - Alo clay, 30 to 50 percent slopes, warm MAAT, MLRA 20

Component: Alo (85%)
The Alo component makes up 85 percent of the map unit. Slopes are 30 to 50 percent. This component is on hills, foothills. The parent material consists of residuum weathered from sandstone and shale. Depth to a root restrictive layer, bedrock, paralithic, is 20 to 30 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is very low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is very high. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. This component is in the R019XD001CA Clayey (1975) ecological site. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. There are no saline horizons within 30 inches of the soil surface.

Component: Balcom (5%)
Generated brief soil descriptions are created for major soil components. The Balcom soil is a minor component.

Component: Anaheim (5%)
Generated brief soil descriptions are created for major soil components. The Anaheim soil is a minor component.

Component: Calleguas (3%)
Generated brief soil descriptions are created for major soil components. The Calleguas soil is a minor component.

Component: Bosanko (2%)
Generated brief soil descriptions are created for major soil components. The Bosanko soil is a minor component.

Map Unit 106 (0.48%)

Map Unit Name:	Anaheim loam, 15 to 30 percent slopes
Bedrock Depth - Min:	66cm
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	C - Soils in this group have moderately high runoff potential when thoroughly wet. Water transmission through the soil is somewhat restricted.

Major components are printed below

Anaheim(85%)

horizon A1(0cm to 23cm)	Loam

horizon A2(23cm to 43cm)	Loam
horizon A3(43cm to 66cm)	Loam
horizon Cr(66cm to 137cm)	Bedrock

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 106 - Anaheim loam, 15 to 30 percent slopes

Component: Anaheim (85%)
The Anaheim component makes up 85 percent of the map unit. Slopes are 15 to 30 percent. This component is on hillslopes, hills. The parent material consists of fine grained residuum weathered from sandstone and shale. Depth to a root restrictive layer, bedrock, paralithic, is 20 to 39 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is very low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. This component is in the R019XD029CA Loamy (1975) ecological site. Nonirrigated land capability classification is 4e. This soil does not meet hydric criteria.

Component: Anaheim (7%)
Generated brief soil descriptions are created for major soil components. The Anaheim soil is a minor component.

Component: Nacimiento (5%)
Generated brief soil descriptions are created for major soil components. The Nacimiento soil is a minor component.

Component: Cieneba (3%)
Generated brief soil descriptions are created for major soil components. The Cieneba soil is a minor component.

Map Unit 107 (0.2%)

Map Unit Name:	Anaheim loam, 30 to 50 percent slopes
Bedrock Depth - Min:	66cm
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	C - Soils in this group have moderately high runoff potential when thoroughly wet. Water transmission through the soil is somewhat restricted.

Major components are printed below

Anaheim(85%)

horizon A1(0cm to 23cm)	Loam
horizon A2(23cm to 43cm)	Loam
horizon A3(43cm to 66cm)	Loam
horizon Cr(66cm to 137cm)	Bedrock

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 107 - Anaheim loam, 30 to 50 percent slopes

Component: Anaheim (85%)
The Anaheim component makes up 85 percent of the map unit. Slopes are 30 to 50 percent. This component is on hills, hillslopes. The parent material consists of fine grained residuum weathered from sandstone and shale. Depth to a root restrictive layer, bedrock, paralithic, is 20 to 39 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is very low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. This component is in the R019XD029CA Loamy (1975) ecological site. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria.

Component: Anaheim (7%)
Generated brief soil descriptions are created for major soil components. The Anaheim soil is a minor component.

Soil Information

Component: Cieneba (4%)
Generated brief soil descriptions are created for major soil components. The Cieneba soil is a minor component.

Component: Nacimiento (4%)
Generated brief soil descriptions are created for major soil components. The Nacimiento soil is a minor component.

Map Unit 111 (0.14%)

Map Unit Name:	Balcom clay loam, 9 to 15 percent slopes
Bedrock Depth - Min:	86cm
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	C - Soils in this group have moderately high runoff potential when thoroughly wet. Water transmission through the soil is somewhat restricted.

Major components are printed below

Balcom(85%)

horizon H1(0cm to 86cm)	Clay loam
horizon H2(86cm to 150cm)	Weathered bedrock

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 111 - Balcom clay loam, 9 to 15 percent slopes

Component: Balcom (85%)
The Balcom component makes up 85 percent of the map unit. Slopes are 9 to 15 percent. This component is on hills. The parent material consists of calcareous residuum weathered from sandstone and shale. Depth to a root restrictive layer, bedrock, paralithic, is 24 to 36 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R019XD001CA Unspecified ecological site. Nonirrigated land capability classification is 3e. Irrigated land capability classification is 3e. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface.

Component: Bosanko (5%)
Generated brief soil descriptions are created for major soil components. The Bosanko, CLAY soil is a minor component.

Component: Calleguas (4%)
Generated brief soil descriptions are created for major soil components. The Calleguas, CLAY LOAM soil is a minor component.

Component: San Andreas (4%)
Generated brief soil descriptions are created for major soil components. The San Andreas, SANDY LOAM soil is a minor component.

Component: Unnamed (2%)
Generated brief soil descriptions are created for major soil components. The Unnamed soil is a minor component.

Map Unit 112 (0.6%)

Map Unit Name:	Balcom clay loam, 15 to 30 percent slopes
Bedrock Depth - Min:	86cm
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	C - Soils in this group have moderately high runoff potential when thoroughly wet. Water transmission through the soil is somewhat restricted.

Major components are printed below

Balcom(85%)

horizon A(0cm to 48cm)	Clay loam
horizon Bk(48cm to 86cm)	Clay loam

horizon Cr(86cm to 111cm)	Bedrock

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 112 - Balcom clay loam, 15 to 30 percent slopes

Component: Balcom (85%)
The Balcom component makes up 85 percent of the map unit. Slopes are 15 to 30 percent. This component is on hillslopes, hills. The parent material consists of calcareous residuum weathered from sandstone and shale. Depth to a root restrictive layer, bedrock, paralithic, is 20 to 39 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is very low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R019XD001CA Clayey (1975) ecological site. Nonirrigated land capability classification is 4e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 18 percent. There are no saline horizons within 30 inches of the soil surface.

Component: Bosanko (5%)
Generated brief soil descriptions are created for major soil components. The Bosanko soil is a minor component.

Component: Calleguas (5%)
Generated brief soil descriptions are created for major soil components. The Calleguas soil is a minor component.

Component: Cieneba (5%)
Generated brief soil descriptions are created for major soil components. The Cieneba soil is a minor component.

Map Unit 113 (1.84%)

Map Unit Name:	Balcom clay loam, 30 to 50 percent slopes
Bedrock Depth - Min:	76cm
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	C - Soils in this group have moderately high runoff potential when thoroughly wet. Water transmission through the soil is somewhat restricted.

Major components are printed below

Balcom(85%)

horizon H1(0cm to 76cm)	Clay loam
horizon H2(76cm to 150cm)	Weathered bedrock

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 113 - Balcom clay loam, 30 to 50 percent slopes

Component: Balcom (85%)
The Balcom component makes up 85 percent of the map unit. Slopes are 30 to 50 percent. This component is on hills. The parent material consists of calcareous residuum weathered from sandstone and shale. Depth to a root restrictive layer, bedrock, paralithic, is 24 to 36 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R019XD001CA Unspecified ecological site. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. There are no saline horizons within 30 inches of the soil surface.

Component: Bosanko (5%)
Generated brief soil descriptions are created for major soil components. The Bosanko, CLAY soil is a minor component.

Component: Calleguas (4%)
Generated brief soil descriptions are created for major soil components. The Calleguas, CLAY LOAM soil is a minor component.

Component: Unnamed (3%)
Generated brief soil descriptions are created for major soil components. The Unnamed soil is a minor component.

Component: Cieneba (3%)
Generated brief soil descriptions are created for major soil components. The Cieneba, SANDY LOAM soil is a minor component.

Map Unit 126 (0.64%)

Map Unit Name:	Bosanko clay, 9 to 15 percent slopes
Bedrock Depth - Min:	94cm
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	D - Soils in this group have high runoff potential when thoroughly wet. Water movement through the soil is restricted or very restricted.

Major components are printed below

Bosanko(85%)

horizon Ap(0cm to 13cm)	Clay
horizon Bss(13cm to 64cm)	Clay
horizon Bk(64cm to 94cm)	Clay
horizon Cr(94cm to 200cm)	Bedrock

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 126 - Bosanko clay, 9 to 15 percent slopes

Component: Bosanko (85%)
The Bosanko component makes up 85 percent of the map unit. Slopes are 9 to 15 percent. This component is on hills, foothills. The parent material consists of residuum weathered from granite. Depth to a root restrictive layer, bedrock, paralithic, is 26 to 38 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is very low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is high. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. This component is in the R019XD001CA Clayey (1975) ecological site. Nonirrigated land capability classification is 3e. Irrigated land capability classification is 3e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent.

Component: Balcom (3%)
Generated brief soil descriptions are created for major soil components. The Balcom soil is a minor component.

Component: Alo (3%)
Generated brief soil descriptions are created for major soil components. The Alo soil is a minor component.

Component: Fallbrook (3%)
Generated brief soil descriptions are created for major soil components. The Falllbrook soil is a minor component.

Component: Bonsall (3%)
Generated brief soil descriptions are created for major soil components. The Bonsall soil is a minor component.

Component: Vista (3%)
Generated brief soil descriptions are created for major soil components. The Vista soil is a minor component.

Map Unit 127 (21.71%)

Map Unit Name:	Bosanko clay, 15 to 30 percent slopes
Bedrock Depth - Min:	89cm
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	D - Soils in this group have high runoff potential when thoroughly wet. Water movement through the soil is restricted or very restricted.

Soil Information

Major components are printed below

Bosanko(85%)

horizon Ap(0cm to 13cm)	Clay
horizon Bss(13cm to 64cm)	Clay
horizon Bk(64cm to 89cm)	Clay
horizon Cr(89cm to 200cm)	Bedrock

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 127 - Bosanko clay, 15 to 30 percent slopes

Component: Bosanko (85%)
The Bosanko component makes up 85 percent of the map unit. Slopes are 15 to 30 percent. This component is on uplands, hillslopes. The parent material consists of acid residuum weathered from igneous rock. Depth to a root restrictive layer, bedrock, paralithic, is 26 to 36 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is very low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is high. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. This component is in the R019XD001CA Clayey (1975) ecological site. Nonirrigated land capability classification is 4e. Irrigated land capability classification is 4e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. There are no saline horizons within 30 inches of the soil surface.

Component: Balcom (6%)
Generated brief soil descriptions are created for major soil components. The Balcom soil is a minor component.

Component: Alo (6%)
Generated brief soil descriptions are created for major soil components. The Alo soil is a minor component.

Component: Vista (1%)
Generated brief soil descriptions are created for major soil components. The Vista soil is a minor component.

Component: Bonsall (1%)
Generated brief soil descriptions are created for major soil components. The Bonsall soil is a minor component.

Component: Fallbrook (1%)
Generated brief soil descriptions are created for major soil components. The Fallbrook soil is a minor component.

Map Unit 129 (19.55%)

Map Unit Name:	Bosanko-Balcom complex, 15 to 30 percent slopes
Bedrock Depth - Min:	79cm
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	D - Soils in this group have high runoff potential when thoroughly wet. Water movement through the soil is restricted or very restricted.

Major components are printed below

Bosanko(45%)

horizon H1(0cm to 51cm)	Clay
horizon H2(51cm to 79cm)	Clay
horizon H3(79cm to 89cm)	Weathered bedrock

Balcom(35%)

horizon H1(0cm to 86cm)	Clay loam
horizon H2(86cm to 150cm)	Weathered bedrock

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 129 - Bosanko-Balcom complex, 15 to 30 percent slopes

Soil Information

Component: Bosanko (45%)
The Bosanko component makes up 45 percent of the map unit. Slopes are 15 to 30 percent. This component is on hills, foothills. The parent material consists of residuum weathered from granite. Depth to a root restrictive layer, bedrock, paralithic, is 26 to 36 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is high. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. This component is in the R019XD001CA Unspecified ecological site. Nonirrigated land capability classification is 4e. Irrigated land capability classification is 4e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent.

Component: Balcom (35%)
The Balcom component makes up 35 percent of the map unit. Slopes are 15 to 30 percent. This component is on hills. The parent material consists of calcareous residuum weathered from sandstone and shale. Depth to a root restrictive layer, bedrock, paralithic, is 26 to 36 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R019XD001CA Unspecified ecological site. Nonirrigated land capability classification is 4e. Irrigated land capability classification is 4e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. There are no saline horizons within 30 inches of the soil surface.

Component: Unnamed (5%)
Generated brief soil descriptions are created for major soil components. The Unnamed, STEEPER SOILS soil is a minor component.

Component: Calleguas (5%)
Generated brief soil descriptions are created for major soil components. The Calleguas, CLAY LOAM soil is a minor component.

Component: Unnamed (5%)
Generated brief soil descriptions are created for major soil components. The Unnamed, LESS SLOPING SOILS soil is a minor component.

Component: Alo (3%)
Generated brief soil descriptions are created for major soil components. The Alo, CLAY soil is a minor component.

Component: San Andreas (2%)
Generated brief soil descriptions are created for major soil components. The San Andreas, CLAY LOAM soil is a minor component.

Map Unit 130 (1.47%)

Map Unit Name:	Bosanko-Balcom complex, 30 to 50 percent slopes
Bedrock Depth - Min:	69cm
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	D - Soils in this group have high runoff potential when thoroughly wet. Water movement through the soil is restricted or very restricted.
Major components are printed below	
Bosanko(45%)	
horizon H1(0cm to 38cm)	Clay
horizon H2(38cm to 69cm)	Clay
horizon H3(69cm to 79cm)	Weathered bedrock
Balcom(40%)	
horizon H1(0cm to 76cm)	Clay loam
horizon H2(76cm to 150cm)	Weathered bedrock

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 130 - Bosanko-Balcom complex, 30 to 50 percent slopes

Component: Bosanko (45%)
The Bosanko component makes up 45 percent of the map unit. Slopes are 30 to 50 percent. This component is on hills. The parent material consists of residuum weathered from granite. Depth to a root restrictive layer, bedrock, paralithic, is 22 to 32 inches. The

natural drainage class is well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is high. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. This component is in the R019XD001CA Unspecified ecological site. Nonirrigated land capability classification is 6e. Irrigated land capability classification is 6e. This soil does not meet hydric criteria.

Component: Balcom (40%)
The Balcom component makes up 40 percent of the map unit. Slopes are 30 to 50 percent. This component is on hills. The parent material consists of calcareous residuum weathered from sandstone and shale. Depth to a root restrictive layer, bedrock, paralithic, is 24 to 30 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R019XD001CA Unspecified ecological site. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria. There are no saline horizons within 30 inches of the soil surface.

Component: Unnamed (5%)
Generated brief soil descriptions are created for major soil components. The Unnamed, LESS SLOPING SOILS soil is a minor component.

Component: Unnamed (5%)
Generated brief soil descriptions are created for major soil components. The Unnamed, STEEPER SOILS soil is a minor component.

Component: Calleguas (2%)
Generated brief soil descriptions are created for major soil components. The Calleguas, CLAY LOAM soil is a minor component.

Component: Alo (2%)
Generated brief soil descriptions are created for major soil components. The Alo, CLAY soil is a minor component.

Component: Cieneba (1%)
Generated brief soil descriptions are created for major soil components. The Cieneba, SANDY LOAM soil is a minor component.

Map Unit 131 (1.28%)

Map Unit Name:	Botella loam, 2 to 9 percent slopes, warm MAAT, lower MAP, MLRA 19
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	C - Soils in this group have moderately high runoff potential when thoroughly wet. Water transmission through the soil is somewhat restricted.

Major components are printed below

Botella(85%)	
horizon H1(0cm to 20cm)	Loam
horizon H2(20cm to 89cm)	Silty clay loam
horizon H3(89cm to 168cm)	Clay loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 131 - Botella loam, 2 to 9 percent slopes, warm MAAT, lower MAP, MLRA 19

Component: Botella (85%)
The Botella component makes up 85 percent of the map unit. Slopes are 2 to 9 percent. This component is on alluvial fans, alluvial plains. The parent material consists of alluvium derived from sedimentary rock. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 4 percent. This component is in the R019XD029CA Loamy (1975) ecological site. Nonirrigated land capability classification is 3e. Irrigated land capability classification is 2e. This soil does not meet hydric criteria.

Component: Capistrano (5%)

Soil Information

Generated brief soil descriptions are created for major soil components. The Capistrano soil is a minor component.

Component: Sorrento (5%)
Generated brief soil descriptions are created for major soil components. The Sorrento soil is a minor component.

Component: Botella (5%)
Generated brief soil descriptions are created for major soil components. The Botella soil is a minor component.

Map Unit 134 (9.97%)

Map Unit Name:	Calleguas clay loam, 50 to 75 percent slopes, eroded
Bedrock Depth - Min:	38cm
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	D - Soils in this group have high runoff potential when thoroughly wet. Water movement through the soil is restricted or very restricted.

Major components are printed below

Calleguas(85%)

horizon A1(0cm to 18cm)	Clay loam
horizon A2(18cm to 28cm)	Clay loam
horizon A3(28cm to 38cm)	Very channery clay loam
horizon Cr(38cm to 150cm)	Bedrock

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 134 - Calleguas clay loam, 50 to 75 percent slopes, eroded

Component: Calleguas (85%)
The Calleguas component makes up 85 percent of the map unit. Slopes are 50 to 75 percent. This component is on hillslopes, hills. The parent material consists of residuum weathered from calcareous shale. Depth to a root restrictive layer, bedrock, paralithic, is 10 to 20 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is very low. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R019XD071CA Shallow Clayey (1975) ecological site. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. There are no saline horizons within 30 inches of the soil surface.

Component: Cieneba (5%)
Generated brief soil descriptions are created for major soil components. The Cieneba soil is a minor component.

Component: Anaheim (5%)
Generated brief soil descriptions are created for major soil components. The Anaheim soil is a minor component.

Component: Balcom (5%)
Generated brief soil descriptions are created for major soil components. The Balcom soil is a minor component.

Map Unit 135 (1.09%)

Map Unit Name:	Capistrano sandy loam, 2 to 9 percent slopes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	A - Soils in this group have low runoff potential when thoroughly wet. Water is transmitted freely through the soil.

Major components are printed below

Capistrano(80%)

horizon H1(0cm to 69cm)	Sandy loam
horizon H2(69cm to 165cm)	Fine sandy loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 135 - Capistrano sandy loam, 2 to 9 percent slopes

Component: Capistrano (80%)
The Capistrano component makes up 80 percent of the map unit. Slopes are 2 to 9 percent. This component is on alluvial fans, alluvial plains. The parent material consists of alluvium derived from granite. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. This component is in the R019XD029CA Loamy (1975) ecological site. Nonirrigated land capability classification is 3e. Irrigated land capability classification is 2e. This soil does not meet hydric criteria.

Component: Corralitos (5%)
Generated brief soil descriptions are created for major soil components. The Corralitos soil is a minor component.

Component: Hanford (5%)
Generated brief soil descriptions are created for major soil components. The Hanford soil is a minor component.

Component: Capistrano (5%)
Generated brief soil descriptions are created for major soil components. The Capistrano soil is a minor component.

Component: Myford (3%)
Generated brief soil descriptions are created for major soil components. The Myford soil is a minor component.

Component: Ramona (2%)
Generated brief soil descriptions are created for major soil components. The Ramona soil is a minor component.

Map Unit 136 (0.47%)

Map Unit Name:	Capistrano sandy loam, 9 to 15 percent slopes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	A - Soils in this group have low runoff potential when thoroughly wet. Water is transmitted freely through the soil.

Major components are printed below

Capistrano(85%)

horizon H1(0cm to 69cm)	Sandy loam
horizon H2(69cm to 165cm)	Fine sandy loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 136 - Capistrano sandy loam, 9 to 15 percent slopes

Component: Capistrano (85%)
The Capistrano component makes up 85 percent of the map unit. Slopes are 9 to 15 percent. This component is on alluvial fans, alluvial plains. The parent material consists of alluvium derived from igneous and sedimentary rock. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is moderate. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. This component is in the R019XD029CA Loamy (1975) ecological site. Nonirrigated land capability classification is 3e. Irrigated land capability classification is 3e. This soil does not meet hydric criteria.

Component: San Andreas (5%)
Generated brief soil descriptions are created for major soil components. The San Andreas soil is a minor component.

Component: Unnamed (5%)
Generated brief soil descriptions are created for major soil components. The Unnamed soil is a minor component.

Component: Myford (3%)
Generated brief soil descriptions are created for major soil components. The Myford soil is a minor component.

Component: Unnamed (2%)
Generated brief soil descriptions are created for major soil components. The Unnamed soil is a minor component.

Map Unit 137 (0.35%)

Map Unit Name:	Chesterton loamy sand, 2 to 15 percent slopes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Moderately well drained
Hydrologic Group - Dominant:	D - Soils in this group have high runoff potential when thoroughly wet. Water movement through the soil is restricted or very restricted.

Major components are printed below

Chesterton(80%)

horizon H1(0cm to 41cm)	Loamy sand
horizon H2(41cm to 81cm)	Sandy clay
horizon H3(81cm to 106cm)	Indurated

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 137 - Chesterton loamy sand, 2 to 15 percent slopes

Component: Chesterton (80%)
The Chesterton component makes up 80 percent of the map unit. Slopes are 2 to 15 percent. This component is on terraces. The parent material consists of uplifted marine deposits. Depth to a root restrictive layer, duripan, is 20 to 40 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 2 percent. This component is in the R019XD061CA Unspecified ecological site. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria.

Component: Chesterson (5%)
Generated brief soil descriptions are created for major soil components. The Chesterson, SOILS soil is a minor component.

Component: Marina (5%)
Generated brief soil descriptions are created for major soil components. The Marina, LOAMY SAND soil is a minor component.

Component: Myford (5%)
Generated brief soil descriptions are created for major soil components. The Myford, SANDY LOAM soil is a minor component.

Component: Unnamed (4%)
Generated brief soil descriptions are created for major soil components. The Unnamed soil is a minor component.

Component: Unnamed (1%)
Generated brief soil descriptions are created for major soil components. The Unnamed, PONDED soil is a minor component.

Map Unit 138 (0.11%)

Map Unit Name:	Chesterton loam sand, 15 to 30 percent slopes
Bedrock Depth - Min:	null

Soil Information

Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Moderately well drained
Hydrologic Group - Dominant:	D - Soils in this group have high runoff potential when thoroughly wet. Water movement through the soil is restricted or very restricted.

Major components are printed below

Chesterton(80%)

horizon H1(0cm to 41cm)	Loamy sand
horizon H2(41cm to 81cm)	Sandy clay
horizon H3(81cm to 106cm)	Indurated

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 138 - Chesterton loam sand, 15 to 30 percent slopes

Component: Chesterton (80%)
The Chesterton component makes up 80 percent of the map unit. Slopes are 15 to 30 percent. This component is on terraces. The parent material consists of uplifted marine deposits. Depth to a root restrictive layer, duripan, is 20 to 40 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R019XD061CA Unspecified ecological site. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria.

Component: Unnamed (5%)
Generated brief soil descriptions are created for major soil components. The Unnamed soil is a minor component.

Component: Unnamed (5%)
Generated brief soil descriptions are created for major soil components. The Unnamed, LESS SLOPING SOILS soil is a minor component.

Component: Unnamed (5%)
Generated brief soil descriptions are created for major soil components. The Unnamed, STEEPER SOILS soil is a minor component.

Component: Marina (3%)
Generated brief soil descriptions are created for major soil components. The Marina, LOAMY SAND soil is a minor component.

Component: Myford (2%)
Generated brief soil descriptions are created for major soil components. The Myford, SANDY LOAM soil is a minor component.

Map Unit 141 (0.87%)

Map Unit Name:	Cieneba sandy loam, 15 to 30 percent slopes
Bedrock Depth - Min:	43cm
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Somewhat excessively drained
Hydrologic Group - Dominant:	D - Soils in this group have high runoff potential when thoroughly wet. Water movement through the soil is restricted or very restricted.

Major components are printed below

Cieneba(85%)

horizon H1(0cm to 43cm)	Sandy loam
horizon H2(43cm to 150cm)	Weathered bedrock

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 141 - Cieneba sandy loam, 15 to 30 percent slopes

Component: Cieneba (85%)

Soil Information

The Cieneba component makes up 85 percent of the map unit. Slopes are 15 to 30 percent. This component is on hills, foothills. The parent material consists of residuum weathered from granite. Depth to a root restrictive layer, bedrock, paralithic, is 4 to 20 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R019XD060CA Shallow Loamy (1975) ecological site. Nonirrigated land capability classification is 4e. Irrigated land capability classification is 4e. This soil does not meet hydric criteria.

Component: San Andreas (5%)
Generated brief soil descriptions are created for major soil components. The San Andreas soil is a minor component.

Component: Soper (5%)
Generated brief soil descriptions are created for major soil components. The Soper soil is a minor component.

Component: Anaheim (5%)
Generated brief soil descriptions are created for major soil components. The Anaheim soil is a minor component.

Map Unit 142 (2.74%)

Map Unit Name:	Cieneba sandy loam, 30 to 75 percent slopes, eroded
Bedrock Depth - Min:	18cm
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Somewhat excessively drained
Hydrologic Group - Dominant:	D - Soils in this group have high runoff potential when thoroughly wet. Water movement through the soil is restricted or very restricted.

Major components are printed below

Cieneba(65%)

horizon H1(0cm to 18cm)	Sandy loam
horizon H2(18cm to 150cm)	Weathered bedrock

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 142 - Cieneba sandy loam, 30 to 75 percent slopes, eroded

Component: Cieneba (65%)
The Cieneba component makes up 65 percent of the map unit. Slopes are 30 to 75 percent. This component is on hills, foothills. The parent material consists of residuum weathered from granite. Depth to a root restrictive layer, bedrock, paralithic, is 4 to 20 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is very low. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R019XD060CA Shallow Loamy (1975) ecological site. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria.

Component: Cieneba (10%)
Generated brief soil descriptions are created for major soil components. The Cieneba soil is a minor component.

Component: Vista (5%)
Generated brief soil descriptions are created for major soil components. The Vista soil is a minor component.

Component: San Andreas (5%)
Generated brief soil descriptions are created for major soil components. The San Andreas soil is a minor component.

Component: Calleguas (5%)
Generated brief soil descriptions are created for major soil components. The Calleguas soil is a minor component.

Component: Soper (5%)
Generated brief soil descriptions are created for major soil components. The Soper soil is a minor component.

Component: Rock outcrop (2%)
Generated brief soil descriptions are created for major soil components. The Rock outcrop soil is a minor component.

Component: Tollhouse (2%)
Generated brief soil descriptions are created for major soil components. The Tollhouse soil is a minor component.

Component: Blasingame (1%)
Generated brief soil descriptions are created for major soil components. The Blasingame soil is a minor component.

Map Unit 145 (1.29%)

Map Unit Name:	Cieneba-Rock outcrop complex, 30 to 75 percent slopes
Bedrock Depth - Min:	0cm
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Somewhat excessively drained
Hydrologic Group - Dominant:	D - Soils in this group have high runoff potential when thoroughly wet. Water movement through the soil is restricted or very restricted.

Major components are printed below

Cieneba(60%)	
horizon H1(0cm to 18cm)	Sandy loam
horizon H2(18cm to 150cm)	Weathered bedrock
Rock outcrop(30%)	
horizon H1(0cm to 10cm)	Unweathered bedrock

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 145 - Cieneba-Rock outcrop complex, 30 to 75 percent slopes

Component: Cieneba (60%)
The Cieneba component makes up 60 percent of the map unit. Slopes are 30 to 75 percent. This component is on hills, foothills. The parent material consists of residuum weathered from granite. Depth to a root restrictive layer, bedrock, paralithic, is 7 to 20 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is very low. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R019XD073CA Shallow Loamy - Rock Outcrop Complex ecological site. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria.

Component: Rock outcrop (30%)
Generated brief soil descriptions are created for major soil components. The Rock outcrop is a miscellaneous area.

Component: Anaheim (5%)
Generated brief soil descriptions are created for major soil components. The Anaheim soil is a minor component.

Component: San Andreas (2%)
Generated brief soil descriptions are created for major soil components. The San Andreas soil is a minor component.

Component: Tollhouse (2%)
Generated brief soil descriptions are created for major soil components. The Tollhouse soil is a minor component.

Component: Vista (1%)
Generated brief soil descriptions are created for major soil components. The Vista soil is a minor component.

Map Unit 146 (0.04%)

Map Unit Name:	Corralitos loamy sand
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Somewhat excessively drained
Hydrologic Group - Dominant:	A - Soils in this group have low runoff potential when thoroughly wet. Water is

	transmitted freely through the soil.

Major components are printed below

Corralitos(65%)

horizon H1(0cm to 23cm)	Loamy sand
horizon H2(23cm to 152cm)	Stratified sand to loamy sand

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 146 - Corralitos loamy sand

Component: Corralitos (65%)
The Corralitos component makes up 65 percent of the map unit. Slopes are 0 to 5 percent. This component is on alluvial fans, alluvial plains. The parent material consists of alluvium derived from mixed. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R019XD035CA Sandy (1975) ecological site. Nonirrigated land capability classification is 3e. Irrigated land capability classification is 3s. This soil does not meet hydric criteria.

Component: Unnamed (20%)
The Unnamed component makes up 20 percent of the map unit. Slopes are The parent material consists of alluvium derived from mixed. Depth to a root restrictive layer is greater than 60 inches. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. This soil does not meet hydric criteria.

Component: Riverwash (5%)
Generated brief soil descriptions are created for major soil components. The Riverwash soil is a minor component.

Component: Metz (5%)
Generated brief soil descriptions are created for major soil components. The Metz soil is a minor component.

Component: Soboba (3%)
Generated brief soil descriptions are created for major soil components. The Soboba soil is a minor component.

Component: Capistrano (2%)
Generated brief soil descriptions are created for major soil components. The Capistrano soil is a minor component.

Map Unit 147 (0.81%)

Map Unit Name:	Corralitos loamy sand, moderately fine substratum
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	122cm
Drainage Class - Dominant:	Moderately well drained
Hydrologic Group - Dominant:	A - Soils in this group have low runoff potential when thoroughly wet. Water is transmitted freely through the soil.

Major components are printed below

Corralitos(75%)

horizon H1(0cm to 25cm)	Loamy sand
horizon H2(25cm to 102cm)	Loamy sand
horizon H3(102cm to 117cm)	Silt loam
horizon H4(117cm to 203cm)	Stratified sand to fine sand to loamy sand

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 147 - Corralitos loamy sand, moderately fine substratum

Soil Information

Component: Corralitos (75%)
The Corralitos component makes up 75 percent of the map unit. Slopes are 0 to 5 percent. This component is on alluvial fans, alluvial plains. The parent material consists of alluvium derived from mixed. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. A seasonal zone of water saturation is at 48 inches during May, June, July, August, September. Organic matter content in the surface horizon is about 1 percent. This component is in the R019XD035CA Sandy (1975) ecological site. Nonirrigated land capability classification is 3e. Irrigated land capability classification is 3s. This soil does not meet hydric criteria.

Component: Corralitos (10%)
Generated brief soil descriptions are created for major soil components. The Corralitos soil is a minor component.

Component: Unnamed (5%)
Generated brief soil descriptions are created for major soil components. The Unnamed soil is a minor component.

Component: Metz (5%)
Generated brief soil descriptions are created for major soil components. The Metz soil is a minor component.

Component: Capistrano (3%)
Generated brief soil descriptions are created for major soil components. The Capistrano soil is a minor component.

Component: Riverwash (2%)
Generated brief soil descriptions are created for major soil components. The Riverwash soil is a minor component.

Map Unit 162 (1.44%)

Map Unit Name:	Marina loamy sand, 2 to 9 percent slopes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Somewhat excessively drained
Hydrologic Group - Dominant:	B - Soils in this group have moderately low runoff potential when thoroughly wet. Water transmission through the soil is unimpeded.

Major components are printed below

Marina(85%)

horizon H1(0cm to 84cm)	Loamy sand
horizon H2(84cm to 152cm)	Sand
horizon H3(152cm to 203cm)	Sand

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 162 - Marina loamy sand, 2 to 9 percent slopes

Component: Marina (85%)
The Marina component makes up 85 percent of the map unit. Slopes are 2 to 9 percent. This component is on dunes. The parent material consists of old eolian sands. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R019XD035CA Unspecified ecological site. Nonirrigated land capability classification is 4e. Irrigated land capability classification is 3s. This soil does not meet hydric criteria.

Component: Marina (10%)
Generated brief soil descriptions are created for major soil components. The Marina, LESS SLOPING OR STEEPER soil is a minor component.

Component: Unnamed (3%)
Generated brief soil descriptions are created for major soil components. The Unnamed soil is a minor component.

Component: Myford (2%)

Soil Information

Generated brief soil descriptions are created for major soil components. The Myford, SANDY LOAM, THICK SURFACE soil is a minor component.

Map Unit 173 (0.29%)

Map Unit Name:	Myford sandy loam, 2 to 9 percent slopes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Moderately well drained
Hydrologic Group - Dominant:	C - Soils in this group have moderately high runoff potential when thoroughly wet. Water transmission through the soil is somewhat restricted.

Major components are printed below

Myford(75%)

horizon A1(0cm to 2cm)	Sandy loam
horizon A2(2cm to 10cm)	Sandy loam
horizon A3(10cm to 30cm)	Sandy loam
horizon Bt1(30cm to 46cm)	Sandy clay
horizon Bt2(46cm to 71cm)	Sandy clay loam
horizon Btk1(71cm to 89cm)	Sandy clay loam
horizon Btk2(89cm to 104cm)	Sandy clay loam
horizon B't1(104cm to 124cm)	Sandy clay loam
horizon B't2(124cm to 155cm)	Sandy clay loam
horizon Bt3(155cm to 180cm)	Sandy clay loam
horizon C(180cm to 201cm)	Sandy loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 173 - Myford sandy loam, 2 to 9 percent slopes

Component: Myford (75%)
The Myford component makes up 75 percent of the map unit. Slopes are 2 to 9 percent. This component is on terraces, alluvial plains. The parent material consists of alluvium derived from sandstone. Depth to a root restrictive layer, abrupt textural change, is 8 to 20 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R019XD061CA Claypan (1975) ecological site. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. There are no saline horizons within 30 inches of the soil surface.

Component: Myford (10%)
Generated brief soil descriptions are created for major soil components. The Myford soil is a minor component.

Component: Yorba (5%)
Generated brief soil descriptions are created for major soil components. The Yorba soil is a minor component.

Component: Capistrano (5%)
Generated brief soil descriptions are created for major soil components. The Capistrano soil is a minor component.

Component: Chesterton (3%)
Generated brief soil descriptions are created for major soil components. The Chesterton soil is a minor component.

Component: Water (2%)
Generated brief soil descriptions are created for major soil components. The Water soil is a minor component.

Map Unit 175 (2.9%)

Map Unit Name:	Myford sandy loam, 9 to 15 percent slopes

Soil Information

Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Moderately well drained
Hydrologic Group - Dominant:	D - Soils in this group have high runoff potential when thoroughly wet. Water movement through the soil is restricted or very restricted.

Major components are printed below

Myford(85%)

horizon H1(0cm to 30cm)	Sandy loam
horizon H2(30cm to 46cm)	Sandy clay
horizon H3(46cm to 71cm)	Sandy clay loam
horizon H4(71cm to 180cm)	Sandy clay loam
horizon H5(180cm to 201cm)	Sandy loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 175 - Myford sandy loam, 9 to 15 percent slopes

Component: Myford (85%)
The Myford component makes up 85 percent of the map unit. Slopes are 9 to 15 percent. This component is on terraces, alluvial plain remnants. The parent material consists of alluvium derived from mixed. Depth to a root restrictive layer, abrupt textural change, inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R019XD061CA Claypan (1975) ecological site. Nonirrigated land capability classification is 4e. Irrigated land capability classification is 4e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. There are no saline horizons within 30 inches of the soil surface.

Component: Myford (5%)
Generated brief soil descriptions are created for major soil components. The Myford soil is a minor component.

Component: Capistrano (5%)
Generated brief soil descriptions are created for major soil components. The Capistrano soil is a minor component.

Component: Yorba (3%)
Generated brief soil descriptions are created for major soil components. The Yorba soil is a minor component.

Component: San Andreas (2%)
Generated brief soil descriptions are created for major soil components. The San Andreas soil is a minor component.

Map Unit 176 (2.33%)

Map Unit Name:	Myford sandy loam, 15 to 30 percent slopes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Moderately well drained
Hydrologic Group - Dominant:	D - Soils in this group have high runoff potential when thoroughly wet. Water movement through the soil is restricted or very restricted.

Major components are printed below

Myford(85%)

horizon H1(0cm to 30cm)	Sandy loam
horizon H2(30cm to 46cm)	Sandy clay
horizon H3(46cm to 71cm)	Sandy clay loam
horizon H4(71cm to 180cm)	Sandy clay loam
horizon H5(180cm to 201cm)	Sandy loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 176 - Myford sandy loam, 15 to 30 percent slopes

Component: Myford (85%)
The Myford component makes up 85 percent of the map unit. Slopes are 15 to 30 percent. This component is on terraces, alluvial plain remnants. The parent material consists of alluvium derived from mixed. Depth to a root restrictive layer, abrupt textural change, inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R019XD061CA Claypan (1975) ecological site. Nonirrigated land capability classification is 6e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. There are no saline horizons within 30 inches of the soil surface.

Component: Myford (5%)
Generated brief soil descriptions are created for major soil components. The Myford soil is a minor component.

Component: Myford (5%)
Generated brief soil descriptions are created for major soil components. The Myford soil is a minor component.

Component: Cieneba (3%)
Generated brief soil descriptions are created for major soil components. The Cieneba soil is a minor component.

Component: Yorba (2%)
Generated brief soil descriptions are created for major soil components. The Yorba soil is a minor component.

Map Unit 177 (0.25%)

Map Unit Name:	Myford sandy loam, 9 to 30 percent slopes, eroded
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Moderately well drained
Hydrologic Group - Dominant:	C - Soils in this group have moderately high runoff potential when thoroughly wet. Water transmission through the soil is somewhat restricted.

Major components are printed below

Myford(85%)

horizon A(0cm to 18cm)	Sandy loam
horizon Bt(18cm to 28cm)	Sandy clay
horizon Btk(28cm to 53cm)	Sandy clay loam
horizon B't(53cm to 163cm)	Sandy clay loam
horizon C(163cm to 201cm)	Sandy loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 177 - Myford sandy loam, 9 to 30 percent slopes, eroded

Component: Myford (85%)
The Myford component makes up 85 percent of the map unit. Slopes are 9 to 30 percent. This component is on terraces, alluvial plains. The parent material consists of alluvium derived from sandstone. Depth to a root restrictive layer, abrupt textural change, is 4 to 10 inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R019XD061CA Claypan (1975) ecological site. Nonirrigated land capability classification is 4e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. There are no saline horizons within 30 inches of the soil surface.

Component: Myford (10%)
Generated brief soil descriptions are created for major soil components. The Myford soil is a minor component.

Component: Cieneba (3%)
Generated brief soil descriptions are created for major soil components. The Cieneba soil is a minor component.

Component: Yorba (2%)
Generated brief soil descriptions are created for major soil components. The Yorba soil is a minor component.

Map Unit 179 (0.35%)

Map Unit Name:	Myford sandy loam, thick surface, 2 to 9 percent slopes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Moderately well drained
Hydrologic Group - Dominant:	D - Soils in this group have high runoff potential when thoroughly wet. Water movement through the soil is restricted or very restricted.

Major components are printed below

Myford(75%)

horizon H1(0cm to 56cm)	Sandy loam
horizon H2(56cm to 71cm)	Sandy clay
horizon H3(71cm to 97cm)	Sandy clay loam
horizon H4(97cm to 180cm)	Sandy clay loam
horizon H5(180cm to 201cm)	Sandy loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 179 - Myford sandy loam, thick surface, 2 to 9 percent slopes

Component: Myford (75%)
The Myford component makes up 75 percent of the map unit. Slopes are 2 to 9 percent. This component is on terraces. The parent material consists of alluvium derived from mixed. Depth to a root restrictive layer, abrupt textural change, inches. The natural drainage class is moderately well drained. Water movement in the most restrictive layer is low. Available water to a depth of 60 inches (or restricted depth) is low. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R019XD061CA Claypan (1975) ecological site. Nonirrigated land capability classification is 3e. Irrigated land capability classification is 3e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent.

Component: Myford (10%)
Generated brief soil descriptions are created for major soil components. The Myford soil is a minor component.

Component: Myford (5%)
Generated brief soil descriptions are created for major soil components. The Myford soil is a minor component.

Component: Yorba (3%)
Generated brief soil descriptions are created for major soil components. The Yorba soil is a minor component.

Component: Chesterson (3%)
Generated brief soil descriptions are created for major soil components. The Chesterson soil is a minor component.

Component: Capistrano (3%)
Generated brief soil descriptions are created for major soil components. The Capistrano soil is a minor component.

Component: Unnamed (1%)
Generated brief soil descriptions are created for major soil components. The Unnamed soil is a minor component.

Map Unit 191 (13.0%)

Map Unit Name:	Riverwash

Soil Information

Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	31cm
Drainage Class - Dominant:	null
Hydrologic Group - Dominant:	null
Major components are printed below	
Riverwash(100%)	
horizon C1(0cm to 15cm)	Gravelly sand
horizon C2(15cm to 152cm)	Stratified gravelly coarse sand to sandy loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 191 - Riverwash

Component: Riverwash (100%)
Generated brief soil descriptions are created for major soil components. The Riverwash is a miscellaneous area.

Map Unit 192 (3.57%)

Map Unit Name:	Rock outcrop-Cieneba complex, 30 to 75 percent slopes
Bedrock Depth - Min:	18cm
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	null
Hydrologic Group - Dominant:	null
Major components are printed below	
Cieneba(40%)	
horizon H1(0cm to 18cm)	Sandy loam
horizon H2(18cm to 150cm)	Weathered bedrock

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 192 - Rock outcrop-Cieneba complex, 30 to 75 percent slopes

Component: Rock outcrop (50%)
Generated brief soil descriptions are created for major soil components. The Rock outcrop is a miscellaneous area.

Component: Cieneba (40%)
The Cieneba component makes up 40 percent of the map unit. Slopes are 30 to 75 percent. This component is on hills, uplands. The parent material consists of residuum weathered from granite. Depth to a root restrictive layer, bedrock, paralithic, is 4 to 20 inches. The natural drainage class is somewhat excessively drained. Water movement in the most restrictive layer is very low. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 1 percent. This component is in the R019XD073CA Shallow Loamy - Rock Outcrop Complex ecological site. Nonirrigated land capability classification is 7e. This soil does not meet hydric criteria.

Component: Vista (3%)
Generated brief soil descriptions are created for major soil components. The Vista soil is a minor component.

Component: Soper (3%)
Generated brief soil descriptions are created for major soil components. The Soper soil is a minor component.

Component: Anaheim (3%)
Generated brief soil descriptions are created for major soil components. The Anaheim soil is a minor component.

Component: Tollhouse (1%)
Generated brief soil descriptions are created for major soil components. The Tollhouse soil is a minor component.

Map Unit 207 (5.9%)

Map Unit Name:	Sorrento loam, 2 to 9 percent slopes, warm MAAT, MLRA 19
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	C - Soils in this group have moderately high runoff potential when thoroughly wet. Water transmission through the soil is somewhat restricted.

Major components are printed below

Sorrento(85%)

horizon A(0cm to 30cm)	Loam
horizon AB(30cm to 94cm)	Silty clay loam
horizon Bk(94cm to 157cm)	Silty clay loam
horizon 2C(157cm to 183cm)	Sandy loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 207 - Sorrento loam, 2 to 9 percent slopes, warm MAAT, MLRA 19

Component: Sorrento (85%)
The Sorrento component makes up 85 percent of the map unit. Slopes are 2 to 9 percent. This component is on alluvial fans, alluvial plains. The parent material consists of alluvium derived from sedimentary rock. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 3 percent. This component is in the R019XD029CA Loamy (1975) ecological site. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. There are no saline horizons within 30 inches of the soil surface.

Component: Mocho (7%)
Generated brief soil descriptions are created for major soil components. The Mocho soil is a minor component.

Component: Pico (2%)
Generated brief soil descriptions are created for major soil components. The Pico soil is a minor component.

Component: Garretson (2%)
Generated brief soil descriptions are created for major soil components. The Garretson soil is a minor component.

Component: Anacapa (2%)
Generated brief soil descriptions are created for major soil components. The Anacapa soil is a minor component.

Component: Botella (2%)
Generated brief soil descriptions are created for major soil components. The Botella soil is a minor component.

Map Unit 209 (4.0%)

Map Unit Name:	Sorrento clay loam, 2 to 9 percent slopes, warm MAAT, MLRA 19
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	C - Soils in this group have moderately high runoff potential when thoroughly wet. Water transmission through the soil is somewhat restricted.

Major components are printed below

Sorrento(75%)

horizon Ap1(0cm to 15cm)	Clay loam

horizon Ap2(15cm to 30cm)	Clay loam
horizon AB1(30cm to 53cm)	Silty clay loam
horizon AB2(53cm to 69cm)	Silty clay loam
horizon AB3(69cm to 94cm)	Silty clay loam
horizon Bk1(94cm to 124cm)	Silty clay loam
horizon Bk2(124cm to 157cm)	Silty clay loam
horizon 2C(157cm to 183cm)	Stratified loamy fine sand to silt loam

Component Description:

Minor map unit components are excluded from this report.

Map Unit: 209 - Sorrento clay loam, 2 to 9 percent slopes, warm MAAT, MLRA 19

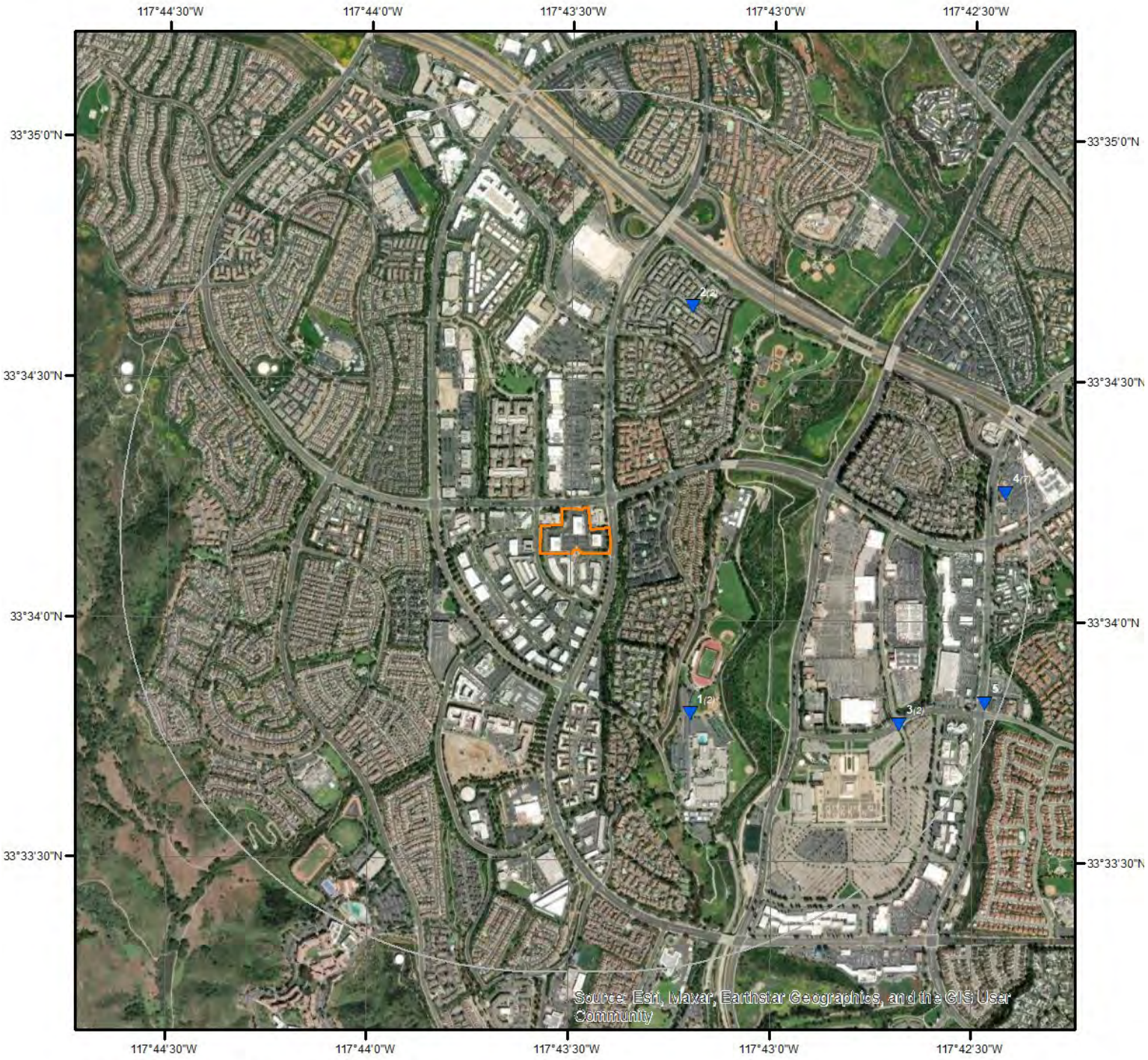
Component: Sorrento (75%)
The Sorrento component makes up 75 percent of the map unit. Slopes are 2 to 9 percent. This component is on alluvial fans, alluvial plains. The parent material consists of alluvium derived from sedimentary rock. Depth to a root restrictive layer is greater than 60 inches. The natural drainage class is well drained. Water movement in the most restrictive layer is moderately high. Available water to a depth of 60 inches (or restricted depth) is high. Shrink-swell potential is moderate. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches. Organic matter content in the surface horizon is about 3 percent. This component is in the R019XD001CA Clayey (1975) ecological site. Nonirrigated land capability classification is 3e. This soil does not meet hydric criteria. The calcium carbonate equivalent within 40 inches, typically, does not exceed 3 percent. There are no saline horizons within 30 inches of the soil surface.

Component: Sorrento (10%)
Generated brief soil descriptions are created for major soil components. The Sorrento soil is a minor component.

Component: Mocho (10%)
Generated brief soil descriptions are created for major soil components. The Mocho soil is a minor component.

Component: Botella (5%)
Generated brief soil descriptions are created for major soil components. The Botella soil is a minor component.

Wells and Additional Sources



Wells & Additional Sources

N

0 0.15 0.3 0.6 Miles

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

ERIS

Wells and Additional Sources Summary

Federal Sources

Public Water Systems Violations and Enforcement Data

Map Key	PWS ID	Distance (ft)	Direction
3	090400216	4235.19	ESE

Safe Drinking Water Information System (SDWIS)

Map Key	PWS ID	Distance (ft)	Direction
3	090400216	4235.19	ESE
5	CA3010073	5088.20	ESE

USGS National Water Information System

Map Key	ID	Distance (ft)	Direction
	No records found		

State Sources

Oil and Gas Wells

Map Key	ID	Distance (ft)	Direction
	No records found		

Periodic Groundwater Level Measurement Locations

Map Key	ID	Distance (ft)	Direction
	No records found		

Well Completion Reports

Map Key	WCR No	Distance (ft)	Direction
1	WCR1959-001711	2264.00	SSE
1	WCR1960-001890	2264.00	SSE
2	WCR2000-011663	2847.66	NNE
2	WCR2001-013203	2847.66	NNE
4	WCR2018-003504	5013.71	E
4	WCR2018-003507	5013.71	E
4	WCR2018-003499	5013.71	E
4	WCR2018-003503	5013.71	E
4	WCR2018-003501	5013.71	E
4	WCR2018-003506	5013.71	E
4	WCR2018-003505	5013.71	E

Public Water Systems Violations and Enforcement Data

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	ESE	0.80	4,235.19	208.04	PWSV

PWS ID:	090400216
PWS Type Code:	NTNCWS
PWS Type Description:	Non-Transient non-community system
Primary Source Code:	GWP
Primary Source Desc:	Ground water purchased
PWS Activity Code:	I
PWS Activity Description:	Inactive
PWS Deactivation Date:	07/01/2013
Zip Code:	92677
Phone No:	2028707430
Phone Ext No:	
Admin Name:	Abel Andrew Anderson
Alt Phone No:	
Email Addr:	abel.anderson@cbp.dhs.gov
Fax No:	
Cds ID:	
Population Served Count:	32
Epa Region Desc:	Region 9
Epa Region:	09
First Reported Date:	05/22/2013
Gw or Sw:	Groundwater
Gw Sw Code:	GW
Is Grant Eligible Ind:	No
Outstanding Performer:	
Is School or Daycare Ind:	No
Is Source Water Protection:	
Is Wholesaler Ind:	No
Lt2 Schedule Cat:	
Lt2 Schedule Cat Code:	
Last Reported Date:	09/20/2023
Org Name:	U.S. Customs and Border Protection
Outstanding Perform Begin Date:	
Owner Type:	Private
Pop Cat 11:	<=100
Pop Cat 2:	<10,000
Pop Cat 3:	<=3300
Pop Cat 4:	<10K
Pop Cat 5:	<=500
Primacy Agency:	EPA Region 9
Season Begin Date:	01-01

Season End Date:	12-31
Service Connections Count:	1
Submission Status Code:	Y
Submissionyearquarter:	2023Q3
Primacy Type:	Tribal
Dbpr Schedule Category:	
Submission Status:	Reported and accepted
Reduced Monitoring Begin Date:	
Reduced Monitoring End Date:	
Reduced Rtcr Monitoring:	
Seasonal Startup System:	
Source Protection Begin Date:	
City Served:	
County Served:	

Safe Drinking Water Information System (SDWIS)

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	ESE	0.80	4,235.19	208.04	SDWIS

PWS ID:	090400216
PWS Type Code:	NTNCWS
PSW Type:	Non-Transient non-community system
Primary Source Code:	GWP
Primary Source:	Ground water purchased
Pws Activity Code:	I
Activity:	Inactive
PWS Deactivation Dt:	07/01/2013
Phone No:	2028707430
Phone Ext No:	
Admin Name:	Abel Andrew Anderson
Alt Phone No:	
Email Addr:	abel.anderson@cbp.dhs.gov
Fax No:	
Cds ID:	
Population Served Count:	32
Epa Region Desc:	Region 9
Epa Region:	09
First Reported Date:	05/22/2013
Gw or Sw:	Groundwater
Is Grant Eligible Ind:	No
Outstanding Performer:	
Is School or Daycare Ind:	No
Is Wholesaler Ind:	No
Lt2 Schedule Cat:	
Last Reported Date:	09/20/2023

Wells and Additional Sources Detail Report

Org Name:	U.S. Customs and Border Protection
Outstanding Perform Begin Date:	
Owner Type:	Private
Pop Cat 11:	<=100
Pop Cat 2:	<10,000
Pop Cat 3:	<=3300
Pop Cat 4:	<10K
Pop Cat 5:	<=500
Primacy Agency:	EPA Region 9
Primacy Agency Code:	09
Season Begin Date:	01-01
Season End Date:	12-31
Service Connections Count:	1
Submission Yr Qtr:	2023Q3
Primacy Type:	Tribal
Dbpr Schedule Category:	
Submission Status:	Reported and accepted
Reduced Monitoring Begin:	
Reduced Monitoring End Date:	
Reduced Rtcr Monitoring:	
Seasonal Startup System:	
Source Protection Begin Date:	
City Served:	
County Served:	

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
5	ESE	0.96	5,088.20	173.91	SDWIS

PWS ID:	CA3010073
PWS Type Code:	CWS
PSW Type:	Community water system
Primary Source Code:	SWP
Primary Source:	Surface water purchased
Pws Activity Code:	A
Activity:	Active
PWS Deactivation Dt:	
Phone No:	949-448-4032
Phone Ext No:	
Admin Name:	COLLINGS, MATT
Alt Phone No:	
Email Addr:	mcollings@mnwd.com
Fax No:	
Cds ID:	
Population Served Count:	170236

Wells and Additional Sources Detail Report

Epa Region Desc:	Region 9
Epa Region:	09
First Reported Date:	03/22/1979
Gw or Sw:	Surface water
Is Grant Eligible Ind:	Yes
Outstanding Performer:	
Is School or Daycare Ind:	No
Is Wholesaler Ind:	No
Lt2 Schedule Cat:	
Last Reported Date:	10/02/2023
Org Name:	COLLINGS, MATT
Outstanding Perform Begin Date:	
Owner Type:	Local government
Pop Cat 11:	100,001-250,000
Pop Cat 2:	10,000+
Pop Cat 3:	>50,000
Pop Cat 4:	100K+
Pop Cat 5:	>100,000
Primacy Agency:	California
Primacy Agency Code:	CA
Season Begin Date:	
Season End Date:	
Service Connections Count:	53616
Submission Yr Qtr:	2023Q3
Primacy Type:	State
Dbpr Schedule Category:	
Submission Status:	Reported and accepted
Reduced Monitoring Begin:	
Reduced Monitoring End Date:	
Reduced Rtcr Monitoring:	
Seasonal Startup System:	
Source Protection Begin Date:	
City Served:	
County Served:	Orange

Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
1	SSE	0.43	2,264.00	187.86	WATER WELLS

WCR No:	WCR1959-001711
Location:	SALT CREEK RD, PACIFIC COAST HWY
City:	
County:	Orange
Decimal Latitude:	33.5634

Decimal Longitude:	-117.72
Location(OSWCR):	SALT CREEK RD, PACIFIC COAST HWY
City(OSWCR):	
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.5634
Decim Long(OSWCR):	-117.72
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
1	SSE	0.43	2,264.00	187.86	WATER WELLS

WCR No:	WCR1960-001890
Location:	SALT CREEK RD, PACIFIC COAST HWY
City:	
County:	Orange
Decimal Latitude:	33.5634
Decimal Longitude:	-117.72
Location(OSWCR):	SALT CREEK RD, PACIFIC COAST HWY
City(OSWCR):	
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.5634
Decim Long(OSWCR):	-117.72
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
2	NNE	0.54	2,847.66	315.53	WATER WELLS

WCR No:	WCR2000-011663
Location:	ALICIA PKWY, HOLLY OAK
City:	Aliso Viejo
County:	Orange
Decimal Latitude:	33.5775
Decimal Longitude:	-117.72
Location(OSWCR):	ALICIA PKWY, HOLLY OAK
City(OSWCR):	Aliso Viejo
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.5775
Decim Long(OSWCR):	-117.72
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
2	NNE	0.54	2,847.66	315.53	WATER WELLS

WCR No:	WCR2001-013203

Wells and Additional Sources Detail Report

Location:	s/o Pacific Park Dr, w/o Alicia Parkway
City:	Aliso Viejo
County:	Orange
Decimal Latitude:	33.5775
Decimal Longitude:	-117.72
Location(OSWCR):	s/o Pacific Park Dr, w/o Alicia Parkway
City(OSWCR):	Aliso Viejo
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.5775
Decim Long(OSWCR):	-117.72
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.95	5,013.71	206.66	WATER WELLS

WCR No:	WCR2018-003504
Location:	26996 LA PAZ RD
City:	ALISO VIEJO
County:	Orange
Decimal Latitude:	33.5711
Decimal Longitude:	-117.707
Location(OSWCR):	26996 LA PAZ RD
City(OSWCR):	ALISO VIEJO
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.5711
Decim Long(OSWCR):	-117.707
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.95	5,013.71	206.66	WATER WELLS

WCR No:	WCR2018-003507
Location:	26996 LA PAZ RD
City:	ALISO VIEJO
County:	Orange
Decimal Latitude:	33.5711
Decimal Longitude:	-117.707
Location(OSWCR):	26996 LA PAZ RD
City(OSWCR):	ALISO VIEJO
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.5711
Decim Long(OSWCR):	-117.707
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB

4	E	0.95	5,013.71	206.66	WATER WELLS

WCR No:	WCR2018-003499
Location:	26996 LA PAZ RD
City:	ALISO VIEJO
County:	Orange
Decimal Latitude:	33.5711
Decimal Longitude:	-117.707
Location(OSWCR):	26996 LA PAZ RD
City(OSWCR):	ALISO VIEJO
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.5711
Decim Long(OSWCR):	-117.707
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.95	5,013.71	206.66	WATER WELLS

WCR No:	WCR2018-003503
Location:	26996 LA PAZ RD
City:	ALISO VIEJO
County:	Orange
Decimal Latitude:	33.5711
Decimal Longitude:	-117.707
Location(OSWCR):	26996 LA PAZ RD
City(OSWCR):	ALISO VIEJO
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.5711
Decim Long(OSWCR):	-117.707
Data Source:	California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.95	5,013.71	206.66	WATER WELLS

WCR No:	WCR2018-003501
Location:	26996 LA PAZ RD
City:	ALISO VIEJO
County:	Orange
Decimal Latitude:	33.5711
Decimal Longitude:	-117.707
Location(OSWCR):	26996 LA PAZ RD
City(OSWCR):	ALISO VIEJO
County(OSWCR):	Orange
Decimal Lat(OSWCR):	33.5711

Decim Long(OSWCR): -117.707
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.95	5,013.71	206.66	WATER WELLS

WCR No: WCR2018-003506
Location: 26996 LA PAZ RD
City: ALISO VIEJO
County: Orange
Decimal Latitude: 33.5711
Decimal Longitude: -117.707
Location(OSWCR): 26996 LA PAZ RD
City(OSWCR): ALISO VIEJO
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.5711
Decim Long(OSWCR): -117.707
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	E	0.95	5,013.71	206.66	WATER WELLS

WCR No: WCR2018-003505
Location: 26996 LA PAZ RD
City: ALISO VIEJO
County: Orange
Decimal Latitude: 33.5711
Decimal Longitude: -117.707
Location(OSWCR): 26996 LA PAZ RD
City(OSWCR): ALISO VIEJO
County(OSWCR): Orange
Decimal Lat(OSWCR): 33.5711
Decim Long(OSWCR): -117.707
Data Source: California Department of Water Resources - OSWCR(Well Numbers); California Department of Water Resources - Well Completion Reports

Radon Information

This section lists any relevant radon information found for the target property.

Federal EPA Radon Zone for *ORANGE* County: **3**

Zone 1: Counties with predicted average indoor radon screening levels greater than 4 pCi/L
Zone 2: Counties with predicted average indoor radon screening levels from 2 to 4 pCi/L
Zone 3: Counties with predicted average indoor radon screening levels less than 2 pCi/L

Federal Area Radon Information for *ORANGE* County

No Measures/Homes:	31
Geometric Mean:	0.5
Arithmetic Mean:	0.7
Median:	0.6
Standard Deviation:	0.7
Maximum:	2.2
% >4 pCi/L:	0
% >20 pCi/L:	0
Notes on Data Table:	TABLE 1. Screening indoor radon data from the EPA/State Residential Radon Survey of California conducted during 1989-90. Data represent 2-7 day charcoal canister measurements from the lowest level of each home tested.

Appendix

Federal Sources

FEMA National Flood Hazard Layer — **FEMA FLOOD**

The National Flood Hazard Layer (NFHL) data incorporates Flood Insurance Rate Map (FIRM) databases published by the Federal Emergency Management Agency (FEMA), and any Letters Of Map Revision (LOMRs) that have been issued against those databases since their publication date. The FIRM Database is the digital, geospatial version of the flood hazard information shown on the published paper FIRMs. The FIRM Database depicts flood risk information and supporting data used to develop the risk data. The FIRM Database is derived from Flood Insurance Studies (FISs), previously published FIRMs, flood hazard analyses performed in support of the FISs and FIRMs, and new mapping data, where available.

Indoor Radon Data — **INDOOR RADON**

Indoor radon measurements tracked by the Environmental Protection Agency(EPA) and the State Residential Radon Survey.

Public Water Systems Violations and Enforcement Data — **PWSV**

This list of drinking water violations and enforcement actions is sourced from the U.S Environmental Protection Agency's (EPA) Enforcement and Compliance History Online (ECHO) system that incorporates Public Water Systems data from EPA's Safe Drinking Water Information System (SDWIS) database, as part of the national download of Safe Drinking Water Act (SDWA) data. SDWIS contains information on public water systems from the Public Water System Supervision (PWSS) Program, including monitoring, enforcement, and violation data related to requirements established by the SWDA. Address information provided in SWDIS may correspond either with the physical location of the water system, or with a contact address.

Radon Zone Level — **RADON ZONE**

Areas showing the level of Radon Zones (level 1, 2 or 3) by county. This data is maintained by the Environmental Protection Agency (EPA).

Safe Drinking Water Information System (SDWIS) — **SDWIS**

This national download of Safe Drinking Water Act (SDWA) data is sourced from the U.S Environmental Protection Agency's (EPA) Enforcement and Compliance History Online (ECHO) system that incorporates Public Water Systems data from EPA's Safe Drinking Water Information System (SDWIS) database. SDWIS contains information on public water systems from the Public Water System Supervision (PWSS) Program related to requirements established by the Safe Drinking Water Act (SDWA). Address information provided in SWDIS may correspond either with the physical location of the water system, or with a contact address.

Soil Survey Geographic database — **SSURGO**

The Soil Survey Geographic database (SSURGO) contains information about soil as collected by the National Cooperative Soil Survey at the Natural Resources Conservation Service (NRCS). Soil maps outline areas called map units. The map units are linked to soil properties in a database. Each map unit may contain one to three major components and some minor components.

U.S. Fish & Wildlife Service Wetland Data — **US WETLAND**

The U.S. Fish & Wildlife Service Wetland layer represents the approximate location and type of wetlands and deepwater habitats in the United States.

USGS Current Topo — **US TOPO**

US Topo topographic maps are produced by the National Geospatial Program of the U.S. Geological Survey (USGS). The project was launched in late 2009, and the term "US Topo" refers specifically to quadrangle topographic maps published in 2009 and later.

USGS Geology — **US GEOLOGY**

Seamless maps depicting geological information provided by the United States Geological Survey (USGS).

USGS National Water Information System — **FED USGS**

The U.S. Geological Survey's (USGS) National Water Information System (NWIS) is the nation's principal repository of water resources data. The data includes comprehensive information of well-construction details, time-series data for gage height, streamflow, groundwater level, and precipitation and water use data. This NWIS database information is obtained through the Water Quality Data Portal (WQP). The WQP

is a cooperative service sponsored by the USGS, the Environmental Protection Agency (EPA), and the National Water Quality Monitoring Council (NWQMC).

State Sources

Oil and Gas Wells **OGW**

The California Department of Conservation, Geologic Energy Management Division (CalGEM) provides this oil and gas wells dataset. CalGEM makes no warranties, whether expressed or implied, and the data is for informational purposes.

Periodic Groundwater Level Measurement Locations **MONITOR WELLS**

Locations of groundwater level monitoring wells in the Department of Water Resources (DWR)'s Periodic Groundwater Levels dataset. The DWR Periodic Groundwater Levels dataset contains seasonal and long-term groundwater level measurements collected by the Department of Water Resources and cooperating agencies.

Well Completion Reports **WATER WELLS**

List of wells from the Well Completion Reports data made available by the California Department of Water Resources' (DWR) Online System for Well Completion Reports (OSWCR). Please note that the majority of well completion reports have been spatially registered to the center of the 1x1 mile Public Land Survey System section that the well is located in.

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TOPOGRAPHIC MAPS

Project Property:	27081 Aliso Creek Road
	27081 Aliso Creek Road Aliso Viejo CA 92656
Project No:	2450-009
Requested By:	Farallon Consulting, LLC
Order No:	24112101214
Date Completed:	November 23, 2024

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We have searched USGS collections of current topographic maps and historical topographic maps for the project property. Below is a list of maps found for the project property and adjacent area. Maps are from 7.5 and 15 minute topographic map series, if available.

Year	Map Series
2022	7.5
2018	7.5
2015	7.5
1981	7.5
1978	7.5
1974	7.5
1968	7.5
1949	7.5
1948	7.5
1942	15

Topographic Map Symbology for the maps may be available in the following documents:
Pre-1947
Page 223 of 1918 Topographic Instructions
Page 130 of 1928 Topographic Instructions
1947-2009
Topographic Map Symbols
2009-present
US Topo Map Symbols

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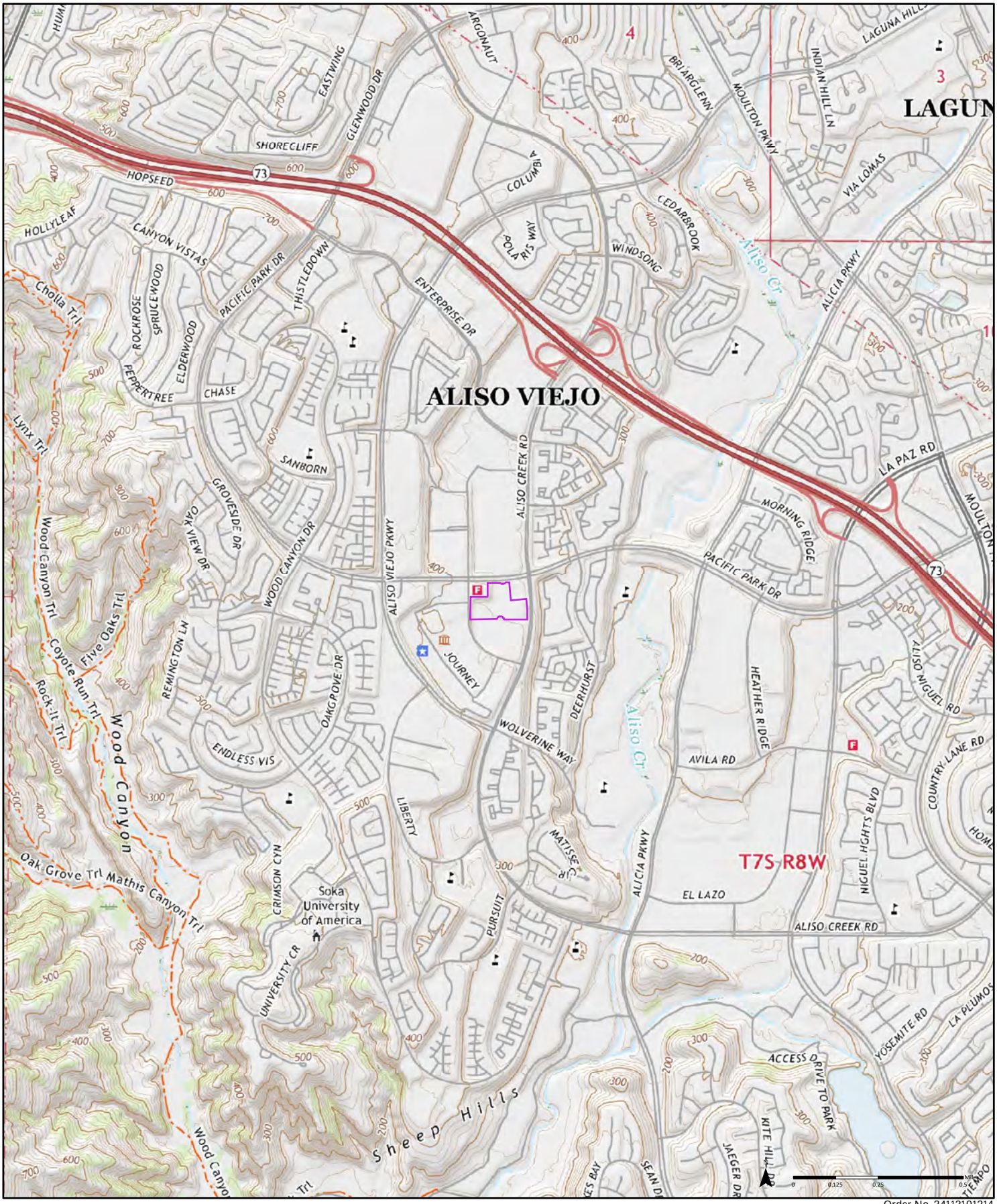
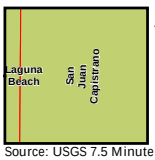


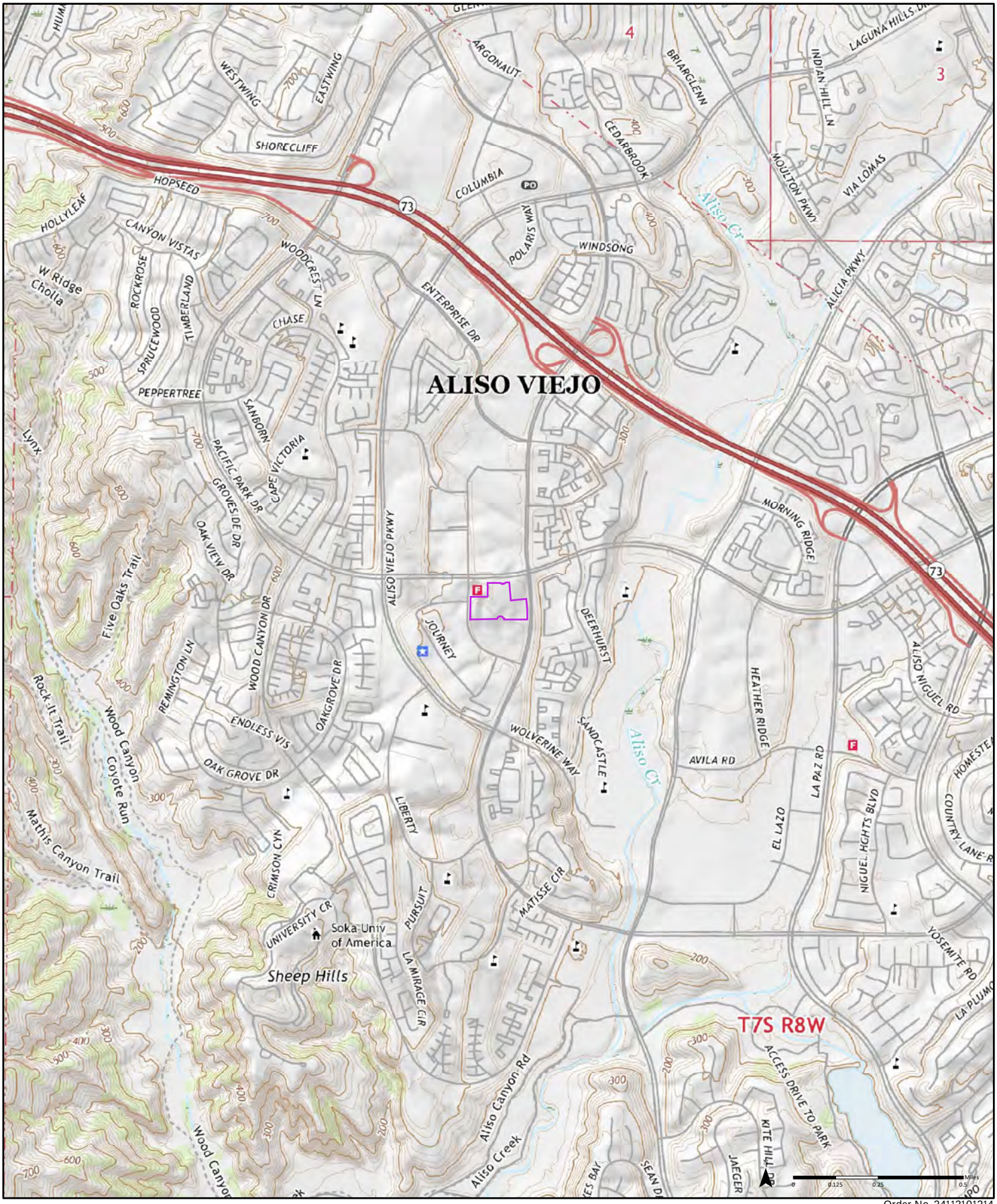
2022

Order No. 24112101214

Available Quadrangle(s): San Juan Capistrano, CA
Laguna Beach, CA



Source: USGS 7.5 Minute Topographic Map

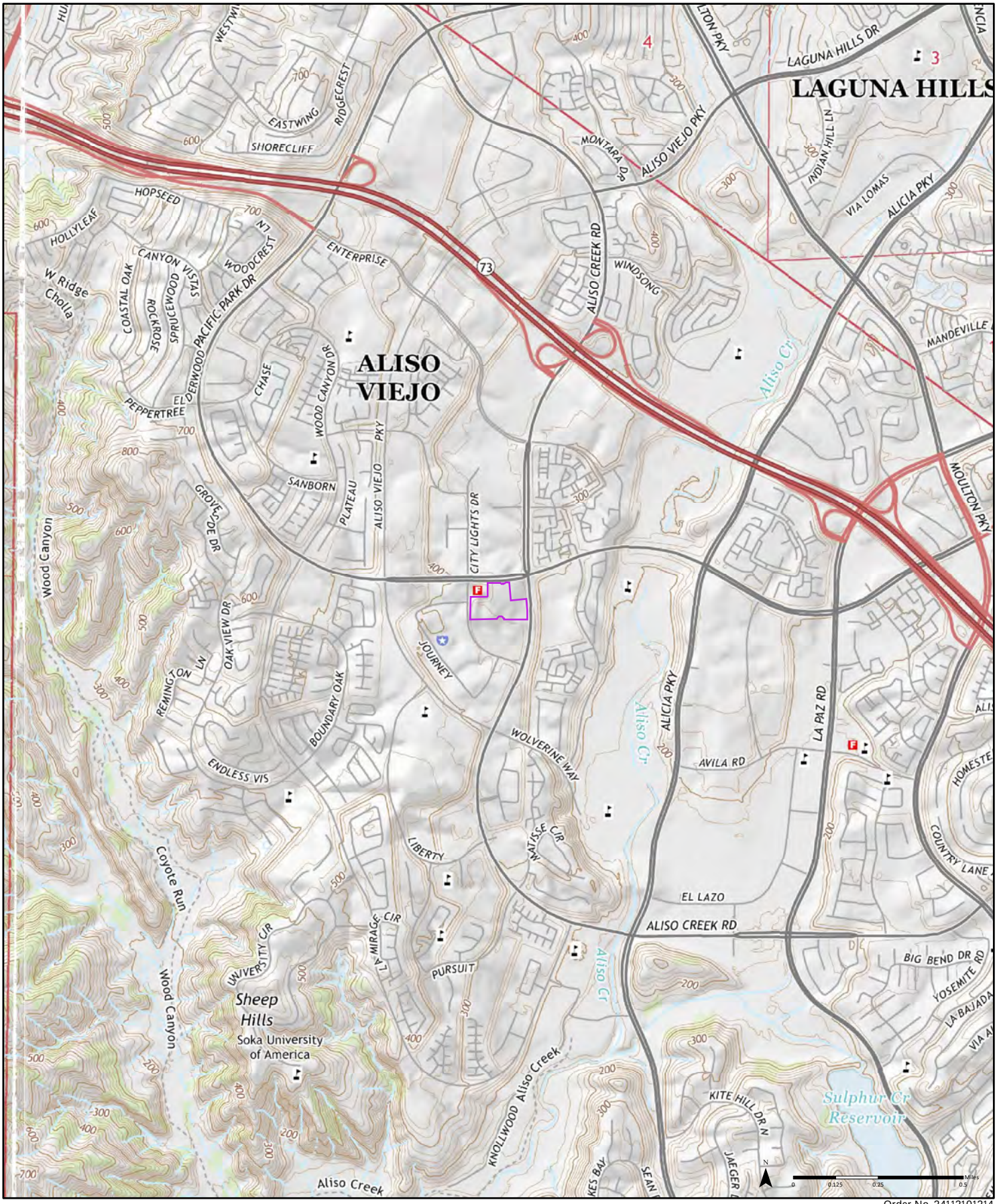


2018

Order No. 24112101214

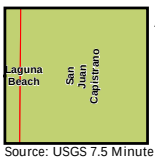
Available Quadrangle(s): San Juan Capistrano, CA
Laguna Beach, CA

Source: USGS 7.5 Minute Topographic Map



2015

Order No. 24112101214



Available Quadrangle(s): San Juan Capistrano, CA
Laguna Beach, CA

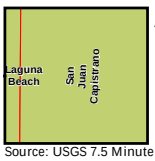
Source: USGS 7.5 Minute Topographic Map

1981

(1-1981) *Aerial Photo Year: 1978*
Photo Revision Year: 1981

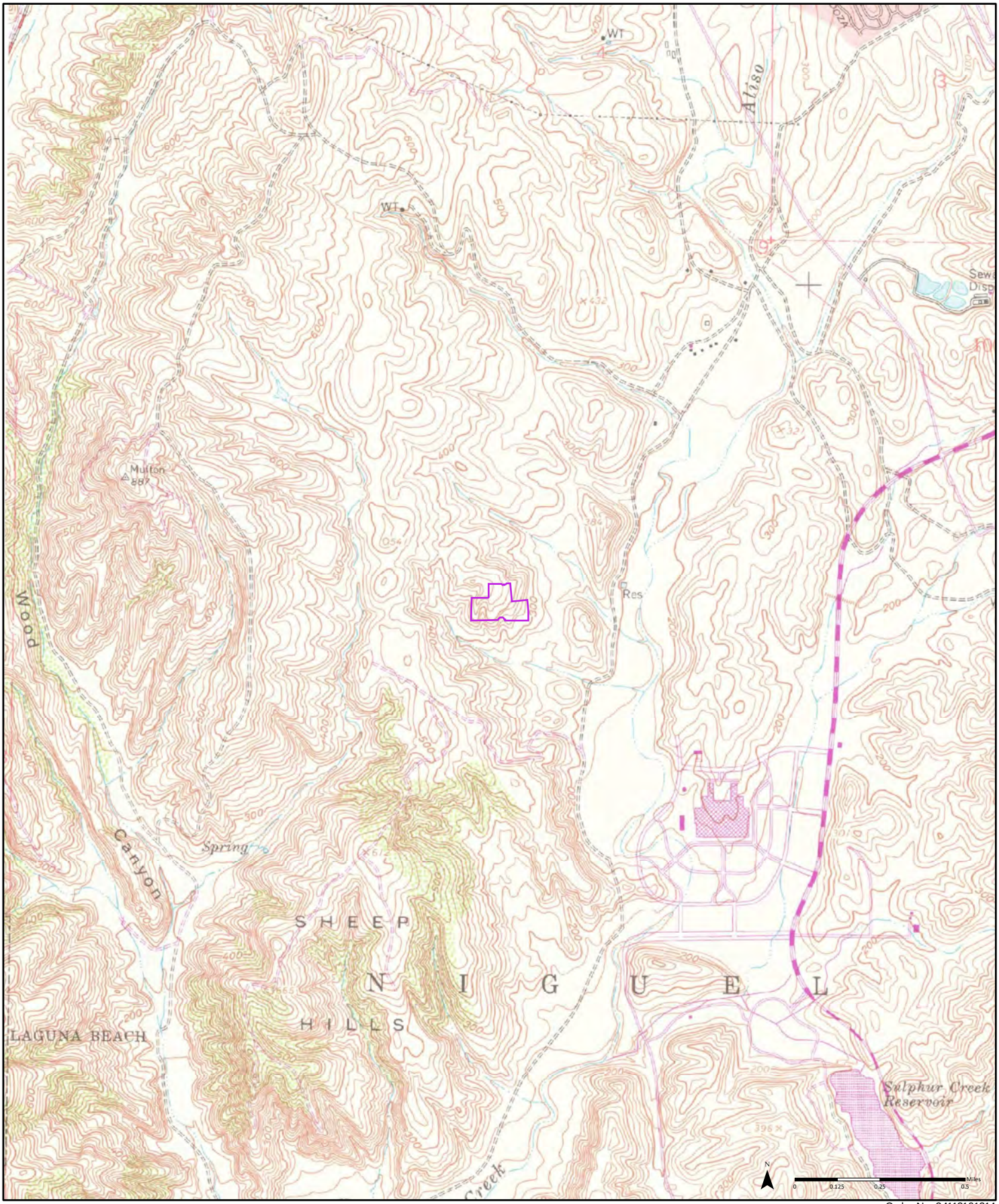
(2-1981) *Aerial Photo Year: 1977*

Order No. 24112101214



Available Quadrangle(s): San Juan Capistrano, CA(2-1981)
Laguna Beach, CA(1-1981)

Source: USGS 7.5 Minute Topographic Map

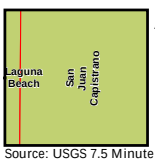


1978

(1-1974) *Aerial Photo Year: 1974*

(2-1978) *Aerial Photo Year: 1974*
Photo Revision Year: 1978

Order No. 24112101214



Available Quadrangle(s): San Juan Capistrano, CA(2-1978)
Laguna Beach, CA(1-1974)

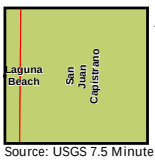
Source: USGS 7.5 Minute Topographic Map

1974

(1-1974) *Aerial Photo Year: 1974*

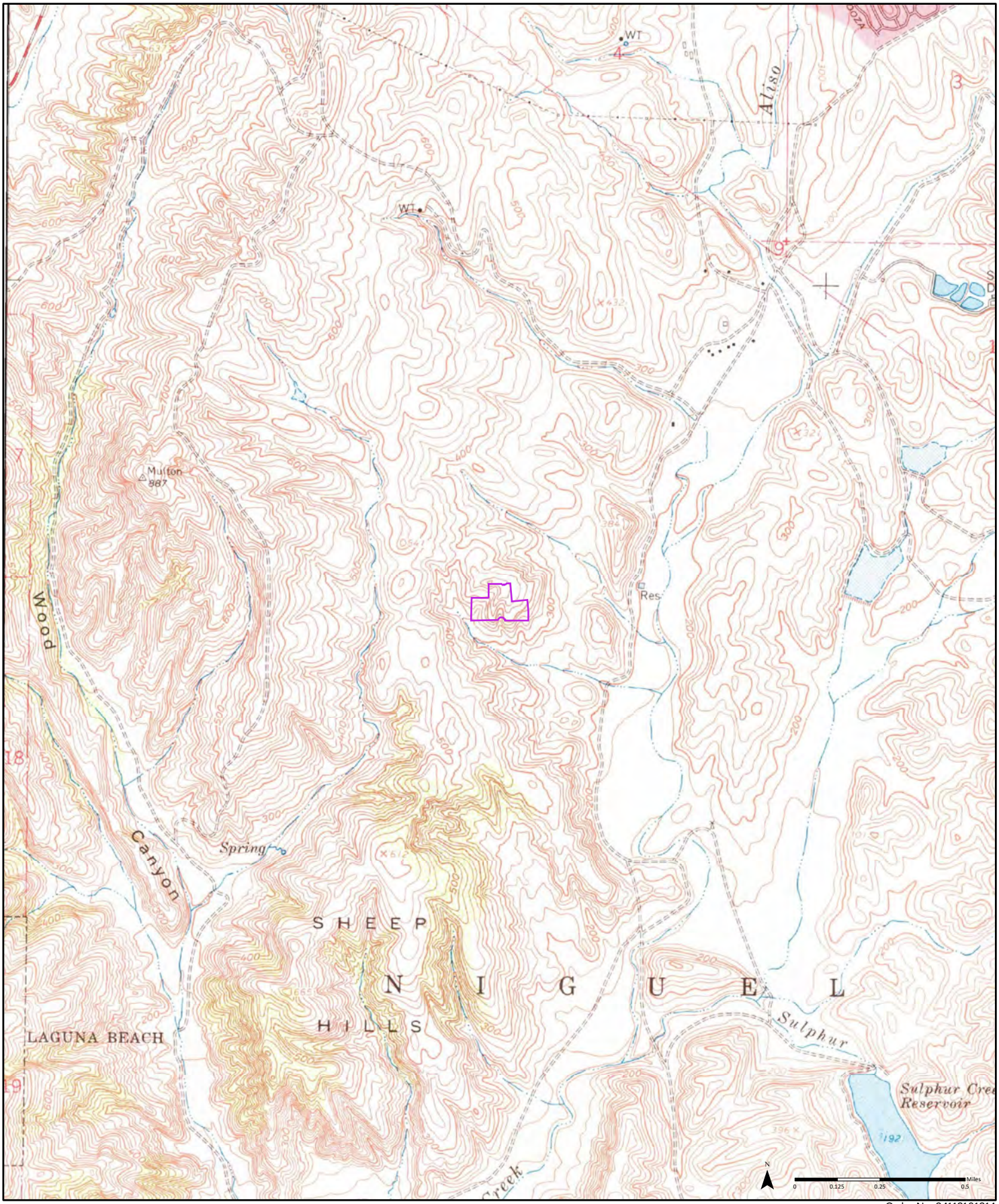
(2-1974) *Aerial Photo Year: 1974*

Order No. 24112101214



Available Quadrangle(s): San Juan Capistrano, CA(2-1974)
Laguna Beach, CA(1-1974)

Source: USGS 7.5 Minute Topographic Map

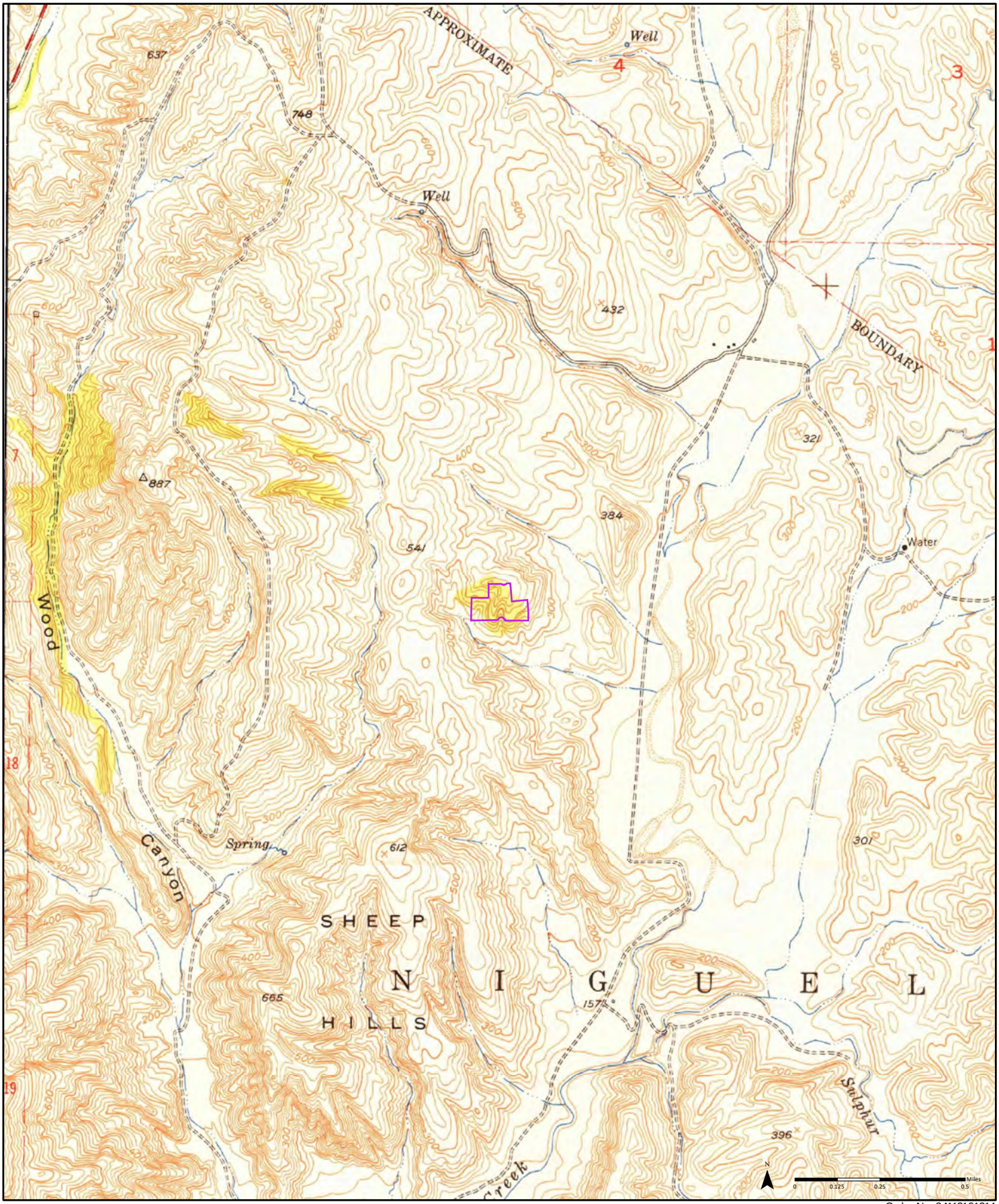


1968 (1-1949) *Aerial Photo Year: 1946* (2-1968) *Aerial Photo Year: 1967*

Order No. 24112101214

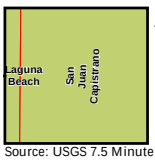
Available Quadrangle(s): San Juan Capistrano, CA(2-1968)
Laguna Beach, CA(1-1949)

Source: USGS 7.5 Minute Topographic Map



1949 (1-1949) *Aerial Photo Year: 1946* (2-1949) *Aerial Photo Year: 1946*

Order No. 24112101214



Available Quadrangle(s): San Juan Capistrano, CA(2-1949)
Laguna Beach, CA(1-1949)

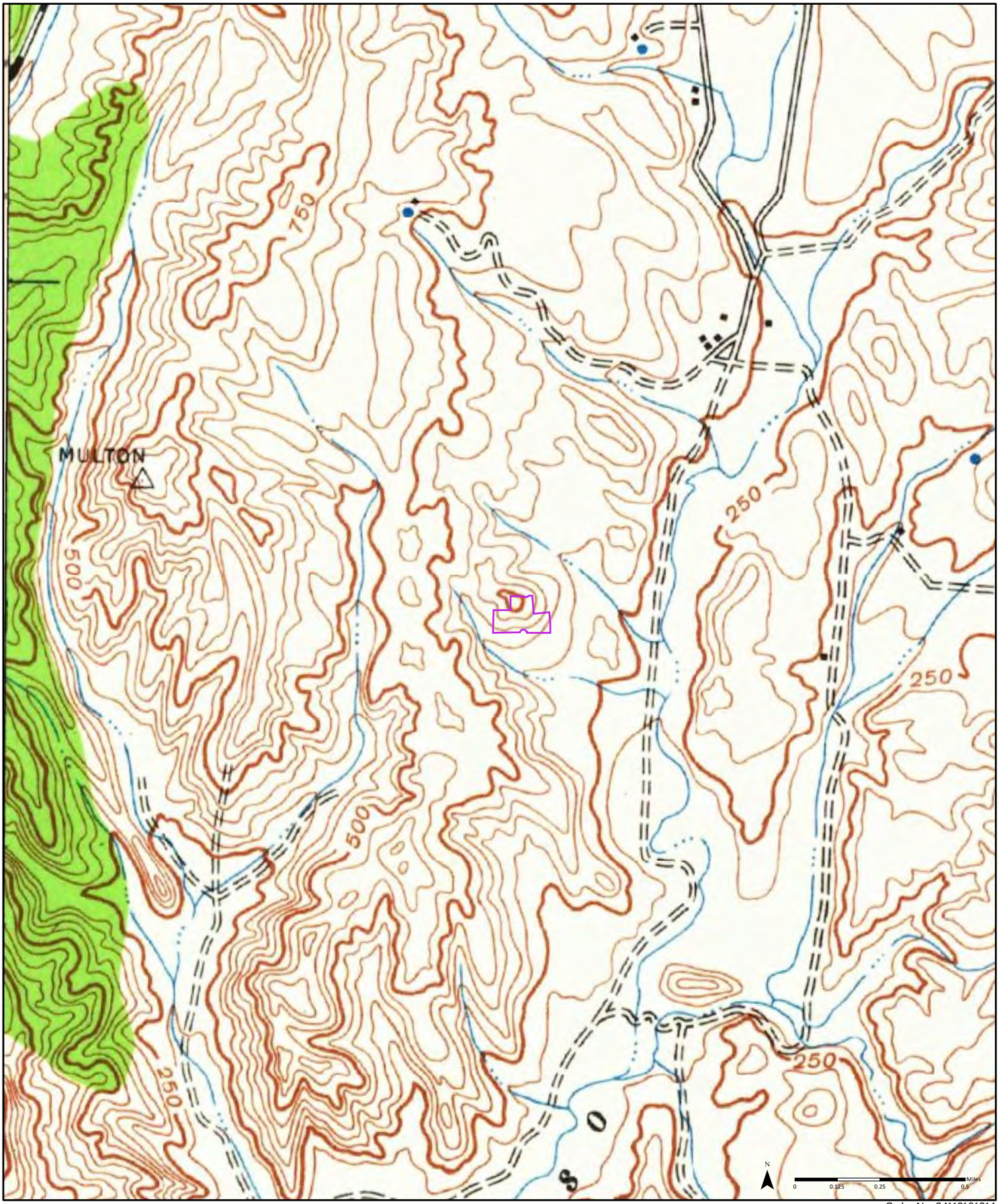
Source: USGS 7.5 Minute Topographic Map

1948 *(1-1948) Aerial Photo Year: 1946* *(2-1948) Aerial Photo Year: 1946*

Order No. 24112101214

Available Quadrangle(s): San Juan Capistrano, CA(1-1948)
Laguna Beach, CA(2-1948)

Source: USGS 7.5 Minute Topographic Map



1942 (1-1942) *Aerial Photo Year: 1939* (2-1942) *Aerial Photo Year: 1939*

Order No. 24112101214

Available Quadrangle(s): Santiago Peak, CA(1-1942)
Santa Ana, CA(2-1942)

Source: USGS 15 Minute Topographic Map

APPENDIX E
ENVIRONMENTAL DATABASE REPORT

PHASE I
ENVIRONMENTAL SITE ASSESSMENT REPORT
27061, 27071, and 27081 Aliso Creek Road
Aliso Viejo, California

Farallon PN: 2450-009

DATABASE REPORT

Project Property:	*27081 Aliso Creek Road* *27081 Aliso Creek Road* *Aliso Viejo CA 92656*
Project No:	*2450-009*
Report Type:	*Database Report*
Order No:	*24112101214*
Requested by:	*Farallon Consulting, LLC*
Date Completed:	*November 25, 2024*

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Executive Summary

Property Information:

Project Property:		*27081 Aliso Creek Road* *27081 Aliso Creek Road Aliso Viejo CA 92656*
Project No:		*2450-009*
Coordinates:		
	Latitude:	*33.56957974*
	Longitude:	*-117.72483104*
	UTM Northing:	*3,714,668.80*
	UTM Easting:	*432,727.01*
	UTM Zone:	*11S*
Elevation:		*355 FT*

Order Information:

Order No:	*24112101214*
Date Requested:	*November 21, 2024*
Requested by:	*Farallon Consulting, LLC*
Report Type:	*Database Report*

Historicals/Products:

Aerial Photographs	*Historical Aerials (with Project Boundaries)*
City Directory Search	*Smart CD Search*
ERIS Xplorer	*ERIS Xplorer*
Excel Add-On	*Excel Add-On*
Fire Insurance Maps	*US Fire Insurance Maps*
Physical Setting Report (PSR)	*Physical Setting Report (PSR)*
Topographic Map	*Topographic Maps*

Executive Summary: Report Summary

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
Standard Environmental Records								
Federal								
NPL	Y	1	0	0	0	0	0	0
PROPOSED NPL	Y	1	0	0	0	0	0	0
DELETED NPL	Y	0.5	0	0	0	0	-	0
SEMS	Y	0.5	0	0	0	0	-	0
ODI	Y	0.5	0	0	0	0	-	0
SEMS ARCHIVE	Y	0.5	0	0	0	0	-	0
CERCLIS	Y	0.5	0	0	0	0	-	0
IODI	Y	0.5	0	0	0	0	-	0
CERCLIS NFRAP	Y	0.5	0	0	0	0	-	0
CERCLIS LIENS	Y	PO	0	-	-	-	-	0
RCRA CORRACTS	Y	1	0	0	0	0	0	0
RCRA TSD	Y	0.5	0	**1**	0	**2**	-	**3**
RCRA LQG	Y	0.25	0	**3**	0	-	-	**3**
RCRA SQG	Y	0.25	0	**3**	**1**	-	-	**4**
RCRA VSQG	Y	0.25	0	0	0	-	-	0
RCRA NON GEN	Y	0.25	0	**15**	**25**	-	-	**40**
RCRA CONTROLS	Y	0.5	0	0	0	0	-	0
FED ENG	Y	0.5	0	0	0	0	-	0
FED INST	Y	0.5	0	0	0	0	-	0
LUCIS	Y	0.5	0	0	0	0	-	0
NPL IC	Y	0.5	0	0	0	0	-	0
ERNS 1982 TO 1986	Y	PO	0	-	-	-	-	0
ERNS 1987 TO 1989	Y	PO	0	-	-	-	-	0
ERNS	Y	PO	0	-	-	-	-	0
FED BROWNFIELDS	Y	0.5	0	0	0	0	-	0
FEMA UST	Y	0.25	0	0	0	-	-	0
FRP	Y	0.25	0	0	0	-	-	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
DELISTED FRP	Y	0.25	0	0	0	-	-	0
HIST GAS STATIONS	Y	0.25	0	0	0	-	-	0
REFN	Y	0.25	0	0	0	-	-	0
BULK TERMINAL	Y	0.25	0	0	0	-	-	0
SEMS LIEN	Y	PO	0	-	-	-	-	0
SUPERFUND ROD	Y	1	0	0	0	0	0	0
DOE FUSRAP	Y	1	0	0	0	0	0	0
State								
RESPONSE	Y	1	0	0	0	0	0	0
ENVIROSTOR	Y	1	0	0	0	0	0	0
DELISTED ENVS	Y	1	0	0	0	0	0	0
SWF/LF	Y	0.5	0	0	0	0	-	0
SWRCB SWF	Y	0.5	0	0	0	0	-	0
WMUD	Y	0.5	0	0	0	0	-	0
HWP	Y	1	0	0	0	0	0	0
SWAT	Y	0.5	0	0	0	0	-	0
C&D DEBRIS RECY	Y	0.5	0	0	**1**	0	-	**1**
RECYCLING	Y	0.5	0	**1**	0	0	-	**1**
PROCESSORS	Y	0.5	0	0	0	0	-	0
CONTAINER RECY	Y	0.5	0	0	0	0	-	0
LDS	Y	0.5	0	0	0	0	-	0
LUST	Y	0.5	0	0	**1**	0	-	**1**
DELISTED LST	Y	0.5	0	0	0	0	-	0
UST	Y	0.25	0	**1**	**2**	-	-	**3**
UST CLOSURE	Y	0.5	0	0	0	0	-	0
HHSS	Y	0.25	0	**1**	0	-	-	**1**
UST SWEEPS	Y	0.25	0	**3**	0	-	-	**3**
AST	Y	0.25	0	**1**	**2**	-	-	**3**
AST SWRCB	Y	0.25	0	0	0	-	-	0
TANK OIL GAS	Y	0.25	0	0	0	-	-	0
DELISTED TNK	Y	0.25	0	**2**	**3**	-	-	**5**
CERS TANK	Y	0.25	0	**2**	**2**	-	-	**4**
DELISTED CTNK	Y	0.25	0	0	0	-	-	0
HIST TANK	Y	0.25	0	**1**	0	-	-	**1**

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
LUR	Y	0.5	0	0	0	0	-	0
CALSITES	Y	0.5	0	0	0	0	-	0
HLUR	Y	0.5	0	0	0	0	-	0
DEED	Y	0.5	0	0	0	0	-	0
VCP	Y	0.5	0	0	0	0	-	0
CLEANUP SITES	Y	0.5	0	0	0	0	-	0
DELISTED CLEANUP	Y	0.5	0	0	0	0	-	0
DELISTED COUNTY	Y	0.25	0	0	**1**	-	-	**1**
Tribal								
INDIAN LUST	Y	0.5	0	0	0	0	-	0
INDIAN UST	Y	0.25	0	0	0	-	-	0
DELISTED INDIAN LST	Y	0.5	0	0	0	0	-	0
DELISTED INDIAN UST	Y	0.25	0	0	0	-	-	0
County								
ICP ORANGE	Y	0.25	0	0	0	-	-	0
LOP ORANGE	Y	0.5	0	0	**1**	0	-	**1**
NPUT ORANGE	Y	0.5	0	0	0	0	-	0
UST ORANGE	Y	0.25	0	**1**	**3**	-	-	**4**
AST ORANGE	Y	0.25	0	**1**	**2**	-	-	**3**
UST CLP ANAHEIM	Y	0.5	0	0	0	0	-	0
UST ANAHEIM	Y	0.25	0	0	0	-	-	0
AST ANAHEIM	Y	0.25	0	0	0	-	-	0
Additional Environmental Records								
Federal								
PFAS GHG	Y	0.5	0	0	0	0	-	0
OSC RESPONSE	Y	0.125	0	0	-	-	-	0
FINDS/FRS	Y	PO	0	-	-	-	-	0
TRIS	Y	PO	0	-	-	-	-	0
PFAS NPL	Y	0.5	0	0	0	0	-	0
PFAS FED SITES	Y	0.5	0	0	0	0	-	0
PFAS SSEHRI	Y	0.5	0	0	0	0	-	0
PFAS ERNS	Y	0.5	0	0	0	0	-	0
PFAS NPDES	Y	0.5	0	0	0	0	-	0
PFAS TRI	Y	0.5	0	0	0	0	-	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
PFAS WATER	Y	0.5	0	0	0	0	-	0
PFAS TSCA	Y	0.5	0	0	0	0	-	0
PFAS E-MANIFEST	Y	0.5	0	0	0	0	-	0
PFAS IND	Y	0.5	0	0	0	**6**	-	**6**
HMIRS	Y	0.125	0	0	-	-	-	0
NCDL	Y	0.125	0	0	-	-	-	0
TSCA	Y	0.125	0	0	-	-	-	0
HIST TSCA	Y	0.125	0	0	-	-	-	0
FTTS ADMIN	Y	PO	0	-	-	-	-	0
FTTS INSP	Y	PO	0	-	-	-	-	0
PRP	Y	PO	0	-	-	-	-	0
SCRD DRYCLEANER	Y	0.5	0	0	0	0	-	0
ICIS	Y	PO	0	-	-	-	-	0
FED DRYCLEANERS	Y	0.25	0	**2**	0	-	-	**2**
DELISTED FED DRY	Y	0.25	0	0	0	-	-	0
FUDS	Y	1	0	0	0	0	0	0
FUDS MRS	Y	1	0	0	0	0	0	0
FORMER NIKE	Y	1	0	0	0	0	0	0
PIPELINE INCIDENT	Y	PO	0	-	-	-	-	0
MLTS	Y	PO	0	-	-	-	-	0
HIST MLTS	Y	PO	0	-	-	-	-	0
MINES	Y	0.25	0	0	0	-	-	0
SMCRA	Y	1	0	0	0	0	0	0
MRDS	Y	1	0	0	0	0	0	0
LM SITES	Y	1	0	0	0	0	0	0
ALT FUELS	Y	0.25	0	**2**	0	-	-	**2**
CONSENT DECREES	Y	0.25	0	0	0	-	-	0
AFS	Y	PO	0	-	-	-	-	0
SSTS	Y	0.25	0	0	0	-	-	0
PCBT	Y	0.5	0	0	0	0	-	0
PCB	Y	0.5	0	0	0	0	-	0
POWER PLANTS	Y	0.125	0	0	-	-	-	0
State								
PFAS SAMPLING	Y	0.5	0	0	0	0	-	0
DRYCLEANERS	Y	0.25	0	**7**	0	-	-	**7**

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
DELISTED DRYCLEANERS	Y	0.25	0	0	0	-	-	0
DRYC GRANT	Y	0.25	0	0	0	-	-	0
PFAS GT CLEANUPS	Y	0.5	0	0	0	0	-	0
PFAS GW	Y	0.5	0	0	0	0	-	0
PFAS INVEST	Y	0.5	0	0	0	0	-	0
HWSS CLEANUP	Y	0.5	0	0	0	0	-	0
TOXIC PITS	Y	1	0	0	0	0	0	0
DTSC HWF	Y	0.5	0	0	0	0	-	0
INSP COMP ENF	Y	1	0	0	0	0	0	0
SCH	Y	1	0	0	0	0	0	0
CHMIRS	Y	PO	0	-	-	-	-	0
HIST CHMIRS	Y	PO	0	-	-	-	-	0
HAZNET	Y	PO	0	**2**	-	-	-	**2**
HAZ GEN	Y	PO	0	**3**	-	-	-	**3**
HAZ TSD	Y	0.5	0	0	0	0	-	0
HIST MANIFEST	Y	PO	0	-	-	-	-	0
HW TRANSPORT	Y	0.125	0	0	-	-	-	0
WASTE TIRE	Y	PO	0	-	-	-	-	0
MEDICAL WASTE	Y	0.25	0	0	0	-	-	0
HIST CORTESE	Y	0.5	0	0	0	0	-	0
CDO/CAO	Y	0.5	0	0	0	0	-	0
CERS HAZ	Y	0.125	0	**11**	-	-	-	**11**
DELISTED HAZ	Y	0.5	0	**1**	0	**1**	-	**2**
GEOTRACKER	Y	0.125	0	0	-	-	-	0
MINE	Y	1	0	0	0	0	0	0
LIEN	Y	PO	0	-	-	-	-	0
WASTE DISCHG	Y	0.25	0	0	0	-	-	0
EMISSIONS	Y	0.25	0	**2**	**5**	-	-	**7**
CDL	Y	0.125	0	0	-	-	-	0
Tribal	***No Tribal additional environmental record sources available for this State.***							
County								
HW ORANGE	Y	0.125	0	**8**	-	-	-	**8**
Total:			*0*	***74***	***49***	***9***	*0*	***132***

**** PO – Property Only***
**** 'Property and adjoining properties' database search radii are set at 0.25 miles.***

Executive Summary: Site Report Summary - Project Property

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number

No records found in the selected databases for the project property.

Executive Summary: Site Report Summary - Surrounding Properties

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
1	CERS HAZ	AT&T California - LEX27	53 1/2 JOURNEY ALISO VIEJO CA 92656	W	0.01 / 36.94	35	42
2	HAZNET	KILROY REALTY	27111 ALISO CREEK RD ALISO VIEJO CA 926560000	ESE	0.01 / 73.99	-12	44
3	DELISTED TNK	ORANGE COUNTY FIRE STATION #57	57 JOURNEY ALISO VIEJO CA 92656	WNW	0.02 / 95.80	38	44
3	AST ORANGE	Orange County Fire Authority Station #57	57 Journey Aliso Viejo, Ca 92656-3318 CA ***Establishment ID:*** FA0024299	WNW	0.02 / 95.80	38	44
3	AST		57 JOURNEY ALISO VIEJO CA 92656	WNW	0.02 / 95.80	38	44
3	HAZNET	ORANGE COUNTY FIRE AUTHORITY STATION 57	57 JOURNEY ALISO VIEJO CA 926560000	WNW	0.02 / 95.80	38	44
3	CERS TANK	ORANGE COUNTY FIRE AUTHORITY Station #57 Aliso Viejo	57 JOURNEY ALISO VIEJO CA 92656 ***Site ID:*** 361811	WNW	0.02 / 95.80	38	45
3	UST SWEEPS	ALISO VIEJO FIRE STATION #57	57 JOURNEY ALISO VIEJO CA ***C C | Status:*** A30-000-11477 | ACTIVE ***Tank ID:*** 000001, 000002	WNW	0.02 / 95.80	38	51
3	HAZ GEN	ORANGE COUNTY FIRE AUTHORITY	57 JOURNEY ALISO VIEJO CA 926560000	WNW	0.02 / 95.80	38	52
3	HAZ GEN	ORANGE COUNTY FIRE AUTHORITY	57 JOURNEY ALISO VIEJO CA 926560000	WNW	0.02 / 95.80	38	52
3	HAZ GEN	ORANGE CO FIRE STATION 57	57 GOURNEY ALISO VIEJO CA 926560000	WNW	0.02 / 95.80	38	52
4	RCRA SQG	SHELL SERVICE STATION	27055 ALISO CREEK SAP #121780 ALISO VIEJO CA 92550	ENE	0.03 / 135.75	-12	52

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
			EPA Handler ID: CAR000080630				
4	DELISTED TNK	TEXACO (121780)	27055 ALISO CREEK RD ALISO VIEJO CA 92656	ENE	0.03 / 135.75	-12	55
4	UST ORANGE	7-Eleven Inc #43122	27055 Aliso Creek Rd Aliso Viejo, Ca 92656-3399 Aliso Viejo CA ***FA No:*** FA0049726	ENE	0.03 / 135.75	-12	55
4	HW ORANGE	7-Eleven Inc #43122	27055 Aliso Creek Rd Aliso Viejo, Ca 92656-3399 Aliso Viejo CA 92656-3399	ENE	0.03 / 135.75	-12	55
4	UST	7-ELEVEN INC. #43122	27055 ALISO CREEK ROAD ALISO VIEJO CA 92656 ***Facility ID:*** FA0049726 ***Tank ID No. | Tank Status | Tank Closure Date:*** 2 | Confirmed/Updated Information | , 1 | Confirmed/Updated Information |	ENE	0.03 / 135.75	-12	55
4	CERS TANK	7-ELEVEN INC. #43122	27055 ALISO CREEK ROAD ALISO VIEJO CA 92656 ***Site ID:*** 160254	ENE	0.03 / 135.75	-12	56
4	RCRA NON GEN	TESORO SHELL 68503	27055 ALISO CREEK RD ALISO VIEJO CA 92656-3399 ***EPA Handler ID:*** CAL000321759	ENE	0.03 / 135.75	-12	76
4	EMISSIONS	TESORO REFINING & MKTG ALISO CREEK SHEL	27055 ALISO CREEK RD ALISO VIEJO CA 92656	ENE	0.03 / 135.75	-12	77
4	RCRA NON GEN	TESORO SIERRA PROPERTIES LLC #68503	27055 ALISO CREEK RD ALISO VIEJO CA 92656 ***EPA Handler ID:*** CAL000460661	ENE	0.03 / 135.75	-12	78
4	RCRA NON GEN	7-ELEVEN 43122	27055 ALISO CREEK RD ALISO VIEJO CA 92656 ***EPA Handler ID:*** CAL000471514	ENE	0.03 / 135.75	-12	79
4	EMISSIONS	7-ELEVEN INC #43122	27055 ALISO CREEK RD ALISO VIEJO CA 92656	ENE	0.03 / 135.75	-12	80
5	RCRA NON GEN	SEA VIEW PEDIATRICS	2 JOURNEY #100 ALISO VIEJO CA 92653 ***EPA Handler ID:*** CAC003127280	W	0.03 / 145.23	40	80
6	RCRA NON GEN	ACTA LABS INC	27101 ALISO CREEK RD ALISO VIEJO CA 92656 ***EPA Handler ID:*** CAD983663691	SE	0.04 / 187.53	-10	82

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
7	HW ORANGE	Staar Surgical	27121 Aliso Creek Rd Ste 100 Aliso Viejo, Ca 92656-3364 Aliso Viejo CA 92656-3364	SE	0.05 / 276.76	-8	82
7	CERS HAZ	STAAR SURGICAL	27121 ALISO CREEK RD STE 100 ALISO VIEJO CA 92656	SE	0.05 / 276.76	-8	83
7	RCRA NON GEN	STAAR SURGICAL CO.	27121 ALISO CREEK RD STE 105 ALISO VIEJO CA 92656-3364 ***EPA Handler ID:*** CAL000122201	SE	0.05 / 276.76	-8	88
8	RCRA SQG	PACIFIC PLAZA CLEANERS	27131 ALISO CREEK RD NUMBER 115 ALISO VIEJO CA 92656 ***EPA Handler ID:*** CA0000137612	SE	0.06 / 320.33	-8	90
8	DRYCLEANERS	PACIFIC PLAZA CLEANERS	27131 ALISO CREEK RD STE 115 ALISO VIEJO CA	SE	0.06 / 320.33	-8	90
8	DRYCLEANERS	PACIFIC PLAZA CLEANERS	27131 ALISO CREEK RD ALISO VIEJO CA	SE	0.06 / 320.33	-8	91
8	DRYCLEANERS	PACIFIC PLAZA CLEANERS	27131 ALISO CREEK RD STE 115 ALISO VIEJO CA	SE	0.06 / 320.33	-8	91
8	DRYCLEANERS	PACIFIC PLAZA CLEANERS	27131 ALISO CREEK RD #115 ALISO VIEJO CA	SE	0.06 / 320.33	-8	92
8	HW ORANGE	Pacific Plaza Cleaners	27131 Aliso Creek Rd Ste 115 Aliso Viejo, Ca 92656-3361 Aliso Viejo CA 92656-3361	SE	0.06 / 320.33	-8	92
8	RCRA NON GEN	FAMILY & SPORTS CHIROPRACTIC	27131 ALISO CREEK RD__STE 105 ALISO VIEJO CA 92656-0000 ***EPA Handler ID:*** CAL000169937	SE	0.06 / 320.33	-8	92
8	RCRA NON GEN	PACIFIC PLAZA CLEANERS	27131 ALISO CREEK RD STE 115 ALISO VIEJO CA 92656-3361 ***EPA Handler ID:*** CAL000389606	SE	0.06 / 320.33	-8	93
8	FED DRYCLEANERS	PACIFIC PLAZA CLEANERS	27131 ALISO CREEK RD ALISO VIEJO CA 92656 ***FRS Facility ID:*** 110002614127	SE	0.06 / 320.33	-8	94
9	HW ORANGE	Hampton Research Corp	34 Journey Aliso Viejo, Ca 92656-3317 Aliso Viejo CA 92656-3317	SW	0.07 / 359.65	25	95

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
9	RCRA NON GEN	HAMPTON RESEARCH CORP	34 JOURNEY ALISO VIEJO CA 92656 ***EPA Handler ID:*** CAL000271845	SW	0.07 / 359.65	25	95
10	CERS HAZ	Verizon Wireless: Aliso Viejo	27141 ALISO CREEK ROAD, #245 ALISO VIEJO CA 92656	SE	0.07 / 374.15	-7	96
11	CERS HAZ	Del Taco #937	26951 ALISO CREEK RD ALISO VIEJO CA 92656	NNE	0.07 / 376.02	-6	100
12	RCRA LQG	RALPHS GROCERY COMPANY #755	26901 ALISO CREEK RD ALISO VIEJO CA 92656 ***EPA Handler ID:*** CAR000259143	NNW	0.08 / 410.00	3	104
12	HW ORANGE	Ralphs Grocery #755	26901 Aliso Creek Rd Aliso Viejo, Ca 92656-3393 Aliso Viejo CA 92656-3393	NNW	0.08 / 410.00	3	106
12	RCRA LQG	RALPHS #755	26901 ALISO CREEK RD ALISO VIEJO CA 92656 ***EPA Handler ID:*** CAL000321032	NNW	0.08 / 410.00	3	106
12	CERS HAZ	Ralphs Grocery #755	26901 ALISO CREEK ROAD ALISO VIEJO CA 92656	NNW	0.08 / 410.00	3	109
12	RECYCLING	Ponce Recycling	26901 Aliso Creek Rd Aliso Viejo CA 92656	NNW	0.08 / 410.00	3	114
13	RCRA SQG	PACIFIC BELL TELEPHONE COMPANY DBA AT&T CALIFORNIA	27151 ALISO CREEK RD LAGUNA NIGUEL CA 92677 ***EPA Handler ID:*** CAT080025596	SE	0.08 / 417.70	-4	115
13	HHSS	PACIFIC BELL LE-287	27151 ALISO CREEK RD LAGUNA NIGUEL CA 92677	SE	0.08 / 417.70	-4	117
13	HIST TANK	PACIFIC BELL LE-287	27151 ALISO CREEKO RD LAGUNA NIGUEL CA	SE	0.08 / 417.70	-4	117
13	UST SWEEPS	PACIFIC BELL	27151 ALISO CREEK RD LAGUNA NIGUEL CA ***C C | Status:*** I30-000-7074 | INACTIVE ***Tank ID:*** 000001	SE	0.08 / 417.70	-4	117
13	UST SWEEPS	PACIFIC BELL	27151 ALISO CREEK RD LAGUNA NIGUEL CA	SE	0.08 / 417.70	-4	117

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
			***C C	Status:*** A30-000-7074 | ACTIVE ***Tank ID:*** 000002			
14	CERS HAZ	OC Service Group LLC DBA Chick fil A Aliso Viejo	26861 ALISO CREEK RD ALISO VIEJO CA 92656	NNE	0.10 / 509.87	-6	118
15	RCRA NON GEN	LE/PHAM INC. DBA SOUTH MARINA PHARMACY	5 JOURNEY STE 140A ALISO VIEJO CA 92656 ***EPA Handler ID:*** CAC003218358	WNW	0.11 / 564.45	55	122
16	CERS HAZ	Luna Grill LG14	26921 ALISO CREEK RD STE E105 ALISO VIEJO CA 92656	NNW	0.11 / 574.71	2	123
16	DELISTED HAZ	Subway #19369	26921 ALISO CREEK RD STE C ALISO VIEJO CA 92656	NNW	0.11 / 574.71	2	127
16	CERS HAZ	The Habit Burger Grill	26921 ALISO CREEK RD STE A ALISO VIEJO CA 92656	NNW	0.11 / 574.71	2	127
17	HW ORANGE	Ace Tube Bending	14 Journey Aliso Viejo, Ca 92656-3317 Aliso Viejo CA 92656-3317	SW	0.12 / 617.83	41	130
17	CERS HAZ	ACE TUBE BENDING	14 JOURNEY ALISO VIEJO CA 92656	SW	0.12 / 617.83	41	131
17	RCRA NON GEN	ACE TUBE BENDING	14 JOURNEY ALISO VIEJO CA 92656-3317 ***EPA Handler ID:*** CAL000075963	SW	0.12 / 617.83	41	137
18	RCRA LQG	CVS PHARMACY # 8872	26891 ALISO CREEK ROAD ALISO VIEJO CA 92656-0000 ***EPA Handler ID:*** CAR000234070	NNW	0.12 / 620.83	2	138
18	HW ORANGE	Cvs Pharmacy #8872	26891 Aliso Creek Rd Aliso Viejo, Ca 92656-3392 Aliso Viejo CA 92656-3392	NNW	0.12 / 620.83	2	146
18	CERS HAZ	CVS PHARMACY #8872	26891 ALISO CREEK RD ALISO VIEJO CA 92656	NNW	0.12 / 620.83	2	147
19	DRYCLEANERS	BIO SAFE CLEANERS INC	26895 ALISO CREEK RD ALISO VIEJO CA	NNE	0.12 / 629.66	-19	149

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
19	DRYCLEANERS	BIO SAFE CLEANERS	26895 ALISO CREEK RD STE A ALISO VIEJO CA	NNE	0.12 / 629.66	-19	150
19	HW ORANGE	Bio Safe Cleaners	26895 Aliso Creek Rd Ste A Aliso Viejo, Ca 92656-5302 Aliso Viejo CA 92656-5302	NNE	0.12 / 629.66	-19	150
19	DRYCLEANERS	BIO SAFE CLEANERS	26895 AISO CREEK RD #A ALISO VIEJO CA	NNE	0.12 / 629.66	-19	150
19	CERS HAZ	BIO SAFE CLEANERS	26895 ALISO CREEK RD ALISO VIEJO CA 92656	NNE	0.12 / 629.66	-19	151
19	RCRA NON GEN	HBR MANAGEMENT LLC	26895 ALISO CREEK RD # B404 ALISO VIEJO CA 92656-5301 ***EPA Handler ID:*** CAL000398196	NNE	0.12 / 629.66	-19	157
19	RCRA NON GEN	CARDINAL INVESTMENT PROPERTIES-STERLING LP	26895 ALISO CREEK RD B404 ALISO VIEJO CA 92656 ***EPA Handler ID:*** CAC003000926	NNE	0.12 / 629.66	-19	158
19	RCRA TSD	BIO SAFE CLEANERS	26895 AISO CREEK RD #A ALISO VIEJO CA 92656 ***EPA Handler ID:*** CAL000426268	NNE	0.12 / 629.66	-19	159
19	RCRA NON GEN	BIO SAFE CLEANERS	26895 AISO CREEK RD #A ALISO VIEJO CA 92656 ***EPA Handler ID:*** CAL000426268	NNE	0.12 / 629.66	-19	161
19	FED DRYCLEANERS	BIO SAFE CLEANERS	26895 AISO CREEK RD #A ALISO VIEJO CA 92656 ***FRS Facility ID:*** 110070590657	NNE	0.12 / 629.66	-19	162
20	RCRA NON GEN	CITY OF ALISO VIEJO	12 JOURNEY STE 100 ALISO VIEJO CA 92656-5335 ***EPA Handler ID:*** CAL000343591	WSW	0.12 / 649.89	42	162
20	ALT FUELS	City of Aliso Viejo	12 Journey, Suite 100 Aliso Viejo CA 92708 ***ID:*** 310229	WSW	0.12 / 649.89	42	163
20	ALT FUELS	Aliso Viejo City Hall	12 Journey Aliso Viejo CA 92656 ***ID:*** 195648	WSW	0.12 / 649.89	42	164
21	RCRA NON GEN	ALISO NIGUEL AUTO CARE	22972 PACIFIC PARK DR STE A ALISO VIEJO CA 92656-5357 ***EPA Handler ID:*** CAL000349002	W	0.14 / 724.55	85	164

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
21	RCRA NON GEN	PACIFIC AUTOMOTIVE	22972 PACIFIC PARK DR STE B ALISO VIEJO CA 92656-5357 ***EPA Handler ID:*** CAL000348250	W	0.14 / 724.55	85	165
22	RCRA NON GEN	PEP BOYS STORE#0880	26881 ALISO CREEK RD ALISO VIEJO CA 92656-0000 ***EPA Handler ID:*** CAL000160290	NNW	0.14 / 730.55	1	166
22	C&D DEBRIS RECY	PEP BOYS #880	26881 ALISO CREEK RD ALISO VIEJO CA 92656	NNW	0.14 / 730.55	1	168
22	RCRA NON GEN	IEH AUTO PARTS LLC DBA AUTO PLUS #880	26881 ALISO CREEK RD STE B ALISO VIEJO CA 92656 ***EPA Handler ID:*** CAL000458937	NNW	0.14 / 730.55	1	168
22	RCRA NON GEN	ADVANCE AUTO PARTS #9056	26881 ALISO CREEK RD UNIT B ALISO VIEJO CA 92656 ***EPA Handler ID:*** CAL000473968	NNW	0.14 / 730.55	1	169
23	DELISTED TNK	UNOCAL (CIRCLE K #5743)	26871 ALISO CREEK RD ALISO VIEJO CA 92656	NNE	0.14 / 740.39	-9	170
23	UST ORANGE	United Pacific 0677	26871 Aliso Creek Rd Aliso Viejo, Ca 92656-3392 Aliso Viejo CA ***FA No:*** FA0062426	NNE	0.14 / 740.39	-9	171
23	LUST	76 STATION #5743	26871 ALISO CREEK ALISO VIEJO CA 92565 ***Global ID | Status:*** T10000000036 |	NNE	0.14 / 740.39	-9	171
23	UST	United Pacific 0677	26871 Aliso Creek Rd Aliso Viejo CA 92656 ***Facility ID:*** FA0062426 ***Tank ID No. | Tank Status | Tank Closure Date:*** 2 | Confirmed/Updated Information | , 1 | Confirmed/Updated Information |	NNE	0.14 / 740.39	-9	177
23	EMISSIONS	CHINO HILLS OIL, INC/DBA ALISO CREEK 76	26871 ALISO CREEK RD ALISO VIEJO CA 92656	NNE	0.14 / 740.39	-9	178
23	CERS TANK	United Pacific 0677	26871 ALISO CREEK RD ALISO VIEJO CA 92656 ***Site ID:*** 4231	NNE	0.14 / 740.39	-9	178
23	EMISSIONS	GSE ALISO CREEK, GOLDEN STATE ENTERPRISE	26871 ALISO CREEK RD ALISO VIEJO CA 92656	NNE	0.14 / 740.39	-9	194
23	RCRA NON GEN	GSE ALISO CREEK 2705743	26871 ALISO CREEK RD ALISO VIEJO CA 92656	NNE	0.14 / 740.39	-9	195

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
			EPA Handler ID: CAL000422836				
23	UST ORANGE	CIRCLE K # 5743	26871 ALISO CREEK ALISO VIEJO CA 92656 ***FA No:*** FA24343	NNE	0.14 / 740.39	-9	196
23	RCRA NON GEN	APRO LLC DBA UNITED PACIFIC	26871 ALISO CREEK RD ALISO VIEJO CA 92656 ***EPA Handler ID:*** CAL000454582	NNE	0.14 / 740.39	-9	196
23	RCRA NON GEN	APRO LLC DBA UNITED PACIFIC	26871 ALISO CREEK RD ALISO VIEJO CA 92656 ***EPA Handler ID:*** CAL000460045	NNE	0.14 / 740.39	-9	198
23	LOP ORANGE	76 Station #5743	26871 Aliso Creek Rd Aliso Viejo Ca 92656-3392 CA ***Case ID:*** 08UT006 ***Closed Date:*** 6/15/2012	NNE	0.14 / 740.39	-9	199
23	RCRA NON GEN	APRO LLC DBA UNITED PACIFIC 0677	26871 ALISO CREEK RD. ALISO VIEJO CA 92656 ***EPA Handler ID:*** CAC003196222	NNE	0.14 / 740.39	-9	199
23	RCRA NON GEN	UNITED PACIFIC 0677	26871 ALISO CREEK RD. ALISO VIEJO CA 92656 ***EPA Handler ID:*** CAC003208889	NNE	0.14 / 740.39	-9	200
23	EMISSIONS	UNITED PACIFIC #0677	26871 ALISO CREEK RD ALISO VIEJO CA 92656	NNE	0.14 / 740.39	-9	201
23	RCRA NON GEN	UNITED PACIFIC 677	26871 ALISO CREEK RD ALISO VIEJO CA 92656 ***EPA Handler ID:*** CAC003277148	NNE	0.14 / 740.39	-9	202
24	RCRA NON GEN	SOCAL ROOF RESTORATION	9 JOURNEY ALISO VIEJO CA 92656 ***EPA Handler ID:*** CAC003138985	WSW	0.14 / 744.03	44	203
25	AST ORANGE	Cox Communications Aliso Viejo Mtc	17 Journey Aliso Viejo, Ca 92656-3333 CA ***Establishment ID:*** FA0039876	SW	0.16 / 826.42	37	204
25	AST		17 JOURNEY ALISO VIEJO CA 92656	SW	0.16 / 826.42	37	204
25	RCRA NON GEN	COX COMMUNICATIONS CALIFORNIA - ALISO VIEJO MTC	17 JOURNEY ALISO VIEJO CA 92656 ***EPA Handler ID:*** CAC003088824	SW	0.16 / 826.42	37	204
25	RCRA NON GEN	COX COMMUNICATIONS CALIFORNIA - ALISO VIEJO MTC	17 JOURNEY ALISO VIEJO CA 92656	SW	0.16 / 826.42	37	205

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
			EPA Handler ID: CAC003138648				
26	DELISTED COUNTY	ORANGE COUNTY SHERIFF (ALISO VIEJO	11 JOURNEY ALISO VIEJO CA 92656	WSW	0.16 / 828.48	44	206
26	AST		11 JOURNEY ALISO VIEJO CA 92656	WSW	0.16 / 828.48	44	207
26	RCRA NON GEN	ORANGE COUNTY SHERIFF'S DEPARTMENT	11 JOURNEY ALISO VIEJO CA 92656-3333 ***EPA Handler ID:*** CAL000178543	WSW	0.16 / 828.48	44	207
27	RCRA NON GEN	TONY GAUTHIER	7 JOURNEY ALISO VIEJO CA 92656 ***EPA Handler ID:*** CAC003138624	W	0.16 / 843.21	46	208
28	RCRA NON GEN	STAPLES THE OFFICE SUPERSTORE EAST INC STORE 0743	26791 ALISO CREEK RD ALISO VIEJO CA 92656 ***EPA Handler ID:*** CAL000390677	N	0.17 / 880.75	0	209
28	RCRA NON GEN	FIVE BELOW, INC	26791 B ALISO CREEK RD ALISO VIEJO CA 92656 ***EPA Handler ID:*** CAL000426805	N	0.17 / 880.75	0	210
29	DELISTED TNK	ALL HANDS CAR WASH/FAST LUBE	22952 PACIFIC PARK DR ALISO VIEJO CA 92656	W	0.18 / 953.50	82	211
29	AST ORANGE	Aliso Viejo Auto Care Inc	22952 Pacific Park Dr Aliso Viejo, Ca 92656-3389 CA ***Establishment ID:*** FA0042604	W	0.18 / 953.50	82	211
29	UST ORANGE	Aliso Viejo Auto Care Inc	22952 Pacific Park Dr Aliso Viejo, Ca 92656-3389 Aliso Viejo CA ***FA No:*** FA0042604	W	0.18 / 953.50	82	211
29	DELISTED TNK	Aliso Viejo Auto Care, Inc.	22952 PACIFIC PARK DR ALISO VIEJO CA 92656	W	0.18 / 953.50	82	212
29	EMISSIONS	ALISO VIEJO AUTO CARE INC	22952 PACIFIC PARK DR ALISO VIEJO CA 92656	W	0.18 / 953.50	82	212
29	CERS TANK	Aliso Viejo Auto Care, Inc.	22952 PACIFIC PARK DR ALISO VIEJO CA 92656	W	0.18 / 953.50	82	213

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
			Site ID: 379432				
29	EMISSIONS	CAR WASH CONCEPTS INC, A CAL CORP	22952 PACIFIC PARK DR ALISO VIEJO CA 92656	W	0.18 / 953.50	82	232
29	UST	Aliso Viejo Auto Care, Inc.	22952 PACIFIC PARK DR ALISO VIEJO CA 92656	W	0.18 / 953.50	82	232
			Facility ID: FA0042604 ***Tank ID No. | Tank Status | Tank Closure Date:*** TK-1 | Confirmed/Updated Information | , TK-2 | Confirmed/Updated Information |				
29	RCRA NON GEN	ALISO VIEJO AUTO CARE INC	22952 PACIFIC PARK DR ALISO VIEJO CA 92656-3389	W	0.18 / 953.50	82	233
			EPA Handler ID: CAL000274878				
30	RCRA NON GEN	TJ MAXX 689	26781 ALISO CREEK RD ALISO VIEJO CA 92656	N	0.20 / 1,066.70	-2	234
			EPA Handler ID: CAL000383110				
31	RCRA NON GEN	ARLETHA PAPPAS	82 HAWAII DR ALISO VIEJO CA 92656	ESE	0.20 / 1,067.28	-89	235
			EPA Handler ID: CAC003119897				
32	RCRA NON GEN	CENTON ELECTRONICS INC	27 JOURNEY STE 100 ALISO VIEJO CA 92656	SSW	0.21 / 1,131.86	33	236
			EPA Handler ID: CAL000472377				
33	RCRA SQG	AIRCRAFT BEARING CORP	25 JOURNEY ALISO VIEJO CA 92656	SSW	0.22 / 1,162.13	31	237
			EPA Handler ID: CAR000008409				
34	RCRA NON GEN	AARON BROTHERS #0214	26775 ALISO CREEK RD ALISO VIEJO CA 92656	N	0.23 / 1,213.57	-2	238
			EPA Handler ID: CAL000407511				
34	RCRA NON GEN	DOLLAR TREE #08702	26775 ALISO CREEK RD ALISO VIEJO CA 92656	N	0.23 / 1,213.57	-2	239
			EPA Handler ID: CAL000459916				
35	RCRA NON GEN	O'REILLY AUTO ENTERPRISES LLC	26771 ALISO CREEK RD ALISO VIEJO CA 92656	N	0.24 / 1,287.64	-3	240
			EPA Handler ID: CAL000475783				
36	RCRA TSD	CENTON ELECTRONICS INC	27412 ALISO VIEJO PKWY ALISO VIEJO CA 92656	S	0.27 / 1,435.85	42	241
			EPA Handler ID: CAL000357390				
37	PFAS IND	CENTON ELECTRONICS INC	ALISO VIEJO CA	S	0.31 / 1,613.74	26	242
38	PFAS IND	MICROVENTION INC	ALISO VIEJO CA	N	0.41 / 2,184.17	-26	243

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
39	PFAS IND	KEITH MOORE	ALISO VIEJO CA	N	0.42 / 2,240.85	-17	244
39	PFAS IND	FIRSTELEMENT FUEL	ALISO VIEJO CA	N	0.42 / 2,240.85	-17	245
39	PFAS IND	CENTON ELECTRONICS INC	ALISO VIEJO CA	N	0.42 / 2,240.85	-17	246
39	PFAS IND	W G HOLT INC DBA HOLT INTEGRATED CIRCUITS	ALISO VIEJO CA	N	0.42 / 2,240.85	-17	246
40	RCRA TSD	HOAG HEALTH CENTER ALISO VIEJO	26671 ALISO CREEK ROAD SUITE 106 ALISO VIEJO CA 92656 ***EPA Handler ID:*** CAL000444029	N	0.48 / 2,544.62	3	247
41	DELISTED HAZ	QLogic Corporation	26600 ALISO VIEJO PKWY ALISO VIEJO CA 92656	NW	0.49 / 2,567.27	124	248

Executive Summary: Summary by Data Source

Standard

Federal

RCRA TSD - RCRA non-CORRACTS TSD Facilities

A search of the RCRA TSD database, dated Apr 8, 2024 has found that there are 3 RCRA TSD site(s) within approximately 0.50miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
CENTON ELECTRONICS INC	27412 ALISO VIEJO PKWY ALISO VIEJO CA 92656 ***EPA Handler ID**: CAL000357390*	S	0.27 / 1,435.85	36
HOAG HEALTH CENTER ALISO VIEJO	26671 ALISO CREEK ROAD SUITE 106 ALISO VIEJO CA 92656 ***EPA Handler ID**: CAL000444029*	N	0.48 / 2,544.62	40

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
BIO SAFE CLEANERS	26895 AISO CREEK RD #A ALISO VIEJO CA 92656 ***EPA Handler ID**: CAL000426268*	NNE	0.12 / 629.66	19

RCRA LQG - RCRA Generator List

A search of the RCRA LQG database, dated Apr 8, 2024 has found that there are 3 RCRA LQG site(s) within approximately 0.25miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
RALPHS #755	26901 ALISO CREEK RD ALISO VIEJO CA 92656 ***EPA Handler ID**: CAL000321032*	NNW	0.08 / 410.00	12
RALPHS GROCERY COMPANY #755	26901 ALISO CREEK RD ALISO VIEJO CA 92656 ***EPA Handler ID**: CAR000259143*	NNW	0.08 / 410.00	12
CVS PHARMACY # 8872	26891 ALISO CREEK ROAD ALISO VIEJO CA 92656-0000 ***EPA Handler ID**: CAR000234070*	NNW	0.12 / 620.83	18

RCRA SQG - RCRA Small Quantity Generators List

A search of the RCRA SQG database, dated Apr 8, 2024 has found that there are 4 RCRA SQG site(s) within approximately 0.25miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
AIRCRAFT BEARING CORP	25 JOURNEY ALISO VIEJO CA 92656 ***EPA Handler ID**: CAR000008409*	SSW	0.22 / 1,162.13	33

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
SHELL SERVICE STATION	27055 ALISO CREEK SAP #121780 ALISO VIEJO CA 92550 ***EPA Handler ID**: CAR000080630*	ENE	0.03 / 135.75	4
PACIFIC PLAZA CLEANERS	27131 ALISO CREEK RD NUMBER 115 ALISO VIEJO CA 92656 ***EPA Handler ID**: CA0000137612*	SE	0.06 / 320.33	8
PACIFIC BELL TELEPHONE COMPANY DBA AT&T CALIFORNIA	27151 ALISO CREEK RD LAGUNA NIGUEL CA 92677 ***EPA Handler ID**: CAT080025596*	SE	0.08 / 417.70	13

RCRA NON GEN - RCRA Non-Generators

A search of the RCRA NON GEN database, dated Apr 8, 2024 has found that there are 40 RCRA NON GEN site(s) within approximately 0.25miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
SEA VIEW PEDIATRICS	2 JOURNEY #100 ALISO VIEJO CA 92653 ***EPA Handler ID**: CAC003127280*	W	0.03 / 145.23	5
HAMPTON RESEARCH CORP	34 JOURNEY ALISO VIEJO CA 92656 ***EPA Handler ID**: CAL000271845*	SW	0.07 / 359.65	9
LE/PHAM INC. DBA SOUTH MARINA PHARMACY	5 JOURNEY STE 140A ALISO VIEJO CA 92656 ***EPA Handler ID**: CAC003218358*	WNW	0.11 / 564.45	15
ACE TUBE BENDING	14 JOURNEY ALISO VIEJO CA 92656-3317 ***EPA Handler ID**: CAL000075963*	SW	0.12 / 617.83	17
CITY OF ALISO VIEJO	12 JOURNEY STE 100 ALISO VIEJO CA 92656-5335 ***EPA Handler ID**: CAL000343591*	WSW	0.12 / 649.89	20
ALISO NIGUEL AUTO CARE	22972 PACIFIC PARK DR STE A ALISO VIEJO CA 92656-5357 ***EPA Handler ID**: CAL000349002*	W	0.14 / 724.55	21
PACIFIC AUTOMOTIVE	22972 PACIFIC PARK DR STE B ALISO VIEJO CA 92656-5357 ***EPA Handler ID**: CAL000348250*	W	0.14 / 724.55	21

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
PEP BOYS STORE#0880	26881 ALISO CREEK RD ALISO VIEJO CA 92656-0000 ***EPA Handler ID**: CAL000160290*	NNW	0.14 / 730.55	22
IEH AUTO PARTS LLC DBA AUTO PLUS #880	26881 ALISO CREEK RD STE B ALISO VIEJO CA 92656 ***EPA Handler ID**: CAL000458937*	NNW	0.14 / 730.55	22
ADVANCE AUTO PARTS #9056	26881 ALISO CREEK RD UNIT B ALISO VIEJO CA 92656 ***EPA Handler ID**: CAL000473968*	NNW	0.14 / 730.55	22
SOCAL ROOF RESTORATION	9 JOURNEY ALISO VIEJO CA 92656 ***EPA Handler ID**: CAC003138985*	WSW	0.14 / 744.03	24
COX COMMUNICATIONS CALIFORNIA - ALISO VIEJO MTC	17 JOURNEY ALISO VIEJO CA 92656 ***EPA Handler ID**: CAC003088824*	SW	0.16 / 826.42	25
COX COMMUNICATIONS CALIFORNIA - ALISO VIEJO MTC	17 JOURNEY ALISO VIEJO CA 92656 ***EPA Handler ID**: CAC003138648*	SW	0.16 / 826.42	25
ORANGE COUNTY SHERIFF'S DEPARTMENT	11 JOURNEY ALISO VIEJO CA 92656-3333 ***EPA Handler ID**: CAL000178543*	WSW	0.16 / 828.48	26
TONY GAUTHIER	7 JOURNEY ALISO VIEJO CA 92656 ***EPA Handler ID**: CAC003138624*	W	0.16 / 843.21	27
STAPLES THE OFFICE SUPERSTORE EAST INC STORE 0743	26791 ALISO CREEK RD ALISO VIEJO CA 92656 ***EPA Handler ID**: CAL000390677*	N	0.17 / 880.75	28
FIVE BELOW, INC	26791 B ALISO CREEK RD ALISO VIEJO CA 92656 ***EPA Handler ID**: CAL000426805*	N	0.17 / 880.75	28
ALISO VIEJO AUTO CARE INC	22952 PACIFIC PARK DR ALISO VIEJO CA 92656-3389 ***EPA Handler ID**: CAL000274878*	W	0.18 / 953.50	29
CENTON ELECTRONICS INC	27 JOURNEY STE 100 ALISO VIEJO CA 92656 ***EPA Handler ID**: CAL000472377*	SSW	0.21 / 1,131.86	32

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
TESORO SHELL 68503	27055 ALISO CREEK RD ALISO VIEJO CA 92656-3399	ENE	0.03 / 135.75	4

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
	***EPA Handler ID**: CAL000321759*			
TESORO SIERRA PROPERTIES LLC #68503	27055 ALISO CREEK RD ALISO VIEJO CA 92656	ENE	0.03 / 135.75	4
	***EPA Handler ID**: CAL000460661*			
7-ELEVEN 43122	27055 ALISO CREEK RD ALISO VIEJO CA 92656	ENE	0.03 / 135.75	4
	***EPA Handler ID**: CAL000471514*			
ACTA LABS INC	27101 ALISO CREEK RD ALISO VIEJO CA 92656	SE	0.04 / 187.53	6
	***EPA Handler ID**: CAD983663691*			
STAAR SURGICAL CO.	27121 ALISO CREEK RD STE 105 ALISO VIEJO CA 92656-3364	SE	0.05 / 276.76	7
	***EPA Handler ID**: CAL000122201*			
FAMILY & SPORTS CHIROPRACTIC	27131 ALISO CREEK RD__STE 105 ALISO VIEJO CA 92656-0000	SE	0.06 / 320.33	8
	***EPA Handler ID**: CAL000169937*			
PACIFIC PLAZA CLEANERS	27131 ALISO CREEK RD STE 115 ALISO VIEJO CA 92656-3361	SE	0.06 / 320.33	8
	***EPA Handler ID**: CAL000389606*			
HBR MANAGEMENT LLC	26895 ALISO CREEK RD # B404 ALISO VIEJO CA 92656-5301	NNE	0.12 / 629.66	19
	***EPA Handler ID**: CAL000398196*			
CARDINAL INVESTMENT PROPERTIES-STERLING LP	26895 ALISO CREEK RD B404 ALISO VIEJO CA 92656	NNE	0.12 / 629.66	19
	***EPA Handler ID**: CAC003000926*			
BIO SAFE CLEANERS	26895 AISO CREEK RD #A ALISO VIEJO CA 92656	NNE	0.12 / 629.66	19
	***EPA Handler ID**: CAL000426268*			
GSE ALISO CREEK 2705743	26871 ALISO CREEK RD ALISO VIEJO CA 92656	NNE	0.14 / 740.39	23
	***EPA Handler ID**: CAL000422836*			
APRO LLC DBA UNITED PACIFIC	26871 ALISO CREEK RD ALISO VIEJO CA 92656	NNE	0.14 / 740.39	23
	***EPA Handler ID**: CAL000454582*			
APRO LLC DBA UNITED PACIFIC	26871 ALISO CREEK RD ALISO VIEJO CA 92656	NNE	0.14 / 740.39	23
	***EPA Handler ID**: CAL000460045*			
APRO LLC DBA UNITED PACIFIC 0677	26871 ALISO CREEK RD. ALISO VIEJO CA 92656	NNE	0.14 / 740.39	23

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
	***EPA Handler ID**: CAC003196222*			
UNITED PACIFIC 0677	26871 ALISO CREEK RD. ALISO VIEJO CA 92656	NNE	0.14 / 740.39	23
	***EPA Handler ID**: CAC003208889*			
UNITED PACIFIC 677	26871 ALISO CREEK RD ALISO VIEJO CA 92656	NNE	0.14 / 740.39	23
	***EPA Handler ID**: CAC003277148*			
TJ MAXX 689	26781 ALISO CREEK RD ALISO VIEJO CA 92656	N	0.20 / 1,066.70	30
	***EPA Handler ID**: CAL000383110*			
ARLETHA PAPPAS	82 HAWAII DR ALISO VIEJO CA 92656	ESE	0.20 / 1,067.28	31
	***EPA Handler ID**: CAC003119897*			
AARON BROTHERS #0214	26775 ALISO CREEK RD ALISO VIEJO CA 92656	N	0.23 / 1,213.57	34
	***EPA Handler ID**: CAL000407511*			
DOLLAR TREE #08702	26775 ALISO CREEK RD ALISO VIEJO CA 92656	N	0.23 / 1,213.57	34
	***EPA Handler ID**: CAL000459916*			
O'REILLY AUTO ENTERPRISES LLC	26771 ALISO CREEK RD ALISO VIEJO CA 92656	N	0.24 / 1,287.64	35
	***EPA Handler ID**: CAL000475783*			

State

C&D DEBRIS RECY - Construction and Demolition Debris Recyclers

A search of the C&D DEBRIS RECY database, dated Jun 20, 2018 has found that there are 1 C&D DEBRIS RECY site(s) within approximately 0.50miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
PEP BOYS #880	26881 ALISO CREEK RD ALISO VIEJO CA 92656	NNW	0.14 / 730.55	22

RECYCLING - Recycling Centers

A search of the RECYCLING database, dated Oct 5, 2024 has found that there are 1 RECYCLING site(s) within approximately 0.50 miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
Ponce Recycling	26901 Aliso Creek Rd Aliso Viejo CA 92656	NNW	0.08 / 410.00	12

LUST - Leaking Underground Fuel Tank Reports

A search of the LUST database, dated Jul 4, 2024 has found that there are 1 LUST site(s) within approximately 0.50miles of the project property.

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
76 STATION #5743	26871 ALISO CREEK ALISO VIEJO CA 92565	NNE	0.14 / 740.39	23
	Global ID* | *Status: *T10000000036* |			

UST - Permitted Underground Storage Tank (UST) in GeoTracker

A search of the UST database, dated Nov 17, 2024 has found that there are 3 UST site(s) within approximately 0.25miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
Aliso Viejo Auto Care, Inc.	22952 PACIFIC PARK DR ALISO VIEJO CA 92656	W	0.18 / 953.50	29
	Facility ID: *FA0042604* ***Tank ID No.* | *Tank Status* | *Tank Closure Date***: *TK-1* | *Confirmed/Updated Information* | , *TK-2* | *Confirmed/Updated Information* |			

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
7-ELEVEN INC. #43122	27055 ALISO CREEK ROAD ALISO VIEJO CA 92656	ENE	0.03 / 135.75	4
	Facility ID: *FA0049726* ***Tank ID No.* | *Tank Status* | *Tank Closure Date***: *2* | *Confirmed/Updated Information* | , *1* | *Confirmed/Updated Information* |			
United Pacific 0677	26871 Aliso Creek Rd Aliso Viejo CA 92656	NNE	0.14 / 740.39	23
	Facility ID: *FA0062426* ***Tank ID No.* | *Tank Status* | *Tank Closure Date***: *2* | *Confirmed/Updated Information* | , *1* | *Confirmed/Updated Information* |			

HHSS - Historical Hazardous Substance Storage Information Database

A search of the HHSS database, dated Aug 27, 2015 has found that there are 1 HHSS site(s) within approximately 0.25miles of the project property.

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
PACIFIC BELL LE-287	27151 ALISO CREEK RD LAGUNA NIGUEL CA 92677	SE	0.08 / 417.70	13

UST SWEEPS - Statewide Environmental Evaluation and Planning System

A search of the UST SWEEPS database, dated Oct 1, 1994 has found that there are 3 UST SWEEPS site(s) within approximately 0.25 miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
ALISO VIEJO FIRE STATION #57	57 JOURNEY ALISO VIEJO CA	WNW	0.02 / 95.80	3
	C C* | *Status: *A30-000-11477* | *ACTIVE* ***Tank ID***: *000001, 000002*			

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
PACIFIC BELL	27151 ALISO CREEK RD LAGUNA NIGUEL CA ***C C | Status**: A30-000-7074 | ACTIVE* ***Tank ID**: 000002*	SE	0.08 / 417.70	13
PACIFIC BELL	27151 ALISO CREEK RD LAGUNA NIGUEL CA ***C C | Status**: I30-000-7074 | INACTIVE* ***Tank ID**: 000001*	SE	0.08 / 417.70	13

AST - Aboveground Storage Tanks

A search of the AST database, dated Aug 31, 2009 has found that there are 3 AST site(s) within approximately 0.25miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
	57 JOURNEY ALISO VIEJO CA 92656	WNW	0.02 / 95.80	3
	17 JOURNEY ALISO VIEJO CA 92656	SW	0.16 / 826.42	25
	11 JOURNEY ALISO VIEJO CA 92656	WSW	0.16 / 828.48	26

DELISTED TNK - Delisted Storage Tanks

A search of the DELISTED TNK database, dated Nov 17, 2024 has found that there are 5 DELISTED TNK site(s) within approximately 0.25miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
ORANGE COUNTY FIRE STATION #57	57 JOURNEY ALISO VIEJO CA 92656	WNW	0.02 / 95.80	3
Aliso Viejo Auto Care, Inc.	22952 PACIFIC PARK DR ALISO VIEJO CA 92656	W	0.18 / 953.50	29
ALL HANDS CAR WASH/FAST LUBE	22952 PACIFIC PARK DR ALISO VIEJO CA 92656	W	0.18 / 953.50	29

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
TEXACO (121780)	27055 ALISO CREEK RD ALISO VIEJO CA 92656	ENE	0.03 / 135.75	4

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
UNOCAL (CIRCLE K #5743)	26871 ALISO CREEK RD ALISO VIEJO CA 92656	NNE	0.14 / 740.39	23

CERS TANK - California Environmental Reporting System (CERS) Tanks

A search of the CERS TANK database, dated Oct 28, 2024 has found that there are 4 CERS TANK site(s) within approximately 0.25 miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
ORANGE COUNTY FIRE AUTHORITY Station #57 Aliso Viejo	57 JOURNEY ALISO VIEJO CA 92656 ***Site ID**: 361811*	WNW	0.02 / 95.80	3
Aliso Viejo Auto Care, Inc.	22952 PACIFIC PARK DR ALISO VIEJO CA 92656 ***Site ID**: 379432*	W	0.18 / 953.50	29

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
7-ELEVEN INC. #43122	27055 ALISO CREEK ROAD ALISO VIEJO CA 92656 ***Site ID**: 160254*	ENE	0.03 / 135.75	4
United Pacific 0677	26871 ALISO CREEK RD ALISO VIEJO CA 92656 ***Site ID**: 4231*	NNE	0.14 / 740.39	23

HIST TANK - Historical Hazardous Substance Storage Container Information - Facility Summary

A search of the HIST TANK database, dated May 27, 1988 has found that there are 1 HIST TANK site(s) within approximately 0.25 miles of the project property.

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
PACIFIC BELL LE-287	27151 ALISO CREEKO RD LAGUNA NIGUEL CA	SE	0.08 / 417.70	13

DELISTED COUNTY - Delisted County Records

A search of the DELISTED COUNTY database, dated Oct 28, 2024 has found that there are 1 DELISTED COUNTY site(s) within approximately 0.25miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
ORANGE COUNTY SHERIFF (ALISO VIEJO	11 JOURNEY ALISO VIEJO CA 92656	WSW	0.16 / 828.48	26

County

LOP ORANGE - Orange County - LOP Lead Cases List

A search of the LOP ORANGE database, dated May 15, 2023 has found that there are 1 LOP ORANGE site(s) within approximately 0.50miles of the project property.

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
76 Station #5743	26871 Aliso Creek Rd Aliso Viejo Ca 92656-3392 CA ***Case ID**: 08UT006* ***Closed Date**: 6/15/2012*	NNE	0.14 / 740.39	23

UST ORANGE - Orange County - Underground Storage Tanks Listing

A search of the UST ORANGE database, dated May 15, 2023 has found that there are 4 UST ORANGE site(s) within approximately 0.25miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
Aliso Viejo Auto Care Inc	22952 Pacific Park Dr Aliso Viejo, Ca 92656-3389 Aliso Viejo CA ***FA No**: FA0042604*	W	0.18 / 953.50	29

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
7-Eleven Inc #43122	27055 Aliso Creek Rd Aliso Viejo, Ca 92656-3399 Aliso Viejo CA ***FA No**: FA0049726*	ENE	0.03 / 135.75	4
CIRCLE K # 5743	26871 ALISO CREEK ALISO VIEJO CA 92656 ***FA No**: FA24343*	NNE	0.14 / 740.39	23
United Pacific 0677	26871 Aliso Creek Rd Aliso Viejo, Ca 92656-3392 Aliso Viejo CA ***FA No**: FA0062426*	NNE	0.14 / 740.39	23

AST ORANGE - Orange County - Aboveground Petroleum Storage Tank Listing

A search of the AST ORANGE database, dated May 15, 2023 has found that there are 3 AST ORANGE site(s) within approximately 0.25miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
Orange County Fire Authority Station #57	57 Journey Aliso Viejo, Ca 92656-3318 CA ***Establishment ID**: FA0024299*	WNW	0.02 / 95.80	3
Cox Communications Aliso Viejo Mtc	17 Journey Aliso Viejo, Ca 92656-3333 CA ***Establishment ID**: FA0039876*	SW	0.16 / 826.42	25
Aliso Viejo Auto Care Inc	22952 Pacific Park Dr Aliso Viejo, Ca 92656-3389 CA ***Establishment ID**: FA0042604*	W	0.18 / 953.50	29

Non Standard

Federal

PFAS IND - PFAS Industry Sectors

A search of the PFAS IND database, dated Sep 23, 2024 has found that there are 6 PFAS IND site(s) within approximately 0.50miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
CENTON ELECTRONICS INC	ALISO VIEJO CA	S	0.31 / 1,613.74	37

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
MICROVENTION INC	ALISO VIEJO CA	N	0.41 / 2,184.17	38
CENTON ELECTRONICS INC	ALISO VIEJO CA	N	0.42 / 2,240.85	39
W G HOLT INC DBA HOLT INTEGRATED CIRCUITS	ALISO VIEJO CA	N	0.42 / 2,240.85	39
KEITH MOORE	ALISO VIEJO CA	N	0.42 / 2,240.85	39
FIRSTELEMENT FUEL	ALISO VIEJO CA	N	0.42 / 2,240.85	39

FED DRYCLEANERS - Drycleaner Facilities

A search of the FED DRYCLEANERS database, dated May 5, 2024 has found that there are 2 FED DRYCLEANERS site(s) within approximately 0.25miles of the project property.

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
PACIFIC PLAZA CLEANERS	27131 ALISO CREEK RD ALISO VIEJO CA 92656 ***FRS Facility ID**: 110002614127*	SE	0.06 / 320.33	8
BIO SAFE CLEANERS	26895 AISO CREEK RD #A ALISO VIEJO CA 92656 ***FRS Facility ID**: 110070590657*	NNE	0.12 / 629.66	19

ALT FUELS - Alternative Fueling Stations

A search of the ALT FUELS database, dated Aug 29, 2024 has found that there are 2 ALT FUELS site(s) within approximately 0.25

miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
Aliso Viejo City Hall	12 Journey Aliso Viejo CA 92656 ***ID**: 195648*	WSW	0.12 / 649.89	20
City of Aliso Viejo	12 Journey, Suite 100 Aliso Viejo CA 92708 ***ID**: 310229*	WSW	0.12 / 649.89	20

State

DRYCLEANERS - Dry Cleaning Facilities

A search of the DRYCLEANERS database, dated Dec 20, 2021 has found that there are 7 DRYCLEANERS site(s) within approximately 0.25miles of the project property.

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
PACIFIC PLAZA CLEANERS	27131 ALISO CREEK RD #115 ALISO VIEJO CA	SE	0.06 / 320.33	8
PACIFIC PLAZA CLEANERS	27131 ALISO CREEK RD STE 115 ALISO VIEJO CA	SE	0.06 / 320.33	8
PACIFIC PLAZA CLEANERS	27131 ALISO CREEK RD STE 115 ALISO VIEJO CA	SE	0.06 / 320.33	8
PACIFIC PLAZA CLEANERS	27131 ALISO CREEK RD ALISO VIEJO CA	SE	0.06 / 320.33	8
BIO SAFE CLEANERS	26895 AISO CREEK RD #A ALISO VIEJO CA	NNE	0.12 / 629.66	19
BIO SAFE CLEANERS	26895 ALISO CREEK RD STE A ALISO VIEJO CA	NNE	0.12 / 629.66	19
BIO SAFE CLEANERS INC	26895 ALISO CREEK RD ALISO VIEJO CA	NNE	0.12 / 629.66	19

HAZNET - Handlers from Hazardous Waste Manifest Data

A search of the HAZNET database, dated Oct 24, 2016 has found that there are 2 HAZNET site(s) within approximately 0.02miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
ORANGE COUNTY FIRE AUTHORITY STATION 57	57 JOURNEY ALISO VIEJO CA 926560000	WNW	0.02 / 95.80	3

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
KILROY REALTY	27111 ALISO CREEK RD ALISO VIEJO CA 926560000	ESE	0.01 / 73.99	2

HAZ GEN - Generators from Hazardous Waste Manifest Data

A search of the HAZ GEN database, dated Dec 31, 2017 has found that there are 3 HAZ GEN site(s) within approximately 0.02miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
ORANGE COUNTY FIRE AUTHORITY	57 JOURNEY ALISO VIEJO CA 926560000	WNW	0.02 / 95.80	3
ORANGE COUNTY FIRE AUTHORITY	57 JOURNEY ALISO VIEJO CA 926560000	WNW	0.02 / 95.80	3
ORANGE CO FIRE STATION 57	57 GOURNEY ALISO VIEJO CA 926560000	WNW	0.02 / 95.80	3

CERS HAZ - California Environmental Reporting System (CERS) Hazardous Waste Sites

A search of the CERS HAZ database, dated Oct 28, 2024 has found that there are 11 CERS HAZ site(s) within approximately 0.12 miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
AT&T California - LEX27	53 1/2 JOURNEY ALISO VIEJO CA 92656	W	0.01 / 36.94	1
Ralphs Grocery #755	26901 ALISO CREEK ROAD ALISO VIEJO CA 92656	NNW	0.08 / 410.00	12
The Habit Burger Grill	26921 ALISO CREEK RD STE A ALISO VIEJO CA 92656	NNW	0.11 / 574.71	16
Luna Grill LG14	26921 ALISO CREEK RD STE E105 ALISO VIEJO CA 92656	NNW	0.11 / 574.71	16

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
ACE TUBE BENDING	14 JOURNEY ALISO VIEJO CA 92656	SW	0.12 / 617.83	17
CVS PHARMACY #8872	26891 ALISO CREEK RD ALISO VIEJO CA 92656	NNW	0.12 / 620.83	18

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
STAAR SURGICAL	27121 ALISO CREEK RD STE 100 ALISO VIEJO CA 92656	SE	0.05 / 276.76	7
Verizon Wireless: Aliso Viejo	27141 ALISO CREEK ROAD, #245 ALISO VIEJO CA 92656	SE	0.07 / 374.15	10
Del Taco #937	26951 ALISO CREEK RD ALISO VIEJO CA 92656	NNE	0.07 / 376.02	11
OC Service Group LLC DBA Chick fil A Aliso Viejo	26861 ALISO CREEK RD ALISO VIEJO CA 92656	NNE	0.10 / 509.87	14
BIO SAFE CLEANERS	26895 ALISO CREEK RD ALISO VIEJO CA 92656	NNE	0.12 / 629.66	19

DELISTED HAZ - Delisted Environmental Reporting System (CERS) Hazardous Waste Sites

A search of the DELISTED HAZ database, dated Nov 29, 2018 has found that there are 2 DELISTED HAZ site(s) within approximately 0.50miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
Subway #19369	26921 ALISO CREEK RD STE C ALISO VIEJO CA 92656	NNW	0.11 / 574.71	16
QLogic Corporation	26600 ALISO VIEJO PKWY ALISO VIEJO CA 92656	NW	0.49 / 2,567.27	41

EMISSIONS - Toxic Pollutant Emissions Facilities

A search of the EMISSIONS database, dated Dec 31, 2021 has found that there are 7 EMISSIONS site(s) within approximately 0.25 miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
CAR WASH CONCEPTS INC, A CAL CORP	22952 PACIFIC PARK DR ALISO VIEJO CA 92656	W	0.18 / 953.50	29
ALISO VIEJO AUTO CARE INC	22952 PACIFIC PARK DR ALISO VIEJO CA 92656	W	0.18 / 953.50	29

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
7-ELEVEN INC #43122	27055 ALISO CREEK RD ALISO VIEJO CA 92656	ENE	0.03 / 135.75	4
TESORO REFINING & MKTG ALISO CREEK SHEL	27055 ALISO CREEK RD ALISO VIEJO CA 92656	ENE	0.03 / 135.75	4
GSE ALISO CREEK, GOLDEN STATE ENTERPRISE	26871 ALISO CREEK RD ALISO VIEJO CA 92656	NNE	0.14 / 740.39	23
UNITED PACIFIC #0677	26871 ALISO CREEK RD ALISO VIEJO CA 92656	NNE	0.14 / 740.39	23
CHINO HILLS OIL, INC/DBA ALISO CREEK 76	26871 ALISO CREEK RD ALISO VIEJO CA 92656	NNE	0.14 / 740.39	23

County

HW ORANGE - Orange County - Hazardous Waste Facilities

A search of the HW ORANGE database, dated May 15, 2023 has found that there are 8 HW ORANGE site(s) within approximately 0.12 miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
Hampton Research Corp	34 Journey Aliso Viejo, Ca 92656-3317 Aliso Viejo CA 92656-3317	SW	0.07 / 359.65	9
Ralphs Grocery #755	26901 Aliso Creek Rd Aliso Viejo, Ca 92656-3393 Aliso Viejo CA 92656-3393	NNW	0.08 / 410.00	12
Ace Tube Bending	14 Journey Aliso Viejo, Ca 92656-3317 Aliso Viejo CA 92656-3317	SW	0.12 / 617.83	17

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
Cvs Pharmacy #8872	26891 Aliso Creek Rd Aliso Viejo, Ca 92656-3392 Aliso Viejo CA 92656-3392	NNW	0.12 / 620.83	18

Lower Elevation	Address	Direction	Distance (mi/ft)	Map Key
7-Eleven Inc #43122	27055 Aliso Creek Rd Aliso Viejo, Ca 92656-3399 Aliso Viejo CA 92656-3399	ENE	0.03 / 135.75	4
Staar Surgical	27121 Aliso Creek Rd Ste 100 Aliso Viejo, Ca 92656-3364 Aliso Viejo CA 92656-3364	SE	0.05 / 276.76	7
Pacific Plaza Cleaners	27131 Aliso Creek Rd Ste 115 Aliso Viejo, Ca 92656-3361 Aliso Viejo CA 92656-3361	SE	0.06 / 320.33	8
Bio Safe Cleaners	26895 Aliso Creek Rd Ste A Aliso Viejo, Ca 92656-5302 Aliso Viejo CA 92656-5302	NNE	0.12 / 629.66	19

Map: 1.0 Mile Radius

Order Number: 24112101214

Address: 27081 Aliso Creek Road, Aliso Viejo, CA

- Project Property
- Buffer Outline
- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- Areas with Higher Elevation
- Areas with Same Elevation
- Areas with Lower Elevation
- Areas with Unknown Elevation
- Freeways; Highways
- Traffic Circle; Ramp
- Major & Minor Arterial
- Traffic Circle; Ramp
- Local Road
- Rail
- State
- Country
- National Wetland
- Indian Reserve Land
- 100 Year Flood Zone
- 500 Year Flood Zone
- FWS Special Designation Areas
- National Priorities List (Active, Delisted, Proposed, Institutional Control)

Source: © 2021 ESRI StreetMap Premium

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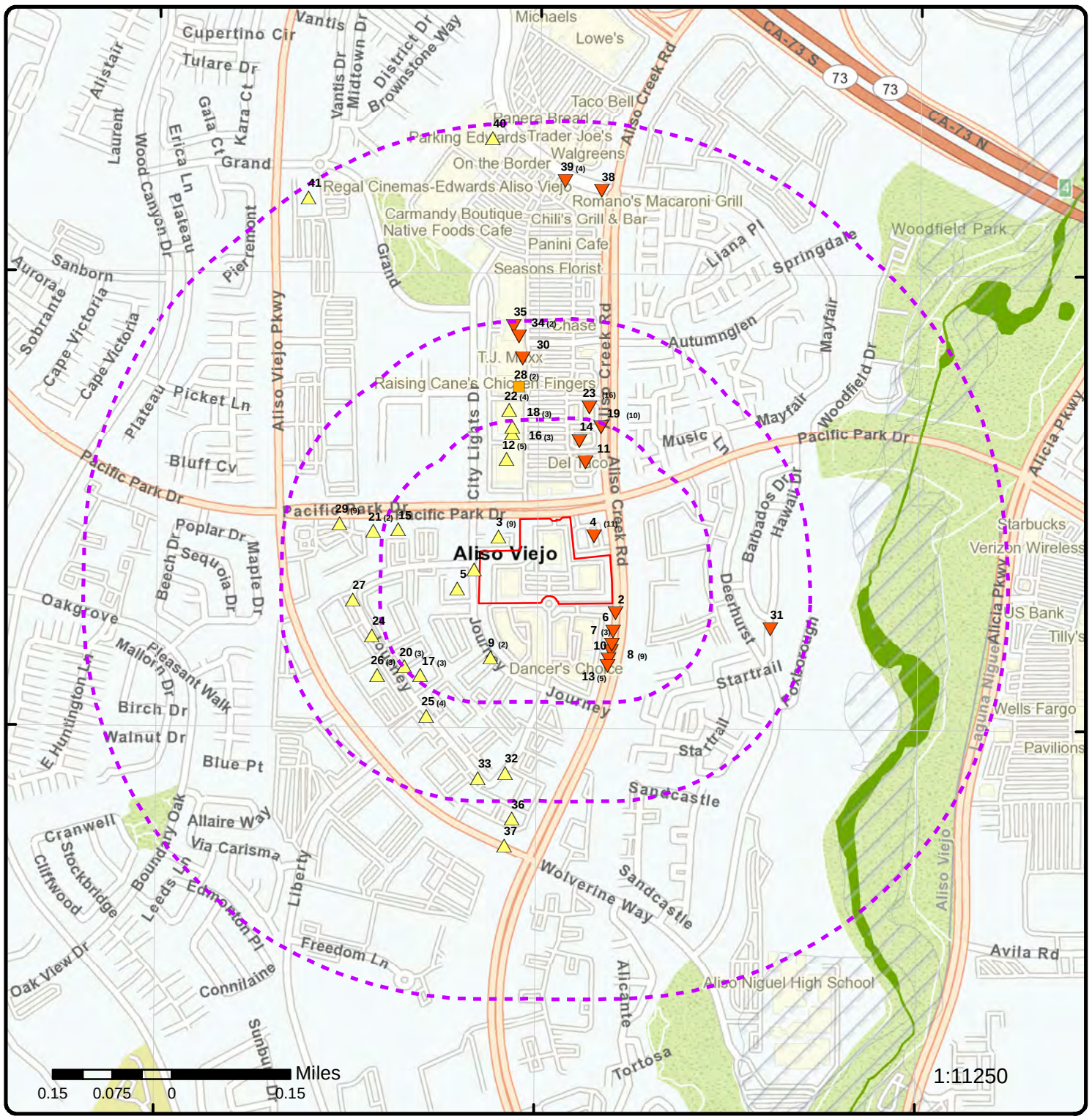

Map: 0.5 Mile Radius

Order Number: 24112101214

Address: 27081 Aliso Creek Road, Aliso Viejo, CA

- Project Property
- Buffer Outline
- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- Areas with Higher Elevation
- Areas with Same Elevation
- Areas with Lower Elevation
- Areas with Unknown Elevation
- Freeways; Highways
- Traffic Circle; Ramp
- Major & Minor Arterial
- Traffic Circle; Ramp
- Local Road
- Rail
- State
- Country
- National Wetland
- Indian Reserve Land
- 100 Year Flood Zone
- 500 Year Flood Zone
- FWS Special Designation Areas
- National Priorities List (Active, Delisted, Proposed, Institutional Control)

Source: © 2021 ESRI StreetMap Premium

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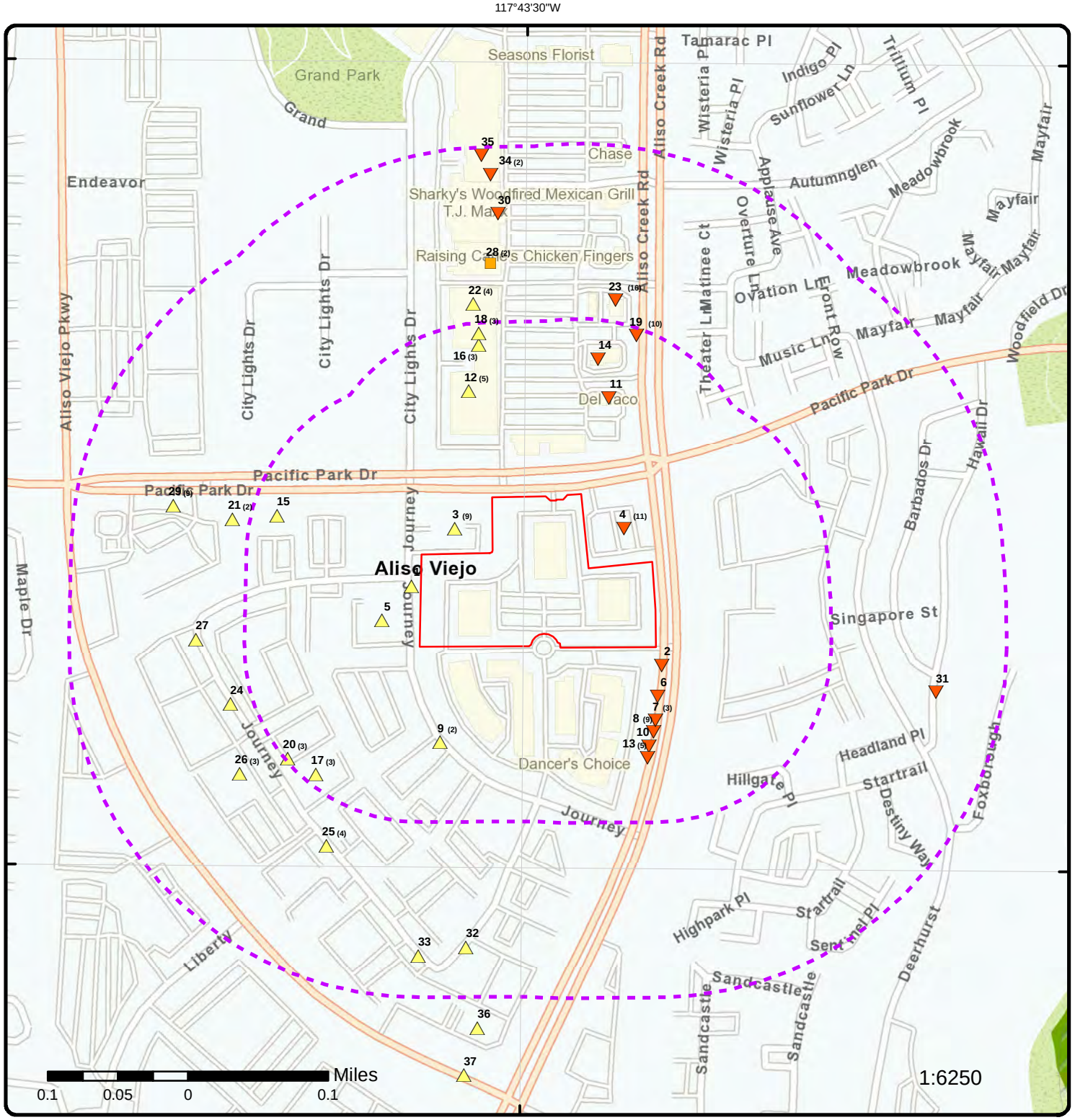

Map: 0.25 Mile Radius

Order Number: 24112101214

Address: 27081 Aliso Creek Road, Aliso Viejo, CA

- Project Property
- Buffer Outline
- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- Areas with Higher Elevation
- Areas with Same Elevation
- Areas with Lower Elevation
- Areas with Unknown Elevation
- Freeways; Highways
- Traffic Circle; Ramp
- Major & Minor Arterial
- Traffic Circle; Ramp
- Local Road
- Rail
- State
- Country
- National Wetland
- Indian Reserve Land
- 100 Year Flood Zone
- 500 Year Flood Zone
- FWS Special Designation Areas
- National Priorities List (Active, Delisted, Proposed, Institutional Control)

Source: © 2021 ESRI StreetMap Premium

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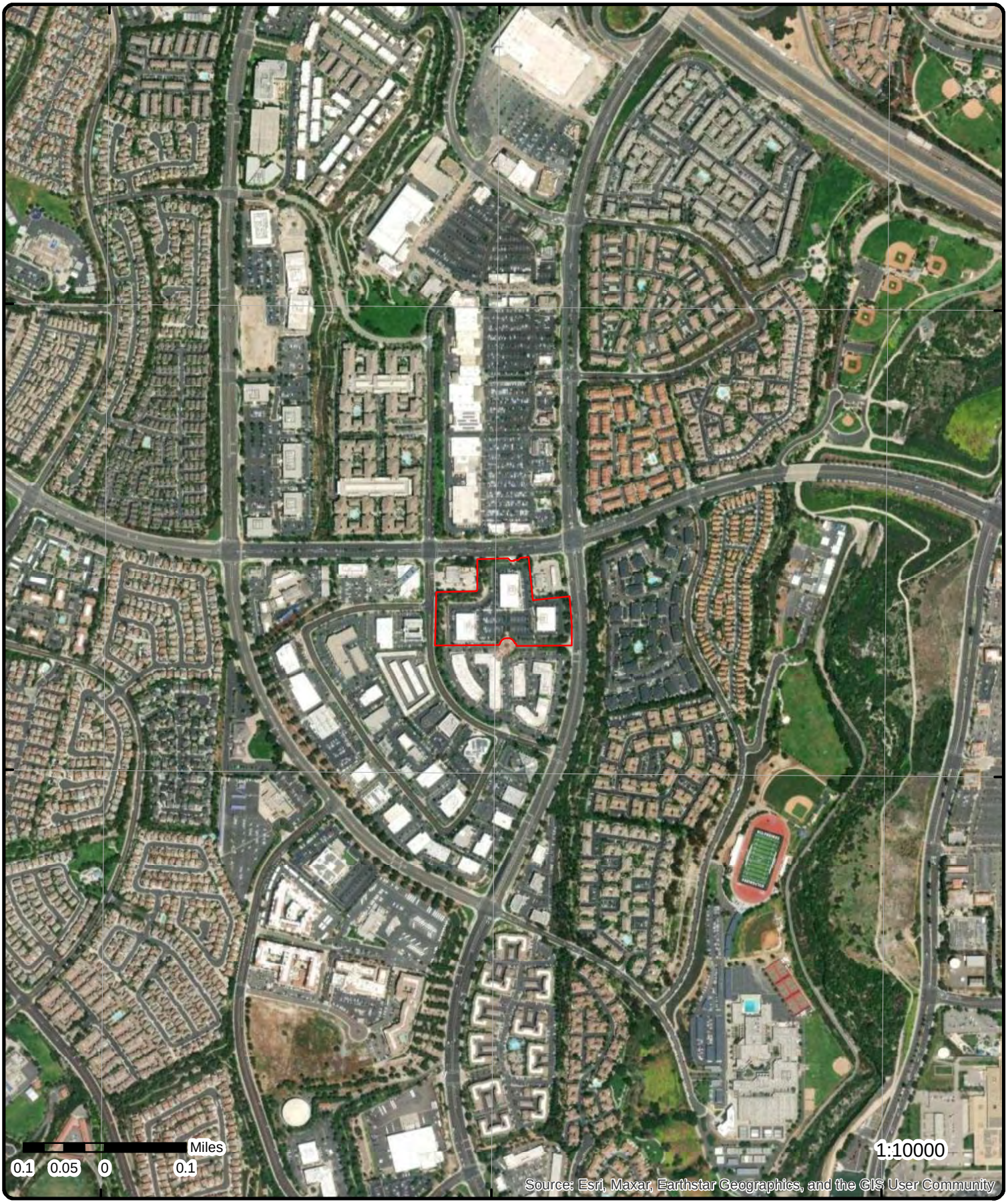

Aerial **Year: 2023**

Order Number: 24112101214

Address: 27081 Aliso Creek Road, Aliso Viejo, CA

Source: ESRI World Imagery

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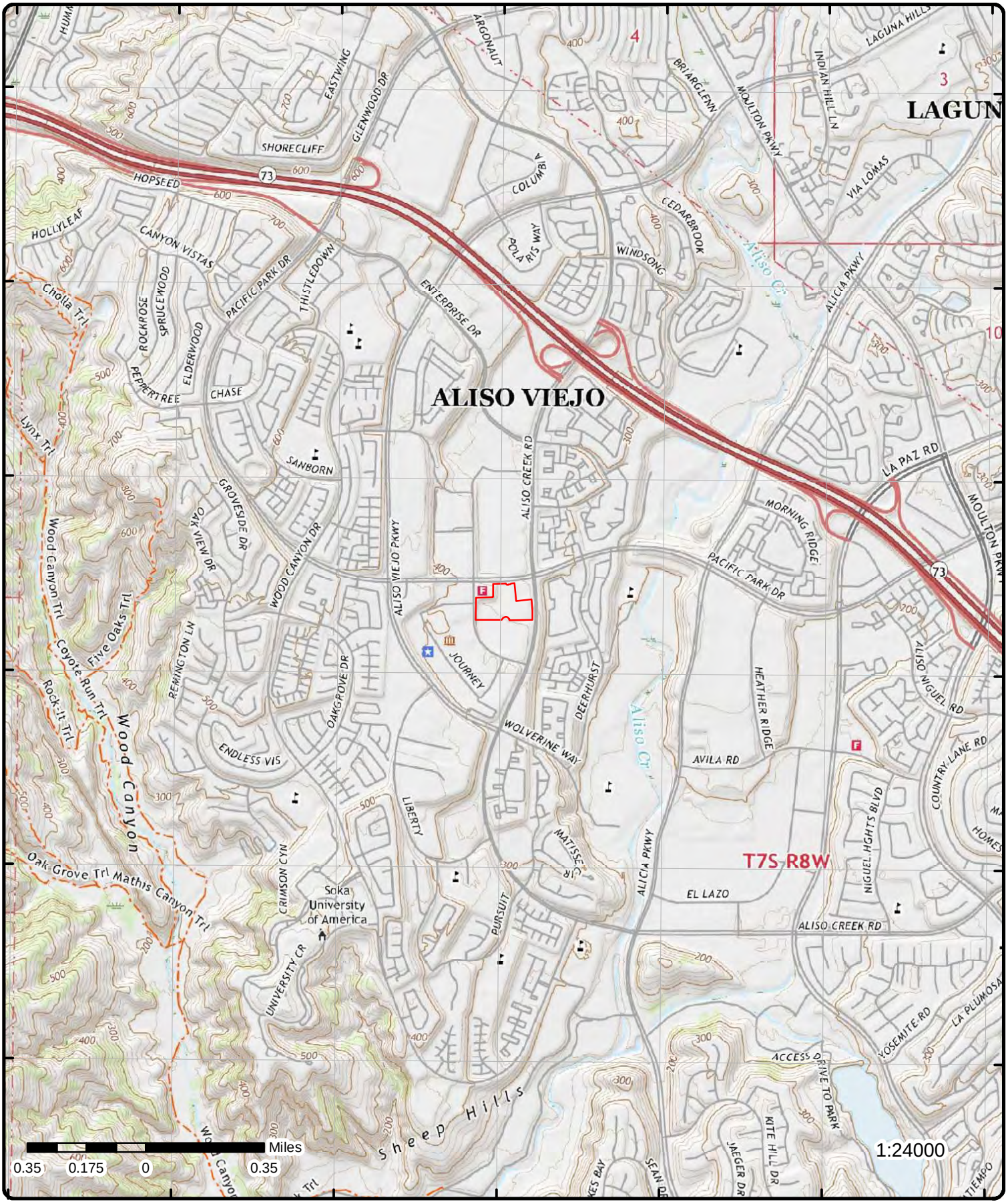

Topographic Map

Year: 2022

Order Number: 24112101214

Address: 27081 Aliso Creek Road, CA

Quadrangle(s): Laguna Beach CA, San Juan Capistrano CA

Source: USGS Topographic Map

© ERIS Information In

Detail Report

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
1	1 of1	W	0.01 / 36.94	390.49 / 35	AT&T California - LEX27 53 1/2 JOURNEY ALISO VIEJO CA 92656	CERS HAZ

Site ID: 552149
Latitude: 33.569240
Longitude: -117.726330

Regulated Programs

EI ID: 10815424 **EI Description:** Chemical Storage Facilities

Evaluations

Eval Date: 11/15/2023
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site for routine hazardous materials and business emergency plan inspection. Consent to enter and inspect was given by Robert Fields, Environmental Site Manager. This is an underground cabinet. Observed the following materials on site at reportable quantities: nicad batteries Hazardous Materials disclosed in CERS match what is reported on site. Training log was available and reviewed. CERS 10815424 was reviewed and accepted Inspection report emailed to Robert Fields, rf0886@att.com; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 10/25/2021
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site for routine hazardous materials and business emergency plan inspection. Consent to enter and inspect was given by Robert Fields, Environmental Site Manager. Facility is a cabinet Observed the following materials on site at reportable quantities: - nickel cadmium batteries Hazardous Materials disclosed in CERS match what is reported on site. Training log was available and reviewed. CERS 10815424 was reviewed and accepted (site map was updated) Per California Health & Safety Code Ch. 6.95, businesses that store and handle hazardous materials at or over reportable quantities (55 gal of a liquid, 500 lbs of a solid, 200 cubic ft of a compressed gas) must prepare and implement an HMBP. The facility is responsible for identifying all hazardous materials, including hazardous wastes, which are at or above disclosure thresholds. If there is a change in the type of amount of chemicals that are maintained on site, please submit revised documents [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Affiliations

Affil Type Desc: CUPA District
Entity Name: Orange County Env Health
Entity Title:
Address: 1241 East Dyer RoadSuite 120
City: Santa Ana
State: CA
Country:

Zip Code:	92705-5611
Phone:	(714) 433-6406
Affil Type Desc:	Environmental Contact
Entity Name:	AT&T EH&S Hotline - Option #1
Entity Title:	
Address:	311 S. Akard Street, Floor 12
City:	Dallas
State:	TX
Country:	
Zip Code:	75202
Phone:	
Affil Type Desc:	Operator
Entity Name:	AT&T California
Entity Title:	
Address:	
City:	
State:	
Country:	
Zip Code:	
Phone:	(800) 566-9347
Affil Type Desc:	Document Preparer
Entity Name:	Peter Burnell, Sigma Consultants, Inc.
Entity Title:	
Address:	
City:	
State:	
Country:	
Zip Code:	
Phone:	
Affil Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	
Address:	311 S. Akard Street, Floor 12
City:	Dallas
State:	TX
Country:	
Zip Code:	75202
Phone:	
Affil Type Desc:	Legal Owner
Entity Name:	Pacific Bell Telephone Company dba AT&T California
Entity Title:	
Address:	311 S. Akard Street, Floor 12
City:	Dallas
State:	TX
Country:	United States
Zip Code:	75202
Phone:	(469) 295-2319
Affil Type Desc:	Identification Signer
Entity Name:	Jeremy McGrue
Entity Title:	National EPCRA Manager
Address:	
City:	
State:	
Country:	
Zip Code:	
Phone:	
Affil Type Desc:	Parent Corporation
Entity Name:	Pacific Bell Telephone Company dba AT&T California
Entity Title:	
Address:	
City:	
State:	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
Country:						
Zip Code:						
Phone:						

2	1 of1	ESE	0.01 / 73.99	343.01 / -12	KILROY REALTY 27111 ALISO CREEK RD ALISO VIEJO CA 926560000	HAZNET

SIC Code:		Mailing City:	NEWPORT BEACH
NAICS Code:		Mailing State:	CA
EPA ID:	CAC001359864	Mailing Zip:	926600000
Create Date:	5/12/1998	Region Code:	4
Fac Act Ind:	No	Owner Name:	KILROY REALTY
Inact Date:	10/25/2000	Owner Addr 1:	1000 QUAIL ST STE 190
County Code:	30	Owner Addr 2:	
County Name:	Orange	Owner City:	NEWPORT BEACH
Mail Name:		Owner State:	CA
Mailing Addr 1:	1000 QUAIL ST STE 190	Owner Zip:	926600000
Mailing Addr 2:		Owner Phone:	9492504145
Owner Fax:			

Details DTSC HWTS: The Department of Toxic Substances Control (DTSC) makes available a Waste Code Matrix showing each Waste Code, its description, and annual amounts in its Hazardous Waste Tracking System: https://hwts.dtsc.ca.gov/search

DTSC Handler Profile url: https://hwts.dtsc.ca.gov/facility/CAC001359864

3	1 of9	WNW	0.02 / 95.80	393.07 / 38	ORANGE COUNTY FIRE STATION #57 57 JOURNEY ALISO VIEJO CA 92656	DELISTED TNK

Delisted Storage Tanks

Facility ID:	11477	County:	Orange
Latitude:	33.571544	Original Source:	UST
Longitude:	-117.724456	Record Date:	30-JAN-2017
Permitting Agency:	ORANGE COUNTY		

3	2 of9	WNW	0.02 / 95.80	393.07 / 38	Orange County Fire Authority Station #57 57 Journey Aliso Viejo, Ca 92656-3318 CA	AST ORANGE

Establishment ID: FA0024299

3	3 of9	WNW	0.02 / 95.80	393.07 / 38	57 JOURNEY ALISO VIEJO CA 92656	AST

Total Capacity(Gal):	1,320	Owner Name:	ORANGE COUNTY FIRE AUTHORTY STA #57
CUPA:	Orange	County:	Orange

3	4 of9	WNW	0.02 / 95.80	393.07 / 38	ORANGE COUNTY FIRE AUTHORITY STATION 57 57 JOURNEY ALISO VIEJO CA 926560000	HAZNET

SIC Code:		Mailing City:	ORANGE
NAICS Code:		Mailing State:	CA

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

EPA ID:	CAC001175352	**Mailing Zip:**	928660000
Create Date:	12/18/1998	**Region Code:**	4
Fac Act Ind:	No	**Owner Name:**	ORANGE COUNTY FIRE AUTHORITY
Inact Date:	10/25/2000	**Owner Addr 1:**	180 SOUTH WATER ST
County Code:	30	**Owner Addr 2:**	
County Name:	Orange	**Owner City:**	ORANGE
Mail Name:		**Owner State:**	CA
Mailing Addr 1:	180 S WATER ST	**Owner Zip:**	928660000
Mailing Addr 2:		**Owner Phone:**	0000000000
Owner Fax:			

Details DTSC HWTS: The Department of Toxic Substances Control (DTSC) makes available a Waste Code Matrix showing each Waste Code, its description, and annual amounts in its Hazardous Waste Tracking System: https://hwts.dtsc.ca.gov/search

DTSC Handler Profile url: https://hwts.dtsc.ca.gov/facility/CAC001175352

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
3	5 of9	WNW	0.02 / 95.80	393.07 / 38	ORANGE COUNTY FIRE AUTHORITY Station #57 Aliso Viejo 57 JOURNEY ALISO VIEJO CA 92656	CERS TANK

Site ID: 361811
Latitude: 33.570194
Longitude: -117.725807

Regulated Programs

EI ID: 10513291
EI Description: Chemical Storage Facilities

EI ID: 10513291
EI Description: Aboveground Petroleum Storage

Violations

Violation Date:	11/03/2015	**Violation Source:**	CERS
Violation Program:	APSA	**Violation Division:**	Orange County Environmental Health

Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)
Violation Notes:

Returned to compliance on 05/24/2017. Documentation for annual training not available for review. Provide records of this training that has been performed within the past 12 months. If training has not been performed, provide it immediately. Send proof of training documentation to Health Care Agency within 30 days.

Violation Description:

Failure to provide training regarding:
1. The operation and maintenance of equipment to prevent discharges.
2. Discharge procedure protocols.
3. Applicable pollution control laws, rules, and regulations.
4. General facility operations. AND
5. The contents of the SPCC Plan.

Violations

Violation Date:	03/03/2018	**Violation Source:**	CERS
Violation Program:	HMRRP	**Violation Division:**	Orange County Environmental Health

Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Notes:

Returned to compliance on 06/12/2018. 2018 CERS Re-Certification has not been electronically submitted. Submit to CERS within 30 days.

Violation Description:

Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.

Violations

Violation Date: 11/03/2015
Violation Source: CERS
Violation Program: APSA
Violation Division: Orange County Environmental Health
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)
Violation Notes:

Returned to compliance on 05/11/2016. Documentation for monthly storage tank inspections not available for review. Provide copy of inspection log for the past year to Health Care Agency. If inspections have not been performed, implement monthly inspections immediately. Provide documentation to Health Care Agency after the second monthly inspection is performed.

Violation Description:

Failure to comply with all of the following requirements:
1. Failure to conduct inspections and tests in accordance with written procedures that you or a certifying engineer have developed for the facility.
2. Failure to sign written procedures and/or a record of inspections and/or customary business records by the appropriate supervisor or inspector.
3. Failure to keep written procedures and/or a record of inspections and/or customary business records with the plan. AND
4. Failure to maintain written procedures and/or a record of inspections and/or customary business records for three years.

Enforcements

Enf Action Date: 06/01/2016
Enf Action Program: APSA
Enf Action Type: AEO - Unified Program
Enf Action Source: CERS
Enf Action Division: Orange County Environmental Health
Enf Action Description: Administrative Enforcement Order Based on the Unified Program Statute
Enf Action Notes:

Evaluations

Eval Date: 12/19/2018
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site to conduct hazardous materials chemical inventory and business emergency plan inspection. Jeffrey Higbee granted consent to conduct inspection. I walked through the facility and inspected hazardous material storage areas. There has been no changes in type of hazardous material stored on site since last inspection or previous reporting period. However, volume of diesel stored in generator's belly tank has not been reported. Please update total volume of diesel stored on site by adding volume of diesel stored in belly tank, within 30 days of this inspection. Facility has 2000 gallons of diesel in an aboveground tank, 180 gallons of diesel in generator's day tank and volume to be determined, in generator's belly tank. Hazardous materials management training is provided annually. Last training was conducted in 2/2018 and records are available for review. Fire hydrant in front of building and fire extinguishers observed by generator and APST enclosure [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 07/17/2023
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Facility inspection conducted with Tyler Putnam, EHS specialist, for the site. Observed the following disclosable materials: - 180 gal Diesel generator - 2,000 gal Diesel AST Verified Hazardous Material Business Plan (HMBP) components submitted in the California Environmental Reporting System (CERS). Training records were reviewed. HMBP documents can be submitted via CERS at http://cers.calepa.ca.gov/. Emailed a copy of this report to tylerputnam@ocfa.org and garygrammer@ocfa.org.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 09/17/2014
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Declined in e submit Reviewed submittal. Please include locations of emergency response equipment on the site map. Resubmit the disclosure after modifications are performed.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 08/31/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Reviewed and accepted submittal.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 11/12/2014
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Reviewed and accepted disclosure on e submit.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 01/04/2021
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: APSA
Eval Source: CERS
Eval Notes:

On site for a routine aboveground storage tank inspection. Facility is regulated under the Aboveground Storage Tank Act (APSA). Facility has between 1,320 and 9,999 gallons of regulated petroleum products. Facility has the Following: 1) On site SPCC Prepared and implemented. This plan is dated August 2016. 2) Facility personnel conduct monthly monitoring. Documentation of monitoring was available. 3) Appropriate secondary containment or diversionary structures are present.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 04/19/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: APSA
Eval Source: CERS
Eval Notes:

INSPECTOR COMMENTS This Agency has reviewed the Spill Prevention Countermeasures and Control (SPCC) Plan by ESCI August 2016. The plan is complete. This site has the following Oil Storage Containers: - Diesel Fuel Tank 57A | 2,000 gallon DW - Emergency Generator Fuel Tank 57B | 180 gallon DW Maintain the SPCC Plan on-site. Provide the following to this Agency: - Annual Training records for Oil-Handling employees - Periodic Inspection records as indicated in the SPCC Plan Violations I009 and I258 remain OUTSTANDING. Report emailed to Jonathan Bredehoft, OCFA Risk Management.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/13/2017

Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

accepted in CERS for 2017; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 10/15/2013
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: APSA
Eval Source: CERS
Eval Notes:

Billing sent RUR stating wrong address. Address is OK. Sent RUR back for billing.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/24/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: APSA
Eval Source: CERS
Eval Notes:

INSPECTOR COMMENTS This Agency has received and reviewed the following from OCFA Risk Management: - SPCC and Hazmat Training Records - SPCC Monthly Inspection Reports from Tanknology The following violations have been CORRECTED: - I009: Failure to provide training to staff in accordance with SPCC - I258: Failure to conduct Monthly Inspections All Violations have been CORRECTED. Maintain the SPCC, Monthly Inspection reports and training records available for review.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 08/13/2018
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

INSPECTOR COMMENTS 2018 HMBEP Annual Certification Approval. The following documents were received and ACCEPTED on CERS: Business Activities Business Ownership Information Chemical Inventory Facility Site Map Emergency Plan Violation I463 has been CORRECTED. Report emailed to Jeffrey Higbee, OCFA Risk Management.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/13/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Review of CERS, declined materials The submittal was declined at this time, please make the following changes and resubmit within 30 days. The hazardous materials transfer from e-submit to CERS did not complete all of the sections required. Please go into each material disclosure and verify the info and add the information for trade secret (no), fire code hazard class (from the drop down), chemical location confidential (no).; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 11/20/2015
Violations Found: No

Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Reviewed and accepted re submittal in e submit; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 11/03/2015
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: APSA
Eval Source: CERS
Eval Notes:

SPCC plan not available for review. OCFA has a multi facility plan that was management certified on 1-1-11. Make sure a copy is kept on site and that is being implemented.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 11/03/2015
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site for inspection with Amy Smith. Walked facility with the latest disclosed hazardous material inventory and site map. Did not observe any additional hazardous material stored at or above disclosure threshold. Please address the following regarding the site map: > Identify the location for the spill kit (which is located next to the 2000 gallon diesel tank) on the site map > The main gas shut off did not appear to be where it is identified on the site map. Double check this and identify the correct location on the map. > The street Journey is incorrectly identified as Paseo de Valencia. Change it to Journey. Declined certified submittal. Re submit the disclosure after modifications have been performed.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 01/04/2021
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site for a routine hazardous materials inspection. Facility has disclosed diesel fuel. There were no other materials observed on site meeting minimum disclosure thresholds. Site map was updated at the inspection.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/11/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: APSA
Eval Source: CERS
Eval Notes:

INSPECTOR COMMENTS The following minor violations issued on the 11/3/15 inspection report remain UNCORRECTED and have been ELEVATED to CLASS II: - I009: Failure to provide training regarding operation/maintenance of equipment, discharge procedure protocols, applicable pollution control laws, rules and regulations, general facility operations, and contents of the SPCC Plan; - I258: Failure to conduct inspections/tests conducted in accordance with written procedures. _____; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/20/2016
Violations Found: No

Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Reviewed and accepted submittal in e submit.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/19/2018
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: APSA
Eval Source: CERS
Eval Notes:

On site to conduct aboveground petroleum storage tank (APST) inspection. Jeffrey Higbee granted consent to conduct inspection. Facility has 2000 gallons of diesel in an aboveground tank, 180 gallons of diesel in generator's day tank and volume to be determined, in generator's belly tank. Monthly inspection logs are available for review. Annual employee training is provided and records are available for review. SPCC plan dated 9/19/2018 is available on site. Please be advised that the SPCC plan must evaluated for any necessary updates every five years.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/03/2018
Violations Found: Yes
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

INSPECTOR COMMENTS 2018 CERS Re-Certification has not been electronically submitted. Submit to CERS within 30 days.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Affiliations

Affil Type Desc: Legal Owner
Entity Name: Orange County Fire Authority
Entity Title:
Address: 1 FIRE AUTHORITY
City: IRVINE
State: CA
Country: United States
Zip Code: 92602
Phone: (714) 573-6000

Affil Type Desc: CUPA District
Entity Name: Orange County Env Health
Entity Title:
Address: 1241 East Dyer RoadSuite 120
City: Santa Ana
State: CA
Country:
Zip Code: 92705-5611
Phone: (714) 433-6406

Affil Type Desc: Document Preparer
Entity Name: Tyler Putnam
Entity Title:
Address:
City:
State:
Country:
Zip Code:

Phone:

Affil Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title:
Address: 1 FIRE AUTHORITY RD
City: IRVINE
State: CA
Country:
Zip Code: 92602
Phone:

Affil Type Desc: Identification Signer
Entity Name: Tyler Putnam
Entity Title: EHS Specialist
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Parent Corporation
Entity Name: Orange County Fire Authority
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Environmental Contact
Entity Name: Tyler Putnam
Entity Title:
Address: 1 Fire Authority Rd
City: Irvine
State: CA
Country:
Zip Code: 92602
Phone:

Affil Type Desc: Operator
Entity Name: OCFA FS 57
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone: (714) 573-6000

Coordinates

Env Int Type Code:	APSA	**Longitude:**	-117.725810
Program ID:	10513291	**Coord Name:**	
Latitude:	33.570190	**Ref Point Type Desc:**	Center of a facility or station.

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
3	6 of9	WNW	0.02 / 95.80	393.07 / 38	ALISO VIEJO FIRE STATION #57 57 JOURNEY ALISO VIEJO CA	UST SWEEPS

C C:	A30-000-11477	**D Filename:**	SITE12A
BOE:		**Page No:**	76
Comp:	11477	**County:**	ORANGE
Status:	ACTIVE	**State :**	CA
No of Tanks:	2	**Zip:**	92656

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Jurisdict: ORANGE COUNTY
Agency: ENVIRONMENTAL HEALTH
Phone:
Latitude: 33.567671
Longitude: -117.725866
Georesult: S5HPNTSCZA

Tank Details

Tank ID: 000001
O Tank ID:
SWRCB No: 30-000-011477-000001
Removed:
Installed:
A Date:
Capac: 1000
Tank Use: M.V. FUEL
S Contain:
Stg: P
Storage :
Storag Type: PRODUCT
P Contain:
Content: REG UNLEADED
ONA:
D File Name: TANK12A

Tank Details

Tank ID: 000002
O Tank ID:
SWRCB No: 30-000-011477-000002
Removed:
Installed:
A Date:
Capac: 1000
Tank Use: M.V. FUEL
S Contain:
Stg: P
Storage :
Storag Type: PRODUCT
P Contain:
Content: DIESEL
ONA:
D File Name: TANK12A

3	7 of9	WNW	0.02 / 95.80	393.07 / 38	ORANGE COUNTY FIRE AUTHORITY 57 JOURNEY ALISO VIEJO CA 926560000	HAZ GEN

Epa ID: CAC002451511
Address 2:
Facility County: 30
County: Orange
Details DTSC HWTS: The Department of Toxic Substances Control (DTSC) makes available a Waste Code Matrix showing each Waste Code, its description, and annual amounts in its Hazardous Waste Tracking System: https://hwts.dtsc.ca.gov/search
Handler Profile URL: https://hwts.dtsc.ca.gov/facility/CAC002451511

3	8 of9	WNW	0.02 / 95.80	393.07 / 38	ORANGE COUNTY FIRE AUTHORITY 57 JOURNEY ALISO VIEJO CA 926560000	HAZ GEN

Epa ID: CAC001065480
Address 2:
Facility County: 30
County: Orange
Details DTSC HWTS: The Department of Toxic Substances Control (DTSC) makes available a Waste Code Matrix showing each Waste Code, its description, and annual amounts in its Hazardous Waste Tracking System: https://hwts.dtsc.ca.gov/search
Handler Profile URL: https://hwts.dtsc.ca.gov/facility/CAC001065480

3	9 of9	WNW	0.02 / 95.80	393.07 / 38	ORANGE CO FIRE STATION 57 57 GOURNEY ALISO VIEJO CA 926560000	HAZ GEN

Epa ID: CAC002315217
Address 2:
Facility County: 30
County: Orange
Details DTSC HWTS: The Department of Toxic Substances Control (DTSC) makes available a Waste Code Matrix showing each Waste Code, its description, and annual amounts in its Hazardous Waste Tracking System: https://hwts.dtsc.ca.gov/search
Handler Profile URL: https://hwts.dtsc.ca.gov/facility/CAC002315217

4	1 of11	ENE	0.03 / 135.75	343.26 / -12	SHELL SERVICE STATION 27055 ALISO CREEK SAP #121780	RCRA SQG

EPA Handler ID: CAR000080630
Gen Status Universe: Small Quantity Generator
Contact Name: GARY V WING
Contact Address: US
Contact Phone No and Ext: 714-731-8337
Contact Email: GVWING@SHELLOPUS.COM
Contact Country: US
County Name: ORANGE
EPA Region: 09
Land Type: Private
Receive Date: 20040226
Location Latitude: 33.57009
Location Longitude: -117.724014

Violation/Evaluation Summary

Note: NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity: No
Mixed Waste Generator: No
Transporter Activity: No
Transfer Facility: No
Onsite Burner Exemption: No
Furnace Exemption: No
Underground Injection Activity: No
Commercial TSD: No
Used Oil Transporter: No
Used Oil Transfer Facility: No
Used Oil Processor: No
Used Oil Refiner: No
Used Oil Burner: No
Used Oil Market Burner: No
Used Oil Spec Marketer: No

Hazardous Waste Handler Details

Sequence No: 1
Receive Date: 20000817
Handler Name: TEXACO SERVICE STATION
Federal Waste Generator Code: 2
Generator Code Description: Small Quantity Generator
Source Type: Notification

Waste Code Details

Hazardous Waste Code: D001
Waste Code Description: IGNITABLE WASTE

Hazardous Waste Code: D018
Waste Code Description: BENZENE

Hazardous Waste Handler Details

Sequence No: 1
Receive Date: 20040226
Handler Name: SHELL SERVICE STATION
Federal Waste Generator Code: 2

Generator Code Description: Small Quantity Generator
Source Type: Implementer

Hazardous Waste Handler Details

Sequence No: 1
Receive Date: 20040226
Handler Name: SHELL SERVICE STATION
Federal Waste Generator Code: 1
Generator Code Description: Large Quantity Generator
Source Type: Annual/Biennial Report

Waste Code Details

Hazardous Waste Code: D001
Waste Code Description: IGNITABLE WASTE

Hazardous Waste Code: D018
Waste Code Description: BENZENE

Owner/Operator Details

Owner/Operator Ind: Current Operator
Type: Private
Name: SHELL OIL PRODUCTS US
Date Became Current: 19980801
Date Ended Current:
Phone:
Source Type: Annual/Biennial Report
Street No:
Street 1:
Street 2:
City:
State:
Country: US
Zip Code:

Owner/Operator Ind: Current Owner
Type: Private
Name: EQUILON ENTERPRISES LLC DBA SHELL OIL PR
Date Became Current: 19980801
Date Ended Current:
Phone:
Source Type: Implementer
Street No:
Street 1: PO BOX 2648
Street 2:
City: HOUSTON
State: TX
Country: US
Zip Code: 77252

Owner/Operator Ind: Current Owner
Type: Private
Name: EQUILON ENTERPRISES L L C
Date Became Current:
Date Ended Current:
Phone: 713-241-5036
Source Type: Notification
Street No:
Street 1: P O BOX 2099
Street 2:
City: HOUTSON
State: TX
Country:
Zip Code: 77252-2099

Owner/Operator Ind: Current Owner
Type: Private
Name: EQUILON ENTERPRISES LLC DBA SHELL OIL PR
Date Became Current: 19980801
Date Ended Current:
Phone:
Source Type: Annual/Biennial Report
Street No:
Street 1: PO BOX 2648
Street 2:
City: HOUSTON
State: TX
Country: US
Zip Code: 77252

Owner/Operator Ind: Current Operator
Type: Private
Name: SHELL OIL PRODUCTS US
Date Became Current: 19980801
Date Ended Current:
Phone:
Source Type: Implementer
Street No:
Street 1:
Street 2:
City:
State:
Country: US
Zip Code:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Historical Handler Details

Receive Dt: 20040226
Generator Code Description: Large Quantity Generator
Handler Name: SHELL SERVICE STATION

Receive Dt: 20000817
Generator Code Description: Small Quantity Generator
Handler Name: TEXACO SERVICE STATION

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
4	2 of11	ENE	0.03 / 135.75	343.26 / -12	TEXACO (121780) 27055 ALISO CREEK RD ALISO VIEJO CA 92656	DELISTED TNK

Delisted Storage Tanks

Facility ID: 19450
Latitude: 33.5714028
Longitude: -117.7226904
Permitting Agency: ORANGE COUNTY
County: Orange
Original Source: UST
Record Date: 30-JAN-2017

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
4	3 of11	ENE	0.03 / 135.75	343.26 / -12	7-Eleven Inc #43122 27055 Aliso Creek Rd Aliso Viejo, Ca 92656-3399 Aliso Viejo CA	UST ORANGE

FA No: FA0049726
SR No:
Notes:
Data Source: Permitted Underground Storage Tank (UST) Facilities Listing

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Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
4	4 of11	ENE	0.03 / 135.75	343.26 / -12	7-Eleven Inc #43122 27055 Aliso Creek Rd Aliso Viejo, Ca 92656-3399 Aliso Viejo CA 92656-3399	HW ORANGE

Establishment ID: FA0049726

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
4	5 of11	ENE	0.03 / 135.75	343.26 / -12	7-ELEVEN INC. #43122 27055 ALISO CREEK ROAD ALISO VIEJO CA 92656	UST

Facility ID: FA0049726
CERS ID: 10403929
County: Orange
Permitting Agency: Orange County Environmental Health
Site Facility Type: PERMITTED UNDERGROUND STORAGE TANK (UST)
Note: Information related to facilities can be searched on Geo Tracker Website: https://geotracker.waterboards.ca.gov/search
Latitude: 33.57018
Longitude: -117.72384
CalEnviroScrn 4 Pct: 10-15%

Tank Details

Epa Region: 9
No. of Closed UST: 0
No. of Inuse UST:
No. of Oos UST: 0
Owner Type: Non-Government
Tank ID No.: 2
Tank Status: Confirmed/Updated Information
Tank Type: Double Wall
Tank Closure Date:
Tank Configuration: Stand Alone Tank
Tank Contents: Premium Unleaded
Tank Cp Impr Curr: No
Tank Cp Shutoff: Yes
Tank Installatn Dt: 12/1/1997 12:00:00 AM
Tank No of Compart: 1
Tank Pc Constructn: Fiberglass

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Tank Alarms:	No	**Tank Spill Bucket:**	Yes
Tank Ball Float:	No	**Tribal Lands:**	No

Tank Operator Name: 7-ELEVEN INC.
Tank Operator Mail Address: P.O. BOX 711 ATTN: GASOLINE COMPLIANCE, LOC 148
Tank Operator Mail City: DALLAS
Tank Operator Mail State: TX
Tank Operator Mail Zip: 75221
Tank Owner Name: 7-ELEVEN INC.
Tank Owner Mailing Address: P.O BOX 711 ATTN: GASOLINE COMPLIANCE, LOC 148
Tank Owner Mailing City: DALLAS
Tank Owner Mailing State: TX
Tank Owner Mailing Zip: 75221
Tank Capacity Gallons: 15000
Tank Piping Construction: Double Walled
Tank Piping Type: Pressure
Tank Pw Piping Construction: Fiberglass
Tank Sacrificial Anode: No

Tank Details

Epa Region:	9	**Tank Closure Date:**	
No. of Closed UST:	0	**Tank Configuration:**	Stand Alone Tank
No. of Inuse UST:		**Tank Contents:**	Regular Unleaded
No. of Oos UST:	0	**Tank Cp Impr Curr:**	No
Owner Type:	Non-Government	**Tank Cp Shutoff:**	Yes
Tank ID No.:	1	**Tank Installatn Dt:**	12/1/1997 12:00:00 AM
Tank Status:	Confirmed/Updated Information	**Tank No of Compart:**	1
Tank Type:	Double Wall	**Tank Pc Constructn:**	Fiberglass
Tank Alarms:	No	**Tank Spill Bucket:**	Yes
Tank Ball Float:	No	**Tribal Lands:**	No

Tank Operator Name: 7-ELEVEN INC.
Tank Operator Mail Address: P.O. BOX 711 ATTN: GASOLINE COMPLIANCE, LOC 148
Tank Operator Mail City: DALLAS
Tank Operator Mail State: TX
Tank Operator Mail Zip: 75221
Tank Owner Name: 7-ELEVEN INC.
Tank Owner Mailing Address: P.O BOX 711 ATTN: GASOLINE COMPLIANCE, LOC 148
Tank Owner Mailing City: DALLAS
Tank Owner Mailing State: TX
Tank Owner Mailing Zip: 75221
Tank Capacity Gallons: 20000
Tank Piping Construction: Double Walled
Tank Piping Type: Pressure
Tank Pw Piping Construction: Fiberglass
Tank Sacrificial Anode: No

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
4	6 of11	ENE	0.03 / 135.75	343.26 / -12	7-ELEVEN INC. #43122 27055 ALISO CREEK ROAD ALISO VIEJO CA 92656	CERS TANK

Site ID: 160254
Latitude: 33.570180
Longitude: -117.723840

Regulated Programs

EI ID: 10403929
EI Description: Underground Storage Tank

EI ID: 10403929
EI Description: Chemical Storage Facilities

EI ID: 10403929
EI Description: Hazardous Waste Generator

Violations

Violation Date: 09/04/2014 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.7 25292(e) - California Health and Safety Code, Chapter 6.7, Section(s) 25292(e)
Violation Notes:

Returned to compliance on 01/05/2015. UDCs 3/4, 5/6, 7/8 & 9/10 failed SB 989 testing on 8-27-14. Address this situation and send corrective action documentation and re test results to Health Care Agency. If necessary, submit a plan check modification application to Health care Agency within 30 days.

Violation Description:

Failure to maintain secondary containment, as evidenced by failure of secondary containment testing.

Violations

Violation Date: 02/14/2023 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: 23 CCR 16 2636(f)(2) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2636(f)(2)
Violation Notes:

Returned to compliance on 02/14/2023. The 91 PLLD failed to detect a release of 3 gallons per hour and restrict or shut off the flow of product when the leak was detected. The technician indicated that the 91 PLLD would be replaced with like component, retested and passed. The violation was CORRECTED ON SITE on this DATE

Violation Description:

Failure of the functional line leak detector (LLD) monitoring pressurized piping to meet one or more of the following requirements: Monitored at least hourly with the capability of detecting a release of 3.0 gallons per hour leak at 10 pounds per square inch and restrict or shut off the flow of product through the piping when a leak is detected.

Violations

Violation Date: 02/05/2020 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: 23 CCR 16 2641(j) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2641(j)
Violation Notes:

Returned to compliance on 02/05/2020. The 87 fill sump sensor failed testing on this date. The sensor was subsequently replaced and re-tested. The new sensor passed testing. CORRECTED ONSITE THIS DATE.

Violation Description:

Failure of the leak detection equipment to be installed, calibrated, operated, and/or maintained properly.

Violations

Violation Date: 02/18/2021 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.7 25292.1(a) - California Health and Safety Code, Chapter 6.7, Section(s) 25292.1(a)
Violation Notes:

Returned to compliance on 02/18/2021. Spill buckets were tested visually with both failing initial test. The cap gasket for 87 tank and drain valve for 91 tank were replaced during inspection and both passed when retested.

Violation Description:

Failure to operate the UST system to prevent unauthorized releases including leaks, spills, and/or overfills.

Evaluations

Eval Date: 03/02/2021
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

I received and reviewed copies of Monitoring System Certification Form and Spill Container Testing Report Form for activities conducted on 2/18/21. All components passed test.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 08/19/2020
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

A follow-up inspection was conducted this date (8/19/20). The violations noted below are in reference to a visit or review of your facility conducted on 7/20/20. OUTSTANDING VIOLATIONS - 8/19/20 NONE CORRECTED VIOLATIONS - 8/19/20 I382 - The operator has successfully repaired UDC 1/2. On 8/18/20 I witnessed a post-repair hydrostatic test performed on the UDC fitted with new penetrations (sealed and cured) with PASS results An inspection report is to be emailed to: burke.d.albelda@tsocorp.com; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/02/2018
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Emailed copy of inspection report to Gloria Arroyo and to Burke Albelda; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/05/2020
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

An on-site inspection was conducted this date to witness the annual monitoring system certification. David Branson (Fastech) conducted the monitoring system certification and provided current Veeder-Root, VMI, and ICC certifications. This facility contains: 2 - USTs (87, 91) Monitor system is a Veeder-Root monitor panel and reads all functions normal. Overfill protection provided fill tube shut-off valve (flapper). Sensors were observed positioned so as to initiate alarms at the earliest point possible. Sensors were re-positioned in a true vertical position upon installation after testing. Alarm history and setup tape reviewed while on site. The following were tested: - Sensors: VR 208: UDCs and Sumps; VR302: Tank Annulars - Sensors, initiated positive shutdown to the turbines when tested in water - "Fail Safe" and "Positive Shutdown" - Spill buckets using a visual hydrostatic test - Leak detectors. PLLDs (electronic) Documents reviewed onsite: - Permit [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 07/23/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Reviewed and approved modification plan; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/20/2019
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Review of monitoring certification report for testing done on 2/14/19, all components passed at that time.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/14/2023
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

On site to conduct a routine Underground Storage Tank (UST) inspection and witness the annual monitoring system certification and spill bucket testing. Met with Steven Loera, service technician with Fastech. Technician certifications (VR, ICC and VMI) were verified. Gloria Arroyo, Manager, with the facility provided consent to inspect. The facility has two double-walled (87,91) tanks monitored by a Veeder Root TLS350 system. The monitor is operational for audible and visual alarms. Panel reads "all functions normal". Flapper valves are used for overfill prevention. Sensors were observed positioned to initiate alarms at the earliest point possible. Sensor out were verified and passed. All sensors tested and verified to be operational. Spill buckets were tested without any changes in water levels. Alarm history and set up tape reviewed while on site. Line Leak for 91 not functioning and was to be replaced. Overfill was also scheduled to be tested after the monitoring certification. Th; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/06/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Received report for a UST tank system monitoring certification performed on 3-3-15. All monitoring equipment operational per manufacturer's specifications.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 08/05/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Reviewed and accepted submittal in CERS (updated DO notification form). Alternate DO listed.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 08/16/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Received an email this date from Regina Boren with Tesoro indicating that a tank size for the Aliso Viejo location was incorrect: Hi Christine, Can you please correct the attached CUPA permit and resend as soon as possible? Thank you. Regina I wanted to let you know that our permit to operate lists the 91 product tank size as 12,000 gallons. CERS lists 87 as 20,000 gallons and the 91 as 15K which coincides with my historical information. I'm not

sure if you want to change that or if it will automatically on the next printing? Tank capacity updated this date for the 91 grade fuel, from 12,000 gallons to 15,000 gallons. Revised permit will be emailed to contact and mailed to facility.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 09/15/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Reviewed and accepted submittal in CERS. Updated designated operator statement.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 09/29/2014
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Initial plan review; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 10/20/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

File review and closed SR in EC; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/02/2022
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

On site to conduct a routine hazardous waste inspection. Gloria Arroyo, Manager, provided consent to inspect The facility generates liquid mix with petroleum from testing activities. A perimeter walk was conducted. Municipal dumpsters does not appear to contain any hazardous waste. Manifests from US Ecology were avaialble and reviewed. Last pick up was on 12/1/2021. Currently their are two empty drums stored in the dumpster area. Labels will be placed when test water is placed in these drums. Emergency response information is posted and employees are reported to be trained. No hazardous waste violations were observed on this date. Inspection report emailed to environmental contact vcslayman@speedway.com; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/15/2020
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

This Agency received the overfill prevention equipment certification test report for a test conducted 5/26/2020. The following tanks PASSED testing: - 87: Flapper (95%) - 91: Flapper (95%) The overfill prevention components listed in this report match those listed in the most recent CERS submittal. A copy

of this inspection report will be emailed to: burke.d.albelda@tsocorp.com; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 08/09/2022
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site for routine hazardous materials and business emergency plan inspection following change of ownership on 6/14/2022. Gloria Arroyo, Manager, provided consent to inspect. Observed the following materials on site at reportable quantities: - carbon dioxide (Carbon Mizer 550) - gasoline (regular/premium) - carwash (detergent) Hazardous Materials disclosed in CERS 10403929 match what is reported on site. Training is reported to be conducted annually by the DO (UST/HW/HMBP) Per California Health & Safety Code Ch. 6.95, businesses that store and handle hazardous materials at or over reportable quantities (55 gal of a liquid, 500 lbs of a solid, 200 cubic ft of a compressed gas) must prepare and implement an HMBP. The facility is responsible for identifying all hazardous materials, including hazardous wastes, which are at or above disclosure thresholds. If there is a change in the type of amount of chemicals that are maintained on site, please submit revised documents (electronically; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 11/12/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Review of CERS this date, accepted facility info and Tank info. DO Christian Torres; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 04/03/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Review of CERS this date DO Christian Torres CFO/Financial responsibility exp 3/3/2018; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/14/2017
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Routine inspection conducted this date in regards to underground storage tank, consent to enter, inspect and take photographs was given by – Lorena Hilliad, employee Monitoring system certification was conducted at this time. Stephen Dombrowski, Fastech- performed the monitor cert. Ensure submittal of monitor cert test results within 30 days. Tester provided the following certifications: ICC Tech exp 4/29/17, Veeder-Root tech exp 7/22/18, VMI/vaporless 3/11/17 Number of UST's - 2 Sensor types - UDC/pipe 208, tank-302 UDC type - fiberglass overfill listed as ball float and audible visual alarms. The facility also appears to have flapper valves The Veeder-Root monitoring panel showed all functions normal. Sensors and sumps in good order this date. The following documents were available for review: CUPA Business Activities form, CUPA Business Owner / Operator Identification form CUPA UST Facility Information form, CUPA UST Tank Information forms, CUPA [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 07/08/2014
Violations Found: No

Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

SB 989 test notification; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 08/28/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Received and reviewed SB989 testing, All components passed on 7/25/2017; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/14/2020
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

An overfill prevention equipment test was conducted at this facility on 2/5/2020. The overfill prevention equipment failed for each tank (see violation).; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 09/04/2014
Violations Found: Yes
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Received report for SB 989 testing performed on 8-27-14. Testing passed except UDCs 3/4, 5/6, 7/8 & 9/10.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/06/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Monitor cert notification; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/03/2015
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

On site for a routine compliance inspection. Steven Gallardo of Fastech currently performing a UST system monitoring certification. Current ICC, Veeder-Root, VMI and eSite certifications provided. System consists of two tanks and five UDCs. The four tank top sumps and five UDCs were free of liquid and the sensors were located at the proper positions. Sensors for the two tank annulars (brine filled) appeared to be positioned correctly. Reviewed all forms in the submittal. The only modification needed is to change the tank capacity of tank #2 from 12,000 gallons to 15,000 gallons. This amount was shown on the Veeder-Root tank profile during an on site visit. Re submit after change is made. Reviewed designated operator (DO) inspection reports during the past 12 months. All documented alarms during that period were followed up on. Corrective action/work orders were attached to the corresponding reports. Current DO training provided to 9 employees. Training records [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/06/2019
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Recieved and reviewed monitoring system certification and spill bucket testing report for testing done on 2/14/2019. All components passed at that time. Emailed report this date; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/12/2014
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site for initial hazardous materials and business emergency plan audit. Observed the facility and inspected hazardous materials storage. The following hazardous materials were observed in amounts that exceed the required disclosure quantities: - One 55 gallon drum of solid waste with gasoline - One 55 gallon drum of used sump testing water - Two gasoline USTs - One CO2 refrigerated liquid tank; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/08/2014
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Reviewed hazardous material disclosure in CERS. Accepted the emergency response and training plans. Declined the hazardous materials inventory and site map. The following modifications need to be made: > List the gasoline disclosures as "pure". There is already a CAS number for this disclosure. Leave mixture components box blank (if it populates). > The CAS number listed for detergent is water. This would not need to be disclosed. Delete this from the disclosure. > The mixture components box should be listed as "gasoline, 8006-61-9 and 1%" for the waste gas/water disclosure. > The propane on site meets the retail exemption. Delete this chemical from the submittal. > The maximum daily amount of the solid waste disclosure was less than 500 pounds. Delete this chemical from the disclosure. > There are symbols in the "key" on the site map for storm drain, sewer and emergency response equipment. However, these could not be located on the map itself. Indicate [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/14/2023
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HHW
Eval Source: CERS
Eval Notes:

On site to conduct a routine hazardous waste inspection. Gloria Arroyo, Manager, provided consent to inspect. The facility generates liquid mix with petroleum from testing activities and the 55-gallon drum is stored in the trash enclosure area. A perimeter walk was conducted. Municipal dumpsters does not appear to contain any hazardous waste. Emergency response information is posted and employees are reported to be trained. No hazardous waste violations were observe on this date. Inspection report emailed to environmental contact VESTA.SLAYMAN@7-11.COM; Note: data in [EVAL

Notes] field for some records is truncated from the source.

Eval Date: 03/12/2014
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

On site for a compliance inspection. Andrew McMichael of Fastech currently performing a UST system monitoring certification. Current ICC, Veeder-Root, VMI and e-Site certifications provided. Facility consists of two USTs and five UDCs. All sensors were located at the low areas of secondary containment. UDCs, 87 turbine sump and 91 fill sump were free of liquid. Small amounts of liquid (approximately one quart) were present in the 87 fill sump and 91 turbine sump. The service technician said he would clean them out prior to completion of today's testing. Reviewed designated operator reports during the past 12 months. All alarms documented were followed up on. Corrective action documentation attached to the corresponding reports. Current training provided to seven employees. Training documentation available for review. SB 989 testing performed and passed on 12-5-11. Certification of financial responsibility valid through 3-28-14. Facility information forms and [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 01/06/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Monitor cert notification; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 04/25/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Reviewed and accepted submittal in CERS. CFR valid through 3-31-17. DO notification statement dated 4-19-16.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 07/17/2013
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

The violation that was showing open has been abated and was closed in the system.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 08/09/2022
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

On site for routine UST inspection following change of ownership on 6/14/2022. Gloria Arroyo, Manager, provided consent to inspect. The facility has

two double-walled (87,91) tanks monitored by a Veeder Root TLS350 system. The monitor is operational for audible and visual alarms. Panel reads "all functions normal". Flapper valves are used for overfill prevention The following monitoring equipment is installed: - Tank annulars: VR302 - STP and fill sumps: VR208 - UDCs: 208 The following documents are available for review: monitoring plan, leak response plan, test reports, maintenance records, DO monthly reports, and DO annual employee training records. Testing was last conducted as follows: - Monitoring system certification: 2/3/22 - Spill bucket testing: 2/3/22 - Secondary containment: 7/16/20 - Overfill prevention inspection: 2/6/20 UST permitting documents have been submitted via CERS. Certification of financial responsibility is valid until 12/18/22 Inspection report emailed; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/12/2014
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Inspected perimeter of facility including the dumpster area. Permission to inspect and take necessary photos granted by Gloria Arroya. Hazardous waste contingency plan kept on site and available for review. Manifests for hazardous waste pickup reviewed on site. Training records regarding hazardous waste management available for review. No hazardous waste stored on site on this date. The two 55 gallon drums for solid and liquid hazardous waste were properly labeled and stored in the dumpster enclosure area. No violations noted at this time.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 10/06/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Monitor cert notification; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/14/2019
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Onsite inspection this date in regards to hazardous waste emailed copy of report to site.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/14/2019
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

report emailed to site and environmental contact Fastec Sephan Dombrowski - ICC certification 8206110 exp 3/20/19, VR B34616 exp 7/20/20, VMI 2233 exp 2/28/19 The facility has two UST's using sensors 302/208; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/03/2015
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval Notes:

Reviewed and and declined chemical disclosure in CERS. Please address the following: Maximum daily amount for gasoline should be 35,000 gallons (An on site inspection was performed to verify this amount) The mixture components box for sump waste should be completed as [gasoline 8006-61-9 1%]. Leave the trade secret line blank in the mixture components box for the soap disclosure. Re submit disclosure after modifications have been performed. Walked facility with latest site map in CERS (4-15-14). Map was complete with all required items. All items listed on the map were accurate as to the actual locations. Employee training records were current (8 employees) and available for review.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/30/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

SB 989 test notification for 7-25; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 11/20/2014
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

SB 989 test notification; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/04/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Reviewed and declined submittal in CERS. Please address the following: Delete the Rainshield and car wash wax disclosures from the submittal. They are listed at below disclosure threshold. Line three of the mixture components box for car wash detergent (trade secret) needs to be deleted. Resubmit after modifications have been performed.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 10/13/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

On site to confirm modifications and the functionality of the new monitoring components. Alfredo Ortega of Dimaggio Maintenance Construction on site to perform testing. Current ICC and Veeder-Root certifications provided. Sensors were changed (from eSite to Veeder-Root 208s) in the two turbine sumps, two fill sumps and five UDCs. All sensors were located in sleeves at the lowest area of secondary containment. Each sensor signaled an audible and visual alarm as leaks were simulated (submerged in water). Close SR0126488; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/08/2014
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST

Eval Source: CERS
Eval Notes:

On site to verify modifications and witness secondary testing. Saul Gonzalez of Belshire Environmental performed the modifications and testing. Current ICC certifications (install/retro fit & service technician) provided. New Bravo S penetration fittings installed on UDCs 3/4, 5/6, 7/8, & 9/10. The four UDCs passed consecutive 15 minute tests using an Incon sump tester. * Provide copy of resuts for today's testing to Health Care Agency. > Closed plan check number SR0124705; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/18/2014
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Monitor cert notification; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 10/01/2014
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Reviewed and approved plans; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/03/2015
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Inspected perimeter of facility including the dumpster area. Permission to inspect granted by the shift manager. Hazardous waste drums properly identified. No hazardous waste storage on this date. Manifests for hazardous waste pickup reviewed on site. Hazardous waste contingency plan kept on site and available for review. Employee training performed annually. Records reviewed on site. No violations noted at this time.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/31/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Reviewed and accepted submittal in CERS.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/02/2022
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

On site to conduct a routine Underground Storage Tank (UST) inspection. Gloria Arroyo, Manager, provided consent to inspect. The facility has two

USTs (87, 91 monitored by a Veeder Root and reads all functions normal. The UDCs, and sumps are monitored by VR 208 sensors, and tank annulars by VR302. Overfill protection provided fill tube shut off valve (flapper). Sensors were observed positioned to initiate alarms at the earliest point possible. Sensor out were verified and passed. All sensors tested and verified to be operational. Spill buckets were tested without any changes in water levels. Alarm history and set up tape reviewed while on site. Monitoring certification was conducted by Steven Loera with Fastech. Technician certifications were verified. The following were reviewed on this date: UST Permit to Operate Leak Response, Monitoring Plan, and Tank Pages DO Owner Statement Monthly DO Inspection Reports Training Test results for monitoring [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/16/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Review of monitoring certification done on 1/14/17. All components passed at that time.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/11/2014
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Reviewed and accepted facility information and UST forms in CERS.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 08/09/2022
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

On site to conduct a routine hazardous waste inspection following a change of ownership on 6/14/2022. Gloria Arroyo, Manager, provided consent to inspect. The facility generates liquid mix with petroleum from testing activities. A perimeter walk was conducted. Municipal dumpsters does not appear to contain any hazardous waste. Emergency response information is posted and employees are reported to be trained. No hazardous waste violations were observe on this date. Inspection report emailed to environmental contact VESTA.SLAYMAN@7-11.COM; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 10/01/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Reviewed HMBEP submission package on CERS, DENIED. Request for resubmittal within 30 days.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 01/06/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS

Eval Notes:

Monitor cert reschedule notification; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/14/2020
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

This Agency received the monitoring system certification test report, site map, and spill bucket test report for a test conducted 2/5/2020. The following components PASSED testing: - Tank Annular Sensors (2) - STP Sump Sensors (2) - Fill Sump Sensors (2) - UDC Sensors (5) - Fail Safe/Sensor Out - Spill Buckets Visual Test - Line Leak Detectors; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/01/2023
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

This Agency has received and reviewed the Monitoring System Certification Form and Line Leak Detection Form for testing conducted 2/14/23. Test reports shows passing results for all components tested. The 91 PLLD was replaced with like component and retested. Inspection report emailed to environmental contact VESTA.SLAYMAN@7-11.COM; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/14/2023
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site for routine hazardous materials and business emergency plan inspection. Gloria Arroyo, Manager, provided consent to inspect. Observed the facility and inspected hazardous materials storage. The following materials were observed in amounts that meet or exceed the minimum volumes required for disclosure: carbon dioxide, gasoline, gasoline mixed waste. Hazardous Materials disclosed in CERS (10403929) match what is reported on site. Per California Health & Safety Code Ch. 6.95, businesses that store and handle hazardous materials at or over reportable quantities (55 gal of a liquid, 500 lbs of a solid, 200 cubic ft of a compressed gas) must prepare and implement an HMBP. The facility is responsible for identifying all hazardous materials, including hazardous wastes, which are at or above disclosure thresholds. If there is a change in the type of amount of chemicals that are maintained on site, please submit revised documents (electronically though CERS) within 30 days of change.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/14/2017
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Routine inspection conducted this date in regards to hazardous waste, consent to enter, inspect and take photographs was given by – Lorena Hilliad, employee Hazardous waste containers on-site this date consisted of: waste fuel contaminated liquid and solid The containers are in compliance with all applicable labeling requirements this date. Per HMBEP, employees receive Hazardous Waste Management Training on the job. Consolidated waste receipts/ manifests were reviewed this date. Hazardous Waste Emergency Response information and was posted. Inspected municipal trash dumpster and area, no apparent hazardous waste in this area. Perimeter of facility inspected, no water runoff or staining noted at this time. Discussed – Hazardous Waste Program, Hazardous Materials Program, and Management of Universal Waste. E-mailed copy of report this date. >>>>Please consult http://occupainfo.com/ for assistance at any time. Of course, you may also contact [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/22/2016
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

On site for a routine compliance inspection. Aaron Medina of Fastech currently performing a UST system monitoring certification. Current ICC, Veeder-Root, and VMI and certifications provided. System consists of two tanks and five UDCs. The four tank top sumps and five UDCs were free of liquid and the sensors were located at the proper positions. Sensors for the two tank annulars (brine filled) appeared to be positioned correctly. Reviewed all forms in the CERS portal. Reviewed designated operator (DO) inspection reports during the past 12 months. All documented alarms during that period were followed up on. Corrective action/work orders were attached to the corresponding reports. DO statement valid through 6-12-16. Current DO training provided to 10 employees. Training records kept on site and available for review. Secondary containment testing valid through 9-3-17. Certification of financial responsibility valid through 3-28-16. Daily alarm log current and [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/04/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Reviewed and accepted submittal in CERS (removed e site information).; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 07/20/2020
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

This Agency received the secondary containment test report for a test conducted 7/16/2020. One secondary containment component FAILED testing (see violation). The following components PASSED testing: Tank annular (exempt Secondary piping run (2) Piping sump (2) Fill sump (2) UDCs (4); Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 01/05/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Received results for secondary containment testing performed on 12-8-14. UDCs 3/4, 5/6, 7/8, & 9/10 passed two consecutive 15 minute tests.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/05/2020
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

On site for routine hazardous waste inspection. Access to the facility, and permission to inspect and take photographs (if needed) was provided by Lorena Hilliad and Gloria Arroyo, and included the areas noted below. - Trash Dumpster Area: Fuel-contaminated water and absorbent The containers

were observed properly stored and labeled. Hazardous waste disposal documents were reviewed. A copy of this report will be sent to: burke.d. albelda@tsocorp.com; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/06/2018
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Received and reviewed monitoring certification results from testing done on 2/2/2018. All components passed that date.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/02/2022
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site for routine hazardous materials and business emergency plan inspection. Consent to enter and inspect was given by Gloria Arroyo, Manager. Observed the following materials on site at reportable quantities: - carbon dioxide (Carbon Mizer 550) - gasoline (regular/premium) - carwash (detergent) Hazardous Materials disclosed in CERS match what is reported on site. Training is reported to be conducted annually by the DO (UST/HW/HMBP) Per California Health & Safety Code Ch. 6.95, businesses that store and handle hazardous materials at or over reportable quantities (55 gal of a liquid, 500 lbs of a solid, 200 cubic ft of a compressed gas) must prepare and implement an HMBP. The facility is responsible for identifying all hazardous materials, including hazardous wastes, which are at or above disclosure thresholds. If there is a change in the type of amount of chemicals that are maintained on site, please submit revised documents (electronically though CERS) [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/05/2020
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

An onsite hazardous materials inspection of this facility was conducted this date. Access to the facility was provided by Gloria Arroyo. The following materials were observed in amounts that meet or exceed the minimum volumes required for disclosure: - Gasoline - Carbon Dioxide - Carwash detergent - Gasoline-contaminated water A copy of this inspection report will be emailed to: burke.d.albelda@tsocorp.com; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/06/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

accepted in CERS this date.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/14/2017
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval Notes:

On site to conduct hazardous materials chemical inventory and business emergency plan inspection this date, consent to enter, inspect and take photographs was given by - Lorena Hilliad, employee The HMBEP has been submitted through CERS 10403929 Employee Business Emergency Plan Training was reviewed this date. Safety/cleanup equipment is available. Hazardous materials storage area were reviewed at this time. The facility has the following hazardous materials that exceed the required disclosure quantities: **Please note, you are required to review the submittal yearly and resubmit prior to March 1st each year. You will get communication (probably email) indicating you should go in and review and resubmit around January of each year as a reminder. Emailed copy of inspection this date.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/22/2016
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Inspected perimeter of facility including the dumpster area. Permission to inspect granted by the shift manager. Hazardous waste drums properly identified. No hazardous waste storage on this date. Manifests for hazardous waste pickup reviewed on site. Hazardous waste contingency plan kept on site and available for review. Employee training records reviewed on site. Ten employees received hazardous waste management within the past 12 months. No violations noted at this time.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/31/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Reviewed and declined submittal in CERS. Delete the third line in the mixture components box for detergent "TRADE SECRET - 35.00 No". Resubmit after modification has been performed.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/12/2020
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

This Agency received the overfill prevention equipment certification test report for a test conducted 4/30/2020. The following tanks PASSED testing: - 87: Flapper (95%) - 91: Flapper (95%) The overfill prevention components listed in this report match those listed in the most recent CERS submittal. A copy of this inspection report will be emailed to: burke.d.albelda@tsocorp.com CORRECTED VIOLATIONS - 5/12/2020 I101 - Overfill test was completed for both USTs with PASS results (test conducted 4/30/20) I106 - Training documents indicate all staff have completed annual DO UST training.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/18/2021
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

On site to witness monitoring system certification testing activities and to conduct routine UST inspection. Annular sensors (wet annular) alarmed properly, both visual and audible, at sensor out, low and high liquid. Sump sensors alarmed properly (visual and audible) and shut down respective turbine when submerged in water. UDC sensors alarmed properly (visual and audible) and shut down all turbines when submerged in water. Fail-safe and sensor out were tested and passed. Line leak detectors were tested and passed. Spill buckets were tested visually with both failing initial test. The cap gasket for 87 tank and drain valve for 91 tank were replaced during inspection and both passed when retested. Copy of valid permit is posted inside glass covered bulletin in hallway by manager's office. Designated operator documentation, monthly inspection reports, monitoring plan, response plan, owner/operator agreement, employee training records, tank pages, [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the

source.

Eval Date: 02/19/2021
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

I received and reviewed copies of Monitoring System Certification Form and Spill Container Testing Report Form for activities conducted on 2/18/21 All components passed test.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/19/2014
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Received report for UST system monitoring certification performed on 3-12-14. All monitoring equipment operational per manufacturer's specifications.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 04/25/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Reviewed and accepted submittal in CERS.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 09/03/2013
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Received change of designated operator (DO) notification. Belshire Environmental Services, Inc. is the DO as of 8-15-13. Andrew Marvin is listed as the primary DO (8146893-UC).; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/14/2019
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

emailed copy to site disclosable materials include gasoline, CO2, test water and carwash detergent. The submittal was approved this date for 2019; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/29/2016
Violations Found: No
Eval General Type: Other/Unknown

Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Received results for a monitoring system certification performed on 2-22-16. All monitoring equipment operational per manufacturer's specifications.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Affiliations

Affil Type Desc: Operator
Entity Name: 7-ELEVEN INC.
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone: (800) 828-0711

Affil Type Desc: Identification Signer
Entity Name: TERESA S. MILES
Entity Title: SENIOR MANAGER
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: CUPA District
Entity Name: Orange County Env Health
Entity Title:
Address: 1241 East Dyer RoadSuite 120
City: Santa Ana
State: CA
Country:
Zip Code: 92705-5611
Phone: (714) 433-6406

Affil Type Desc: Property Owner
Entity Name: 7-ELEVEN INC.
Entity Title:
Address: P.O. BOX 711 ATTN: GASOLINE COMPLIANCE, LOC 148
City: DALLAS
State: TX
Country: United States
Zip Code: 75221
Phone: (800) 828-0711

Affil Type Desc: UST Permit Applicant
Entity Name: BURKE D. ALBELDA
Entity Title: ENVIRONMENTAL COMPLIANCE SUPERVISOR
Address:
City:
State:
Country:
Zip Code:
Phone: (310) 869-4096

Affil Type Desc: UST Tank Owner
Entity Name: 7-ELEVEN INC.
Entity Title:
Address: P.O BOX 711 ATTN: GASOLINE COMPLIANCE, LOC 148
City: DALLAS
State: TX

Country:	United States
Zip Code:	75221
Phone:	(800) 828-0711
Affil Type Desc:	Legal Owner
Entity Name:	7-ELEVEN INC.
Entity Title:	
Address:	P.O. BOX 711 ATTN: GASOLINE COMPLIANCE, LOC 148
City:	DALLAS
State:	TX
Country:	United States
Zip Code:	75221
Phone:	(800) 828-0711
Affil Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	
Address:	P.O. BOX 711 ATTN: GASOLINE COMPLIANCE, LOC 148
City:	DALLAS
State:	TX
Country:	
Zip Code:	75221
Phone:	
Affil Type Desc:	UST Property Owner Name
Entity Name:	7-ELEVEN INC.
Entity Title:	
Address:	P.O. BOX 711 ATTN: GASOLINE COMPLIANCE, LOC 148
City:	DALLAS
State:	TX
Country:	United States
Zip Code:	75221
Phone:	(800) 828-0711
Affil Type Desc:	Document Preparer
Entity Name:	BELSHIRE ENVIRONMENTAL SERVICES, INC.
Entity Title:	
Address:	
City:	
State:	
Country:	
Zip Code:	
Phone:	
Affil Type Desc:	UST Tank Operator
Entity Name:	7-ELEVEN INC.
Entity Title:	
Address:	P.O. BOX 711 ATTN: GASOLINE COMPLIANCE, LOC 148
City:	DALLAS
State:	TX
Country:	United States
Zip Code:	75221
Phone:	(800) 828-0711
Affil Type Desc:	Environmental Contact
Entity Name:	VESTA SLAYMAN
Entity Title:	
Address:	P.O. BOX 711 ATTN: GASOLINE COMPLIANCE, LOC 148
City:	DALLAS
State:	TX
Country:	
Zip Code:	75221
Phone:	
Affil Type Desc:	Parent Corporation
Entity Name:	7-ELEVEN INC.
Entity Title:	
Address:	
City:	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
State:						
Country:						
Zip Code:						
Phone:						
4	7 of11	ENE	0.03 / 135.75	343.26 / -12	TESORO SHELL 68503 27055 ALISO CREEK RD ALISO VIEJO CA 92656-3399	RCRA NON GEN

EPA Handler ID: CAL000321759
Gen Status Universe: No Report
Contact Name: BRENDA RAMIREZ
Contact Address: 19100 , RIDGEWOOD PKWY , , SAN ANTONIO , TX, 78259 , US
Contact Phone No and Ext: 210-626-5153
Contact Email: BRENDA.RAMIREZ@SPEEDWAY.COM
Contact Country: US
County Name: ORANGE
EPA Region: 09
Land Type:
Receive Date: 20210310
Location Latitude: 33.57009
Location Longitude: -117.724014

Violation/Evaluation Summary

Note: NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity: No
Mixed Waste Generator: No
Transporter Activity: No
Transfer Facility: No
Onsite Burner Exemption: No
Furnace Exemption: No
Underground Injection Activity: No
Commercial TSD: No
Used Oil Transporter: No
Used Oil Transfer Facility: No
Used Oil Processor: No
Used Oil Refiner: No
Used Oil Burner: No
Used Oil Market Burner: No
Used Oil Spec Marketer: No

Hazardous Waste Handler Details

Sequence No: 1
Receive Date: 20070705
Handler Name: TESORO SHELL 68503
Source Type: Implementer
Federal Waste Generator Code: N
Generator Code Description: Not a Generator, Verified

Hazardous Waste Handler Details

Sequence No: 1
Receive Date: 20210310
Handler Name: TESORO SHELL 68503
Source Type: Deactivation
Federal Waste Generator Code: N
Generator Code Description: Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street 1:***	19100 RIDGEWOOD PKWY
Name:	BRENDA RAMIREZ	***Street 2:***	
Date Became Current:		***City:***	SAN ANTONIO
Date Ended Current:		***State:***	TX
Phone:	210-626-5153	***Country:***	
Source Type:	Implementer	***Zip Code:***	78259

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street 1:***	19100 RIDGEWOOD PKWY
Name:	TESORO REFINING & MARKETING COMPANY	***Street 2:***	
Date Became Current:		***City:***	SAN ANTONIO
Date Ended Current:		***State:***	TX
Phone:	210-626-6153	***Country:***	US
Source Type:	Deactivation	***Zip Code:***	78259-0000

Owner/Operator Ind:	Current Operator	***Street No:***	19100
Type:	Other	***Street 1:***	RIDGEWOOD PKWY
Name:	TESORO REFINING & MARKETING COMPANY	***Street 2:***	
Date Became Current:		***City:***	SAN ANTONIO
Date Ended Current:		***State:***	TX
Phone:	210-626-5153	***Country:***	US
Source Type:	Deactivation	***Zip Code:***	78259-0000

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street 1:***	19100 RIDGEWOOD PKWY
Name:	TESORO REFINING & MARKETING COMPANY	***Street 2:***	
Date Became Current:		***City:***	SAN ANTONIO
Date Ended Current:		***State:***	TX
Phone:	210-626-6153	***Country:***	
Source Type:	Implementer	***Zip Code:***	78259-0000

Historical Handler Details

Receive Dt:	20070705
Generator Code Description:	Not a Generator, Verified
Handler Name:	TESORO SHELL 68503

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
4	8 of11	ENE	0.03 / 135.75	343.26 / -12	TESORO REFINING & MKTG ALISO CREEK SHEL 27055 ALISO CREEK RD ALISO VIEJO CA 92656	EMISSIONS

2017 Toxic Data

Facility ID:	151967	***COID:***	ORA
Facility SIC Code:	9999	***DISN:***	SOUTH COAST AQMD
CO:	30	***CHAPIS:***	
Air Basin:	SC	***CERR Code:***	
District:	SC		
TS:			
Health Risk Asmt:			
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

2018 Toxic Data

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Facility ID:	151967	**COID:**	ORA
Facility SIC Code:	9999	**DISN:**	SOUTH COAST AQMD
CO:	30	**CHAPIS:**	
Air Basin:	SC	**CERR Code:**	
District:	SC		
TS:			
Health Risk Asmt:			
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

2019 Toxic Data

CO:	30	**DISN:**	SOUTH COAST AQMD
Air Basin:	SC	**CHAPIS:**	
Faccility ID:	151967	**CERR Code:**	
District:	SC	**TS:**	
Facility SIC Code:	9999	**Health Risk Asmt:**	
COID:	ORA		
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

2020 Toxic Data

CO:	30	**DISN:**	SOUTH COAST AQMD
Air Basin:	SC	**CHAPIS:**	
Facility ID:	151967	**CHERR Code:**	
District:	SC	**TS:**	
Facility SIC Code:	9999	**Health Risk Asmt:**	
COID:	ORA		
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
4	9 of11	ENE	0.03 / 135.75	343.26 / -12	TESORO SIERRA PROPERTIES LLC #68503 27055 ALISO CREEK RD ALISO VIEJO CA 92656	RCRA NON GEN

EPA Handler ID:	CAL000460661
Gen Status Universe:	No Report
Contact Name:	TERESA MILES
Contact Address:	500 SPEEDWAY DR , , ENON , OH, 45323 ,
Contact Phone No and Ext:	562-305-8226
Contact Email:	TAMILES@SPEEDWAY.COM
Contact Country:	
County Name:	ORANGE
EPA Region:	09
Land Type:	
Receive Date:	20210302
Location Latitude:	
Location Longitude:	

Violation/Evaluation Summary

Note:	NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility:	No
Onsite Burner Exemption:	No

Furnace Exemption:	No
Underground Injection Activity:	No
Commercial TSD:	No
Used Oil Transporter:	No
Used Oil Transfer Facility:	No
Used Oil Processor:	No
Used Oil Refiner:	No
Used Oil Burner:	No
Used Oil Market Burner:	No
Used Oil Spec Marketer:	No

Hazardous Waste Handler Details

Sequence No:	1
Receive Date:	20210302
Handler Name:	TESORO SIERRA PROPERTIES LLC #68503
Source Type:	Implementer
Federal Waste Generator Code:	N
Generator Code Description:	Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind:	Current Owner	**Street No:**	
Type:	Other	**Street 1:**	500 SPEEDWAY DR
Name:	TESORO SIERRA PROPERTIES LLC	**Street 2:**	
Date Became Current:		**City:**	ENON
Date Ended Current:		**State:**	OH
Phone:	562-305-8226	**Country:**	
Source Type:	Implementer	**Zip Code:**	45323
Owner/Operator Ind:	Current Operator	**Street No:**	
Type:	Other	**Street 1:**	500 SPEEDWAY DR
Name:	TERESA MILES	**Street 2:**	
Date Became Current:		**City:**	ENON
Date Ended Current:		**State:**	OH
Phone:	562-305-8226	**Country:**	
Source Type:	Implementer	**Zip Code:**	45323

4	***10 of11***	***ENE***	***0.03 / 135.75***	***343.26 / -12***	***7-ELEVEN 43122 27055 ALISO CREEK RD ALISO VIEJO CA 92656***	***RCRA NON GEN***

EPA Handler ID:	CAL000471514
Gen Status Universe:	No Report
Contact Name:	JAMIL HERSHEWE
Contact Address:	PO BOX 711 , , DALLAS , TX, 75221 ,
Contact Phone No and Ext:	714-264-6074
Contact Email:	JAMIL.HERSHEWE@7-11.COM
Contact Country:	
County Name:	ORANGE
EPA Region:	09
Land Type:	
Receive Date:	20220623
Location Latitude:	
Location Longitude:	

Violation/Evaluation Summary

Note:	NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility:	No
Onsite Burner Exemption:	No
Furnace Exemption:	No
Underground Injection Activity:	No
Commercial TSD:	No
Used Oil Transporter:	No
Used Oil Transfer Facility:	No
Used Oil Processor:	No
Used Oil Refiner:	No
Used Oil Burner:	No
Used Oil Market Burner:	No
Used Oil Spec Marketer:	No

Hazardous Waste Handler Details

Sequence No:	1
Receive Date:	20220623
Handler Name:	7-ELEVEN 43122
Source Type:	Implementer
Federal Waste Generator Code:	N
Generator Code Description:	Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street 1:***	PO BOX 711
Name:	JAMIL HERSHEWE	***Street 2:***	
Date Became Current:		***City:***	DALLAS
Date Ended Current:		***State:***	TX
Phone:	714-264-6074	***Country:***	
Source Type:	Implementer	***Zip Code:***	75221

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street 1:***	3200 HACKBERRY RD
Name:	7-ELEVEN INC	***Street 2:***	
Date Became Current:		***City:***	IRVING
Date Ended Current:		***State:***	TX
Phone:	714-264-6074	***Country:***	
Source Type:	Implementer	***Zip Code:***	75063

4	***11 of11***	***ENE***	***0.03 / 135.75***	***343.26 / -12***	***7-ELEVEN INC #43122 27055 ALISO CREEK RD ALISO VIEJO CA 92656***	***EMISSIONS***

2021 Toxic Data

Co:	30	***DISN:***	SOUTH COAST AQMD
Air Basin:	SC	***CHAPIS:***	
Facility ID:	197513	***Cerr Code:***	
District:	SC	***TS:***	
Facility SIC Code:	9999	***Health Risk Asmt:***	
COID:	ORA		
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

5	***1 of1***	***W***	***0.03 / 145.23***	***394.52 / 40***	***SEA VIEW PEDIATRICS 2 JOURNEY #100 ALISO VIEJO CA 92653***	***RCRA NON GEN***

EPA Handler ID:	CAC003127280

Gen Status Universe:	No Report
Contact Name:	JAIME WILLIS
Contact Address:	2 JOURNEY , #100 , ALISO VIEJO , CA, 92653 ,
Contact Phone No and Ext:	949-951-5437
Contact Email:	JWILLIS@CHOC.ORG
Contact Country:	
County Name:	ORANGE
EPA Region:	09
Land Type:	
Receive Date:	20210630
Location Latitude:	
Location Longitude:	

Violation/Evaluation Summary

Note:	NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility:	No
Onsite Burner Exemption:	No
Furnace Exemption:	No
Underground Injection Activity:	No
Commercial TSD:	No
Used Oil Transporter:	No
Used Oil Transfer Facility:	No
Used Oil Processor:	No
Used Oil Refiner:	No
Used Oil Burner:	No
Used Oil Market Burner:	No
Used Oil Spec Marketer:	No

Hazardous Waste Handler Details

Sequence No:	1
Receive Date:	20210630
Handler Name:	SEA VIEW PEDIATRICS
Source Type:	Implementer
Federal Waste Generator Code:	N
Generator Code Description:	Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street 1:***	2 JOURNEY
Name:	JAIME WILLIS	***Street 2:***	#100
Date Became Current:		***City:***	ALISO VIEJO
Date Ended Current:		***State:***	CA
Phone:	949-951-5437	***Country:***	
Source Type:	Implementer	***Zip Code:***	92653

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street 1:***	1201 W. LA VETA AVE
Name:	CHOC ROBIN	***Street 2:***	
Date Became Current:		***City:***	ORANGE
Date Ended Current:		***State:***	CA
Phone:	949-951-5437	***Country:***	
Source Type:	Implementer	***Zip Code:***	92868

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
6	1 of1	SE	0.04 / 187.53	344.70 / -10	ACTA LABS INC 27101 ALISO CREEK RD ALISO VIEJO CA 92656	RCRA NON GEN

EPA Handler ID: CAD983663691
Gen Status Universe: No Report
Contact Name: KURT SCHULZE
Contact Address: 27101 ALISO CREEK RD , , FOOTHILL RANCH , CA, 92610-2508 , US
Contact Phone No and Ext: 949-595-0641
Contact Email:
Contact Country: US
County Name: ORANGE
EPA Region: 09
Land Type: Private
Receive Date: 19980915
Location Latitude:
Location Longitude:

Violation/Evaluation Summary

Note: NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity: No
Mixed Waste Generator: No
Transporter Activity: No
Transfer Facility: No
Onsite Burner Exemption: No
Furnace Exemption: No
Underground Injection Activity: No
Commercial TSD: No
Used Oil Transporter: No
Used Oil Transfer Facility: No
Used Oil Processor: No
Used Oil Refiner: No
Used Oil Burner: No
Used Oil Market Burner: No
Used Oil Spec Marketer: No

Hazardous Waste Handler Details

Sequence No: 1
Receive Date: 19980915
Handler Name: ACTA LABS INC
Source Type: Notification
Federal Waste Generator Code: N
Generator Code Description: Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind: Current Owner
Type: Private
Name: CAROLYN SCHULZE
Date Became Current:
Date Ended Current:
Phone: 714-362-5514
Source Type: Notification
Street No:
Street 1: 27101 ALISO CREEK RD
Street 2:
City: ALISO VIEJO
State: CA
Country:
Zip Code: 92656

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
7	1 of3	SE	0.05 / 276.76	346.91 / -8	Staar Surgical 27121 Aliso Creek Rd Ste 100 Aliso Viejo, Ca 92656-3364	HW ORANGE

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
					Aliso Viejo CA 92656-3364	

Establishment ID: FA0029104

7	2 of3	SE	0.05 / 276.76	346.91 / -8	**STAAR SURGICAL** **27121 ALISO CREEK RD STE 100** **ALISO VIEJO CA 92656**	CERS HAZ

Site ID: 428231
Latitude: 33.568220
Longitude: -117.723270

Regulated Programs

EI ID: 10541716 ***EI Description:*** Hazardous Waste Generator

EI ID: 10541716 ***EI Description:*** Chemical Storage Facilities

Violations

Violation Date: 09/11/2017 ***Violation Source:*** CERS
Violation Program: HMRRP ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Notes:

Returned to compliance on 06/25/2018. Complete CERS and submit all elements including disclosure of both the nitrogen cylinders and the cryogenic nitrogen within 30 days to abate this violation.

Violation Description:

Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.

Violations

Violation Date: 09/11/2017 ***Violation Source:*** CERS
Violation Program: HMRRP ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)
Violation Notes:

Returned to compliance on 06/25/2018. Please submit employee training records showing that all staff are annually trained on the Business Emergency Plan and on hazardous materials found onsite within 30 days to abate this violaion.

Violation Description:

Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years.

Violations

Violation Date: 09/11/2017 ***Violation Source:*** CERS
Violation Program: HMRRP ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Notes:

Returned to compliance on 06/25/2018. complete and upload a map that includes all of the required information and submit within 30 days to abate the violation.

Violation Description:

Failure to complete and electronically submit a site map with all required content.

Violations

Violation Date: 09/11/2017
Violation Source: CERS
Violation Program: HW
Violation Division: Orange County Environmental Health
Citation: 22 CCR 12 66262.40(a) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.40(a)
Violation Notes:

Returned to compliance on 09/11/2017. The manifests were not available during the inspection as the Production Supervisor was not available at that time. Please submit the last 2 years copies of manifests to my email for review within 30 days and I will abate the violation.

Violation Description:

Failure to keep a copy of each properly signed manifest for at least three years from the date the waste was accepted by the initial transporter. The manifest signed at the time the waste was accepted for transport shall be kept until receiving a signed copy from the designated facility which received the waste.

Evaluations

Eval Date: 08/26/2014
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site for initial hazardous materials and business emergency plan audit. Observed the facility and inspected hazardous materials storage. The following hazardous materials were observed in amounts that exceed the required disclosure quantities: - Six nitrogen compressed gas cylinders - Laboratory waste (contaminated solids) This report serves as notice that the facility must submit the following documents electronically within 30 days of this report: - Business Emergency Plan - Hazardous Materials Chemical Inventory - Site Map The facility is responsible for identifying all hazardous materials, to include hazardous wastes, which are above the disclosure thresholds. If there is a change in the type or amount of chemicals that are maintained on site, please submit revised documents (electronically) within 30 days of the change. The E-Submit portal for electronic submittal can be located at https://www.esubmit.ocgov.com/home/index.htm Site Map [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/21/2018
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Review of Ed Rael's emails, shows that he submitted by email. All violations were abated retroactively.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 09/11/2017
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site to conduct a new hazardous materials chemical inventory and business emergency plan inspection this date, consent to enter, inspect and take photographs was given by - Hiep Vu, chemist and discussion with Ed Real, production supervisor later. Hazardous materials storage area were reviewed at this time. The facility has the following hazardous materials that exceed the required disclosure quantities: - 6 cylinders of nitrogen, please find out how much nitrogen is stored in total and disclose that quantity - there is also a liquid nitrogen/cryogenic tank- disclose this material separately as the total amount of cryogenic nitrogen that is stored. The facility is required (and is notified) to electronically submit the following documents within 30 days of this inspection: - Business Activities form - Owner/Operator Identification form - Hazardous Material Chemical Inventory forms - Facility Site Map

- Business Emergency Plan The above documents be [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 10/27/2020
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

An onsite hazardous materials inspection of this facility was conducted this date. Access to the facility was provided by Ed Rael, Manager of Collamer Manufacturing. The following materials were observed in amounts that meet or exceed the minimum volumes required for disclosure: - Nitrogen liquid - Nitrogen gas A copy of this inspection report will be emailed to: erael@staar.com; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 07/28/2023
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site for routine Hazardous Materials Business Plan (HMBP). Roland Moreno, Senior Facility Specialty, provided consent to inspect. Observed the following materials on site at reportable quantities: nitorgen Hazardous Materials disclosed in CERS (10541716) match what is reported on site. Training is provided to staff through online training and records are also kept online. Per California Health & Safety Code Ch. 6.95, businesses that store and handle hazardous materials at or over reportable quantities (55 gal of a liquid, 500 lbs of a solid, 200 cubic ft of a compressed gas) must prepare and implement an HMBP. The facility is responsible for identifying all hazardous materials, including hazardous wastes, which are at or above disclosure thresholds. If there is a change in the type of amount of chemicals that are maintained on site, please submit revised documents (electronically though CERS) within 30 days of change. The HMBP must be submitted online through the California Envir; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 10/30/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Review of submittal, only facility info submitted, declined, requested rest The submittal was declined, please make the following changes and resubmit within 30 days; 1. in addition to the facility information, you also need to include the items located in the hazardous materials section along with a map and in the section Emergency Response and Training plan section. Submit all 3 sections for review.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 08/01/2013
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Inspected perimeter of facility including the trash containment areas. Permission to inspect and take necessary photos granted by Ed Rael (director of manufacturing). Manifests for hazardous waste pickup reviewed on site. Business emergency plan kept on site and available for review. No hazardous waste stored on site on this date. No violations noted at this time.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 09/11/2017
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency

Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Routine inspection conducted this date in regards to hazardous waste, consent to enter, inspect and take photographs was given by – Hiep Vu, chemist Hazardous waste containers on-site this date consisted of: lab waste solids and liquids, and sodium hydroxide The containers are in compliance with all applicable labeling requirements this date. Per Hiep Vu, employees receive Hazardous Waste Management Training on the job. Consolidated waste receipts/ manifests were unavailable to be reviewed this date. Hazardous Waste Emergency Response information and was posted. Inspected municipal trash dumpster and area, no apparent hazardous waste in this area. Perimeter of facility inspected, no water runoff or staining noted at this time. Discussed – Hazardous Waste Program, Hazardous Materials Program, and Management of Universal Waste. E-mailed copy of report this date. >>>>Please consult http://occupainfo.com/ for assistance at any time. Of course, [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 04/30/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site for a follow up inspection. Walked facility with Ed Real (Director of Manufacturing). Six compressed gas cylinders of nitrogen will need to be disclosed. Business has not yet disclosed this to Health Care Agency. Business must submit this immediately. The E-Submit portal for electronic submittal can be located at https://www.esubmit.ocgov.com/home/index.htm Site Map directions and template can be located at: http://occupainfo.com/civicax/filebank/blobdload.aspx?BlobID=14769 The completed site map will need to be uploaded to the reporting website. The California Electronic Reporting System (CERS) may also be used to meet the regulatory requirement for electronic reporting. * Inspection report emailed to Ed Real; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 07/28/2023
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

On site to conduct a routine hazardous waste inspection of the facility. Met this date with Roland Moreno, Senior Facility Specialist who granted consent to inspect. A walk through of the facility was conducted. The facility generates non-RCRA hazardous waste laboratory solids, waste liquids (corrosive and flammables) and sharps containers. Each laboratory and/or area that generates hazardous waste has appropriate waste containers (labeled as empty daily). The hazardous waste is consolidated daily into the appropriate hazardous waste drums from these locations to the hazardous waste storage (locked shed right outside the facility). All containers were properly labeled and stored closed. Hazardous waste is hauled by Crosby & Overton on a weekly basis. Manifest were available and reviewed. Emergency response information is posted. Employees are reported to be trained. Municipal trash is shared with other tenants. No hazardous waste violations were observed on this date. Inspection re; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 08/26/2014
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Inspected perimeter of facility including the dumpster area. Permission to inspected granted by Ed Real. Hazardous waste properly stored and identified. Manifests for hazardous waste pickup reviewed on site. Hazardous waste emergency response sticker completed and posted on site. No violations noted at this time.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 11/09/2020
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health

Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

A follow-up inspection was conducted this date (11/9/20). The violations noted below are in reference to a visit or review of your facility conducted on 10/27/20. OUTSTANDING VIOLATIONS - 11/9/20 NONE CORRECTED VIOLATIONS - 11/9/20 I463 - The operator has successfully completed an electronic submittal of its hazardous materials inventory and emergency plan. Each January the re-certification should include the following three components: Facility, Inventory, Emergency Plan. An inspection report is to be emailed to: erael@staar.com; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/21/2018
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Onsite inspection with Ed Rael in regards to haz mat disclosure not yet submitted. All haz mat violations are still open. I helped him work on the submittal this date, he will submit all info to his hired consultant for haz mat disclosure, Wayman Kam of CEF Engineering. Submit a copy of the the CERS submittal for all required sections and obtain acceptance to abate the issued violations. Emailed copy to Ed Rael.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 10/27/2020
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

On site for routine hazardous waste inspection. Access to the facility, and permission to inspect and take photographs (if needed) was provided by Ed Rael, Manager of Collamer Manufacturing, and included the areas noted below. - Laboratory/Manufacturing: Sodium hydroxide, alcohol, contaminated debris - Hazardous Waste Storage Area: containers properly labeled and closed The containers were observed properly stored and labeled. Hazardous waste disposal documents were reviewed. A copy of this report will be sent to: erael@staar.com; Note: data in [EVAL Notes] field for some records is truncated from the source.

Affiliations

Affil Type Desc: CUPA District
Entity Name: Orange County Env Health
Entity Title:
Address: 1241 East Dyer RoadSuite 120
City: Santa Ana
State: CA
Country:
Zip Code: 92705-5611
Phone: (714) 433-6406

Affil Type Desc: Operator
Entity Name: STAAR SURGICAL COMPANY
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone: (626) 201-9589

Affil Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title:
Address: 27121 Aliso Creek Rd, Suite 100
City: Aliso Viejo

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

State: CA
Country:
Zip Code: 92656
Phone:

Affil Type Desc: Property Owner
Entity Name: Oxford Spectrum Wilson, LLC
Entity Title:
Address: 27111 Aliso Creek Rd., Suite 196
City: Aliso Viejo
State: CA
Country: United States
Zip Code: 92656
Phone: (949) 250-0100

Affil Type Desc: Environmental Contact
Entity Name: Jack Ferguson
Entity Title:
Address: 25651 Atlantic Ocean Drive
City: Lake Forest
State: CA
Country:
Zip Code: 92630
Phone:

Affil Type Desc: Parent Corporation
Entity Name: STAAR SURGICAL
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Identification Signer
Entity Name: Ed Rael
Entity Title: Manager
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Legal Owner
Entity Name: STAAR SURGICAL COMPANY
Entity Title:
Address: erael@staar.com
City: Monrovia
State: CA
Country: United States
Zip Code: 91016
Phone: (626) 201-9589

Affil Type Desc: Document Preparer
Entity Name: Ed Rael
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

7	3 of3	SE	0.05 / 276.76	346.91 / -8	STAAR SURGICAL CO. 27121 ALISO CREEK RD STE 105 ALISO VIEJO CA 92656-3364	RCRA NON GEN

EPA Handler ID:	CAL000122201
Gen Status Universe:	No Report
Contact Name:	SEAN SIQUEIROS-DIRECTOR SAFETY
Contact Address:	1941 WALKER AVE , , MONROVIA , CA, 91016 ,
Contact Phone No and Ext:	626-303-7902
Contact Email:	SSIQUEIROS@STAAR.COM
Contact Country:	
County Name:	ORANGE
EPA Region:	09
Land Type:	
Receive Date:	19930608
Location Latitude:	33.568387
Location Longitude:	-117.723315

Violation/Evaluation Summary

Note:	NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility:	No
Onsite Burner Exemption:	No
Furnace Exemption:	No
Underground Injection Activity:	No
Commercial TSD:	No
Used Oil Transporter:	No
Used Oil Transfer Facility:	No
Used Oil Processor:	No
Used Oil Refiner:	No
Used Oil Burner:	No
Used Oil Market Burner:	No
Used Oil Spec Marketer:	No

Hazardous Waste Handler Details

Sequence No:	1
Receive Date:	19930608
Handler Name:	STAAR SURGICAL CO.
Source Type:	Implementer
Federal Waste Generator Code:	N
Generator Code Description:	Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street 1:***	1941 WALKER AVE
Name:	SEAN SIQUEIROS-DIRECTOR SAFETY	***Street 2:***	
Date Became Current:		***City:***	MONROVIA
Date Ended Current:		***State:***	CA
Phone:	626-303-7902	***Country:***	
Source Type:	Implementer	***Zip Code:***	91016

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street 1:***	1941 WALKER AVE
Name:	STAAR SURGICAL CO.	***Street 2:***	
Date Became Current:		***City:***	MONROVIA
Date Ended Current:		***State:***	CA
Phone:	626-303-7902	***Country:***	
Source Type:	Implementer	***Zip Code:***	91016-0000

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
8	1 of9	SE	0.06 / 320.33	347.20 / -8	PACIFIC PLAZA CLEANERS 27131 ALISO CREEK RD NUMBER 115 ALISO VIEJO CA 92656	RCRA SQG

EPA Handler ID: CA0000137612
Gen Status Universe: Small Quantity Generator
Contact Name: CRYSTAL PHAM
Contact Address: 27131 ALISO CREEK RD , NUMBER 115 , ALISO VIEJO , CA, 92656 , US
Contact Phone No and Ext: 714-643-9244
Contact Email:
Contact Country: US
County Name: ORANGE
EPA Region: 09
Land Type: Private
Receive Date: 19940224
Location Latitude: 33.5919
Location Longitude: -117.727281

Violation/Evaluation Summary

Note: NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity: No
Mixed Waste Generator: No
Transporter Activity: No
Transfer Facility: No
Onsite Burner Exemption: No
Furnace Exemption: No
Underground Injection Activity: No
Commercial TSD: No
Used Oil Transporter: No
Used Oil Transfer Facility: No
Used Oil Processor: No
Used Oil Refiner: No
Used Oil Burner: No
Used Oil Market Burner: No
Used Oil Spec Marketer: No

Hazardous Waste Handler Details

Sequence No: 1
Receive Date: 19940224
Handler Name: PACIFIC PLAZA CLEANERS
Federal Waste Generator Code: 2
Generator Code Description: Small Quantity Generator
Source Type: Notification

Owner/Operator Details

Owner/Operator Ind: Current Owner
Type: Private
Name: CRYSTAL PHAM
Date Became Current:
Date Ended Current:
Phone: 714-643-9244
Source Type: Notification
Street No:
Street 1: 27131 ALISO CREEK RD NO 115
Street 2:
City: ALISO VIEJO
State: CA
Country:
Zip Code: 92656

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
8	2 of9	SE	0.06 /	347.20 /	PACIFIC PLAZA CLEANERS	DRYCLEANERS

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
			320.33	-8	27131 ALISO CREEK RD STE 115 ALISO VIEJO CA	

EPA ID:	CAL000293176	**Owner City:**	ALISO VIEJO
Create Date:	4/12/2005	**Owner State:**	CA
Facility Act Ind:	No	**Owner Zip:**	926563361
Inact Date:	6/30/2013	**Owner Phone:**	9496439244
Reason:	SIC/NAICS	**Owner Fax:**	9496439244
Region Code:	4	**Contact Name:**	EUNICE KIM
DD Latitude:	33.56861	**Contact Street 1:**	27131 ALISO CREEK RD STE 115
DD Longitude:	-117.72327	**Contact Street 2:**	
Facility County Code:	(30) ORANGE	**Contact City:**	ALISO VIEJO
Mail Name:		**Contact State:**	CA
Owner Name:	EUNICE KIM	**Contact Zip:**	926563361
Owner Street 1:	27131 ALISO CREEK RD STE 115	**Contact Phone:**	9493788918
Owner Street 2:		**Contact Fax:**	9496439244

NAICS Details

NAICS Code:	81232
NAICS Description:	Drycleaning and Laundry Services (except Coin-Operated)
SIC Code:	7211
SIC Description:	Power Laundries, Family and Commercial

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
8	3 of9	SE	0.06 / 320.33	347.20 / -8	PACIFIC PLAZA CLEANERS 27131 ALISO CREEK RD ALISO VIEJO CA	DRYCLEANERS

EPA ID:	CA0000137612	**Owner City:**	ALISO VIEJO
Create Date:	12/8/1995	**Owner State:**	CA
Facility Act Ind:	No	**Owner Zip:**	926560000
Inact Date:	6/30/2005	**Owner Phone:**	9496335659
Reason:	SIC/NAICS	**Owner Fax:**	
Region Code:	4	**Contact Name:**	A.J. MOBASSON
DD Latitude:	33.568644	**Contact Street 1:**	27131 ALISO CREEK RD #115
DD Longitude:	-117.723325	**Contact Street 2:**	
Facility County Code:	(30) ORANGE	**Contact City:**	ALISO VIEJO
Mail Name:		**Contact State:**	CA
Owner Name:	NASRI CORP. INC.	**Contact Zip:**	926560000
Owner Street 1:	27131 ALISO CREEK RD NO 115	**Contact Phone:**	9496335659
Owner Street 2:		**Contact Fax:**	

NAICS Details

NAICS Code:	81232
NAICS Description:	Drycleaning and Laundry Services (except Coin-Operated)
SIC Code:	7211
SIC Description:	Power Laundries, Family and Commercial

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
8	4 of9	SE	0.06 / 320.33	347.20 / -8	PACIFIC PLAZA CLEANERS 27131 ALISO CREEK RD STE 115 ALISO VIEJO CA	DRYCLEANERS

EPA ID:	CAL000389606	**Owner City:**	ALISO VIEJO
Create Date:	9/20/2013	**Owner State:**	CA
Facility Act Ind:	Yes	**Owner Zip:**	926563361
Inact Date:		**Owner Phone:**	9496439244
Reason:	SIC/NAICS	**Owner Fax:**	
Region Code:	4	**Contact Name:**	JEFF AN
DD Latitude:	0	**Contact Street 1:**	27131 ALISO CREEK RD STE 115
DD Longitude:	0	**Contact Street 2:**	
Facility County Code:	(30) ORANGE	**Contact City:**	ALISO VIEJO
Mail Name:		**Contact State:**	CA
Owner Name:	JYCBO INC	**Contact Zip:**	92656
Owner Street 1:	27131 ALISO CREEK RD STE 115	**Contact Phone:**	9496439244

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Owner Street 2: **Contact Fax:**

NAICS Details

NAICS Code: 81232
NAICS Description: Drycleaning and Laundry Services (except Coin-Operated)
SIC Code: 7211
SIC Description: Power Laundries, Family and Commercial

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8 | **5 of9** | **SE** | **0.06 / 320.33** | **347.20 / -8** | **PACIFIC PLAZA CLEANERS**
27131 ALISO CREEK RD #115
ALISO VIEJO CA | **DRYCLEANERS**

EPA ID: CAL000274854
Create Date: 9/23/2003
Facility Act Ind: No
Inact Date: 1/30/2005
Reason: SIC/NAICS
Region Code: 4
DD Latitude: 33.561638
DD Longitude: -117.725918
Facility County Code: (30) ORANGE
Mail Name:
Owner Name: LUIS CORTES
Owner Street 1: 22501 CHASE # 12116
Owner Street 2:
Owner City: ALISO VIEJO
Owner State: CA
Owner Zip: 92656
Owner Phone: 9499166233
Owner Fax:
Contact Name: LUIS CORTES
Contact Street 1: 27131 ALISO CREEK RD #115
Contact Street 2:
Contact City: ALISO VIEJO
Contact State: CA
Contact Zip: 926560000
Contact Phone: 9496439244
Contact Fax:

NAICS Details

NAICS Code: 81232
NAICS Description: Drycleaning and Laundry Services (except Coin-Operated)
SIC Code: 7211
SIC Description: Power Laundries, Family and Commercial

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8 | **6 of9** | **SE** | **0.06 / 320.33** | **347.20 / -8** | **Pacific Plaza Cleaners**
27131 Aliso Creek Rd Ste 115
Aliso Viejo, Ca 92656-3361
Aliso Viejo CA 92656-3361 | **HW ORANGE**

Establishment ID: FA0046163

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8 | **7 of9** | **SE** | **0.06 / 320.33** | **347.20 / -8** | **FAMILY & SPORTS CHIROPRACTIC**
27131 ALISO CREEK RD__STE 105
ALISO VIEJO CA 92656-0000 | **RCRA NON GEN**

EPA Handler ID: CAL000169937
Gen Status Universe: No Report
Contact Name: JAMES REILEY
Contact Address: 27131 ALISO CREEK RD__STE 105 , , ALISO VIEJO , CA, 92656 ,
Contact Phone No and Ext: 949-448-9088
Contact Email: DR.REILEY@GMAIL.COM
Contact Country:
County Name: ORANGE
EPA Region: 09
Land Type:
Receive Date: 19971020
Location Latitude: 33.567668
Location Longitude: -117.723458

Violation/Evaluation Summary

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Note: NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility:	No
Onsite Burner Exemption:	No
Furnace Exemption:	No
Underground Injection Activity:	No
Commercial TSD:	No
Used Oil Transporter:	No
Used Oil Transfer Facility:	No
Used Oil Processor:	No
Used Oil Refiner:	No
Used Oil Burner:	No
Used Oil Market Burner:	No
Used Oil Spec Marketer:	No

Hazardous Waste Handler Details

Sequence No:	1
Receive Date:	19971020
Handler Name:	FAMILY & SPORTS CHIROPRACTIC
Source Type:	Implementer
Federal Waste Generator Code:	N
Generator Code Description:	Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind:	Current Operator	**Street No:**	
Type:	Other	**Street 1:**	27131 ALISO CREEK RD__STE 105
Name:	JAMES REILEY	**Street 2:**	
Date Became Current:		**City:**	ALISO VIEJO
Date Ended Current:		**State:**	CA
Phone:	949-448-9088	**Country:**	
Source Type:	Implementer	**Zip Code:**	92656
Owner/Operator Ind:	Current Owner	**Street No:**	
Type:	Other	**Street 1:**	27131 ALISO CREEK RD__STE 105
Name:	FAMILY & SPORTS CHIROPRACTIC	**Street 2:**	
Date Became Current:		**City:**	ALISO VIEJO
Date Ended Current:		**State:**	CA
Phone:	714-448-9088	**Country:**	
Source Type:	Implementer	**Zip Code:**	92656-0000

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
8	8 of9	SE	0.06 / 320.33	347.20 / -8	PACIFIC PLAZA CLEANERS 27131 ALISO CREEK RD STE 115 ALISO VIEJO CA 92656-3361	RCRA NON GEN

EPA Handler ID:	CAL000389606
Gen Status Universe:	No Report
Contact Name:	JEFF AN
Contact Address:	27131 ALISO CREEK RD STE 115 , , ALISO VIEJO , CA, 92656 ,
Contact Phone No and Ext:	949-643-9244
Contact Email:	SPORTAGEMAX@YAHOO.COM
Contact Country:	
County Name:	ORANGE
EPA Region:	09
Land Type:	
Receive Date:	20130920
Location Latitude:	33.567606

Location Longitude: -117.723476

Violation/Evaluation Summary

Note: NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity: No
Mixed Waste Generator: No
Transporter Activity: No
Transfer Facility: No
Onsite Burner Exemption: No
Furnace Exemption: No
Underground Injection Activity: No
Commercial TSD: No
Used Oil Transporter: No
Used Oil Transfer Facility: No
Used Oil Processor: No
Used Oil Refiner: No
Used Oil Burner: No
Used Oil Market Burner: No
Used Oil Spec Marketer: No

Hazardous Waste Handler Details

Sequence No: 1
Receive Date: 20130920
Handler Name: PACIFIC PLAZA CLEANERS
Source Type: Implementer
Federal Waste Generator Code: N
Generator Code Description: Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind: Current Operator
Type: Other
Name: JEFF AN
Date Became Current:
Date Ended Current:
Phone: 949-643-9244
Source Type: Implementer
Street No:
Street 1: 27131 ALISO CREEK RD STE 115
Street 2:
City: ALISO VIEJO
State: CA
Country:
Zip Code: 92656

Owner/Operator Ind: Current Owner
Type: Other
Name: JYCBO INC
Date Became Current:
Date Ended Current:
Phone: 949-643-9244
Source Type: Implementer
Street No:
Street 1: 27131 ALISO CREEK RD STE 115
Street 2:
City: ALISO VIEJO
State: CA
Country:
Zip Code: 92656-3361

8	9 of9	SE	0.06 / 320.33	347.20 / -8	PACIFIC PLAZA CLEANERS 27131 ALISO CREEK RD ALISO VIEJO CA 92656	FED DRYCLEANERS

FRS Facility ID: 110002614127
NPDES IDs:
NAICS Codes: 81232
SIC Codes:
Latitude: 33.567997
Longitude: -117.723345

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
9	1 of2	SW	0.07 / 359.65	380.48 / 25	Hampton Research Corp 34 Journey Aliso Viejo, Ca 92656-3317 Aliso Viejo CA 92656-3317	HW ORANGE

Establishment ID: FA0041869

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
9	2 of2	SW	0.07 / 359.65	380.48 / 25	HAMPTON RESEARCH CORP 34 JOURNEY ALISO VIEJO CA 92656	RCRA NON GEN

EPA Handler ID: CAL000271845
Gen Status Universe: No Report
Contact Name: BOB CUDNEY EXT 200
Contact Address: 34 JOURNEY , , ALISO VIEJO , CA, 92656 ,
Contact Phone No and Ext: 949-425-1321
Contact Email: BOB@HRMAIL.COM
Contact Country:
County Name: ORANGE
EPA Region: 09
Land Type:
Receive Date: 20030616
Location Latitude: 33.567957
Location Longitude: -117.726002

Violation/Evaluation Summary

Note: NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity: No
Mixed Waste Generator: No
Transporter Activity: No
Transfer Facility: No
Onsite Burner Exemption: No
Furnace Exemption: No
Underground Injection Activity: No
Commercial TSD: No
Used Oil Transporter: No
Used Oil Transfer Facility: No
Used Oil Processor: No
Used Oil Refiner: No
Used Oil Burner: No
Used Oil Market Burner: No
Used Oil Spec Marketer: No

Hazardous Waste Handler Details

Sequence No: 1
Receive Date: 20030616
Handler Name: HAMPTON RESEARCH CORP
Source Type: Implementer
Federal Waste Generator Code: N
Generator Code Description: Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind: Current Owner
Type: Other
Name: HAMPTON RESEARCH CORP
Street No:
Street 1: 34 JOURNEY
Street 2:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Date Became Current:		**City:**	ALISO VIEJO
Date Ended Current:		**State:**	CA
Phone:	949-425-1321	**Country:**	
Source Type:	Implementer	**Zip Code:**	92656-3317
Owner/Operator Ind:	Current Operator	**Street No:**	
Type:	Other	**Street 1:**	34 JOURNEY
Name:	BOB CUDNEY EXT 200	**Street 2:**	
Date Became Current:		**City:**	ALISO VIEJO
Date Ended Current:		**State:**	CA
Phone:	949-425-1321	**Country:**	
Source Type:	Implementer	**Zip Code:**	92656

10 | ***1 of1*** | ***SE*** | ***0.07 / 374.15*** | ***348.14 / -7*** | ***Verizon Wireless: Aliso Viejo
27141 ALISO CREEK ROAD, #245
ALISO VIEJO CA 92656*** | ***CERS HAZ***

Site ID:	81986
Latitude:	33.568230
Longitude:	-117.724650

Regulated Programs

EI ID:	10160969	**EI Description:**	Chemical Storage Facilities

Violations

Violation Date:	04/08/2016	**Violation Source:**	CERS
Violation Program:	HMRRP	**Violation Division:**	Orange County Environmental Health
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)		
Violation Notes:			

Returned to compliance on 10/15/2016. Please revise Facility Map #2 to show the correct location of the battery cells.

Violation Description:

Failure to complete and electronically submit a site map with all required content.

Violations

Violation Date:	06/17/2014	**Violation Source:**	CERS
Violation Program:	HMRRP	**Violation Division:**	Orange County Environmental Health
Citation:	HSC 6.95 25505(a) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)		
Violation Notes:			

Returned to compliance on 03/20/2015.

Violation Description:

Owner/Operator failed to complete and/or submit a Hazardous Materials Business Plan when storing hazardous materials at or above the thresholds quantities of 55 gallons/500 lbs/200 cubic feet.

Evaluations

Eval Date:	04/05/2016
Violations Found:	No
Eval General Type:	Other/Unknown
Eval Type:	Other, not routine, done by local agency
Eval Division:	Orange County Environmental Health
Eval Program:	HMRRP
Eval Source:	CERS
Eval Notes:	

Eval Date: 10/15/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Review of CERS submittal. Maps updated and violation abated. Accepted facility info and HM inventory.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 04/01/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Scheduling inspection with technician.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 01/23/2023
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site for routine hazardous materials and business emergency plan inspection. Consent to enter and inspect was given by Steven Rossi, Field Engineer. . Observed the following materials on site at reportable quantities: lead acid batteries Hazardous Materials disclosed in CERS (10160969) match what is reported on site. Training is maintained online. Per California Health & Safety Code Ch. 6.95, businesses that store and handle hazardous materials at or over reportable quantities(55 gal of a liquid, 500 lbs of a solid, 200 cubic ft of a compressed gas) must prepare and implement an HMBP. The facility is responsible for identifying all hazardous materials, including hazardous wastes, which are at or above disclosure thresholds. If there is a change in the type of amount of chemicals that are maintained on site, please submit revised documents (electronically though CERS) within 30 days of change. The HMBP must be submitted online through the California Environmental Reporting System (; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/01/2019
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site for a routine inspection with Carlos Martinez (cell field technician). Walked facility with the latest disclosed hazardous material inventory and site map. Hazardous material containment appeared to be in satisfactory condition. No signs of leaking or previous releases. Locations for site map requirements were accurate. Did not observe any additional hazardous material stored at or above disclosure threshold. This is an "unmanned" facility. Training provided to all Verizon responder employees. Hazardous materials business emergency plan available for review. * Change the phone number in box C3 of the emergency response/contingency plan to (714) 433-6406. Also, Location for the water shut off is missing from the facility site map. Add location to one of the site maps. Re submit within 30 days.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/16/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval Notes:

Review of CERS accepted for 2017; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 10/09/2014
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Disclosure review - accepted; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 04/08/2016
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Onsite to conduct a routine hazardous material business emergency plan HMBEP inspection. Consent to inspect and take photos if necessary was granted by the technician, Dana Jacobsen. No photos were taken on this date. The following were observed: 24 back-up battery cells (Unigy II) CERS submittal dated 2/16/16 was verified during this inspection. Facility Information: ACCEPTED, Emergency Response and Training Plans: ACCEPTED Hazardous Materials Inventory: NOT ACCEPTED. Please revise Facility Map #2 to show the correct location of the battery string. A copy of this report will be sent to myrna.allende@verizonwireless.com; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/17/2014
Violations Found: Yes
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Nondisclosure violation; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/20/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

2015 HMBEP is accepted. No changes.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Affiliations

Affil Type Desc: Legal Owner
Entity Name: Verizon Wireless
Entity Title:
Address: 15505 Sand Canyon Avenue
City: Irvine
State: CA
Country: United States
Zip Code: 92618
Phone: (949) 286-7000

Affil Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title:
Address: 15505 Sand Canyon Avenue
City: Irvine
State: CA
Country:
Zip Code: 92618
Phone:

Affil Type Desc: Document Preparer
Entity Name: Steve Skanderson, Stantec
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Parent Corporation
Entity Name: Verizon Wireless [Southern California]
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Environmental Contact
Entity Name: Environmental Compliance
Entity Title:
Address: 15505 Sand Canyon Avenue
City: Irvine
State: CA
Country:
Zip Code: 92618
Phone:

Affil Type Desc: Identification Signer
Entity Name: Wilson Rodriguez
Entity Title: Engr III Spec-RE/Regulatory
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Operator
Entity Name: Verizon Wireless
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone: (949) 286-7000

Affil Type Desc: CUPA District
Entity Name: Orange County Env Health
Entity Title:
Address: 1241 East Dyer RoadSuite 120
City: Santa Ana
State: CA
Country:
Zip Code: 92705-5611
Phone: (714) 433-6406

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
11	1 of1	NNE	0.07 / 376.02	349.13 / -6	Del Taco #937 26951 ALISO CREEK RD ALISO VIEJO CA 92656	CERS HAZ

Site ID: 24515
Latitude: 33.571423
Longitude: -117.723885

Regulated Programs

EI ID: 10592440 **EI Description:** Chemical Storage Facilities

Violations

Violation Date: 06/20/2017 **Violation Source:** CERS
Violation Program: HMRRP **Violation Division:** Orange County Environmental Health
Citation: HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)
Violation Notes:

Returned to compliance on 06/26/2017. No training has been documented. Submit proof of business emergency plan training and training on the hazards of CO2 for all site employees. Employee training should include both of these items both when they start and annually. A copy of a log or sign in sheet that shows both of the trainings listed above and date/employee will be adequate. Please email it to me.

Violation Description:

Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years.

Violations

Violation Date: 08/09/2022 **Violation Source:** CERS
Violation Program: HMRRP **Violation Division:** Orange County Environmental Health
Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2
Violation Notes:

Electronically submit and certify that the business plan is complete, accurate, and in compliance with EPCRA within 30 days. On an ongoing basis, electronically submit and certify the business plan annually on or before the annual due date. Submittal of your annual certification documents for disclosing hazardous materials was due by March 1st and was last updated 2/23/21. Please log into CERS at http://cers.calepa.ca.gov/log into "Business Portal Sign In" and submit documents.

Violation Description:

Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.

Evaluations

Eval Date: 07/05/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

review of CERS, accepted facility info and map; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/04/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency

Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Review in CERS, declined this date HM On the chemical page for CO2, the storage pressure is above ambient and the temperature is below ambient, please change and resubmit.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 08/09/2022
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site for routine Hazardous Materials Business Plan (HMBP) inspection. Isabel, Manager, provided consent to inspect. Observed the following materials on site at reportable quantities - Carbon dioxide Materials disclosed in CERS10592440 match what is reported on site. Training was reported to have been conducted and records are kept online. CERS was last summited on 2/23/2021. Please logged into your account and certify the information in CERS is correct for the 2022 year. Per California Health & Safety Code Ch. 6.95, businesses that store and handle hazardous material sat or over reportable quantities (55 gal of a liquid, 500 lbs of a solid, 200 cubic ft of compressed gas) must prepare and implement an HMBP. The facility is responsible for identifying all hazardous materials, including hazardous wastes, which are at or above disclosure thresholds. If there is a change in the type of amount of chemicals that are maintained on site, please submit revised documents (electronically th; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/06/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Reviewed and declined disclosure in CERS. Please add the following to the site map: Site orientation (north arrow) Adjacent street Emergency shut offs (electrical, water & natural gas) Resubmit after modifications have been performed.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 04/08/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Reviewed and accepted submittal in CERS.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/30/2020
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

An onsite hazardous materials inspection of this facility was conducted this date. Access to the facility was provided by Isabella Lagunas, Manager. The following materials were observed in amounts that meet or exceed the minimum volumes required for disclosure: - Carbon Dioxide A copy of this inspection report will be emailed to: tnicholson@deltaco.com; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/22/2016
Violations Found: No

Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Reviewed and declined submittal in CERS. Please address the following regarding the facility site map: Site orientation (north arrow)and adjacent street are missing. Employee evacuation/staging area needs to be added. Locations for the electrical and water shut offs need to be included. > Add the above mentioned items to the map and resubmit.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/03/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Review of CERS, declined chemical pages Declined materials this date, make the following changes and resubmit within 30 days; 1. on the CO2 chemical page -make physical state liquid -make trade secret no -make units gallons and the maximum daily amount- 64 gal, average daily amount- 51 gal largest container- 57 gallons (recent changes in the regulation require disclosure in the units it is stored. -populate storage pressure as above ambient and storage pressure as below ambient The submittal was declined at this time, please change the CUPA phone number to our general number 714-433-6000. Remove all old copies to reduce confusion. If you need a new template to make it easier, here is the link http://www.calepa.ca.gov/CUPA/Documents/eTemplates/Contingency.pdf; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/06/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

review of CERS, accepted; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/20/2017
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site to conduct hazardous materials chemical inventory and business emergency plan inspection this date, consent to enter, inspect and take photographs was given by - Jaime Hernandez, supervisor. The HMBEP has been submitted through CERS 10592440 Employee Business Emergency Plan Training was not available this date, see violation. The map on CERS requires addition of the evacuation staging area so that they can be trained on the accurate information. I have declined the map in CERS this date. Safety/cleanup equipment is available. Hazardous materials storage area were reviewed at this time. The facility has the following hazardous materials that exceed the required disclosure quantities: CO2 **Please note, you are required to review the submittal yearly and resubmit prior to March 1st each year. You will get communication (probably email) indicating you should go in and review and resubmit around January of each year as a reminder. Emailed copy of [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Affiliations

Affil Type Desc: Legal Owner
Entity Name: DEL TACO LLC
Entity Title:
Address: 25521 Commercentre Dr. Ste. 200
City: Lake Forest
State: CA
Country: United States

Zip Code:	92630
Phone:	(949) 462-9300
Affil Type Desc:	Facility Mailing Address
Entity Name:	Mailing Address
Entity Title:	
Address:	26951 Aliso Creek Rd
City:	Aliso Viejo
State:	CA
Country:	
Zip Code:	92656
Phone:	
Affil Type Desc:	Identification Signer
Entity Name:	Mark Raber
Entity Title:	Manager of Special Projects, Facilities
Address:	
City:	
State:	
Country:	
Zip Code:	
Phone:	
Affil Type Desc:	Operator
Entity Name:	Del Taco #937
Entity Title:	
Address:	
City:	
State:	
Country:	
Zip Code:	
Phone:	(949) 448-9171
Affil Type Desc:	Property Owner
Entity Name:	Donahue Schriber Realty Group, L.P.
Entity Title:	
Address:	200 E Baker, Ste. 100
City:	Costa Mesa
State:	CA
Country:	United States
Zip Code:	92626
Phone:	(714) 966-6433
Affil Type Desc:	Environmental Contact
Entity Name:	Mark Raber
Entity Title:	
Address:	25521 Commercentre Dr. 2nd Floor
City:	Lake Forest
State:	CA
Country:	
Zip Code:	92630
Phone:	
Affil Type Desc:	Document Preparer
Entity Name:	Mark Raber
Entity Title:	
Address:	
City:	
State:	
Country:	
Zip Code:	
Phone:	
Affil Type Desc:	CUPA District
Entity Name:	Orange County Env Health
Entity Title:	
Address:	1241 East Dyer RoadSuite 120
City:	Santa Ana
State:	CA

Country:
Zip Code: 92705-5611
Phone: (714) 433-6406

Affil Type Desc: Parent Corporation
Entity Name: Del Taco
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Coordinates

Env Int Type Code: HMBP
Program ID: 10592440
Latitude: 33.571440
Longitude: -117.723790
Coord Name:
Ref Point Type Desc: Center of a facility or station.

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
12	1 of5	NNW	0.08 / 410.00	357.69 / 3	RALPHS GROCERY COMPANY #755 26901 ALISO CREEK RD ALISO VIEJO CA 92656	RCRA LQG

EPA Handler ID: CAR000259143
Gen Status Universe: Large Quantity Generator
Contact Name: SHERRIE WALTERS
Contact Address: 1100 , W ARTESIA BLVD , , COMPTON , CA, 90220 , US
Contact Phone No and Ext: 310-884-4016
Contact Email: SHERRIE.WALTERS@RALPHS.COM
Contact Country: US
County Name: ORANGE
EPA Region: 09
Land Type: Private
Receive Date: 20160212
Location Latitude: 33.5919
Location Longitude: -117.727281

Violation/Evaluation Summary

Note: NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity: No
Mixed Waste Generator: No
Transporter Activity: No
Transfer Facility: No
Onsite Burner Exemption: No
Furnace Exemption: No
Underground Injection Activity: No
Commercial TSD: No
Used Oil Transporter: No
Used Oil Transfer Facility: No
Used Oil Processor: No
Used Oil Refiner: No
Used Oil Burner: No
Used Oil Market Burner: No
Used Oil Spec Marketer: No

Hazardous Waste Handler Details

Sequence No: 1
Receive Date: 20160212
Handler Name: RALPHS GROCERY COMPANY #755
Federal Waste Generator Code: 1
Generator Code Description: Large Quantity Generator
Source Type: Notification

Waste Code Details

Hazardous Waste Code: 122
Waste Code Description: Alkaline solution without metals (pH > 12.5)

Hazardous Waste Code: 214
Waste Code Description: Unspecified solvent mixture

Hazardous Waste Code: 311
Waste Code Description: Pharmaceutical waste

Hazardous Waste Code: 331
Waste Code Description: Off-specification, aged, or surplus organics

Hazardous Waste Code: D001
Waste Code Description: IGNITABLE WASTE

Hazardous Waste Code: D005
Waste Code Description: BARIUM

Hazardous Waste Code: D006
Waste Code Description: CADMIUM

Hazardous Waste Code: D007
Waste Code Description: CHROMIUM

Hazardous Waste Code: D035
Waste Code Description: METHYL ETHYL KETONE

Hazardous Waste Code: P001
Waste Code Description: 2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYLBUTYL)-, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3% (OR) WARFARIN, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3%

Hazardous Waste Code: P075
Waste Code Description: NICOTINE, & SALTS (OR) PYRIDINE, 3-(1-METHYL-2-PYRROLIDINYL)-,(S)-, & SALTS

Hazardous Waste Code: U002
Waste Code Description: 2-PROPANONE (I) (OR) ACETONE (I)

Owner/Operator Details

Owner/Operator Ind:	Current Owner	**Street No:**	200
Type:	Private	**Street 1:**	E BAKER ST STE 100
Name:	DONAHUE SCHRIBER REALTY GROUP LP	**Street 2:**	
Dt Became Current:	19970402	**City:**	COSTA MESA
Dt Ended Current:		**State:**	CA
Phone:	714-966-6433	**Country:**	US
Source Type:	Notification	**Zip Code:**	92626

Owner/Operator Ind:	Current Operator	**Street No:**	
Type:	Private	**Street 1:**	
Name:	RALPHS GROCERY COMPANY	**Street 2:**	
Dt Became Current:	19910417	**City:**	
Dt Ended Current:		**State:**	
Phone:		**Country:**	US
Source Type:	Notification	**Zip Code:**	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
12	2 of5	NNW	0.08 / 410.00	357.69 / 3	Ralphs Grocery #755 26901 Aliso Creek Rd Aliso Viejo, Ca 92656-3393 Aliso Viejo CA 92656-3393	HW ORANGE

Establishment ID: FA0037190

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
12	3 of5	NNW	0.08 / 410.00	357.69 / 3	RALPHS #755 26901 ALISO CREEK RD ALISO VIEJO CA 92656	RCRA LQG

EPA Handler ID: CAL000321032
Gen Status Universe: Large Quantity Generator
Contact Name: SHERRIE WALTERS
Contact Address: 1100 , W ARTESIA BLVD , , COMPTON , CA, 90220 , US
Contact Phone No and Ext: 310-884-4016
Contact Email: SHERRIE.WALTERS@RALPHS.COM
Contact Country: US
County Name: ORANGE
EPA Region: 09
Land Type: Private
Receive Date: 20160624
Location Latitude: 33.5919
Location Longitude: -117.727281

Violation/Evaluation Summary

Note: NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity: No
Mixed Waste Generator: No
Transporter Activity: No
Transfer Facility: No
Onsite Burner Exemption: No
Furnace Exemption: No
Underground Injection Activity: No
Commercial TSD: No
Used Oil Transporter: No
Used Oil Transfer Facility: No
Used Oil Processor: No
Used Oil Refiner: No
Used Oil Burner: No
Used Oil Market Burner: No
Used Oil Spec Marketer: No

Hazardous Waste Handler Details

Sequence No: 1
Receive Date: 20160624
Handler Name: RALPHS #755
Federal Waste Generator Code: 1
Generator Code Description: Large Quantity Generator
Source Type: Annual/Biennial Report update with Notification

Waste Code Details

Hazardous Waste Code: 121
Waste Code Description: Alkaline solution (pH >12.5) with metals (antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, selenium, silver, thallium, vanadium, and zinc)

Hazardous Waste Code:	122
Waste Code Description:	Alkaline solution without metals (pH > 12.5)
Hazardous Waste Code:	134
Waste Code Description:	Aqueous solution with <10% total organic residues
Hazardous Waste Code:	141
Waste Code Description:	Off-specification, aged, or surplus inorganics
Hazardous Waste Code:	181
Waste Code Description:	Other inorganic solid waste
Hazardous Waste Code:	221
Waste Code Description:	Waste oil and mixed oil
Hazardous Waste Code:	223
Waste Code Description:	Unspecified oil-containing waste
Hazardous Waste Code:	232
Waste Code Description:	Pesticides and other waste associated with pesticide production
Hazardous Waste Code:	281
Waste Code Description:	Adhesives
Hazardous Waste Code:	311
Waste Code Description:	Pharmaceutical waste
Hazardous Waste Code:	331
Waste Code Description:	Off-specification, aged, or surplus organics
Hazardous Waste Code:	352
Waste Code Description:	Other organic solids
Hazardous Waste Code:	512
Waste Code Description:	Other empty containers 30 gallons or more
Hazardous Waste Code:	513
Waste Code Description:	Empty containers less than 30 gallons
Hazardous Waste Code:	551
Waste Code Description:	Laboratory waste chemicals
Hazardous Waste Code:	561
Waste Code Description:	Detergent and soap
Hazardous Waste Code:	791
Waste Code Description:	Liquids with pH < 2
Hazardous Waste Code:	792
Waste Code Description:	Liquids with pH < 2 with metals
Hazardous Waste Code:	D001
Waste Code Description:	IGNITABLE WASTE
Hazardous Waste Code:	D002
Waste Code Description:	CORROSIVE WASTE
Hazardous Waste Code:	D005
Waste Code Description:	BARIUM
Hazardous Waste Code:	D006
Waste Code Description:	CADMIUM
Hazardous Waste Code:	D007
Waste Code Description:	CHROMIUM
Hazardous Waste Code:	D008
Waste Code Description:	LEAD

Hazardous Waste Code:	D009
Waste Code Description:	MERCURY
Hazardous Waste Code:	D010
Waste Code Description:	SELENIUM
Hazardous Waste Code:	D011
Waste Code Description:	SILVER
Hazardous Waste Code:	D016
Waste Code Description:	2,4-D (2,4-DICHLOROPHENOXYACETIC ACID)
Hazardous Waste Code:	D018
Waste Code Description:	BENZENE
Hazardous Waste Code:	D022
Waste Code Description:	CHLOROFORM
Hazardous Waste Code:	D024
Waste Code Description:	M-CRESOL
Hazardous Waste Code:	D026
Waste Code Description:	CRESOL
Hazardous Waste Code:	D035
Waste Code Description:	METHYL ETHYL KETONE
Hazardous Waste Code:	F001
Waste Code Description:	THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLORETHYLENE, METHYLENE CHLORIDE, 1,1,1-TRICHLOROETHANE, CARBON TETRACHLORIDE AND CHLORINATED FLUOROCARBONS; ALL SPENT SOLVENT MIXTURES/BLENDS USED IN DEGREASING CONTAINING, BEFORE USE, A TOTAL OF TEN PERCENT OR MORE (BY VOLUME) OF ONE OR MORE OF THE ABOVE HALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F002, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.
Hazardous Waste Code:	P001
Waste Code Description:	2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYLBUTYL)-, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3% (OR) WARFARIN, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3%
Hazardous Waste Code:	P075
Waste Code Description:	NICOTINE, & SALTS (OR) PYRIDINE, 3-(1-METHYL-2-PYRROLIDINYL)-,(S)-, & SALTS
Hazardous Waste Code:	U002
Waste Code Description:	2-PROPANONE (I) (OR) ACETONE (I)
Hazardous Waste Code:	U010
Waste Code Description:	AZIRINO [2',3':3,4]PYRROLO[1,2-A]INDOLE-4,7-DIONE, 6-AMINO-8-[[(AMINOCARBONYL)OXY]METHYL]-1,1A, 2,8,8A,8B-HEXAHYDRO-8A-METHOXY-5-METHYL-, [1AS-(1AALPHA, 8BETA, 8AALPHA, 8BALPHA)]- (OR) MITOMYCIN C
Hazardous Waste Code:	U035
Waste Code Description:	BENZENEBUTANOIC ACID, 4-[BIS(2-CHLOROETHYL)AMINO]- (OR) CHLORAMBUCIL
Hazardous Waste Code:	U044
Waste Code Description:	CHLOROFORM (OR) METHANE, TRICHLORO-
Hazardous Waste Code:	U058
Waste Code Description:	2H-1,3,2-OXAZAPHOSPHORIN-2-AMINE, N,N-BIS(2-CHLOROETHYL)TETRAHYDRO-, 2-OXIDE (OR) CYCLOPHOSPHAMIDE
Hazardous Waste Code:	U059
Waste Code Description:	5,12-NAPHTHACENEDIONE, 8-ACETYL-10-[(3-AMINO-2,3,6-TRIDEOXY)-ALPHA-L-LYXO-HEXOPYRANOSYL) OXY]-7,8,9,10-TETRAHYDRO-6,8,11-TRIHYDROXY-1-METHOXY-, (8S-CIS)- (OR) DAUNOMYCIN
Hazardous Waste Code:	U089
Waste Code Description:	DIETHYLSTILBESTEROL (OR) PHENOL, 4,4'-(1,2-DIETHYL-1,2-ETHENEDIYL)BIS, (E)-
Hazardous Waste Code:	U129

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Waste Code Description: CYCLOHEXANE, 1,2,3,4,5,6-HEXACHLORO-, (1ALPHA, 2ALPHA, 3BETA, 4ALPHA, 5ALPHA, 6BETA)- (OR) LINDANE

Hazardous Waste Code: U132
Waste Code Description: HEXACHLOROPHENE (OR) PHENOL, 2,2'-METHYLENEBIS[3,4,6-TRICHLORO-

Hazardous Waste Code: U154
Waste Code Description: METHANOL (I) (OR) METHYL ALCOHOL (I)

Hazardous Waste Code: U159
Waste Code Description: 2-BUTANONE (I,T) (OR) METHYL ETHYL KETONE (MEK) (I,T)

Hazardous Waste Code: U205
Waste Code Description: SELENIUM SULFIDE (OR) SELENIUM SULFIDE SES2 (R,T)

Hazardous Waste Code: U240
Waste Code Description: 2,4-D, SALTS & ESTERS (OR) ACETIC ACID, (2,4-DICHLOROPHENOXY)-, SALTS & ESTERS (OR) DICHLOROPHENOXYACETIC ACID 2,4-D

Hazardous Waste Code: U249
Waste Code Description: ZINC PHOSPHIDE ZN3P2, WHEN PRESENT AT CONCENTRATIONS OF 10% OR LESS

Hazardous Waste Code: U279
Waste Code Description: CARBARYL (OR) 1-NAPHTHALENOL, METHYLCARBAMATE

Owner/Operator Details

Owner/Operator Ind:	Current Operator	**Street No:**	
Type:	Private	**Street 1:**	
Name:	RALPHS #755	**Street 2:**	
Dt Became Current:	19790328	**City:**	
Dt Ended Current:		**State:**	
Phone:		**Country:**	
Source Type:	Annual/Biennial Report update with Notification	**Zip Code:**	

Owner/Operator Ind:	Current Owner	**Street No:**	200
Type:	Private	**Street 1:**	E BAKER ST STE 100
Name:	DONAHUE SCHRIBER REALTY GROUP, LP	**Street 2:**	
Dt Became Current:	19970402	**City:**	COSTA MESA
Dt Ended Current:		**State:**	CA
Phone:	714-966-6433	**Country:**	US
Source Type:	Annual/Biennial Report update with Notification	**Zip Code:**	92626

12	4 of5	NNW	0.08 / 410.00	357.69 / 3	**Ralphs Grocery #755** **26901 ALISO CREEK ROAD** **ALISO VIEJO CA 92656**	CERS HAZ

Site ID: 400322
Latitude: 33.571460
Longitude: -117.725330

Regulated Programs

EI ID:	10160413	**EI Description:**	Chemical Storage Facilities
EI ID:	10160413	**EI Description:**	Hazardous Waste Generator

Evaluations

Eval Date: 04/17/2018
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP

Eval Source: CERS
Eval Notes:

emailed copy of inspection to Randall Stamper; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/24/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

accepted facility info, declined emergency plan and accepted materials for 2017; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 10/01/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Received and ACCEPTED the HMBEP on CERS.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 11/10/2015
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Inspected perimeter of facility including the trash disposal area. Permission to inspect granted by Becky De Paola (rotating store manager). Hazardous waste properly stored, labeled and dated. Manifests for hazardous waste pickup reviewed on site. Documentation kept for the past three years. Business emergency plan available for review. Weekly hazardous waste storage area inspections performed. Inspection log kept on site and available for review. No violations noted at this time.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/31/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Reviewed and accepted submittal in CERS.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 10/18/2023
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

On site to conduct a routine hazardous waste inspection. Dan Oberg, Receiver, provided consent to inspect. Retail returned waste storage area is in the receiving area in the back of the store. The waste containers were properly labeled, and stored closed. A recent hazardous waste pickup by US Ecology on 10/4/2023. A perimeter walk was conducted. Municipal dumpster does not appear to contain any hazardous waste. Manifests from US Ecology were

available and reviewed. Emergency response information is posted and employees are reported to be trained. Inspection report emailed to environmental contact edward.idian@kroger.com; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/30/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

CERS review. Incorrect facility site map submitted. Spoke with Edward Idian regarding situation. Said he would submit the latest map including the latest propane modifications.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/11/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Reviewed and accepted submittal in CERS. EPA ID number changed/corrected. CAR000259143 is the current number.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 08/18/2021
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

On site to conduct routine hazardous waste inspection. Angie Bermudez granted consent to conduct inspection. I walked through facility and inspected hazardous waste storage area in receiving. All hazardous waste bins are stored closed and labeled properly. Manifests were reviewed. A copy of emergency plan is maintained inside manifest folder in hazardous waste storage area.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 04/17/2018
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

emailed copy of inspection to Randall Stamper; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 09/06/2013
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Processed A21.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 08/18/2021

Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site to conduct hazardous materials chemical inventory and business emergency plan inspection. Angie Bermudez granted consent to conduct inspection. I walked through facility and inspected hazardous material storage areas inside and outside building. There has been changes in types and/or volumes of the hazardous material stored on site since last inspection or previous reporting period. Facility has one forklift and one floor cleaning machine with battery packs. The other equipment observed in receiving are not battery powered. Please delete Lead Acid Batteries from reporting. Seven Helium cylinders, 5 in locked liquor stockroom and 2 in floral department, were observed on site. Cylinders in the liquor room all had "Empty" tags on them. Facility stores the following hazardous materials at disclosure threshold: - Refrigerants - 25 gallons of propane Hazardous materials management training is provided annually and training records are maintained [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 08/01/2013
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Ralphs #5729 26901 Aliso Creek Road Aliso Viejo, CA 92656 Inspected perimeter of facility including the trash containment areas. Permission to inspect and take necessary photos granted by Mario Caporuscio (store manager). Documentation for hazardous waste pickup reviewed on site. Hazardous waste emergency response sticker completed and posted on site. Weekly hazardous waste storage area inspection log posted on site. Hazardous waste properly stored, labeled and dated. No violations noted at this time.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 10/18/2023
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site for routine Hazardous Materials Business Plan (HMBP). Dan Oberg, receiver, provided consent to inspect. Observed the following materials on site at reportable quantities: propane, lead acid batteries, R-22, R-407A, R-407C. Hazardous Materials disclosed in CERS (10160413) match what is reported on site. Training is provided to staff through online training and records are also kept online. Inspection report emailed to environmental contact edward.idian@kroger.com; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/02/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

review of CERS, declined emergency plan, accepted HM and facility info; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/11/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Reviewed and accepted submittal in CERS.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/09/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

CERS review - Accept old submittal's; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 11/10/2015
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site for routine inspection with Becky De Paola (rotating store manager). Walked facility with the latest disclosed chemical inventory and site map. Reviewed and declined latest submittal in CERS. Observed a 500 gallon propane tank just outside the back of the building. Add this volume to the propane disclosure. Address the following regarding the facility site map: Water shut off is listed to be at grid 11-A. It appears to be at grid 4-A. Change this on map. Gas shut off is listed to be at grid 12-A. It appears to be at grid 3-N. Change this on map. Fire hydrant is listed at grid 1-A. It appears to be at grid 3-A. Change this on map. Additional fire hydrant is at grid 1-L Add this to map. Add location of the 500 gallon propane tank to the site map. Location is at grid 1-D Closest storm drains are at grids 5-B and 1-B. Add these to map. Re submit disclosure after modifications have been performed.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Affiliations

Affil Type Desc: Identification Signer
Entity Name: Edward Idian
Entity Title: Env Affairs Specialist
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Document Preparer
Entity Name: Ralphs Grocery Company
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Legal Owner
Entity Name: Ralphs Grocery Company
Entity Title:
Address: P.O. Box 54143
City: Los Angeles
State: CA
Country: United States
Zip Code: 90054-0143
Phone: (310) 884-9000

Affil Type Desc: Parent Corporation
Entity Name: Ralphs Grocery Company
Entity Title:
Address:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: CUPA District
Entity Name: Orange County Env Health
Entity Title:
Address: 1241 East Dyer RoadSuite 120
City: Santa Ana
State: CA
Country:
Zip Code: 92705-5611
Phone: (714) 433-6406

Affil Type Desc: Operator
Entity Name: Ralphs Grocery Company
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone: (310) 884-9000

Affil Type Desc: Environmental Contact
Entity Name: Edward Idian
Entity Title:
Address: P.O. Box 54143
City: Los Angeles
State: CA
Country:
Zip Code: 90054-0143
Phone:

Affil Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title:
Address: P.O. Box 54143
City: Los Angeles
State: CA
Country:
Zip Code: 90054-0143
Phone:

Affil Type Desc: Property Owner
Entity Name: Donahue Schriber Realty G
Entity Title:
Address: 200 E. Baker Street, Suit
City: Costa Mesa
State: CA
Country: United States
Zip Code: 90803
Phone: (714) 966-6433

12	5 of5	NNW	0.08 / 410.00	357.69 / 3	**Ponce Recycling** **26901 Aliso Creek Rd** **Aliso Viejo CA 92656**	RECYCLING

Account No: RC295666.001
Website:
Phone No: (323) 533-4862
Email: poncerecycling@aol.com
Hours of Operation: Mon - Sat 9:00 am - 5:00 pm; Sun Closed
Organization Name: Ponce Recycling Inc
Mailing Address: 5425 W 64Th St
Mailing City: Los Angeles

Facility County: Orange
Operation Begin Dt: 3/17/2020
Rural: No
Appointment Only: No

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Mailing State: CA
Mailing Postal Cd: 90056

13	1 of5	SE	0.08 / 417.70	350.69 / -4	PACIFIC BELL TELEPHONE COMPANY DBA AT&T CALIFORNIA 27151 ALISO CREEK RD LAGUNA NIGUEL CA 92677	RCRA SQG

EPA Handler ID: CAT080025596
Gen Status Universe: Small Quantity Generator
Contact Name: SEAN MCFARLANE
Contact Address: PO BOX 5095 4W2001 , , SAN RAMON , CA, 94583 , US
Contact Phone No and Ext: 800-566-9347
Contact Email: EHSRRC@LIST.ATT.COM
Contact Country: US
County Name: ORANGE
EPA Region: 09
Land Type: Private
Receive Date: 20160527
Location Latitude: 33.555478
Location Longitude: -117.713111

Violation/Evaluation Summary

Note: NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity: No
Mixed Waste Generator: No
Transporter Activity: No
Transfer Facility: No
Onsite Burner Exemption: No
Furnace Exemption: No
Underground Injection Activity: No
Commercial TSD: No
Used Oil Transporter: No
Used Oil Transfer Facility: No
Used Oil Processor: No
Used Oil Refiner: No
Used Oil Burner: No
Used Oil Market Burner: No
Used Oil Spec Marketer: No

Hazardous Waste Handler Details

Sequence No: 1
Receive Date: 19810120
Handler Name: PACIFIC BELL
Federal Waste Generator Code: 1
Generator Code Description: Large Quantity Generator
Source Type: Notification

Hazardous Waste Handler Details

Sequence No: 1
Receive Date: 19960901
Handler Name: PACIFIC BELL
Federal Waste Generator Code: 2
Generator Code Description: Small Quantity Generator

Source Type: Implementer

Hazardous Waste Handler Details

Sequence No: 2
Receive Date: 20160527
Handler Name: PACIFIC BELL TELEPHONE COMPANY DBA AT&T CALIFORNIA
Federal Waste Generator Code: 2
Generator Code Description: Small Quantity Generator
Source Type: Notification

Waste Code Details

Hazardous Waste Code: 134
Waste Code Description: Aqueous solution with <10% total organic residues

Hazardous Waste Code: 221
Waste Code Description: Waste oil and mixed oil

Hazardous Waste Code: 223
Waste Code Description: Unspecified oil-containing waste

Hazardous Waste Code: 352
Waste Code Description: Other organic solids

Hazardous Waste Code: D008
Waste Code Description: LEAD

Owner/Operator Details

Owner/Operator Ind: Current Owner
Type: Private
Name: AT&T
Date Became Current: 20051101
Date Ended Current:
Phone: 800-566-9347
Source Type: Notification
Street No: 308
Street 1: S AKARD
Street 2:
City: DALLAS
State: TX
Country: US
Zip Code: 75202

Owner/Operator Ind: Current Operator
Type: Private
Name: AT&T
Date Became Current: 20051101
Date Ended Current:
Phone:
Source Type: Notification
Street No:
Street 1:
Street 2:
City:
State:
Country: US
Zip Code:

Owner/Operator Ind: Current Operator
Type: Private
Name: NOT REQUIRED
Date Became Current:
Date Ended Current:
Phone: 415-555-1212
Source Type: Implementer
Street No:
Street 1: NOT REQUIRED
Street 2:
City: NOT REQUIRED
State: ME
Country:
Zip Code: 99999

Owner/Operator Ind: Current Owner
Type: Private
Name: THE PACIFIC TELEPHONE AND TELEGRAPH CO
Date Became Current:
Date Ended Current:
Phone: 415-555-1212
Source Type: Notification
Street No:
Street 1: NOT REQUIRED
Street 2:
City: NOT REQUIRED
State: ME
Country:
Zip Code: 99999

Historical Handler Details

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Receive Dt: 19960901
Generator Code Description: Small Quantity Generator
Handler Name: PACIFIC BELL

Receive Dt: 19810120
Generator Code Description: Large Quantity Generator
Handler Name: PACIFIC BELL

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13 | **2 of5** | **SE** | **0.08 / 417.70** | **350.69 / -4** | **PACIFIC BELL LE-287**
27151 ALISO CREEK RD
LAGUNA NIGUEL CA 92677 | **HHSS**

County:
Tank Details Microfiche: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0002ec8e.pdf

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13 | **3 of5** | **SE** | **0.08 / 417.70** | **350.69 / -4** | **PACIFIC BELL LE-287**
27151 ALISO CREEKO RD
LAGUNA NIGUEL CA | **HIST TANK**

Owner Name: PACIFIC BELL
Owner Street: 370 THIRD STREET
Owner City: SAN FRANCISCO
Owner State: CA
Owner Zip: 94107

No of Containers: 1
County: ORANGE
Facility State: CA
Facility Zip: 92677

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13 | **4 of5** | **SE** | **0.08 / 417.70** | **350.69 / -4** | **PACIFIC BELL**
27151 ALISO CREEK RD
LAGUNA NIGUEL CA | **UST SWEEPS**

C C: I30-000-7074
BOE: 44-016567
Comp: 7074
Status: INACTIVE
No of Tanks: 1
Jurisdict: ORANGE COUNTY
Agency: ENVIRONMENTAL HEALTH - U.S.T.
Phone: (714) 831-0009

D Filename: NSITE3
Page No: 431
County: ORANGE
State : CA
Zip: 92677
Latitude: 33.555445
Longitude: -117.706912
Georesult: S5HPNTS--A

Tank Details

Tank ID: 000001
O Tank ID:
SWRCB No: 30-000-007074-000001
Removed:
Installed: 01-01-68
A Date:
Capac: 3000
Tank Use: UNKNOWN

S Contain: NONE
Stg:
Storage : PRODUCT
Storag Type: PRODUCT
P Contain: BARE STEEL
Content:
ONA:
D File Name: NTANK3

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13 | **5 of5** | **SE** | **0.08 / 417.70** | **350.69 / -4** | **PACIFIC BELL**
27151 ALISO CREEK RD
LAGUNA NIGUEL CA | **UST SWEEPS**

C C: A30-000-7074
BOE: 44-016567
Comp: 7074
Status: ACTIVE
No of Tanks: 1
Jurisdict: ORANGE COUNTY
Agency: ENVIRONMENTAL HEALTH
Phone:

D Filename: SITE12A
Page No: 181
County: ORANGE
State : CA
Zip: 92677
Latitude: 33.555445
Longitude: -117.706912
Georesult: S5HPNTS--A

Tank Details

Tank ID:	000002	***S Contain:***	
O Tank ID:		***Stg:***	P
SWRCB No:	30-000-007074-000002	***Storage :***	
Removed:		***Storag Type:***	PRODUCT
Installed:		***P Contain:***	
A Date:		***Content:***	DIESEL
Capac:	3000	***ONA:***	
Tank Use:	M.V. FUEL	***D File Name:***	TANK12A

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
14	1 of1	NNE	0.10 / 509.87	348.85 / -6	OC Service Group LLC DBA Chick fil A Aliso Viejo 26861 ALISO CREEK RD ALISO VIEJO CA 92656	CERS HAZ

Site ID:	414180
Latitude:	33.573511
Longitude:	-117.723593

Regulated Programs

EI ID:	10719517	***EI Description:***	Chemical Storage Facilities

Violations

Violation Date:	12/05/2016	***Violation Source:***	CERS
Violation Program:	HMRRP	***Violation Division:***	Orange County Environmental Health
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)		
Violation Notes:			

Returned to compliance on 01/11/2017. Complete CERS submittal within 30 days to abate the violation.

Violation Description:

Failure to complete and electronically submit a business plan when storing/handling a hazardous material at or above reportable quantities.

Violations

Violation Date:	12/05/2016	***Violation Source:***	CERS
Violation Program:	HMRRP	***Violation Division:***	Orange County Environmental Health
Citation:	HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)		
Violation Notes:			

Returned to compliance on 01/11/2017. After you have had the business emergency plan training, submit a copy of the training records to abate this violation. Submit all within 30 days

Violation Description:

Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years.

Violations

Violation Date:	12/05/2016	***Violation Source:***	CERS
Violation Program:	HMRRP	***Violation Division:***	Orange County Environmental Health
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)		
Violation Notes:			

Returned to compliance on 01/11/2017. Complete CERS submittal within 30 days to abate the violation.

Violation Description:

Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.

Evaluations

Eval Date: 09/27/2019
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Walked facility with the latest submitted chemical inventory and site map. Hazardous material containers appeared to be in satisfactory condition. No indications of previous releases. Did not observe any additional hazardous material stored at or above disclosure threshold. Locations for site map requirements were accurate. * Reviewed the latest CERS submittal. Please address the following: > Change the "units" for the CO2 disclosure (from cubic feet) to gallons. Use 365 for the "days on site" field. > Change the phone number in box C3 of the Emergency Response/Contingency Plan to (714) 433-6406. > Add location for the natural gas shut off to the facility site map. > According to Philip Myers (store owner), some hazardous material business emergency plan training is provided during the annual teem member meeting. Ensure that employees have received this training (including the CO2). Document training and provide spread sheet/sign in sheet to Health [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 01/05/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Review of CERS submittal declined. The submittal was declined, make the following changes and resubmit within 30 days; 1. the map needs to be submitted in PDF format 2. looking at the map, you are going to need to include a plot plan showing the inside rooms/doors etc so it is clear 3. the electrical room points to the drive through make it accurate 4. add a north arrow 5. add the nearest fire hydrant hookup outside 6. add the nearest storm drain possibly in the street/curb, possibly in the parking lot 7. add all entrances and exits 8. add location of all fire extinguishers please upload the business emergency plan right side up.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/05/2016
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Chick-fil-A 26861 Aliso Creek Rd, Aliso Viejo On site to conduct a new hazardous materials chemical inventory and business emergency plan inspection this date, consent to enter, inspect and take photographs was given by - Daniel Orlandi, general manager Hazardous materials storage area were reviewed at this time. The facility has the following hazardous materials that exceed the required disclosure quantities: - about 45 gallons of CO2 please make sure you check the size of the tank before you do the submittal. *For your reference CO2 has a CAS # of 124-38-9, the fire code hazard class is Cryogenic, and pressure release. Disclose CO2 as a liquid in gallons (if you know the number of pounds of CO2 the cylinder contains multiply it by 0.11806 to get the number of gallons). If you store 14.6 gallons or more or 123 pounds or more of CO2, you are required to disclose under HMBEP requirements. The facility is required (and is notified) to electronically submit the [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 09/13/2022
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP

Eval Source: CERS
Eval Notes:

On site for routine Hazardous Materials Business Plan (HMBP). Met this date with Maxanna Miller, Manager, who granted consent to enter and inspect. Observed the following materials on site at reportable quantity: Carbon Dioxide Hazardous Materials disclosed in CERS (10719517) match what is reported on site. Training is conducted at the time of hire and then annual refreshers are provided through on line training. Per California Health & Safety Code Ch. 6.95, businesses that store and handle hazardous materials at or over reportable quantities (55 gal of a liquid, 500 lbs of a solid, 200 cubic ft of a compressed gas) must prepare and implement an HMBP. The facility is responsible for identifying all hazardous materials, including hazardous wastes, which are at or above disclosure thresholds. If there is a change in the type of amount of chemicals that are maintained on site, please submit revised documents (electronically though CERS) within 30 days of change. The HMBP must be submit; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 01/20/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

accepted facility information for 2017; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/14/2018
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Review of CERS The submittal was declined, please make the following changes and resubmit within 30 days; 1. on the days onsite section, add 365 2. Cal EPA recently replaced the previous five federal hazard categories with twenty-four new federal hazard categories, these categories for all of your disclosed hazardous materials are required to by updated to the new classification. For CO2 disclosure, uncheck the obsolete hazard categories and check the "gas under pressure" and "simple asphyxiant" under the new hazard categories.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 01/11/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Review of CERS this date, the materials and emergency response plans were accepted. The ownership section was rejected and a phone call to Phillip Myers made, message left; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 10/21/2020
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

An onsite hazardous materials inspection of this facility was conducted this date. An ownership change occurred at this location in May 2020. This facility will be updated to reflect the change Access to the facility was provided by David Nesson, Owner. The following materials were observed in amounts that meet or exceed the minimum volumes required for disclosure: - Carbon Dioxide Please update the facility's CERS record to reflect the change in ownership. A copy of this inspection report will be emailed to: david.nesson@cfafranchise.com; Note: data in [EVAL Notes] field for some records is truncated from the source.

Affiliations

Affil Type Desc: Environmental Contact
Entity Name: David Nesson
Entity Title:
Address: 26861 Aliso Creek Rd
City: Aliso Viejo
State: CA
Country:
Zip Code: 92656
Phone:

Affil Type Desc: Legal Owner
Entity Name: OC Service Group LLC
Entity Title:
Address: 26861 Aliso Creek Rd
City: Aliso Viejo
State: CA
Country: United States
Zip Code: 92656
Phone: (949) 279-1322

Affil Type Desc: Operator
Entity Name: David Nesson
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone: (949) 279-1322

Affil Type Desc: Parent Corporation
Entity Name: Chick fil A Aliso Viejo
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: CUPA District
Entity Name: Orange County Env Health
Entity Title:
Address: 1241 East Dyer RoadSuite 120
City: Santa Ana
State: CA
Country:
Zip Code: 92705-5611
Phone: (714) 433-6406

Affil Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title:
Address: 26861 Aliso Creek Rd
City: Aliso Viejo
State: CA
Country:
Zip Code: 92656
Phone:

Affil Type Desc: Identification Signer
Entity Name: David Nesson
Entity Title: Owner
Address:
City:
State:
Country:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Zip Code:
Phone:

Affil Type Desc: Document Preparer
Entity Name: David Nesson
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Coordinates

Env Int Type Code: HMBP
Program ID: 10719517
Latitude: 33.573510
Longitude: -117.723590
Coord Name:
Ref Point Type Desc: Center of a facility or station.

15	1 of1	WNW	0.11 / 564.45	410.02 / 55	LE/PHAM INC. DBA SOUTH MARINA PHARMACY 5 JOURNEY STE 140A ALISO VIEJO CA 92656	RCRA NON GEN

EPA Handler ID: CAC003218358
Gen Status Universe: No Report
Contact Name: QUEENIE PHAM
Contact Address: 2800 W WARNER STE B , , SANTA ANA , CA, 92704 ,
Contact Phone No and Ext: 714-585-4023
Contact Email: WELLNESS@SOUTHMARINARX.COM
Contact Country:
County Name: ORANGE
EPA Region: 09
Land Type:
Receive Date: 20230217
Location Latitude:
Location Longitude:

Violation/Evaluation Summary

Note: NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity: No
Mixed Waste Generator: No
Transporter Activity: No
Transfer Facility: No
Onsite Burner Exemption: No
Furnace Exemption: No
Underground Injection Activity: No
Commercial TSD: No
Used Oil Transporter: No
Used Oil Transfer Facility: No
Used Oil Processor: No
Used Oil Refiner: No
Used Oil Burner: No
Used Oil Market Burner: No
Used Oil Spec Marketer: No

Hazardous Waste Handler Details

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Sequence No: 1
Receive Date: 20230217
Handler Name: LE/PHAM INC. DBA SOUTH MARINA PHARMACY
Source Type: Implementer
Federal Waste Generator Code: N
Generator Code Description: Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind:	Current Owner	**Street No:**	
Type:	Other	**Street 1:**	2800 W WARNER STE B
Name:	QUEENIE PHAM	**Street 2:**	
Date Became Current:		**City:**	SANTA ANA
Date Ended Current:		**State:**	CA
Phone:	714-585-4023	**Country:**	
Source Type:	Implementer	**Zip Code:**	92704

Owner/Operator Ind:	Current Operator	**Street No:**	
Type:	Other	**Street 1:**	2800 W WARNER STE B
Name:	QUEENIE PHAM	**Street 2:**	
Date Became Current:		**City:**	SANTA ANA
Date Ended Current:		**State:**	CA
Phone:	714-585-4023	**Country:**	
Source Type:	Implementer	**Zip Code:**	92704

16	1 of3	NNW	0.11 / 574.71	356.92 / 2	**Luna Grill LG14** **26921 ALISO CREEK RD STE E105** **ALISO VIEJO CA 92656**	CERS HAZ

Site ID: 421152
Latitude: 33.572270
Longitude: -117.723780

Regulated Programs

EI ID: 10733683 **EI Description:** Chemical Storage Facilities

Violations

Violation Date: 11/22/2016 **Violation Source:** CERS
Violation Program: HMRRP **Violation Division:** Orange County Environmental Health
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Notes:

Returned to compliance on 05/03/2017. OBSERVATION: A business plan has not been received by the CUPA. The facility was previously sent a notice/request from the CUPA for the submittal of a business plan within 30 days. CORRECTIVE ACTION: Submit the business plan electronically in the California Environmental Reporting System (CERS) and implement immediately.

Violation Description:

Failure to complete and electronically submit a business plan when storing/handling a hazardous material at or above reportable quantities.

Violations

Violation Date: 11/22/2016 **Violation Source:** CERS
Violation Program: HMRRP **Violation Division:** Orange County Environmental Health
Citation: HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)
Violation Notes:

Returned to compliance on 05/03/2017. OBSERVATION: Annual training documentation for all applicable employees was not available. CORRECTIVE ACTION: Submit documentation to the CUPA demonstrating that employees have received training on safe handling of hazardous materials and the Emergency Response Plan within 30 days to abate the violation.

Violation Description:

Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years.

Violations

Violation Date: 11/22/2016
Violation Source: CERS
Violation Program: HMRRP
Violation Division: Orange County Environmental Health
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Notes:

Returned to compliance on 05/03/2017. OBSERVATION: The facility has not submitted the Hazardous Materials Inventory Chemical Description page for CO2 as listed below, to the CUPA. CORRECTIVE ACTION: Complete and submit the Hazardous Materials Inventory Chemical Description page for all materials listed above electronically in the California Environmental Reporting System (CERS) within 30 days to abate this violation.

Violation Description:

Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.

Evaluations

Eval Date: 05/03/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

re-review of CERS accepted for 2017; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/03/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Declined all in CERS this date. The submittal was declined this date, please make the following changes and resubmit within 30 days; 1. we have the ownership down as an LLC, if this is correct, you should change the owner name to the LLC name. If the business is owned by one person, then we will change this in our database. The submittal was declined, please make the following changes and resubmit within 30 days; 1. on the business emergency plan, you listed an inactive phone number for the UPA phone number. Please use our main number (714)433-6000 The submittal was declined, please make the following changes and resubmit within 30 days; 1. on the chemical page, also complete; trade secret- no, acute health- yes, location confidential- no, chemical location should be the area in the building the CO2 is (not the address), add the average daily amount (probably about half or more), larges container, days onsite (365), storage pressure is above ambient and storage [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 11/23/2016
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Luna Grill 26921 Aliso Creek Rd #E, Aliso Viejo; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 09/13/2022
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site for routine Hazardous Materials Business Plan (HMBP). Met this date with Justin Twardy, Store Manager, who granted consent to enter and inspect. Observed the following materials on site at reportable quantities: carbon dioxide Hazardous Materials disclosed in CERS (10733683) match what is reported on site. Training is conducted at the time of hire and then annual refreshers are provided through on line training. Per California Health & Safety Code Ch. 6.95, businesses that store and handle hazardous materials at or over reportable quantities (55 gal of a liquid, 500 lbs of a solid, 200 cubic ft of a compressed gas) must prepare and implement an HMBP. The facility is responsible for identifying all hazardous materials, including hazardous wastes, which are at or above disclosure thresholds. If there is a change in the type of amount of chemicals that are maintained on site, please submit revised documents (electronically though CERS) within 30 days of change. The HMBP must be; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 09/27/2019
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Walked facility with the latest submitted chemical inventory and site map. Hazardous material containers appeared to be in satisfactory condition. No indications of previous releases. Locations for site map requirements were accurate. * Reviewed the latest CERS submittal. Please address the following: > Observed six 5 gallon propane tanks on site. Add propane to the chemical inventory. > Change the phone number in box C1 of the Emergency Response/Contingency Plan to (714) 433-6406. > According to Ava Woodson (shift lead), hazardous material business emergency plan training has not been provided. Ensure that employees have received this training (including the CO2). Document training and provide spread sheet/sign in sheet to Health Care Agency (or submit in the CERS portal) within 30 days. Re submit disclosure within 30 days.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/14/2018
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Review of CERS accepted; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 11/22/2016
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Luna Grill 26921 Aliso Creek Rd #E, Aliso Viejo On site to conduct a new hazardous materials chemical inventory and business emergency plan inspection this date, consent to enter, inspect and take photographs was given by - Alma Martinez, manager Hazardous materials storage area were reviewed at this time. The facility has the following hazardous materials that exceed the required disclosure quantities: - check the gallon size of the CO2 tank, it looks like around 40 gallons, *For your reference CO2 has a CAS # of 124-38-9, the fire code hazard class is Cryogenic, and pressure release. Disclose CO2 as a liquid in gallons The facility is required (and is notified) to electronically submit the following documents within 30 days of this inspection: - Business Activities form - Owner/Operator Identification form - Hazardous Material Chemical Inventory forms - Facility Site Map - Business Emergency Plan The above documents can be electronically [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Affiliations

Affil Type Desc: CUPA District
Entity Name: Orange County Env Health
Entity Title:
Address: 1241 East Dyer RoadSuite 120
City: Santa Ana
State: CA
Country:
Zip Code: 92705-5611
Phone: (714) 433-6406

Affil Type Desc: Environmental Contact
Entity Name: Ron Schroeder
Entity Title:
Address: 17581 Irvine Blvd, Ste 210
City: Tustin
State: CA
Country:
Zip Code: 92780
Phone:

Affil Type Desc: Legal Owner
Entity Name: Premier Food Concepts LLC
Entity Title:
Address: 17581 Irvine Blvd, Ste 210
City: Tustin
State: CA
Country: United States
Zip Code: 92780
Phone: (858) 450-1188

Affil Type Desc: Identification Signer
Entity Name: Ron Schroeder
Entity Title: Regional Facilities Manager
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Document Preparer
Entity Name: Ron Schroeder
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Operator
Entity Name: Karina Sandez
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone: (949) 305-1721

Affil Type Desc: Property Owner
Entity Name: Donahue Schriber Realty Group, L.P.
Entity Title:
Address: 200 East Baker Street, Suite 100
City: Costa Mesa
State: CA
Country: United States
Zip Code: 92626

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Phone: (714) 545-1400

Affil Type Desc: Parent Corporation
Entity Name: Premier Food Concepts LLC dba Luna Grill
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title:
Address: 17581 Irvine Blvd, Ste 210
City: Tustin
State: CA
Country:
Zip Code: 92780
Phone:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
16	2 of3	NNW	0.11 / 574.71	356.92 / 2	Subway #19369 26921 ALISO CREEK RD STE C ALISO VIEJO CA 92656	DELISTED HAZ

Siteid: 421745
Latitude: 33.571660
Longitude: -117.723670
Original Source: CHAZ
Record Date: 09-JUL-2018

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
16	3 of3	NNW	0.11 / 574.71	356.92 / 2	The Habit Burger Grill 26921 ALISO CREEK RD STE A ALISO VIEJO CA 92656	CERS HAZ

Site ID: 414891
Latitude: 33.572270
Longitude: -117.723780

Regulated Programs

EI ID: 10719574 **EI Description:** Chemical Storage Facilities

Violations

Violation Date: 11/22/2016 **Violation Source:** CERS
Violation Program: HMRRP **Violation Division:** Orange County Environmental Health
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Notes:

Returned to compliance on 07/24/2017. OBSERVATION: The facility has not submitted the Hazardous Materials Inventory Chemical Description page for CO2 as listed below, to the CUPA. CORRECTIVE ACTION: Complete and submit the Hazardous Materials Inventory Chemical Description page for all materials listed above electronically in the California Environmental Reporting System (CERS) within 30 days to abate this violation.

Violation Description:

Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.

Violations

Violation Date: 11/22/2016 **Violation Source:** CERS
Violation Program: HMRRP **Violation Division:** Orange County Environmental Health
Citation: HSC 6.95 25505(a)(4) - California Health and Safety Code, Chapter 6.95, Section(s) 25505(a)(4)
Violation Notes:

Returned to compliance on 07/24/2017. OBSERVATION: Annual training documentation for all applicable employees was not available. CORRECTIVE ACTION: Submit documentation to the CUPA demonstrating that employees have received training on safe handling of hazardous materials and the Emergency Response Plan within 30 days to abate the violation.

Violation Description:

Failure to provide initial and annual training to all employees in safety procedures in the event of a release or threatened release of a hazardous material or failure to document and maintain training records for a minimum of three years.

Violations

Violation Date: 11/22/2016 **Violation Source:** CERS
Violation Program: HMRRP **Violation Division:** Orange County Environmental Health
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Notes:

Returned to compliance on 07/24/2017. OBSERVATION: A business plan has not been received by the CUPA. The facility was previously sent a notice/request from the CUPA for the submittal of a business plan within 30 days. CORRECTIVE ACTION: Submit the business plan electronically in the California Environmental Reporting System (CERS) and implement immediately.

Violation Description:

Failure to complete and electronically submit a business plan when storing/handling a hazardous material at or above reportable quantities.

Evaluations

Eval Date: 09/13/2022
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site for routine Hazardous Materials Business Plan (HMBP). Met this date with Johnny Basurto, Manager, who granted consent to enter and inspect. Observed the following materials on site at reportable quantity: Carbon Dioxide Hazardous Materials disclosed in CERS (10719574) match what is reported on site. Training is conducted at the time of hire and then annual refreshers are provided through on line training. Per California Health & Safety Code Ch. 6.95, businesses that store and handle hazardous materials at or over reportable quantities (55 gal of a liquid, 500 lbs of a solid, 200 cubic ft of a compressed gas) must prepare and implement an HMBP. The facility is responsible for identifying all hazardous materials, including hazardous wastes, which are at or above disclosure thresholds. If there is a change in the type of amount of chemicals that are maintained on site, please submit revised documents (electronically though CERS) within 30 days of change. The HMBP must be submit; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/13/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

CERS submittal reviewed and declined The submittal was declined, please make the following changes and resubmit within 30 days; 1. the CO2 needs to be disclosed in gallons instead of cubic feet. 2. The map is inadequate, it needs to be specific for your location, not the whole center. Add the following to the map; -site orientation -internal roads -adjacent streets -storm drains and sewers nearby -access and exit points -evacuation staging area -emergency shutoffs for electric, water and natural gas -CO2 storage area -emergency response equipment such as fire extinguishers -nearest fire hydrant he submittal was not accepted. Remove the map, and complete and upload the business emergency plan from this site http://www.calepa.ca.gov/CUPA/Documents/eTemplates/Contingency.pdf. Use CUPA phone number as 714-433-6000.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 07/24/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

accepted facility info, materials, map and BEP in CERS; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 11/22/2016
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

the Habit 26921 aliso creek rd A, AV On site to conduct a new hazardous materials chemical inventory and business emergency plan inspection this date, consent to enter, inspect and take photographs was given by - Silvio Costa, manager, and discussion with Mike Helm Sr Fac Manager. Hazardous materials storage area were reviewed at this time. The facility has the following hazardous materials that exceed the required disclosure quantities: - 35-50 gallons in the cryogenic tank (check the size) plus a cylinder of 50 pounds *For your reference, CAS # 64742-57-0, and hazard category combustible IIIB is used for oil/used oil. Antifreeze is CAS # 107-21-1 with hazard category combustible IIIB, Irritant and OHH other health hazards. *For your reference CO2 has a CAS # of 124-38-9, the fire code hazard class is Cryogenic, and pressure release. Disclose CO2 as a liquid in gallons . The facility is required (and is notified) to electronically submit the following [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 09/27/2019
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Walked facility with the latest submitted chemical inventory and site map. Hazardous material containers appeared to be in satisfactory condition. No indications of previous releases. Did not observe any additional hazardous material stored at or above disclosure threshold. Locations for site map requirements were accurate. * Reviewed the latest CERS submittal. Please address the following: > Un check the obsolete hazard categories for the CO2 disclosure and check the "gas under pressure" and "simple asphyxiant" under the new hazard categories. > Change the phone number in box C3 of the Emergency Response/Contingency Plan to (714) 433-6406. > According to Silvo Costa (store manager), hazardous material business emergency plan training has not been provided. Ensure that employees have received this training (including the CO2). Document training and provide spread sheet/sign in sheet to Health Care Agency (or submit in the CERS portal) within 30 days. [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Affiliations

Affil Type Desc: Environmental Contact
Entity Name: Edith Trejo
Entity Title:
Address: 1 Glen Bell Way
City: Irvine
State: CA
Country:
Zip Code: 92618
Phone:

Affil Type Desc: Document Preparer
Entity Name: Edith Trejo
Entity Title:
Address:
City:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

State:
Country:
Zip Code:
Phone:

Affil Type Desc: Identification Signer
Entity Name: Edith Trejo
Entity Title: Facilities Administrative Specialist
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Parent Corporation
Entity Name: The Habit Restaurants, LLC.
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: CUPA District
Entity Name: Orange County Env Health
Entity Title:
Address: 1241 East Dyer RoadSuite 120
City: Santa Ana
State: CA
Country:
Zip Code: 92705-5611
Phone: (714) 433-6406

Affil Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title:
Address: 1 Glen Bell Way
City: Irvine
State: CA
Country:
Zip Code: 92618
Phone:

Affil Type Desc: Operator
Entity Name: The Habit Burger Grill # 35
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone: (949) 360-4628

Affil Type Desc: Legal Owner
Entity Name: THE HABIT RESTAURANTS, LLC
Entity Title:
Address: 1 Glen Bell Way
City: Irvine
State: CA
Country: United States
Zip Code: 92618
Phone: (949) 851-8881

17	1 of3	SW	0.12 / 617.83	396.30 / 41	Ace Tube Bending 14 Journey Aliso Viejo, Ca 92656-3317	HW ORANGE

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
					Aliso Viejo CA 92656-3317	

Establishment ID: FA0028609

17	*2 of3*	*SW*	*0.12 / 617.83*	*396.30 / 41*	*ACE TUBE BENDING* *14 JOURNEY* *ALISO VIEJO CA 92656*	*CERS HAZ*

Site ID: 409289
Latitude: 33.567650
Longitude: -117.727900

Regulated Programs

EI ID: 10540966 ***EI Description:*** Hazardous Waste Generator

EI ID: 10540966 ***EI Description:*** Chemical Storage Facilities

EI ID: 841405 ***EI Description:*** Industrial Facility Storm Water

Violations

Violation Date: 09/25/2018 ***Violation Source:*** CERS
Violation Program: HW ***Violation Division:*** Orange County Environmental Health
Citation: 22 CCR 12 66262.11 - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.11
Violation Notes:

Returned to compliance on 01/21/2022. OBSERVATION: No waste analysis was available for the used sand blast waste from sand blasting steel. This waste is being disposed of as non-hazardous waste to the trash. A generator shall make a hazardous waste determination and keep a record of any test results, waste analyses, or other determinations made in accordance with hazardous waste regulations for at least three years from the date that the waste was last sent to on-site or off-site treatment, storage, or disposal. CORRECTIVE ACTION: Immediately locate a copy of the waste analysis conducted for the sand blast waste waste and submit a copy to the CUPA. If you do not have a waste determination for the sand blast waste, you will need to do one. Start putting all sand blast waste that was stated to be going to the trash, into a container with a lid and label it as what it is and that you are doing a waste determination on the material. If it comes back as hazardous waste, it will need to be sent as such. If it [Truncated]

Violation Description:

Failure to determine if wastes generated are hazardous waste by using generator knowledge or applying testing method.

Violations

Violation Date: 09/25/2018 ***Violation Source:*** CERS
Violation Program: HW ***Violation Division:*** Orange County Environmental Health
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Notes:

Returned to compliance on 10/01/2018. OBSERVATION: metal waste oil containers under the blue tarp were not labeled as a hazardous waste. All hazardous waste containers shall be marked with the following information: 1) the words "Hazardous Waste"; 2) name and address of generator; 3) hazardous properties; 4) physical state; 5) composition (contents); 6) accumulation start date. CORRECTIVE ACTION: Immediately label these containers and ensure that all hazardous waste containers are marked with all the required information. The accumulation date is the date the first drop of hazardous waste is put into the drum, so will probably be different for each drum. In looking at your hazardous waste files, it appears that hazardous waste labeling issues have been found in the past. It is the generators responsibility to ensure that the drums are labeled at all times (during the inspection, they were completely unlabeled). To abate the violation, complete the hazardous waste stickers I gave you during the inspection, [Truncated]

Violation Description:

Failure to properly label hazardous waste accumulation containers and portable tanks with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.

Violations

Violation Date: 06/30/2023 ***Violation Source:*** CERS
Violation Program: HMRRP ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2
Violation Notes:

Business has failed to annually certify the HMBP.

Violation Description:

Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.

Evaluations

Eval Date: 08/20/2015
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Inspected perimeter of facility including the dumpster area. Permission to inspect granted by Angel Varela. Hazardous waste properly stored and identified. * Make sure non hazardous waste drums are not identified using hazardous waste labels. Hazardous waste emergency response sticker completed and posted on site. Documentation for hazardous waste pickup available for review.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 11/05/2014
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Reviewed and accepted disclosure in e submit.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 09/24/2018
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

copy of inspection emailed to Amanda Varela Please note, you are required to transport all of your hazardous waste within 180 days (6 months) of the date of accumulation on the oldest drum. Ensure that your hazardous waste is transported at least this often. >>>>Please consult http://occupainfo.com/ for assistance at any time. Of course, you may also contact your inspector as questions arise. On our website: "Hazardous Waste-The Basics, a resource for small and medium-sized businesses in Orange County" is offered. The purpose of this manual is to provide the reader with a quick and simple reference regarding hazardous waste. It covers basic concepts that businesses generating, storing or disposing of hazardous waste need to know.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 08/24/2022
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

On site to conduct a routine small quantity hazardous waste inspection. Ralph Varela, V.P. Quality Control, provided consent to inspect. Walked throughout the facility. Hazardous waste were properly labeled, stored, and dated. A perimeter walk was conducted. Municipal dumpster does not

appear to contain any hazardous waste. Manifests were available and reviewed. Pick ups are conducted by Environmental Management Technologies . Emergency response information is posted and employees are reported to be trained. No hazardous waste violations were observed on this date. Inspection report emailed to ralph@acetubebending.com; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 01/09/2019
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

copy of inspection report emailed to Ralph Varela Copy of waste analysis recieved for waste sand blast media, material is non hazardous, labeling verified, all violations abated.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/24/2014
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Reviewed submittal. Make the following modifications/additions: Un check the third box in section II E of the business activity page. Hazardous waste is not treated on site. Waste waste water in treatment unit was determined non hazardous. Delete helium from the disclosure. It is below the reportable quantity requirement. At least one box needs to be checked regarding federal hazardous categories for oxygen (at least pressure release). Waste oil is listed as a mixture. Should be listed as a waste. Also, oil should be listed for waste oil in the hazardous components box along with the CAS number and % weight. Briefly describe the training conducted in box III of the emergency plan. Site map is missing locations storm drain/sewer, cross streets and the shut offs for gas, water & electrical. Re submit the disclosure with the corrections.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/19/2014
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Initial disclosure review; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/30/2023
Violations Found: Yes
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

According to the CERS database, your business remains out of compliance with the annual certification requirement and a violation is being cited. Businesses are required to annually review and certify that their information in the California Electronic Reporting System (CERS) is complete, accurate and in compliance by March 1st. Your business was notified via email on 4/28/23 that your facility was out of compliance with this requirement. Please visit https://cers.calepa.ca.gov/ to access CERS and submit your completed HMBP forms. Failure to submit HMBEP forms is a violation of the California Health & Safety Code and California Code of Regulations. Progressive enforcement will be taken by this Agency if a submittal/certification has not been completed within 30 days of this report. If you have any questions regarding this violation, please contact your inspector, Julie Wozencraft at (714) 614-3566 or jwozencraft@ochca.com; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/20/2014
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency

Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Inspected perimeter of facility including the dumpster area. Permission to inspect and take necessary photos granted by Ralph Varela. Hazardous waste properly stored and identified. Manifests for hazardous waste pickup reviewed on site. Business emergency plan kept on site and available for review. No violations noted at this time.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 09/24/2018
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

copy of inspection emailed to Amanda Varela onsite inspection, the following items require disclosure in CERS; -propane- 7 gallons -waste oil/coolant residues- 220 gal -ultraclean (is this the soap in the vats?)- 220 gal -trim E206- 300 gal (the diluted coolant waste in the machines) -acetylene- 400 cu ft -O2-1500 cu ft -argon- 3400 cu ft -hydraulic oil- 55 Sinopec - product 0804 - 55 gal (the soap you use for the degreaser machines?); Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/18/2014
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Reviewed HMBEP submission package on eSubmit Portal, DENIED. Request for re-submittal this date. Reviewed changes to the emergency plan and site map. Did not see any the requested modifications to the chemical disclosure . Please make the following modifications/additions: Un check the third box in section II E of the business activity page. Hazardous waste is not treated on site. Waste waste water in treatment unit was determined non hazardous. Delete helium from the disclosure. It is below the reportable quantity requirement. At least one box needs to be checked regarding federal hazardous categories for oxygen (at least pressure release). Waste oil is listed as a mixture. Should be listed as a waste. Also, oil should be listed for waste oil in the hazardous components box along with the CAS number and % weight. Site map is still missing location for natural gas shut-off and cross streets. Re submit the disclosure after the above listed are done. [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 01/09/2019
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

copy of inspection report emailed to Ralph Varela Worked on haz mat disclosure and submitted, fixed all violations and abated this date.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 08/24/2022
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site for routine hazardous materials and business emergency plan (HMBP) . Ralph Varela, V.P. Quality Control, provided consent to inspect. Observed the following materials on site at reportable quantities: - argon - waste petroleum oil - trim 3206 - ultra clean soap - hydraulic oil Hazardous Materials disclosed in CERS 10540966 match what is reported on site. Training is reported to be conducted and records are kept online. Per California Health & Safety Code Ch. 6.95, businesses that store and handle hazardous materials at or over reportable quantities(55 gal of a liquid, 500 lbs of a

solid, 200 cubic ft of a compressed gas) must prepare and implement an HMBP. The facility is responsible for identifying all hazardous materials, including hazardous wastes, which are at or above disclosure thresholds. If there is a change in the type of amount of chemicals that are maintained on site, please submit revised documents (electronically though CERS) within 30 days of change. The HMBP m; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/20/2014
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site for initial hazardous materials and business emergency plan inspection. Observed the facility and inspected hazardous materials storage. The following hazardous materials were observed in amounts that exceed the required disclosure quantities: - Approximately 100 gallons of cutting coolant - Three or four 55 gallon drums of waste oil - Various compressed gas cylinders (12 argon, 4 oxygen, 2 acetylene, 1 helium & 1 nitrogen) This report serves as notice that the facility must submit the following documents electronically within 30 days of this report: - Business Emergency Plan - Hazardous Materials Chemical Inventory - Site Map The facility is responsible for identifying all hazardous materials, to include hazardous wastes, which are above the disclosure thresholds. If there is a change in the type or amount of chemicals that are maintained on site, please submit revised documents (electronically) within 30 days of the change. The E-Submit [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 08/20/2015
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site for a routine compliance inspection. Walked facility with the latest submitted site map and chemical inventory. Locations for the listed items on the site map were accurate except for the water shut off. Did not observe any additional chemicals that were stored at or above disclosure threshold. Please address the following: Add the emergency response equipment (absorbent) location to the site map. Change the location for the water shut off from side of building to the front (by main entrance.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Affiliations

Affil Type Desc: Owner/Operator
Entity Name: Ace Tube Bending
Entity Title: Operator
Address: 14 Journey
City: Aliso Viejo
State: CA
Country:
Zip Code: 92656
Phone:

Affil Type Desc: CUPA District
Entity Name: Orange County Env Health
Entity Title:
Address: 1241 East Dyer RoadSuite 120
City: Santa Ana
State: CA
Country:
Zip Code: 92705-5611
Phone: (714) 433-6406

Affil Type Desc: Environmental Contact
Entity Name: Ralph Varela
Entity Title:
Address: 14 Journey
City: Aliso Viejo
State: CA
Country:

Zip Code: 92656
Phone:

Affil Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title:
Address: 14 JOURNEY
City: ALISO VIEJO
State: CA
Country:
Zip Code: 92656
Phone:

Affil Type Desc: Operator
Entity Name: Angel M Varela
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone: (949) 362-2220

Affil Type Desc: Document Preparer
Entity Name: Amanda Varela
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Identification Signer
Entity Name: Angel M. Varela
Entity Title: President
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Parent Corporation
Entity Name: ACE TUBE BENDING
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Legal Owner
Entity Name: ACE TUBE BENDING
Entity Title:
Address: 14 JOURNEY
City: ALISO VIEJO
State: CA
Country: United States
Zip Code: 92656
Phone: (949) 362-2220

Coordinates

Env Int Type Code: HMBP
Program ID: 10540966
Latitude: 33.567590
Longitude: -117.727370
Coord Name:
Ref Point Type Desc: Center of a facility or station.

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
17	3 of3	SW	0.12 / 617.83	396.30 / 41	ACE TUBE BENDING 14 JOURNEY ALISO VIEJO CA 92656-3317	RCRA NON GEN

EPA Handler ID: CAL000075963
Gen Status Universe: No Report
Contact Name: AMANDA VARELA
Contact Address: 14 JOURNEY , , ALISO VIEJO , CA, 92656 ,
Contact Phone No and Ext: 949-362-2220
Contact Email: AMANDA@ACETUBEBENDING.COM
Contact Country:
County Name: ORANGE
EPA Region: 09
Land Type:
Receive Date: 19920611
Location Latitude: 33.567371
Location Longitude: -117.727769

Violation/Evaluation Summary

Note: NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity: No
Mixed Waste Generator: No
Transporter Activity: No
Transfer Facility: No
Onsite Burner Exemption: No
Furnace Exemption: No
Underground Injection Activity: No
Commercial TSD: No
Used Oil Transporter: No
Used Oil Transfer Facility: No
Used Oil Processor: No
Used Oil Refiner: No
Used Oil Burner: No
Used Oil Market Burner: No
Used Oil Spec Marketer: No

Hazardous Waste Handler Details

Sequence No: 1
Receive Date: 19920611
Handler Name: ACE TUBE BENDING
Source Type: Implementer
Federal Waste Generator Code: N
Generator Code Description: Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind: Current Owner
Type: Other
Name: ANGEL VARELA
Date Became Current:
Date Ended Current:
Phone: 949-362-2220
Source Type: Implementer
Street No:
Street 1: 14 JOURNEY
Street 2:
City: ALISO VIEJO
State: CA
Country:
Zip Code: 92656-3317

Owner/Operator Ind: Current Operator
Type: Other
Street No:
Street 1: 14 JOURNEY

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Name:	AMANDA VARELA	**Street 2:**	
Date Became Current:		**City:**	ALISO VIEJO
Date Ended Current:		**State:**	CA
Phone:	949-362-2220	**Country:**	
Source Type:	Implementer	**Zip Code:**	92656

18	1 of3	NNW	0.12 / 620.83	356.68 / 2	CVS PHARMACY # 8872 26891 ALISO CREEK ROAD ALISO VIEJO CA 92656-0000	RCRA LQG

EPA Handler ID:	CAR000234070
Gen Status Universe:	Large Quantity Generator
Contact Name:	NICOLE WILKINSON
Contact Address:	1 , CVS DR MC2340 , , WOONSOCKET , RI, 02895 , US
Contact Phone No and Ext:	401-770-7132
Contact Email:	NICOLE.WILKINSON@CVSHEALTH.COM
Contact Country:	US
County Name:	ORANGE
EPA Region:	09
Land Type:	Private
Receive Date:	20220215
Location Latitude:	33.5919
Location Longitude:	-117.727281

Violation/Evaluation Summary

Note:	NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility:	No
Onsite Burner Exemption:	No
Furnace Exemption:	No
Underground Injection Activity:	No
Commercial TSD:	No
Used Oil Transporter:	No
Used Oil Transfer Facility:	No
Used Oil Processor:	No
Used Oil Refiner:	No
Used Oil Burner:	No
Used Oil Market Burner:	No
Used Oil Spec Marketer:	No

Hazardous Waste Handler Details

Sequence No:	1
Receive Date:	20130103
Handler Name:	CVS PHARMACY NO 8872
Federal Waste Generator Code:	1
Generator Code Description:	Large Quantity Generator
Source Type:	Notification

Waste Code Details

Hazardous Waste Code:	D001
Waste Code Description:	IGNITABLE WASTE
Hazardous Waste Code:	D002
Waste Code Description:	CORROSIVE WASTE

Hazardous Waste Code: P001
Waste Code Description: 2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYLBUTYL)-, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3% (OR) WARFARIN, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3%

Hazardous Waste Code: P042
Waste Code Description: 1,2-BENZENEDIOL, 4-[1-HYDROXY-2-(METHYLAMINO)ETHYL]-, (R)- (OR) EPINEPHRINE

Hazardous Waste Code: P075
Waste Code Description: NICOTINE, & SALTS (OR) PYRIDINE, 3-(1-METHYL-2-PYRROLIDINYL)-,(S)-, & SALTS

Hazardous Waste Code: P081
Waste Code Description: 1,2,3-PROPANETRIOL, TRINITRATE (R) (OR) NITROGLYCERINE (R)

Hazardous Waste Handler Details

Sequence No: 1
Receive Date: 20140301
Handler Name: CVS PHARMACY #8872
Federal Waste Generator Code: 1
Generator Code Description: Large Quantity Generator
Source Type: Annual/Biennial Report update with Notification

Waste Code Details

Hazardous Waste Code: 122
Waste Code Description: Alkaline solution without metals (pH > 12.5)

Hazardous Waste Code: 123
Waste Code Description: Unspecified alkaline solution

Hazardous Waste Code: 131
Waste Code Description: Aqueous solution (2 < pH < 12.5) containing reactive anions (azide, bromate, chlorate, cyanide, fluoride, hypochlorite, nitrite, perchlorate, and sulfide anions)

Hazardous Waste Code: 134
Waste Code Description: Aqueous solution with <10% total organic residues

Hazardous Waste Code: 141
Waste Code Description: Off-specification, aged, or surplus inorganics

Hazardous Waste Code: 181
Waste Code Description: Other inorganic solid waste

Hazardous Waste Code: 214
Waste Code Description: Unspecified solvent mixture

Hazardous Waste Code: 311
Waste Code Description: Pharmaceutical waste

Hazardous Waste Code: 331
Waste Code Description: Off-specification, aged, or surplus organics

Hazardous Waste Code: 352
Waste Code Description: Other organic solids

Hazardous Waste Code: 541
Waste Code Description: Photochemicals / photo processing waste

Hazardous Waste Code: 561
Waste Code Description: Detergent and soap

Hazardous Waste Code: 791
Waste Code Description: Liquids with pH < 2

Hazardous Waste Code: D001

Waste Code Description:	IGNITABLE WASTE
Hazardous Waste Code:	D002
Waste Code Description:	CORROSIVE WASTE
Hazardous Waste Code:	D004
Waste Code Description:	ARSENIC
Hazardous Waste Code:	D005
Waste Code Description:	BARIUM
Hazardous Waste Code:	D006
Waste Code Description:	CADMIUM
Hazardous Waste Code:	D007
Waste Code Description:	CHROMIUM
Hazardous Waste Code:	D008
Waste Code Description:	LEAD
Hazardous Waste Code:	D009
Waste Code Description:	MERCURY
Hazardous Waste Code:	D010
Waste Code Description:	SELENIUM
Hazardous Waste Code:	D011
Waste Code Description:	SILVER
Hazardous Waste Code:	D016
Waste Code Description:	2,4-D (2,4-DICHLOROPHENOXYACETIC ACID)
Hazardous Waste Code:	D018
Waste Code Description:	BENZENE
Hazardous Waste Code:	D024
Waste Code Description:	M-CRESOL
Hazardous Waste Code:	D027
Waste Code Description:	1,4-DICHLOROBENZENE
Hazardous Waste Code:	D035
Waste Code Description:	METHYL ETHYL KETONE
Hazardous Waste Code:	D039
Waste Code Description:	TETRACHLOROETHYLENE
Hazardous Waste Code:	P001
Waste Code Description:	2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYLBUTYL)-, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3% (OR) WARFARIN, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3%
Hazardous Waste Code:	P012
Waste Code Description:	ARSENIC OXIDE AS2O3 (OR) ARSENIC TRIOXIDE
Hazardous Waste Code:	P075
Waste Code Description:	NICOTINE, & SALTS (OR) PYRIDINE, 3-(1-METHYL-2-PYRROLIDINYL)-,(S)-, & SALTS
Hazardous Waste Code:	P081
Waste Code Description:	1,2,3-PROPANETRIOL, TRINITRATE (R) (OR) NITROGLYCERINE (R)
Hazardous Waste Code:	P188
Waste Code Description:	BENZOIC ACID, 2-HYDROXY-, COMPD. WITH (3AS-CIS)-1,2,3,3A,8,8A-HEXAHYDRO-1,3A,8-TRIMETHYLPYRROLO[2,3-B]INDOL-5-YL METHYLCARBAMATE ESTER (1:1) (OR) PHYSOSTIGMINE SALICYLATE
Hazardous Waste Code:	U002
Waste Code Description:	2-PROPANONE (I) (OR) ACETONE (I)

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Hazardous Waste Code: U010
Waste Code Description: AZIRINO [2',3':3,4]PYRROLO[1,2-A]INDOLE-4,7-DIONE, 6-AMINO-8-[[(AMINOCARBONYL)OXY]METHYL]-1,1A, 2,8,8A,8B-HEXAHYDRO-8A-METHOXY-5-METHYL-, [1AS-(1AALPHA, 8BETA, 8AALPHA, 8BALPHA)]- (OR) MITOMYCIN C

Hazardous Waste Code: U031
Waste Code Description: 1-BUTANOL (I) (OR) N-BUTYL ALCOHOL (I)

Hazardous Waste Code: U034
Waste Code Description: ACETALDEHYDE, TRICHLORO- (OR) CHLORAL

Hazardous Waste Code: U035
Waste Code Description: BENZENEBUTANOIC ACID, 4-[BIS(2-CHLOROETHYL)AMINO]- (OR) CHLORAMBUCIL

Hazardous Waste Code: U044
Waste Code Description: CHLOROFORM (OR) METHANE, TRICHLORO-

Hazardous Waste Code: U058
Waste Code Description: 2H-1,3,2-OXAZAPHOSPHORIN-2-AMINE, N,N-BIS(2-CHLOROETHYL)TETRAHYDRO-, 2-OXIDE (OR) CYCLOPHOSPHAMIDE

Hazardous Waste Code: U059
Waste Code Description: 5,12-NAPHTHACENEDIONE, 8-ACETYL-10-[(3-AMINO-2,3,6-TRIDEOXY)-ALPHA-L-LYXO-HEXOPYRANOSYL) OXY]-7,8,9,10-TETRAHYDRO-6,8,11-TRIHYDROXY-1-METHOXY-, (8S-CIS)- (OR) DAUNOMYCIN

Hazardous Waste Code: U070
Waste Code Description: BENZENE, 1,2-DICHLORO- (OR) O-DICHLOROBENZENE

Hazardous Waste Code: U072
Waste Code Description: BENZENE, 1,4-DICHLORO- (OR) P-DICHLOROBENZENE

Hazardous Waste Code: U089
Waste Code Description: DIETHYLSTILBESTEROL (OR) PHENOL, 4,4'-(1,2-DIETHYL-1,2-ETHENEDIYL)BIS, (E)-

Hazardous Waste Code: U122
Waste Code Description: FORMALDEHYDE

Hazardous Waste Code: U129
Waste Code Description: CYCLOHEXANE, 1,2,3,4,5,6-HEXACHLORO-, (1ALPHA, 2ALPHA, 3BETA, 4ALPHA, 5ALPHA, 6BETA)- (OR) LINDANE

Hazardous Waste Code: U132
Waste Code Description: HEXACHLOROPHENE (OR) PHENOL, 2,2'-METHYLENEBIS[3,4,6-TRICHLORO-

Hazardous Waste Code: U150
Waste Code Description: L-PHENYLALANINE, 4-[BIS(2-CHLOROETHYL)AMINO]- (OR) MELPHALAN

Hazardous Waste Code: U151
Waste Code Description: MERCURY

Hazardous Waste Code: U154
Waste Code Description: METHANOL (I) (OR) METHYL ALCOHOL (I)

Hazardous Waste Code: U165
Waste Code Description: NAPHTHALENE

Hazardous Waste Code: U188
Waste Code Description: PHENOL

Hazardous Waste Code: U200
Waste Code Description: RESERPINE (OR) YOHIMBAN-16-CARBOXYLIC ACID, 11,17-DIMETHOXY-18-[(3,4,5-TRIMETHOXYBENZOYL) OXY]-, METHYL ESTER, (3BETA, 16BETA, 17ALPHA, 18BETA, 20ALPHA)-

Hazardous Waste Code: U201
Waste Code Description: 1,3-BENZENEDIOL (OR) RESORCINOL

Hazardous Waste Code: U204
Waste Code Description: SELENIOUS ACID (OR) SELENIUM DIOXIDE

Hazardous Waste Code: U205
Waste Code Description: SELENIUM SULFIDE (OR) SELENIUM SULFIDE SES2 (R,T)

Hazardous Waste Code: U206
Waste Code Description: D-GLUCOSE, 2-DEOXY-2-[[(METHYLNITROSOAMINO)-CARBONYL]AMINO]- (OR) GLUCOPYRANOSE, 2-DEOXY-2-(3-METHYL-3-NITROSOUREIDO)-,D- (OR) STREPTOZOTOCIN

Hazardous Waste Code: U210
Waste Code Description: ETHENE, TETRACHLORO- (OR) TETRACHLOROETHYLENE

Hazardous Waste Code: U279
Waste Code Description: CARBARYL (OR) 1-NAPHTHALENOL, METHYLCARBAMATE

Hazardous Waste Code: U411
Waste Code Description: PHENOL, 2-(1-METHYLETHOXY)-, METHYLCARBAMATE (OR) PROPOXUR

Hazardous Waste Handler Details

Sequence No: 2
Receive Date: 20160831
Handler Name: CVS PHARMACY #8872
Federal Waste Generator Code: 1
Generator Code Description: Large Quantity Generator
Source Type: Annual/Biennial Report update with Notification

Waste Code Details

Hazardous Waste Code: 122
Waste Code Description: Alkaline solution without metals (pH > 12.5)

Hazardous Waste Code: 141
Waste Code Description: Off-specification, aged, or surplus inorganics

Hazardous Waste Code: 181
Waste Code Description: Other inorganic solid waste

Hazardous Waste Code: 214
Waste Code Description: Unspecified solvent mixture

Hazardous Waste Code: 311
Waste Code Description: Pharmaceutical waste

Hazardous Waste Code: 331
Waste Code Description: Off-specification, aged, or surplus organics

Hazardous Waste Code: 791
Waste Code Description: Liquids with pH < 2

Hazardous Waste Code: D001
Waste Code Description: IGNITABLE WASTE

Hazardous Waste Code: D002
Waste Code Description: CORROSIVE WASTE

Hazardous Waste Code: D007
Waste Code Description: CHROMIUM

Hazardous Waste Code: D009
Waste Code Description: MERCURY

Hazardous Waste Code: D010
Waste Code Description: SELENIUM

Hazardous Waste Code: D024
Waste Code Description: M-CRESOL

Hazardous Waste Code: P001

Waste Code Description: 2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYLBUTYL)-, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3% (OR) WARFARIN, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3%

Hazardous Waste Code: P075
Waste Code Description: NICOTINE, & SALTS (OR) PYRIDINE, 3-(1-METHYL-2-PYRROLIDINYL)-,(S)-, & SALTS

Hazardous Waste Code: U002
Waste Code Description: 2-PROPANONE (I) (OR) ACETONE (I)

Hazardous Waste Code: U129
Waste Code Description: CYCLOHEXANE, 1,2,3,4,5,6-HEXACHLORO-, (1ALPHA, 2ALPHA, 3BETA, 4ALPHA, 5ALPHA, 6BETA)- (OR) LINDANE

Hazardous Waste Code: U205
Waste Code Description: SELENIUM SULFIDE (OR) SELENIUM SULFIDE SES2 (R,T)

Hazardous Waste Handler Details

Sequence No: 3
Receive Date: 20180301
Handler Name: CVS PHARMACY # 8872
Federal Waste Generator Code: 1
Generator Code Description: Large Quantity Generator
Source Type: Annual/Biennial Report update with Notification

Waste Code Details

Hazardous Waste Code: 122
Waste Code Description: Alkaline solution without metals (pH > 12.5)

Hazardous Waste Code: 141
Waste Code Description: Off-specification, aged, or surplus inorganics

Hazardous Waste Code: 214
Waste Code Description: Unspecified solvent mixture

Hazardous Waste Code: 311
Waste Code Description: Pharmaceutical waste

Hazardous Waste Code: 331
Waste Code Description: Off-specification, aged, or surplus organics

Hazardous Waste Code: D001
Waste Code Description: IGNITABLE WASTE

Hazardous Waste Code: D002
Waste Code Description: CORROSIVE WASTE

Hazardous Waste Code: D003
Waste Code Description: REACTIVE WASTE

Hazardous Waste Code: D007
Waste Code Description: CHROMIUM

Hazardous Waste Code: D009
Waste Code Description: MERCURY

Hazardous Waste Code: D010
Waste Code Description: SELENIUM

Hazardous Waste Code: D024
Waste Code Description: M-CRESOL

Hazardous Waste Code: P001
Waste Code Description: 2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYLBUTYL)-, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3% (OR) WARFARIN, & SALTS, WHEN PRESENT AT

CONCENTRATIONS GREATER THAN 0.3%

Hazardous Waste Code: P075
Waste Code Description: NICOTINE, & SALTS (OR) PYRIDINE, 3-(1-METHYL-2-PYRROLIDINYL)-,(S)-, & SALTS

Hazardous Waste Code: U002
Waste Code Description: 2-PROPANONE (I) (OR) ACETONE (I)

Hazardous Waste Code: U129
Waste Code Description: CYCLOHEXANE, 1,2,3,4,5,6-HEXACHLORO-, (1ALPHA, 2ALPHA, 3BETA, 4ALPHA, 5ALPHA, 6BETA)- (OR) LINDANE

Hazardous Waste Code: U205
Waste Code Description: SELENIUM SULFIDE (OR) SELENIUM SULFIDE SES2 (R,T)

Hazardous Waste Handler Details

Sequence No: 4
Receive Date: 20220215
Handler Name: CVS PHARMACY # 8872
Federal Waste Generator Code: 1
Generator Code Description: Large Quantity Generator
Source Type: Annual/Biennial Report update with Notification

Waste Code Details

Hazardous Waste Code: 122
Waste Code Description: Alkaline solution without metals (pH > 12.5)

Hazardous Waste Code: 141
Waste Code Description: Off-specification, aged, or surplus inorganics

Hazardous Waste Code: 214
Waste Code Description: Unspecified solvent mixture

Hazardous Waste Code: 311
Waste Code Description: Pharmaceutical waste

Hazardous Waste Code: 331
Waste Code Description: Off-specification, aged, or surplus organics

Hazardous Waste Code: D001
Waste Code Description: IGNITABLE WASTE

Hazardous Waste Code: D002
Waste Code Description: CORROSIVE WASTE

Hazardous Waste Code: D003
Waste Code Description: REACTIVE WASTE

Hazardous Waste Code: D005
Waste Code Description: BARIUM

Hazardous Waste Code: D007
Waste Code Description: CHROMIUM

Hazardous Waste Code: D009
Waste Code Description: MERCURY

Hazardous Waste Code: D010
Waste Code Description: SELENIUM

Hazardous Waste Code: D011
Waste Code Description: SILVER

Hazardous Waste Code: P001
Waste Code Description: 2H-1-BENZOPYRAN-2-ONE, 4-HYDROXY-3-(3-OXO-1-PHENYLBUTYL)-, & SALTS, WHEN PRESENT AT

CONCENTRATIONS GREATER THAN 0.3% (OR) WARFARIN, & SALTS, WHEN PRESENT AT CONCENTRATIONS GREATER THAN 0.3%

Hazardous Waste Code: P075
Waste Code Description: NICOTINE, & SALTS (OR) PYRIDINE, 3-(1-METHYL-2-PYRROLIDINYL)-,(S)-, & SALTS

Hazardous Waste Code: U002
Waste Code Description: 2-PROPANONE (I) (OR) ACETONE (I)

Hazardous Waste Code: U034
Waste Code Description: ACETALDEHYDE, TRICHLORO- (OR) CHLORAL

Hazardous Waste Code: U129
Waste Code Description: CYCLOHEXANE, 1,2,3,4,5,6-HEXACHLORO-, (1ALPHA, 2ALPHA, 3BETA, 4ALPHA, 5ALPHA, 6BETA)- (OR) LINDANE

Hazardous Waste Code: U165
Waste Code Description: NAPHTHALENE

Hazardous Waste Code: U188
Waste Code Description: PHENOL

Hazardous Waste Code: U205
Waste Code Description: SELENIUM SULFIDE (OR) SELENIUM SULFIDE SES2 (R,T)

Owner/Operator Details

Owner/Operator Ind: Current Operator
Type: Private
Name: GARFIELD BEACH CVS LLC
Dt Became Current: 20060602
Dt Ended Current:
Phone:
Source Type: Annual/Biennial Report update with Notification
Street No:
Street 1:
Street 2:
City:
State:
Country:
Zip Code:

Owner/Operator Ind: Current Operator
Type: Private
Name: GARFIELD BEACH CVS LLC
Dt Became Current: 20060602
Dt Ended Current:
Phone:
Source Type: Notification
Street No:
Street 1:
Street 2:
City:
State:
Country: US
Zip Code:

Owner/Operator Ind: Current Operator
Type: Private
Name: GARFIELD BEACH CVS, L.L.C.
Dt Became Current: 20060602
Dt Ended Current:
Phone: 401-765-1500
Source Type: Annual/Biennial Report update with Notification
Street No: 1
Street 1: CVS DR MC2340
Street 2:
City: WOONSOCKET
State: RI
Country: US
Zip Code: 02895

Owner/Operator Ind: Current Owner
Type: Private
Name: DONAHUE SCHRIBER REALTY GROUP
Dt Became Current: 19960722
Dt Ended Current:
Phone: 401-765-1500
Source Type: Annual/Biennial Report update with Notification
Street No: 200
Street 1: EAST BAKER ST., STE 100
Street 2:
City: COSTA MESA
State: CA
Country: US
Zip Code: 92626

Owner/Operator Ind: Current Owner
Type: Private
Name: DONAHUE SCHRIBER REALTY GROUP
Dt Became Current: 19960722
Dt Ended Current:
Phone:
Source Type: Annual/Biennial Report update with Notification
Street No: 200
Street 1: EAST BAKER ST.
Street 2: STE 100, ATTN: JANICE SCOTT
City: COSTA MESA
State: CA
Country: US
Zip Code: 92626

Owner/Operator Ind: Current Operator
Street No:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Type:	Private	**Street 1:**	
Name:	GARFIELD BEACH CVS, L.L.C.	**Street 2:**	
Dt Became Current:	20060602	**City:**	
Dt Ended Current:		**State:**	
Phone:		**Country:**	
Source Type:	Annual/Biennial Report update with Notification	**Zip Code:**	
Owner/Operator Ind:	Current Owner	**Street No:**	200
Type:	Private	**Street 1:**	EAST BAKER ST., STE 100
Name:	DONAHUE SCHRIBER REALTY GROUP	**Street 2:**	
Dt Became Current:	19960722	**City:**	COSTA MESA
Dt Ended Current:		**State:**	CA
Phone:	714-545-1400	**Country:**	US
Source Type:	Annual/Biennial Report update with Notification	**Zip Code:**	92626
Owner/Operator Ind:	Current Owner	**Street No:**	
Type:	Private	**Street 1:**	200 E BAKER ST
Name:	DONAHUE SCHRIBER REALTY GROUP	**Street 2:**	STE 100 ATTN JANICE SCOTT
Dt Became Current:	19960722	**City:**	COSTA MESA
Dt Ended Current:		**State:**	CA
Phone:	714-545-1400	**Country:**	US
Source Type:	Notification	**Zip Code:**	92626
Owner/Operator Ind:	Current Operator	**Street No:**	1
Type:	Private	**Street 1:**	CVS DRIVE
Name:	GARFIELD BEACH CVS, L.L.C.	**Street 2:**	
Dt Became Current:	20060602	**City:**	WOONSOCKET
Dt Ended Current:		**State:**	RI
Phone:	401-765-1500	**Country:**	US
Source Type:	Annual/Biennial Report update with Notification	**Zip Code:**	02895
Owner/Operator Ind:	Current Owner	**Street No:**	200
Type:	Private	**Street 1:**	E BAKER ST STE 100 ATTN: JANIC
Name:	DONAHUE SCHRIBER REALTY GROUP	**Street 2:**	E SCOTT
Dt Became Current:	19960722	**City:**	COSTA MESA
Dt Ended Current:		**State:**	RI
Phone:	714-545-1400	**Country:**	
Source Type:	Annual/Biennial Report update with Notification	**Zip Code:**	92626

Historical Handler Details

Receive Dt:	20180301
Generator Code Description:	Large Quantity Generator
Handler Name:	CVS PHARMACY # 8872
Receive Dt:	20160831
Generator Code Description:	Large Quantity Generator
Handler Name:	CVS PHARMACY #8872
Receive Dt:	20140301
Generator Code Description:	Large Quantity Generator
Handler Name:	CVS PHARMACY #8872
Receive Dt:	20130103
Generator Code Description:	Large Quantity Generator
Handler Name:	CVS PHARMACY NO 8872

18	*2 of3*	*NNW*	*0.12 / 620.83*	*356.68 / 2*	***Cvs Pharmacy #8872*** ***26891 Aliso Creek Rd Aliso Viejo, Ca 92656-3392*** ***Aliso Viejo CA 92656-3392***	***HW ORANGE***

Establishment ID:	FA0048185

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
18	3 of3	NNW	0.12 / 620.83	356.68 / 2	CVS PHARMACY #8872 26891 ALISO CREEK RD ALISO VIEJO CA 92656	CERS HAZ

Site ID: 109466
Latitude: 33.572370
Longitude: -117.723584

Regulated Programs

EI ID: 10443385 **EI Description:** Hazardous Waste Generator

EI ID: 10443385 **EI Description:** RCRA LQ HW Generator

Evaluations

Eval Date: 02/16/2022
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

On site to conduct a routine hazardous waste inspection. Jose Aguirre, Assistant Manager, provided consent to inspect. The facility stores returned retail merchandises in the back store room in plastic totes (corrosives, toxics, oxidizers, aerosol, universal waste, flammable). The totes were properly labeled, dated, and stored closed. Manifests from Clean Earth were available and reviewed. The last picked up was on 1/13/2022. Emergency response information is posted and employees are reported to be trained. No hazardous waste violations were observed on this date. Inspection report emailed to jaguir8@yahoo.com and environmental contact phuong.hunter@cvshealth.com; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 11/10/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site for inspection. Facility does not have hazardous material on site that exceeds disclosure threshold. Removed program via RUR.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 11/10/2015
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Inspected perimeter of facility including the dumpster area. Permission to inspect granted by Gleny Stott (supervisor). Hazardous waste properly stored, labeled and dated. Business emergency plan available for review. Emergency procedures posted on site. Manifests for hazardous waste pickup available for review during the past three years. Weekly hazardous waste storage area inspection log maintained and available for review. No violations noted at this time.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/07/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS

Eval Notes:

Reviewed and accepted disclosure in CERS; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/15/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

accepted in CERS for 2017; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/09/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Facility reporting below thresholds for refrigerants = 1000 CF; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/11/2018
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Emailed inspection to manager Inspection of both pharmacy waste and store waste; Note: data in [EVAL Notes] field for some records is truncated from the source.

Affiliations

Affil Type Desc: Identification Signer
Entity Name: Karina Romero, Agent for Garfield Beach CVS, L.L.C.
Entity Title: Regulatory Compliance Specialist, 3E
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Environmental Contact
Entity Name: 3E, Regulatory Services/CVS
Entity Title:
Address: 3207 Grey Hawk Court, Suite 200
City: Carlsbad
State: CA
Country:
Zip Code: 92010
Phone:

Affil Type Desc: CUPA District
Entity Name: Orange County Env Health
Entity Title:
Address: 1241 East Dyer RoadSuite 120
City: Santa Ana

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

State: CA
Country:
Zip Code: 92705-5611
Phone: (714) 433-6406

Affil Type Desc: Legal Owner
Entity Name: Garfield Beach CVS, L.L.C.
Entity Title:
Address: One CVS Drive
City: Woonsocket
State: RI
Country: United States
Zip Code: 02895
Phone: (401) 765-1500

Affil Type Desc: Document Preparer
Entity Name: Karina Romero, Agent for Garfield Beach CVS, L.L.C.
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Parent Corporation
Entity Name: CVS Health
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title:
Address: CVS Health, Attn: Erin Chilinski, One CVS Drive – MC 1160
City: Woonsocket
State: RI
Country:
Zip Code: 02895
Phone:

Affil Type Desc: Operator
Entity Name: Garfield Beach CVS, L.L.C.
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone: (401) 765-1500

Coordinates

Env Int Type Code: HWG
Program ID: 10443385
Latitude: 33.572370
Longitude: -117.723580
Coord Name:
Ref Point Type Desc: Center of a facility or station.

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
19	1 of10	NNE	0.12 / 629.66	335.85 / -19	BIO SAFE CLEANERS INC 26895 ALISO CREEK RD ALISO VIEJO CA	DRYCLEANERS

EPA ID: CAL000317951
Create Date: 3/27/2007
Owner City: ALISO VIEJO
Owner State: CA

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Facility Act Ind:	No	**Owner Zip:**	926565302
Inact Date:	6/30/2011	**Owner Phone:**	9494250246
Reason:	SIC/NAICS	**Owner Fax:**	0
Region Code:	4	**Contact Name:**	JUNG KIM/PRESIDENT
DD Latitude:	33.5728	**Contact Street 1:**	26895 ALISO CREEK RD STE A
DD Longitude:	-117.72355	**Contact Street 2:**	
Facility County Code:	(30) ORANGE	**Contact City:**	ALISO VIEJO
Mail Name:		**Contact State:**	CA
Owner Name:	BIO SAFE CLEANERS INC	**Contact Zip:**	926565302
Owner Street 1:	26895 ALISO CREEK RD STE A	**Contact Phone:**	9494250246
Owner Street 2:		**Contact Fax:**	0

NAICS Details

NAICS Code:	325612
NAICS Description:	Polish and Other Sanitation Good Manufacturing
SIC Code:	2842
SIC Description:	Specialty Cleaning, Polishing, and Sanitary Preparations

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Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
19	2 of10	NNE	0.12 / 629.66	335.85 / -19	**BIO SAFE CLEANERS** **26895 ALISO CREEK RD STE A** **ALISO VIEJO CA**	DRYCLEANERS

EPA ID:	CAL000366221	**Owner City:**	ALISO VIEJO
Create Date:	7/29/2011	**Owner State:**	CA
Facility Act Ind:	No	**Owner Zip:**	926565302
Inact Date:	6/30/2016	**Owner Phone:**	9494250246
Reason:	SIC/NAICS	**Owner Fax:**	0
Region Code:	4	**Contact Name:**	YOUNG HEE SUNG
DD Latitude:	33.5728	**Contact Street 1:**	26895 ALISO CREEK RD STE A
DD Longitude:	-117.72355	**Contact Street 2:**	
Facility County Code:	(30) ORANGE	**Contact City:**	ALISO VIEJO
Mail Name:		**Contact State:**	CA
Owner Name:	YOUNG HEE SUNG	**Contact Zip:**	92656
Owner Street 1:	26895 ALISO CREEK RD STE A	**Contact Phone:**	9494250246
Owner Street 2:		**Contact Fax:**	0

NAICS Details

NAICS Code:	81232
NAICS Description:	Drycleaning and Laundry Services (except Coin-Operated)
SIC Code:	7211
SIC Description:	Power Laundries, Family and Commercial

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
19	3 of10	NNE	0.12 / 629.66	335.85 / -19	**Bio Safe Cleaners** **26895 Aliso Creek Rd Ste A Aliso Viejo, Ca 92656-5302** **Aliso Viejo CA 92656-5302**	HW ORANGE

Establishment ID: FA0059572

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
19	4 of10	NNE	0.12 / 629.66	335.85 / -19	**BIO SAFE CLEANERS** **26895 AISO CREEK RD #A** **ALISO VIEJO CA**	DRYCLEANERS

EPA ID:	CAL000426268	**Owner City:**	SAN DIEGO
Create Date:	3/28/2017	**Owner State:**	CA
Facility Act Ind:	Yes	**Owner Zip:**	921300000
Inact Date:		**Owner Phone:**	9494331026
Reason:	SIC/NAICS	**Owner Fax:**	
Region Code:	4	**Contact Name:**	ANN LEE
DD Latitude:	0	**Contact Street 1:**	5357 AURORA SUMMIT TRAILS
DD Longitude:	0	**Contact Street 2:**	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Facility County Code:	(30) ORANGE	**Contact City:**	SAN DIEGO
Mail Name:		**Contact State:**	CA
Owner Name:	ANN LEE	**Contact Zip:**	92130
Owner Street 1:	5357 AURORA SUMMIT TRAILS	**Contact Phone:**	9494331026
Owner Street 2:		**Contact Fax:**	

NAICS Details

NAICS Code:	81232
NAICS Description:	Drycleaning and Laundry Services (except Coin-Operated)
SIC Code:	7211
SIC Description:	Power Laundries, Family and Commercial

19	***5 of10***	***NNE***	***0.12 / 629.66***	***335.85 / -19***	***BIO SAFE CLEANERS 26895 ALISO CREEK RD ALISO VIEJO CA 92656***	***CERS HAZ***

Site ID:	410806
Latitude:	33.572235
Longitude:	-117.723584

Regulated Programs

EI ID:	10574359	**EI Description:**	Chemical Storage Facilities
EI ID:	10574359	**EI Description:**	Hazardous Waste Generator

Violations

Violation Date:	10/03/2014	**Violation Source:**	CERS
Violation Program:	HMRRP	**Violation Division:**	Orange County Environmental Health
Citation:	HSC 6.95 25508(d) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(d)		
Violation Notes:			

Returned to compliance on 12/02/2014.

Violation Description:

Failure to complete and/or electronically submit a business plan when storing/handling a hazardous material at or above reportable quantities.

Violations

Violation Date:	10/03/2014	**Violation Source:**	CERS
Violation Program:	HMRRP	**Violation Division:**	Orange County Environmental Health
Citation:	HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)		
Violation Notes:			

Returned to compliance on 11/02/2014.

Violation Description:

Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.

Violations

Violation Date:	02/16/2022	**Violation Source:**	CERS
Violation Program:	HMRRP	**Violation Division:**	Orange County Environmental Health
Citation:	HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2		
Violation Notes:			

OBSERVATION: The business failed to electronically submit and certify that the business plan is complete, accurate, and in compliance with EPCRA on or before the annual due date. CERS #10574359 was last submitted on 7/9/2018. CORRECTIVE ACTION: Electronically submit and certify that the business plan is complete, accurate, and in compliance with EPCRA within 30 days of this inspection report.

Violation Description:

Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.

Violations

Violation Date: 09/15/2023
Violation Source: CERS
Violation Program: HMRRP
Violation Division: Orange County Environmental Health
Citation: HSC 6.95 25508.2 - California Health and Safety Code, Chapter 6.95, Section(s) 25508.2
Violation Notes:

Business failed to annually certify HMBP.

Violation Description:

Failure to annually review and electronically certify that the business plan is complete and accurate on or before the annual due date.

Enforcements

Enf Action Date: 08/07/2015
Enf Action Program: HMRRP
Enf Action Type: Notice of Violation (Unified Program)
Enf Action Source: CERS
Enf Action Division: Orange County Environmental Health
Enf Action Description: Notice of Violation Issued by the Inspector at the Time of Inspection
Enf Action Notes:

Failure to Electronically Submit HMD/BEP.

Evaluations

Eval Date: 01/17/2019
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

emailed inspection report to owner this date Discussed annual submittal on phone with Ann Lee and Alphonso Lara. Ensure that your CERS submittal is resubmitted every year in January of February to verify accuracy; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 08/07/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Eval Date: 12/12/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Reviewed and declined re submittal in e submit. Thank you for the modifications. Please address the following: CAS number is needed in the hazardous components box for the WASTE hydrocarbon disclosure. Use CAS number 64742-48-9. Fire code hazard class should be combustible liquid III B for the WASTE hydrocarbon disclosure. Site map is missing site orientation (north arrow), adjacent street and employee staging area. Add these to the site map. Resubmit after modifications are completed.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 01/17/2019
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

emailed inspection report to owner this date; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 10/05/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Reviewed and declined submittal in e submit. Please address the following: CAS number is needed in the hazardous components box for the waste hydrocarbon disclosure. Fire code hazard class should be combustible liquid III B for the waste hydrocarbon disclosure. Site map is missing locations for the water shut off and emergency response equipment (absorbent/spill kit). Resubmit after modifications are completed.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 08/01/2013
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Inspected perimeter of facility including the trash containment areas. Permission to inspect and take necessary photos granted by Alfonso Lara (manager). Documentation for hazardous waste pickup reviewed on site. Hazardous waste emergency response sticker completed and posted on site. Hazardous waste properly stored, labeled and dated. No violations noted at this time.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 11/05/2015
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site for routine inspection. Walked facility with the latest disclosed chemical inventory and site map. Please address the following: The latest submittal was declined on 10-5-15 in the e submit portal. Modify the disclosure per the comments. There is currently approximately 130 gallons of new hydrocarbon cleaner and 55 gallons of waste hydrocarbon cleaner storage on site. Both of these need to be accurately listed in the chemical inventory (one page for each one). Make sure the locations for emergency response equipment (electrical, water and natural gas) and emergency response equipment (fire extinguisher and absorbent material) are properly indicated on the facility site map. Resubmit after all modifications have been performed.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/15/2022
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency

Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

On site for routine Hazardous Waste inspection, Jenny Kim was present and provided consent to inspect. The facility generates waste hydrocarbon liquid from dry cleaning activities. The hazardous waste drum is properly labeled, dated and stored closed. Veolia has been contacted for pickup. The last pick up was on 1/27/2020. A perimeter walk was conducted an no hazardous waste was observed in the municipal dumpster. Emergency response information is posted and employees are reported to be trained. Inspection report emailed to sarapark1224@gmail.com; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 11/05/2015
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Inspected perimeter of facility including the dumpster area. Permission to inspect granted by Alfonso Lara. Hazardous waste properly stored, labeled and dated. Documentation for hazardous waste pickup kept on site and available for review during the past three years. Hazardous waste emergency response sticker completed and posted on site. Condensate water evaporated in the boiler room. No violations noted at this time.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/21/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

File review and e submit disclosure discussion with facility contact.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/23/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

esubmit and CERS review; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 09/15/2023
Violations Found: Yes
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

According to the CERS database, your business remains out of compliance with the annual certification requirement and a violation is being cited. Businesses are required to annually review and certify that their information in the California Electronic Reporting System (CERS) is complete, accurate and in compliance by March 1st. Your business was notified via email on 5/4/23 that your facility was out of compliance with this requirement. Please visit https://cers.calepa.ca.gov/ to access CERS and submit your completed HMBP forms. Failure to submit HMBEP forms is a violation of the California Health & Safety Code and California Code of Regulations. Progressive enforcement will be taken by this Agency if a submittal/certification has not been completed within 30 days of this report. If you have any questions regarding this violation, please contact your inspector, Julie Wozencraft at (714) 614-3566 or jwozencraft@ochca.com.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/15/2022

Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site for routine Hazardous Materials Business Plan (HMBP) inspection. Jenny Kim provided consent to inspect. Observed the following materials on site above disclosure thresholds: - hydrocarbon (used in the dry cleaning machine) Per California Health & Safety Code Ch. 6.95, businesses that store and handle hazardous materials at or over reportable quantities (55 gal of a liquid, 500 lbs of a solid, 200 cubic ft of a compressed gas) must prepare and implement an HMBP. The facility is responsible for identifying all hazardous materials, including hazardous wastes, which are at or above disclosure thresholds. If there is a change in the type of amount of chemicals that are maintained on site, please submit revised documents (electronically though CERS) within 30 days of change. The HMBP must be submitted online through the California Environmental Reporting System (CERS) by March 1st of every year. Inspection report emailed to sarapark1224@gmail.com; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 01/26/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Reviewed and accepted disclosure in e submit.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 09/28/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

9/28: SPoke with Alphonso Lara who indicated he completed the submittal. Reviewed eSubmit and the Submission was not submitted. Let Alphonso know to log in and hit submit.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 08/25/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

8/24: Voicemail from Jesus Lare in regards to the portal lab. 8/25: Called Jesus and informed him that anyone can come to the portal lab for assistance.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 07/09/2018
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Declined in CERS The submittal was declined, please make the following changes and resubmit within 30 days; 1.For DF-2000 solvent waste and material disclosure, uncheck the obsolete federal hazard categories and check the "flammable", "aspiration hazard", under the new hazard categories. 2. on the waste and material under fire code hazard class indicate 'combustible' 3. for the solvent waste list state waste code as '214'; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 08/21/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

8/21: Spoke with Eric hangers for the owner who received the NOV. Discussed the Haz Mat Program and the eSubmit portal. Assigned Eric credentials to the eSubmit portal. Emailed eric link to portal and the the haz mat web page for OC CUPA.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 10/03/2014
Violations Found: Yes
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Orange County Environmental Health as the Certified Unified Program Agency (OC CUPA) is the administrating agency for the Hazardous Materials Disclosure and Business Emergency Plan programs (HMD/BEP) previously administered by the Orange County Fire Authority. During the months of August and December of 2013, the OC CUPA sent out letters to regulated businesses requesting them to electronically submit their HMD/BEP forms. Electronic submission of these forms is a legal requirement. Failure to submit HMD/BEP forms is in violation of the California Health & Safety Code Chapter 6.95. According to our records there is no electronic submission for this facility. Please go to www.esubmit.ocgov.com to request a user name and password and submit your HMD/BEP forms within the next 30 days. Businesses may also submit forms via the California Environmental Reporting System. Please verify that all owner information that is pre populated on the E-Submit Portal is still [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Affiliations

Affil Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title:
Address: 26895 ALISO CREEK RD
City: ALISO VIEJO
State: CA
Country:
Zip Code: 92656
Phone:

Affil Type Desc: CUPA District
Entity Name: Orange County Env Health
Entity Title:
Address: 1241 East Dyer RoadSuite 120
City: Santa Ana
State: CA
Country:
Zip Code: 92705-5611
Phone: (714) 433-6406

Affil Type Desc: Document Preparer
Entity Name: ANN LEE
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Environmental Contact
Entity Name: Ann Lee
Entity Title:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Address:	26895 ALISO CREEK RD SUITE A
City:	ALISO VIEJO
State:	CA
Country:	
Zip Code:	92656
Phone:	
Affil Type Desc:	Parent Corporation
Entity Name:	BIO SAFE CLEANERS INC
Entity Title:	
Address:	
City:	
State:	
Country:	
Zip Code:	
Phone:	
Affil Type Desc:	Legal Owner
Entity Name:	CLEAR SOURCE CAPITAL INC
Entity Title:	
Address:	26895 ALISO CREEK RD
City:	ALISO VIEJO
State:	CA
Country:	United States
Zip Code:	92656
Phone:	(949) 422-3795
Affil Type Desc:	Identification Signer
Entity Name:	Ann Lee
Entity Title:	OWNER
Address:	
City:	
State:	
Country:	
Zip Code:	
Phone:	
Affil Type Desc:	Operator
Entity Name:	Ann Lee
Entity Title:	
Address:	
City:	
State:	
Country:	
Zip Code:	
Phone:	(949) 422-3795

Coordinates

Env Int Type Code:	HMBP	**Longitude:**	-117.723580
Program ID:	10574359	**Coord Name:**	
Latitude:	33.572230	**Ref Point Type Desc:**	Center of a facility or station.

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
19	6 of10	NNE	0.12 / 629.66	335.85 / -19	HBR MANAGEMENT LLC 26895 ALISO CREEK RD # B404 ALISO VIEJO CA 92656-5301	RCRA NON GEN

EPA Handler ID:	CAL000398196
Gen Status Universe:	No Report
Contact Name:	DEBBIE LOGAN
Contact Address:	26895 ALISO CREEK RD # B404 , , ALISO VIEJO , CA, 92656 ,
Contact Phone No and Ext:	949-294-2727
Contact Email:	DEBBIE@LOGANCONSULT.COM
Contact Country:	
County Name:	ORANGE
EPA Region:	09
Land Type:	

Receive Date:	20140626
Location Latitude:	33.571917
Location Longitude:	-117.725477

Violation/Evaluation Summary

Note:	NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility:	No
Onsite Burner Exemption:	No
Furnace Exemption:	No
Underground Injection Activity:	No
Commercial TSD:	No
Used Oil Transporter:	No
Used Oil Transfer Facility:	No
Used Oil Processor:	No
Used Oil Refiner:	No
Used Oil Burner:	No
Used Oil Market Burner:	No
Used Oil Spec Marketer:	No

Hazardous Waste Handler Details

Sequence No:	1
Receive Date:	20140626
Handler Name:	HBR MANAGEMENT LLC
Source Type:	Implementer
Federal Waste Generator Code:	N
Generator Code Description:	Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind:	Current Operator	**Street No:**	
Type:	Other	**Street 1:**	26895 ALISO CREEK RD # B404
Name:	DEBBIE LOGAN	**Street 2:**	
Date Became Current:		**City:**	ALISO VIEJO
Date Ended Current:		**State:**	CA
Phone:	949-294-2727	**Country:**	
Source Type:	Implementer	**Zip Code:**	92656
Owner/Operator Ind:	Current Owner	**Street No:**	
Type:	Other	**Street 1:**	4470 KATELLA AVE
Name:	HBR MANAGEMENT LLC	**Street 2:**	
Date Became Current:		**City:**	LOS ALAMITOS
Date Ended Current:		**State:**	CA
Phone:	562-344-1044	**Country:**	
Source Type:	Implementer	**Zip Code:**	90720

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
19	7 of10	NNE	0.12 / 629.66	335.85 / -19	CARDINAL INVESTMENT PROPERTIES-STERLING LP 26895 ALISO CREEK RD B404 ALISO VIEJO CA 92656	RCRA NON GEN

EPA Handler ID:	CAC003000926
Gen Status Universe:	No Report
Contact Name:	DEBBIE LOGAN
Contact Address:	26895 ALISO CREEK RD B404 , , ALISO VIEJO , CA, 92656 ,

Contact Phone No and Ext:	949-294-2727
Contact Email:	DEBBIE@LOGANCONSULT.COM
Contact Country:	
County Name:	ORANGE
EPA Region:	09
Land Type:	
Receive Date:	20190213
Location Latitude:	33.571917
Location Longitude:	-117.725477

Violation/Evaluation Summary

Note:	NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility:	No
Onsite Burner Exemption:	No
Furnace Exemption:	No
Underground Injection Activity:	No
Commercial TSD:	No
Used Oil Transporter:	No
Used Oil Transfer Facility:	No
Used Oil Processor:	No
Used Oil Refiner:	No
Used Oil Burner:	No
Used Oil Market Burner:	No
Used Oil Spec Marketer:	No

Hazardous Waste Handler Details

Sequence No:	1
Receive Date:	20190213
Handler Name:	CARDINAL INVESTMENT PROPERTIES-STERLING LP
Source Type:	Implementer
Federal Waste Generator Code:	N
Generator Code Description:	Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind:	Current Owner	**Street No:**	
Type:	Other	**Street 1:**	26895 ALISO CREEK RD B404
Name:	CARDINAL INVESTMENT PROPERTIES-STER	**Street 2:**	
Date Became Current:		**City:**	ALISO VIEJO
Date Ended Current:		**State:**	CA
Phone:	949-294-2727	**Country:**	
Source Type:	Implementer	**Zip Code:**	92656

Owner/Operator Ind:	Current Operator	**Street No:**	
Type:	Other	**Street 1:**	26895 ALISO CREEK RD B404
Name:	DEBBIE LOGAN	**Street 2:**	
Date Became Current:		**City:**	ALISO VIEJO
Date Ended Current:		**State:**	CA
Phone:	949-294-2727	**Country:**	
Source Type:	Implementer	**Zip Code:**	92656

19	*8 of10*	*NNE*	*0.12 / 629.66*	*335.85 / -19*	***BIO SAFE CLEANERS 26895 AISO CREEK RD #A***	***RCRA TSD***

EPA Handler ID: CAL000426268
Gen Status Universe: No Report
Contact Name: ANN LEE
Contact Address: 27 WINDROW RD , , TUSTIN , CA, 92782-0000 ,
Contact Phone No and Ext: 949-433-1026
Contact Email: CLEARSOURCE2012@GMAIL.COM
Contact Country:
Land Type:
County Name: ORANGE
EPA Region: 09
Receive Date: 20170328
Location Latitude: 33.571917
Location Longitude: -117.725477

Violation/Evaluation Summary

Note: NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity: No
Mixed Waste Generator: No
Transporter Activity: No
Transfer Facility: No
Onsite Burner Exemption: No
Smelting, Melting and Refining: No
Underground Injection Control: No
Commercial TSD: No
Used Oil Transporter: No
Used Oil Transfer Facility: No
Used Oil Processor: No
Used Oil Refiner: No
Used Oil Burner: No
Used Oil Market Burner: No
Used Oil Spec Marketer: No

Hazardous Waste Handler Details

Sequence No: 1
Receive Date: 20170328
Handler Name: BIO SAFE CLEANERS
Federal Waste Generator Code: N
Generator Code Description: Not a Generator, Verified
Source Type: Implementer
TSD Activity: Y

Owner/Operator Details

Owner/Operator Ind: Current Operator
Type: Other
Name: ANN LEE
Date Became Current:
Date Ended Current:
Phone: 949-433-1026
Source Type: Implementer
Street No:
Street 1: 27 WINDROW RD
Street 2:
City: TUSTIN
State: CA
Country:
Zip Code: 92782-0000

Owner/Operator Ind: Current Owner
Type: Other
Name: ANN LEE
Date Became Current:
Date Ended Current:
Street No:
Street 1: 27 WINDROW RD
Street 2:
City: TUSTIN
State: CA

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Phone:	949-433-1026	**Country:**		
Source Type:	Implementer	**Zip Code:**	92782	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
19	9 of10	NNE	0.12 / 629.66	335.85 / -19	BIO SAFE CLEANERS 26895 AISO CREEK RD #A ALISO VIEJO CA 92656	RCRA NON GEN

EPA Handler ID:	CAL000426268
Gen Status Universe:	No Report
Contact Name:	ANN LEE
Contact Address:	27 WINDROW RD , , TUSTIN , CA, 92782-0000 ,
Contact Phone No and Ext:	949-433-1026
Contact Email:	CLEARSOURCE2012@GMAIL.COM
Contact Country:	
County Name:	ORANGE
EPA Region:	09
Land Type:	
Receive Date:	20170328
Location Latitude:	33.571917
Location Longitude:	-117.725477

Violation/Evaluation Summary

Note:	NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility:	No
Onsite Burner Exemption:	No
Furnace Exemption:	No
Underground Injection Activity:	No
Commercial TSD:	No
Used Oil Transporter:	No
Used Oil Transfer Facility:	No
Used Oil Processor:	No
Used Oil Refiner:	No
Used Oil Burner:	No
Used Oil Market Burner:	No
Used Oil Spec Marketer:	No

Hazardous Waste Handler Details

Sequence No:	1
Receive Date:	20170328
Handler Name:	BIO SAFE CLEANERS
Source Type:	Implementer
Federal Waste Generator Code:	N
Generator Code Description:	Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind:	Current Owner	**Street No:**	
Type:	Other	**Street 1:**	27 WINDROW RD
Name:	ANN LEE	**Street 2:**	
Date Became Current:		**City:**	TUSTIN
Date Ended Current:		**State:**	CA
Phone:	949-433-1026	**Country:**	
Source Type:	Implementer	**Zip Code:**	92782

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Owner/Operator Ind:	Current Operator	**Street No:**		
Type:	Other	**Street 1:**	27 WINDROW RD	
Name:	ANN LEE	**Street 2:**		
Date Became Current:		**City:**	TUSTIN	
Date Ended Current:		**State:**	CA	
Phone:	949-433-1026	**Country:**		
Source Type:	Implementer	**Zip Code:**	92782-0000	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
19	10 of10	NNE	0.12 / 629.66	335.85 / -19	BIO SAFE CLEANERS 26895 AISO CREEK RD #A ALISO VIEJO CA 92656	FED DRYCLEANERS

FRS Facility ID:	110070590657
NPDES IDs:	
NAICS Codes:	81232
SIC Codes:	
Latitude:	33.571917
Longitude:	-117.725477

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
20	1 of3	WSW	0.12 / 649.89	397.35 / 42	CITY OF ALISO VIEJO 12 JOURNEY STE 100 ALISO VIEJO CA 92656-5335	RCRA NON GEN

EPA Handler ID:	CAL000343591
Gen Status Universe:	No Report
Contact Name:	MOY YAHYA
Contact Address:	12 JOURNEY STE 100 , , ALISO VIEJO , CA, 92656 ,
Contact Phone No and Ext:	949-425-2538
Contact Email:	MYAHYA@CITYOFALISOVIEJO.COM
Contact Country:	
County Name:	ORANGE
EPA Region:	09
Land Type:	
Receive Date:	20090602
Location Latitude:	33.567672
Location Longitude:	-117.728

Violation/Evaluation Summary

Note: NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility:	No
Onsite Burner Exemption:	No
Furnace Exemption:	No
Underground Injection Activity:	No
Commercial TSD:	No
Used Oil Transporter:	No
Used Oil Transfer Facility:	No
Used Oil Processor:	No
Used Oil Refiner:	No
Used Oil Burner:	No
Used Oil Market Burner:	No
Used Oil Spec Marketer:	No

Hazardous Waste Handler Details

Sequence No: 1

Receive Date:	20090602
Handler Name:	CITY OF ALISO VIEJO
Source Type:	Implementer
Federal Waste Generator Code:	N
Generator Code Description:	Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind:	Current Operator	**Street No:**	
Type:	Other	**Street 1:**	12 JOURNEY STE 100
Name:	MOY YAHYA	**Street 2:**	
Date Became Current:		**City:**	ALISO VIEJO
Date Ended Current:		**State:**	CA
Phone:	949-425-2538	**Country:**	
Source Type:	Implementer	**Zip Code:**	92656

Owner/Operator Ind:	Current Owner	**Street No:**	
Type:	Other	**Street 1:**	12 JOURNEY STE 100
Name:	CITY OF ALISO VIEJO	**Street 2:**	
Date Became Current:		**City:**	ALISO VIEJO
Date Ended Current:		**State:**	CA
Phone:	949-425-2500	**Country:**	
Source Type:	Implementer	**Zip Code:**	92656-5335

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
20	2 of3	WSW	0.12 / 649.89	397.35 / 42	City of Aliso Viejo 12 Journey, Suite 100 Aliso Viejo CA 92708	ALT FUELS

ID:	310229	**CNG Dispenser No:**	
Fuel Type Code:	ELEC: Electric	**CNG Site Renew Src:**	
Station Phone:	888-998-2546	**CNG Tot Compr Cap:**	
Expected Date:		**CNG Storage Cap:**	
BD Blends:		**CNG Fill Type Code:**	
NG PSI:		**CNG PSI:**	
Federal Agency ID:		**CNG Vehicle Class:**	
Open Date:	2022-05-11	**LNG Site Renew Src:**	
Hydrogen is Retail:		**LNG Vehicle Class:**	
Federal Agency:		**LPG Nozzle Types:**	
Facility Type:		**Hydrogen Pressures:**	
Dt Last Confirmed:	2024-08-29	**Hydrogen Standards:**	
Updated at:	2024-08-29 00:26:52 UTC	**Latitude:**	33.5680272
Access Code:	public	**Longitude:**	-117.7276195
Access Detail Code:			
Groups with Access Code:	Public		
Groups with Access Code Fr:	Public		
Fed Agency Name:			
Hydrogen Status Link:			
E85 Other Ethanol Blends:			
NPS Unit Name:			
Cards Accepted:			
CNG Statn Sells Renewable Na:			
LNG Statn Sells Renewable Na:			
Maximum Vehicle Class:			
RD Blended With Biodiesel:			
RD Blends:			
RD Blends French:			
RD Maximum Biodiesel Level:			
Status:	Open: The station is open.		
Owner Type Desc:			
E85 Blender Pump Desc:			
NG Fill Type Desc:			
NG Vehicle Class Desc:			
Geocode Status Desc:	The location is from a real GPS readout at the station.		
Group with Access Desc:	Publicly available to all customers.		
LPG Primary Desc:			
Intersection Directions:			
Access Days Time:	24 hours daily		

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Restricted Access:
Ev Workplace Charging: false
Funding Sources:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
20	3 of3	WSW	0.12 / 649.89	397.35 / 42	Aliso Viejo City Hall 12 Journey Aliso Viejo CA 92656	ALT FUELS

ID: 195648
Fuel Type Code: ELEC: Electric
Station Phone: 800-663-5633
Expected Date:
BD Blends:
NG PSI:
Federal Agency ID:
Open Date: 2020-02-12
Hydrogen is Retail:
Federal Agency:
Facility Type:
Dt Last Confirmed: 2024-08-29
Updated at: 2024-08-29 00:23:37 UTC
Access Code: public
Access Detail Code:
Groups with Access Code: Public
Groups with Access Code Fr: Public
Fed Agency Name:
Hydrogen Status Link:
E85 Other Ethanol Blends:
NPS Unit Name:
Cards Accepted:
CNG Statn Sells Renewable Na:
LNG Statn Sells Renewable Na:
Maximum Vehicle Class:
RD Blended With Biodiesel:
RD Blends:
RD Blends French:
RD Maximum Biodiesel Level:
Status: Open: The station is open.
Owner Type Desc:
E85 Blender Pump Desc:
NG Fill Type Desc:
NG Vehicle Class Desc:
Geocode Status Desc: The location is from a real GPS readout at the station.
Group with Access Desc: Publicly available to all customers.
LPG Primary Desc:
Intersection Directions:
Access Days Time: 24 hours daily
Restricted Access:
Ev Workplace Charging: false
Funding Sources:

CNG Dispenser No:
CNG Site Renew Src:
CNG Tot Compr Cap:
CNG Storage Cap:
CNG Fill Type Code:
CNG PSI:
CNG Vehicle Class:
LNG Site Renew Src:
LNG Vehicle Class:
LPG Nozzle Types:
Hydrogen Pressures:
Hydrogen Standards:
Latitude: 33.5680323
Longitude: -117.7276701

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
21	1 of2	W	0.14 / 724.55	439.77 / 85	ALISO NIGUEL AUTO CARE 22972 PACIFIC PARK DR STE A ALISO VIEJO CA 92656-5357	RCRA NON GEN

EPA Handler ID: CAL000349002
Gen Status Universe: No Report
Contact Name: GABE SANCHEZ
Contact Address: 22972 PACIFIC PARK DR STE A , , ALISO VIEJO , CA, 92656 ,
Contact Phone No and Ext: 949-916-1566
Contact Email: ALISONIGUELAUTOCARE@GMAIL.COM
Contact Country:
County Name: ORANGE
EPA Region: 09
Land Type:

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Receive Date: 20091228
Location Latitude: 33.570523
Location Longitude: -117.728611

Violation/Evaluation Summary

Note: NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity: No
Mixed Waste Generator: No
Transporter Activity: No
Transfer Facility: No
Onsite Burner Exemption: No
Furnace Exemption: No
Underground Injection Activity: No
Commercial TSD: No
Used Oil Transporter: No
Used Oil Transfer Facility: No
Used Oil Processor: No
Used Oil Refiner: No
Used Oil Burner: No
Used Oil Market Burner: No
Used Oil Spec Marketer: No

Hazardous Waste Handler Details

Sequence No: 1
Receive Date: 20091228
Handler Name: ALISO NIGUEL AUTO CARE
Source Type: Implementer
Federal Waste Generator Code: N
Generator Code Description: Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind: Current Owner
Type: Other
Name: ALISO NIGUEL AUTO CARE
Date Became Current:
Date Ended Current:
Phone: 949-388-8852
Source Type: Implementer
Street No:
Street 1: 22972 PACIFIC PARK SUITE A
Street 2:
City: ALISO VIEJO
State: CA
Country:
Zip Code: 92656-0000

Owner/Operator Ind: Current Operator
Type: Other
Name: GABE SANCHEZ
Date Became Current:
Date Ended Current:
Phone: 949-916-1566
Source Type: Implementer
Street No:
Street 1: 22972 PACIFIC PARK DR STE A
Street 2:
City: ALISO VIEJO
State: CA
Country:
Zip Code: 92656

21	2 of2	W	0.14 / 724.55	439.77 / 85	PACIFIC AUTOMOTIVE 22972 PACIFIC PARK DR STE B ALISO VIEJO CA 92656-5357	RCRA NON GEN

EPA Handler ID: CAL000348250
Gen Status Universe: No Report
Contact Name: TONY SWEETT
Contact Address: 22972 PACIFIC PARK DR , STE B , ALISO VIEJO , CA, 92656 ,
Contact Phone No and Ext: 949-362-8212

Contact Email:	JASWEETT@HOTMAIL.COM
Contact Country:	
County Name:	ORANGE
EPA Region:	09
Land Type:	
Receive Date:	20091125
Location Latitude:	33.56991
Location Longitude:	-117.728604

Violation/Evaluation Summary

Note:	NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility:	No
Onsite Burner Exemption:	No
Furnace Exemption:	No
Underground Injection Activity:	No
Commercial TSD:	No
Used Oil Transporter:	No
Used Oil Transfer Facility:	No
Used Oil Processor:	No
Used Oil Refiner:	No
Used Oil Burner:	No
Used Oil Market Burner:	No
Used Oil Spec Marketer:	No

Hazardous Waste Handler Details

Sequence No:	1
Receive Date:	20091125
Handler Name:	PACIFIC AUTOMOTIVE
Source Type:	Implementer
Federal Waste Generator Code:	N
Generator Code Description:	Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind:	Current Owner	**Street No:**	
Type:	Other	**Street 1:**	22972 PACIFIC PARK DR
Name:	PATTON AUTOMOTIVE INC	**Street 2:**	STE B
Date Became Current:		**City:**	ALISO VIEJO
Date Ended Current:		**State:**	CA
Phone:	949-362-8212	**Country:**	
Source Type:	Implementer	**Zip Code:**	92656-5357

Owner/Operator Ind:	Current Operator	**Street No:**	
Type:	Other	**Street 1:**	22972 PACIFIC PARK DR
Name:	TONY SWEETT	**Street 2:**	STE B
Date Became Current:		**City:**	ALISO VIEJO
Date Ended Current:		**State:**	CA
Phone:	949-362-8212	**Country:**	
Source Type:	Implementer	**Zip Code:**	92656

22	***1 of4***	***NNW***	***0.14 / 730.55***	***355.98 / 1***	***PEP BOYS STORE#0880 26881 ALISO CREEK RD ALISO VIEJO CA 92656-0000***	***RCRA NON GEN***

EPA Handler ID:	CAL000160290
Gen Status Universe:	No Report
Contact Name:	ANGELA BANKS
Contact Address:	3111 , W ALLEGHENY AVE , , PHILADELPHIA , PA, 19132 , US
Contact Phone No and Ext:	215-430-9645
Contact Email:	ANGELA_BANKS@PEPBOYS.COM
Contact Country:	US
County Name:	ORANGE
EPA Region:	09
Land Type:	Private
Receive Date:	20201214
Location Latitude:	
Location Longitude:	

Violation/Evaluation Summary

Note:	NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility:	No
Onsite Burner Exemption:	No
Furnace Exemption:	No
Underground Injection Activity:	No
Commercial TSD:	No
Used Oil Transporter:	No
Used Oil Transfer Facility:	No
Used Oil Processor:	No
Used Oil Refiner:	No
Used Oil Burner:	No
Used Oil Market Burner:	No
Used Oil Spec Marketer:	No

Hazardous Waste Handler Details

Sequence No:	1
Receive Date:	19960403
Handler Name:	PEP BOYS STORE#0880
Source Type:	Implementer
Federal Waste Generator Code:	N
Generator Code Description:	Not a Generator, Verified

Hazardous Waste Handler Details

Sequence No:	1
Receive Date:	20201214
Handler Name:	PEP BOYS STORE#0880
Source Type:	Notification
Federal Waste Generator Code:	N
Generator Code Description:	Not a Generator, Verified

Waste Code Details

Hazardous Waste Code:	134
Waste Code Description:	Aqueous solution with <10% total organic residues

Owner/Operator Details

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Owner/Operator Ind:	Current Operator	**Street No:**	
Type:	Other	**Street 1:**	PEP BOYS -MANNY, MOE & JACK
Name:	ALANA PERSAD	**Street 2:**	3111 WEST ALLEGHENY AVENUE
Date Became Current:		**City:**	PHILADELPHIA
Date Ended Current:		**State:**	PA
Phone:	215-430-9226	**Country:**	
Source Type:	Implementer	**Zip Code:**	19132
Owner/Operator Ind:	Current Owner	**Street No:**	200
Type:	Private	**Street 1:**	EAST BAKER STREET
Name:	DS PROPERTIES 18 LP (ALISO PACIFIC PLAZA)	**Street 2:**	SUITE 100
Date Became Current:		**City:**	COSA MESA
Date Ended Current:		**State:**	CA
Phone:		**Country:**	US
Source Type:	Notification	**Zip Code:**	92626
Owner/Operator Ind:	Current Owner	**Street No:**	
Type:	Other	**Street 1:**	3111 WEST ALLEGHENY AVE
Name:	THE PEP BOYS MANNY MOE & JACK OF CA	**Street 2:**	ENVIRONMENTAL DEPT
Date Became Current:		**City:**	PHILADELPHIA
Date Ended Current:		**State:**	PA
Phone:	215-430-9226	**Country:**	
Source Type:	Implementer	**Zip Code:**	19132-0000
Owner/Operator Ind:	Current Operator	**Street No:**	3111
Type:	Private	**Street 1:**	W ALLEGHENY AVE
Name:	THE PEP BOYS - MANNY, MOE & JACK OF CALIFORNIA	**Street 2:**	
Date Became Current:	19961012	**City:**	PHILADELPHIA
Date Ended Current:		**State:**	PA
Phone:	215-430-9000	**Country:**	US
Source Type:	Notification	**Zip Code:**	19132

Historical Handler Details

Receive Dt:	19960403
Generator Code Description:	Not a Generator, Verified
Handler Name:	PEP BOYS STORE#0880

22	*2 of4*	*NNW*	*0.14 / 730.55*	*355.98 / 1*	***PEP BOYS #880*** ***26881 ALISO CREEK RD*** ***ALISO VIEJO CA 92656***	***C&D*** ***DEBRIS RECY***

County:	ORANGE
Activity Type:	USED OIL COLLECTION
Phone No:	

22	*3 of4*	*NNW*	*0.14 / 730.55*	*355.98 / 1*	***IEH AUTO PARTS LLC DBA AUTO PLUS #880*** ***26881 ALISO CREEK RD STE B*** ***ALISO VIEJO CA 92656***	***RCRA*** ***NON GEN***

EPA Handler ID:	CAL000458937
Gen Status Universe:	No Report
Contact Name:	ANGELA BANKS
Contact Address:	3111 W ALLEGHENY AVE , , PHILADELPHIA , PA, 19132 ,
Contact Phone No and Ext:	215-430-9645
Contact Email:	ANGELA_BANKS@PEPBOYS.COM
Contact Country:	
County Name:	ORANGE
EPA Region:	09
Land Type:	
Receive Date:	20201223
Location Latitude:	

Location Longitude:

Violation/Evaluation Summary

Note: NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility:	No
Onsite Burner Exemption:	No
Furnace Exemption:	No
Underground Injection Activity:	No
Commercial TSD:	No
Used Oil Transporter:	No
Used Oil Transfer Facility:	No
Used Oil Processor:	No
Used Oil Refiner:	No
Used Oil Burner:	No
Used Oil Market Burner:	No
Used Oil Spec Marketer:	No

Hazardous Waste Handler Details

Sequence No:	1
Receive Date:	20201223
Handler Name:	IEH AUTO PARTS LLC DBA AUTO PLUS #880
Source Type:	Implementer
Federal Waste Generator Code:	N
Generator Code Description:	Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street 1:***	3111 W ALLEGHENY AVE
Name:	IEH AUTO PARTS LLC	***Street 2:***	
Date Became Current:		***City:***	PHILADELPHIA
Date Ended Current:		***State:***	PA
Phone:	215-430-9000	***Country:***	
Source Type:	Implementer	***Zip Code:***	19132

Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street 1:***	3111 W ALLEGHENY AVE
Name:	ANGELA BANKS	***Street 2:***	
Date Became Current:		***City:***	PHILADELPHIA
Date Ended Current:		***State:***	PA
Phone:	215-430-9645	***Country:***	
Source Type:	Implementer	***Zip Code:***	19132

22	*4 of4*	*NNW*	*0.14 / 730.55*	*355.98 / 1*	***ADVANCE AUTO PARTS #9056 26881 ALISO CREEK RD UNIT B ALISO VIEJO CA 92656***	***RCRA NON GEN***

EPA Handler ID:	CAL000473968
Gen Status Universe:	No Report
Contact Name:	AMANDA SANDIDGE ENGSTROM
Contact Address:	5008 AIRPORT RD , , ROANOKE , VA, 24012 ,
Contact Phone No and Ext:	540-561-8303
Contact Email:	AMANDA.SANDIDGE@ADVANCE-AUTO.COM
Contact Country:	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

County Name: ORANGE
EPA Region: 09
Land Type:
Receive Date: 20221019
Location Latitude:
Location Longitude:

Violation/Evaluation Summary

Note: NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity: No
Mixed Waste Generator: No
Transporter Activity: No
Transfer Facility: No
Onsite Burner Exemption: No
Furnace Exemption: No
Underground Injection Activity: No
Commercial TSD: No
Used Oil Transporter: No
Used Oil Transfer Facility: No
Used Oil Processor: No
Used Oil Refiner: No
Used Oil Burner: No
Used Oil Market Burner: No
Used Oil Spec Marketer: No

Hazardous Waste Handler Details

Sequence No: 1
Receive Date: 20221019
Handler Name: ADVANCE AUTO PARTS #9056
Source Type: Implementer
Federal Waste Generator Code: N
Generator Code Description: Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind: Current Operator
Type: Other
Name: AMANDA SANDIDGE ENGSTROM
Date Became Current:
Date Ended Current:
Phone: 540-561-8303
Source Type: Implementer
Street No:
Street 1: 5008 AIRPORT RD
Street 2:
City: ROANOKE
State: VA
Country:
Zip Code: 24012

Owner/Operator Ind: Current Owner
Type: Other
Name: GOLDEN STATE SUPPLY LLC
Date Became Current:
Date Ended Current:
Phone: 919-573-3900
Source Type: Implementer
Street No:
Street 1: 4200 SIX FORKS RD
Street 2:
City: RALEIGH
State: NC
Country:
Zip Code: 27609

23	1 of16	NNE	0.14 / 740.39	345.92 / -9	UNOCAL (CIRCLE K #5743) 26871 ALISO CREEK RD ALISO VIEJO CA 92656	DELISTED TNK

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Delisted Storage Tanks

Facility ID: 18679
Latitude: 33.5738338
Longitude: -117.7225101
Permitting Agency: ORANGE COUNTY
County: Orange
Original Source: UST
Record Date: 30-JAN-2017

23	2 of16	NNE	0.14 / 740.39	345.92 / -9	United Pacific 0677 26871 Aliso Creek Rd Aliso Viejo, Ca 92656-3392 Aliso Viejo CA	UST ORANGE

FA No: FA0062426
SR No:
Notes:
Data Source: Permitted Underground Storage Tank (UST) Facilities Listing

---

23	3 of16	NNE	0.14 / 740.39	345.92 / -9	76 STATION #5743 26871 ALISO CREEK ALISO VIEJO CA 92565	LUST

Global ID: T10000000036
Site Facility Type: LUST CLEANUP SITE
Site Fac Type (SRCH): LUST CLEANUP SITE
Status:
Status (SRCH): COMPLETED - CASE CLOSED
Status (DL): Completed - Case Closed
Status Date (DL): 6/15/2012
Cleanup Status: COMPLETED - CASE CLOSED
Case Type (DL): LUST Cleanup Site
Oil Field (SRCH):
Oil Field Oper (SRCH):
Census Tract (SRCH): 6059062637
Latitude (DL): 33.572419
Longitude (DL): -117.724135
RWQCB Region (DL): SAN DIEGO RWQCB (REGION 9)
Site Facility Name (SRCH): 76 STATION #5743
Address (SRCH): 26871 ALISO CREEK
City (SRCH): ALISO VIEJO
Zip (SRCH): 92565
County (SRCH): ORANGE
Street No (DL): 26871
Street Name (DL): ALISO CREEK
City (DL): ALISO VIEJO
Zip (DL): 92565
County (DL): Orange
State (DL): CA
Business Name (DL): 76 STATION #5743
Site Facility Name: 76 STATION #5743
Address : 26871 ALISO CREEK
City : ALISO VIEJO
Zip : 92565
County : ORANGE
Report Source: GeoTracker Search Results (SRCH);GeoTracker Sites Data Download (DL);GeoTracker Search Results Report

GeoTracker Sites Data Download - Site Details

CUF Case: NO
Lead Agency: ORANGE COUNTY LOP
Case Worker:
Local Agency:
RB Case No:
Local Case No: 08UT006
File Location: Local Agency
Potential COC: Gasoline, Diesel
Potential Media of Concern: Other Groundwater (uses other than drinking water)
Begin Date: 1/4/2008
How Discovered: * SA
How Discovered Description:
Stop Method: Other Means
Stop Description:
Calwater Watershed Name: San Juan - Laguna - Aliso (901.13)

DWR GW Subbasin Name:
Disadvantaged Community:
CalEnvScreen Score:
Coordinate Source: Manual Entry on Screens
Discharge Cause:
Discharge Source:
EPA Region: 9
Leak Reported Dt: 2008-06-06 00:00:00
Military DoD Site: No
No Further Action Dt: 2012-06-15 00:00:00
Qty Rlsd Gallons:
Facility Project Sub Type:
Calenviroscreen 3 Score: 1-5% (lowest scores)
Calenviroscreen 4 Score: 15-20%
Site History:

Please refer to recent Site Documents or Monitoring Reports in GeoTracker for site history. Orange County is not responsible for the accuracy of any professional interpretations provided in reports submitted by consultants for the responsible party.

GeoTracker Sites Data Download - Status History

Status: Completed - Case Closed
Status Date: 6/15/2012

Status: Open - Verification Monitoring
Status Date: 10/7/2009

Status: Open - Site Assessment
Status Date: 7/16/2008

Status: Open - Case Begin Date
Status Date: 1/4/2008

GeoTracker Search - Regulatory Profile (as of June 5, 2024)

Site Facility Name: 76 STATION #5743
Site Facility Type: LUST CLEANUP SITE
Cleanup Status: COMPLETED - CASE CLOSED
Address: 26871 ALISO CREEK
City: ALISO VIEJO
Zip: 92565
County: ORANGE
Report Link: https://geotracker.waterboards.ca.gov/profile_report?global_id=T10000000036
Cleanup Status Detail: COMPLETED - CASE CLOSED AS OF 6/15/2012
Project Status:
Cleanup History Link: https://geotracker.waterboards.ca.gov/profile_report_include?global_id=T10000000036&tabname=regulatoryhistory
Potential COC: DIESEL, GASOLINE
Potential Media of Concern: OTHER GROUNDWATER (USES OTHER THAN DRINKING WATER)
File Location: LOCAL AGENCY
User Defined Beneficial Use:
Designated Beneficial Use:
DWR GW Sub Basin:
Calwater Watershed Name: San Juan - Laguna - Aliso (901.13)
Post Closure Site Management:
Future Land Use:
Cleanup Oversight Agencies: ORANGE COUNTY LOP (LEAD) - CASE #: 08UT006
SAN DIEGO RWQCB (REGION 9)
CUF Claim No:
CUF Priority Assig:
CUF Amount Paid:
WDR Place Type:
WDR File No:
WDR Order No:
Project Oversight Agencies:
Facility Type:

Composting Method:
Grndwtr Monitoring Frequency:
Designated Beneficial Use
Desc:
Site History:

Please refer to recent Site Documents or Monitoring Reports in GeoTracker for site history. Orange County is not responsible for the accuracy of any professional interpretations provided in reports submitted by consultants for the responsible party.

GeoTracker Search - Cleanup Status History (as of June 5, 2024)

Status: Completed - Case Closed
Date : 6/15/2012

Status: Open - Verification Monitoring
Date : 10/7/2009

Status: Open - Site Assessment
Date : 7/16/2008

Status: Open - Case Begin Date
Date : 1/4/2008

GeoTracker Search - Regulatory Activities (as of June 5, 2024)

Action Type: Other Regulatory Actions
Action: Closure/No Further Action Letter
Action Date: 6/15/2012
Received Issue Date: 6/15/2012
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000000036&enforcement_id=6124520&temptable=ENFORCEMENT
Title Description Comments:

REMEDIAL ACTION COMPLETION CERTIFICATION

Action Type: Other Regulatory Actions
Action: Staff Letter
Action Date: 4/20/2012
Received Issue Date: 4/20/2012
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000000036&enforcement_id=6119512&temptable=ENFORCEMENT
Title Description Comments:

DRAFT CASE CLOSURE SUMMARY SUBMISSION TO RESPONSIBLE PARTIES AND LANDOWNERS - PROPERTY OWNER

Action Type: Other Regulatory Actions
Action: Staff Letter
Action Date: 4/20/2012
Received Issue Date: 4/20/2012
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000000036&enforcement_id=6119514&temptable=ENFORCEMENT
Title Description Comments:

DRAFT CASE CLOSURE SUMMARY SUBMISSION TO RESPONSIBLE PARTIES AND LANDOWNERS - RP

Action Type: Other Regulatory Actions
Action: File review
Action Date: 5/12/2011
Received Issue Date: 5/12/2011
Doc Link:
Title Description Comments:

FILE REVIEW - CLOSURE REVIEW PENDING

Action Type: Other Regulatory Actions
Action: File Review - Closure
Action Date: 7/14/2010
Received Issue Date: 7/14/2010
Doc Link:
Title Description Comments:

CLOSURE REVIEW

Action Type: Other Regulatory Actions
Action: Staff Letter
Action Date: 10/27/2009
Received Issue Date: 10/27/2009
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000000036&enforcement_id=6034047&temptable=ENFORCEMENT
Title Description Comments:

SITE ASSESSMENT

Action Type: Other Regulatory Actions
Action: Staff Letter
Action Date: 10/29/2008
Received Issue Date: 10/29/2008
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000000036&enforcement_id=5992461&temptable=ENFORCEMENT
Title Description Comments:

SITE ASSESSMENT WORK PLAN APPROVAL

Action Type: Other Regulatory Actions
Action: Staff Letter
Action Date: 8/12/2008
Received Issue Date: 8/12/2008
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000000036&enforcement_id=5997290&temptable=ENFORCEMENT
Title Description Comments:

NOTICE OF RESPONSIBILITY

Action Type: Other Regulatory Actions
Action: Staff Letter
Action Date: 7/16/2008
Received Issue Date: 7/16/2008
Doc Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000000036&enforcement_id=5997974&temptable=ENFORCEMENT
Title Description Comments:

NOTIFICATION TO INITIATE CORRECTIVE ACTION

Action Type: Leak Action
Action: Leak Reported
Action Date: 6/6/2008
Received Issue Date:
Doc Link:
Title Description Comments:

Action Type: Leak Action
Action: Leak Discovery
Action Date: 1/4/2008
Received Issue Date:
Doc Link:
Title Description Comments:

GeoTracker Search - Site Maps (as of June 5, 2024)

Submitted: 10/7/2009
Submitted By: ANTEA GROUP (CONTRACTOR)
Title: GEO_MAP
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_map/7106207609/T10000000036.PDF

Submitted: 10/7/2009
Submitted By: ANTEA GROUP (CONTRACTOR)
Title: SITE ASSESSMENT REPORT (B-9)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/8306102931/T10000000036.PDF

Submitted: 10/7/2009
Submitted By: ANTEA GROUP (CONTRACTOR)
Title: SITE ASSESSMENT REPORT (B-8)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/8785656154/T10000000036.PDF

Submitted: 10/7/2009
Submitted By: ANTEA GROUP (CONTRACTOR)
Title: SITE ASSESSMENT REPORT (B-7)
Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_bore/7952645719/T10000000036.PDF

GeoTracker Search - Documents (as of June 5, 2024)

Document Type: Site Documents ***Document Date:*** 6/15/2012
Type: CLOSURE/NO FURTHER ACTION LETTER ***Submitted:***
Submitted By: KEVIN LAMBERT (REGULATOR)
Title: REMEDIAL ACTION COMPLETION CERTIFICATION
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000000036&enforcement_id=6124520

Document Type: Site Documents ***Document Date:*** 4/20/2012
Type: STAFF LETTER ***Submitted:***
Submitted By: KEVIN LAMBERT (REGULATOR)
Title: DRAFT CASE CLOSURE SUMMARY SUBMISSION TO RESPONSIBLE PARTIES AND LANDOWNERS - RP
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000000036&enforcement_id=6119514

Document Type: Site Documents ***Document Date:*** 4/20/2012
Type: STAFF LETTER ***Submitted:***
Submitted By: KEVIN LAMBERT (REGULATOR)
Title: DRAFT CASE CLOSURE SUMMARY SUBMISSION TO RESPONSIBLE PARTIES AND LANDOWNERS - PROPERTY OWNER
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000000036&enforcement_id=6119512

Document Type: Monitoring Reports ***Document Date:*** 7/22/2010
Type: MONITORING REPORT - QUARTERLY ***Submitted:***
Submitted By: ANTEA GROUP (AUTH_RP)
Title: SITE STATUS REPORT - SECOND QUARTER 2010
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/6892868995/T10000000036.PDF

Document Type: Monitoring Reports ***Document Date:*** 4/28/2010
Type: MONITORING REPORT - QUARTERLY ***Submitted:***
Submitted By: ANTEA GROUP (AUTH_RP)
Title: SITE STATUS REPORT - FIRST QUARTER 2010
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/3123742520/T10000000036.PDF

Document Type: Site Documents ***Document Date:*** 3/17/2010
Type: REQUEST FOR CLOSURE ***Submitted:***
Submitted By: ANTEA GROUP (AUTH_RP)
Title: ADDITIONAL CLOSURE DOCUMENTATION
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/6640115320/T10000000036.PDF

Document Type: Monitoring Reports ***Document Date:*** 1/28/2010
Type: MONITORING REPORT - QUARTERLY ***Submitted:***
Submitted By: ANTEA GROUP (AUTH_RP)
Title: SITE STATUS REPORT
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/6583100676/T10000000036.PDF

Document Type: Site Documents **Document Date:** 1/6/2010
Type: CORRESPONDENCE **Submitted:**
Submitted By: ANTEA GROUP (CONTRACTOR)
Title: CLOSURE DOCUMENTATION
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/1398810148/T10000000036.PDF

Document Type: Monitoring Reports **Document Date:** 10/28/2009
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: ANTEA GROUP (CONTRACTOR)
Title: SITE STATUS REPORT
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/9659684538/T10000000036.PDF

Document Type: Site Documents **Document Date:** 10/27/2009
Type: STAFF LETTER **Submitted:**
Submitted By: KEVIN LAMBERT (REGULATOR)
Title: SITE ASSESSMENT
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000000036&enforcement_id=6034047

Document Type: Site Documents **Document Date:** 10/7/2009
Type: SITE ASSESSMENT REPORT **Submitted:**
Submitted By: ANTEA GROUP (CONTRACTOR)
Title: SITE ASSESSMENT REPORT
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/9611914396/T10000000036.PDF

Document Type: Monitoring Reports **Document Date:** 7/30/2009
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: ANTEA GROUP (CONTRACTOR)
Title: SECOND QUARTER 2009 SITE STATUS REPORT
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/3657403409/T10000000036.PDF

Document Type: Monitoring Reports **Document Date:** 4/29/2009
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: GHD (CONTRACTOR)
Title: QUARTERLY STATUS REPORT -FIRST QUARTER 2009, 76-BRANDED SERVICE STATION, STATION NO. 5743, 26871 ALISO CREEK, ALISO VIEJO, CALIFORNIA, APRIL 2009
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/9544686436/T10000000036.PDF

Document Type: Monitoring Reports **Document Date:** 1/30/2009
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: STEVEN COLE (CONTRACTOR)
Title: 76 STATION 5743 4Q08 QSR
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/8625580310/T10000000036.PDF

Document Type: Monitoring Reports **Document Date:** 10/30/2008
Type: MONITORING REPORT - QUARTERLY **Submitted:**
Submitted By: STEVEN COLE (CONTRACTOR)
Title: 76 STATION 5743 3Q08 QSR
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/5583428502/T10000000036.PDF

Document Type: Site Documents **Document Date:** 10/29/2008
Type: STAFF LETTER **Submitted:**
Submitted By: KEVIN LAMBERT (REGULATOR)
Title: SITE ASSESSMENT WORK PLAN APPROVAL
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000000036&enforcement_id=5992461

Document Type: Site Documents **Document Date:** 10/24/2008
Type: OTHER WORKPLAN **Submitted:**
Submitted By: STEVEN COLE (CONTRACTOR)
Title: 76 STATION 5743 WORKPLAN FOR SITE ASSESSMENT ACTIVITIES
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/3425850987/T10000000036.PDF

Document Type: Site Documents **Document Date:** 8/12/2008
Type: STAFF LETTER **Submitted:**
Submitted By: (REGULATOR)
Title: NOTICE OF RESPONSIBILITY
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000000036&enforcement_id=5997290

Document Type: Site Documents **Document Date:** 7/16/2008
Type: STAFF LETTER **Submitted:**

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Submitted By: GENIECE HIGGINS (REGULATOR)
Title: NOTIFICATION TO INITIATE CORRECTIVE ACTION
Title Link: https://geotracker.waterboards.ca.gov/view_documents?global_id=T10000000036&enforcement_id=5997974

Document Type: Site Documents
Document Date: 6/19/2008
Type: OTHER REPORT / DOCUMENT
Submitted:
Submitted By: STEVEN COLE (CONTRACTOR)
Title: 76 STATION 5743 DUE DILIGENCE SITE ASSESS. REPORT
Title Link: https://geotracker.waterboards.ca.gov/esi/uploads/geo_report/7257645130/T10000000036.PDF

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23 | **4 of16** | **NNE** | **0.14 / 740.39** | **345.92 / -9** | **United Pacific 0677**
26871 Aliso Creek Rd
Aliso Viejo CA 92656 | **UST**

Facility ID: FA0062426
CERS ID: 10397647
County: Orange
Latitude: 33.57249
Longitude: -117.72397
CalEnviroScrn 4 Pct: 15-20%
Permitting Agency: Orange County Environmental Health
Site Facility Type: PERMITTED UNDERGROUND STORAGE TANK (UST)
Note: Information related to facilities can be searched on Geo Tracker Website: https://geotracker.waterboards.ca.gov/search

Tank Details

Epa Region: 9
No. of Closed UST: 0
No. of Inuse UST:
No. of Oos UST: 0
Owner Type: Non-Government
Tank ID No.: 2
Tank Status: Confirmed/Updated Information
Tank Type: Double Wall
Tank Alarms: No
Tank Ball Float: No
Tank Operator Name: APRO, LLC
Tank Operator Mail Address: 4130 Cover Street
Tank Operator Mail City: Long Beach
Tank Operator Mail State: Ca
Tank Operator Mail Zip: 90808
Tank Owner Name: APRO, LLC
Tank Owner Mailing Address: 4130 Cover Street
Tank Owner Mailing City: Long Beach
Tank Owner Mailing State: Ca
Tank Owner Mailing Zip: 90808
Tank Capacity Gallons: 12000
Tank Piping Construction: Double Walled
Tank Piping Type: Pressure
Tank Pw Piping Construction: Fiberglass
Tank Sacrificial Anode: No
Tank Closure Date:
Tank Configuration: Stand Alone Tank
Tank Contents: Premium Unleaded
Tank Cp Impr Curr: No
Tank Cp Shutoff: Yes
Tank Installatn Dt: 1/1/1997 12:00:00 AM
Tank No of Compart: 1
Tank Pc Constructn: Steel
Tank Spill Bucket: Yes
Tank Tribal Lands: No

Tank Details

Epa Region: 9
No. of Closed UST: 0
No. of Inuse UST:
No. of Oos UST: 0
Owner Type: Non-Government
Tank ID No.: 1
Tank Status: Confirmed/Updated Information
Tank Type: Double Wall
Tank Alarms: No
Tank Ball Float: No
Tank Operator Name: APRO, LLC
Tank Operator Mail Address: 4130 Cover Street
Tank Operator Mail City: Long Beach
Tank Operator Mail State: Ca
Tank Closure Date:
Tank Configuration: Stand Alone Tank
Tank Contents: Regular Unleaded
Tank Cp Impr Curr: No
Tank Cp Shutoff: Yes
Tank Installatn Dt: 1/1/1997 12:00:00 AM
Tank No of Compart: 1
Tank Pc Constructn: Steel
Tank Spill Bucket: Yes
Tank Tribal Lands: No

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Tank Operator Mail Zip: 90808
Tank Owner Name: APRO, LLC
Tank Owner Mailing Address: 4130 Cover Street
Tank Owner Mailing City: Long Beach
Tank Owner Mailing State: Ca
Tank Owner Mailing Zip: 90808
Tank Capacity Gallons: 15000
Tank Piping Construction: Double Walled
Tank Piping Type: Pressure
Tank Pw Piping Construction: Fiberglass
Tank Sacrificial Anode: No

23	5 of16	NNE	0.14 / 740.39	345.92 / -9	CHINO HILLS OIL, INC/DBA ALISO CREEK 76 26871 ALISO CREEK RD ALISO VIEJO CA 92656	EMISSIONS

2015 Toxic Data

Facility ID: 173956
Facility SIC Code: 9999
CO: 30
Air Basin: SC
District: SC
TS:
Health Risk Asmt:
Non-Cancer Chronic Haz Ind:
Non-Cancer Acute Haz Ind:
COID: ORA
DISN: SOUTH COAST AQMD
CHAPIS:
CERR Code:

23	6 of16	NNE	0.14 / 740.39	345.92 / -9	United Pacific 0677 26871 ALISO CREEK RD ALISO VIEJO CA 92656	CERS TANK

Site ID: 4231
Latitude: 33.572491
Longitude: -117.723969

Regulated Programs

EI ID: 10397647
EI Description: Hazardous Waste Generator

EI ID: 10397647
EI Description: Underground Storage Tank

EI ID: 10397647
EI Description: Chemical Storage Facilities

Violations

Violation Date: 05/16/2022
Violation Source: CERS
Violation Program: UST
Violation Division: Orange County Environmental Health
Citation: 23 CCR 16 2641(j) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2641(j)
Violation Notes:

Returned to compliance on 05/16/2022. OBSERVATION: Owner/Operator did not properly install, calibrate, operate and/or maintain leak detection equipment. The VR280 in the 87 and 91 used for pipe monitoring was not properly install and was observed horizontal at the bottom. CORRECTIVE ON SITE: The VR280 were placed in the correct position. Please note that the sensor in the 91 fill did not have a sleeve.

Violation Description:

Failure of the leak detection equipment to be installed, calibrated, operated, and/or maintained properly.

Violations

Violation Date: 10/03/2014 ***Violation Source:*** CERS
Violation Program: HMRRP ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.95 25508(d) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(d)
Violation Notes:

Returned to compliance on 12/02/2014.

Violation Description:

Failure to complete and/or electronically submit a business plan when storing/handling a hazardous material at or above reportable quantities.

Violations

Violation Date: 05/18/2021 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: 23 CCR 16 2716(e) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2716(e)
Violation Notes:

Returned to compliance on 06/15/2021. The date (5/20/20) listed for last Overfill Prevention Equipment Inspection conducted at the facility on DO monthly reports from 7/1/20 to most current is not correct. Correct date for Overfill Prevention Equipment Inspection conducted must be on monthly DO reports.

Violation Description:

For designated operator (DO) monthly inspections conducted before October 1, 2018, failure to comply with one or more of the following requirements:
Be performed by an ICC certified DO.
Inspect monthly alarm history report, check that alarms are documented and responded to appropriately, and attach a copy.
Inspect for the presence of liquid/debris in spill containers.
Inspect for the presence of liquid/debris in under dispenser containment (UDC) and ensure that the monitoring equipment is positioned correctly.
Inspect for liquid or debris in containment sumps where an alarm occurred with no service visit.
Check that all testing and maintenance has been completed and documented.
Verify that all facility employees have been trained in accordance with 23 CCR 2715(c).
For designated operator (DO) 30 day inspections conducted on and after October 1, 2018, failure to conduct the designated UST operator visual inspection at least once every 30 days.

Violations

Violation Date: 10/03/2014 ***Violation Source:*** CERS
Violation Program: HMRRP ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.95 25508(a)(1) - California Health and Safety Code, Chapter 6.95, Section(s) 25508(a)(1)
Violation Notes:

Returned to compliance on 11/02/2014.

Violation Description:

Failure to complete and electronically submit hazardous material inventory information for all reportable hazardous materials on site at or above reportable quantities.

Violations

Violation Date: 05/16/2022 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: 23 CCR 16 2712(i) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(i)
Violation Notes:

Returned to compliance on 05/16/2022. OBSERVATION: Owner/Operator did not retain a copy of the current permit to operate at the facility. CORRECTED ON SITE: A current copy of permit for the facility was emailed to the facility along with the inspection report. Retain a copy of the permit to operate at the facility.

Violation Description:

Failure to retain a copy of the permit to operate at the facility.

Violations

Violation Date: 09/23/2013 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.7 25292(e) - California Health and Safety Code, Chapter 6.7, Section(s) 25292(e)
Violation Notes:

Returned to compliance on 10/16/2013. Secondary piping and piping sump (91 octane) were not tested because of a damaged boot. Address/correct this situation and test the the two components. Provide test results to Health Care Agency within 30 days.

Violation Description:

Failure to maintain secondary containment, as evidenced by failure of secondary containment testing.

Violations

Violation Date: 05/14/2015 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.75 25299.30-25299.34 - California Health and Safety Code, Chapter 6.75, Section(s) 25299.30-25299.34
Violation Notes:

Returned to compliance on 03/22/2016. Latest Certification of Financial Responsibility in CERS expired on 1-1-15. Submit current certification within 30 days.

Violation Description:

Failure to submit and maintain complete and current Certification of Financial Responsibility or other mechanism of financial assurance.

Evaluations

Eval Date: 05/14/2015
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

On site for a routine compliance inspection. Jeffrey Crisostomo of Tanknology currently performing a UST system monitoring certification. Current ICC, VMI and Veeder-Root certifications available for review. Facility consists of two USTs (12k & 15 K) and six UDCs. The four tank sumps and six UDCs were free of liquid. Sensors were located at the low area of secondary containment. The twelve float and chain mechanisms for the six UDCs appeared to be properly attached to the shear valves. UPC forms submitted and reviewed in CERS. Certification of financial responsibility valid through 1-1-15. SB 989 testing performed on 9-11-13 and 10-4-13. Designated operator reports reviewed on site. No fuel alarms documented for the past 12 months. Monitoring alarm log available for review. Employee training provided to six employees on 9-2-14.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 09/23/2013
Violations Found: Yes
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Received results for SB 989 testing performed on 9-11-13. All components that were tested passed.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/27/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Review of CERS, change of ownership pending onsite inspection.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/12/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Confirmed the latest hazardous material inventory submittal in CERS.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/21/2020
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

An on-site inspection was conducted this date. The annual monitoring system certification was performed by Jose Rodriguez (Cal Maintenance) on 5/15/2020 and was NOT witnessed by this agency on that date due to COVID-19 precautions. This facility contains: 2 - USTs (87, 91) Monitor system is a Veeder-Root monitor panel and reads all functions normal. The following were tested on 5/15/20 and PASSED per the test report submitted to this agency by the service technician: - Sensors: -- Tank Annulars: VR420 -- Sumps: VR 208 -- UDCs: Float and chain - Sensors, initiated positive shutdown to the turbines when tested in water - "Fail Safe" and "Positive Shutdown" - Spill buckets using a visual hydrostatic test - Leak detectors: MLLDs (FE Petro) Documents reviewed onsite: - Permit to operate - Previous Monitoring System Certification conducted on 5/15/20 (previous test on 5/20/19) - Previous Secondary Testing conducted on 9/4/19 - Overfill Prevention [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/29/2014
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Inspected perimeter of facility including the dumpster area. Permission to inspect and take necessary photos granted by Brian Banik. Hazardous waste properly stored, labeled and dated. Hazardous waste contingency plan kept on site and available for review. No hazardous waste pickup since the new ownership as of March 2013. Currently there are approximately 40 pounds of solid waste and 10 gallons of liquid waste stored on site. No violations noted at this time.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/12/2016
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Inspected perimeter of facility including the dumpster area. Permission to inspect and take necessary photos granted by the shift manager. Hazardous waste properly stored, labeled and dated. Documentation for hazardous waste pickup reviewed on site. Hazardous waste training provided on 11-20-15.

Emergency/contingency plan kept on site and available for review (7-14-15). No violations noted at this time.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/16/2022
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site for routine hazardous materials and business emergency plan inspection. Mary Smith, Cashier, provided consent to inspect. Observed the facility and inspected hazardous materials storage. The following materials were observed in amounts that meet or exceed the minimum volumes required for disclosure: - CO2 - gasoline - mix water/petroleum (testing water) waste Hazardous Materials disclosed in CERS 10397647 match what is reported on site. Employee training records were available and reviewed. Per California Health & Safety Code Ch. 6.95, businesses that store and handle hazardous materials at or over reportable quantities (55 gal of a liquid, 500 lbs of a solid, 200 cubic ft of a compressed gas) must prepare and implement an HMBP. The facility is responsible for identifying all hazardous materials, including hazardous wastes, which are at or above disclosure thresholds. If there is a change in the type of amount of chemicals that are maintained on [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/08/2023
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

On site to conduct a routine Underground Storage Tank (UST) inspection and witness the annual monitoring system certification and spill bucket testing. The facility has the following double walled (DW) USTs: one 15,000 UST (regular); one 12,000 UST (premium); six (6) dispensers (with Bravo float & chain) The system is monitored by a Veeder Root TLS 350 panel. The monitor is operational for audible and visual alarms and display reads "all functions normal" Overfill protection is by flapper valves. Tank Annular, VR420; Sumps, VR208; Fail-safe and sensor out were tested and passed. Line leak detectors were tested and passed. Spill buckets were tested visually without any changes in water level. Testing conducted by Zee Aldoyan of Robertson Testing Inc. Technician certifications (ICC, VR) were verified. The following were on site and reviewed this date: - Permit to Operate - Certificate of Financial Responsibility - Leak Response, Monitoring Plan, and Tank Pages - Plot Plan Map - DO O; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/20/2019
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Inspected perimeter of facility including the dumpster area. Permission to inspect granted by the manager on duty. Hazardous waste properly labeled and dated. Storage area inspected and recorded daily. Manifests for hazardous waste pickup available for review during the past three years. Emergency response/contingency plan kept on site and available for review. Hazardous waste management training provided to twelve employees during the past 12 months. Training documentation available for review. No violations noted at this time.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/20/2019
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

On site for a routine compliance inspection. Jose Rodriguez of California Maintenance & Environmental currently performing a UST system monitoring certification. Current ICC, VMI and Veeder-Root certifications provided upon request. Facility consists of two USTs (12k & 15 K) and six UDCs. The four tank sumps and six UDCs were free of liquid. Sensors were located at the low/proper area of secondary containment (Veeder-Root 208). Annular sensor

cords were measured. Both sensors confirmed to be at the bottom of the tanks (Veeder-Root 420). The twelve float and chain mechanisms for the UDCs appeared to be properly attached to the shear valves. Pipelines have Fe Petro mechanical leak detectors. Overfill prevention inspection also being performed today (flapper valves). Required UST forms have been previously submitted, reviewed and approved in CERS. Components observed on site appear to be accurate on the tank information/monitoring plan. Certification of financial [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/29/2014
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Aliso Creek 76 26871 Aliso Creek Road Aliso Viejo, CA 92656 FA0062426 On site for initial hazardous materials and business emergency plan audit. Observed the facility and inspected hazardous materials storage. The following hazardous materials were observed in amounts that exceed the required disclosure quantities: - One 55 gallon drum of used sump test water - Two gasoline USTs; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/29/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Received results for a UST system monitoring certification performed on 5-14-15. All monitoring equipment operational per manufacturer's specifications.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/10/2014
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Reviewed submittal in CERS. Please make the following modifications to the disclosure: Gasoline should be listed as pure. Mixture components box should be blank. Mixture components box should be blank for the CO2 disclosure. Delete the propane disclosure. This chemical meets the retail exemption. The mixture components box for spill bucket water waste should have at least one entry as --> "gasoline, 86290-81-5, 1%" The site map needs to show the locations of the storm drain, sewer, hazardous waste storage and emergency response equipment. Resubmit with modifications * Accepted emergency response and training plans.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/27/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

On-site inspection this date in regards to the undergrouns storage tank, consent to enter, take photographs was given by Arlene Trenton, front staff. This inspection is being done due to the change of ownership disclosed as 12/15/2016 to Golden State Enterprises LLC. The onsite regulatory book is required to include all of the new/updated owner information including all of the information submitted in CERS and the Financial Responsibility and CFO letter and DO statement need to be in the new ownership name. Please email me when the new book is set up. The last SB989 was 9/6/2016 *** PLEASE NOTE-the DO records for 9/2016, 10/2016 and 11/2016 are incorrect in the SB989 testing dates. Please modify the DO reports to ensure that they are accurate to the new SB989 testing date. the last monitor cert was 5/14/2015 DO George Zoumalan; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/17/2017
Violations Found: No

Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Accepted all in CERS for 2017; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/10/2014
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Received report for a UST system monitoring certification performed on 5-29-14. All equipment operational per manufacturer's specifications.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/21/2020
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

This Agency received the monitoring system certification test report, site map, and spill bucket test report for a test conducted 5/15/2020. The following components PASSED testing: - Tank Annular Sensors (2) - Line Leak Detectors (2) - STP Sump Sensors (2) - Fill Sump Sensors (2) - UDC Sensors (6) (Float and Chain) - Fail Safe/Sensor Out - Spill Buckets Visual Test; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/27/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Review of CERs submittal pending change of ownership inspection . Financial Resp exp 1/1/2018 DO-George Zoumalan exp6/8/18; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/12/2016
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

On site for a routine compliance inspection. Jose Rodriguez of California Maintenance & Environmental currently performing a UST system monitoring certification. Current ICC, VMI and Veeder-Root certifications available for review. Facility consists of two USTs (12k & 15 K) and six UDCs. The four tank sumps and six UDCs were free of liquid. Sensors were located at the low/proper area of secondary containment. The twelve float and chain mechanisms for the six UDCs appeared to be properly attached to the shear valves. UPC forms have been submitted, reviewed and approved in CERS. Certification of financial responsibility valid through 1-1-17. SB 989 testing performed on 9-11-13 and 10-4-13. Leak response plan kept on site and and available for review (12-9-14). Designated operator reports reviewed on site. No fuel alarms documented for the past 12 months. Monitoring alarm log available for review. Employee training provided to nine employees on [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/29/2019

Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Received results for a monitoring system certification performed on 5-20-19. All equipment operational per manufacturer's specifications.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 08/28/2020
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Recent CERS submittal indicates an ownership change occurred at this facility August 2020. The new owner APRO LLC has made no changes to the types or quantities of hazardous waste generated at this facility. Waste generated: - Flammable solid/absorbent - Flammable liquid (waste from testing); Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/27/2016
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Routine inspection conducted this date in regards to hazardous waste, consent to enter, inspect and take photographs was given by – Arlene Trenton, front staff. This inspection is due to the change of ownership to Golden State Enterprises LLC, the change of ownership is being processed. Hazardous waste containers on-site this date consisted of: waste gas contaminated liquids and solids. The containers are in compliance with all applicable labeling requirements this date. Per Arlene, employees receive Hazardous Waste Management Training on the job. Consolidated waste receipts/ manifests were reviewed this date. Solids and liquids disposed of through Clean Harbors. Hazardous Waste Emergency Response information and was posted. Inspected municipal trash dumpster and area, no apparent hazardous waste in this area. Perimeter of facility inspected, no water runoff or staining noted at this time. Discussed – Hazardous Waste Program, Hazardous Program, [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/24/2021
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

I received and reviewed copies of Monitoring System Certification Form, Spill Container Testing Report Form and Overfill Prevention Equipment Inspection Report Form for activities conducted on 5/18/21. All components passed test.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/22/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Reviewed and accepted submittal in CERS. Financial responsibility certification valid through 1-1-17. Deleted violation I583.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 04/18/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Monitor cert notification for 5-10; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/29/2014
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

On site for a routine compliance inspection. Patrick Pfrang of Tanknology currently performing a UST system monitoring certification. Current ICC and Veeder-Root certifications available for review. Facility consists of two USTs (12k & 15 K) and six UDCs. The four tank sumps and six UDCs were free of liquid. Sensors were located at the low area of secondary containment. The twelve float and chain mechanisms for the six UDCs appeared to be properly attached to the shear valves. UPC forms have been submitted in CERS. Certification of financial responsibility valid through 1-1-15. SB 989 testing performed on 9-11-13 and 10-4-13. Designated operator reports reviewed on site. No fuel alarms documented for the past 12 months. Monitoring alarm log available for review. Employee training provided in 2014. No violations noted at tis time.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 10/16/2013
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Received results for secondary containment testing performed on 10-4-13. 91 octane product piping and STP sump for T2 supreme passed testing.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/27/2016
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site to conduct hazardous materials chemical inventory and business emergency plan inspection this date, consent to enter, inspect and take photographs was given by - Arlene Trenton, front staff. The facility recently changed ownership to Golden State Enterprises LLC, the change of ownership information has been added to CERS. The HMBEP has been submitted through CERS 10397647 Employee Business Emergency Plan Training was reviewed this date. Safety/cleanup equipment is available. Hazardous materials storage area were reviewed at this time. The facility has the following hazardous materials that exceed the required disclosure quantities: gasoline, CO2 and gasoline contaminated liquid **Please note, you are required to review the submittal yearly and resubmit prior to March 1st each year. You will get communication (probably email) indicating you should go in and review and resubmit around January of each year as a reminder. Emailed copy of this [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 10/03/2014
Violations Found: Yes
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP

Eval Source: CERS
Eval Notes:

Orange County Environmental Health as the Certified Unified Program Agency (OC CUPA) is the administrating agency for the Hazardous Materials Disclosure and Business Emergency Plan programs (HMD/BEP) previously administered by the Orange County Fire Authority. During the months of August and December of 2013, the OC CUPA sent out letters to regulated businesses requesting them to electronically submit their HMD/BEP forms. Electronic submission of these forms is a legal requirement. Failure to submit HMD/BEP forms is in violation of the California Health & Safety Code Chapter 6.95. According to our records there is no electronic submission for this facility. Please go to www.esubmit.ocgov.com to request a user name and password and submit your HMD/BEP forms within the next 30 days. Businesses may also submit forms via the California Environmental Reporting System. Please verify that all owner information that is pre populated on the E-Submit Portal is still [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/12/2014
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Monitor cert notification; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 01/03/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

PROCESSED CHANGE OF OWNER; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 04/27/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Monitor cert notification; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/08/2023
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

On site to conduct a routine small quantity hazardous waste inspection. Mary Smith, Manager provided consent to inspect. The hazardous waste drum is properly labeled, dated (accumulation start date 12/16/21 approximately half full from the bottom) and stored closed. Drum is stored in trash enclosure area. A perimeter walk was conducted. Municipal dumpster does not appear to contain any hazardous waste. Manifests were available and reviewed. Emergency response information is posted and employees are reported to be trained. Inspection report emailed to facility 0677@unitedpacific.com and environmental contact tom.robins@unitedpacific.com; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/15/2021
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health

Eval Program: UST
Eval Source: CERS
Eval Notes:

On site for follow up inspection to correct outstanding violation I106 regarding date (5/20/20) listed for last Overfill Prevention Equipment Inspection on DO monthly report not being correct. Mary Smith granted consent to conduct inspection. Date for last Overfill Prevention Equipment Inspection conducted at the facility was corrected on all DO reports dated from July 2020 to most current. Violation has been corrected.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 01/03/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

PROCESSED CHANGE OF OWNER; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/08/2023
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site for routine hazardous materials and business emergency plan inspection. Mary Smith, Manager, provided consent to inspect. Observed the facility and inspected hazardous materials storage. The following materials were observed in amounts that meet or exceed the minimum volumes required for disclosure: CO2, gasoline, mix water/petroleum (testing water) waste Hazardous Materials disclosed in CERS 10397647 match what is reported on site. Employee training records were available and reviewed. Per California Health & Safety Code Ch. 6.95, businesses that store and handle hazardous materials at or over reportable quantities (55 gal of a liquid, 500 lbs of a solid, 200 cubic ft of a compressed gas) must prepare and implement an HMBP. The facility is responsible for identifying all hazardous materials, including hazardous wastes, which are at or above disclosure thresholds. If there is a change in the type of amount of chemicals that are maintained on site, please submit revised docume; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 04/21/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Monitor cert notification; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/10/2014
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

The UST submittal in CERS was reviewed and accepted.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/18/2021
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health

Eval Program: UST
Eval Source: CERS
Eval Notes:

On site to witness monitoring system certification testing activities and to conduct routine UST inspection. Mary Smith granted consent to conduct inspection. Annular and sump sensors alarmed properly (visual and audible) and shut respective turbines when submerged in water. UDCs have Bravo boxes with float and chain mechanism. Water was poured in all UDCs and all float and chains functioned properly. Fail-safe and sensor out were tested and passed. Facility has Fill Tube Shut-Off Valve for overfill prevention. Overfill Prevention inspection was conducted and passed. Line leak detectors were tested and passed. Spill buckets were tested visually without any changes in water level. Valid permit, designated operator documentation, monthly inspection reports, responses to alarms, tanks information and monitoring plans, response plan, employee training records, certification of financial responsibility, copies of Monitoring System Certification Report Form, [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 08/29/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

SB 989 test notification; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/14/2015
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Inspected perimeter of facility including the dumpster area. Permission to inspect and take necessary photos granted by the manager on duty. Hazardous waste properly stored, labeled and dated. Hazardous waste contingency plan kept on site and available for review. Hazardous waste manifests kept on site and available for review. Latest pick up on 3-10-15 (solids and liquid with fuel). No violations noted at this time.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 08/28/2020
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Recent CERS submittal indicates an ownership change occurred at this facility August 2020. The new owner APRO LLC has made no changes to the UST system. In a review of documentation onsite, all required documentation was observed including: - Test reports - Tank info, monitoring plans, site plan - CFR with insurance policy valid until 7/2024 - DO inspection reports and DO Statement of Understanding The next annual monitoring system certification is due in May 2021.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 08/28/2020
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Recent CERS submittal indicates an ownership change occurred at this facility August 2020. The new owner APRO LLC has made no changes to the types or quantities of hazardous materials stored at this facility. The following hazardous materials were observed: - Gasoline - Spill bucket waste - Carbon dioxide The facility's Emergency Plan and site plan were observed onsite.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/10/2017
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Routine inspection conducted this date in regards to underground storage tank, consent to enter, inspect and take photographs was given by – Bryan Banik, manager Monitoring system certification was conducted at this time. Jose Rodriguez, California Maintenance Env. performed the monitor cert. Ensure submittal of monitor cert test results within 30 days. Tester provided the following certifications: ICC Tech exp 3/18/19, Veeder-Root tech exp 1/11/18, VMI/vaporless exp 8/23/18 Number of UST's -2 Leak detector type - mechanical Sensor types -420's and 208's UDC type - brovo box The Veeder-Root monitoring panel showed all functions normal. Sensors and sumps in good order this date. The following documents were available for review: CUPA Business Activities form, CUPA Business Owner / Operator Identification form CUPA UST Facility Information form, CUPA UST Tank Information forms, CUPA UST monitoring plan, CUPA UST response plan, Monitoring site map [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/07/2018
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

emailed report to Mary Smith and Lisa Thompson Jose Rodriguez performed monitor cert from California Maintenance UST's-2 sensors 420/208 UDC - Bravo; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/30/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Received and reviewed monitoring certification performed on 5/10/17. All components passed at that time.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/20/2019
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Walked facility with the latest submitted hazardous material inventory and site map. Did not observe any additional hazardous material stored at or above disclosure threshold. Hazardous material containers appeared to be in satisfactory condition. No indication of leaking or previous releases. Hazardous material business emergency plan training provided to twelve employees during the past 12 months. Please address the following. Locations for the electrical shut off, storm drain and CO2 are missing from the facility site map. Add them to grids E6, E3 and F6 respectively. Water shut off should be located at grid G6 on the facility site map. Change the phone number in box C3 on the emergency response/contingency plan to (714) 433-6406. Re submit within 30 days.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/22/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Reviewed and accepted submittal in CERS.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/16/2022
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

On site to conduct a routine Underground Storage Tank (UST) inspection and witness the annual monitoring system certification and spill bucket testing. The facility has the following double walled (DW) USTs: - one 15,000 UST (regular) - one 12,000 UST (premium) Six (6) dispensers (with Bravo float & chain) The system is monitored by a Veeder Root TLS 350 panel. The monitor is operational for audible and visual alarms and display reads "all functions normal" Overfill protection is by flapper valves. Tank Annulars, VR420 Sumps, VR208 Fail-safe and sensor out were tested and passed. Line leak detectors were tested and passed. Spill buckets were tested visually without any changes in water level. Testing conducted by Zee Aldoyan of Robertson Testing Inc. Technician certifications (ICC, VR) were verified. The following were on site and reviewed this date: - Permit to Operate - Certificate of Financial Responsibility (exp 7/1/24) - Leak Response, Monitoring [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 09/23/2019
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Received SB 989 testing report. All components passed testing on 9-4-19. No violations noted at this time.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 09/22/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Received results for secondary containment testing performed on 9-6-16 by A & J Environmental. All 16 secondary containment components passed testing.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 01/03/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

PROCESSED CHANGE OF OWNER; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 09/23/2013
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

SB 989 retest notification; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/14/2015
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site for a routine inspection. Walked facility with the latest disclosed site map. Did not observe any additional hazardous materials that were stored at or above disclosure threshold. Locations for the various items disclosed on the site map appear to be accurate. Latest CERS submittal accepted on this date.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/16/2022
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

On site to conduct a routine small quantity hazardous waste inspection. Mary Smith, Cashier, provided consent to inspect. The hazardous waste drum is properly labeled, dated (accumulation start date 12/16/21 only 1/4 from the bottom) and stored closed. Drums are stored in trash enclosure area. A perimeter walk was conducted. Municipal dumpster does not appear to contain any hazardous waste. Manifests were available and reviewed. Last picked up was on California Hazardous Services on 6/21/20. Emergency response information is posted and employees are reported to be trained. Inspection report emailed to facility 0677@unitedpacific.com and environmental contact tom.robins@unitedpacific.com; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/17/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Received report for a UST system monitoring certification performed on 5-12-16. All monitoring equipment operational per manufacturer's specifications.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 10/01/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Received and ACCEPTED the HMBEP on CERS.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Affiliations

Affil Type Desc: Identification Signer
Entity Name: Tom Robins
Entity Title: Staff Geologist
Address:
City:
State:
Country:
Zip Code:

Phone:

Affil Type Desc: Operator
Entity Name: APRO, LLC
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone: (310) 323-3992

Affil Type Desc: Parent Corporation
Entity Name: APRO LLC
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: UST Tank Owner
Entity Name: APRO, LLC
Entity Title:
Address: 4130 Cover Street
City: Long Beach
State: Ca
Country: United States
Zip Code: 90808
Phone: (310) 323-3992

Affil Type Desc: UST Property Owner Name
Entity Name: GOLDEN STATE ENTERPRISES
Entity Title:
Address: 29501 Canwood St Suite #200
City: AGOURA HILLS
State: Ca
Country: United States
Zip Code: 91301
Phone: (818) 206-5700

Affil Type Desc: Document Preparer
Entity Name: Tom Robins
Entity Title:
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Legal Owner
Entity Name: APRO, LLC
Entity Title:
Address: 4130 Cover Street
City: Long Beach
State: CA
Country: United States
Zip Code: 90808
Phone: (310) 323-3992

Affil Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title:
Address: 4130 Cover Street
City: Long Beach
State: CA
Country:

Zip Code:	90808
Phone:	
Affil Type Desc:	Property Owner
Entity Name:	GOLDEN STATE ENTERPRISES
Entity Title:	
Address:	29501 Canwood St Suite #200
City:	AGOURA HILLS
State:	CA
Country:	United States
Zip Code:	91301
Phone:	(818) 206-5700
Affil Type Desc:	CUPA District
Entity Name:	Orange County Env Health
Entity Title:	
Address:	1241 East Dyer RoadSuite 120
City:	Santa Ana
State:	CA
Country:	
Zip Code:	92705-5611
Phone:	(714) 433-6406
Affil Type Desc:	Environmental Contact
Entity Name:	Tom Robins
Entity Title:	
Address:	4130 Cover Street
City:	Long Beach
State:	CA
Country:	
Zip Code:	90808
Phone:	
Affil Type Desc:	UST Permit Applicant
Entity Name:	LISA THOMPSON
Entity Title:	COMPLIANCE MANAGER
Address:	
City:	
State:	
Country:	
Zip Code:	
Phone:	(818) 206-5700
Affil Type Desc:	UST Tank Operator
Entity Name:	APRO, LLC
Entity Title:	
Address:	4130 Cover Street
City:	Long Beach
State:	Ca
Country:	United States
Zip Code:	90808
Phone:	(310) 323-3992

Coordinates

Env Int Type Code:	HWG	**Longitude:**	-117.723970
Program ID:	10397647	**Coord Name:**	
Latitude:	33.572490	**Ref Point Type Desc:**	Center of a facility or station.

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
23	7 of16	NNE	0.14 / 740.39	345.92 / -9	GSE ALISO CREEK, GOLDEN STATE ENTERPRISE 26871 ALISO CREEK RD ALISO VIEJO CA 92656	EMISSIONS

2016 Toxic Data

Facility ID:	183773	**TS:**	
Facility SIC Code:	1799	**HRA:**	
CERR CODE:		**CH Index:**	
COID:	ORA	**AH Index:**	
CO:	30	**Air Basin:**	SC
DISN:	SOUTH COAST AQMD	**District:**	SC
CHAPIS:			

2017 Toxic Data

Facility ID:	183773	**COID:**	ORA
Facility SIC Code:	9999	**DISN:**	SOUTH COAST AQMD
CO:	30	**CHAPIS:**	
Air Basin:	SC	**CERR Code:**	
District:	SC		
TS:			
Health Risk Asmt:			
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

2018 Toxic Data

Facility ID:	183773	**COID:**	ORA
Facility SIC Code:	9999	**DISN:**	SOUTH COAST AQMD
CO:	30	**CHAPIS:**	
Air Basin:	SC	**CERR Code:**	
District:	SC		
TS:			
Health Risk Asmt:			
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

2019 Toxic Data

CO:	30	**DISN:**	SOUTH COAST AQMD
Air Basin:	SC	**CHAPIS:**	
Faccility ID:	183773	**CERR Code:**	
District:	SC	**TS:**	
Facility SIC Code:	9999	**Health Risk Asmt:**	
COID:	ORA		
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

23	*8 of16*	*NNE*	*0.14 / 740.39*	*345.92 / -9*	***GSE ALISO CREEK 2705743*** ***26871 ALISO CREEK RD*** ***ALISO VIEJO CA 92656***	***RCRA NON GEN***

EPA Handler ID:	CAL000422836
Gen Status Universe:	No Report
Contact Name:	LISA THOMPSON
Contact Address:	29501 CANWOOD ST STE 200 , , AGOURA HILLS , CA, 91301 ,
Contact Phone No and Ext:	818-206-5700
Contact Email:	LTHOMPSON@GSG.EMAIL
Contact Country:	
County Name:	ORANGE
EPA Region:	09
Land Type:	
Receive Date:	20161206
Location Latitude:	33.572466
Location Longitude:	-117.723556

Violation/Evaluation Summary

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Note: NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility:	No
Onsite Burner Exemption:	No
Furnace Exemption:	No
Underground Injection Activity:	No
Commercial TSD:	No
Used Oil Transporter:	No
Used Oil Transfer Facility:	No
Used Oil Processor:	No
Used Oil Refiner:	No
Used Oil Burner:	No
Used Oil Market Burner:	No
Used Oil Spec Marketer:	No

Hazardous Waste Handler Details

Sequence No:	1
Receive Date:	20161206
Handler Name:	GSE ALISO CREEK 2705743
Source Type:	Implementer
Federal Waste Generator Code:	N
Generator Code Description:	Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind:	Current Owner	**Street No:**	
Type:	Other	**Street 1:**	29501 CANWOOD ST STE 200
Name:	GOLDEN STATE ENTERPRISES	**Street 2:**	
Date Became Current:		**City:**	AGOURA HILLS
Date Ended Current:		**State:**	CA
Phone:	818-206-5700	**Country:**	
Source Type:	Implementer	**Zip Code:**	91301
Owner/Operator Ind:	Current Operator	**Street No:**	
Type:	Other	**Street 1:**	29501 CANWOOD ST STE 200
Name:	LISA THOMPSON	**Street 2:**	
Date Became Current:		**City:**	AGOURA HILLS
Date Ended Current:		**State:**	CA
Phone:	818-206-5700	**Country:**	
Source Type:	Implementer	**Zip Code:**	91301

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
23	9 of16	NNE	0.14 / 740.39	345.92 / -9	CIRCLE K # 5743 26871 ALISO CREEK ALISO VIEJO CA 92656	UST ORANGE

FA No: FA24343
SR No:
Notes:
Data Source: Removed Underground Storage Tank (UST) Facilities

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
23	10 of16	NNE	0.14 / 740.39	345.92 / -9	APRO LLC DBA UNITED PACIFIC 26871 ALISO CREEK RD ALISO VIEJO CA 92656	RCRA NON GEN

EPA Handler ID: CAL000454582

Gen Status Universe:	No Report
Contact Name:	TOM ROBINS
Contact Address:	4130 COVER STREET , , LONG BEACH , CA, 90808 ,
Contact Phone No and Ext:	310-323-3992
Contact Email:	TOM.ROBINS@UNITEDPACIFIC.COM
Contact Country:	
County Name:	ORANGE
EPA Region:	09
Land Type:	
Receive Date:	20200513
Location Latitude:	
Location Longitude:	

Violation/Evaluation Summary

Note:	NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility:	No
Onsite Burner Exemption:	No
Furnace Exemption:	No
Underground Injection Activity:	No
Commercial TSD:	No
Used Oil Transporter:	No
Used Oil Transfer Facility:	No
Used Oil Processor:	No
Used Oil Refiner:	No
Used Oil Burner:	No
Used Oil Market Burner:	No
Used Oil Spec Marketer:	No

Hazardous Waste Handler Details

Sequence No:	1
Receive Date:	20200513
Handler Name:	APRO LLC DBA UNITED PACIFIC
Source Type:	Implementer
Federal Waste Generator Code:	N
Generator Code Description:	Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street 1:***	4130 COVER STREET
Name:	TOM ROBINS	***Street 2:***	
Date Became Current:		***City:***	LONG BEACH
Date Ended Current:		***State:***	CA
Phone:	310-323-3992	***Country:***	
Source Type:	Implementer	***Zip Code:***	90808

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street 1:***	4130 COVER STREET
Name:	APRO LLC DBA UNITED PACIFIC	***Street 2:***	
Date Became Current:		***City:***	LONG BEACH
Date Ended Current:		***State:***	CA
Phone:	310-323-3992	***Country:***	
Source Type:	Implementer	***Zip Code:***	90808

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
23	11 of16	NNE	0.14 / 740.39	345.92 / -9	APRO LLC DBA UNITED PACIFIC 26871 ALISO CREEK RD ALISO VIEJO CA 92656	RCRA NON GEN

EPA Handler ID: CAL000460045
Gen Status Universe: No Report
Contact Name: TOM ROBINS
Contact Address: 4130 , COVER STREET , , LONG BEACH , CA, 90808 , US
Contact Phone No and Ext: 310-323-3992
Contact Email: TOM.ROBINS@UNITEDPACIFIC.COM
Contact Country: US
County Name: ORANGE
EPA Region: 09
Land Type:
Receive Date: 20210921
Location Latitude:
Location Longitude:

Violation/Evaluation Summary

Note: NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity: No
Mixed Waste Generator: No
Transporter Activity: No
Transfer Facility: No
Onsite Burner Exemption: No
Furnace Exemption: No
Underground Injection Activity: No
Commercial TSD: No
Used Oil Transporter: No
Used Oil Transfer Facility: No
Used Oil Processor: No
Used Oil Refiner: No
Used Oil Burner: No
Used Oil Market Burner: No
Used Oil Spec Marketer: No

Hazardous Waste Handler Details

Sequence No: 1
Receive Date: 20210211
Handler Name: APRO LLC DBA UNITED PACIFIC
Source Type: Implementer
Federal Waste Generator Code: N
Generator Code Description: Not a Generator, Verified

Hazardous Waste Handler Details

Sequence No: 2
Receive Date: 20210921
Handler Name: APRO LLC DBA UNITED PACIFIC
Source Type: Implementer
Federal Waste Generator Code: N
Generator Code Description: Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind: Current Operator
Type: Other
Street No:
Street 1: 4130 COVER STREET

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Name:	TOM ROBINS	**Street 2:**	
Date Became Current:		**City:**	LONG BEACH
Date Ended Current:		**State:**	CA
Phone:	310-323-3992	**Country:**	
Source Type:	Implementer	**Zip Code:**	90808
Owner/Operator Ind:	Current Operator	**Street No:**	
Type:	Other	**Street 1:**	4130 COVER STREET
Name:	APRO LLC DBA UNITED PACIFIC	**Street 2:**	
Date Became Current:		**City:**	LONG BEACH
Date Ended Current:		**State:**	CA
Phone:	310-323-3992	**Country:**	US
Source Type:	Implementer	**Zip Code:**	90808
Owner/Operator Ind:	Current Owner	**Street No:**	
Type:	Other	**Street 1:**	4130 COVER STREET
Name:	APRO LLC DBA UNITED PACIFIC	**Street 2:**	
Date Became Current:		**City:**	LONG BEACH
Date Ended Current:		**State:**	CA
Phone:	310-323-3992	**Country:**	US
Source Type:	Implementer	**Zip Code:**	90808
Owner/Operator Ind:	Current Owner	**Street No:**	
Type:	Other	**Street 1:**	4130 COVER STREET
Name:	APRO LLC DBA UNITED PACIFIC	**Street 2:**	
Date Became Current:		**City:**	LONG BEACH
Date Ended Current:		**State:**	CA
Phone:	310-323-3992	**Country:**	
Source Type:	Implementer	**Zip Code:**	90808

Historical Handler Details

Receive Dt:	20210211
Generator Code Description:	Not a Generator, Verified
Handler Name:	APRO LLC DBA UNITED PACIFIC

23	***12 of16***	***NNE***	***0.14 / 740.39***	***345.92 / -9***	***76 Station #5743 26871 Aliso Creek Rd Aliso Viejo Ca 92656-3392 CA***	***LOP ORANGE***

Case ID: 08UT006

Details

Current Status:	Closed
Type of Closure:	Closure certification issued
Closed Date:	6/15/2012
File Location:	Local Agency

23	***13 of16***	***NNE***	***0.14 / 740.39***	***345.92 / -9***	***APRO LLC DBA UNITED PACIFIC 0677 26871 ALISO CREEK RD. ALISO VIEJO CA 92656***	***RCRA NON GEN***

EPA Handler ID:	CAC003196222
Gen Status Universe:	No Report
Contact Name:	TOM ROBINS
Contact Address:	4130 COVER ST. , , LONG BEACH , CA, 90808 ,
Contact Phone No and Ext:	310-808-6812
Contact Email:	TOM.ROBINS@UNITEDPACIFIC.COM
Contact Country:	
County Name:	ORANGE
EPA Region:	09
Land Type:	

Receive Date:	20220923
Location Latitude:	
Location Longitude:	

Violation/Evaluation Summary

Note:	NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility:	No
Onsite Burner Exemption:	No
Furnace Exemption:	No
Underground Injection Activity:	No
Commercial TSD:	No
Used Oil Transporter:	No
Used Oil Transfer Facility:	No
Used Oil Processor:	No
Used Oil Refiner:	No
Used Oil Burner:	No
Used Oil Market Burner:	No
Used Oil Spec Marketer:	No

Hazardous Waste Handler Details

Sequence No:	1
Receive Date:	20220923
Handler Name:	APRO LLC DBA UNITED PACIFIC 0677
Source Type:	Implementer
Federal Waste Generator Code:	N
Generator Code Description:	Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind:	Current Operator	**Street No:**	
Type:	Other	**Street 1:**	4130 COVER ST.
Name:	TOM ROBINS	**Street 2:**	
Date Became Current:		**City:**	LONG BEACH
Date Ended Current:		**State:**	CA
Phone:	310-808-6812	**Country:**	
Source Type:	Implementer	**Zip Code:**	90808
Owner/Operator Ind:	Current Owner	**Street No:**	
Type:	Other	**Street 1:**	4130 COVER ST.
Name:	APRO LLC DBA UNITED PACIFIC 0677	**Street 2:**	
Date Became Current:		**City:**	LONG BEACH
Date Ended Current:		**State:**	CA
Phone:	310-808-6812	**Country:**	
Source Type:	Implementer	**Zip Code:**	90808

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
23	14 of16	NNE	0.14 / 740.39	345.92 / -9	UNITED PACIFIC 0677 26871 ALISO CREEK RD. ALISO VIEJO CA 92656	RCRA NON GEN

EPA Handler ID:	CAC003208889
Gen Status Universe:	No Report
Contact Name:	TOM ROBINS
Contact Address:	4130 COVER ST. , , LONG BEACH , CA, 90808 ,
Contact Phone No and Ext:	310-808-6812

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Contact Email: MREDMAN@CGRS.COM
Contact Country:
County Name: ORANGE
EPA Region: 09
Land Type:
Receive Date: 20221216
Location Latitude:
Location Longitude:

Violation/Evaluation Summary

Note: NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity: No
Mixed Waste Generator: No
Transporter Activity: No
Transfer Facility: No
Onsite Burner Exemption: No
Furnace Exemption: No
Underground Injection Activity: No
Commercial TSD: No
Used Oil Transporter: No
Used Oil Transfer Facility: No
Used Oil Processor: No
Used Oil Refiner: No
Used Oil Burner: No
Used Oil Market Burner: No
Used Oil Spec Marketer: No

Hazardous Waste Handler Details

Sequence No: 1
Receive Date: 20221216
Handler Name: UNITED PACIFIC 0677
Source Type: Implementer
Federal Waste Generator Code: N
Generator Code Description: Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind: Current Operator
Type: Other
Name: TOM ROBINS
Date Became Current:
Date Ended Current:
Phone: 310-808-6812
Source Type: Implementer
Street No:
Street 1: 4130 COVER ST.
Street 2:
City: LONG BEACH
State: CA
Country:
Zip Code: 90808

Owner/Operator Ind: Current Owner
Type: Other
Name: APRO LLC DBA UNITED PACIFIC
Date Became Current:
Date Ended Current:
Phone: 310-808-6812
Source Type: Implementer
Street No:
Street 1: 4130 COVER ST.
Street 2:
City: LONG BEACH
State: CA
Country:
Zip Code: 90808

23	15 of16	NNE	0.14 / 740.39	345.92 / -9	UNITED PACIFIC #0677 26871 ALISO CREEK RD ALISO VIEJO CA 92656	EMISSIONS

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

2020 Toxic Data

CO:	30	***DISN:***	SOUTH COAST AQMD
Air Basin:	SC	***CHAPIS:***	
Facility ID:	192525	***CHERR Code:***	
District:	SC	***TS:***	
Facility SIC Code:	9999	***Health Risk Asmt:***	
COID:	ORA		
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

2021 Toxic Data

Co:	30	***DISN:***	SOUTH COAST AQMD
Air Basin:	SC	***CHAPIS:***	
Facility ID:	192525	***Cerr Code:***	
District:	SC	***TS:***	
Facility SIC Code:	9999	***Health Risk Asmt:***	
COID:	ORA		
Non-Cancer Chronic Haz Ind:			
Non-Cancer Acute Haz Ind:			

23	***16 of16***	***NNE***	***0.14 / 740.39***	***345.92 / -9***	***UNITED PACIFIC 677 26871 ALISO CREEK RD ALISO VIEJO CA 92656***	***RCRA NON GEN***

EPA Handler ID:	CAC003277148
Gen Status Universe:	No Report
Contact Name:	TOM ROBINS
Contact Address:	UP 2 HOLDINGS LLC , 4130 COVER ST , LONG BEACH , CA, 90808 ,
Contact Phone No and Ext:	310-808-6812
Contact Email:	TOM.ROBINS@UNITEDPACIFIC.COM
Contact Country:	
County Name:	ORANGE
EPA Region:	09
Land Type:	
Receive Date:	20240308
Location Latitude:	
Location Longitude:	

Violation/Evaluation Summary

Note: NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility:	No
Onsite Burner Exemption:	No
Furnace Exemption:	No
Underground Injection Activity:	No
Commercial TSD:	No
Used Oil Transporter:	No
Used Oil Transfer Facility:	No
Used Oil Processor:	No
Used Oil Refiner:	No
Used Oil Burner:	No
Used Oil Market Burner:	No
Used Oil Spec Marketer:	No

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Hazardous Waste Handler Details

Sequence No:	1
Receive Date:	20240308
Handler Name:	UNITED PACIFIC 677
Source Type:	Implementer
Federal Waste Generator Code:	N
Generator Code Description:	Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street 1:***	4130 COVER ST
Name:	APRO LLC DBA UNITED PACIFIC	***Street 2:***	
Date Became Current:		***City:***	LONG BEACH
Date Ended Current:		***State:***	CA
Phone:	310-808-6812	***Country:***	
Source Type:	Implementer	***Zip Code:***	90808
Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street 1:***	UP 2 HOLDINGS LLC
Name:	TOM ROBINS	***Street 2:***	4130 COVER ST
Date Became Current:		***City:***	LONG BEACH
Date Ended Current:		***State:***	CA
Phone:	310-808-6812	***Country:***	
Source Type:	Implementer	***Zip Code:***	90808

24	*1 of1*	***WSW***	***0.14 / 744.03***	***398.92 / 44***	***SOCAL ROOF RESTORATION 9 JOURNEY ALISO VIEJO CA 92656***	***RCRA NON GEN***

EPA Handler ID:	CAC003138985
Gen Status Universe:	No Report
Contact Name:	MIKE KOEJEN
Contact Address:	32414 CROWN VALLEY PKWY , , DANA POINT , CA, 92629 ,
Contact Phone No and Ext:	619-602-6191
Contact Email:	MIKE@SOCALROOFRESTORATION.COM
Contact Country:	
County Name:	ORANGE
EPA Region:	09
Land Type:	
Receive Date:	20210915
Location Latitude:	
Location Longitude:	

Violation/Evaluation Summary

Note:	NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility:	No
Onsite Burner Exemption:	No
Furnace Exemption:	No
Underground Injection Activity:	No
Commercial TSD:	No
Used Oil Transporter:	No
Used Oil Transfer Facility:	No

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Used Oil Processor: No
Used Oil Refiner: No
Used Oil Burner: No
Used Oil Market Burner: No
Used Oil Spec Marketer: No

Hazardous Waste Handler Details

Sequence No: 1
Receive Date: 20210915
Handler Name: SOCAL ROOF RESTORATION
Source Type: Implementer
Federal Waste Generator Code: N
Generator Code Description: Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind: Current Owner
Type: Other
Name: SOCAL ROOF RESTORATION
Date Became Current:
Date Ended Current:
Phone: 619-602-6191
Source Type: Implementer
Street No:
Street 1: 32414 CROWN VALLEY PKWY
Street 2:
City: DANA POINT
State: CA
Country:
Zip Code: 92629

Owner/Operator Ind: Current Operator
Type: Other
Name: MIKE KOEJEN
Date Became Current:
Date Ended Current:
Phone: 619-602-6191
Source Type: Implementer
Street No:
Street 1: 32414 CROWN VALLEY PKWY
Street 2:
City: DANA POINT
State: CA
Country:
Zip Code: 92629

25	1 of4	SW	0.16 / 826.42	392.26 / 37	Cox Communications Aliso Viejo Mtc 17 Journey Aliso Viejo, Ca 92656-3333 CA	AST ORANGE

Establishment ID: FA0039876

25	2 of4	SW	0.16 / 826.42	392.26 / 37	17 JOURNEY ALISO VIEJO CA 92656	AST

Total Capacity(Gal): 1,320
CUPA: Orange
Owner Name: COX COMMUNICATIONS
County: Orange

25	3 of4	SW	0.16 / 826.42	392.26 / 37	COX COMMUNICATIONS CALIFORNIA - ALISO VIEJO MTC 17 JOURNEY ALISO VIEJO CA 92656	RCRA NON GEN

EPA Handler ID: CAC003088824
Gen Status Universe: No Report
Contact Name: ANNEMARIE CARIGNAN
Contact Address: 1985 GILLESPIE WAY, EL CAJON, CA 92 , , EL CAJON , CA, 92020 ,
Contact Phone No and Ext: 619-368-7912
Contact Email: ENVIRONMENTALCOMPLIANCE@COX.COM
Contact Country:
County Name: ORANGE
EPA Region: 09

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Land Type:
Receive Date: 20201016
Location Latitude:
Location Longitude:

Violation/Evaluation Summary

Note: NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity: No
Mixed Waste Generator: No
Transporter Activity: No
Transfer Facility: No
Onsite Burner Exemption: No
Furnace Exemption: No
Underground Injection Activity: No
Commercial TSD: No
Used Oil Transporter: No
Used Oil Transfer Facility: No
Used Oil Processor: No
Used Oil Refiner: No
Used Oil Burner: No
Used Oil Market Burner: No
Used Oil Spec Marketer: No

Hazardous Waste Handler Details

Sequence No: 1
Receive Date: 20201016
Handler Name: COX COMMUNICATIONS CALIFORNIA - ALISO VIEJO MTC
Source Type: Implementer
Federal Waste Generator Code: N
Generator Code Description: Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind: Current Owner
Type: Other
Name: COX COMMUNICATIONS CALIFORNIA, LLC
Date Became Current:
Date Ended Current:
Phone: 404-269-4038
Source Type: Implementer
Street No:
Street 1: 6205-B PEACHTREE DUNWOODY
Street 2:
City: ATLANTA
State: CA
Country:
Zip Code: 30328

Owner/Operator Ind: Current Operator
Type: Other
Name: ANNEMARIE CARIGNAN
Date Became Current:
Date Ended Current:
Phone: 619-368-7912
Source Type: Implementer
Street No:
Street 1: 1985 GILLESPIE WAY, EL CAJON, CA 92
Street 2:
City: EL CAJON
State: CA
Country:
Zip Code: 92020

25	4 of4	SW	0.16 / 826.42	392.26 / 37	COX COMMUNICATIONS CALIFORNIA - ALISO VIEJO MTC 17 JOURNEY ALISO VIEJO CA 92656	RCRA NON GEN

EPA Handler ID: CAC003138648
Gen Status Universe: No Report
Contact Name: ANNEMARIE CARIGNAN

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Contact Address: 5159 FEDERAL BOULEVARD , , SAN DIEGO , CA, 92105 ,
Contact Phone No and Ext: 619-368-7912
Contact Email: ANNEMARIE.CARIGNAN@COX.COM
Contact Country:
County Name: ORANGE
EPA Region: 09
Land Type:
Receive Date: 20210913
Location Latitude:
Location Longitude:

Violation/Evaluation Summary

Note: NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity: No
Mixed Waste Generator: No
Transporter Activity: No
Transfer Facility: No
Onsite Burner Exemption: No
Furnace Exemption: No
Underground Injection Activity: No
Commercial TSD: No
Used Oil Transporter: No
Used Oil Transfer Facility: No
Used Oil Processor: No
Used Oil Refiner: No
Used Oil Burner: No
Used Oil Market Burner: No
Used Oil Spec Marketer: No

Hazardous Waste Handler Details

Sequence No: 1
Receive Date: 20210913
Handler Name: COX COMMUNICATIONS CALIFORNIA - ALISO VIEJO MTC
Source Type: Implementer
Federal Waste Generator Code: N
Generator Code Description: Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind: Current Operator
Type: Other
Name: ANNEMARIE CARIGNAN
Date Became Current:
Date Ended Current:
Phone: 619-368-7912
Source Type: Implementer
Street No:
Street 1: 5159 FEDERAL BOULEVARD
Street 2:
City: SAN DIEGO
State: CA
Country:
Zip Code: 92105

Owner/Operator Ind: Current Owner
Type: Other
Name: COX COMMUNICATIONS CALIFORNIA, LLC
Date Became Current:
Date Ended Current:
Phone: 404-269-4038
Source Type: Implementer
Street No:
Street 1: 6205-B PEACHTREE DUNWOODY
Street 2:
City: ATLANTA
State: GA
Country:
Zip Code: 30328

26	1 of3	WSW	0.16 / 828.48	399.42 / 44	ORANGE COUNTY SHERIFF (ALISO VIEJO	DELISTED COUNTY

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
					11 JOURNEY ALISO VIEJO CA 92656	

Delisted County Records

Original Source Facility ID:	FA0044164
Original Source Name:	Orange County Aboveground Petroleum Storage Tank Listing
Record Dt:	01-MAY-2015
Record Date:	01-MAY-2015

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
26	2 of3	WSW	0.16 / 828.48	399.42 / 44	11 JOURNEY ALISO VIEJO CA 92656	AST

Total Capacity(Gal):	1,320	***Owner Name:***	ORANGE COUNTY SHERIFF (ALISO VIEJO
CUPA:	Orange	***County:***	Orange

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
26	3 of3	WSW	0.16 / 828.48	399.42 / 44	ORANGE COUNTY SHERIFF'S DEPARTMENT 11 JOURNEY ALISO VIEJO CA 92656-3333	RCRA NON GEN

EPA Handler ID:	CAL000178543
Gen Status Universe:	No Report
Contact Name:	RYAN PIERCE
Contact Address:	1900 W KATELLA AVE , , ORANGE , CA, 92867-3419 ,
Contact Phone No and Ext:	714-538-2464
Contact Email:	RCPIERCE@OCSD.ORG
Contact Country:	
County Name:	ORANGE
EPA Region:	09
Land Type:	
Receive Date:	19960909
Location Latitude:	33.5679
Location Longitude:	-117.728247

Violation/Evaluation Summary

Note:	NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility:	No
Onsite Burner Exemption:	No
Furnace Exemption:	No
Underground Injection Activity:	No
Commercial TSD:	No
Used Oil Transporter:	No
Used Oil Transfer Facility:	No
Used Oil Processor:	No
Used Oil Refiner:	No
Used Oil Burner:	No
Used Oil Market Burner:	No
Used Oil Spec Marketer:	No

Hazardous Waste Handler Details

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Sequence No: 1
Receive Date: 19960909
Handler Name: ORANGE COUNTY SHERIFF'S DEPARTMENT
Source Type: Implementer
Federal Waste Generator Code: N
Generator Code Description: Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind:	Current Operator	**Street No:**	
Type:	Other	**Street 1:**	1900 W KATELLA AVE
Name:	RYAN PIERCE	**Street 2:**	
Date Became Current:		**City:**	ORANGE
Date Ended Current:		**State:**	CA
Phone:	714-538-2464	**Country:**	
Source Type:	Implementer	**Zip Code:**	92867-3419

Owner/Operator Ind:	Current Owner	**Street No:**	
Type:	Other	**Street 1:**	1900 W KATELLA AVE
Name:	ORANGE COUNTY SHERIFFS DEPT	**Street 2:**	
Date Became Current:		**City:**	ORANGE
Date Ended Current:		**State:**	CA
Phone:	714-538-2464	**Country:**	
Source Type:	Implementer	**Zip Code:**	92867-3419

27	1 of1	W	0.16 / 843.21	401.02 / 46	TONY GAUTHIER 7 JOURNEY ALISO VIEJO CA 92656	RCRA NON GEN

EPA Handler ID: CAC003138624
Gen Status Universe: No Report
Contact Name: TONY GAUTHIER
Contact Address: 7 JOURNEY , , ALISO VIEJO , CA, 92656 ,
Contact Phone No and Ext: 949-394-9818
Contact Email: TONY@BDIDVELOPMENT.COM
Contact Country:
County Name: ORANGE
EPA Region: 09
Land Type:
Receive Date: 20210913
Location Latitude:
Location Longitude:

Violation/Evaluation Summary

Note: NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity: No
Mixed Waste Generator: No
Transporter Activity: No
Transfer Facility: No
Onsite Burner Exemption: No
Furnace Exemption: No
Underground Injection Activity: No
Commercial TSD: No
Used Oil Transporter: No
Used Oil Transfer Facility: No
Used Oil Processor: No
Used Oil Refiner: No
Used Oil Burner: No
Used Oil Market Burner: No
Used Oil Spec Marketer: No

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Hazardous Waste Handler Details

Sequence No:	1
Receive Date:	20210913
Handler Name:	TONY GAUTHIER
Source Type:	Implementer
Federal Waste Generator Code:	N
Generator Code Description:	Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street 1:***	7 JOURNEY
Name:	TONY GAUTHIER	***Street 2:***	
Date Became Current:		***City:***	ALISO VIEJO
Date Ended Current:		***State:***	CA
Phone:	949-394-9818	***Country:***	
Source Type:	Implementer	***Zip Code:***	92656
Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street 1:***	7 JOURNEY
Name:	TONY GAUTHIER	***Street 2:***	
Date Became Current:		***City:***	ALISO VIEJO
Date Ended Current:		***State:***	CA
Phone:	949-394-9818	***Country:***	
Source Type:	Implementer	***Zip Code:***	92656

28	*1 of2*	*N*	*0.17 / 880.75*	*355.09 / 0*	***STAPLES THE OFFICE SUPERSTORE EAST INC STORE 0743*** ***26791 ALISO CREEK RD*** ***ALISO VIEJO CA 92656***	***RCRA NON GEN***

EPA Handler ID:	CAL000390677
Gen Status Universe:	No Report
Contact Name:	KEITH BARROWS
Contact Address:	500 STAPLES DR , , FRAMINGHAM , MA, 01702 ,
Contact Phone No and Ext:	508-253-1498
Contact Email:	KEITH.BARROWS@STAPLES.COM
Contact Country:	
County Name:	ORANGE
EPA Region:	09
Land Type:	
Receive Date:	20131101
Location Latitude:	33.572916
Location Longitude:	-117.725414

Violation/Evaluation Summary

Note:	NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility:	No
Onsite Burner Exemption:	No
Furnace Exemption:	No
Underground Injection Activity:	No
Commercial TSD:	No

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Used Oil Transporter: No
Used Oil Transfer Facility: No
Used Oil Processor: No
Used Oil Refiner: No
Used Oil Burner: No
Used Oil Market Burner: No
Used Oil Spec Marketer: No

Hazardous Waste Handler Details

Sequence No: 1
Receive Date: 20131101
Handler Name: STAPLES THE OFFICE SUPERSTORE EAST INC STORE 0743
Source Type: Implementer
Federal Waste Generator Code: N
Generator Code Description: Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind: Current Owner
Type: Other
Name: STAPLES THE OFFICE SUPERSTORE E INC
Date Became Current:
Date Ended Current:
Phone: 508-253-1498
Source Type: Implementer
Street No:
Street 1: 500 STAPLES DR
Street 2:
City: FRAMINGHAM
State: MA
Country:
Zip Code: 01702

Owner/Operator Ind: Current Operator
Type: Other
Name: KEITH BARROWS
Date Became Current:
Date Ended Current:
Phone: 508-253-1498
Source Type: Implementer
Street No:
Street 1: 500 STAPLES DR
Street 2:
City: FRAMINGHAM
State: MA
Country:
Zip Code: 01702

28	2 of2	N	0.17 / 880.75	355.09 / 0	FIVE BELOW, INC 26791 B ALISO CREEK RD ALISO VIEJO CA 92656	RCRA NON GEN

EPA Handler ID: CAL000426805
Gen Status Universe: No Report
Contact Name: MAINTENANCE DEPARTMENT
Contact Address: 701 MARKET STREET , SUITE 300 , PHILADELPHIA , PA, 19106 ,
Contact Phone No and Ext: 215-207-2595
Contact Email: MAINTENANCE@FIVEBELOW.COM
Contact Country:
County Name: ORANGE
EPA Region: 09
Land Type:
Receive Date: 20170414
Location Latitude: 33.572916
Location Longitude: -117.725414

Violation/Evaluation Summary

Note: NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity: No
Mixed Waste Generator: No
Transporter Activity: No

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Transfer Facility:	No
Onsite Burner Exemption:	No
Furnace Exemption:	No
Underground Injection Activity:	No
Commercial TSD:	No
Used Oil Transporter:	No
Used Oil Transfer Facility:	No
Used Oil Processor:	No
Used Oil Refiner:	No
Used Oil Burner:	No
Used Oil Market Burner:	No
Used Oil Spec Marketer:	No

Hazardous Waste Handler Details

Sequence No:	1
Receive Date:	20170414
Handler Name:	FIVE BELOW, INC
Source Type:	Implementer
Federal Waste Generator Code:	N
Generator Code Description:	Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind:	Current Operator	**Street No:**	
Type:	Other	**Street 1:**	701 MARKET STREET
Name:	MAINTENANCE DEPARTMENT	**Street 2:**	SUITE 300
Date Became Current:		**City:**	PHILADELPHIA
Date Ended Current:		**State:**	PA
Phone:	215-207-2595	**Country:**	
Source Type:	Implementer	**Zip Code:**	19106

Owner/Operator Ind:	Current Owner	**Street No:**	
Type:	Other	**Street 1:**	701 MARKET STREET
Name:	FIVE BELOW, INC	**Street 2:**	SUITE 300
Date Became Current:		**City:**	PHILADELPHIA
Date Ended Current:		**State:**	PA
Phone:	215-546-7909	**Country:**	
Source Type:	Implementer	**Zip Code:**	19106

29	1 of9	W	0.18 / 953.50	436.86 / 82	ALL HANDS CAR WASH/FAST LUBE 22952 PACIFIC PARK DR ALISO VIEJO CA 92656	DELISTED TNK

Delisted Storage Tanks

Facility ID:	19945	**County:**	Orange
Latitude:	33.57049	**Original Source:**	UST
Longitude:	-117.72834	**Record Date:**	30-JAN-2017
Permitting Agency:	ORANGE COUNTY		

29	2 of9	W	0.18 / 953.50	436.86 / 82	Aliso Viejo Auto Care Inc 22952 Pacific Park Dr Aliso Viejo, Ca 92656-3389 CA	AST ORANGE

Establishment ID: FA0042604

29	3 of9	W	0.18 / 953.50	436.86 / 82	Aliso Viejo Auto Care Inc 22952 Pacific Park Dr Aliso Viejo,	UST ORANGE

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
					Ca 92656-3389 Aliso Viejo CA	

FA No: FA0042604
SR No:
Notes:
Data Source: Permitted Underground Storage Tank (UST) Facilities Listing

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
29	4 of9	W	0.18 / 953.50	436.86 / 82	Aliso Viejo Auto Care, Inc. 22952 PACIFIC PARK DR ALISO VIEJO CA 92656	DELISTED TNK

Delisted Storage Tanks

Facility ID: FA0025050
Latitude: 33.56996
Longitude: -117.72938
Permitting Agency: Orange County Environmental Health
County: Orange
Original Source: UST
Record Date: 13-MAR-2018

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
29	5 of9	W	0.18 / 953.50	436.86 / 82	ALISO VIEJO AUTO CARE INC 22952 PACIFIC PARK DR ALISO VIEJO CA 92656	EMISSIONS

2015 Toxic Data

Facility ID: 140836
Facility SIC Code: 7549
CO: 30
Air Basin: SC
District: SC
TS:
Health Risk Asmt:
Non-Cancer Chronic Haz Ind:
Non-Cancer Acute Haz Ind:
COID: ORA
DISN: SOUTH COAST AQMD
CHAPIS:
CERR Code:

2016 Toxic Data

Facility ID: 140836
Facility SIC Code: 7549
CERR CODE:
COID: ORA
CO: 30
DISN: SOUTH COAST AQMD
CHAPIS:
TS:
HRA:
CH Index:
AH Index:
Air Basin: SC
District: SC

2017 Toxic Data

Facility ID: 140836
Facility SIC Code: 9999
CO: 30
Air Basin: SC
District: SC
TS:
Health Risk Asmt:
Non-Cancer Chronic Haz Ind:
Non-Cancer Acute Haz Ind:
COID: ORA
DISN: SOUTH COAST AQMD
CHAPIS:
CERR Code:

2018 Toxic Data

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Facility ID: 140836
Facility SIC Code: 9999
CO: 30
Air Basin: SC
District: SC
TS:
Health Risk Asmt:
Non-Cancer Chronic Haz Ind:
Non-Cancer Acute Haz Ind:
COID: ORA
DISN: SOUTH COAST AQMD
CHAPIS:
CERR Code:

2019 Toxic Data

CO: 30
Air Basin: SC
Faccility ID: 140836
District: SC
Facility SIC Code: 9999
COID: ORA
Non-Cancer Chronic Haz Ind:
Non-Cancer Acute Haz Ind:
DISN: SOUTH COAST AQMD
CHAPIS:
CERR Code:
TS:
Health Risk Asmt:

2020 Toxic Data

CO: 30
Air Basin: SC
Facility ID: 140836
District: SC
Facility SIC Code: 9999
COID: ORA
Non-Cancer Chronic Haz Ind:
Non-Cancer Acute Haz Ind:
DISN: SOUTH COAST AQMD
CHAPIS:
CHERR Code:
TS:
Health Risk Asmt:

2021 Toxic Data

Co: 30
Air Basin: SC
Facility ID: 140836
District: SC
Facility SIC Code: 9999
COID: ORA
Non-Cancer Chronic Haz Ind:
Non-Cancer Acute Haz Ind:
DISN: SOUTH COAST AQMD
CHAPIS:
Cerr Code:
TS:
Health Risk Asmt:

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29 | ***6 of9*** | ***W*** | ***0.18 / 953.50*** | ***436.86 / 82*** | ***Aliso Viejo Auto Care, Inc.***
22952 PACIFIC PARK DR
ALISO VIEJO CA 92656 | ***CERS TANK***

Site ID: 379432
Latitude: 33.569958
Longitude: -117.729378

Regulated Programs

EI ID: 10535851
EI Description: Chemical Storage Facilities

EI ID: 10535851
EI Description: Hazardous Waste Generator

EI ID: 10535851
EI Description: Underground Storage Tank

EI ID: 10535851

EI Description: Aboveground Petroleum Storage

Violations

Violation Date: 12/11/2015 ***Violation Source:*** CERS
Violation Program: APSA ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)
Violation Notes:

Returned to compliance on 01/14/2016. Tank inspections currently not being performed. All tank systems covered in the SPCC plan must be inspected. Frequency of the inspections must be done as per the plan or at minimum on a monthly basis. Document the inspections. Keep inspection log available for review during the past three years.

Violation Description:

Failure to comply with all of the following requirements:
1. Failure to conduct inspections and tests in accordance with written procedures that you or a certifying engineer have developed for the facility.
2. Failure to sign written procedures and/or a record of inspections and/or customary business records by the appropriate supervisor or inspector.
3. Failure to keep written procedures and/or a record of inspections and/or customary business records with the plan. AND
4. Failure to maintain written procedures and/or a record of inspections and/or customary business records for three years.

Violations

Violation Date: 02/02/2021 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.7 25291(a)(2) - California Health and Safety Code, Chapter 6.7, Section(s) 25291(a)(2)
Violation Notes:

Returned to compliance on 06/16/2021. The 87A secondary line and UDCs 1 through 18 failed secondary containment tests conducted on 12/22/20. Investigation to determine failures must be conducted and if necessary, plans for repair/replacement must be submitted to this Agency within 30 days of this inspection report.

Violation Description:

Failure to maintain secondary containment (e.g., failure of secondary containment testing).

Violations

Violation Date: 12/11/2015 ***Violation Source:*** CERS
Violation Program: APSA ***Violation Division:*** Orange County Environmental Health
Citation: HSC 6.67 25270.4.5(a) - California Health and Safety Code, Chapter 6.67, Section(s) 25270.4.5(a)
Violation Notes:

Returned to compliance on 01/14/2016. Annual training not provided to "oil handling personnel" . Provide SPCC training to all "oil handling personnel" on an annual basis. Document this training and keep it available for review.

Violation Description:

Failure to provide training regarding:
1. The operation and maintenance of equipment to prevent discharges.
2. Discharge procedure protocols.
3. Applicable pollution control laws, rules, and regulations.
4. General facility operations. AND
5. The contents of the SPCC Plan.

Violations

Violation Date: 12/23/2019 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: 23 CCR 16 2712(b)(1)(G) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(b)(1)(G)
Violation Notes:

Returned to compliance on 12/23/2019. The initial overfill prevention equipment test was not conducted before the required October 13, 2018 deadline.

The test was conducted on 12/10/2018 and is now CORRECTED ONSITE.

Violation Description:

Failure to comply with one or more of the following overfill prevention equipment requirements:
Alert the transfer operator when the tank is 90 percent full by restricting the flow into the tank or triggering an audible and visual alarm; or
Restrict delivery of flow to the tank at least 30 minutes before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95 percent of capacity; and activate an audible alarm at least five minutes before the tank overfills; or
Provide positive shut-off of flow to the tank when the tank is filled to no more than 95 percent of capacity; or
Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling.

Install/retrofit overfill prevention equipment that does not use flow restrictors on vent piping to meet overfill prevention equipment requirements when the overfill prevention equipment is installed, repaired, or replaced on and after October 1, 2018.

For USTs installed before October 1, 2018, perform an inspection by October 13, 2018 and every 36 months thereafter.

For USTs installed on and after October 1, 2018, perform an inspection at installation and every 36 months thereafter.

Inspected within 30 days after a repair to the overfill prevention equipment.

Inspected using an applicable manufacturer guidelines, industry codes, engineering standards, or a method approved by a professional engineer.

Inspected by a certified UST service technician.

Maintain records of overfill prevention equipment inspection for 36 months.

Violations

Violation Date: 12/11/2015 ***Violation Source:*** CERS
Violation Program: HW ***Violation Division:*** Orange County Environmental Health
Citation: 22 CCR 15 66265.173 - California Code of Regulations, Title 22, Chapter 15, Section(s) 66265.173
Violation Notes:

Returned to compliance on 01/14/2016. The two 55 gallon used oil filter drums were not stored closed (lids completely on). Make sure the lids are kept on the drums to prevent exposure from rain water and/or an unauthorized release.

Violation Description:

Failure to properly close hazardous waste containers when not in active use.

Violations

Violation Date: 01/10/2019 ***Violation Source:*** CERS
Violation Program: UST ***Violation Division:*** Orange County Environmental Health
Citation: 23 CCR 16 2712(b)(1)(G) - California Code of Regulations, Title 23, Chapter 16, Section(s) 2712(b)(1)(G)
Violation Notes:

Returned to compliance on 04/11/2019. Received overfill prevention equipment testing. Flapper valves failed testing for both tanks as they are set to 96% and 99%. The facility is required to come into compliance with overfill requirements. Submit documentation showing that the overfill prevention system complies with requirements within 60 days. Please note, UST permitting occurs July 1, 2019 and no permit will be issued to facilities that are not in compliance with operating conditions.

Violation Description:

Failure to comply with one or more of the following overfill prevention equipment requirements:
Alert the transfer operator when the tank is 90 percent full by restricting the flow into the tank or triggering an audible and visual alarm; or
Restrict delivery of flow to the tank at least 30 minutes before the tank overfills, provided the restriction occurs when the tank is filled to no more than 95 percent of capacity; and activate an audible alarm at least five minutes before the tank overfills; or
Provide positive shut-off of flow to the tank when the tank is filled to no more than 95 percent of capacity; or
Provide positive shut-off of flow to the tank so that none of the fittings located on the top of the tank are exposed to product due to overfilling.

Install/retrofit overfill prevention equipment that does not use flow restrictors on vent piping to meet overfill prevention equipment requirements when the overfill prevention equipment is installed, repaired, or replaced on and after October 1, 2018.

For USTs installed before October 1, 2018, perform an inspection by October 13, 2018 and every 36 months thereafter.

For USTs installed on and after October 1, 2018, perform an inspection at installation and every 36 months thereafter.

Inspected within 30 days after a repair to the overfill prevention equipment.

Inspected using an applicable manufacturer guidelines, industry codes, engineering standards, or a method approved by a professional engineer.

Inspected by a certified UST service technician.

Maintain records of overfill prevention equipment inspection for 36 months.

Violations

Violation Date: 12/11/2015 ***Violation Source:*** CERS
Violation Program: HW ***Violation Division:*** Orange County Environmental Health
Citation: 22 CCR 12 66262.34(f) - California Code of Regulations, Title 22, Chapter 12, Section(s) 66262.34(f)
Violation Notes:

Returned to compliance on 01/14/2016. Some of the hazardous waste drums in the lower floor of the auto lube building were not properly identified. Make sure the label on each drum has the above mentioned information on them.

Violation Description:

Failure to properly label hazardous waste accumulation containers with the following requirements: "Hazardous Waste", name and address of the generator, physical and chemical characteristics of the Hazardous Waste, and starting accumulation date.

Evaluations

Eval Date: 12/20/2021
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site for routine Hazardous Materials Business Plan (HMBP) inspection. Ricardo Marquez Manager, provided consent to inspect. Hazardous Materials disclosed in CERS match what is reported on site. - Waste Oil - New Motor Oil - Gear Oil - Transmission Fluid - New CNG Motor Oil - New Coolant - Waste Coolant Per California Health & Safety Code Ch. 6.95, businesses that store and handle hazardous materials at or over reportable quantities (55 gal of a liquid, 500 lbs of a solid, 200 cubic ft of a compressed gas) must prepare and implement an HMBP. The facility is responsible for identifying all hazardous materials, including hazardous wastes, which are at or above disclosure thresholds. If there is a change in the type of amount of chemicals that are maintained on site, please submit revised documents (electronically though CERS) within 30 days of change. The HMBP must be submitted online through the California Environmental Reporting System (CERS) by March of [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/04/2023
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

On site to conduct a routine Underground Storage Tank (UST) inspection and witness the annual monitoring system certification, overfill and spill bucket testing. SB989 is also being conducted on this date by Clean Air Testing. Ricardo Marquez, Manager, provided consent to inspect. Marty Schwartz (OC Tank Testing) conducted the monitoring system certification. Technician certifications (VR, VMI, and ICC certifications) were verified. The facility has 2 USTs: - 20,000 gallons 87 - 15,000 gallons 91 (each tank contains two STPs and two leak detectors per tank) The system is monitored by a Veeder Root (VR) TLS 350. The monitor is operational for audible and visual alarms and display reads "all functions normal." Sensors were observed positions so as to initiate alarms at the earliest point possible. All sensors tested and verified to be operational. Positive shutdown and fail-safe programming were verified. Spill buckets tested without any changes in water levels. Line leak detectors are; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 01/14/2016
Violations Found: No
Eval General Type: Other/Unknown

Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

On site for a follow up inspection. Oil filter drums stored closed (lids on). Waste coolant drums properly labeled and dated. Deleted violations I400 & I617. No violations noted at this time.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 07/26/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Rejected portal submittal is conditionally accepted prior to CERS transfer: This submittal is being conditionally approved in order to facilitate transfer of data to California Electronic Reporting System (CERS) database. Do not make any additional submittals to the eSubmit portal. All future submittals must be made to the CERS database (previous)_____ Please make the following corrections UST Tank sections: IV Please mark FLL TUBE SHUT -OFF VALVE and verify that you have an external Audible Visual Alarm visible to the Tank Fill Operator. VIII Mark ISOLATION box for corrosion protection (section VIII on tank page). Also, mark a second box ---> "fill tube shut-off valve" for overfill protection (section IV on tank page). If you have the Audible & Visual Alarms please denote the location of the Overfill external annunciator on your plot plan. For questions please contact Alvin Dong, adong@ochca.com 714 640 9358; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/04/2017
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Emailed inspection report to Ricardo Marquez, manager; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/12/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Received and reviewed monitoring certification results from testing done on 12/4/17. All components passed at that time.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/04/2017
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Emailed inspection report to Ricardo Marquez, manager; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/23/2019
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health

Eval Program: HW
Eval Source: CERS
Eval Notes:

On site for routine hazardous waste inspection. Access to the facility, and permission to inspect and take photographs (if needed) was provided by Brenda Puepke, Facility Consultant. - Tank Basement: waste oil, waste oil filters, waste coolant The containers were observed properly stored and labeled. Hazardous waste disposal documents were reviewed. A copy of this report will be sent to: AlisoViejoCarwash1@gmail.com; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 09/29/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Review of submittal in CERS. Accepted facility info, hazardous materials inventory, emergency response plan and apst info; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/22/2020
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

An onsite hazardous materials inspection of this facility was conducted this date. Access to the facility was provided by Brenda Puepke, Facility Consultant. The following materials were observed in amounts that meet or exceed the minimum volumes required for disclosure: - Motor oil: 3000 gal - Waste oil: 1000 gal - Waste antifreeze: 220 gal - Carbon dioxide: 1215 cu ft - Gasoline: 35000 gal; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/23/2019
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: APSA
Eval Source: CERS
Eval Notes:

On site for an aboveground petroleum storage tank (APST) inspection. A tour of this facility was provided by Brenda Puepke, Facility Consultant. Facility contains: - Used oil and various drums of motor oil (4000 gallons combined) Facility is regulated under the Aboveground Storage Tank Act (APSA). This facility has between 1,320 and 9,999 gallons of regulated petroleum products (Tier 1 facility). Facility has the following: - On-site Spill Prevention Controls and Countermeasures (SPCC) plan prepared and implemented. SPCC last evaluated 7/19/2019 - Periodic checklist is available for tanks (per SPCC inspections are conducted monthly) - Appropriate secondary containment or diversionary structures; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 01/10/2019
Violations Found: Yes
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Received and reviewed monitoring system certification and spill bucket testing for testing done on 12/10/2018, all components passed at that time. Received overfill prevention equipment testing. Flapper valves failed on 10/10/2018, see violation issued this date. Cers lists flapper valves only.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 06/17/2021

Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

All UDCs and 87A secondary line that failed initial secondary containment test conducted on 12/22/21 were tested on 5/21/21 and 6/16/21 after completion of repairs and passed test. Outstanding violation, I382 regarding failure to maintain secondary containment, cited in inspection report dated 2/2/21, has been corrected. Please ensure the a copy of Secondary Containment Testing Report Form is submitted within 30 days of testing.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 07/02/2021
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

I received and reviewed a copy of Secondary Containment Testing Report Form for tests conducted on 5/21/21 and 6/16/21 after completion of repairs on all components that failed initial tests on 12/22/21. All tested components passed.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 11/14/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Monitor cert notification; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/10/2018
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Routine inspection conducted this date in regards to underground storage tank, consent to enter, inspect and take photographs was given by – Ricardo Marquez, manager Monitoring system certification was conducted at this time. Rich Rustin, OC Tank Testing performed the monitor cert. Ensure submittal of monitor cert test results within 30 days. Tester provided the following certifications: ICC Tech exp 4/10/2019 Veeder-Root tech #12/1/20 VMI/vaporless 5/30/19 Number of UST's -2 Leak detector type -ELLD Sensor types -Beaudreau 406,409,208 The Veeder-Root monitoring panel showed all functions normal. Sensors and sumps in good order this date. The following documents were available for review: CUPA Business Activities form, CUPA Business Owner / Operator Identification form CUPA UST Facility Information form, CUPA UST Tank Information forms, CUPA UST monitoring plan, CUPA UST response plan, Monitoring site map are available on-site. SB989 test results [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/11/2015
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Visited the facility on 12/11/15 and received consent to inspect the premises and take pictures where necessary from Ricardo Marquez, the manager of the facility. Confirmed the location of each disclosed material and the accuracy of the map. The site map was found to be correct and contained all

necessary labels. Found an additional 55 gallon drum of oily water that was not included in the disclosure. Advised the manager to add this material to the disclosure or to store the material in a smaller container. No other hazardous materials were observed to be stored above the disclosure thresholds. Confirmed that a copy of the BEP was stored on the premises.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/17/2014
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: APSA
Eval Source: CERS
Eval Notes:

On site for a routine inspection. Tier I qualified facility SPCC plan kept on site and available for review (signed and dated 1-22-14). Monthly tank and piping inspection log kept on site and available for review. Employee training log kept on site and available for review (current). No violations noted at this time.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 09/29/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Review of CERS submittal accepted tank info. financial responsibility/cfo letter expires 4/10/2017 DO Brenda Puepke exp 7/26/2018; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/23/2019
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

An onsite hazardous materials inspection of this facility was conducted this date. Access to the facility was provided by Brenda Puepke, Facility Consultant. The following materials were observed in amounts that meet or exceed the minimum volumes required for disclosure: - Motor oil: 3000 gal (APST for backup generator) - Waste oil: 1000 gal - Waste antifreeze: 220 gal - Carbon dioxide: 1215 cu ft - Gasoline: 35000 gal; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/23/2019
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

An on-site inspection was conducted this date to witness the annual monitoring system certification. Rich Ruston (OC Tank Testing) conducted the monitoring system certification and provided current Veeder-Root, VMI, and ICC certifications. This facility contains: 2 - USTs (87, 91) NOTE: Each tank contains two STPs and two leak detectors per tank. Monitor system is a Veeder-Root monitor panel and reads all functions normal. Overfill protection provided by fill tube shut-off valve (flapper). Sensors were observed positioned so as to initiate alarms at the earliest point possible. Sensors were re-positioned in a true vertical position upon installation after testing. Alarm history and setup tape reviewed while on site. The following were tested: - Sensors: VR 208: Fill and STP Sumps; VR409: Tank Annulars; Beaudreau 406: UDCs - Sensors, initiated positive shutdown to the turbines when tested in water - "Fail Safe" and "Positive Shutdown" - Spill buckets using a [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/11/2015
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency

Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Inspected perimeter of facility including the dumpster area. Permission to inspect granted by Ricardo Marquez. Documentation for hazardous waste pickup kept on site and available for review. Hazardous waste emergency response/contingency plan kept on site and available for review. * An on site follow up inspection will be performed in approximately 30 days.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/20/2021
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

On site to conduct a routine Underground Storage Tank (UST) inspection and witness the annual monitoring system certification and spill bucket testing. Ricardo Marquez, Manager, provided consent to inspect. Marty Schwartz (OC Tank Testing) conducted the monitoring system certification. Technician certifications (VR, VMI, and ICC certifications) were verified. The facility has 2 USTs: - 15,000 gallons 87 - 15,000 gallons 91 (each tank contains two STPs and two leak detectors per tank) The system is monitored by a Veeder Root (VR) TLS 350. The monitor is operational for audible and visual alarms and display reads "all functions normal." Sensors were observed positions so as to initiate alarms at the earliest point possible. All sensors tested and verified to be operational. Positive shutdown and fail-safe programming were verified. Spill buckets tested without any changes in water levels. Line leak detectors are mechanical. Sensors: Annulars (VR 409), STP/Fill (VR [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 04/18/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Accepted CFR dated 4/12/16 in portal.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 09/29/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Eval Date: 12/20/2021
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

On site to conduct a routine small quantity hazardous waste inspection. Ricardo Marquez, Manager, provided consent to inspect. The hazardous waste drums/tanks are properly labeled, dated and stored closed. A perimeter walk was conducted. Municipal dumpster does not appear to contain any hazardous waste. Manifests were available and reviewed. Last picked up was on 10/6/21 by Clean Tech. Emergency response information is posted and employees are reported to be trained. Inspection report emailed to alisoviejocarwash1@gmail.com, and environmental contact brenda@puepkeconsulting.com; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 01/11/2017
Violations Found: No
Eval General Type: Other/Unknown

Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Review of CERS submittal accepted for 2017; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/25/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Reviewed submission package on eSubmit Portal, DECLINED. Request for re-submittal this date. Please make the following corrections UST Tank sections: IV Please mark FLL TUBE SHUT -OFF VALVE and verify that you have an external Audible Visual Alarm visible to the Tank Fill Operator. VIII Mark ISOLATION box for corrosion protection (section VIII on tank page). Also, mark a second box ---> "fill tube shut-off valve" for overfill protection (section IV on tank page). If you have the Audible & Visual Alarms please denote the location of the Overfill external annunciator on your plot plan. For questions please contact Alvin Dong, adong@ochca.com 714 640 9358; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 04/02/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Received results from a UST system monitor certification and secondary containment testing performed on 12-17-15. All monitoring equipment operational per manufacturer's specifications. All secondary containment components passed testing.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 11/15/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Monitor Certification & SB989 Notification (12/4/17); Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/04/2017
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: APSA
Eval Source: CERS
Eval Notes:

Emailed inspection report to Ricardo Marquez, manager; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/20/2021
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: APSA
Eval Source: CERS

Eval Notes:

On site to conduct a routine Aboveground Petroleum Storage Tank (APST) inspection. Ricardo Marquez, Manger, provided consent to inspect. Brenda Puepke, facility environmental consultant, provided a tour of this facility. The facility is a Tier 1 facility. Facility has between 1,320 and 9,999 gallons of regulated petroleum products. This facility maintains used oil, various drums of motor oils (4,000 gallons combined) On site Spill Prevention Control and Countermeasures (SPCC) plan prepared and signed 1/22/2014 and reviewed 1/21/2019, please note that the SPCC plan must be evaluated every 5 years. Periodic inspections per SPCC are being conducted. Tank inspection logs were available and reviewed. No spill have occurred or been reported. Appropriate secondary containment are in place. Annual SPCC training records for oil handling personnel are reported to be given (7/27/21) Inspection report emailed to alisoviejocarwash1@gmail.com, and environmental contact [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/11/2015
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

On site for a routine compliance inspection. Martin Schwartz of OC Tank Testing currently performing a UST system monitor certification. Current ICC, Veeder-Root, VMI and Franklin Fueling certifications provided. Fueling system consists of two tanks, piping and 10 UDCs. All sumps and UDCs were free of liquid. Sensors were located at the low/proper points of secondary containment. SB 989 testing records available for review. Testing done on 12-6-14. Reviewed monthly designated operator (DO) reports. Fuel alarms properly followed up on. Employee training records current. Financial responsibility certification valid in e submit through 4-8-16. No violations noted at this time.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/11/2015
Violations Found: Yes
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: APSA
Eval Source: CERS
Eval Notes:

Current SPCC plan kept on site and available for review.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 04/18/2019
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Received results for overfill prevention certification performed on 4-11-19. 91 and 87 flapper valves operational and set at 92% and 95% respectively. Abated violation I101. No violations noted at this time.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/14/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Reviewed and accepted submittal in e submit. On the submittal for next year mark the "isolation" box for corrosion protection (section VIII on tank page). Mark a second box ---> "fill tube shut-off valve" for overfill protection (section IV on tank page). CFR valid through 4-8-16. DO statement/certification valid through 8-26-16. Received report for the monitoring certification performed on 12-11-15. All monitoring equipment operation per manufacturer's specifications.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/22/2020
Violations Found: No

Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

On site for routine hazardous waste inspection. Access to the facility, and permission to inspect and take photographs (if needed) was provided by Brenda Puepke, Facility Consultant. - Tank Basement: used oil, waste oil filters, waste coolant - Trash Enclosure: used oil filters The containers were observed properly stored and labeled. Hazardous waste disposal documents were reviewed. A copy of this report will be sent to: AlisoViejoCarwash1@gmail.com; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/17/2014
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site for a hazardous materials and business emergency plan inspection. Observed the facility and inspected hazardous materials storage. The following hazardous materials were observed in amounts that exceed the required disclosure quantities: - Four 55 gallon drums of used radiator coolant - One 20,000 gallon gasoline UST - One 15,000 gallon gasoline UST - Three 1000 gallon new oil basement tanks - One 1000 gallon waste oil tank - Five compressed gas cylinders This report serves as notice that this facility has not yet submitted the hazardous material disclosure. The following documents must be electronically submitted immediately: - Business Emergency Plan - Hazardous Materials Chemical Inventory - Site Map The facility is responsible for identifying all hazardous materials, to include hazardous wastes, which are above the disclosure thresholds. If there is a change in the type or amount of chemicals that are maintained on site, please submit [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 03/12/2021
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Please be advised that this facility has an outstanding violation I382, regarding failure to maintain secondary containment cited in this agency's report dated 2/2/21 after reviewing Secondary Containment Testing Report Form for activities conducted on 12/22/20, in which the 87A secondary line UDCs 1 through 18 failed tests. Your business was given 30 days to conduct investigation to determine failures and if necessary, submit plans for repair/replacement to this Agency within 30 days (by 3/2/21) of that report. To date, this agency has not received plans to repair failures or any other documentation that failed components were retested with passing results. Documentation showing that failed components have been repaired and retested or plans to conduct repairs must be submitted to this agency by 3/26/21. Failure to comply may result in the issuance of a Notice of Violation to the facility and/or an Administrative Enforcement Order.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/04/2017
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Marty Schultz of OC Tank Testing performed the monitoring certification, all certifications are current. Emailed inspection report to Ricardo Marquez, manager; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 01/14/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: APSA
Eval Source: CERS

Eval Notes:

On site for a follow up inspection. Employee training provided on 12-11-15. Monthly inspections and log started on 12-6-15. Deleted violations I009 & I258. No violations noted at this time.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 05/30/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Review in CERS, accepted financial responsibility/CFO exp 5/26/2018; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/04/2023
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

On site to conduct a routine small quantity hazardous waste inspection. Ricardo Marquez, Manager, provided consent to inspect. The hazardous waste drums/tanks are properly labeled, dated and stored closed. A perimeter walk was conducted. Municipal dumpster does not appear to contain any hazardous waste. Manifests were available and reviewed. Emergency response information is posted and employees are reported to be trained. No hazardous waste violations were noted on this date. Inspection report emailed to alisoviejocarwash1@gmail.com, and environmental contact brenda@puepkeconsulting.com; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/12/2022
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site for routine Hazardous Materials Business Plan (HMBP) inspection. Ricardo Marquez Manager, provided consent to inspect. Hazardous Materials disclosed in CERS match what is reported on site. - Waste Oil - New Motor Oil - Gear Oil - Transmission Fluid - New CNG Motor Oil - New Coolant - Waste Coolant Per California Health & Safety Code Ch. 6.95, businesses that store and handle hazardous materials at or over reportable quantities (55 gal of a liquid, 500 lbs of a solid, 200 cubic ft of a c; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 01/10/2022
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

This Agency has received and reviewed the Monitoring System Certification Form and the Spill Container Testing Form for testing conducted 12/12/21. Test reports shows passing results for all components tested and is in agreement with on site inspection. Inspection report emailed to alisoviejocarwash1@gmail.com, and environmental contact brenda@puepkeconsulting.com; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 11/18/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST

Eval Source: CERS
Eval Notes:

Monitor cert notification; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/02/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Monitor cert reschedule notification; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/17/2014
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

On site for a routine compliance inspection. Gregoio Vasquez of Vasquez Maintenance Engineering currently performing a UST system monitor certification and secondary containment testing. Current ICC, Veeder-Root, VMI and Franklin Fueling certifications provided. Fueling system consists of two tanks, piping and 10 UDCs. All sumps and UDCs were free of liquid. Sensors were located at the low points of secondary containment. Daily Veeder-Root alarm log reviewed on site. SB 989 testing records kept on site. Testing was due again by 12-6-14 (Testing is currently being performed). Reviewed monthly designated operator (DO) reports. No fuel alarms recorded during the past 12 months. Employee training provided on 6-27-14. Financial responsibility certification was submitted in e submit on 11-12-14. Certification was reviewed and accepted on this date. According to the "hard copy" on site, certification expires on 1-1-15. * Make sure current certification is re [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 04/30/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Reviewed and accepted disclosure in e submit.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/06/2018
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Received and reviewed SB989 testing done on 12/4/2017. 2 UST's, 4 piping runs, 2 piping sumps/2 fill sumps and 10 UDC passed at that time.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 11/01/2017
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Monitor Certification Notification (12/6/17); Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/31/2019
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

This Agency received the monitoring system certification test report, site map, and spill bucket test report for a test conducted 12/23/2019. The following components PASSED testing: - Tank Annular Sensors (2) - STP Sump Sensors (2) - Fill Sump Sensors (2) - UDC Sensors (10) - Fail Safe/Sensor Out - Spill Buckets Visual Test - Line Leak Detectors; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/12/2022
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

On site to conduct a routine Underground Storage Tank (UST) inspection and witness the annual monitoring system certification and spill bucket testing. Ricardo Marquez, Manager, provided consent to inspect. Marty Schwartz (OC Tank Testing) conducted the monitoring system certification. Technician certifications (VR, VMI, and ICC certifications) were verified. The facility has 2 USTs: - 15,000 gallons 87 - 15,000 gallons 91 (each tank contains two STPs and two leak detectors per tank) The syste; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/08/2016
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

Routine inspection conducted this date in regards to underground storage tank, consent to enter, inspect and take photographs was given by –Edgar Deanda, manager Monitoring system certification was conducted at this time. Tester Marty Schwartz, OC Tank Testing performed the monitor cert. Ensure submittal of monitor cert test results within 30 days. Tester provided the following certifications: ICC Tech exp 3/14/2017 Veeder-Root tech b33396 exp 1/12/18 VMI/vaporless exp 6/4/2017 Franklin 3285513701 exp 6/28/2017 Number of UST's -2 Leak detector type -ELLD Sensor types -409 /208/406 UDC type -single wall monitored by Beaudreau 406 The Veeder-Root monitoring panel showed all functions normal. Sensors and sumps in good order this date. The following documents were available for review: CUPA Business Activities form, CUPA Business Owner / Operator Identification form CUPA UST Facility Information form, CUPA UST Tank Information forms, CUPA UST [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/31/2020
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

This Agency received the overfill prevention equipment certification test report for a test conducted 12/22/2020. The following tanks PASSED testing: - 87: Flapper (95%) - 91:Flapper (92%) The overfill prevention components listed in this report match those listed in the most recent CERS submittal.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/31/2020
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency

Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

This Agency received the monitoring system certification test report, site map, and spill bucket test report for a test conducted 12/22/2020. The following components PASSED testing: - Tank Annular Sensors (2) - STP Sump Sensors (2) - Fill Sump Sensors (2) - UDC Sensors (10) - Fail Safe/Sensor Out - Spill Buckets Visual Test - Line Leak Detectors; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/02/2021
Violations Found: Yes
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

I received a copy of Secondary Containment Testing Report Form (3 year SB989) for activities conducted on 12/22/20. All components passed test except for the following: - 87A secondary line - UDCs 1 through 18 Investigation to determine 87A secondary line and UDC failures must be conducted and if necessary, plans for repair/replacement must be submitted to this Agency within 30 days of this report. Also, box (pass or fail) is not checked for 91 fill sump. Incon tape indicates this sump passed test. Please submit revised page to indicate that 91 fill sump passed.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 01/14/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

On site for a follow up inspection. Oily water waste is now stored in a 30 gallon drum. Hazardous material disclosure not needed for this waste.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/17/2014
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HW
Eval Source: CERS
Eval Notes:

Inspected perimeter of facility including the dumpster area. Permission to inspect granted by Ricardo marquez. Hazardous waste properly stored and identified. Documentation for hazardous wast pickup reviewed on site. Hazardous waste emergency response sticker completed and posted on site. No violations noted at this time.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/22/2020
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

An on-site inspection was conducted this date to witness the annual monitoring system certification. Marty Schwartz (OC Tank Testing) conducted the monitoring system certification and provided current Veeder-Root, VMI, and ICC certifications. This facility contains: 2 - USTs (87, 91) NOTE: Each tank contains two STPs and two leak detectors per tank. Monitor system is a Veeder-Root monitor panel and reads all functions normal. Overfill protection provided by fill tube shut-off valve (flapper). Sensors were observed positioned so as to initiate alarms at the earliest point possible. Sensors were re-positioned in a true vertical position upon installation after testing. Alarm history and setup tape reviewed while on site. The following were tested: - Sensors: VR 208: Fill and STP Sumps; VR409: Tank Annulars; Beaudreau 406: UDCs - Sensors, initiated positive shutdown to the turbines when tested in water - "Fail Safe" and "Positive Shutdown" - Spill buckets using [Truncated]; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/06/2020
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: UST
Eval Source: CERS
Eval Notes:

This Agency received the monitoring system certification test report, site map for a COLD START test conducted 1/27/2020. The following components PASSED testing: - Tank Annular Sensors (2) - STP Sump Sensors (2) - Fill Sump Sensors (2) - Fail Safe/Sensor Out - Line Leak Detectors; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 01/26/2016
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Reviewed and accepted disclosure in e submit.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 02/23/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

esubmit and CERS review; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 04/24/2015
Violations Found: No
Eval General Type: Other/Unknown
Eval Type: Other, not routine, done by local agency
Eval Division: Orange County Environmental Health
Eval Program: HMRRP
Eval Source: CERS
Eval Notes:

Reviewed and declined disclosure in e submit. Please address the following regarding the site map: Add location(s) for any emergency response equipment such as absorbent material or spill kits. Add location for the natural gas shut off (if applicable). Resubmit after modifications have been performed.; Note: data in [EVAL Notes] field for some records is truncated from the source.

Eval Date: 12/22/2020
Violations Found: No
Eval General Type: Compliance Evaluation Inspection
Eval Type: Routine done by local agency
Eval Division: Orange County Environmental Health
Eval Program: APSA
Eval Source: CERS
Eval Notes:

On site for an aboveground petroleum storage tank (APST) inspection. A tour of this facility was provided by Brenda Puepke, Facility Consultant. Facility contains: - Used oil and various drums of motor oil (4000 gallons combined) Facility is regulated under the Aboveground Storage Tank Act (APSA). This facility has between 1,320 and 9,999 gallons of regulated petroleum products (Tier 1 facility). Facility has the following: - On-site Spill Prevention Controls and Countermeasures (SPCC) plan prepared and implemented. SPCC last evaluated 7/19/2019 - Periodic checklist is available for tanks (per SPCC inspections are conducted monthly) - Appropriate secondary containment or diversionary structures; Note: data in [EVAL Notes] field for some records is truncated from the source.

Affiliations

Affil Type Desc: UST Property Owner Name
Entity Name: VALCOMP, LLC
Entity Title:
Address: 22952 Pacific Park Dr.
City: Aliso Viejo
State: CA
Country: United States
Zip Code: 92656
Phone: (949) 716-3600

Affil Type Desc: Environmental Contact
Entity Name: BRENDA PUEPKE
Entity Title:
Address: PO Box 80777
City: Rancho Santa Margarita
State: CA
Country:
Zip Code: 92688-0777
Phone:

Affil Type Desc: UST Tank Owner
Entity Name: Aliso Viejo Auto Care, Inc.
Entity Title:
Address: 22952 Pacific Park Dr.
City: Aliso Viejo
State: CA
Country: United States
Zip Code: 92656
Phone: (949) 716-3600

Affil Type Desc: UST Permit Applicant
Entity Name: Raul Valerio
Entity Title: President
Address:
City:
State:
Country:
Zip Code:
Phone: (949) 716-3600

Affil Type Desc: Identification Signer
Entity Name: Carlos Valerio
Entity Title: Owner/Operator
Address:
City:
State:
Country:
Zip Code:
Phone:

Affil Type Desc: Facility Mailing Address
Entity Name: Mailing Address
Entity Title:
Address: 22952 Pacific Park Dr.
City: Aliso Viejo
State: CA
Country:
Zip Code: 92656
Phone:

Affil Type Desc: Legal Owner
Entity Name: Aliso Viejo Auto Care, Inc.
Entity Title:
Address: 22952 Pacific Park Dr.
City: Aliso Viejo
State: CA

Country:	United States
Zip Code:	92656
Phone:	(949) 716-3600
Affil Type Desc:	Property Owner
Entity Name:	Aliso Viejo Auto Care, Inc.
Entity Title:	
Address:	22952 Pacific Park Dr.
City:	Aliso Viejo
State:	CA
Country:	United States
Zip Code:	92656
Phone:	(949) 716-3600
Affil Type Desc:	Parent Corporation
Entity Name:	Aliso Viejo Auto Care, Inc.
Entity Title:	
Address:	
City:	
State:	
Country:	
Zip Code:	
Phone:	
Affil Type Desc:	CUPA District
Entity Name:	Orange County Env Health
Entity Title:	
Address:	1241 East Dyer RoadSuite 120
City:	Santa Ana
State:	CA
Country:	
Zip Code:	92705-5611
Phone:	(714) 433-6406
Affil Type Desc:	Operator
Entity Name:	Aliso Viejo Auto Care, Inc.
Entity Title:	
Address:	
City:	
State:	
Country:	
Zip Code:	
Phone:	(949) 697-4000
Affil Type Desc:	Document Preparer
Entity Name:	Brenda Puepke
Entity Title:	
Address:	
City:	
State:	
Country:	
Zip Code:	
Phone:	
Affil Type Desc:	UST Tank Operator
Entity Name:	Aliso Viejo Auto Care, Inc
Entity Title:	
Address:	22952 Pacific Park Dr.
City:	Aliso Viejo
State:	CA
Country:	United States
Zip Code:	92656
Phone:	(949) 716-3600

Coordinates

Env Int Type Code:	APSA	**Longitude:**	-117.729380
Program ID:	10535851	**Coord Name:**	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Latitude: 33.569960 **Ref Point Type Desc:** Center of a facility or station.

29	7 of9	W	0.18 / 953.50	436.86 / 82	CAR WASH CONCEPTS INC, A CAL CORP 22952 PACIFIC PARK DR ALISO VIEJO CA 92656	EMISSIONS

2016 Toxic Data

Facility ID: 117511
Facility SIC Code: 7542
CERR CODE:
COID: ORA
CO: 30
DISN: SOUTH COAST AQMD
CHAPIS:
TS:
HRA:
CH Index:
AH Index:
Air Basin: SC
District: SC

29	8 of9	W	0.18 / 953.50	436.86 / 82	Aliso Viejo Auto Care, Inc. 22952 PACIFIC PARK DR ALISO VIEJO CA 92656	UST

Facility ID: FA0042604
CERS ID: 10535851
County: Orange
Permitting Agency: Orange County Environmental Health
Site Facility Type: PERMITTED UNDERGROUND STORAGE TANK (UST)
Note: Information related to facilities can be searched on Geo Tracker Website: https://geotracker.waterboards.ca.gov/search
Latitude: 33.56996
Longitude: -117.72938
CalEnviroScrn 4 Pct: 10-15%

Tank Details

Epa Region: 9
No. of Closed UST: 0
No. of Inuse UST:
No. of Oos UST: 0
Owner Type: Non-Government
Tank ID No.: TK-1
Tank Status: Confirmed/Updated Information
Tank Type: Double Wall
Tank Alarms: No
Tank Ball Float: No
Tank Operator Name: Aliso Viejo Auto Care, Inc
Tank Operator Mail Address: 22952 Pacific Park Dr.
Tank Operator Mail City: Aliso Viejo
Tank Operator Mail State: CA
Tank Operator Mail Zip: 92656
Tank Owner Name: Aliso Viejo Auto Care, Inc.
Tank Owner Mailing Address: 22952 Pacific Park Dr.
Tank Owner Mailing City: Aliso Viejo
Tank Owner Mailing State: CA
Tank Owner Mailing Zip: 92656
Tank Capacity Gallons: 20000
Tank Piping Construction: Double Walled
Tank Piping Type: Pressure
Tank Pw Piping Construction: Fiberglass
Tank Sacrificial Anode: No
Tank Closure Date:
Tank Configuration: Stand Alone Tank
Tank Contents: Regular Unleaded
Tank Cp Impr Curr: No
Tank Cp Shutoff: Yes
Tank Installatn Dt: 5/26/1999 12:00:00 AM
Tank No of Compart: 1
Tank Pc Constructn: Fiberglass
Tank Spill Bucket: Yes
Tribal Lands: No

Tank Details

Epa Region: 9
No. of Closed UST: 0
No. of Inuse UST:
No. of Oos UST: 0
Tank Closure Date:
Tank Configuration: Stand Alone Tank
Tank Contents: Premium Unleaded
Tank Cp Impr Curr: No

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Owner Type:	Non-Government	**Tank Cp Shutoff:**	Yes
Tank ID No.:	TK-2	**Tank Installatn Dt:**	5/26/1999 12:00:00 AM
Tank Status:	Confirmed/Updated Information	**Tank No of Compart:**	1
Tank Type:	Double Wall	**Tank Pc Constructn:**	Fiberglass
Tank Alarms:	No	**Tank Spill Bucket:**	Yes
Tank Ball Float:	No	**Tribal Lands:**	No

Tank Operator Name:	Aliso Viejo Auto Care, Inc
Tank Operator Mail Address:	22952 Pacific Park Dr.
Tank Operator Mail City:	Aliso Viejo
Tank Operator Mail State:	CA
Tank Operator Mail Zip:	92656
Tank Owner Name:	Aliso Viejo Auto Care, Inc.
Tank Owner Mailing Address:	22952 Pacific Park Dr.
Tank Owner Mailing City:	Aliso Viejo
Tank Owner Mailing State:	CA
Tank Owner Mailing Zip:	92656
Tank Capacity Gallons:	15000
Tank Piping Construction:	Double Walled
Tank Piping Type:	Pressure
Tank Pw Piping Construction:	Fiberglass
Tank Sacrificial Anode:	No

29	***9 of9***	***W***	***0.18 / 953.50***	***436.86 / 82***	***ALISO VIEJO AUTO CARE INC 22952 PACIFIC PARK DR ALISO VIEJO CA 92656-3389***	***RCRA NON GEN***

EPA Handler ID:	CAL000274878
Gen Status Universe:	No Report
Contact Name:	RICARDO MARQUEZ
Contact Address:	22952 PACIFIC PARK DR , , ALISO VIEJO , CA, 92656 ,
Contact Phone No and Ext:	949-291-4705
Contact Email:	VALERIO@COX.NET
Contact Country:	
County Name:	ORANGE
EPA Region:	09
Land Type:	
Receive Date:	20030924
Location Latitude:	33.569847
Location Longitude:	-117.729293

Violation/Evaluation Summary

Note:	NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility:	No
Onsite Burner Exemption:	No
Furnace Exemption:	No
Underground Injection Activity:	No
Commercial TSD:	No
Used Oil Transporter:	No
Used Oil Transfer Facility:	No
Used Oil Processor:	No
Used Oil Refiner:	No
Used Oil Burner:	No
Used Oil Market Burner:	No
Used Oil Spec Marketer:	No

Hazardous Waste Handler Details

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Sequence No: 1
Receive Date: 20030924
Handler Name: ALISO VIEJO AUTO CARE INC
Source Type: Implementer
Federal Waste Generator Code: N
Generator Code Description: Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind:	Current Owner	**Street No:**	
Type:	Other	**Street 1:**	22952 PACIFIC PARK DR
Name:	ALISO VIEJO AUTO CARE INC	**Street 2:**	
Date Became Current:		**City:**	ALISO VIEJO
Date Ended Current:		**State:**	CA
Phone:	949-697-4000	**Country:**	
Source Type:	Implementer	**Zip Code:**	92656-3389

Owner/Operator Ind:	Current Operator	**Street No:**	
Type:	Other	**Street 1:**	22952 PACIFIC PARK DR
Name:	RICARDO MARQUEZ	**Street 2:**	
Date Became Current:		**City:**	ALISO VIEJO
Date Ended Current:		**State:**	CA
Phone:	949-291-4705	**Country:**	
Source Type:	Implementer	**Zip Code:**	92656

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
30	1 of1	N	0.20 / 1,066.70	353.32 / -2	TJ MAXX 689 26781 ALISO CREEK RD ALISO VIEJO CA 92656	RCRA NON GEN

EPA Handler ID: CAL000383110
Gen Status Universe: No Report
Contact Name: PAUL KANGAS
Contact Address: 770 COCHITUATE RD , 300.1AN , FRAMINGHAM , MA, 01701 ,
Contact Phone No and Ext: 774-308-3651
Contact Email: PAUL_KANGAS@TJX.COM
Contact Country:
County Name: ORANGE
EPA Region: 09
Land Type:
Receive Date: 20130301
Location Latitude: 33.573429
Location Longitude: -117.725328

Violation/Evaluation Summary

Note: NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity: No
Mixed Waste Generator: No
Transporter Activity: No
Transfer Facility: No
Onsite Burner Exemption: No
Furnace Exemption: No
Underground Injection Activity: No
Commercial TSD: No
Used Oil Transporter: No
Used Oil Transfer Facility: No
Used Oil Processor: No
Used Oil Refiner: No
Used Oil Burner: No
Used Oil Market Burner: No
Used Oil Spec Marketer: No

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Hazardous Waste Handler Details

Sequence No:	1
Receive Date:	20130301
Handler Name:	TJ MAXX 689
Source Type:	Implementer
Federal Waste Generator Code:	N
Generator Code Description:	Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street 1:***	770 COCHITUATE RD
Name:	TJ MAXX OF CA LLC	***Street 2:***	
Date Became Current:		***City:***	FRAMINGHAM
Date Ended Current:		***State:***	MA
Phone:	774-308-3651	***Country:***	
Source Type:	Implementer	***Zip Code:***	01701
Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street 1:***	770 COCHITUATE RD
Name:	PAUL KANGAS	***Street 2:***	300.1AN
Date Became Current:		***City:***	FRAMINGHAM
Date Ended Current:		***State:***	MA
Phone:	774-308-3651	***Country:***	
Source Type:	Implementer	***Zip Code:***	01701

31	*1 of1*	***ESE***	***0.20 / 1,067.28***	***265.94 / -89***	***ARLETHA PAPPAS 82 HAWAII DR ALISO VIEJO CA 92656***	***RCRA NON GEN***

EPA Handler ID:	CAC003119897
Gen Status Universe:	No Report
Contact Name:	ARLETHA PAPPAS
Contact Address:	82 HAWAII DR , , ALISO VIEJO , CA, 92656 ,
Contact Phone No and Ext:	714-222-3519
Contact Email:	ARLETHAPAPAS@GMAIL.COM
Contact Country:	
County Name:	ORANGE
EPA Region:	09
Land Type:	
Receive Date:	20210517
Location Latitude:	
Location Longitude:	

Violation/Evaluation Summary

Note:	NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility:	No
Onsite Burner Exemption:	No
Furnace Exemption:	No
Underground Injection Activity:	No
Commercial TSD:	No
Used Oil Transporter:	No
Used Oil Transfer Facility:	No

Used Oil Processor:	No
Used Oil Refiner:	No
Used Oil Burner:	No
Used Oil Market Burner:	No
Used Oil Spec Marketer:	No

Hazardous Waste Handler Details

Sequence No:	1
Receive Date:	20210517
Handler Name:	ARLETHA PAPPAS
Source Type:	Implementer
Federal Waste Generator Code:	N
Generator Code Description:	Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind:	Current Operator	**Street No:**	
Type:	Other	**Street 1:**	82 HAWAII DR
Name:	ARLETHA PAPPAS	**Street 2:**	
Date Became Current:		**City:**	ALISO VIEJO
Date Ended Current:		**State:**	CA
Phone:	714-222-3519	**Country:**	
Source Type:	Implementer	**Zip Code:**	92656
Owner/Operator Ind:	Current Owner	**Street No:**	
Type:	Other	**Street 1:**	82 HAWAII DR
Name:	ARLETHA PAPPAS	**Street 2:**	
Date Became Current:		**City:**	ALISO VIEJO
Date Ended Current:		**State:**	CA
Phone:	714-222-3519	**Country:**	
Source Type:	Implementer	**Zip Code:**	92656

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
32	1 of1	SSW	0.21 / 1,131.86	387.77 / 33	CENTON ELECTRONICS INC 27 JOURNEY STE 100 ALISO VIEJO CA 92656	RCRA NON GEN

EPA Handler ID:	CAL000472377
Gen Status Universe:	No Report
Contact Name:	GARY CLACK
Contact Address:	27 JOURNEY STE 100 , , ALISO VIEJO , CA, 92656 ,
Contact Phone No and Ext:	949-699-2073
Contact Email:	GCLACK@CENTON.COM
Contact Country:	
County Name:	ORANGE
EPA Region:	09
Land Type:	
Receive Date:	20220805
Location Latitude:	
Location Longitude:	

Violation/Evaluation Summary

Note:	NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility:	No
Onsite Burner Exemption:	No

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Furnace Exemption:	No
Underground Injection Activity:	No
Commercial TSD:	No
Used Oil Transporter:	No
Used Oil Transfer Facility:	No
Used Oil Processor:	No
Used Oil Refiner:	No
Used Oil Burner:	No
Used Oil Market Burner:	No
Used Oil Spec Marketer:	No

Hazardous Waste Handler Details

Sequence No:	1
Receive Date:	20220805
Handler Name:	CENTON ELECTRONICS INC
Source Type:	Implementer
Federal Waste Generator Code:	N
Generator Code Description:	Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street 1:***	27 JOURNEY STE 100
Name:	CENTON ELECTRONICS INC	***Street 2:***	
Date Became Current:		***City:***	ALISO VIEJO
Date Ended Current:		***State:***	CA
Phone:	949-855-9111	***Country:***	
Source Type:	Implementer	***Zip Code:***	92656
Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street 1:***	27 JOURNEY STE 100
Name:	GARY CLACK	***Street 2:***	
Date Became Current:		***City:***	ALISO VIEJO
Date Ended Current:		***State:***	CA
Phone:	949-699-2073	***Country:***	
Source Type:	Implementer	***Zip Code:***	92656

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
33	*1 of1*	***SSW***	***0.22 / 1,162.13***	***386.35 / 31***	***AIRCRAFT BEARING CORP*** ***25 JOURNEY*** ***ALISO VIEJO CA 92656***	***RCRA SQG***

EPA Handler ID:	CAR000008409
Gen Status Universe:	Small Quantity Generator
Contact Name:	JACK ODONNELL
Contact Address:	25 JOURNEY , , ALISO VIEJO , CA, 92656 , US
Contact Phone No and Ext:	714-360-0200
Contact Email:	
Contact Country:	US
County Name:	ORANGE
EPA Region:	09
Land Type:	Private
Receive Date:	19960122
Location Latitude:	33.568121
Location Longitude:	-117.728385

Violation/Evaluation Summary

Note:	NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility:	No
Onsite Burner Exemption:	No
Furnace Exemption:	No
Underground Injection Activity:	No
Commercial TSD:	No
Used Oil Transporter:	No
Used Oil Transfer Facility:	No
Used Oil Processor:	No
Used Oil Refiner:	No
Used Oil Burner:	No
Used Oil Market Burner:	No
Used Oil Spec Marketer:	No

Hazardous Waste Handler Details

Sequence No:	1
Receive Date:	19960122
Handler Name:	AIRCRAFT BEARING CORP
Federal Waste Generator Code:	2
Generator Code Description:	Small Quantity Generator
Source Type:	Notification

Owner/Operator Details

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Private	***Street 1:***	306 W SERVICE RD
Name:	BANNER AEROSPACE INC	***Street 2:***	
Date Became Current:		***City:***	WASHINGTON
Date Ended Current:		***State:***	DC
Phone:	703-478-5725	***Country:***	
Source Type:	Notification	***Zip Code:***	20041

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
34	*1 of2*	*N*	*0.23 / 1,213.57*	*352.79 / -2*	***AARON BROTHERS #0214 26775 ALISO CREEK RD ALISO VIEJO CA 92656***	***RCRA NON GEN***

EPA Handler ID:	CAL000407511
Gen Status Universe:	No Report
Contact Name:	RYAN DRAPER
Contact Address:	8000 BENT BRANCH DR , , IRVING , TX, 75063 ,
Contact Phone No and Ext:	972-409-5786
Contact Email:	DRAPERR@MICHAELS.COM
Contact Country:	
County Name:	ORANGE
EPA Region:	09
Land Type:	
Receive Date:	20150605
Location Latitude:	33.57378
Location Longitude:	-117.725382

Violation/Evaluation Summary

Note:	NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Transfer Facility:	No
Onsite Burner Exemption:	No
Furnace Exemption:	No
Underground Injection Activity:	No
Commercial TSD:	No
Used Oil Transporter:	No
Used Oil Transfer Facility:	No
Used Oil Processor:	No
Used Oil Refiner:	No
Used Oil Burner:	No
Used Oil Market Burner:	No
Used Oil Spec Marketer:	No

Hazardous Waste Handler Details

Sequence No:	1
Receive Date:	20150605
Handler Name:	AARON BROTHERS #0214
Source Type:	Implementer
Federal Waste Generator Code:	N
Generator Code Description:	Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street 1:***	8000 BENT BRANCH DR
Name:	RYAN DRAPER	***Street 2:***	
Date Became Current:		***City:***	IRVING
Date Ended Current:		***State:***	TX
Phone:	972-409-5786	***Country:***	
Source Type:	Implementer	***Zip Code:***	75063

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street 1:***	8000 BENT BRANCH DR
Name:	MICHAELS INC	***Street 2:***	
Date Became Current:		***City:***	IRVING
Date Ended Current:		***State:***	TX
Phone:	972-409-5786	***Country:***	
Source Type:	Implementer	***Zip Code:***	75063

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
34	*2 of2*	*N*	*0.23 / 1,213.57*	*352.79 / -2*	***DOLLAR TREE #08702 26775 ALISO CREEK RD ALISO VIEJO CA 92656***	***RCRA NON GEN***

EPA Handler ID:	CAL000459916
Gen Status Universe:	No Report
Contact Name:	JOSE FIGUEROA
Contact Address:	500 VOLVO PKWY , , CHESAPEAKE , VA, 23320 ,
Contact Phone No and Ext:	661-808-4202
Contact Email:	JFIGUE79@DOLLARTREE.COM
Contact Country:	
County Name:	ORANGE
EPA Region:	09
Land Type:	
Receive Date:	20210204
Location Latitude:	
Location Longitude:	

Violation/Evaluation Summary

Note:	NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Handler Summary

Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility:	No
Onsite Burner Exemption:	No
Furnace Exemption:	No
Underground Injection Activity:	No
Commercial TSD:	No
Used Oil Transporter:	No
Used Oil Transfer Facility:	No
Used Oil Processor:	No
Used Oil Refiner:	No
Used Oil Burner:	No
Used Oil Market Burner:	No
Used Oil Spec Marketer:	No

Hazardous Waste Handler Details

Sequence No:	1
Receive Date:	20210204
Handler Name:	DOLLAR TREE #08702
Source Type:	Implementer
Federal Waste Generator Code:	N
Generator Code Description:	Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street 1:***	500 VOLVO PKWY
Name:	JOSE FIGUEROA	***Street 2:***	
Date Became Current:		***City:***	CHESAPEAKE
Date Ended Current:		***State:***	VA
Phone:	661-808-4202	***Country:***	
Source Type:	Implementer	***Zip Code:***	23320
Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street 1:***	500 VOLVO PKWY
Name:	DOLLAR TREE STORES, INC	***Street 2:***	
Date Became Current:		***City:***	CHESAPEAKE
Date Ended Current:		***State:***	VA
Phone:	757-321-5000	***Country:***	
Source Type:	Implementer	***Zip Code:***	23320

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
35	1 of1	N	0.24 / 1,287.64	352.31 / -3	O'REILLY AUTO ENTERPRISES LLC 26771 ALISO CREEK RD ALISO VIEJO CA 92656	RCRA NON GEN

EPA Handler ID:	CAL000475783
Gen Status Universe:	No Report
Contact Name:	JAMES DAVIS
Contact Address:	233 S PATTERSON AVE , , SPRINGFIELD , MO, 65802 ,
Contact Phone No and Ext:	417-730-1147
Contact Email:	EHS_TEAM@OREILLYAUTO.COM
Contact Country:	
County Name:	ORANGE
EPA Region:	09
Land Type:	
Receive Date:	20230117
Location Latitude:	
Location Longitude:	

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Violation/Evaluation Summary

Note: NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility:	No
Onsite Burner Exemption:	No
Furnace Exemption:	No
Underground Injection Activity:	No
Commercial TSD:	No
Used Oil Transporter:	No
Used Oil Transfer Facility:	No
Used Oil Processor:	No
Used Oil Refiner:	No
Used Oil Burner:	No
Used Oil Market Burner:	No
Used Oil Spec Marketer:	No

Hazardous Waste Handler Details

Sequence No:	1
Receive Date:	20230117
Handler Name:	O'REILLY AUTO ENTERPRISES LLC
Source Type:	Implementer
Federal Waste Generator Code:	N
Generator Code Description:	Not a Generator, Verified

Owner/Operator Details

Owner/Operator Ind:	Current Owner	***Street No:***	
Type:	Other	***Street 1:***	233 S PATTERSON AVE
Name:	O'REILLY AUTO ENTERPRISES LLC	***Street 2:***	
Date Became Current:		***City:***	SPRINGFIELD
Date Ended Current:		***State:***	MO
Phone:	417-520-4589	***Country:***	
Source Type:	Implementer	***Zip Code:***	65802
Owner/Operator Ind:	Current Operator	***Street No:***	
Type:	Other	***Street 1:***	233 S PATTERSON AVE
Name:	JAMES DAVIS	***Street 2:***	
Date Became Current:		***City:***	SPRINGFIELD
Date Ended Current:		***State:***	MO
Phone:	417-730-1147	***Country:***	
Source Type:	Implementer	***Zip Code:***	65802

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
36	1 of1	S	0.27 / 1,435.85	397.02 / 42	CENTON ELECTRONICS INC 27412 ALISO VIEJO PKWY ALISO VIEJO CA 92656	RCRA TSD

EPA Handler ID:	CAL000357390
Gen Status Universe:	No Report
Contact Name:	DAMIAN CARRIZALES
Contact Address:	27412 ALISO VIEJO PKWY , , ALISO VIEJO , CA, 92656 ,
Contact Phone No and Ext:	949-699-2004
Contact Email:	DCARRIZALES@CENTON.COM
Contact Country:	
Land Type:	
County Name:	ORANGE
EPA Region:	09

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Receive Date: 20100930
Location Latitude: 33.564514
Location Longitude: -117.725675

Violation/Evaluation Summary

Note: NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Importer Activity: No
Mixed Waste Generator: No
Transporter Activity: No
Transfer Facility: No
Onsite Burner Exemption: No
Smelting, Melting and Refining: No
Underground Injection Control: No
Commercial TSD: No
Used Oil Transporter: No
Used Oil Transfer Facility: No
Used Oil Processor: No
Used Oil Refiner: No
Used Oil Burner: No
Used Oil Market Burner: No
Used Oil Spec Marketer: No

Hazardous Waste Handler Details

Sequence No: 1
Receive Date: 20100930
Handler Name: CENTON ELECTRONICS INC
Federal Waste Generator Code: N
Generator Code Description: Not a Generator, Verified
Source Type: Implementer
TSD Activity: Y

Owner/Operator Details

Owner/Operator Ind: Current Owner
Type: Other
Name: CENTON ELECTRONICS INC
Date Became Current:
Date Ended Current:
Phone: 949-699-2004
Source Type: Implementer
Street No:
Street 1: 27412 ALISO VIEJO PKWY
Street 2:
City: ALISO VIEJO
State: CA
Country:
Zip Code: 92656-0000

Owner/Operator Ind: Current Operator
Type: Other
Name: DAMIAN CARRIZALES
Date Became Current:
Date Ended Current:
Phone: 949-699-2004
Source Type: Implementer
Street No:
Street 1: 27412 ALISO VIEJO PKWY
Street 2:
City: ALISO VIEJO
State: CA
Country:
Zip Code: 92656

37	1 of1	S	0.31 / 1,613.74	381.15 / 26	CENTON ELECTRONICS INC ALISO VIEJO CA	PFAS IND

Status: Active
Fac Indian Cntry Flg: No
Fac Derived Huc: 18070301
Fac Derived Wbd: 180703010301
Fac Fips Code: 06059
Compliance Status: No Violation Identified
EPA Programs: RCRA
Federal Facility: No

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Fac Derived Cd113:	48	**Federal Agency:**	-
Fac Derived Cb2010:	060590626393000	**Fac Snc Flg:**	No
Fac Informal Count:	0	**AIR Flag:**	No
Last Informal Action:	-	**NPDES Flag:**	No
Formal Action Count:	0	**SDWIS Flag:**	No
Last Formal Action:	-	**RCRAFlag:**	Yes
Fac Total Penalties:	0	**TRI Flag:**	No
Fac Penalty Count:	-	**GHG Flag:**	No
Date Last Penalty:	-	**TRI IDs:**	-
Last Penalty Amt:	-	**TRI Releases Trnsfrs:**	-
Fac Qtrs With Nc:	0	**TRI on Site Releases:**	-
Programs With Snc:	0	**TRI off Site Trnsfrs:**	-
Fac Percent Minority:	33.122	**TRI Reporter:**	-
Fac Pop Den:	3895.49	**Fac Imp Water Flg:**	-
Count:	1	**Fac Major Flag:**	-
Fac County:	ORANGE	**Fac Active Flag:**	Yes
State Other :		**Fac Inspection Count:**	0
Region:	09	**Date Last Inspection:**	-
Latitude:	33.564514	**Days Last Inspection:**	-
Longitude:	-117.725675		

Fac Derived Tribes:	-
AIR IDs:	-
CAA Permit Types:	-
CAA NAICS:	-
CAA SICS:	-
NPDES IDs:	-
CWA Permit Types:	-
CWA NAICS:	-
CWA SICS:	-
RCRA IDs:	CAL000357390
RCRA Permit Types:	Other
RCRA NAICS:	334412
SDWA IDs:	-
SDWA System Types:	-
SDWA Compliance Status:	-
SDWA Snc Flag:	No
Fac Collection Meth:	GDT-ADDRESS MATCHING (GEOCODING)
EJSCREEN Flag Us:	No
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-117.725675,%22y%22:33.564514,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
ECHO Facility Report:	https://echo.epa.gov/detailed-facility-report?fid=110070589767

Industry: Electronics Industry

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
38	1 of1	N	0.41 / 2,184.17	328.61 / -26	MICROVENTION INC ALISO VIEJO CA	PFAS IND

Status:	Active	**Fac Fips Code:**	06059
Fac Indian Cntry Flg:	No	**Compliance Status:**	No Violation Identified
Fac Derived Huc:	18070301	**EPA Programs:**	RCRA
Fac Derived Wbd:	180703010301	**Federal Facility:**	No
Fac Derived Cd113:	48	**Federal Agency:**	-
Fac Derived Cb2010:	060590626371006	**Fac Snc Flg:**	No
Fac Informal Count:	0	**AIR Flag:**	No
Last Informal Action:	-	**NPDES Flag:**	No
Formal Action Count:	0	**SDWIS Flag:**	No
Last Formal Action:	-	**RCRAFlag:**	Yes
Fac Total Penalties:	0	**TRI Flag:**	No
Fac Penalty Count:	-	**GHG Flag:**	No
Date Last Penalty:	-	**TRI IDs:**	-
Last Penalty Amt:	-	**TRI Releases Trnsfrs:**	-
Fac Qtrs With Nc:	1	**TRI on Site Releases:**	-
Programs With Snc:	0	**TRI off Site Trnsfrs:**	-
Fac Percent Minority:	34.108	**TRI Reporter:**	-
Fac Pop Den:	4192.35	**Fac Imp Water Flg:**	-
Count:	1	**Fac Major Flag:**	-

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Fac County:	ORANGE	**Fac Active Flag:**	Yes
State Other :		**Fac Inspection Count:**	5
Region:	09	**Date Last Inspection:**	5/25/2022
Latitude:	33.576518	**Days Last Inspection:**	850
Longitude:	-117.723629		
Fac Derived Tribes:	-		
AIR IDs:	-		
CAA Permit Types:	-		
CAA NAICS:	-		
CAA SICS:	-		
NPDES IDs:	-		
CWA Permit Types:	-		
CWA NAICS:	-		
CWA SICS:	-		
RCRA IDs:	CAR000273185		
RCRA Permit Types:	LQG		
RCRA NAICS:	339112		
SDWA IDs:	-		
SDWA System Types:	-		
SDWA Compliance Status:	-		
SDWA Snc Flag:	No		
Fac Collection Meth:	GDT-ADDRESS MATCHING (GEOCODING)		
EJSCREEN Flag Us:	No		
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-117.723629,%22y%22:33.576518,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1		
ECHO Facility Report:	https://echo.epa.gov/detailed-facility-report?fid=110070119302		
Industry:	Metal Machinery Mfg		

39	1 of4	N	0.42 / 2,240.85	338.07 / -17	KEITH MOORE ALISO VIEJO CA	PFAS IND

Status:	Inactive	**Fac Fips Code:**	06059
Fac Indian Cntry Flg:	No	**Compliance Status:**	No Violation Identified
Fac Derived Huc:	-	**EPA Programs:**	RCRA
Fac Derived Wbd:	-	**Federal Facility:**	No
Fac Derived Cd113:	-	**Federal Agency:**	-
Fac Derived Cb2010:	-	**Fac Snc Flg:**	No
Fac Informal Count:	0	**AIR Flag:**	No
Last Informal Action:	-	**NPDES Flag:**	No
Formal Action Count:	0	**SDWIS Flag:**	No
Last Formal Action:	-	**RCRAFlag:**	Yes
Fac Total Penalties:	0	**TRI Flag:**	No
Fac Penalty Count:	-	**GHG Flag:**	No
Date Last Penalty:	-	**TRI IDs:**	-
Last Penalty Amt:	-	**TRI Releases Trnsfrs:**	-
Fac Qtrs With Nc:	0	**TRI on Site Releases:**	-
Programs With Snc:	0	**TRI off Site Trnsfrs:**	-
Fac Percent Minority:	-	**TRI Reporter:**	-
Fac Pop Den:	-	**Fac Imp Water Flg:**	-
Count:	1	**Fac Major Flag:**	-
Fac County:	ORANGE	**Fac Active Flag:**	-
State Other :		**Fac Inspection Count:**	0
Region:	09	**Date Last Inspection:**	-
Latitude:	33.576697	**Days Last Inspection:**	-
Longitude:	-117.724429		
Fac Derived Tribes:	-		
AIR IDs:	-		
CAA Permit Types:	-		
CAA NAICS:	-		
CAA SICS:	-		
NPDES IDs:	-		
CWA Permit Types:	-		
CWA NAICS:	-		
CWA SICS:	-		
RCRA IDs:	CAC003197155		

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

RCRA Permit Types: Other
RCRA NAICS: 324191
SDWA IDs: -
SDWA System Types: -
SDWA Compliance Status: -
SDWA Snc Flag: No
Fac Collection Meth: Zip Code Centroid
EJSCREEN Flag Us: No
EJSCREEN Report: https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-117.724429,%22y%22:33.576697,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
ECHO Facility Report: https://echo.epa.gov/detailed-facility-report?fid=110071353651

Industry: Petroleum

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
39	2 of4	N	0.42 / 2,240.85	338.07 / -17	FIRSTELEMENT FUEL ALISO VIEJO CA	PFAS IND

Status:	Inactive	**Fac Fips Code:**	06059
Fac Indian Cntry Flg:	No	**Compliance Status:**	No Violation Identified
Fac Derived Huc:	-	**EPA Programs:**	RCRA
Fac Derived Wbd:	-	**Federal Facility:**	No
Fac Derived Cd113:	-	**Federal Agency:**	-
Fac Derived Cb2010:	-	**Fac Snc Flg:**	No
Fac Informal Count:	0	**AIR Flag:**	No
Last Informal Action:	-	**NPDES Flag:**	No
Formal Action Count:	0	**SDWIS Flag:**	No
Last Formal Action:	-	**RCRAFlag:**	Yes
Fac Total Penalties:	0	**TRI Flag:**	No
Fac Penalty Count:	-	**GHG Flag:**	No
Date Last Penalty:	-	**TRI IDs:**	-
Last Penalty Amt:	-	**TRI Releases Trnsfrs:**	-
Fac Qtrs With Nc:	0	**TRI on Site Releases:**	-
Programs With Snc:	0	**TRI off Site Trnsfrs:**	-
Fac Percent Minority:	-	**TRI Reporter:**	-
Fac Pop Den:	-	**Fac Imp Water Flg:**	-
Count:	1	**Fac Major Flag:**	-
Fac County:	ORANGE	**Fac Active Flag:**	-
State Other :		**Fac Inspection Count:**	0
Region:	09	**Date Last Inspection:**	-
Latitude:	33.576697	**Days Last Inspection:**	-
Longitude:	-117.724429		

Fac Derived Tribes: -
AIR IDs: -
CAA Permit Types: -
CAA NAICS: -
CAA SICS: -
NPDES IDs: -
CWA Permit Types: -
CWA NAICS: -
CWA SICS: -
RCRA IDs: CAL000458539
RCRA Permit Types: Other
RCRA NAICS: 325120
SDWA IDs: -
SDWA System Types: -
SDWA Compliance Status: -
SDWA Snc Flag: No
Fac Collection Meth: Zip Code Centroid
EJSCREEN Flag Us: No
EJSCREEN Report: https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-117.724429,%22y%22:33.576697,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
ECHO Facility Report: https://echo.epa.gov/detailed-facility-report?fid=110070902773

Industry: Industrial Gas

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
39	3 of4	N	0.42 / 2,240.85	338.07 / -17	CENTON ELECTRONICS INC ALISO VIEJO CA	PFAS IND

Status:	Inactive	**Fac Fips Code:**	06059
Fac Indian Cntry Flg:	No	**Compliance Status:**	No Violation Identified
Fac Derived Huc:	-	**EPA Programs:**	RCRA
Fac Derived Wbd:	-	**Federal Facility:**	No
Fac Derived Cd113:	-	**Federal Agency:**	-
Fac Derived Cb2010:	-	**Fac Snc Flg:**	No
Fac Informal Count:	0	**AIR Flag:**	No
Last Informal Action:	-	**NPDES Flag:**	No
Formal Action Count:	0	**SDWIS Flag:**	No
Last Formal Action:	-	**RCRAFlag:**	Yes
Fac Total Penalties:	0	**TRI Flag:**	No
Fac Penalty Count:	-	**GHG Flag:**	No
Date Last Penalty:	-	**TRI IDs:**	-
Last Penalty Amt:	-	**TRI Releases Trnsfrs:**	-
Fac Qtrs With Nc:	0	**TRI on Site Releases:**	-
Programs With Snc:	0	**TRI off Site Trnsfrs:**	-
Fac Percent Minority:	-	**TRI Reporter:**	-
Fac Pop Den:	-	**Fac Imp Water Flg:**	-
Count:	1	**Fac Major Flag:**	-
Fac County:	ORANGE	**Fac Active Flag:**	-
State Other :		**Fac Inspection Count:**	0
Region:	09	**Date Last Inspection:**	-
Latitude:	33.576697	**Days Last Inspection:**	-
Longitude:	-117.724429		

Fac Derived Tribes:	-
AIR IDs:	-
CAA Permit Types:	-
CAA NAICS:	-
CAA SICS:	-
NPDES IDs:	-
CWA Permit Types:	-
CWA NAICS:	-
CWA SICS:	-
RCRA IDs:	CAL000472377
RCRA Permit Types:	Other
RCRA NAICS:	334413
SDWA IDs:	-
SDWA System Types:	-
SDWA Compliance Status:	-
SDWA Snc Flag:	No
Fac Collection Meth:	Zip Code Centroid
EJSCREEN Flag Us:	No
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-117.724429,%22y%22:33.576697,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
ECHO Facility Report:	https://echo.epa.gov/detailed-facility-report?fid=110071318406

Industry: Electronics Industry

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
39	4 of4	N	0.42 / 2,240.85	338.07 / -17	W G HOLT INC DBA HOLT INTEGRATED CIRCUITS ALISO VIEJO CA	PFAS IND

Status:	Inactive	**Fac Fips Code:**	06059
Fac Indian Cntry Flg:	No	**Compliance Status:**	No Violation Identified
Fac Derived Huc:	-	**EPA Programs:**	RCRA
Fac Derived Wbd:	-	**Federal Facility:**	No
Fac Derived Cd113:	-	**Federal Agency:**	-
Fac Derived Cb2010:	-	**Fac Snc Flg:**	No
Fac Informal Count:	0	**AIR Flag:**	No
Last Informal Action:	-	**NPDES Flag:**	No
Formal Action Count:	0	**SDWIS Flag:**	No

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Last Formal Action:	-	**RCRAFlag:**	Yes
Fac Total Penalties:	0	**TRI Flag:**	No
Fac Penalty Count:	-	**GHG Flag:**	No
Date Last Penalty:	-	**TRI IDs:**	-
Last Penalty Amt:	-	**TRI Releases Trnsfrs:**	-
Fac Qtrs With Nc:	0	**TRI on Site Releases:**	-
Programs With Snc:	0	**TRI off Site Trnsfrs:**	-
Fac Percent Minority:	-	**TRI Reporter:**	-
Fac Pop Den:	-	**Fac Imp Water Flg:**	-
Count:	1	**Fac Major Flag:**	-
Fac County:	ORANGE	**Fac Active Flag:**	-
State Other :		**Fac Inspection Count:**	0
Region:	09	**Date Last Inspection:**	-
Latitude:	33.576697	**Days Last Inspection:**	-
Longitude:	-117.724429		

Fac Derived Tribes:	-
AIR IDs:	-
CAA Permit Types:	-
CAA NAICS:	-
CAA SICS:	-
NPDES IDs:	-
CWA Permit Types:	-
CWA NAICS:	-
CWA SICS:	-
RCRA IDs:	CAL000479896
RCRA Permit Types:	Other
RCRA NAICS:	334413
SDWA IDs:	-
SDWA System Types:	-
SDWA Compliance Status:	-
SDWA Snc Flag:	No
Fac Collection Meth:	Zip Code Centroid
EJSCREEN Flag Us:	No
EJSCREEN Report:	https://ejscreen.epa.gov/mapper/mobile/EJSCREEN_mobile.aspx?geometry=%7B%22x%22:-117.724429,%22y%22:33.576697,%22spatialReference%22:%7B%22wkid%22:4326%7D%7D&unit=9035&areatype=&areaid=&basemap=streets&distance=1
ECHO Facility Report:	https://echo.epa.gov/detailed-facility-report?fid=110071454776
Industry:	Electronics Industry

40	1 of1	N	0.48 / 2,544.62	357.70 / 3	**HOAG HEALTH CENTER ALISO VIEJO** **26671 ALISO CREEK ROAD SUITE 106** **ALISO VIEJO CA 92656**	RCRA TSD

EPA Handler ID:	CAL000444029
Gen Status Universe:	No Report
Contact Name:	ALLISON TAYLOR
Contact Address:	ONE HOAG DRIVE , , NEWPORT BEACH , CA, 92658 ,
Contact Phone No and Ext:	949-764-1470
Contact Email:	ALLISON.TAYLOR@HOAG.ORG
Contact Country:	
Land Type:	
County Name:	ORANGE
EPA Region:	09
Receive Date:	20190304
Location Latitude:	33.577461
Location Longitude:	-117.725895

Violation/Evaluation Summary

Note: NO RECORDS: As of Apr 2024, there are no Compliance Monitoring and Enforcement (violation) records associated with this facility (EPA ID).

Handler Summary

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB

Importer Activity:	No
Mixed Waste Generator:	No
Transporter Activity:	No
Transfer Facility:	No
Onsite Burner Exemption:	No
Smelting, Melting and Refining:	No
Underground Injection Control:	No
Commercial TSD:	No
Used Oil Transporter:	No
Used Oil Transfer Facility:	No
Used Oil Processor:	No
Used Oil Refiner:	No
Used Oil Burner:	No
Used Oil Market Burner:	No
Used Oil Spec Marketer:	No

Hazardous Waste Handler Details

Sequence No:	1
Receive Date:	20190304
Handler Name:	HOAG HEALTH CENTER ALISO VIEJO
Federal Waste Generator Code:	N
Generator Code Description:	Not a Generator, Verified
Source Type:	Implementer
TSD Activity:	Y

Owner/Operator Details

Owner/Operator Ind:	Current Owner	**Street No:**	
Type:	Other	**Street 1:**	ONE HOAG DRIVE
Name:	HOAG MEMORIAL HOSPITAL PRESBYTERIAN	**Street 2:**	
Date Became Current:		**City:**	NEWPORT BEACH
Date Ended Current:		**State:**	CA
Phone:	949-764-4624	**Country:**	
Source Type:	Implementer	**Zip Code:**	92658
Owner/Operator Ind:	Current Operator	**Street No:**	
Type:	Other	**Street 1:**	ONE HOAG DRIVE
Name:	ALLISON TAYLOR	**Street 2:**	
Date Became Current:		**City:**	NEWPORT BEACH
Date Ended Current:		**State:**	CA
Phone:	949-764-1470	**Country:**	
Source Type:	Implementer	**Zip Code:**	92658

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
41	1 of1	NW	0.49 / 2,567.27	478.94 / 124	QLogic Corporation 26600 ALISO VIEJO PKWY ALISO VIEJO CA 92656	DELISTED HAZ

Siteid:	358797
Latitude:	33.575230
Longitude:	-117.729752
Original Source:	CHAZ
Record Date:	04-JAN-2018

Unplottable Summary

Total: 0 Unplottable sites

DB	Company Name/Site Name	Address	City	Zip	ERIS ID

No unplottable records were found that may be relevant for the search criteria.

Unplottable Report

No unplottable records were found that may be relevant for the search criteria.

Appendix: Database Descriptions

Environmental Risk Information Services (ERIS) can search the following databases. The extent of historical information varies with each database and current information is determined by what is publicly available to ERIS at the time of update. ERIS updates databases as set out in ASTM Standard E1527-13 and E1527-21, Section 8.1.8 Sources of Standard Source Information:

"Government information from nongovernmental sources may be considered current if the source updates the information at least every 90 days, or, for information that is updated less frequently than quarterly by the government agency, within 90 days of the date the government agency makes the information available to the public."

Standard Environmental Record Sources

Federal

National Priority List: NPL

The U.S. Environmental Protection Agency (EPA)'s National Priorities List (NPL) includes the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under the Superfund program, based primarily on the score a site receives from EPA's Hazard Ranking System. A site must be on the NPL to receive money from the Superfund Trust Fund for remedial action. This data includes NPL sites represented as polygons, where available, that can be sourced from the EPA NPL Superfund Site Boundaries dataset, refreshed by the Shared Enterprise Geodata and Services (SEGS). These site boundaries represent the footprint of a whole site, the sum of all the Operable Units (OUs) and the current understanding of the full extent of contamination; for Federal Facility sites, the total site polygon may be the Facility boundary. As site investigation and remediation progress, OUs may be added, modified or refined. Data provided by external parties is not independently verified by EPA. This boundary data is made available to the public strictly for informational purposes. Where there is no polygon boundary data available for a given site, the site is represented as a point.

Government Publication Date: Sep 25, 2024

National Priority List - Proposed: PROPOSED NPL

Sites proposed by the U.S. Environmental Protection Agency (EPA), the state agency, or concerned citizens for addition to the National Priorities List (NPL) due to contamination by hazardous waste and identified by the EPA as a candidate for cleanup because it poses a risk to human health and/or the environment. Sites represented as polygons, where available, can be sourced from the EPA NPL Superfund Site Boundaries dataset, refreshed by the Shared Enterprise Geodata and Services (SEGS). These site boundaries represent the footprint of a whole site, the sum of all the Operable Units (OUs) and the current understanding of the full extent of contamination; for Federal Facility sites, the total site polygon may be the Facility boundary. Data provided by external parties is not independently verified by EPA. This boundary data is made available to the public strictly for informational purposes. Where there is no polygon boundary data available for a given site, the site is represented as a point.

Government Publication Date: Sep 25, 2024

Deleted NPL: DELETED NPL

Sites deleted from the U.S. Environmental Protection Agency (EPA)'s National Priorities List (NPL). The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate. Sites represented as polygons, where available, can be sourced from the EPA NPL Superfund Site Boundaries dataset, refreshed by the Shared Enterprise Geodata and Services (SEGS). These site boundaries represent the footprint of a whole site, the sum of all the Operable Units (OUs) and the current understanding of the full extent of contamination; for Federal Facility sites, the total site polygon may be the Facility boundary. Data provided by external parties is not independently verified by EPA. This boundary data is made available to the public strictly for informational purposes. Where there is no polygon boundary data available for a given site, the site is represented as a point.

Government Publication Date: Sep 25, 2024

SEMS List 8R Active Site Inventory: SEMS

The U.S. Environmental Protection Agency's (EPA) Superfund Program has deployed the Superfund Enterprise Management System (SEMS), which integrates multiple legacy systems into a comprehensive tracking and reporting tool. This inventory contains active sites evaluated by the Superfund program that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL. The Active Site Inventory Report displays site and location information at active SEMS sites. An active site is one at which site assessment, removal, remedial, enforcement, cost recovery, or oversight activities are being planned or conducted. This data includes SEMS sites from the List 8R Active file as well as applicable sites from the EPA's Facility Registry Service map tool.

Government Publication Date: Jul 24, 2024

Inventory of Open Dumps, June 1985: ODI

The Resource Conservation and Recovery Act (RCRA) provides for publication of an inventory of open dumps. The Act defines "open dumps" as facilities which do not comply with EPA's "Criteria for Classification of Solid Waste Disposal Facilities and Practices" (40 CFR 257).

Government Publication Date: Jun 1985

SEMS List 8R Archive Sites: SEMS ARCHIVE

The U.S. Environmental Protection Agency's (EPA) Superfund Enterprise Management System (SEMS) Archived Site Inventory displays site and location information at sites archived from SEMS. An archived site is one at which EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program at this time. This data includes sites from the List 8R Archived site file.

Government Publication Date: Jul 24, 2024

Comprehensive Environmental Response, Compensation and Liability Information System - CERCLIS: CERCLIS

Superfund is a program administered by the United States Environmental Protection Agency (EPA) to locate, investigate, and clean up the worst hazardous waste sites throughout the United States. CERCLIS is a database of potential and confirmed hazardous waste sites at which the EPA Superfund program has some involvement. It contains sites that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL. The EPA administers the Superfund program in cooperation with individual states and tribal governments; this database is made available by the EPA.

Government Publication Date: Oct 25, 2013

EPA Report on the Status of Open Dumps on Indian Lands: IODI

Public Law 103-399, The Indian Lands Open Dump Cleanup Act of 1994, enacted October 22, 1994, identified congressional concerns that solid waste open dump sites located on American Indian or Alaska Native (AI/AN) lands threaten the health and safety of residents of those lands and contiguous areas. The purpose of the Act is to identify the location of open dumps on Indian lands, assess the relative health and environment hazards posed by those sites, and provide financial and technical assistance to Indian tribal governments to close such dumps in compliance with Federal standards and regulations or standards promulgated by Indian Tribal governments or Alaska Native entities.

Government Publication Date: Dec 31, 1998

CERCLIS - No Further Remedial Action Planned: CERCLIS NFRAP

An archived site is one at which EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program at this time. The Archive designation means that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL). This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Government Publication Date: Oct 25, 2013

CERCLIS Liens: CERCLIS LIENS

A Federal Superfund lien exists at any property where EPA has incurred Superfund costs to address contamination ("Superfund site") and has provided notice of liability to the property owner. A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. This database is made available by the United States Environmental Protection Agency (EPA). This database was provided by the United States Environmental Protection Agency (EPA). Refer to SEMS LIEN as the current data source for Superfund Liens.

Government Publication Date: Jan 30, 2014

RCRA CORRACTS-Corrective Action: RCRA CORRACTS

RCRA Info is the U.S. Environmental Protection Agency's (EPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. At these sites, the Corrective Action Program ensures that cleanups occur. EPA and state regulators work with facilities and communities to design remedies based on the contamination, geology, and anticipated use unique to each site.

Government Publication Date: Apr 8, 2024

RCRA non-CORRACTS TSD Facilities: RCRA TSD

RCRA Info is the U.S. Environmental Protection Agency's (EPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. This database includes Non-Corrective Action sites that have indicated engagement in the treatment, storage, or disposal of hazardous waste which requires a RCRA hazardous waste permit.

Government Publication Date: Apr 8, 2024

RCRA Generator List: RCRA LQG

RCRA Info is the U.S. Environmental Protection Agency's (EPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Large Quantity Generators (LQGs) generate 1,000 kilograms per month or more of hazardous waste or more than one kilogram per month of acutely hazardous waste.

Government Publication Date: Apr 8, 2024

RCRA Small Quantity Generators List: RCRA SQG

RCRA Info is the U.S. Environmental Protection Agency's (EPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Small Quantity Generators (SQGs) generate more than 100 kilograms, but less than 1,000 kilograms, of hazardous waste per month.

Government Publication Date: Apr 8, 2024

RCRA Very Small Quantity Generators List: RCRA VSQG

RCRA Info is the U.S. Environmental Protection Agency's (EPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Very Small Quantity Generators (VSQG) generate 100 kilograms or less per month of hazardous waste, or one kilogram or less per month of acutely hazardous waste. Additionally, VSQG may not accumulate more than 1,000 kilograms of hazardous waste at any time.

Government Publication Date: Apr 8, 2024

RCRA Non-Generators: RCRA NON GEN

RCRA Info is the U.S. Environmental Protection Agency's (EPA) comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Non-Generators do not presently generate hazardous waste.

Government Publication Date: Apr 8, 2024

RCRA Sites with Controls: RCRA CONTROLS

List of Resource Conservation and Recovery Act (RCRA) facilities with institutional controls in place. RCRA gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances.

Government Publication Date: Apr 8, 2024

Federal Engineering Controls-ECs: FED ENG

List of Engineering controls (ECs) made availabe by the United States Environmental Protection Agency (EPA). ECs encompass a variety of engineered and constructed physical barriers (e.g., soil capping, sub-surface venting systems, mitigation barriers, fences) to contain and/or prevent exposure to contamination on a property. The EC listing includes remedy component data from Superfund decision documents for applicable sites on the final or deleted on the National Priorities List (NPL); and sites with a Superfund Alternative Approach (SAA) Agreement in place. The only sites included that are not on the NPL; proposed for NPL; or removed from proposed NPL, are those with an SAA Agreement in place.

Government Publication Date: Sep 25, 2024

Federal Institutional Controls- ICs: FED INST

List of Institutional controls (ICs) made available by the United States Environmental Protection Agency (EPA). ICs are non-engineered instruments, such as administrative and legal controls, that help minimize the potential for human exposure to contamination and/or protect the integrity of the remedy. Although it is EPA's expectation that treatment or engineering controls will be used to address principal threat wastes and that groundwater will be returned to its beneficial use whenever practicable, ICs play an important role in site remedies because they reduce exposure to contamination by limiting land or resource use and guide human behavior at a site. The IC listing includes remedy component data from Superfund decision documents for applicable sites on the final or deleted on the National Priorities List (NPL); and sites with a Superfund Alternative Approach (SAA) Agreement in place. The only sites included that are not on the NPL; proposed for NPL; or removed from proposed NPL, are those with an SAA Agreement in place.

Government Publication Date: Sep 25, 2024

Land Use Control Information System: LUCIS

The LUCIS database is maintained by the U.S. Department of the Navy and contains information for former Base Realignment and Closure (BRAC) properties across the United States.

Government Publication Date: Sep 1, 2006

Institutional Control Boundaries at NPL sites: NPL IC

These boundaries of Institutional Control areas at sites on the U.S. Environmental Protection Agency's (EPA) National Priorities List (NPL), or as Proposed or Deleted, are sourced from the EPA NPL Superfund Site Boundaries dataset, refreshed by the Shared Enterprise Geodata and Services (SEGS). The EPA's NPL includes the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under the Superfund program. Institutional controls are non-engineered instruments such as administrative and legal controls that help minimize the potential for human exposure to contamination and/or protect the integrity of the remedy. Data provided by external parties is not independently verified by EPA. This boundary data is made available to the public strictly for informational purposes.

Government Publication Date: Sep 25, 2024

Emergency Response Notification System: ERNS 1982 TO 1986

Database of oil and hazardous substances spill reports controlled by the National Response Center. The primary function of the National Response Center is to serve as the sole national point of contact for reporting oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories.

Government Publication Date: 1982-1986

Emergency Response Notification System: ERNS 1987 TO 1989

Database of oil and hazardous substances spill reports controlled by the National Response Center. The primary function of the National Response Center is to serve as the sole national point of contact for reporting oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories.

Government Publication Date: 1987-1989

Emergency Response Notification System: ERNS

Database of oil and hazardous substances spill reports made available by the United States Coast Guard National Response Center (NRC). The NRC fields initial reports for pollution and railroad incidents and forwards that information to appropriate federal/state agencies for response. These data contain initial incident data that has not been validated or investigated by a federal/state response agency.

Government Publication Date: Oct 15, 2024

The Assessment, Cleanup and Redevelopment Exchange System (ACRES) Brownfield Database: FED BROWNFIELDS

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties protects the environment, reduces blight, and takes development pressures off greenspaces and working lands. This data is provided by the United States Environmental Protection Agency (EPA) and includes Brownfield sites from the Cleanups in My Community (CIMC) web application.

Government Publication Date: Feb 7, 2024

FEMA Underground Storage Tank Listing: FEMA UST

The Federal Emergency Management Agency (FEMA) of the Department of Homeland Security maintains a list of FEMA owned underground storage tanks.

Government Publication Date: Dec 31, 2017

Facility Response Plan: FRP

This listing contains facilities that have submitted Facility Response Plans (FRPs) to the U.S. Environmental Protection Agency (EPA). Facilities that could reasonably be expected to cause "substantial harm" to the environment by discharging oil into or on navigable waters are required to prepare and submit FRPs. Harm is determined based on total oil storage capacity, secondary containment and age of tanks, oil transfer activities, history of discharges, proximity to a public drinking water intake or sensitive environments. This listing includes FRP facilities from an applicable EPA FOIA file and Homeland Infrastructure Foundation-Level Data (HIFLD) data file.

Government Publication Date: Jan 9, 2024

Delisted Facility Response Plans: DELISTED FRP

Facilities that once appeared in - and have since been removed from - the list of facilities that have submitted Facility Response Plans (FRP) to EPA. Facilities that could reasonably be expected to cause "substantial harm" to the environment by discharging oil into or on navigable waters are required to prepare and submit Facility Response Plans (FRPs). Harm is determined based on total oil storage capacity, secondary containment and age of tanks, oil transfer activities, history of discharges, proximity to a public drinking water intake or sensitive environments.

Government Publication Date: Jan 9, 2024

Historical Gas Stations: HIST GAS STATIONS

This historic directory of service stations is provided by the Cities Service Company. The directory includes Cities Service filling stations that were located throughout the United States in 1930.

Government Publication Date: Jul 1, 1930

Petroleum Refineries: REFN

This list of petroleum refineries is sourced from the U.S. Energy Information Administration (EIA), Refinery Capacity Report. The listing includes operating and idle petroleum refineries (including new refineries under construction) and refineries shut down during the previous year. The geographic area the report covers is the 50 States, the District of Columbia, Puerto Rico, the U.S. Virgin Islands, Guam, and other U.S. possessions. Per the EIA, the facility location data represents the approximate location based on research of publicly available information from sources such as Federal agencies, company websites, and satellite images on public websites.

Government Publication Date: Jun 6, 2024

Petroleum Product and Crude Oil Rail Terminals: BULK TERMINAL

A list of petroleum product and crude oil rail terminals from the U.S. Energy Information Administration (EIA), as well as petroleum terminals sourced from the Federal Communications Commission Data hosted by the Homeland Infrastructure Foundation-Level Database. Data includes operable bulk petroleum product terminals with a total bulk shell storage capacity of 50,000 barrels or more, and/or the ability to receive volumes from tanker, barge, or pipeline; also rail terminals handling the loading and unloading of crude oil with activity between 2017 and 2018. EIA petroleum product terminal data comes from the EIA-815 Bulk Terminal and Blender Report, which includes working, shell in operation, and shell idle for several major product groupings.

Government Publication Date: Jun 6, 2024

LIEN on Property: SEMS LIEN

The U.S. Environmental Protection Agency's (EPA) Superfund Enterprise Management System (SEMS) provides Lien details on applicable properties, such as the Superfund lien on property activity, the lien property information, and the parties associated with the lien.

Government Publication Date: Jul 24, 2024

Superfund Decision Documents: SUPERFUND ROD

This database contains a list of decision documents for Superfund sites. Decision documents serve to provide the reasoning for the choice of (or) changes to a Superfund Site cleanup plan. The decision documents include completed Records of Decision (ROD), ROD Amendments, Explanations of Significant Differences (ESD) for active and archived sites stored in the Superfund Enterprise Management System (SEMS), along with other associated memos and files. This information is maintained and made available by the U.S. Environmental Protection Agency.

Government Publication Date: Oct 24, 2024

Formerly Utilized Sites Remedial Action Program: DOE FUSRAP

The U.S. Department of Energy (DOE) established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from the Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations. The DOE Office of Legacy Management (LM) established long-term surveillance and maintenance (LTS&M) requirements for remediated FUSRAP sites. DOE evaluates the final site conditions of a remediated site on the basis of risk for different future uses. DOE then confirms that LTS&M requirements will maintain protectiveness.

Government Publication Date: Mar 4, 2017

State

State Response Sites: RESPONSE

A list of identified confirmed release sites where the Department of Toxic Substances Control (DTSC) is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk. This database serves a purpose similar to that of the federal NPL, functioning as a state-level counterpart for prioritizing cleanup efforts at hazardous substance release sites.

Government Publication Date: Sep 25, 2024

EnviroStor Database: ENVIROSTOR

The EnviroStor Data Management System is made available by the Department of Toxic Substances Control (DTSC). Includes Corrective Action sites, Tiered Permit sites, Historical Sites and Evaluation/Investigation sites. This database serves a purpose similar to that of the federal Superfund Enterprise Management System (SEMS), functioning as a state-level counterpart for tracking potential hazardous substance release sites.

Government Publication Date: Sep 25, 2024

Delisted State Response Sites: DELISTED ENVS

Sites removed from the list of State Response Sites made available by the EnviroStor Data Management System, Department of Toxic Substances Control (DTSC).

Government Publication Date: Sep 25, 2024

Solid Waste Information System (SWIS): SWF/LF

The Solid Waste Information System (SWIS) database made available by the Department of Resources Recycling and Recovery (CalRecycle) contains information on solid waste facilities, operations, and disposal sites throughout the State of California. The types of facilities found in this database include landfills, transfer stations, material recovery facilities, composting sites, transformation facilities, waste tire sites, and closed disposal sites.

Government Publication Date: Oct 26, 2024

Solid Waste Disposal Sites with Waste Constituents Above Hazardous Waste Levels: SWRCB SWF

This is a list of solid waste disposal sites identified by California State Water Resources Control Board with waste constituents above hazardous waste levels outside the waste management unit.

Government Publication Date: Sep 20, 2006

Waste Management Unit Database: WMUD

The Waste Management Unit Database System tracks and inventories waste management units. CCR Title 27 contains criteria stating that Waste Management Units are classified according to their ability to contain wastes. Containment shall be determined by geology, hydrology, topography, climatology, and other factors relating to the ability of the Unit to protect water quality. Water Code Section 13273.1 requires that operators submit a water quality solid waste assessment test (SWAT) report to address leak status. The WMUDS was last updated by the State Water Resources control board in 2000.

Government Publication Date: Jan 1, 2000

EnviroStor Hazardous Waste Facilities: HWP

A list of hazardous waste facilities including permitted, post-closure and historical facilities found in the Department of Toxic Substances Control (DTSC) EnviroStor database.

Government Publication Date: Sep 25, 2024

Sites Listed in the Solid Waste Assessment Test (SWAT) Program Report: SWAT

In a 1993 Memorandum of Understanding, the State Water Resources Control Board (SWRCB) agreed to submit a comprehensive report on the Solid Waste Assessment Test (SWAT) Program to the California Integrated Waste Management Board (CIWMB). This report summarizes the work completed to date on the SWAT Program, and addresses both the impacts that leakage from solid waste disposal sites (SWDS) may have upon waters of the State and the actions taken to address such leakage.

Government Publication Date: Dec 31, 1995

Construction and Demolition Debris Recyclers: C&D DEBRIS RECY

This listing of Construction and Demolition Debris Recyclers is maintained by the California Intergrated Waste Management Board-common C&D materials include lumber, drywall, metals, masonry (brick, concrete, etc.), carpet, plastic, pipe, rocks, dirt, paper, cardboard, or green waste related to land development.

Government Publication Date: Jun 20, 2018

Recycling Centers: RECYCLING

This list of Certified Recycling Centers that are operating under the state of California's Beverage Container Recycling Program is maintained by the California Department of Resources Recycling and Recovery.

Government Publication Date: Oct 5, 2024

Listing of Certified Processors: PROCESSORS

This list of Certified Processors that are operating under the state of California's Beverage Container Recycling Program is maintained by the California Department of Resources Recycling and Recovery.

Government Publication Date: Oct 4, 2024

Listing of Certified Dropoff, Collection, and Community Service Programs: CONTAINER RECY

This list of Certified Dropoff, Collection, and Community Service Programs (non-buyback) operating under the state of California's Beverage Container Recycling Program is maintained by the California Department of Resources Recycling and Recovery.

Government Publication Date: Oct 5, 2024

Land Disposal Sites: LDS

Land Disposal Sites in GeoTracker, the State Water Resources Control Board (SWRCB)'s data management system. The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management units. Waste management units include waste piles, surface impoundments, and landfills.

Government Publication Date: Jul 4, 2024

Leaking Underground Fuel Tank Reports: LUST

List of Leaking Underground Storage Tanks within the Cleanup Sites data in GeoTracker database. GeoTracker is the State Water Resources Control Board's (SWRCB) data management system for managing sites that impact groundwater, especially those that require groundwater cleanup (Underground Storage Tanks, Department of Defense and Site Cleanup Program) as well as permitted facilities such as operating Underground Storage Tanks. The Leak Prevention Program that overlooks LUST sites is the SWRCB in California's Environmental Protection Agency.

Government Publication Date: Jul 4, 2024

Delisted Leaking Storage Tanks: DELISTED LST

List of Leaking Underground Storage Tanks (LUST) cleanup sites removed from GeoTracker, the State Water Resources Control Board (SWRCB)'s database system, as well as sites removed from the SWRCB's list of UST Case closures.

Government Publication Date: Oct 26, 2024

Permitted Underground Storage Tank (UST) in GeoTracker: UST

List of Permitted Underground Storage Tank (UST) sites made available by the State Water Resources Control Board (SWRCB) in California's Environmental Protection Agency (EPA).

Government Publication Date: Nov 17, 2024

Proposed Closure of Underground Storage Tank Cases: UST CLOSURE

This listing includes Proposed Closure of Underground Storage Tank (UST) Cases which are being considered for closure by either the State Water Resources Control Board at a Future Board Meeting or the Executive Director that have been posted for a 60-day public comment period, and Closure of UST Cases with Closure Denials and Approved Orders. The lists are provided by the California Water Boards.

Government Publication Date: Oct 26, 2024

Historical Hazardous Substance Storage Information Database: HHSS

The Historical Hazardous Substance Storage database contains information collected in the 1980s from facilities that stored hazardous substances. The information was originally collected on paper forms, was later transferred to microfiche, and recently indexed as a searchable database. When using this database, please be aware that it is based upon self-reported information submitted by facilities which has not been independently verified. It is unlikely that every facility responded to the survey and the database should not be expected to be a complete inventory of all facilities that were operating at that time. This database is maintained by the California State Water Resources Control Board's (SWRCB) Geotracker.

Government Publication Date: Aug 27, 2015

Statewide Environmental Evaluation and Planning System: UST SWEEPS

The Statewide Environmental Evaluation and Planning System (SWEEPS) is a historical listing of active and inactive underground storage tanks made available by the California State Water Resources Control Board (SWRCB).

Government Publication Date: Oct 1, 1994

Aboveground Storage Tanks: AST

A statewide list from 2009 of aboveground storage tanks (ASTs) made available by the Cal FIRE Office of the State Fire Marshal (OSFM). This list is no longer maintained or updated by the Cal FIRE OSFM.

Government Publication Date: Aug 31, 2009

SWRCB Historical Aboveground Storage Tanks: AST SWRCB

A list of aboveground storage tanks made available by the California State Water Resources Control Board (SWRCB). Effective January 1, 2008, the Certified Unified Program Agencies (CUPAs) are vested with the responsibility and authority to implement the Aboveground Petroleum Storage Act (APSA).

Government Publication Date: Dec 1, 2007

Oil and Gas Facility Tanks: TANK OIL GAS

Locations of oil and gas tanks that fall under the jurisdiction of the Geologic Energy Management Division of the California Department of Conservation (CalGEM) (CCR 1760). CalGEM was formerly the Division of Oil, Gas, and Geothermal Resources (DOGGR).

Government Publication Date: Sep 13, 2024

Delisted Storage Tanks: DELISTED TNK

This database contains a list of storage tank sites that were removed by the State Water Resources Control Board (SWRCB) in California's Environmental Protection Agency (EPA) and the Cal FIRE Office of State Fire Marshal (OSFM).

Government Publication Date: Nov 17, 2024

California Environmental Reporting System (CERS) Tanks: CERS TANK

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the Aboveground Petroleum Storage and Underground Storage Tank regulatory programs. The CalEPA oversees the statewide implementation of the Unified Program which applies regulatory standards to protect Californians from hazardous waste and materials.

Government Publication Date: Oct 28, 2024

Delisted California Environmental Reporting System (CERS) Tanks: DELISTED CTNK

This database contains a list of Aboveground Petroleum Storage and Underground Storage Tank sites that were removed from in the California Environmental Protection Agency (CalEPA) Regulated Site Portal.

Government Publication Date: Oct 28, 2024

Historical Hazardous Substance Storage Container Information - Facility Summary: HIST TANK

The State Water Resources Control Board maintained the Hazardous Substance Storage Containers listing and inventory in th 1980s. This facility summary lists historic tank sites where the following container types were present: farm motor vehicle fuel tanks; waste tanks; sumps; pits, ponds, lagoons, and others; and all other product tanks. This set, published in May 1988, lists facility and owner information, as well as the number of containers. This data is historic and will not be updated.

Government Publication Date: May 27, 1988

Site Mitigation and Brownfields Reuse Program Facility Sites with Land Use Restrictions: LUR

The Department of Toxic Substances Control (DTSC) Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents land use restrictions that are active. Some sites have multiple land use restrictions.

Government Publication Date: Sep 25, 2024

CALSITES Database: CALSITES

This historical database was maintained by the Department of Toxic Substance Control (DTSC) for more than a decade. CALSITES contains information on Brownfield properties with confirmed or potential hazardous contamination. In 2006, DTSC introduced EnviroStor as the latest Brownfields site database.

Government Publication Date: May 1, 2004

Hazardous Waste Management Program Facility Sites with Deed / Land Use Restrictions: HLUR

The Department of Toxic Substances Control (DTSC) Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Government Publication Date: Feb 18, 2021

Deed Restrictions and Land Use Restrictions: DEED

List of Deed Restrictions, Land Use Restrictions and Covenants in GeoTracker made available by the State Water Resources Control Board (SWRCB) in California's Environmental Protection Agency. A deed restriction (land use covenant) may be required to facilitate the remediation of past environmental contamination and to protect human health and the environment by reducing the risk of exposure to residual hazardous materials.

Government Publication Date: Jul 4, 2024

Voluntary Cleanup Program: VCP

List of sites in the Voluntary Cleanup Program made available by the Department of Toxic Substances and Control (DTSC). The Voluntary Cleanup Program was designed to respond to lower priority sites. Under the Voluntary Cleanup Program, DTSC enters site-specific agreements with project proponents for DTSC oversight of site assessment, investigation, and/or removal or remediation activities, and the project proponents agree to pay DTSC's reasonable costs for those services.

Government Publication Date: Sep 25, 2024

GeoTracker Cleanup Program Sites: CLEANUP SITES

A list of Cleanup Program sites in the state of California made available by The State Water Resources Control Board (SWRCB) of the California Environmental Protection Agency (EPA). SWRCB tracks leaking underground storage tank cleanups as well as other water board cleanups.

Government Publication Date: Jul 4, 2024

Delisted Cleanup Program Sites: DELISTED CLEANUP

A list of Cleanup Program sites which were once included - and have since been removed from - the list of Cleanup Program Sites in GeoTracker. GeoTracker is the State Water Resource Control Boards' data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater.

Government Publication Date: Jul 4, 2024

Delisted County Records: DELISTED COUNTY

Records removed from county or CUPA databases. Records may be removed from the county lists made available by the respective county departments because they are inactive, or because they have been deemed to be below reportable thresholds.

Government Publication Date: Oct 28, 2024

Tribal

Leaking Underground Storage Tanks on Tribal/Indian Lands: INDIAN LUST

This list of leaking underground storage tanks (LUSTs) on Tribal/Indian Lands in Region 9, which includes California, is made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: May 7, 2024

Underground Storage Tanks on Tribal/Indian Lands: INDIAN UST

This list of underground storage tanks (USTs) on Tribal/Indian Lands in Region 9, which includes California, is made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: May 7, 2024

Delisted Tribal Leaking Storage Tanks: DELISTED INDIAN LST

Leaking Underground Storage Tank (LUST) facilities which once appeared on - and have since been removed from - the Regional Tribal/Indian LUST lists made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: May 7, 2024

Delisted Tribal Underground Storage Tanks: DELISTED INDIAN UST

Underground Storage Tank (UST) facilities which once appeared on - and have since been removed from - the Regional Tribal/Indian UST lists made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: May 7, 2024

County

Orange County - Industrial Cleanup Program Cases Listing: ICP ORANGE

Orange County Health Care Agency's Environmental Health Division has an Industrial Cleanup (IC) program which oversees the voluntary cleanup of contaminated property. This is a list of cases (by city) which the IC program has overseen in the past, or is currently overseeing.

Government Publication Date: May 15, 2023

Orange County - LOP Lead Cases List: LOP ORANGE

The Local Oversight Program of the County of Orange provides regulatory cleanup oversight for cleanup of leaking underground storage tanks (USTs). This dataset is provided by the Orange County Health Care Agency.

Government Publication Date: May 15, 2023

Orange County - Non-Petroleum Underground Storage Tank Cases: NPUT ORANGE

This list of open and closed non-petroleum underground storage tank cases is maintained by the Orange County Health Care Agency.

Government Publication Date: Sep 13, 2024

Orange County - Underground Storage Tanks Listing: UST ORANGE

A list of registered Underground Storage Tank (UST) sites in Orange County. This list is made available by Orange County Health Care Agency (OCHCA), Environmental Health Division which oversees the underground storage tank inspection program in most of the cities of Orange County, with the exception of Anaheim, Fullerton, and Orange.

Government Publication Date: May 15, 2023

Orange County - Aboveground Petroleum Storage Tank Listing: AST ORANGE

A list of Aboveground Petroleum Storage Tank (APST) facilities inspected by Orange County Certified Unified Program Agency (CUPA) Under the Aboveground Petroleum Storage Act (APSA). This list is made available by the Environmental Health Division of Orange County Health Care Agency.

Government Publication Date: May 15, 2023

Orange County - Anaheim City UST Cleanup Cases: UST CLP ANAHEIM

A list of UST Cleanup Cases in the City of Anaheim in Orange County. As part of its Groundwater Protection Program, the City of Anaheim managed the UST Cleanup Oversight Program from April 1991 to June 2014. This list is published by the City of Anaheim Underground Storage Tank Cleanup Program.

Government Publication Date: May 26, 2015

Orange County - Anaheim City UST List: UST ANAHEIM

A list of Underground Storage Tanks in Anaheim City, Orange County. This list is made available by Anaheim Fire & Rescue Department.

Government Publication Date: Oct 9, 2024

Orange County - Anaheim City AST List: AST ANAHEIM

List of Aboveground Storage Tanks (ASTs) in Anaheim City, Orange County made available by Anaheim Fire & Rescue.

Government Publication Date: Oct 9, 2024

Additional Environmental Record Sources

Federal

PFAS Greenhouse Gas Emissions Data: PFAS GHG

The U.S. Environmental Protection Agency's Greenhouse Gas Reporting Program (GHGRP) collects Greenhouse Gas (GHG) data from large emitting facilities (25,000 metric tons of carbon dioxide equivalent (CO2e) per year), and suppliers of fossil fuels and industrial gases that results in GHG emissions when used. Includes GHG emissions data for facilities that emit or have emitted since 2010 chemicals identified in EPA's CompTox Chemicals Dashboard list of PFAS without explicit structures and list of PFAS structures by DSSTox. PFAS emissions data has been identified for facilities engaged in the following industrial processes: Aluminum Production (GHGRP Subpart F), HCFC-22 Production and HFC-23 Destruction (Subpart O), Electronics Manufacturing (Subpart I), Fluorinated Gas Production (Subpart L), Magnesium Production (Subpart T), Electrical Transmission and Distribution Equipment Use (Subpart DD), and Manufacture of Electric Transmission and Distribution Equipment (Subpart SS). Over time, other industrial processes with required GHGRP reporting may include PFAS emissions data and the list of reportable gases may change over time.

Government Publication Date: Aug 5, 2024

On-Scene Coordinator Response Sites: OSC RESPONSE

This list of On-Scene Coordinator (OSC) Response Sites is provided by the U.S. Environmental Protection Agency (EPA). OSCs are the federal officials responsible for monitoring or directing responses to all oil spills and hazardous substance releases reported to the federal government. OSCs coordinate all federal efforts with, and provide support and information to local, state, and regional response communities. An OSC is an agent of either EPA or the U.S. Coast Guard (USCG), depending on where the incident occurs. EPA's OSCs have primary responsibility for spills and releases to inland areas and waters. USCG OSCs have responsibility for coastal waters and the Great Lakes. In general, an OSC has the following key responsibilities during and after a response: Assessment, Monitoring, Response Assistance, and Evaluation.

Government Publication Date: Apr 4, 2024

Facility Registry Service/Facility Index: FINDS/FRS

The Facility Registry Service (FRS) is a centrally managed database that identifies facilities, sites, or places subject to environmental regulations or of environmental interest. FRS creates high-quality, accurate, and authoritative facility identification records through rigorous verification and management procedures that incorporate information from program national systems, state master facility records, and data collected from EPA's Central Data Exchange registrations and data management personnel. This list is made available by the U.S. Environmental Protection Agency (EPA).

Government Publication Date: Aug 1, 2024

Toxics Release Inventory (TRI) Program: TRIS

The U.S. Environmental Protection Agency's Toxics Release Inventory (TRI) is a database containing data on disposal or other releases of toxic chemicals from U.S. facilities and information about how facilities manage those chemicals through recycling, energy recovery, and treatment. There are currently 770 individually listed chemicals and 33 chemical categories covered by the TRI Program. Facilities that manufacture, process or otherwise use these chemicals in amounts above established levels must submit annual reporting forms for each chemical. Note that the TRI chemical list does not include all toxic chemicals used in the U.S. One of TRI's primary purposes is to inform communities about toxic chemical releases to the environment. This database includes TRI Reporting Data for calendar years 1987 through 2021 and Preliminary Data for 2022.

Government Publication Date: Sep 20, 2023

PFOA/PFOS Contaminated Sites: PFAS NPL

This list of Superfund Sites with Per- and Polyfluoroalkyl Substances (PFAS) detections is made available by the U.S. Environmental Protection Agency (EPA) in their PFAS Analytic Tools data, previously the list was obtained by EPA FOIA requests. EPA's Office of Land and Emergency Management and EPA Regional Offices maintain what is known about site investigations, contamination, and remedial actions under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) where PFAS is present in the environment. Limitations: Detections of PFAS at National Priorities List (NPL) sites do not mean that people are at risk from PFAS, are exposed to PFAS, or that the site is the source of the PFAS. The information in the Superfund NPL and Superfund Alternative Agreement (SAA) PFAS detection site list is years old and may not be accurate today. Site information such as site name, site ID, and location has been confirmed for accuracy; however, PFAS-related information such as media sampled, drinking water being above the health advisory, or mitigation efforts has not been verified. For Federal Facilities data, the other Federal agencies (OFA) are the lead agency for their data and provided them to EPA.

Government Publication Date: Sep 18, 2024

Federal Agency Locations with Known or Suspected PFAS Detections: PFAS FED SITES

List of Federal agency locations with known or suspected detections of Per- and Polyfluoroalkyl Substances (PFAS), made available by the U.S. Environmental Protection Agency (EPA) in their PFAS Analytic Tools data. EPA outlines that these data are gathered from several federal entities, such as the Federal Superfund program, Department of Defense (DOD), National Aeronautics and Space Administration, Department of Transportation, and Department of Energy. The dates this data was extracted for the PFAS Analytic Tools range from 2022 to 2024. Sites on this list do not necessarily reflect the source/s of PFAS contamination and detections do not indicate level of risk or human exposure at the site. Agricultural notifications in this data are limited to DOD sites only. At this time, the EPA is aware that this list is not comprehensive of all Federal agencies.

Government Publication Date: Jul 22, 2024

SSEHRI PFAS Contamination Sites: PFAS SSEHRI

This PFAS Contamination Site Tracker database is compiled by the PFAS Project Lab, part of the Social Science Environmental Health Research Institute (SSEHRI) at Northeastern University. According to the SSEHRI, the database records qualitative and quantitative data from each known site of PFAS contamination, including timeline of discovery, sources, levels, health impacts, community response, and government response. The goal of this database is to compile information and support public understanding of the rapidly unfolding issue of PFAS contamination. All data presented was extracted from government websites, news articles, or publicly available documents. Locations for the Known PFAS Contamination Sites are sourced from the PFAS Sites and Community Resources Map by the PFAS-REACH team, credited to PFAS Project Lab, Silent Spring Institute, and PFAS Exchange. Disclaimer: The source conveys the data undergoes regular updates as new information becomes available, some sites may be missing and/or contain information that is incorrect or outdated, as well as their information represents all contamination sites SSEHRI is aware of, not all possible contamination sites. This data is not intended to be used for legal purposes. Access the following source link for the most current information: https://pfasproject.com/pfas-sites-and-community-resources/

Government Publication Date: Jun 27, 2024

National Response Center PFAS Spills: PFAS ERNS

This Per- and Poly-Fluoroalkyl Substances (PFAS) Spills dataset is made available via the U.S. Environmental Protection Agency's (EPA) PFAS Analytic Tools. The National Response Center (NRC), operated by the U.S. Coast Guard, is the designated federal point of contact for reporting all oil, chemical, and other discharges into the environment, for the United States and its territories. This dataset contains NRC spill information from 1990 to the present that is restricted to records associated with PFAS and PFAS-containing materials. Incidents are filtered to include only records with a "Material Involved" or "Incident Description" related to Aqueous Film Forming Foam (AFFF). The keywords used to filter the data included "AFFF," "Fire Fighting Foam," "Aqueous Film Forming Foam," "Fire Suppressant Foam, "PFAS," "PERFL," "PFOA," "PFOS," and "Genx." Limitations: The data from the NRC website contains initial incident data that has not been validated or investigated by a federal/state response agency. Keyword searches may misidentify some incident reports that do not contain PFAS. This dataset should also not be considered to be exhaustive of all PFAS spills/release incidents.

Government Publication Date: Sep 23, 2024

PFAS NPDES Discharge Monitoring: PFAS NPDES

This list of National Pollutant Discharge Elimination System (NPDES) permitted facilities with required monitoring for Per- and Polyfluoroalkyl (PFAS) Substances is made available via the U.S. Environmental Protection Agency (EPA)'s PFAS Analytic Tools. Any point-source wastewater discharger to waters of the United States must have a NPDES permit, which defines a set of parameters for pollutants and monitoring to ensure that the discharge does not degrade water quality or impair human health. This list includes NPDES permitted facilities associated with permits that monitor for Per- and Polyfluoroalkyl Substances (PFAS), limited to the years 2007 - present. EPA further advises the following regarding these data: currently, fewer than half of states have required PFAS monitoring for at least one of their permittees, and fewer states have established PFAS effluent limits for permittees. For states that may have required monitoring, some reporting and data transfer issues may exist on a state-by-state basis.

Government Publication Date: Sep 30, 2024

Perfluorinated Alkyl Substances (PFAS) from Toxic Release Inventory: PFAS TRI

List of Toxics Release Inventory (TRI) facilities at which the reported chemical is a per- or polyfluoroalkyl (PFAS) substance included in the U.S. Environmental Protection Agency's (EPA) consolidated PFAS Master List of PFAS Substances. Encompasses Toxics Release Inventory records included in the EPA PFAS Analytic Tools. The EPA's TRI database currently tracks information on disposal or releases of 770 individually listed toxic chemicals and 33 chemical categories from thousands of U.S. facilities and details about how facilities manage those chemicals through recycling, energy recovery, and treatment. This listing includes TRI Reporting Data for calendar years 1987 through 2021 and Preliminary Data for 2022.

Government Publication Date: Sep 20, 2023

PFAS Water Quality Portal Sampling Data: PFAS WATER

This Per- and Poly-Fluoroalkyl Substances (PFAS) Environmental Media Sampling Data is made available via the U.S. Environmental Protection Agency's (EPA) PFAS Analytic Tools. The Water Quality Portal (WQP), as a cooperative service sponsored by the United States Geological Survey, the EPA, and the National Water Quality Monitoring Council, is part of a modernized repository storing ambient sampling data for all environmental media and tissue samples. A wide range of federal, state, tribal and local governments, academic and non-governmental organizations, and individuals submit project details and sampling results to this public repository. Limitations: EPA did not carry out the sampling or testing of a majority of the data in the WQP PFAS dataset. EPA can only speak to the accuracy and completeness of the data from projects like the National Aquatic Resource Surveys for which EPA is the data owner/organization. Data may exist within the file on Quality Assurance Project Plans (QAPPs) and the approving agency of the QAPP, if a QAPP is entered.

Government Publication Date: Jul 22, 2024

PFAS TSCA Manufacture and Import Facilities: PFAS TSCA

The U.S. Environmental Protection Agency (EPA) issued the Chemical Data Reporting (CDR) Rule under the Toxic Substances Control Act (TSCA) and requires chemical manufacturers and facilities that manufacture or import chemical substances to report data to EPA. This list is specific only to TSCA Manufacture and Import Facilities with reported per- and poly-fluoroalkyl (PFAS) substances. Data file is sourced from EPA's PFAS Analytic Tools TSCA dataset which includes CDR/Inventory Update Reporting data from 1998 up to 2020. Disclaimer: This data file includes production and importation data for chemicals identified in EPA's CompTox Chemicals Dashboard list of PFAS without explicit structures and list of PFAS structures in DSSTox. Note that some regulations have specific chemical structure requirements that define PFAS differently than the lists in EPA's CompTox Chemicals Dashboard. Reporting information on manufactured or imported chemical substance amounts should not be compared between facilities, as some companies claim Chemical Data Reporting Rule data fields for PFAS information as Confidential Business Information.

Government Publication Date: Jan 5, 2023

PFAS Waste Transfers from RCRA e-Manifest : PFAS E-MANIFEST

This Per- and Poly-Fluoroalkyl Substances (PFAS) Waste Transfers dataset is made available via the U.S. Environmental Protection Agency's (EPA) PFAS Analytic Tools. Every shipment of hazardous waste in the U.S. must be accompanied by a shipment manifest, which is a critical component of the cradle-to-grave tracking of wastes mandated by the Resource Conservation and Recovery Act (RCRA). According to the EPA, currently no Federal Waste Code exists for any PFAS compounds. To work around the lack of PFAS waste codes in the RCRA database, EPA developed the PFAS Transfers dataset by mining e-Manifest records containing at least one of these common PFAS keywords: • PFAS • PFOA • PFOS • PERFL • AFFF • GENX • GEN-X (plus the Vermont state-specific waste codes). Limitations: Amount or concentration of PFAS being transferred cannot be determined from the manifest information. Keyword searches may misidentify some manifest records that do not contain PFAS. This dataset should also not be considered to be exhaustive of all PFAS waste transfers.

Government Publication Date: Sep 22, 2024

PFAS Industry Sectors: PFAS IND

This Per- and Poly-Fluoroalkyl Substances (PFAS) Industry Sectors dataset is made available via the U.S. Environmental Protection Agency's (EPA) PFAS Analytic Tools. The EPA developed the dataset from various sources that show which industries may be handling PFAS including: EPA's Enforcement and Compliance History Online (ECHO) records restricted to potential PFAS-handling industry sectors; ECHO records for Fire Training Sites identified where fire-fighting foam may have been used in training exercises; and 14 CFR Part 139 Airports compiled from historic and current records from the FAA Airport Data and Information Portal. Since July 2006, all certificated Part 139 Airports are required to have fire-fighting foam onsite that meet certain military specifications, which to date have been fluorinated (Aqueous Film Forming Foam). Limitations: Inclusion in this dataset does not indicate that PFAS are being manufactured, processed, used, or released by the facility. Listed facilities potentially handle PFAS based on their industrial profile, but are unconfirmed by the EPA. Keyword searches in ECHO for Fire Training sites may misidentify some facilities and should not be considered to be an exhaustive list of fire training facilities in the U.S.

Government Publication Date: Sep 23, 2024

Hazardous Materials Information Reporting System: HMIRS

The Hazardous Materials Incident Reporting System (HMIRS) database contains unintentional hazardous materials release information reported to the U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration.

Government Publication Date: May 29, 2024

National Clandestine Drug Labs: NCDL

The U.S. Department of Justice ("the Department"), Drug Enforcement Administration (DEA), provides this data as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy.

Government Publication Date: Nov 30, 2023

Toxic Substances Control Act: TSCA

The U.S. Environmental Protection Agency (EPA) is amending the Toxic Substances Control Act (TSCA) section 8(a) Inventory Update Reporting (IUR) rule and changing its name to the Chemical Data Reporting (CDR) rule. The CDR enables EPA to collect and publish information on the manufacturing, processing, and use of commercial chemical substances and mixtures (referred to hereafter as chemical substances) on the TSCA Chemical Substance Inventory (TSCA Inventory). This includes current information on chemical substance production volumes, manufacturing sites, and how the chemical substances are used. This information helps the Agency determine whether people or the environment are potentially exposed to reported chemical substances. EPA publishes submitted CDR data that is not Confidential Business Information (CBI). EPA CDR collections occur approximately every four years and reporting requirements change per collection.

Government Publication Date: May 12, 2022

Hist TSCA: HIST TSCA

The Environmental Protection Agency (EPA) is amending the Toxic Substances Control Act (TSCA) section 8(a) Inventory Update Reporting (IUR) rule and changing its name to the Chemical Data Reporting (CDR) rule.
The 2006 IUR data summary report includes information about chemicals manufactured or imported in quantities of 25,000 pounds or more at a single site during calendar year 2005. In addition to the basic manufacturing information collected in previous reporting cycles, the 2006 cycle is the first time EPA collected information to characterize exposure during manufacturing, processing and use of organic chemicals. The 2006 cycle also is the first time manufacturers of inorganic chemicals were required to report basic manufacturing information.

Government Publication Date: Dec 31, 2006

FTTS Administrative Case Listing: FTTS ADMIN

An administrative case listing from the Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA) and Toxic Substances Control Act (TSCA), together known as FTTS. This database was obtained from the Environmental Protection Agency's (EPA) National Compliance Database (NCDB). The FTTS and NCDB was shut down in 2006.

Government Publication Date: Jan 19, 2007

FTTS Inspection Case Listing: FTTS INSP

An inspection case listing from the Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA) and Toxic Substances Control Act (TSCA), together known as FTTS. This database was obtained from the Environmental Protection Agency's (EPA) National Compliance Database (NCDB). The FTTS and NCDB was shut down in 2006.

Government Publication Date: Jan 19, 2007

Potentially Responsible Parties List: PRP

Early in the site cleanup process, the U.S. Environmental Protection Agency (EPA) conducts a search to find the Potentially Responsible Parties (PRPs). The EPA looks for evidence to determine liability by matching wastes found at the site with parties that may have contributed wastes to the site. This listing contains PRPs, Noticed Parties, at sites in the EPA's Superfund Enterprise Management System (SEMS).

Government Publication Date: Jul 24, 2024

State Coalition for Remediation of Drycleaners Listing: SCRD DRYCLEANER

The State Coalition for Remediation of Drycleaners (SCRD) was established in 1998, with support from the U.S. Environmental Protection Agency (EPA) Office of Superfund Remediation and Technology Innovation. Coalition members are states with mandated programs and funding for drycleaner site remediation. Current members are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin. Since 2017, the SCRD no longer maintains this data, refer to applicable state source data where available.

Government Publication Date: Nov 08, 2017

Integrated Compliance Information System (ICIS): ICIS

The Integrated Compliance Information System (ICIS) database contains integrated enforcement and compliance information across most of U.S. Environmental Protection Agency's (EPA) programs. The vision for ICIS is to replace EPA's independent databases that contain enforcement data with a single repository for that information. Currently, ICIS contains all Federal Administrative and Judicial enforcement actions and a subset of the Permit Compliance System (PCS), which supports the National Pollutant Discharge Elimination System (NPDES). This information is maintained by the EPA Headquarters and at the Regional offices. A future release of ICIS will completely replace PCS and will integrate that information with Federal actions already in the system. ICIS also has the capability to track other activities that support compliance and enforcement programs, including incident tracking, compliance assistance, and compliance monitoring.

Government Publication Date: Apr 13, 2024

Drycleaner Facilities: FED DRYCLEANERS

A list of drycleaner facilities from Enforcement and Compliance History Online (ECHO) data as made available by the U.S. Environmental Protection Agency (EPA), sourced from the ECHO Exporter file. The EPA tracks facilities that possess NAIC and SIC codes that classify businesses as drycleaner establishments.

Government Publication Date: May 5, 2024

Delisted Drycleaner Facilities: DELISTED FED DRY

List of sites removed from the list of Drycleaner Facilities (sites in the EPA's Integrated Compliance Information System (ICIS) with NAIC or SIC codes identifying the business as a drycleaner establishment).

Government Publication Date: May 5, 2024

Formerly Used Defense Sites: FUDS

Formerly Used Defense Sites (FUDS) are properties that were formerly owned by, leased to, or otherwise possessed by and under the jurisdiction of the Secretary of Defense prior to October 1986, where the Department of Defense (DOD) is responsible for an environmental restoration. The FUDS Annual Report to Congress (ARC) is published by the U.S. Army Corps of Engineers (USACE). This data is compiled from the USACE's Geospatial FUDS data layers and Homeland Infrastructure Foundation-Level Data (HIFLD) FUDS dataset which applies to the Fiscal Year 2021 FUDS Inventory.

Government Publication Date: May 15, 2023

FUDS Munitions Response Sites: FUDS MRS

Boundaries of Munitions Response Sites (MRS), published with the Formerly Used Defense Sites (FUDS) Annual Report to Congress (ARC) by the U.S. Army Corps of Engineers (USACE). An MRS is a discrete location within a Munitions response area (MRA) that is known to require a munitions response. An MRA means any area on a defense site that is known or suspected to contain unexploded ordnance (UXO), discarded military munitions (DMM), or munitions constituents (MC). This data is compiled from the USACE's Geospatial MRS data layers and Homeland Infrastructure Foundation-Level Data (HIFLD) MRS dataset.

Government Publication Date: May 15, 2023

Former Military Nike Missile Sites: FORMER NIKE

This information was taken from report DRXTH-AS-IA-83A016 (Historical Overview of the Nike Missile System, 12/1984) which was performed by Environmental Science and Engineering, Inc. for the U.S. Army Toxic and Hazardous Materials Agency Assessment Division. The Nike system was deployed between 1954 and the mid-1970's. Among the substances used or stored on Nike sites were liquid missile fuel (JP-4); starter fluids (UDKH, aniline, and furfuryl alcohol); oxidizer (IRFNA); hydrocarbons (motor oil, hydraulic fluid, diesel fuel, gasoline, heating oil); solvents (carbon tetrachloride, trichloroethylene, trichloroethane, stoddard solvent); and battery electrolyte. The quantities of material a disposed of and procedures for disposal are not documented in published reports. Virtually all information concerning the potential for contamination at Nike sites is confined to personnel who were assigned to Nike sites. During deactivation most hardware was shipped to depot-level supply points. There were reportedly instances where excess materials were disposed of on or near the site itself at closure. There was reportedly no routine site decontamination.

Government Publication Date: Dec 2, 1984

PHMSA Pipeline Safety Flagged Incidents: PIPELINE INCIDENT

This list of flagged pipeline incidents is made available by the U.S. Department of Transportation (US DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA). PHMSA regulations require incident and accident reports for five different pipeline system types. Accidents reported on hazardous liquid gravity lines (§195.13) and reporting-regulated-only hazardous liquid gathering lines (§195.15) and incidents reported on Type R gas gathering (§192.8(c)) are not included in the flagged incident file data.

Government Publication Date: May 6, 2024

Material Licensing Tracking System (MLTS): MLTS

A list of sites that store radioactive material subject to the Nuclear Regulatory Commission (NRC) licensing requirements. This list is maintained by the NRC. As of September 2016, the NRC no longer releases location information for sites. Site locations were last received in July 2016.

Government Publication Date: May 11, 2021

Historic Material Licensing Tracking System (MLTS) sites: HIST MLTS

A historic list of sites that have inactive licenses and/or removed from the Material Licensing Tracking System (MLTS). In some cases, a site is removed from the MLTS when the state becomes an "Agreement State". An Agreement State is a State that has signed an agreement with the Nuclear Regulatory Commission (NRC) authorizing the State to regulate certain uses of radioactive materials within the State.

Government Publication Date: Jan 31, 2010

Mines Master Index File: MINES

The Master Index File (MIF) is provided by the United States Department of Labor, Mine Safety and Health Administration (MSHA). This file, which was originally created in the 1970's, contained many Mine-IDs that were invalid. MSHA removes invalid IDs from the MIF upon discovery. MSHA applicable data includes the following: all Coal and Metal/Non-Metal mines under MSHA's jurisdiction since 1/1/1970; mine addresses for all mines in the database except for Abandoned mines prior to 1998 from MSHA's legacy system (addresses may or may not correspond with the physical location of the mine itself); violations that have been assessed penalties as a result of MSHA inspections beginning on 1/1/2000; and violations issued as a result of MSHA inspections conducted beginning on 1/1/2000.

Government Publication Date: Feb 5, 2024

Surface Mining Control and Reclamation Act Sites: SMCRA

This inventory of land and water impacted by past mining (primarily legacy coal mining operations) is maintained by the U.S. Department of the Interior's Office of Surface Mining Reclamation and Enforcement (OSMRE), as it provides information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). This inventory contains information on the type and extent of Abandoned Mine Land (AML) Problems, as well as information on the cost associated with the reclamation of those problems. The data is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed. Disclaimer: Per the OSMRE, States and tribes who enter their data into e-AMLIS (AML Inventory System) may truncate their latitude and longitude so the precise location of usually dangerous AMLs is not revealed in an effort to protect the public from searching for these AMLs, most of which are on private property. If more precise location information is needed, please contact the applicable state/tribe of interest.

Government Publication Date: May 20, 2024

Mineral Resource Data System: MRDS

The Mineral Resource Data System (MRDS) is a collection of reports describing metallic and nonmetallic mineral resources throughout the world. Included are deposit name, location, commodity, deposit description, geologic characteristics, production, reserves, resources, and references. This database contains the records previously provided in the Mineral Resource Data System (MRDS) of USGS and the Mineral Availability System/Mineral Industry Locator System (MAS/MILS) originated in the U.S. Bureau of Mines, which is now part of USGS. The USGS has ceased systematic updates of the MRDS database with their focus more recently on deposits of critical minerals while providing a well-documented baseline of historical mine locations from USGS topographic maps.

Government Publication Date: Mar 15, 2016

DOE Legacy Management Sites: LM SITES

The U.S. Department of Energy (DOE) Office of Legacy Management (LM) currently manages radioactive and chemical waste, environmental contamination, and hazardous material at over 100 sites across the U.S. The LM manages sites with diverse regulatory drivers (statutes or programs that direct cleanup and management requirements at DOE sites) or as part of internal DOE or congressionally-recognized programs, such as but not limited to: Formerly Utilized Sites Remedial Action Program (FUSRAP), Uranium Mill Tailings Radiation Control Act (UMTRCA Title I, Tile II), Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), Resource Conservation and Recovery Act (RCRA), Decontamination and Decommissioning (D&D), Nuclear Waste Policy Act (NWPA). This site listing includes data exported from the DOE Office of LM's Geospatial Environmental Mapping System (GEMS). GEMS Data disclaimer: The DOE Office of LM makes no representation or warranty, expressed or implied, regarding the use, accuracy, availability, or completeness of the data presented herein.

Government Publication Date: Dec 12, 2023

Alternative Fueling Stations: ALT FUELS

This list of alternative fueling stations is sourced from the Alternative Fuels Data Center (AFDC). The U.S. Department of Energy's Office of Energy Efficiency & Renewable Energy launched the AFDC in 1991 as a repository for alternative fuel vehicle performance data, which provides a wealth of information and data on alternative and renewable fuels, advanced vehicles, fuel-saving strategies, and emerging transportation technologies. The data includes Biodiesel (B20 and above), Compressed Natural Gas (CNG), Electric, Ethanol (E85), Hydrogen, Liquefied Natural Gas (LNG), Propane (LPG), and Renewable Diesel (R20 and above) fuel type locations.

Government Publication Date: Aug 29, 2024

Superfunds Consent Decrees: CONSENT DECREES

This list of Superfund consent decrees is provided by the Department of Justice, Environment & Natural Resources Division (ENRD) through a Freedom of Information Act (FOIA) applicable file. This listing includes Cases filed since 2010 limited to the following: Consent Decrees for CERCLA or Superfund Sites filed and/or as proposed within the ENRD's Case Management System (CMS); and applicable ENRD's Environmental Defense Section (EDS) CERCLA Cases with "Consent" in History Note. CMS may not reflect the latest developments in a case, nor can the agency guarantee the accuracy of the data. ENRD Disclaimer: Congress excluded three discrete categories of law enforcement and national security records from the requirements of the FOIA; response is limited to those records that are subject to the requirements of the FOIA; however, this should not be taken as an indication that excluded records do, or do not, exist.

Government Publication Date: Jun 26, 2024

Air Facility System: AFS

This EPA retired Air Facility System (AFS) dataset contains emissions, compliance, and enforcement data on stationary sources of air pollution. Regulated sources cover a wide spectrum; from large industrial facilities to relatively small operations such as dry cleaners. AFS does not contain data on facilities that are solely asbestos demolition and/or renovation contractors, or landfills. ECHO Clean Air Act data from AFS are frozen and reflect data as of October 17, 2014; the EPA retired this system for Clean Air Act stationary sources and transitioned to ICIS-Air.

Government Publication Date: Oct 17, 2014

Registered Pesticide Establishments: SSTS

This national list of active EPA-registered foreign and domestic pesticide and/or device-producing establishments is based on data from the Section Seven Tracking System (SSTS). The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Section 7 requires that each producing establishment must place its EPA establishment number on the label or immediate container of each pesticide, active ingredient or device produced. An EPA establishment number on a pesticide product label identifies the EPA registered location where the product was produced. The list of establishments is made available by the U.S. Environmental Protection Agency (EPA).

Government Publication Date: Feb 29, 2024

Polychlorinated Biphenyl (PCB) Transformers: PCBT

Locations of Transformers Containing Polychlorinated Biphenyls (PCBs) registered with the United States Environmental Protection Agency. PCB transformer owners must register their transformer(s) with EPA. Although not required, PCB transformer owners who have removed and properly disposed of a registered PCB transformer may notify EPA to have their PCB transformer de-registered. Data made available by EPA.

Government Publication Date: Oct 15, 2019

Polychlorinated Biphenyl (PCB) Notifiers: PCB

Facilities included in the national list of facilities that have notified the United States Environmental Protection Agency (EPA) of Polychlorinated Biphenyl (PCB) activities. Any company or person storing, transporting or disposing of PCBs or conducting PCB research and development must notify the EPA and receive an identification number.

Government Publication Date: May 23, 2024

Power Plants: POWER PLANTS

This list of power plants is provided by the U.S. Energy Information Administration (EIA). The listing includes operable electric generating plants in the United States by energy source, originating from the EIA-860, Annual Electric Generator Report; EIA-860M, Monthly Update to the Annual Electric Generator Report; and EIA-923, Power Plant Operations Report. It includes all operable plants by energy source with a combined nameplate capacity of 1 megawatt or more that are operating, are on standby, or out of service for short- or long-term.

Government Publication Date: Apr 15, 2024

State

PFAS Sampling Locations: PFAS SAMPLING

This data is sourced from the State Water Board's GeoTracker Per- and Polyfluoroalkyl Substances (PFAS) Map tool which contains individual sampling points (i.e., soil boring, groundwater monitoring well, drinking water well for municipal drinking water systems, etc.) or a site location with PFAS analytical data. Includes analytical results that are finalized and submitted electronically by the Responsible Parties via GeoTracker's Electronic Submittal of Information Portal, and after it's accepted by a Regional Water Quality Control Board.

Government Publication Date: Sep 25, 2024

Dry Cleaning Facilities: DRYCLEANERS

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial, linen supply, commercial laundry, dry cleaning and pressing machines - Coin Operated Laundry and Dry Cleaning. This is provided by the Department of Toxic Substance Control.

Government Publication Date: Dec 20, 2021

Delisted Drycleaners: DELISTED DRYCLEANERS

Sites removed from the list of drycleaner related facilities that have EPA ID numbers, made available by the California Department of Toxic Substance Control.

Government Publication Date: Jan 31, 2022

Non-Toxic Dry Cleaning Incentive Program: DRYC GRANT

A list of grant recipients of the Non-Toxic Dry Cleaning Incentive Program made available by the California Air Resources Board (CARB). The program provides grants to eligible dry cleaning businesses to assist them in transitioning away from PERC machines to alternative non-toxic and non-smog forming technologies.

Government Publication Date: Jan 31, 2022

PFAS GeoTracker Cleanup Sites: PFAS GT CLEANUPS

A list of applicable cleanup sites from the State Water Resources Control Board's (SWRCB) GeoTracker data management system where one or more of the potential contaminants of concern are identified in the PFAS Structure List and/or PFAS Chemicals Without Explicit Structure List made available by the United States Environmental Protection Agency (US EPA).

Government Publication Date: Jul 4, 2024

PFOA/PFOS Groundwater: PFAS GW

A list of water wells from the Groundwater Ambient Monitoring and Assessment Program (GAMA) Groundwater Information System with the groundwater chemical perfluorooctanoic acid (PFOA) (NL = 0.014 UG/L) or perfluorooctanoic sulfonate (PFOS) (NL = 0.013 UG/L). The GAMA Groundwater Information System search is made available by California Water Boards.

Government Publication Date: Sep 19, 2024

PFAS Investigations: PFAS INVEST

This list of potential Per- and Polyfluoroalkyl Substance (PFAS) sites is compiled from the California State Water Resources Control Board's (SWRCB) PFAS Investigations Map tool. The SWRCB issued investigative orders, per California Water Code (CWC) Section 13267 and/or 13383, to these sites. Orders were also issued to the public water systems to sample wells in the vicinity of these locations. Military facilities have been identified by the Department of Defense (DOD) as part of their efforts to investigate PFAS per the Defense Environmental Restoration Program (DERP) under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). The data includes locations for Airports, Chrome Plating Facilities, Landfills, Publicly Owned Treatment Works, Refineries and Bulk Terminals, DOD Facilities, and Monitored Drinking Water Wells being investigated for potential PFAS.

Government Publication Date: Jan 23, 2024

Hazardous Waste and Substances Site List - Site Cleanup: HWSS CLEANUP

The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the State, local agencies and developers to comply with the California Environmental Quality Act requirements in providing information about the location of hazardous materials release sites. This list is published by California Department of Toxic Substance Control.

Government Publication Date: Mar 15, 2023

Toxic Pit Cleanup Act Sites: TOXIC PITS

The Toxic Pits Cleanup Act (TPCA) list identifies sites suspected of containing hazardous substances where cleanup has not yet been completed. This list was maintained by the State Water Resources Control Board (SWRCB), is not longer maintained, and updates are not planned.

Government Publication Date: Jul 1, 1995

List of Hazardous Waste Facilities Subject to Corrective Action: DTSC HWF

This is a list of hazardous waste facilities identified in Health and Safety Code (HSC) § 25187.5. These facilities are those where Department of Toxic Substances Control (DTSC) has taken or contracted for corrective action because a facility owner/operator has failed to comply with a date for taking corrective action in an order issued under HSC § 25187, or because DTSC determined that immediate corrective action was necessary to abate an imminent or substantial endangerment.
Government Publication Date: Jul 18, 2016

EnviroStor Inspection, Compliance, and Enforcement: INSP COMP ENF
A list of permitted facilities with inspections and enforcements tracked by the California Department of Toxic Substance Control's (DTSC) EnviroStor data management system.
Government Publication Date: Nov 23, 2023

School Property Evaluation Program Sites: SCH
A list of sites registered with The Department of Toxic Substances Control (DTSC) School Property Evaluation and Cleanup (SPEC) Division. SPEC is responsible for assessing, investigating and cleaning up proposed school sites. The Division ensures that selected properties are free of contamination or, if the properties were previously contaminated, that they have been cleaned up to a level that protects the students and staff who will occupy the new school.
Government Publication Date: Sep 25, 2024

California Hazardous Material Incident Report System (CHMIRS): CHMIRS
A list of reported hazardous material incidents, spills, and releases from the California Hazardous Material Incident Report System (CHMIRS). This listing has been made available by the California Governor's Office of Emergency Services (Cal OES).
Government Publication Date: Aug 1, 2024

Historical California Hazardous Material Incident Report System (CHMIRS): HIST CHMIRS
A list of reported hazardous material incidents, spills, and releases from the California Hazardous Material Incident Report System (CHMIRS) prior to 1993. This list has been made available by the California Office of Emergency Services (OES).
Government Publication Date: Jan 1, 1993

Handlers from Hazardous Waste Manifest Data: HAZNET
A list of handlers not otherwise classified as Treatment, Storage, Disposal facilities (TSDF) or generators from the facilities and manifests data made available by the California Department of Toxic Substances Control (DTSC) in their Hazardous Waste Tracking System (HWTS).
Government Publication Date: Oct 24, 2016

Generators from Hazardous Waste Manifest Data: HAZ GEN
List of handlers listed as having generated waste from the facilities and manifests data made available by the California Department of Toxic Substances Control (DTSC) in their Hazardous Waste Tracking System (HWTS).
Government Publication Date: Dec 31, 2017

TSDF from Hazardous Waste Manifest Data: HAZ TSD
List of Treatment, Storage, and Disposal Facilities (TSDFs) from the facilities and manifests data made available by the California Department of Toxic Substances Control (DTSC) in their Hazardous Waste Tracking System (HWTS).
Government Publication Date: Dec 31, 2017

Historical Hazardous Waste Manifest Data: HIST MANIFEST
A list of historic hazardous waste manifests received by the Department of Toxic Substances Control (DTSC) from year the 1980 to 1992. The volume of manifests is typically 900,000 - 1,000,000 annually, representing approximately 450,000 - 500,000 shipments.
Government Publication Date: Dec 31, 1992

DTSC Registered Hazardous Waste Transporters: HW TRANSPORT
The California Department of Toxic Substances Control (DTSC) maintains this list of Registered Hazardous Waste Transporters.
Government Publication Date: Oct 5, 2024

Registered Waste Tire Haulers: WASTE TIRE
This list of registered waste tire haulers is maintained by the California Department of Resources Recycling and Recovery.
Government Publication Date: Oct 28, 2024

California Medical Waste Management Program Facility List: MEDICAL WASTE

This list of Medical Waste Management Program Facilities is maintained by the California Department of Public Health. The Medical Waste Management Program (MWMP) regulates the generation, handling, storage, treatment, and disposal of medical waste by providing oversight for the implementation of the Medical Waste Management Act (MWMA). The MWMP permits and inspects all medical waste off-site treatment facilities, medical waste transporters, and medical waste transfer stations. This list contains transporters, treatment, and transfer facilities.

Government Publication Date: Sep 5, 2024

Historical Cortese List: HIST CORTESE

List of sites which were once included on the Cortese list. The Hazardous Waste and Substances Sites (Cortese) List is a planning document used by the State, local agencies and developers to comply with the California Environmental Quality Act requirements for providing information about the location of hazardous sites.

Government Publication Date: Nov 13, 2008

Cease and Desist Orders and Cleanup and Abatement Orders: CDO/CAO

The California Environment Protection Agency "Cortese List" of active Cease and Desist Orders (CDO) and Cleanup and Abatement Orders (CAO). This list contains many CDOs and CAOs that do NOT concern the discharge of wastes that are hazardous materials. Many of the listed orders concern, as examples, discharges of domestic sewage, food processing wastes, or sediment that do not contain hazardous materials, but the Water Boards' database does not distinguish between these types of orders.

Government Publication Date: Dec 6, 2021

California Environmental Reporting System (CERS) Hazardous Waste Sites: CERS HAZ

List of sites in the California Environmental Protection Agency (CalEPA) Regulated Site Portal which fall under the following regulatory programs: Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, RCRA LQ HW Generator. The CalEPA oversees the statewide implementation of the Unified Program which applies regulatory standards to protect Californians from hazardous waste and materials.

Government Publication Date: Oct 28, 2024

Delisted Environmental Reporting System (CERS) Hazardous Waste Sites: DELISTED HAZ

This database contains a list of sites that were removed from the California Environmental Protection Agency (CalEPA) in the following regulatory programs: Hazardous Chemical Management, Hazardous Waste Onsite Treatment, Household Hazardous Waste Collection, Hazardous Waste Generator, RCRA LQ HW Generator.

Government Publication Date: Nov 29, 2018

Sites in GeoTracker: GEOTRACKER

GeoTracker is the State Water Resource Control Boards' data management system for sites that impact, or have the potential to impact, water quality in California, with emphasis on groundwater. This is a list of sites in GeoTracker that aren't otherwise categorized as LUST, Land Disposal Sites (LDS), Cleanup Sites, or sites having Waste Discharge Requirements (WDR). This listing includes program types such as Underground Injection Control (UIC), Confined Animal Facilities (CAF), Irrigated Lands Regulatory Program, plans, and non-case information.

Government Publication Date: Jul 4, 2024

Mines Listing: MINE

This list includes mine site locations extracted from the Mines Online database, maintained by the California Department of Conservation. Mines Online (MOL) is an interactive web map designed with GIS features that provide information such as the mine name, mine status, commodity sold, location, and other mine specific data. Please note: Mine location information is provided to assist experts in determining the location of mine operators in accordance with California Civil Code section 1103.4 and reflects information reported by mine operators in annual reports provided under Public Resources Code section 2207. While the Division of Mine Reclamation (DMR) attempts to populate MOL with accurate location information, the DMR cannot guarantee the accuracy of operator reported location information.

Government Publication Date: Oct 3, 2024

Recorded Environmental Cleanup Liens: LIEN

The California Department of Toxic Substance Control (DTSC) maintains this list of liens placed upon real properties. A lien is utilized by the DTSC to obtain reimbursement from responsible parties for costs associated with the remediation of contaminated properties.

Government Publication Date: Dec 18, 2023

Waste Discharge Requirements: WASTE DISCHG

List of sites in California State Water Resources Control Board (SWRCB) Waste Discharge Requirements (WDRs) Program in California, made available by the SWRCB via GeoTracker. The WDR program regulates point discharges that are exempt pursuant to Subsection 20090 of Title 27 and not subject to the Federal Water Pollution Control Act. The scope of the WDRs Program also includes the discharge of wastes classified as inert, pursuant to section 20230 of Title 27.

Government Publication Date: Jul 4, 2024

Toxic Pollutant Emissions Facilities: EMISSIONS

A list of criteria and toxic pollutant emissions data for facilities in California made available by the California Environmental Protection Agency - Air Resources Board (ARB). Risk data may be based on previous inventory submittals. The toxics data are submitted to the ARB by the local air districts as requirement of the Air Toxics "Hot Spots" Program.

Government Publication Date: Dec 31, 2021

Clandestine Drug Lab Sites: CDL

The Department of Toxic Substances Control (DTSC) maintains a listing of drug lab sites. DTSC is responsible for removal and disposal of hazardous substances discovered by law enforcement officials while investigating illegal/clandestine drug laboratories.

Government Publication Date: Jan 19, 2021

Tribal

No Tribal additional environmental record sources available for this State.

County

Orange County - Hazardous Waste Facilities: HW ORANGE

A list of Hazardous Waste Facilities in Orange County. This list is made available by Orange County Environmental Health Department.

Government Publication Date: May 15, 2023

Definitions

Database Descriptions: This section provides a detailed explanation for each database including: source, information available, time coverage, and acronyms used. They are listed in alphabetic order.

Detail Report: This is the section of the report which provides the most detail for each individual record. Records are summarized by location, starting with the project property followed by records in closest proximity.

Distance: The distance value is the distance between plotted points, not necessarily the distance between the sites' boundaries. All values are an approximation.

Direction: The direction value is the compass direction of the site in respect to the project property and/or center point of the report.

Elevation: The elevation value is taken from the location at which the records for the site address have been plotted. All values are an approximation. Source: Google Elevation API.

Executive Summary: This portion of the report is divided into 3 sections:

'Report Summary'- Displays a chart indicating how many records fall on the project property and, within the report search radii.

'Site Report Summary'-Project Property'- This section lists all the records which fall on the project property. For more details, see the 'Detail Report' section.

'Site Report Summary-Surrounding Properties'- This section summarizes all records on adjacent properties, listing them in order of proximity from the project property. For more details, see the 'Detail Report' section.

Map Key: The map key number is assigned according to closest proximity from the project property. Map Key numbers always start at #1. The project property will always have a map key of '1' if records are available. If there is a number in brackets beside the main number, this will indicate the number of records on that specific property. If there is no number in brackets, there is only one record for that property.

The symbol and colour used indicates 'elevation': the red inverted triangle will dictate 'ERIS Sites with Lower Elevation', the yellow triangle will dictate 'ERIS Sites with Higher Elevation' and the orange square will dictate 'ERIS Sites with Same Elevation.'

Unplottables: These are records that could not be mapped due to various reasons, including limited geographic information. These records may or may not be in your study area, and are included as reference.

APPENDIX F
SPYGLASS PHARMA HAZARDOUS MATERIALS LIST

PHASE I
ENVIRONMENTAL SITE ASSESSMENT REPORT
27061, 27071, and 27081 Aliso Creek Road
Aliso Viejo, California

Farallon PN: 2450-009

DocuSign Envelope ID: 465CA01A-5883-47A8-AC18-048353310F8D

Exhibit "E"

Approved Hazardous Materials List

MATERIAL	MANUFACTURER
Bimatoprost	Toroto Research Chemicals (TRC)
Bimatoprost	Chemo / Industriale Chimica
Bimatoprost	Cayman Chemicals
Bimatoprost	Jetpharma
Bimatoprost	BOC Science
Bimatoprost Acid	Toroto Research Chemicals (TRC)
RHO-KINASE-IN-1	MedChemExpress (MCE)
Moxifloxacin	Cayman Chemicals
Dexamethasone Phosphate	MedChemExpress (MCE)
Dexamethasone Phosphate	SIGMA-Aldrich
Dexamethasone Phosphate	LUS Health
Moxifloxacin Hydrochloride	SIGMA-Aldrich
Dexamethasone Sodium Phosphate	Millipore Sigma
Dexamethasone Sodium Phosphate	Spectrum Chemical
Dexamethasone Phosphate Disodium	MedChemExpress (MCE)
Dexamethasone Phosphate Disodium	Spectrum Chemical
Ketorolac	Santa Cruz Biotechnology, Inc.
Ketorolac	Cayman Chemicals
Ketorolac Tromethamine	TCI America
Sodium Lauryl Sulfate	Fisher Chemicals
Titaium Dioxide	Spectrum Chemical
15-Keton-Bimatoprost	MuseChem
Formalin	Azer Scientific
Trifluoroacetic Acid (TFA)	Fisher Chemical
Tetrahydrofuran, Stabilized w/ BHT	ThermoFischer or Alfa Aesar
Acetic Acid 100%	ThermoFischer
Methanol	Fisher Chemical
Isopropanol	ThermoFischer
Acetonitrile	Fisher Chemical
Phosphoric Acid, 85%	LabChem
Triethylamine	ThermoFischer
Waste Acetonitrile & TFA solution	Onsite Generation

APPENDIX G
LABORATORY ANALYTICAL REPORT

PHASE I
ENVIRONMENTAL SITE ASSESSMENT REPORT
27061, 27071, and 27081 Aliso Creek Road
Aliso Viejo, California

Farallon PN: 2450-009

Enthalpy Analytical
931 West Barkley Ave
Orange, CA 92868
(714) 771-6900

enthalpy.com

Lab Job Number : 523595
Report Level : II
Report Date : 01/15/2025

Analytical Report *prepared for:*

Kathy Lehnus
Farallon Consulting
27 Mauchy, Suite 213
Irvine, CA 92618

Location: 2450.009 Aliso Creek

Authorized for release by:

Patty Mata, Project Manager
patty.mata@enthalpy.com

This data package has been reviewed for technical correctness and completeness. Release of this data has been authorized by the Laboratory Manager or the Manager's designee, as verified by the above signature which applies to this PDF file as well as any associated electronic data deliverable files. The results contained in this report meet all requirements of NELAP and pertain only to those samples which were submitted for analysis. This report may be reproduced only in its entirety.

CA ELAP# 1338, NELAP# 4038, SCAQMD LAP# 18LA0518, LACSD ID# 10105, ORELAP# 4197

ENTHALPY ANALYTICAL

Sample Summary

Kathy Lehnus
Farallon Consulting
27 Mauchy, Suite
213
Irvine, CA 92618

Lab Job #: 523595
Location: 2450.009 Aliso Creek
Date Received: 01/08/25

Sample ID	Lab ID	Collected	Matrix
SB-1-1.5'	523595-001	01/08/25 08:36	Soil
SB-1-1.5'-DUP	523595-002	01/08/25 08:36	Soil
SB-2-1.5'	523595-003	01/08/25 08:49	Soil
SB-3-1.5'	523595-004	01/08/25 09:03	Soil
SB-4-1'	523595-005	01/08/25 09:25	Soil
SB-5-1'	523595-006	01/08/25 09:43	Soil

Case Narrative

Farallon Consulting	Lab Job Number: 523595
27 Mauchy, Suite 213	Location: 2450.009 Aliso Creek
Irvine, CA 92618	Date Received: 01/08/25
Kathy Lehnus	

This data package contains sample and QC results for six soil samples, requested for the above referenced project on 01/08/25. The samples were received cold and intact.

TPH-Extractables by GC (EPA 8015M):
No analytical problems were encountered.

Pesticides (EPA 8081A):
No analytical problems were encountered.

PCBs (EPA 8082):

- High recoveries were observed for Aroclor-1016 in the MS/MSD for batch 359892; the parent sample was not a project sample, the LCS was within limits, the associated RPD was within limits, and this analyte was not detected at or above the RL in the associated samples.
- No other analytical problems were encountered.

Metals (EPA 6010B):
No analytical problems were encountered.

ENTHALPY ANALYTICAL

Chain of Custody Record

Lab No: 523595

Page: 1 of 1

Turn Around Time (rush by advanced notice only)

Standard:	X	5 Day:		3 Day:	
2 Day:		1 Day:		Custom TAT:	

Enthalpy Analytical - Orange

931 W. Barkley Avenue, Orange, CA 92868

Phone 714-771-6900

Matrix: A = Air S = Soil/Solid W = Water DW = Drinking Wate SD = Sediment PP = Pure Product SEA = Sea Water SW = Swab T = Tissue WP = Wipe O = Other

Preservatives: 1 = $Na_2S_2O_3$ 2 = HCl 3 = HNO_3 4 = H_2SO_4 5 = NaOH 6 = Other

Sample Receipt Temp: (lab use only)

CUSTOMER INFORMATION		PROJECT INFORMATION	
Company:	Farallon Consulting	Name:	2450-009 Aliso Creek
Report To:	Kathy Lehnus	Number:	2450-009
Email:	klehnus@farallonconsulting.com	P.O. #:	
Address:	27 Mauchly Suite 213	Address:	27061, 27071, 27081 Aliso Creek
	Irvine, CA		Road, Aliso Viejo, CA
Phone:	657-247-1304	Global ID:	
Fax:		Sampled By:	Trey Slaughter

	Sample ID	Sampling Date	Sampling Time	Matrix	Container No. / Size	Pres.	Pesticide by EPA 8081	Arsenic by EPA 6010B	TPH-cc by EPA 8015	PCB by EPA 8082	Test Instructions / Comments
1	SB-1-1.5'	1/8/25	0836	S	1-4oz jar	Ice	X	X			
2	SB-1-1.5'-DUP	1/8/25	0836	S	1-4oz jar	Ice	X	X			
3	SB-2-1.5'	1/8/25	0849	S	1-4oz jar	Ice	X	X			
4	SB-3-1.5'	1/8/25	0903	S	1-4oz jar	Ice	X	X			
5	SB-4-1'	1/8/25	0925	S	1-4oz jar	Ice			X	X	
6	SB-5-1'	1/8/25	0943	S	1-4oz jar	Ice			X	X	
7											
8											
9											
10											

	Signature	Print Name	Company / Title	Date / Time
[1] Relinquished By:		Trey Slaughter	Farallon	1/8/25 1203
[1] Received By:		[illegible]	E.A	1/8/25 13:37
[2] Relinquished By:		[illegible]	E.A	1/8/25 14:10
[2] Received By:		[illegible]	EA	1/8/25 1410
[3] Relinquished By:				
[3] Received By:				

IR12 2.7 / 2.9

SAMPLE RECEIPT CHECKLIST

Section 1: General Info

Date Received: 1/8/25 WO# 523595 Client: Farallon Consulting

Section 2: Shipping / Custody **Are custody seals present?** ☐ Yes ☑ No

Custody seals intact on arrival? ☑ N/A ☐ Yes ☐ No ☐ On cooler / box ☐ On samples

Shipping Info: _____

Section 3a: Condition / Packaging ☐ **Outside 0.0 - 6.0°C (0.0 - 10.0°C for microbiology) (PM notified)**

Date Opened 1/8/25 By (initials) TJQ Type of ice used: ☑ Wet ☐ Blue/Gel ☐ None

☐ Samples received on ice directly from the field; cooling process had begun. (if checked, skip temperatures)

☐ Sample matrix doesn't require cooling (e.g. air, bulk PCB). (if checked, skip temperatures)

If no cooler: Observed/Adjusted Temp (°C): _____ / _____ Thermometer/IR Gun: IR12 CF: +0.2

Cooler Temp (°C) #1: 2.7 / 2.9 #2: ____/____ #3: ____/____ #4: ____/____ #5: ____/____ #6: ____/____

Section 3b: Microbiology Samples ☑ **No microbiology samples submitted (skip 3b)**

☐ Within temp range 0.0 - 10.0°C or received on ice directly from field.

☐ Adequate headspace for microbiology analysis.

Section 3c: Air Samples ☑ **No air samples submitted (skip 3c)**

☐ 1.4L Canisters ☐ 6L Canisters ☐ Tedlar Bags ☐ MCE Cassettes ☐ Sorbent Tubes ☐ Other_____

Section 4: Containers / Labels / Samples	YES	NO	N/A
1) Were custody papers present, filled properly, and legible?	✓		
2) Is the sampler's name present on the CoC?	✓		
3) Were containers received in good condition (unbroken / unopened / uncompromised)?	✓		
4) Were the samples bagged? (required for microbiology samples; recommended for soil samples)			✓
5) Were all of, and only, the correct samples received?	✓		
6) Are sample labels present, legible, and in agreement with the CoC?	✓		
7) Does the container count match the CoC?	✓		
8) Was sufficient sample volume / mass received for the analyses requested?	✓		
9) Were samples received in proper containers for the analyses requested?	✓		
10) Were samples received with > 1/2 holding time remaining?	✓		
11) Are samples properly preserved as indicated by CoC / labels?	✓		
12) Unpreserved VOAs received - If necessary, was the hold time changed in LIM5?			✓
13) Are VOA vials free from headspace/bubbles > 6mm?			✓

Section 5: Explanations / Comments ☐ **PM notified**

Date Logged 1/8/25 **By (print)** TJQ **(sign)** _____

Date Labeled 1/8/25 **By (print)** E. Orange **(sign)** _____

ENTHALPY ANALYTICAL

Analysis Results for 523595

Kathy Lehnus
Farallon Consulting
27 Mauchy, Suite 213
Irvine, CA 92618

Lab Job #: 523595
Location: 2450.009 Aliso Creek
Date Received: 01/08/25

Sample ID: SB-1-1.5' **Lab ID: 523595-001** **Collected: 01/08/25 08:36**
Matrix: Soil

523595-001 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B										
Arsenic	**5.7**		mg/Kg	1.0	0.63	1	359838	01/09/25	01/09/25	CAP
Method: EPA 8081A Prep Method: EPA 3546										
alpha-BHC	ND		ug/Kg	5.1	2.0	1	359892	01/09/25	01/12/25	MES
beta-BHC	ND		ug/Kg	5.1	2.0	1	359892	01/09/25	01/12/25	MES
gamma-BHC	ND		ug/Kg	5.1	1.7	1	359892	01/09/25	01/12/25	MES
delta-BHC	ND		ug/Kg	5.1	2.4	1	359892	01/09/25	01/12/25	MES
Heptachlor	ND		ug/Kg	5.1	1.9	1	359892	01/09/25	01/12/25	MES
Aldrin	ND		ug/Kg	5.1	2.3	1	359892	01/09/25	01/12/25	MES
Heptachlor epoxide	ND		ug/Kg	5.1	2.1	1	359892	01/09/25	01/12/25	MES
Endosulfan I	ND		ug/Kg	5.1	2.3	1	359892	01/09/25	01/12/25	MES
Dieldrin	ND		ug/Kg	5.1	3.1	1	359892	01/09/25	01/12/25	MES
4,4'-DDE	ND		ug/Kg	5.1	3.2	1	359892	01/09/25	01/12/25	MES
Endrin	ND		ug/Kg	5.1	2.0	1	359892	01/09/25	01/12/25	MES
Endosulfan II	ND		ug/Kg	5.1	2.0	1	359892	01/09/25	01/12/25	MES
Endosulfan sulfate	ND		ug/Kg	5.1	3.2	1	359892	01/09/25	01/12/25	MES
4,4'-DDD	ND		ug/Kg	5.1	1.6	1	359892	01/09/25	01/12/25	MES
Endrin aldehyde	ND		ug/Kg	5.1	3.6	1	359892	01/09/25	01/12/25	MES
Endrin ketone	ND		ug/Kg	5.1	2.1	1	359892	01/09/25	01/12/25	MES
4,4'-DDT	ND		ug/Kg	5.1	2.1	1	359892	01/09/25	01/12/25	MES
Methoxychlor	ND		ug/Kg	10	3.8	1	359892	01/09/25	01/12/25	MES
Toxaphene	ND		ug/Kg	100	88	1	359892	01/09/25	01/12/25	MES
Chlordane (Technical)	ND		ug/Kg	51	39	1	359892	01/09/25	01/12/25	MES
Surrogates				**Limits**						
TCMX	65%		%REC	23-120		1	359892	01/09/25	01/12/25	MES
Decachlorobiphenyl	77%		%REC	24-120		1	359892	01/09/25	01/12/25	MES

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 523595

Sample ID: SB-1-1.5'-DUP	Lab ID: 523595-002	Collected: 01/08/25 08:36
	Matrix: Soil	

523595-002 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B										
Arsenic	**5.5**		mg/Kg	1.0	0.63	1	359838	01/09/25	01/09/25	CAP
Method: EPA 8081A Prep Method: EPA 3546										
alpha-BHC	ND		ug/Kg	5.1	2.0	1	359892	01/09/25	01/12/25	MES
beta-BHC	ND		ug/Kg	5.1	2.0	1	359892	01/09/25	01/12/25	MES
gamma-BHC	ND		ug/Kg	5.1	1.7	1	359892	01/09/25	01/12/25	MES
delta-BHC	ND		ug/Kg	5.1	2.4	1	359892	01/09/25	01/12/25	MES
Heptachlor	ND		ug/Kg	5.1	1.9	1	359892	01/09/25	01/12/25	MES
Aldrin	ND		ug/Kg	5.1	2.3	1	359892	01/09/25	01/12/25	MES
Heptachlor epoxide	ND		ug/Kg	5.1	2.1	1	359892	01/09/25	01/12/25	MES
Endosulfan I	ND		ug/Kg	5.1	2.3	1	359892	01/09/25	01/12/25	MES
Dieldrin	ND		ug/Kg	5.1	3.1	1	359892	01/09/25	01/12/25	MES
4,4'-DDE	ND		ug/Kg	5.1	3.2	1	359892	01/09/25	01/12/25	MES
Endrin	ND		ug/Kg	5.1	2.0	1	359892	01/09/25	01/12/25	MES
Endosulfan II	ND		ug/Kg	5.1	2.0	1	359892	01/09/25	01/12/25	MES
Endosulfan sulfate	ND		ug/Kg	5.1	3.2	1	359892	01/09/25	01/12/25	MES
4,4'-DDD	ND		ug/Kg	5.1	1.6	1	359892	01/09/25	01/12/25	MES
Endrin aldehyde	ND		ug/Kg	5.1	3.6	1	359892	01/09/25	01/12/25	MES
Endrin ketone	ND		ug/Kg	5.1	2.1	1	359892	01/09/25	01/12/25	MES
4,4'-DDT	ND		ug/Kg	5.1	2.1	1	359892	01/09/25	01/12/25	MES
Methoxychlor	ND		ug/Kg	10	3.8	1	359892	01/09/25	01/12/25	MES
Toxaphene	ND		ug/Kg	100	88	1	359892	01/09/25	01/12/25	MES
Chlordane (Technical)	ND		ug/Kg	51	39	1	359892	01/09/25	01/12/25	MES
Surrogates				**Limits**						
TCMX	77%		%REC	23-120		1	359892	01/09/25	01/12/25	MES
Decachlorobiphenyl	85%		%REC	24-120		1	359892	01/09/25	01/12/25	MES

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 523595

Sample ID: SB-2-1.5'	Lab ID: 523595-003	Collected: 01/08/25 08:49
	Matrix: Soil	

523595-003 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B										
Arsenic	**4.3**		mg/Kg	1.0	0.63	1	359838	01/09/25	01/09/25	CAP
Method: EPA 8081A Prep Method: EPA 3546										
alpha-BHC	ND		ug/Kg	5.1	2.0	1	359892	01/09/25	01/13/25	MES
beta-BHC	ND		ug/Kg	5.1	2.0	1	359892	01/09/25	01/13/25	MES
gamma-BHC	ND		ug/Kg	5.1	1.7	1	359892	01/09/25	01/13/25	MES
delta-BHC	ND		ug/Kg	5.1	2.4	1	359892	01/09/25	01/13/25	MES
Heptachlor	ND		ug/Kg	5.1	1.9	1	359892	01/09/25	01/13/25	MES
Aldrin	ND		ug/Kg	5.1	2.3	1	359892	01/09/25	01/13/25	MES
Heptachlor epoxide	ND		ug/Kg	5.1	2.1	1	359892	01/09/25	01/13/25	MES
Endosulfan I	ND		ug/Kg	5.1	2.3	1	359892	01/09/25	01/13/25	MES
Dieldrin	ND		ug/Kg	5.1	3.1	1	359892	01/09/25	01/13/25	MES
4,4'-DDE	ND		ug/Kg	5.1	3.2	1	359892	01/09/25	01/13/25	MES
Endrin	ND		ug/Kg	5.1	2.0	1	359892	01/09/25	01/13/25	MES
Endosulfan II	ND		ug/Kg	5.1	2.0	1	359892	01/09/25	01/13/25	MES
Endosulfan sulfate	ND		ug/Kg	5.1	3.2	1	359892	01/09/25	01/13/25	MES
4,4'-DDD	ND		ug/Kg	5.1	1.6	1	359892	01/09/25	01/13/25	MES
Endrin aldehyde	ND		ug/Kg	5.1	3.6	1	359892	01/09/25	01/13/25	MES
Endrin ketone	ND		ug/Kg	5.1	2.1	1	359892	01/09/25	01/13/25	MES
4,4'-DDT	ND		ug/Kg	5.1	2.1	1	359892	01/09/25	01/13/25	MES
Methoxychlor	ND		ug/Kg	10	3.8	1	359892	01/09/25	01/13/25	MES
Toxaphene	ND		ug/Kg	100	88	1	359892	01/09/25	01/13/25	MES
Chlordane (Technical)	ND		ug/Kg	51	39	1	359892	01/09/25	01/13/25	MES
Surrogates				**Limits**						
TCMX	78%		%REC	23-120		1	359892	01/09/25	01/13/25	MES
Decachlorobiphenyl	88%		%REC	24-120		1	359892	01/09/25	01/13/25	MES

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 523595

Sample ID: SB-3-1.5'	Lab ID: 523595-004	Collected: 01/08/25 09:03
	Matrix: Soil	

523595-004 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 6010B Prep Method: EPA 3050B										
Arsenic	**6.0**		mg/Kg	0.97	0.61	0.97	359771	01/08/25	01/08/25	CAP
Method: EPA 8081A Prep Method: EPA 3546										
alpha-BHC	ND		ug/Kg	5.1	2.0	1	359892	01/09/25	01/13/25	MES
beta-BHC	ND		ug/Kg	5.1	2.0	1	359892	01/09/25	01/13/25	MES
gamma-BHC	ND		ug/Kg	5.1	1.7	1	359892	01/09/25	01/13/25	MES
delta-BHC	ND		ug/Kg	5.1	2.4	1	359892	01/09/25	01/13/25	MES
Heptachlor	ND		ug/Kg	5.1	1.9	1	359892	01/09/25	01/13/25	MES
Aldrin	ND		ug/Kg	5.1	2.3	1	359892	01/09/25	01/13/25	MES
Heptachlor epoxide	ND		ug/Kg	5.1	2.1	1	359892	01/09/25	01/13/25	MES
Endosulfan I	ND		ug/Kg	5.1	2.3	1	359892	01/09/25	01/13/25	MES
Dieldrin	ND		ug/Kg	5.1	3.1	1	359892	01/09/25	01/13/25	MES
4,4'-DDE	ND		ug/Kg	5.1	3.2	1	359892	01/09/25	01/13/25	MES
Endrin	ND		ug/Kg	5.1	2.0	1	359892	01/09/25	01/13/25	MES
Endosulfan II	ND		ug/Kg	5.1	2.0	1	359892	01/09/25	01/13/25	MES
Endosulfan sulfate	ND		ug/Kg	5.1	3.2	1	359892	01/09/25	01/13/25	MES
4,4'-DDD	ND		ug/Kg	5.1	1.6	1	359892	01/09/25	01/13/25	MES
Endrin aldehyde	ND		ug/Kg	5.1	3.6	1	359892	01/09/25	01/13/25	MES
Endrin ketone	ND		ug/Kg	5.1	2.1	1	359892	01/09/25	01/13/25	MES
4,4'-DDT	ND		ug/Kg	5.1	2.1	1	359892	01/09/25	01/13/25	MES
Methoxychlor	ND		ug/Kg	10	3.8	1	359892	01/09/25	01/13/25	MES
Toxaphene	ND		ug/Kg	100	88	1	359892	01/09/25	01/13/25	MES
Chlordane (Technical)	ND		ug/Kg	51	39	1	359892	01/09/25	01/13/25	MES
Surrogates				**Limits**						
TCMX	71%		%REC	23-120		1	359892	01/09/25	01/13/25	MES
Decachlorobiphenyl	76%		%REC	24-120		1	359892	01/09/25	01/13/25	MES

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Analysis Results for 523595

Sample ID: SB-4-1'	Lab ID: 523595-005	Collected: 01/08/25 09:25
	Matrix: Soil	

523595-005 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8015M Prep Method: EPA 3580M										
GRO C6-C10	ND		mg/Kg	10		1	359816	01/09/25	01/14/25	KMB
DRO C10-C28	**9.9**	J	mg/Kg	10	3.7	1	359816	01/09/25	01/14/25	KMB
ORO C28-C44	**24**		mg/Kg	10	3.7	1	359816	01/09/25	01/14/25	KMB
Surrogates				**Limits**						
n-Triacontane	112%		%REC	70-130		1	359816	01/09/25	01/14/25	KMB
Method: EPA 8082 Prep Method: EPA 3546										
Aroclor-1016	ND		ug/Kg	50	24	1	359892	01/09/25	01/10/25	MES
Aroclor-1221	ND		ug/Kg	50	24	1	359892	01/09/25	01/10/25	MES
Aroclor-1232	ND		ug/Kg	50	20	1	359892	01/09/25	01/10/25	MES
Aroclor-1242	ND		ug/Kg	50	26	1	359892	01/09/25	01/10/25	MES
Aroclor-1248	ND		ug/Kg	50	35	1	359892	01/09/25	01/10/25	MES
Aroclor-1254	ND		ug/Kg	50	37	1	359892	01/09/25	01/10/25	MES
Aroclor-1260	ND		ug/Kg	50	27	1	359892	01/09/25	01/10/25	MES
Aroclor-1262	ND		ug/Kg	50	25	1	359892	01/09/25	01/10/25	MES
Aroclor-1268	ND		ug/Kg	50	31	1	359892	01/09/25	01/10/25	MES
Surrogates				**Limits**						
Decachlorobiphenyl (PCB)	57%		%REC	19-121		1	359892	01/09/25	01/10/25	MES

Sample ID: SB-5-1'	Lab ID: 523595-006	Collected: 01/08/25 09:43
	Matrix: Soil	

523595-006 Analyte	Result	Qual	Units	RL	MDL	DF	Batch	Prepared	Analyzed	Chemist
Method: EPA 8015M Prep Method: EPA 3580M										
GRO C6-C10	ND		mg/Kg	10		1	359816	01/09/25	01/10/25	KMB
DRO C10-C28	ND		mg/Kg	10	3.7	1	359816	01/09/25	01/10/25	KMB
ORO C28-C44	**4.5**	J	mg/Kg	10	3.7	1	359816	01/09/25	01/10/25	KMB
Surrogates				**Limits**						
n-Triacontane	90%		%REC	70-130		1	359816	01/09/25	01/10/25	KMB
Method: EPA 8082 Prep Method: EPA 3546										
Aroclor-1016	ND		ug/Kg	50	24	1	359892	01/09/25	01/10/25	MES
Aroclor-1221	ND		ug/Kg	50	24	1	359892	01/09/25	01/10/25	MES
Aroclor-1232	ND		ug/Kg	50	20	1	359892	01/09/25	01/10/25	MES
Aroclor-1242	ND		ug/Kg	50	26	1	359892	01/09/25	01/10/25	MES
Aroclor-1248	ND		ug/Kg	50	35	1	359892	01/09/25	01/10/25	MES
Aroclor-1254	ND		ug/Kg	50	37	1	359892	01/09/25	01/10/25	MES
Aroclor-1260	ND		ug/Kg	50	27	1	359892	01/09/25	01/10/25	MES
Aroclor-1262	ND		ug/Kg	50	25	1	359892	01/09/25	01/10/25	MES
Aroclor-1268	ND		ug/Kg	50	31	1	359892	01/09/25	01/10/25	MES
Surrogates				**Limits**						
Decachlorobiphenyl (PCB)	56%		%REC	19-121		1	359892	01/09/25	01/10/25	MES

Results for any subcontracted analyses are not included in this section.

Analysis Results for 523595

J Estimated value
ND Not Detected

Results for any subcontracted analyses are not included in this section.

ENTHALPY ANALYTICAL

Batch QC

Type: Blank	Lab ID: QC1218580	Batch: 359838
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1218580 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
Arsenic	ND		mg/Kg	1.0	0.63	01/09/25	01/09/25

Type: Lab Control Sample	Lab ID: QC1218581	Batch: 359838
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1218581 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Arsenic	87.79	100.0	mg/Kg	88%		80-120

Type: Matrix Spike	Lab ID: QC1218582	Batch: 359838
Matrix (Source ID): Soil (523595-001)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1218582 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	96.98	5.713	97.09	mg/Kg	94%		75-125	0.97

Type: Matrix Spike Duplicate	Lab ID: QC1218583	Batch: 359838
Matrix (Source ID): Soil (523595-001)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1218583 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Arsenic	96.71	5.713	95.24	mg/Kg	96%		75-125	2	35	0.95

Type: Post Digest Spike	Lab ID: QC1218584	Batch: 359838
Matrix (Source ID): Soil (523595-001)	Method: EPA 6010B	Prep Method: EPA 3050B

QC1218584 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	97.85	5.713	100.0	mg/Kg	92%		75-125	1

Type: Blank	Lab ID: QC1218347	Batch: 359771
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1218347 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
Arsenic	ND		mg/Kg	1.0	0.63	01/08/25	01/08/25

Type: Lab Control Sample	Lab ID: QC1218348	Batch: 359771
Matrix: Soil	Method: EPA 6010B	Prep Method: EPA 3050B

QC1218348 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Arsenic	92.74	100.0	mg/Kg	93%		80-120

ENTHALPY ANALYTICAL

Batch QC

Type:	Matrix Spike	Lab ID:	QC1218349	Batch:	359771
Matrix (Source ID):	Miscell. (523402-001)	Method:	EPA 6010B	Prep Method:	EPA 3050B

QC1218349 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	164.5	70.04	99.01	mg/Kg	95%		75-125	0.99

Type:	Matrix Spike Duplicate	Lab ID:	QC1218350	Batch:	359771
Matrix (Source ID):	Miscell. (523402-001)	Method:	EPA 6010B	Prep Method:	EPA 3050B

QC1218350 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Arsenic	162.9	70.04	95.24	mg/Kg	97%		75-125	1	35	0.95

Type:	Post Digest Spike	Lab ID:	QC1218351	Batch:	359771
Matrix (Source ID):	Miscell. (523402-001)	Method:	EPA 6010B	Prep Method:	EPA 3050B

QC1218351 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Arsenic	164.9	70.04	99.01	mg/Kg	96%		75-125	0.99

Type:	Blank	Lab ID:	QC1218510	Batch:	359816
Matrix:	Soil	Method:	EPA 8015M	Prep Method:	EPA 3580M

QC1218510 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
GRO C6-C10	ND		mg/Kg	9.9		01/09/25	01/09/25
DRO C10-C28	ND		mg/Kg	9.9	3.6	01/09/25	01/09/25
ORO C28-C44	ND		mg/Kg	9.9	3.6	01/09/25	01/09/25
Surrogates				**Limits**			
n-Triacontane	70%		%REC	70-130		01/09/25	01/09/25

Type:	Lab Control Sample	Lab ID:	QC1218511	Batch:	359816
Matrix:	Soil	Method:	EPA 8015M	Prep Method:	EPA 3580M

QC1218511 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Diesel C10-C28	230.0	250.0	mg/Kg	92%		76-122
Surrogates						
n-Triacontane	9.304	10.00	mg/Kg	93%		70-130

ENTHALPY ANALYTICAL

Batch QC

Type:	**Matrix Spike**	**Lab ID:**	**QC1218512**	**Batch:**	**359816**
Matrix (Source ID):	**Soil (523453-001)**	**Method:**	**EPA 8015M**	**Prep Method:**	**EPA 3580M**

QC1218512 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Diesel C10-C28	271.5	54.18	248.8	mg/Kg	87%		62-126	1
Surrogates								
n-Triacontane	11.13		9.950	mg/Kg	112%		70-130	1

Type:	**Matrix Spike Duplicate**	**Lab ID:**	**QC1218513**	**Batch:**	**359816**
Matrix (Source ID):	**Soil (523453-001)**	**Method:**	**EPA 8015M**	**Prep Method:**	**EPA 3580M**

QC1218513 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Diesel C10-C28	274.3	54.18	249.0	mg/Kg	88%		62-126	1	35	1
Surrogates										
n-Triacontane	11.24		9.960	mg/Kg	113%		70-130			1

ENTHALPY ANALYTICAL

Batch QC

Type: Blank	Lab ID: QC1218687	Batch: 359892
Matrix: Soil		

QC1218687 Analyte	Result	Qual	Units	RL	MDL	Prepared	Analyzed
Method: EPA 8081A Prep Method: EPA 3546							
alpha-BHC	ND		ug/Kg	5.0	2.0	01/09/25	01/12/25
beta-BHC	ND		ug/Kg	5.0	1.9	01/09/25	01/12/25
gamma-BHC	ND		ug/Kg	5.0	1.7	01/09/25	01/12/25
delta-BHC	ND		ug/Kg	5.0	2.4	01/09/25	01/12/25
Heptachlor	ND		ug/Kg	5.0	1.9	01/09/25	01/12/25
Aldrin	ND		ug/Kg	5.0	2.3	01/09/25	01/12/25
Heptachlor epoxide	ND		ug/Kg	5.0	2.1	01/09/25	01/12/25
Endosulfan I	ND		ug/Kg	5.0	2.2	01/09/25	01/12/25
Dieldrin	ND		ug/Kg	5.0	3.1	01/09/25	01/12/25
4,4'-DDE	ND		ug/Kg	5.0	3.2	01/09/25	01/12/25
Endrin	ND		ug/Kg	5.0	2.0	01/09/25	01/12/25
Endosulfan II	ND		ug/Kg	5.0	2.0	01/09/25	01/12/25
Endosulfan sulfate	ND		ug/Kg	5.0	3.2	01/09/25	01/12/25
4,4'-DDD	ND		ug/Kg	5.0	1.6	01/09/25	01/12/25
Endrin aldehyde	ND		ug/Kg	5.0	3.6	01/09/25	01/12/25
Endrin ketone	ND		ug/Kg	5.0	2.1	01/09/25	01/12/25
4,4'-DDT	ND		ug/Kg	5.0	2.0	01/09/25	01/12/25
Methoxychlor	ND		ug/Kg	10	3.8	01/09/25	01/12/25
Toxaphene	ND		ug/Kg	100	87	01/09/25	01/12/25
Chlordane (Technical)	ND		ug/Kg	50	39	01/09/25	01/12/25
Surrogates				**Limits**			
TCMX	63%		%REC	23-120		01/09/25	01/12/25
Decachlorobiphenyl	76%		%REC	24-120		01/09/25	01/12/25
Method: EPA 8082 Prep Method: EPA 3546							
Aroclor-1016	ND		ug/Kg	50	24	01/09/25	01/10/25
Aroclor-1221	ND		ug/Kg	50	24	01/09/25	01/10/25
Aroclor-1232	ND		ug/Kg	50	20	01/09/25	01/10/25
Aroclor-1242	ND		ug/Kg	50	26	01/09/25	01/10/25
Aroclor-1248	ND		ug/Kg	50	35	01/09/25	01/10/25
Aroclor-1254	ND		ug/Kg	50	37	01/09/25	01/10/25
Aroclor-1260	ND		ug/Kg	50	27	01/09/25	01/10/25
Aroclor-1262	ND		ug/Kg	50	25	01/09/25	01/10/25
Aroclor-1268	ND		ug/Kg	50	31	01/09/25	01/10/25
Surrogates				**Limits**			
Decachlorobiphenyl (PCB)	80%		%REC	19-121		01/09/25	01/10/25

ENTHALPY ANALYTICAL

Batch QC

Type:	**Lab Control Sample**	**Lab ID:**	**QC1218688**	**Batch:**	**359892**
Matrix:	**Soil**	**Method:**	**EPA 8081A**	**Prep Method:**	**EPA 3546**

QC1218688 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
alpha-BHC	48.76	49.02	ug/Kg	99%		22-129
beta-BHC	46.34	49.02	ug/Kg	95%		28-125
gamma-BHC	48.86	49.02	ug/Kg	100%		22-128
delta-BHC	49.79	49.02	ug/Kg	102%		24-131
Heptachlor	48.14	49.02	ug/Kg	98%		18-124
Aldrin	47.40	49.02	ug/Kg	97%		23-120
Heptachlor epoxide	47.83	49.02	ug/Kg	98%		26-120
Endosulfan I	49.09	49.02	ug/Kg	100%		25-126
Dieldrin	48.99	49.02	ug/Kg	100%		23-124
4,4'-DDE	51.21	49.02	ug/Kg	104%		28-121
Endrin	52.00	49.02	ug/Kg	106%		25-127
Endosulfan II	51.20	49.02	ug/Kg	104%		29-121
Endosulfan sulfate	49.12	49.02	ug/Kg	100%		30-121
4,4'-DDD	49.18	49.02	ug/Kg	100%		26-120
Endrin aldehyde	36.08	49.02	ug/Kg	74%		10-120
Endrin ketone	52.07	49.02	ug/Kg	106%		28-125
4,4'-DDT	49.91	49.02	ug/Kg	102%		22-125
Methoxychlor	51.04	49.02	ug/Kg	104%		28-130
Surrogates						
TCMX	37.03	49.02	ug/Kg	76%		23-120
Decachlorobiphenyl	44.37	49.02	ug/Kg	91%		24-120

ENTHALPY ANALYTICAL

Batch QC

Type:	**Matrix Spike**	**Lab ID:**	**QC1218689**	**Batch:**	**359892**
Matrix (Source ID):	**Soil (523595-001)**	**Method:**	**EPA 8081A**	**Prep Method:**	**EPA 3546**

QC1218689 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
alpha-BHC	41.98	ND	50.51	ug/Kg	83%		46-120	1
beta-BHC	39.55	ND	50.51	ug/Kg	78%		41-120	1
gamma-BHC	41.59	ND	50.51	ug/Kg	82%		41-120	1
delta-BHC	43.01	ND	50.51	ug/Kg	85%		38-123	1
Heptachlor	40.09	ND	50.51	ug/Kg	79%		39-120	1
Aldrin	42.68	ND	50.51	ug/Kg	85%		34-120	1
Heptachlor epoxide	40.76	ND	50.51	ug/Kg	81%		43-120	1
Endosulfan I	41.97	ND	50.51	ug/Kg	83%		45-120	1
Dieldrin	41.60	ND	50.51	ug/Kg	82%		45-120	1
4,4'-DDE	43.67	ND	50.51	ug/Kg	86%		34-120	1
Endrin	44.03	ND	50.51	ug/Kg	87%		40-120	1
Endosulfan II	43.74	ND	50.51	ug/Kg	87%		41-120	1
Endosulfan sulfate	42.28	ND	50.51	ug/Kg	84%		42-120	1
4,4'-DDD	43.16	ND	50.51	ug/Kg	85%		41-120	1
Endrin aldehyde	30.86	ND	50.51	ug/Kg	61%		30-120	1
Endrin ketone	43.73	ND	50.51	ug/Kg	87%		45-120	1
4,4'-DDT	37.92	ND	50.51	ug/Kg	75%		35-127	1
Methoxychlor	37.93	ND	50.51	ug/Kg	75%		42-136	1
Surrogates								
TCMX	32.27		50.51	ug/Kg	64%		23-120	1
Decachlorobiphenyl	37.08		50.51	ug/Kg	73%		24-120	1

ENTHALPY ANALYTICAL

Batch QC

Type:	**Matrix Spike Duplicate**	**Lab ID:**	**QC1218690**	**Batch:**	**359892**
Matrix (Source ID):	**Soil (523595-001)**	**Method:**	**EPA 8081A**	**Prep Method:**	**EPA 3546**

QC1218690 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
alpha-BHC	42.71	ND	50.51	ug/Kg	85%		46-120	2	30	1
beta-BHC	39.55	ND	50.51	ug/Kg	78%		41-120	0	30	1
gamma-BHC	42.43	ND	50.51	ug/Kg	84%		41-120	2	30	1
delta-BHC	43.38	ND	50.51	ug/Kg	86%		38-123	1	30	1
Heptachlor	40.93	ND	50.51	ug/Kg	81%		39-120	2	30	1
Aldrin	42.64	ND	50.51	ug/Kg	84%		34-120	0	30	1
Heptachlor epoxide	41.00	ND	50.51	ug/Kg	81%		43-120	1	30	1
Endosulfan I	42.27	ND	50.51	ug/Kg	84%		45-120	1	30	1
Dieldrin	41.89	ND	50.51	ug/Kg	83%		45-120	1	30	1
4,4'-DDE	43.76	ND	50.51	ug/Kg	87%		34-120	0	30	1
Endrin	44.23	ND	50.51	ug/Kg	88%		40-120	0	30	1
Endosulfan II	43.81	ND	50.51	ug/Kg	87%		41-120	0	30	1
Endosulfan sulfate	42.79	ND	50.51	ug/Kg	85%		42-120	1	30	1
4,4'-DDD	43.36	ND	50.51	ug/Kg	86%		41-120	0	30	1
Endrin aldehyde	31.61	ND	50.51	ug/Kg	63%		30-120	2	30	1
Endrin ketone	44.84	ND	50.51	ug/Kg	89%		45-120	3	30	1
4,4'-DDT	38.20	ND	50.51	ug/Kg	76%		35-127	1	30	1
Methoxychlor	38.60	ND	50.51	ug/Kg	76%		42-136	2	30	1
Surrogates										
TCMX	32.42		50.51	ug/Kg	64%		23-120			1
Decachlorobiphenyl	37.46		50.51	ug/Kg	74%		24-120			1

Type:	**Lab Control Sample**	**Lab ID:**	**QC1218691**	**Batch:**	**359892**
Matrix:	**Soil**	**Method:**	**EPA 8082**	**Prep Method:**	**EPA 3546**

QC1218691 Analyte	Result	Spiked	Units	Recovery	Qual	Limits
Aroclor-1016	401.0	505.1	ug/Kg	79%		14-150
Aroclor-1260	410.6	505.1	ug/Kg	81%		10-150
Surrogates						
Decachlorobiphenyl (PCB)	37.88	50.51	ug/Kg	75%		19-121

Type:	**Matrix Spike**	**Lab ID:**	**QC1218692**	**Batch:**	**359892**
Matrix (Source ID):	**Soil (523470-013)**	**Method:**	**EPA 8082**	**Prep Method:**	**EPA 3546**
				Basis:	**Dry**

QC1218692 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	DF
Aroclor-1016	760.9	ND	537.6	ug/Kg	142%	*	42-127	1
Aroclor-1260	1,215	582.8	537.6	ug/Kg	118%		38-130	1
Surrogates								
Decachlorobiphenyl (PCB)	43.28		53.76	ug/Kg	81%		19-121	1

ENTHALPY ANALYTICAL

Batch QC

Type:	**Matrix Spike Duplicate**	**Lab ID:**	**QC1218693**	**Batch:**	**359892**
Matrix (Source ID):	**Soil (523470-013)**	**Method:**	**EPA 8082**	**Prep Method:**	**EPA 3546**
				Basis:	**Dry**

QC1218693 Analyte	Result	Source Sample Result	Spiked	Units	Recovery	Qual	Limits	RPD	RPD Lim	DF
Aroclor-1016	782.9	ND	543.1	ug/Kg	144%	*	42-127	2	30	1
Aroclor-1260	1,186	582.8	543.1	ug/Kg	111%		38-130	3	30	1
Surrogates										
Decachlorobiphenyl (PCB)	44.03		54.31	ug/Kg	81%		19-121			1

* Value is outside QC limits
ND Not Detected

Appendix G:

Preliminary Hydrology & Hydraulics Report

Preliminary Hydrology & Hydraulics Report
Aliso Viejo, CA

Prepared for:

Shea Homes
2 Ada, Suite 200
Irvine, CA 92618

Prepared by:

Proactive Engineering Consultants
27042 Towne Centre Drive, Suite 270
Foothill Ranch, CA 92610

Prepared: September 2025

_____

Prepared by Amy L. Jaramillo, P.E. RCE 94608

PROACTIVE ENGINEERING CONSULTANTS

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Figure 1: Vicinity Map
Figure 2: Project Location

Exhibits

Exhibit A – Existing Condition Hydrology Map
Exhibit B – Proposed Condition Hydrology Map

Technical Appendices

Appendix A: Rational Method Hydrology (AES) – Existing
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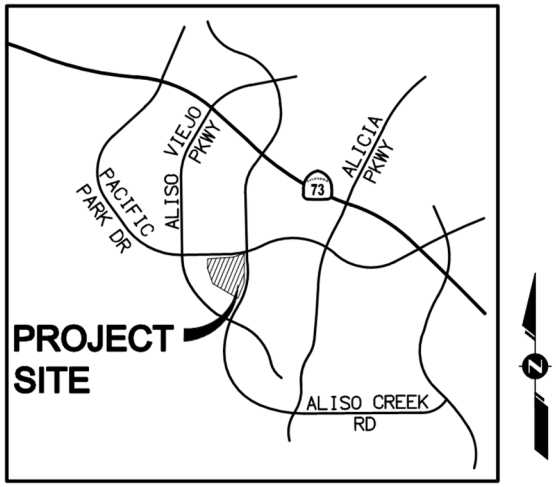
INTRODUCTION

This report includes the preliminary hydrologic analysis completed for Tentative Tract Map for Shea Homes development in the City of Aliso Viejo. The project is located south of Pacific Park Dr and west of Aliso Creek Rd. The project site is approximately 8.5 acres. The general location of the project site is shown on Figure 1, Vicinity Map.

The site is currently zoned professional office and the project proposes residential high density. Given the existing site is developed with three two story office buildings and associated surface parking, it is not anticipated that the proposed project should greatly increase the runoff from the site.

Figure 1: Vicinity Map



The purpose of this preliminary hydrology and hydraulics report is to evaluate the hydrologic conditions for the proposed site development and identify preliminary storm drain facilities based on the results of the hydrologic analysis.

The primary objectives of this report are as follows:

1. Delineate the tributary drainage areas for the existing site.
2. Delineate the tributary drainage areas for the project conditions.
3. Based on the drainage patterns, ground slope, land use and soil type and using the Orange County Rational Method, perform hydrologic calculations of the on site drainage areas for the existing and proposed condition.
4. Based on the hydrology results, and physical site requirements, identify preliminary storm drain facilities to collect and convey the computed design discharges.

EXISTING SITE CONDITIONS

The existing property contains three two-story office buildings and surface parking. These areas are fairly flat, with a slope between 1-3%. The western edge of the property is an existing landscaped 2:1 slope. The runoff from the slopes is picked up by a series of v-ditches and downdrains which in turn tie into the private on-site storm drain system. There are a series of onsite inlets that take the site surface drainage and run it to the point of connection at the eastern edge.

The 30" RCP runs through the adjacent parcel (existing gas station at the corner of Aliso Creek and Pacific Park). From there the storm drain connects to a catch basin in Aliso Creek Rd and in turn enters an existing 42" RCP in Aliso Creek. That pipe joins an existing 72" RCP in Pacific Park which

continues down Woodfield. Along Woodfield the pipe upsizes to a 96" RCP and eventually outlets into Aliso Creek Channel.

PROJECT CONDITIONS

The project proposes the redevelopment of three existing commercial office buildings and associated parking lots into 137 town home and garden court condos with associated private streets, wet and dry utilities, landscaping, rec center and amenities. The overall drainage pattern will be very similar, still draining to the east and connecting to the existing offsite 30" RCP. The western landscaped slopes will primarily stay untouched. The grades along the boundaries will not significantly change. The streets will drain at approximately 0.7-2.0% across the site.

Figure 2: Project Location

HYDROLOGY ANALYSIS AND METHODOLOGY

Hydrologic calculations were performed in accordance with the methods described in the Orange County Hydrology Manual. The Rational Method Module of Advanced Engineering Software (AES) Computer Software Version 22.0 was used in performing the runoff calculations. The design discharges were computed by generating a hydrologic "link-node" model that divides the area into drainage sub-areas, each tributary to a concentration point or hydrologic "node" point determined by the proposed layout.

HYDROLOGIC SOIL TYPE

Soil Type D per Orange County Public Works Watershed Infiltration & Hydromodification Management Plan GIS.

RAINFALL DATA

All precipitation data was based on the AES preset values for rainfall intensity for Orange County. The intensity values are derived from the intensity-duration curves found on Figure B-3 of the Orange County Hydrology Manual. An antecedent moisture content AMC II condition was used for the 10 and 25 - year analysis.

RUNOFF INDEX AND LAND USE

A land use of open brush was used for the existing 2:1 landscape slopes along the western edge of the project. A land use of commercial was used for the existing parking and office buildings. A land use of apartments was used for the proposed condition given the calculated impervious rate of the site plan.

RESULTS & CONCLUSION

The table below summarizes the 10 & 25 flows at the point of connection.

Table 1 : 10 & 25 yr Existing vs. Proposed Runoff Peak Q (AES)			
	Tributary Area (ac)	10 Year Peak Flow (cfs)	25 Year Peak Flow (cfs)
Existing Condition	7.4	15.6	18.8
Proposed Condition	7.9	17.2	20.8

See Appendix A for complete 10 and 25 year existing conditions AES results. See Appendix B for complete 10 and 25 year proposed condition results.

From the results you can see the proposed condition has increased the peak flow leaving the site by approximately 11%. The main reason for this increase is the slight change in total tributary area. The existing condition tributary area is only 7.4 acres compared to the proposed condition 7.9 acres. The main difference in the drainage areas is along the southern boundary. In the existing condition there are parking spaces along the southern boundary that drain away from the project site. In the proposed condition this runoff is captured in the on site storm drain system. There is also a slight increase in drainage area along the eastern edge where retaining walls will be used to increase the flat developable space. Overall the slight increase in flow can be attributed to the slight increase in drainage area and therefore there are no anticipated impacts to the site drainage.

In order to mitigate the peak increase down to the existing peak flow discharge the increase in runoff volume was calculated by running the unit hydrograph in both the existing and proposed conditions (plots can be found on the next page, Figures 3 & 4 and full results can be found in Appendix C). The precipitation losses were calculated following the Orange County Hydrology Manual. The areas with the same land use and soil type were totaled up to simplify the calculations.

The increase in volume was calculated by plotting the unit hydrograph for the proposed condition and drawing a horizontal line across at the existing condition peak flow. The area between the proposed hydrograph and existing peak was calculated and units converted into cubic feet (see Figure 5). This peak volume increase was calculated to be approximately 950 cubic feet. This increased volume will be mitigated by upsizing a sufficient stretch of on-site storm drain pipe and outletting the flow through an orifice to match the existing peak flow. See preliminary orifice calculations in Appendix D. Final sizing and orifice design will be part of final engineering.

Figure 3: Existing Unti Hydrograph (25 year)

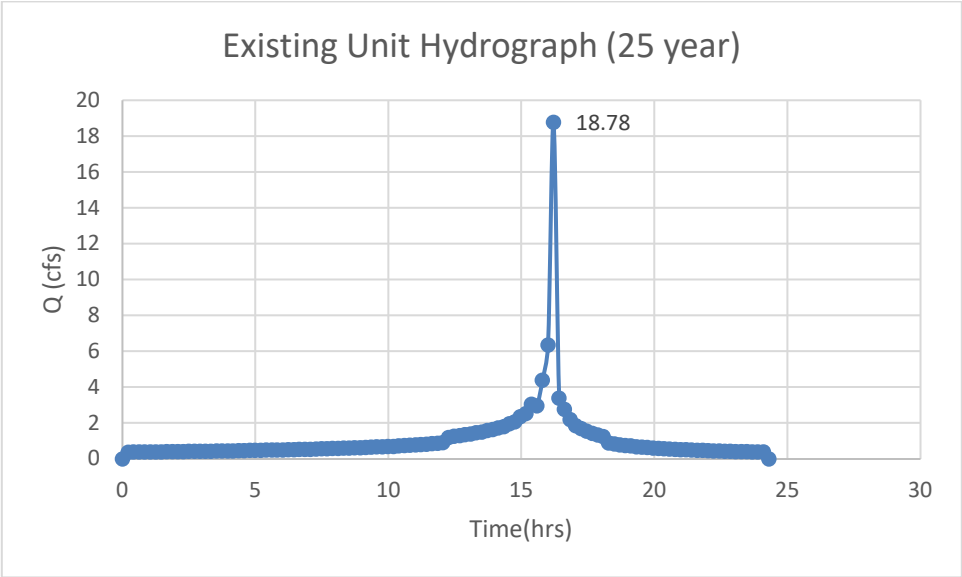


Figure 4: Proposed Unti Hydrograph (25 year)

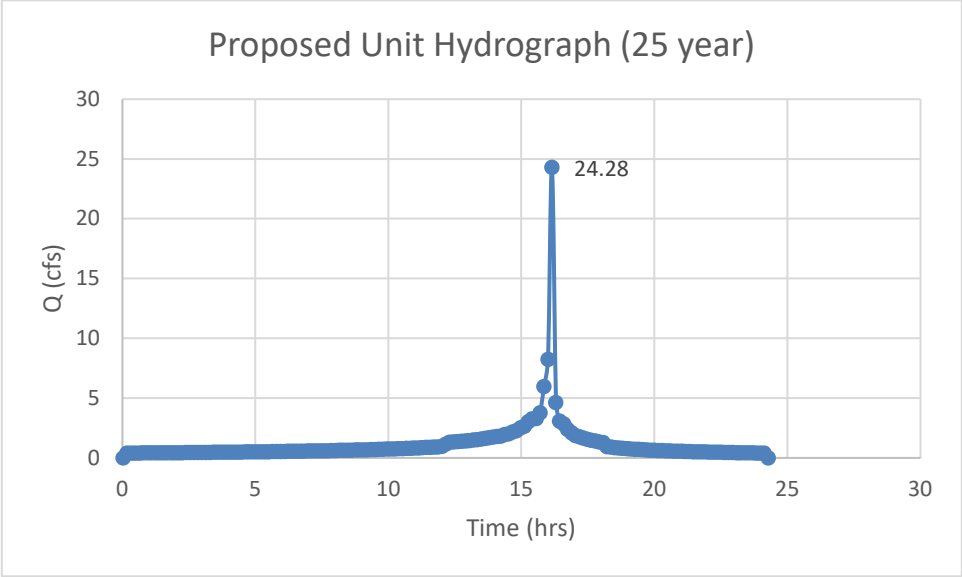
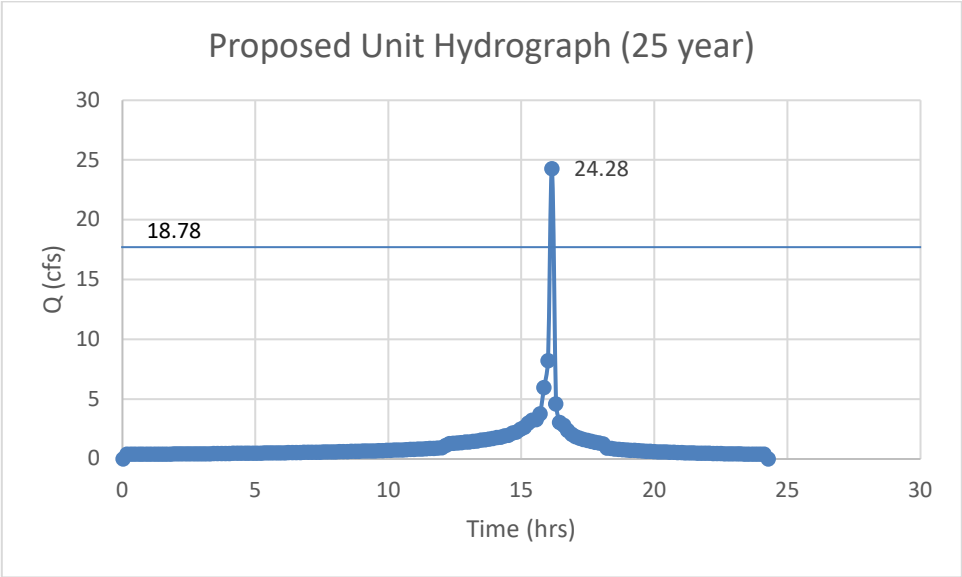


Figure 5: Volume Increase

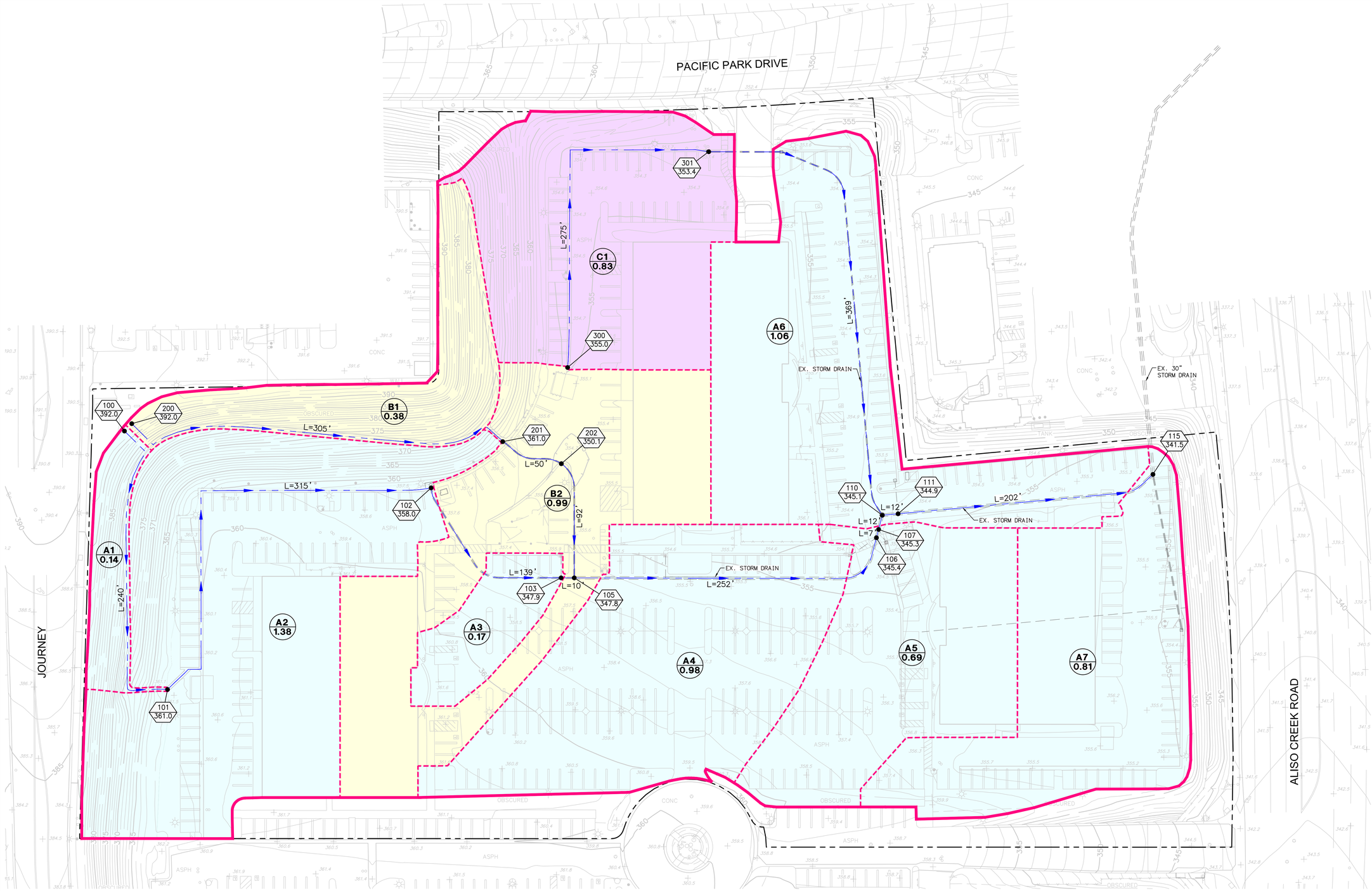


Area between proposed hydrograph and existing peak (horizontal line at 18.78 cfs).
Area = 0.26 cf-hr/sec x (60 sec/1 min) x (60 min/1hr) = 936 cubic feet

REFERENCES

Orange County (1986). *Orange County Hydrology Manual.* Department of Public Works. October 1986.

EXHIBITS



LEGEND

- A1 / 1.0 — SUBAREA NO. / SUBAREA AREA - ACRE
- 120 / 341.0 — NODE / ELEVATION
- L=100' — FLOW PATH DISTANCE
- DRAINAGE BOUNDARY
- SUBAREA DRAINAGE BOUNDARY
- PROPERTY LINE
- FLOW PATH

30 15 0 30 60 90

SCALE: 1"=30'

AMY L. JARAMILLO, R.C.E. NO. 94608 DATE

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HYDROLOGY EXHIBIT
27181 ALISO CREEK RD
EXISTING CONDITION

PLAN PREPARATION: JUNE 2025

SHEET 1 OF 1

Plotted: Jun 30, 2025 - 5:28pm by: A_Jaramillo
Drawing Name: N:\20.197.000\DLV\REPORTS\HMP\197-PRE-HYD-MAP.dwg

PACIFIC PARK DRIVE

JOURNEY

ALISO CREEK ROAD

EX. 30" STORM DRAIN

JOIN EX. STORM DRAIN

EX. STORM DRAIN

PROP. STORM DRAIN

B1 0.56 | B2 0.40 | B3 0.16 | B4 0.50 | B5 0.25 | B6 0.81 | B7 0.96 | B8 0.76 | A1 0.30 | A3 0.12 | A4 0.12 | A5 0.38 | A6 0.95 | A7 0.93 | A8 0.30 | A9 0.42

100 382.0 | 101 354.0 | 102 352.3 | 103 352.1 | 104 349.6 | 105 346.6 | 106 346.3 | 110 342.0 | 115 341.4 | 120 341.0 | 200 367.0 | 201 364.0 | 210 355.5 | 211 353.5 | 300 392.0 | 301 361.0 | 305 349.3 | 310 345.0 | 315 342.3 | 400 360.9 | 401 360.4 | 500 370.0 | 501 361.0 | 502 356.5 | 503 352.7 | 504 347.4 | 505 347.0 | 506 346.8 | 507 345.7

L=305' | L=263' | L=175' | L=45' | L=25' | L=144' | L=139' | L=87' | L=78' | L=146' | L=144' | L=275' | L=24' | L=57' | L=150' | L=179' | L=63' | L=200' | L=235' | L=111' | L=170' | L=19' | L=250' | L=307' | L=26' | L=218'

PAD=356.8 | PAD=356.3 | PAD=356.1 | PAD=357.0 | PAD=356.5 | PAD=356.8 | PAD=357.3 | PAD=357.5 | PAD=357.0 | PAD=358.3 | PAD=357.8 | PAD=357.1 | PAD=357.6 | PAD=358.8 | PAD=358.3 | PAD=357.6 | PAD=357.1 | PAD=361.7 | PAD=360.5 | PAD=360.0 | PAD=359.3 | PAD=358.8 | PAD=357.3 | PAD=356.8 | PAD=356.1 | PAD=355.6 | PAD=354.5 | PAD=355.0 | PAD=361.1 | PAD=360.6 | PAD=361.6 | PAD=361.1 | PAD=360.4 | PAD=359.9 | PAD=359.2 | PAD=358.7 | PAD=357.1 | PAD=356.6 | PAD=356.0 | PAD=355.5 | PAD=354.8 | PAD=354.3 | PAD=362.2 | PAD=361.7 | PAD=360.7 | PAD=360.2 | PAD=359.8 | PAD=359.3 | PAD=357.1 | PAD=356.6 | PAD=355.9 | PAD=355.4

LEGEND

- A1 / 1.0 — SUBAREA NO. / SUBAREA AREA - ACRE
- 120 / 341.0 — NODE / ELEVATION
- L=100' — FLOW PATH DISTANCE
- DRAINAGE BOUNDARY
- SUBAREA DRAINAGE BOUNDARY
- PROPERTY LINE
- FLOW PATH

30 15 0 30 60 90

SCALE: 1"=30'

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HYDROLOGY EXHIBIT
27181 ALISO CREEK RD
PROPOSED CONDITION

PLAN PREPARATION: JUNE 2025

SHEET 1 OF 1

Plotted: Jun 30, 2025 - 5:28pm by: A_Jaramillo
Drawing Name: N:\20.197.000\DLV\REPORTS\Hdrlt\197-POST-HYD-MAP.dwg

APPENDIX

APPENDIX A
Rational Method Hydrology - EXISTING

A.1
EXISTING 10 YEAR STORM

RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
(Reference: 1986 ORANGE COUNTY HYDROLOGY CRITERION)
(c) Copyright 1983-2015 Advanced Engineering Software (aes)
Ver. 22.0 Release Date: 07/01/2015 License ID 1673

Analysis prepared by:

PROACTIVE
ENGINEERING CONSULTANTS

```
 ************************* DESCRIPTION OF STUDY *************************
* EXISTING 10 YR STORM                                                  *
*                                                                       *
*                                                                       *
 ************************************************************************

  FILE NAME: 197-E10.DAT
  TIME/DATE OF STUDY: 14:37 06/26/2025
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =   10.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  18.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *DATA BANK RAINFALL USED*
  *ANTECEDENT MOISTURE CONDITION (AMC) II ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  =========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0313 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

**************************************************************************
  FLOW PROCESS FROM NODE    100.00 TO NODE    101.00 IS CODE =  21
--------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   240.00
  ELEVATION DATA: UPSTREAM(FEET) =    392.00  DOWNSTREAM(FEET) =    361.00
```



```
  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    9.520
  *  10 YEAR RAINFALL INTENSITY(INCH/HR) =  2.807
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  NATURAL FAIR COVER
  "OPEN BRUSH"               D        0.14      0.20     1.000    83    9.52
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  1.000
  SUBAREA RUNOFF(CFS) =      0.33
  TOTAL AREA(ACRES) =      0.14   PEAK FLOW RATE(CFS) =      0.33

**************************************************************************
  FLOW PROCESS FROM NODE    101.00 TO NODE    102.00 IS CODE =  92
--------------------------------------------------------------------------
  >>>>>COMPUTE "V" GUTTER FLOW TRAVEL TIME THRU SUBAREA<<<<<
==========================================================================
  UPSTREAM NODE ELEVATION(FEET) =    361.00
  DOWNSTREAM NODE ELEVATION(FEET) =    358.00
  CHANNEL LENGTH THRU SUBAREA(FEET) =   315.00
  "V" GUTTER WIDTH(FEET) =   3.00   GUTTER HIKE(FEET) =  0.120
  PAVEMENT LIP(FEET) =  0.030   MANNING'S N = .0150
  PAVEMENT CROSSFALL(DECIMAL NOTATION) = 0.02000
  MAXIMUM DEPTH(FEET) =   0.20
  *  10 YEAR RAINFALL INTENSITY(INCH/HR) =  2.567
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 D        0.86      0.20     0.100    75
  NATURAL FAIR COVER
  "OPEN BRUSH"               D        0.52      0.20     1.000    83
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.439
  TRAVEL TIME COMPUTED USING ESTIMATED FLOW(CFS) =      1.78
  TRAVEL TIME THRU SUBAREA BASED ON VELOCITY(FEET/SEC.) =   3.27
  AVERAGE FLOW DEPTH(FEET) =   0.20   FLOOD WIDTH(FEET) =    8.00
  "V" GUTTER FLOW TRAVEL TIME(MIN.) =   1.61   Tc(MIN.) =   11.13
  SUBAREA AREA(ACRES) =    1.38       SUBAREA RUNOFF(CFS) =    3.08
  EFFECTIVE AREA(ACRES) =    1.52     AREA-AVERAGED Fm(INCH/HR) =   0.10
  AREA-AVERAGED Fp(INCH/HR) =   0.20  AREA-AVERAGED Ap =   0.49
  TOTAL AREA(ACRES) =        1.5         PEAK FLOW RATE(CFS) =       3.38
  ** PIPE SIZED TO MAXIMIZE V-GUTTER FLOW AT DOWNSTREAM NODE **
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  DEPTH OF FLOW IN  18.0 INCH PIPE IS   2.2 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   2.73
  PIPE-FLOW(CFS) =       0.33
  PIPEFLOW TRAVEL TIME(MIN.) =   1.92    Tc(MIN.) =  11.44
  *  10 YEAR RAINFALL INTENSITY(INCH/HR) =  2.526
  SUBAREA AREA(ACRES) =    1.38      SUBAREA RUNOFF(CFS) =    3.03
  EFFECTIVE AREA(ACRES) =    1.52    AREA-AVERAGED Fm(INCH/HR) =  0.10
  AREA-AVERAGED Fp(INCH/HR) =  0.11  AREA-AVERAGED Ap =  0.89
  TOTAL AREA(ACRES) =        1.5        PEAK FLOW RATE(CFS) =       3.32
  *NOTE: V-GUTTER CAPACITY MAY BE EXCEEDED*
  V-GUTTER HYDRAULICS BASED ON MAINLINE Tc :
```

```
 V-GUTTER HYDRAULICS COMPUTED USING ESTIMATED FLOW(CFS) =    2.99

 END OF SUBAREA "V" GUTTER HYDRAULICS:
 DEPTH(FEET) =  0.20   FLOOD WIDTH(FEET) =    8.00
 FLOW VELOCITY(FEET/SEC.) =   5.49   DEPTH*VELOCITY(FT*FT/SEC) =   1.10
 LONGEST FLOWPATH FROM NODE    100.00 TO NODE    102.00 =     555.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    102.00 TO NODE    103.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   348.40  DOWNSTREAM(FEET) =   347.90
 FLOW LENGTH(FEET) =   139.00   MANNING'S N =  0.013
 ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
 DEPTH OF FLOW IN  18.0 INCH PIPE IS   9.4 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   3.54
 ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =       3.32
 PIPE TRAVEL TIME(MIN.) =   0.65    Tc(MIN.) =   11.78
 LONGEST FLOWPATH FROM NODE    100.00 TO NODE    103.00 =     694.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    103.00 TO NODE    103.00 IS CODE =  81
----------------------------------------------------------------------------
 >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
 MAINLINE Tc(MIN.) =   11.78
 *  10 YEAR RAINFALL INTENSITY(INCH/HR) =  2.484
 SUBAREA LOSS RATE DATA(AMC  II):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
 COMMERCIAL                 D        0.17      0.20     0.100    75
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
 SUBAREA AREA(ACRES) =    0.17      SUBAREA RUNOFF(CFS) =    0.38
 EFFECTIVE AREA(ACRES) =      1.69   AREA-AVERAGED Fm(INCH/HR) =  0.09
 AREA-AVERAGED Fp(INCH/HR) =  0.11  AREA-AVERAGED Ap =  0.81
 TOTAL AREA(ACRES) =        1.7       PEAK FLOW RATE(CFS) =       3.64

****************************************************************************
 FLOW PROCESS FROM NODE    103.00 TO NODE    105.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   347.90  DOWNSTREAM(FEET) =   347.80
 FLOW LENGTH(FEET) =    10.00   MANNING'S N =  0.013
 ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
 DEPTH OF FLOW IN  18.0 INCH PIPE IS   7.4 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   5.30
 ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =       3.64
 PIPE TRAVEL TIME(MIN.) =   0.03    Tc(MIN.) =   11.81
```



```
 LONGEST FLOWPATH FROM NODE    100.00 TO NODE    105.00 =     704.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    105.00 TO NODE    105.00 IS CODE =   1
----------------------------------------------------------------------------
 >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
============================================================================
 TOTAL NUMBER OF STREAMS =  2
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  1 ARE:
 TIME OF CONCENTRATION(MIN.) =   11.81
 RAINFALL INTENSITY(INCH/HR) =   2.48
 AREA-AVERAGED Fm(INCH/HR) =  0.09
 AREA-AVERAGED Fp(INCH/HR) =  0.11
 AREA-AVERAGED Ap =  0.81
 EFFECTIVE STREAM AREA(ACRES) =       1.69
 TOTAL STREAM AREA(ACRES) =       1.69
 PEAK FLOW RATE(CFS) AT CONFLUENCE =       3.64

****************************************************************************
 FLOW PROCESS FROM NODE    200.00 TO NODE    201.00 IS CODE =  21
----------------------------------------------------------------------------
 >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
 >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
 INITIAL SUBAREA FLOW-LENGTH(FEET) =   305.00
 ELEVATION DATA: UPSTREAM(FEET) =    392.00  DOWNSTREAM(FEET) =    361.00

 Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
 SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =   10.993
 *  10 YEAR RAINFALL INTENSITY(INCH/HR) =  2.585
 SUBAREA Tc AND LOSS RATE DATA(AMC  II):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
 NATURAL FAIR COVER
 "OPEN BRUSH"               D        0.38      0.20     1.000    83   10.99
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  1.000
 SUBAREA RUNOFF(CFS) =      0.82
 TOTAL AREA(ACRES) =      0.38   PEAK FLOW RATE(CFS) =      0.82

****************************************************************************
 FLOW PROCESS FROM NODE    201.00 TO NODE    202.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   351.20  DOWNSTREAM(FEET) =   350.10
 FLOW LENGTH(FEET) =    50.00   MANNING'S N =  0.013
 ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
 DEPTH OF FLOW IN  18.0 INCH PIPE IS   2.8 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   4.58
 ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =       0.82
 PIPE TRAVEL TIME(MIN.) =   0.18    Tc(MIN.) =   11.18
 LONGEST FLOWPATH FROM NODE    200.00 TO NODE    202.00 =     355.00 FEET.
```

```
****************************************************************************
  FLOW PROCESS FROM NODE    202.00 TO NODE    202.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =   11.18
  *  10 YEAR RAINFALL INTENSITY(INCH/HR) =  2.561
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 D        0.95      0.20     0.100    75
  NATURAL FAIR COVER
  "OPEN BRUSH"               D        0.04      0.20     1.000    83
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.136
  SUBAREA AREA(ACRES) =    0.99      SUBAREA RUNOFF(CFS) =    2.26
  EFFECTIVE AREA(ACRES) =      1.37   AREA-AVERAGED Fm(INCH/HR) =  0.08
  AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap =  0.38
  TOTAL AREA(ACRES) =        1.4       PEAK FLOW RATE(CFS) =       3.06

****************************************************************************
  FLOW PROCESS FROM NODE    202.00 TO NODE    105.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   350.10  DOWNSTREAM(FEET) =   347.80
  FLOW LENGTH(FEET) =    92.00   MANNING'S N =  0.013
  ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
  DEPTH OF FLOW IN  18.0 INCH PIPE IS   5.3 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   7.05
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       3.06
  PIPE TRAVEL TIME(MIN.) =   0.22    Tc(MIN.) =   11.39
  LONGEST FLOWPATH FROM NODE    200.00 TO NODE    105.00 =     447.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    105.00 TO NODE    105.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
  >>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  2
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  2 ARE:
  TIME OF CONCENTRATION(MIN.) =   11.39
  RAINFALL INTENSITY(INCH/HR) =   2.53
  AREA-AVERAGED Fm(INCH/HR) =  0.08
  AREA-AVERAGED Fp(INCH/HR) =  0.20
  AREA-AVERAGED Ap =  0.38
  EFFECTIVE STREAM AREA(ACRES) =       1.37
  TOTAL STREAM AREA(ACRES) =       1.37
  PEAK FLOW RATE(CFS) AT CONFLUENCE =       3.06

 ** CONFLUENCE DATA **
```



```
  STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
  NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
     1        3.64   11.81    2.481  0.11( 0.09) 0.81       1.7     100.00
     2        3.06   11.39    2.532  0.20( 0.08) 0.38       1.4     200.00

  RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
  CONFLUENCE FORMULA USED FOR  2 STREAMS.

  ** PEAK FLOW RATE TABLE **
  STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
  NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
     1        6.65   11.39    2.532  0.14( 0.08) 0.61       3.0     200.00
     2        6.64   11.81    2.481  0.14( 0.08) 0.62       3.1     100.00

  COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
  PEAK FLOW RATE(CFS) =       6.65    Tc(MIN.) =    11.39
  EFFECTIVE AREA(ACRES) =       3.00   AREA-AVERAGED Fm(INCH/HR) =  0.08
  AREA-AVERAGED Fp(INCH/HR) =  0.14  AREA-AVERAGED Ap =  0.61
  TOTAL AREA(ACRES) =        3.1
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    105.00 =     704.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    105.00 TO NODE    106.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   347.80  DOWNSTREAM(FEET) =   345.40
  FLOW LENGTH(FEET) =   252.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  18.0 INCH PIPE IS  10.7 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.05
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       6.65
  PIPE TRAVEL TIME(MIN.) =   0.69    Tc(MIN.) =   12.09
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    106.00 =     956.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    106.00 TO NODE    106.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =   12.09
  *  10 YEAR RAINFALL INTENSITY(INCH/HR) =  2.448
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 D        0.98      0.20     0.100    75
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.98      SUBAREA RUNOFF(CFS) =    2.14
  EFFECTIVE AREA(ACRES) =      3.98   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.14  AREA-AVERAGED Ap =  0.49
  TOTAL AREA(ACRES) =        4.0       PEAK FLOW RATE(CFS) =       8.53

****************************************************************************
```

```
 FLOW PROCESS FROM NODE    106.00 TO NODE    107.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   345.40  DOWNSTREAM(FEET) =   345.30
 FLOW LENGTH(FEET) =     7.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  18.0 INCH PIPE IS  11.1 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   7.48
 ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =       8.53
 PIPE TRAVEL TIME(MIN.) =   0.02    Tc(MIN.) =   12.10
 LONGEST FLOWPATH FROM NODE    100.00 TO NODE    107.00 =     963.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    107.00 TO NODE    107.00 IS CODE =  81
----------------------------------------------------------------------------
 >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
 MAINLINE Tc(MIN.) =   12.10
 *  10 YEAR RAINFALL INTENSITY(INCH/HR) =  2.446
 SUBAREA LOSS RATE DATA(AMC  II):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
 COMMERCIAL                 D        0.69      0.20     0.100    75
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
 SUBAREA AREA(ACRES) =    0.69      SUBAREA RUNOFF(CFS) =    1.51
 EFFECTIVE AREA(ACRES) =      4.67   AREA-AVERAGED Fm(INCH/HR) =  0.06
 AREA-AVERAGED Fp(INCH/HR) =  0.14  AREA-AVERAGED Ap =  0.43
 TOTAL AREA(ACRES) =        4.7       PEAK FLOW RATE(CFS) =      10.03

****************************************************************************
 FLOW PROCESS FROM NODE    107.00 TO NODE    110.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   345.30  DOWNSTREAM(FEET) =   345.10
 FLOW LENGTH(FEET) =    12.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  18.0 INCH PIPE IS  11.7 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   8.23
 ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =      10.03
 PIPE TRAVEL TIME(MIN.) =   0.02    Tc(MIN.) =   12.13
 LONGEST FLOWPATH FROM NODE    100.00 TO NODE    110.00 =     975.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    110.00 TO NODE    110.00 IS CODE =   1
----------------------------------------------------------------------------
 >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
============================================================================
 TOTAL NUMBER OF STREAMS =  2
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  1 ARE:
 TIME OF CONCENTRATION(MIN.) =   12.13
```



```
 RAINFALL INTENSITY(INCH/HR) =   2.44
 AREA-AVERAGED Fm(INCH/HR) =  0.06
 AREA-AVERAGED Fp(INCH/HR) =  0.14
 AREA-AVERAGED Ap =  0.43
 EFFECTIVE STREAM AREA(ACRES) =       4.67
 TOTAL STREAM AREA(ACRES) =       4.73
 PEAK FLOW RATE(CFS) AT CONFLUENCE =      10.03

****************************************************************************
 FLOW PROCESS FROM NODE    300.00 TO NODE    301.00 IS CODE =  21
----------------------------------------------------------------------------
 >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
 >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
 INITIAL SUBAREA FLOW-LENGTH(FEET) =   275.00
 ELEVATION DATA: UPSTREAM(FEET) =    355.00  DOWNSTREAM(FEET) =    353.40

 Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
 SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    8.047
 *  10 YEAR RAINFALL INTENSITY(INCH/HR) =  3.091
 SUBAREA Tc AND LOSS RATE DATA(AMC  II):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
 COMMERCIAL                 D        0.51      0.20     0.100    75    8.05
 NATURAL FAIR COVER
 "OPEN BRUSH"               D        0.32      0.20     1.000    83   18.69
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.447
 SUBAREA RUNOFF(CFS) =      2.24
 TOTAL AREA(ACRES) =      0.83   PEAK FLOW RATE(CFS) =      2.24

****************************************************************************
 FLOW PROCESS FROM NODE    301.00 TO NODE    110.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   349.10  DOWNSTREAM(FEET) =   345.10
 FLOW LENGTH(FEET) =   369.00   MANNING'S N =  0.013
 ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
 DEPTH OF FLOW IN  18.0 INCH PIPE IS   5.6 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   4.78
 ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =       2.24
 PIPE TRAVEL TIME(MIN.) =   1.29    Tc(MIN.) =    9.33
 LONGEST FLOWPATH FROM NODE    300.00 TO NODE    110.00 =     644.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    110.00 TO NODE    110.00 IS CODE =   1
----------------------------------------------------------------------------
 >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
 >>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
============================================================================
 TOTAL NUMBER OF STREAMS =  2
 CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  2 ARE:
```

```
 TIME OF CONCENTRATION(MIN.) =    9.33
 RAINFALL INTENSITY(INCH/HR) =   2.84
 AREA-AVERAGED Fm(INCH/HR) =  0.09
 AREA-AVERAGED Fp(INCH/HR) =  0.20
 AREA-AVERAGED Ap =  0.45
 EFFECTIVE STREAM AREA(ACRES) =       0.83
 TOTAL STREAM AREA(ACRES) =       0.83
 PEAK FLOW RATE(CFS) AT CONFLUENCE =       2.24

 ** CONFLUENCE DATA **
  STREAM       Q      Tc    Intensity   Fp(Fm)     Ap      Ae     HEADWATER
  NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
     1       10.03   12.13    2.443  0.14( 0.06) 0.43       4.7     200.00
     1        9.95   12.55    2.396  0.14( 0.06) 0.43       4.7     100.00
     2        2.24    9.33    2.839  0.20( 0.09) 0.45       0.8     300.00

 RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
 CONFLUENCE FORMULA USED FOR  2 STREAMS.

 ** PEAK FLOW RATE TABLE **
  STREAM       Q      Tc    Intensity   Fp(Fm)     Ap      Ae     HEADWATER
  NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
     1       11.24    9.33    2.839  0.15( 0.07) 0.43       4.4     300.00
     2       11.95   12.13    2.443  0.15( 0.07) 0.43       5.5     200.00
     3       11.83   12.55    2.396  0.15( 0.07) 0.44       5.6     100.00

 COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
 PEAK FLOW RATE(CFS) =      11.95    Tc(MIN.) =    12.13
 EFFECTIVE AREA(ACRES) =       5.50   AREA-AVERAGED Fm(INCH/HR) =  0.07
 AREA-AVERAGED Fp(INCH/HR) =  0.15  AREA-AVERAGED Ap =  0.43
 TOTAL AREA(ACRES) =        5.6
 LONGEST FLOWPATH FROM NODE    100.00 TO NODE    110.00 =     975.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    110.00 TO NODE    111.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   345.10  DOWNSTREAM(FEET) =   344.90
 FLOW LENGTH(FEET) =    12.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  18.0 INCH PIPE IS  13.4 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   8.47
 ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =      11.95
 PIPE TRAVEL TIME(MIN.) =   0.02    Tc(MIN.) =   12.15
 LONGEST FLOWPATH FROM NODE    100.00 TO NODE    111.00 =     987.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    111.00 TO NODE    111.00 IS CODE =  81
----------------------------------------------------------------------------
 >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
 MAINLINE Tc(MIN.) =   12.15
 *  10 YEAR RAINFALL INTENSITY(INCH/HR) =  2.441
```



```
 SUBAREA LOSS RATE DATA(AMC  II):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
 COMMERCIAL                 D        1.06      0.20     0.100    75
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
 SUBAREA AREA(ACRES) =    1.06      SUBAREA RUNOFF(CFS) =    2.31
 EFFECTIVE AREA(ACRES) =      6.56   AREA-AVERAGED Fm(INCH/HR) =  0.06
 AREA-AVERAGED Fp(INCH/HR) =  0.15  AREA-AVERAGED Ap =  0.38
 TOTAL AREA(ACRES) =        6.6       PEAK FLOW RATE(CFS) =      14.07

****************************************************************************
 FLOW PROCESS FROM NODE    111.00 TO NODE    115.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   344.90  DOWNSTREAM(FEET) =   341.50
 FLOW LENGTH(FEET) =   202.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  21.0 INCH PIPE IS  13.0 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   9.02
 ESTIMATED PIPE DIAMETER(INCH) =  21.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =      14.07
 PIPE TRAVEL TIME(MIN.) =   0.37    Tc(MIN.) =   12.52
 LONGEST FLOWPATH FROM NODE    100.00 TO NODE    115.00 =    1189.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    115.00 TO NODE    115.00 IS CODE =  81
----------------------------------------------------------------------------
 >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
 MAINLINE Tc(MIN.) =   12.52
 *  10 YEAR RAINFALL INTENSITY(INCH/HR) =  2.399
 SUBAREA LOSS RATE DATA(AMC  II):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
 COMMERCIAL                 D        0.81      0.20     0.100    75
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
 SUBAREA AREA(ACRES) =    0.81      SUBAREA RUNOFF(CFS) =    1.73
 EFFECTIVE AREA(ACRES) =      7.37   AREA-AVERAGED Fm(INCH/HR) =  0.05
 AREA-AVERAGED Fp(INCH/HR) =  0.15  AREA-AVERAGED Ap =  0.35
 TOTAL AREA(ACRES) =        7.4       PEAK FLOW RATE(CFS) =      15.56
============================================================================
 END OF STUDY SUMMARY:
 TOTAL AREA(ACRES)     =        7.4  TC(MIN.) =     12.52
 EFFECTIVE AREA(ACRES) =      7.37  AREA-AVERAGED Fm(INCH/HR)=  0.05
 AREA-AVERAGED Fp(INCH/HR) =  0.15  AREA-AVERAGED Ap = 0.347
 PEAK FLOW RATE(CFS)   =      15.56

 ** PEAK FLOW RATE TABLE **
  STREAM       Q      Tc    Intensity   Fp(Fm)     Ap      Ae     HEADWATER
  NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
     1       15.40    9.73    2.772  0.16( 0.05) 0.33       6.3     300.00
     2       15.56   12.52    2.399  0.15( 0.05) 0.35       7.4     200.00
```

```
      3       15.38   12.94    2.354  0.15( 0.05) 0.35       7.4     100.00
================================================================================
================================================================================
  END OF RATIONAL METHOD ANALYSIS
```

A.2
EXISTING 25 YEAR STORM

RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
(Reference: 1986 ORANGE COUNTY HYDROLOGY CRITERION)
(c) Copyright 1983-2015 Advanced Engineering Software (aes)
Ver. 22.0 Release Date: 07/01/2015 License ID 1673

Analysis prepared by:

PROACTIVE
ENGINEERING CONSULTANTS

```
 ************************* DESCRIPTION OF STUDY *************************
* EXISTING 25 YR STORM                                                  *
*                                                                       *
*                                                                       *
 ************************************************************************

  FILE NAME: 197-E25.DAT
  TIME/DATE OF STUDY: 11:31 06/26/2025
==========================================================================
  USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                    --*TIME-OF-CONCENTRATION MODEL*--

  USER SPECIFIED STORM EVENT(YEAR) =   25.00
  SPECIFIED MINIMUM PIPE SIZE(INCH) =  18.00
  SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
  *DATA BANK RAINFALL USED*
  *ANTECEDENT MOISTURE CONDITION (AMC) II ASSUMED FOR RATIONAL METHOD*

  *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  =========  =================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0312 0.167 0.0150

  GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
    1. Relative Flow-Depth =  0.00 FEET
       as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
    2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
  *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
   OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
  *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

**************************************************************************
  FLOW PROCESS FROM NODE    100.00 TO NODE    101.00 IS CODE =  21
--------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==========================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   240.00
  ELEVATION DATA: UPSTREAM(FEET) =    392.00  DOWNSTREAM(FEET) =    361.00
```



```
  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    9.520
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.350
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  NATURAL FAIR COVER
  "OPEN BRUSH"               D        0.14      0.20     1.000    83    9.52
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  1.000
  SUBAREA RUNOFF(CFS) =      0.40
  TOTAL AREA(ACRES) =      0.14   PEAK FLOW RATE(CFS) =      0.40

**************************************************************************
  FLOW PROCESS FROM NODE    101.00 TO NODE    102.00 IS CODE =  92
--------------------------------------------------------------------------
  >>>>>COMPUTE "V" GUTTER FLOW TRAVEL TIME THRU SUBAREA<<<<<
==========================================================================
  UPSTREAM NODE ELEVATION(FEET) =    361.00
  DOWNSTREAM NODE ELEVATION(FEET) =    358.00
  CHANNEL LENGTH THRU SUBAREA(FEET) =   315.00
  "V" GUTTER WIDTH(FEET) =   3.00   GUTTER HIKE(FEET) =  0.120
  PAVEMENT LIP(FEET) =  0.030   MANNING'S N = .0150
  PAVEMENT CROSSFALL(DECIMAL NOTATION) = 0.02000
  MAXIMUM DEPTH(FEET) =   0.20
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.111
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap      SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 D        0.86      0.20     0.100    75
  NATURAL FAIR COVER
  "OPEN BRUSH"               D        0.52      0.20     1.000    83
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.439
  TRAVEL TIME COMPUTED USING ESTIMATED FLOW(CFS) =      2.15
  TRAVEL TIME THRU SUBAREA BASED ON VELOCITY(FEET/SEC.) =   3.95
  AVERAGE FLOW DEPTH(FEET) =   0.20   FLOOD WIDTH(FEET) =    8.00
  "V" GUTTER FLOW TRAVEL TIME(MIN.) =   1.33   Tc(MIN.) =   10.85
  SUBAREA AREA(ACRES) =    1.38       SUBAREA RUNOFF(CFS) =    3.76
  EFFECTIVE AREA(ACRES) =    1.52     AREA-AVERAGED Fm(INCH/HR) =   0.10
  AREA-AVERAGED Fp(INCH/HR) =   0.20  AREA-AVERAGED Ap =   0.49
  TOTAL AREA(ACRES) =        1.5         PEAK FLOW RATE(CFS) =       4.12
  ** PIPE SIZED TO MAXIMIZE V-GUTTER FLOW AT DOWNSTREAM NODE **
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  DEPTH OF FLOW IN  18.0 INCH PIPE IS   2.3 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   2.93
  PIPE-FLOW(CFS) =       0.40
  PIPEFLOW TRAVEL TIME(MIN.) =   1.79    Tc(MIN.) =  11.31
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.039
  SUBAREA AREA(ACRES) =    1.38      SUBAREA RUNOFF(CFS) =    3.67
  EFFECTIVE AREA(ACRES) =    1.52    AREA-AVERAGED Fm(INCH/HR) =  0.10
  AREA-AVERAGED Fp(INCH/HR) =  0.11  AREA-AVERAGED Ap =  0.89
  TOTAL AREA(ACRES) =        1.5        PEAK FLOW RATE(CFS) =       4.02
  *NOTE: V-GUTTER CAPACITY MAY BE EXCEEDED*
  V-GUTTER HYDRAULICS BASED ON MAINLINE Tc :
```

```
  V-GUTTER HYDRAULICS COMPUTED USING ESTIMATED FLOW(CFS) =    3.63

  END OF SUBAREA "V" GUTTER HYDRAULICS:
  DEPTH(FEET) =  0.20   FLOOD WIDTH(FEET) =    8.00
  FLOW VELOCITY(FEET/SEC.) =   6.65   DEPTH*VELOCITY(FT*FT/SEC) =   1.33
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    102.00 =     555.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    102.00 TO NODE    103.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   348.40  DOWNSTREAM(FEET) =   347.90
  FLOW LENGTH(FEET) =   139.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  18.0 INCH PIPE IS  10.6 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   3.71
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       4.02
  PIPE TRAVEL TIME(MIN.) =   0.62    Tc(MIN.) =   11.47
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    103.00 =     694.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    103.00 TO NODE    103.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =   11.47
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.014
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 D        0.17      0.20     0.100    75
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.17      SUBAREA RUNOFF(CFS) =    0.46
  EFFECTIVE AREA(ACRES) =      1.69   AREA-AVERAGED Fm(INCH/HR) =  0.09
  AREA-AVERAGED Fp(INCH/HR) =  0.11  AREA-AVERAGED Ap =  0.81
  TOTAL AREA(ACRES) =        1.7       PEAK FLOW RATE(CFS) =       4.45

****************************************************************************
  FLOW PROCESS FROM NODE    103.00 TO NODE    105.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   347.90  DOWNSTREAM(FEET) =   347.80
  FLOW LENGTH(FEET) =    10.00   MANNING'S N =  0.013
  ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
  DEPTH OF FLOW IN  18.0 INCH PIPE IS   8.3 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.59
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       4.45
  PIPE TRAVEL TIME(MIN.) =   0.03    Tc(MIN.) =   11.50
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    105.00 =     704.00 FEET.
```



```
****************************************************************************
  FLOW PROCESS FROM NODE    105.00 TO NODE    105.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  2
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  1 ARE:
  TIME OF CONCENTRATION(MIN.) =   11.50
  RAINFALL INTENSITY(INCH/HR) =   3.01
  AREA-AVERAGED Fm(INCH/HR) =  0.09
  AREA-AVERAGED Fp(INCH/HR) =  0.11
  AREA-AVERAGED Ap =  0.81
  EFFECTIVE STREAM AREA(ACRES) =       1.69
  TOTAL STREAM AREA(ACRES) =       1.69
  PEAK FLOW RATE(CFS) AT CONFLUENCE =       4.45

****************************************************************************
  FLOW PROCESS FROM NODE    200.00 TO NODE    201.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   305.00
  ELEVATION DATA: UPSTREAM(FEET) =    392.00  DOWNSTREAM(FEET) =    361.00

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =   10.993
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.088
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  NATURAL FAIR COVER
  "OPEN BRUSH"               D        0.38      0.20     1.000    83   10.99
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  1.000
  SUBAREA RUNOFF(CFS) =      0.99
  TOTAL AREA(ACRES) =      0.38   PEAK FLOW RATE(CFS) =      0.99

****************************************************************************
  FLOW PROCESS FROM NODE    201.00 TO NODE    202.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   351.20  DOWNSTREAM(FEET) =   350.10
  FLOW LENGTH(FEET) =    50.00   MANNING'S N =  0.013
  ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
  DEPTH OF FLOW IN  18.0 INCH PIPE IS   3.1 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.83
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       0.99
  PIPE TRAVEL TIME(MIN.) =   0.17    Tc(MIN.) =   11.17
  LONGEST FLOWPATH FROM NODE    200.00 TO NODE    202.00 =     355.00 FEET.
```

```
****************************************************************************
  FLOW PROCESS FROM NODE    202.00 TO NODE    202.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =   11.17
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.061
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 D        0.95      0.20     0.100    75
  NATURAL FAIR COVER
  "OPEN BRUSH"               D        0.04      0.20     1.000    83
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.136
  SUBAREA AREA(ACRES) =    0.99      SUBAREA RUNOFF(CFS) =    2.70
  EFFECTIVE AREA(ACRES) =      1.37   AREA-AVERAGED Fm(INCH/HR) =  0.08
  AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap =  0.38
  TOTAL AREA(ACRES) =        1.4       PEAK FLOW RATE(CFS) =       3.68

****************************************************************************
  FLOW PROCESS FROM NODE    202.00 TO NODE    105.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   350.10  DOWNSTREAM(FEET) =   347.80
  FLOW LENGTH(FEET) =    92.00   MANNING'S N =  0.013
  ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
  DEPTH OF FLOW IN  18.0 INCH PIPE IS   5.8 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   7.41
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       3.68
  PIPE TRAVEL TIME(MIN.) =   0.21    Tc(MIN.) =   11.37
  LONGEST FLOWPATH FROM NODE    200.00 TO NODE    105.00 =     447.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    105.00 TO NODE    105.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
  >>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  2
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  2 ARE:
  TIME OF CONCENTRATION(MIN.) =   11.37
  RAINFALL INTENSITY(INCH/HR) =   3.03
  AREA-AVERAGED Fm(INCH/HR) =  0.08
  AREA-AVERAGED Fp(INCH/HR) =  0.20
  AREA-AVERAGED Ap =  0.38
  EFFECTIVE STREAM AREA(ACRES) =       1.37
  TOTAL STREAM AREA(ACRES) =       1.37
  PEAK FLOW RATE(CFS) AT CONFLUENCE =       3.68

  ** CONFLUENCE DATA **
   STREAM       Q      Tc    Intensity   Fp(Fm)     Ap     Ae     HEADWATER
```



```
    NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)         (ACRES)    NODE
       1        4.45   11.50    3.010  0.11( 0.09) 0.81       1.7     100.00
       2        3.68   11.37    3.030  0.20( 0.08) 0.38       1.4     200.00

  RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
  CONFLUENCE FORMULA USED FOR  2 STREAMS.

  ** PEAK FLOW RATE TABLE **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)         (ACRES)    NODE
      1        8.11   11.37    3.030  0.14( 0.08) 0.61       3.0     200.00
      2        8.11   11.50    3.010  0.14( 0.08) 0.62       3.1     100.00

  COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
  PEAK FLOW RATE(CFS) =       8.11    Tc(MIN.) =    11.37
  EFFECTIVE AREA(ACRES) =       3.04   AREA-AVERAGED Fm(INCH/HR) =  0.08
  AREA-AVERAGED Fp(INCH/HR) =  0.14  AREA-AVERAGED Ap =  0.61
  TOTAL AREA(ACRES) =        3.1
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    105.00 =     704.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    105.00 TO NODE    106.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   347.80  DOWNSTREAM(FEET) =   345.40
  FLOW LENGTH(FEET) =   252.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  18.0 INCH PIPE IS  12.3 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.30
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       8.11
  PIPE TRAVEL TIME(MIN.) =   0.67    Tc(MIN.) =   12.04
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    106.00 =     956.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    106.00 TO NODE    106.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =   12.04
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  2.934
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 D        0.98      0.20     0.100    75
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.98      SUBAREA RUNOFF(CFS) =    2.57
  EFFECTIVE AREA(ACRES) =      4.02   AREA-AVERAGED Fm(INCH/HR) =  0.07
  AREA-AVERAGED Fp(INCH/HR) =  0.14  AREA-AVERAGED Ap =  0.49
  TOTAL AREA(ACRES) =        4.0       PEAK FLOW RATE(CFS) =      10.37

****************************************************************************
  FLOW PROCESS FROM NODE    106.00 TO NODE    107.00 IS CODE =  31
```

```
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   345.40  DOWNSTREAM(FEET) =   345.30
  FLOW LENGTH(FEET) =     7.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  18.0 INCH PIPE IS  12.7 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   7.77
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      10.37
  PIPE TRAVEL TIME(MIN.) =   0.02    Tc(MIN.) =   12.05
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    107.00 =     963.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    107.00 TO NODE    107.00 IS CODE =  81
----------------------------------------------------------------------------
  >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
  MAINLINE Tc(MIN.) =   12.05
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  2.931
  SUBAREA LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
  COMMERCIAL                 D        0.69      0.20     0.100    75
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
  SUBAREA AREA(ACRES) =    0.69      SUBAREA RUNOFF(CFS) =    1.81
  EFFECTIVE AREA(ACRES) =      4.71   AREA-AVERAGED Fm(INCH/HR) =  0.06
  AREA-AVERAGED Fp(INCH/HR) =  0.14  AREA-AVERAGED Ap =  0.43
  TOTAL AREA(ACRES) =        4.7       PEAK FLOW RATE(CFS) =      12.17

****************************************************************************
  FLOW PROCESS FROM NODE    107.00 TO NODE    110.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   345.30  DOWNSTREAM(FEET) =   345.10
  FLOW LENGTH(FEET) =    12.00   MANNING'S N =  0.013
  DEPTH OF FLOW IN  18.0 INCH PIPE IS  13.6 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   8.48
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =      12.17
  PIPE TRAVEL TIME(MIN.) =   0.02    Tc(MIN.) =   12.08
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    110.00 =     975.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    110.00 TO NODE    110.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  2
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  1 ARE:
  TIME OF CONCENTRATION(MIN.) =   12.08
  RAINFALL INTENSITY(INCH/HR) =   2.93
```


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```
  AREA-AVERAGED Fm(INCH/HR) =  0.06
  AREA-AVERAGED Fp(INCH/HR) =  0.14
  AREA-AVERAGED Ap =  0.43
  EFFECTIVE STREAM AREA(ACRES) =       4.71
  TOTAL STREAM AREA(ACRES) =       4.73
  PEAK FLOW RATE(CFS) AT CONFLUENCE =      12.17

****************************************************************************
  FLOW PROCESS FROM NODE    300.00 TO NODE    301.00 IS CODE =  21
----------------------------------------------------------------------------
  >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
  >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
  INITIAL SUBAREA FLOW-LENGTH(FEET) =   275.00
  ELEVATION DATA: UPSTREAM(FEET) =    355.00  DOWNSTREAM(FEET) =    353.40

  Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
  SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    8.047
  *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.685
  SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  COMMERCIAL                 D        0.51      0.20     0.100    75    8.05
  NATURAL FAIR COVER
  "OPEN BRUSH"               D        0.32      0.20     1.000    83   18.69
  SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
  SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.447
  SUBAREA RUNOFF(CFS) =      2.69
  TOTAL AREA(ACRES) =      0.83   PEAK FLOW RATE(CFS) =      2.69

****************************************************************************
  FLOW PROCESS FROM NODE    301.00 TO NODE    110.00 IS CODE =  31
----------------------------------------------------------------------------
  >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
  >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
  ELEVATION DATA: UPSTREAM(FEET) =   349.10  DOWNSTREAM(FEET) =   345.10
  FLOW LENGTH(FEET) =   369.00   MANNING'S N =  0.013
  ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
  DEPTH OF FLOW IN  18.0 INCH PIPE IS   6.2 INCHES
  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.03
  ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
  PIPE-FLOW(CFS) =       2.69
  PIPE TRAVEL TIME(MIN.) =   1.22    Tc(MIN.) =    9.27
  LONGEST FLOWPATH FROM NODE    300.00 TO NODE    110.00 =     644.00 FEET.

****************************************************************************
  FLOW PROCESS FROM NODE    110.00 TO NODE    110.00 IS CODE =   1
----------------------------------------------------------------------------
  >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
  >>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
============================================================================
  TOTAL NUMBER OF STREAMS =  2
  CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  2 ARE:
  TIME OF CONCENTRATION(MIN.) =    9.27
```

```
 RAINFALL INTENSITY(INCH/HR) =   3.40
 AREA-AVERAGED Fm(INCH/HR) =  0.09
 AREA-AVERAGED Fp(INCH/HR) =  0.20
 AREA-AVERAGED Ap =  0.45
 EFFECTIVE STREAM AREA(ACRES) =       0.83
 TOTAL STREAM AREA(ACRES) =       0.83
 PEAK FLOW RATE(CFS) AT CONFLUENCE =       2.69

 ** CONFLUENCE DATA **
  STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
  NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)         (ACRES)    NODE
     1       12.17   12.08    2.928  0.14( 0.06) 0.43       4.7     200.00
     1       12.14   12.21    2.910  0.14( 0.06) 0.43       4.7     100.00
     2        2.69    9.27    3.401  0.20( 0.09) 0.45       0.8     300.00

 RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
 CONFLUENCE FORMULA USED FOR  2 STREAMS.

 ** PEAK FLOW RATE TABLE **
  STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
  NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)         (ACRES)    NODE
     1       13.57    9.27    3.401  0.15( 0.07) 0.43       4.4     300.00
     2       14.47   12.08    2.928  0.15( 0.07) 0.43       5.5     200.00
     3       14.43   12.21    2.910  0.15( 0.07) 0.44       5.6     100.00

 COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
 PEAK FLOW RATE(CFS) =      14.47    Tc(MIN.) =    12.08
 EFFECTIVE AREA(ACRES) =       5.54   AREA-AVERAGED Fm(INCH/HR) =  0.07
 AREA-AVERAGED Fp(INCH/HR) =  0.15  AREA-AVERAGED Ap =  0.43
 TOTAL AREA(ACRES) =        5.6
 LONGEST FLOWPATH FROM NODE    100.00 TO NODE    110.00 =     975.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    110.00 TO NODE    111.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   345.10  DOWNSTREAM(FEET) =   344.90
 FLOW LENGTH(FEET) =    12.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  21.0 INCH PIPE IS  13.3 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   9.04
 ESTIMATED PIPE DIAMETER(INCH) =  21.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =      14.47
 PIPE TRAVEL TIME(MIN.) =   0.02    Tc(MIN.) =   12.10
 LONGEST FLOWPATH FROM NODE    100.00 TO NODE    111.00 =     987.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    111.00 TO NODE    111.00 IS CODE =  81
----------------------------------------------------------------------------
 >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
 MAINLINE Tc(MIN.) =   12.10
 *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  2.925
 SUBAREA LOSS RATE DATA(AMC  II):
```



```
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
 COMMERCIAL                 D        1.06      0.20     0.100    75
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
 SUBAREA AREA(ACRES) =    1.06      SUBAREA RUNOFF(CFS) =    2.77
 EFFECTIVE AREA(ACRES) =      6.60   AREA-AVERAGED Fm(INCH/HR) =  0.06
 AREA-AVERAGED Fp(INCH/HR) =  0.15  AREA-AVERAGED Ap =  0.38
 TOTAL AREA(ACRES) =        6.6       PEAK FLOW RATE(CFS) =      17.03

****************************************************************************
 FLOW PROCESS FROM NODE    111.00 TO NODE    115.00 IS CODE =  31
----------------------------------------------------------------------------
 >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
 >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
 ELEVATION DATA: UPSTREAM(FEET) =   344.90  DOWNSTREAM(FEET) =   341.50
 FLOW LENGTH(FEET) =   202.00   MANNING'S N =  0.013
 DEPTH OF FLOW IN  21.0 INCH PIPE IS  14.9 INCHES
 PIPE-FLOW VELOCITY(FEET/SEC.) =   9.35
 ESTIMATED PIPE DIAMETER(INCH) =  21.00    NUMBER OF PIPES =   1
 PIPE-FLOW(CFS) =      17.03
 PIPE TRAVEL TIME(MIN.) =   0.36    Tc(MIN.) =   12.46
 LONGEST FLOWPATH FROM NODE    100.00 TO NODE    115.00 =    1189.00 FEET.

****************************************************************************
 FLOW PROCESS FROM NODE    115.00 TO NODE    115.00 IS CODE =  81
----------------------------------------------------------------------------
 >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
 MAINLINE Tc(MIN.) =   12.46
 *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  2.877
 SUBAREA LOSS RATE DATA(AMC  II):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
 COMMERCIAL                 D        0.81      0.20     0.100    75
 SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
 SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.100
 SUBAREA AREA(ACRES) =    0.81      SUBAREA RUNOFF(CFS) =    2.08
 EFFECTIVE AREA(ACRES) =      7.41   AREA-AVERAGED Fm(INCH/HR) =  0.05
 AREA-AVERAGED Fp(INCH/HR) =  0.15  AREA-AVERAGED Ap =  0.35
 TOTAL AREA(ACRES) =        7.4       PEAK FLOW RATE(CFS) =      18.83
============================================================================
 END OF STUDY SUMMARY:
 TOTAL AREA(ACRES)     =        7.4  TC(MIN.) =     12.46
 EFFECTIVE AREA(ACRES) =      7.41  AREA-AVERAGED Fm(INCH/HR)=  0.05
 AREA-AVERAGED Fp(INCH/HR) =  0.15  AREA-AVERAGED Ap = 0.350
 PEAK FLOW RATE(CFS)   =      18.83

 ** PEAK FLOW RATE TABLE **
  STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
  NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)         (ACRES)    NODE
     1       18.59    9.65    3.324  0.16( 0.05) 0.34       6.3     300.00
     2       18.83   12.46    2.877  0.15( 0.05) 0.35       7.4     200.00
     3       18.76   12.59    2.860  0.15( 0.05) 0.35       7.4     100.00
```

```
================================================================================
================================================================================
  END OF RATIONAL METHOD ANALYSIS
```


1159

APPENDIX B
Rational Method Hydrology - PROPOSED

B.1
PROPOSED 10 YEAR STORM

```
**************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
          (Reference: 1986 ORANGE COUNTY HYDROLOGY CRITERION)
        (c) Copyright 1983-2015 Advanced Engineering Software (aes)
            Ver. 22.0  Release Date: 07/01/2015  License ID 1673

                          Analysis prepared by:
```

PROACTIVE
ENGINEERING CONSULTANTS

```
 ************************ DESCRIPTION OF STUDY ************************
 * PROPOSED 10YR STORM                                                *
 *                                                                    *
 *                                                                    *
  **********************************************************************

                          FILE NAME: 197-P10.DAT
                        TIME/DATE OF STUDY: 14:19 06/26/2025
 ======================================================================
           USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
 ======================================================================
                              --*TIME-OF-CONCENTRATION MODEL*--

                    USER SPECIFIED STORM EVENT(YEAR) =   10.00
                    SPECIFIED MINIMUM PIPE SIZE(INCH) =  18.00
    SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
                            *DATA BANK RAINFALL USED*
      *ANTECEDENT MOISTURE CONDITION (AMC) II ASSUMED FOR RATIONAL METHOD*

    *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
      HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
       WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
 NO.    (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
=== =====  =========  ================  ======  ===== ====== ===== =======
   1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0312 0.167 0.0150

                    GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
                      1. Relative Flow-Depth =  0.00 FEET
                as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
                  2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
                    *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
                      OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
       *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

 **************************************************************************
       FLOW PROCESS FROM NODE    100.00 TO NODE    101.00 IS CODE =  21
 --------------------------------------------------------------------------
             >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
          >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
 ==========================================================================
                  INITIAL SUBAREA FLOW-LENGTH(FEET) =   235.00
```



```
    ELEVATION DATA: UPSTREAM(FEET) =    382.00  DOWNSTREAM(FEET) =    367.00

            Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
            SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =   10.870
             *  10 YEAR RAINFALL INTENSITY(INCH/HR) =  2.602
                 SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp          Ap     SCS   Tc
      LAND USE           GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
                              NATURAL FAIR COVER
 "OPEN BRUSH"               D        0.30      0.20     1.000    83   10.87
       SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
         SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  1.000
                   SUBAREA RUNOFF(CFS) =      0.65
     TOTAL AREA(ACRES) =      0.30   PEAK FLOW RATE(CFS) =      0.65

 **************************************************************************
       FLOW PROCESS FROM NODE    101.00 TO NODE    102.00 IS CODE =  31
 --------------------------------------------------------------------------
             >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
          >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
 ==========================================================================
    ELEVATION DATA: UPSTREAM(FEET) =   354.00  DOWNSTREAM(FEET) =   352.30
            FLOW LENGTH(FEET) =   170.00   MANNING'S N =  0.012
             ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
             DEPTH OF FLOW IN  18.0 INCH PIPE IS   3.0 INCHES
                  PIPE-FLOW VELOCITY(FEET/SEC.) =   3.43
      ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
                       PIPE-FLOW(CFS) =       0.65
          PIPE TRAVEL TIME(MIN.) =   0.83    Tc(MIN.) =   11.70
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    102.00 =     405.00 FEET.

 **************************************************************************
       FLOW PROCESS FROM NODE    102.00 TO NODE    102.00 IS CODE =   1
 --------------------------------------------------------------------------
             >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
 ==========================================================================
                       TOTAL NUMBER OF STREAMS =  2
            CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  1 ARE:
                    TIME OF CONCENTRATION(MIN.) =   11.70
                    RAINFALL INTENSITY(INCH/HR) =   2.49
                      AREA-AVERAGED Fm(INCH/HR) =  0.20
                      AREA-AVERAGED Fp(INCH/HR) =  0.20
                          AREA-AVERAGED Ap =  1.00
                   EFFECTIVE STREAM AREA(ACRES) =       0.30
                     TOTAL STREAM AREA(ACRES) =       0.30
                PEAK FLOW RATE(CFS) AT CONFLUENCE =       0.65

 **************************************************************************
       FLOW PROCESS FROM NODE    200.00 TO NODE    201.00 IS CODE =  21
 --------------------------------------------------------------------------
             >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
          >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
 ==========================================================================
                  INITIAL SUBAREA FLOW-LENGTH(FEET) =   111.00
    ELEVATION DATA: UPSTREAM(FEET) =    367.00  DOWNSTREAM(FEET) =    364.00
```

```
            Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
            SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    9.563
             *  10 YEAR RAINFALL INTENSITY(INCH/HR) =  2.800
                 SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
     LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
                            NATURAL FAIR COVER
 "OPEN BRUSH"               D        0.12      0.20     1.000    83    9.56
        SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
          SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  1.000
                    SUBAREA RUNOFF(CFS) =      0.28
      TOTAL AREA(ACRES) =      0.12   PEAK FLOW RATE(CFS) =      0.28

****************************************************************************
      FLOW PROCESS FROM NODE    201.00 TO NODE    102.00 IS CODE =  31
----------------------------------------------------------------------------
           >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
       >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
    ELEVATION DATA: UPSTREAM(FEET) =   354.50  DOWNSTREAM(FEET) =   352.30
            FLOW LENGTH(FEET) =   218.00   MANNING'S N =  0.012
             ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
             DEPTH OF FLOW IN  18.0 INCH PIPE IS   2.0 INCHES
                  PIPE-FLOW VELOCITY(FEET/SEC.) =   2.70
      ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
                      PIPE-FLOW(CFS) =       0.28
          PIPE TRAVEL TIME(MIN.) =   1.35    Tc(MIN.) =   10.91
  LONGEST FLOWPATH FROM NODE    200.00 TO NODE    102.00 =     329.00 FEET.

****************************************************************************
      FLOW PROCESS FROM NODE    102.00 TO NODE    102.00 IS CODE =  81
----------------------------------------------------------------------------
           >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
                      MAINLINE Tc(MIN.) =   10.91
            *  10 YEAR RAINFALL INTENSITY(INCH/HR) =  2.596
                  SUBAREA LOSS RATE DATA(AMC  II):
     DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
        LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
    APARTMENTS                D        0.12      0.20     0.200    75
         SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
           SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
     SUBAREA AREA(ACRES) =     0.12      SUBAREA RUNOFF(CFS) =     0.28
   EFFECTIVE AREA(ACRES) =      0.24   AREA-AVERAGED Fm(INCH/HR) =  0.12
       AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap =  0.60
    TOTAL AREA(ACRES) =        0.2       PEAK FLOW RATE(CFS) =       0.53

****************************************************************************
      FLOW PROCESS FROM NODE    102.00 TO NODE    102.00 IS CODE =   1
----------------------------------------------------------------------------
           >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
          >>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
============================================================================
                      TOTAL NUMBER OF STREAMS =  2
```



```
          CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  2 ARE:
                TIME OF CONCENTRATION(MIN.) =   10.91
                RAINFALL INTENSITY(INCH/HR) =   2.60
                 AREA-AVERAGED Fm(INCH/HR) =  0.12
                 AREA-AVERAGED Fp(INCH/HR) =  0.20
                     AREA-AVERAGED Ap =  0.60
              EFFECTIVE STREAM AREA(ACRES) =       0.24
                TOTAL STREAM AREA(ACRES) =       0.24
            PEAK FLOW RATE(CFS) AT CONFLUENCE =       0.53

                          ** CONFLUENCE DATA **
 STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
  NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
    1        0.65   11.70    2.495  0.20( 0.20) 1.00       0.3     100.00
    2        0.53   10.91    2.596  0.20( 0.12) 0.60       0.2     200.00

          RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
               CONFLUENCE FORMULA USED FOR  2 STREAMS.

                          ** PEAK FLOW RATE TABLE **
 STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
  NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
    1        1.17   10.91    2.596  0.20( 0.16) 0.82       0.5     200.00
    2        1.16   11.70    2.495  0.20( 0.16) 0.82       0.5     100.00

            COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
          PEAK FLOW RATE(CFS) =       1.17    Tc(MIN.) =    10.91
     EFFECTIVE AREA(ACRES) =       0.52   AREA-AVERAGED Fm(INCH/HR) =  0.16
        AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap =  0.82
                      TOTAL AREA(ACRES) =        0.5
   LONGEST FLOWPATH FROM NODE    100.00 TO NODE    102.00 =     405.00 FEET.

****************************************************************************
      FLOW PROCESS FROM NODE    102.00 TO NODE    103.00 IS CODE =  31
----------------------------------------------------------------------------
           >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
       >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
    ELEVATION DATA: UPSTREAM(FEET) =   352.30  DOWNSTREAM(FEET) =   352.10
            FLOW LENGTH(FEET) =    19.00   MANNING'S N =  0.012
             ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
             DEPTH OF FLOW IN  18.0 INCH PIPE IS   3.9 INCHES
                  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.16
      ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
                      PIPE-FLOW(CFS) =       1.17
          PIPE TRAVEL TIME(MIN.) =   0.08    Tc(MIN.) =   10.99
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    103.00 =     424.00 FEET.

****************************************************************************
      FLOW PROCESS FROM NODE    103.00 TO NODE    103.00 IS CODE =  81
----------------------------------------------------------------------------
           >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
                      MAINLINE Tc(MIN.) =   10.99
            *  10 YEAR RAINFALL INTENSITY(INCH/HR) =  2.586
```

```
                    SUBAREA LOSS RATE DATA(AMC  II):
      DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
          LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
      APARTMENTS                D        0.38      0.20     0.200    75
           SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
             SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
       SUBAREA AREA(ACRES) =     0.38      SUBAREA RUNOFF(CFS) =     0.87
     EFFECTIVE AREA(ACRES) =      0.90   AREA-AVERAGED Fm(INCH/HR) =  0.11
         AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap =  0.56
     TOTAL AREA(ACRES) =        0.9       PEAK FLOW RATE(CFS) =       2.00

****************************************************************************
       FLOW PROCESS FROM NODE    103.00 TO NODE    104.00 IS CODE =  31
----------------------------------------------------------------------------
            >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
        >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
    ELEVATION DATA: UPSTREAM(FEET) =   352.10  DOWNSTREAM(FEET) =   349.60
            FLOW LENGTH(FEET) =   250.00   MANNING'S N =  0.012
             ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
              DEPTH OF FLOW IN  18.0 INCH PIPE IS   5.2 INCHES
                   PIPE-FLOW VELOCITY(FEET/SEC.) =   4.77
       ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
                        PIPE-FLOW(CFS) =       2.00
           PIPE TRAVEL TIME(MIN.) =   0.87    Tc(MIN.) =   11.86
   LONGEST FLOWPATH FROM NODE    100.00 TO NODE    104.00 =     674.00 FEET.

****************************************************************************
       FLOW PROCESS FROM NODE    104.00 TO NODE    104.00 IS CODE =  81
----------------------------------------------------------------------------
            >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
                        MAINLINE Tc(MIN.) =   11.86
              *  10 YEAR RAINFALL INTENSITY(INCH/HR) =  2.475
                    SUBAREA LOSS RATE DATA(AMC  II):
      DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
          LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
      APARTMENTS                D        0.95      0.20     0.200    75
           SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
             SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
       SUBAREA AREA(ACRES) =     0.95      SUBAREA RUNOFF(CFS) =     2.08
     EFFECTIVE AREA(ACRES) =      1.85   AREA-AVERAGED Fm(INCH/HR) =  0.07
         AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap =  0.37
     TOTAL AREA(ACRES) =        1.9       PEAK FLOW RATE(CFS) =       4.00

****************************************************************************
       FLOW PROCESS FROM NODE    104.00 TO NODE    105.00 IS CODE =  31
----------------------------------------------------------------------------
            >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
        >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
    ELEVATION DATA: UPSTREAM(FEET) =   349.60  DOWNSTREAM(FEET) =   346.60
            FLOW LENGTH(FEET) =   307.00   MANNING'S N =  0.012
             ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
              DEPTH OF FLOW IN  18.0 INCH PIPE IS   7.5 INCHES
```



```
                   PIPE-FLOW VELOCITY(FEET/SEC.) =   5.72
       ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
                        PIPE-FLOW(CFS) =       4.00
           PIPE TRAVEL TIME(MIN.) =   0.90    Tc(MIN.) =   12.75
   LONGEST FLOWPATH FROM NODE    100.00 TO NODE    105.00 =     981.00 FEET.

****************************************************************************
       FLOW PROCESS FROM NODE    105.00 TO NODE    105.00 IS CODE =  81
----------------------------------------------------------------------------
            >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
                        MAINLINE Tc(MIN.) =   12.75
              *  10 YEAR RAINFALL INTENSITY(INCH/HR) =  2.374
                    SUBAREA LOSS RATE DATA(AMC  II):
      DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
          LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
      APARTMENTS                D        0.93      0.20     0.200    75
           SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
             SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
       SUBAREA AREA(ACRES) =     0.93      SUBAREA RUNOFF(CFS) =     1.95
     EFFECTIVE AREA(ACRES) =      2.78   AREA-AVERAGED Fm(INCH/HR) =  0.06
         AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap =  0.32
     TOTAL AREA(ACRES) =        2.8       PEAK FLOW RATE(CFS) =       5.78

****************************************************************************
       FLOW PROCESS FROM NODE    105.00 TO NODE    106.00 IS CODE =  31
----------------------------------------------------------------------------
            >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
        >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
    ELEVATION DATA: UPSTREAM(FEET) =   346.60  DOWNSTREAM(FEET) =   346.30
            FLOW LENGTH(FEET) =    26.00   MANNING'S N =  0.012
             ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
              DEPTH OF FLOW IN  18.0 INCH PIPE IS   8.8 INCHES
                   PIPE-FLOW VELOCITY(FEET/SEC.) =   6.69
       ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
                        PIPE-FLOW(CFS) =       5.78
           PIPE TRAVEL TIME(MIN.) =   0.06    Tc(MIN.) =   12.82
   LONGEST FLOWPATH FROM NODE    100.00 TO NODE    106.00 =    1007.00 FEET.

****************************************************************************
       FLOW PROCESS FROM NODE    106.00 TO NODE    106.00 IS CODE =   1
----------------------------------------------------------------------------
            >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
============================================================================
                        TOTAL NUMBER OF STREAMS =  2
              CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  1 ARE:
                     TIME OF CONCENTRATION(MIN.) =   12.82
                     RAINFALL INTENSITY(INCH/HR) =   2.37
                       AREA-AVERAGED Fm(INCH/HR) =  0.06
                       AREA-AVERAGED Fp(INCH/HR) =  0.20
                            AREA-AVERAGED Ap =  0.32
                     EFFECTIVE STREAM AREA(ACRES) =       2.78
                      TOTAL STREAM AREA(ACRES) =       2.80
                   PEAK FLOW RATE(CFS) AT CONFLUENCE =       5.78
```

```
****************************************************************************
       FLOW PROCESS FROM NODE    210.00 TO NODE    211.00 IS CODE =  21
----------------------------------------------------------------------------
             >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
          >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
                INITIAL SUBAREA FLOW-LENGTH(FEET) =   179.00
   ELEVATION DATA: UPSTREAM(FEET) =    355.50  DOWNSTREAM(FEET) =    353.50

              Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
              SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    6.339
               *  10 YEAR RAINFALL INTENSITY(INCH/HR) =  3.543
                   SUBAREA Tc AND LOSS RATE DATA(AMC  II):
    DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE           GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  APARTMENTS                D        0.30      0.20     0.200    75    6.34
           SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
             SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
                        SUBAREA RUNOFF(CFS) =      0.95
        TOTAL AREA(ACRES) =      0.30   PEAK FLOW RATE(CFS) =      0.95

****************************************************************************
       FLOW PROCESS FROM NODE    211.00 TO NODE    106.00 IS CODE =  31
----------------------------------------------------------------------------
             >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
          >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
     ELEVATION DATA: UPSTREAM(FEET) =   346.90  DOWNSTREAM(FEET) =   346.30
               FLOW LENGTH(FEET) =    63.00   MANNING'S N =  0.012
               ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
               DEPTH OF FLOW IN  18.0 INCH PIPE IS   3.6 INCHES
                    PIPE-FLOW VELOCITY(FEET/SEC.) =   3.77
        ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
                         PIPE-FLOW(CFS) =      0.95
             PIPE TRAVEL TIME(MIN.) =   0.28    Tc(MIN.) =    6.62
   LONGEST FLOWPATH FROM NODE    210.00 TO NODE    106.00 =     242.00 FEET.

****************************************************************************
       FLOW PROCESS FROM NODE    106.00 TO NODE    106.00 IS CODE =   1
----------------------------------------------------------------------------
             >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
            >>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
============================================================================
                          TOTAL NUMBER OF STREAMS =  2
              CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  2 ARE:
                     TIME OF CONCENTRATION(MIN.) =    6.62
                     RAINFALL INTENSITY(INCH/HR) =   3.46
                       AREA-AVERAGED Fm(INCH/HR) =  0.04
                       AREA-AVERAGED Fp(INCH/HR) =  0.20
                            AREA-AVERAGED Ap =  0.20
                   EFFECTIVE STREAM AREA(ACRES) =       0.30
                     TOTAL STREAM AREA(ACRES) =       0.30
                PEAK FLOW RATE(CFS) AT CONFLUENCE =       0.95
```



```
                          ** CONFLUENCE DATA **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
    NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
      1        5.78   12.82    2.367  0.20( 0.06) 0.32       2.8     200.00
      1        5.62   13.62    2.286  0.20( 0.06) 0.32       2.8     100.00
      2        0.95    6.62    3.457  0.20( 0.04) 0.20       0.3     210.00

          RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
               CONFLUENCE FORMULA USED FOR  2 STREAMS.

                          ** PEAK FLOW RATE TABLE **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
    NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
      1        5.34    6.62    3.457  0.20( 0.06) 0.30       1.7     210.00
      2        6.43   12.82    2.367  0.20( 0.06) 0.30       3.1     200.00
      3        6.24   13.62    2.286  0.20( 0.06) 0.31       3.1     100.00

            COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
          PEAK FLOW RATE(CFS) =       6.43    Tc(MIN.) =    12.82
       EFFECTIVE AREA(ACRES) =       3.08   AREA-AVERAGED Fm(INCH/HR) =  0.06
         AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap =  0.30
                        TOTAL AREA(ACRES) =        3.1
     LONGEST FLOWPATH FROM NODE    100.00 TO NODE    106.00 =    1007.00 FEET.

****************************************************************************
       FLOW PROCESS FROM NODE    106.00 TO NODE    110.00 IS CODE =  31
----------------------------------------------------------------------------
             >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
          >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
     ELEVATION DATA: UPSTREAM(FEET) =   346.30  DOWNSTREAM(FEET) =   342.00
               FLOW LENGTH(FEET) =   150.00   MANNING'S N =  0.012
               ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
               DEPTH OF FLOW IN  18.0 INCH PIPE IS   7.3 INCHES
                    PIPE-FLOW VELOCITY(FEET/SEC.) =   9.62
        ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
                         PIPE-FLOW(CFS) =       6.43
             PIPE TRAVEL TIME(MIN.) =   0.26    Tc(MIN.) =   13.08
   LONGEST FLOWPATH FROM NODE    100.00 TO NODE    110.00 =    1157.00 FEET.

****************************************************************************
       FLOW PROCESS FROM NODE    110.00 TO NODE    110.00 IS CODE =  10
----------------------------------------------------------------------------
          >>>>>MAIN-STREAM MEMORY COPIED ONTO MEMORY BANK # 1 <<<<<
============================================================================

****************************************************************************
       FLOW PROCESS FROM NODE    300.00 TO NODE    301.00 IS CODE =  21
----------------------------------------------------------------------------
             >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
          >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
                INITIAL SUBAREA FLOW-LENGTH(FEET) =   305.00
   ELEVATION DATA: UPSTREAM(FEET) =    392.00  DOWNSTREAM(FEET) =    361.00
```

```
            Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
            SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =   10.993
             *  10 YEAR RAINFALL INTENSITY(INCH/HR) =  2.585
                 SUBAREA Tc AND LOSS RATE DATA(AMC  II):
    DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
                          NATURAL FAIR COVER
  "OPEN BRUSH"              D        0.56      0.20     1.000    83   10.99
          SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
            SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  1.000
                      SUBAREA RUNOFF(CFS) =      1.20
       TOTAL AREA(ACRES) =      0.56   PEAK FLOW RATE(CFS) =      1.20

****************************************************************************
       FLOW PROCESS FROM NODE    301.00 TO NODE    305.00 IS CODE =  31
----------------------------------------------------------------------------
            >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
       >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
    ELEVATION DATA: UPSTREAM(FEET) =   352.40  DOWNSTREAM(FEET) =   349.30
            FLOW LENGTH(FEET) =    78.00   MANNING'S N =  0.012
             ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
             DEPTH OF FLOW IN  18.0 INCH PIPE IS   2.8 INCHES
                  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.69
      ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
                       PIPE-FLOW(CFS) =       1.20
          PIPE TRAVEL TIME(MIN.) =   0.19    Tc(MIN.) =   11.19
  LONGEST FLOWPATH FROM NODE    300.00 TO NODE    305.00 =     383.00 FEET.

****************************************************************************
       FLOW PROCESS FROM NODE    305.00 TO NODE    305.00 IS CODE =   1
----------------------------------------------------------------------------
            >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
============================================================================
                       TOTAL NUMBER OF STREAMS =  2
           CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  1 ARE:
                   TIME OF CONCENTRATION(MIN.) =   11.19
                   RAINFALL INTENSITY(INCH/HR) =   2.56
                     AREA-AVERAGED Fm(INCH/HR) =  0.20
                     AREA-AVERAGED Fp(INCH/HR) =  0.20
                          AREA-AVERAGED Ap =  1.00
                 EFFECTIVE STREAM AREA(ACRES) =       0.56
                   TOTAL STREAM AREA(ACRES) =       0.56
              PEAK FLOW RATE(CFS) AT CONFLUENCE =       1.20

****************************************************************************
       FLOW PROCESS FROM NODE    400.00 TO NODE    401.00 IS CODE =  21
----------------------------------------------------------------------------
            >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
        >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
               INITIAL SUBAREA FLOW-LENGTH(FEET) =   200.00
   ELEVATION DATA: UPSTREAM(FEET) =    360.90  DOWNSTREAM(FEET) =    360.40

            Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
```



```
            SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    8.941
             *  10 YEAR RAINFALL INTENSITY(INCH/HR) =  2.910
                 SUBAREA Tc AND LOSS RATE DATA(AMC  II):
    DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  APARTMENTS                D        0.40      0.20     0.200    75    8.94
          SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
            SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
                      SUBAREA RUNOFF(CFS) =      1.03
       TOTAL AREA(ACRES) =      0.40   PEAK FLOW RATE(CFS) =      1.03

****************************************************************************
       FLOW PROCESS FROM NODE    401.00 TO NODE    305.00 IS CODE =  31
----------------------------------------------------------------------------
            >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
       >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
    ELEVATION DATA: UPSTREAM(FEET) =   353.70  DOWNSTREAM(FEET) =   349.30
            FLOW LENGTH(FEET) =   146.00   MANNING'S N =  0.012
             ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
             DEPTH OF FLOW IN  18.0 INCH PIPE IS   2.8 INCHES
                  PIPE-FLOW VELOCITY(FEET/SEC.) =   5.80
      ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
                       PIPE-FLOW(CFS) =       1.03
          PIPE TRAVEL TIME(MIN.) =   0.42    Tc(MIN.) =    9.36
  LONGEST FLOWPATH FROM NODE    400.00 TO NODE    305.00 =     346.00 FEET.

****************************************************************************
       FLOW PROCESS FROM NODE    305.00 TO NODE    305.00 IS CODE =   1
----------------------------------------------------------------------------
            >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
           >>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
============================================================================
                       TOTAL NUMBER OF STREAMS =  2
           CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  2 ARE:
                   TIME OF CONCENTRATION(MIN.) =    9.36
                   RAINFALL INTENSITY(INCH/HR) =   2.83
                     AREA-AVERAGED Fm(INCH/HR) =  0.04
                     AREA-AVERAGED Fp(INCH/HR) =  0.20
                          AREA-AVERAGED Ap =  0.20
                 EFFECTIVE STREAM AREA(ACRES) =       0.40
                   TOTAL STREAM AREA(ACRES) =       0.40
              PEAK FLOW RATE(CFS) AT CONFLUENCE =       1.03

                        ** CONFLUENCE DATA **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
    NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
      1        1.20   11.19    2.559  0.20( 0.20) 1.00       0.6     300.00
      2        1.03    9.36    2.834  0.20( 0.04) 0.20       0.4     400.00

          RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
               CONFLUENCE FORMULA USED FOR  2 STREAMS.

                        ** PEAK FLOW RATE TABLE **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
```

```
     NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)         (ACRES)    NODE
      1        2.16    9.36    2.834  0.20( 0.13) 0.63       0.9     400.00
      2        2.13   11.19    2.559  0.20( 0.13) 0.67       1.0     300.00

            COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
         PEAK FLOW RATE(CFS) =       2.16    Tc(MIN.) =     9.36
   EFFECTIVE AREA(ACRES) =       0.87   AREA-AVERAGED Fm(INCH/HR) =  0.13
       AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap =  0.63
                    TOTAL AREA(ACRES) =        1.0
  LONGEST FLOWPATH FROM NODE    300.00 TO NODE    305.00 =     383.00 FEET.

****************************************************************************
      FLOW PROCESS FROM NODE    305.00 TO NODE    310.00 IS CODE =  31
----------------------------------------------------------------------------
           >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
       >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
    ELEVATION DATA: UPSTREAM(FEET) =   349.30  DOWNSTREAM(FEET) =   345.00
            FLOW LENGTH(FEET) =   144.00   MANNING'S N =  0.012
             ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
             DEPTH OF FLOW IN  18.0 INCH PIPE IS   4.1 INCHES
                  PIPE-FLOW VELOCITY(FEET/SEC.) =   7.18
      ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
                      PIPE-FLOW(CFS) =       2.16
          PIPE TRAVEL TIME(MIN.) =   0.33    Tc(MIN.) =    9.69
  LONGEST FLOWPATH FROM NODE    300.00 TO NODE    310.00 =     527.00 FEET.

****************************************************************************
      FLOW PROCESS FROM NODE    310.00 TO NODE    310.00 IS CODE =  10
----------------------------------------------------------------------------
          >>>>>MAIN-STREAM MEMORY COPIED ONTO MEMORY BANK # 2 <<<<<
============================================================================

****************************************************************************
      FLOW PROCESS FROM NODE    500.00 TO NODE    501.00 IS CODE =  21
----------------------------------------------------------------------------
           >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
         >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
              INITIAL SUBAREA FLOW-LENGTH(FEET) =   144.00
   ELEVATION DATA: UPSTREAM(FEET) =    370.00  DOWNSTREAM(FEET) =    361.00

            Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
            SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    8.974
             *  10 YEAR RAINFALL INTENSITY(INCH/HR) =  2.904
                 SUBAREA Tc AND LOSS RATE DATA(AMC  II):
    DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
                           NATURAL FAIR COVER
  "OPEN BRUSH"               D        0.16      0.20     1.000    83    8.97
          SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
            SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  1.000
                      SUBAREA RUNOFF(CFS) =      0.39
       TOTAL AREA(ACRES) =      0.16   PEAK FLOW RATE(CFS) =      0.39
```



```
****************************************************************************
      FLOW PROCESS FROM NODE    501.00 TO NODE    505.00 IS CODE =  31
----------------------------------------------------------------------------
           >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
       >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
    ELEVATION DATA: UPSTREAM(FEET) =   349.00  DOWNSTREAM(FEET) =   347.00
            FLOW LENGTH(FEET) =   175.00   MANNING'S N =  0.012
             ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
             DEPTH OF FLOW IN  18.0 INCH PIPE IS   2.2 INCHES
                  PIPE-FLOW VELOCITY(FEET/SEC.) =   3.08
      ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
                      PIPE-FLOW(CFS) =       0.39
          PIPE TRAVEL TIME(MIN.) =   0.95    Tc(MIN.) =    9.92
  LONGEST FLOWPATH FROM NODE    500.00 TO NODE    505.00 =     319.00 FEET.

****************************************************************************
      FLOW PROCESS FROM NODE    505.00 TO NODE    505.00 IS CODE =   1
----------------------------------------------------------------------------
           >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
============================================================================
                      TOTAL NUMBER OF STREAMS =  2
           CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  1 ARE:
                  TIME OF CONCENTRATION(MIN.) =    9.92
                  RAINFALL INTENSITY(INCH/HR) =   2.74
                    AREA-AVERAGED Fm(INCH/HR) =  0.20
                    AREA-AVERAGED Fp(INCH/HR) =  0.20
                         AREA-AVERAGED Ap =  1.00
                EFFECTIVE STREAM AREA(ACRES) =       0.16
                  TOTAL STREAM AREA(ACRES) =       0.16
               PEAK FLOW RATE(CFS) AT CONFLUENCE =       0.39

****************************************************************************
      FLOW PROCESS FROM NODE    502.00 TO NODE    503.00 IS CODE =  21
----------------------------------------------------------------------------
           >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
         >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
              INITIAL SUBAREA FLOW-LENGTH(FEET) =   263.00
   ELEVATION DATA: UPSTREAM(FEET) =    356.50  DOWNSTREAM(FEET) =    352.70

            Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
            SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    7.024
             *  10 YEAR RAINFALL INTENSITY(INCH/HR) =  3.341
                 SUBAREA Tc AND LOSS RATE DATA(AMC  II):
    DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  APARTMENTS                 D        0.50      0.20     0.200    75    7.02
          SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
            SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
                      SUBAREA RUNOFF(CFS) =      1.49
       TOTAL AREA(ACRES) =      0.50   PEAK FLOW RATE(CFS) =      1.49

****************************************************************************
      FLOW PROCESS FROM NODE    503.00 TO NODE    504.00 IS CODE =  31
```


1167

```
------------------------------------------------------------------------
            >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
       >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
========================================================================
    ELEVATION DATA: UPSTREAM(FEET) =   347.50  DOWNSTREAM(FEET) =   347.40
           FLOW LENGTH(FEET) =    23.00   MANNING'S N =  0.012
            ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
            DEPTH OF FLOW IN  18.0 INCH PIPE IS   5.5 INCHES
                 PIPE-FLOW VELOCITY(FEET/SEC.) =   3.24
      ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
                      PIPE-FLOW(CFS) =       1.49
          PIPE TRAVEL TIME(MIN.) =   0.12    Tc(MIN.) =    7.14
  LONGEST FLOWPATH FROM NODE    502.00 TO NODE    504.00 =     286.00 FEET.

************************************************************************
       FLOW PROCESS FROM NODE    504.00 TO NODE    504.00 IS CODE =  81
------------------------------------------------------------------------
            >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
========================================================================
                        MAINLINE Tc(MIN.) =    7.14
                *  10 YEAR RAINFALL INTENSITY(INCH/HR) =  3.309
                     SUBAREA LOSS RATE DATA(AMC  II):
      DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
          LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
     APARTMENTS                 D        0.25      0.20     0.200    75
          SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
            SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
      SUBAREA AREA(ACRES) =    0.25      SUBAREA RUNOFF(CFS) =    0.74
    EFFECTIVE AREA(ACRES) =      0.75   AREA-AVERAGED Fm(INCH/HR) =  0.04
        AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap =  0.20
    TOTAL AREA(ACRES) =        0.8       PEAK FLOW RATE(CFS) =       2.21

************************************************************************
       FLOW PROCESS FROM NODE    504.00 TO NODE    505.00 IS CODE =  31
------------------------------------------------------------------------
            >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
       >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
========================================================================
    ELEVATION DATA: UPSTREAM(FEET) =   347.40  DOWNSTREAM(FEET) =   347.00
           FLOW LENGTH(FEET) =    45.00   MANNING'S N =  0.012
            ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
            DEPTH OF FLOW IN  18.0 INCH PIPE IS   5.6 INCHES
                 PIPE-FLOW VELOCITY(FEET/SEC.) =   4.69
      ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
                      PIPE-FLOW(CFS) =       2.21
          PIPE TRAVEL TIME(MIN.) =   0.16    Tc(MIN.) =    7.30
  LONGEST FLOWPATH FROM NODE    502.00 TO NODE    505.00 =     331.00 FEET.

************************************************************************
       FLOW PROCESS FROM NODE    505.00 TO NODE    505.00 IS CODE =   1
------------------------------------------------------------------------
            >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
           >>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
========================================================================
                        TOTAL NUMBER OF STREAMS =  2
```



```
          CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  2 ARE:
                TIME OF CONCENTRATION(MIN.) =    7.30
                RAINFALL INTENSITY(INCH/HR) =   3.27
                 AREA-AVERAGED Fm(INCH/HR) =  0.04
                 AREA-AVERAGED Fp(INCH/HR) =  0.20
                      AREA-AVERAGED Ap =  0.20
              EFFECTIVE STREAM AREA(ACRES) =       0.75
                TOTAL STREAM AREA(ACRES) =       0.75
            PEAK FLOW RATE(CFS) AT CONFLUENCE =       2.21

                          ** CONFLUENCE DATA **
 STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
  NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
    1        0.39    9.92    2.741  0.20( 0.20) 1.00       0.2     500.00
    2        2.21    7.30    3.268  0.20( 0.04) 0.20       0.8     502.00

         RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
              CONFLUENCE FORMULA USED FOR  2 STREAMS.

                          ** PEAK FLOW RATE TABLE **
 STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
  NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
    1        2.55    7.30    3.268  0.20( 0.06) 0.31       0.9     502.00
    2        2.24    9.92    2.741  0.20( 0.07) 0.34       0.9     500.00

           COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
        PEAK FLOW RATE(CFS) =       2.55    Tc(MIN.) =     7.30
   EFFECTIVE AREA(ACRES) =       0.87   AREA-AVERAGED Fm(INCH/HR) =  0.06
       AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap =  0.31
                    TOTAL AREA(ACRES) =        0.9
  LONGEST FLOWPATH FROM NODE    502.00 TO NODE    505.00 =     331.00 FEET.

************************************************************************
       FLOW PROCESS FROM NODE    505.00 TO NODE    506.00 IS CODE =  31
------------------------------------------------------------------------
            >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
       >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
========================================================================
    ELEVATION DATA: UPSTREAM(FEET) =   347.00  DOWNSTREAM(FEET) =   346.80
           FLOW LENGTH(FEET) =    25.00   MANNING'S N =  0.012
            ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
            DEPTH OF FLOW IN  18.0 INCH PIPE IS   6.2 INCHES
                 PIPE-FLOW VELOCITY(FEET/SEC.) =   4.70
      ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
                      PIPE-FLOW(CFS) =       2.55
          PIPE TRAVEL TIME(MIN.) =   0.09    Tc(MIN.) =    7.39
  LONGEST FLOWPATH FROM NODE    502.00 TO NODE    506.00 =     356.00 FEET.

************************************************************************
       FLOW PROCESS FROM NODE    506.00 TO NODE    506.00 IS CODE =  81
------------------------------------------------------------------------
            >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
========================================================================
                        MAINLINE Tc(MIN.) =    7.39
                *  10 YEAR RAINFALL INTENSITY(INCH/HR) =  3.245
```


1168

SUBAREA LOSS RATE DATA(AMC II):

DEVELOPMENT TYPE/ LAND USE	SCS SOIL GROUP	AREA (ACRES)	Fp (INCH/HR)	Ap (DECIMAL)	SCS CN
APARTMENTS	D	0.81	0.20	0.200	75

SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) = 0.20
SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap = 0.200
SUBAREA AREA(ACRES) = 0.81 SUBAREA RUNOFF(CFS) = 2.34
EFFECTIVE AREA(ACRES) = 1.68 AREA-AVERAGED Fm(INCH/HR) = 0.05
AREA-AVERAGED Fp(INCH/HR) = 0.20 AREA-AVERAGED Ap = 0.26
TOTAL AREA(ACRES) = 1.7 PEAK FLOW RATE(CFS) = 4.82

****
FLOW PROCESS FROM NODE 506.00 TO NODE 507.00 IS CODE = 31

>>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
>>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
==========
ELEVATION DATA: UPSTREAM(FEET) = 346.80 DOWNSTREAM(FEET) = 345.70
FLOW LENGTH(FEET) = 139.00 MANNING'S N = 0.012
ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
DEPTH OF FLOW IN 18.0 INCH PIPE IS 8.9 INCHES
PIPE-FLOW VELOCITY(FEET/SEC.) = 5.55
ESTIMATED PIPE DIAMETER(INCH) = 18.00 NUMBER OF PIPES = 1
PIPE-FLOW(CFS) = 4.82
PIPE TRAVEL TIME(MIN.) = 0.42 Tc(MIN.) = 7.81
LONGEST FLOWPATH FROM NODE 502.00 TO NODE 507.00 = 495.00 FEET.

****
FLOW PROCESS FROM NODE 507.00 TO NODE 507.00 IS CODE = 81

>>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
==========
MAINLINE Tc(MIN.) = 7.81
* 10 YEAR RAINFALL INTENSITY(INCH/HR) = 3.145
SUBAREA LOSS RATE DATA(AMC II):

DEVELOPMENT TYPE/ LAND USE	SCS SOIL GROUP	AREA (ACRES)	Fp (INCH/HR)	Ap (DECIMAL)	SCS CN
APARTMENTS	D	0.96	0.20	0.200	75

SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) = 0.20
SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap = 0.200
SUBAREA AREA(ACRES) = 0.96 SUBAREA RUNOFF(CFS) = 2.68
EFFECTIVE AREA(ACRES) = 2.64 AREA-AVERAGED Fm(INCH/HR) = 0.05
AREA-AVERAGED Fp(INCH/HR) = 0.20 AREA-AVERAGED Ap = 0.24
TOTAL AREA(ACRES) = 2.7 PEAK FLOW RATE(CFS) = 7.35

****
FLOW PROCESS FROM NODE 507.00 TO NODE 310.00 IS CODE = 31

>>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
>>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
==========
ELEVATION DATA: UPSTREAM(FEET) = 345.70 DOWNSTREAM(FEET) = 345.00
FLOW LENGTH(FEET) = 87.00 MANNING'S N = 0.012
DEPTH OF FLOW IN 18.0 INCH PIPE IS 11.5 INCHES
PIPE-FLOW VELOCITY(FEET/SEC.) = 6.16

ESTIMATED PIPE DIAMETER(INCH) = 18.00 NUMBER OF PIPES = 1
PIPE-FLOW(CFS) = 7.35
PIPE TRAVEL TIME(MIN.) = 0.24 Tc(MIN.) = 8.04
LONGEST FLOWPATH FROM NODE 502.00 TO NODE 310.00 = 582.00 FEET.

****
FLOW PROCESS FROM NODE 310.00 TO NODE 310.00 IS CODE = 11

>>>>>CONFLUENCE MEMORY BANK # 2 WITH THE MAIN-STREAM MEMORY<<<<<
==========

** MAIN STREAM CONFLUENCE DATA **

STREAM NUMBER	Q (CFS)	Tc (MIN.)	Intensity (INCH/HR)	Fp(Fm) (INCH/HR)	Ap	Ae (ACRES)	HEADWATER NODE
1	7.35	8.04	3.091	0.20(0.05)	0.24	2.6	502.00
2	6.30	10.69	2.626	0.20(0.05)	0.25	2.7	500.00

LONGEST FLOWPATH FROM NODE 502.00 TO NODE 310.00 = 582.00 FEET.

** MEMORY BANK # 2 CONFLUENCE DATA **

STREAM NUMBER	Q (CFS)	Tc (MIN.)	Intensity (INCH/HR)	Fp(Fm) (INCH/HR)	Ap	Ae (ACRES)	HEADWATER NODE
1	2.16	9.69	2.778	0.20(0.13)	0.63	0.9	400.00
2	2.13	11.52	2.516	0.20(0.13)	0.67	1.0	300.00

LONGEST FLOWPATH FROM NODE 300.00 TO NODE 310.00 = 527.00 FEET.

** PEAK FLOW RATE TABLE **

STREAM NUMBER	Q (CFS)	Tc (MIN.)	Intensity (INCH/HR)	Fp(Fm) (INCH/HR)	Ap	Ae (ACRES)	HEADWATER NODE
1	9.35	8.04	3.091	0.20(0.06)	0.32	3.4	502.00
2	8.85	9.69	2.778	0.20(0.07)	0.34	3.5	400.00
3	8.44	10.69	2.626	0.20(0.07)	0.35	3.6	500.00
4	8.16	11.52	2.516	0.20(0.07)	0.36	3.6	300.00

TOTAL AREA(ACRES) = 3.6

COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
PEAK FLOW RATE(CFS) = 9.35 Tc(MIN.) = 8.043
EFFECTIVE AREA(ACRES) = 3.36 AREA-AVERAGED Fm(INCH/HR) = 0.06
AREA-AVERAGED Fp(INCH/HR) = 0.20 AREA-AVERAGED Ap = 0.32
TOTAL AREA(ACRES) = 3.6
LONGEST FLOWPATH FROM NODE 502.00 TO NODE 310.00 = 582.00 FEET.

****
FLOW PROCESS FROM NODE 310.00 TO NODE 315.00 IS CODE = 31

>>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
>>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
==========
ELEVATION DATA: UPSTREAM(FEET) = 345.00 DOWNSTREAM(FEET) = 342.30
FLOW LENGTH(FEET) = 275.00 MANNING'S N = 0.012
DEPTH OF FLOW IN 18.0 INCH PIPE IS 12.8 INCHES
PIPE-FLOW VELOCITY(FEET/SEC.) = 6.99
ESTIMATED PIPE DIAMETER(INCH) = 18.00 NUMBER OF PIPES = 1
PIPE-FLOW(CFS) = 9.35
PIPE TRAVEL TIME(MIN.) = 0.66 Tc(MIN.) = 8.70
LONGEST FLOWPATH FROM NODE 502.00 TO NODE 315.00 = 857.00 FEET.

```
****************************************************************************
       FLOW PROCESS FROM NODE    315.00 TO NODE    315.00 IS CODE =  81
----------------------------------------------------------------------------
            >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
                        MAINLINE Tc(MIN.) =    8.70
                *  10 YEAR RAINFALL INTENSITY(INCH/HR) =  2.956
                     SUBAREA LOSS RATE DATA(AMC  II):
      DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
          LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
     APARTMENTS                 D        0.76      0.20     0.200    75
          SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
            SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
       SUBAREA AREA(ACRES) =     0.76      SUBAREA RUNOFF(CFS) =     1.99
     EFFECTIVE AREA(ACRES) =      4.12   AREA-AVERAGED Fm(INCH/HR) =  0.06
        AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap =  0.30
     TOTAL AREA(ACRES) =        4.4       PEAK FLOW RATE(CFS) =      10.73

****************************************************************************
       FLOW PROCESS FROM NODE    315.00 TO NODE    110.00 IS CODE =  31
----------------------------------------------------------------------------
            >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
          >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
     ELEVATION DATA: UPSTREAM(FEET) =   342.30  DOWNSTREAM(FEET) =   342.00
               FLOW LENGTH(FEET) =    24.00   MANNING'S N =  0.012
                DEPTH OF FLOW IN  18.0 INCH PIPE IS  12.9 INCHES
                     PIPE-FLOW VELOCITY(FEET/SEC.) =   7.90
          ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
                          PIPE-FLOW(CFS) =      10.73
             PIPE TRAVEL TIME(MIN.) =   0.05    Tc(MIN.) =    8.75
   LONGEST FLOWPATH FROM NODE    502.00 TO NODE    110.00 =     881.00 FEET.

****************************************************************************
       FLOW PROCESS FROM NODE    110.00 TO NODE    110.00 IS CODE =  11
----------------------------------------------------------------------------
          >>>>>CONFLUENCE MEMORY BANK # 1 WITH THE MAIN-STREAM MEMORY<<<<<
============================================================================

                    ** MAIN STREAM CONFLUENCE DATA **
    STREAM       Q      Tc    Intensity   Fp(Fm)     Ap      Ae     HEADWATER
     NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
       1       10.73    8.75    2.946  0.20( 0.06) 0.30       4.1     502.00
       2       10.09   10.41    2.667  0.20( 0.06) 0.31       4.3     400.00
       3        9.70   11.41    2.530  0.20( 0.06) 0.32       4.4     500.00
       4        9.38   12.25    2.430  0.20( 0.07) 0.33       4.4     300.00
   LONGEST FLOWPATH FROM NODE    502.00 TO NODE    110.00 =     881.00 FEET.

                    ** MEMORY BANK #  1 CONFLUENCE DATA **
    STREAM       Q      Tc    Intensity   Fp(Fm)     Ap      Ae     HEADWATER
     NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
       1        5.34    6.89    3.378  0.20( 0.06) 0.30       1.7     210.00
       2        6.43   13.08    2.340  0.20( 0.06) 0.30       3.1     200.00
       3        6.24   13.88    2.261  0.20( 0.06) 0.31       3.1     100.00
```



```
   LONGEST FLOWPATH FROM NODE    100.00 TO NODE    110.00 =    1157.00 FEET.

                    ** PEAK FLOW RATE TABLE **
    STREAM       Q      Tc    Intensity   Fp(Fm)     Ap      Ae     HEADWATER
     NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
       1       15.06    6.89    3.378  0.20( 0.06) 0.30       5.0     210.00
       2       16.40    8.75    2.946  0.20( 0.06) 0.30       6.3     502.00
       3       16.05   10.41    2.667  0.20( 0.06) 0.31       6.8     400.00
       4       15.83   11.41    2.530  0.20( 0.06) 0.32       7.1     500.00
       5       15.66   12.25    2.430  0.20( 0.06) 0.32       7.3     300.00
       6       15.45   13.08    2.340  0.20( 0.06) 0.32       7.5     200.00
       7       14.95   13.88    2.261  0.20( 0.06) 0.32       7.5     100.00
                     TOTAL AREA(ACRES) =         7.5

          COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
        PEAK FLOW RATE(CFS) =       16.40  Tc(MIN.) =    8.750
     EFFECTIVE AREA(ACRES) =      6.26  AREA-AVERAGED Fm(INCH/HR) =  0.06
        AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap =  0.30
                     TOTAL AREA(ACRES) =        7.5
   LONGEST FLOWPATH FROM NODE    100.00 TO NODE    110.00 =    1157.00 FEET.

****************************************************************************
       FLOW PROCESS FROM NODE    110.00 TO NODE    115.00 IS CODE =  31
----------------------------------------------------------------------------
            >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
          >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
     ELEVATION DATA: UPSTREAM(FEET) =   342.00  DOWNSTREAM(FEET) =   341.40
               FLOW LENGTH(FEET) =    57.00   MANNING'S N =  0.012
                DEPTH OF FLOW IN  21.0 INCH PIPE IS  16.4 INCHES
                     PIPE-FLOW VELOCITY(FEET/SEC.) =   8.13
          ESTIMATED PIPE DIAMETER(INCH) =  21.00    NUMBER OF PIPES =   1
                          PIPE-FLOW(CFS) =      16.40
             PIPE TRAVEL TIME(MIN.) =   0.12    Tc(MIN.) =    8.87
   LONGEST FLOWPATH FROM NODE    100.00 TO NODE    115.00 =    1214.00 FEET.

****************************************************************************
       FLOW PROCESS FROM NODE    115.00 TO NODE    115.00 IS CODE =  81
----------------------------------------------------------------------------
            >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
                        MAINLINE Tc(MIN.) =    8.87
                *  10 YEAR RAINFALL INTENSITY(INCH/HR) =  2.924
                     SUBAREA LOSS RATE DATA(AMC  II):
      DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
          LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
     APARTMENTS                 D        0.42      0.20     0.200    75
          SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
            SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
       SUBAREA AREA(ACRES) =     0.42      SUBAREA RUNOFF(CFS) =     1.09
     EFFECTIVE AREA(ACRES) =      6.68   AREA-AVERAGED Fm(INCH/HR) =  0.06
        AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap =  0.29
     TOTAL AREA(ACRES) =        7.9       PEAK FLOW RATE(CFS) =      17.22

****************************************************************************
```

```
      FLOW PROCESS FROM NODE    115.00 TO NODE    120.00 IS CODE =  31
----------------------------------------------------------------------------
            >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
       >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
    ELEVATION DATA: UPSTREAM(FEET) =   341.40  DOWNSTREAM(FEET) =   341.00
              FLOW LENGTH(FEET) =    45.00   MANNING'S N =  0.012
               DEPTH OF FLOW IN  24.0 INCH PIPE IS  15.7 INCHES
                    PIPE-FLOW VELOCITY(FEET/SEC.) =   7.90
       ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
                        PIPE-FLOW(CFS) =      17.22
            PIPE TRAVEL TIME(MIN.) =   0.09    Tc(MIN.) =    8.96
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    120.00 =    1259.00 FEET.
============================================================================
                            END OF STUDY SUMMARY:
          TOTAL AREA(ACRES)     =        7.9  TC(MIN.) =      8.96
     EFFECTIVE AREA(ACRES) =      6.68  AREA-AVERAGED Fm(INCH/HR)=  0.06
         AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap = 0.292
                     PEAK FLOW RATE(CFS)   =      17.22

                        ** PEAK FLOW RATE TABLE **
    STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
     NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)         (ACRES)    NODE
       1       15.97    7.11    3.319  0.20( 0.06) 0.29       5.4     210.00
       2       17.22    8.96    2.906  0.20( 0.06) 0.29       6.7     502.00
       3       16.81   10.62    2.636  0.20( 0.06) 0.30       7.2     400.00
       4       16.55   11.62    2.503  0.20( 0.06) 0.31       7.5     500.00
       5       16.35   12.46    2.406  0.20( 0.06) 0.31       7.7     300.00
       6       16.10   13.29    2.318  0.20( 0.06) 0.31       7.9     200.00
       7       15.59   14.10    2.241  0.20( 0.06) 0.32       7.9     100.00
============================================================================
============================================================================
                         END OF RATIONAL METHOD ANALYSIS
```

B.2
PROPOSED 25 YEAR STORM

```
**************************************************************************
            RATIONAL METHOD HYDROLOGY COMPUTER PROGRAM PACKAGE
          (Reference: 1986 ORANGE COUNTY HYDROLOGY CRITERION)
        (c) Copyright 1983-2015 Advanced Engineering Software (aes)
            Ver. 22.0  Release Date: 07/01/2015  License ID 1673

                          Analysis prepared by:
```

```
  ************************ DESCRIPTION OF STUDY ************************
 * PROPOSED 25 YR STORM                                                 *
 *                                                                      *
 *                                                                      *
  **************************************************************************

                          FILE NAME: 197-P25.DAT
                        TIME/DATE OF STUDY: 14:19 06/26/2025
==========================================================================
          USER SPECIFIED HYDROLOGY AND HYDRAULIC MODEL INFORMATION:
==========================================================================
                              --*TIME-OF-CONCENTRATION MODEL*--

                  USER SPECIFIED STORM EVENT(YEAR) =   25.00
                  SPECIFIED MINIMUM PIPE SIZE(INCH) =  18.00
   SPECIFIED PERCENT OF GRADIENTS(DECIMAL) TO USE FOR FRICTION SLOPE = 0.95
                          *DATA BANK RAINFALL USED*
     *ANTECEDENT MOISTURE CONDITION (AMC) II ASSUMED FOR RATIONAL METHOD*

   *USER-DEFINED STREET-SECTIONS FOR COUPLED PIPEFLOW AND STREETFLOW MODEL*
     HALF-  CROWN TO   STREET-CROSSFALL:   CURB  GUTTER-GEOMETRIES:  MANNING
     WIDTH  CROSSFALL  IN-  / OUT-/PARK-  HEIGHT  WIDTH  LIP   HIKE  FACTOR
 NO.   (FT)     (FT)    SIDE / SIDE/ WAY    (FT)    (FT)  (FT)  (FT)    (n)
===  =====  =========  ================  ======  ===== ====== ===== =======
  1   30.0     20.0    0.018/0.018/0.020   0.67    2.00 0.0312 0.167 0.0150

                    GLOBAL STREET FLOW-DEPTH CONSTRAINTS:
                      1. Relative Flow-Depth =  0.00 FEET
                as (Maximum Allowable Street Flow Depth) - (Top-of-Curb)
                  2. (Depth)*(Velocity) Constraint =  6.0 (FT*FT/S)
                    *SIZE PIPE WITH A FLOW CAPACITY GREATER THAN
                      OR EQUAL TO THE UPSTREAM TRIBUTARY PIPE.*
       *USER-SPECIFIED MINIMUM TOPOGRAPHIC SLOPE ADJUSTMENT NOT SELECTED

**************************************************************************
       FLOW PROCESS FROM NODE    100.00 TO NODE    101.00 IS CODE =  21
--------------------------------------------------------------------------
             >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
          >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==========================================================================
                  INITIAL SUBAREA FLOW-LENGTH(FEET) =   235.00
```



```
   ELEVATION DATA: UPSTREAM(FEET) =    382.00  DOWNSTREAM(FEET) =    367.00

            Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
            SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =   10.870
             *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.108
                 SUBAREA Tc AND LOSS RATE DATA(AMC  II):
  DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp          Ap     SCS    Tc
     LAND USE           GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
                              NATURAL FAIR COVER
"OPEN BRUSH"               D        0.30      0.20     1.000    83   10.87
       SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
         SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  1.000
                   SUBAREA RUNOFF(CFS) =      0.79
     TOTAL AREA(ACRES) =      0.30   PEAK FLOW RATE(CFS) =      0.79

**************************************************************************
       FLOW PROCESS FROM NODE    101.00 TO NODE    102.00 IS CODE =  31
--------------------------------------------------------------------------
             >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
          >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
==========================================================================
    ELEVATION DATA: UPSTREAM(FEET) =   354.00  DOWNSTREAM(FEET) =   352.30
            FLOW LENGTH(FEET) =   170.00   MANNING'S N =  0.012
             ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
             DEPTH OF FLOW IN  18.0 INCH PIPE IS   3.2 INCHES
                  PIPE-FLOW VELOCITY(FEET/SEC.) =   3.64
      ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
                       PIPE-FLOW(CFS) =       0.79
          PIPE TRAVEL TIME(MIN.) =   0.78    Tc(MIN.) =   11.65
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    102.00 =     405.00 FEET.

**************************************************************************
       FLOW PROCESS FROM NODE    102.00 TO NODE    102.00 IS CODE =   1
--------------------------------------------------------------------------
             >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
==========================================================================
                      TOTAL NUMBER OF STREAMS =  2
            CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  1 ARE:
                    TIME OF CONCENTRATION(MIN.) =   11.65
                    RAINFALL INTENSITY(INCH/HR) =   2.99
                      AREA-AVERAGED Fm(INCH/HR) =  0.20
                      AREA-AVERAGED Fp(INCH/HR) =  0.20
                          AREA-AVERAGED Ap =  1.00
                   EFFECTIVE STREAM AREA(ACRES) =       0.30
                     TOTAL STREAM AREA(ACRES) =       0.30
                  PEAK FLOW RATE(CFS) AT CONFLUENCE =       0.79

**************************************************************************
       FLOW PROCESS FROM NODE    200.00 TO NODE    201.00 IS CODE =  21
--------------------------------------------------------------------------
             >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
          >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
==========================================================================
                  INITIAL SUBAREA FLOW-LENGTH(FEET) =   111.00
   ELEVATION DATA: UPSTREAM(FEET) =    367.00  DOWNSTREAM(FEET) =    364.00
```

```
            Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
            SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    9.563
             *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.342
                 SUBAREA Tc AND LOSS RATE DATA(AMC  II):
   DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
     LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
                            NATURAL FAIR COVER
 "OPEN BRUSH"               D        0.12      0.20     1.000    83    9.56
       SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
         SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  1.000
                   SUBAREA RUNOFF(CFS) =      0.34
      TOTAL AREA(ACRES) =      0.12   PEAK FLOW RATE(CFS) =      0.34

****************************************************************************
      FLOW PROCESS FROM NODE    201.00 TO NODE    102.00 IS CODE =  31
----------------------------------------------------------------------------
           >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
       >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
    ELEVATION DATA: UPSTREAM(FEET) =   354.50  DOWNSTREAM(FEET) =   352.30
            FLOW LENGTH(FEET) =   218.00   MANNING'S N =  0.012
             ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
             DEPTH OF FLOW IN  18.0 INCH PIPE IS   2.2 INCHES
                  PIPE-FLOW VELOCITY(FEET/SEC.) =   2.82
      ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
                      PIPE-FLOW(CFS) =       0.34
          PIPE TRAVEL TIME(MIN.) =   1.29    Tc(MIN.) =   10.85
  LONGEST FLOWPATH FROM NODE    200.00 TO NODE    102.00 =     329.00 FEET.

****************************************************************************
      FLOW PROCESS FROM NODE    102.00 TO NODE    102.00 IS CODE =  81
----------------------------------------------------------------------------
           >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
                       MAINLINE Tc(MIN.) =   10.85
             *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.111
                  SUBAREA LOSS RATE DATA(AMC  II):
     DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
        LAND USE           GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
    APARTMENTS               D        0.12      0.20     0.200    75
         SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
           SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
     SUBAREA AREA(ACRES) =     0.12      SUBAREA RUNOFF(CFS) =     0.33
   EFFECTIVE AREA(ACRES) =      0.24   AREA-AVERAGED Fm(INCH/HR) =  0.12
       AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap =  0.60
    TOTAL AREA(ACRES) =        0.2       PEAK FLOW RATE(CFS) =       0.65

****************************************************************************
      FLOW PROCESS FROM NODE    102.00 TO NODE    102.00 IS CODE =   1
----------------------------------------------------------------------------
           >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
          >>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
============================================================================
                       TOTAL NUMBER OF STREAMS =  2
```



```
          CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  2 ARE:
                TIME OF CONCENTRATION(MIN.) =   10.85
                RAINFALL INTENSITY(INCH/HR) =   3.11
                  AREA-AVERAGED Fm(INCH/HR) =  0.12
                  AREA-AVERAGED Fp(INCH/HR) =  0.20
                      AREA-AVERAGED Ap =  0.60
              EFFECTIVE STREAM AREA(ACRES) =       0.24
                TOTAL STREAM AREA(ACRES) =       0.24
            PEAK FLOW RATE(CFS) AT CONFLUENCE =       0.65

                          ** CONFLUENCE DATA **
  STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
     1        0.79   11.65    2.989  0.20( 0.20) 1.00       0.3     100.00
     2        0.65   10.85    3.111  0.20( 0.12) 0.60       0.2     200.00

          RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
               CONFLUENCE FORMULA USED FOR  2 STREAMS.

                          ** PEAK FLOW RATE TABLE **
  STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
     1        1.41   10.85    3.111  0.20( 0.16) 0.82       0.5     200.00
     2        1.40   11.65    2.989  0.20( 0.16) 0.82       0.5     100.00

            COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
          PEAK FLOW RATE(CFS) =       1.41    Tc(MIN.) =    10.85
     EFFECTIVE AREA(ACRES) =       0.52   AREA-AVERAGED Fm(INCH/HR) =  0.16
        AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap =  0.82
                      TOTAL AREA(ACRES) =        0.5
    LONGEST FLOWPATH FROM NODE    100.00 TO NODE    102.00 =     405.00 FEET.

****************************************************************************
      FLOW PROCESS FROM NODE    102.00 TO NODE    103.00 IS CODE =  31
----------------------------------------------------------------------------
           >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
       >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
    ELEVATION DATA: UPSTREAM(FEET) =   352.30  DOWNSTREAM(FEET) =   352.10
            FLOW LENGTH(FEET) =    19.00   MANNING'S N =  0.012
             ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
             DEPTH OF FLOW IN  18.0 INCH PIPE IS   4.3 INCHES
                  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.37
      ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
                      PIPE-FLOW(CFS) =       1.41
          PIPE TRAVEL TIME(MIN.) =   0.07    Tc(MIN.) =   10.92
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    103.00 =     424.00 FEET.

****************************************************************************
      FLOW PROCESS FROM NODE    103.00 TO NODE    103.00 IS CODE =  81
----------------------------------------------------------------------------
           >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
                       MAINLINE Tc(MIN.) =   10.92
             *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.100
```

```
                    SUBAREA LOSS RATE DATA(AMC  II):
      DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp          Ap     SCS
          LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
     APARTMENTS                 D        0.38      0.20     0.200    75
          SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
            SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
       SUBAREA AREA(ACRES) =     0.38      SUBAREA RUNOFF(CFS) =     1.05
     EFFECTIVE AREA(ACRES) =      0.90   AREA-AVERAGED Fm(INCH/HR) =  0.11
         AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap =  0.56
     TOTAL AREA(ACRES) =        0.9       PEAK FLOW RATE(CFS) =       2.42

****************************************************************************
       FLOW PROCESS FROM NODE    103.00 TO NODE    104.00 IS CODE =  31
----------------------------------------------------------------------------
            >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
        >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
    ELEVATION DATA: UPSTREAM(FEET) =   352.10  DOWNSTREAM(FEET) =   349.60
            FLOW LENGTH(FEET) =   250.00   MANNING'S N =  0.012
             ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
              DEPTH OF FLOW IN  18.0 INCH PIPE IS   5.7 INCHES
                   PIPE-FLOW VELOCITY(FEET/SEC.) =   5.03
       ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
                      PIPE-FLOW(CFS) =       2.42
          PIPE TRAVEL TIME(MIN.) =   0.83    Tc(MIN.) =   11.75
   LONGEST FLOWPATH FROM NODE    100.00 TO NODE    104.00 =     674.00 FEET.

****************************************************************************
       FLOW PROCESS FROM NODE    104.00 TO NODE    104.00 IS CODE =  81
----------------------------------------------------------------------------
            >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
                      MAINLINE Tc(MIN.) =   11.75
              *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  2.974
                    SUBAREA LOSS RATE DATA(AMC  II):
      DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp          Ap     SCS
          LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
     APARTMENTS                 D        0.95      0.20     0.200    75
          SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
            SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
       SUBAREA AREA(ACRES) =     0.95      SUBAREA RUNOFF(CFS) =     2.51
     EFFECTIVE AREA(ACRES) =      1.85   AREA-AVERAGED Fm(INCH/HR) =  0.07
         AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap =  0.37
     TOTAL AREA(ACRES) =        1.9       PEAK FLOW RATE(CFS) =       4.83

****************************************************************************
       FLOW PROCESS FROM NODE    104.00 TO NODE    105.00 IS CODE =  31
----------------------------------------------------------------------------
            >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
        >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
    ELEVATION DATA: UPSTREAM(FEET) =   349.60  DOWNSTREAM(FEET) =   346.60
            FLOW LENGTH(FEET) =   307.00   MANNING'S N =  0.012
             ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
              DEPTH OF FLOW IN  18.0 INCH PIPE IS   8.4 INCHES
```



```
                   PIPE-FLOW VELOCITY(FEET/SEC.) =   6.01
       ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
                      PIPE-FLOW(CFS) =       4.83
          PIPE TRAVEL TIME(MIN.) =   0.85    Tc(MIN.) =   12.60
   LONGEST FLOWPATH FROM NODE    100.00 TO NODE    105.00 =     981.00 FEET.

****************************************************************************
       FLOW PROCESS FROM NODE    105.00 TO NODE    105.00 IS CODE =  81
----------------------------------------------------------------------------
            >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
                      MAINLINE Tc(MIN.) =   12.60
              *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  2.859
                    SUBAREA LOSS RATE DATA(AMC  II):
      DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp          Ap     SCS
          LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
     APARTMENTS                 D        0.93      0.20     0.200    75
          SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
            SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
       SUBAREA AREA(ACRES) =     0.93      SUBAREA RUNOFF(CFS) =     2.36
     EFFECTIVE AREA(ACRES) =      2.78   AREA-AVERAGED Fm(INCH/HR) =  0.06
         AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap =  0.31
     TOTAL AREA(ACRES) =        2.8       PEAK FLOW RATE(CFS) =       6.99

****************************************************************************
       FLOW PROCESS FROM NODE    105.00 TO NODE    106.00 IS CODE =  31
----------------------------------------------------------------------------
            >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
        >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
    ELEVATION DATA: UPSTREAM(FEET) =   346.60  DOWNSTREAM(FEET) =   346.30
            FLOW LENGTH(FEET) =    26.00   MANNING'S N =  0.012
             ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
              DEPTH OF FLOW IN  18.0 INCH PIPE IS   9.9 INCHES
                   PIPE-FLOW VELOCITY(FEET/SEC.) =   7.01
       ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
                      PIPE-FLOW(CFS) =       6.99
          PIPE TRAVEL TIME(MIN.) =   0.06    Tc(MIN.) =   12.66
   LONGEST FLOWPATH FROM NODE    100.00 TO NODE    106.00 =    1007.00 FEET.

****************************************************************************
       FLOW PROCESS FROM NODE    106.00 TO NODE    106.00 IS CODE =   1
----------------------------------------------------------------------------
            >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
============================================================================
                      TOTAL NUMBER OF STREAMS =  2
           CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  1 ARE:
                    TIME OF CONCENTRATION(MIN.) =   12.66
                     RAINFALL INTENSITY(INCH/HR) =   2.85
                      AREA-AVERAGED Fm(INCH/HR) =  0.06
                      AREA-AVERAGED Fp(INCH/HR) =  0.20
                           AREA-AVERAGED Ap =  0.31
                    EFFECTIVE STREAM AREA(ACRES) =       2.78
                     TOTAL STREAM AREA(ACRES) =       2.80
                  PEAK FLOW RATE(CFS) AT CONFLUENCE =       6.99
```

```
****************************************************************************
       FLOW PROCESS FROM NODE    210.00 TO NODE    211.00 IS CODE =  21
----------------------------------------------------------------------------
             >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
         >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
                INITIAL SUBAREA FLOW-LENGTH(FEET) =   179.00
   ELEVATION DATA: UPSTREAM(FEET) =    355.50  DOWNSTREAM(FEET) =    353.50

             Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
             SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    6.339
              *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  4.217
                   SUBAREA Tc AND LOSS RATE DATA(AMC  II):
    DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE           GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  APARTMENTS                D        0.30      0.20     0.200    75    6.34
          SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
            SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
                       SUBAREA RUNOFF(CFS) =      1.13
        TOTAL AREA(ACRES) =      0.30   PEAK FLOW RATE(CFS) =      1.13

****************************************************************************
       FLOW PROCESS FROM NODE    211.00 TO NODE    106.00 IS CODE =  31
----------------------------------------------------------------------------
             >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
        >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
     ELEVATION DATA: UPSTREAM(FEET) =   346.90  DOWNSTREAM(FEET) =   346.30
              FLOW LENGTH(FEET) =    63.00   MANNING'S N =  0.012
               ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
               DEPTH OF FLOW IN  18.0 INCH PIPE IS   3.9 INCHES
                    PIPE-FLOW VELOCITY(FEET/SEC.) =   3.97
       ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
                         PIPE-FLOW(CFS) =      1.13
            PIPE TRAVEL TIME(MIN.) =   0.26    Tc(MIN.) =    6.60
   LONGEST FLOWPATH FROM NODE    210.00 TO NODE    106.00 =     242.00 FEET.

****************************************************************************
       FLOW PROCESS FROM NODE    106.00 TO NODE    106.00 IS CODE =   1
----------------------------------------------------------------------------
             >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
            >>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
============================================================================
                          TOTAL NUMBER OF STREAMS =  2
             CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  2 ARE:
                    TIME OF CONCENTRATION(MIN.) =    6.60
                    RAINFALL INTENSITY(INCH/HR) =   4.12
                      AREA-AVERAGED Fm(INCH/HR) =  0.04
                      AREA-AVERAGED Fp(INCH/HR) =  0.20
                           AREA-AVERAGED Ap =  0.20
                  EFFECTIVE STREAM AREA(ACRES) =       0.30
                    TOTAL STREAM AREA(ACRES) =       0.30
                PEAK FLOW RATE(CFS) AT CONFLUENCE =       1.13
```



```
                          ** CONFLUENCE DATA **
  STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
     1        6.99   12.66    2.851  0.20( 0.06) 0.31       2.8     200.00
     1        6.79   13.48    2.752  0.20( 0.06) 0.32       2.8     100.00
     2        1.13    6.60    4.121  0.20( 0.04) 0.20       0.3     210.00

          RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
               CONFLUENCE FORMULA USED FOR  2 STREAMS.

                          ** PEAK FLOW RATE TABLE **
  STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
   NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
     1        6.44    6.60    4.121  0.20( 0.06) 0.30       1.7     210.00
     2        7.77   12.66    2.851  0.20( 0.06) 0.30       3.1     200.00
     3        7.54   13.48    2.752  0.20( 0.06) 0.31       3.1     100.00

          COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
        PEAK FLOW RATE(CFS) =       7.77    Tc(MIN.) =    12.66
   EFFECTIVE AREA(ACRES) =       3.08   AREA-AVERAGED Fm(INCH/HR) =  0.06
       AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap =  0.30
                      TOTAL AREA(ACRES) =        3.1
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    106.00 =    1007.00 FEET.

****************************************************************************
       FLOW PROCESS FROM NODE    106.00 TO NODE    110.00 IS CODE =  31
----------------------------------------------------------------------------
             >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
        >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
    ELEVATION DATA: UPSTREAM(FEET) =   346.30  DOWNSTREAM(FEET) =   342.00
              FLOW LENGTH(FEET) =   150.00   MANNING'S N =  0.012
               ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
               DEPTH OF FLOW IN  18.0 INCH PIPE IS   8.1 INCHES
                    PIPE-FLOW VELOCITY(FEET/SEC.) =  10.12
       ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
                         PIPE-FLOW(CFS) =       7.77
            PIPE TRAVEL TIME(MIN.) =   0.25    Tc(MIN.) =   12.91
   LONGEST FLOWPATH FROM NODE    100.00 TO NODE    110.00 =    1157.00 FEET.

****************************************************************************
       FLOW PROCESS FROM NODE    110.00 TO NODE    110.00 IS CODE =  10
----------------------------------------------------------------------------
          >>>>>MAIN-STREAM MEMORY COPIED ONTO MEMORY BANK # 1 <<<<<
============================================================================

****************************************************************************
       FLOW PROCESS FROM NODE    300.00 TO NODE    301.00 IS CODE =  21
----------------------------------------------------------------------------
             >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
         >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
                INITIAL SUBAREA FLOW-LENGTH(FEET) =   305.00
   ELEVATION DATA: UPSTREAM(FEET) =    392.00  DOWNSTREAM(FEET) =    361.00
```

```
            Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
            SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =   10.993
             *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.088
                 SUBAREA Tc AND LOSS RATE DATA(AMC  II):
    DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
                            NATURAL FAIR COVER
  "OPEN BRUSH"               D        0.56      0.20     1.000    83   10.99
          SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
            SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  1.000
                      SUBAREA RUNOFF(CFS) =      1.46
       TOTAL AREA(ACRES) =      0.56   PEAK FLOW RATE(CFS) =      1.46

****************************************************************************
       FLOW PROCESS FROM NODE    301.00 TO NODE    305.00 IS CODE =  31
----------------------------------------------------------------------------
            >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
       >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
    ELEVATION DATA: UPSTREAM(FEET) =   352.40  DOWNSTREAM(FEET) =   349.30
            FLOW LENGTH(FEET) =    78.00   MANNING'S N =  0.012
             ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
             DEPTH OF FLOW IN  18.0 INCH PIPE IS   3.1 INCHES
                  PIPE-FLOW VELOCITY(FEET/SEC.) =   7.08
      ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
                       PIPE-FLOW(CFS) =       1.46
          PIPE TRAVEL TIME(MIN.) =   0.18    Tc(MIN.) =   11.18
  LONGEST FLOWPATH FROM NODE    300.00 TO NODE    305.00 =     383.00 FEET.

****************************************************************************
       FLOW PROCESS FROM NODE    305.00 TO NODE    305.00 IS CODE =   1
----------------------------------------------------------------------------
            >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
============================================================================
                       TOTAL NUMBER OF STREAMS =  2
           CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  1 ARE:
                   TIME OF CONCENTRATION(MIN.) =   11.18
                   RAINFALL INTENSITY(INCH/HR) =   3.06
                     AREA-AVERAGED Fm(INCH/HR) =  0.20
                     AREA-AVERAGED Fp(INCH/HR) =  0.20
                          AREA-AVERAGED Ap =  1.00
                 EFFECTIVE STREAM AREA(ACRES) =       0.56
                   TOTAL STREAM AREA(ACRES) =       0.56
              PEAK FLOW RATE(CFS) AT CONFLUENCE =       1.46

****************************************************************************
       FLOW PROCESS FROM NODE    400.00 TO NODE    401.00 IS CODE =  21
----------------------------------------------------------------------------
            >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
         >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
               INITIAL SUBAREA FLOW-LENGTH(FEET) =   200.00
   ELEVATION DATA: UPSTREAM(FEET) =    360.90  DOWNSTREAM(FEET) =    360.40

            Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
```



```
            SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    8.941
             *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.472
                 SUBAREA Tc AND LOSS RATE DATA(AMC  II):
    DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
      LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  APARTMENTS                 D        0.40      0.20     0.200    75    8.94
          SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
            SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
                      SUBAREA RUNOFF(CFS) =      1.24
       TOTAL AREA(ACRES) =      0.40   PEAK FLOW RATE(CFS) =      1.24

****************************************************************************
       FLOW PROCESS FROM NODE    401.00 TO NODE    305.00 IS CODE =  31
----------------------------------------------------------------------------
            >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
       >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
    ELEVATION DATA: UPSTREAM(FEET) =   353.70  DOWNSTREAM(FEET) =   349.30
            FLOW LENGTH(FEET) =   146.00   MANNING'S N =  0.012
             ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
             DEPTH OF FLOW IN  18.0 INCH PIPE IS   3.1 INCHES
                  PIPE-FLOW VELOCITY(FEET/SEC.) =   6.13
      ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
                       PIPE-FLOW(CFS) =       1.24
          PIPE TRAVEL TIME(MIN.) =   0.40    Tc(MIN.) =    9.34
  LONGEST FLOWPATH FROM NODE    400.00 TO NODE    305.00 =     346.00 FEET.

****************************************************************************
       FLOW PROCESS FROM NODE    305.00 TO NODE    305.00 IS CODE =   1
----------------------------------------------------------------------------
            >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
           >>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
============================================================================
                       TOTAL NUMBER OF STREAMS =  2
           CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  2 ARE:
                   TIME OF CONCENTRATION(MIN.) =    9.34
                   RAINFALL INTENSITY(INCH/HR) =   3.39
                     AREA-AVERAGED Fm(INCH/HR) =  0.04
                     AREA-AVERAGED Fp(INCH/HR) =  0.20
                          AREA-AVERAGED Ap =  0.20
                 EFFECTIVE STREAM AREA(ACRES) =       0.40
                   TOTAL STREAM AREA(ACRES) =       0.40
              PEAK FLOW RATE(CFS) AT CONFLUENCE =       1.24

                          ** CONFLUENCE DATA **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
    NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
      1        1.46   11.18    3.060  0.20( 0.20) 1.00       0.6     300.00
      2        1.24    9.34    3.387  0.20( 0.04) 0.20       0.4     400.00

          RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
               CONFLUENCE FORMULA USED FOR  2 STREAMS.

                          ** PEAK FLOW RATE TABLE **
   STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
```

```
     NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)         (ACRES)    NODE
      1        2.59    9.34    3.387  0.20( 0.13) 0.63       0.9     400.00
      2        2.57   11.18    3.060  0.20( 0.13) 0.67       1.0     300.00

            COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
         PEAK FLOW RATE(CFS) =       2.59    Tc(MIN.) =     9.34
   EFFECTIVE AREA(ACRES) =       0.87   AREA-AVERAGED Fm(INCH/HR) =  0.13
       AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap =  0.63
                    TOTAL AREA(ACRES) =        1.0
  LONGEST FLOWPATH FROM NODE    300.00 TO NODE    305.00 =     383.00 FEET.

****************************************************************************
      FLOW PROCESS FROM NODE    305.00 TO NODE    310.00 IS CODE =  31
----------------------------------------------------------------------------
           >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
       >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
    ELEVATION DATA: UPSTREAM(FEET) =   349.30  DOWNSTREAM(FEET) =   345.00
           FLOW LENGTH(FEET) =   144.00   MANNING'S N =  0.012
            ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
            DEPTH OF FLOW IN  18.0 INCH PIPE IS   4.5 INCHES
                 PIPE-FLOW VELOCITY(FEET/SEC.) =   7.56
      ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
                     PIPE-FLOW(CFS) =       2.59
          PIPE TRAVEL TIME(MIN.) =   0.32    Tc(MIN.) =    9.65
  LONGEST FLOWPATH FROM NODE    300.00 TO NODE    310.00 =     527.00 FEET.

****************************************************************************
      FLOW PROCESS FROM NODE    310.00 TO NODE    310.00 IS CODE =  10
----------------------------------------------------------------------------
          >>>>>MAIN-STREAM MEMORY COPIED ONTO MEMORY BANK # 2 <<<<<
============================================================================

****************************************************************************
      FLOW PROCESS FROM NODE    500.00 TO NODE    501.00 IS CODE =  21
----------------------------------------------------------------------------
           >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
         >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
              INITIAL SUBAREA FLOW-LENGTH(FEET) =   144.00
   ELEVATION DATA: UPSTREAM(FEET) =    370.00  DOWNSTREAM(FEET) =    361.00

            Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
            SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    8.974
             *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.464
                 SUBAREA Tc AND LOSS RATE DATA(AMC  II):
    DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
                          NATURAL FAIR COVER
  "OPEN BRUSH"              D        0.16      0.20     1.000    83    8.97
          SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
            SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  1.000
                      SUBAREA RUNOFF(CFS) =      0.47
       TOTAL AREA(ACRES) =      0.16   PEAK FLOW RATE(CFS) =      0.47
```



```
****************************************************************************
      FLOW PROCESS FROM NODE    501.00 TO NODE    505.00 IS CODE =  31
----------------------------------------------------------------------------
           >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
       >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
    ELEVATION DATA: UPSTREAM(FEET) =   349.00  DOWNSTREAM(FEET) =   347.00
           FLOW LENGTH(FEET) =   175.00   MANNING'S N =  0.012
            ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
            DEPTH OF FLOW IN  18.0 INCH PIPE IS   2.5 INCHES
                 PIPE-FLOW VELOCITY(FEET/SEC.) =   3.25
      ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
                     PIPE-FLOW(CFS) =       0.47
          PIPE TRAVEL TIME(MIN.) =   0.90    Tc(MIN.) =    9.87
  LONGEST FLOWPATH FROM NODE    500.00 TO NODE    505.00 =     319.00 FEET.

****************************************************************************
      FLOW PROCESS FROM NODE    505.00 TO NODE    505.00 IS CODE =   1
----------------------------------------------------------------------------
           >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
============================================================================
                     TOTAL NUMBER OF STREAMS =  2
          CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  1 ARE:
                  TIME OF CONCENTRATION(MIN.) =    9.87
                  RAINFALL INTENSITY(INCH/HR) =   3.28
                    AREA-AVERAGED Fm(INCH/HR) =  0.20
                    AREA-AVERAGED Fp(INCH/HR) =  0.20
                         AREA-AVERAGED Ap =  1.00
                EFFECTIVE STREAM AREA(ACRES) =       0.16
                  TOTAL STREAM AREA(ACRES) =       0.16
               PEAK FLOW RATE(CFS) AT CONFLUENCE =       0.47

****************************************************************************
      FLOW PROCESS FROM NODE    502.00 TO NODE    503.00 IS CODE =  21
----------------------------------------------------------------------------
           >>>>>RATIONAL METHOD INITIAL SUBAREA ANALYSIS<<<<<
         >>USE TIME-OF-CONCENTRATION NOMOGRAPH FOR INITIAL SUBAREA<<
============================================================================
              INITIAL SUBAREA FLOW-LENGTH(FEET) =   263.00
   ELEVATION DATA: UPSTREAM(FEET) =    356.50  DOWNSTREAM(FEET) =    352.70

            Tc = K*[(LENGTH** 3.00)/(ELEVATION CHANGE)]**0.20
            SUBAREA ANALYSIS USED MINIMUM Tc(MIN.) =    7.024
             *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.980
                 SUBAREA Tc AND LOSS RATE DATA(AMC  II):
    DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS   Tc
       LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN  (MIN.)
  APARTMENTS                 D        0.50      0.20     0.200    75    7.02
          SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
            SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
                      SUBAREA RUNOFF(CFS) =      1.77
       TOTAL AREA(ACRES) =      0.50   PEAK FLOW RATE(CFS) =      1.77

****************************************************************************
      FLOW PROCESS FROM NODE    503.00 TO NODE    504.00 IS CODE =  31
```

```
------------------------------------------------------------------------
            >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
       >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
========================================================================
    ELEVATION DATA: UPSTREAM(FEET) =   347.50  DOWNSTREAM(FEET) =   347.40
            FLOW LENGTH(FEET) =    23.00   MANNING'S N =  0.012
             ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
             DEPTH OF FLOW IN  18.0 INCH PIPE IS   6.0 INCHES
                  PIPE-FLOW VELOCITY(FEET/SEC.) =   3.42
      ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
                      PIPE-FLOW(CFS) =       1.77
          PIPE TRAVEL TIME(MIN.) =   0.11    Tc(MIN.) =    7.14
  LONGEST FLOWPATH FROM NODE    502.00 TO NODE    504.00 =     286.00 FEET.

************************************************************************
       FLOW PROCESS FROM NODE    504.00 TO NODE    504.00 IS CODE =  81
------------------------------------------------------------------------
            >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
========================================================================
                        MAINLINE Tc(MIN.) =    7.14
                *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.944
                    SUBAREA LOSS RATE DATA(AMC  II):
      DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
          LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
     APARTMENTS                 D        0.25      0.20     0.200    75
          SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
           SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
     SUBAREA AREA(ACRES) =    0.25      SUBAREA RUNOFF(CFS) =    0.88
    EFFECTIVE AREA(ACRES) =      0.75   AREA-AVERAGED Fm(INCH/HR) =  0.04
        AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap =  0.20
    TOTAL AREA(ACRES) =        0.8       PEAK FLOW RATE(CFS) =       2.64

************************************************************************
       FLOW PROCESS FROM NODE    504.00 TO NODE    505.00 IS CODE =  31
------------------------------------------------------------------------
            >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
       >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
========================================================================
    ELEVATION DATA: UPSTREAM(FEET) =   347.40  DOWNSTREAM(FEET) =   347.00
            FLOW LENGTH(FEET) =    45.00   MANNING'S N =  0.012
             ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
             DEPTH OF FLOW IN  18.0 INCH PIPE IS   6.2 INCHES
                  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.93
      ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
                      PIPE-FLOW(CFS) =       2.64
          PIPE TRAVEL TIME(MIN.) =   0.15    Tc(MIN.) =    7.29
  LONGEST FLOWPATH FROM NODE    502.00 TO NODE    505.00 =     331.00 FEET.

************************************************************************
       FLOW PROCESS FROM NODE    505.00 TO NODE    505.00 IS CODE =   1
------------------------------------------------------------------------
            >>>>>DESIGNATE INDEPENDENT STREAM FOR CONFLUENCE<<<<<
           >>>>>AND COMPUTE VARIOUS CONFLUENCED STREAM VALUES<<<<<
========================================================================
                        TOTAL NUMBER OF STREAMS =  2
```



```
          CONFLUENCE VALUES USED FOR INDEPENDENT STREAM  2 ARE:
                TIME OF CONCENTRATION(MIN.) =    7.29
                RAINFALL INTENSITY(INCH/HR) =   3.90
                 AREA-AVERAGED Fm(INCH/HR) =  0.04
                 AREA-AVERAGED Fp(INCH/HR) =  0.20
                     AREA-AVERAGED Ap =  0.20
              EFFECTIVE STREAM AREA(ACRES) =       0.75
                TOTAL STREAM AREA(ACRES) =       0.75
            PEAK FLOW RATE(CFS) AT CONFLUENCE =       2.64

                          ** CONFLUENCE DATA **
 STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
  NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
    1        0.47    9.87    3.282  0.20( 0.20) 1.00       0.2     500.00
    2        2.64    7.29    3.897  0.20( 0.04) 0.20       0.8     502.00

         RAINFALL INTENSITY AND TIME OF CONCENTRATION RATIO
              CONFLUENCE FORMULA USED FOR  2 STREAMS.

                          ** PEAK FLOW RATE TABLE **
 STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
  NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
    1        3.05    7.29    3.897  0.20( 0.06) 0.31       0.9     502.00
    2        2.69    9.87    3.282  0.20( 0.07) 0.34       0.9     500.00

           COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
        PEAK FLOW RATE(CFS) =       3.05    Tc(MIN.) =     7.29
   EFFECTIVE AREA(ACRES) =       0.87   AREA-AVERAGED Fm(INCH/HR) =  0.06
       AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap =  0.31
                    TOTAL AREA(ACRES) =        0.9
  LONGEST FLOWPATH FROM NODE    502.00 TO NODE    505.00 =     331.00 FEET.

************************************************************************
       FLOW PROCESS FROM NODE    505.00 TO NODE    506.00 IS CODE =  31
------------------------------------------------------------------------
            >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
       >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
========================================================================
    ELEVATION DATA: UPSTREAM(FEET) =   347.00  DOWNSTREAM(FEET) =   346.80
            FLOW LENGTH(FEET) =    25.00   MANNING'S N =  0.012
             ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
             DEPTH OF FLOW IN  18.0 INCH PIPE IS   6.9 INCHES
                  PIPE-FLOW VELOCITY(FEET/SEC.) =   4.94
      ESTIMATED PIPE DIAMETER(INCH) =  18.00    NUMBER OF PIPES =   1
                      PIPE-FLOW(CFS) =       3.05
          PIPE TRAVEL TIME(MIN.) =   0.08    Tc(MIN.) =    7.37
  LONGEST FLOWPATH FROM NODE    502.00 TO NODE    506.00 =     356.00 FEET.

************************************************************************
       FLOW PROCESS FROM NODE    506.00 TO NODE    506.00 IS CODE =  81
------------------------------------------------------------------------
            >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
========================================================================
                        MAINLINE Tc(MIN.) =    7.37
                *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.872
```


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SUBAREA LOSS RATE DATA(AMC II):

DEVELOPMENT TYPE/ LAND USE	SCS SOIL GROUP	AREA (ACRES)	Fp (INCH/HR)	Ap (DECIMAL)	SCS CN
APARTMENTS	D	0.81	0.20	0.200	75

SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) = 0.20
SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap = 0.200
SUBAREA AREA(ACRES) = 0.81 SUBAREA RUNOFF(CFS) = 2.79
EFFECTIVE AREA(ACRES) = 1.68 AREA-AVERAGED Fm(INCH/HR) = 0.05
AREA-AVERAGED Fp(INCH/HR) = 0.20 AREA-AVERAGED Ap = 0.26
TOTAL AREA(ACRES) = 1.7 PEAK FLOW RATE(CFS) = 5.77

****
FLOW PROCESS FROM NODE 506.00 TO NODE 507.00 IS CODE = 31

>>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
>>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
==========
ELEVATION DATA: UPSTREAM(FEET) = 346.80 DOWNSTREAM(FEET) = 345.70
FLOW LENGTH(FEET) = 139.00 MANNING'S N = 0.012
ESTIMATED PIPE DIAMETER(INCH) INCREASED TO 18.000
DEPTH OF FLOW IN 18.0 INCH PIPE IS 9.9 INCHES
PIPE-FLOW VELOCITY(FEET/SEC.) = 5.80
ESTIMATED PIPE DIAMETER(INCH) = 18.00 NUMBER OF PIPES = 1
PIPE-FLOW(CFS) = 5.77
PIPE TRAVEL TIME(MIN.) = 0.40 Tc(MIN.) = 7.77
LONGEST FLOWPATH FROM NODE 502.00 TO NODE 507.00 = 495.00 FEET.

****
FLOW PROCESS FROM NODE 507.00 TO NODE 507.00 IS CODE = 81

>>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
==========
MAINLINE Tc(MIN.) = 7.77
* 25 YEAR RAINFALL INTENSITY(INCH/HR) = 3.758
SUBAREA LOSS RATE DATA(AMC II):

DEVELOPMENT TYPE/ LAND USE	SCS SOIL GROUP	AREA (ACRES)	Fp (INCH/HR)	Ap (DECIMAL)	SCS CN
APARTMENTS	D	0.96	0.20	0.200	75

SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) = 0.20
SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap = 0.200
SUBAREA AREA(ACRES) = 0.96 SUBAREA RUNOFF(CFS) = 3.21
EFFECTIVE AREA(ACRES) = 2.64 AREA-AVERAGED Fm(INCH/HR) = 0.05
AREA-AVERAGED Fp(INCH/HR) = 0.20 AREA-AVERAGED Ap = 0.24
TOTAL AREA(ACRES) = 2.7 PEAK FLOW RATE(CFS) = 8.81

****
FLOW PROCESS FROM NODE 507.00 TO NODE 310.00 IS CODE = 31

>>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
>>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
==========
ELEVATION DATA: UPSTREAM(FEET) = 345.70 DOWNSTREAM(FEET) = 345.00
FLOW LENGTH(FEET) = 87.00 MANNING'S N = 0.012
DEPTH OF FLOW IN 18.0 INCH PIPE IS 13.2 INCHES
PIPE-FLOW VELOCITY(FEET/SEC.) = 6.36

ESTIMATED PIPE DIAMETER(INCH) = 18.00 NUMBER OF PIPES = 1
PIPE-FLOW(CFS) = 8.81
PIPE TRAVEL TIME(MIN.) = 0.23 Tc(MIN.) = 8.00
LONGEST FLOWPATH FROM NODE 502.00 TO NODE 310.00 = 582.00 FEET.

****
FLOW PROCESS FROM NODE 310.00 TO NODE 310.00 IS CODE = 11

>>>>>CONFLUENCE MEMORY BANK # 2 WITH THE MAIN-STREAM MEMORY<<<<<
==========

** MAIN STREAM CONFLUENCE DATA **

STREAM NUMBER	Q (CFS)	Tc (MIN.)	Intensity (INCH/HR)	Fp(Fm) (INCH/HR)	Ap	Ae (ACRES)	HEADWATER NODE
1	8.81	8.00	3.697	0.20(0.05)	0.24	2.6	502.00
2	7.58	10.61	3.152	0.20(0.05)	0.25	2.7	500.00

LONGEST FLOWPATH FROM NODE 502.00 TO NODE 310.00 = 582.00 FEET.

** MEMORY BANK # 2 CONFLUENCE DATA **

STREAM NUMBER	Q (CFS)	Tc (MIN.)	Intensity (INCH/HR)	Fp(Fm) (INCH/HR)	Ap	Ae (ACRES)	HEADWATER NODE
1	2.59	9.65	3.324	0.20(0.13)	0.63	0.9	400.00
2	2.57	11.49	3.011	0.20(0.13)	0.67	1.0	300.00

LONGEST FLOWPATH FROM NODE 300.00 TO NODE 310.00 = 527.00 FEET.

** PEAK FLOW RATE TABLE **

STREAM NUMBER	Q (CFS)	Tc (MIN.)	Intensity (INCH/HR)	Fp(Fm) (INCH/HR)	Ap	Ae (ACRES)	HEADWATER NODE
1	11.21	8.00	3.697	0.20(0.06)	0.32	3.4	502.00
2	10.62	9.65	3.324	0.20(0.07)	0.34	3.5	400.00
3	10.16	10.61	3.152	0.20(0.07)	0.35	3.6	500.00
4	9.81	11.49	3.011	0.20(0.07)	0.36	3.6	300.00

TOTAL AREA(ACRES) = 3.6

COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
PEAK FLOW RATE(CFS) = 11.21 Tc(MIN.) = 7.999
EFFECTIVE AREA(ACRES) = 3.36 AREA-AVERAGED Fm(INCH/HR) = 0.06
AREA-AVERAGED Fp(INCH/HR) = 0.20 AREA-AVERAGED Ap = 0.32
TOTAL AREA(ACRES) = 3.6
LONGEST FLOWPATH FROM NODE 502.00 TO NODE 310.00 = 582.00 FEET.

****
FLOW PROCESS FROM NODE 310.00 TO NODE 315.00 IS CODE = 31

>>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
>>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
==========
ELEVATION DATA: UPSTREAM(FEET) = 345.00 DOWNSTREAM(FEET) = 342.30
FLOW LENGTH(FEET) = 275.00 MANNING'S N = 0.012
DEPTH OF FLOW IN 21.0 INCH PIPE IS 12.7 INCHES
PIPE-FLOW VELOCITY(FEET/SEC.) = 7.40
ESTIMATED PIPE DIAMETER(INCH) = 21.00 NUMBER OF PIPES = 1
PIPE-FLOW(CFS) = 11.21
PIPE TRAVEL TIME(MIN.) = 0.62 Tc(MIN.) = 8.62
LONGEST FLOWPATH FROM NODE 502.00 TO NODE 315.00 = 857.00 FEET.

```
****************************************************************************
       FLOW PROCESS FROM NODE    315.00 TO NODE    315.00 IS CODE =  81
----------------------------------------------------------------------------
            >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
                        MAINLINE Tc(MIN.) =    8.62
                *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.544
                     SUBAREA LOSS RATE DATA(AMC  II):
      DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
          LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
     APARTMENTS                 D        0.76      0.20     0.200    75
          SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
            SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
       SUBAREA AREA(ACRES) =     0.76      SUBAREA RUNOFF(CFS) =     2.40
     EFFECTIVE AREA(ACRES) =      4.12   AREA-AVERAGED Fm(INCH/HR) =  0.06
        AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap =  0.30
     TOTAL AREA(ACRES) =        4.4       PEAK FLOW RATE(CFS) =      12.91

****************************************************************************
       FLOW PROCESS FROM NODE    315.00 TO NODE    110.00 IS CODE =  31
----------------------------------------------------------------------------
            >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
          >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
    ELEVATION DATA: UPSTREAM(FEET) =   342.30  DOWNSTREAM(FEET) =   342.00
              FLOW LENGTH(FEET) =    24.00   MANNING'S N =  0.012
               DEPTH OF FLOW IN  21.0 INCH PIPE IS  12.8 INCHES
                    PIPE-FLOW VELOCITY(FEET/SEC.) =   8.39
         ESTIMATED PIPE DIAMETER(INCH) =  21.00    NUMBER OF PIPES =   1
                         PIPE-FLOW(CFS) =      12.91
            PIPE TRAVEL TIME(MIN.) =   0.05    Tc(MIN.) =    8.67
   LONGEST FLOWPATH FROM NODE    502.00 TO NODE    110.00 =     881.00 FEET.

****************************************************************************
       FLOW PROCESS FROM NODE    110.00 TO NODE    110.00 IS CODE =  11
----------------------------------------------------------------------------
       >>>>>CONFLUENCE MEMORY BANK # 1 WITH THE MAIN-STREAM MEMORY<<<<<
============================================================================

                    ** MAIN STREAM CONFLUENCE DATA **
    STREAM       Q      Tc    Intensity   Fp(Fm)     Ap      Ae     HEADWATER
     NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
       1       12.91    8.67    3.533  0.20( 0.06) 0.30       4.1     502.00
       2       12.14   10.35    3.195  0.20( 0.06) 0.31       4.3     400.00
       3       11.69   11.31    3.040  0.20( 0.06) 0.32       4.4     500.00
       4       11.30   12.20    2.912  0.20( 0.07) 0.33       4.4     300.00
   LONGEST FLOWPATH FROM NODE    502.00 TO NODE    110.00 =     881.00 FEET.

                    ** MEMORY BANK #  1 CONFLUENCE DATA **
    STREAM       Q      Tc    Intensity   Fp(Fm)     Ap      Ae     HEADWATER
     NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
       1        6.44    6.86    4.032  0.20( 0.06) 0.30       1.7     210.00
       2        7.77   12.91    2.820  0.20( 0.06) 0.30       3.1     200.00
       3        7.54   13.72    2.724  0.20( 0.06) 0.31       3.1     100.00
```



```
   LONGEST FLOWPATH FROM NODE    100.00 TO NODE    110.00 =    1157.00 FEET.

                    ** PEAK FLOW RATE TABLE **
    STREAM       Q      Tc    Intensity   Fp(Fm)     Ap      Ae     HEADWATER
     NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)          (ACRES)    NODE
       1       18.13    6.86    4.032  0.20( 0.06) 0.30       5.0     210.00
       2       19.75    8.67    3.533  0.20( 0.06) 0.30       6.3     502.00
       3       19.34   10.35    3.195  0.20( 0.06) 0.31       6.8     400.00
       4       19.11   11.31    3.040  0.20( 0.06) 0.32       7.1     500.00
       5       18.91   12.20    2.912  0.20( 0.06) 0.32       7.3     300.00
       6       18.70   12.91    2.820  0.20( 0.06) 0.32       7.5     200.00
       7       18.09   13.72    2.724  0.20( 0.06) 0.32       7.5     100.00
                     TOTAL AREA(ACRES) =         7.5

          COMPUTED CONFLUENCE ESTIMATES ARE AS FOLLOWS:
        PEAK FLOW RATE(CFS) =       19.75  Tc(MIN.) =    8.666
     EFFECTIVE AREA(ACRES) =      6.26  AREA-AVERAGED Fm(INCH/HR) =  0.06
        AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap =  0.30
                     TOTAL AREA(ACRES) =        7.5
   LONGEST FLOWPATH FROM NODE    100.00 TO NODE    110.00 =    1157.00 FEET.

****************************************************************************
       FLOW PROCESS FROM NODE    110.00 TO NODE    115.00 IS CODE =  31
----------------------------------------------------------------------------
            >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
          >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
    ELEVATION DATA: UPSTREAM(FEET) =   342.00  DOWNSTREAM(FEET) =   341.40
              FLOW LENGTH(FEET) =    57.00   MANNING'S N =  0.012
               DEPTH OF FLOW IN  24.0 INCH PIPE IS  16.3 INCHES
                    PIPE-FLOW VELOCITY(FEET/SEC.) =   8.68
         ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
                         PIPE-FLOW(CFS) =      19.75
            PIPE TRAVEL TIME(MIN.) =   0.11    Tc(MIN.) =    8.78
   LONGEST FLOWPATH FROM NODE    100.00 TO NODE    115.00 =    1214.00 FEET.

****************************************************************************
       FLOW PROCESS FROM NODE    115.00 TO NODE    115.00 IS CODE =  81
----------------------------------------------------------------------------
            >>>>>ADDITION OF SUBAREA TO MAINLINE PEAK FLOW<<<<<
============================================================================
                        MAINLINE Tc(MIN.) =    8.78
                *  25 YEAR RAINFALL INTENSITY(INCH/HR) =  3.508
                     SUBAREA LOSS RATE DATA(AMC  II):
      DEVELOPMENT TYPE/      SCS SOIL   AREA      Fp         Ap     SCS
          LAND USE            GROUP   (ACRES)  (INCH/HR)  (DECIMAL)  CN
     APARTMENTS                 D        0.42      0.20     0.200    75
          SUBAREA AVERAGE PERVIOUS LOSS RATE, Fp(INCH/HR) =  0.20
            SUBAREA AVERAGE PERVIOUS AREA FRACTION, Ap =  0.200
       SUBAREA AREA(ACRES) =     0.42      SUBAREA RUNOFF(CFS) =     1.31
     EFFECTIVE AREA(ACRES) =      6.68   AREA-AVERAGED Fm(INCH/HR) =  0.06
        AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap =  0.29
     TOTAL AREA(ACRES) =        7.9       PEAK FLOW RATE(CFS) =      20.75

****************************************************************************
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1181

```
      FLOW PROCESS FROM NODE    115.00 TO NODE    120.00 IS CODE =  31
----------------------------------------------------------------------------
            >>>>>COMPUTE PIPE-FLOW TRAVEL TIME THRU SUBAREA<<<<<
       >>>>>USING COMPUTER-ESTIMATED PIPESIZE (NON-PRESSURE FLOW)<<<<<
============================================================================
    ELEVATION DATA: UPSTREAM(FEET) =   341.40  DOWNSTREAM(FEET) =   341.00
              FLOW LENGTH(FEET) =    45.00   MANNING'S N =  0.012
               DEPTH OF FLOW IN  24.0 INCH PIPE IS  18.2 INCHES
                    PIPE-FLOW VELOCITY(FEET/SEC.) =   8.13
       ESTIMATED PIPE DIAMETER(INCH) =  24.00    NUMBER OF PIPES =   1
                        PIPE-FLOW(CFS) =      20.75
            PIPE TRAVEL TIME(MIN.) =   0.09    Tc(MIN.) =    8.87
  LONGEST FLOWPATH FROM NODE    100.00 TO NODE    120.00 =    1259.00 FEET.
============================================================================
                            END OF STUDY SUMMARY:
          TOTAL AREA(ACRES)     =        7.9  TC(MIN.) =      8.87
     EFFECTIVE AREA(ACRES) =      6.68  AREA-AVERAGED Fm(INCH/HR)=  0.06
         AREA-AVERAGED Fp(INCH/HR) =  0.20  AREA-AVERAGED Ap = 0.292
                     PEAK FLOW RATE(CFS)   =      20.75

                         ** PEAK FLOW RATE TABLE **
    STREAM       Q      Tc   Intensity   Fp(Fm)     Ap     Ae     HEADWATER
     NUMBER     (CFS)  (MIN.) (INCH/HR) (INCH/HR)         (ACRES)    NODE
       1       19.24    7.07    3.966  0.20( 0.06) 0.29       5.4     210.00
       2       20.75    8.87    3.488  0.20( 0.06) 0.29       6.7     502.00
       3       20.27   10.55    3.160  0.20( 0.06) 0.30       7.2     400.00
       4       19.99   11.51    3.009  0.20( 0.06) 0.31       7.5     500.00
       5       19.75   12.40    2.885  0.20( 0.06) 0.31       7.7     300.00
       6       19.50   13.11    2.795  0.20( 0.06) 0.31       7.9     200.00
       7       18.88   13.93    2.701  0.20( 0.06) 0.32       7.9     100.00
============================================================================
============================================================================
                        END OF RATIONAL METHOD ANALYSIS
```

APPENDIX C
Unit Hydrograph

C.1
EXISTING LOSS CALCULATIONS

Orange County Precipitation Loss Calculations
Shea - Aliso Existing

area {acres}	subarea	soil type	land use	curve number CN			low loss fraction (1-Y) for selected year-storm frequencies									A_p	F_p	maximum loss rate, F_m {in/h}			
							expected value {EV}						high confidence {HC}					year-storm frequency			
				AMC			100	50	25	10	5	2	10	25	100			EV			HC
							P_{24} (Inches)														
				II	I	III	4.49	4.03	3.68	3.03	2.12	1.44	3.68	4.49	5.63			> 5	5	2	all
1.40		D	Open Brush	83	67	96	0.85	0.80	0.77	0.68	0.51	0.34	0.77	0.85	1.28	1.00	0.20	0.420	0.700	0.840	0.280
6.03		D	Commercial	75	57	91	5.42	5.36	5.32	5.21	4.97	4.66	5.32	5.42	5.69	0.10	0.20	0.181	0.302	0.362	0.121
7.43							0.157	0.170	0.182	0.208	0.262	0.327	0.182	0.157	0.062			0.081	0.135	0.162	0.054

C.2
EXISTING 25 YEAR UNIT HYDROGRAPH

EXISTING 25 YEAR UNIT HYDROGRAPH

RATIONAL METHOD CALIBRATION COEFFICIENT = 0.90
TOTAL CATCHMENT AREA(ACRES) = 7.43
SOIL-LOSS RATE, Fm,(INCH/HR) = 0.054
LOW LOSS FRACTION = 0.157
TIME OF CONCENTRATION(MIN.) = 12.46
SMALL AREA PEAK Q COMPUTED USING PEAK FLOW RATE FORMULA
ORANGE COUNTY "VALLEY" RAINFALL VALUES ARE USED
RETURN FREQUENCY(YEARS) = 25
5-MINUTE POINT RAINFALL VALUE(INCHES) = 0.40
30-MINUTE POINT RAINFALL VALUE(INCHES) = 0.87
1-HOUR POINT RAINFALL VALUE(INCHES) = 1.15
3-HOUR POINT RAINFALL VALUE(INCHES) = 1.94
6-HOUR POINT RAINFALL VALUE(INCHES) = 2.71
24-HOUR POINT RAINFALL VALUE(INCHES) = 4.49

TOTAL CATCHMENT RUNOFF VOLUME(ACRE-FEET) = 2.17
TOTAL CATCHMENT SOIL-LOSS VOLUME(ACRE-FEET) = 0.61

****

TIME (HOURS)	VOLUME (AF)	Q (CFS)	0.	5.0	10.0	15.0	20.0
0.01	0.0000	0.00	Q	.	.	.	.
0.22	0.0033	0.38	Q	.	.	.	.
0.42	0.0099	0.39	Q	.	.	.	.
0.63	0.0166	0.39	Q	.	.	.	.
0.84	0.0234	0.40	Q	.	.	.	.
1.05	0.0302	0.40	Q	.	.	.	.
1.26	0.0370	0.40	Q	.	.	.	.
1.46	0.0440	0.40	Q	.	.	.	.
1.67	0.0509	0.41	Q	.	.	.	.

1.88	0.0580	0.41	Q	.	.	.	.
2.09	0.0651	0.42	Q	.	.	.	.
2.29	0.0723	0.42	Q	.	.	.	.
2.50	0.0795	0.43	Q	.	.	.	.
2.71	0.0869	0.43	Q	.	.	.	.
2.92	0.0943	0.43	Q	.	.	.	.
3.12	0.1017	0.44	Q	.	.	.	.
3.33	0.1093	0.44	Q	.	.	.	.
3.54	0.1169	0.45	Q	.	.	.	.
3.75	0.1246	0.45	Q	.	.	.	.
3.96	0.1324	0.46	Q	.	.	.	.
4.16	0.1402	0.46	Q	.	.	.	.
4.37	0.1482	0.47	Q	.	.	.	.
4.58	0.1562	0.47	Q	.	.	.	.
4.79	0.1644	0.48	Q	.	.	.	.
4.99	0.1726	0.48	Q	.	.	.	.
5.20	0.1809	0.49	Q	.	.	.	.
5.41	0.1894	0.50	Q	.	.	.	.
5.62	0.1979	0.50	Q	.	.	.	.
5.82	0.2065	0.51	.Q	.	.	.	.
6.03	0.2153	0.51	.Q	.	.	.	.
6.24	0.2242	0.52	.Q	.	.	.	.
6.45	0.2332	0.53	.Q	.	.	.	.
6.65	0.2423	0.54	.Q	.	.	.	.
6.86	0.2515	0.54	.Q	.	.	.	.
7.07	0.2609	0.55	.Q	.	.	.	.
7.28	0.2704	0.56	.Q	.	.	.	.
7.49	0.2800	0.57	.Q	.	.	.	.
7.69	0.2898	0.57	.Q	.	.	.	.
7.90	0.2998	0.59	.Q	.	.	.	.
8.11	0.3099	0.59	.Q	.	.	.	.
8.32	0.3202	0.61	.Q	.	.	.	.
8.52	0.3306	0.61	.Q	.	.	.	.
8.73	0.3412	0.63	.Q	.	.	.	.
8.94	0.3521	0.63	.Q	.	.	.	.
9.15	0.3631	0.65	.Q	.	.	.	.
9.35	0.3743	0.66	.Q	.	.	.	.
9.56	0.3858	0.68	.Q	.	.	.	.

9.77	0.3974	0.69	.Q . . . .
9.98	0.4094	0.70	.Q . . . .
10.19	0.4216	0.71	.Q . . . .
10.39	0.4340	0.74	.Q . . . .
10.60	0.4467	0.75	.Q . . . .
10.81	0.4598	0.77	.Q . . . .
11.02	0.4732	0.79	.Q . . . .
11.22	0.4869	0.81	.Q . . . .
11.43	0.5010	0.83	.Q . . . .
11.64	0.5155	0.86	.Q . . . .
11.85	0.5304	0.88	.Q . . . .
12.05	0.5458	0.92	.Q . . . .
12.26	0.5640	1.20	. Q . . . .
12.47	0.5853	1.28	. Q . . . .
12.68	0.6076	1.31	. Q . . . .
12.88	0.6305	1.37	. Q . . . .
13.09	0.6543	1.40	. Q . . . .
13.30	0.6788	1.47	. Q . . . .
13.51	0.7044	1.51	. Q . . . .
13.72	0.7309	1.59	. Q . . . .
13.92	0.7587	1.64	. Q . . . .
14.13	0.7877	1.74	. Q . . . .
14.34	0.8181	1.80	. Q . . . .
14.55	0.8504	1.96	. Q . . . .
14.75	0.8850	2.07	. Q . . . .
14.96	0.9230	2.36	. Q . . . .
15.17	0.9650	2.54	. Q . . . .
15.38	1.0131	3.06	. Q . . . .
15.58	1.0648	2.97	. Q . . . .
15.79	1.1281	4.40	. Q . . . .
16.00	1.2203	6.35	. . Q . . .
16.21	1.4359	18.78	. . . . Q .
16.42	1.6262	3.40	. Q . . . .
16.62	1.6791	2.77	. Q . . . .
16.83	1.7218	2.20	. Q . . . .
17.04	1.7568	1.87	. Q . . . .
17.25	1.7874	1.70	. Q . . . .
17.45	1.8152	1.55	. Q . . . .

17.66	1.8408	1.43	. Q	.	.	.	.
17.87	1.8645	1.34	. Q	.	.	.	.
18.08	1.8868	1.26	. Q	.	.	.	.
18.28	1.9053	0.90	.Q	.	.	.	.
18.49	1.9202	0.84	.Q	.	.	.	.
18.70	1.9343	0.80	.Q	.	.	.	.
18.91	1.9477	0.76	.Q	.	.	.	.
19.11	1.9605	0.73	.Q	.	.	.	.
19.32	1.9726	0.69	.Q	.	.	.	.
19.53	1.9843	0.67	.Q	.	.	.	.
19.74	1.9956	0.64	.Q	.	.	.	.
19.95	2.0064	0.62	.Q	.	.	.	.
20.15	2.0169	0.60	.Q	.	.	.	.
20.36	2.0270	0.58	.Q	.	.	.	.
20.57	2.0368	0.56	.Q	.	.	.	.
20.78	2.0463	0.55	.Q	.	.	.	.
20.98	2.0555	0.53	.Q	.	.	.	.
21.19	2.0645	0.52	.Q	.	.	.	.
21.40	2.0732	0.50	.Q	.	.	.	.
21.61	2.0818	0.49	Q	.	.	.	.
21.81	2.0901	0.48	Q	.	.	.	.
22.02	2.0983	0.47	Q	.	.	.	.
22.23	2.1062	0.46	Q	.	.	.	.
22.44	2.1140	0.45	Q	.	.	.	.
22.65	2.1216	0.44	Q	.	.	.	.
22.85	2.1291	0.43	Q	.	.	.	.
23.06	2.1364	0.42	Q	.	.	.	.
23.27	2.1436	0.41	Q	.	.	.	.
23.48	2.1506	0.41	Q	.	.	.	.
23.68	2.1576	0.40	Q	.	.	.	.
23.89	2.1644	0.39	Q	.	.	.	.
24.10	2.1711	0.39	Q	.	.	.	.
24.31	2.1744	0.00	Q	.	.	.	.

TIME DURATION(minutes) OF PERCENTILES OF ESTIMATED PEAK FLOW RATE:
(Note: 100% of Peak Flow Rate estimate assumed to have
an instantaneous time duration)

Percentile of Estimated Peak Flow Rate	Duration (minutes)
0%	1445.4
10%	149.5
20%	37.4
30%	24.9
40%	12.5
50%	12.5
60%	12.5
70%	12.5
80%	12.5
90%	12.5

C.3
PROPSED LOSS CALCULATIONS

Orange County Precipitation Loss Calculations
Shea - Aliso Proposed

area {acres}	subarea	soil type	land use	curve number CN			low loss fraction (1-Y) for selected year-storm frequencies									A_p	F_p	maximum loss rate, F_m {in/h}			
							expected value {EV}						high confidence {HC}					year-storm frequency			
							100	50	25	10	5	2	10	25	100			EV			HC
				AMC			P_{24} (Inches)														
				II	I	III	4.49	4.03	3.68	3.03	2.12	1.44	3.68	4.49	5.63			> 5	5	2	all
1.14		D	Open Brush	83	67	96	0.69	0.65	0.62	0.55	0.42	0.27	0.62	0.69	1.04	1.00	0.20	0.342	0.570	0.684	0.228
6.78		D	Apartments	75	57	91	5.76	5.68	5.61	5.45	5.13	4.74	5.61	5.76	6.30	0.20	0.20	0.407	0.678	0.814	0.271
7.92							0.186	0.201	0.213	0.242	0.300	0.367	0.213	0.186	0.073			0.095	0.158	0.189	0.063

C.4
PROPOSED 25 YEAR HYDROGRAPH

PROPOSED 25 YEAR UNIT HYDROGRAPH

RATIONAL METHOD CALIBRATION COEFFICIENT = 0.90
TOTAL CATCHMENT AREA(ACRES) = 7.92
SOIL-LOSS RATE, Fm,(INCH/HR) = 0.063
LOW LOSS FRACTION = 0.186
TIME OF CONCENTRATION(MIN.) = 8.87
SMALL AREA PEAK Q COMPUTED USING PEAK FLOW RATE FORMULA
ORANGE COUNTY "VALLEY" RAINFALL VALUES ARE USED
RETURN FREQUENCY(YEARS) = 25
5-MINUTE POINT RAINFALL VALUE(INCHES) = 0.40
30-MINUTE POINT RAINFALL VALUE(INCHES) = 0.87
1-HOUR POINT RAINFALL VALUE(INCHES) = 1.15
3-HOUR POINT RAINFALL VALUE(INCHES) = 1.94
6-HOUR POINT RAINFALL VALUE(INCHES) = 2.71
24-HOUR POINT RAINFALL VALUE(INCHES) = 4.49

TOTAL CATCHMENT RUNOFF VOLUME(ACRE-FEET) = 2.26
TOTAL CATCHMENT SOIL-LOSS VOLUME(ACRE-FEET) = 0.71

****

TIME (HOURS)	VOLUME (AF)	Q (CFS)	0.	7.5	15.0	22.5	30.0
0.03	0.0000	0.00	Q	.	.	.	.
0.18	0.0024	0.40	Q	.	.	.	.
0.33	0.0073	0.40	Q	.	.	.	.
0.48	0.0122	0.40	Q	.	.	.	.
0.63	0.0171	0.40	Q	.	.	.	.
0.77	0.0220	0.41	Q	.	.	.	.
0.92	0.0270	0.41	Q	.	.	.	.
1.07	0.0320	0.41	Q	.	.	.	.
1.22	0.0370	0.41	Q	.	.	.	.
1.36	0.0421	0.42	Q	.	.	.	.

1.51	0.0472	0.42	Q	.	.	.	.
1.66	0.0523	0.42	Q	.	.	.	.
1.81	0.0575	0.42	Q	.	.	.	.
1.96	0.0627	0.43	Q	.	.	.	.
2.10	0.0679	0.43	Q	.	.	.	.
2.25	0.0732	0.43	Q	.	.	.	.
2.40	0.0785	0.44	Q	.	.	.	.
2.55	0.0839	0.44	Q	.	.	.	.
2.70	0.0893	0.44	Q	.	.	.	.
2.84	0.0947	0.45	Q	.	.	.	.
2.99	0.1001	0.45	Q	.	.	.	.
3.14	0.1056	0.45	Q	.	.	.	.
3.29	0.1112	0.45	Q	.	.	.	.
3.43	0.1167	0.46	Q	.	.	.	.
3.58	0.1224	0.46	Q	.	.	.	.
3.73	0.1280	0.47	Q	.	.	.	.
3.88	0.1337	0.47	Q	.	.	.	.
4.03	0.1395	0.47	Q	.	.	.	.
4.17	0.1453	0.48	Q	.	.	.	.
4.32	0.1511	0.48	Q	.	.	.	.
4.47	0.1570	0.48	Q	.	.	.	.
4.62	0.1629	0.49	Q	.	.	.	.
4.76	0.1689	0.49	Q	.	.	.	.
4.91	0.1749	0.50	Q	.	.	.	.
5.06	0.1810	0.50	Q	.	.	.	.
5.21	0.1871	0.50	Q	.	.	.	.
5.36	0.1933	0.51	Q	.	.	.	.
5.50	0.1996	0.51	Q	.	.	.	.
5.65	0.2059	0.52	Q	.	.	.	.
5.80	0.2122	0.52	Q	.	.	.	.
5.95	0.2186	0.53	Q	.	.	.	.
6.10	0.2251	0.53	Q	.	.	.	.
6.24	0.2316	0.54	Q	.	.	.	.
6.39	0.2382	0.54	Q	.	.	.	.
6.54	0.2449	0.55	Q	.	.	.	.
6.69	0.2516	0.55	Q	.	.	.	.
6.83	0.2584	0.56	Q	.	.	.	.
6.98	0.2653	0.57	Q	.	.	.	.

7.13	0.2722	0.57	Q	.	.	.	.
7.28	0.2792	0.58	Q	.	.	.	.
7.43	0.2863	0.58	Q	.	.	.	.
7.57	0.2934	0.59	Q	.	.	.	.
7.72	0.3007	0.59	Q	.	.	.	.
7.87	0.3080	0.60	Q	.	.	.	.
8.02	0.3154	0.61	Q	.	.	.	.
8.16	0.3229	0.62	Q	.	.	.	.
8.31	0.3304	0.62	Q	.	.	.	.
8.46	0.3381	0.63	Q	.	.	.	.
8.61	0.3459	0.64	Q	.	.	.	.
8.76	0.3537	0.65	Q	.	.	.	.
8.90	0.3617	0.65	Q	.	.	.	.
9.05	0.3698	0.67	Q	.	.	.	.
9.20	0.3779	0.67	Q	.	.	.	.
9.35	0.3862	0.68	Q	.	.	.	.
9.50	0.3946	0.69	Q	.	.	.	.
9.64	0.4031	0.70	Q	.	.	.	.
9.79	0.4118	0.71	Q	.	.	.	.
9.94	0.4206	0.73	Q	.	.	.	.
10.09	0.4295	0.73	Q	.	.	.	.
10.23	0.4385	0.75	Q	.	.	.	.
10.38	0.4477	0.76	.Q	.	.	.	.
10.53	0.4571	0.77	.Q	.	.	.	.
10.68	0.4666	0.78	.Q	.	.	.	.
10.83	0.4762	0.80	.Q	.	.	.	.
10.97	0.4861	0.81	.Q	.	.	.	.
11.12	0.4961	0.83	.Q	.	.	.	.
11.27	0.5063	0.84	.Q	.	.	.	.
11.42	0.5167	0.86	.Q	.	.	.	.
11.57	0.5273	0.88	.Q	.	.	.	.
11.71	0.5382	0.90	.Q	.	.	.	.
11.86	0.5493	0.91	.Q	.	.	.	.
12.01	0.5606	0.94	.Q	.	.	.	.
12.16	0.5733	1.14	.Q	.	.	.	.
12.30	0.5882	1.30	.Q	.	.	.	.
12.45	0.6042	1.32	.Q	.	.	.	.
12.60	0.6205	1.35	.Q	.	.	.	.

12.75 0.6371 1.37 .Q . . . .
12.90 0.6542 1.42 .Q . . . .
13.04 0.6717 1.44 .Q . . . .
13.19 0.6896 1.49 .Q . . . .
13.34 0.7080 1.52 . Q . . . .
13.49 0.7269 1.58 . Q . . . .
13.63 0.7463 1.61 . Q . . . .
13.78 0.7664 1.68 . Q . . . .
13.93 0.7871 1.72 . Q . . . .
14.08 0.8085 1.79 . Q . . . .
14.23 0.8306 1.82 . Q . . . .
14.37 0.8536 1.93 . Q . . . .
14.52 0.8775 2.00 . Q . . . .
14.67 0.9030 2.17 . Q . . . .
14.82 0.9301 2.27 . Q . . . .
14.97 0.9592 2.51 . Q . . . .
15.11 0.9907 2.65 . Q . . . .
15.26 1.0254 3.01 . Q . . . .
15.41 1.0636 3.25 . Q . . . .
15.56 1.1036 3.29 . Q . . . .
15.70 1.1467 3.77 . Q . . . .
15.85 1.2062 5.97 . Q . . . .
16.00 1.2929 8.22 . Q . . .
16.15 1.4915 24.28 . . . . Q .
16.30 1.6679 4.61 . Q . . . .
16.44 1.7149 3.07 . Q . . . .
16.59 1.7509 2.82 . Q . . . .
16.74 1.7826 2.38 . Q . . . .
16.89 1.8098 2.08 . Q . . . .
17.03 1.8340 1.87 . Q . . . .
17.18 1.8562 1.76 . Q . . . .
17.33 1.8769 1.64 . Q . . . .
17.48 1.8964 1.55 . Q . . . .
17.63 1.9148 1.47 .Q . . . .
17.77 1.9323 1.40 .Q . . . .
17.92 1.9490 1.34 .Q . . . .
18.07 1.9649 1.28 .Q . . . .
18.22 1.9784 0.93 .Q . . . .

18.37	1.9895	0.89	.Q	.	.	.	.
18.51	2.0001	0.85	.Q	.	.	.	.
18.66	2.0104	0.82	.Q	.	.	.	.
18.81	2.0202	0.79	.Q	.	.	.	.
18.96	2.0297	0.76	.Q	.	.	.	.
19.10	2.0389	0.74	Q	.	.	.	.
19.25	2.0478	0.72	Q	.	.	.	.
19.40	2.0565	0.70	Q	.	.	.	.
19.55	2.0649	0.68	Q	.	.	.	.
19.70	2.0730	0.66	Q	.	.	.	.
19.84	2.0810	0.64	Q	.	.	.	.
19.99	2.0888	0.63	Q	.	.	.	.
20.14	2.0963	0.61	Q	.	.	.	.
20.29	2.1037	0.60	Q	.	.	.	.
20.43	2.1110	0.59	Q	.	.	.	.
20.58	2.1181	0.57	Q	.	.	.	.
20.73	2.1250	0.56	Q	.	.	.	.
20.88	2.1318	0.55	Q	.	.	.	.
21.03	2.1384	0.54	Q	.	.	.	.
21.17	2.1450	0.53	Q	.	.	.	.
21.32	2.1514	0.52	Q	.	.	.	.
21.47	2.1577	0.51	Q	.	.	.	.
21.62	2.1639	0.50	Q	.	.	.	.
21.77	2.1700	0.49	Q	.	.	.	.
21.91	2.1759	0.49	Q	.	.	.	.
22.06	2.1818	0.48	Q	.	.	.	.
22.21	2.1876	0.47	Q	.	.	.	.
22.36	2.1933	0.46	Q	.	.	.	.
22.50	2.1989	0.46	Q	.	.	.	.
22.65	2.2045	0.45	Q	.	.	.	.
22.80	2.2099	0.44	Q	.	.	.	.
22.95	2.2153	0.44	Q	.	.	.	.
23.10	2.2206	0.43	Q	.	.	.	.
23.24	2.2259	0.43	Q	.	.	.	.
23.39	2.2310	0.42	Q	.	.	.	.
23.54	2.2361	0.41	Q	.	.	.	.
23.69	2.2412	0.41	Q	.	.	.	.
23.84	2.2461	0.40	Q	.	.	.	.

23.98	2.2510	0.40	Q	.	.	.	.
24.13	2.2559	0.40	Q	.	.	.	.
24.28	2.2583	0.00	Q	.	.	.	.

TIME DURATION(minutes) OF PERCENTILES OF ESTIMATED PEAK FLOW RATE:
(Note: 100% of Peak Flow Rate estimate assumed to have
an instantaneous time duration)

Percentile of Estimated Peak Flow Rate	Duration (minutes)
0%	1445.8
10%	106.4
20%	26.6
30%	17.7
40%	8.9
50%	8.9
60%	8.9
70%	8.9
80%	8.9
90%	8.9

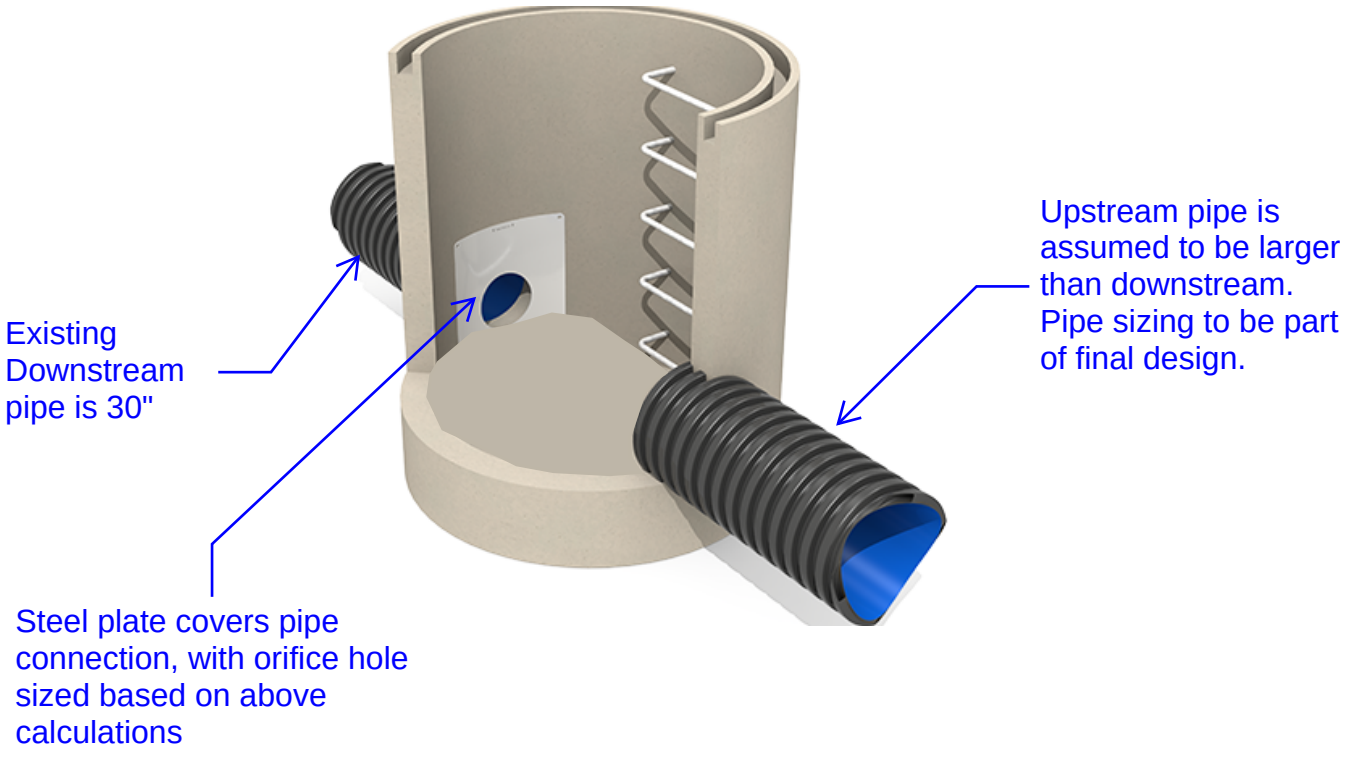
APPENDIX D
Orifice Calculations

Orifice Design (Submerged)

$$Q = C_d A \sqrt{2g(h_1 - h_2)} \qquad A = \frac{Q}{C_d \sqrt{2g(h_1 - h_2)}} \qquad d = \sqrt{\frac{4A}{\pi}}$$

Q	18.8	cfs	
Cd	0.6		0.6 is conservative
h1	1.75	ft	upstream WSE above orfice centroid
h2	1.25		downstream WSE above orifice centroid
g	32.2	ft/s2	
A	5.52	sf	
d	2.65	ft	

Using trial and error we get to this solution, where the diameter of the orifice is roughly the size of the downstream pipe. In the submerged orifice situation the downstream 30" pipe acts as an orifice restricting the flow to the existing conditon. This will be further proved during final design. We will model the hydraulic grade line and balance that with the orifice size.



Appendix H:

Water Quality Management Plan

Water Quality Management Plan (WQMP)

Project Name:

Shea – Aliso Viejo

Prepared for:

Shea Homes

15261 Laguna Canyon Rd, Suite 100

Irvine, CA 92618

(949) 526-8800

Prepared by:

Proactive Engineering

Engineer: Amy Jaramillo

Registration No. 94608

27051 Towne Centre Dr, Suite 270

Foothill Ranch, CA 92610

(949) 716-7460

Engineer's Seal

Prepared on:

PC #1 June 30, 2025

PC #2 October 14, 2025

PC #3 January 12, 2026

Project Owner's Certification

Permit/Application No.	TBD	Grading Permit No.	TBD
Tract/Parcel Map No.	TBD	Building Permit No.	TBD
CUP, SUP, and/or APN (Specify Lot Numbers if Portions of Tract)			APN 623-124-08

This Water Quality Management Plan (WQMP) has been prepared for Shea Homes by Proactive Engineering. The WQMP is intended to comply with the requirements of the local NPDES Stormwater Program requiring the preparation of the plan.

The undersigned, while it owns the subject property, is responsible for the implementation of the provisions of this plan and will ensure that this plan is amended as appropriate to reflect up-to-date conditions on the site consistent with the current Orange County Drainage Area Management Plan (DAMP) and the intent of the non-point source NPDES Permit for Waste Discharge Requirements for the County of Orange, Orange County Flood Control District and the incorporated Cities of Orange County within the San Diego Region (South Orange County). Once the undersigned transfers its interest in the property, its successors-in-interest shall bear the aforementioned responsibility to implement and amend the WQMP. An appropriate number of approved and signed copies of this document shall be available on the subject site in perpetuity.

Owner: Shea Homes Limited Partnership (Attn: Emilie Simard)			
Title	Director of Forward Planning		
Company	Shea Homes		
Address	15261 Laguna Canyon Rd, Suite 100 Irvine, CA 92618		
Email	Emilie.Simard@sheahomes.com		
Telephone #	949-526-8800		
Signature	Emilie Simard	Date	3/9/26

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Section 1 Discretionary Permit(s) and Water Quality Conditions

Project Infomation			
Permit/Application No.	TBD	Site Address or Tract/Parcel Map No.	APN 632-124-08
Additional Information/ Comments:	Parcel 1 of Parcel Map No. 93-196		
Water Quality Conditions			
Water Quality Conditions from prior approvals or applicable watershed-based plans	TBD – none currently.		

Section 2 Project Description

2.1 General Description

Description of Proposed Project				
Site Location	The project is located at 2718 Aliso Creek Rd in Aliso Viejo. APN 632-124-08. Parcel 1 of Parcel Map No. 93-196. The project borders Pacific Park Dr, Journey and Aliso Creek Rd.			
Project Area (ft^2): 367,650	Number of Dwelling Units: 137		SIC Code: 1522	
Narrative Project Description:	The project proposes the redevelopment of three existing commercial office buildings and associated parking lots into 137 town home and garden court condos with associated private streets, wet and dry utilities, landscaping, rec center and amenities.			
Project Area	Pervious		Impervious	
	Area (acres or sq ft)	Percentage	Area (acres or sq ft)	Percentage
Pre-Project Conditions	2.0 acres	24%	6.5 acres	76%
Post-Project Conditions	3.2 acres	38%	5.3 acres	62%

2.2 Post Development Drainage Characteristics

The site drains from all directions to a low point on the eastern edge. Onsite catch basins, inlets and private storm drain pipes connect to an existing 30" RCP that traverses the adjacent property (APN: 631-124-07). The western edge of the property is an existing landscaped 2:1 slope that will primarily remain untouched. The runoff from the slopes is picked up by a series of v-ditches and downdrains which in turn will tie into the private on-site storm drain system.

2.3 Property Ownership/Management

The proposed project consists of for-sale condominium units. Homeowners will only own the airspace within their unit. Everything outside of the condominium air-space will be owned and maintained by a homeowner's association (HOA) created specifically for this development. Mainline sewer and water will be publicly owned and maintained by Moulton Niguel Water District. The HOA will be responsible for maintenance of all the common areas within the development including the amenities, streets and proposed storm water facilities.

Section 3 Site & Watershed Characterization

3.1 Site Conditions

3.1.1 Existing Site Conditions

The existing property contains three two-story office buildings and surface parking. These areas are fairly flat, with a slope between 1-3%. The western edge of the property is an existing landscaped 2:1 slope. The runoff from the slopes is picked up by a series of v-ditches and downdrains which in turn tie into the private on-site storm drain system. There are a series of onsite inlets that take the site surface drainage and run it to the point of connection at the eastern edge. The flows continue into a 30" RCP that runs through the adjacent property (APN 632-124-07).

Existing Land Uses

Land Use Description	Total Area (acres)	Impervious Area (acres)	Pervious Area (acres)	Imperviousness (%)
Office Buildings & Parking	6.5	6.5	0.0	100%
Landscaped Slopes	2.0	0.0	2.0	0%
Total	8.5	6.5	2.0	76%

3.1.2 Infiltration-Related Characteristics

3.1.2.1 Hydrogeologic Conditions

Groundwater is not anticipated to be encountered during grading on construction. Given this is a redevelopment, the likelihood of groundwater is even lower.

3.1.2.2 Soil and Geologic Infiltration Characteristics

The entire site consists of soil type "D"

Based on the NMG due diligence report "due to the conditions of compacted fill over bedrock the subject site is not considered feasible for infiltration."

3.1.2.3 Geotechnical Conditions

Based on NMG's initial exploration the following conditions exist on the project site:

- Variable soil conditions with moisture contents from 2-35%
- Expansion potential very low to low, with the possibility of higher expansive soils during demo and grading

- 2:1 existing slopes on the western edge to remain

3.1.2.4 Summary of Infiltration Opportunities and Constraints of Existing Site

Due to the nature of a redevelopment site and the soil type D infiltration does not seem feasible on the project site.

3.2 Proposed Site Development Activities

3.2.1 Overview of Site Development Activities

The project proposes the redevelopment of three existing commercial office buildings and associated parking lots into 137 town home and garden court condos. The overall drainage pattern will be very similar, still draining to the east and connecting to the existing offsite 30" RCP. The western landscaped slopes will primarily stay untouched. The grades along the boundaries will not significantly change. The streets will drain at approximately 0.7-2.0% across the site.

3.2.2 Project Attributes Influencing Stormwater Management

- Potential pollutant generating activities are those typical of residential developments. Possible sources include fertilizers from improperly managed landscape areas, pet waste, improper homeowner disposal of trash and debris, uncovered on-street parking and dry weather flows such as irrigation overspray and car washing activities.
- Proposed buildings are condos, attached townhomes/garden courts for single family dwelling. There will be a recreation building for community use at the center of the site.
- The majority of the landscaping will be the 2:1 slopes along the western edge of the property which will remain primarily untouched. Additional landscape areas between the garden courts and the town homes will be maintained by the HOA.
- Existing drainage patterns will be largely unchanged with the site flowing from the north/south and west to the east. Cut/fill in any area will not be substantial. The streets will slope primarily at 1%.
- Land uses include areas of residential development and HOA maintained 2:1 landscaped slopes.

Proposed Land Uses				
Land Use Description	Total Area (acres)	Impervious Area (acres)	Pervious Area (acres)	Imperviousness (%)
Residential Development	6.9	5.3	1.6	77%
Landscaped Slopes	1.6	0.0	1.6	0%
Total	8.5	5.3	3.2	62%

3.2.3 Effects on Infiltration and Harvest and Use Feasibility

Due to the nature of redevelopment and compacted fills over bedrock infiltration is not feasible on-site. The irrigation demands are not great enough to implement harvest and use.

3.3 Receiving Waterbodies

The project drainage is collected by a series of onsite inlets and private storm drain which eventually connects to an existing 30″ RCP at the eastern boundary of the site. The 30″ RCP runs through the adjacent parcel (existing gas station at the corner of Aliso Creek and Pacific Park). From there the storm drain connects to a catch basin in Aliso Creek Rd and in turn enters an existing 42″ RCP in Aliso Creek. That pipe joins an existing 72″ RCP in Pacific Park which continues down Woodfield. Along Woodfield the pipe upsizes to a 96″ RCP and eventually outlets into Aliso Creek Channel. The drainage flows along Aliso Creek Channel, through Aliso Creek (mouth) to the Pacific Ocean Shoreline at Aliso Creek Mouth. The following are the 303(d) listings for the drainage:

- Aliso Creek
  - Benthic Community Effects (125926)
  - Indicator Bacteria (79858)
  - Malathion (81901)
  - Nitrogen (127601)
  - Phosphorus (111092)
  - Selenium (111093)
  - Toxicity (111095)
- Aliso Creek (mouth)
  - Indicator Bacteria (70046)
  - Toxicity (95760)
- Pacific Ocean Shoreline
  - Indicator Bacteria (132167)
  - Toxicity (84122)

3.4 Stormwater Pollutants or Conditions of Concern

Pollutants or Conditions of Concern				
Pollutant	Expected from Proposed Land Uses/Activities (Yes or No)	Receiving Waterbody Impaired (Yes or No)	Priority Pollutant from WQIP or other Water Quality Condition? (Yes or No)	**Pollutant of Concern (Primary, Other, or No)**
Suspended-Solids	Yes	No	No	Other
Nutrients	Yes	Yes	No	Primary
Heavy Metals	No	No	No	No
Bacteria/Virus/Pathogens	Yes	Yes	No	Primary
Pesticides	Yes	No	No	Other
Oil and Grease	Yes	No	No	Other
Toxic Organic Compounds	No	Yes	No	No
Trash and Debris	Yes	No	No	Other
Dry Weather Runoff	Yes	No	No	Other

3.5 Hydrologic Conditions of Concern

Does a hydrologic condition of concern exist for this project

☐ No – An HCOC does not exist for this receiving water because:

- ☐ Project discharges directly to a protected conveyance (bed and bank are concrete lined the entire way from the point(s) of discharge to a receiving lake, reservoir, embayment, or the Ocean
- ☐ Project discharges directly to storm drains which discharge directly to a reservoir, lake, embayment, ocean or protected conveyance (as described above)
- ☐ The project discharges to an area identified in the WMAA as exempt from hydromodification concerns

☒ Yes – An HCOC does exist for this receiving water because none of the above are applicable.

Repeat this checklist for each different receiving water to which the project would discharge.

3.6 Critical Course Sediment Yield Areas

Critical coarse sediment provisions do not apply to redevelopment of an existing developed site.

Section 4 Site Plan and Drainage Plan

4.1 Drainage Management Area Delineation

The WQMP Exhibit contained in this report shows the breakup of the project site into 10 DMA's. The site was divided up based on the layout of the inlets onsite. Where possible two inlets will be connected to one BMP in order to reduce the number of BMPs needed.

4.2 Overall Site Design BMPs

Minimize Impervious Area – Common area HOA maintained landscape will be incorporated where feasible on site, in the middle of the garden court units, between the townhome buildings, around the entries and rec center.

Maximize Natural Infiltration Capacity – Landscape areas have been provided for incidental infiltration and evapotranspiration.

Preserve Existing Drainage Patterns and Time of Concentration – the project follows the existing drainage pattern and Tc as much as possible. The western edge 2:1 slopes are the further reaches of the flow path and travel through onsite storm drain pipes to the existing point of connection on the eastern side.

Disconnect Impervious Areas - Landscaping will be provided throughout the project to minimize the amount of directly connected impervious areas.

Protect Existing Vegetation and Sensitive Areas – Existing slopes will be maintained and protected. No sensitive areas.

Revegetate Disturbed Areas – slopes that are impacted will be replanted.

Soil Stockpiling and Site Generated Organics - The site earthwork is expected to balance. If stockpiling is necessary, then proper stockpiling, storage, and reapplication of disturbed topsoil is recommended. Proper stockpiling generally includes protecting the stockpile to prevent excessive compaction and covering the stockpile to prevent significant erosion and leaching of nutrients.

Firescaping - Correct zone plant selection and spacing will be integrated

Water Efficient Landscaping - Efficient irrigation and drought tolerant plants will be integrated

Slopes and Channel Buffers – Existing 2:1 slopes will be protected and maintained. Existing v-ditches will be utilized and will be tied into the onsite storm drain.

4.3 DMA Characteristics and Site Design BMPs

The site is broken up into 14 different DMA's. See summary table below for the individual areas.

4.3.1 DMA Summary

Drainage Management Areas				
DMA (Number/Description)	Total Area (acres)	Imperviousness (%)	Infiltration Feasibility Category (Full, Partial, or No Infiltration)	Hydrologic Source Controls Used
A1	0.49	37%	No Infiltration	Impervious area dispersion
A2	0.25	17%	No Infiltration	Impervious area dispersion
B1	0.44	35%	No Infiltration	Impervious area dispersion
B2	0.38	28%	No Infiltration	Impervious area dispersion
C1	0.83	66%	No Infiltration	Impervious area dispersion
C2	0.12	8%	No Infiltration	Impervious area dispersion
D1	0.35	26%	No Infiltration	Impervious area dispersion
D2	0.05	4%	No Infiltration	Impervious area dispersion
E	0.51	34%	No Infiltration	Impervious area dispersion
F	0.95	73%	No Infiltration	Impervious area dispersion
G	0.93	76%	No Infiltration	Impervious area dispersion
H	0.29	24%	No Infiltration	Impervious area dispersion

I	0.42	31%	No Infiltration	Impervious area dispersion
J	0.76	66%	No Infiltration	Impervious area dispersion

4.4 Source Control BMPs

Non-Structural Source Control BMPs				
Identifier	**Name**	**Check One**		**Reason Source Control is Not Applicable**
		Included	**Not Applicable**	
N1	Education for Property Owners, Tenants and Occupants	☒	☐	
N2	Activity Restrictions	☒	☐	
N3	Common Area Landscape Management	☒	☐	
N4	BMP Maintenance	☒	☐	
N5	Title 22 CCR Compliance (How development will comply)	☐	☒	No hazardous waste on-site
N6	Local Industrial Permit Compliance	☐	☒	Not an industrial project
N7	Spill Contingency Plan	☐	☒	No hazardous waste on-site
N8	Underground Storage Tank Compliance	☐	☒	No underground storage tanks on-site
N9	Hazardous Materials Disclosure Compliance	☐	☒	No hazardous waste on-site
N10	Uniform Fire Code Implementation	☐	☒	No toxic gases on-site
N11	Common Area Litter Control	☒	☐	
N12	Employee Training	☐	☒	No employees for residential development
N13	Housekeeping of Loading Docks	☐	☒	No loading docks on-site
N14	Common Area Catch Basin Inspection	☒	☐	
N15	Street Sweeping Private Streets and Parking Lots	☒	☐	
N16	Retail Gasoline Outlets	☐	☒	No retail gasoline on-site

The following is a description of how each non-structural source control BMP will be implemented:

N1 – Education for Property Owners 66%
Educational materials will be provided to homeowners at close of escrow by owner/developer and periodically thereafter by the HOA to inform them of their actions and the potential impacts to downstream water quality. Materials include those described in Section 7 of this WQMP and any updates to educational materials.

N2 – Activity Restrictions
Activity restrictions to minimize potential impacts to water quality and with the purpose of protecting water quality will be prescribed by the project's Covenant, Conditions and Restrictions (CC&Rs), or other equally effective measure.

N3 – Common Area Landscape Management
Maintenance activities for landscape areas shall be consistent with City and manufacturer guidelines for fertilizer and pesticide use (OC DAMP Section 5.5). Maintenance includes trimming, weeding and debris removal and vegetation planting and replacement and shall be consistent with the City's Landscape Ordinance. Stockpiled materials during maintenance activities shall be placed away from drain inlets and runoff conveyance devices. Wastes shall be properly disposed of or recycled.

N4 – BMP Maintenance
The Owner shall be responsible for implementation of each applicable non-structural, structural and LID BMPs as well as scheduling inspection and maintenance cleaning of all applicable structural BMP facilities. The Owner shall be responsible for inspection and maintenance activities in landscape areas.

N11 – Common Area Litter Control
Litter control onsite will include the use of litter patrols, violation reporting and clean up during landscaping maintenance activities and as needed to ensure good housekeeping of the project's common areas.

N14 – Common Area Catch Basin Inspection
As required by the TGD, at least 80% of all drainage facilities shall be inspected each year and, if necessary, cleaned and maintained prior to the storm season, no later than October 15th each year; with 100% of all drainage facilities inspected, cleaned and maintained within a two-year period. Drainage facilities include catch basins and inlets, detention vaults and the project's LID BMPs.

N15 – Street Sweeping Private Streets and Parking Lots
Private streets shall be vacuum swept on a regular basis consistent with the HOA's schedule.

Structural Source Control BMPs				
Identifier	**Name**	**Check One**		**Reason Source Control is Not Applicable**
		Included	**Not Applicable**	
S1	Provide storm drain system stenciling and signage	☒	☐	
S2	Design and construct outdoor material storage areas to reduce pollution introduction	☐	☒	No outdoor storage proposed
S3	Design and construct trash and waste storage areas to reduce pollution introduction	☐	☒	No trash enclosures proposed
S4	Use efficient irrigation systems & landscape design, water conservation, smart controllers, and source control	☒	☐	
S5	Protect slopes and channels and provide energy dissipation	☒	☐	
	Incorporate requirements applicable to individual priority project categories (from SDRWQCB NPDES Permit)	☐	☐	
S6	Dock areas	☐	☒	No dock areas proposed
S7	Maintenance bays	☐	☒	No maintenance bays proposed
S8	Vehicle wash areas	☐	☒	No vehicle wash areas proposed
S9	Outdoor processing areas	☐	☒	No outdoor processing areas proposed
S10	Equipment wash areas	☐	☒	No equipment wash areas proposed.
S11	Fueling areas	☐	☒	No fueling areas proposed
S12	Hillside landscaping	☒	☐	
S13	Wash water control for food preparation areas	☐	☒	No food prep areas proposed
S14	Community car wash racks	☐	☒	No community car wash racks proposed

The following is a description of how each structural source control BMP will be implemented:

S1 – Provide Storm Drain System Stenciling and Signage (CASQA SD-13)

Storm drain stenciling with a brief message or graphical icons with symbols, prohibiting the dumping of improper materials into the storm drain system shall be placed in highly visible areas adjacent to all storm drain inlets. The BMP is designed to alert and educate homeowners and guests of the destination of pollutants discharged into storm drain systems. Legibility of stencils and signs shall be maintained.

S4 – Efficient Irrigation System & Landscape Design (CASQA SD-10 & SD-12)
Landscaping will be designed to consist of native species or drought tolerant, water conserving landscaping. Irrigation system will be designed, constructed and adjusted to eliminate overspray to hardscape areas, with timing and cycle lengths adjusted in accordance with water demands, given time of year, weather, day or night time temperatures based on system specifications and local climate patterns.

S5 – Protect Slopes & Channels
Existing v-ditches on the western edge slopes will be protected and maintained. Existing landscaping will be maintained and any areas of construction will be replanted to reduce erosion susceptibility.

S12 – Hillside Landscaping (CASQA SD-10)
Hillside areas that are disturbed by project development shall be landscaped with deep-rooted, drought tolerant plant species selected for erosion control, satisfactory to the local permitting authority.

Section 5 Low Impact Development BMPs

The site is broken up into 10 different DMA's but each is relatively small and contains similar land use and imperviousness. Each area is treated by the same type of BMP's so a summary of those is contained below.

5.1 LID BMPs

- Infiltration is not feasible due to very low measured infiltration rates (see geotechnical report in Attachment E).
- Harvest and use are not feasible due to insufficient demand
    - Given the nature of the project is 137 individual town homes with small yards it is infeasible to expect each individual homeowner to harvest and reuse their water.
    - Alternatively, the HOA maintained landscape areas are spread out throughout the site without a sufficiently large area to capture and reuse.
- Bioretention BMPs with partial infiltration are infeasible given the project site's inability to infiltrate
- Biotreatment BMP's without infiltration
    - Bioretention with Underdrain & Impervious Liner
        - In order to use a traditional bioretention system without infiltration we would need to construct an open air basin at the downstream end of the storm drain system. Unfortunately, by the time the storm drain gets to the downstream end it is already significantly deep. Outletting that storm drain at the surface of a basin and allowing for gravity biotreatment would not work to connect to the existing point of connection.

5.1.1 Hydrologic Source Controls

HSC-1 Localized On-Lot Infiltration
On-lot infiltration will not be used. These are multifamily buildings so the downspouts will be tied into the area drain system.

HSC-2 Impervious Area Dispersion
Runoff from the project's walkway areas will be directed to adjacent landscaping areas for filtration, evapotranspiration and incidental infiltration of runoff and volume reduction, prior to discharging to the storm drain system. This will take place in the rear of the lots, draining to the garden courtyards and the paseo between the townhomes.

HSC-3 Street Trees
Trees will be planted in the common spaces, including the garden courts, paseos between townhomes and along parking area.

HSC-4 Residential Rain Barrels
There is not sufficient irrigation demand to make rain barrels feasible.

HSC-5 Green Roof/Brown Roof
Green/brown roofs are not part of the structural and architectural design at this time.

HSC-6 Self Retaining Areas
None of the DMA's are self retaining, they all create more runoff than the natural condition.

Note: DCV reduction credit has not been determined for these areas as their benefits are incidental and the areas not specifically designed to retain runoff.

5.1.2 Structural LID BMP

The project site in its existing condition is made up of 3 large office buildings and surface parking lots. The soil on site is compacted fill over siltstone and sandstone and not suitable for infiltration. Therefore, BMPs designed for full or partial infiltration are not applicable or appropriate.

The project LID selection and sizing criteria is the following, "Third Priority – Biotreatment with Negligible Retention".

LID BMPs must be implemented that are designed to meet the following criteria:
1) Maximize volume retention through the incorporation of all applicable HSCs.
Note: Due to their more distributed nature, some HSCs may allow incidental volume reduction in marginal conditions where no volume reduction is permissible within LID BMPs.

AND

2) Size biotreatment BMPs to meet one of the following equivalent criteria:
d) Treat 1.5 times the DCV.
OR
e) Treat 80 percent of average annual runoff volume, and apply a multiplier of 1.5 to the resultant required volume and footprint.
OR
f) Design a biofiltration BMP that has a static biofiltration volume (bowl volume plus media pore spaces) of at least 0.75 times the DCV.

NOTE: Option (d) and (e) do not have a specific static storage volume requirement and allow routing to be considered; Option (f) specifies a minimum static storage volume and does not require or allow routing to be considered

The following BMP was selected based on site constraints and infiltration feasibility:
BIO-7: Proprietary Biotreatment, see Attachment G for fact sheet.

The BMP sizing methodology used was based on the "Biotreatment with No Infiltration" category for a proprietary compact biofiltration system. See Worksheet 9: Flow-Based Compact Biofiltration with Supplemental Retention Method for sizing calculations of the biofiltration system.

Biofiltration BMPs are a class of structural BMPs that treat suspended solids and dissolved pollutants in storm water using mechanisms characteristic of biologically active systems. These

BMPs are considered treat and release facilities and include treatment mechanisms that employ soil microbes and plants. To address the project's pollutants of concern, a proprietary biotreatment BMP by Modular Wetland Systems(MWS) will be utilized with a nutrient sensitive media, which will allow the units to provide a medium to high level of effectiveness at removing the project's storm water pollutants.

The biofiltration system will include 10 MWS Linear units (one in each DMA). The units will provide decentralized treatment to collect street, common area and roof drain flows. Treated flows will then be conveyed to the main storm drain system for outlet into the existing storm at the eastern edge of the site.

Section 6 Hydromodification BMPs

6.1 Points of Compliance

The entire project site drains to an existing storm drain pipe on the eastern side of the property. From there the 30" RCP runs through the adjacent parcel (existing gas station at the corner of Aliso Creek and Pacific Park) and then the storm drain connects to a catch basin in Aliso Creek Rd and in turn enters an existing 42" RCP in Aliso Creek Rd. That pipe joins an existing 72" RCP in Pacific Park Dr which continues down Woodfield. Along Woodfield the pipe upsizes to a 96" RCP and eventually outlets into Aliso Creek Channel. The drainage flows along Aliso Creek Channel, through Aliso Creek (mouth) to the Pacific Ocean Shoreline at Aliso Creek Mouth. Aliso Creek Channel, Aliso Creek (mouth) and the Pacific Ocean Shoreline at Aliso Creek Mouth are all considered natural drainage conveyance systems to some extent and therefore cause a hydraulic condition of concern.

6.2 Pre-Development (Natural) Conditions

The site is currently developed with 3 office buildings and surface parking. The western edge is primarily 20-30' 2:1 landscaped slopes. In the natural (pre-development) condition the site was barren, covered with open brush. The site was naturally composed of steep slopes as noted in the geotechnical report (Attachment E).

6.3 Post-Development Conditions and Hydromodification BMPs

In the post-development condition the site is 62% impervious compared to the existing site which is 76% impervious. It can easily be seen that this redevelopment project increases the pervious area by adding landscape space throughout the project.

6.4 Measures for Avoidance of Critical Coarse Sediment Yield Areas

Per WIHMP map, Critical Coarse Sediment Yield Areas are not applicable to this project.

6.5 Hydrologic Modeling and Hydromodification Compliance

The South Orange County Hydromodification Management Plan (SOCHM) establishes criteria to ensure that new development and redevelopment projects do not increase downstream erosion, sedimentation, or habitat degradation due to altered stormwater flow. Projects that create or replace one acre or more of impervious surface must evaluate post-project runoff against pre-project (natural) conditions. Where feasible, reducing stormwater flows to natural conditions is achieved through on-site retention/detention facilities or other low-impact development (LID) practices.

The entire project site drains out to one point of connection and thus was modeled as one basin. The natural conditions of the site were input into the SOCHM software as open brush very steep and all impervious. The proposed condition was broken into pervious land use, urban very steep for the perimeter slopes and urban flat for the internal landscape areas. The proposed impervious includes the buildings, flatwork, streets, etc and is flat.

From there, a vault was modeled through an iterative process was used to determine the necessary detention volume to required to reduce stormwater flows to the natural condition. Compliance is defined as not exceeding the natural runoff flow rates and durations by more than 10% of the time, for flow rates from 10% of the 2 year flowrate up to the 10 year flow rate. The flows will be detained in an underground vault and released through an orifice opening which was also sized through the SOCHM model. The vault will be approximately 28'x130'x5' deep. Full SOCHM model results can be found in Attachment F.

Section 7 Educational Materials Index

Educational Materials			
Residential Material (http://www.ocwatersheds.com)	**Check If Applicable**	**Business Material (http://www.ocwatersheds.com)**	**Check If Applicable**
The Ocean Begins at Your Front Door	☒	Tips for the Automotive Industry	☐
Tips for Car Wash Fund-raisers	☐	Tips for Using Concrete and Mortar	☐
Tips for the Home Mechanic	☐	Tips for the Food Service Industry	☐
Homeowners Guide for Sustainable Water Use	☒	Proper Maintenance Practices for Your Business	☐
Household Tips	☒	Compliance BMPs for Mobile Businesses	☐
Proper Disposal of Household Hazardous Waste	☒	**Other Material**	**Check If Attached**
Recycle at Your Local Used Oil Collection Center (North County)	☐		
Recycle at Your Local Used Oil Collection Center (Central County)	☐		☐
Recycle at Your Local Used Oil Collection Center (South County)	☒		☐
Tips for Maintaining a Septic Tank System	☐		☐
Responsible Pest Control	☒		☐
Sewer Spill	☐		☐
Tips for the Home Improvement Projects	☒		☐
Tips for Horse Care	☒		☐
Tips for Landscaping and Gardening	☒		☐
Tips for Pet Care	☒		☐
Tips for Projects Using Paint	☒		☐

Attachment A: WQMP Site Plan

PREPARED FOR:

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PREPARED BY:

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27181 ALISO CREEK RD
WQMP EXHIBIT

PLAN PREPARATION:
JANUARY 2026

SHEET 1 OF 1

Plotted: Jan 12, 2026 – 12:23pm by: A_Jaramillo Drawing Name: N:\20.197.000\DLV\REPORTS\PWQMP\197-WQMP Exhibit.dwg

1230

Attachment B: BMP Calculations

Worksheet 9: Flow-Based Compact Biofiltration with Supplemental Retention Method

	Step 1: Determine the design capture storm depth used for calculating volume			***ALL***	***A1***	***A2***	***B1***	***B2***	***C1***	***C2***	***D1***	***D2***	***E***	***F***	***G***	***H***	***I***	***J***
1	Enter the time of concentration, T_c (min) (See **E.2.3**)	T_c=	min	9.3	7	6	7.7	7.6	7.6	5.5	9	5.5	8.6	8	8.5	7	6.5	7.6
2	Using **Figure E-7**, determine the design intensity at which the estimated time of concentration (T_c) achieves 80% capture efficiency, I_1	I_1=	in/hr	0.23	0.24	0.25	0.24	0.24	0.24	0.25	0.23	0.25	0.23	0.24	0.23	0.24	0.25	0.24
3	Enter capture efficiency corresponding to the upstream HSCs and/or upstream BMPs, Y_2	Y_2=	inches	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Using **Figure E-7**, determine the design intensity at which the time of concentration (T_c) achieves the upstream capture efficiency(Y_2), I_2	I_2=	%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	Determine the design intensity that must be provided by BMP, $I_{design} = I_1 - I_2$	$I_{design\_80\%}$=	in/hr	0.23	0.24	0.25	0.24	0.24	0.24	0.25	0.23	0.25	0.23	0.24	0.23	0.24	0.25	0.24
	Step 2: Calculate the design flowrate																	
6a	Enter DMA area tributary to BMP (s), *A* (acres)	A=	acres	7.92	0.49	0.25	0.44	0.38	0.83	0.12	0.35	0.05	0.51	0.95	0.93	0.29	0.42	0.76
6b	Enter DMA Imperviousness, imp (unitless)	imp=		0.66	0.37	0.17	0.35	0.28	0.66	0.08	0.26	0.04	0.34	0.73	0.76	0.24	0.31	0.66
6c	Calculate runoff coefficient, *C= (0.75 x imp) + 0.15*	c=		0.65	0.43	0.28	0.41	0.36	0.65	0.21	0.35	0.18	0.41	0.70	0.72	0.33	0.38	0.65
6d	Calculate flowrate to achieve 80 percent capture, $Q_{80\%} = (c \times I_{design} \times A)$	$Q_{80\%}$=	cfs	1.17	0.05	0.02	0.04	0.03	0.13	0.01	0.03	0.00	0.05	0.16	0.15	0.02	0.04	0.12
7	Calculate design flowrate, $Q_{design} = Q_{80\%} \times 150\%$	Q_{design}=	cfs	1.76	0.08	0.03	0.07	0.05	0.19	0.01	0.04	0.00	0.07	0.24	0.23	0.03	0.06	0.18
			MWS Unit		4x8	4x4	4x8	4x4	8x8	4x4	4x4	4x4	4x6	8x12	8x8	4x4	4x6	8x8
	Supporting Calculations																	

Describe system:

Proprietary biofiltration units will be used to meet the required treatment design flowrate.

Provide time of concentration assumptions:

Used the nomograph in the TGD

Attachment C: Educational Materials

Will be provided with FWQMP

Attachment D: Operations and Maintenance Plan

Will be provided with FWQMP

Attachment E: Geotechnical Report

NMG Geotechnical, Inc.

November 25, 2025

Project No. 24074-02

To: Shea Homes
15261 Laguna Canyon Road, Suite 100
Irvine, California 92618

Attention: Ms. Danielle Prigmore

Subject: Preliminary Geotechnical Investigation and Review of Vesting Tentative Tract Map 19442, Proposed Residential Redevelopment, Aliso Viejo, California

EXECUTIVE SUMMARY

In accordance with your request and authorization, NMG Geotechnical, Inc. (NMG) has reviewed the Vesting Tentative Tract Map (VTTM) 19442 and Engineering Site Plan and performed a preliminary geotechnical investigation for the proposed redevelopment at the subject site. Our study focused on evaluating the existing geotechnical conditions with respect to the proposed residential development. The project will consist of the demolition of the existing office park, regrading of the site, and construction of 137 new residential homes. The project will require minor modification of the existing perimeter slopes and includes addition of retaining walls at the top of existing slopes up to 6 feet tall along the eastern and southeastern perimeter and retaining walls at the toe of slopes up to 8 feet tall along the western and northern perimeter. The project construction will also include new utility and interior street infrastructure. The VTTM reviewed for this report was prepared by Proactive Engineering Consultants (Proactive).

This geotechnical study included a review of background reports and maps, review of a prior geotechnical investigation report covering the subject site and surrounding area prepared by Jack G. Raub Company (1987), field reconnaissance, drilling of six hollow-stem-auger borings, excavation of four geotechnical test pits, laboratory testing, preliminary geotechnical analysis of the collected data, and preparation of this report.

The site is predominantly underlain by a thin mantle of compacted fill over sedimentary bedrock consisting of interbedded sandstone, siltstone and diatomaceous siltstone. Quaternary-age alluvial deposits were encountered in the southeast corner of the property, at depths of approximately 40 feet. The compacted fill thickness varies from about 2.5 to 5 feet over the majority of the site, with the thickest fills (20 to 40 feet thick) located in the southern portion of the site.

No active or potentially active faults are mapped beneath the property. The nearest known seismogenic source is the San Joaquin Hills blind thrust fault, located approximately 2.5 miles to the northeast. Furthermore, the site is not located within a mapped seismic hazard zone for

liquefaction or earthquake-induced landsliding (CDMG, 2001). The seismic design parameters were prepared in accordance with the 2025 California Building Code.

The main geotechnical issues impacting the project development include:

- Removal of the existing fill and weathered bedrock in the upper 5 feet to provide a uniform cap of certified engineered fill for the building pads. The demolition of existing structures and utilities may require deeper excavations and would result in additional loose, disturbed soil that will need to be removed and replaced as compacted fill.
- The finer grade bedrock (siltstone and claystone) is more plastic, expansive, corrosive, and generally poorer subgrade material than the existing fill and coarse-grained bedrock. Additional mixing and blending of fill materials may be needed to reduce the impact on the project design (i.e. building foundations). Additionally, deepened removals may be required where finer grained bedrock is exposed to mitigate differential expansion.
- Retaining wall backcuts into the existing ascending slopes should be mapped to document the existing bedrock conditions and determine the extent of the compacted fill cover for the slope.
- Deeper utility excavations into the bedrock may encounter siltstone and claystone layers with adverse bedding conditions which may adversely impact trench stability. This condition should be closely monitored during construction. Excess spoils from the siltstone bedrock should not be placed near the edge of the trench, especially on the up-dip side of the bedding.
- Potential for strong seismic shaking during an earthquake on a regionally active fault.
- Addition of design fill and retaining wall at the top of slope along the eastern perimeter may cause surcharge loading to the existing retaining wall for the gas station. This condition will require further evaluation once retaining wall plans are made available.
- The varying deep and shallow bedrock conditions will influence the seismic and foundation design and will also need to be taken into account during the site grading/earthwork operations and underground utility construction.
- Due to the presence of shallow bedrock, the site is considered unsuitable for stormwater infiltration.

This report presents our geotechnical findings, conclusions and preliminary recommendations for project planning and preliminary design related to the tentative tract plan. The report includes a Geotechnical Map (Plate 1) which depicts the boring and test pit locations by NMG, and the subsurface geologic conditions based on prior mapping by others. Cross section A-A' (Figure 4) depicts the existing and design conditions and was used for our preliminary slope stability analysis where a portion of the slope below the fire station exposed bedrock, and in a second location along the eastern perimeter where design fill is proposed above an existing slope with a retaining wall at the toe of slope. The geotechnical boring and trench logs and laboratory test data from our subsurface exploration are included in Appendices B and C, respectively. Appendix D includes

the code-based seismic analysis. The results of our slope stability analysis are presented in Appendix E. Appendix F includes NMG's general earthwork and grading specifications.

The proposed residential redevelopment at the site is considered geotechnically acceptable, providing the recommendations provided in this report and future reports are incorporated into the design, grading and construction. The recommendations in this report are preliminary and final geotechnical recommendations will be provided based on review of the future grading, foundation, and improvement plans. Additional testing of the subgrade and foundation soils will need to be performed after completion of the site grading for confirmation of the recommendations.

NMG's expertise and scope of services did not include assessment of potential subsurface environmental contaminants or environmental health hazards.

If you have any questions regarding this report, please contact us. We appreciate the opportunity to provide our services.

Respectfully submitted,

NMG GEOTECHNICAL, INC.

William Goodman, CEG 1577
Principal Geologist

Karlos Markouizos, RCE 50312
Principal Engineer

WG/KGM/je

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Appendix B – Geotechnical Boring and Test Pit Logs
Appendix C – Summary of Laboratory Test Results
Appendix D – Seismic Parameters
Appendix E – Slope Stability Analysis
Appendix F – General Earthwork and Grading Specifications

1.0 INTRODUCTION

1.1 Scope of Work

The purpose of our geotechnical study was to evaluate the existing subsurface conditions in light of the proposed residential redevelopment at the subject site. Our investigation and this report are based upon our review of the Vesting Tentative Tract Map and Engineering Site Plan prepared by Proactive Engineering (received November 14, 2025).

Our scope of work included the following:

- Background review of available published and unpublished reports and maps (Appendix A).
- Review of available historic aerial photographs and topographic maps pertinent to the site and surrounding area.
- Drilling, logging, sampling, and backfilling of six hollow-stem-auger borings (H-1 to H-6) to approximate depths ranging from 11 to 51 feet deep below ground surface (bgs). Approximate boring locations are shown on Plate 1, and the boring logs are included in Appendix B.
- Excavation of four geotechnical test pits to confirm the geologic and as-graded conditions of a portion of the perimeter slope below the fire station. Approximate test pit locations are shown on Plate 1, and the logs are included in Appendix B.
- Laboratory testing of relatively undisturbed ring and bulk soil samples. Test results are summarized in Appendix C. Soil test results from the prior investigation in the area were also utilized in our engineering assessment of the soil properties.
- Geotechnical evaluation and analysis of the compiled data with respect to the proposed residential development. This included seismic design analysis (Appendix D) and preliminary slope stability analysis (Appendix E).
- Preparation of this report including our findings, conclusions, recommendations, and accompanying illustrations. The report includes a Geotechnical Map (Plate 1) and geologic Cross-Section A-A' (Figure 4).

1.2 Site Location and Existing Conditions

The subject site is located in the city of Aliso Viejo, Orange County, California, south of Pacific Park Drive, west of Aliso Creek Road and bounded to the northwest by an existing fire station and Journey street, northeast by an existing gas station and south by an existing office complex (Figure 1).

The roughly 8.4-acre site consists of generally flat ground with elevations ranging between 346 mean sea level (msl) at the southeast corner to 388 msl in the northwest corner. This measurement includes slope areas within the property. The relief across the site for the building area is about 8 feet. A 25- to 35-foot ascending, vegetated slope is present on the west to northwest area of the site with a descending slope on the eastern area bordering Aliso Creek Road that is up to 16 feet tall. Along the northeast perimeter of the site, adjacent to the gas station, there is a combination of

descending slopes and retaining walls up to approximately 6 feet tall. These slopes are generally constructed at 2H:1V slope ratios. The majority of the site is developed as paved parking lots with three, two-story office buildings, with the exception of the ascending and descending slopes.

1.3 Site Reconnaissance

Our site reconnaissance was initially performed on November 26, 2024 and more recently on October 13, 2025. The site was accessed from Aliso Creek Road and the primary field observations are listed below:

- Three large two-story office buildings are present on the site. The majority of the site is covered in asphalt pavement and hardscape.
- An approximately 2:1 (H:V) descending slope up to 16 feet tall is present from the at-grade building and parking lot area down to Aliso Creek Road and a southern access street. The slopes are covered in vegetation and large trees.
- At the southeastern corner of the subject site, there is an existing 5-foot retaining wall that is tilting 13 degrees to the southeast.
- A retaining wall up to approximately 6 feet high is present on the northeastern boundary associated with the Shell gas station car wash facility.
- An ascending 2H:1V slope up to approximately 35 feet high is present on the northwestern and western boundary of the site. The slopes have one concrete stormwater v-ditch and are covered with vegetation and large trees. Bedding was observed dipping into slope at the surface in the northern portion of this slope. As the slope extends to the west, bedding was no longer visible at the surface and a subdrain outlet was observed at the slope face.
- Minor cracking was observed in the asphalt pavement across the site. Some cracking and separations were observed in the curbs and hardscape and were generally associated with root systems from nearby trees.

1.4 Site History

The following site history is based on available historic aerial photographs dating back to 1938.

- In 1938, the subject property was vacant natural hillside area with two canyons draining southward. This status continued until 1987-1988.
- In 1987, dirt roads are observed crossing the site with associated local drill pads.
- In 1988, mass grading at the site was in progress and both small canyons were being filled in.
- Between 1988 and 1991, the site became a finished mass graded pad, with a fire station constructed on the northwest border bounded by an ascending 25- to 35-foot-high slope, an office complex constructed on the southern border, a surface drainage detention basin at the

northeast corner, and both Pacific Park Drive, and Aliso Creek Road being constructed on the north and east borders.

- Between 1996 and 1997, the gas station was constructed on the northeast border of the site. The gas station was constructed approximately 10 feet below the elevations at the subject site, with a descending slope from the subject site.
- Construction of the office buildings began between 1998 and 1999 and was completed by 2000.
- Between 2011 and 2012, the eastern descending slope to the existing gas station was cut back, and an approximately 6-foot-high retaining wall was constructed for the addition of a driveway and carwash.
- The site has remained essentially unchanged since 2012.

1.5 Prior Geotechnical Work

The original geotechnical investigation that included this site was performed by the Jack G. Raub Company in 1987 (Appendix A). They provided the results of their subsurface exploration and geologic field mapping and provided recommendations for mass grading.

Based on our review of city files, the report of mass grading that occurred between 1988 and 1991 and the reports related to design, grading and construction for the existing commercial development were not available for review.

1.6 Proposed Development

According to the architectural site plan, prepared by Woodley Architectural Group, Inc., received November 17, 2025, and the tentative tract map prepared by Proactive Engineering received November 14, 2025, the proposed residential development consists of 3-story attached residential units, open space landscape areas, and an interior street network with parking stalls for guest parking. The total unit count for the development is 137 units with approximately 70 units consisting of a 3-story townhome row style product and the remaining 67 units consisting of a 3-story garden-court-style product. Retaining walls up to 8 feet high are planned at the toe of slopes descending from the fire station and from Journey Street along the west side of the project site, and at the top of slopes descending to the gas station and Aliso Creek Road along the northeastern perimeter. Primary access to the site will be from Pacific Park at the north end of the development and a secondary access from Aliso Creek Road at the southeast corner.

The preliminary cut-fill map prepared by Proactive, shows design grading to consist of 4,200 cubic yards (CY) of cut and 9,800 CY of fill, for a net import of 5,600 CY. We do not anticipate site grades to change significantly.

1.7 Subsurface Exploration

Our initial subsurface exploration was performed on December 6, 2024, and included excavation of six hollow-stem-auger borings (H-1 through H-6) to depths ranging from 11 to 51 feet below

ground surface (bgs). The hollow-stem borings were initially excavated with a hand-auger to 5 feet deep to confirm no conflicts with shallow utilities and then sampled and geotechnically surface-logged by a geologist to evaluate soil stratigraphy and groundwater conditions. Soil samples were taken at selected intervals with a 2.5-inch-inside-diameter California split-barrel sampler and were also used to obtain a measure of resistance of the soil to penetration (recorded as blows-per-foot on our geotechnical boring logs). Drive weights were with a 140-pound automatic hammer for all borings. Bulk samples of onsite soils were collected from the cuttings and used for additional soil identification purposes and laboratory testing. Soil samples were visually classified in accordance with the Unified Soil Classification System (USCS). The depths of the pavement sections were recorded with each boring and are presented on the logs in Appendix B. The approximate locations of the borings are shown on the Geotechnical Map (Plate 1).

Recently, NMG excavated four geotechnical test pits (T-1 through T-4) with a backhoe at the toe of the slope ascending to the fire station at the northwest corner of the site. The purpose of these excavations was to evaluate the limits of compacted fill and bedrock conditions exposed in the lower portion of the slope. The approximate location of the test pits is depicted on the geotechnical map (Plate 1), and the logs are provided in Appendix B.

1.8 Infiltration Potential

Percolation testing was not performed during subsurface exploration since the site consists of compacted fill over siltstone and sandstone bedrock. This condition is not suitable for infiltration.

1.9 Laboratory Testing

The laboratory testing performed is listed below. The test results provide soil engineering properties for the selected samples of the onsite soils. Existing laboratory test results from prior geotechnical studies in the area were also reviewed and utilized for this study.

- In-situ density and moisture content.
- Soluble sulfate
- Expansion index
- Atterberg limits
- Hydrometer
- Sieve analysis
- Maximum density
- Consolidation
- Direct shear
- Corrosion testing
- R-Value

Laboratory test results are included in Appendix C. In-situ density and moisture contents are presented on our boring logs in Appendix B.

2.0 GEOLOGIC CONDITIONS

The site is located within the San Joaquin Hills of the western Peninsular Ranges geomorphic province. This province is characterized by Cretaceous-age granitic bedrock and Mesozoic-age metamorphic rock overlain by various terrestrial and marine deposits. Structurally, the San Joaquin Hills are bounded by the Newport-Inglewood-Rose Canyon Fault Zone to the west and the Elsinore Fault Zone to the east.

According to mapping by (Morton and Miller, 2006; Raub Company, 1987), the primary geologic unit at the subject site is Miocene age deposits of the Monterey and Capistrano Formations.

2.1 Geologic Units

Based on available geologic maps (Morton and Miller, 2006; Raub Company, 1987), NMG site reconnaissance, and NMG hollow-stem borings (Appendix B), the site is covered by artificial fill and underlain by Miocene Monterey/Capistrano Formations. The northwestern ascending slope bordering Pacific Park Drive exposes diatomaceous siltstone bedrock of the Monterey Formation. Based on NMG hollow-stem borings, the artificial fill generally consists of light olive brown, grayish brown and light yellowish-brown silty/clayey sand and sand that is fine to coarse grained, medium dense to dense, and generally ranges in moisture content from 14.2 to 18.1 percent in the upper 6 feet. Locally, moisture was found to be as high as 34.6 percent. The underlying Miocene Monterey Formation generally consists of light grey to very dark grey diatomaceous siltstones and claystones that are moist to wet, hard and have trace fish scales. Locally, we observed light olive brown to pale yellow silty fine sandstones that were moist, dense/very dense and friable in the Monterey formation. The underlying Tertiary Capistrano Formation, Oso Member generally consists of light gray to pale olive clean fine sandstone that is moist, dense/very dense, micaceous and friable. Quaternary-aged alluvium was encountered in the southeast corner of the site in boring H-2, between 40 and 50 feet deep below the existing ground surface. The alluvium consists of olive gray clayey fine to medium sand that was damp to moist and very dense.

During our limited subsurface exploration, significant cementation was not encountered in the Capistrano or Monterrey Formations. However, it is not uncommon to encounter cemented beds within these formations. Thin cemented beds may be encountered locally in deeper excavations that may cause difficult ripping.

2.2 Geologic Structure/Faulting

Based on published mapping by the State of California (CGS, 2010), there are no active faults that transect the site, and the site is not located within an Alquist-Priolo Earthquake Zone of Required Investigation (CGS, 2018). Also, no evidence of active faulting was observed during the prior investigation by the Jack G. Raub Company (1987). The closest major active faults identified by the state are the San Joaquin Hills Thrust Fault located approximately 2.5 miles to the northeast and the Newport Inglewood-Rose Canyon Fault zone (Dana Point Section) located approximately 6.1 miles to the southwest and the Glen Ivy section of the Elsinore Fault Zone located 19.2 miles to the northeast.

Based on the California Geological Survey, there are no active faults in or near the subject site.

2.3 Seismic Hazards

Using the USGS computer program (USGS, 2025) and the site coordinates of 33.5695 degrees north latitude and 117.7247 degrees west longitude, the controlling fault at the site is the San Joaquin Hills Fault located 4.1 kilometers (2.5 miles) northeast of the site. The maximum Moment Magnitude for the Controlling Fault is 7.27 Mw. The other faults noted that can produce strong ground shaking at the site include the Newport-Inglewood (Offshore), and Elsinore (Glen Ivy section) Faults. Based on review of published maps, historic aerial photographs and topographic maps, the potential for primary ground rupture due to an earthquake is considered very low.

Seismicity: Properties in southern California are subject to seismic hazards of varying degrees depending upon the proximity, degree of activity, and capability of nearby faults. These hazards can be primary (i.e., directly related to the energy release of an earthquake, such as surface rupture and ground shaking) or secondary (i.e., related to the effect of earthquake energy on the physical world, which can cause phenomena such as liquefaction and ground lurching). The site is not located in a seismic hazard zone for liquefaction potential (CDMG, 2001), as shown in Figure 2. Liquefaction potential is discussed further in Section 2.5. Secondary seismic hazards, such as tsunami and seiche, need not be considered since the site is located approximately 4 miles from the ocean or any confined bodies of water and at elevations well above mean sea level.

As with the majority of sites in Southern California, the primary seismic hazard for this site is ground shaking due to a future earthquake on one of the major regional active faults, such as the San Joaquin Hills Blind Thrust, Newport-Inglewood, or the Elsinore-Glen Ivy Faults. We anticipate the site will be designated as Class CD. However, due to the lack of seismic data at depth, we are unable to determine the Vs (30) shear wave velocity at this time and the default category has been used to develop the preliminary seismic design parameters. The seismic design parameters are presented in the Conclusions and Recommendations section of this report. Seismic design parameters were calculated based on a computer program by the Structural Engineers Association/Office of Statewide Health Planning and Development (2025). The results are tabulated in Section 3.5 and the data is included in Appendix D.

2.4 Groundwater

Groundwater was not encountered by NMG during our subsurface exploration to a depth of 51.5 feet. Also, based on information on the GeoTracker website there were several borings excavated at the 76-gas station in 2009 that were drilled from 40 to 51 feet deep and did not encounter groundwater. This gas station is located approximately 800 feet north of the subject site.

Therefore, based on our subsurface investigation and publicly available well data groundwater is expected to be greater than 51.5 feet deep.

2.5 Engineering Soil Properties

Based on the borings at the site, the moisture content of the existing fill generally ranges from 14.2 to 18.1 percent and in-place dry density ranged from approximately 85.4 to 124.8 pcf. Locally, moisture was found to be as high as 34.6 percent. The near-surface fill material (upper 5 feet) is generally moist. The grain size testing indicates 30 to 59 percent fines content (passing No 200 sieve). Most of the soils are non-plastic however, some soils are clayey and had Liquid Limits of 28 to 41 percent and Plasticity Index of 9 to 16 percent. Maximum density testing was performed on one bulk samples collected from the upper 5 to 10 feet that consisted of clayey sand (USCS classification of SC). The maximum dry density test result was 114 pcf with optimum moisture content of 15.5 percent.

Based on the USCS classification, the existing fill consists of crudely layered SP, SC, CL, SM, and ML soils. The soil sample descriptions, classification (USCS group symbol), in-situ soil dry density and moisture content are presented on the boring logs (Appendix B).

Direct shear testing was performed on one sample remolded to 90 percent (based on ASTM Test Method D1557) to evaluate the strength of reworked onsite soils, to assess the strength of the future fill material. The selected sample was a clayey sand material sampled in the upper 5 feet. The test result indicated peak cohesion of 375 psf and a soil friction angle of 27 degrees, and ultimate cohesion of 180 psf and a soil friction angle of 26 degrees. The original direct shear testing of the bedrock in the area indicated friction angles of 27 to 47 degrees and cohesion of 80 to 625 psf.

Expansion index tests were performed on selected bulk samples from the existing fill to evaluate the expansion potential of onsite soils. Based on the laboratory test results, the expansion index (EI) varies from 9 to 23 which corresponds to "Very Low" to "Low" expansion potential. However, due to the presence of the Monterrey Formation bedrock in the shallow subsurface, higher expansive soils should be expected during demolition and grading.

R-value testing was performed on a sample of the clayey sand fill and indicated a minimum value of 29 (by expansion).

The direct shear, Atterberg Limit, and maximum density/optimum moisture content test results for the bedrock materials in the area included in the investigation report (JGR, 1987) were also reviewed and utilized.

2.6 Liquefaction Potential

The subject site is not located within a zone of liquefaction potential as mapped by the State (Figure 2). According to mapping by CDMG (2201) Historic high groundwater at the site is 20 feet below ground surface (bgs). However, groundwater was not encountered while drilling during prior investigations by others or during the current investigation to depths up to 51.5 feet bgs. Liquefaction potential at the subject site is considered very low to nil due to the significant depth to groundwater and relatively shallow bedrock across the majority of the site.

2.7 Settlement Potential

We anticipate the future compacted fill and underlying bedrock will have low compressibility. Based on the minor design grading and the light structural loads, we anticipate only minor settlement. The potential settlement due to seismic shaking should also be minor.

2.8 Slope Stability

The slopes around the perimeter of the site consist mainly of fill slopes or stabilization fill slopes with a limited window of exposed bedrock below the fire station. The bedrock bedding is generally favorable with respect to slope stability. The existing slopes are 2H:1V and up to 35 feet in height. Slope stability was performed utilizing Cross-Section A-A' (Figure 4) for the western perimeter ascending slope and the eastern descending slope. The western slope will have a proposed retaining wall cut into the toe of slope. This wall will have a maximum height of 8 feet. A temporary cut slope will be required for construction of the proposed retaining wall at toe of slope. The existing descending eastern slope has an existing retaining wall at the bottom next to the car wash. The height of the slope and retaining wall combination is 9 feet. To accommodate the design finish grades for the new development a retaining wall up to 6 feet in high is proposed at the top of slope.

The results of the preliminary slope stability indicate the revised slope with the new retaining walls have a global factor of safety greater than 1.5. The factor of safety for the pseudostatic slope stability analysis has a factor of safety greater than 1.1. The temporary slope for the new retaining wall construction is anticipated to expose competent bedrock. The results of the slope stability analysis is presented in Appendix E.

2.9 Existing Asphalt Pavement

The existing asphalt encountered during our subsurface exploration within the parking lot area varied from 3 to 4.5 inches of asphalt concrete (AC) over 5 to 9 inches of aggregate base (AB). The actual pavement section measurements were obtained during our subsurface exploration and are provided on the boring logs (Appendix B).

2.10 Corrosivity Testing

Corrosion testing was performed by Keegan Labs on three samples provided by NMG to evaluate Resistivity, pH, Sulfate content, and Chloride content. One of the soil samples was of the fine grained (silty) bedrock and the other two samples were of the existing fill (clayey sand/sandy clay). As a result of the varied soil types, the corrosion potential ranged from corrosive to severely corrosive to metals, negligible to severely corrosive to concrete, and low to moderate chloride exposure. Soil pH values indicate slight to medium alkalinity. The soil analysis lab test results are presented in Appendix C and summarized below.

Soil Corrosion Test	*Test Results*
Minimum Resistivity (ohm-cm)	322 -1660
pH	7.0-7.7
Sulfate Content (ppm)	96 – 5,220
Chloride Content (ppm)	44 – 1,061

2.11 Earthwork Factors

The loss or gain of volume (shrinkage or bulking, respectively) of excavated natural materials and re-compaction as fill varies according to earth material type and location. This volume change is represented as a percentage shrinkage (volume loss) and as a percentage bulking (volume gain) after re-compaction of a unit volume of cut in this same material in its natural state. We anticipate the existing fill materials and near-surface bedrock will vary from 2 percent bulk (bedrock) to 1 percent shrinkage (existing fill). The loss of volume due to demolition is not included in our earthwork factors. Due to prior site use, subsidence at the site is anticipated to be negligible.

3.0 CONCLUSION AND PRELIMINARY RECOMMENDATIONS

3.1 General Conclusion

Based on review of the VTTM and Engineering Site Plan, the proposed residential redevelopment at the site is considered geotechnically feasible. This report provides the collected site-specific subsurface information and preliminary recommendations that can be used for planning and initial design at the site. Specific geotechnical recommendations for design, grading, and construction will be provided in future reports based on review of the design plans for the project.

Our subsurface investigation confirmed that most of the site has between 2.5 and 5 feet of fill over bedrock. The southeastern and southwestern perimeter of the site have thicker compacted fills and alluvium where canyons were filled during prior grading. The variable as-graded and geologic subsurface conditions will influence the seismic design parameters, foundation design, grading and earthwork, and underground utility construction. The recommended remedial grading and deeper utility excavations will encounter bedrock across the majority of the site. Where bedrock is encountered, grading may require extra mixing and blending locally to produce a uniform fill and foundation soil conditions. Testing during and at the completion of grading will be required to confirm the engineering soil properties. Groundwater is in excess of 50 feet below ground surface and is not anticipated to impact the subject development.

3.2 Demolition of Existing Structures

Demolition of the three office buildings, existing utilities, walls and pavement will be performed prior to grading. We are anticipating a five-foot removal in the design fill areas and a five-foot over-excavation in the design cut areas. If any of the building foundations, underground utilities or retaining wall footings extend below the anticipated removal bottoms then the deeper areas need to be cleaned out of loose materials and replace with compacted fill to the depth of the anticipated removal bottom.

There will be large quantities of asphalt and concrete generated during demolition of the existing improvements. We understand this material will be exported offsite for disposal.

3.3 Site Preparation and Earthwork

General earthwork and grading specifications are provided below and in Appendix F. Grading will also have to satisfy the requirements of the City of Aliso Viejo. Prior to grading, deleterious material (highly organic topsoil, vegetation, trash, construction debris), if any, should be cleared from the site and disposed of offsite. The existing structures to be demolished and the buried utilities within the site should be removed, the loose soil cleaned out and the areas below the planned remedial removal bottoms be properly backfilled with compacted fill. The demolition operation should minimize disturbing/loosening existing soils and should protect existing improvements to remain.

Although not encountered during our limited exploration, there is the potential for cemented bedrock to be encountered locally in the deeper excavation that may be difficult to rip and may generate some oversize material (greater than 12 inches in diameter. Due to the shallow fills anticipated across the

site, any oversize material generated will need to be crushed onsite prior to placement in fill or exported offsite.

We recommend a minimum of 5-foot-deep remedial removals in the design fill areas and 5-foot-deep overexcavation in the design cut areas for the site to provide a new, uniform compacted fill blanket. Deeper remedial removals may be recommended during grading in areas where diatomaceous siltstone and claystone are encountered in removal bottoms to mitigate the potential for differential heave beneath building pads. The demolition operation and local variations in soil conditions may result in the need for deeper removals. Some of the existing utility lines may be locally deeper than the recommended remedial removals; therefore, special excavation for these lines may be necessary if encountered and backfilled accordingly with compacted fill.

Onsite materials that are relatively free of deleterious material should be suitable for use as compacted fill. Prior to placement of fill, the removal bottoms should be scarified a minimum of 6 inches, moisture-conditioned as needed, and compacted to minimum 90 percent relative compaction. The relative compaction should be based upon ASTM Test Method D1557-91.

The moisture content of the fill soil should be over optimum moisture content and consideration should be given to placing fill at higher moisture contents to facilitate the future presoaking process for slab-on-grade foundations. Fill material should be placed in loose lifts no greater than 8 inches in thickness and compacted prior to placement of the next lift. Ground sloping steeper than 5:1 (horizontal to vertical) should be prepared by benching into firm competent material as fill is placed. If diatomaceous soils are encountered, additional measures may be needed to achieve compaction.

3.4 Infiltration

Due to the subsurface conditions of compacted fill over shallow, low-permeability bedrock, stormwater infiltration is not feasible at this site.

3.5 Settlement Potential

For preliminary foundation design purposes, we estimate total consolidation (static) settlement would not exceed 1 inch and differential settlement on the order of 1 inch over a span of 40 feet. Additional evaluation of the settlement should be performed once a grading plan and structural loads become available.

3.6 Foundation and Slab Design Guidelines

Slab-on-grade foundations will be acceptable for the subject development. The design of shallow footings and slab-on-grade foundations will require collaboration between the geotechnical and structural engineers based on the anticipated structural loading conditions and considering the requirements of the 2025 CBC. For expansive soils, the CBC requires slab-on-grade foundations to be designed in accordance with the Post-Tension Institute (PTI) or Wire Reinforcement Institute (WRI) methodology. The foundation design for the shallow fill area will need to consider the potential for higher expansion and differential heave due to siltstone and claystone bedrock. This will be evaluated in more detail with the future design and during the site grading.

3.7 Foundation Setbacks

The footings of structures located above descending slopes should be set back from the slope face in accordance with the minimum requirements of the City of Aliso Viejo, County of Orange, and 2025 CBC criteria, whichever is greater. The setback distance is measured from the outside edge of the footing bottom along a horizontal line to the face of the slope.

The tables below summarize the minimum setback criteria for structures above descending slopes:

Structural Setback Requirements

Building and Retaining Wall Footings Above Descending Slopes	
Slope Height [H] (feet)	*Minimum Setback from Slope face (feet)*
Less than 10	5
10 to 20	½ * H
20 to 30	10
More than 30	⅓ * H (maximum of 40')

For freestanding walls and other structures that are sensitive to lateral movement (e.g., smooth stucco finish, glass screens, etc.), NMG recommends that the structural setback requirements above be followed or that additional design measures be used to help control the potential for cracking and displacements.

Additionally, foundations for the new retaining wall above the existing retaining wall will need further evaluation for potential surcharge loading.

3.8 Seismic Design Guidelines

The following table summarizes the seismic design criteria for the subject site. The seismic design parameters are developed in accordance with 2025 CBC and ASCE 7-22. Due to the variable depths to bedrock across the overall site and the lack of shear wave velocities at depth, the seismic parameters were determined using the Default Site Class per ASCE 7-22. A geophysical study may be warranted in the future in order to obtain shear wave velocities in the upper 100 feet (Vs (30)) and determine the seismic site class.

Selected Seismic Design Parameters from 2025 CBC/ASCE 7-22	*Seismic Design Values*	*Reference*
Latitude	33.5695 North	
Longitude	117.7247 West	
Controlling Seismic Source	San Joaquin Hills	USGS, 2025
Distance to Controlling Seismic Source	2.5 mi (4.1 km)	USGS, 2025
Site Class per Table 20.3 and 11.4.2 of ASCE 7-22	Default	SEA/OSHPD, 2025
Ss, Spectral Acceleration for Short Periods	1.41 g	SEA/OSHPD, 2025
S_1, Spectral Accelerations for 1-Second Periods	0.45 g	SEA/OSHPD, 2025
S_{DS}, Design Spectral Response Acceleration at Short Periods from Equation 11.4-1 of ASCE 7-22	1.09 g	SEA/OSHPD, 2025
S_{D1}, Design Spectral Response Acceleration at 1-Second Period from Equation 11.4-2 of ASCE 7-22	0.73 g	SEA/OSHPD, 2025
T_S, S_{D1}/ S_{DS}, Section 11.4.5.2 of ASCE 7-22	0.67 sec	SEA/OSHPD, 2025
T_L, Long-Period Transition Period	8 sec	SEA/OSHPD, 2025
PGA_M, Peak Ground Acceleration Corrected for Site Class Effects from Equation 11.8.3 of ASCE 7-22	0.64 g	SEA/OSHPD, 2025
Seismic Design Category, Section 11.6 of ASCE 7-22	D	SEA/OSHPD, 2025

3.9 Pavement Design

We anticipate the future subgrade soils for pavements will have a minimum R-value of 20. Final structural pavement sections should be based on R-value testing after the completion of grading.

The following preliminary pavement sections are for the assumed traffic indices (TIs). The final structural pavement design should be based on the actual design TIs and the actual subgrade soil once the grading and utilities are completed. Lower R-values could be present if the fine grained bedrock ends up near the design pavement subgrade elevation.

Minimum Structural Pavement Section (Preliminary)

Location	*TI*	*Composite Section*	*Full-Depth Section*
Parking Stalls	4.5	0.25' AC over 0.50' AB*	0.50' AC
Private Courts	5.5	0.35' AC over 0.60' AB	0.55' AC
Drives	6.0	0.35' AC over 0.65' AB	0.60' AC

AC = Asphalt Concrete; AB = Aggregate Base

*In accordance with County of Orange/City of Aliso Viejo design minimums.

Asphalt concrete should also be compacted to a minimum relative compaction of 95 percent. Please note that for two-stage paving operations, the initial based asphalt pavement layer should be a minimum of 0.25-foot AC and the final cap should be a minimum of 0.10 foot thick.

Prior to construction of pavement sections, the subgrade soils should be scarified to a minimum depth of 6 inches, moisture-conditioned as needed, and recompacted in place to a minimum of 90 percent relative compaction per ASTM D1557. The full-depth pavement area will require

subgrade to have a minimum of 95 percent relative compaction in the upper 1 foot. Subgrade for the proposed pavements should be uniform, firm, and unyielding.

AB materials can be crushed aggregate base or crushed miscellaneous base in accordance with the Greenbook (Section 200-2). The materials should be free of any deleterious materials. Aggregate base materials should be placed in 6- to 8-inch-thick loose lifts, moisture-conditioned as necessary, and compacted to a minimum of 95 percent relative compaction (per ASTM D1557).

3.10 Exterior Concrete

The recommendations provided below should be used for design and construction measures of the concrete pavements/hardscape. These recommendations are considered minimum and may be superseded by more stringent requirements/standards of the City of Aliso Viejo, the Standard Specifications for Public Work Construction "Greenbook" or other designers. The public pavements and other exterior concrete improvements (within the street right-of-way) should be constructed in accordance with City of Aliso Viejo standards.

3.11 Soil Corrosivity and Cement Type

The soil soluble sulfates exposures at the site as found to vary from "negligible" to "severe" per Table 19.3.1.1 of ACI-318-19. The existing sandy fill is generally classified as "S0" and the clayey fill is classified as "S2". Finer grained bedrock soil is generally classified as "S2". The chloride levels within the soils are classified as Class C1. The chloride content in the bedrock exceeded 500 ppm. The onsite soils are corrosive to severely corrosive to ferrous metals.

Concrete mix requirements for structural concrete will require additional sulfate testing once the project grading is complete. Otherwise, the concrete mix requirements for structural concrete should be based on the "S2" exposure class. Table 19.3.2.1 in ACI-318-19 lists the appropriate type of cement, maximum water-cement ratio, and minimum concrete compressive strength. The city or other agency may have additional concrete requirements.

Structural concrete elements in contact with soil include footings and building slabs-on-grade. Concrete improvements for streets, sidewalk and hardscape typically are not considered structural elements.

3.12 Pipelines, Trench Excavations, Temporary Shoring, and Backfill

Excavations should conform to the latest edition of OSHA requirements (shoring or layback of trench or wall excavations). The near-surface soils across most of the site are anticipated to be classified as Type B in compacted fill soils (upper 5 feet) and Type C in bedrock (below a depth of 5 feet) for CalOSHA trenching and shoring excavation requirements. Excavations deeper than approximately 5 feet below existing ground surface will encounter siltstone and sandstone bedrock. The bedding conditions may be adverse to the trench wall and shoring may be needed during utility installation. Trench spoils should not be placed immediately adjacent to the trenches, especially on the up-dip side.

The existing fill should generally be suitable for use as trench backfill. Excavations into bedrock may have chunky siltstone and cemented sandstone fragments and may need to be broken down to comply with trench backfill requirements. Backfill materials should not have rocks greater than 6 inches in the maximum dimension and should be compacted to a minimum relative compaction of 90 percent (per ASTM D1557). We recommend that moisture content of native backfill to be over optimum moisture content. Select backfill may be used in lieu of native soils.

If a high-density, polyethylene (HDPE) pipe is proposed for the development, then excavation, installation, bedding, shading, and backfilling should be in strict accordance with the project and manufacturer's requirements. HDPE pipe has specific requirements for the width of the trench excavation.

4.0 PLANNING AND DESIGN RECOMMENDATIONS

1. The future rough grading plan should be reviewed by the geotechnical consultant once available, and specific recommendations provided as necessary for the project. Additional subsurface exploration and laboratory testing may be needed based on final design.

2. A geophysical survey may be needed in the future in order to properly determine the seismic site class based on the 2025 California Building Code.

3. A geotechnical rough grading plan review report should be prepared for the site-specific conditions and submitted to the City for their review and approval.

4. The model and production precise grading plans should be reviewed, and reports prepared to provide geotechnical recommendations and foundation design parameters in accordance with the most recent CBC code.

5. The structural and foundation plans, once available, should be reviewed to confirm the geotechnical parameters pertinent to the site are used for design.

6. The retaining and perimeter wall plans, once available, should be reviewed and recommendations provided for future design, grading, and construction. The existing retaining wall in the southeast corner that is tilting will need further evaluation.

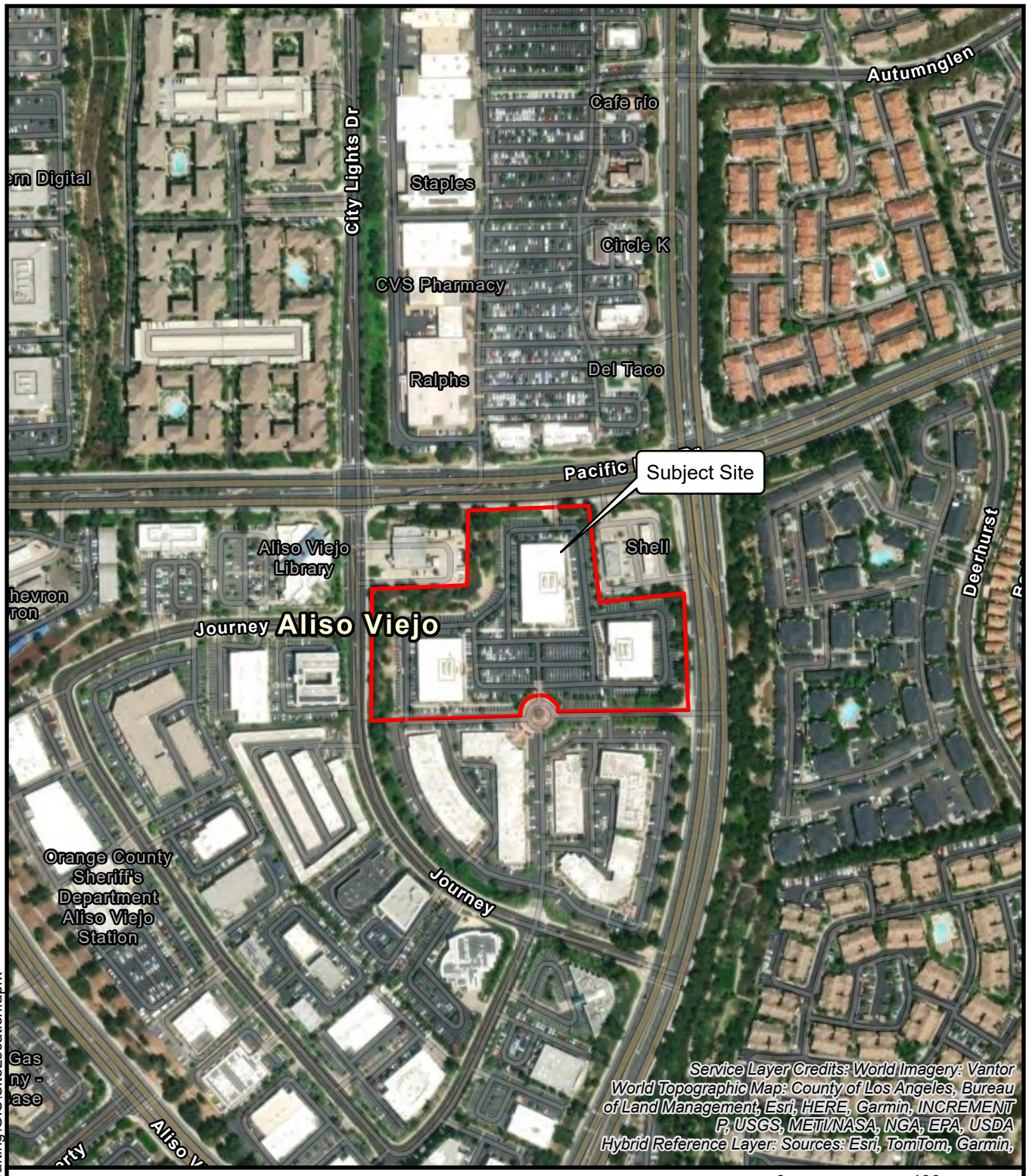
7. Additional soil testing should be performed to confirm the final soil conditions related to the foundation design parameters after the completion of rough grading.

8. The street improvement and utility plans should be reviewed, and recommendations provided as needed. Trench excavations in the native bedrock may encounter friable material and/or adverse bedding that should be evaluated for safety compliance.

5.0 LIMITATIONS

This report has been prepared for the exclusive use of our client, Shea Homes, within the specific scope of services requested by them for the subject residential development in Aliso Viejo, California. This report or its contents should not be used or relied upon for other projects or purposes or by other parties without the written consent of NMG and the involvement of a geotechnical professional. The means and methods used by NMG for this study are based on local geotechnical standards of practice, care, and requirements of governing agencies. No warranty or guarantee, express or implied is given.

The findings, conclusions, and recommendations herein are professional opinions based on interpretations and inferences made from geologic and engineering data from specific locations and depths, observed or collected at a given time. By nature, geologic conditions can vary from point to point, can be very different in between points, and can also change over time. Our conclusions and recommendations are subject to verification and/or modification during excavation and construction when more subsurface conditions are exposed.



0 400 Feet

1 inch =400 feet

N

SITE LOCATION MAP

PACIFIC CORPORATE PLAZA
27061 ALISO CREEK ROAD
SHEA HOMES DEVELOPMENT
CITY OF ALISO VIEJO, CALIFORNIA

Project Number: 24074-02 By: KGM/WG
Project Name: Shea Aliso Viejo
Date: 11/25/2025 Figure 1

NMG

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Legend

- Liquefaction Zones
- Landslide Zones

0 200 400 Feet

1 inch =400 feet

N

SEISMIC HAZARD ZONE MAP

Source: https://maps.conservation.ca.gov/cgs/informationwarehouse/eqzapp/

SHEA HOMES RESIDENTIAL DEVELOPMENT
27181 ALISO CREEK ROAD
TENTATIVE TRACK MAP 19442
CITY OF ALISO VIEJO, CALIFORNIA

Project Number: 24074-02 By: KGM/WG
Project Name: Shea Aliso Viejo
Date: 11/25/2025 Figure 2

NMG

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Legend

- fault, approx. located
- fault, approx. located, queried
- fault, certain
- fault, concealed
- fault, concealed, queried
- fault, inferred, queried
- thrust fault, certain
- thrust fault, approx. located
- thrust fault, concealed

Regency of Movement

- Holocene
- Late Quaternary
- Quaternary

0 10,000 20,000 Feet

1 inch =20,000 Feet

N

REGIONAL FAULT ACTIVITY MAP

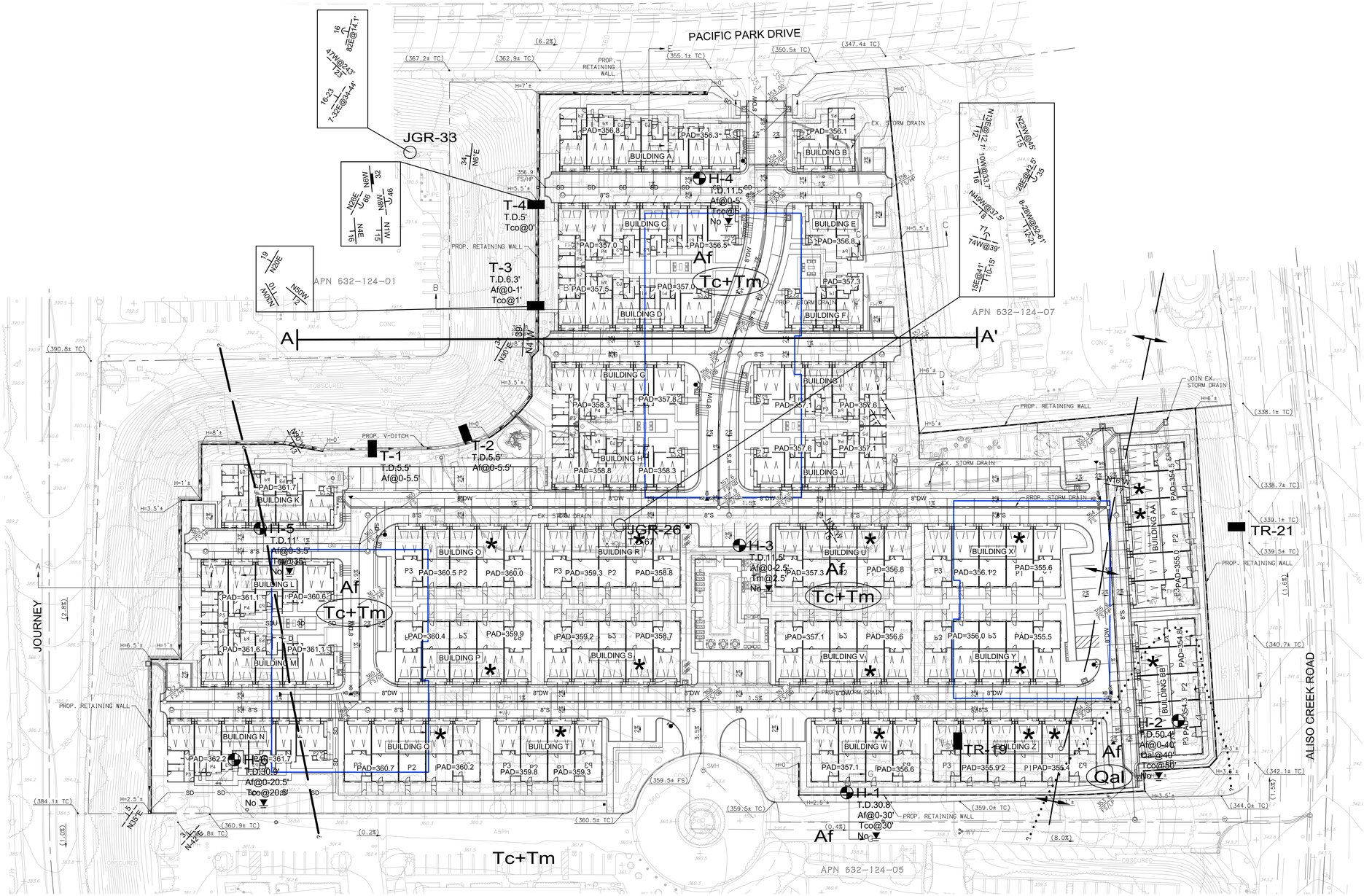
Base: California Geological Survey, Fault Activity Map of California, 2010

SHEA HOMES RESIDENTIAL DEVELOPMENT
27181 ALISO CREEK ROAD
TENTATIVE TRACK MAP 19442
CITY OF ALISO VIEJO, CALIFORNIA

Project Number: 24074-01 By: KGM/WG
Project Name: Shea Aliso Viejo
Date: 11/25/2025 Figure 3

NMG

O:\NMGIS\Templates\ArcGIS PRO Templates\RegionalFault_20230420.aprx



LEGEND

EARTH UNITS - CIRCLED WHERE BURIED

Af	ARTIFICIAL FILL
Qal	ALLUVIUM
Tc+Tm	INTERFINGERED CAPISTRANO AND MONTEREY FORMATION

SYMBOLS - LOCATIONS ARE APPROXIMATE, QUERIED WHERE UNCERTAIN

- GEOLOGIC CONTACT, DOTTED WHERE BURIED
- FAULT, DOTTED WHERE BURIED
- ANTICLINAL FOLD AXIS, SHOWING DIRECTION OF PLUNGE
- DESIGN CUT / FILL / EXISTING / NATURAL LINE

OTHER SYMBOLS - LOCATIONS ARE APPROXIMATE

- H-6 (T.D.11' Af@0-3.5' Tm@3.5' No ▼): HOLLOW-STEM AUGER BORING, SHOWING TOTAL DEPTH, DEPTH TO EARTH UNIT AND DEPTH TO GROUNDWATER
- T-4 (T.D. 5' Tco @ 0'): GEOTECHNICAL TEST PIT THIS INVESTIGATION, SHOWING TOTAL DEPTH AND DEPTH TO EARTH UNIT
- JGR-33 (T.D.67'): PRIOR BORING BY JGR (1987) SHOWING TOTAL DEPTH
- TR-21: PRIOR GEOTECHNICAL TEST PIT BY JGR (1987)

GEOLOGIC ATTITUDES- LOCATIONS ARE APPROXIMATE, DASHED WHERE BURIED

- 34 / N6°E: BEDDING ATTITUDE
- A — A': CROSS-SECTION
- LIMITS OF EXISTING BULIDINGS (3 TOTAL)

GRAPHIC SCALE

40 0 20 40 80

(IN FEET)
1 inch = 40 ft.

PLATE 1

GEOTECHNICAL MAP
VESTING TENTATIVE TRACT MAP 19390
27181 ALISO CREEK ROAD
CITY OF ALISO VIEJO, CALIFORNIA

Project No.: 24074-02 By: KGM/WG
Project Name: Shea/Aliso Viejo DD
Date: 11/25/2025 SCALE: 1" = 40'

NMG Geotechnical, Inc.

BASE MAP: PROACTIVE ENGINEERING

Drawing: P:\2024\24074-02 Shea Aliso Viejo\Drafting_WP\24074-02 Geo Map.dwg Layout: Layout1 Last Saved: Tue Nov 25, 2025 - 3:39pm By: bfrysile Last Plotted: Tue Nov 25, 2025 - 3:41pm

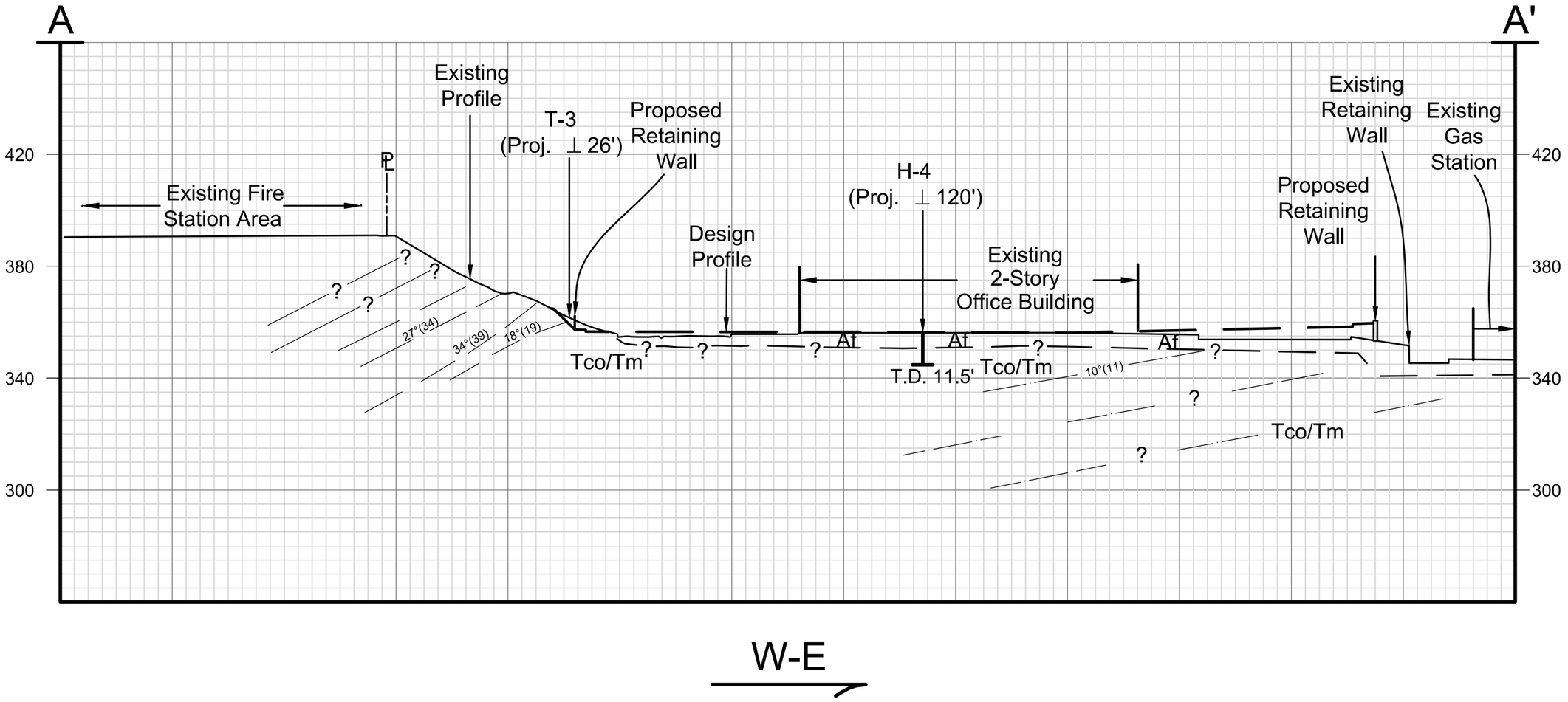


FIGURE 4

CROSS-SECTION A-A'

Project No.: 24074-02	BY:KGM/WG
Project Name: Shea Aliso Viejo	
Date: 11/25/2025	SCALE: 1"-40'

NMG Geotechnical, Inc.

APPENDIX A

APPENDIX A

REFERENCES

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APPENDIX B

Report: HOLLOW STEM; Project: 24074-01.GPJ; Data Template: NMG_GINT_2016.GDT; Printed: 11/18/25

Date(s) Drilled	12/6/24	Logged By	SHC
Drilling Company	2R Drilling	Drill Bit Size/Type	8"
Drill Rig Type	CME 75	Hammer Data	140 lbs @ 30 inch drop
Sampling Method(s)	Modified California, Bulk		
Approximate Groundwater Depth:	No Groundwater Encountered		
Comments	Hand Augered First 5 Feet.		

H- 1

Sheet 1 of 2

Total Depth Drilled (ft)	30.8
Approximate Ground Surface Elevation (ft)	359.0 msl

Elevation (ft)	Depth (ft)	SAMPLES Type	SAMPLES Number	SAMPLES Blows per foot	Graphic Log	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	OTHER TESTS and REMARKS
	0						Surface: Asphalt Pavement, 4.5" AC over 9" AB.			
						SC	**Artificial Fill (Af)** @ 1-5': Light olive brown clayey fine to coarse SAND, damp to moist, few sandstone/claystone clasts up to 1", trace roots, trace rusted metal, trace concrete, crystalline rock clast encountered @4.5'.			B-1 @ 1-5'
			B-1							
	5		D-1	39			@ 5': Light olive brown clayey fine SAND, damp to moist, medium dense, few sandstone/siltstone clasts up to 1", FeO staining in bedrock fragments.	14.2	110.1	
350										
	10		D-2	45			@ 10': Light olive brown clayey fine to medium SAND, damp to moist, medium dense to dense, few sandstone/siltstone clasts up to 1", FeO staining in bedrock fragments.	13.3	110.6	
	15		D-3	29			@ 15': Light olive brown clayey fine to medium SAND, moist, medium dense, few sandstone/siltstone clasts up to 1", FeO staining in bedrock fragments, some layers of more clay.	17.9	105.8	
340										
	20		D-4	26		ML-CL	@ 20': Grayish brown to yellowish brown clayey SILT to silty CLAY, moist to wet, very stiff, trace FeO and MnO staining, upper rings contain few sandstone/siltstone clasts up to 1/2".	22.2	99.5	
	25									

LOG OF BORING

Shea/ Aliso Viejo
Aliso Viejo, CA
PROJECT NO. 24074-01

NMG

Elevation (ft)	Depth (ft)	SAMPLES Type	SAMPLES Number	SAMPLES Blows per foot	Graphic Log	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	OTHER TESTS and REMARKS
	25									
330										
	30		D-5	90/10"		ML SC	**Tertiary Capistrano Formation, Oso Member (Tco)** @ 30': Upper: Grayish brown sandy SILTSTONE, damp, hard, trace clay laminations, trace MnO staining, minimal mica. Lower: Light gray clean fine SANDSTONE, damp, very dense, trace FeO staining.	4.9	107.6	
							Notes: Total Depth: 30.8 Feet. No Groundwater Encountered. Backfilled with Cuttings and Tamped. Upper 6" Patched with Quick-Set Concrete and Black Dye.			
	35									
320										
	40									
	45									
310										
	50									
	55									

LOG OF BORING

Shea/ Aliso Viejo
Aliso Viejo, CA

PROJECT NO. 24074-01

NMG

Report: HOLLOW STEM; Project: 24074-01.GPJ; Data Template: NMG_GINT_2016.GDT; Printed: 11/18/25

Report: HOLLOW STEM; Project: 24074-01.GPJ; Data Template: NMG_GINT_2016.GDT; Printed: 11/18/25

Date(s) Drilled	**12/6/24**	Logged By	**SHC**
Drilling Company	**2R Drilling**	Drill Bit Size/Type	**8"**
Drill Rig Type	**CME 75**	Hammer Data	**140 lbs @ 30 inch drop**
Sampling Method(s)	**Modified California, Bulk**		
Approximate Groundwater Depth:	**No Groundwater Encountered**		
Comments	**Hand Augered First 5 Feet.**		

H- 2

Sheet 1 of 2

Total Depth Drilled (ft)	**50.9**
Approximate Ground Surface Elevation (ft)	**352.0 msl**

Elevation (ft)	Depth (ft)	SAMPLES Type	SAMPLES Number	SAMPLES Blows per foot	Graphic Log	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	OTHER TESTS and REMARKS
	0						Surface: Asphalt Pavement, 4" AC over 7" AB.			
350						SC	**Artificial Fill (Af)** @ 1-5': Light grayish brown to olive yellow clayey fine to medium SAND , moist, few sandstone/siltstone clasts up to 1", trace FeO staining.			B-1 @ 1-5'
			B-1							
	5		D-1	34		CL	@ 5': Grayish brown fine sandy CLAY, wet, very stiff, few sandstone/siltstone clasts up to 1", trace FeO staining.	34.6	85.4	-200, AL, CN
	10		D-2	25			@ 10': Light olive brown to orange sandy silty CLAY, wet, very stiff, few sandstone/siltstone clasts up to 1", trace medium to coarse sand, trace FeO staining.	26.6	96.4	
340										
	15		D-3	61		SC	@ 15': Brownish yellow clayey fine to medium SAND, damp, dense, few sandstone/siltstone clasts up to 1", trace FeO and MnO staining.	9.2	116.1	
	20		D-4	50			@ 20': Light olive brown clayey fine SAND, damp, dense, trace to few sandstone/siltstone clasts up to 1", trace FeO staining.	9.6	109.3	
330										
	25									

LOG OF BORING

Shea/ Aliso Viejo
Aliso Viejo, CA
PROJECT NO. 24074-01

NMG

Elevation (ft)	Depth (ft)	SAMPLES Type	SAMPLES Number	SAMPLES Blows per foot	Graphic Log	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	OTHER TESTS and REMARKS
	25									
	30		D-5	65		ML-CL SC	@ 30':Upper: Black to dark Grayish brown silty CLAY to clayey SILT, damp to moist, hard, low plasticity, few sandstone/siltstone clasts up to 1", trace FeO and MnO staining. Lower: Yellowish brown clayey fine SAND, damp to moist, dense, trace to few sandstone/siltstone clasts up to 1", trace FeO staining.	12.4	124.8	
320										
	35									
	40		D-6	85/11"			**Quaternary Alluvium (Qal)** @ 40': Olive gray clayey fine to medium SAND, damp to moist, very dense, trace to few highly weathered sandstone/siltstone clasts up to 1", trace coarse sand, trace pinhole pores.	11.7	120.1	
310										
	45									
	50		D-7	70/11"		ML SM	**Tertiary Monterey Formation (Tm)** @ 50': Upper: Light gray diatomaceous SILTSTONE, wet, hard, trace joints, trace fish scales, well bedded. Lower: Light yellowish brown silty fine SANDSTONE, wet, very dense, trace FeO staining, minimal mica, friable. Notes: Total Depth: 50.9 Feet. No Groundwater Encountered. Backfilled with Cuttings and Tamped. Upper 6" Patched with Quick-Set Concrete and Black Dye.	40.5	82.8	
300										
	55									

LOG OF BORING

Shea/ Aliso Viejo
Aliso Viejo, CA

PROJECT NO. 24074-01

NMG

Report: HOLLOW STEM; Project: 24074-01.GPJ; Data Template: NMG_GINT_2016.GDT; Printed: 11/18/25

Report: HOLLOW STEM; Project: 24074-01.GPJ; Data Template: NMG_GINT_2016.GDT; Printed: 11/18/25

Date(s) Drilled	12/6/24	Logged By	SHC
Drilling Company	2R Drilling	Drill Bit Size/Type	8"
Drill Rig Type	CME 75	Hammer Data	140 lbs @ 30 inch drop
Sampling Method(s)	Modified California, Bulk		
Approximate Groundwater Depth:	No Groundwater Encountered		
Comments	Hand Augered First 5 Feet.		

H- 3

Sheet 1 of 1

Total Depth Drilled (ft)	11.5
Approximate Ground Surface Elevation (ft)	355.0 msl

Elevation (ft)	Depth (ft)	SAMPLES Type	SAMPLES Number	SAMPLES Blows per foot	Graphic Log	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	OTHER TESTS and REMARKS
	0						Surface: Asphalt Pavement, 3" AC over 5" AB.			
						SC	**Artificial Fill (Af)** @ 1-2.5': Yellowish brown silty clayey fine SAND, damp, few sandstone/siltstone clasts up to 1", trace FeO staining.			B-1 @ 1-2.5'
			B-1							
			D-1	18		CL	**Tertiary Monterey Formation (Tm)** @ 2.5': Grayish brown fine sandy CLAYSTONE, wet, stiff, moderately bedded, trace FeO staining, trace fish scales, diatomaceous.	32.9	86.4	
350	5		D-2	68		SC SP	@ 5' Upper: Grayish brown clayey fine SANDSTONE, wet, dense, moderately bedded, trace FeO and MnO staining, micaceous. Lower: Light grayish brown very fine clean SANDSTONE, wet, dense, trace FeO and MnO staining, friable.	27.7	90.1	
	10		D-3	56		CL	@ 10': Upper: Light grayish brown very fine clean SANDSTONE, dry to damp, dense, trace FeO and MnO staining, friable. Lower: Light grayish brown silty CLAYSTONE, damp, hard, low plasticity, trace fish scales, trace FeO and MnO staining.	4.2	112.7	
							Notes: Total Depth: 11.5 Feet. No Groundwater Encountered. Backfilled with Cuttings and Tamped. Upper 6" Patched with Quick-Set Concrete and Black Dye.			
340	15									
	20									
330	25									

LOG OF BORING

Shea/ Aliso Viejo
Aliso Viejo, CA
PROJECT NO. 24074-01

NMG

Report: HOLLOW STEM; Project: 24074-01.GPJ; Data Template: NMG_GINT_2016.GDT; Printed: 11/18/25

Date(s) Drilled	**12/6/24**	Logged By	**SHC**
Drilling Company	**2R Drilling**	Drill Bit Size/Type	**8"**
Drill Rig Type	**CME 75**	Hammer Data	**140 lbs @ 30 inch drop**
Sampling Method(s)	**Modified California, Bulk**		
Approximate Groundwater Depth:	**No Groundwater Encountered**		
Comments	**Hand Augered First 5 Feet.**		

H- 4

Sheet 1 of 1

Total Depth Drilled (ft)	**11.5**
Approximate Ground Surface Elevation (ft)	**354.0 msl**

Elevation (ft)	Depth (ft)	SAMPLES Type	SAMPLES Number	SAMPLES Blows per foot	Graphic Log	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	OTHER TESTS and REMARKS
	0						Surface: Asphalt Pavement, 3" AC oer 5" AB.			
						SM	**Artificial Fill (Af)** @ 1': Grayish brown silty fine SAND, damp.			B-1 @ 1-5'
350			B-1			SP	@ 2': Light gray clean fine SAND, damp, minimal mica, trace medium sand.			
	5		D-1	53		SP	**Tertiary Capistrano Formation, Oso member (Tco)** @ 5': Pale olive clean fine SANDSTONE, dense, dry to damp, minimal mica, friable.	2.1	110.8	
	10		D-2	38			@ 10': Pale olive clean fine to medium SANDSTONE, medium dense, dry to damp, trace coarse sand, minimal mica, trace FeO staining, friable.	2.3	108.2	
340							Notes: Total Depth: 11.5 Feet. No Groundwater Encountered. Backfilled with Cuttings and Tamped. Upper 6" Patched with Quick-Set Concrete and Black Dye.			
	15									
	20									
330										
	25									

LOG OF BORING

Shea/ Aliso Viejo
Aliso Viejo, CA
PROJECT NO. 24074-01

NMG

Report: HOLLOW STEM; Project: 24074-01.GPJ; Data Template: NMG_GINT_2016.GDT; Printed: 11/18/25

Date(s) Drilled	12/6/24	Logged By	SHC
Drilling Company	2R Drilling	Drill Bit Size/Type	8"
Drill Rig Type	CME 75	Hammer Data	140 lbs @ 30 inch drop
Sampling Method(s)	Modified California, Bulk		
Approximate Groundwater Depth:	No Groundwater Encountered		
Comments	Hand Augered First 5 Feet.		

H- 5

Sheet 1 of 1

Total Depth Drilled (ft)	11.0
Approximate Ground Surface Elevation (ft)	360.0 msl

Elevation (ft)	Depth (ft)	SAMPLES Type	SAMPLES Number	SAMPLES Blows per foot	Graphic Log	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	OTHER TESTS and REMARKS
360	0						Surface: Asphalt Pavement, 4" AC over 9" AB.			
						SP	**Artificial Fill (Af)** @ 1': Light olive brown fine SAND, damp, trace clay.			B-1 @ 1-5', GS, AL,MD, EI, CC, DS
			B-1			SC ML	@ 3': Light olive brown silty clayey fine SAND, damp, trace sandstone/siltstone clasts up to 1".			
							Tertiary Monterey Formation (Tm) @ 3.5': Thinly bedded very dark gray SILTSTONE clasts in cuttings, damp.			
	5		D-1	62		SM-ML	@ 5': Upper: Very dark gray clayey SILTSTONE, wet, hard, moderately bedded, diatomaceous.	32.4	93.0	
							Lower: Light olive brown very fine sandy SILTSTONE/silty very fine SANDSTONE, moist to wet, hard/dense, minimal mica.			
							@ 8.5 Increase in clay content.			
350	10		D-2	63		ML SC	@ 10': Upper: Very dark gray cemented SILTSTONE, moist, hard, highly oxidized w/ FeO staining, 3" claystone layer in upper three rings.	15.0	101.2	
							Lower: Pale yellow silty very fine SANDSTONE, dense to very dense, moist, moderately bedded, trace FeO and MnO staining, minimal mica.			
							Notes: Total Depth: 11 Feet. No Groundwater Encountered. Backfilled with Cuttings and Tamped. Upper 6" Patched with Quick-Set Concrete and Black Dye.			
	15									
340	20									
	25									

LOG OF BORING

Shea/ Aliso Viejo
Aliso Viejo, CA
PROJECT NO. 24074-01

NMG

Report: HOLLOW STEM; Project: 24074-01.GPJ; Data Template: NMG_GINT_2016.GDT; Printed: 11/18/25

Date(s) Drilled	12/6/24	Logged By	SHC
Drilling Company	2R Drilling	Drill Bit Size/Type	8"
Drill Rig Type	CME 75	Hammer Data	140 lbs @ 30 inch drop
Sampling Method(s)	Modified California, Bulk		
Approximate Groundwater Depth:	No Groundwater Encountered		
Comments	Hand Augered First 5 Feet.		

H- 6

Sheet 1 of 2

Total Depth Drilled (ft)	30.9
Approximate Ground Surface Elevation (ft)	361.0 msl

Elevation (ft)	Depth (ft)	SAMPLES Type	SAMPLES Number	SAMPLES Blows per foot	Graphic Log	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	OTHER TESTS and REMARKS
	0						Surface: Asphalt Pavement, 4" AC over 8" AB.			
360						SC	**Artificial Fill (Af)** @ 1-5': Light brown to light gray clayey fine SAND, moist, few sandstone/siltstone clasts up to 1".			B-1 @ 1-5', GS, AL, EI, CC
			B-1							
	5		D-1	39			@ 5': Olive yellow clayey fine to medium SAND, moist, medium dense, few siltstone clasts up to 1", trace FeO and MnO staining.	18.1	109.4	
	10		D-2	28			@ 10': Mottled yellowish brown and light olive gray clayey medium to coarse SAND, damp to moist, medium dense, orange clayey coarse sand in upper rings.	12.7	113.8	
350										
	15		D-3	28		SM	@15': Light yellowish brown silty fine to medium SAND, moist to wet, medium dense, few siltstone clasts up to 1", trace FeO staining.	22.8	101.6	
	20		D-4	75/11"		SC SP	@ 20': Upper: Light yellowish brown clayey SAND, damp, dense, few siltstone clasts up to 1". **Tertiary Capistrano Formation, Oso Member (Tco)** Lower: Light gray clean fine SANDSTONE, damp, very dense, abundant FeO staining, trace MnO staining, friable, minimal mica.	6.1	105.9	
340										
	25									

LOG OF BORING

Shea/ Aliso Viejo
Aliso Viejo, CA
PROJECT NO. 24074-01

NMG

Elevation (ft)	Depth (ft)	SAMPLES Type	SAMPLES Number	SAMPLES Blows per foot	Graphic Log	USCS	MATERIAL DESCRIPTION	Moisture Content (%)	Dry Density (pcf)	OTHER TESTS and REMARKS
	25									
	30		D-5	84/11"		SP	@ 30': Light gray clean fine SANDSTONE, dry to damp, very dense, abundant FeO staining, minimal mica, friable.	3.5	108.6	
330							Notes: Total Depth: 30.9 Feet. No Groundwater Encountered. Backfilled with Cuttings and Tamped. Upper 6" Patched with Quick-Set Concrete and Black Dye.			
	35									
	40									
320										
	45									
	50									
310										
	55									

LOG OF BORING

Shea/ Aliso Viejo
Aliso Viejo, CA

PROJECT NO. 24074-01

NMG

Report: HOLLOW STEM; Project: 24074-01.GPJ; Data Template: NMG_GINT_2016.GDT; Printed: 11/18/25

1276

NMG Geotechnical, Inc.

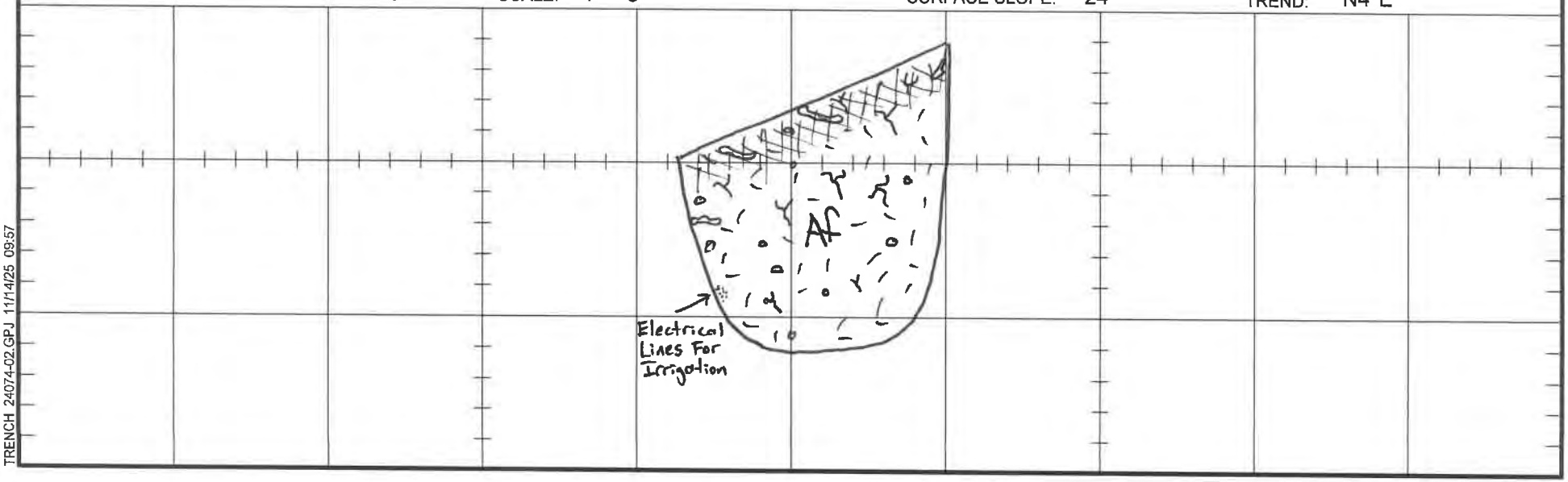
Project Name:	Shea - Aliso Viejo	Logged By:	ASC
Project Number:	24074-02	Elevation:	361
Equipment:	John Deere 310SL	Location:	Northeast of Building K

TRENCH NO.: **T-1**

DATE: 11/7/25

GEOLOGIC ATTITUDES	DESCRIPTION:	GEOLOGIC UNIT	ENGINEERING PROPERTIES: U.S.C.S.	SAMPLE NO.	MOISTURE CONTENT (%)	DRY DENSITY (pcf)
	Surface: Fill Slope **Artificial Fill (Af)** @ 0-2': Olive gray and very dark gray clayey sandy SILT, damp, stiff, abundant roots up to 1.5-inches in diameter, abundant rootlets, scattered bedrock clasts comprised of siltstone and sandstone, weathered in the upper foot.		ML			
	@ 2'-5.5': Alternating layers of yellowish brown to olive brown clayey SAND and very dark brown sandy CLAY, moist, medium dense to dense/very stiff to hard, scattered rootlets and root hairs, abundant bedrock clasts up to 2-inches in diameter.		SC/CL			
	Notes: Total Depth 5.5 Feet. Partially Backfilled with Cuttings and Tamped. Portion of Trench Left Open for Landscapers to Repair Electrical Lines for Irrigation.					

GRAPHIC REPRESENTATION: West Wall SCALE: 1" = 3' SURFACE SLOPE: 24° TREND: N4°E



LOG OF TRENCH NO: T-1

TRENCH 24074-02.GPJ 11/14/25 09:57

1277

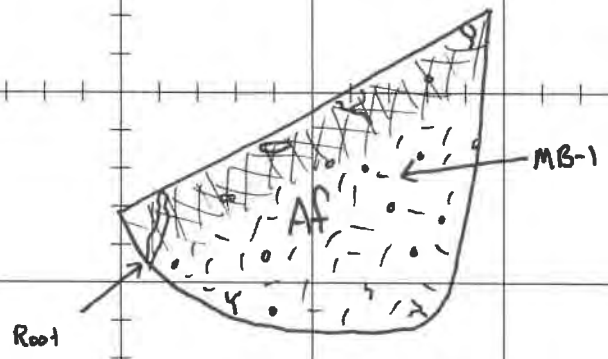
NMG Geotechnical, Inc.

Project Name:	Shea - Aliso Viejo	Logged By:	ASC
Project Number:	24074-02	Elevation:	363
Equipment:	John Deere 310SL	Location:	West of Building H

TRENCH NO.: **T-2**

GEOLOGIC ATTITUDES	DESCRIPTION:	DATE: 11/7/25	GEOLOGIC UNIT	ENGINEERING PROPERTIES: U.S.C.S.	SAMPLE NO.	MOISTURE CONTENT (%)	DRY DENSITY (pcf)
	Surface: Fill Slope **Artificial Fill (Af)** @ 0-1.5': Yellowish brown to olive brown silty fine SAND, damp, medium dense, trace roots up to 1/4-inch in diameter, abundant root hairs and rootlets, scattered bedrock clasts composed of mostly sandstone with some siltstone, highly weathered with trace			SM			
	@ 1.5'-5.5': Yellowish brown to olive brown silty SAND and grayish brown fine sandy SILT, damp to moist, medium dense/stiff, scattered rootlets and roothairs, scattered bedrock clasts.			SM/ML	MB-1		
	Notes: Total Depth 5.5 Feet. Backfilled with Cuttings and Compacted with Backhoe-Mounted Compaction Wheel.						

GRAPHIC REPRESENTATION: West Wall SCALE: 1" = 3' SURFACE SLOPE: 30° TREND: N25°W



LOG OF TRENCH NO: T-2

TRENCH 24074-02.GPJ 11/14/25 09:57

NMG Geotechnical, Inc.

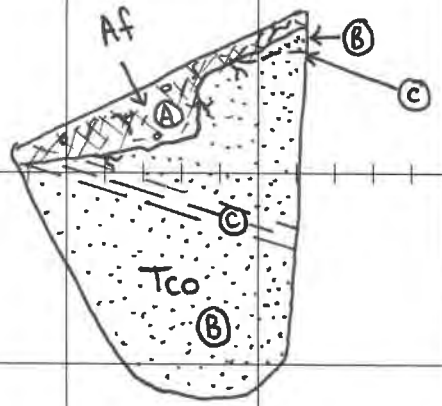
Project Name:	Shea - Aliso Viejo	Logged By:	ASC
Project Number:	24074-02	Elevation:	363
Equipment:	John Deere 310SL	Location:	West of Building D

TRENCH NO.: **T-3**

DATE: 11/7/25

GEOLOGIC ATTITUDES	DESCRIPTION:	GEOLOGIC UNIT	ENGINEERING PROPERTIES: U.S.C.S.	SAMPLE NO.	MOISTURE CONTENT (%)	DRY DENSITY (pcf)
1: Bedding- N30°W/10°NE (N Wall) 2: Bedding- N50°W/2°SW (S Wall) 3: Bedding- N20°E/19°NW	Surface: Fill Slope **Artificial Fill (Af)** **A**: Very dark brown clayey sandy SILT, dry to damp, medium stiff, abundant roots and rootlets, highly weathered.		SM			
	Capistrano Formation, Oso Member (Tco) **B**: Reddish yellow silty fine SANDSTONE, Damp to moist, abundant FeO staining, bioturbations infilled with gray fine sandstone and highlighted with FeO staining.		SM			
	C: Thinly bedded Olive gray SILTSTONE with trace fine reddish yellow SANDSTONE laminations, moist, very stiff to hard, Siltstone beds generally between 1/2- and 1-inch thick. Locally, Siltstone bed is undulatory in the upper foot.		ML			
	Notes: Total Depth 6.3 Feet. Backfilled with Cuttings and Compacted with Backhoe-Mounted Compaction Wheel.					

GRAPHIC REPRESENTATION: South Wall SCALE: 1" = 3' SURFACE SLOPE: 25° TREND: N85°E



LOG OF TRENCH NO: T-3

TRENCH 24074-02.GPJ 11/14/25 09:57

1279

NMG Geotechnical, Inc.

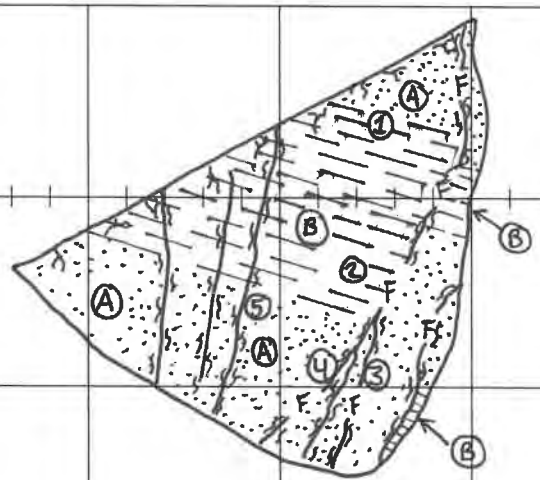
Project Name:	Shea - Aliso Viejo	Logged By:	ASC
Project Number:	24074-02	Elevation:	362
Equipment:	John Deere 310SL	Location:	West of Building C

TRENCH NO.: **T-4**

DATE: 11/7/25

GEOLOGIC ATTITUDES	DESCRIPTION:	GEOLOGIC UNIT	ENGINEERING PROPERTIES: U.S.C.S.	SAMPLE NO.	MOISTURE CONTENT (%)	DRY DENSITY (pcf)
1: Bedding- N4°E/16°NW 2: Bedding- N1°W/15°SW 3: Fault- N26°E/66°SE 4: Fault- N8°W/46°NE 5: Joint- N6°W/82°NE	Surface: Cut Slope **Capistrano Formation, Oso Member (Tco)** **A**:Pale brownish yellow silty fine SANDSTONE, damp, dense, slightly micaceous, trace FeO staining. **B**: Pale brownish gray to olive gray thinly bedded SILTSTONE, damp, very stiff to hard, trace laminations of pale gray fine SANDSTONE. **Faulting and Joints**:Steeply dipping faults and joints were observed in the excavation. The faults were generally highlighted with FeO staining and had abundant rootlets and roothairs lining the surface. SILTSTONE within the trench had an apparen		SM ML			
	Notes: Total Depth 5 Feet. Backfilled with Cuttings and Compacted with Backhoe-Mounted Compaction Wheel.					

GRAPHIC REPRESENTATION: South Wall SCALE: 1" = 2' SURFACE SLOPE: 29° TREND: N85°E



LOG OF TRENCH NO: T-4

TRENCH 24074-02.GPJ 11/14/25 12:44

APPENDIX C

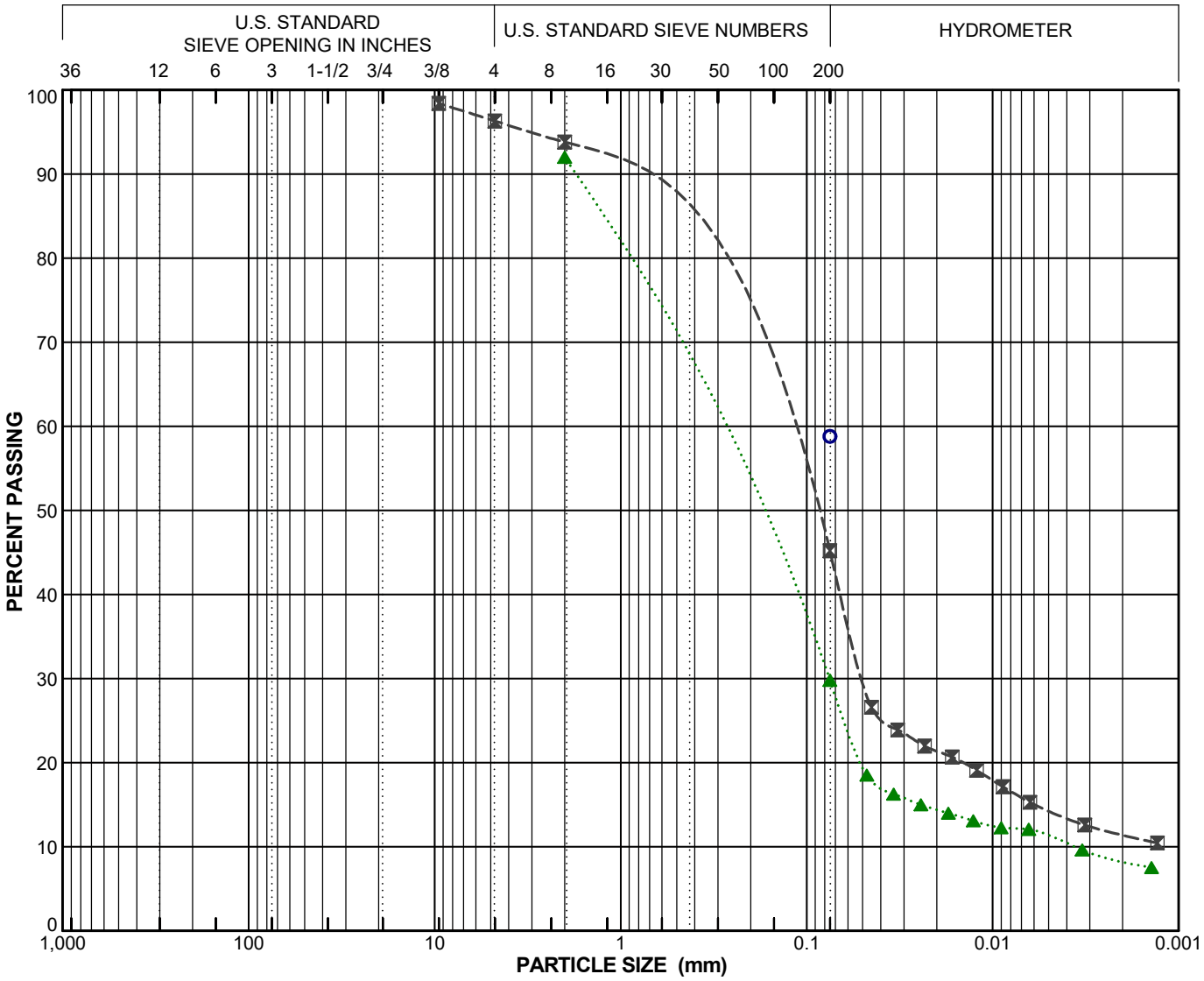
Shea/ Aliso Viejo DD
Project Number: 24074-01

APPENDIX C
SUMMARY OF SOIL LABORATORY DATA

Aliso Viejo, CA

Boring/Sample Information						Field Wet Density (pcf)	Field Dry Density (pcf)	Field Moisture Content (%)	Degree of Sat. (%)	Sieve/ Hydrometer		Atterberg Limits		USCS Group Symbol	Direct Shear				Compaction		Expansion Index	R-Value	Soluble Sulfate Content (% by wt)	Remarks
															Ultimate		Peak		Maximum Dry Density (pcf)	Optimum Moisture Content (%)				
Boring No.	Sample No.	Depth (feet)	End Depth (feet)	Elevation (feet)	Blow Count (N)					Fines Content (% pass. #200)	Clay Content (% pass. 2μ)	LL (%)	PI (%)		Cohesion (psf)	Friction Angle (°)	Cohesion (psf)	Friction Angle (°)						
H- 1	D-1	5.0		354.0	39	125.8	110.1	14.2	72.4															
H- 1	D-2	10.0		349.0	45	125.2	110.6	13.3	68.4															
H- 1	D-3	15.0		344.0	29	124.7	105.8	17.9	81.6															
H- 1	D-4	20.0		339.0	26	121.6	99.5	22.2	86.5															
H- 1	D-5	30.0		329.0	90/10"	112.9	107.6	4.9	23.2															
H- 2	D-1	5.0		347.0	34	115.0	85.4	34.6	96.1	59		41	16	CL										CN
H- 2	D-2	10.0		342.0	25	122.1	96.4	26.6	96.2															
H- 2	D-3	15.0		337.0	61	126.8	116.1	9.2	55.0															
H- 2	D-4	20.0		332.0	50	119.8	109.3	9.6	47.8															
H- 2	D-5	30.0		322.0	65	140.2	124.8	12.4	95.3															
H- 2	D-6	40.0		312.0	85/11"	134.2	120.1	11.7	78.4															
H- 2	D-7	50.0		302.0	70/11"	116.3	82.8	40.5	100.0															
H- 3	B-1	1.0	5.0	354.0																		29		CC
H- 3	D-1	2.5		352.5	18	114.7	86.4	32.9	93.3															
H- 3	D-2	5.0		350.0	68	115.0	90.1	27.7	86.0															
H- 3	D-3	10.0		345.0	56	117.5	112.7	4.2	23.1															
H- 4	D-1	5.0		349.0	53	113.1	110.8	2.1	11.1															
H- 4	D-2	10.0		344.0	38	110.7	108.2	2.3	11.2															
H- 5	B-1	1.0	5.0	359.0			102.6	26.7		45	11	32	11	SC	180	26	375	27.0	114.0	15.5	23		0.21	
H- 5	D-1	5.0		355.0	62	123.2	93.0	32.4	100.0															
H- 5	D-2	10.0		350.0	63	116.3	101.2	15.0	60.9															
H- 6	B-1	1.0	5.0	360.0						30	8	28	9	SC							6		0.05	CC
H- 6	D-1	5.0		356.0	39	129.2	109.4	18.1	90.5															
H- 6	D-2	10.0		351.0	28	128.3	113.8	12.7	71.3															
H- 6	D-3	15.0		346.0	28	124.8	101.6	22.8	93.4															
H- 6	D-4	20.0		341.0	75/11"	112.4	105.9	6.1	27.9															
H- 6	D-5	30.0		331.0	84/11"	112.4	108.6	3.5	17.2															
T-2	MB-1	3.0		360.0																				CC

BOULDERS	COBBLES	GRAVEL		SAND			SILT OR CLAY
		coarse	fine	coarse	medium	fine	

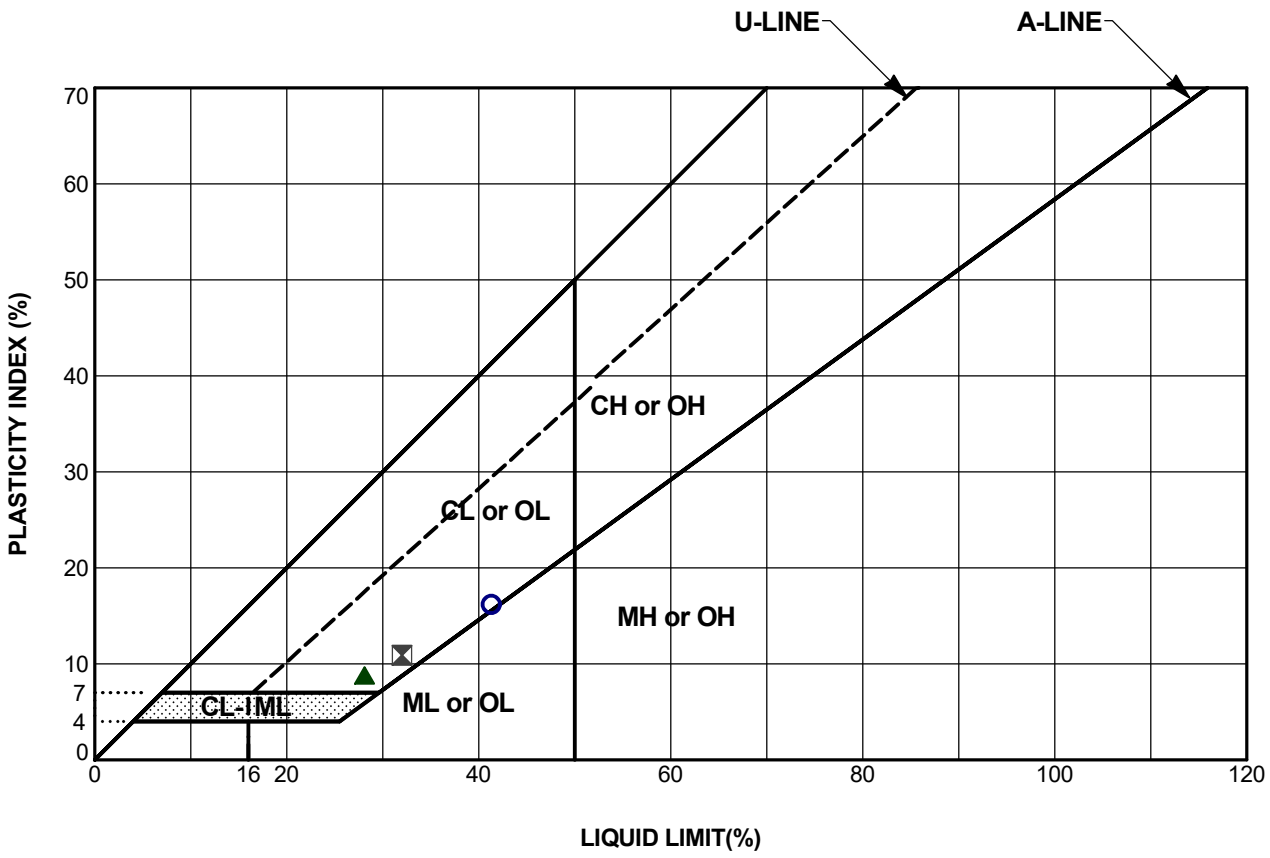


Symbol	Boring Number	Sample Number	Depth (feet)	Field Moisture (%)	LL	PI	Activity PI/-2μ	C_u	C_c	Passing No. 200 Sieve (%)	Passing 2μ (%)	USCS
○	H- 2	D-1	5.0	35	41	16				59		CL
⊠	H- 5	B-1	1.0 - 5.0		32	11	1.00			45	11	SC
▲	H- 6	B-1	1.0 - 5.0		28	9	1.13			30	8	SC

PARTICLE SIZE DISTRIBUTION

Shea/ Aliso Viejo DD
Aliso Viejo, CA
PROJECT NO. 24074-01

NMG Geotechnical, Inc.

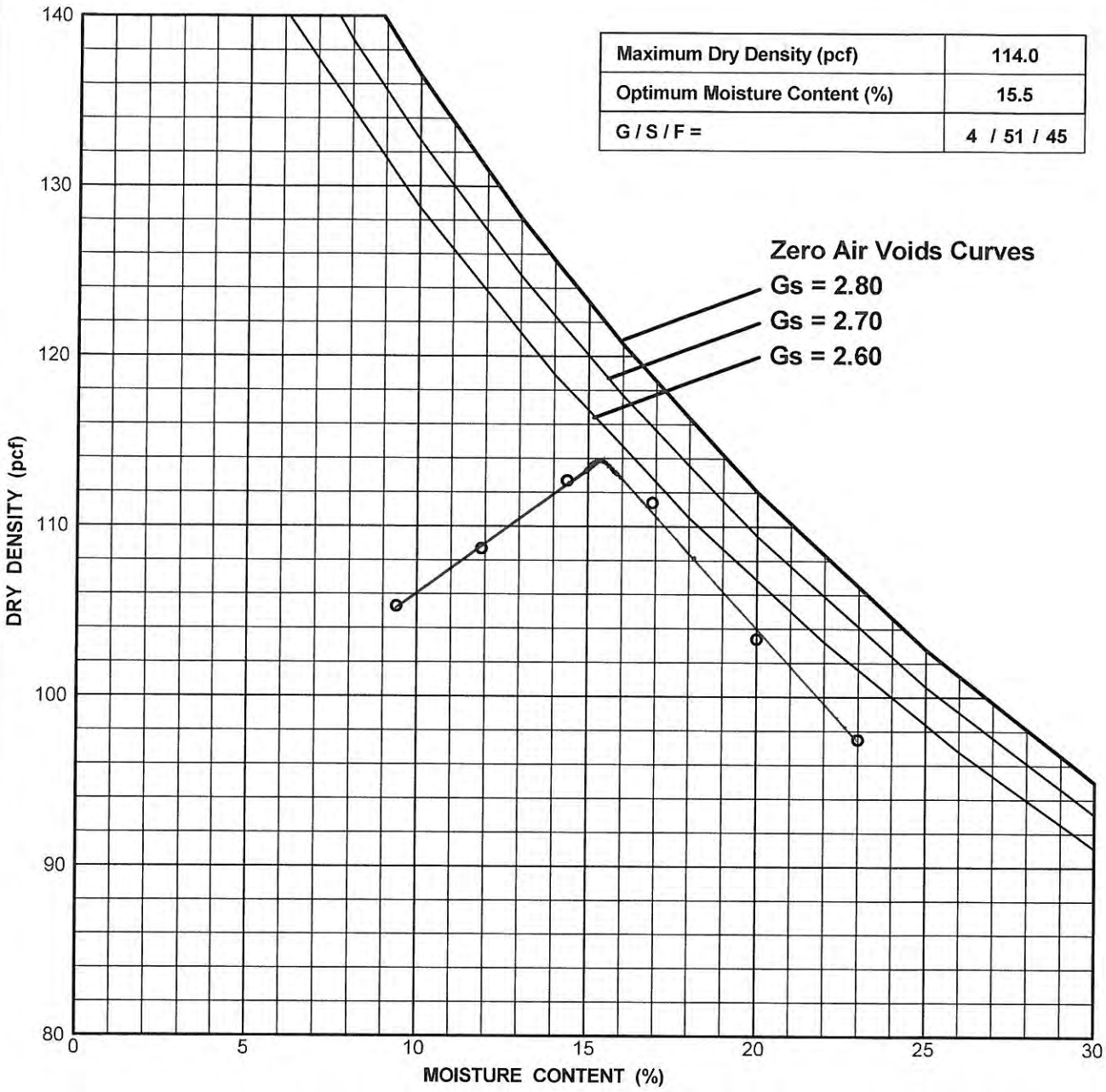


Symbol	Boring Number	Sample Number	Depth (feet)	Passing No. 200 Sieve (%)	LL	PI	USCS	Description
○	H- 2	D-1	5.0	59	41	16	CL	(Af) Pale gray sandy CLAY
⊠	H- 5	B-1	1.0 - 5.0	45	32	11	SC	(Af) Yellowish brown clayey SAND
▲	H- 6	B-1	1.0 - 5.0	30	28	9	SC	(Af) Light brown clayey SAND

PLASTICITY CHART

Shea/ Aliso Viejo DD
Aliso Viejo, CA
PROJECT NO. 24074-01

Maximum Dry Density (pcf)	114.0
Optimum Moisture Content (%)	15.5
G / S / F =	4 / 51 / 45



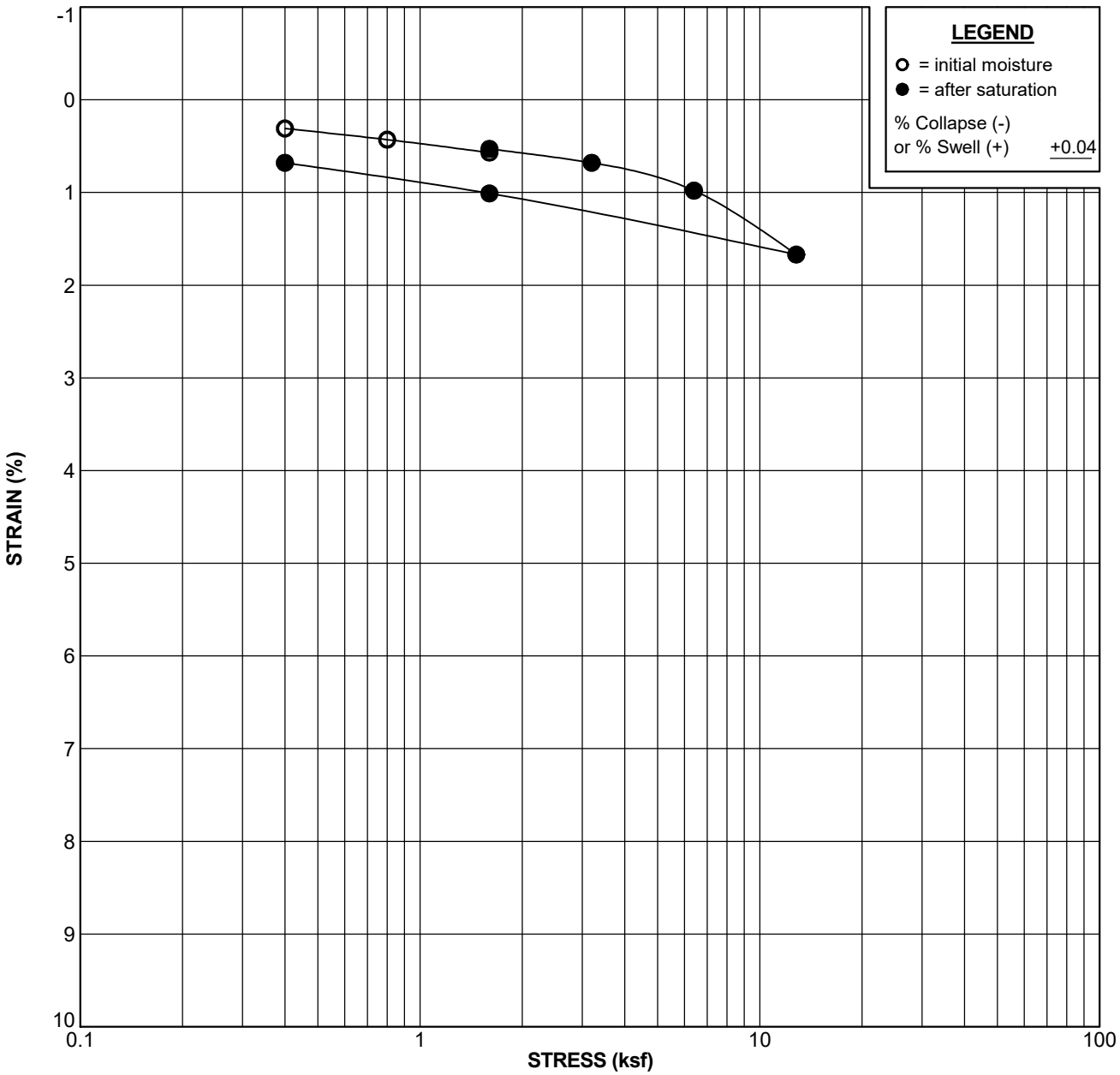
Boring No. H- 5	**Sample No. B-1**	**Depth: 1.0 - 5.0 ft**
Sample Description: (Af) Yellowish brown clayey SAND		**USCS:** SC
Liquid Limit: 32	**Plasticity Index:** 11	**Percent Passing No. 200 Sieve:** 45
Comments: 1557A		

COMPACTION TEST RESULTS

Shea Homes DD
Aliso Viejo, CA
PROJECT NO. 24074-01

NMG Geotechnical, Inc.

Template: NMCOMP_21; Prj ID: 24074-01.GPJ; Printed: 1/10/25



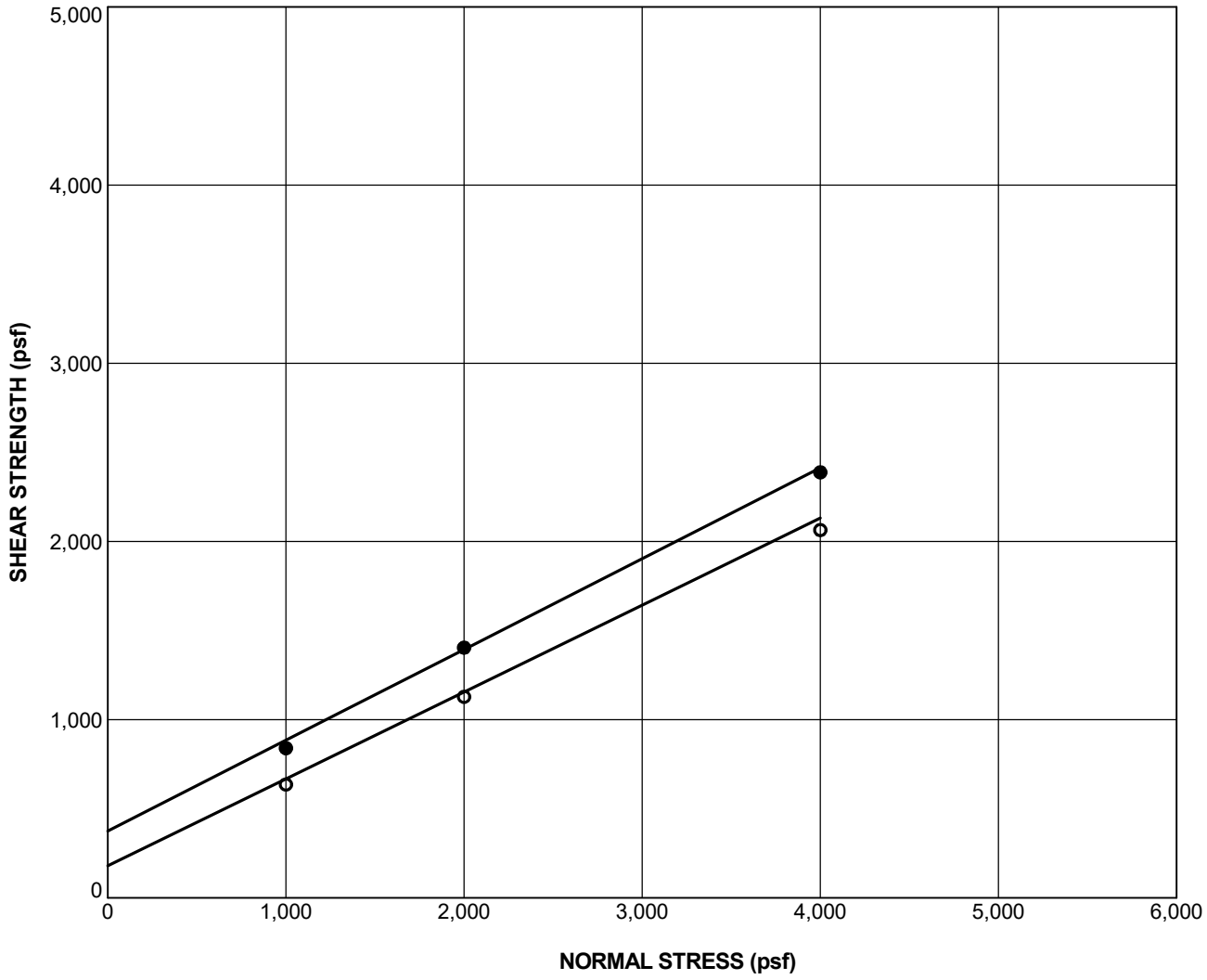
Boring No. H- 2	**Sample No. D-1**	**Depth: 5.0 ft**
Sample Description: (Af) Pale gray sandy CLAY		**USCS:** CL
Liquid Limit: 41	**Plasticity Index:** 16	**Percent Passing No. 200 Sieve:** 59

Test Stage	Moisture Content (%)	Dry Density (pcf)	Degree of Saturation (%)	Void Ratio
Initial	32.1	85.7	89.7	0.966
Final	34.8	86.3	98.7	0.952

CONSOLIDATION TEST RESULTS

Shea/ Aliso Viejo DD
Aliso Viejo, CA
PROJECT NO. 24074-01

NMG Geotechnical, Inc.



Boring No. H- 5		**Sample No. B-1**		**Depth: 1.0 - 5.0 ft**	
Sample Description: (Af) Yellowish brown clayey SAND				**USCS:** SC	
Liquid Limit:	32	**Plasticity Index:**	11	**Percent Passing No. 200 Sieve:**	45
Final Moisture Content (%):	26.7	**Final Dry Density (pcf):**	102.6	**Degree of Saturation (%):**	100
Sample Type:	Remolded @ 90%RC	**Rate of Shear (in./min.):**	0.005		

SHEAR STRENGTH PARAMETERS		
Parameter	**Peak ●**	**Ultimate ○**
Cohesion (psf)	375	180
Friction Angle (degrees)	27.0	26.0

DIRECT SHEAR TEST RESULTS

Shea/ Aliso Viejo DD
Aliso Viejo, CA
PROJECT NO. 24074-01

Sample	Compacted Moisture (%)	Compacted Dry Density (pcf)	Final Moisture (%)	Volumetric Swell (%)	Expansion Index[1] Value	Expansion Index[1] Method	Expansive Classification[2]	Soluble Sulfate (%)	Sulfate Exposure[3]
H-5 B-1 1-5'	15.0	97.0	23.7	2.07	23	B	Low	0.21	S2
H-6 B-1 1-5'	11.0	105.0	18.8	0.56	6	A	Very Low	0.05	S0

Test Method:
ASTM D4829

HACH SF-1 (Turbidimetric)

Notes:
1. Expansion Index (EI) method of determination*:*
   [A] E.I. determined by adjusting water content to achieve a 50 ±2% degree of saturation
   [B] E.I. calculated based on measured saturation within the range of 40% and 60%
2. ASTM D4829 *(Classification of Expansive Soil)*
3. ACI-318-14 Table 19.3.1.1 *(Requirement for Concrete Exposed to Sulfate-Containing Solutions)*

Expansion Index and Soluble Sulfate Test Results

(FRM001 Rev.5)

Project No. 24074-01

Project Name: Shea/ Aliso Viejo DD

NMG

Table 1 - Laboratory Tests on Soil Samples

NMG Geotechnical, Inc.
Shea/Aliso Viejo
Keegan Labs #25-0203, Your #24074-02
19-Nov-25

Sample ID			T-2, MB-1 @ 3'	H-3, B-1 @ 1-5'	H-6, B-1 @ 1-5'
Resistivity		Units			
saturated		ohm-cm	322	573	1,660
pH			7.0	7.6	7.7
Electrical Conductivity		mS/cm	2.04	0.51	0.10
Chemical Analyses (Total Salts)					
Cations					
sodium	Na^{1+}	mg/kg	1,051	459	89
ammonium	NH_4^{1+}	mg/kg	ND	ND	ND
potassium	K^{1+}	mg/kg	24	15	1.4
magnesium	Mg^{2+}	mg/kg	281	9.8	0
calcium	Ca^{2+}	mg/kg	898	31	ND
Anions					
carbonate	CO_3^{2-}	mg/kg	ND	ND	ND
bicarbonate	HCO_3^{1-}	mg/kg	21	92	43
fluoride	F^{1-}	mg/kg	5.4	5.6	7.0
chloride	Cl^{1-}	mg/kg	1,061	505	44
nitrate	NO_3^{1-}	mg/kg	7.0	15	7.1
phosphate	PO_4^{3-}	mg/kg	19	ND	ND
sulfate	SO_4^{2-}	mg/kg	5,220	437	96
Other Tests					
sulfide	S^{2-}	mg/kg	na	na	na
Redox		mV	na	na	na
% Moisture	H_2O	%	na	na	na

For test methods refer to Laboratory Test Methods attachment
Conductivity in millisiemens/cm and chemical analyses were made on a 1:5 soil-to-water extract.
mg/kg = milligrams per kilogram (parts per million) of dry soil.
ND = not detected
na = not analyzed

465 W Alvarado St., Pomona, CA 91768
Phone: 951-203-6581

APPENDIX D

Announcement
ASCE 7-22 is now available.

Latitude, Longitude: 33.5695, -117.7247

Date	11/13/2025, 2:47:14 PM
Design Code Reference Document	ASCE7-22
Risk Category	II
Site Class	Default

Type	Value	Description (Data)
S_S	1.41	The MCE_R spectral response acceleration at 0.2 seconds for Site Class BC, in units of g.
S_1	0.45	The MCE_R spectral response acceleration at 1 second for Site Class BC, in units of g.
S_{MS}	1.64	S_{MS} = 1.5 x S_{DS}, the Risk-Targeted Maximum Considered Earthquake (MCE_R) spectral response acceleration for short periods (of the two-period spectrum) and the user-specified Site Class.
S_{M1}	1.1	S_{M1} = 1.5 x S_{D1}, the MCE_R spectral response acceleration for 1 second (of the two-period spectrum) and the user-specified Site Class.
S_{DS}	1.09	The design spectral response acceleration for short periods (of the two-period spectrum) and the user-specified Site Class, in units of g.
S_{D1}	0.73	The design spectral response acceleration for 1 second (of the two-period spectrum) and the user-specified Site Class, in units of g

Type	Value	Description (Data Contd.)
SDC	D	Seismic design category
PGA_M	0.64	PGA_M, the Geometric-Mean Maximum Considered Earthquake (MCE_G) peak ground acceleration for the user-specified Site Class, in units of g
T_S	0.672	T_S = S_{D1}/S_{DS}, in seconds, for construction of the two-period design spectrum
T_0	0.134	T_0 = 0.2 x T_S, in seconds, for construction of the two-period design response spectrum
T_L	8	T_L, the long-period transition period, in seconds, for construction of the two-period design response spectrum

Type	Value	Description (Underlying Data and Metadata)
PGA_{uh}	See underlying data for Site Classes C, CD, and D	Probabilistic uniform-hazard (2%-in-50-years), geometric-mean peak ground acceleration, in units of g.
PGA_{84th}	See underlying data for Site Classes C, CD, and D	Deterministic 84th-percentile, geometric-mean peak ground acceleration (without deterministic lower limit), in units of g.
V_{S30}	260	The shear-wave velocity used for the user-specified Site Class, in units of m/s
Spatial Interpolation Method	linearloglinear	Identifier for spatial interpolation method used to obtain values for location of interest from underlying gridded values: "linearloglinear" for bilinear of natural logarithm of values.
PGA_{dFloor}		Deterministic lower limit peak ground acceleration (PGA_G) for the user-specified Site Class, in units of g.
riskTargetedSpectrum		Probabilistic risk-targeted, maximum direction response spectrum (for 1%-in-50-years collapse risk)
eightyFourthSpectrum		Deterministic 84th-percentile, maximum-direction response spectrum (without deterministic lower limit)

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Multi Period

Period T(s)	Design Spectrum Ordinates (g)	MCE_R Spectrum Ordinates (g)
0	0.48	0.72
0.01	0.48	0.72
0.02	0.48	0.73
0.03	0.51	0.76
0.05	0.62	0.93
0.075	0.8	1.2
0.1	0.93	1.4
0.15	1.07	1.61
0.2	1.15	1.73
0.25	1.18	1.77
0.3	1.21	1.82
0.4	1.19	1.78
0.5	1.13	1.69
0.75	0.9	1.35
1	0.73	1.1
1.5	0.51	0.77
2	0.38	0.57
3	0.24	0.36
4	0.17	0.25
5	0.13	0.19
7.5	0.077	0.12
10	0.052	0.079

Click to copy

Two Period

Period T(s)	Design Spectrum Ordinates (g)	MCE_R Spectrum Ordinates (g)
0	0.44	0.66
0.025	0.56	0.84
0.05	0.68	1.02
0.1	0.93	1.39
0.13	1.09	1.64
0.15	1.09	1.64
0.2	1.09	1.64
0.25	1.09	1.64
0.3	1.09	1.64
0.35	1.09	1.64
0.4	1.09	1.64
0.45	1.09	1.64
0.5	1.09	1.64
0.55	1.09	1.64
0.6	1.09	1.64
0.65	1.09	1.64
0.67	1.09	1.64
0.7	1.05	1.57
0.75	0.98	1.47
0.8	0.92	1.38
0.85	0.86	1.3
0.9	0.82	1.22
0.95	0.77	1.16

Period T(s)	Design Spectrum Ordinates (g)	MCE_R Spectrum Ordinates (g)
1	0.73	1.1
1.05	0.7	1.05
1.1	0.67	1
1.15	0.64	0.96
1.2	0.61	0.92
1.25	0.59	0.88
1.3	0.56	0.85
1.35	0.54	0.82
1.4	0.52	0.79
1.45	0.51	0.76
1.5	0.49	0.73
1.55	0.47	0.71
1.6	0.46	0.69
1.65	0.44	0.67
1.7	0.43	0.65
1.75	0.42	0.63
1.8	0.41	0.61
1.85	0.4	0.6
1.9	0.39	0.58
1.95	0.38	0.56
2	0.37	0.55
2.05	0.36	0.54
2.1	0.35	0.52
2.15	0.34	0.51
2.2	0.33	0.5
2.25	0.33	0.49
2.3	0.32	0.48
2.35	0.31	0.47
2.4	0.31	0.46
2.45	0.3	0.45
2.5	0.29	0.44
2.55	0.29	0.43
2.6	0.28	0.42
2.65	0.28	0.42
2.7	0.27	0.41
2.75	0.27	0.4
2.8	0.26	0.39
2.85	0.26	0.39
2.9	0.25	0.38
2.95	0.25	0.37
3	0.24	0.37
3.05	0.24	0.36
3.1	0.24	0.36
3.15	0.23	0.35
3.2	0.23	0.34
3.25	0.23	0.34
3.3	0.22	0.33
3.35	0.22	0.33
3.4	0.22	0.32
3.45	0.21	0.32

Period T(s)	Design Spectrum Ordinates (g)	MCE_R Spectrum Ordinates (g)
3.5	0.21	0.31
3.55	0.21	0.31
3.6	0.2	0.31
3.65	0.2	0.3
3.7	0.2	0.3
3.75	0.2	0.29
3.8	0.19	0.29
3.85	0.19	0.29
3.9	0.19	0.28
3.95	0.19	0.28
4	0.18	0.28
4.05	0.18	0.27
4.1	0.18	0.27
4.15	0.18	0.27
4.2	0.17	0.26
4.25	0.17	0.26
4.3	0.17	0.26
4.35	0.17	0.25
4.4	0.17	0.25
4.45	0.16	0.25
4.5	0.16	0.24
4.55	0.16	0.24
4.6	0.16	0.24
4.65	0.16	0.24
4.7	0.16	0.23
4.75	0.15	0.23
4.8	0.15	0.23
4.85	0.15	0.23
4.9	0.15	0.22
4.95	0.15	0.22
5	0.15	0.22
5.05	0.15	0.22
5.1	0.14	0.22
5.15	0.14	0.21
5.2	0.14	0.21
5.25	0.14	0.21
5.3	0.14	0.21
5.35	0.14	0.21
5.4	0.14	0.2
5.45	0.13	0.2
5.5	0.13	0.2
5.55	0.13	0.2
5.6	0.13	0.2
5.65	0.13	0.19
5.7	0.13	0.19
5.75	0.13	0.19
5.8	0.13	0.19
5.85	0.13	0.19
5.9	0.12	0.19
5.95	0.12	0.19

Period T(s)	Design Spectrum Ordinates (g)	MCE_R Spectrum Ordinates (g)
6	0.12	0.18
6.05	0.12	0.18
6.1	0.12	0.18
6.15	0.12	0.18
6.2	0.12	0.18
6.25	0.12	0.18
6.3	0.12	0.17
6.35	0.12	0.17
6.4	0.11	0.17
6.45	0.11	0.17
6.5	0.11	0.17
6.55	0.11	0.17
6.6	0.11	0.17
6.65	0.11	0.17
6.7	0.11	0.16
6.75	0.11	0.16
6.8	0.11	0.16
6.85	0.11	0.16
6.9	0.11	0.16
6.95	0.11	0.16
7	0.1	0.16
7.05	0.1	0.16
7.1	0.1	0.16
7.15	0.1	0.15
7.2	0.1	0.15
7.25	0.1	0.15
7.3	0.1	0.15
7.35	0.1	0.15
7.4	0.099	0.15
7.45	0.099	0.15
7.5	0.098	0.15
7.55	0.097	0.15
7.6	0.097	0.14
7.65	0.096	0.14
7.7	0.095	0.14
7.75	0.095	0.14
7.8	0.094	0.14
7.85	0.094	0.14
7.9	0.093	0.14
7.95	0.092	0.14
8	0.092	0.14
8.05	0.091	0.14
8.1	0.09	0.13
8.15	0.088	0.13
8.2	0.087	0.13
8.25	0.086	0.13
8.3	0.085	0.13
8.35	0.084	0.13
8.4	0.083	0.12
8.45	0.082	0.12

Period T(s)	Design Spectrum Ordinates (g)	MCE_R Spectrum Ordinates (g)
8.5	0.081	0.12
8.55	0.08	0.12
8.6	0.079	0.12
8.65	0.078	0.12
8.7	0.078	0.12
8.75	0.077	0.12
8.8	0.076	0.11
8.85	0.075	0.11
8.9	0.074	0.11
8.95	0.073	0.11
9	0.073	0.11

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Probabilistic & Deterministic

Period T(s)	Risk Targeted Spectrum Ordinates (g)	84th Spectrum Ordinates(g)

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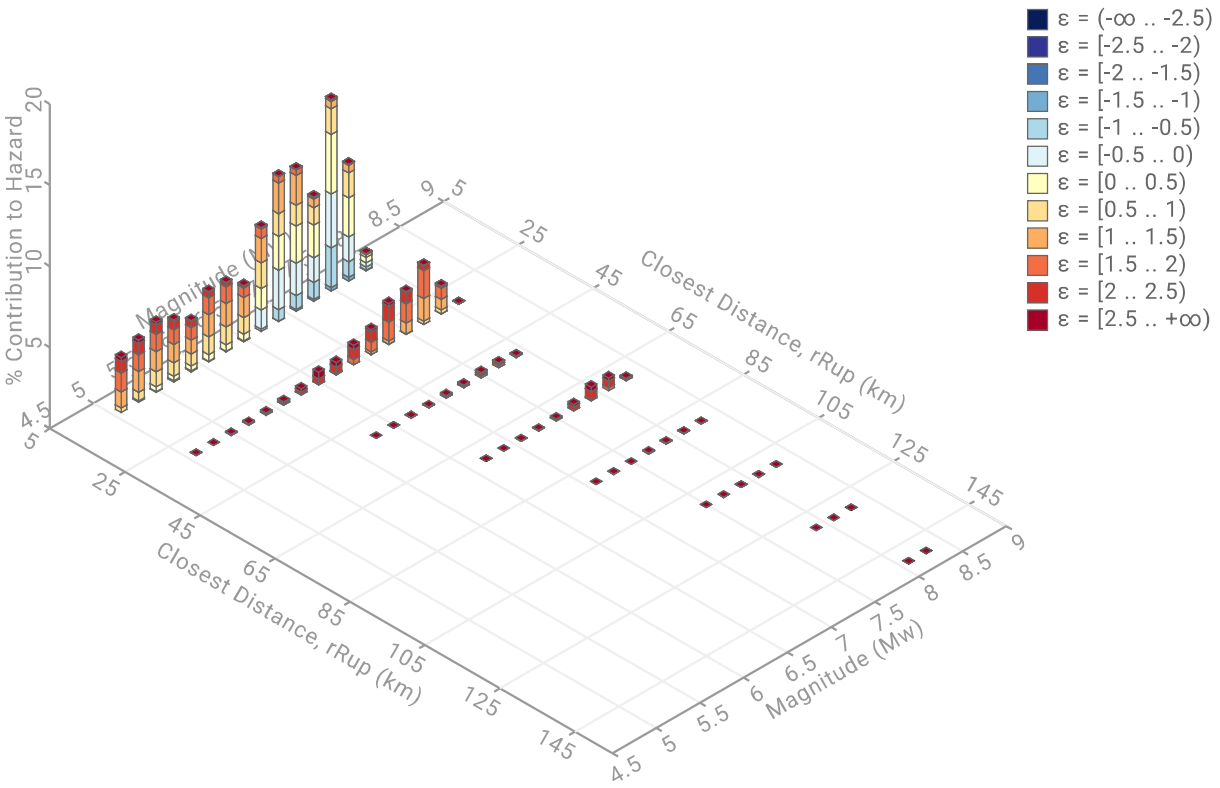
Disaggregation Report

Disaggregation



Geographical Disaggregation

Parameter Summary

Model: NSHM Conterminous U.S. 2023

Latitude: 33.5695 °

Longitude: -117.7247 °

Site Class: CD (Vs30 365)

Intensity Measure Type: PGA

Return Period: 2475 (2% in 50)

Component: Total

Disaggregation Summary: Total

Disaggregation targets

Return period : 2475 yrs

Exceedance rate : 4.040e-4 yr^{-1}

PGA ground motion : 6.223e-1 g

Recovered targets

Return period : 2456.129 yrs

Exceedance rate : 4.071e-4 yr^{-1}

Totals

Binned : 100 %

Residual : 0 %

Trace : 0.12 %

Mean (over all sources)

m : 6.83

r : 13.31 km

ε_0 : 0.91 σ

Mode (largest m-r bin)

m : 7.47

r : 5.35 km

ε_0 : 0.01 σ

Contribution : 11.79 %

Mode (largest m-r-ε_0 bin)

m : 7.47

r : 5.2 km

ε_0 : 0.17 σ

Contribution : 3.68 %

Discretization

r : min = 0.0, max = 1000.0, Δ = 20.0 km

m : min = 4.4, max = 9.4, Δ = 0.2

ε : min = -3.0, max = 3.0, Δ = 0.5 σ

Epsilon keys

ε0 : [-∞ .. -2.5)

ε1 : [-2.5 .. -2.0)

ε2 : [-2.0 .. -1.5)

ε3 : [-1.5 .. -1.0)

ε4 : [-1.0 .. -0.5)

ε5 : [-0.5 .. 0.0)

ε6 : [0.0 .. 0.5)

ε7 : [0.5 .. 1.0)

ε8 : [1.0 .. 1.5)

ε9 : [1.5 .. 2.0)

ε10 : [2.0 .. 2.5)

ε11 : [2.5 .. +∞]

Disaggregation Contributions: Total

Source Set ↳ Source	Type	r	m	ε_0	lon	lat	az	%
WUS Branch Average	FaultSystem							65.36
San Joaquin Hills (2)		4.08	7.27	-0.13	117.699°W	33.588°N	48.73	28.36
Newport - Inglewood (offshore) (3)		9.75	7.17	0.86	117.798°W	33.507°N	224.61	11.29
Elsinore (Glen Ivy) (1)		30.87	7.32	1.97	117.495°W	33.770°N	43.52	2.99
Chino (3)		29.55	7.43	1.70	117.571°W	33.821°N	26.88	2.94
Compton (0)		33.54	7.60	1.60	118.043°W	33.703°N	296.72	2.58
Lausuen Knoll (2)		11.17	7.27	0.47	117.896°W	33.421°N	223.96	2.42
San Joaquin Hills (1)		7.40	7.29	0.35	117.758°W	33.632°N	336.30	2.3
Palos Verdes (3)		33.58	7.30	2.06	118.019°W	33.394°N	234.54	1.94
Newport - Inglewood (offshore) (1)		11.11	6.92	1.16	117.837°W	33.535°N	249.95	1.79
Elsinore (stepover) (0)		35.07	7.35	2.07	117.373°W	33.685°N	68.36	1.01
WUS Branch Average (opt)	Grid							34.64
PointSourceFinite: -117.725, 33.628		7.44	5.76	1.17	117.725°W	33.628°N	0.00	1.4
PointSourceFinite: -117.725, 33.610		6.24	5.70	1.01	117.725°W	33.610°N	0.00	1.39
PointSourceFinite: -117.725, 33.637		8.04	5.80	1.24	117.725°W	33.637°N	0.00	1.29
PointSourceFinite: -117.725, 33.619		6.82	5.73	1.09	117.725°W	33.619°N	0.00	1.26
PointSourceFinite: -117.725, 33.610		7.20	5.71	1.05	117.725°W	33.610°N	0.00	1.23
PointSourceFinite: -117.725, 33.646		8.68	5.84	1.31	117.725°W	33.646°N	0.00	1.22
PointSourceFinite: -117.725, 33.628		8.49	5.77	1.22	117.725°W	33.628°N	0.00	1.21
PointSourceFinite: -117.725, 33.601		5.74	5.67	0.93	117.725°W	33.601°N	0.00	1.19
PointSourceFinite: -117.725, 33.583		4.88	5.68	0.77	117.725°W	33.583°N	0.00	1.17
PointSourceFinite: -117.725, 33.637		9.15	5.81	1.28	117.725°W	33.637°N	0.00	1.11
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PointSourceFinite: -117.725, 33.619		7.83	5.74	1.14	117.725°W	33.619°N	0.00	1.1
PointSourceFinite: -117.725, 33.655		9.29	5.90	1.36	117.725°W	33.655°N	0.00	1.07
PointSourceFinite: -117.725, 33.601		6.60	5.68	0.97	117.725°W	33.601°N	0.00	1.07
PointSourceFinite: -117.725, 33.646		9.82	5.85	1.35	117.725°W	33.646°N	0.00	1.06

Application Metadata

Application: Disaggregation
URL: https://earthquake.usgs.gov/nshmp/hazard/disagg

Repository: nshmp-apps
Version: 20.8.0
URL: https://code.usgs.gov/ghsc/nshmp/nshmp-apps

Repository : nshmp-haz
Version: 2.7.0
URL: https://code.usgs.gov/ghsc/nshmp/nshmp-haz

Repository : nshmp-lib
Version: 1.7.15
URL: https://code.usgs.gov/ghsc/nshmp/nshmp-lib

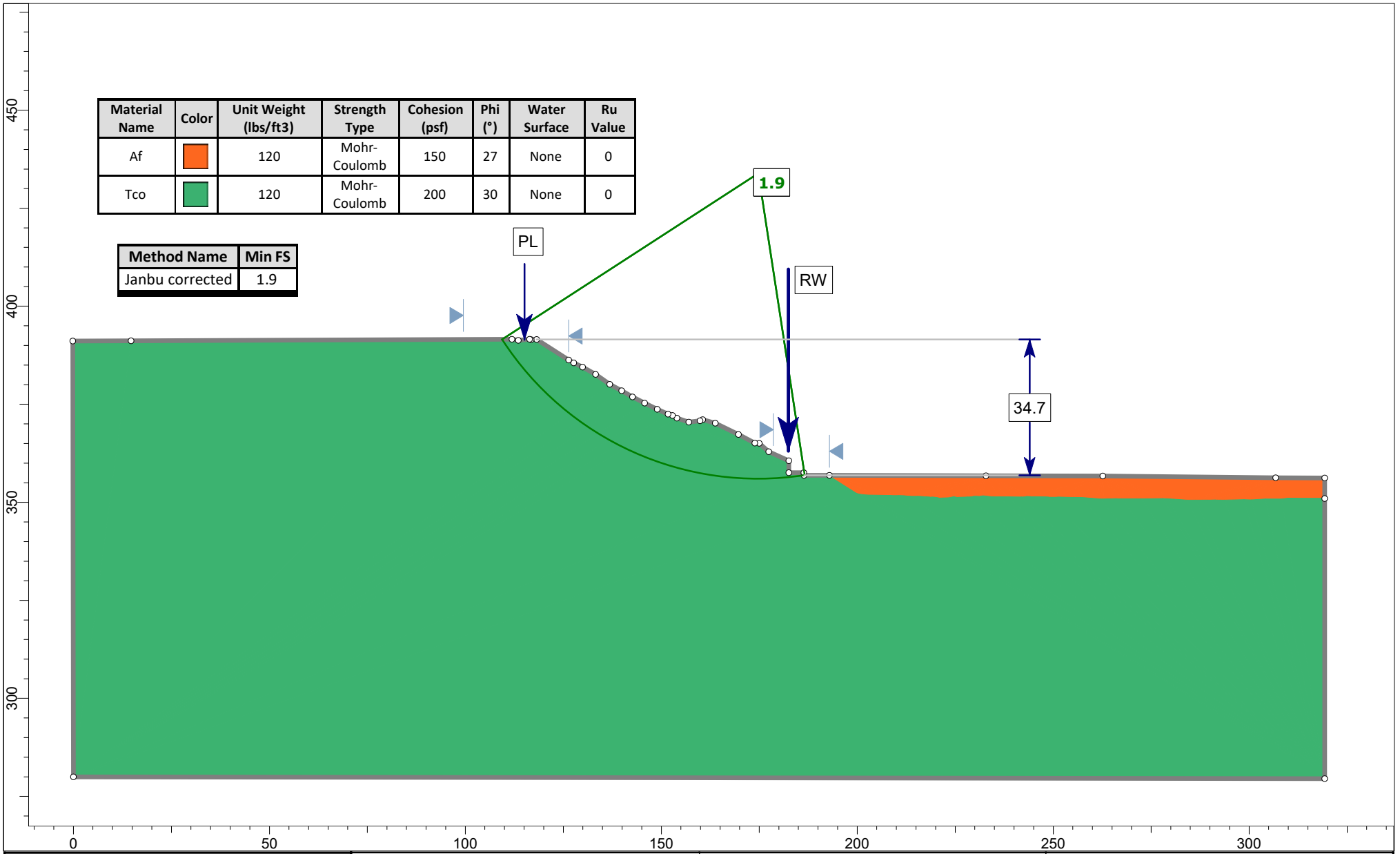
Repository : nshm-conus
Version: 6.1.1
URL: https://code.usgs.gov/ghsc/nshmp/nshms/nshm-conus

November 13, 2025, 02:41 PM

APPENDIX E

Material Name	Color	Unit Weight (lbs/ft3)	Strength Type	Cohesion (psf)	Phi (°)	Water Surface	Ru Value
Af		120	Mohr-Coulomb	150	27	None	0
Tco		120	Mohr-Coulomb	200	30	None	0

Method Name	Min FS
Janbu corrected	1.9



NMG Geotechnical, Inc.

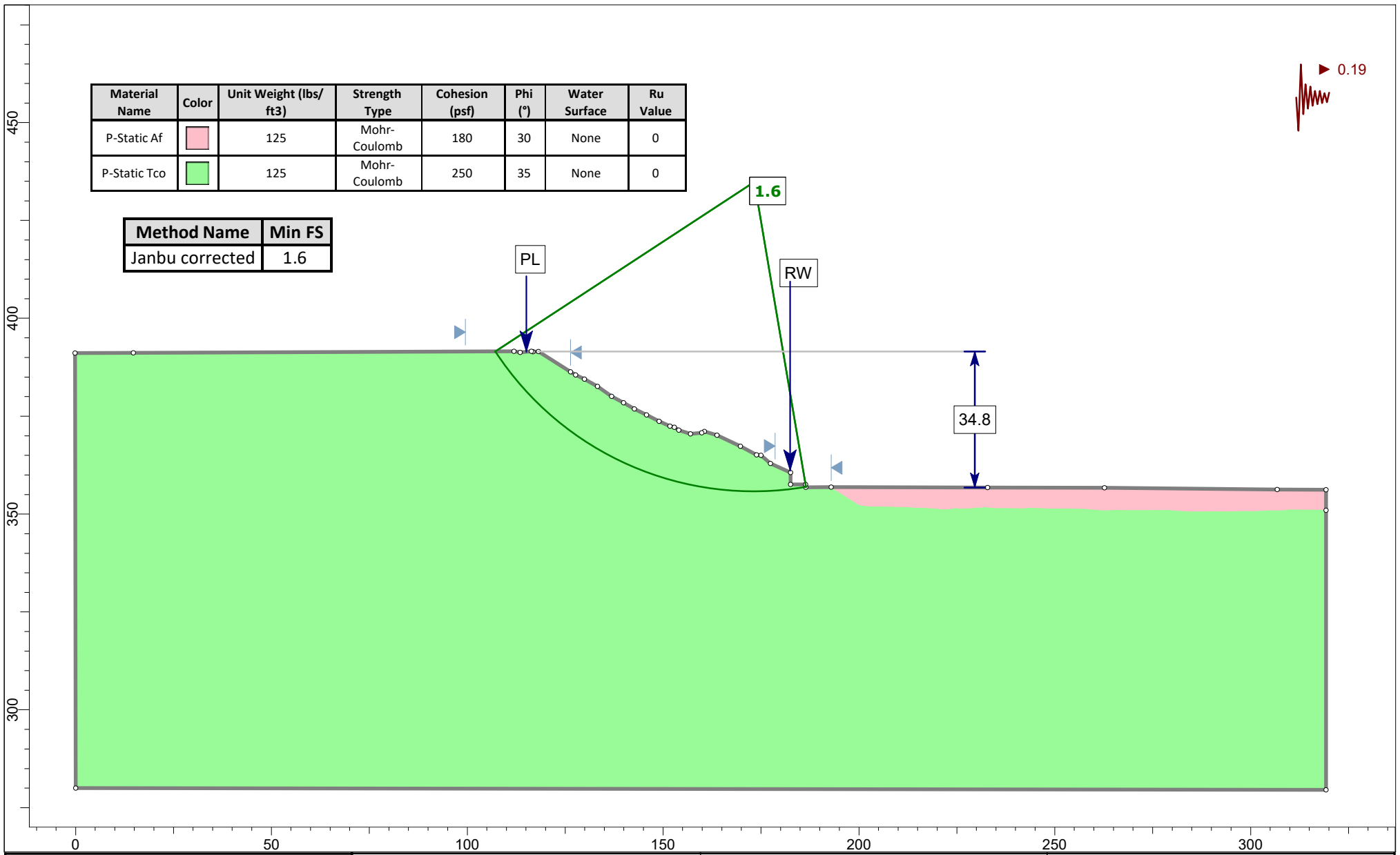
NTERPRET 9.038

Project Shea/Aliso Viejo	Project Number 24074-02	Cross Section Cross Section A-A', West Side
Analysis Static, Slope H=35', RW at Toe		*Analysis By* FEO/KGM
Date 11/25/2025		*File Path & Name* P:\2024\24074-02 Shea Aliso Viejo\Slide2\A-A" Design Slope.slmd

1303

Material Name	Color	Unit Weight (lbs/ ft3)	Strength Type	Cohesion (psf)	Phi (°)	Water Surface	Ru Value
P-Static Af		125	Mohr-Coulomb	180	30	None	0
P-Static Tco		125	Mohr-Coulomb	250	35	None	0

Method Name	Min FS
Janbu corrected	1.6



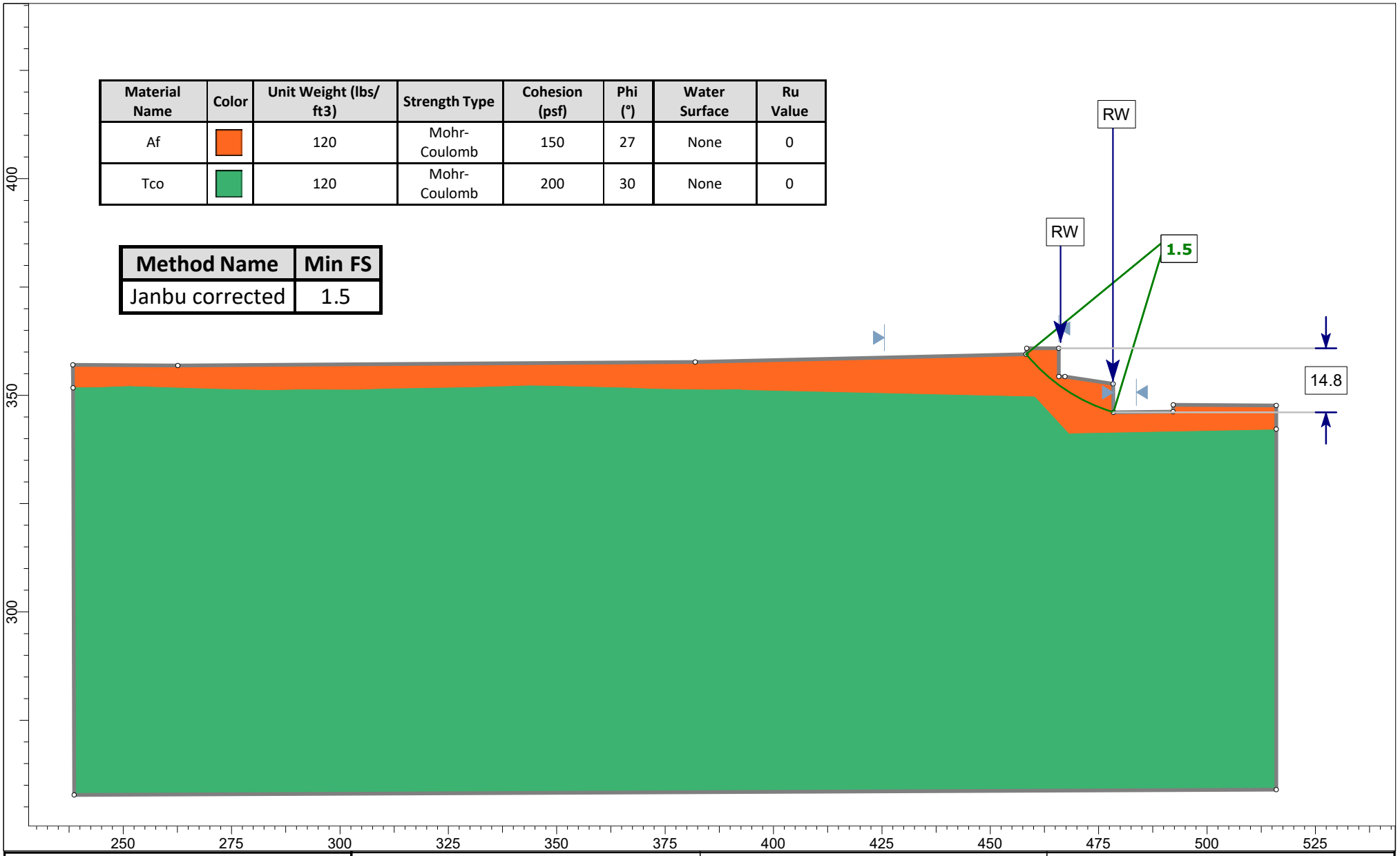
NMG Geotechnical, Inc.

NTERPRET 9.038

Project Shea/Aliso Viejo	Project Number 24074-02	Cross Section Cross Section A-A', West Side
Analysis P-Static, Slope H=35', RW at Toe		*Analysis By* FEO/KGM
Date 11/25/2025		*File Path & Name* P:\2024\24074-02 Shea Aliso Viejo\Slide2\A-A" Design Slope.slmd

Material Name	Color	Unit Weight (lbs/ ft3)	Strength Type	Cohesion (psf)	Phi (°)	Water Surface	Ru Value
Af		120	Mohr-Coulomb	150	27	None	0
Tco		120	Mohr-Coulomb	200	30	None	0

Method Name	Min FS
Janbu corrected	1.5



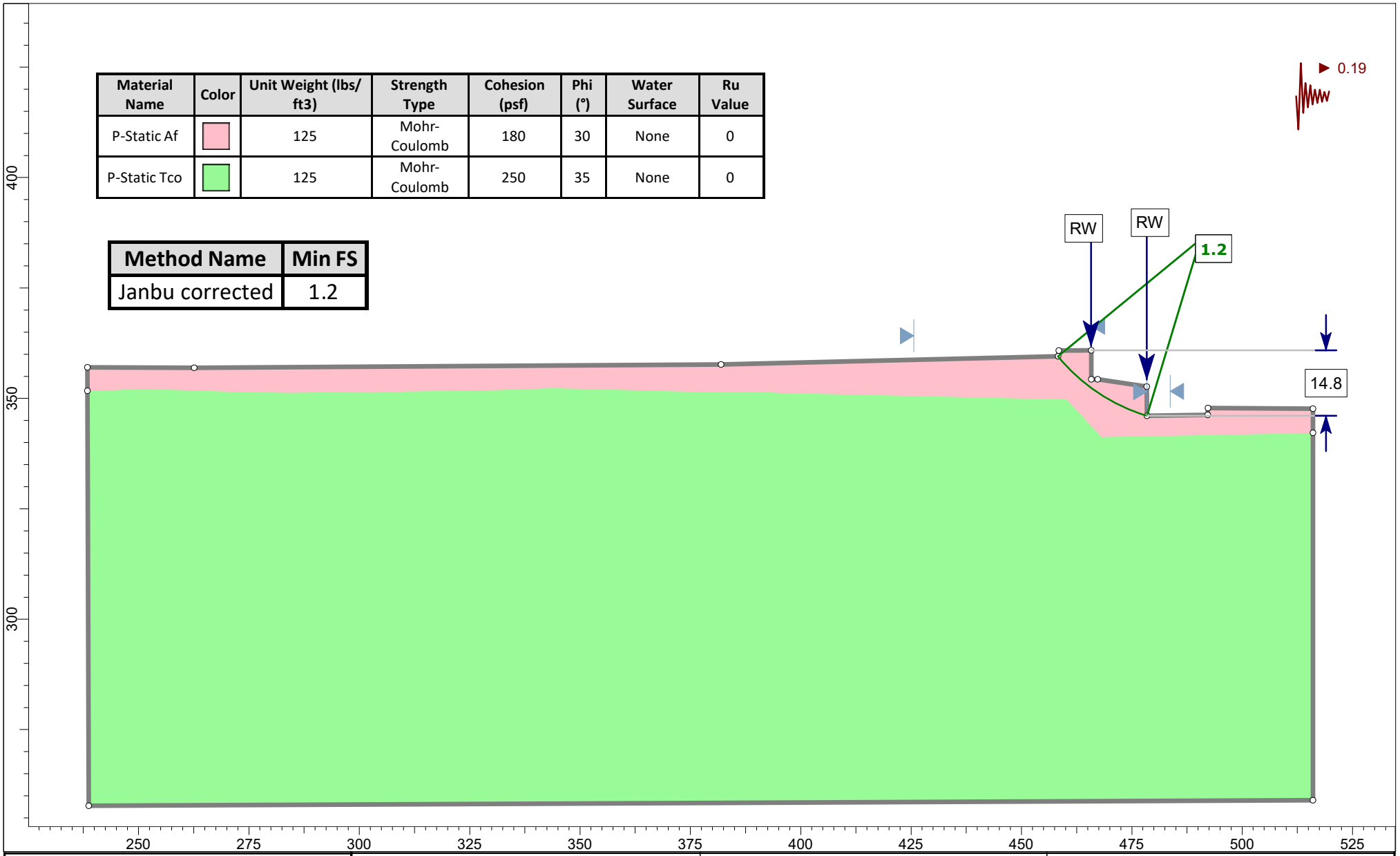
NMG Geotechnical, Inc.

NTERPRET 9.038

Project Shea/Aliso Viejo	Project Number 24074-02	Cross Section Cross Section A-A' East Side
Analysis Static, Slope H=15', RW Top of Slope		*Analysis By* FEO/KGM
Date 11/25/2025		*File Path & Name* P:\2024\24074-02 Shea Aliso Viejo\Slide2\A-A" East Side - Design Slope.slmd

Material Name	Color	Unit Weight (lbs/ ft3)	Strength Type	Cohesion (psf)	Phi (°)	Water Surface	Ru Value
P-Static Af		125	Mohr-Coulomb	180	30	None	0
P-Static Tco		125	Mohr-Coulomb	250	35	None	0

Method Name	Min FS
Janbu corrected	1.2



NMG Geotechnical, Inc.

Project Shea/Aliso Viejo	Project Number 24074-02	Cross Section Cross Section A-A' East Side
Analysis P-Static, Slope H=15', RW Top of Slope		*Analysis By* FEO/KGM
Date 11/25/2025		*File Path & Name* P:\2024\24074-02 Shea Aliso Viejo\Slide2\A-A" East Side - Design Slope.slmd

NTERPRET 9.038

1306

APPENDIX F

APPENDIX F

GENERAL EARTHWORK AND GRADING SPECIFICATIONS

1.0 General

1.1 Intent: These General Earthwork and Grading Specifications are for the grading and earthwork shown on the approved grading plan(s) and/or indicated in the geotechnical report(s). These Specifications are a part of the recommendations contained in the geotechnical report(s). In case of conflict, the specific recommendations in the geotechnical report shall supersede these more general Specifications. Observations of the earthwork by the project Geotechnical Consultant during the course of grading may result in new or revised recommendations that could supersede these specifications or the recommendations in the geotechnical report(s).

1.2 Geotechnical Consultant: Prior to commencement of work, the owner shall employ a geotechnical consultant. The geotechnical consultant shall be responsible for reviewing the approved geotechnical report(s) and accepting the adequacy of the preliminary geotechnical findings, conclusions, and recommendations prior to the commencement of the grading.

Prior to commencement of grading, the Geotechnical Consultant shall review the "work plan" prepared by the Earthwork Contractor (Contractor) and schedule sufficient personnel to perform the appropriate level of observation, mapping, and compaction testing.

During the grading and earthwork operations, the Geotechnical Consultant shall observe, map, and document the subsurface exposures to verify the geotechnical design assumptions. If the observed conditions are found to be significantly different than the interpreted assumptions during the design phase, the Geotechnical Consultant shall inform the owner, recommend appropriate changes in design to accommodate the observed conditions, and notify the review agency where required. Subsurface areas to be geotechnically observed, mapped, elevations recorded, and/or tested include natural ground after it has been cleared for receiving fill but before fill is placed, bottoms of all "remedial removal" areas, all key bottoms, and benches made on sloping ground to receive fill.

The Geotechnical Consultant shall observe the moisture-conditioning and processing of the subgrade and fill materials and perform relative compaction testing of fill to determine the attained level of compaction. The Geotechnical Consultant shall provide the test results to the owner and the Contractor on a routine and frequent basis.

1.3 The Earthwork Contractor: The Earthwork Contractor (Contractor) shall be qualified, experienced, and knowledgeable in earthwork logistics, preparation and processing of ground to receive fill, moisture-conditioning and processing of fill, and compacting fill. The Contractor shall review and accept the plans, geotechnical report(s), and these Specifications prior to commencement of grading. The Contractor shall be solely responsible for performing the grading in accordance with the plans and specifications.

The Contractor shall prepare and submit to the owner and the Geotechnical Consultant a work plan that indicates the sequence of earthwork grading, the number of "spreads" of work and the estimated quantities of daily earthwork contemplated for the site prior to commencement of grading. The Contractor shall inform the owner and the Geotechnical Consultant of changes in work schedules and updates to the work plan at least 24 hours in advance of such changes so that appropriate observations and tests can be planned and accomplished. The Contractor shall not assume that the Geotechnical Consultant is aware of all grading operations.

The Contractor shall have the sole responsibility to provide adequate equipment and methods to accomplish the earthwork in accordance with the applicable grading codes and agency ordinances, these Specifications, and the recommendations in the approved geotechnical report(s) and grading plan(s). If, in the opinion of the Geotechnical Consultant, unsatisfactory conditions, such as unsuitable soil, improper moisture condition, inadequate compaction, insufficient buttress key size, adverse weather, etc., are resulting in a quality of work less than required in these specifications, the Geotechnical Consultant shall reject the work and may recommend to the owner that construction be stopped until the conditions are rectified.

2.0 Preparation of Areas to be Filled

2.1 Clearing and Grubbing: Vegetation, such as brush, grass, roots, and other deleterious material shall be sufficiently removed and properly disposed of in a method acceptable to the owner, governing agencies, and the Geotechnical Consultant.

The Geotechnical Consultant shall evaluate the extent of these removals depending on specific site conditions. Earth fill material shall not contain more than 1 percent of organic materials (by volume). No fill lift shall contain more than 5 percent of organic matter. Nesting of the organic materials shall not be allowed.

If potentially hazardous materials are encountered, the Contractor shall stop work in the affected area, and a hazardous material specialist shall be informed immediately for proper evaluation and handling of these materials prior to continuing to work in that area.

As presently defined by the State of California, most refined petroleum products (gasoline, diesel fuel, motor oil, grease, coolant, etc.) have chemical constituents that are considered to be hazardous waste. As such, the indiscriminate dumping or spillage of these fluids onto the ground may constitute a misdemeanor, punishable by fines and/or imprisonment, and shall not be allowed.

2.2 Processing: Existing ground that has been declared satisfactory for support of fill by the Geotechnical Consultant shall be scarified to a minimum depth of 6 inches. Existing ground that is not satisfactory shall be overexcavated as specified in the following section. Scarification shall continue until soils are broken down and free of large clay lumps or clods and the working surface is reasonably uniform, flat, and free of uneven features that would inhibit uniform compaction.

2.3 Overexcavation: In addition to removals and overexcavations recommended in the approved geotechnical report(s) and the grading plan, soft, loose, dry, saturated, spongy, organic-rich, highly fractured or otherwise unsuitable ground shall be overexcavated to competent ground as evaluated by the Geotechnical Consultant during grading.

2.4 Benching: Where fills are to be placed on ground with slopes steeper than 5:1 (horizontal to vertical units), the ground shall be stepped or benched. Please see the Standard Details for a graphic illustration. The lowest bench or key shall be a minimum of 15 feet wide and at least 2 feet deep, into competent material as evaluated by the Geotechnical Consultant. Other benches shall be excavated a minimum height of 4 feet into competent material or as otherwise recommended by the Geotechnical Consultant. Fill placed on ground sloping flatter than 5:1 shall also be benched or otherwise overexcavated to provide a flat subgrade for the fill.

2.5 Evaluation/Acceptance of Fill Areas: All areas to receive fill, including removal and processed areas, key bottoms, and benches, shall be observed, mapped, elevations recorded, and/or tested prior to being accepted by the Geotechnical Consultant as suitable to receive fill. The Contractor shall obtain a written acceptance from the Geotechnical Consultant prior to fill placement. A licensed surveyor shall provide the survey control for determining elevations of processed areas, keys, and benches.

3.0 Fill Material

3.1 General: Material to be used as fill shall be essentially free of organic matter and other deleterious substances evaluated and accepted by the Geotechnical Consultant prior to placement. Soils of poor quality, such as those with unacceptable gradation, high expansion potential, or low strength shall be placed in areas acceptable to the Geotechnical Consultant or mixed with other soils to achieve satisfactory fill material.

3.2 Oversize: Oversize material defined as rock, or other irreducible material with a maximum dimension greater than 12 inches, shall not be buried or placed in fill unless location, materials, and placement methods are specifically accepted by the Geotechnical Consultant. Placement operations shall be such that nesting of oversized material does not occur and such that oversize material is completely surrounded by compacted or densified fill. Oversize material shall not be placed within 10 vertical feet of finish grade or within 2 feet of future utilities or underground construction.

3.3 Import: If importing of fill material is required for grading, proposed import material shall meet the requirements of Section 3.1. The potential import source shall be given to the Geotechnical Consultant at least 48 hours (2 working days) before importing begins so that its suitability can be determined and appropriate tests performed.

4.0 Fill Placement and Compaction

4.1 Fill Layers: Approved fill material shall be placed in areas prepared to receive fill (per Section 3.0) in near-horizontal layers not exceeding 8 inches in loose thickness. The Geotechnical Consultant may accept thicker layers if testing indicates the grading procedures can adequately compact the thicker layers. Each layer shall be spread evenly and mixed thoroughly to attain relative uniformity of material and moisture throughout.

4.2 Fill Moisture Conditioning: Fill soils shall be watered, dried back, blended, and/or mixed, as necessary to attain a relatively uniform moisture content at or slightly over optimum. Maximum density and optimum soil moisture content tests shall be performed in accordance with the American Society of Testing and Materials (ASTM Test Method D1557-91).

4.3 Compaction of Fill: After each layer has been moisture-conditioned, mixed, and evenly spread, it shall be uniformly compacted to not less than 90 percent of maximum dry density (ASTM Test Method D1557-91). Compaction equipment shall be adequately sized and be either specifically designed for soil compaction or of proven reliability to efficiently achieve the specified level of compaction with uniformity.

4.4 Compaction of Fill Slopes: In addition to normal compaction procedures specified above, compaction of slopes shall be accomplished by backrolling of slopes with sheepsfoot rollers at increments of 3 to 4 feet in fill elevation, or by other methods producing satisfactory results acceptable to the Geotechnical Consultant. Upon completion of grading, relative compaction of the fill, out to the slope face, shall be at least 90 percent of maximum density per ASTM Test Method D1557-91.

4.5 Compaction Testing: Field tests for moisture content and relative compaction of the fill soils shall be performed by the Geotechnical Consultant. Location and frequency of tests shall be at the Consultant's discretion based on field conditions encountered. Compaction test locations will not necessarily be selected on a random basis. Test locations shall be selected to verify adequacy of compaction levels in areas that are judged to be prone to inadequate compaction (such as close to slope faces and at the fill/bedrock benches).

4.6 Frequency of Compaction Testing: Tests shall be taken at intervals not exceeding 2 feet in vertical rise and/or 1,000 cubic yards of compacted fill soils embankment. In addition, as a guideline, at least one test shall be taken on slope faces for each 5,000 square feet of slope face and/or each 10 feet of vertical height of slope. The Contractor shall assure that fill construction is such that the testing schedule can be accomplished by the Geotechnical Consultant. The Contractor shall stop or slow down the earthwork construction if these minimum standards are not met.

4.7 Compaction Test Locations: The Geotechnical Consultant shall document the approximate elevation and horizontal coordinates of each test location. The Contractor shall coordinate with the project surveyor to assure that sufficient grade stakes are established so that the Geotechnical Consultant can determine the test locations with sufficient accuracy. At a minimum, two grade stakes within a horizontal distance of 100 feet and vertically less than 5 feet apart from potential test locations shall be provided.

5.0 Subdrain Installation

Subdrain systems shall be installed in accordance with the approved geotechnical report(s), the grading plan, and the Standard Details. The Geotechnical Consultant may recommend additional subdrains and/or changes in subdrain extent, location, grade, or material depending on conditions encountered during grading. All subdrains shall be surveyed by a land surveyor/civil engineer for line and grade after installation and prior to burial. Sufficient time should be allowed by the Contractor for these surveys.

6.0 Excavation

Excavations, as well as over-excavation for remedial purposes, shall be evaluated by the Geotechnical Consultant during grading. Remedial removal depths shown on geotechnical plans are estimates only. The actual extent of removal shall be determined by the Geotechnical Consultant based on the field evaluation of exposed conditions during grading. Where fill-over-cut slopes are to be graded, the cut portion of the slope shall be made, evaluated, and accepted by the Geotechnical Consultant prior to placement of materials for construction of the fill portion of the slope, unless otherwise recommended by the Geotechnical Consultant.

7.0 Trench Backfills

7.1 Contractor shall follow all OHSA and Cal/OSHA requirements for safety of trench excavations.

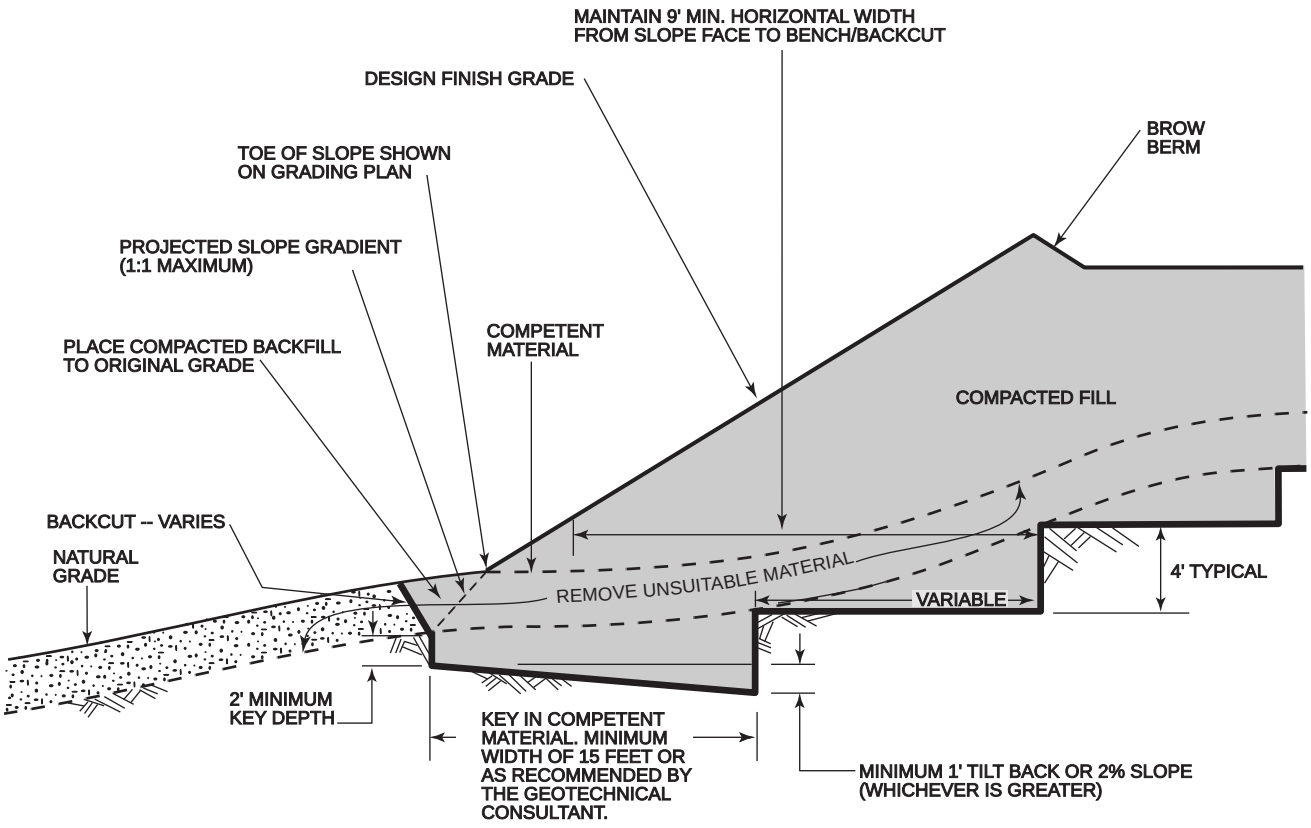
7.2 Bedding and backfill of utility trenches shall be done in accordance with the applicable provisions of Standard Specifications of Public Works Construction. Bedding material shall have a Sand Equivalent greater than 30 (SE>30). The bedding shall be placed to 1 foot over the top of the conduit and densified by jetting. Backfill shall be placed and densified to a minimum 90 percent of maximum from 1 foot above the top of the conduit to the surface, except in traveled ways (see Section 7.6 below).

7.3 Jetting of the bedding around the conduits shall be observed by the Geotechnical Consultant.

7.4 Geotechnical Consultant shall test the trench backfill for relative compaction. At least one test should be made for every 300 feet of trench and 2 feet of fill.

7.5 Lift thickness of trench backfill shall not exceed those allowed in the Standard Specifications of Public Works Construction unless the Contractor can demonstrate to the Geotechnical Consultant that the fill lift can be compacted to the minimum relative compaction by his alternative equipment and method.

7.6 Trench backfill in the upper foot measured from finish grade/subgrade within existing or future traveled way, shoulder, and other paved areas (or areas to receive pavement) should be placed to a minimum 95 percent relative compaction unless specified differently by the governing agency.

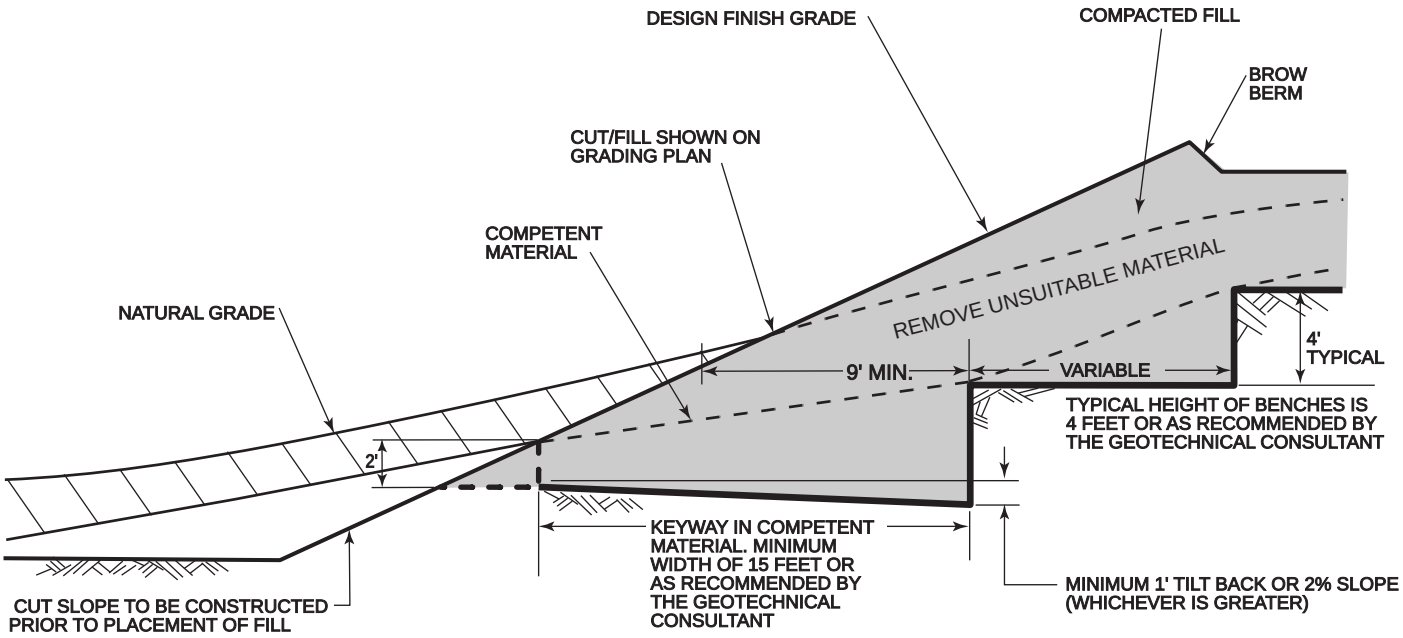


NOTE: BENCHING SHALL BE REQUIRED WHEN NATURAL SLOPES ARE EQUAL TO OR STEEPER THAN 5:1 OR WHEN RECOMMENDED BY THE SOIL ENGINEER. WHERE THE NATURAL SLOPE APPROACHES OR EXCEEDS THE DESIGN SLOPE RATIO, SPECIAL RECOMMENDATIONS WILL BE PROVIDED BY THE GEOTECHNICAL ENGINEER.

FIGURE 1

TYPICAL FILL KEY ABOVE NATURAL SLOPE MINIMUM STANDARD GRADING DETAILS

NMG Geotechnical, Inc.

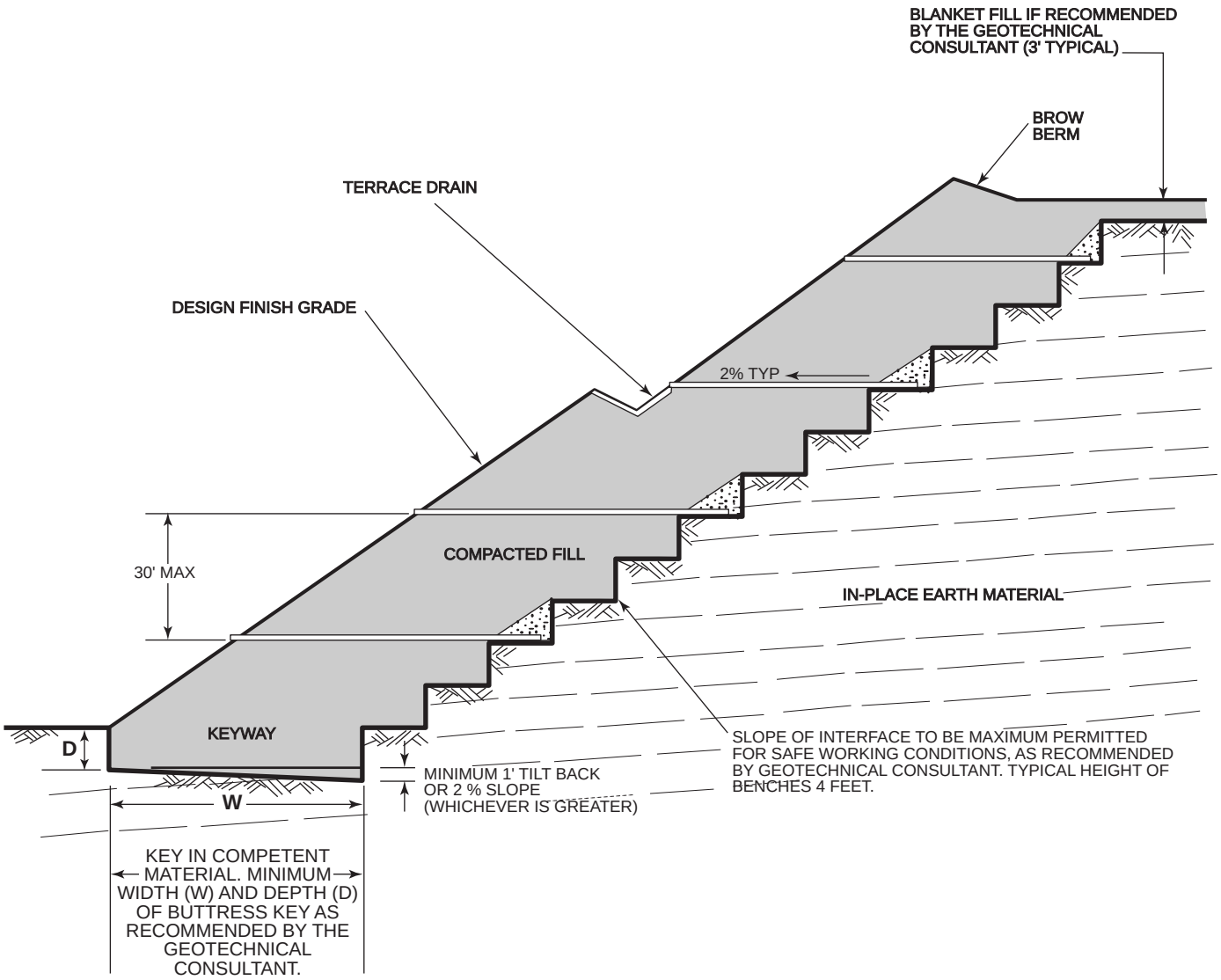


NOTE: THE FILL PORTION OF THE SLOPE SHALL BE COMPACTED AS STATED IN THE PROJECT SPECIFICATIONS.

FIGURE 2

TYPICAL FILL ABOVE CUT SLOPE
MINIMUM STANDARD GRADING DETAILS

NMG Geotechnical, Inc.



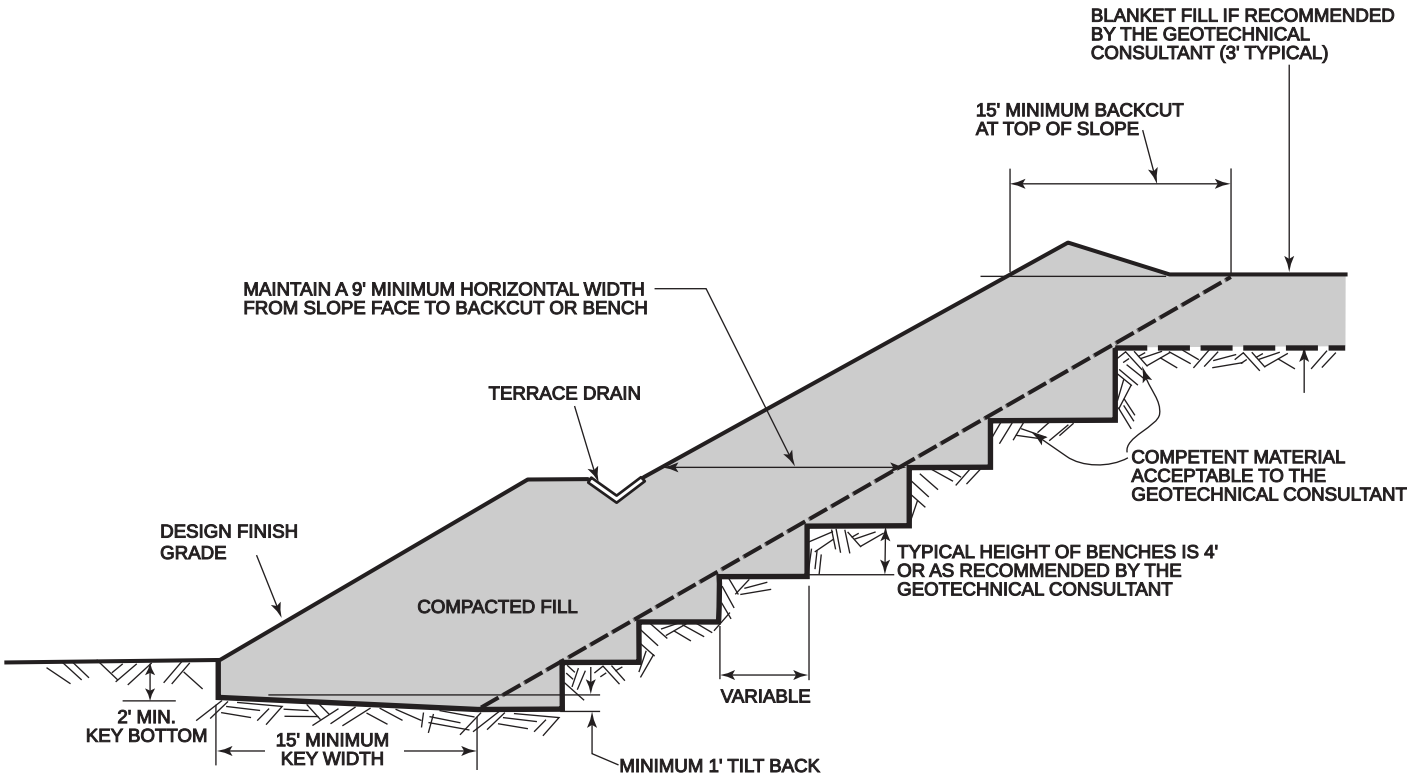
NOTE: SUBDRAIN DETAILS, SEE FIGURE 5.

FIGURE 3

TYPICAL BUTTRESS FILL
MINIMUM STANDARD GRADING DETAILS

NMG Geotechnical, Inc.

1/04 TYP BUTTRESS FILL.ai

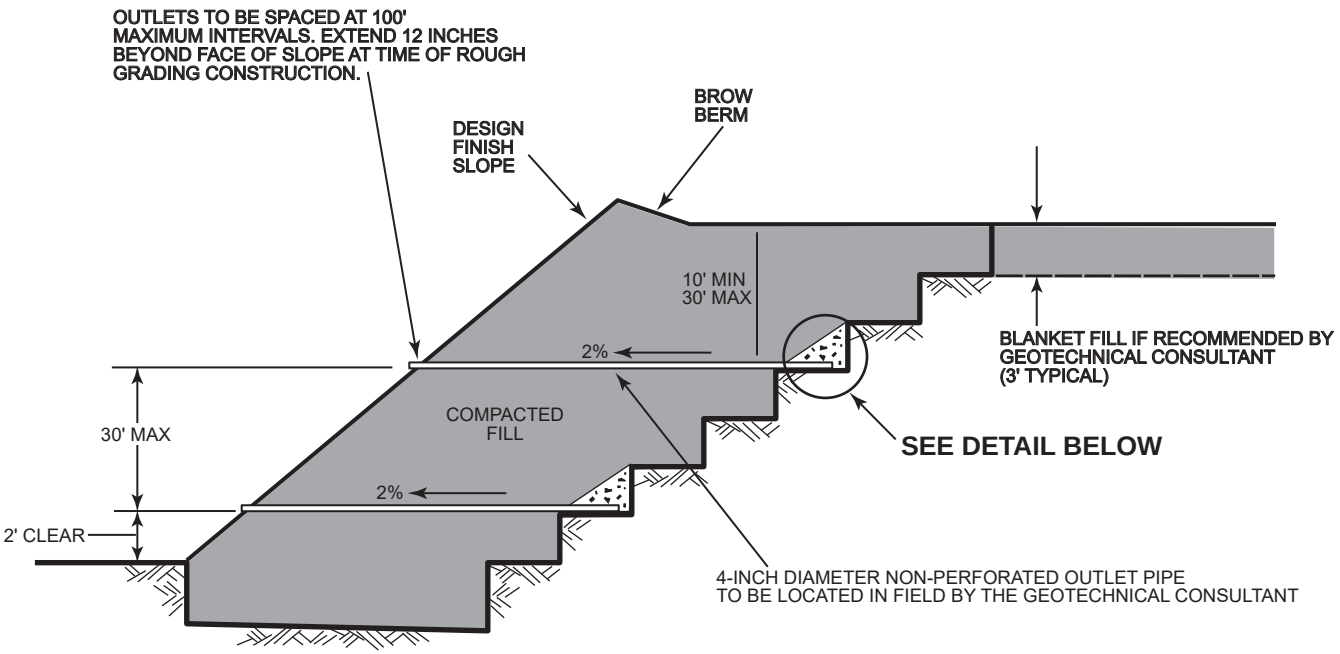


NOTE:
SEE FIGURE 5 FOR TYPICAL SUBDRAIN DETAILS FOR STABILIZATION FILLS

FIGURE 4

TYPICAL STABILIZATION FILL MINIMUM STANDARD GRADING DETAILS

NMG Geotechnical, Inc.



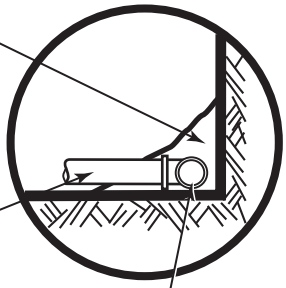
FILTER MATERIAL - MINIMUM OF THREE CUBIC FEET PER FOOT OF PIPE. SEE FILTER MATERIAL SPECIFICATION.

ALTERNATE: IN LIEU OF FILTER MATERIAL, THREE CUBIC FEET OF GRAVEL PER FOOT OF SUBDRAIN (WITHOUT PIPE) MAY BE ENCASED IN FILTER FABRIC. SEE GRAVEL SPECIFICATION, AND FIGURE 6 FOR FILTER FABRIC SPECIFICATION

"GRAVEL" TO CONSIST OF 1/2" TO 1" CRUSHED ROCK PER STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.

FILTER FABRIC SHALL BE LAPPED A MINIMUM OF 12 INCHES ON ALL JOINTS.

DETAIL



OUTLET PIPE TO BE CONNECTED TO SUBDRAIN PIPE WITH TEE OR ELBOW

MINIMUM 4-INCH DIAMETER SCHEDULE 40 ASTM D1527 OR D1785 OR SDR 35 ASTM D2751 OR D 3034. FOR FILL DEPTH OF 90 FEET OR GREATER, USE ONLY SCHEDULE 40 OR EQUIVALENT. THERE SHALL BE A MINIMUM OF 8 UNIFORMLY SPACED PERFORATIONS PER FOOT OF PIPE INSTALLED WITH PERFORATIONS ON BOTTOM OF PIPE. PROVIDE CAP AT UPSTREAM END OF PIPE. SLOPE AT 2 PERCENT TO OUTLET PIPE.

"FILTER MATERIAL" TO MEET FOLLOWING SPECIFICATION OR APPROVED EQUIVALENT.

SIEVE SIZE	PERCENTAGE PASSING
1"	100
3/4"	90-100
3/8"	40-100
NO. 4	25-40
NO. 8	18-33
NO. 30	5-15
NO. 50	0-7
NO. 200	0-3

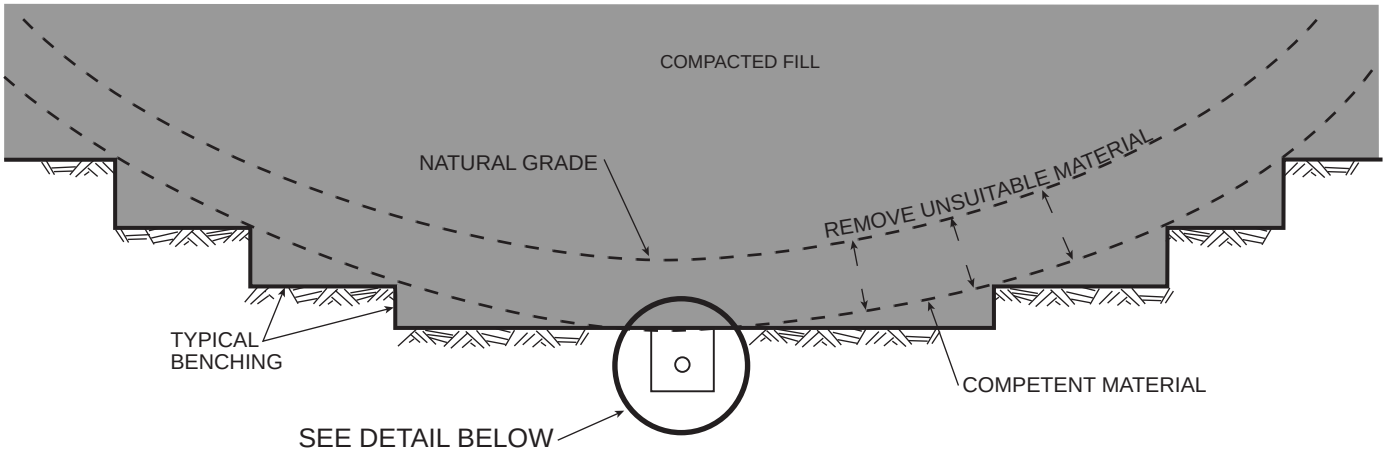
NOTE:
TRENCH FOR OUTLET PIPES TO BE BACKFILLED WITH ON-SITE SOIL.

FIGURE 5

TYPICAL STABILIZATION AND BUTTRESS FILL SUBDRAINS MINIMUM STANDARD GRADING DETAILS

NMG Geotechnical, Inc.

8/96 STAB. BUTTRESS FILL SUBDRAINS.ai



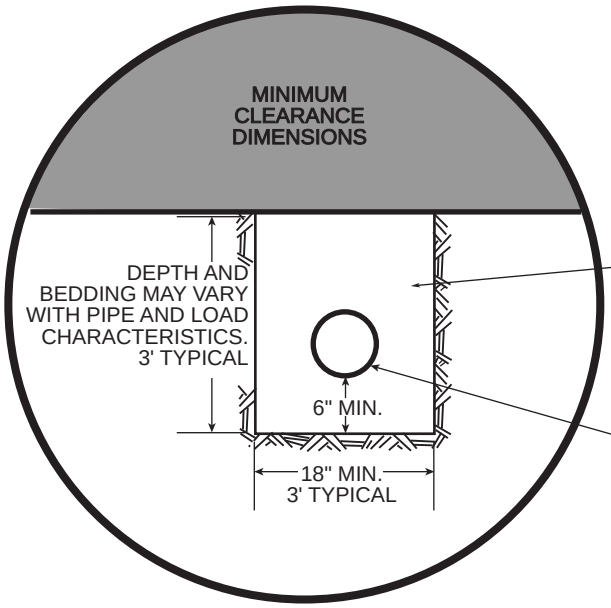
FILTER FABRICS SHALL BE PERMEABLE NON-WOVEN POLYESTER, NYLON, OR POLYPROPYLENE MATERIAL CONFORMING TO THE FOLLOWING:

1) GRAB TENSILE STRENGTH. POUNDS, MIN. ASTM D 4632.....90
2) ELONGATION, AT PEAK LOAD, PERCENT, MIN. ASTM D 4632.....50
3) PUNCTURE STRENGTH, LBS., MIN. ASTM D 3787.....45
4) COEFFICIENT OF WATER PERMITTIVITY, 1/SEC. ASTM D 4491.....>0.7
5) BURST STRENGTH, P.S.I., MIN. ASTM D 3786.....180

NOTES: DOWNSTREAM 20' OF PIPE AT OUTLET SHALL BE NON-PERFORATED AND BACKFILLED WITH FINE-GRAINED MATERIAL

PIPE SHALL BE A MINIMUM OF 4-INCH DIAMETER. FOR RUNS OF 500 FEET OR MORE, USE 6-INCH DIAMETER PIPE, OR AS RECOMMENDED BY THE GEOTECHNICAL CONSULTANT

DETAIL



FILTER MATERIAL - MINIMUM OF NINE CUBIC FEET PER FOOT OF PIPE. SEE FIGURE 5 FOR FILTER MATERIAL SPECIFICATIONS.

ALTERNATE: IN LIEU OF FILTER MATERIAL, NINE CUBIC FEET OF GRAVEL PER FOOT OF SUBDRAIN (WITHOUT PIPE) MAY BE ENCASED IN FILTER FABRIC. SEE FIGURE 5 TO GRAVEL SPECIFICATION. SEE ABOVE FOR FILTER FABRIC SPECIFICATION. FILTER FABRIC SHALL BE LAPPED MINIMUM OF 12 INCHES ON ALL JOINTS.

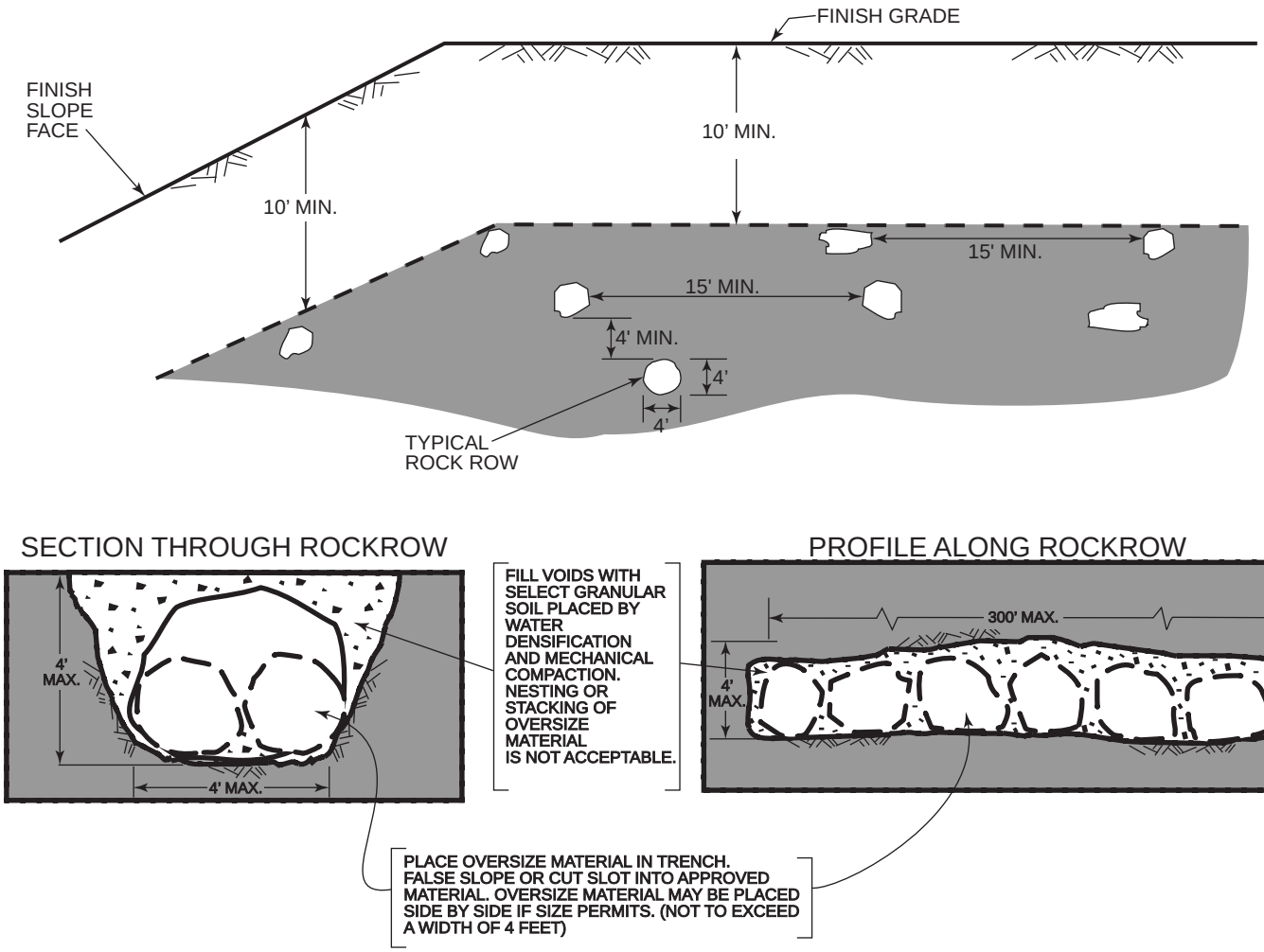
MINIMUM 4 INCH DIAMETER SCHEDULE 40 ASTM D 1527, OR D 1785, OR SDR 35 ASTM 2751 OR D 3034. FOR FILL DEPTH OF 90 FEET OR GREATER, USE ONLY SCHEDULE 40 OR APPROVED EQUIVALENT. THERE SHALL BE A MINIMUM OF 8 UNIFORMLY SPACED PERFORATIONS PER FOOT OF PIPE INSTALLED WITH PERFORATIONS ON BOTTOM OF PIPE.

FIGURE 6

TYPICAL CANYON SUBDRAIN MINIMUM STANDARD GRADING DETAILS

NMG Geotechnical, Inc.

Rev. 8/96 CANYON SUBDRAIN.ai



NOTES:

A) OVERSIZED ROCK IS DEFINED AS LARGER THAN 12" IN SIZE (IN GREATEST DIMENSION).

B) SPACE BETWEEN ROCKROWS SHOULD BE ONE EQUIPMENT WIDTH OR A MINIMUM OF 15 FEET.

C) THE WIDTH AND HEIGHT OF THE ROCKROW SHALL BE LIMITED TO FOUR FEET AND THE LENGTH LIMITED TO 300 FEET UNLESS APPROVED OTHERWISE BY THE GEOTECHNICAL CONSULTANT. OVERSIZE SHOULD BE PLACED WITH FLATEST SIDE ON THE BOTTOM.

D) OVERSIZE MATERIAL EXCEEDING FOUR FEET MAY BE PLACED ON AN INDIVIDUAL BASIS IF APPROVED BY THE GEOTECHNICAL CONSULTANT.

E) FILLING OF VOIDS WILL REQUIRE SELECT GRANULAR SOIL (SE > 20, OR LESS THAN 20 PERCENT FINES) AS APPROVED BY THE GEOTECHNICAL CONSULTANT. VOIDS IN THE ROCKROW TO BE FILLED BY WATER DENSIFYING GRANULAR SOIL INTO PLACE ALONG WITH MECHANICAL COMPACTION EFFORT.

F) IF APPROVED BY THE GEOTECHNICAL CONSULTANT, ROCKROWS MAY BE PLACED DIRECTLY ON COMPETENT MATERIALS OR BEDROCK, PROVIDED ADEQUATE SPACE IS AVAILABLE FOR COMPACTION.

G) THE FIRST LIFT OF MATERIAL ABOVE THE ROCKROW SHALL CONSIST OF GRANULAR MATERIAL AND SHALL BE PROOF-ROLLED WITH A D-8 OR LARGER DOZER OR EQUIVALENT.

H) ROCKROWS NEAR SLOPES SHOULD BE ORIENTED PARALLEL TO SLOPE FACE.

I) NESTING OR STACKING OF ROCKS IS NOT ACCEPTABLE.

FIGURE 7

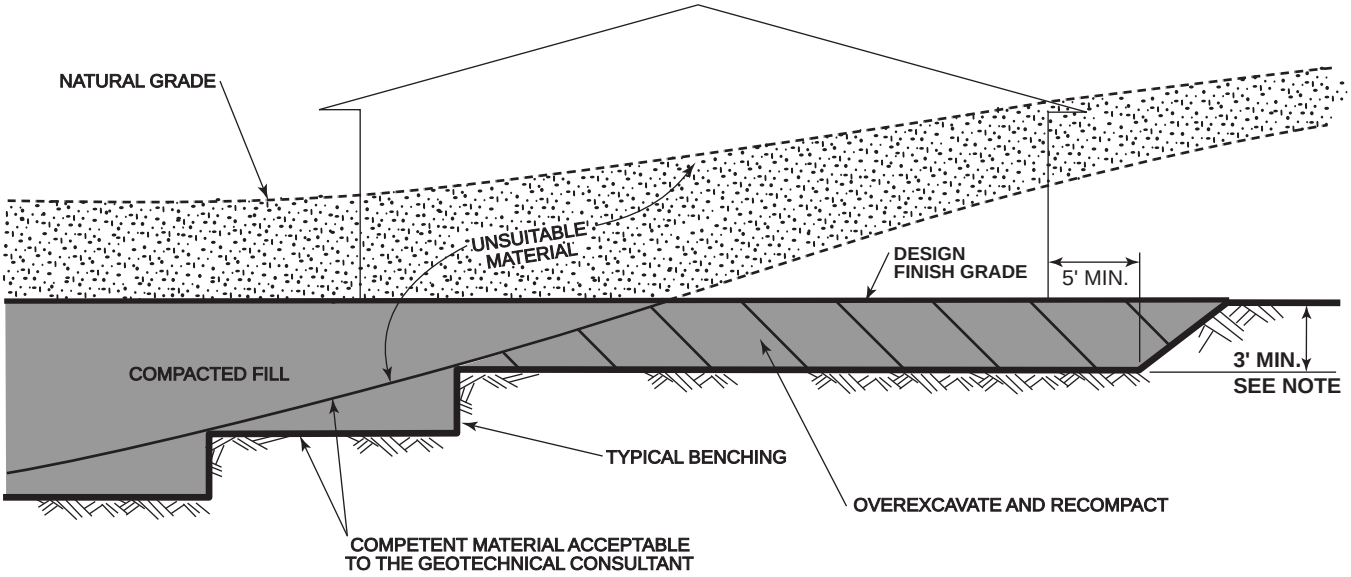
TYPICAL OVERSIZE ROCK PLACEMENT METHOD MINIMUM STANDARD GRADING DETAIL FOR STRUCTURAL FILL

NMG Geotechnical, Inc

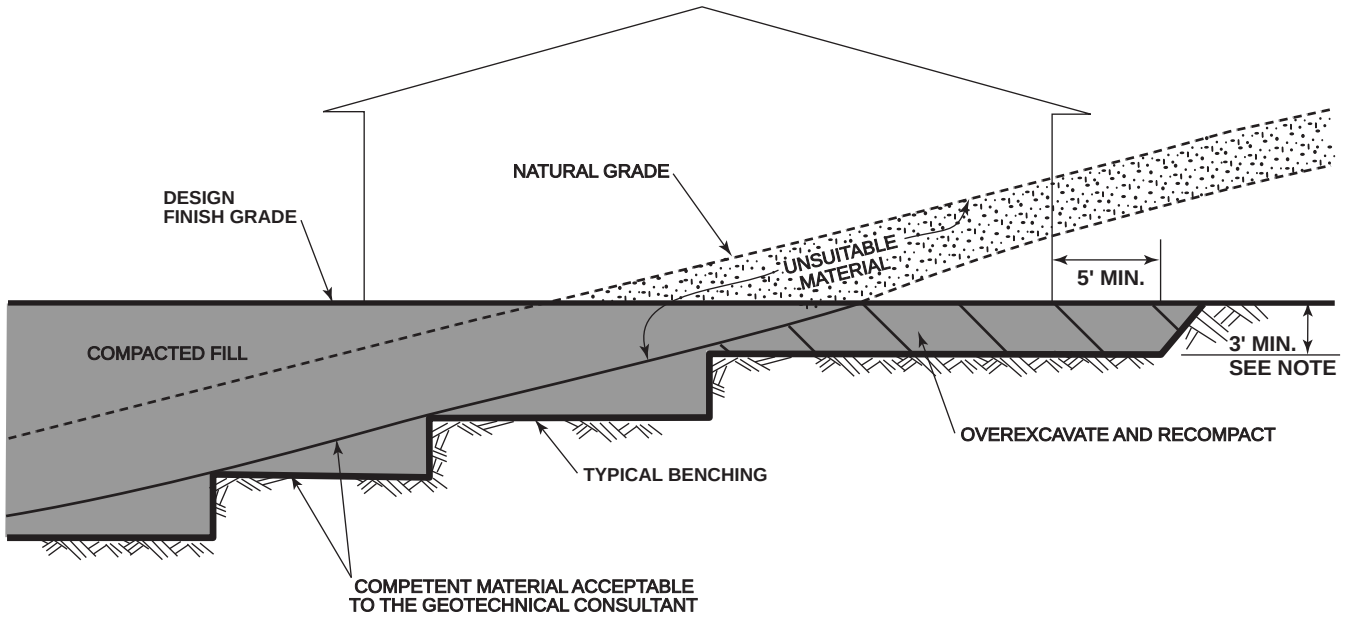
1320

3/04 TYP OVERSIZE ROCK PLACEMENT.ai

CUT LOT



CUT FILL LOT (TRANSITION)



NOTE: DEEPER THAN THE 3-FOOT OVEREXCAVATION MAY BE RECOMMENDED BY THE GEOTECHNICAL CONSULTANT IN STEEP TRANSITIONS.

FIGURE 8

TYPICAL OVEREXCAVATION OF DAYLIGHT LINE MINIMUM STANDARD GRADING DETAILS

NMG Geotechnical, Inc.

Attachment F: SOCHM Model

SOHM

PROJECT REPORT

General Model Information

Project Name:	Aliso Viejo
Site Name:	
Site Address:	2718 Aliso Creek Rd
City:	Aliso Viejo
Report Date:	1/9/2026
Gage:	Laguna Beach
Data Start:	10/01/1949
Data End:	09/30/2006
Timestep:	15 Minute
Precip Scale:	1.000
Version Date:	2021/05/25

POC Thresholds

Low Flow Threshold for POC1:	10 Percent of the 2 Year
High Flow Threshold for POC1:	10 Year

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Landuse Basin Data

Predeveloped Land Use

Basin 1

Bypass:	No
GroundWater:	No
Pervious Land Use	acre
D,Open Brush,VSteep	7.92
Pervious Total	7.92
Impervious Land Use	acre
Impervious Total	0
Basin Total	7.92

Element Flows To:

Surface	Interflow	Groundwater

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Mitigated Land Use

Basin 1

Bypass:	No
GroundWater:	No

Pervious Land Use	acre
D,Urban,VSteep(>15%)	1.14
D,Urban,Flat(0-5%)	1.53
Pervious Total	2.67

Impervious Land Use	acre
Impervious,Flat(0-5)	5.25
Impervious Total	5.25
Basin Total	7.92

Element Flows To:

Surface	Interflow	Groundwater
Vault 1	Vault 1	

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Mitigated Routing

Vault 1

Width: 28 ft.
Length: 130 ft.
Depth: 5 ft.
Discharge Structure
Riser Height: 4 ft.
Riser Diameter: 54 in.
Notch Type: Rectangular
Notch Width: 4.186 ft.
Notch Height: 0.341 ft.
Orifice 1 Diameter: 1.45 in. Elevation:0 ft.
Element Flows To:
Outlet 1 Outlet 2

Vault Hydraulic Table

Stage(feet)	Area(ac.)	Volume(ac-ft.)	Discharge(cfs)	Infilt(cfs)
0.0000	0.083	0.000	0.000	0.000
0.0556	0.083	0.004	0.013	0.000
0.1111	0.083	0.009	0.019	0.000
0.1667	0.083	0.013	0.023	0.000
0.2222	0.083	0.018	0.026	0.000
0.2778	0.083	0.023	0.030	0.000
0.3333	0.083	0.027	0.032	0.000
0.3889	0.083	0.032	0.035	0.000
0.4444	0.083	0.037	0.038	0.000
0.5000	0.083	0.041	0.040	0.000
0.5556	0.083	0.046	0.042	0.000
0.6111	0.083	0.051	0.044	0.000
0.6667	0.083	0.055	0.046	0.000
0.7222	0.083	0.060	0.048	0.000
0.7778	0.083	0.065	0.050	0.000
0.8333	0.083	0.069	0.052	0.000
0.8889	0.083	0.074	0.053	0.000
0.9444	0.083	0.078	0.055	0.000
1.0000	0.083	0.083	0.057	0.000
1.0556	0.083	0.088	0.058	0.000
1.1111	0.083	0.092	0.060	0.000
1.1667	0.083	0.097	0.061	0.000
1.2222	0.083	0.102	0.063	0.000
1.2778	0.083	0.106	0.064	0.000
1.3333	0.083	0.111	0.065	0.000
1.3889	0.083	0.116	0.067	0.000
1.4444	0.083	0.120	0.068	0.000
1.5000	0.083	0.125	0.069	0.000
1.5556	0.083	0.130	0.071	0.000
1.6111	0.083	0.134	0.072	0.000
1.6667	0.083	0.139	0.073	0.000
1.7222	0.083	0.143	0.074	0.000
1.7778	0.083	0.148	0.076	0.000
1.8333	0.083	0.153	0.077	0.000
1.8889	0.083	0.157	0.078	0.000
1.9444	0.083	0.162	0.079	0.000
2.0000	0.083	0.167	0.080	0.000

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2.0556	0.083	0.171	0.081	0.000
2.1111	0.083	0.176	0.082	0.000
2.1667	0.083	0.181	0.084	0.000
2.2222	0.083	0.185	0.085	0.000
2.2778	0.083	0.190	0.086	0.000
2.3333	0.083	0.195	0.087	0.000
2.3889	0.083	0.199	0.088	0.000
2.4444	0.083	0.204	0.089	0.000
2.5000	0.083	0.208	0.090	0.000
2.5556	0.083	0.213	0.091	0.000
2.6111	0.083	0.218	0.092	0.000
2.6667	0.083	0.222	0.093	0.000
2.7222	0.083	0.227	0.094	0.000
2.7778	0.083	0.232	0.095	0.000
2.8333	0.083	0.236	0.096	0.000
2.8889	0.083	0.241	0.097	0.000
2.9444	0.083	0.246	0.097	0.000
3.0000	0.083	0.250	0.098	0.000
3.0556	0.083	0.255	0.099	0.000
3.1111	0.083	0.260	0.100	0.000
3.1667	0.083	0.264	0.101	0.000
3.2222	0.083	0.269	0.102	0.000
3.2778	0.083	0.273	0.103	0.000
3.3333	0.083	0.278	0.104	0.000
3.3889	0.083	0.283	0.105	0.000
3.4444	0.083	0.287	0.105	0.000
3.5000	0.083	0.292	0.106	0.000
3.5556	0.083	0.297	0.107	0.000
3.6111	0.083	0.301	0.108	0.000
3.6667	0.083	0.306	0.117	0.000
3.7222	0.083	0.311	0.329	0.000
3.7778	0.083	0.315	0.678	0.000
3.8333	0.083	0.320	1.123	0.000
3.8889	0.083	0.325	1.645	0.000
3.9444	0.083	0.329	2.234	0.000
4.0000	0.083	0.334	2.885	0.000
4.0556	0.083	0.338	3.511	0.000
4.1111	0.083	0.343	4.654	0.000
4.1667	0.083	0.348	6.134	0.000
4.2222	0.083	0.352	7.884	0.000
4.2778	0.083	0.357	9.866	0.000
4.3333	0.083	0.362	12.05	0.000
4.3889	0.083	0.366	14.42	0.000
4.4444	0.083	0.371	16.95	0.000
4.5000	0.083	0.376	19.63	0.000
4.5556	0.083	0.380	22.45	0.000
4.6111	0.083	0.385	25.38	0.000
4.6667	0.083	0.390	28.41	0.000
4.7222	0.083	0.394	31.52	0.000
4.7778	0.083	0.399	34.71	0.000
4.8333	0.083	0.403	37.95	0.000
4.8889	0.083	0.408	41.22	0.000
4.9444	0.083	0.413	44.52	0.000
5.0000	0.083	0.417	47.83	0.000
5.0556	0.083	0.422	51.12	0.000
5.1111	0.000	0.000	54.39	0.000

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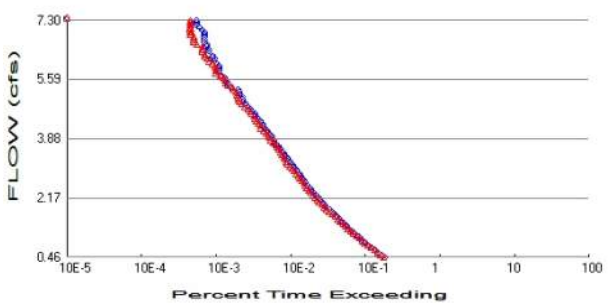
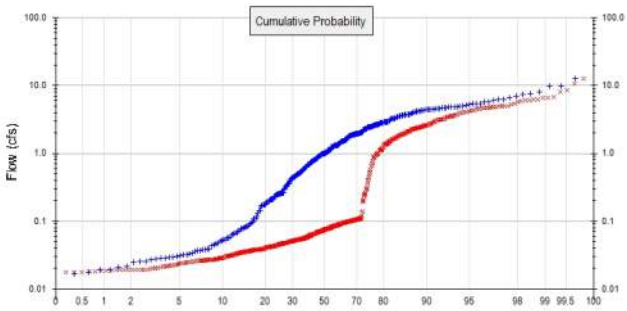
Analysis Results
POC 1





+ Predeveloped x Mitigated

Predeveloped Landuse Totals for POC #1
Total Pervious Area: 7.92
Total Impervious Area: 0

Mitigated Landuse Totals for POC #1
Total Pervious Area: 2.67
Total Impervious Area: 5.25

Flow Frequency Method: Cunnane

Flow Frequency Return Periods for Predeveloped. POC #1

Return Period	**Flow(cfs)**
2 year	4.604602
5 year	5.788406
10 year	7.300378
25 year	9.762206

Flow Frequency Return Periods for Mitigated. POC #1

Return Period	**Flow(cfs)**
2 year	4.542625
5 year	5.966315
10 year	6.624831
25 year	9.051075

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Duration Flows

The Facility PASSED

Flow(cfs)	Predev	Mit	Percentage	Pass/Fail
0.4605	3616	3530	97	Pass
0.5296	3266	3208	98	Pass
0.5986	2940	2934	99	Pass
0.6677	2642	2656	100	Pass
0.7368	2400	2380	99	Pass
0.8059	2175	2159	99	Pass
0.8750	1978	1958	98	Pass
0.9441	1819	1796	98	Pass
1.0132	1683	1646	97	Pass
1.0823	1553	1518	97	Pass
1.1514	1421	1370	96	Pass
1.2205	1306	1269	97	Pass
1.2895	1205	1179	97	Pass
1.3586	1107	1072	96	Pass
1.4277	1031	999	96	Pass
1.4968	958	922	96	Pass
1.5659	896	850	94	Pass
1.6350	827	784	94	Pass
1.7041	757	716	94	Pass
1.7732	711	651	91	Pass
1.8423	664	604	90	Pass
1.9114	602	561	93	Pass
1.9804	562	525	93	Pass
2.0495	520	482	92	Pass
2.1186	492	454	92	Pass
2.1877	467	429	91	Pass
2.2568	430	398	92	Pass
2.3259	398	370	92	Pass
2.3950	375	348	92	Pass
2.4641	355	327	92	Pass
2.5332	335	317	94	Pass
2.6023	314	302	96	Pass
2.6713	298	282	94	Pass
2.7404	282	268	95	Pass
2.8095	273	251	91	Pass
2.8786	261	236	90	Pass
2.9477	241	223	92	Pass
3.0168	227	207	91	Pass
3.0859	216	194	89	Pass
3.1550	204	179	87	Pass
3.2241	196	173	88	Pass
3.2932	183	167	91	Pass
3.3622	172	163	94	Pass
3.4313	164	153	93	Pass
3.5004	156	146	93	Pass
3.5695	146	139	95	Pass
3.6386	138	131	94	Pass
3.7077	129	126	97	Pass
3.7768	121	116	95	Pass
3.8459	118	109	92	Pass
3.9150	112	105	93	Pass
3.9841	106	100	94	Pass
4.0531	100	94	94	Pass

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4.1222	96	87	90	Pass
4.1913	90	80	88	Pass
4.2604	85	79	92	Pass
4.3295	81	73	90	Pass
4.3986	79	69	87	Pass
4.4677	73	67	91	Pass
4.5368	67	65	97	Pass
4.6059	66	59	89	Pass
4.6750	60	57	95	Pass
4.7440	57	53	92	Pass
4.8131	53	48	90	Pass
4.8822	49	44	89	Pass
4.9513	46	41	89	Pass
5.0204	45	40	88	Pass
5.0895	45	39	86	Pass
5.1586	42	38	90	Pass
5.2277	41	37	90	Pass
5.2968	39	34	87	Pass
5.3659	32	33	103	Pass
5.4349	29	29	100	Pass
5.5040	29	27	93	Pass
5.5731	27	26	96	Pass
5.6422	26	25	96	Pass
5.7113	23	23	100	Pass
5.7804	22	20	90	Pass
5.8495	22	20	90	Pass
5.9186	22	20	90	Pass
5.9877	22	19	86	Pass
6.0568	20	18	90	Pass
6.1258	19	16	84	Pass
6.1949	19	15	78	Pass
6.2640	18	14	77	Pass
6.3331	16	14	87	Pass
6.4022	16	13	81	Pass
6.4713	16	13	81	Pass
6.5404	15	13	86	Pass
6.6095	15	11	73	Pass
6.6786	14	10	71	Pass
6.7477	14	10	71	Pass
6.8167	14	10	71	Pass
6.8858	14	9	64	Pass
6.9549	14	9	64	Pass
7.0240	13	9	69	Pass
7.0931	12	9	75	Pass
7.1622	11	9	81	Pass
7.2313	11	9	81	Pass
7.3004	11	9	81	Pass

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Model Default Modifications

Total of 0 changes have been made.

PERLND Changes

No PERLND changes have been made.

IMPLND Changes

No IMPLND changes have been made.

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Appendix
Predeveloped Schematic

Mitigated Schematic

Predeveloped UCI File

```
RUN

GLOBAL
  WWHM4 model simulation
  START       1949 10 01        END    2006 09 30
  RUN INTERP OUTPUT LEVEL    3    0
  RESUME     0 RUN     1                    UNIT SYSTEM     1
END GLOBAL

FILES
<File>  <Un#>   <-----------File Name------------------------------>***
<-ID->                                                              ***
WDM         26   Aliso Viejo.wdm
MESSU       25   PreAliso Viejo.MES
            27   PreAliso Viejo.L61
            28   PreAliso Viejo.L62
            30   POCAliso Viejo1.dat
END FILES

OPN SEQUENCE
    INGRP              INDELT 00:15
      PERLND      44
      COPY       501
      DISPLY       1
    END INGRP
END OPN SEQUENCE
DISPLY
  DISPLY-INFO1
    # -  #<----------Title---------->***TRAN PIVL DIG1 FIL1  PYR DIG2 FIL2 YRND
    1        Basin  1                   MAX                    1    2   30    9
  END DISPLY-INFO1
END DISPLY
COPY
  TIMESERIES
    # -  #  NPT  NMN ***
    1         1    1
  501         1    1
  END TIMESERIES
END COPY
GENER
  OPCODE
    #    # OPCD ***
  END OPCODE
  PARM
    #    #         K ***
  END PARM
END GENER
PERLND
  GEN-INFO
    <PLS ><-------Name------->NBLKS   Unit-systems   Printer ***
    # -  #                        User  t-series Engl Metr ***
                                    in  out           ***
   44     D,Open Brush,VSteep     1    1    1    1   27    0
  END GEN-INFO
  *** Section PWATER***

  ACTIVITY
    <PLS > ************ Active Sections ****************************
    # -  # ATMP SNOW PWAT  SED  PST  PWG PQAL MSTL PEST NITR PHOS TRAC ***
   44         0    0    1    0    0    0    0    0    0    0    0    0
  END ACTIVITY

  PRINT-INFO
    <PLS > ***************** Print-flags **************************** PIVL  PYR
    # -  # ATMP SNOW PWAT  SED  PST  PWG PQAL MSTL PEST NITR PHOS TRAC  *********
   44         0    0    4    0    0    0    0    0    0    0    0    0    1    9
  END PRINT-INFO
```

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```
  PWAT-PARM1
    <PLS >  PWATER variable monthly parameter value flags  ***
    # -  # CSNO RTOP UZFG  VCS  VUZ  VNN VIFW VIRC  VLE INFC  HWT ***
   44         0    0    0    1    0    0    0    0    1    0    0
  END PWAT-PARM1

  PWAT-PARM2
    <PLS >      PWATER input info: Part 2         ***
    # -  # ***FOREST      LZSN    INFILT      LSUR     SLSUR     KVARY     AGWRC
   44              0       3.7     0.012       250       0.2       0.8     0.955
  END PWAT-PARM2

  PWAT-PARM3
    <PLS >      PWATER input info: Part 3         ***
    # -  # ***PETMAX    PETMIN    INFEXP    INFILD    DEEPFR    BASETP    AGWETP
   44             40        35         4         2         0      0.03         0
  END PWAT-PARM3
  PWAT-PARM4
    <PLS >     PWATER input info: Part 4                              ***
    # -  #     CEPSC      UZSN      NSUR     INTFW       IRC     LZETP ***
   44              0      0.25      0.25       0.3       0.3         0
  END PWAT-PARM4
  MON-LZETPARM
    <PLS >      PWATER input info: Part 3         ***
    # -  #  JAN  FEB  MAR  APR  MAY  JUN  JUL  AUG  SEP  OCT  NOV  DEC  ***
   44       0.4  0.4  0.4  0.5 0.55 0.55 0.55 0.55 0.55 0.55 0.45  0.4
  END MON-LZETPARM
  MON-INTERCEP
    <PLS >      PWATER input info: Part 3         ***
    # -  #  JAN  FEB  MAR  APR  MAY  JUN  JUL  AUG  SEP  OCT  NOV  DEC  ***
   44      0.12 0.12 0.12 0.12 0.12 0.12 0.12 0.12 0.12 0.12 0.12 0.12
  END MON-INTERCEP

  PWAT-STATE1
    <PLS > *** Initial conditions at start of simulation
               ran from 1990 to end of 1992 (pat 1-11-95) RUN 21 ***
    # -  # ***  CEPS      SURS       UZS      IFWS       LZS      AGWS      GWVS
   44              0         0     0.025         0      0.74       0.3      0.01
  END PWAT-STATE1

END PERLND

IMPLND
  GEN-INFO
    <PLS ><-------Name------->   Unit-systems   Printer ***
    # -  #                     User  t-series Engl Metr ***
                                     in  out           ***
  END GEN-INFO
  *** Section IWATER***

  ACTIVITY
    <PLS > ************ Active Sections ******************************
    # -  # ATMP SNOW IWAT  SLD  IWG IQAL   ***
  END ACTIVITY

  PRINT-INFO
    <ILS > ******** Print-flags ******** PIVL  PYR
    # -  # ATMP SNOW IWAT  SLD  IWG IQAL    *********
  END PRINT-INFO

  IWAT-PARM1
    <PLS >  IWATER variable monthly parameter value flags  ***
    # -  # CSNO RTOP  VRS  VNN RTLI     ***
  END IWAT-PARM1

  IWAT-PARM2
    <PLS >      IWATER input info: Part 2         ***
    # -  # ***  LSUR     SLSUR      NSUR     RETSC
  END IWAT-PARM2
```

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```
  IWAT-PARM3
    <PLS >      IWATER input info: Part 3         ***
    # -  # ***PETMAX    PETMIN
  END IWAT-PARM3

  IWAT-STATE1
    <PLS > *** Initial conditions at start of simulation
    # -  # ***  RETS      SURS
  END IWAT-STATE1

END IMPLND

SCHEMATIC
<-Source->                  <--Area-->     <-Target->   MBLK   ***
<Name>   #                  <-factor->     <Name>   #   Tbl#   ***
Basin  1***
PERLND  44                        7.92     COPY   501     12
PERLND  44                        7.92     COPY   501     13

******Routing******
END SCHEMATIC

NETWORK
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member->  ***
<Name>   #        <Name> # #<-factor->strg <Name>   #   #        <Name> # #  ***
COPY   501 OUTPUT MEAN   1 1   48.4        DISPLY   1     INPUT  TIMSER 1



<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member->  ***
<Name>   #        <Name> # #<-factor->strg <Name>   #   #        <Name> # #  ***
END NETWORK

RCHRES
  GEN-INFO
    RCHRES       Name        Nexits   Unit Systems   Printer                 ***
    # -  #<------------------><---> User T-series  Engl Metr LKFG            ***
                                           in  out                           ***
  END GEN-INFO
  *** Section RCHRES***

  ACTIVITY
    <PLS > ************* Active Sections *****************************
    # -  # HYFG ADFG CNFG HTFG SDFG GQFG OXFG NUFG PKFG PHFG ***
  END ACTIVITY

  PRINT-INFO
    <PLS > ***************** Print-flags ****************** PIVL  PYR
    # -  # HYDR ADCA CONS HEAT  SED  GQL OXRX NUTR PLNK PHCB PIVL  PYR  *********
  END PRINT-INFO

  HYDR-PARM1
    RCHRES  Flags for each HYDR Section                                      ***
    # -  #  VC A1 A2 A3  ODFVFG for each *** ODGTFG for each     FUNCT  for each
            FG FG FG FG  possible  exit  *** possible  exit      possible  exit
             *  *  *  *    *  *  *  *  *        *  *  *  *  *        ***
  END HYDR-PARM1

  HYDR-PARM2
    # -  #    FTABNO       LEN     DELTH     STCOR        KS      DB50       ***
  <------><--------><--------><--------><--------><--------><-------->       ***
  END HYDR-PARM2
  HYDR-INIT
    RCHRES  Initial conditions for each HYDR section                         ***
    # -  # ***   VOL     Initial  value  of COLIND     Initial  value  of OUTDGT
          *** ac-ft     for each possible exit        for each possible exit
  <------><-------->     <---><---><---><---><---> *** <---><---><---><---><--->
  END HYDR-INIT
END RCHRES
```

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```
SPEC-ACTIONS
END SPEC-ACTIONS
FTABLES
END FTABLES

EXT SOURCES
<-Volume-> <Member> SsysSgap<--Mult-->Tran <-Target vols> <-Grp> <-Member->  ***
<Name>   # <Name> # tem strg<-factor->strg <Name>   #   #        <Name> # #  ***
WDM      2 PREC     ENGL    1              PERLND   1 999 EXTNL  PREC
WDM      2 PREC     ENGL    1              IMPLND   1 999 EXTNL  PREC
WDM      1 EVAP     ENGL    1              PERLND   1 999 EXTNL  PETINP
WDM      1 EVAP     ENGL    1              IMPLND   1 999 EXTNL  PETINP

END EXT SOURCES

EXT TARGETS
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Volume-> <Member> Tsys Tgap Amd ***
<Name>   #        <Name> # #<-factor->strg <Name>   # <Name>    tem strg strg***
COPY   501 OUTPUT MEAN   1 1     48.4      WDM    501 FLOW     ENGL      REPL
END EXT TARGETS

MASS-LINK
<Volume>   <-Grp> <-Member-><--Mult-->     <Target>       <-Grp> <-Member->***
<Name>            <Name> # #<-factor->     <Name>                <Name> # #***
  MASS-LINK       12
PERLND     PWATER SURO       0.083333      COPY           INPUT  MEAN
  END MASS-LINK   12

  MASS-LINK       13
PERLND     PWATER IFWO       0.083333      COPY           INPUT  MEAN
  END MASS-LINK   13


END MASS-LINK

END RUN
```

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Mitigated UCI File

```
RUN

GLOBAL
  WWHM4 model simulation
  START       1949 10 01        END    2006 09 30
  RUN INTERP OUTPUT LEVEL    3    0
  RESUME     0 RUN     1                    UNIT SYSTEM     1
END GLOBAL

FILES
<File>  <Un#>   <-----------File Name------------------------------>***
<-ID->                                                              ***
WDM         26   Aliso Viejo.wdm
MESSU       25   MitAliso Viejo.MES
            27   MitAliso Viejo.L61
            28   MitAliso Viejo.L62
            30   POCAliso Viejo1.dat
END FILES

OPN SEQUENCE
    INGRP              INDELT 00:15
      PERLND      64
      PERLND      61
      IMPLND       1
      RCHRES       1
      COPY         1
      COPY       501
      DISPLY       1
    END INGRP
END OPN SEQUENCE
DISPLY
  DISPLY-INFO1
    # -  #<----------Title---------->***TRAN PIVL DIG1 FIL1  PYR DIG2 FIL2 YRND
    1        Vault  1                   MAX                    1    2   30    9
  END DISPLY-INFO1
END DISPLY
COPY
  TIMESERIES
    # -  #  NPT  NMN ***
    1         1    1
  501         1    1
  END TIMESERIES
END COPY
GENER
  OPCODE
    #    # OPCD ***
  END OPCODE
  PARM
    #    #         K ***
  END PARM
END GENER
PERLND
  GEN-INFO
    <PLS ><-------Name------->NBLKS   Unit-systems   Printer ***
    # -  #                          User  t-series Engl Metr ***
                                          in  out            ***
   64     D,Urban,VSteep(>15%)    1    1    1    1   27    0
   61     D,Urban,Flat(0-5%)      1    1    1    1   27    0
  END GEN-INFO
  *** Section PWATER***

  ACTIVITY
    <PLS > ************ Active Sections ******************************
    # -  # ATMP SNOW PWAT  SED  PST  PWG PQAL MSTL PEST NITR PHOS TRAC ***
   64         0    0    1    0    0    0    0    0    0    0    0    0
   61         0    0    1    0    0    0    0    0    0    0    0    0
  END ACTIVITY
```

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```
  PRINT-INFO
    <PLS > ***************** Print-flags ***************************** PIVL  PYR
    # -  # ATMP SNOW PWAT  SED  PST  PWG PQAL MSTL PEST NITR PHOS TRAC  *********
   64         0    0    4    0    0    0    0    0    0    0    0    0    1    9
   61         0    0    4    0    0    0    0    0    0    0    0    0    1    9
  END PRINT-INFO

  PWAT-PARM1
    <PLS >  PWATER variable monthly parameter value flags  ***
    # -  # CSNO RTOP UZFG  VCS  VUZ  VNN VIFW VIRC  VLE INFC  HWT ***
   64         0    0    0    1    0    0    0    0    1    0    0
   61         0    0    0    1    0    0    0    0    1    0    0
  END PWAT-PARM1

  PWAT-PARM2
    <PLS >      PWATER input info: Part 2         ***
    # -  # ***FOREST      LZSN    INFILT      LSUR     SLSUR     KVARY     AGWRC
   64              0       3.6     0.012       250       0.2       0.8     0.955
   61              0       4.4      0.04       400      0.05       0.8     0.955
  END PWAT-PARM2

  PWAT-PARM3
    <PLS >      PWATER input info: Part 3         ***
    # -  # ***PETMAX    PETMIN    INFEXP    INFILD    DEEPFR    BASETP    AGWETP
   64             40        35         4         2         0      0.03         0
   61             40        35         4         2         0      0.03         0
  END PWAT-PARM3
  PWAT-PARM4
    <PLS >     PWATER input info: Part 4                                  ***
    # -  #     CEPSC      UZSN      NSUR     INTFW       IRC     LZETP ***
   64              0       0.2      0.25         1       0.3         0
   61              0       0.7      0.25         3       0.7         0
  END PWAT-PARM4
  MON-LZETPARM
    <PLS >      PWATER input info: Part 3         ***
    # -  #  JAN  FEB  MAR  APR  MAY  JUN  JUL  AUG  SEP  OCT  NOV  DEC  ***
   64       0.5  0.5  0.5  0.6 0.65 0.65 0.65 0.65 0.65 0.65 0.55  0.5
   61       0.5  0.5  0.5  0.6 0.65 0.65 0.65 0.65 0.65 0.65 0.55  0.5
  END MON-LZETPARM
  MON-INTERCEP
    <PLS >      PWATER input info: Part 3         ***
    # -  #  JAN  FEB  MAR  APR  MAY  JUN  JUL  AUG  SEP  OCT  NOV  DEC  ***
   64      0.12 0.12 0.12 0.12 0.12 0.12 0.12 0.12 0.12 0.12 0.12 0.12
   61      0.12 0.12 0.12 0.12 0.12 0.12 0.12 0.12 0.12 0.12 0.12 0.12
  END MON-INTERCEP

  PWAT-STATE1
    <PLS > *** Initial conditions at start of simulation
               ran from 1990 to end of 1992 (pat 1-11-95) RUN 21 ***
    # -  # ***  CEPS      SURS       UZS      IFWS       LZS      AGWS      GWVS
   64              0         0      0.02         0      0.72       0.3      0.01
   61              0         0      0.07         0      0.88       0.3      0.01
  END PWAT-STATE1

END PERLND

IMPLND
  GEN-INFO
    <PLS ><-------Name------->   Unit-systems   Printer ***
    # -  #                     User  t-series Engl Metr ***
                                  in  out           ***
    1     Impervious,Flat(0-5)    1    1    1   27    0
  END GEN-INFO
  *** Section IWATER***

  ACTIVITY
    <PLS > ************* Active Sections ******************************
    # -  # ATMP SNOW IWAT  SLD  IWG IQAL   ***
    1         0    0    1    0    0    0
  END ACTIVITY
```

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```
  PRINT-INFO
    <ILS > ******** Print-flags ******** PIVL  PYR
    # -  # ATMP SNOW IWAT  SLD  IWG IQAL    *********
    1         0    0    4    0    0    0    1    9
  END PRINT-INFO

  IWAT-PARM1
    <PLS >  IWATER variable monthly parameter value flags  ***
    # -  # CSNO RTOP  VRS  VNN RTLI     ***
    1         0    0    0    0    0
  END IWAT-PARM1

  IWAT-PARM2
    <PLS >      IWATER input info: Part 2         ***
    # -  # ***  LSUR     SLSUR      NSUR     RETSC
    1            100      0.05       0.1       0.1
  END IWAT-PARM2

  IWAT-PARM3
    <PLS >      IWATER input info: Part 3         ***
    # -  # ***PETMAX    PETMIN
    1              0         0
  END IWAT-PARM3

  IWAT-STATE1
    <PLS > *** Initial conditions at start of simulation
    # -  # ***  RETS      SURS
    1              0         0
  END IWAT-STATE1

END IMPLND

SCHEMATIC
<-Source->                <--Area-->     <-Target->   MBLK   ***
<Name>   #                <-factor->     <Name>   #   Tbl#   ***
Basin  1***
PERLND  64                       1.14     RCHRES   1      2
PERLND  64                       1.14     RCHRES   1      3
PERLND  61                       1.53     RCHRES   1      2
PERLND  61                       1.53     RCHRES   1      3
IMPLND   1                       5.25     RCHRES   1      5

******Routing******
PERLND  64                       1.14     COPY     1     12
PERLND  61                       1.53     COPY     1     12
IMPLND   1                       5.25     COPY     1     15
PERLND  64                       1.14     COPY     1     13
PERLND  61                       1.53     COPY     1     13
RCHRES   1                          1     COPY   501     16
END SCHEMATIC

NETWORK
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member->  ***
<Name>   #        <Name> # #<-factor->strg <Name>   #   #        <Name> # #  ***
COPY   501 OUTPUT MEAN   1 1   48.4        DISPLY   1     INPUT  TIMSER 1



<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member->  ***
<Name>   #        <Name> # #<-factor->strg <Name>   #   #        <Name> # #  ***
END NETWORK

RCHRES
  GEN-INFO
    RCHRES       Name        Nexits   Unit Systems   Printer                ***
    # -  #<----------------><---> User T-series  Engl Metr LKFG             ***
                                      in  out                               ***
    1     Vault  1               1    1    1    1   28    0    1
  END GEN-INFO
```

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```
  *** Section RCHRES***

  ACTIVITY
    <PLS > ************ Active Sections ****************************
    # -  # HYFG ADFG CNFG HTFG SDFG GQFG OXFG NUFG PKFG PHFG ***
    1         1    0    0    0    0    0    0    0    0    0
  END ACTIVITY

  PRINT-INFO
    <PLS > ***************** Print-flags ****************** PIVL  PYR
    # -  # HYDR ADCA CONS HEAT  SED  GQL OXRX NUTR PLNK PHCB PIVL  PYR  *********
    1         4    0    0    0    0    0    0    0    0    0    1    9
  END PRINT-INFO

  HYDR-PARM1
    RCHRES  Flags for each HYDR Section                                    ***
    # -  #  VC A1 A2 A3  ODFVFG for each *** ODGTFG for each     FUNCT  for each
           FG FG FG FG  possible  exit  *** possible  exit      possible  exit
            *  *  *  *    *  *  *  *  *       *  *  *  *  *         ***
    1        0  1  0  0    4  0  0  0  0       0  0  0  0  0       2  2  2  2  2
  END HYDR-PARM1

  HYDR-PARM2
    # -  #    FTABNO       LEN      DELTH     STCOR        KS      DB50       ***
  <------><--------><--------><--------><--------><--------><--------><--------> ***
    1              1      0.02       0.0       0.0       0.5       0.0
  END HYDR-PARM2
  HYDR-INIT
    RCHRES  Initial conditions for each HYDR section                       ***
    # -  # ***   VOL     Initial  value  of COLIND     Initial  value  of OUTDGT
         *** ac-ft     for each possible exit        for each possible exit
  <------><-------->     <---><---><---><---> *** <---><---><---><---><--->
    1            0        4.0  0.0  0.0  0.0  0.0       0.0  0.0  0.0  0.0  0.0
  END HYDR-INIT
END RCHRES

SPEC-ACTIONS
END SPEC-ACTIONS
FTABLES
  FTABLE      1
   92    4
     Depth      Area    Volume  Outflow1 Velocity  Travel Time***
      (ft)   (acres) (acre-ft)   (cfs)   (ft/sec)    (Minutes)***
  0.000000  0.083563  0.000000  0.000000
  0.055556  0.083563  0.004642  0.013448
  0.111111  0.083563  0.009285  0.019018
  0.166667  0.083563  0.013927  0.023293
  0.222222  0.083563  0.018570  0.026896
  0.277778  0.083563  0.023212  0.030071
  0.333333  0.083563  0.027854  0.032941
  0.388889  0.083563  0.032497  0.035580
  0.444444  0.083563  0.037139  0.038037
  0.500000  0.083563  0.041781  0.040344
  0.555556  0.083563  0.046424  0.042526
  0.611111  0.083563  0.051066  0.044602
  0.666667  0.083563  0.055709  0.046585
  0.722222  0.083563  0.060351  0.048488
  0.777778  0.083563  0.064993  0.050318
  0.833333  0.083563  0.069636  0.052084
  0.888889  0.083563  0.074278  0.053792
  0.944444  0.083563  0.078921  0.055448
  1.000000  0.083563  0.083563  0.057055
  1.055556  0.083563  0.088205  0.058619
  1.111111  0.083563  0.092848  0.060141
  1.166667  0.083563  0.097490  0.061627
  1.222222  0.083563  0.102132  0.063077
  1.277778  0.083563  0.106775  0.064494
  1.333333  0.083563  0.111417  0.065882
  1.388889  0.083563  0.116060  0.067240
  1.444444  0.083563  0.120702  0.068572
```

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```
  1.500000  0.083563  0.125344  0.069878
  1.555556  0.083563  0.129987  0.071160
  1.611111  0.083563  0.134629  0.072420
  1.666667  0.083563  0.139272  0.073658
  1.722222  0.083563  0.143914  0.074875
  1.777778  0.083563  0.148556  0.076074
  1.833333  0.083563  0.153199  0.077253
  1.888889  0.083563  0.157841  0.078415
  1.944444  0.083563  0.162483  0.079560
  2.000000  0.083563  0.167126  0.080688
  2.055556  0.083563  0.171768  0.081801
  2.111111  0.083563  0.176411  0.082899
  2.166667  0.083563  0.181053  0.083983
  2.222222  0.083563  0.185695  0.085053
  2.277778  0.083563  0.190338  0.086109
  2.333333  0.083563  0.194980  0.087153
  2.388889  0.083563  0.199622  0.088185
  2.444444  0.083563  0.204265  0.089204
  2.500000  0.083563  0.208907  0.090212
  2.555556  0.083563  0.213550  0.091209
  2.611111  0.083563  0.218192  0.092195
  2.666667  0.083563  0.222834  0.093171
  2.722222  0.083563  0.227477  0.094136
  2.777778  0.083563  0.232119  0.095092
  2.833333  0.083563  0.236762  0.096038
  2.888889  0.083563  0.241404  0.096975
  2.944444  0.083563  0.246046  0.097903
  3.000000  0.083563  0.250689  0.098822
  3.055556  0.083563  0.255331  0.099733
  3.111111  0.083563  0.259973  0.100636
  3.166667  0.083563  0.264616  0.101530
  3.222222  0.083563  0.269258  0.102417
  3.277778  0.083563  0.273901  0.103296
  3.333333  0.083563  0.278543  0.104168
  3.388889  0.083563  0.283185  0.105032
  3.444444  0.083563  0.287828  0.105890
  3.500000  0.083563  0.292470  0.106740
  3.555556  0.083563  0.297113  0.107584
  3.611111  0.083563  0.301755  0.108421
  3.666667  0.083563  0.306397  0.117943
  3.722222  0.083563  0.311040  0.329709
  3.777778  0.083563  0.315682  0.678800
  3.833333  0.083563  0.320324  1.123028
  3.888889  0.083563  0.324967  1.645112
  3.944444  0.083563  0.329609  2.234785
  4.000000  0.083563  0.334252  2.885025
  4.055556  0.083563  0.338894  3.511273
  4.111111  0.083563  0.343536  4.654699
  4.166667  0.083563  0.348179  6.134009
  4.222222  0.083563  0.352821  7.883988
  4.277778  0.083563  0.357464  9.865995
  4.333333  0.083563  0.362106  12.05266
  4.388889  0.083563  0.366748  14.42232
  4.444444  0.083563  0.371391  16.95643
  4.500000  0.083563  0.376033  19.63815
  4.555556  0.083563  0.380675  22.45157
  4.611111  0.083563  0.385318  25.38119
  4.666667  0.083563  0.389960  28.41162
  4.722222  0.083563  0.394603  31.52738
  4.777778  0.083563  0.399245  34.71287
  4.833333  0.083563  0.403887  37.95224
  4.888889  0.083563  0.408530  41.22946
  4.944444  0.083563  0.413172  44.52832
  5.000000  0.083563  0.417815  47.83252
  5.055556  0.083563  0.422457  51.12577
  END FTABLE  1
END FTABLES

EXT SOURCES
<-Volume-> <Member> SsysSgap<--Mult-->Tran <-Target vols> <-Grp> <-Member->  ***
```

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```
<Name>   # <Name> # tem strg<-factor->strg <Name>   #   #        <Name> # #  ***
WDM      2 PREC     ENGL    1              PERLND   1 999 EXTNL  PREC
WDM      2 PREC     ENGL    1              IMPLND   1 999 EXTNL  PREC
WDM      1 EVAP     ENGL    1              PERLND   1 999 EXTNL  PETINP
WDM      1 EVAP     ENGL    1              IMPLND   1 999 EXTNL  PETINP
WDM     22 IRRG     ENGL    0.7       SAME PERLND  64     EXTNL  SURLI
WDM     22 IRRG     ENGL    0.7       SAME PERLND  61     EXTNL  SURLI

END EXT SOURCES

EXT TARGETS
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Volume-> <Member> Tsys Tgap Amd ***
<Name>   #        <Name> # #<-factor->strg <Name>   # <Name>    tem strg strg***
RCHRES   1 HYDR   RO     1 1        1      WDM   1004 FLOW     ENGL      REPL
RCHRES   1 HYDR   STAGE  1 1        1      WDM   1005 STAG     ENGL      REPL
COPY     1 OUTPUT MEAN   1 1     48.4      WDM    701 FLOW     ENGL      REPL
COPY   501 OUTPUT MEAN   1 1     48.4      WDM    801 FLOW     ENGL      REPL
END EXT TARGETS

MASS-LINK
<Volume>   <-Grp> <-Member-><--Mult-->     <Target>       <-Grp> <-Member->***
<Name>            <Name> # #<-factor->     <Name>                <Name> # #***
  MASS-LINK        2
PERLND     PWATER SURO       0.083333      RCHRES         INFLOW IVOL
  END MASS-LINK    2

  MASS-LINK        3
PERLND     PWATER IFWO       0.083333      RCHRES         INFLOW IVOL
  END MASS-LINK    3

  MASS-LINK        5
IMPLND     IWATER SURO       0.083333      RCHRES         INFLOW IVOL
  END MASS-LINK    5

  MASS-LINK       12
PERLND     PWATER SURO       0.083333      COPY           INPUT  MEAN
  END MASS-LINK   12

  MASS-LINK       13
PERLND     PWATER IFWO       0.083333      COPY           INPUT  MEAN
  END MASS-LINK   13

  MASS-LINK       15
IMPLND     IWATER SURO       0.083333      COPY           INPUT  MEAN
  END MASS-LINK   15

  MASS-LINK       16
RCHRES     ROFLOW                          COPY           INPUT  MEAN
  END MASS-LINK   16


END MASS-LINK

END RUN
```

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Appendix I:

Pacific Park Drive Townhome Project
Noise Impact Study

Pacific Park Drive Townhome Project
Noise Impact Study

City of Aliso Viejo, California
May 19, 2026

rkengineer.com

RK ENGINEERING GROUP INC.

1351

Pacific Park Drive Townhome Project
Noise Impact Study

City of Aliso Viejo, California

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1.0 Introduction

1.1 Purpose of Report & Study Objectives

The purpose of this report is to evaluate the potential noise impacts from the proposed Pacific Park Drive Townhome Project (hereinafter referred to as "project") and provide recommendations, if necessary, to minimize any project noise impacts.

The assessment was conducted within the context of the California Environmental Quality Act (CEQA, California Public Resources Code Sections 21000, et seq.) and the standards and methodology follow the City of Aliso Viejo Municipal Code and General Plan requirements.

The following is provided in this report:

- A description of the study area and the proposed project;
- Information regarding the fundamentals of noise;
- Identification of the regulatory setting and applicable noise standards;
- Establishment of the existing ambient noise environment at the project site;
- Analysis of the project's construction and operational noise impact to adjacent receptors;
- Analysis of the project's noise/land use compatibility and preliminary interior noise levels; and

1.2 Site Location & Project Description

The proposed project site is generally located south of Pacific Park Drive, between Journey and Aliso Creek Road, in the City of Aliso Viejo. The project site is approximately 8.44 acres and is currently occupied by three (3) 2-story commercial office buildings and associated parking lots. **Exhibit A** shows the location map of the proposed project.

The proposed project consists of demolishing the existing commercial buildings and constructing 137 residential townhome dwelling units.

During construction, the project will demolish approximately 64,350 square feet of building area, 217,550 square feet of hardscape, and 41,200 square feet of landscaping. The project will require the import of approximately 5,700 cubic yards of earthwork material for grading purposes.

Exhibit B shows the proposed site plan used for this analysis.

1.3 Sensitive Receptors

Sensitive receptors are considered land uses or other types of population groups that are more sensitive to noise exposure. There are several sensitive land uses adjacent to the project site, including the following.

A project site location map, including sensitive receptor locations, is provided in **Exhibit A**.

Receptor-1 Existing multifamily residential land uses located to the northeast of the project site. The nearest point of Receptor-1 (marked as circle "1" on **Exhibit A**) is located approximately 400 feet northeast of the northeastern corner of the project site.

Receptor-2 Existing multifamily residential land uses located to the east of the project site. The point of Receptor-2 (marked as circle "2" on **Exhibit A**) is located approximately 210 feet east of the project site's eastern boundary.

Receptor-3 Existing educational land uses located to the south of the project site, including the Preschool of Aliso Viejo and the Alive Church Orange County's daycare services. The nearest point of Receptor-3 (marked as circle "3" on **Exhibit A**) is located approximately 50 feet south of the project site's southern boundary.

Receptor-4 Existing medical office land uses located to the west of the project site. The nearest point of Receptor-4 (marked as circle "4" on **Exhibit A**) is located approximately 80 feet west of the project site's western boundary.

Receptor-5 Existing Orange County Fire Station 57 located to the west-northwest of the project site. The nearest point of Receptor-5 (marked as circle "5" on **Exhibit A**) is located directly adjacent to the project site's western boundary.

Receptor-6 Existing multifamily residential land uses located to the northwest of the project site. The nearest point of Receptor-6 (marked as circle "6" on **Exhibit A**) is located approximately 375 feet northwest of the northwestern corner of the project site.

1.4 Summary of Analysis Results

Table 1-1 provides a summary of the noise analysis results, per the CEQA impact criteria checklist.

Table 1-1 | CEQA Noise Impact Criteria

Noise Impact Criteria	Potentially Significant	Potentially Significant Unless Mitigated	Less Than Significant	No Impact
Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?			X	
b) Generation of excessive groundborne vibration or groundborne noise levels?			X	
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				X

Legend

① = Sensitive Receptor Location

= Project Site Boundary

Exhibit A

Location Map

Exhibit B

Site Plan

2.0 Fundamentals of Noise

This section of the report provides basic information about noise and presents some of the terms used within the report.

2.1 Sound, Noise, and Acoustics

Sound is a disturbance created by a moving or vibrating source and is capable of being detected by the hearing organs. Sound may be thought of as mechanical energy of a moving object transmitted by pressure waves through a medium to a human ear. For traffic, or stationary noise, the medium of concern is air. Noise is defined as sound that is loud, unpleasant, unexpected, or unwanted.

2.2 Frequency and Hertz

A continuous sound is described by its frequency (pitch) and its amplitude (loudness). Frequency relates to the number of pressure oscillations per second. Low-frequency sounds are low in pitch (bass sounding) and high-frequency sounds are high in pitch (squeak). These oscillations per second (cycles) are commonly referred to as Hertz (Hz). The human ear can hear from the bass pitch starting out at 20 Hz all the way to the high pitch of 20,000 Hz.

2.3 Sound Pressure Levels and Decibels

The amplitude of a sound determines its loudness. The loudness of sound increases or decreases, as the amplitude increases or decreases. Sound pressure amplitude is measured in units of micro-Newton per square inch meter (N/m2), also called micro-Pascal (μPa). One μPa is approximately one hundred billionths (0.00000000001) of normal atmospheric pressure. Sound pressure level (SPL or L_p) is used to describe in logarithmic units the ratio of actual sound pressures to a reference pressure squared. These units are called decibels and abbreviated dB.

2.4 Addition of Decibels

Because decibels are on a logarithmic scale, sound pressure levels cannot be added or subtracted by simple plus or minus addition. When two (2) sounds of equal SPL are combined, they will produce an SPL 3 dB greater than the original single SPL. In other words, sound energy must be doubled to produce a 3 dB increase. If two (2) sounds differ by approximately 10 dB the higher sound level is the predominant sound.

2.5 Human Response to Changes in Noise Levels

In general, the healthy human ear is most sensitive to sounds between 1,000 Hz and 5,000 Hz, (A-weighted scale) and it perceives a sound within that range as being more intense than a sound with a higher or lower frequency with the same magnitude. For purposes of this report as well as with most environmental documents, the A-scale weighting is typically reported in terms of A-weighted decibel (dBA). Typically, the human ear can barely perceive the change in noise level of 3 dB. A change in 5

dB is readily perceptible, and a change in 10 dB is perceived as being twice or half as loud . As previously discussed, a doubling of sound energy results in a 3 dB increase in sound, which means that a doubling of sound energy (e.g. doubling the volume of traffic on a highway), would result in a barely perceptible change in sound level.

2.6 Noise Descriptors

Noise in our daily environment fluctuates over time. Some noise levels occur in regular patterns, others are random. Some noise levels are constant, while others are sporadic. Noise descriptors were created to describe the different time-varying noise levels. The following are the most commonly used noise descriptors along with brief definitions.

- **A-Weighted Sound Level.** The sound pressure level in decibels as measured on a sound level meter using the A-weighted filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the response of the human ear. A numerical method of rating human judgment of loudness.

- **Ambient Noise Level.** The composite of noise from all sources, near and far. In this context, the ambient noise level constitutes the normal or existing level of environmental noise at a given location.

- **Community Noise Equivalent Level (CNEL).** The average equivalent A-weighted sound level during a 24-hour day, obtained after addition of five (5) decibels to sound levels in the evening from 7:00 to 10:00 PM and after addition of ten (10) decibels to sound levels in the night before 7:00 AM and after 10:00 PM.

- **Decibel (dB).** A unit for measuring the amplitude of a sound, equal to 20 times the logarithm to the base 10 of the ratio of the pressure of the sound measured to the reference pressure, which is 20 micro-pascals.

- **dBA.** A-weighted sound level (see definition above).

- **Equivalent Sound Level (Leq).** The sound level corresponding to a steady noise level over a given sample period with the same amount of acoustic energy as the actual time varying noise level. The energy average noise level during the sample period.

- **Habitable Room.** Any room meeting the requirements of the Uniform Building Code or other applicable regulations which is intended to be used for sleeping, living, cooking or dining purposes, excluding such enclosed spaces as closets, pantries, bath or toilet rooms, service rooms, connecting corridors, laundries, unfinished attics, foyers, storage spaces, cellars, utility rooms, and similar spaces.

- **L(n).** The A-weighted sound level exceeded during a certain percentage of the sample time. For example, L10 is the sound level exceeded 10 percent of the sample time. Similarly, L50, L90 and L99, etc.

- **Noise.** Any unwanted sound or sound which is undesirable because it interferes with speech and hearing, or is intense enough to damage hearing, or is otherwise annoying. The State Noise Control Act defines noise as "...excessive undesirable sound...".

- **Outdoor Living Area.** Outdoor spaces that are associated with residential land uses typically used for passive recreational activities or other noise-sensitive uses. Such spaces include patio areas, barbecue areas, jacuzzi areas, etc. associated with residential uses; outdoor patient recovery or resting areas associated with hospitals, convalescent hospitals, or rest homes; outdoor areas associated with places of worship which have a significant role in services or other noise-sensitive activities; and outdoor school facilities routinely used for educational purposes which may be adversely impacted by noise. Outdoor areas usually not included in this definition are: front yard areas, driveways, greenbelts, maintenance areas and storage areas associated with residential land uses; exterior areas at hospitals that are not used for patient activities; outdoor areas associated with places of worship and principally used for short-term social gatherings; and, outdoor areas associated with school facilities that are not typically associated with educational uses prone to adverse noise impacts (for example, school play yard areas).

- **Percent Noise Levels.** See L(n).

- **Sound Level (Noise Level).** The weighted sound pressure level obtained by use of a sound level meter having a standard frequency-filter for attenuating part of the sound spectrum.

- **Sound Level Meter.** An instrument, including a microphone, an amplifier, an output meter, and frequency weighting networks for the measurement and determination of noise and sound levels.

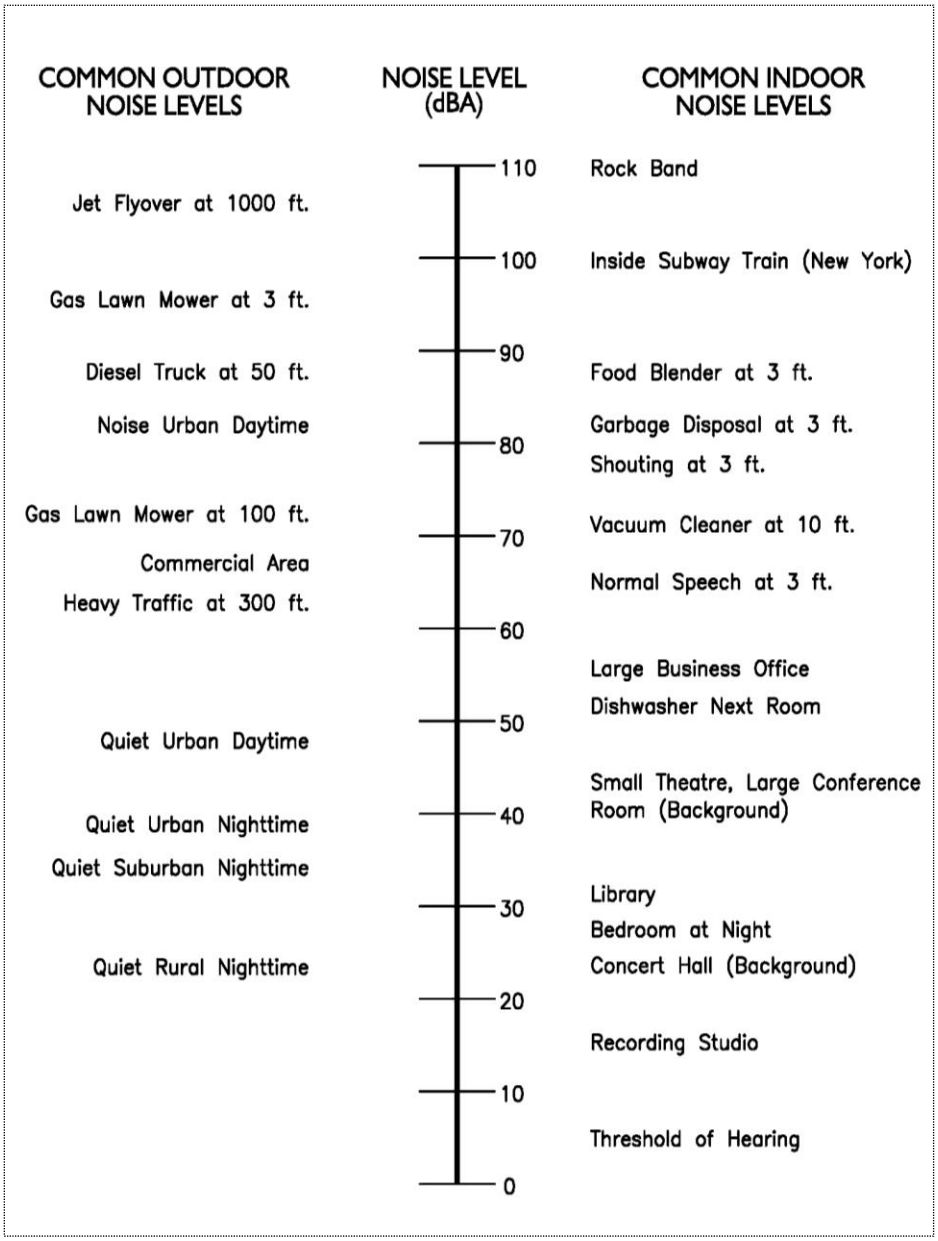
- **Single Event Noise Exposure Level (SENEL).** The dBA level which, if it lasted for one (1) second, would produce the same A-weighted sound energy as the actual event.

2.7 Sound Propagation

As sound propagates from a source it spreads geometrically. Sound from a small, localized source (i.e., a point source) radiates uniformly outward as it travels away from the source in a spherical pattern. The sound level attenuates at a rate of 6 dB per doubling of distance. The movement of vehicles down a roadway makes the source of the sound appear to propagate from a line (i.e., line source) rather than a point source. This line source results in the noise propagating from a roadway in a cylindrical spreading versus a spherical spreading that results from a point source. The sound level attenuates for a line source at a rate of 3 dB per doubling of distance.

As noise propagates from the source, it is affected by the ground and atmosphere. Noise models use hard site (reflective surfaces) and soft site (absorptive surfaces) to help calculate predicted noise levels. Hard site conditions assume no excessive ground absorption between the noise source and the receiver. Soft site conditions such as grass, soft dirt or landscaping attenuate noise at an additional rate of 1.5 dB per doubling of distance. When added to the geometric spreading, the excess ground attenuation results in an overall noise attenuation of 3 dB per doubling of distance for a line source and 6.0 dB per doubling of distance for a point source.

Figure 1-1 | Typical Sound Levels from Indoor and Outdoor Noise Sources[1]



[1] Source: AASHSTO. 1993. Guide on Evaluation and Abatement of Traffic Noise

2.8 Vibration Descriptors

Ground-borne vibrations consist of rapidly fluctuating motions within the ground that have an average motion of zero. The effects of ground-borne vibrations typically only cause a nuisance to people, but at extreme vibration levels, damage to buildings may occur. Although ground-borne vibration can be felt outdoors, it is typically only an annoyance to people indoors where the associated effects of the shaking of a building can be notable. Ground-borne noise is an effect of ground-borne vibration that only exists indoors since it is produced from noise radiated from the motion of the walls and floors of a room and may also consist of the rattling of windows or dishes on shelves.

Several different methods are used to quantify vibration amplitude:

- **PPV.** Known as the peak particle velocity (PPV) which is the maximum instantaneous peak in vibration velocity, typically given in inches per second.
- **RMS.** Known as the root mean squared (RMS) can be used to denote vibration amplitude.
- **VdB.** A commonly used abbreviation to describe the vibration level (VdB) for a vibration source.

2.9 Vibration Perception

Typically, developed areas are continuously affected by vibration velocities of 50 VdB or lower. These continuous vibrations are not noticeable to humans whose threshold of perception is around 65 VdB. Outdoor sources that may produce perceptible vibrations are usually caused by construction equipment, steel-wheeled trains, and traffic on rough roads, while smooth roads rarely produce perceptible ground-borne noise or vibration. To counter the effects of ground-borne vibration, the Federal Transit Administration (FTA) has published guidance relative to vibration impacts.

2.10 Vibration Propagation

There are three main types of vibration propagation: surface, compression, and shear waves. Surface waves, or Rayleigh waves, travel along the ground's surface. These waves carry most of their energy along an expanding circular wavefront, similar to ripples produced by throwing a rock into a pool of water. P-waves, or compression waves, are body waves that carry their energy along an expanding spherical wavefront. The particle motion in these waves is longitudinal (i.e., in a "push-pull" fashion). P-waves are analogous to airborne sound waves. S-waves, or shear waves, are also body waves that carry energy along an expanding spherical wavefront. However, unlike P-waves, the particle motion is transverse, or side-to-side and perpendicular to the direction of propagation.

As vibration waves propagate from a source, the vibration energy decreases in a logarithmic nature and the vibration levels typically decrease by 6 VdB per doubling of the distance from the vibration source. As stated above, this drop-off rate can vary greatly depending on the soil but has been shown

to be effective enough for screening purposes in order to identify potential vibration impacts that may need to be studied through actual field tests.

2.11 Construction-Related Vibration Level Prediction[2]

Operational activities are separated into two different categories. The vibration can be transient or continuous in nature. Each category can result in varying degrees of ground vibration, depending on the equipment used on the site. Operation of equipment causes ground vibrations that spread through the ground and diminish in strength with distance. Buildings in the vicinity of the project area site respond to these vibrations with varying results ranging from no perceptible effects at the low levels to slight damage at the highest levels. The thresholds from Caltrans Transportation and Construction Vibration Guidance Manual, April 2020, in the table below provide general guidelines as to the maximum vibration limits for when vibration becomes potentially damaging to structures.

The Caltrans Transportation and Construction Vibration Guidance Manual, April 2020 provides general thresholds and guidelines as to the vibration damage potential from vibratory impacts. **Table 2-1** provides general vibration damage potential thresholds.

Table 2-1 | Vibration Damage Potential Threshold Criteria

Structure and Condition	PPV (in./sec.)	
	Transient Sources	Continuous/Frequent Intermittent Sources
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.20	0.10
Historic and some old buildings	0.50	0.25
Older residential structures	0.50	0.30
New residential structures	1.00	0.50
Modern industrial/commercial buildings	2.00	0.50

Soil conditions have an impact on how vibration propagates through the ground. The Caltrans Transportation and Construction Vibration Guidance Manual, April 2020 provides suggested "n" values based on soil class. **Table 2-2** outlines the manual's suggested values and description.

[2] Source: Caltrans Transportation and Construction Vibration Guidance Manual, April 2020.

Table 2-2 | Suggested "n" Values Based on Soil Classes

Soil Class	Description of Soil Material	Suggested Value of "n"
I	Weak or soft soils: loose soils, dry or partially saturated peat and muck, mud, loose beach sand, and dune sand.	1.4
II	Most sands, sandy clays, silty clays, gravel, silts, and weathered rock.	1.3
III	Hard soils: densely compacted sand, dry consolidated clay, consolidated glacial till, and some exposed rock.	1.1
IV	Hard, component rock: bedrock, freshly exposed hard rock.	1.0

3.0 Regulatory Setting

The proposed project is located in the City of Aliso Viejo, and the agencies responsible for regulating noise are discussed below.

3.1 State Regulations

The State of California has established noise insulation standards as outlined in Title 24 of the Building Standards Code which in some cases requires acoustical analyses to outline exterior noise levels and to ensure interior noise levels do not exceed the interior threshold.

Noise insulation design standards for residential dwellings are established in the 2022 California Building Code, Title 24, Part 2, Volume 1, Section 1206 Sound Transmission. The City is required by the State Housing Law to adopt these State codes as minimum performance standards. The City may enact stricter noise standards throughout the city or on a case-by-case basis if deemed necessary. In brief, the Title 24 noise standards require the following for allowable interior noise levels:

1. Interior noise levels due to exterior sources must not exceed a community noise equivalent level (CNEL) or a day-night level (LDN) of 45 dBA, in any habitable room.

2. Party wall and floor-ceiling assembly designs must provide a minimum STC of 50, based on lab tests. Field tested assemblies must provide a minimum noise isolation class (NIC) of 45.

3. Floor-ceiling assembly designs must provide for a minimum impact insulation class (IIC) of 50, based on lab tests. Field tested assemblies must provide a minimum FIIC of 45.

4. Penetrations or openings in sound rated assemblies must be treated to maintain required ratings.

3.2 City of Aliso Viejo Noise Regulations

The proposed project is located in the City of Aliso Viejo and is subject to the standards and regulations established by the City of Aliso Viejo General Plan Noise Element and Municipal Code Chapter 8.12 – Noise Control, as discussed below.

A copy of the City of Aliso Viejo General Plan and Municipal Code standards are provided in **Appendix A**.

3.2.1 General Plan Noise Standards

3.2.1.1 Noise/Land Use Compatibility

The City of Aliso Viejo General Plan establishes planning criteria for determining a development's noise/land use compatibility based on the community noise equivalent level (CNEL). CNEL noise levels are typically used to evaluate mobile noise source impacts such as those from roadways.

Table 3-1 shows the City of Aliso Viejo noise/land use compatibility standards for the land uses on and adjacent to the proposed project site, as prescribed in the General Plan.

Table 3-1 | City of Aliso Viejo Land Use Compatibility Guidelines[1]

Land Use Category	Community Noise Exposure (dBA CNEL)[2]			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential	60 and below	60 – 70	70 – 75	75 and above
Schools, Libraries, Churches, Hospitals, Nursing Homes	60 and below	60 – 70	70 – 80	80 and above

[1] Source: City of Aliso Viejo General Plan Noise Element, Table N-2: Noise/Land Use Compatibility Matrix.

[2] Notes:

Normally Acceptable:	Specified land use is satisfactory, based upon the assumption that any buildings involved meet conventional Title 24 construction standards. No special noise insulation requirements.
Conditionally Acceptable:	New construction or development shall be undertaken only after a detailed noise analysis is made and noise reduction measures are identified and included in the project design.
Normally Unacceptable:	New construction or development is discouraged. If new construction is proposed, a detailed analysis is required, noise reduction measures must be identified, and noise insulation features included in the design.
Clearly Unacceptable:	New construction or development clearly should not be undertaken.

3.2.1.2 Stationary Noise Standards

In addition to the above noise/land use compatibility guidelines, the General Plan has established the following stationary noise standards. Stationary noise standards represent the maximum acceptable noise levels as measured from any residential property in the City. Accordingly, it is unlawful to cause the noise level on any residential property to exceed the exterior noise standards listed in **Table 3-2**:

1. For a cumulative period of more than 30 minutes in any hour;
2. Plus five (5) dBA for a cumulative period of more than 15 minutes in any hour;
3. Plus ten (10) dBA for a cumulative period of more than five (5) minutes in any hour; or
4. Plus 20 dBA for any period of time.

In addition, it is unlawful to cause the noise level on any residential property to exceed the interior noise standards listed in **Table 3-2**:

1. For a cumulative period of more than five (5) minutes in any hour;
2. Plus five (5) dBA for a cumulative period of more than one (1) minute in any hour; or
3. Plus ten (10) dBA for any period of time.

Table 3-2 | City of Aliso Viejo General Plan Noise Standards - Residential[1]

Location	Allowable Noise Level (dBA Leq)	
	Daytime (7:00 a.m. to 10:00 p.m.)	Nighttime (10:00 p.m. to 7:00 a.m.)
Interior	55.0	45.0
Exterior	55.0	50.0

[1] Source: City of Aliso Viejo General Plan Noise Element, Table N-1: Orange County Residential Noise Standards.

For the purposes of this analysis, the noise levels listed in **Table 3-1** are used to evaluate the project's noise/land use compatibility, and the noise levels listed in **Table 3-2** are used to evaluate the project's consistency with established plans, policies, and programs for noise control within the City.

It should be noted that the City's General Plan Noise Element also places the following provisions on multifamily land uses within the City:

> *"The City of Aliso Viejo will continue to enforce the provisions of the California Energy Code. Energy Code standards specify that combined indoor noise for multi-family living spaces shall not exceed 45 dBA CNEL and must be implemented when the outdoor noise level exceeds 60 dBA CNEL. The Noise Policy Map (Figure N-1) can be used to determine when and where it is appropriate to implement this standard. This standard must be applied to all new hotels, motels, and multifamily residential development."*

3.2.2 Municipal Code Noise Standards

3.2.2.1 Noise Standards

Table 3-3 shows the exterior noise standards established in Chapter 8.12 of the City of Aliso Viejo Municipal Code.

Table 3-3 | City of Aliso Viejo Municipal Code Noise Standards[1]

Location	Exterior Noise Level Thresholds (dBA Leq)	
	Daytime (7:00 a.m. – 10:00 p.m.)	Nighttime (10:00 p.m. – 7:00 a.m.)
Residential – Density of less than 10 DU/AC	50.0	45.0
Residential – Density of 10 DU/AC or more	55.0	50.0
Commercial	65.0	60.0

[1] Source: City of Aliso Viejo Municipal Code Chapter 8.12 – Noise Control.

Per the Municipal Code, it is unlawful for any person at any location within the City to create any noise, or to allow the creation of any noise on property owned, leased, occupied, or otherwise controlled by the person, when the foregoing causes the noise level, when measured on any other parcel, to exceed:

1. The noise standard for a cumulative period of more than 30 minutes in any hour;
2. The noise standard plus five (5) dBA for a cumulative period of more than 15 minutes in any hour;
3. The noise standard plus ten (10) dBA for a cumulative period of more than five (5) minutes in any hour;
4. The noise standard plus 15 dBA for a cumulative period of more than one (1) minute in any hour; or
5. The noise standard plus 20 dBA for any period of time.

3.2.2.2 Construction Noise Standards

Per the Municipal Code, noise sources associated with construction, repair, remodeling, or grading of any real property shall be exempted from the provisions of Chapter 8.12, provided said activities do not take place between the hours of eight p.m. and seven a.m. on weekdays, eight p.m. and eight a.m. on Saturday, or at any time on Sunday or a federal holiday.

4.0 Study Method and Procedures

The following section describes the noise measurement procedures and locations, noise modeling procedures, and assumptions used in this analysis.

4.1 Noise Measurement Procedures and Criteria

Noise measurements are taken to determine the existing noise levels. A noise receiver or receptor is any location in the noise analysis in which noise might produce an impact. The following criteria are used to select measurement locations and receptors:

- Locations expected to receive the highest noise impacts, such as the nearest houses to the project site;
- Locations that are acoustically representative and equivalent to the area of concern;
- Human land usage; and
- Sites clear of major obstructions and contamination.

RK conducted the sound level measurements in accordance with Caltrans technical noise specifications. All measurement equipment meets American National Standards Institute (ANSI) specifications for sound level meters (ANSI S1.4: Specification for Sound Level Meter, 1983).

Piccolo-II Type 2 integrating-averaging level meters were used to conduct noise measurements at the project site and property boundaries.

The Leq, Lmin, Lmax, L2, L8, L25, and L50 statistical data were recorded over the measurement time intervals and the information was utilized to define the noise characteristics for the project. The following gives a brief description of the procedures for sound level measurements:

- Microphones for sound level meters were placed five (5) feet above the ground;
- Sound level meters were calibrated before each measurement;
- Following the calibration of equipment, a windscreen was placed over the microphone;
- Frequency weighting was set on “A” and slow response; and
- Temperature and sky conditions were observed and documented.

Appendix B includes photographs, field sheets, and measured noise data.

4.2 Stationary Noise Source Modeling

Stationary noise generated by the project was modeled using a computer program that replicates the FHWA Noise Prediction Model (FHWA-RD-77-108). The FHWA model arrives at a predicted noise level through a series of adjustments to the reference energy noise level. For stationary sources, the following noise levels were applied to the model. The model outputs the projected noise level based on the following key parameters:

- Referenced noise level (i.e., how loud a source is at a specific distance);
- Vertical and horizontal distances of sensitive receptor from the noise source;
- Vertical and horizontal distances of noise barriers from the noise source and receptor;
- Typical noise source spectra; and
- Topography.

The primary source of onsite noise generated by the proposed project would be the operation of HVAC equipment. Potential HVAC/condenser equipment noise is modeled assuming that equipment would be located at ground level and shielded behind noise barrier walls/enclosures. It is assumed that the project will include one HVAC unit per townhouse dwelling unit. To be conservative, noise impacts are modeled based on the simultaneous operation of five (5) HVAC units.

To model HVAC noise, reference noise levels for typical residential HVAC units are used. **Table 4-1** indicates the referenced noise levels used in this analysis.

Table 4-1 | Referenced Stationary Noise Levels

Noise Source	Distance from Source (Feet)	Noise Levels (dBA Leq and Lmax)
HVAC[1]	3.28	65.0

[1] Noise level is representative of a single unit.

4.3 Interior Noise Modeling

The interior noise level is the difference between the projected exterior noise level at the structure's façade and the noise reduction provided by the structure itself. Typical building construction will provide a conservative 12 dBA noise level reduction with a "windows open" condition and a very conservative 20 dBA noise level reduction with "windows closed". The interior noise level is estimated by subtracting the building shell design from the estimated exterior noise level.

The interior noise analysis is based on industry standards for building noise reduction established by the Federal Highway Administration (FHWA), the 2013 Caltrans Technical Noise Supplement to the Traffic Noise Analysis Protocol (TeNS), the California Office of Noise Control Catalog of STC and IIC Ratings for Wall and Floor/Ceiling Assemblies, and the California Building Standards Code, Title 24.

The TeNS manual shows that the noise reduction due to building exteriors with ordinary sash windows (windows closed) is at least 20 decibels. By providing upgraded STC rated windows, the project design is considered adequate to meet interior noise standards. The building's exterior walls will be constructed per the latest building code insulation requirements and provide occupants with the most protection from exterior noise. Insulated exterior walls, designed per the latest California Building Standards, would provide a minimum of STC 35-40. Windows, on the other hand, are one of the acoustically weakest parts of the structure. Therefore, for a conservative estimate of preliminary interior noise, the building's noise reduction potential is limited to the STC of the windows.

4.4 Construction Noise Modeling

The construction noise vibration assessment is based on the General Assessment methodology set forth by the FTA's Transit Noise and Vibration Impact Assessment Manual, Section 7 – Noise and Vibration during Construction. This analysis utilizes the Federal Highway Administration (FHWA) Roadway Construction Noise Model, together with several key construction parameters, to estimate future construction noise levels during each phase of construction. Consistent with the FTA General Assessment methodology, the following assumptions have been utilized in the construction noise model:

- Noise emission level ($L_{emission}$) – Determine the emission level at 50 feet according to noise from typical construction equipment.
- Usage factor (Adj_{Usage}) – Assume a usage factor of one (1). This assumes a time period of one-hour with full power operation.
- Distance (D) – Assume that all equipment operates at the center of the project, or centerline for guideway or highway construction projects.
- Ground effect (G) – G equals zero (0) assuming free-field conditions and ignoring ground effects.
- The $L_{eq.equip}$ is determined only for the two noisiest pieces of equipment expected to be used in each phase of construction. The equipment noise levels are summed for each phase of construction using decibel addition.

Noise levels were projected from the center of the project site to the adjacent sensitive receptor property lines. Although some construction activity may occur closer to the adjacent receptors than the center of the project site, noise levels are based on an average distance from the center of the site per FTA General Assessment recommendations.

4.5 Construction Vibration Modeling

The construction vibration assessment is based on the methodology set forth within the Caltrans Transportation and Construction Induced Vibration Guidance Manual. The vibration impacts from bulldozers, heavy truck loading, vibratory rollers and compactors, and caisson drilling activity are analyzed. All vibratory activity is analyzed as a continuous and/or frequent event and is required to comply with the applicable guidance threshold criteria. It is expected that vibration levels will be highest during the paving phase. No impact pile driving is expected as part of this project.

Vibratory impacts were calculated from the nearest expected location of on-site construction to the nearest sensitive receptors and structures using the reference vibration levels, soil conditions, and the reference equation PPV= PPV ref (25/D)^n (in/sec) (from Caltrans Manual) where:

- PPV = reference measurement at 25 feet from the vibration source;
- D = distance from equipment to property line; and
- n = vibration attenuation rate through ground (n = 1.1 was utilized for this study).

5.0 Existing Noise Environment

The existing noise environment for the project site and surrounding areas has been established based on noise measurement data collected by RK. The project setting is residential and commercial, and the primary sources of environmental noise impacting the project site are commercial activity at adjacent properties, fire station activity, and roadway activity along Aliso Viejo Parkway and Pacific Park Drive.

5.1 Noise Measurement Results

To determine the existing noise level environment, RK conducted three (3) 24-hour noise measurements at the project site and receptors.

Noise levels were measured on August 7, 2025, using Piccolo-II Type 2 integrating-averaging sound level meters. The information was utilized to establish the noise characteristics of the existing ambient environment.

The noise monitoring locations were selected based on the proximity and location of adjacent sensitive receptors. **Exhibit C** graphically illustrates the location of the noise measurements.

- Noise Monitoring Location 1 (L-1) was taken near the northern boundary of the project site, approximately 155 feet south of the centerline of Pacific Park Drive.
- Noise Monitoring Location 2 (L-2) was taken near the eastern boundary of the project site, approximately 150 feet west of the centerline of Aliso Creek Road.
- Noise Monitoring Location 3 (L-3) was taken near the western boundary of the project site, approximately 155 feet east of the centerline of Journey.

Noise measurements were conducted at the above-selected locations to determine the existing ambient noise environment at the project site and nearby sensitive receptors.

Results of the ambient noise measurements are shown in **Tables 5-1, 5-2** and **5-3**. **Appendix B** includes photographs, field sheets, and measured noise data.

Table 5-1 | 24-Hour Noise Measurement Results – L-1[1]

Time	dBA Leq	Time	dBA Leq
12:00 AM	51.6	12:00 PM	61.6
1:00 AM	49.1	1:00 PM	55.8
2:00 AM	62.9	2:00 PM	56.5
3:00 AM	47.7	3:00 PM	59.0
4:00 AM	51.1	4:00 PM	61.1
5:00 AM	54.5	5:00 PM	59.1
6:00 AM	56.9	6:00 PM	57.0
7:00 AM	58.4	7:00 PM	63.0
8:00 AM	62.1	8:00 PM	58.3
9:00 AM	59.6	9:00 PM	56.3
10:00 AM	57.3	10:00 PM	55.3
11:00 AM	57.4	11:00 PM	58.1
24-Hour CNEL			**64.0**

[1] L-1 was measured on August 7, 2025.

Table 5-2 | 24-Hour Noise Measurement Results – L-2[1]

Time	dBA Leq	Time	dBA Leq
12:00 AM	53.0	12:00 PM	62.7
1:00 AM	52.1	1:00 PM	61.9
2:00 AM	52.4	2:00 PM	61.9
3:00 AM	53.8	3:00 PM	61.3
4:00 AM	54.9	4:00 PM	61.6
5:00 AM	57.5	5:00 PM	62.0
6:00 AM	61.6	6:00 PM	62.9
7:00 AM	63.0	7:00 PM	61.3
8:00 AM	63.7	8:00 PM	60.5
9:00 AM	64.1	9:00 PM	60.1
10:00 AM	62.4	10:00 PM	60.0
11:00 AM	62.5	11:00 PM	61.4
24-Hour CNEL			**65.6**

[1] L-2 was measured on August 7, 2025.

Table 5-3 | 24-Hour Noise Measurement Results – L-3[1]

Time	dBA Leq	Time	dBA Leq
12:00 AM	45.4	12:00 PM	51.2
1:00 AM	45.3	1:00 PM	51.7
2:00 AM	56.1	2:00 PM	51.8
3:00 AM	44.4	3:00 PM	51.9
4:00 AM	44.9	4:00 PM	55.4
5:00 AM	51.3	5:00 PM	53.5
6:00 AM	52.4	6:00 PM	49.7
7:00 AM	55.8	7:00 PM	50.0
8:00 AM	52.4	8:00 PM	47.6
9:00 AM	54.1	9:00 PM	47.7
10:00 AM	51.8	10:00 PM	47.7
11:00 AM	49.6	11:00 PM	47.3
24-Hour CNEL			**57.2**

[1] L-3 was measured on August 7, 2025.

As shown in **Table 5-1**, **Table 5-2** and **Table 5-3**, the existing ambient noise levels at the proposed project site range from approximately 57.2 dBA CNEL to 65.6 dBA CNEL.

Legend

① = Noise Monitoring Location

= Project Site Boundary

Exhibit C

Noise Monitoring Locations

6.0 Operational Noise Impacts

The following noise impact analysis has been performed to determine whether the proposed project would result in a substantial increase in ambient noise levels in the vicinity of the site. Additionally, the noise analysis examines whether the project can meet the City of Aliso Viejo and State of California requirements for residential exterior and interior noise exposure.

6.1 Stationary Noise Source Impacts

The proposed project consists of constructing and operating 137 single-family attached dwelling units. The primary sources of potential on-site noise would be HVAC equipment and other general residential activity.

These types of on-site stationary noises would not typically be categorized as loud, unnecessary, or unusual noise that disturbs the peace or quiet of any neighborhood, or that causes discomfort or annoyance to any person of normal sensitiveness. In particular, social activities and vehicle-related noise are generally substantially less during the noise sensitive nighttime hours.

To help ensure onsite noise levels do not exceed the City of Aliso Viejo General Plan and Municipal Code noise standards, the following stationary noise impact analysis has been prepared. The analysis assumes that onsite HVAC units will be operating continuously during daytime hours (7:00 a.m. to 10:00 p.m.) and nighttime hours (10:00 p.m. to 7:00 a.m.). The result is a worst-case assessment of impacts, as HVAC units would likely only operate intermittently throughout the day.

The referenced noise level used for this analysis is indicative of the noise level generated by a typical HVAC unit at the noise source location. Onsite HVAC noise is modeled assuming that equipment would be located at ground level and shielded behind noise barrier walls/enclosures.

The closest potential daytime HVAC location to the adjacent residential receptors will be near the southern boundary of the project site, approximately 70 feet from Receptor-3, which consists of educational land uses. Although the City of Aliso Viejo Municipal Code does not include stationary noise thresholds for educational buildings, these land uses are considered sensitive for the purposes of this analysis. Therefore, potential noise impacts are conservatively estimated at a distance of 70 feet from the nearest potential HVAC location and are compared with the City's stationary noise thresholds for residential land uses. It is assumed that the educational land uses located at Receptor-3 are only occupied and operational during daytime hours. Therefore, this analysis compares the worst-case noise levels at Receptor-3 to the City's daytime noise level threshold only.

Potential noise level impacts during nighttime hours are assessed at the property line of Receptor-5, which is the nearest adjacent receptor that is assumed to be occupied and operational during nighttime hours. Receptor-5 is located approximately 125 feet from the nearest potential onsite HVAC location.

To estimate noise level impacts at the adjacent receptors, the referenced noise level is input into the FHWA model and projected from the nearest potential HVAC locations to the nearest receptor property lines, at a distance of approximately 70 feet from Receptor-3, and 125 feet from Receptor-5. The model projections take into account the noise attenuation effects from distance, local topography, and ground effects. In addition, potential HVAC/condenser equipment noise is modeled assuming that the equipment would be located at ground level and shielded behind noise barrier walls/enclosures.

Table 6-1 shows the projected noise levels during daytime hours at the nearest adjacent residential receptors. **Table 6-2** shows the projected noise levels during nighttime hours at the nearest adjacent residential receptors. Stationary noise calculation worksheets are provided in **Appendix C**.

Table 6-1 | Stationary Noise Impacts – Daytime Hours

Noise Source	Receptor Distance from Noise Source (feet)	Noise Level at Receptor (dBA Leq)
		Daytime (Leq / Lmax 7 a.m. – 10 p.m.)
HVAC[1]	70.0	37.8 / 37.8
Noise Level Threshold		55.0 / 75.0
Noise Level Exceeds Threshold?		**No / No**

[1] Noise level is indicative of five (5) units.

Table 6-2 | Stationary Noise Impacts – Nighttime Hours

Noise Source	Receptor Distance from Noise Source (feet)	Noise Level at Receptor (dBA Leq)
		Nighttime (Leq / Lmax 10 p.m. – 7 a.m.)
HVAC[1]	125.0	32.8 / 32.8
Noise Level Threshold		50.0 / 70.0
Noise Level Exceeds Threshold?		**No / No**

[1] Noise level is indicative of five (5) units.

As shown in the tables above, noise levels generated by the project are not expected to exceed the City's daytime or nighttime noise standards at any of the adjacent sensitive receptor locations.

As a result, the project will not generate stationary noise levels in excess of the noise standards established by the City, and **the impact is considered less than significant**.

6.2 Mobile Source Noise Impacts

6.2.1 Roadway Noise

The project is not expected to cause a substantial increase in ambient noise levels in the vicinity of the site as a result of increased traffic volumes along adjacent roadways. Typically, it takes a doubling of traffic volume along a roadway to cause a significant increase in ambient noise levels of more than 3 dBA.

The main source of roadway noise affecting the proposed project site and adjacent receptors is activity along Pacific Park Drive and Aliso Creek Road. Annual average daily traffic (AADT) along these roadways were obtained from Streetlight, an online transportation analytics platform that derives traffic data from location-based services and GPS sources. Streetlight provides validated AADT estimates for roadway segments, which can be used in environmental analyses to establish existing, baseline conditions.

Per 2024 Streetlight data, the segments of Pacific Park Drive adjacent to the proposed project site have an existing annual average daily traffic (AADT) of approximately 16,074 vehicles. The segment of Aliso Creek Road adjacent to the proposed project site has an existing annual average daily traffic (AADT) of approximately 16,664 vehicles.

Based on the *ITE Trip Generation Manual, 11th Edition* trip generation rates for Land Use 215: Single-Family Attached Housing, the proposed project is forecast to generate approximately 986 daily trips. Hence, the amount of traffic generated by the project will not double the amount of traffic along Pacific Park Drive or Aliso Creek Road, either directly or cumulatively, and **therefore the increase in roadway noise levels as a result of the project will be less than significant**.

6.2.2 Airport Noise

John Wayne Airport, located in Santa Ana, California, is the nearest airport to the proposed project site at a distance of approximately 10 miles. The project site is not located within the John Wayne Airport, or any other airport's, area of influence.

Furthermore, as described above, the proposed project is not expected to expose people residing or working in the project area to excessive noise levels. **Therefore, the project will have no impact on airport-adjacent land uses**.

6.3 Noise/Land Use Compatibility

The project proposes to site new single-family attached dwelling units located near the southwest corner of Pacific Park Drive and Aliso Creek Road. Traffic noise from these roadways will be the primary source of noise impacting the project site and may expose future residents to noise levels above the City of Aliso Viejo exterior noise thresholds for residential uses.

6.3.1 Exterior Noise/Land Use Compatibility

A noise/land use compatibility assessment has been prepared to help determine whether existing exterior noise levels affecting the project site exceed the City's noise/land use compatibility threshold for residential land uses. Exterior ambient noise levels are assessed at the first-row residential building façades of each dwelling unit facing Pacific Park Drive and Aliso Creek Road.

Future exterior noise levels are estimated based on the existing ambient noise level measurements collected by RK. The measured noise levels were adjusted to reflect the minimum distance from adjacent roadways to the nearest project building façades. To account for future increases in roadway volumes, a three-decibel increase has been applied to the measured noise levels. This is a conservative estimate, as a doubling of traffic volume along a roadway would be required to increase ambient noise levels by 3 dBA or more[3].

Table 6-3 shows the anticipated exterior noise levels at the first-row residential building façades. Future exterior noise calculation worksheets are provided in **Appendix D**.

Table 6-3 | Exterior Noise/Land Use Compatibility (dBA CNEL)

Receptor Location	Noise Monitoring Location	Estimated Future Exterior Noise Levels
First-row building façades facing Pacific Park Dr.	L-1	72.5
First-row building façades facing Aliso Creek Rd.	L-2	72.1

As shown in **Table 6-3**, future exterior ambient noise levels are expected to range from approximately 72.1 dBA CNEL to 72.5 dBA CNEL and fall within the Normally Unacceptable noise/land use compatibility category.

Per the City of Aliso Viejo General Plan, new construction or development of Normally Unacceptable land uses requires a detailed noise analysis, identification of noise reduction measures, and noise insulation features included in the design.

In order to ensure that interior noise levels comply with County and State standards, the following preliminary interior noise analysis is provided.

[3] Source: Technical Noise Supplement to the Traffic Noise Analysis Protocol, California Department of Transportation (Caltrans), September 2013.

6.3.2 Interior Noise/Land Use Compatibility

The project must show that interior noise levels at the project site will not exceed the City of Aliso Viejo and State of California noise/land use compatibility threshold for residential land uses. A preliminary interior noise analysis has been performed for the first row of habitable dwellings facing the adjacent roadways using a typical "windows open" and "windows closed" condition. A "windows open" condition assumes 12 dBA of noise attenuation from the exterior noise level. A "windows closed" condition" assumes 20 dBA of noise attenuation from the exterior noise level.

Table 6-4 indicates the future interior noise levels along the adjacent roadways.

Table 6-4 | Future Interior Noise Levels (dBA CNEL)

Exterior Façade Study Location	Projected Exterior Noise Level[1]	Interior Noise Standard	Required Building Shell Noise Reduction	Interior Noise Level with Standard Windows (STC ~ 25)		Required STC Rating
				"Windows Open"[2]	"Windows Closed"[3]	
First-row dwelling units facing Pacific Park Dr.	72.5	45.0	27.5	60.5	52.5	33
First-row dwelling units facing Aliso Creek Rd.	72.1		27.1	60.1	52.1	33

[1] Worst-case future exterior noise levels are based on existing ambient noise level measurements collected by RK.
[2] A minimum of 12 dBA noise reduction is assumed with the "windows open" condition.
[3] A minimum of 20 dBA noise reduction is assumed with the "windows closed" condition.

The project is expected to require a "windows closed" condition and upgraded STC-rated windows for all residential units facing adjacent roadways. To accommodate windows closed conditions, all residential units facing the adjacent roadways shall be equipped with adequate fresh air ventilation.

Exterior walls, designed per the latest California Building Standards are typically rated between STC 35-40. In order to ensure adequate noise attenuation is provided from the building shell, exterior walls should be designed to meet the required sound attenuation targets. Attic vents and other openings should be baffled and oriented away from facing the adjacent roadways.

Prior to issuance of building permits, the project proponent should demonstrate to the City Building Department that the proposed building shell and window assemblies will achieve exterior to interior noise reduction necessary to meet the State of California and City of Aliso Viejo requirements.

7.0 Construction Noise and Vibration Impacts

Temporary construction noise and vibration impacts have been assessed from the project site to the surrounding adjacent land uses. The degree of construction noise and vibration will vary depending on the type of construction activity taking place and the location of the activity relative to the surrounding properties.

During the construction period, the contractors will be required to comply with the City of Aliso Viejo Municipal Code Chapter 8.12. Per the Municipal Code, noise sources associated with construction, repair, remodeling, or grading of any real property shall be exempted from the provisions of Chapter 8.12, provided said activities do not take place between the hours of eight p.m. and seven a.m. on weekdays, eight p.m. and eight a.m. on Saturday, or at any time on Sunday or a federal holiday. The Municipal Code does not include specific noise level limits for construction activities.

Because the City of Aliso Viejo does not establish quantitative thresholds for construction-related noise, the proposed project's potential construction noise impacts have been evaluated using the Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment (2006) criteria. The FTA provides criteria for assessing construction noise impacts based on the potential for adverse community reaction. For residential uses, the daytime noise threshold is 90 dBA Leq for a 1-hour period. It is assumed that no project-related construction would occur during the noise-sensitive nighttime hours.

Construction phasing and equipment usage assumptions are referenced from the *Pacific Park Drive Townhome Project Air Quality, Greenhouse Gas, and Energy Study, City of Aliso Viejo*, prepared by RK.

7.1 Typical Construction Noise Levels

Table 7-1 shows typical construction noise levels compiled by the Environmental Protection Agency (EPA) for common-type construction equipment. Typical construction noise levels are used to estimate potential project construction noise levels at the adjacent sensitive receptors.

Table 7-1 | Typical Construction Noise Levels (dBA Leq)[1]

Equipment Type	Noise Level at 50 Feet
Earth Moving	
Compactors (Rollers)	73 - 76
Front Loaders	73 - 84
Backhoes	73 - 92
Tractors	75 - 95
Scrapers, Graders	78 - 92
Pavers	85 - 87
Trucks	81 - 94
Materials Handling	
Concrete Mixers	72 - 87
Concrete Pumps	81 - 83
Cranes (Movable)	72 - 86
Cranes (Derrick)	85 - 87
Stationary	
Pumps	68 - 71
Generators	71 - 83
Compressors	75 - 86
Impact Equipment	
Pneumatic Wrenches	82 - 87
Jack Hammers, Rock Drills	80 - 99
Pile Drivers (Peak)	95-105
Other	
Vibrators	68 - 82
Saws	71 - 82

[1] Referenced noise levels from the Environmental Protection Agency (EPA).

7.2 Construction Noise Impact Analysis

This assessment analyzes potential noise impacts of the two noisiest pieces of equipment during all expected phases of construction, including demolition, site preparation, grading, building construction, paving, and architectural coating. Noise levels are calculated based on an average distance of equipment over a 1-hour period to the nearest adjacent residential receptors. The project's estimated construction noise levels have been calculated using the Federal Highway Administration Roadway Construction Noise Model Version 1.1.

Table 7-2 shows the noise level impacts from the center of the project site to the nearest receptor property line at Receptor-5. Construction noise calculation worksheets are provided in **Appendix E**.

Table 7-2 | Project Construction Noise Levels

Phase	Equipment	Quantity	Equipment Noise Level at 250 ft. (dBA Leq)	Combined Noise Level (dBA Leq)
Demolition	Concrete/Industrial Saws	1	75.6	76.3
	Rubber Tired Dozers	1	67.7	
Site Preparation	Tractors/Loaders/Backhoes	2	70.0	73.0
Grading	Graders	1	71.0	73.6
	Tractors/Loaders/Backhoes	1	70.0	
Building Construction	Tractors/Loaders/Backhoes	2	70.0	73.0
Paving	Rollers	2	66.0	69.0
Architectural Coating	Air Compressors	1	63.7	63.7
Worst-Case Construction Phase Noise Level (dBA Leq)				**76.3**
FTA Daytime General Assessment Construction Noise Criteria (dBA Leq)[1]				90.0
Noise level exceeds criteria?				**No**

[1] Source: Federal Transit Administration (FTA). *Transit Noise and Vibration Impact Assessment Manual, Section 7: Noise and Vibration During Construction.*

As shown in **Table 7-2**, the project is not expected to generate noise levels which exceed the FTA General Assessment construction noise threshold for residential land uses. **As a result, the project impact is considered less than significant**.

7.3 Construction Vibration

To determine the vibratory impacts during construction, reference construction equipment vibration levels were utilized and then extrapolated to the façade of the nearest adjacent structures.

The nearest structure to the project site is the existing gas station located to the east of the proposed project site. This structure is considered a "modern industrial/commercial building" and is located approximately 30 feet from the nearest expected area of onsite construction activity.

The nearest residential structures to the project site are the existing homes located to the east of the proposed project site. These structures are considered "new residential homes" are located approximately 215 feet from the nearest expected areas of onsite construction activity.

The construction of the proposed project is not expected to require the use of substantial vibration-inducing equipment or activities, such as pile drivers or blasting. The main source of vibration impacts during the construction of the project would be the operation of equipment such as bulldozer activity during site preparation and loading trucks during grading and excavation.

The construction vibration assessment utilizes the referenced vibration levels and methodology set forth within the Transit Noise and Vibration Impact Assessment Manual, Federal Transit Administration, September 2018. **Table 7-3** shows the FTA-referenced vibration levels.

Table 7-3 | Typical Construction Vibration Levels[1]

Equipment	Peak Particle Velocity (PPV) at 25 Feet (in./sec.)	Approximate Vibration Level (LV) at 25 feet
Piledriver (impact)	1.518 (upper range)	112
	0.644 (typical)	104
Piledriver (sonic)	0.734 upper range	105
	0.170 typical	93
Clam shovel drop (slurry wall)	0.202	94
Hydromill	0.008 in soil	66
(slurry wall)	0.017 in rock	75
Vibratory Roller	0.210	94
Hoe Ram	0.089	87
Large bulldozer	0.089	87
Caisson drill	0.089	87
Loaded trucks	0.076	86
Jackhammer	0.035	79
Small bulldozer	0.003	58

[1] Source: Federal Transit Administration (FTA). *Transit Noise and Vibration Impact Assessment Manual, Section 7: Noise and Vibration During Construction.*

Table 7-4 shows the project's construction-related vibration analysis at the nearest commercial structure to the project construction area. **Table 7-5** shows the project's construction-related vibration analysis at the nearest residential structure to the project's construction area. Construction vibration calculation worksheets are provided in **Appendix E**.

Table 7-4 | Construction Vibration Impact Analysis – Nearest Commercial Structure

Construction Activity	Distance to Nearest Structure (Feet)	Duration	Calculated Vibration Level (PPV) (in./sec.)
Large Bulldozer	30	Continuous/Frequent	0.073
Loaded Trucks		Continuous/Frequent	0.062
Vibratory Rollers		Continuous/Frequent	0.172
Worst-Case Construction Vibration Level			**0.172**
Vibration Damage Potential Threshold[1]			0.500
Vibration level exceeds threshold?			**No**

[1] Source: Caltrans Transportation and Construction Vibration Guidance Manual (April 2020) vibration damage potential threshold for "new residential structures".

Table 7-5 | Construction Vibration Impact Analysis – Nearest Residential Structure

Construction Activity	Distance to Nearest Structure (Feet)	Duration	Calculated Vibration Level (PPV) (in./sec.)
Large Bulldozer	215	Continuous/Frequent	0.008
Loaded Trucks		Continuous/Frequent	0.007
Vibratory Rollers		Continuous/Frequent	0.020
Worst-Case Construction Vibration Level			**0.020**
Vibration Damage Potential Threshold[1]			0.500
Vibration level exceeds threshold?			**No**

[1] Source: Caltrans Transportation and Construction Vibration Guidance Manual (April 2020) vibration damage potential threshold for "new residential structures".

Based on the tables above, project-related construction activity is not expected to cause any potential damage to the nearest structures. **Hence, the impact from construction-related vibration will be less than significant.**

Appendices

Appendix A

City of Aliso Viejo General Plan Noise Element and Municipal Code Chapter 8.12 – Noise Control

NOISE ELEMENT

INTRODUCTION

The City of Aliso Viejo desires to achieve and maintain an environment free from objectionable, excessive, or harmful noise to protect and enhance quality of life for residents. In addition to causing irritation, high noise levels can be a source of stress for those working and residing nearby. Creating effective strategies that reduce excessive noise and limit the community's exposure to loud noise sources is the central objective of the General Plan Noise Element.

PURPOSE OF THE NOISE ELEMENT

The purpose of the Noise Element is to identify current and potential future sources of noise so that future land uses can be organized and new development adequately designed in a manner that minimizes noise impacts to community residents and businesses. This Element contains policies and programs to achieve and maintain a safe noise environment within Aliso Viejo.

SCOPE AND CONTENT OF THE NOISE ELEMENT

The Noise Element is a mandatory component of the General Plan as outlined in the State Government Code. Noise exposure contours in the Element present quantified projections of future noise conditions associated with both short- and long-term growth. This noise information serves as the basis for guidelines describing compatible land uses.

The Noise Element has three sections: 1) this Introduction; 2) Issues, Goals and Policies; and 3) the Noise Plan. In the second section (Issues, Goals and Policies), goals and policies are established which address identified noise issues. The goals identify overall City desires and consist of broad statements of purpose and direction. The policies are guidelines aimed to reduce or avoid adverse noise effects on residents and businesses. The Noise Plan describes how goals and policies will be achieved, or implemented. Specific implementation for the Noise Element is provided in the General Plan Implementation Program, located in Appendix A.

RELATED PLANS AND PROGRAMS

Many plans and programs enacted through State and local legislation directly relate to the Noise Element. These plans and programs are administered by agencies with powers to enforce State and local laws.

California Environmental Quality Act (CEQA) and Guidelines

The California Environmental Quality Act (CEQA) was adopted by the State legislature in response to a public mandate for thorough environmental analysis of projects that might affect the environment. The provisions of the law and environmental review procedure are described in the CEQA Statutes and the CEQA Guidelines. Excessive noise is considered an environmental impact under CEQA. Implementation of

CEQA ensures that during the decision making stage of development, City officials and the general public will be able to assess the potential noise impacts associated with private and public development projects.

California Noise Insulation Standards (Title 24)

The California Commission of Housing and Community Development officially adopted noise insulation standards in 1974. In 1988, the Building Standards Commission approved revisions to the standards (Title 24, Part 2, California Code of Regulations). As revised, Title 24 establishes an interior noise standard of 45 dB(A) for residential space (CNEL or Ldn). Acoustical studies must be prepared for residential structures to be located within noise contours of 60 dB(A) or greater (CNEL or Ldn) from freeways, major streets, thoroughfares, rail lines, rapid transit lines, or industrial noise sources. The studies must demonstrate that the building is designed to reduce interior noise to 45 dB(A) or lower (CNEL or Ldn).

City of Aliso Viejo Noise Control Ordinance

Upon incorporation, Aliso Viejo adopted the Orange County Noise Control Ordinance. The Ordinance establishes interior and exterior noise standards, controls for nuisance and business-related noise, and specific standards for acceptable daytime and nighttime noise levels. Requirements of the Noise Control Ordinance are identified in this Element.

RELATIONSHIP TO OTHER GENERAL PLAN ELEMENTS

State planning law requires the Noise Element to be consistent with other General Plan elements. The Land Use, Circulation and Conservation/Open Space Elements are most closely related to the Noise Element.

Policies and plans developed in the Noise Element are intended to protect current and planned land uses identified in the Land Use Element from excessive noise. Potential noise sources are identified in the Noise Element and programs are established to avoid or mitigate noise impacts from planned development. At the same time, policies contained in the Land Use Element ensure that environmental conditions, including noise, are considered in all land use decisions. Preventing the intrusion of negative environmental conditions, such as excessive noise, in order to create a healthy environment is a central objective of the Land Use Element.

The transportation issues discussed in the Circulation Element are also directly related to the Noise Element. Noise from transportation is largely responsible for excessive noise levels in certain locations in urban environments. Projected noise distribution, depicted as noise contours, is corollary to the Circulation Plan. Noise policies and implementation are largely based on the Circulation Element and are aimed to minimize the effects of transportation noise on current and planned land uses.

The Conservation/Open Space Element is also related to the Noise Element. Enjoyment of parks and open spaces can be diminished by excessive noise, and noise information provided in the Noise Element should be considered in planning new recreational areas. At the same time, where appropriate, open space areas can serve as effective buffers between sensitive land uses and noise producers.

ISSUES, GOALS, AND POLICIES

Some parts of Aliso Viejo are subject to high noise levels, which can reduce quality of life in residential neighborhoods and for certain other sensitive uses, like churches and schools. Consideration of noise sources in the planning process, combined with identification of affected areas can minimize the impacts of noise on the community.

Noise Element goals, policies and implementation address three issues: (1) avoiding the negative impacts of noise through land use planning and noise reduction measures; (2) minimizing the impact of transportation related noise; and (3) minimizing the impact of non-transportation related noise.

NOISE AND LAND USE PLANNING

Consideration of the sources and recipients of noise early in the land use planning and development process can be an effective way to reduce the impact of noise on the community. Consideration should be given to both reducing noise in severely impacted areas through rehabilitative improvements and avoiding potential noise impacts through effective land use planning.

Goal N-1 **Minimize the impact of point source noise and ambient noise levels throughout the community.**

Policy N-1.1 Ensure that construction and occupancy of new development are compatible with, and do not exceed thresholds defining the acceptable noise environment in surrounding areas.

Policy N-1.2 Require inclusion of noise-reducing design features in development projects to address the impact of noise on residential development.

TRANSPORTATION RELATED NOISE

Excessive noise levels in Aliso Viejo are caused primarily by traffic on the San Joaquin Hills Transportation Corridor (SR-73) and major thoroughfares. Reduction of transportation-related noise levels is desired to improve quality of life in all neighborhoods and for other noise-sensitive land uses.

Goal N-2 **Minimize transportation-related noise impacts.**

Policy N-2.1 Ensure noise impacts generated by motorized vehicles are minimized through the use of noise attenuation measures on City streets.

Policy N-2.2 Control truck traffic routing within the City.

Policy N-2.3 Require inclusion of sound-reducing design measures in development projects impacted by transportation-related noise.

Policy N-2.4 Encourage use of alternative transportation technologies that minimize noise impacts.

NON-TRANSPORTATION RELATED NOISE

Noise is also associated with construction activity, manufacturing or business operations, and everyday activities in Aliso Viejo neighborhoods, such as leafblowing and lawnmowing.

Goal N-3 **Minimize noise impacts from sources other than transportation.**

Policy N-3.1 Ensure stationary noise impacts on sensitive receptors and noise emanating from construction activities, private developments/residences, landscaping activities and special events are minimized.

Policy N-3.2 Require that mixed-use structures and areas be designed to prevent transfer of noise and vibration from commercial uses to residential uses.

NOISE PLAN

As the population of Aliso Viejo and the surrounding region increases, noise levels associated with transportation and non-transportation related sources will also increase. The City has established goals and policies (listed in the previous section) to safeguard the community from excessive noise levels as the ambient noise level in the community rises. The Noise Plan describes the approach for achieving this aim and provides a general outline of action programs. As an extension of the Noise Plan, noise implementation contained in Appendix A of the General Plan describes specific actions that the City will take to protect the overall quality of life in the community.

NOISE POLICY MAP

Figure N-1 presents graphically the City's noise policies and plan. The Noise Policy Map presents the locations of future noise contours surrounding City roadways, within which land use compatibility and noise mitigation requirements outlined in the Noise Plan will be evaluated and required as needed as a part of development review. In addition, the map identifies the location of several "sensitive receptors". These schools, child care facilities, senior housing complexes, churches, and other similar facilities should be protected from additional noise intrusions associated with new development or roadway improvements, to the extent feasible. As applicable, the Noise Plan refers to the Policy Map for identification of significant locations, conditions, or development requirements.

NOISE AND LAND USE PLANNING

Accumulation of noise from transportation activities and stationary sources determines the overall noise environment within a community. Noise generated from automobile use, trucking, airport and rail operations is referred to as transportation related noise, while noise from stationary sources such as commercial establishments, machinery, air conditioning systems, compressors and landscape maintenance equipment is typically referred to as non-transportation noise. Noise is most problematic when it affects noise sensitive land uses that include, but are not limited to residences, schools, hospitals, religious meetings and recreational areas. These uses are considered sensitive because the presence of excessive noise may interrupt normal activities typically associated with the use. Sensitive receptor sites in Aliso Viejo are identified in the Noise Policy Map (Figure N-1). Consideration of noise sources, sensitive land uses, and information regarding the future noise environment leads to implementation of effective ways to avoid noise impacts.

Measuring Noise

Noise generally is defined as unwanted or intrusive sound. Because noise consists of pitch, loudness, and duration, describing noise with a single unit of measure presents a challenge. The A-weighted decibel scale (dB(A)) has been developed to describe the loudness of a sound or sound environment based on the sensitivity of the human ear.

The dB(A) descriptor only reports noise from a single source or combination of sources at a point in time. To allow a more comprehensive description of the noise environment, Federal and State agencies have established noise and land use compatibility guidelines that use averaging approaches to noise measurement. Two measurement scales commonly used in California are the Community Noise Equivalent Level (CNEL) and the day-night level (Ldn). To account for increased human sensitivity at night, the CNEL level includes a 5-decibel penalty on noise during the 7:00 a.m. to 10:00 p.m. time period and a 10-decibel penalty on noise during the 10:00 p.m. to 7:00 a.m. time period. The Ldn level includes only the 10 decibel weighting for late-night noise. These values are nearly identical for all but unusual noise sources.

Noise Standards and Land Use Compatibility

Table N-1 summarizes County of Orange residential noise standards adopted by the City of Aliso Viejo. The standards represent the maximum acceptable noise levels as measured from any residential property in the City. Accordingly, it is unlawful to cause the noise level on any residential property to exceed the exterior noise standards: 1) for a cumulative period of more than thirty minutes in any hour; 2) plus five dB(A) for a cumulative period of more than 15 minutes in any hour; 3) plus 10 dB(A) for a cumulative period of more than five minutes in any hour; 4) plus 15 dB(A) for a cumulative period of more than one minute in any hour; or 5) plus 20 dB(A) for any period of time. In addition, any noise that exceeds the interior noise standards established for residential uses: 1) for a cumulative period of more than five minutes in any hour; 2) plus five dB(A) for a cumulative period of more than one minute in any hour; or 3) plus 10 dB(A) for any period of time, is unlawful.

Table N-1
Orange County Residential Noise Standards

	Daytime Noise Standards (7am to 10pm)	Nighttime Noise Standards (10pm to 7am)
Interior Noise Standards	55 dB(A)	45 dB(A)
Exterior Noise Standards	55 dB(A)	50 dB(A)

Source: County of Orange Code of Ordinances, 2003.
Note: Standards are based on measurements taken from any residential property in the City.

Figure N-1
Noise Policy Map
11x17" Color

Back Side of 11x17" Page

The City's noise standards serve as the basis for the land use compatibility guidelines presented in Table N-2. A project is considered to be compatible with the noise environment if the noise level generated by the project falls within Zone A or Zone B. If the anticipated noise level of a proposed project falls into Zone A, typically no mitigation is needed and if it falls into Zone B, minor mitigation may be required to meet City and State Title 24 noise standards. All project proponents must demonstrate that noise standards have been met prior to human occupation of a building.

If the noise level of a proposed project falls within Zone C, substantial mitigation is likely needed to meet City noise standards. Mitigation may include construction of noise barriers, and/or the inclusion of substantial building sound insulation. Projects in Zone C can be successfully mitigated; however, project proponents with a project in Zone C must demonstrate that the noise standards can be met prior to issuance of a building permit. If noise levels of a proposed project fall within Zone D, the project is clearly incompatible with the noise environment and should not be approved.

The City Planning Director acts as the noise control coordinator, while Aliso Viejo Police Services is responsible for abating nuisance noises. This delegation of responsibility allows consistent and continual enforcement of the noise standards.

Noise Contours and Impacted Areas

Noise contours, based on the location of major noise sources, describe the noise environment within the community. These contours outline areas of equal noise exposure. Information about existing and projected land use development and transportation activity has been used to estimate future noise contours for Aliso Viejo.

Future noise contours for Aliso Viejo are displayed on the Noise Policy Map (Figure N-1). These contours will guide land use and development decisions to address potential noise issues. Noise impacted areas are those areas that fall within the 60 dB(A) CNEL or greater noise contours. An acoustical analysis must be prepared prior to approval of a noise sensitive project proposed within an identified noise impact area in order to assess the impact in more detail. The analysis must show that the project is designed to attenuate noise to meet the City's noise standards as set forth in Tables N-1 and N-2 in order to receive approval.

In addition, noise producing land uses will be evaluated using the standards in Tables N-1 and N-2 to ensure that proposed land uses do not adversely impact the current noise environment. If proposed project designs do not meet noise standards, mitigation will be recommended. If the analysis demonstrates that the noise standards can be met by implementing the mitigation measures, the project can be approved conditioned upon those measures. Noise attenuation measures may include soundwalls, berms, and other noise-reducing devices.

Table N-2
Noise/Land Use Compatibility Matrix

Land Use	Community Noise Exposure (Ldn or CNEL) 50	55	60	65	70	75	80	85
Residential	A	A	B	B	C	D	D	D
Transient Lodging – Motel, Hotel	A	A	B	B	B	C	D	D
Schools, Libraries, Churches, Hospitals, Nursing Homes	A	A	B	B	C	C	D	D
Auditoriums, Concert Halls, Amphitheaters	B	B	B	B	D	D	D	D
Sports Arena, Outdoor Spectator Sports	B	B	B	B	B	D	D	D
Playgrounds, Parks	A	A	A	A	C	D	D	D
Golf Course, Riding Stables, Water Recreation, Cemeteries	A	A	A	A	C	C	D	D
Office Buildings, Business Commercial, and Professional	A	A	B	B	B	C	C	C
Industrial, Manufacturing, Utilities, Agriculture	A	A	A	A	B	B	C	C

Source: Modified by CBA from 1998 State of California General Plan Guidelines.

ZONE A - Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved meet conventional Title 24 construction standards. No special noise insulation requirements.

ZONE B - Conditionally Acceptable: New construction or development shall be undertaken only after a detailed noise analysis is made and noise reduction measures are identified and included in the project design.

ZONE C- Normally Unacceptable: New construction or development is discouraged. If new construction is proposed, a detailed analysis is required, noise reduction measures must be identified, and noise insulation features included in the design.

ZONE D- Clearly Unacceptable: New construction or development clearly should not be undertaken.

Portions of the community fall within the 65 dB(A) CNEL noise contour as depicted in the Airport Environs Land Use Plan (AELUP) for the former Marine Corps Air Station El Toro. At the time this land was developed, the type and intensity of uses were restricted due to noise impacts from the former Air Station. Impacted areas include a broad spectrum of land uses such as business parks, residential areas, and open spaces. Based on provisions within the AELUP, all types of residential uses are normally unacceptable in 65 dB(A) CNEL areas.

Opportunities to intensify areas that were previously within this unacceptable noise contour have emerged in neighboring communities following closure of the Air Station, and future opportunities for such redevelopment exist within portions of Aliso Viejo. The City will continue to monitor the status of the El Toro AELUP and opportunities for appropriate redevelopment of areas within the contour at higher intensities, or with uses that would not have been permitted before closure of the Air Station.

Construction Standards

The City of Aliso Viejo will continue to enforce the provisions of the California Energy Code. Energy Code standards specify that combined indoor noise for multi-family living spaces shall not exceed 45 dB(A) CNEL and must be implemented when the outdoor noise level exceeds 60 dB(A) CNEL. The Noise Policy Map (Figure N-1) can be used to determine when and where it is appropriate to implement this standard. The standard must be applied to all new hotels, motels, and multifamily residential development.

TRANSPORTATION RELATED NOISE

Transportation activity is a significant contributor of noise to the overall noise environment within Aliso Viejo. Transportation related noise is primarily concentrated along the transportation corridors that traverse the community such as State Route 73, major arterials and collector roads.

Noise Control at Reception Sites

The City has little direct control over noise produced by transportation sources since the State is responsible for regulating motor vehicle noise. Therefore, City noise programs focus on reducing the impact of transportation noise on the community.

The most effective ways to mitigate transportation noise impacts on the community are through utilization of a design review process, and implementation of the California Environmental Quality Act (CEQA). Identification of potential impacts from transportation noise will occur during these stages of the development process and mitigation measures may be required to meet City noise standards identified in this Element. The most common ways to reduce transportation-related noise impacts are through site planning, landscaping, use of natural topography, and the design and construction of noise barriers. Small noise reductions can also be achieved by use of setbacks and landscaping.

Noise barriers should be included in roadway and freeway designs and improvements. The City supports efforts by Caltrans and the Transportation Corridor Authority (TCA) to provide acoustical protection for noise sensitive uses along transportation corridors. Additionally, the City will request that barriers be included in any future improvement projects along SR-73 to mitigate identified or potential long- and short-term noise impacts to nearby residences and businesses from roadway expansion or construction related activity. The City continues to promote the use of berms, embankments, landscaping, setbacks, and architectural design where appropriate and effective, rather than conventional wall barriers to enhance community aesthetics.

Noise Control at the Source

Reducing noise at the source is the most efficient and effective way to control noise from transportation systems. The California Vehicle Code contains noise regulations pertaining to the operation of all vehicles on public roads, which are enforced through coordination with the California Highway Patrol and the Orange County Sheriff's Department. While the City is ultimately limited in its ability to restrict noise at the source, Aliso Viejo regulates traffic flow and coordinates with the California Highway Patrol and the Orange County Sheriff's Department to enforce speed limits to reduce traffic noise.

NON-TRANSPORTATION RELATED NOISE

In addition to transportation related noise, excessive noise generated by non-transportation sources, such as commercial and industrial centers, agricultural activities, and restaurants and bars, have the potential to impact sensitive receptors. Enforcement of City noise requirements, analysis of potential noise impacts during the site design review process, and compliance with CEQA are the best means to protect sensitive receptors. Potential noise impacts can be identified during the preliminary stages of the development process and mitigation measures can be imposed.

When reviewing proposed non-residential projects, the City considers noise generation and potential impacts to surrounding development. New development can be made compatible with the noise environment by utilizing noise/land use compatibility standards and the Noise Policy Map as a guide for future planning and development decisions. An acoustical analysis is required for projects that will generate noise potentially affecting sensitive receptors. Where significant impacts are identified, mitigation measures are required. Mitigation measures that could be applied when reviewing projects include acoustically treated and/or quiet designs for furnaces, fans, motors, compressors, valves, pumps and other mechanical equipment. Noise resulting from special one-time events should be minimized as well. The City may also require limited delivery hours and/or hours of operation in order to minimize impacts to adjacent residential uses. In addition, all City departments must comply with State and federal OSHA standards. Any new equipment or vehicles purchased by the City will comply with local, State and federal noise standards, and the City will encourage landscaping contractors to utilize modern noise-reducing equipment.

Noise Control Ordinance

Upon incorporation, the City adopted the County of Orange Noise Control Ordinance. This Ordinance is designed to protect people from non-transportation related noise sources such as construction activity, machinery and pumps, and air conditioners. Enforcing the Ordinance requiring proposed development projects to demonstrate compliance ensures that adjacent properties are not exposed to excessive noise from stationary sources or nuisances. The Ordinance will be reviewed periodically for adequacy and amended as needed to address community needs and development patterns.

The City also has the opportunity to control noise and vibration transfers between adjacent land uses. Particular problems arise in cases where noise-producing uses are located immediately adjacent to sensitive uses, such as business park areas near residences or schools. Mixed use projects also present unique problems in this area, such as when restaurants with nighttime entertainment are located below residential units. The City's Zoning Ordinance or any Specific Plan developed following adoption of the General Plan will include standards regulating noise and vibration transfers within mixed use development projects.

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Chapter 8.12
NOISE CONTROL[1]

Sections:

8.12.010 Purpose.

8.12.020 Declaration of policy.

8.12.030 Definitions.

8.12.040 Noise level measurement criteria.

8.12.050 Exterior noise standards.

8.12.060 Interior noise standards.

8.12.070 Exemptions.

8.12.080 Schools, hospitals and churches – Special provisions.

8.12.090 Manner of enforcement.

8.12.100 Violations.

Prior legislation: Ord. 2002-033.

8.12.010 Purpose.

The purpose of this chapter is to establish noise standards and to protect the health, safety, welfare, and living/working environments in the city. [Ord. 2010-126 § 1 (Exh. A)].

8.12.020 Declaration of policy.

A. It is hereby declared to be the policy of the city to control unnecessary, excessive, and annoying sounds from all sources as specified in this chapter.

B. It is determined that certain sound levels are detrimental to the public health, welfare, and safety, and contrary to public interest. [Ord. 2010-126 § 1 (Exh. A)].

8.12.030 Definitions.

The following definitions apply to the use of these terms for the purposes of this chapter:

“Ambient noise level” means the all-encompassing noise level associated with a given environment, being a composite of sounds from all sources, excluding the alleged offensive noise, at the location and approximate time at which a comparison with the alleged offensive noise is to be made.

“Cumulative period” means an additive period of time composed of individual time segments which may be continuous or interrupted.

“Decibel (dB)” means a unit which denotes the ratio between two quantities which are proportional to power: the number of decibels corresponding to the ratio of two amounts of power to 10 times the logarithm to the base 10 of this ratio.

“Density” means the number of dwelling units per gross acre of land as established in AVMC Title 15.

“Dwelling unit” means a single unit providing complete, independent living facilities for one or more persons including permanent provisions for living, sleeping, eating, cooking and sanitation.

“Emergency machinery, vehicle, or work” means any machinery, vehicle, or work used, employed, or performed in an effort to protect, provide, or restore safe conditions in the community or for the citizenry, or work by private or public utilities when restoring utility service.

“Fixed noise source” means a stationary device which creates sounds while fixed or motionless, including but not limited to industrial and commercial machinery and equipment, pumps, fans, compressors, generators, air conditioners, leaf blowers, public address systems and refrigeration equipment.

“Grading” means any excavating or filling of earth material, or any combination thereof, conducted at a site to prepare the site for construction or other improvements thereon.

“Impact noise source” means the noise produced by the collision of one mass in motion with a second mass which may be either in motion or at rest.

“Mobile noise source” means any noise source other than a fixed noise source.

“Noise level” means the “A” weighted sound pressure level in decibels obtained by using a sound level meter at slow response with a reference pressure of 20 micronewtons per square meter. The unit of measurement shall be designated as dB(A).

“Nonresidential property” means any parcel of real property other than residential property.

“Residential property” means a parcel of real property which is developed and used either in part or in whole for residential purposes, other than transient uses such as hotels and motels.

“Simple tone noise” means a noise characterized by a predominant frequency or frequencies so that other frequencies cannot be readily distinguished.

“Sound level meter” means an instrument meeting American National Standard Institute’s Standard S1.4-1971 for Type 1 or Type 2 sound level meters or an instrument and the associated recording and analyzing equipment which will provide equivalent data.

“Sound pressure level, in decibels” means 20 times the logarithm to the base 10 of the ratio of the pressure of

the sound to a reference pressure, which reference pressure shall be explicitly stated. [Ord. 2010-126 § 1 (Exh. A)].

Cross-reference: definitions generally, AVMC 1.02.010.

8.12.040 Noise level measurement criteria.

Any noise level measurements made pursuant to the provisions of this chapter shall be performed using a sound level meter. Exterior noise levels shall be measured at any point on the affected property. Interior noise levels shall be measured within the affected dwelling unit at a point at least four feet from the wall, ceiling, or floor nearest the alleged noise source with the windows of the affected dwelling unit closed. [Ord. 2010-126 § 1 (Exh. A)].

8.12.050 Exterior noise standards.

A. The following exterior noise standards, unless otherwise specifically indicated, shall apply to all residential property within the city:

Residential Exterior Noise Standards		
	Noise Level	**Time Period**
Density of less than 10 DU/acre	50 dB(A)	7:00 a.m. – 10:00 p.m.
	45 dB(A)	10:00 p.m. – 7:00 a.m.
Density of 10 DU/acre or more	55 dB(A)	7:00 a.m. – 10:00 p.m.
	50 dB(A)	10:00 p.m. – 7:00 a.m.

In the event the noise consists entirely of impact noise, simple tone noise, speech, music, or any combination thereof, each of the above noise levels shall be reduced by five dB(A).

B. The following exterior noise standards, unless otherwise specifically indicated, shall apply to all nonresidential property within the city. If a noise affects both residential and nonresidential property, then the applicable noise standard shall be the arithmetic mean of the applicable standards that apply to residential and nonresidential property.

Nonresidential Exterior Noise Standards		
	Noise	**Time**

	Noise Level	Time Period
Commercial	65 dB(A)	7:00 a.m. – 10:00 p.m.
	60 dB(A)	10:00 p.m. – 7:00 a.m.
Manufacturing/Industrial	70 dB(A)	24 hours per day

In the event the noise consists entirely of impact noise, simple tone noise, speech, music, or any combination thereof, each of the above noise levels shall be reduced by five dB(A).

C. It shall be unlawful for any person at any location within the city to create any noise, or to allow the creation of any noise on property owned, leased, occupied, or otherwise controlled by the person, when the foregoing causes the noise level, when measured on any other parcel, to exceed:

1. The noise standard for a cumulative period of more than 30 minutes in any hour.

2. The noise standard plus five dB(A) for a cumulative period of more than 15 minutes in any hour.

3. The noise standard plus 10 dB(A) for a cumulative period of more than five minutes in any hour.

4. The noise standard plus 15 dB(A) for a cumulative period of more than one minute in any hour.

5. The noise standard plus 20 dB(A) for any period of time.

6. In the event the ambient noise level exceeds any of the applicable standards when the source of the noise is not operating, the ambient noise level shall become the standard. [Ord. 2013-151 § 3 (Exh. A); Ord. 2013-149 § 1; Ord. 2010-126 § 1 (Exh. A)].

8.12.060 Interior noise standards.

A. The following interior noise standards, unless otherwise specifically indicated, shall apply to all residential property within the city:

Residential Interior Noise Standards

Noise Level	Time Period
55 dB(A)	7:00 a.m. – 10:00 p.m.
45 dB(A)	10:00 p.m. – 7:00 a.m.

In the event the noise consists entirely of impact noise, simple tone noise, speech, music, or any combination thereof, each of the above noise levels shall be reduced by five dB(A).

B. It shall be unlawful for any person at any location within the city to create any noise, or to allow the creation of any noise on property owned, leased, occupied, or otherwise controlled by the person, when the foregoing causes the noise level, when measured within the interior of any other dwelling unit on any residential parcel within the city to exceed:

1. The interior noise standard for a cumulative period of more than five minutes in any hour.

2. The interior noise standard plus five dB(A) for a cumulative period of more than one minute in any hour.

3. The interior noise standard plus 10 dB(A) for any period of time.

C. In the event the ambient noise level exceeds either of the first two noise level categories above, the cumulative period applicable to the category shall be increased to reflect the ambient noise level. In the event the ambient noise level exceeds the third noise limit category, the maximum allowable noise level under that category shall be increased to reflect the maximum ambient noise level. [Ord. 2010-126 § 1 (Exh. A)].

8.12.070 Exemptions.

The following activities shall be exempt from the provisions of this chapter:

A. Activities conducted on the grounds of any public or private nursery, elementary, intermediate or secondary school or college, or day care home.

B. “Special events” as defined in AVMC 11.05.020 provided said events are conducted pursuant to a special events permit issued pursuant to Chapter 11.05 AVMC.

C. Outdoor gatherings, public dances and shows, provided the events are conducted pursuant to a permit issued by the city.

D. Any mechanical device, apparatus, or equipment used, related to or connected with emergency machinery, vehicle or work.

E. Noise sources associated with construction, repair, remodeling, or grading of any real property, provided the activities do not take place between the hours of 8:00 p.m. and 7:00 a.m. on weekdays, 8:00 p.m. and 8:00

a.m. on Saturday, or at any time on Sunday or a federal holiday.

F. Noise sources associated with the maintenance of real property, provided the activities take place between the hours of 7:00 a.m. and 8:00 p.m. on any day except Sunday or a federal holiday, or between the hours of 9:00 a.m. and 8:00 p.m. on Sunday or a federal holiday.

G. Any activity to the extent regulation thereof has been preempted by state or federal law.

H. Noise sources associated with solid waste collection and removal, provided such activities take place between 7:00 a.m. and 6:00 p.m. Monday through Friday where audible in residential areas; or between 7:00 a.m. and 6:00 p.m. on Saturdays where audible in residential areas; or between 5:00 a.m. and 9:00 p.m. any day where such activity is not audible in residential areas; or as otherwise provided in an approved franchise agreement between a waste hauler and the city. [Ord. 2010-126 § 1 (Exh. A)].

8.12.080 Schools, hospitals and churches – Special provisions.

It shall be unlawful for any person to create any noise which causes the noise level at any school, hospital or church while the same is in use for its intended purpose to exceed the noise limits as specified in AVMC 8.12.050(A) or which causes the noise level to unreasonably interfere with the use of such institutions for their intended purpose or which unreasonably disturbs or annoys students, patients, or attendees in such institutions, provided conspicuous signs are displayed in three separate locations within one-tenth of a mile of the institution indicating the presence of a school, church or hospital. [Ord. 2010-126 § 1 (Exh. A)].

8.12.090 Manner of enforcement.

A. The chief of police services, or designee, is directed to enforce the provisions of this chapter.

B. No person shall interfere with, oppose, or resist any authorized person charged with the enforcement of this chapter while the person is engaged in the performance of his/her duty. [Ord. 2010-126 § 1 (Exh. A)].

Cross-reference: interference with public officers prohibited, AVMC 8.20.040.

8.12.100 Violations.

Any person violating any of the provisions of this chapter shall be deemed guilty of a misdemeanor and/or such violation shall constitute a public nuisance. [Ord. 2010-126 § 1 (Exh. A)].

Cross-reference: violations and penalties generally, Chapter 1.06 AVMC.

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[1] **Cross-references:** animal noise nuisances, AVMC 6.04.030; solid waste collection vehicles, AVMC 7.05.150; disturbances in residential areas during sleeping hours, Chapter 8.10 AVMC.

Appendix B
Photographs, Field Sheets, and Measured Noise Data

RK ENGINEERING GROUP INC.

Field Sheet

Project:	Pacific Park Townhome Project		**Engineer:**	C. Stokes	**Date:** 8/6/2025
					JN: 2827-2025-02
Measurement Address:	27061-081 Aliso Creek Road		**City:**	Aliso Viejo, CA	

Sound Level Meter:

Piccolo II

Serial #: P0222082204
P0222082205
P0221010801

Calibrator:

BSWA

Serial #: 500732

Calibration Record:

Meter	Input (dB)	Time	Date
1	94	1:21 PM	8/6/2025
2	94	1:23 PM	8/6/2025
3	94	1:24 PM	8/6/2025
4	--	--	

Conditions:

Temperature (°F):	H: 88, L: 62
Windspeed (m.p.h.):	Varies
Wind Direction:	Varies
Skies:	Clear

Meter Settings:

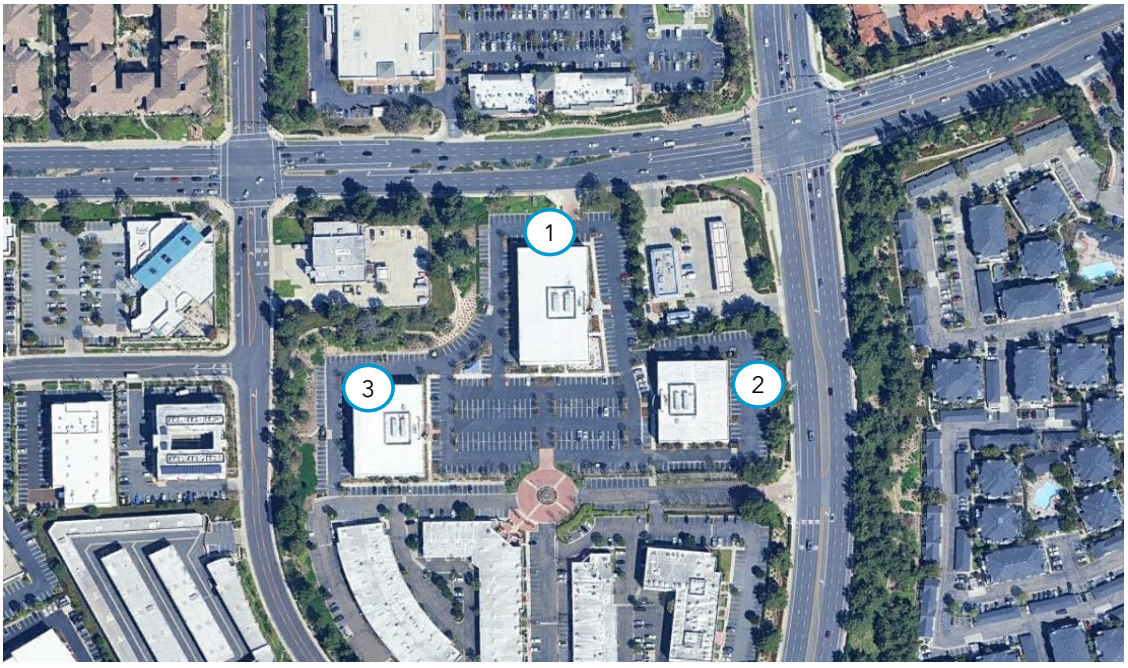
☑ A-Weighted	☐ Linear	☑ Slow	☐ 1/1 Octave	☑ 60 Minute Intervals
☐ C-Weighted	☐ Impulse	☐ Fast	☐ 1/3 Octave	☑ L(n) Percentile Values

Notes:

Noise measurements were taken at one-hour intervals for a duration of 24 hours. The primary sources of environmental noise impacting the project site are commercial activity at adjacent properties, fire station activity, and roadway activity along Aliso Viejo Parkway and Pacific Park Drive.

Measurement Type:

☑ Long-term (24-hour)
☐ Short-term



(1) = Noise Monitoring Location

RK ENGINEERING GROUP INC.

Field Photos - Noise Monitoring Location 1 (L-1)

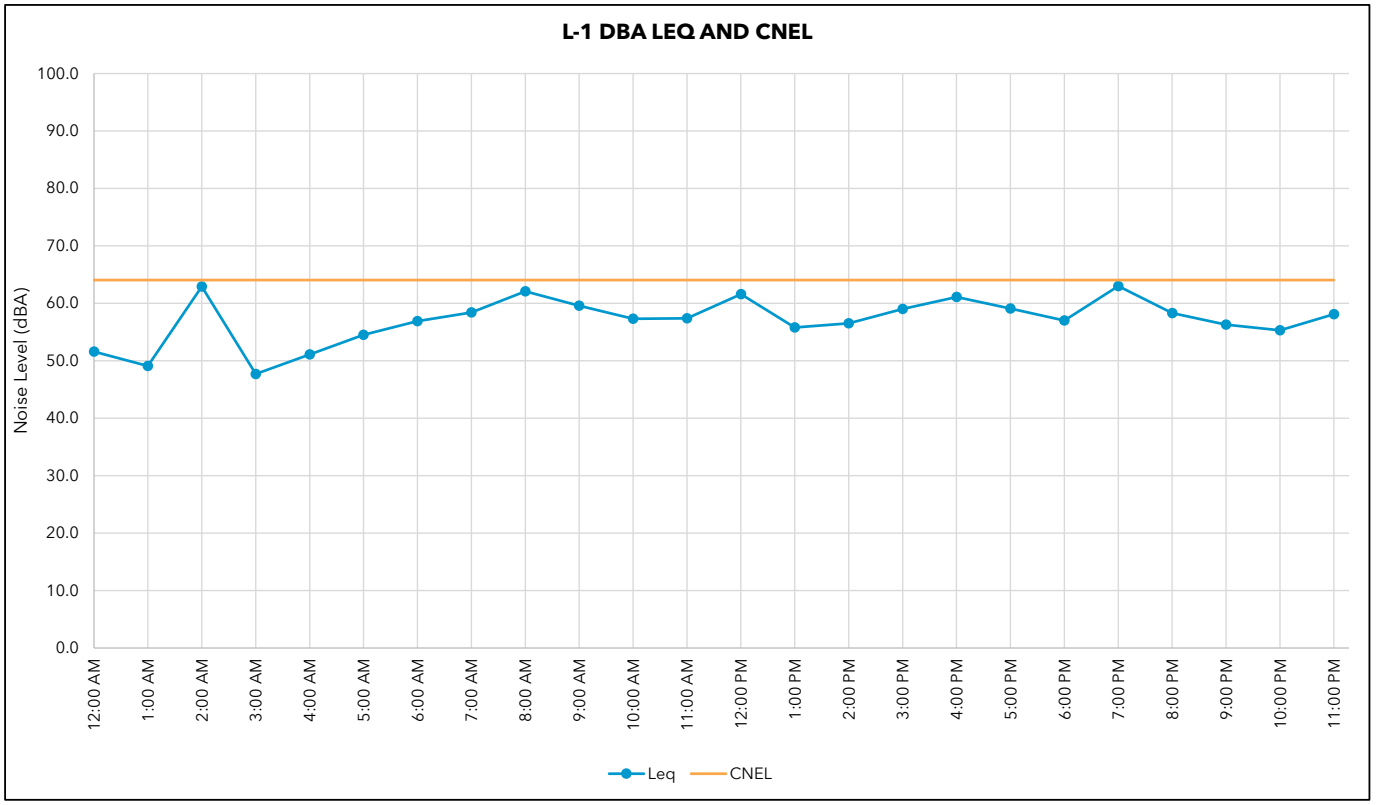
Project:	Pacific Park Townhome Project		**Engineer:**	C. Stokes	**Date:** 8/6/2025
Measurement Address:	27071 Aliso Creek Road		**City:**	Aliso Viejo, CA	**JN:** 2827-2025-02
Notes:	Noise Monitoring Location 1 (L-1) was taken near the northern boundary of the project site, approximately 155 feet south of the centerline of Pacific Park Drive.				

RK ENGINEERING GROUP INC.

Noise Monitoring Location 1 Noise Monitoring Results (dBA Leq and CNEL)

Time	Leq	CNEL
12:00 AM	51.6	64.0
1:00 AM	49.1	64.0
2:00 AM	62.9	64.0
3:00 AM	47.7	64.0
4:00 AM	51.1	64.0
5:00 AM	54.5	64.0
6:00 AM	56.9	64.0
7:00 AM	58.4	64.0
8:00 AM	62.1	64.0
9:00 AM	59.6	64.0
10:00 AM	57.3	64.0
11:00 AM	57.4	64.0
12:00 PM	61.6	64.0
1:00 PM	55.8	64.0
2:00 PM	56.5	64.0
3:00 PM	59.0	64.0
4:00 PM	61.1	64.0
5:00 PM	59.1	64.0
6:00 PM	57.0	64.0
7:00 PM	63.0	64.0
8:00 PM	58.3	64.0
9:00 PM	56.3	64.0
10:00 PM	55.3	64.0
11:00 PM	58.1	64.0

Day Min:	55.8
Night Min	47.7



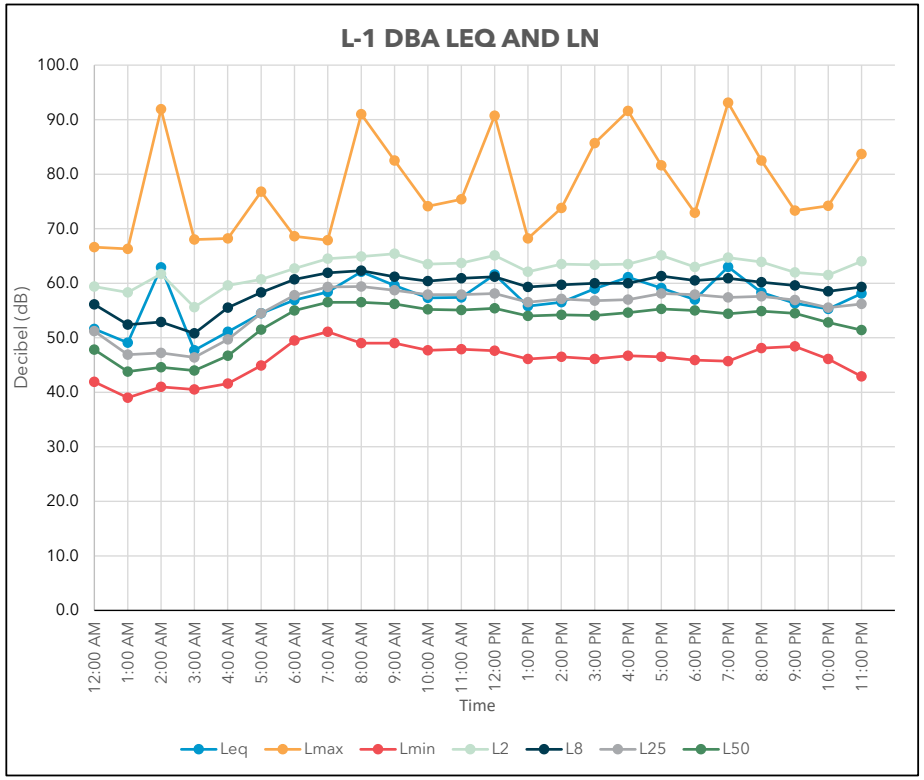
RK ENGINEERING GROUP INC.

Noise Monitoring Location 1 Noise Monitoring Results (dBA Leq and Ln)

PROJECT:	Pacific Park Townhome Project	**JOB #:**	2827-25-2
NOISE METER:	Piccolo II SLM, 24-Hour Measurement	**DATE:**	06-Aug-25
LOCATION:	1	**BY:**	C. Stokes

Time	Leq	Lmax	Lmin	L2	L8	L25	L50
12:00 AM	51.6	66.6	41.9	59.4	56.1	51.2	47.8
1:00 AM	49.1	66.3	39.0	58.3	52.4	46.9	43.8
2:00 AM	62.9	91.9	41.0	61.7	52.9	47.2	44.6
3:00 AM	47.7	68.0	40.5	55.6	50.8	46.4	44.0
4:00 AM	51.1	68.2	41.6	59.6	55.5	49.7	46.7
5:00 AM	54.5	76.8	44.9	60.7	58.3	54.5	51.5
6:00 AM	56.9	68.6	49.5	62.7	60.7	57.8	55.0
7:00 AM	58.4	67.9	51.1	64.5	61.9	59.3	56.5
8:00 AM	62.1	91.0	49.0	64.9	62.3	59.4	56.5
9:00 AM	59.6	82.5	49.0	65.4	61.2	58.7	56.2
10:00 AM	57.3	74.1	47.7	63.5	60.4	57.9	55.2
11:00 AM	57.4	75.4	47.9	63.7	60.9	57.9	55.1
12:00 PM	61.6	90.7	47.6	65.1	61.2	58.1	55.4
1:00 PM	55.8	68.2	46.1	62.1	59.3	56.5	54.0
2:00 PM	56.5	73.8	46.5	63.5	59.7	57.1	54.2
3:00 PM	59.0	85.7	46.1	63.4	60.0	56.8	54.1
4:00 PM	61.1	91.6	46.7	63.5	60.0	57.0	54.6
5:00 PM	59.1	81.6	46.5	65.1	61.3	58.1	55.3
6:00 PM	57.0	72.9	45.9	63.0	60.5	57.9	55.0
7:00 PM	63.0	93.1	45.7	64.7	60.9	57.4	54.4
8:00 PM	58.3	82.5	48.1	63.9	60.2	57.6	54.9
9:00 PM	56.3	73.3	48.4	62.0	59.6	56.9	54.5
10:00 PM	55.3	74.2	46.1	61.5	58.5	55.5	52.8
11:00 PM	58.1	83.7	42.9	64.0	59.3	56.2	51.4

Daytime	59.2	93.1	45.7	63.9	60.6	57.7	55.0
Nighttime	56.7	91.9	39.0	60.9	56.9	53.2	49.9



RK ENGINEERING GROUP INC.

Field Photos - Noise Monitoring Location 2 (L-2)

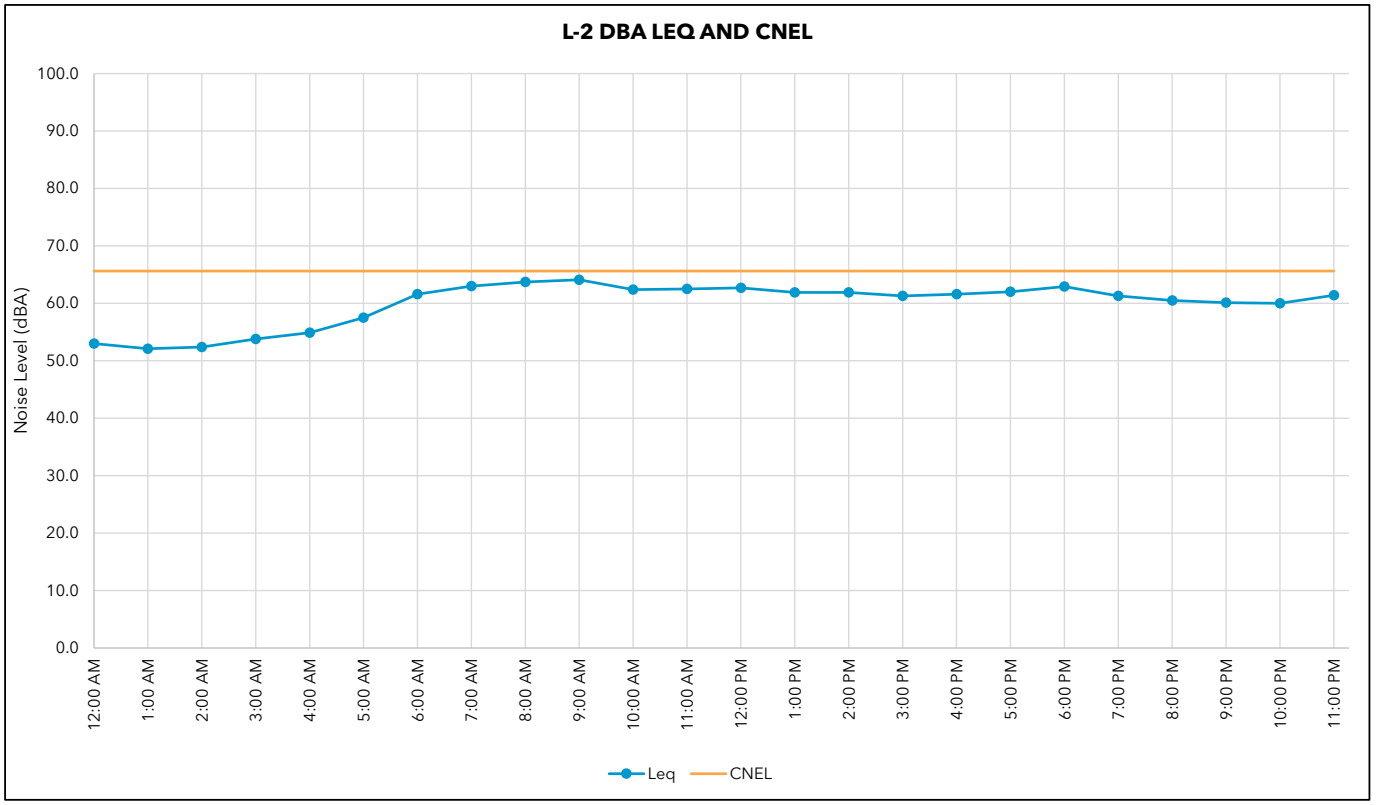
Project:	Pacific Park Townhome Project		**Engineer:**	C. Stokes	**Date:** 8/6/2025
Measurement Address:	27061 Aliso Creek Road		**City:**	Aliso Viejo, CA	**JN:** 2827-2025-02
Notes:	Noise Monitoring Location 2 (L-2) was taken near the eastern boundary of the project site, approximately 150 feet west of the centerline of Aliso Creek Road.				

RK ENGINEERING GROUP INC.

Noise Monitoring Location 2 Noise Monitoring Results (dBA Leq and CNEL)

Time	Leq	CNEL
12:00 AM	53.0	65.6
1:00 AM	52.1	65.6
2:00 AM	52.4	65.6
3:00 AM	53.8	65.6
4:00 AM	54.9	65.6
5:00 AM	57.5	65.6
6:00 AM	61.6	65.6
7:00 AM	63.0	65.6
8:00 AM	63.7	65.6
9:00 AM	64.1	65.6
10:00 AM	62.4	65.6
11:00 AM	62.5	65.6
12:00 PM	62.7	65.6
1:00 PM	61.9	65.6
2:00 PM	61.9	65.6
3:00 PM	61.3	65.6
4:00 PM	61.6	65.6
5:00 PM	62.0	65.6
6:00 PM	62.9	65.6
7:00 PM	61.3	65.6
8:00 PM	60.5	65.6
9:00 PM	60.1	65.6
10:00 PM	60.0	65.6
11:00 PM	61.4	65.6

Day Min:	60.1
Night Min	52.1



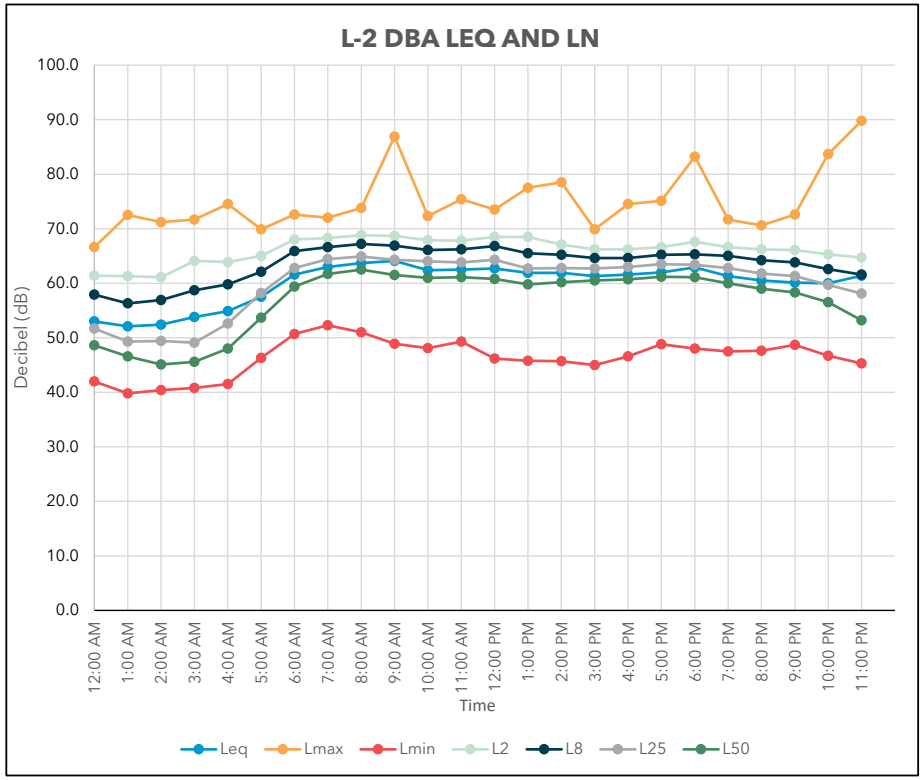
RK ENGINEERING GROUP INC.

Noise Monitoring Location 2 Noise Monitoring Results (dBA Leq and Ln)

PROJECT:	Pacific Park Townhome Project	**JOB #:**	2827-25-2
NOISE METER:	Piccolo II SLM, 24-Hour Measurement	**DATE:**	06-Aug-25
LOCATION:	2	**BY:**	C. Stokes

Time	Leq	Lmax	Lmin	L2	L8	L25	L50
12:00 AM	53.0	66.6	42.0	61.4	57.9	51.7	48.6
1:00 AM	52.1	72.5	39.8	61.3	56.3	49.3	46.6
2:00 AM	52.4	71.2	40.4	61.1	56.9	49.4	45.1
3:00 AM	53.8	71.7	40.8	64.1	58.7	49.1	45.6
4:00 AM	54.9	74.5	41.5	63.9	59.8	52.6	48.0
5:00 AM	57.5	69.9	46.3	65.0	62.1	58.2	53.7
6:00 AM	61.6	72.6	50.7	68.0	65.9	62.8	59.4
7:00 AM	63.0	72.0	52.3	68.3	66.6	64.4	61.7
8:00 AM	63.7	73.8	51.0	68.8	67.2	64.9	62.5
9:00 AM	64.1	86.9	48.9	68.7	66.9	64.3	61.5
10:00 AM	62.4	72.3	48.1	67.9	66.1	64.0	61.0
11:00 AM	62.5	75.4	49.3	67.8	66.2	63.8	61.1
12:00 PM	62.7	73.5	46.2	68.5	66.8	64.3	60.8
1:00 PM	61.9	77.5	45.8	68.5	65.5	62.7	59.8
2:00 PM	61.9	78.5	45.7	67.1	65.2	62.8	60.2
3:00 PM	61.3	69.9	45.0	66.2	64.6	62.7	60.5
4:00 PM	61.6	74.5	46.6	66.2	64.6	63.0	60.7
5:00 PM	62.0	75.1	48.8	66.6	65.2	63.5	61.2
6:00 PM	62.9	83.2	48.0	67.6	65.3	63.4	61.1
7:00 PM	61.3	71.7	47.5	66.6	65.0	62.8	60.0
8:00 PM	60.5	70.6	47.6	66.2	64.2	61.8	59.0
9:00 PM	60.1	72.6	48.7	66.1	63.8	61.3	58.3
10:00 PM	60.0	83.7	46.7	65.3	62.6	59.7	56.5
11:00 PM	61.4	89.8	45.3	64.7	61.6	58.1	53.2

Daytime	62.1	86.9	45.0	67.4	65.5	63.3	60.6
Nighttime	57.5	89.8	39.8	64.3	61.0	56.8	52.9



RK ENGINEERING GROUP INC.

Field Photos - Noise Monitoring Location 3 (L-3)

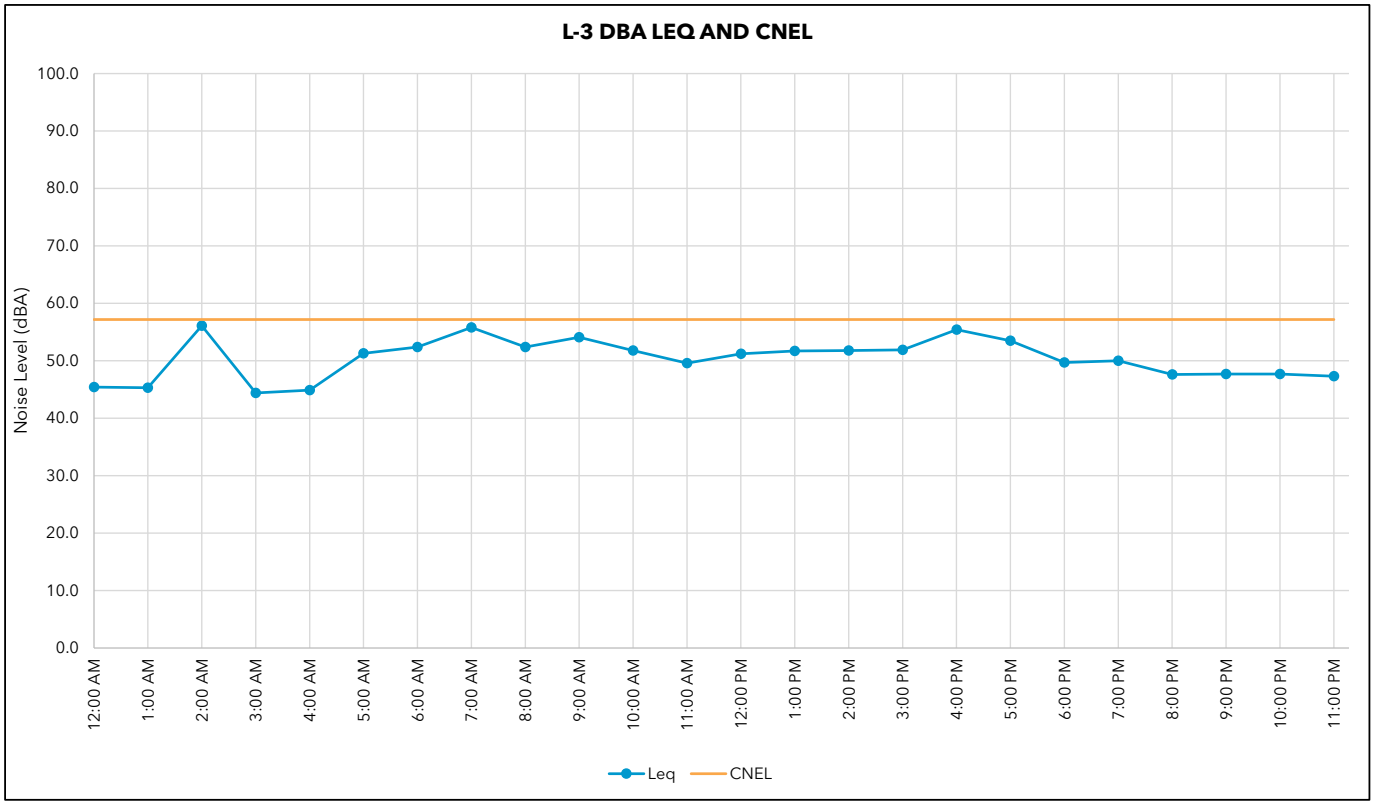
Project:	Pacific Park Townhome Project		**Engineer:**	C. Stokes	**Date:** 8/6/2025
Measurement Address:	27081 Aliso Creek Road		**City:**	Aliso Viejo, CA	**JN:** 2827-2025-02
Notes:	Noise Monitoring Location 3 (L-3) was taken near the western boundary of the project site, approximately 155 feet east of the centerline of Journey.				

RK ENGINEERING GROUP INC.

Noise Monitoring Location 3 Noise Monitoring Results (dBA Leq and CNEL)

Time	Leq	CNEL
12:00 AM	45.4	57.2
1:00 AM	45.3	57.2
2:00 AM	56.1	57.2
3:00 AM	44.4	57.2
4:00 AM	44.9	57.2
5:00 AM	51.3	57.2
6:00 AM	52.4	57.2
7:00 AM	55.8	57.2
8:00 AM	52.4	57.2
9:00 AM	54.1	57.2
10:00 AM	51.8	57.2
11:00 AM	49.6	57.2
12:00 PM	51.2	57.2
1:00 PM	51.7	57.2
2:00 PM	51.8	57.2
3:00 PM	51.9	57.2
4:00 PM	55.4	57.2
5:00 PM	53.5	57.2
6:00 PM	49.7	57.2
7:00 PM	50.0	57.2
8:00 PM	47.6	57.2
9:00 PM	47.7	57.2
10:00 PM	47.7	57.2
11:00 PM	47.3	57.2

Day Min:	47.6
Night Min	44.4



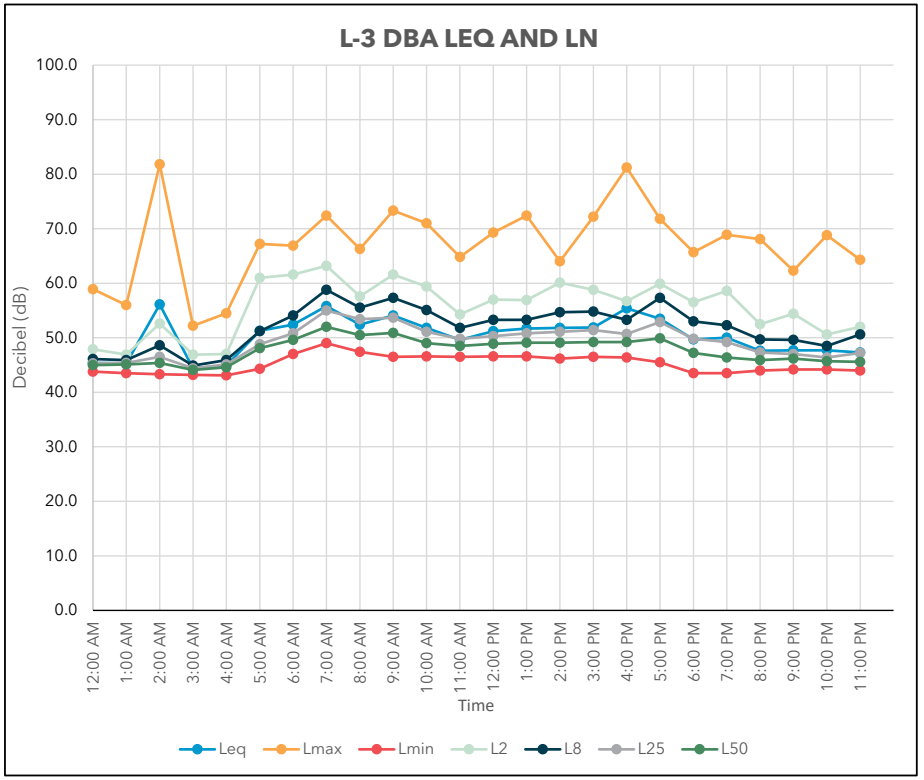
RK ENGINEERING GROUP INC.

Noise Monitoring Location 3 Noise Monitoring Results (dBA Leq and Ln)

PROJECT:	Pacific Park Townhome Project	**JOB #:**	2827-25-2
NOISE METER:	Piccolo II SLM, 24-Hour Measurement	**DATE:**	06-Aug-25
LOCATION:	3	**BY:**	C. Stokes

Time	Leq	Lmax	Lmin	L2	L8	L25	L50
12:00 AM	45.4	58.9	43.8	47.9	46.1	45.3	45.0
1:00 AM	45.3	56.0	43.5	46.9	45.9	45.4	45.1
2:00 AM	56.1	81.8	43.3	52.6	48.6	46.5	45.4
3:00 AM	44.4	52.2	43.2	46.9	44.9	44.4	44.1
4:00 AM	44.9	54.5	43.1	47.0	45.9	45.1	44.6
5:00 AM	51.3	67.2	44.3	61.0	51.2	48.8	48.1
6:00 AM	52.4	66.9	47.0	61.6	54.1	50.8	49.6
7:00 AM	55.8	72.4	49.0	63.2	58.8	55.0	52.0
8:00 AM	52.4	66.3	47.4	57.6	55.5	53.4	50.5
9:00 AM	54.1	73.3	46.5	61.6	57.3	53.7	50.9
10:00 AM	51.8	71.0	46.6	59.4	55.1	51.1	49.0
11:00 AM	49.6	64.8	46.5	54.3	51.8	49.8	48.5
12:00 PM	51.2	69.3	46.6	57.0	53.3	50.3	48.9
1:00 PM	51.7	72.4	46.6	56.9	53.3	50.8	49.1
2:00 PM	51.8	64.0	46.2	60.1	54.7	51.1	49.1
3:00 PM	51.9	72.2	46.5	58.8	54.8	51.4	49.2
4:00 PM	55.4	81.2	46.4	56.7	53.3	50.7	49.2
5:00 PM	53.5	71.8	45.5	59.9	57.3	52.9	49.9
6:00 PM	49.7	65.7	43.5	56.5	53.0	49.8	47.2
7:00 PM	50.0	68.9	43.5	58.6	52.3	49.2	46.4
8:00 PM	47.6	68.1	44.0	52.5	49.7	47.3	45.9
9:00 PM	47.7	62.3	44.2	54.4	49.6	47.0	46.2
10:00 PM	47.7	68.8	44.2	50.6	48.5	46.4	45.7
11:00 PM	47.3	64.3	44.0	52.0	50.6	47.2	45.6

Daytime	52.1	81.2	43.5	58.5	54.5	51.2	49.0
Nighttime	50.5	81.8	43.1	56.1	49.6	47.2	46.4



Appendix C
Stationary Noise Calculation Worksheets

RK ENGINEERING GROUP INC.

Stationary Noise Calculations - Based on FHWA-RD-77-108

Project:	Pacific Park Townhome Project	**Date:**	2/10/2026
		JN:	2827-2025-02
Noise Source:	HVAC Units	**Engineer:**	B. Morrison
Location:	Nearest adjacent receptor (Nighttime)		

Noise Input Data				
OBS DIST=	70.0			
DT WALL=	3.0			
DT W/OB=	67.0			
HTH WALL=	5.0	********		
BARRIER =	0.0	(0=WALL,1=BERM)		
OBS HTH=	5.0			
NOISE HTH=	3.5		BARRIER+	
OBS EL =	0.0		TOPO SHIELDING =	-7.60
NOISE EL =	0.0		NOISE HTH EL=	3.5
DROP-OFF=	20.0	(20 = 6 dBA PER DOUBLING OF DISTANCE)		

Noise Output Data (dBA)							
	Distance (ft.)	**Leq**	**Lmax**	**L2**	**L8**	**L25**	**L50**
REF LEVEL	3.28	65.0	65.0	65.0	65.0	65.0	65.0
PROJ LEVEL	70	38.4	38.4	38.4	38.4	38.4	38.4
SHIELDING	70	-7.6	-7.6	-7.6	-7.6	-7.6	-7.6
ADJ LEVEL	**70**	***30.8***	***30.8***	***30.8***	***30.8***	***30.8***	***30.8***
NOISE LEVEL REDUCTION DUE TO DISTANCE =							-26.58448393

RK ENGINEERING GROUP INC.

Stationary Noise Calculations - Based on FHWA-RD-77-108

Project:	Pacific Park Townhome Project	**Date:**	2/10/2026
		JN:	2827-2025-02
Noise Source:	HVAC Units	**Engineer:**	B. Morrison
Location:	Nearest adjacent receptor (Nighttime)		

Noise Input Data				
OBS DIST=	125.0			
DT WALL=	3.0			
DT W/OB=	122.0			
HTH WALL=	5.0	********		
BARRIER =	0.0	(0=WALL,1=BERM)		
OBS HTH=	5.0			
NOISE HTH=	3.5		BARRIER+	
OBS EL =	0.0		TOPO SHIELDING =	-7.60
NOISE EL =	0.0		NOISE HTH EL=	3.5
DROP-OFF=	20.0	(20 = 6 dBA PER DOUBLING OF DISTANCE)		

Noise Output Data (dBA)							
	Distance (ft.)	**Leq**	**Lmax**	**L2**	**L8**	**L25**	**L50**
REF LEVEL	3.28	65.0	65.0	65.0	65.0	65.0	65.0
PROJ LEVEL	125	33.4	33.4	33.4	33.4	33.4	33.4
SHIELDING	125	-7.6	-7.6	-7.6	-7.6	-7.6	-7.6
ADJ LEVEL	**125**	***25.8***	***25.8***	***25.8***	***25.8***	***25.8***	***25.8***
NOISE LEVEL REDUCTION DUE TO DISTANCE =							-31.62072339

RK ENGINEERING GROUP INC.

dB Adder

Project:	Pacific Park Townhome Project	**Date:**	2/10/2026
		JN:	2827-2025-02
Noise Source:	HVAC Units	**Engineer:**	B. Morrison
Location:	Nearest adjacent receptor (Daytime)		

Noise Levels (dBA)						
Noise Source	**Leq**	**Lmax**	**L2**	**L8**	**L25**	**L50**
HVAC Unit	30.8	30.8	30.8	30.8	30.8	30.8
HVAC Unit	30.8	30.8	30.8	30.8	30.8	30.8
HVAC Unit	30.8	30.8	30.8	30.8	30.8	30.8
HVAC Unit	30.8	30.8	30.8	30.8	30.8	30.8
HVAC Unit	30.8	30.8	30.8	30.8	30.8	30.8
Total	***37.8***	***37.8***	***37.8***	***37.8***	***37.8***	***37.8***

RK ENGINEERING GROUP INC.

dB Adder

Project:	Pacific Park Townhome Project	**Date:**	2/10/2026
		JN:	2827-2025-02
Noise Source:	HVAC Units	**Engineer:**	B. Morrison
Location:	Nearest adjacent receptor (Nighttime)		

Noise Levels (dBA)						
Noise Source	**Leq**	**Lmax**	**L2**	**L8**	**L25**	**L50**
HVAC Unit	25.8	25.8	25.8	25.8	25.8	25.8
HVAC Unit	25.8	25.8	25.8	25.8	25.8	25.8
HVAC Unit	25.8	25.8	25.8	25.8	25.8	25.8
HVAC Unit	25.8	25.8	25.8	25.8	25.8	25.8
HVAC Unit	25.8	25.8	25.8	25.8	25.8	25.8
Total	***32.8***	***32.8***	***32.8***	***32.8***	***32.8***	***32.8***

Appendix D
Exterior Land Use Compatibility Calculation Worksheets

RK ENGINEERING GROUP INC.

Stationary Noise Calculations - Based on FHWA-RD-77-108

Project:	Pacific Park Townhome Project	**Date:**	2/10/2026
		JN:	2827-2025-02
Noise Source:	Existing Exterior Ambient Noise Levels	**Engineer:**	B. Morrison
Location:	Building facades facing Pacific Park Drive (Noise Monitoring Location 1)		

Noise Input Data				
OBS DIST=	80.0			
DT WALL=	0.0			
DT W/OB=	80.0			
HTH WALL=	0.0	********		
BARRIER =	0.0	(0=WALL,1=BERM)		
OBS HTH=	5.0			
NOISE HTH=	5.0		BARRIER+	
OBS EL =	0.0		TOPO SHIELDING =	0.00
NOISE EL =	0.0		NOISE HTH EL=	5.0
DROP-OFF=	20.0	(20 = 6 dBA PER DOUBLING OF DISTANCE)		

Noise Output Data (dBA)							
	Distance (ft.)	**CNEL**	**Leq**	**L2**	**L8**	**L25**	**L50**
REF LEVEL	150	64.0	--	--	--	--	--
PROJ LEVEL	80	69.5	5.5	5.5	5.5	5.5	5.5
SHIELDING	80	0.0	0.0	0.0	0.0	0.0	0.0
ADJ LEVEL	**80**	***69.5***	**--**	**--**	**--**	**--**	**--**
NOISE LEVEL REDUCTION DUE TO DISTANCE =							5.460025441

RK ENGINEERING GROUP INC.

Stationary Noise Calculations - Based on FHWA-RD-77-108

Project:	Pacific Park Townhome Project	**Date:**	2/10/2026
		JN:	2827-2025-02
Noise Source:	Existing Exterior Ambient Noise Levels	**Engineer:**	B. Morrison
Location:	Building facades facing Aliso Creek Road (Noise Monitoring Location 2)		

Noise Input Data				
OBS DIST=	90.0			
DT WALL=	0.0			
DT W/OB=	90.0			
HTH WALL=	0.0	********		
BARRIER =	0.0	(0=WALL,1=BERM)		
OBS HTH=	5.0			
NOISE HTH=	5.0		BARRIER+	
OBS EL =	0.0		TOPO SHIELDING =	0.00
NOISE EL =	0.0		NOISE HTH EL=	5.0
DROP-OFF=	20.0	(20 = 6 dBA PER DOUBLING OF DISTANCE)		

Noise Output Data (dBA)							
	Distance (ft.)	**CNEL**	**Leq**	**L2**	**L8**	**L25**	**L50**
REF LEVEL	135	65.6	--	--	--	--	--
PROJ LEVEL	90	69.1	3.5	3.5	3.5	3.5	3.5
SHIELDING	90	0.0	0.0	0.0	0.0	0.0	0.0
ADJ LEVEL	**90**	***69.1***	**--**	**--**	**--**	**--**	**--**
NOISE LEVEL REDUCTION DUE TO DISTANCE =							3.521825181

Appendix E
Construction Noise and Vibration Calculation Worksheets

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 8/4/2025
Case Description: Pacific Park Townhome Project

---- Receptor #1 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Demolition	Residential	65	65	65

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Saw	No	100		89.6	250	0
Dozer	No	100		81.7	250	0

Results

Calculated (dBA)

Equipment		*Lmax	Leq
Concrete Saw		75.6	75.6
Dozer		67.7	67.7
	Total	75.6	76.3

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 8/4/2025
Case Description: Pacific Park Townhome Project

---- Receptor #1 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Site Preparation	Residential	65	65	65

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Tractor	No	100	84		250	0
Tractor	No	100	84		250	0

Results

Calculated (dBA)

Equipment		*Lmax	Leq
Tractor		70	70
Tractor		70	70
	Total	70	73

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 8/4/2025
Case Description: Pacific Park Townhome Project

---- Receptor #1 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Grading	Residential	65	65	65

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Grader	No	100	85		250	0
Tractor	No	100	84		250	0

Results

Calculated (dBA)

Equipment		*Lmax	Leq
Grader		71	71
Tractor		70	70
	Total	71	73.6

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 8/4/2025
Case Description: Pacific Park Townhome Project

---- Receptor #1 ----

		Baselines (dBA)		
Description	Land Use	Daytime	Evening	Night
Building Construction	Residential	65	65	65

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Tractor	No	100	84		250	0
Tractor	No	100	84		250	0

Results

		Calculated (dBA)	
Equipment		*Lmax	Leq
Tractor		70	70
Tractor		70	70
	Total	70	73

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 8/4/2025
Case Description: Pacific Park Townhome Project

---- Receptor #1 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Paving	Residential	65	65	65

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Roller	No	100		80	250	0
Roller	No	100		80	250	0

Results

Calculated (dBA)

Equipment		*Lmax	Leq
Roller		66	66
Roller		66	66
	Total	66	69

*Calculated Lmax is the Loudest value.

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 8/4/2025
Case Description: Pacific Park Townhome Project

---- Receptor #1 ----

Baselines (dBA)

Description	Land Use	Daytime	Evening	Night
Architectural Coating	Residential	65	65	65

Equipment

Description	Impact Device	Usage(%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	100		77.7	250	0

Results

Calculated (dBA)

Equipment		*Lmax	Leq
Compressor (air)		63.7	63.7
	Total	63.7	63.7

*Calculated Lmax is the Loudest value.

RK ENGINEERING GROUP INC.

Vibration Impact Analysis

Project:	Pacific Park Townhome Project	**Date:**	8/8/2025
Activity:	Construction Vibration	**JN:**	2827-2025-02
Location:	Nearest adjacent commercial structure	**Engineer:**	C. Stokes

Vibration Input/Output Data

$$PPV = PPV_{ref}(25/D)^{n} \text{ (in/sec)}$$

PPV =	**0.062 in/sec**

Equipment Type =	4	Loaded Trucks
PPV_{ref} =	0.076	Reference PPV at 25 ft.
D =	30.00	Distance from Equipment to receiver in ft.
n =	1.10	Vibration attenuation rate through the ground

Equipment PPV Reference Levels

Type	Equipment	Reference PPV
1	Vibratory Roller	0.210
2	Large Bulldozer	0.089
3	Caisson Drilling	0.089
4	Loaded Trucks	0.076
5	Jackhammer	0.035
6	Small Bulldozer	0.003
7	Crack and Seat	2.400

RK ENGINEERING GROUP INC.

Vibration Impact Analysis

Project:	Pacific Park Townhome Project	**Date:**	8/8/2025
Activity:	Construction Vibration	**JN:**	2827-2025-02
Location:	Nearest adjacent commercial structure	**Engineer:**	C. Stokes

Vibration Input/Output Data

$$PPV = PPV_{ref}(25/D)^{n} \text{ (in/sec)}$$

PPV =	**0.073 in/sec**

Equipment Type =	2	Large Bulldozer
PPV_{ref} =	0.089	Reference PPV at 25 ft.
D =	30.00	Distance from Equipment to receiver in ft.
n =	1.10	Vibration attenuation rate through the ground

Equipment PPV Reference Levels

Type	Equipment	Reference PPV
1	Vibratory Roller	0.210
2	Large Bulldozer	0.089
3	Caisson Drilling	0.089
4	Loaded Trucks	0.076
5	Jackhammer	0.035
6	Small Bulldozer	0.003
7	Crack and Seat	2.400

RK ENGINEERING GROUP INC.

Vibration Impact Analysis

Project:	Pacific Park Townhome Project	**Date:**	8/8/2025
Activity:	Construction Vibration	**JN:**	2827-2025-02
Location:	Nearest adjacent commercial structure	**Engineer:**	C. Stokes

Vibration Input/Output Data

$$PPV = PPV_{ref}(25/D)^{n} \text{ (in/sec)}$$

PPV =	**0.172 in/sec**

Equipment Type =	1	Vibratory Roller
PPV_{ref} =	0.210	Reference PPV at 25 ft.
D =	30.00	Distance from Equipment to receiver in ft.
n =	1.10	Vibration attenuation rate through the ground

Equipment PPV Reference Levels

Type	Equipment	Reference PPV
1	Vibratory Roller	0.210
2	Large Bulldozer	0.089
3	Caisson Drilling	0.089
4	Loaded Trucks	0.076
5	Jackhammer	0.035
6	Small Bulldozer	0.003
7	Crack and Seat	2.400

RK ENGINEERING GROUP INC.

Vibration Impact Analysis

Project:	Pacific Park Townhome Project	**Date:**	8/8/2025
Activity:	Construction Vibration	**JN:**	2827-2025-02
Location:	Nearest adjacent residential structure	**Engineer:**	C. Stokes

Vibration Input/Output Data

$$PPV = PPV_{ref}(25/D)^{n} \text{ (in/sec)}$$

PPV =	**0.062 in/sec**

Equipment Type =	4	Loaded Trucks
PPV_{ref} =	0.076	Reference PPV at 25 ft.
D =	30.00	Distance from Equipment to receiver in ft.
n =	1.10	Vibration attenuation rate through the ground

Equipment PPV Reference Levels

Type	Equipment	Reference PPV
1	Vibratory Roller	0.210
2	Large Bulldozer	0.089
3	Caisson Drilling	0.089
4	Loaded Trucks	0.076
5	Jackhammer	0.035
6	Small Bulldozer	0.003
7	Crack and Seat	2.400

RK ENGINEERING GROUP INC.

Vibration Impact Analysis

Project:	Pacific Park Townhome Project	**Date:**	8/8/2025
Activity:	Construction Vibration	**JN:**	2827-2025-02
Location:	Nearest adjacent residential structure	**Engineer:**	C. Stokes

Vibration Input/Output Data

$$PPV = PPV_{ref}(25/D)^{n} \text{ (in/sec)}$$

PPV =	**0.073 in/sec**

Equipment Type =	2	Large Bulldozer
PPV_{ref} =	0.089	Reference PPV at 25 ft.
D =	30.00	Distance from Equipment to receiver in ft.
n =	1.10	Vibration attenuation rate through the ground

Equipment PPV Reference Levels

Type	Equipment	Reference PPV
1	Vibratory Roller	0.210
2	Large Bulldozer	0.089
3	Caisson Drilling	0.089
4	Loaded Trucks	0.076
5	Jackhammer	0.035
6	Small Bulldozer	0.003
7	Crack and Seat	2.400

RK ENGINEERING GROUP INC.

Vibration Impact Analysis

Project:	Pacific Park Townhome Project	**Date:**	8/8/2025
Activity:	Construction Vibration	**JN:**	2827-2025-02
Location:	Nearest adjacent residential structure	**Engineer:**	C. Stokes

Vibration Input/Output Data

$$PPV = PPV_{ref}(25/D)^{n} \text{ (in/sec)}$$

PPV =	**0.172 in/sec**

Equipment Type =	1	Vibratory Roller
PPV_{ref} =	0.210	Reference PPV at 25 ft.
D =	30.00	Distance from Equipment to receiver in ft.
n =	1.10	Vibration attenuation rate through the ground

Equipment PPV Reference Levels

Type	Equipment	Reference PPV
1	Vibratory Roller	0.210
2	Large Bulldozer	0.089
3	Caisson Drilling	0.089
4	Loaded Trucks	0.076
5	Jackhammer	0.035
6	Small Bulldozer	0.003
7	Crack and Seat	2.400

Appendix J:

Pacific Park Drive Townhomes Project
Vehicle Miles Traveled (VMT) Screening Analysis,
City of Aliso Viejo

NOVEMBER 24, 2025

Mr. Peter Carlson
CARLSON STRATEGIC LAND SOLUTIONS
27124A Paseo Espada, Suite 323
San Juan Capistrano, CA 92675

SUBJECT: PACIFIC PARK DRIVE TOWNHOMES PROJECT VEHICLE MILES TRAVELED (VMT) SCREENING ANALYSIS, CITY OF ALISO VIEJO

Dear Mr. Carlson:

INTRODUCTION

RK ENGINEERING GROUP, INC. (RK) is pleased to provide this Vehicle Miles Traveled (VMT) Screening Analysis for the proposed Pacific Park Drive Townhomes Project (hereinafter referred to as "project").

The purpose of this study is to utilize the *City of Aliso Viejo Transportation Impact Guidelines for CEQA and General Plan Consistency*, for determining VMT impacts under the California Environmental Quality Act (CEQA), to determine if the project will require a detailed VMT modeling analysis.

PROJECT DESCRIPTION

The proposed project site is generally located south of Pacific Park Drive, between Journey and Aliso Creek Road, in the City of Aliso Viejo. The project site is approximately 8.44 acres and is currently occupied by three (3) 2-story commercial office buildings totaling approximately 125,166 square feet, plus associated parking lots.

The proposed project consists of demolishing the existing commercial buildings and constructing 137 residential townhome dwelling units.

Primary access to the project is proposed to be provided via two (2) existing driveways. The first is a dedicated right-in/right-out driveway located along Pacific Park Drive, and the second is a shared full-access driveway located along Aliso Creek Road. The site can also be accessed via a third existing driveway located along Journey, however, only a small portion of project traffic is expected to utilize this driveway. None of the project entries are proposed to be gated.

The project is anticipated to open in 2027 and will be evaluated in one (1) single phase.

Exhibit A shows the location map of the project site. **Exhibit B** shows the proposed site plan.

Legend

— = Project Site Boundary

Exhibit A

Location Map

N

Exhibit B

Site Plan

VEHICLE MILES TRAVELED (VMT) SCREENING

The *City of Aliso Viejo Transportation Impact Guidelines for CEQA and General Plan Consistency* provides recommendations in the form of thresholds of significance and methodologies for identifying VMT related impacts. The proposed project is subject to a VMT screening analysis and will adhere to the recommendations and practices described in the City's guidelines.

The City of Aliso Viejo has developed three (3) types of screening criteria that can be applied to effectively screen projects from project-level assessment. The screening steps are identified below:

- Step 1: Transit Priority Area (TPA) Screening
- Step 2: Low VMT Area Screening
- Step 3: Project Type Screening

Step 1: Transit Priority Area (TPA) Screening

Based on the *City of Aliso Viejo Transportation Impact Guidelines for CEQA and General Plan Consistency* "Projects located within a TPA may be presumed to have a less than significant impact absent substantial evidence to the contrary." However, this presumption may not be appropriate if the project:

- Has a Floor Area Ratio (FAR) of less than 0.75;
- Includes more parking for use by residents, customers, or employees of the project than required by the jurisdiction (if the jurisdiction requires the project to supply parking);
- Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the lead agency, with input from the Metropolitan Planning Organization); or
- Replaces affordable residential units with a smaller number of moderate or high-income residential units.

A transit priority area is defined as a half mile area around an existing major transit stop or a high-quality transit corridor. A major transit stop refers to a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency service interval of 20 minutes or less during the morning and afternoon peak commute periods. A high-quality transit corridor refers to a corridor with fixed route bus service intervals no longer than 15 minutes during peak commute hours.

As indicated in the City's VMT Guidelines, there are no TPA's within Aliso Viejo. Therefore, the proposed project does not satisfy the screening criteria based on Step 1: Transit Priority Area (TPA) Screening.

Step 2: Low VMT Area Screening

Per the City of Aliso Viejo Guidelines, residential and office projects located within a low VMT-generating area are presumed to have a less than significant impact absent substantial evidence to the contrary. To identify if the project is in a low VMT-generating area, Appendix A from the City's VMT guidelines was used which provides a map showing the locations of low VMT-generating zones in Aliso Viejo.

As shown on **Exhibit C**, the proposed project is located in an area with a higher VMT per service population than city average (2045). Therefore, the proposed project does not satisfy the screening criteria based on Step 2: Low VMT Area Screening

Step 3: Low Project Type Screening

The *City of Aliso Viejo Transportation Impact Guidelines for CEQA and General Plan Consistency* specify that certain project types are eligible to screen from a project-level VMT assessment because they can be presumed to have a less than significant impact absent substantial evidence to the contrary as their uses are local serving in nature. These types of projects include:

- Local Serving Retail Less than 50,000 square feet (e.g., gas stations, banks, restaurants, shopping centers, etc.)
- Local-Serving K-12 schools
- Local parks
- Day Care Centers
- Local-serving hotels (e.g., non-destination hotels)
- Student housing projects on or adjacent to college campuses
- Local-serving assembly uses (places of worship, community organizations)
- Community institutions (Public libraries, fire stations, local government)
- Local serving community colleges that are consistent with the assumptions noted in the RTP/SCS
- Affordable or supportive housing
- Assisted Living Facilities
- Senior Housing (as defined by HUD)
- Projects generating less than 110 daily vehicle trips
- Other local-serving projects as approved by the Planning Manager and Director of Community Development

The proposed project consists of razing the existing office building to construct 137 single-family attached residential dwelling units. As such, ITE Land Use Code 215: Single-Family Attached Housing

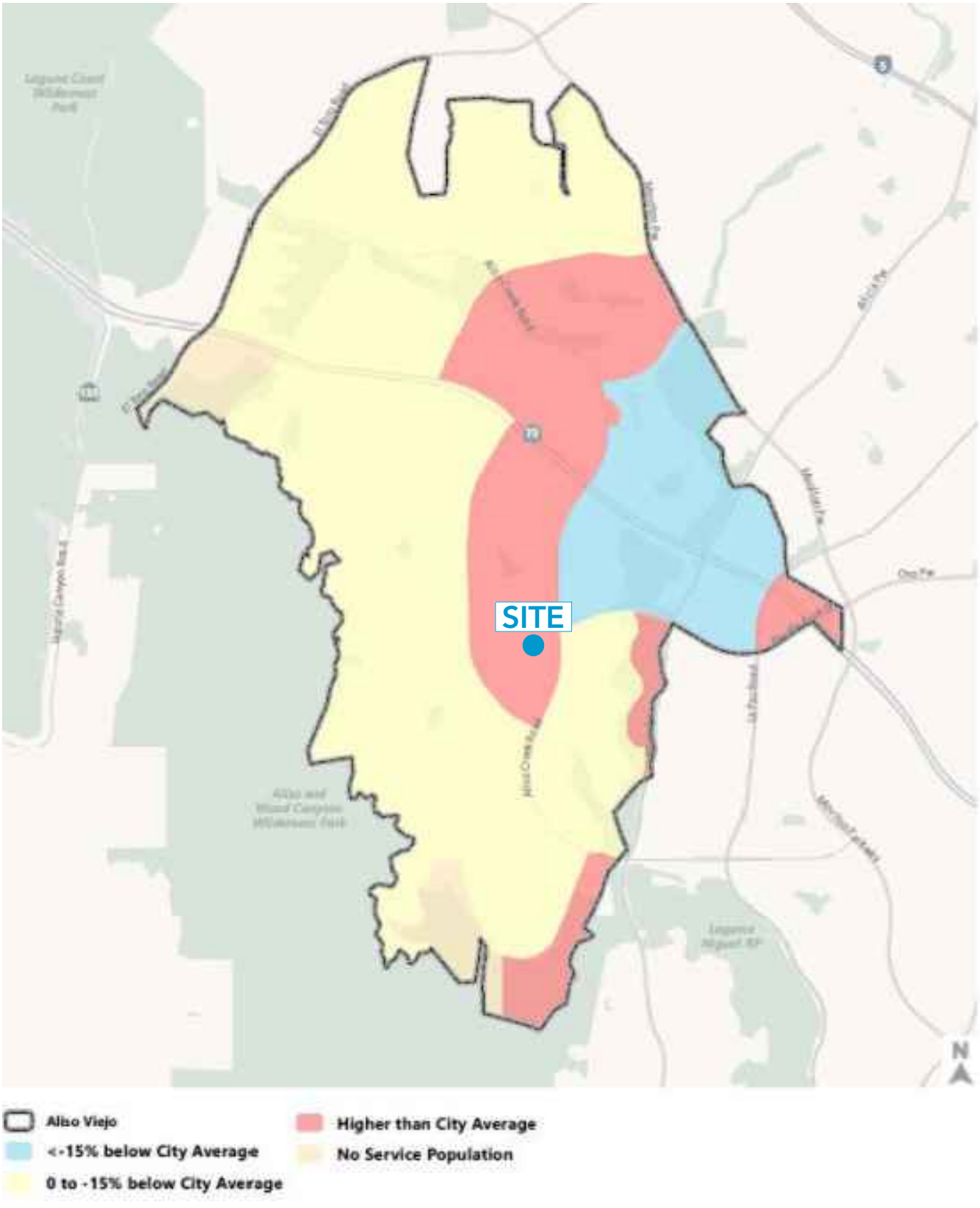


Exhibit C

Low VMT-Generating Areas in Aliso Viejo

and ITE Land Use Code 710: General Office Building trip rates accurately reflect the proposed and existing land uses, respectively.

The project proposes to demolish the existing 125,166 square feet of office and construct 137 residential townhome dwelling units. As such ITE Land Use: 215 Single-Family Attached Housing and ITE Land Use Code 710: General Office Building are the most appropriate trip rates to reflect the proposed and existing land uses, respectively.

It should be noted that for this CEQA Transportation Assessment, full trip credits for the existing entitled office buildings (utilizing ITE trip rates) have been utilized. Trip credits for an existing entitled use are based on the legal/entitled capacity of the site, not on its current level of activity or vacancy. Even if an office building is temporarily vacant, the full trip credit still applies.

Table 1 shows the project trip generation rates and forecast for the CEQA Transportation Assessment with trip credits. The upper portion of Table 1 shows the trip generation rates utilized based on the ITE Trip Generation Manual (12th Edition, 2025) and the lower portion of Table 1 shows a comparison of the trips generated by the existing entitled land use to the trips generated by the proposed project.

Table 1 | Project Trip Generation Rates & Forecast[1] For CEQA Transportation Assessment (With Existing Trip Credits)

Land Use (ITE Code)	Quantity	Units[2]	Weekday						Daily
			AM Peak Hour			PM Peak Hour			
			In	Out	Total	In	Out	Total	
ITE Trip Generation Rate									
Single-Family Attached Housing (215)	--	DU	25%	75%	0.47	57%	43%	0.51	6.57
General Office Building (710)	--	TSF	88%	12%	1.24	16%	84%	1.18	7.83
Trip Generation Forecast									
Proposed Project Trip Generation Forecast									
Pacific Park Drive Townhomes (215) [A]	137	DU	16	48	64	40	30	70	900
Existing Entitled Land Use Trip Generation Forecast									
Office Building (710) [B]	125.166	TSF	137	18	155	24	124	148	980
Total Net Trip Generation Forecast [A] - [B]			**-121**	**+30**	**-91**	**+16**	**-94**	**-78**	**-80**

[1] Source: ITE Trip Generation Manual (12th Edition, 2025).

[2] TSF = 1,000 square feet
DU = Dwelling Units

As shown in Table 1, the proposed project is forecasted to generate approximately 80 fewer weekday daily trips. **Therefore, the proposed project satisfies the screening criteria based on Step 3: Project Type Screening and may be presumed to have less than significant impact on VMT under CEQA and no further VMT analysis is required**.

CONCLUSIONS

RK Engineering Group, Inc. has completed this Trip Generation and Vehicle Miles Traveled (VMT) Screening Assessment for the proposed Pacific Park Drive Townhomes Project.

As specified in the *City of Aliso Viejo Transportation Impact Guidelines for CEQA and General Plan Consistency*, the proposed project is screened out from a full VMT analysis based on the Step 3: Project Type Screening and may be presumed to have a less than significant impact on VMT under CEQA Therefore, no additional VMT analysis is required.

RK Engineering Group, Inc. appreciates this opportunity to work with the CARLSON STRATEGIC LAND SOLUTIONS on the Pacific Park Townhomes Project. If you have any questions regarding this review, or need further clarification, please contact us at (949) 474-0809.

Sincerely,
RK ENGINEERING GROUP, INC.

Justin Tucker, P.E., T.E.
Principal

Bryant Medina
Engineer I

Attachments

Appendix K:

Moulton Niguel Water District Engineering Feasibility Letter

moulton niguel water district

February 5, 2025

Brandon Dieda BDieda@proeng.net

RE: Proposed Development located at Aliso Creek Road 27231 Aliso Viejo- Shea Townhomes

Dear Customer:

Moulton Niguel Water District (MNWD/District) has investigated the proposed development at the above referenced location. A Will Serve Letter will be sent to the City of Aliso Viejo, once Development plans have been reviewed and approved, and all required permitting steps are complete with MNWD Engineering. **This letter is not to be interpreted as a District approval for a municipal Grading or Building permit.**

Moulton Niguel Water District will service the above-mentioned project for water, recycled, and wastewater service, and preliminary review suggests available water supply and sewer capacity to support the project. This project is completely within MNWD's boundaries. As this project's water use is expected to be less than the equivalent of 500 dwelling units, a Water Supply Assessment under Senate bill 610 is not required. The availability of water service is subject to the suppliers of water to Moulton Niguel Water District continuing to honor their contractual obligation relative to the amount of water to be supplied. Moulton Niguel Water District can make no representations as to the future intention of said suppliers in this regard. This indication of MNWD's ability to serve the above-referenced project is conditional upon the following MNWD Permitting requirements:

Improvement Plans

Available capacity in the existing infrastructure will be determined once this development has received an Orange County Fire Authority (OCFA) Water Availability Form with required fire flows identified, and have this form submitted to the District for processing. This will be used to assess whether water system upgrades/upsizing is required. **Water main upsizing and looping is anticipated for this location. Sewer main upsizing is not anticipated for this location**. Additional items required for submittal from the developer or project manager are:

- **Will need to confirm via hydraulic modeling that fire flow demands will be met.**
- **Any existing MNWD improvements not being used shall be demolished and removed.**
- **Each dwelling unit shall have its own independent water meter and fire sprinkler system. Developer shall reserve sufficient space to support the installation of meters and backflows.**
- **A new water main line connection at Pacific Park may be required to complete a sufficient water loop.**
- **MNWD will own and maintain a public sewer line in the major streets, but not within the alley ways in the proximity of the garages.**

BOARD OF DIRECTORS | Duane D. Cave PRESIDENT | Richard Fiore DIRECTOR | Donald Froelich DIRECTOR | Bill Moorhead DIRECTOR | Brian S. Probolsky VICE PRESIDENT | Diane Rifkin VICE PRESIDENT | Sherry Wanninger DIRECTOR

- **Recycled water shall be required for irrigation over common HOA areas. Existing use sites at the project location shall be amended accordingly.**
- Completed Application for Water/Sewer Service
- Complete Insurance and Bonding Requirements per District requirements.
- PDF plans showing locations of proposed potable water connections for domestic use and fire suppression, recycled water connections for dedicated irrigation use, wastewater connections, and grading over existing facilities.
- Engineer's Estimate – materials and construction cost for facilities to be built and dedicated to the District. This will be used to determine Plancheck and Inspection fees, and used for construction performance bonding if required.
- The fire suppression/sprinkler system water demand (gallons-per-minute calculation) from this project's Fire Suppression/Sprinkler System designer.
- Backflow installation on dedicated potable irrigation, homes with an ejector pump or subterranean plumbing, and irrigation services.
- Easement documents, and Title Report if applicable (if any facilities to be dedicated to the District will be located on private property). Easement Encroachment Agreement required if any surface improvements are proposed within the District easement.
- PDF of Irrigation plans. The proposed project location is identified as Use Sites: D1511 and D1512.
- Completion of an OCFA Water Availability Form, and Proof of OCFA Review and Approval.
- Hydraulic Analysis for fireflow (while keeping pipeline flows under the maximum velocities allowed), and/or for wastewater flows (while keeping sewer pipeline capacities within allowable tolerances), to determine any required facility upsizing if required.
- The use of recycled water will be required for construction.
- All plan sets submitted to MNWD shall be in PDF format.

Fee Schedule

The fee schedule and applicable costs that may be required are as follows:

- Commercial, Residential, Irrigation

Meter Size	Water Capacity Fee	Wastewater Capacity Fee
¾"	$2,405	$1,597
1"	$2,405	$1,597
1.5"	$4,810	$3,195
2"	$7,695	$5,112
2.5"	$12,265	$8,147
3"	$16,834	$11,182
4"	$30,301	$20,128
6"	$67,335	$44,730
8"	$115,432	$76,680
10"	$182,767	$121,410

- Potable Irrigation- Residential Development $1,479 per 1000 sq. ft. irrigated Non-Residential Development $1,210 per 1000 sq, ft. irrigated
- Plan check and Inspection Fees Minimum $800 plancheck and/or inspection; projects will require an initial deposit outlined in Resolution 18-13
- Construction Costs (both onsite and off-site improvements)
- Reimbursement agreement fees, Developer Impact Fees, and/or Special Assessments, if applicable.

Fees are subject to change.

Record Drawings

As-Built Drawings of existing facilities will be provided once project design commences. Design Engineer or Project Manager may request these drawings on the District website, at https://mnwdca.seamlessdocs.com/f/requestdrawings.

MNWD will approve the plans after all remaining concerns have been addressed, easements are executed for facilities to be located on private property and after all applicable fees for this project are paid in full.

MNWD's latest Standard Specifications are available online at: https://www.mnwd.com/wp-content/uploads/Standard-Specifications-for-Construction-of-PW-RW-and-WW-Facilities-August-2024-1.pdf

MNWD's latest Development Requirements are available online at: https://www.mnwd.com/wp-content/uploads/2021/12/Complete-Doc-DEVELOPMENT-REQUIREMENTS-SIG-PAGE-PART-I-APENDICES-AND-PART-II-FINAL-2021.pdf

If you have any questions or require further assistance, please do not hesitate in contacting Sheldon Yu (SYu@mnwd.com) at your earliest convenience.

Regards,

MOULTON NIGUEL WATER DISTRICT

Mark Mountford

Mark H. Mountford, P.E.
Engineering Manager

Appendix L:

Fire Master Plan

ORANGE COUNTY FIRE AUTHORITY

FIRE MASTER PLAN

VICINITY MAP

OCFA STAMP

PROJECT INFORMATION REQUIREMENTS

PROJECT LOCATION: 27181 Aliso Creek Rd.
PARCEL MAP NUMBER: 632-124-08
TRACT NUMBER:
LOT NUMBER:
○ EMERGENCY ACCESS EASEMENTS

DETAILED SCOPE OF WORK
NOTE: OCFA WILL ONLY REVIEW WORK OUTLINED IN SCOPE OF WORK

Fire master plan of a residential townhome development and pool amenities with an accessory building.

NUMBER OF UNITS OR HOMES IN DEVELOPMENT

137

SPECIAL CONDITIONS
○ FIRE HAZARD SEVERITY ZONE ○ STATE RESPONSE AREA ○ LOCAL RESPONSE AREA
○ STATE LICENSED FACILITY
○ AM&M ○ PENDING ○ COMPLETE SR:
○ METHANE MITIGATION

NUMBER OF STORIES 3 Stories

BUILDING HEIGHT Maximum Height 40'-11"

BUILDING AREA < 3,600sqft

OCCUPANCY TYPE (CHECK ALL THAT APPLY)
* INDICATES SFM REGULATED OCCUPANCY. OCFA PLAN SUBMITTAL REQUIRED
# GROUP S MOTOR VEHICLE REPAIR AND AIRCRAFT REPAIR REQUIRE OCFA PLAN SUBMITTAL
○ GROUP A1* ○ GROUP A2* ○ GROUP A3* ○ GROUP A4* ○ GROUP A5*
○ GROUP B ○ GROUP E* ○ GROUP F1 ○ GROUP F2 ○ GROUP H1*
○ GROUP H2* ○ GROUP H3* ○ GROUP H4* ○ GROUP H5* ○ GROUP I1*
○ GROUP I2* ○ GROUP I3* ○ GROUP I4* ○ GROUP M ○ GROUP R1*
○ GROUP R2* ○ GROUP R2.1 ○ GROUP R2.2 ● GROUP R3 ○ GROUP R3.1
○ GROUP R4* ○ GROUP S1# ○ GROUP S2# ○ GROUP U

TYPE OF CONSTRUCTION
○ TYPE IA ○ TYPE IB
○ TYPE IIA ○ TYPE IIB
○ TYPE IIIA ○ TYPE IIIB
○ TYPE IV
○ TYPE VA ● TYPE VB

MIXED USE AND OCCUPANCY (PER CBC 508 & 509)
○ ACCESSORY OCCUPANCIES (CBC 508.2)
(ACCESSORY OCCUPANCY < 10% OF STORY)
○ INCIDENTAL USES (CBC 509)
● NONSEPARATED OCCUPANCIES (CBC 508.3)
○ SEPARATED OCCUPANCIES (CBC 508.4)

SPECIAL DETAILED REQUIREMENTS
○ HIGH RISE (CBC 403)
○ ATRIUM (CBC 404)
○ OPEN PARKING GARAGE (CBC 406.5)
○ GROUP I2 (CBC 407) SMOKE COMPARTMENTS REFUGE AREAS
○ HAZARDOUS MATERIALS (CBC 414, CFC CHAPTER 50)

SPRINKLERS
● NEW ○ MANDATORY ○ VOLUNTARY
○ TENANT IMPROVEMENT
TYPE
○ NFPA 13
● NFPA 13D
○ NFPA 13R

○ FIRE PUMP
○ STANDPIPES

FIRE ALARM
○ NEW ○ MANDATORY ○ VOLUNTARY
○ TENANT IMPROVEMENT
○ VOICE EVACUATION

FIRE FLOW REQUIREMENT PER OCFA GUIDELINE B-01 ATTACHMENT 23
FLOW (IN GPM @ 20 PSI): 1500 DURATION: 2

WATER AVAILIBILITY
PROVIDE COPY OF OCFA WATER AVAILABILITY FORM COMPLETED BY WATER DISTRICT ON FIRE MASTER PLAN
FLOW: 3895
PRESSURE: 121
● ON SITE FIRE HYDRANTS
TOTAL NUMBER: 6

EMERGENCY RESPONDER RADIO COVERAGR (BDA)
○ THIS BUILDING SHALL BE EQUIPPED WITH AN EMERGENCY RESPONDER DIGITAL RADIO SYSTEM PER THE REQUIREMENTS OF THE ORANGE COUNTY SHERIFF'S DEPARTMENT–COMMUNICATIONS & TECHNOLOGY DIVISION. FOR THE INITIAL SUBMITTAL, OCSD/COMM REQUIRES THE ERRCS/BDA/DAS SYSTEM DESIGNER TO PROVIDE THE FOLLOWING FOR PRE-EVALUATION: A. PROJECT NAME. B. SITE ADDRESS. C. PROJECT DESCRIPTION. D. CONTRACTOR CONTACT INFORMATION. E. BDA MODEL (S/N IF AVAILABLE). F. PROPOSED MODE OF OPERATION (CLASS A/B). G. PROPOSED PROJECT TIMELINE. THIS INFORMATION IS TO BE SUBMITTED BY THE DESIGNER VIA EMAIL TO ERRCS@OCSD.ORG AND BDACERT@OCFA.ORG. CFC 510

OCFA STANDARD FIRE MASTER PLAN NOTES

INSPECTION REQUIREMENTS
1. OCFA SITE INSPECTIONS ARE REQUIRED FOR THIS PROJECT. PLEASE SCHEDULE ALL FIELD INSPECTIONS AT LEAST 48 HOURS IN ADVANCE. INSPECTIONS CANCELED AFTER 1 P.M. ON THE DAY BEFORE THE SCHEDULED DATE WILL BE SUBJECT TO A RE-INSPECTION FEE. CALL OCFA INSPECTION SCHEDULING AT (714) 573-6150.
2. A LUMBER DROP INSPECTION SHALL BE PERFORMED PRIOR TO BRINGING COMBUSTIBLE MATERIALS (OR COMBUSTIBLE FIXTURES AND FINISHES FOR STRUCTURES OF NON-COMBUSTIBLE CONSTRUCTION). ALL-WEATHER ACCESS ROADS CAPABLE OF SUPPORTING 94,000 LBS., TOPPED WITH ASPHALT, CONCRETE, OR EQUIVALENT SHALL BE IN PLACE AND HYDRANTS OPERATIONAL AT TIME OF LUMBER DROP INSPECTION.
3. FOR PROJECTS WITH FUEL MODIFICATION, A VEGETATION CLEARANCE INSPECTION IS REQUIRED PRIOR TO A LUMBER DROP INSPECTION. USE THE FUEL MODIFICATION PLAN SERVICE REQUEST NUMBER TO SCHEDULE THE VEGETATION CLEARANCE INSPECTION.
4. PHASED INSTALLATION OF FIRE ACCESS ROADS REQUIRES ADDITIONAL INSPECTIONS NOT COVERED BY THE FEES PAID AT PLAN SUBMITTAL. CONTACT INSPECTION SCHEDULING TO ARRANGE FOR ADDITIONAL INSPECTIONS THAT MAY BE NEEDED AND ANY FEES THAT MAY BE DUE.
5. AN ORIGINAL APPROVED, SIGNED, WET-STAMPED OCFA FIRE MASTER PLAN SHALL BE AVAILABLE ON-SITE AT TIME OF INSPECTION.
6. ACCESS ROADS AND HYDRANTS SHALL BE MAINTAINED AND REMAIN CLEAR OF OBSTRUCTIONS AT ALL TIMES DURING AND AFTER CONSTRUCTION. AREAS WHERE PARKING IS NOT PERMITTED SHALL BE CLEARLY IDENTIFIED AT ALL TIMES. OBSTRUCTION OF FIRE LANES AND HYDRANTS MAY RESULT IN CANCELLATION OR SUSPENSION OF INSPECTIONS.
7. TEMPORARY FUEL TANKS OF 60 OR MORE GALLONS SHALL BE REVIEWED, INSPECTED, AND PERMITTED BY THE OCFA PRIOR TO USE.
8. THE PROJECT ADDRESS SHALL BE CLEARLY POSTED AND VISIBLE FROM THE PUBLIC ROAD DURING CONSTRUCTION.
9. ALL GATES IN CONSTRUCTION FENCING SHALL BE EQUIPPED WITH EITHER A KNOX OR BREAKAWAY PADLOCK.
10. BUILDINGS OF FOUR OR MORE STORIES SHALL BE PROVIDED WITH STAIRS AND A STANDPIPE BEFORE REACHING 40 FEET IN HEIGHT.

GENERAL REQUIREMENTS
11. FIRE LANE WIDTHS SHALL BE MEASURED FROM TOP FACE OF THE CURB TO TOP FACE OF THE CURB FOR FIRE LANES WITH STANDARD CURBS AND GUTTERS AND FROM FLOW-LINE TO FLOW-LINE FOR FIRE LANES WITH MODIFIED CURB DESIGNS (E.G., ROLLED, RAMPED, ETC.). THE DEVELOPER IS RESPONSIBLE TO VERIFY THAT ALL APPROVED PUBLIC WORKS OR GRADING DEPARTMENT STREET IMPROVEMENT PLANS OR PRECISE GRADING PLANS CONFORM TO THE MINIMUM STREET WIDTH MEASUREMENTS PER THE APPROVED OCFA FIRE MASTER PLAN AND STANDARDS IDENTIFIED IN OCFA GUIDELINE B-01 FOR ALL PORTIONS OF THE FIRE ACCESS ROADS.
12. PERMANENT, TEMPORARY, AND PHASED EMERGENCY ACCESS ROADS SHALL BE DESIGNED AND MAINTAINED TO SUPPORT AN IMPOSED LOAD OF 94,000 LBS. AND SURFACED TO PROVIDE ALL-WEATHER DRIVING CAPABILITIES.
13. FIRE LANE SIGNS AND RED CURBS SHALL MEET THE SPECIFICATIONS SHOWN IN OCFA GUIDELINE B-01 AND SHALL BE INSTALLED AS DESCRIBED THEREIN. ADDITIONAL FIRE LANE MARKINGS MAY BE REQUIRED AT THE TIME OF INSPECTION DEPENDING ON FIELD CONDITIONS.
14. ALL FIRE HYDRANTS SHALL HAVE A "BLUE REFLECTIVE PAVEMENT MARKER" INDICATING THEIR LOCATION PER THE OCFA STANDARD. ON PRIVATE PROPERTY MARKERS ARE TO BE MAINTAINED IN GOOD CONDITION BY THE PROPERTY OWNER.
15. ADDRESS NUMBERS SHALL BE LOCATED AND BE OF A COLOR AND SIZE SO AS TO BE PLAINLY VISIBLE AND LEGIBLE FROM THE ROADWAY FROM WHICH THE BUILDING IS ADDRESSED IN ACCORDANCE WITH OCFA GUIDELINE B-01. WAYFINDING SIGNS, WHEN REQUIRED BY THE LOCAL AHJ, SHALL COMPLY WITH THE STANDARDS OF THAT AGENCY. WHEN WAYFINDING SIGNS ARE ALSO REQUIRED BY THE OCFA, THEY MAY BE DESIGNED TO LOCAL AHJ REQUIREMENTS PROVIDED THAT SUCH STANDARDS FACILITATE LOCATION OF STRUCTURES, SUITES, AND DWELLING UNITS BY EMERGENCY PERSONNEL.
16. ACCESS GATES SHALL BE APPROVED PRIOR TO INSTALLATION AND SHALL BE IN COMPLIANCE WITH CHAPTER 5 OF THE CFC AND OCFA GUIDELINES.
17. APPROVED ACCESS WALKWAYS SHALL BE PROVIDED TO ALL REQUIRED OPENINGS AND ALL RESCUE WINDOWS.
18. VEGETATION SHALL BE SELECTED AND MAINTAINED IN SUCH A MANNER AS TO ALLOW IMMEDIATE ACCESS TO ALL HYDRANTS, VALVES, FIRE DEPARTMENT CONNECTIONS, PULL STATIONS, EXTINGUISHERS, SPRINKLER RISERS, ALARM CONTROL PANELS, RESCUE WINDOWS, AND OTHER DEVICES OR AREAS USED FOR FIREFIGHTING PURPOSES. VEGETATION OR BUILDING FEATURES SHALL NOT OBSTRUCT ADDRESS NUMBERS OR INHIBIT THE FUNCTIONING OF ALARM BELLS, HORNS, OR STROBES.
19. DUMPSTERS AND TRASH CONTAINERS LARGER THAN 1.5 CUBIC YARDS SHALL NOT BE STORED IN BUILDINGS OR PLACED WITHIN 5 FEET OF COMBUSTIBLE WALLS, OPENINGS OR COMBUSTIBLE ROOF EAVE LINES UNLESS PROTECTED BY AN APPROVED SPRINKLER SYSTEM.
20. ANY FUTURE MODIFICATION TO THE APPROVED FIRE MASTER PLAN OR APPROVED SITE PLAN, INCLUDING BUT NOT LIMITED TO ROAD WIDTH, GRADE, SPEED HUMPS, TURNING RADII, GATES OR OTHER OBSTRUCTIONS, SHALL REQUIRE REVIEW, INSPECTION, AND APPROVAL BY THE OCFA.
21. APPROVAL OF THIS PLAN SHALL NOT BE CONSTRUED AS APPROVAL OF ANY INFORMATION OR PROJECT CONDITIONS OTHER THAN THOSE ITEMS AND REQUIREMENTS IDENTIFIED IN OCFA GUIDELINE B-01 AND RELATED PORTIONS OF THE 2022 CFC AND CBC. THIS PROJECT MAY BE SUBJECT TO ADDITIONAL REQUIREMENTS NOT STATED HEREIN UPON EXAMINATION OF ACTUAL SITE AND PROJECT CONDITIONS OR DISCLOSURE OF ADDITIONAL INFORMATION.

PROJECT-SPECIFIC REQUIREMENTS
22. AN UNDERGROUND PIPING PLAN IS REQUIRED FOR THE INSTALLATION OF AN AUTOMATIC FIRE SPRINKLER SYSTEM OR FOR A PRIVATE FIRE HYDRANT SYSTEM. A SEPARATE PLAN SUBMITTAL IS REQUIRED.
23. AN ARCHITECTURAL PLAN IS REQUIRED TO BE SUBMITTED TO THE OCFA FOR REVIEW AND APPROVAL FOR PROJECTS CONTAINING A, C, E, F, H, I, L, AND R-4 OCCUPANCIES. A PLAN MAY ALSO BE REQUIRED FOR R-1 AND R-2 OCCUPANCIES OVER TWO STORIES OR THOSE UTILIZING SPRINKLERS OR FIRE WALLS TO INCREASE THE MAXIMUM BUILDING SIZE ALLOWED--SEE OCFA INFO BULLETIN 02-13.
24. A CHEMICAL CLASSIFICATION AND HAZARDOUS MATERIALS COMPLIANCE PLAN SHALL BE APPROVED BY THE OCFA PRIOR TO ANY HAZARDOUS MATERIALS BEING STORED OR USED ON SITE. A SEPARATE PLAN SUBMITTAL IS REQUIRED.
25. BUILDINGS USED FOR HIGH-PILED STORAGE SHALL COMPLY WITH CFC REQUIREMENTS. A SEPARATE PLAN SUBMITTAL IS REQUIRED IF MATERIALS WILL BE STORED HIGHER THAN 12 FEET FOR LOWER-HAZARD COMMODITIES, OR HIGHER THAN SIX FEET FOR HIGH-HAZARD COMMODITIES SUCH AS PLASTICS, RUBBER, FLAMMABLE/COMBUSTIBLE LIQUIDS, TIRES, CARPET, ETC.
26. AN AUTOMATIC FIRE SPRINKLER SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH APPLICABLE CODES AND LOCAL ORDINANCES, AMENDMENTS, AND GUIDELINES. SPRINKLER SYSTEMS, OTHER THAN THOSE LISTED IN CFC 903.4, SHALL BE MONITORED BY AN APPROVED CENTRAL STATION. SEPARATE PLAN SUBMITTALS FOR THE SPRINKLER AND MONITORING SYSTEMS ARE REQUIRED.
27. BUILDINGS CONTAINING INDUSTRIAL REFRIGERATION SYSTEMS SHALL COMPLY WITH CFC REQUIREMENTS. A SEPARATE PLAN SUBMITTAL IS REQUIRED IF REFRIGERANT QUANTITIES EXCEED THRESHOLDS.
28. A FIRE ALARM SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH APPLICABLE CODES AND LOCAL ORDINANCES, AMENDMENTS, AND GUIDELINES. A SEPARATE PLAN SUBMITTAL IS REQUIRED.
29. STRUCTURES LOCATED IN A FIRE HAZARD SEVERITY ZONE OR WILDLAND-URBAN INTERFACE AREA ARE SUBJECT TO THE CONSTRUCTION REQUIREMENTS PRESCRIBED IN CHAPTER 7A OF THE 2022 CBC AND/OR SECTION 337 OF THE 2022 CRC. CONSTRUCTION MATERIALS/METHODS ARE REVIEWED AND INSPECTED BY THE BUILDING DEPARTMENT.
30. ONE OR MORE STRUCTURES SHOWN ON THIS PLAN ARE LOCATED ADJACENT TO A FUEL MODIFICATION AREA. CHANGES TO THE FUEL MODIFICATION ZONE LANDSCAPING, NEW STRUCTURES, OR ADDITION/ALTERATION TO EXISTING STRUCTURES REQUIRES REVIEW AND APPROVAL BY THE OCFA.
31. PROJECTS LOCATED IN STATE RESPONSIBILITY AREAS AND IN LOCAL RESPONSIBILITY AREA VHFHSZ SHALL ALSO COMPLY WITH ALL APPLICABLE REQUIREMENTS FROM TITLE 14, DIV. 1.5, CH. 7, SUBCH. 2 "SRA FIRE SAFE REGULATIONS" AND GUIDELINE B-01A.
32. STRUCTURES MEETING THE CRITERIA IN CFC 510.1 SHALL BE PROVIDED WITH AN EMERGENCY RESPONDER RADIO SYSTEM. REFER TO CFC 510.2 THROUGH 510.6.3 AND DAS/BDA GUIDELINES PUBLISHED BY OC SHERIFF'S COMMUNICATION AND TECHNOLOGY DIVISION FOR TECHNICAL AND SUBMITTAL INFORMATION.

GATES

○ MANUAL ○ ELECTRIC

OCFA NOTES FOR ELECTRIC VEHICLE GATES
1. A REMOTE OPENING DEVICE IS REQUIRED. THE REMOTE GATE OPENING DEVICE THAT WILL BE INSTALLED IS (CHECK ONE):
   ○ 3M OPTICOM
   ○ CLICK2ENTER* (SINGLE-PULSE MODE WITH 1.5 SECOND TRANSMISSION WINDOW)
   ○ FIRE STROBE ACCESS PRODUCTS, INC.
   ○ TOMAR
2. IN THE EVENT OF LOSS OF NORMAL POWER TO THE GATE OPERATING MECHANISM, IT SHALL BE AUTOMATICALLY TRANSFERRED TO A FAIL-SAFE MODE ALLOWING THE GATE TO BE PUSHED OPEN BY A SINGLE FIREFIGHTER WITHOUT ANY OTHER ACTIONS, KNOWLEDGE, OR MANIPULATION OF THE OPERATING MECHANISM BEING NECESSARY.
   A) A BATTERY MAY ONLY BE USED IN PLACE OF FAIL-SAFE MANUAL OPERATION WHEN THE GATE OPERATOR HAS A FAIL-OPEN MODE THAT WILL AUTOMATICALLY, IMMEDIATELY, AND COMPLETELY OPEN THE GATE AND KEEP IT OPEN UPON REACHING A LOW POWER THRESHOLD, REGARDLESS OF THE PRESENCE OF NORMAL POWER.
   B) SHOULD THE GATE BE TOO LARGE OR HEAVY FOR A SINGLE FIREFIGHTER TO OPEN MANUALLY, A SECONDARY SOURCE OF RELIABLE POWER BY MEANS OF AN EMERGENCY GENERATOR OR A CAPACITOR WITH ENOUGH RESERVE TO AUTOMATICALLY, IMMEDIATELY, AND COMPLETELY OPEN THE GATE UPON LOSS OF PRIMARY POWER SHALL BE PROVIDED FOR FAIL-OPEN OPERATION.
3. IN ADDITION TO THE REMOTE OPERATOR, THE GATE CONTROL SHALL BE OPERABLE BY A KNOX EMERGENCY OVERRIDE KEY SWITCH EQUIPPED WITH A DUST COVER. UPON ACTIVATION OF THE KEY SWITCH, THE GATE SHALL OPEN AND REMAIN OPEN UNTIL RETURNED TO NORMAL OPERATION BY MEANS OF THE KEY SWITCH. WHERE A GATE CONSISTS OF TWO LEAVES, THE KEY SWITCH SHALL OPEN BOTH SIMULTANEOUSLY IF OPERATION OF A SINGLE LEAF ON THE INGRESS SIDE DOES NOT PROVIDE FOR THE WIDTH, TURNING RADII, OR SETBACKS NECESSARY FOR FIRE APPARATUS TO NAVIGATE THE VEHICLE ENTRY POINT.
4. THE KEY SWITCH SHALL BE PLACED BETWEEN 42" AND 48" ABOVE THE ROADWAY SURFACE AT THE RIGHT SIDE OF THE ACCESS GATE WITHIN TWO FEET OF THE EDGE OF THE ROADWAY. IN IRVINE, THE SWITCH SHALL BE ON THE LEFT SIDE IN ACCORDANCE WITH IRVINE'S UNIFORM SECURITY ORDINANCE.
5. THE KEY SWITCH SHALL BE READILY VISIBLE AND UNOBSTRUCTED FROM THE FIRE LANE LEADING TO THE GATE.
6. THE KEY SWITCH SHALL BE LABELED WITH A PERMANENT RED SIGN WITH NOT LESS THAN ½" CONTRASTING LETTERS READING "FIRE DEPT" OR WITH A "KNOX" DECAL.

APPLICABLE CODES

- ● 2022 CALIFORNIA FIRE CODE
- ● 2022 CALIFORNIA BUILDING CODE
- ● 2022 CALIFORNIA RESIDENTIAL CODE
- ● 2022 CALIFORNIA GREEN BUILDING STANDARDS CODE
- ● 2022 CALIFORNIA MECHANICAL CODE
- ● 2022 CALIFORNIA ELECTRICAL CODE
- ● 2022 CALIFORNIA PLUMBING CODE
- ● 2022 CALIFORNIA BUILDING ENERGY EFFICIENCY STANDARDS
- ● APPLICABLE NFPA STANDARDS
- ● LOCALLY ADOPTED ORDINANCES CITY:
- ● OCFA GUIDELINES
- ● CONDITIONS OF APPROVAL CITY:

DEFERRED SUBMITTALS (CHECK ALL THAT APPLY)

THIS PROJECT HAS BEEN PERMITTED WITHOUT REVIEW AND/OR APPROVAL OF THE FOLLOWING DEFERRED SUBMITTALS. PLANS APPROVED BY OCFA SHALL BE OBTAINED FOR EACH DEFERRED ITEM LISTED BELOW PRIOR TO COMMENCING ANY WORK WITHIN THE SCOPE OF SUCH DEFERRAL. DEFERRALS MUST BE REVIEWED AND ACCEPTED BY THE ARCHITECT OR ENGINEER OF RECORD PRIOR TO SUBMITTING FOR REVIEW WITH OCFA. PORTIONS OF THE PROJECT THAT ARE DEFERRED SHALL BE SUBJECT TO THE CODES, STANDARDS, AND OTHER APPLICABLE REQUIREMENTS IN FORCE ON THE DATE THAT THE DEFERRED PLAN IS SUBMITTED TO OCFA.

- ● ARCHITECTURAL PLAN
- ○ HIGH PILED COMBUSTIBLE STORAGE
- ○ CHEMICAL USE AND/OR STORAGE
- ○ FUEL TANK (FOR GENERATOR, IF OVER 60 GALLONS)
- ○ BATTERY/ENERGY STORAGE SYSTEM
- ○ UNDERGROUND SYSTEM SERVING SPRINKLERS, STANDPIPES, AND/OR PRIVATE HYDRANTS
- ● SPRINKLER SYSTEM
- ○ STANDPIPE SYSTEM
- ○ FIRE PUMP
- ○ HOOD AND DUCT EXTINGUISHING SYSTEM
- ○ ALARM SYSTEM

PREREQUISITE PLANS
○ PLANNING APPLICATION SR:
○ METHANE MITIGATION SR:
○ FUEL MODIFICATION PLAN SR:

REVISION
○ ORIGINAL PLAN SR:
COPY OF ORIGINAL APPROVED PLAN REQUIRED TO BE SUBMITTED WITH ALL REVISED PLANS.

REVISION SCOPE OF WORK

STAKEHOLDERS

BUILDING DEPARTMENT: City of Aliso Viejo
PLANNING DEPARTMENT: City of Aliso Viejo
PUBLIC WORKS DEPARTMENT: City of Aliso Viejo
WATER DISTRICT: Moulton Niguel Water District

ALLOWABL E AREA FACTOR PER 2022 CBC TABLE 506.2:

Aa = ALLOWABLE AREA (SQUARE FEET)

At = TABULAR ALLOWABLE AREA FACTOR (NS, S13D, OR SM VALUE AS APPLICABLE) IN ACCORDANCE WITH TABLE 506.2

NS = TABULAR ALLOWABLE AREA FACTOR IN ACCORDANCE WITH TABLE 506.2 FOR A NON-SPRINKLERED BUILDING, REGARDLESS OF WHETHER THE BUILDING IS SPRINKLERED.

If = AREA FACTOR INCREASE DUE TO FRONTAGE (PERCENT) AS CALCULATED IN ACCORDANCE WITH SECTION 506.3

PROJECT DIRECTORY

ARCHITECT/ENGINEER
BUSINESS NAME: Woodlev Architectural Group. Inc
CONTACT NAME: Mike Fuller
ADDRESS: 2943 Pullman St, Suite A
CITY: Santa Ana STATE: CA ZIP: 92705
PHONE: 949-553-8919
EMAIL: mfuller@woodlevarch.com

PROPERTY OWNER/HOA
BUSINESS NAME: Shea Homes
CONTACT NAME: Emilie Simard
ADDRESS: 2 Ada Suite 200
CITY: Irvine STATE: CA ZIP: 92618
PHONE: 949-526-8800
EMAIL: emilie.simard@sheahomes.com

TENANT
BUSINESS NAME:
CONTACT NAME:
ADDRESS:
CITY: STATE: ZIP:
PHONE:
EMAIL:

NO.	DATE	REVISIONS
7		
6		
5		
4		
3		
2	7/30/2025	VICINITY MAP UPDATE
1		

DESIGNED: CJM
DRAWN: MMB
CHECKED: CM
DATE: 8/28/25
SCALE: N/A

OCFA REVIEW AND INSPECTIONS (OCFA USE ONLY)
☐ NO OCFA REVIEW REQUIRED
☐ PLAN REVIEW ONLY
☐ PLAN REVIEW AND INSPECTION

PLANS PREPARED BY:
DUDEK
605 Third Street Encinitas, CA 92024
760.942.5147 Fax 760.942.9976

ALISO VIEJO FIRE ACCESS MASTER PLAN

ORANGE COUNTY FIRE AUTHORITY
COMMUNITY RISK REDUCTION - PLANNING AND DEVELOPMENT SECTION
REVISED 9/2/2009 JAA

SERVICE REQUEST NUMBER

SHEET 1

10/4/2025 2:19:59 AM \\dudek.int\data\Projects\320.UrbanForestry\18567 Shea Home Aliso Viejo DDAFMP\03 GIS_Graphics\FMP\Aliso Viejo FMP 20250714

FIRE MASTER PLAN SUBMITTAL CHECKLIST

Guideline B-01 January 01, 2023

ATTACHMENTS

Attachment 1 - Fire Master Plan Submittal Checklist

PROJECT INFORMATION

Scope of project is clearly defined on the plan?	☑ Yes
Conditional Use Permit conditions included with submittal?	☐ Yes ☐ N/A (CUP was not required by city/county)
Tract/Tentative Tract/Parcel Map Number has been provided?	☑ Yes
Standard OCFA fire master plan notes are included?	☑ Yes (Notes are tailored to this project, where applicable)
Building area, construction, occupancy, sprinkler type noted on plan?	☑ Yes
Allowable area calculation provided on plan?	☐ Yes ☐ No (<6,000 sf unsprinklered; <18,000 w/ sprink.)
Sheets not relevant to fire master plan removed from plan set?	☑ Yes
Access/hydrant phasing plan provided?	☐ Yes ☑ N/A (No phasing of access/hydrant installation)

WATER AND HYDRANTS

Water availability form completed and provided?	☑ Yes ☐ No (in progress) ☐ No (no change in demand)
All hydrants within 350' of the site are shown on plan?	☑ Yes
Are hydrants provided/spaced per Guideline B-01, Attachment 3?	☑ Yes

ACCESS AND ROADWAYS

Extent of the access roadway is clearly shown on the plan?	☑ Yes
Turning radii and width (incl. road sections) shown on the plan?	☑ Yes
Exterior of all structures within 150' hose pull distance?	☑ Yes ☐ No (AM&M proposed) ☐ No (sprinklered R-3)
Engineer's certification provided for new paving?	☑ Yes ☐ N/A (No new paving)
Walkable surface provided to required openings?	☑ Yes
Road and walkway grades >10% shown on plan?	☐ Yes ☑ N/A (Grade <10%)

FIRE LANE IDENTIFICATION

Red curbs are identified on plan with bold, dashed, or red lines?	☑ Yes ☐ N/A ("Fire Lane—No Parking" signs provided)
Location of each "Fire Lane—No Parking" sign shown?	☑ Yes ☐ N/A (Red curbs provided)
Fire lane entrance sign provided at each vehicle entrance?	☑ Yes ☐ N/A (All roads at least 36 feet wide)
Drawings of red curbs/"No Parking"/entrance signs provided?	☑ Yes ☐ N/A (All roads at least 36 feet wide)

GATES AND OBSTRUCTIONS

Are all gates, fences, and planters shown?	☑ Yes
Are vehicle gates identified as manual or electric?	☐ Yes ☑ N/A (No gates proposed)
Gate operator specs showing emergency operation provided?	☐ Yes ☑ N/A (No electric gates proposed)
Manual vehicle gates have "No Parking" sign noted?	☐ Yes ☑ N/A (No manual gates proposed)
Knox boxes/locks/switches are noted on plans?	☐ Yes ☑ N/A (No gates proposed)
OCFA gate notes/specifications included on plan?	☐ Yes ☑ N/A (No gates proposed)

OTHER REQUIREMENTS

AM&M request letter scanned onto plan?	☐ Yes ☑ N/A (No alternate methods proposed)
Premises ID/address monument location shown on plan?	☑ Yes ☐ N/A (Single family homes)
Trash enclosures are located at least 5' from buildings?	☑ Yes ☐ No (Enclosures are existing or sprinklered)
Two entry points provided for 150 or more residences?	☑ Yes ☐ N/A (Non-residential project)
Buildings >75' to highest occupiable floor called out?	☐ Yes ☑ N/A (No high-rise structures)
Parking enforcement letter provided?	☐ Yes ☐ N/A (Public streets only)
Project located in methane zone(s) (portions of Yorba Linda, Buena Park, Seal Beach, San Clemente, and Unincorporated Orange County)?	☐ Yes ☑ No

NOTE: *This is only a listing of basic fire master plan submittal requirements. Other information or requirements may be necessary, depending on conditions specific to each project.*

24

OCFA WATER AVAILABILITY FORM

OCFA WATER AVAILABILITY FORM

SECTION A: To be completed by customer

Project Name: Shea Homes - Aliso Viejo OCFA SR #: ASSIGNED UPON PLAN SUBMITTAL

Project Address: 27181 Aliso Creek Rd City: Aliso Viejo

Applicant Phone #: (858) 353-5802 Fax #: (______)

Area of largest building 5800 ft²; Construction type? (check one): IA IB IIA IIB IIIA IIIB IV VA ☑VB

Is this building sprinklered throughout? (check one) N ☑Y

SECTION B: To be completed by local water department/district

Customer to provide results to OCFA

Water Department/District: Moulton Niguel Water District

Test location (indicate address or cross-streets & provide reference map): 27181 Aliso Creek Rd, Aliso Viejo CA

Hydrant number(s) (if applicable): FHD16036

Elevation of test hydrant: 362' feet above sea level

Date of Test[1]: 6/12/2025 Time of test[1]: ______ am pm

[1] Test to be performed as close as possible to the time that the lowest flows and pressures are expected (e.g., M-F, 6:00 – 9:00 am and 5:00 - 9:00 pm)

FLOW TEST RESULTS

TEST INFORMATION IS VALID FOR 6 MONTHS FROM DATE TEST IS PERFORMED

Static pressure:	121 psi	**Residual pressure:**	104 psi
Observed flow:	3,895 gpm	**Flow calc'd at 20 psi:**	See Note gpm

☒ Check the box if the test information above was obtained in a manner other than an actual flow test (i.e. by computer modeling).

Note: Flow at 20 PSI exceeds District velocity criteria; flow beyond 3,895 GPM exceeds District velocity

Based on fluctuations known to exist at the site of the test, provide estimated values for the following:			
Maximum static pressure	/ psi	**Minimum static pressure**	/ psi
Minimum residual pressure	/ psi	**Minimum residual flow**	/ gpm

I have witnessed and/or reviewed this water flow information and by personal knowledge and/or on-site observation certify that the above information is correct.

Name: Sean Phayakapong Company/Agency: Moulton Niguel Water District

Signature: [signature] Title: Sr. GIS Analyst

Date: 6/12/2025

Revised 1/7/16 ese

GENERAL NOTES

1. EXISTING LAND USE: COMMERCIAL (EX. PROFESSIONAL OFFICE).
2. PROPOSED LAND USE: PROP: 137 ATTACHED RESIDENTIAL CONDOMINIUM DWELLING UNITS.
3. EXISTING ZONING: PROFESSIONAL OFFICE.
4. WATER SERVICE PROVIDED BY: MOULTON NIGUEL WATER DISTRICT.
5. SANITARY SEWER SERVICE PROVIDED BY: MOULTON NIGUEL WATER DISTRICT.
6. ELECTRIC SERVICE PROVIDED BY: SOUTHERN CALIFORNIA EDISON COMPANY.
7. GAS SERVICE PROVIDED BY: SOUTHERN CALIFORNIA GAS COMPANY.
8. APN# 632-124 (8.44 ACRES)

BUILDING DATA

1. TYPES OF OCCUPANCY THAT WILL BE HOUSED IN THE STRUCTURES AS LISTED IN CALIFORNIA BUILDING CODE (CBC) 2022 EDITION: R-3, U.
2. CONSTRUCTION TYPE: VB.
3. BUILDING HEIGHT: MAXIMUM BUILDING HEIGHT OF 40'-11".

PROJECT VICINITY MAP

350-FOOT BUFFER FROM SITE

LEGEND

● Existing Fire Hydrant Locations

0 120 240
SCALE IN FEET

NO.	DATE	REVISIONS
7		
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2	8/4/2025	FMP SUBMITTAL CHECKLIST UPDATE
1	7/30/2025	PROJECT VICINITY MAP UPDATE

DESIGNED: CM
DRAWN: MMB
CHECKED: CM
DATE: 8/4/2025
SCALE: 1"=100' @ 24X36

OCFA REVIEW AND INSPECTIONS (OCFA USE ONLY)

☐ NO OCFA REVIEW REQUIRED
☐ PLAN REVIEW ONLY
☐ PLAN REVIEW AND INSPECTION

PLANS PREPARED BY:
DUDEK
605 Third Street Encinitas, CA 92024
760.942.5147 Fax 760.942.9976

ALISO VIEJO FIRE ACCESS MASTER PLAN

ORANGE COUNTY FIRE AUTHORITY
COMMUNITY RISK REDUCTION - PLANNING AND DEVELOPMENT SECTION

SERVICE REQUEST NUMBER
SR #

SHEET 2 OF 5

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FIRE ACCESS PLAN

PACIFIC PARK DRIVE

ALISO CREEK ROAD

SEE PAGE 6: "FIRE LADDERING ANGLE ANALYSIS - EAST TOWNHOUSE"

SEE PAGE 6: "FIRE LADDERING ANGLE ANALYSIS - WEST TOWNHOUSE"

LEGEND

- FIRE HOSE PULL
- FIRE ENGINE
- PROPOSED FIRE HYDRANT
- AM — INSTALL "ADDRESS MONUMENT" PER OCFA GUIDELINE B-09
- FIRE LANE ACCESS - POTENTIAL FOR PARKING ON ONE SIDE, 30 FT WIDE
- FIRE LANE ACCESS - THRU ACCESS / LOOPED, 25 FT WIDE
- FIRE LANE ACCESS - DEAD END, 23 FT WIDE
- FIRE LANE TURNING RADIUS (R=40', R=20')
- ① — INSTALL "FIRE LANE ENTRANCE SIGN" PER DETAIL H ON SHEET 5
- ② — INSTALL "FIRE LANE SIGN" PER DETAIL I ON SHEET 5
- ② — INSTALL "FIRE LANE SIGN (WALL MOUNTED)" PER DETAIL I ON SHEET 5
- RED CURB, SEE DETAIL E ON SHEET 4

0 30 60
SCALE IN FEET

OCFA REVIEW AND INSPECTIONS (OCFA USE ONLY)

- ☐ NO OCFA REVIEW REQUIRED
- ☐ PLAN REVIEW ONLY
- ☐ PLAN REVIEW AND INSPECTION

DESIGNED: CM
DRAWN: MMB
CHECKED: CM
DATE: 8/4/2025
SCALE: AS SHOWN

NO.	DATE	REVISIONS
1	8/4/2025	FIRE ACCESS PLAN UPDATE
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PLANS PREPARED BY:
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ALISO VIEJO FIRE ACCESS MASTER PLAN

ORANGE COUNTY FIRE AUTHORITY
COMMUNITY RISK REDUCTION - PLANNING AND DEVELOPMENT SECTION

SERVICE REQUEST NUMBER
SR #

SHEET 3 OF 5

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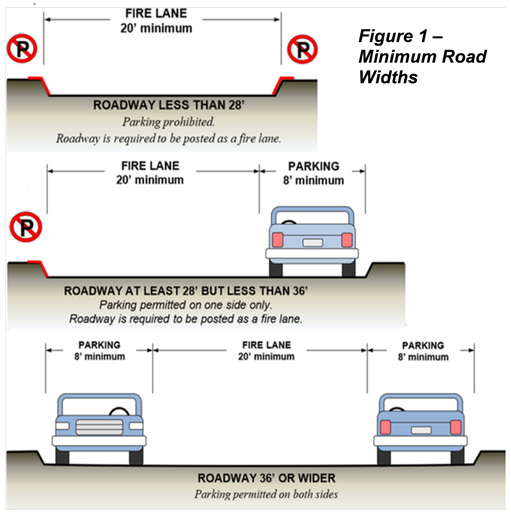
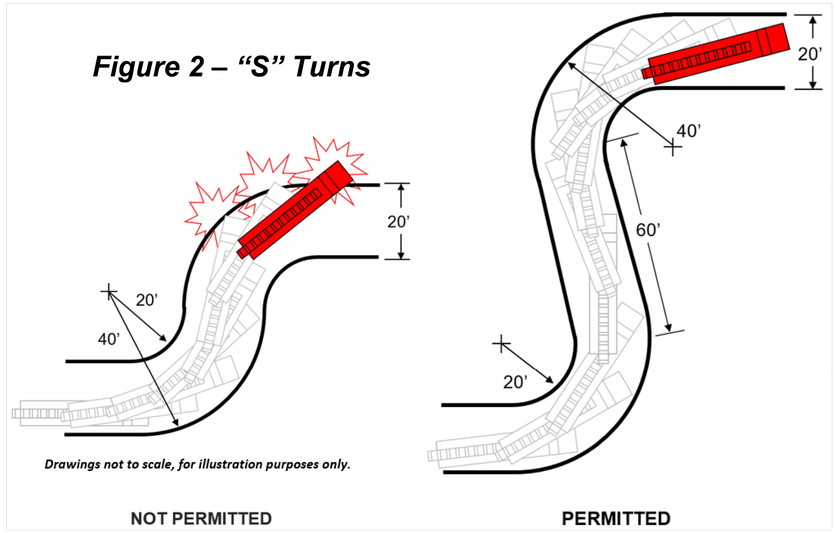
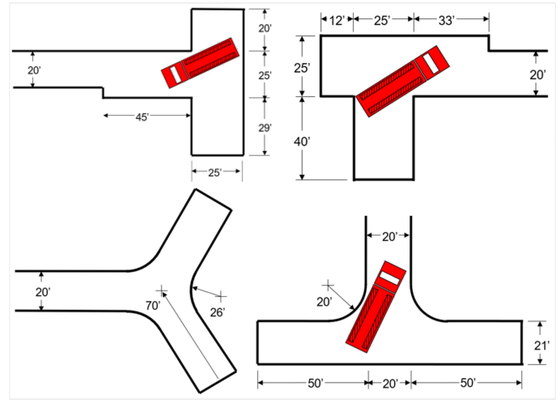


Figure 1 – Minimum Road Widths

A FIRE LANE WIDTHS

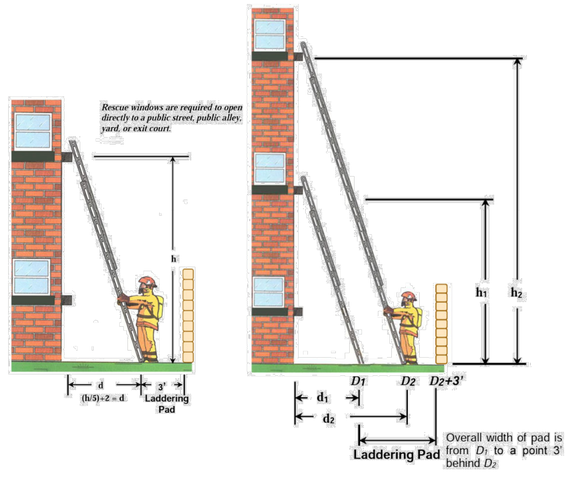


B FIRE LANE S-CURVES



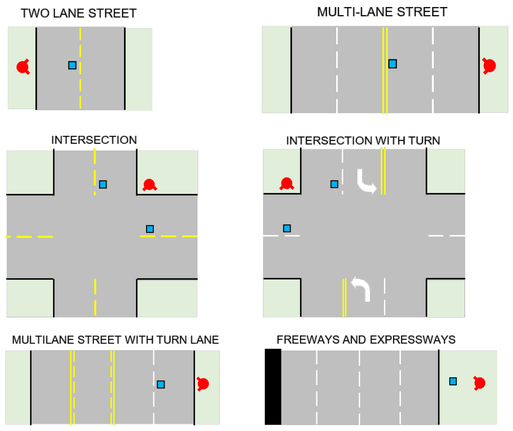
C TURN-AROUND DIMENSIONS

Figure 17 - Ladder Pad Setback at Rescue Openings



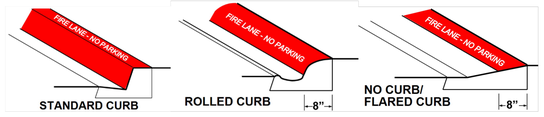
F LADDER PAD

Figure 15 - "Blue Dot" Reflective Hydrant Marker Location



D FIRE HYDRANT MARKER LOCATIONS

Figure 4 – Fire Lane Identification, Red Curbs



- *Curbs shall be painted OSHA safety red.*
- *"FIRE LANE – NO PARKING" shall be painted on top of curb in 3" white lettering at a spacing of 30' on center or portion thereof.*

E RED CURB MARKINGS

ALL DETAILS FROM OCFA GUIDELINE B-01
"FIRE MASTER PLANS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENT"

REVISIONS

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DESIGNED: CM
DRAWN: MMB
CHECKED: CM
DATE: 8/4/2025
SCALE: AS SHOWN

OCFA REVIEW AND INSPECTIONS (OCFA USE ONLY)
☐ NO OCFA REVIEW REQUIRED
☐ PLAN REVIEW ONLY
☐ PLAN REVIEW AND INSPECTION

PLANS PREPARED BY:
DUDEK
605 Third Street Encinitas, CA 92024
760.942.5147 Fax 760.942.9976

ALISO VIEJO FIRE ACCESS MASTER PLAN

ORANGE COUNTY FIRE AUTHORITY
COMMUNITY RISK REDUCTION - PLANNING AND DEVELOPMENT SECTION

SERVICE REQUEST NUMBER
SR #

SHEET 4 OF 5

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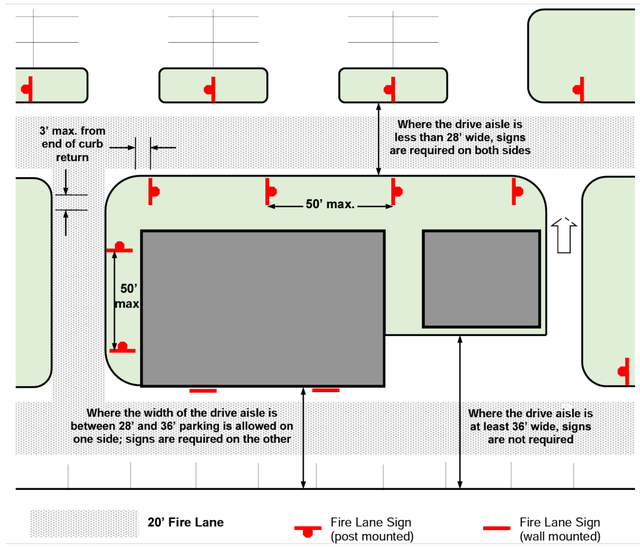
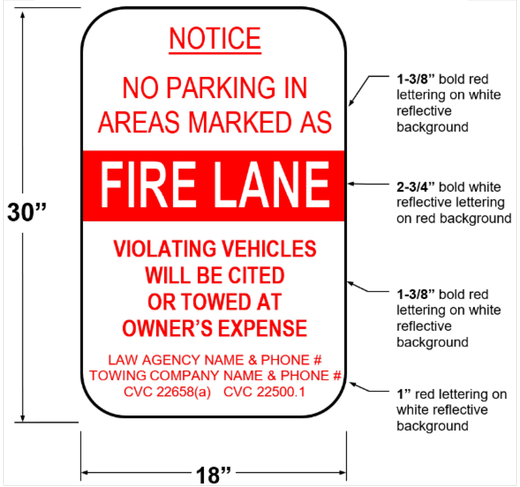
Figure 12 – Fire Lane No Parking Sign Locations



G FIRE LANE SIGN LOCATIONS

Figure 6 – Fire Lane Entrance Signs

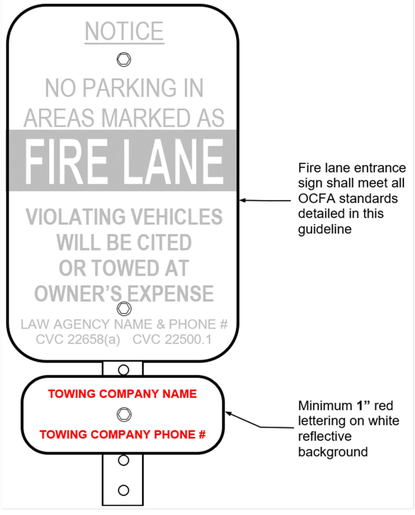


H FIRE LANE ENTRY SIGN

Figure 5 – Fire Lane No Parking Signs

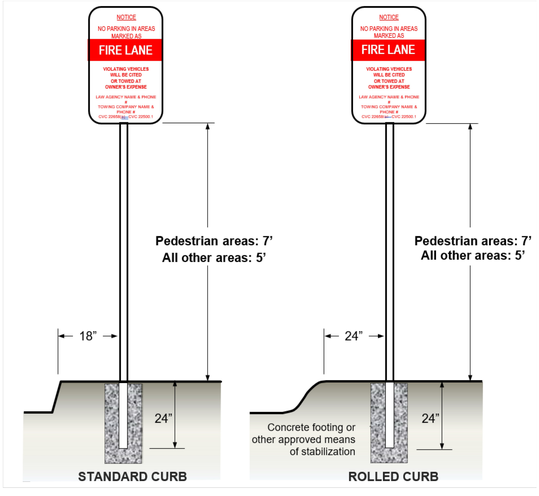
I FIRE LANE SIGN

Figure 7 – Alternate Location of Towing Company Information

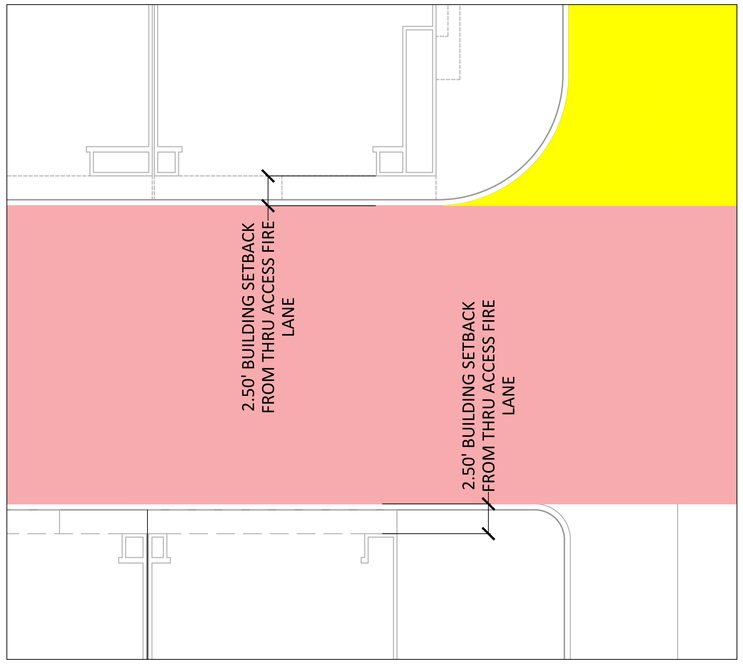


J TOW COMPANY INFORMATION SIGN

Figure 13 – Mounting Specifications for Fire Lane Entrance and No Parking Signs



K FIRE LANE SIGN MOUNTING



L BUILDING TO FIRE LANE SETBACK

DETAILS G-K FROM OCFA GUIDELINE B-01
"FIRE MASTER PLANS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENT"

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DESIGNED: CM
DRAWN: MMB
CHECKED: CM
DATE: 8/4/2025
SCALE: AS SHOWN

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760.942.5147 Fax 760.942.8976

ALISO VIEJO FIRE ACCESS MASTER PLAN

ORANGE COUNTY FIRE AUTHORITY
COMMUNITY RISK REDUCTION - PLANNING AND DEVELOPMENT SECTION

SERVICE REQUEST NUMBER
SR #

SHEET 5 OF 5

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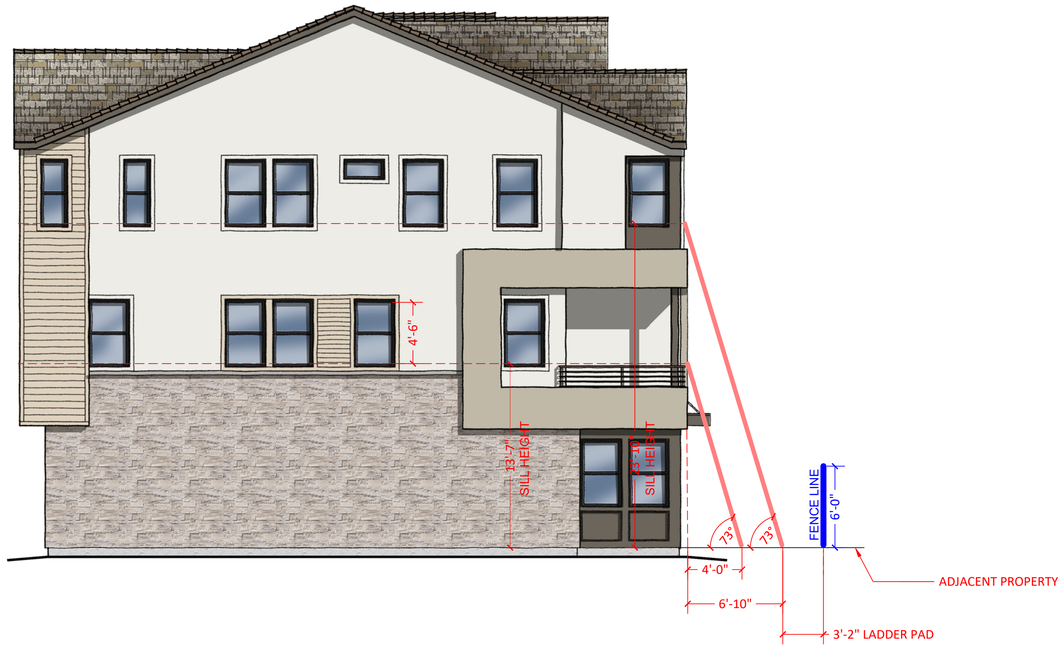

A **FIRE LADDERING ANGLE ANALYSIS - EAST TOWNHOUSE**

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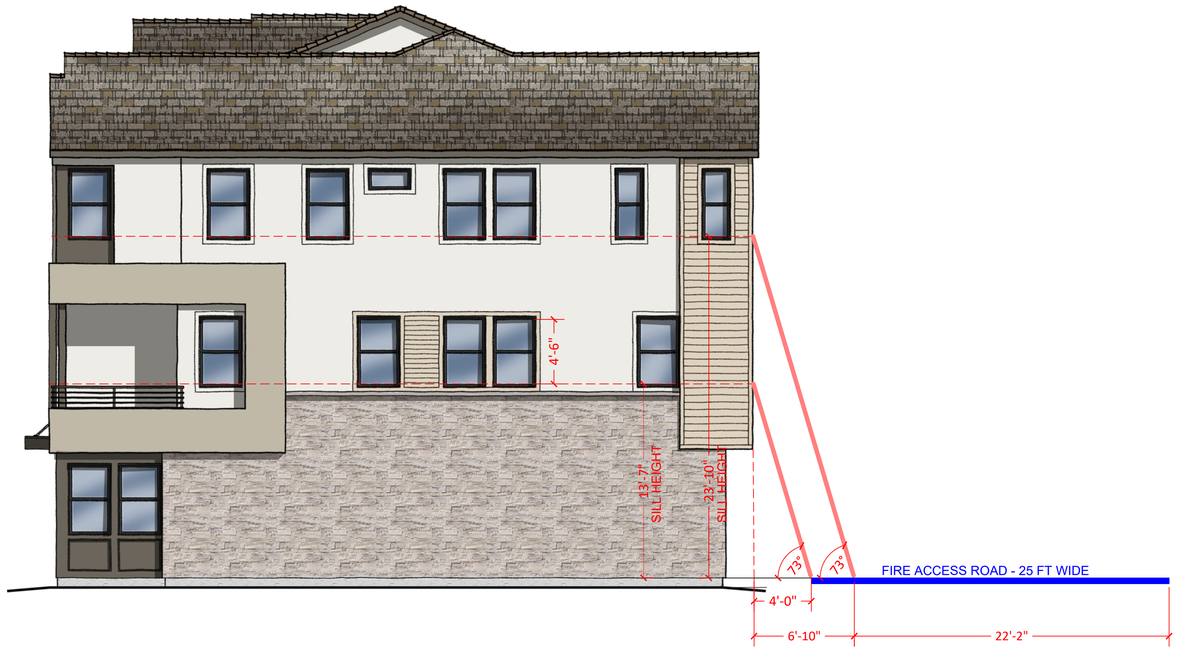

B **FIRE LADDERING ANGLE ANALYSIS - WEST TOWNHOUSE**

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DESIGNED: CM
DRAWN: MWB
CHECKED: CM
DATE: 8/4/2025
SCALE:

OCFA REVIEW AND INSPECTIONS (OCFA USE ONLY)

☐ NO OCFA REVIEW REQUIRED
☐ PLAN REVIEW ONLY
☐ PLAN REVIEW AND INSPECTION

PLANS PREPARED BY:
DUDEK
605 Third Street Encinitas, CA 92024
760.942.5147 Fax 760.942.9976

ALISO VIEJO FIRE ACCESS MASTER PLAN

ORANGE COUNTY FIRE AUTHORITY
COMMUNITY RISK REDUCTION - PLANNING AND DEVELOPMENT SECTION

SERVICE REQUEST NUMBER
SR #

Aliso Creek Residential Development Project
Draft IS/MND Response to Comments
July 21, 2026

Letter No. 1 – Caltrans (July 8, 2026)

1-1 The comment is introductory and does not provide specific comments on the environmental analysis. The comment is noted.

1-2 The comment states there is link between transportation and land use and Caltrans supports collaborating with local agencies. The comment does not provide specific comments on the environmental analysis. The comment is noted.

1-3 The comment indicates that improving access to multimodal transportation (i.e. walking, biking, and transit) can reduce greenhouse gas emissions (GHG) and vehicle miles traveled (VMT). The comment does not provide specific comments on the environmental analysis. It should be noted that the Project provides walking trails and sidewalks through the community and connects to existing sidewalks. Furthermore, the Project reduces VMT compared to the existing office land use.

1-4 The comment suggests providing secure short-term bike parking within the Project. The Project is a residential community where each dwelling unit has its own garage with space for bicycle parking. Furthermore, bicycle parking is provided at the recreation center for community use. Therefore, the design of the community incorporates facilities for bicycle parking.

1-5 The comment requests incorporating high visibility crosswalks and ADA curb ramps. Internal to the Project, the low volume and low speed internal streets do not warrant high visibility crosswalks. External to the Project site, no analysis has shown that the Project would generate the need for high visibility crosswalks at existing intersections adjacent to the Project site. Crosswalks currently exist at surrounding intersections within public right-of-way. The City could upgrade those crosswalks through a capital improvement project, however there is no evidence of nexus to the Project to upgrade crosswalks.

1-6 The comment requests that future residents and workers of the development use transit. This request is noted, but controlling human behavior is beyond the

control of the development project. The Project has been designed as infill, near existing commercial and recreational uses. Furthermore, compared to existing office use, the Project would reduce trip generation and VMT.

1-7 The comment requests "a discussion on existing bus route services and future transit improvement opportunities including intercounty and regional connectivity." The IS/MND provides a discussion on existing bus routes in Section 5.17 on Page 93. The information provided references bus routes 177 and 90. Based on comments received from OCTA, the discussion includes the following edits.

> Transit Facilities
> Public transportation services within the Project site and surrounding area are provided by Orange County Transportation Authority (OCTA). The primary OCTA bus routes serving the Project area are Routes 177 and 90. Route 177 provides service between ~~Foothill Ranch~~ Mission Viejo and Laguna Hills, traveling via Alicia Parkway with key stops serving the Aliso Viejo Town Center to the north of the Project across Pacific Park. Route 90 connects Tustin to Dana Point, passing through Aliso Viejo along ~~Aliso Creek Road~~ Moulton Parkway. There are no existing or planned transit facilities adjacent to the Project site. Project implementation would not conflict with a program plan, ordinance, or policy addressing transit facilities.

The comment also requests information on future transit improvement opportunities. Details of future transit improvement opportunities are beyond the scope of the IS/MND and more appropriately provided by the transit operator, such as OCTA, Metrolink, etc.

1-8 The comment suggests providing wayfinding signage to nearby transit services within the Project. The Project is not large enough and existing transit is not located close enough to the Project site to warrant wayfinding signs. Those who are interested in using transit would do so intentionally and would not need to rely on wayfinding to reach transit, unlike a larger project site with multiple transit options where wayfinding would facilitate the use of transit.

1-9 The comment suggests that internal streets and driveways are wide enough for truck turning movements. The Project has been designed to accommodate

trucks, including trash and fire truck, turning movements, which has been confirmed through City plan check.

1-10 The comment encourages the inclusion of shared package drop-off areas. The Project is not large enough or contain high enough density housing to warrant shared package drop-off areas.

1-11 The comment requests detours, signage, and safety measures be incorporated into the construction phase. The comment is noted. The majority of construction work would occur on the Project site and not interrupt vehicle, pedestrian, or bicycle traffic. Where utility connections are required, the Project would be required to obtain an encroachment permit from the City, which requires detour and traffic control plans to ensure vehicle, pedestrian, and bicycle safety.

1-12 The comment describes Caltrans requirements for construction haul activities. The comment is noted. All construction truck loads and deliveries are subject to vehicle code requirements.

1-13 The comment states that construction-related traffic must not adversely impact operations on the State Highway System. The Project site is not located adjacent to the State Highway System, and no improvements would be made to the State Highway System. Therefore, construction of the Project would not cause a direct adverse impact on the State Highway System.

Letter No. 2 – OCTA (July 8, 2026)

2-1 The comment provides corrections to bus Route 177 and Route 90. The corrections have been incorporated into the following edits found on Page 93 of the Draft IS/MND. The edits provide correction of information only and do not change the analysis or conclusions presented in the Draft IS/MND.

> Transit Facilities
>
> Public transportation services within the Project site and surrounding area are provided by Orange County Transportation Authority (OCTA). The primary OCTA bus routes serving the Project area are Routes 177 and 90. Route 177 provides service between ~~Foothill Ranch~~ Mission Viejo and Laguna Hills, traveling via Alicia Parkway with key stops serving the Aliso Viejo Town Center to the north of the Project across Pacific Park. Route 90

connects Tustin to Dana Point, passing through Aliso Viejo along ~~Aliso Creek Road~~ Moulton Parkway. There are no existing or planned transit facilities adjacent to the Project site. Project implementation would not conflict with a program plan, ordinance, or policy addressing transit facilities.

Letter No. 3 – Orange County Fire Authority (July 14, 2026)

3-1 The comment is introductory and does not provide specific comments on the environmental analysis. The comment is noted.

3-2 The comment is introductory and does not provide specific comments on the environmental analysis. The comment is noted.

3-3 The comment states that after review of the Project the Commentor has concluded the Project would have a less than significant impact associated with fire protection. The comment is noted.

California Department of Transportation

DISTRICT 12
1750 East 4th Street, Suite 100 | SANTA ANA, CA 92705
(657) 328-6000 | FAX (657) 328-6522 TTY 711
https://dot.ca.gov/caltrans-near-me/district12

July 8, 2026

Ms. So Kim
Community Development Director
City of Aliso Viejo
12 Journey Suite 100
Aliso Viejo, CA 92656

File: LDR/CEQA
SCH: 2026060921
12-ORA-2026-03166
SR 73, PM 14.185

Dear Ms. Kim,

Thank you for including the California Department of Transportation (Caltrans) in the review of the Mitigated Negative Declaration for the Aliso Creek Residential Development Project for the City of Aliso Viejo. The mission of Caltrans is improving lives and communities through transportation. 1-1

The project proposes a 137-unit residential community with enclosed garages and 80 guest parking spaces throughout the site. The project proposes two different residential building types, three-story Rowtowns (70 dwelling units), and three-story Garden Courts (67 dwelling units). Regional access to the site is provided by State Route 73 (SR 73). Caltrans is a commenting agency on this project and has the following comments:

1. Caltrans recognizes there is a strong link between transportation and land use. Development can have a significant impact on traffic and congestion on State transportation facilities. In particular, the pattern of land use can affect both local vehicle miles traveled and the number of trips. 1-2

   Caltrans supports collaboration with local agencies to work towards a safe, functional, interconnected, multi-modal transportation network integrated through applicable "smart growth" type land use planning and policies.

2. Caltrans seeks to promote safe, accessible multimodal transportation (i.e. walking, biking, and transit). Providing improved multimodal transportation to housing can encourage residents to utilize alternative transportation options, thus improving public health by reducing Greenhouse Gas (GHG) emissions, reduction to congestion, and Vehicle Miles Traveled (VMT). 1-3

1-4

3. The project is adjacent or close to several existing and planned bicycle facilities. Caltrans recommends the inclusion of secure and functional short-term bike parking. Short-term bike parking should be place on the ground floor in visible areas that are close to main entrances and should be installed at least 24" away from walls and other objects (e.g. trash cans, plants, etc.). With the increasing popularity of electric bikes and cargo/utility bikes, bike parking should also be designed to accommodate different styles, sizes, and weights of bikes (e.g. cargo bike, bike with trailer, adult tricycle, etc.).

    - For additional guidance on providing functional bike parking, see the attached "Essentials of Bike Parking" guidance created by the Association of Pedestrian and Bicycle Professionals (link to online PDF: https://www.apbp.org/Publications).

1-5

4. Please consider the addition of high visibility crosswalks and ADA curb ramps on intersections in or adjacent to the project location that currently lack one or both.

1-6

5. Please encourage the use of transit among future residents and workers of the development. Increasing multimodal transportation will lead to a reduction to congestion, Vehicle Miles Traveled, and improve air quality.

1-7

Provide a discussion on existing bus route services and future transit improvement opportunities including intercounty and regional connectivity. These include but are not limited to Bus Route 177, Bus Route 90, and connectivity to Laguna Niguel/Mission Viejo Metrolink Station.

1-8

6. Consider providing adequate wayfinding signage to nearby transit services within the project vicinity roadways. Connectivity of first and last mile mobility options and transit services help integrate a complete multimodal transportation network.

1-9

7. Confirm that internal streets and driveways are wide enough for truck turning movements and that there is adequate space for internal maneuverability, especially for moving vans, delivery vehicles, and emergency vehicles.

1-10

8. Encourage the inclusion of shared package drop-off areas (e.g. parcel lockers) to reduce delivery trucks trips and improve efficiency, especially in high-density residential developments.

1-11 9. During construction phase, please ensure that appropriate detours, signage, and safety measures that that prioritize the mobility, access and safety of all traffic modes, including bicyclists, pedestrians and transit users

1-12 10. All construction haul vehicles accessing the State Highway System must use routes approved by Caltrans. Any transportation of heavy construction equipment and/or materials which requires use of oversized-transport vehicles on State highways will require a Caltrans transportation permit. We recommend large size truck trips be limited to off-peak commute periods for the construction and operation phases. Construction truck loads should be covered with a tarpaulin cover.

1-13 11. The applicant shall ensure that construction-relation traffic does not adversely impact operations on the State Highway System. All temporary traffic control within or affecting state highways state highways shall comply with the most current edition of the California Manual on Uniform Traffic Control Devices (CA MUTCD) and Caltrans standards. The applicant shall ensure that public safety and mobility are maintained during construction.

Please continue to coordinate with Caltrans for any future developments that could potentially impact State transportation facilities. If you have any questions, please do not hesitate to contact Joseph Jamoralin at Joseph.Jamoralin@dot.ca.gov.

Sincerely,

Scott Shelley (Jul 8, 2026 16:43:52 PDT)

Scott Shelley
Branch Chief, Local Development Review-Climate Change
Caltrans, District 12

OCTA

AFFILIATED AGENCIES

Orange County Transit District

Local Transportation Authority

Service Authority for Freeway Emergencies

Consolidated Transportation Service Agency

Congestion Management Agency

July 8, 2026

Ms. So Kim
Director of Community Development
City of Aliso Viejo
12 Journey, Suite 100
Aliso Viejo, CA 92656

Via Email: skim@avcity.org

Subject: **Aliso Creek Residential Development Project Initial Study/Mitigated Negative Declaration (No. CEQA-2026-01000)**

Dear Ms. Kim:

Thank you for providing the Orange County Transportation Authority with the opportunity to review the Initial Study/Mitigated Negative Declaration (IS/MND) for the Aliso Creek Residential Development Project. The following comments are provided for your consideration:

2-1

- On Page 93 of the IS/MND, under 'Transit Facilities', please revise the transit service descriptions as follows:
  - Change "Route 177 provides service between Foothill Ranch and Laguna Hills" to "Route 177 provides service between Mission Viejo and Laguna Hills."
  - Change "Route 90 connects Tustin to Dana Point, passing through Aliso Viejo along Aliso Creek Road" to "Route 90 connects Tustin to Dana Point, passing through Aliso Viejo along Moulton."

Thank you for the opportunity to review this document. Should you have any questions or comments, please contact me at (714) 560-5907 or at dphu@octa.net.

Sincerely,

Dan Phu
Director, Transportation Planning and Analysis

DP:pv

ORANGE COUNTY FIRE AUTHORITY

P. O. Box 57115, Irvine, CA 92619-7115 • 1 Fire Authority Road, Irvine, CA 92602-0125

TJ McGovern, Fire Chief **(714) 573-6000** **www.ocfa.org**

July 14th, 2026 (SR 26003300)
So Kim, Community Development Director
Aliso Viejo
skim@avcity.org
Subject: Aliso Creek Residential Development Project

Dear So,

3-1 Thank you for the opportunity to review the subject document. The Orange County Fire Authority (OCFA) provides fire protection and emergency medical services response to 23 cities in Orange County and all unincorporated areas. The OCFA operates 78 fire stations throughout Orange County.

3-2 Per Ttile14 CCR § 15164 Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

3-3 We believe that the project will have less than a significant impact.
Please contact me at 714-573-6102 if you have any questions.

Sincerely.

Todd Letterman
Assistant Fire Marshal
Planning and Development
toddletterman@ocfa.org
www.ocfa.org

RESOLUTION NO. 2026-___

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ALISO VIEJO, CALIFORNIA, APPROVING AN AMENDMENT TO THE GENERAL PLAN LAND USE DESIGNATION AND ASSOCIATED LAND USE MAP FROM PROFESSIONAL OFFICE TO MEDIUM DENSITY RESIDENTIAL FOR THE DEVELOPMENT OF A 137-UNIT RESIDENTIAL TOWNHOME COMMUNITY LOCATED AT 27081 ALISO CREEK ROAD (APN: 632-124-08).

WHEREAS, on March 20, 2025, Shea Homes ("Applicant") submitted a pre-application to obtain feedback on concept plans for a development proposal involving the demolition of three existing office buildings to accommodate the construction of a 137-unit, residential community at 27081 Aliso Creek Road;

WHEREAS, on May 7, 2025, the City Council held a duly noticed public review and provided initial feedback on the concept plans for the Project;

WHEREAS, on July 1, 2025, the Applicant submitted a general plan amendment, zone change, vesting tentative tract map, site development permit, and a development agreement application to demolish existing office buildings and construct a multi-family residential community at 27081 Aliso Creek Road ("Project");

WHEREAS, pursuant to section 21067 of the Public Resources Code, and section 15367 of the State CEQA Guidelines (Cal. Code Regs., tit. 14, § 15000 et seq.), the City is the lead agency for the proposed Project and has prepared an Initial Study/Mitigated Negative Declaration (SCH#2026060921) ("IS/MND") and a Mitigation Monitoring and Reporting Program ("MMRP") for the Project;

WHEREAS, on October 1, 2026, the City gave public notice of the City Council public hearing for consideration of a Mitigated Negative Declaration, General Plan Amendment GPA-2026-01004, Zone Change ZC-2026-01003 (SCH#2026060921), Vesting Tentative Tract Map 19442, Site Development Permit SDP-2025-00004, and Development Agreement DA-2026-01001 for the Project by advertising in a newspaper of general circulation; posting notices at City Hall and the Project site; and mailing notices to owners of property within 300 feet, Applicant, and local agencies that provide water, sewage, electricity and schools;

WHEREAS, on October 21, 2026, the City Council held a public hearing as prescribed by law and considered written and verbal public testimony that was submitted prior to the hearing and during the hearing, and evidence and recommendations presented by staff in the agenda report and oral presentation; and

WHEREAS, all other legal prerequisites to the adoption of this Resolution have occurred.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF ALISO VIEJO AS FOLLOWS:

Section 1. **Incorporation of Recitals.** The City Council hereby finds and determines that all of the recitals set forth above are true and correct. The above recitals are hereby incorporated as substantive findings of this Resolution.

Section 2. **CEQA.** Pursuant to the California Environmental Quality Act (Public Resources Code, § 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations, title 14, § 15000 et seq.) (Collectively, "CEQA"), the City Council adopted Resolution No._____, determining that there is no substantial evidence that the approval of the Project would result in a significant adverse effect on the environment, provided appropriate mitigation measures, as identified in the MMRP, are imposed on the Project.

Section 3. **Findings for General Plan Amendment GPA-2026-01004.** Pursuant to AVMC 15.78.020 (General Plan Amendments), the City Council hereby makes the following findings of fact and approves an amendment to the General Plan land use designation and associated land use map from Professional Office to Medium Density Residential, as set forth in Exhibit "A", which is attached hereto and incorporated herein by reference.

1. Public Welfare. Approval of the amendment will not create conditions materially detrimental to the public health, safety and general welfare. The project would replace the existing office development with a 137-unit residential community that includes onsite parking, internal circulation improvements, utility infrastructure, landscaped open space, and access from existing site driveways. The project consists of three-story attached Row Townhome and Garden Court residential buildings with stucco façades, tile roofs, decorative metal balcony railings, recessed entries, and articulated building elevations. The project also provides approximately 127,400 square feet of open space, including a central park, landscaped paseos and garden courts, and landscaped slope areas. Although the site is currently designated and zoned for professional office uses, it is located at the intersection of Pacific Park Drive and Aliso Creek Road, where it serves as a transition between commercial and office uses and existing residential neighborhoods. The proposed residential design, architectural character, landscaping, and open-space amenities are consistent with surrounding residential development patterns, and the project retains the existing site access points and circulation system, supporting compatibility with the surrounding urban environment. Additionally, as part of the environmental assessment, the Project required comprehensive studies addressing air quality, energy, greenhouse gas emissions, biological resources, cultural resources, geotechnical conditions, hydrology and water quality, noise, and transportation impacts. As discussed further in the Environmental Assessment section below, these studies concluded that the Project would result in less-than-significant impacts with the implementation of proposed mitigation measures. The Project plans also cleared preliminary review by the Orange County Fire Authority

(OCFA). Furthermore, the Project aligns with the City's housing goals, as evidenced in Section 3.2, by facilitating the development of new housing opportunities. Future construction on the site will be subject to plan check review and inspection process to ensure full compliance with applicable building and safety standards.

2. Internal General Plan Consistency. The amendment is consistent with the goals and policies of the General Plan listed below in that it incorporates landscaping aligned with the City Council-approved plant palette, emphasizing low-water, drought-tolerant species; features building materials, colors, and architectural design that are compatible with the surrounding residential communities; includes a public benefit fee; proposes three affordable housing units restricted to very low-income households, thereby enhancing housing diversity and affordability; and introduces rezoning to facilitate residential development that includes affordable units in support of the City's housing objectives. In the General Plan, 'COS' refers to Conservation and Open Space policies, 'H' for Housing policies and goals, and 'LU' for Land Use policies.

    - Policy COS-1.2 Reduce the amount of water used for landscaping and increase use of native and low water plants. Maximize use of native, low-water plants for landscaping of areas adjacent to sidewalks or other impermeable surfaces.
    - Policy COS-4.2 Encourage and maintain high-quality architectural and landscaping designs that enhance or complement the community's visual character.
    - Policy COS-7.5 Ensure that new development provides park land and/or improvements at a fair share ratio, pursuant to the City's Parkland Ordinance.
    - Goal H-1: Encourage a diversity of housing types and provide affordability levels within Aliso Viejo to meet the needs of community residents.
    - Policy H-1.1 Identify sites appropriate for the development of a variety of housing types and price ranges to meet the needs of all socioeconomic segments of the community through the disbursement of affordable units in projects.
    - Policy H-1.2 Encourage through the use of density bonuses and rezoning to allow for residential development, development of affordable housing opportunities throughout the community, as well as development of housing for elderly and low- and moderate-income households near public transportation services.
    - Policy H-1.4 Ensure that a portion of future residential development is affordable to low- and very-low-income households by designating certain sites as having the potential to be used for residential uses.
    - Policy H-3.8 Review existing zoning policies and explore zoning changes to facilitate the development of affordable housing.
    - Policy LU-12.2 As a condition upon new development, require payment of park fees and/or dedication and provision of parkland, recreation facilities and/or multi-use trails that improve the public and private recreation system.

3. Land Use Compatibility. In the case of amendments to the general plan land use policy map, the new designation is compatible with the designations on nearby properties. The site is located at the intersection of Pacific Park Drive and Aliso Creek Road and is surrounded by a mix of residential, commercial, office, and community facility uses. Properties to the east are designated Medium and High Density Residential and developed with attached multifamily residential uses, while properties to the north also include similar residential neighborhoods in proximity to the Aliso Viejo Town Center. The proposed residential designation therefore extends an existing residential land use pattern in the surrounding area and provides a transition between residential neighborhoods and nearby commercial and office uses. The Project's three-story Row Townhome and Garden Court buildings, residential architectural design, landscaped open-space, and retention of existing access and circulation patterns further support compatibility with adjacent developments. Accordingly, the proposed Medium Density Residential designation is compatible with the land use designations and development pattern of nearby properties.

4. Property Suitability. In the case of amendments to the general plan land use policy map, the new designation is suitable for the location, access, visual character and topography of the subject property. The property is located at the intersection of Pacific Park Drive and Aliso Creek Road, with access provided from existing driveways connecting to Pacific Park Drive, Aliso Creek Road, and Journey through an established internal circulation system. The site is surrounded by a mix of residential, commercial, office, and community facility uses and is immediately adjacent to existing attached residential development, making it well suited for residential use. The project site is generally flat, with limited slopes along the eastern and western property boundaries, and can accommodate residential development with proposed grading, circulation, utility, and drainage improvements. The proposed development consists of three-story Row Townhome and Garden Court buildings designed around landscaped courtyards, paseos, and open-space areas totaling approximately 127,400 square feet, or 34.7% of the site. The proposed building style and design elements exist in adjacent residential neighborhoods.

Section 4. **Severability**. If any provision of this Resolution or the application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications of this Resolution that can be given effect without the invalid provision or application, and to this end the provisions of this Resolution are severable. The City Council hereby declares that it would have adopted this Resolution irrespective of the invalidity of any particular portion thereof.

Section 5: **Location of Documents.** The administrative record for the Project is maintained at City Hall located at 12 Journey, Suite 100, Aliso Viejo, CA 92656. The custodian of records is the City Clerk.

Section 6: **Effective Date.** This General Plan Amendment shall not take effect unless and until Zone Change ZA-2026-01003, Vesting Tentative Tract Map 19442, and Site Development Permit SDP-2025-00004 are each approved by the City Council and have become effective, and the associated Development Agreement DA-2026-01001 is approved by the City Council and executed by both parties thereto.

Section 7. **Execution of Resolution**. The Mayor shall sign this Resolution and the City Clerk shall attest and certify to the passage and adoption thereof.

PASSED, APPROVED AND ADOPTED this 21st day of October 2026.

_____
Max Duncan, Mayor

APPROVED AS TO FORM:

_____
Scott C. Smith, City Attorney

ATTEST:

_____
Maria Kendig, City Clerk

STATE OF CALIFORNIA)
COUNTY OF ORANGE) ss.
CITY OF ALISO VIEJO)

I, Maria Kendig, City Clerk of the City of Aliso Viejo, California, DO HEREBY CERTIFY that the foregoing is the original of Resolution No. 2026-__ duly passed and adopted by the City Council of the City of Aliso Viejo at their regular meeting held on the 21st day of October 2026, by the following roll call vote, to wit:

AYES:

NOES:

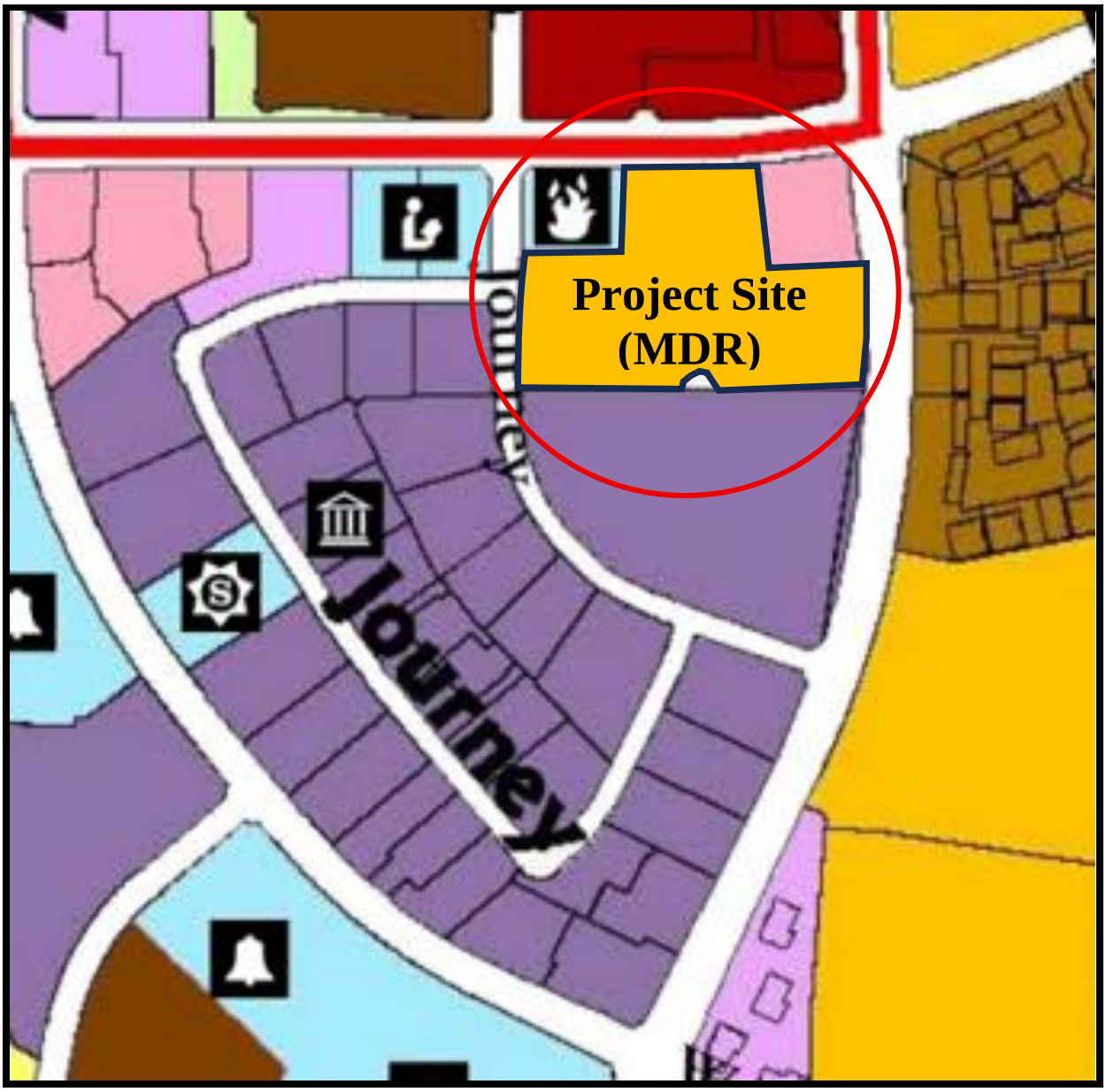
ABSENT:

_____
MARIA KENDIG,
CITY CLERK

(SEAL)

Exhibit "A"
Amendment to the General Plan Land Use Map
Case No. GPA-2026-01004

Property Location – 27081 Aliso Creek Road (see red-circled area below)
Existing Land Use Designation – Professional Office ("PO")
Proposed Land Use Designation – Medium Density Residential (Max. 18 units/acre) ("MDR")



ORDINANCE NO. 2026-___

A ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ALISO VIEJO, CALIFORNIA, APPROVING A ZONE CHANGE FROM PROFESSIONAL OFFICE TO RESIDENTIAL MEDIUM DENSITY DISTRICT FOR THE DEVELOPMENT OF A 137-UNIT RESIDENTIAL TOWNHOME COMMUNITY LOCATED AT 27081 ALISO CREEK ROAD (APN: 632-124-08).

WHEREAS, on March 20, 2025, Shea Homes ("Applicant") submitted a pre-application to obtain feedback on concept plans for a development proposal involving the demolition of three existing office buildings to accommodate the construction of a 137-unit, residential community at 27081 Aliso Creek Road;

WHEREAS, on May 7, 2025, the City Council held a duly noticed public review and provided initial feedback on the concept plans for the Project;

WHEREAS, on July 1, 2025, the Applicant submitted a general plan amendment, zone change, vesting tentative tract map, site development permit, and a development agreement application to demolish existing office buildings and construct a multi-family residential community at 27081 Aliso Creek Road ("Project");

WHEREAS, pursuant to section 21067 of the Public Resources Code, and section 15367 of the State CEQA Guidelines (Cal. Code Regs., tit. 14, § 15000 et seq.), the City is the lead agency for the proposed Project and has prepared an Initial Study/Mitigated Negative Declaration (SCH#2026060921) ("IS/MND") and a Mitigation Monitoring and Reporting Program ("MMRP") for the Project

WHEREAS, on October 1, 2026, the City gave public notice of the City Council public hearing for consideration of a Mitigated Negative Declaration (SCH#2026060921), General Plan Amendment GPA-2026-01004, Zone Change ZA-2026-01003, Vesting Tentative Tract Map 19442, Site Development Permit SDP-2025-00004, and Development Agreement DA-2026-01001 for the Project by advertising in a newspaper of general circulation; posting notices at City Hall and the Project site; and mailing notices to owners of property within 300 feet, Applicant, and local agencies that provide water, sewage, electricity and schools;

WHEREAS, on October 21, 2026, the City Council held a duly noticed public hearing as prescribed by law and considered written and verbal public testimony that was submitted prior to the hearing and during the hearing, and evidence and recommendations presented by staff in the agenda report and oral presentation and introduced the Ordinance;

WHEREAS, on November 18, 2026, the City held a duly noticed public hearing, at which time all interested persons had the opportunity to appear and be heard; and

WHEREAS, all legal prerequisites to the adoption of this Ordinance have occurred.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF ALISO VIEJO DOES ORDAIN AS FOLLOWS:

Section 1. **Incorporation of Recitals.** The City Council hereby finds and determines that all of the recitals set forth above are true and correct. The above recitals are hereby incorporated as substantive findings of this Ordinance.

Section 2. **CEQA.** Pursuant to the California Environmental Quality Act (Public Resources Code, § 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations, title 14, § 15000 et seq.) (Collectively, "CEQA"), the City Council adopted Resolution No._____, determining that there is no substantial evidence that the approval of the Project would result in a significant adverse effect on the environment, provided appropriate mitigation measures, as identified in the MMRP, are imposed on the Project;

Section 3. **Findings for Zone Change ZA-2026-01003.** Pursuant to AVMC 15.78.040 (Zone Change and Prezoning), the City Council hereby makes the following findings of fact and approves the Zone Change ZA-2026-01003 from Professional Office to Residential Medium Density, as set forth in Exhibit "A", which is attached hereto and incorporated herein by reference.

1. Public Welfare. Approval of the amendment will not create conditions materially detrimental to the public health, safety and general welfare. The project would replace the existing office development with a 137-unit residential community that includes onsite parking, internal circulation improvements, utility infrastructure, landscaped open space, and access from existing site driveways. The project consists of three-story attached Row Townhome and Garden Court residential buildings with stucco façades, tile roofs, decorative metal balcony railings, recessed entries, and articulated building elevations. The project also provides approximately 127,400 square feet of open space, including a central park, landscaped paseos and garden courts, and landscaped slope areas. Although the site is currently designated and zoned for professional office uses, it is located at the intersection of Pacific Park Drive and Aliso Creek Road, where it serves as a transition between commercial and office uses and existing residential neighborhoods. The proposed residential design, architectural character, landscaping, and open-space amenities are consistent with surrounding residential development patterns, and the project retains the existing site access points and circulation system, supporting compatibility with the surrounding urban environment. Additionally, as part of the environmental assessment, the Project required comprehensive studies addressing air quality, energy, greenhouse gas emissions, biological resources, cultural resources, geotechnical conditions, hydrology and water quality, noise, and transportation impacts. As discussed further in the Environmental Assessment section below, these studies concluded that the Project would result in less-than-significant impacts with the

implementation of proposed mitigation measures. The Project plans also cleared preliminary review by the Orange County Fire Authority (OCFA). Furthermore, the Project aligns with the City's housing goals, as evidenced in Section 3.2, by facilitating the development of new housing opportunities. Future construction on the site will be subject to plan check review and inspection process to ensure full compliance with applicable building and safety standards.

2. Internal General Plan Consistency. The amendment is consistent with the goals and policies of the General Plan listed below in that it incorporates landscaping aligned with the City Council-approved plant palette, emphasizing low-water, drought-tolerant species; features building materials, colors, and architectural design that are compatible with the surrounding residential communities; includes a public benefit fee; proposes three affordable housing units restricted to very low-income households, thereby enhancing housing diversity and affordability; and introduces rezoning to facilitate residential development that includes affordable units in support of the City's housing objectives. In the General Plan, 'COS' refers to Conservation and Open Space policies, 'H' for Housing policies and goals, and 'LU' for Land Use policies.

    - Policy COS-1.2 Reduce the amount of water used for landscaping and increase use of native and low water plants. Maximize use of native, low-water plants for landscaping of areas adjacent to sidewalks or other impermeable surfaces.
    - Policy COS-4.2 Encourage and maintain high-quality architectural and landscaping designs that enhance or complement the community's visual character.
    - Policy COS-7.5 Ensure that new development provides park land and/or improvements at a fair share ratio, pursuant to the City's Parkland Ordinance.
    - Goal H-1: Encourage a diversity of housing types and provide affordability levels within Aliso Viejo to meet the needs of community residents.
    - Policy H-1.1 Identify sites appropriate for the development of a variety of housing types and price ranges to meet the needs of all socioeconomic segments of the community through the disbursement of affordable units in projects.
    - Policy H-1.2 Encourage through the use of density bonuses and rezoning to allow for residential development, development of affordable housing opportunities throughout the community, as well as development of housing for elderly and low- and moderate-income households near public transportation services.
    - Policy H-1.4 Ensure that a portion of future residential development is affordable to low- and very-low-income households by designating certain sites as having the potential to be used for residential uses.
    - Policy H-3.8 Review existing zoning policies and explore zoning changes to facilitate the development of affordable housing.
    - Policy LU-12.2 As a condition upon new development, require payment of park fees and/or dedication and provision of parkland, recreation facilities and/or multi-use trails that improve the public and private recreation system.

3. Land Use Compatibility. The zone change is compatible with the zoning and land use on nearby properties. The site is located at the intersection of Pacific Park Drive and Aliso Creek Road and is surrounded by a mix of residential, commercial, office, and community facility uses. Properties to the east are designated Medium and High Density Residential and developed with attached multifamily residential uses, while properties to the north also include similar residential neighborhoods in proximity to the Aliso Viejo Town Center. The proposed residential designation therefore extends an existing residential land use pattern in the surrounding area and provides a transition between residential neighborhoods and nearby commercial and office uses. The Project's three-story Row Townhome and Garden Court buildings, residential architectural design, landscaped open-space, and retention of existing access and circulation patterns further support compatibility with adjacent developments. Accordingly, the proposed Medium Density Residential designation is compatible with the land use designations and development pattern of nearby properties.

4. Property Suitability. The zone change is suitable for the location, access, visual character and topography of the subject property. The property is located at the intersection of Pacific Park Drive and Aliso Creek Road, with access provided from existing driveways connecting to Pacific Park Drive, Aliso Creek Road, and Journey through an established internal circulation system. The site is surrounded by a mix of residential, commercial, office, and community facility uses and is immediately adjacent to existing attached residential development, making it well suited for residential use. The project site is generally flat, with limited slopes along the eastern and western property boundaries, and can accommodate residential development with proposed grading, circulation, utility, and drainage improvements. The proposed development consists of three-story Row Townhome and Garden Court buildings designed around landscaped courtyards, paseos, and open-space areas totaling approximately 127,400 square feet, or 34.7% of the site. The proposed building style and design elements exist in adjacent residential neighborhoods.

Section 4. **Effective Date.** This Zone Change Ordinance shall not take effect unless and until General Plan Amendment GPA-2026-01004, Vesting Tentative Tract Map 19442, and Site Development Permit SDP-2025-00004 are each approved by the City Council and have become effective, and the associated Development Agreement DA-2026-01001 is approved by the City Council and executed by both parties thereto.

Section 5. **Severability.** If any provision of this Ordinance or its application to any person or circumstance is held to be invalid by a court of competent jurisdiction, such invalidity has no effect on the other provisions or applications of the Ordinance that can be given effect without the invalid provision or application, and to this extent, the provisions of this Ordinance are severable. The City Council declares that it would have adopted this Ordinance irrespective of the invalidity of any portion thereof.

Section 6. **Location of Documents.** The administrative record for the Project is maintained at City Hall located at 12 Journey, Suite 100, Aliso Viejo, CA 92656. The custodian of records is the City Clerk.

Section 7. **City Clerk's Certification.** The City Clerk shall certify to the adoption of this Ordinance and cause a summary thereof to be published five days prior to the date of adoption of this Ordinance, and, within 15 days after adoption, the City Clerk shall cause to be published the aforementioned summary and shall post a certified copy of this Ordinance, together with the vote for and against the same, in the Office of the City Clerk.

PASSED, APPROVED AND ADOPTED this 18th day of November, 2026.

_____
Max Duncan, Mayor

APPROVED AS TO FORM:

_____
Scott C. Smith, City Attorney

ATTEST:

_____
Maria Kendig, City Clerk

STATE OF CALIFORNIA)
COUNTY OF ORANGE) ss.
CITY OF ALISO VIEJO)

I, Maria Kendig, City Clerk of the City of Aliso Viejo, California, DO HEREBY CERTIFY that the foregoing is the original of Ordinance No. 2025-__ duly passed and adopted by the City Council of the City of Aliso Viejo at their regular meeting held on the 18th day of November 2026, by the following roll call vote, to wit:

AYES:

NOES:

ABSENT:

_____
MARIA KENDIG,
CITY CLERK

(SEAL)

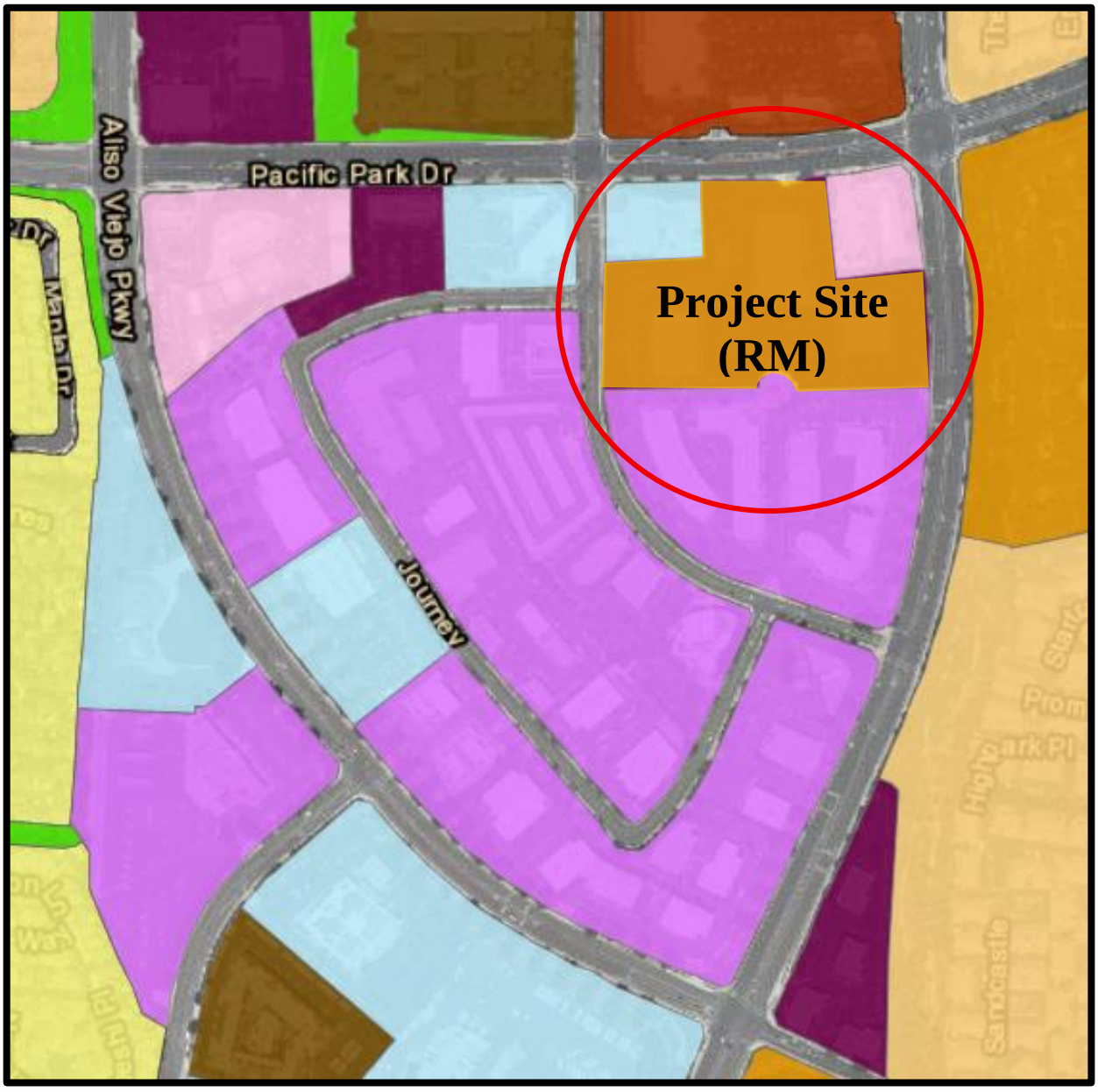
I hereby certify that the foregoing is the original of Ordinance No. 2026-__ duly passed and adopted by the Aliso Viejo City Council at its regular meeting held November 18, 2026, and that the Summary of the Ordinance was published on _____ and _____ in the Laguna Niguel News.

_____
MARIA KENDIG,
CITY CLERK

(SEAL)

Exhibit "A"
Zone Change Map
Case No. ZA-2026-01003

Property Location – 27081 Aliso Creek Road (see red-circled area below)
Existing Zoning District Designation – Professional Office ("PO")
Proposed Zoning District Designation – Residential Medium Density (Max. 18 units/acre) ("RM")



RESOLUTION NO. 2026-___

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ALISO VIEJO, CALIFORNIA, APPROVING VESTING TENTATIVE TRACT MAP 19442 FOR SUBDIVISION INTO CONDOMINIUM PURPOSES AND SITE DEVELOPMENT PERMIT (SDP-2025-00004) TO ALLOW THE DEVELOPMENT OF A 137-UNIT RESIDENTIAL TOWNHOME COMMUNITY LOCATED AT 27081 ALISO CREEK ROAD (APN: 632-124-08).

WHEREAS, on March 20, 2025, Shea Homes ("Applicant") submitted a pre-application to obtain feedback on concept plans for a development proposal involving the demolition of three existing office buildings to accommodate the construction of a 137-unit, residential community at 27081 Aliso Creek Road;

WHEREAS, on May 7, 2025, the City Council held a duly noticed public review and provided initial feedback on the concept plans for the Project;

WHEREAS, on July 1, 2025, the Applicant submitted a general plan amendment, zone change, vesting tentative tract map, site development permit, and a development agreement application to demolish existing office buildings and construct a multi-family residential community at 27081 Aliso Creek Road ("Project");

WHEREAS, pursuant to section 21067 of the Public Resources Code, and section 15367 of the State CEQA Guidelines (Cal. Code Regs., tit. 14, § 15000 et seq.), the City is the lead agency for the proposed Project and has prepared an Initial Study/Mitigated Negative Declaration (SCH#2026060921) ("IS/MND") and a Mitigation Monitoring and Reporting Program ("MMRP") for the Project;

WHEREAS, on October 1, 2026, the City gave public notice of the City Council public hearing for consideration of a Mitigated Negative Declaration (SCH#2026060921), General Plan Amendment GPA-2026-01004, Zone Change ZA-2026-01003, Vesting Tentative Tract Map 19442, Site Development Permit SDP-2025-00004, and Development Agreement DA-2026-01001 for the Project by advertising in a newspaper of general circulation; posting notices at City Hall and the Project site; and mailing notices to owners of property within 300 feet, Applicant, and local agencies that provide water, sewage, electricity and schools;

WHEREAS, on October 21, 2026, the City Council held a public hearing as prescribed by law and considered written and verbal public testimony that was submitted prior to the hearing and during the hearing, and evidence and recommendations presented by staff in the agenda report and oral presentation; and

WHEREAS, all other legal prerequisites to the adoption of this Resolution have occurred. **NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF ALISO VIEJO AS FOLLOWS:**

Section 1. **Incorporation of Recitals.** The City Council hereby finds and determines that all of the recitals set forth above are true and correct. The above recitals are hereby incorporated as substantive findings of this Resolution.

Section 2. **CEQA**. Pursuant to the California Environmental Quality Act (Public Resources Code, § 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations, title 14, § 15000 et seq.) (Collectively, "CEQA"), the City Council adopted Resolution No. _____, determining that there is no substantial evidence that the approval of the Project would result in a significant adverse effect on the environment, provided appropriate mitigation measures, as identified in the MMRP, are imposed on the Project.

Section 3. **Findings for Vesting Tentative Tract Map 19340.** Pursuant to the requirements of the California Subdivision Map Act (Government Code Section 66410 *et. seq.)* and AVMC Title 14 (Subdivisions), the City Council hereby makes the following findings of fact and approves the Vesting Tentative Tract Map ("VTTM") 19442 as set forth in Exhibit "C" and subject to the conditions of approval as set forth in Exhibit "A", which are attached hereto and incorporated herein by reference.

A. The proposed map is consistent with the applicable General and Specific Plans. The Applicant proposes a General Plan Amendment to re-designate the property for Medium Density Residential, which allows for residential development of 9 to 18 dwelling units per acre. The Vesting Tentative Tract Map proposes 137 multi-family homes on 8.44 acres, resulting in a density of 16.2 dwelling units per acre. As conditioned, the Vesting Tentative Tract Map will not take effect unless the General Plan Amendment, Zone Change, Site Development Permit, and Development Agreement take effect. Accordingly, the proposed map would be consistent with the applicable General Plan Land Use designation. There is no applicable Specific Plan for the Site.

B. The design or improvement of the proposed subdivision is consistent with the General and Specific Plans. The Project is consistent with the goals and policies of the Conservation and Open Space, Housing, and Land Use element listed below in that the Project promotes orderly growth, provides a compatible transition between non-residential and residential uses, supports housing objectives by creating new residential opportunities, and utilizes existing infrastructure in a manner consistent with the community's long-term vision and planning framework. The Project is also subject to mitigation measures and conditions of approval that address potential impacts related to traffic, noise, air quality, and emergency access. There is no applicable Specific Plan for the Project site. In the General Plan, 'COS' refers to Conservation and Open Space policies, 'H' for Housing policies and goals, and 'LU' for Land Use policies.

- Policy COS-1.2 Reduce the amount of water used for landscaping and increase use of native and low water plants. Maximize use of native, low-water plants for landscaping of areas adjacent to sidewalks or other impermeable surfaces.
- Policy COS-4.2 Encourage and maintain high-quality architectural and landscaping designs that enhance or complement the community's visual character.
- Policy COS-7.5 Ensure that new development provides park land and/or improvements at a fair share ratio, pursuant to the City's Parkland Ordinance.
- Goal H-1: Encourage a diversity of housing types and provide affordability levels within Aliso Viejo to meet the needs of community residents.
- Policy H-1.1 Identify sites appropriate for the development of a variety of housing types and price ranges to meet the needs of all socioeconomic segments of the community through the disbursement of affordable units in projects.
- Policy H-1.2 Encourage through the use of density bonuses and rezoning to allow for residential development, development of affordable housing opportunities throughout the community, as well as development of housing for elderly and low- and moderate-income households near public transportation services.
- Policy H-1.4 Ensure that a portion of future residential development is affordable to low- and very-low-income households by designating certain sites as having the potential to be used for residential uses.
- Policy H-3.8 Review existing zoning policies and explore zoning changes to facilitate the development of affordable housing.
- Policy LU-12.2 As a condition upon new development, require payment of park fees and/or dedication and provision of parkland, recreation facilities and/or multi-use trails that improve the public and private recreation system.

C. With the Zoning Code amendment, the proposed subdivision conforms to all applicable zoning standards set forth in AVMC Title, as required by AVMC Section 14.08.050. The proposed subdivision is consistent with the permitted uses, development standards, and density provisions of the underlying zoning district, and the design and layout of lots, streets, and improvements comply with the requirements for subdivision and land development established in the AVMC.

D. The site is physically suitable for the type of development. The site is generally level, has adequate access from existing public streets, and is served by established infrastructure systems including water, sewer, storm drainage, and utilities. The site's size, configuration, and surrounding land use context are appropriate to accommodate the Project consistent with applicable zoning and General Plan designations. No unusual topographic, geologic, or environmental conditions have been identified that would render the site unsuitable for residential use.

E. The site is physically suitable for the proposed density of development. The Project includes a General Plan Amendment to re-designate the property to Medium

Density Residential, which permits residential development at a range of 9 to 18 dwelling units per acre. The Vesting Tentative Tract Map proposes 137 multi-family homes on 8.44 acres, resulting in a density of approximately 16.2 dwelling units per acre. This proposed density falls within the allowable range for the Medium-Density Residential designation.

F. The design of the subdivision and the proposed improvements are not likely to cause substantial environmental damage or substantial and avoidable injury to fish or wildlife or their habitat. The Project site is fully developed, contains no special-status plant or wildlife species, no riparian habitat, wetlands, sensitive natural communities, or wildlife corridors, and is not located within or adjacent to any habitat conservation reserve area. While the site provides limited nesting habitat for common avian species protected under the Migratory Bird Treaty Act, implementation of Mitigation Measure BIO-1, including pre-construction nesting bird surveys, avoidance buffers, monitoring, and seasonal construction restrictions, would reduce potential impacts to nesting birds to a less-than-significant level.

G. The design of the subdivision or type of improvements is not likely to cause serious public health problems. The Project will be served by existing off-site infrastructure, with new on-site water, sewer, and storm drain facilities designed to connect to and extend those systems. All facilities have adequate capacity to accommodate the proposed residential use. The Project site is not listed on any hazardous materials sites pursuant to Government Code Section 65962.5, the subdivision design incorporates standard improvements, including paved streets, sidewalks, street lighting, and utility connections that will be constructed in compliance with applicable building codes and City engineering standards. The Initial Study prepared for the Project did not identify any conditions that would result in significant public health impacts, and all potentially significant effects have been mitigated to less-than-significant levels.

H. The design of the subdivision or the type of improvements will not conflict with existing easements, acquired by the public at large, for access through or use of property within the subdivision. The Project as conditioned requires the Applicant to obtain easement holders' authorization for any improvements or encroachments prior to building permit issuance.

I. The advisory agency shall determine whether the discharge of waste from the proposed subdivision into an existing sanitary sewer system would result in or add to a violation of existing requirements prescribed by either the Santa Ana or San Diego Regional Water Quality Control Boards. The project site's wastewater will be conveyed through the existing Moulton Niguel Water District (MNWD) wastewater collection system and treated at existing regional wastewater treatment facilities. The project's Initial Study/Mitigated Negative Declaration (IS/MND) concluded that implementation of the proposed residential development would not violate any water quality standards or waste discharge requirements and

would not substantially degrade surface water or groundwater quality. MNWD provides wastewater collection and treatment services throughout its service area and has existing treatment capacity to serve anticipated development within the district. In addition, the project will be required to comply with all applicable federal, State, regional, and local water quality regulations, including National Pollutant Discharge Elimination System (NPDES) requirements, implementation of the approved Water Quality Management Plan (WQMP), and all applicable Regional Water Quality Control Board regulations.

J. No deviations from the subdivision design standards are approved or conditionally approved as part of the Vesting Tentative Tract Map.

Section 4. **Findings for Site Development Permit SDP-2025-00004.** Pursuant to AVMC 15.74.020 (Site Development Permits), the City Council hereby makes the following findings of fact and approves the Site Development Permit SDP-2025-00004, subject to the conditions of approval as set forth in Exhibit "A" and Project plans as set forth in Exhibit "B", which are attached hereto and incorporated herein by reference.

A. Consistency with General Plan. The project is consistent with the general plan and any applicable specific plan. The Project, with the General Plan Amendment to Medium Density Residential, is consistent with the goals and policies of the General Plan, as listed below. The project incorporates landscaping aligned with the City Council-approved plant palette, emphasizing low-water, drought-tolerant species; features building materials, colors, and architectural design that are compatible with the surrounding residential communities; includes a public benefit fee; proposes three affordable housing units restricted to very low-income households, thereby enhancing housing diversity and affordability; and introduces rezoning to facilitate residential development that includes affordable units in support of the City's housing objectives. In the General Plan, 'COS' refers to Conservation and Open Space policies, 'H' for Housing policies and goals, and 'LU' for Land Use policies. There is no applicable specific plan.

- Policy COS-1.2 Reduce the amount of water used for landscaping and increase use of native and low water plants. Maximize use of native, low-water plants for landscaping of areas adjacent to sidewalks or other impermeable surfaces.
- Policy COS-4.2 Encourage and maintain high-quality architectural and landscaping designs that enhance or complement the community's visual character.
- Policy COS-7.5 Ensure that new development provides park land and/or improvements at a fair share ratio, pursuant to the City's Parkland Ordinance.
- Goal H-1: Encourage a diversity of housing types and provide affordability levels within Aliso Viejo to meet the needs of community residents.
- Policy H-1.1 Identify sites appropriate for the development of a variety of housing types and price ranges to meet the needs of all socioeconomic segments of the community through the disbursement of affordable units in projects.

- Policy H-1.2 Encourage through the use of density bonuses and rezoning to allow for residential development, development of affordable housing opportunities throughout the community, as well as development of housing for elderly and low- and moderate-income households near public transportation services.
- Policy H-1.4 Ensure that a portion of future residential development is affordable to low- and very-low-income households by designating certain sites as having the potential to be used for residential uses.
- Policy H-3.8 Review existing zoning policies and explore zoning changes to facilitate the development of affordable housing.
- Policy LU-12.2 As a condition upon new development, require payment of park fees and/or dedication and provision of parkland, recreation facilities and/or multi-use trails that improve the public and private recreation system.

B. Consistency with Zoning Code. The land use and associated development conform to the permitted use provisions and development standards of this zoning code and is consistent with this code and any applicable specific plan. The proposed zone change to Medium Density Residential, together with the associated development, is compatible with surrounding land uses, providing a transition that complements the existing neighborhood character. The project site is located at the intersection of Pacific Park Drive and Aliso Creek Road and is surrounded by a mix of residential, commercial, office, and community facility uses. Properties to the east and north are designated and developed with attached multifamily residential neighborhoods, and the proposed residential development extends this existing residential land use pattern while providing an appropriate transition between adjacent residential neighborhoods and nearby commercial and office uses. The site is well suited for residential development based on its location, established access and circulation system, visual character, and generally flat topography. The proposed three-story Row Townhome and Garden Court buildings incorporate residential architectural design, landscaped courtyards, paseos, and open-space amenities that are compatible with surrounding residential development and neighborhood character. The Project incorporates reduced perimeter landscape setbacks, an increase in maximum building height, and an increase in retaining wall height along the western property line, all of which are requested as waivers under the State Density Bonus Law (Government Code Section 65915). Because the Project provides the required percentage of affordable housing units for very low-income households, it is eligible for these waivers, which the City is required to grant upon making the applicable statutory findings. In addition, the Project qualifies for a reduced parking ratio under the State Density Bonus Law, which requires a minimum of 308 parking spaces. The Applicant proposes 343 parking spaces, consisting of 260 private residential spaces and 83 guest spaces. Although the Project qualifies for a reduced parking requirement, the proposed parking supply exceeds the minimum parking required under State law and fully complies with the City's parking standard of 2.5 spaces per dwelling unit, which requires 343 parking spaces.

C. Compliance with CEQA. Processing and approval of the permit application are in compliance with the requirements of the California Environmental Quality Act. Pursuant to the California Environmental Quality Act ("CEQA") and the State CEQA Guidelines, the City prepared an Initial Study/Mitigated Negative Declaration ("IS/MND") to evaluate the potential environmental impacts of the proposed Project. The analysis concluded that the Project could result in potentially significant environmental impacts; however, all such impacts can be reduced to less-than-significant levels through the implementation of mitigation measures. As a result, the City also prepared a Mitigation Monitoring and Reporting Program ("MMRP") in compliance with CEQA. The IS/MND determined that the Project would not result in significant impacts to aesthetics, agricultural and forestry resources, cultural resources, energy, greenhouse gas emissions, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation/traffic, or wildfire. However, it identified potentially significant impacts to air quality, biological resources, geology/soils, hazards and hazardous materials, hydrology/water quality, tribal cultural resources, and utilities/service systems. With the implementation of mitigation measures, these impacts would be reduced to less than significant levels. The mitigation measures are detailed in the Mitigation Monitoring and Reporting Program and have been incorporated into the Conditions of Approval (Exhibit "A") for the Project.

D. Architectural Design. The architectural design of the project, including but not limited to the architectural style, scale, building mass, materials, colors, architectural details, and roof style, is compatible with surrounding development. The Project consists of three-story Row Townhome and Garden Court residential buildings that are consistent with the scale and intensity of existing multifamily residential developments located immediately east of the site and across Pacific Park Drive on both sides of the Aliso Viejo Town Center. The proposed residential building forms, architectural character, and site design reflect the development pattern established in these surrounding residential neighborhoods and provide a compatible transition between the adjacent residential, commercial, and office uses. The Row Townhome buildings contain four- to six-unit configurations organized along landscaped paseos, while the Garden Court buildings are arranged around central courtyards, creating a residential character similar to nearby attached housing communities. The proposed architecture incorporates features common throughout Aliso Viejo residential neighborhoods, including stucco exterior finishes, tile roofing, enhanced entry features, varied building elevations, articulated facades, recessed balconies, decorative trim elements, and a combination of roof forms that reduce building mass and provide visual interest. In addition, the Project includes courtyards, paseos, and community gathering areas that complement the design character of surrounding residential development. The building placement, architectural detailing, material palette, and overall site design provide a cohesive residential environment that is compatible with adjacent residential neighborhoods and serves as an appropriate transition to nearby commercial and office uses.

E. Site Design. The site design of the project, including but not limited to project entries, interior circulation, pedestrian and bicycle access, pedestrian amenities, screening of equipment and trash enclosures, exterior lighting, and other site design elements, is compatible with surrounding development. Based on the Project plans and supporting documentation, the Project will retain the existing site access configuration, with primary entry and exit points provided from Pacific Park Drive and Aliso Creek Road. The Traffic Impact Analysis concluded that the Project will maintain acceptable traffic operations within the surrounding roadway network and that site access is adequate to accommodate project traffic safely and efficiently. To improve circulation and vehicular safety, the existing driveway on Aliso Creek Road will be modified to a full-ingress/right-turn-out configuration through the installation of a channelized right-turn island. The analysis also recommends signage, pavement markings, and HOA provisions within the shared access area between the Project and Pacific Park Plaza to discourage cut-through traffic and reinforce the intended circulation pattern. The internal private roadway network, including emergency and service access, was reviewed and accepted by the Orange County Fire Authority. Each dwelling unit will be served by enclosed private garage parking, while guest parking is distributed throughout the site to support visitor access. Approximately 127,400 square feet of landscaped open space, including courtyards, paseos, recreation areas, and perimeter landscaping, is provided throughout the development to enhance the residential character of the site. Utility equipment and other service elements are integrated into the site design and screened from public view through building placement and landscaping. Exterior lighting will be designed to provide safe illumination for vehicular and pedestrian areas while minimizing off-site glare and light spill. These site design elements are compatible with the character and development pattern of the surrounding residential, commercial, and office uses.

F. Landscape Design. Project landscaping, including but not limited to the location, type, size, color, texture, and coverage of plant materials, has been designed so as to provide visual relief, complement buildings, visually emphasize prominent design elements and vistas, screen undesirable views, provide a harmonious transition between adjacent land uses and between development and open space, and provide an overall unifying influence to enhance the visual continuity of the project. The Project incorporates a landscape plan that enhances the overall visual continuity of the site and complements the architectural character of the development. Approximately 127,400 square feet, or 34.7% of the site, is devoted to landscaped open space, including courtyards, paseos, recreation areas, community gathering spaces, perimeter landscaping, and enhanced streetscape improvements. Landscaping is strategically located throughout the development to define pedestrian corridors, frame project entries, provide visual separation between land uses, soften building massing, and screen utilities from public view. The landscape palette includes a variety of trees, shrubs, groundcovers, and accent plantings that comply with City landscape requirements, emphasizing low-water, drought-tolerant species. The proposed landscape design and planting

palette enhances landscaping throughout the site, providing visual buffering and transition between the proposed development and surrounding properties.

Section 5. **Location of Documents.** The administrative record for the Project is maintained at City Hall located at 12 Journey, Suite 100, Aliso Viejo, CA 92656. The custodian of records is the City Clerk.

Section 6. **Severability**. If any provision of this Resolution or the application thereof to any person or circumstance is held invalid, such invalidity shall not affect other provisions or applications of this Resolution that can be given effect without the invalid provision or application, and to this end the provisions of this Resolution are severable. The City Council hereby declares that it would have adopted this Resolution irrespective of the invalidity of any particular portion thereof.

Section 7. **Effective Date.** This Vesting Tentative Tract Map 19442 and Site Development Permit SDP-2025-00004 shall not take effect unless and until General Plan Amendment GPA-2026-01004 and Zone Change ZA-2026-01003are each approved by the City Council and have become effective, and the associated Development Agreement DA-2026-01001 is approved by the City Council and executed by both parties thereto.

Section 8. **Execution of Resolution**. The Mayor shall sign this Resolution and the City Clerk shall attest and certify to the passage and adoption thereof.

PASSED, APPROVED AND ADOPTED this 21st day of October 2026.

_____
Max Duncan, Mayor

APPROVED AS TO FORM:

_____
Scott C. Smith, City Attorney

ATTEST:

_____
Maria Kendig, City Clerk

STATE OF CALIFORNIA)
COUNTY OF ORANGE) ss.
CITY OF ALISO VIEJO)

I, Maria Kendig, City Clerk of the City of Aliso Viejo, California, DO HEREBY CERTIFY that the foregoing is the original of Resolution No. 2026-__ duly passed and adopted by the City Council of the City of Aliso Viejo at their regular meeting held on the 21st day of October 2026, by the following roll call vote, to wit:

AYES:

NOES:

ABSENT:

_____
MARIA KENDIG,
CITY CLERK

(SEAL)

Exhibit "A"
Conditions of Approval
Case Nos. GPA-2026-01004, ZA-2026-01003, VTTM 19442, and SDP-2025-00004

General

1. Indemnification. The Applicant shall indemnify, protect, defend, and hold the city, and/or any of its officials (appointed or elected), officers, employees, agents, departments, agencies, and instrumentalities thereof, harmless from any and all claims, demands, lawsuits, writs of mandamus, and other actions and proceedings (whether legal, equitable, declaratory, administrative or adjudicatory in nature), and alternative dispute resolution procedures (including, but not limited to arbitrations, mediations, and other such procedures), judgments, orders, and decisions (collectively 'Actions'), brought against the city, and/or any of its officials, officers, employees, agents, departments, agencies, and instrumentalities thereof, that challenge, attack, or seek to modify, set aside, void, or annul, any action of, or any permit or approval issued by the city and/or any of its officials, officers, employees, agents, departments, agencies, and instrumentalities thereof (including actions approved by the voters of the city) for or concerning the project, whether such Actions are brought under the Ralph M. Brown Act, California Environmental Quality Act, Planning and Zoning Law, Subdivision Map Act, Community Redevelopment Law, Code of Civil Procedure Sections 1085 or 1094.5, or any other federal, state, or local constitution, statute, law, ordinance, charter, rule, regulation, or any decision of a court of competent jurisdiction. It is expressly agreed the city shall have the right to approve, which approval will not be unreasonably withheld, legal counsel providing the city's defense, and that Applicant shall reimburse city for any costs and expenses directly and necessarily incurred by the city in the course of the defense. The city shall promptly notify the Applicant of any action brought, and city shall cooperate with the Applicant in defense of the action.

2. Other Agency Approvals. The Applicant shall comply with all applicable requirements of outside agencies having jurisdiction, including but not limited to the local fire authority, water district, and any other local, regional, State, or Federal agencies.

Development Agreement

3. **Prior to issuance of any building permit,** the Applicant shall execute the Development Agreement with the City. The Applicant shall comply with all terms and conditions of the agreement.

4. **Prior to issuance of any residential building permit,** the Applicant shall pay a City Public Benefit Fee of Fourteen Dollars ($14.00) per square foot of Habitable Area. The Public Benefit Fee attributable to each building shall be paid in full prior to the issuance of the Building Permit for such building. "Habitable Area" refers to

livable space within the interior walls of a Unit as reflected on the Building Permit and does not include any balcony, patio, or atrium open on one or more sides or any garage or accessory structure. Any remaining unpaid portion of the fees shall be subject to an annual increase on the anniversary date of the first building permit issued, beginning in the second year following such issuance and continuing annually thereafter. The City Public Benefit Fee shall be increased by a percentage set by the Consumer Price Index, which is defined at the Consumer Price Index for all Urban Consumers (CPI-U), published by the Bureau of Labor Statistics of the United States Department of Labor for Los-Angeles-Riverside-Orange County, All Items (1982-84=100) and utilizing the prior calendar year's average as the annual average. If this Index is discontinued, the Parties shall use any other renamed national index covering the Aliso Viejo metropolitan areas or any other successor or substitute index appropriately adjusted. In no event shall the City Public Benefit Fee be reduced. At any time during the construction of the Project and subject to Paragraph 2 above, Owner may elect to pay some or all of any remaining unpaid portion of the City Public Benefit Fee.

5. The Applicant shall provide a minimum of seven Affordable Units, each consisting of a two-bedroom, 2.5-bathroom unit. Each of the Affordable Units shall be "Plan 1" Units within "Garden Court" buildings. As shown on Site Development Permit No. SDP-2025-00004 ("Site Plan"), "Garden Court" buildings are Buildings 1, 3, 4, 7, 8, 9, 10, 12, and 13. Each unit shall be designed and located in full compliance with the plans approved by the City Council on October 21, 2026. **Prior to the issuance of the first Building Permit for a Unit within the Project**, Owner shall enter into a Density Bonus Housing Agreement. The Applicant shall comply with all terms and conditions of the Density Bonus Housing Agreement and the Development Agreement.

Vesting Tentative Tract Map

6. A final tract map shall be filed for approval and recordation pursuant to AVMC Chapter 14.18.

7. **Prior to approval of the Final Map**, the Applicant shall resolve any encroachments into the easements to the satisfaction of the City and all affected parties. No Final Map shall be approved for filing until documentation demonstrating resolution of the encroachment, whether by removal, relocation, or formal modification of the easement, has been reviewed and approved by the City. The Final Map shall reflect the corrected easement boundaries and conditions as approved.

8. Utility lines, including, but not limited to, electric, communications, street lighting, and cable television, shall be placed underground. The Applicant is responsible for making the necessary arrangements with the utility companies for the installation of such facilities. Appurtenances and associated equipment such as, but not limited to, surface-mounted transformers, pedestal-mounted terminal boxes, meter

cabinets, and concealed ducts in an underground system may be placed above ground within the street right-of-way where sufficient right-of-way width exists so as not to pose a serious hazard to pedestrian traffic.

9. All lots shall be connected to a sanitary sewer system.

Construction

10. The approved project involves the demolition of existing office development and construction of a new 137-unit townhome complex with associated parking lot and open space amenities. The project shall be constructed and maintained in full compliance with the approved plans and specifications, including but not limited to all details regarding building height, setbacks, site layout, parking, circulation, architectural features, and other design elements, reviewed by the City Council on October 21, 2026. Any modifications or deviations from the approved plans shall require prior review and approval by the City pursuant to AVMC 15.74.110 (Modifications to discretionary permits).

11. The approved project shall comply with all applicable provisions of the Aliso Viejo Municipal Code, including but not limited to building codes and any conditions imposed as part of the approval process.

12. **Prior to issuance of any permits,** the Applicant shall submit and obtain City approval of a construction plan detailing the phasing and timing of demolition of the existing office building, site grading, infrastructure installation, landscape/open space installation and construction of the approved 137-unit townhome community. All work shall proceed in accordance with the approved construction plan, and any substantive changes to phasing or timing shall require prior written authorization from the City.

13. **Prior to issuance of any permits**, the Applicant shall submit a proposed haul route for the transport of earth, materials, and equipment to and from the site. The haul route shall be reviewed and approved by the City to ensure public safety, minimize traffic impacts, and protect adjacent properties. No grading or excavation shall occur until the haul route has received written approval, and any subsequent modifications shall require prior authorization by the City.

14. **Following completion of grading and prior to issuance of any building permits**, the Applicant shall submit a pad certification prepared and signed by a licensed civil engineer or geotechnical engineer, verifying that all building pads have been graded in accordance with the approved grading plans and are suitable for the intended construction. The certification shall be reviewed and approved by the City prior to any construction.

15. Construction activities shall be limited to the hours of 7:00 a.m. to 8:00 p.m., Monday through Saturday. No construction shall occur on Sundays or on Federal holidays. Use of rock crusher on site is prohibited.

16. During all grading and construction activities, the construction contractor shall post a clearly visible sign at the project site boundary listing a contact name and telephone number.

17. **Prior to building permit final of any unit,** perimeter fencing shall be installed. The use of chain link, barbed wire, razor wire or electrified fencing are prohibited.

18. Project identification sign is required. Prior to installation of this sign, the project name shall be approved by the City to ensure appropriateness, aid in identification for emergency services and to avoid duplication with other projects in the City. Placement of any permanent and temporary signs may be permitted pursuant to AVMC Chapter 15.34.

19. Unless determined infeasible by the City, streetlights shall be placed off of sidewalks; and telephone and cable TV junction boxes, electrical handholes and other similar facilities shall be placed underground.

20. **Prior to residential building permit issuance,** the Applicant shall submit a lighting plan identifying the type, location and height of proposed lighting fixtures, with an associated photometric analysis showing lighting illumination levels and spillover. The lighting plan shall conform to the provisions of AVMC Zoning Code Appendix A (Requirements for Crime Prevention Through Environmental Design) and AVMC 15.62.070 (Outdoor Lighting) and shall be reviewed and approved by the Community Development Director and the Police Services Department prior to issuance of a building permit. The Police Services Department shall also review address numbers, certain landscaping, and door strikes and jambs as part of this same review and approval process.

21. Screening of Equipment and Facilities. Mechanical equipment, ground-mounted utility, mechanical, and other similar equipment shall be screened pursuant to AVMC 15.62.080 (Nonresidential Site Planning).

22. Landscaping shall comply with AVMC 15.62.060 (Landscaping and screening). All landscaping and common areas on site shall be maintained in perpetuity by the Applicant or an established homeowners' association.

Temporary Use Permits

23. The temporary placement of a trailer, recreational vehicle or other relocatable building, or the temporary use of a permanent structure on an active construction or grading site to serve as a construction and/or guard office may be permitted

subject to approval of a temporary use permit pursuant to AVMC 15.14.170 (Construction and Guard Offices).

24. Temporary model home complexes and real estate sales offices may be established subject to approval of a temporary use permit pursuant to AVMC 15.14.180 (Model Home Offices).

Permit Validity

25. Revocation of discretionary permits. Any discretionary permit may be revoked by the original decision-making authority pursuant to the provisions of AVMC 15.74.120 (Revocation of Discretionary Permits).

Orange County Fire Authority ("OCFA")

26. **Prior to building permit issuance, Applicant shall** submit a Fire Master Plan and Tentative Tract Map for review and approval.

27. **Prior to concealing interior construction**, submit plan for review and approval of the fire sprinkler system.

California Department of Transportation ("Caltrans")

28. All construction haul vehicles accessing the State Highway System must use routes approved by Caltrans. Any transportation of heavy construction equipment and/or materials which requires use of oversized-transport vehicles on State highways will require a Caltrans transportation permit. Large-size truck trips be limited to off-peak commute periods for the construction and operation phases. Construction truck loads shall be covered with a tarpaulin cover.

Public Works

P1. Install "No Residential Cut-Through Traffic" and/or similar regulatory signage at appropriate locations within the shared access area to clearly indicate that the connection is not to be utilized as a cut-through route.

P2. Install pavement markings with directional arrows at the shared access point to reinforce the intended circulation pattern, indicating left-turn out only at the roundabout for the project site.

P3. Include provisions within the project's Covenants, Conditions, and Restrictions (CC&Rs) informing residents that the shared access is not intended to function as a through route between the residential development and Pacific Park Plaza and also requiring the Homeowners Association (HOA) to maintain the associated signage and pavement markings.

P4. **Prior to any work being conducted within the City right of way**, the Owner/Developer shall obtain all necessary encroachment permits from the Public Works Department. Separate deposit is required for plan check/inspection of encroachment permit.

P5. **Prior to issuance of a grading permit**, the Owner/Developer shall submit to the Public Works Director for review and approval, street improvement plans including drainage plans and hydraulic calculations prepared by a California Registered Civil Engineer.

P6. The Applicant shall apply for and obtain encroachment permits or other permits from the Public Works Department for any work or placement within the public right-of-way.

P7. Water Quality Management Plan. **Prior to issuance of a grading permit**, the Owner/Developer shall submit and obtain approval of a final project-specific WQMP consistent with the applicable local WQMP or BMP Design Manual and the San Diego Regional MS4 Permit, Order No. R9-2013-0001, as amended by Order Nos. R9-2015-0001 and R9-2015-0100, or the applicable successor order. The WQMP shall address applicable low impact development, pollutant control, and hydromodification management requirements. The approved WQMP shall govern implementation and long-term maintenance of the project's water quality features. The Owner/Developer shall implement its requirements and allow City verification of compliance.

P8. **Prior to issuance of a construction or grading permit and before clearing, grading, or excavation**, the Owner/Developer shall provide evidence of coverage under the State Water Resources Control Board Construction General Permit, Order WQ 2022-0057-DWQ, or the applicable successor order, when coverage is required. Evidence shall include the applicable Notice of Intent and Waste Discharge Identification number or other documentation accepted by the Public Works Director. The Owner/Developer shall maintain required coverage throughout construction and satisfy applicable permit termination requirements.

P9. Other Water Board Approvals. **Before undertaking work requiring authorization the Regional Water Quality Control Board or the State Water Resources Control Board.,** the Owner/Developer shall obtain all applicable required permits and clearances from those Boards, including those applicable to grading, clearing, and grubbing. Copies shall be furnished to the Public Works Director before the affected work begins.

P10. Storm Water Pollution Prevention Plan. Where required by the Construction General Permit, the Owner/Developer shall have a Qualified SWPPP Developer prepare a Storm Water Pollution Prevention Plan (SWPPP) addressing potential pollutant sources, construction pollution prevention, and solid waste management. The SWPPP shall identify the design and placement of BMPs to prevent pollutants

from entering the storm drain system. The Owner/Developer shall retain a Qualified SWPPP Practitioner to implement the SWPPP and perform required inspections, monitoring, and corrective actions. The project shall provide onsite QSP oversight during construction as required by the applicable permit and City-approved construction controls.

P11. Erosion and Sediment Control Plan. **Prior to issuance of a grading permit,** the Owner/Developer shall submit an Erosion and Sediment Control Plan prepared by a qualified civil engineer. The plan shall address construction impacts and long-term effects on downstream environments and watersheds, relevant NPDES requirements, and appropriate best available technology. The plan shall identify temporary soil cover, inlet protection, vegetative filtering, debris basins, silt fences, sediment traps, and other controls suited to the site. Graded slopes shall be protected with approved cover or equivalent measures from October 1 through April 30.

P12. Construction BMPs on Project Plans. Construction plans shall identify applicable measures from the California Stormwater BMP Handbooks and the approved SWPPP and Erosion and Sediment Control Plan. Controls shall include temporary soil cover such as hydroseeding, mulch, binders, or erosion-control blankets; protection of storm drain inlets and drainage courses; grading contours that reduce flow concentration and velocity; runoff diversion; reduced soil exposure during the October-through-April rainy season; sediment traps or basins; and inspection and maintenance of all controls.

P13. Construction and Demolition Waste Management Plan and Recycling Permit. **Prior to issuance of the first permit authorizing demolition, grading, or construction**, the Owner/Developer shall submit and obtain City approval of a construction and demolition (C&D) Waste Management Plan and obtain any C&D recycling permit required by the City. The plan shall identify waste reduction measures, anticipated material types and quantities, materials to be salvaged or recycled, proposed haulers and receiving facilities, onsite separation or approved commingled processing, the responsible coordinator, and documentation procedures. The plan shall demonstrate compliance with the applicable CALGreen code and City waste reduction ordinance. For covered work, at least 65 percent of nonhazardous C&D waste shall be recycled or salvaged for reuse, or a more stringent applicable local standard shall be met. Any code-authorized alternative compliance method or exception requires documented approval by the enforcing agency. Calculations shall use the measurement basis and exclusions required by the applicable code and City program.

P14. Operational Solid Waste Management Plan and Enclosure Design. **Prior to issuance of a grading permit,** the Owner/Developer shall submit an operational Solid Waste Management Plan to the Public Works Director for approval. The plan shall address trash, recyclable materials, and organic waste, including food scraps and landscape waste as applicable to the project and local collection program. It

shall identify anticipated waste volumes, container capacity, collection frequency, separation procedures, and storage and enclosure locations. Enclosures shall comply with City screening and access standards, provide adequate space for required waste streams, and allow safe collection access. Containers shall be covered and maintained to prevent precipitation entry, litter, leakage, and pollutant discharge. Enclosure drainage and cleaning shall comply with the approved WQMP; wash water shall not enter storm drains. The plan shall be reviewed by the City-authorized or franchise waste hauler and revised as necessary for effective collection. Applicable commercial recycling and organics requirements, including AB 341, AB 1826, SB 1383, and local implementing requirements, shall be addressed.

P15. Drainage Improvement Plans and Security. **Prior to issuance of a grading permit**, the Owner/Developer shall submit drainage and related street improvement plans, with hydraulic calculations, prepared by a California registered civil engineer. The Owner/Developer shall post security required by the City to guarantee construction of the approved improvements.

P16. Hydrology Study and Final Drainage Plan. **Prior to issuance of a grading permit**, the Owner/Developer shall submit a hydrology study and final drainage plan addressing the onsite surface drainage system, underground facilities, and capacity of the offsite system to accommodate project-generated flows. Plans and calculations shall identify pre- and post-development runoff quantities and flow rates, watercourses, drainage areas and patterns, diversions, collection systems, flood hazard areas, sumps, and detention facilities. For an Orange County project, the study and plans shall follow the applicable Orange County Flood Control District Hydrology Manual, Orange County Local Drainage Manual, and Orange County Flood Control District Design Manual, as required by the City.

P17. Permanent Stormwater Facilities. A California registered civil engineer shall design the structural BMPs required by the approved WQMP as part of the drainage improvement plans. The Owner/Developer shall provide the approved infiltration, detention, treatment, and other BMPs and establish the maintenance mechanism required below. Selection and sizing of facilities shall follow the approved WQMP; a generic oil or grease trap shall not substitute for a required treatment or hydromodification BMP without City approval.

P18. Permanent Erosion Control Design. The grading and drainage plans shall consider drainage swales, subsurface and slope drains, storm drains, inlet and outlet protection, permanent vegetation, The Owner/Developer shall incorporate the features required by the Public Works Director to control permanent erosion sources.

P19. Onsite Collection and Municipal Connection. The Owner/Developer shall collect surface drainage in an onsite private storm drain system before discharge to the approved municipal storm drain connection. Sheet or concentrated flow shall not

leave the site across adjacent property or discharge uncontrolled into the public right-of-way. Surface water shall be conveyed into the onsite underground drainage system; parkway drains beneath sidewalks shall not be permitted.

P20. Protection of Adjacent Properties. The development shall not increase or concentrate surface drainage onto adjacent properties. The Owner/Developer shall provide all drainage improvements necessary to mitigate project stormwater flows and shall use reasonable efforts to minimize surface drainage across onsite sidewalks and driveways, to the Public Works Director's satisfaction.

P21. Storm Drain Capacity. Storm drains and catch basins shall be designed to carry at least the 10-year storm, or a larger design event where required by applicable City or flood-control standards. The Owner/Developer shall demonstrate that the selected design meets the standards applicable to the project.

P22. Flood Protection. The Owner/Developer shall demonstrate that habitable structures and other structures that are not floodproof will be protected from the 100-year flood level, to the Public Works Director's satisfaction.

P23. Conveyance to the Final Discharge Point. The Owner/Developer shall design and install all necessary onsite and offsite drainage facilities and appurtenances to safely contain and convey storm flows to the approved final discharge point. Facilities identified in approved drainage studies shall be shown on the final drainage plans.

P24. Ditches and Drainage Easements. Flows from V-ditches, ribbon gutters, and similar facilities shall enter the storm drain system before reaching streets, as required by the Public Works Director. Where necessary, the Owner/Developer shall extend facilities through recorded easements to eliminate surface flow between parcels. Maintenance responsibility for private facilities and associated easements shall be assigned to the property owner or other City-approved responsible entity.

P25. Detention Basin Design. Detention basins shall be designed to be safe, accessible for maintenance, and compatible with the site's landscaping and appearance. Basin design shall avoid creating an attractive nuisance.

P26. Appearance of Drainage Structures. **Prior to issuance of a precise grading permit**, the Owner/Developer shall obtain approval of the color and appearance of exposed concrete drainage structures from the Public Works Director and Community Development Director. Natural features and landscaping shall be incorporated where practical to reduce visibility without impairing function or maintenance access.

P27. Disturbance and Staged Grading. The Owner/Developer shall minimize disturbance of natural groundcover until needed for construction and limit

disturbance to the active construction phase. Requests for staged grading shall be approved by the Public Works Director. Stockpiles shall be located and managed under an approved grading plan. Street-cleaning and repair security shall be provided when required by the Public Works Director.

P28. Temporary stabilization. Temporary irrigation, hydroseeding, and/or approved erosion controls shall be installed on partially completed grading and other disturbed ground that remains, or is expected to remain, unfinished or undisturbed in its altered condition for more than 30 days or until the beginning of the rainy season, whichever occurs first. Earlier stabilization shall be provided where required by the SWPPP or applicable permit.

P29. Rainy season grading. Grading between October 15 and April 15 shall require the Public Works Director's approval and installation of erosion controls. Erosion-control facilities shall remain installed and functional between October 1 and April 30. Revised erosion-control plans shall be submitted by September 1 of each year from the start of clearing or grading until release of the grading bond. These dates do not waive year-round permit obligations or storm-event preparation requirements.

P30. NPDES Compliance Superintendent. The Owner/Developer shall designate an onsite superintendent responsible for NPDES compliance during grading and clearing through release of the grading bond. The superintendent shall have authority to hire personnel, obtain equipment, and purchase materials necessary to implement BMPs. The superintendent shall be present before and during grading or clearing, Monday through Friday, and on Saturdays when the probability of rain is 40 percent or greater. The superintendent shall be QSP certified.

P31. Temporary Stormwater Diversions. During site preparation and construction, the Owner/Developer shall install and maintain temporary stormwater diversion structures approved by the Public Works Director. Diversions shall be coordinated with the approved erosion and sediment controls.

P32. Vehicle Trackout Controls. The Owner/Developer shall remove mud and dirt from heavy construction vehicles before they leave the site. Sediment shall be contained and managed so they do not discharge to the storm drain system.

P33. Stabilization and Street Sweeping. Inactive disturbed areas shall be stabilized using approved nonhazardous stabilizers or suitable soil-binding vegetation. Nearby public streets shall be swept periodically, and as directed by the Public Works Director, to remove silt deposited by construction vehicles, wind, or runoff. Sediment shall be collected and properly disposed of.

P34. Construction Housekeeping and Equipment Maintenance. The Owner/Developer shall continuously maintain the site free of litter and debris in accordance with the SWPPP and applicable worker-safety requirements. The Owner/Developer shall

provide schedules and procedures for maintenance of earthmoving and other heavy equipment and document proper disposal of used oil and lubricants. Construction materials and wastes shall be managed to prevent pollutant discharge.

P35. Contractor Recycling and Diversion Records. The Owner/Developer shall require all contractors and subcontractors to implement the approved C&D Waste Management Plan and use authorized hauling and lawful receiving facilities. Provide designated containers or an approved commingled recovery system; protect waste from wind, precipitation, and runoff; and keep hazardous waste out of nonhazardous C&D recycling streams. Retain weight tickets, facility receipts, salvage and reuse records, and other City-required documentation identifying the project, material, quantity, destination, and recovered or disposed amount. Submit progress documentation when required by the City. These records shall support the applicable diversion calculation; shipment to a processing facility alone shall not establish that all material was diverted.

P36. Permanent Slope Planting. Graded slopes shall be permanently planted in a timely manner with groundcover, trees, and shrubs that stabilize slopes and minimize erosion. Planting shall conform to the approved landscape plan and meet the Public Works Director's approval.

P37. Recorded Stormwater Maintenance Covenant. **Prior to issuance of certificate of occupancy**, the Owner/Developer shall execute and record a City-approved stormwater BMP maintenance covenant against the property in the official records of the County Recorder and provide the City with a conformed recorded copy and recording information. The covenant shall run with the land and bind successors and assigns. It shall identify the BMPs and responsible maintenance party; incorporate or reference the approved WQMP and operation and maintenance requirements; establish responsibility and funding for inspection, maintenance, repair, and replacement; and provide City-approved access, inspection, and enforcement provisions. Required drainage, access, and maintenance easements and ownership instruments shall also be recorded. The Owner/Developer shall provide evidence of these arrangements to the Public Works Director before occupancy clearance. This condition implements the maintenance-mechanism and recordation obligations in Regional MS4 Permit Provisions E.3.c.(4) and E.3.e.(1)(c).

P38. Post Construction BMP Certification. **Prior to issuance of certificate of occupancy**, the Owner/Developer shall submit a post-construction BMP installation and operational certification, signed and stamped by the California registered civil engineer responsible for the stormwater design, or another appropriately licensed professional accepted by the Public Works Director. The certification shall identify each permanent structural BMP and confirm, based on construction observations and supporting records, that it has been installed in accordance with the approved WQMP, plans, specifications, and approved

revisions and is functioning as designed. The submittal shall include record drawings, a BMP inventory and location plan, photographs and applicable testing or inspection records, and the final operation and maintenance information. Unapproved deviations and deficiencies shall be corrected, and revised documentation shall be accepted by the Public Works Director before occupancy clearance. This certification supports the City's verification under Regional MS4 Permit Provision E.3.e.(1)(d) and does not replace the required final inspection.

P39. Final WQMP Inspection and City Acceptance. **Prior to issuance of certificate of occupancy**, the Owner/Developer shall request and obtain a satisfactory final WQMP inspection and written stormwater clearance from the Public Works Director. The inspection shall verify that each permanent structural BMP has been constructed and is operating in compliance with the approved WQMP, specifications, plans, permits, applicable ordinances, and Regional MS4 Permit requirements. The inspection shall also verify required source controls, drainage connections, inlet labels, maintenance access, and correction of construction-related sediment accumulation or damage. All deficiencies shall be corrected and any required reinspection completed before occupancy or intended use. The recorded maintenance covenant and accepted post-construction BMP certification shall be provided before the City issues stormwater clearance. This condition implements Regional MS4 Permit Provision E.3.e.(1)(d).

P40. Solid Waste Recycling and Organic Waste Collection. **Prior to issuance of certificate of occupancy**,, the Owner/Developer shall provide evidence of active or scheduled-to-commence trash, recycling, and organic waste collection services through the City-authorized waste hauler. Evidence shall identify the site, required waste streams, container sizes, and collection frequency. Any applicable waiver or lawful alternative compliance method shall be documented and accepted by the City. Approved enclosures and adequately sized, accessible, properly labeled or color-coded containers shall be installed and ready for use before occupancy. Collection shall begin no later than occupancy or intended use.

P41. C and D Diversion Verification and Permit Closeout. **Prior to issuance of certificate of occupancy**, the Owner/Developer shall submit a final C&D diversion report with supporting receipts, weight tickets, and salvage or reuse records demonstrating compliance with the approved Waste Management Plan and applicable diversion requirement or approved alternative. Obtain City acceptance and close out any required C&D recycling permit. For phased construction or temporary occupancy, submit interim records and obtain City approval of the remaining reporting and closeout schedule; temporary occupancy shall not waive outstanding diversion obligations.

P42. Perpetual BMP Maintenance. The property owner or City-approved responsible entity shall inspect, operate, maintain, repair, and replace all structural and nonstructural BMPs in accordance with the approved WQMP, recorded covenant, and approved operation and maintenance plan. Applicable CC&Rs shall

incorporate the maintenance obligations. Responsibilities shall continue through ownership transfers. Maintenance records shall be retained and made available to the City, and the responsible entity shall allow inspections and complete corrective actions required by the City.

P43. Landscaping and Irrigation Runoff. Landscaping shall be permanently maintained in a healthy condition. Irrigation shall be designed, operated, and maintained to eliminate runoff to the extent practical and promote surface filtration. Fertilizer and pesticide use shall be minimized to reduce urban runoff pollution.

P44. Storm Drain Inlet Labeling. All onsite storm drain inlets shall be labeled “Don’t Dump Drains to Ocean,” or with equivalent wording approved by the City. Labels shall remain legible and shall be replaced as necessary.

P45. Storm Drain Cleaning. All onsite storm drains shall be cleaned using approved methods at least twice annually, once immediately before October 1 and once in January. Additional cleaning shall be performed when required by the approved WQMP, facility condition, or the Public Works Director, including during construction.

P46. Sweeping and Wash Water Management. Parking, circulation, and street surfaces shall be maintained in good condition and swept at least as frequently as City public streets. Common sidewalks, walkways, and parking areas shall be swept regularly to prevent litter and debris accumulation. During sweeping or washing, debris shall be captured and collected. Cleaning agents and wash water shall not enter storm drains. Wash water proposed for sanitary-sewer disposal shall be collected and discharged only with the applicable sanitary-sewer agency’s approval.

P47. Ongoing Collection Separation and Education. The property owner or responsible operator shall maintain sufficient trash, recycling, and organic waste collection service and container capacity throughout operation, consistent with the approved Solid Waste Management Plan and applicable City requirements. Occupants and landscape contractors shall separate materials according to the local collection program. Required indoor and outdoor collection containers shall have compliant labels or colors and be placed in required locations. The responsible operator shall provide required sorting education to employees, contractors, tenants, and customers, inspect for contamination, and correct improper sorting and overflowing containers. Applicable business education shall occur at least annually, with required information provided to new tenants within 14 days of occupancy. Maintain service and compliance records for City review and update service levels when occupancy or waste generation changes.

P48. Litter and Debris Removal. Common areas shall be maintained free of litter and debris. Waste storage areas shall remain functional and shall be operated in

accordance with the approved solid waste management plan and WQMP source controls.

P49. Outdoor Vehicle Maintenance and Washing. Outdoor vehicle maintenance shall be prohibited. Car washing shall be prohibited unless a dedicated area is designed and approved to meet applicable water quality requirements. If proposed, the location and design of the washing area shall be approved by the Public Works Director and Community Development Director before issuance of a precise grading permit. Wash water shall not enter storm drains.

Mitigation Measures

Air Quality

PDF AQ-1: The project will follow the SCAQMD rules and requirements for fugitive dust control, which include, but are not limited to the following:

1. Pre-water active grading or trenching areas.
2. Water all active construction areas as frequently as needed (at least twice daily) to prevent visible dust plumes from extending more than 100 feet.
3. Maintain a stabilized surface or apply dust suppressants to inactive areas, disturbed surfaces, staging areas, haul routes, and unpaved roads.
4. Limit on-site vehicle speeds to 15 mph on unpaved areas.
5. Maintain all haul trucks with covered loads and ≥6 inches of freeboard (CVC §23114).
6. Stabilize stockpiles with water or covers and restrict height if near occupied structures.
7. Use a gravel pad at egress points (minimum 30' x 50', 1" washed gravel, 6" depth), or alternatively a wheel shaker or wheel washing station.
8. Remove track-out extending ≥25 feet onto public roadways immediately and clean daily.
9. Suspend dust-generating activities and implement contingency measures during high wind events (wind gusts >25 mph).
10. Re-vegetate or stabilize disturbed areas within 21 days of inactivity.
11. Limit construction vehicle traffic to designated haul routes only.

PDF AQ-2: Construction equipment shall be maintained in proper tune.

PDF AQ-3: All construction vehicles shall be prohibited from excessive idling. Excessive idling is defined as five (5) minutes or longer.

PDF AQ-4: Minimize the simultaneous operation of multiple construction equipment units, to the maximum extent feasible.

PDF AQ-5: The use of heavy construction equipment and earthmoving activity shall be suspended during Air Alerts when the Air Quality Index reaches the “Unhealthy” level.

PDF AQ-6: Establish staging areas for the construction equipment that are as distant as possible from adjacent residential homes.

PDF AQ-7: Utilize zero VOC and low VOC paints and solvents, where feasible.

PDF AQ-8: The project will comply with the mandatory requirements of the California Building Standards Code, Title 24, Part 6 (Energy Code) and Part 11 (CALGreen), including, but not limited to:

1. Install low flow fixtures and toilets, water efficient irrigation systems, drought tolerant/native landscaping, and reduce the amount of turf.
2. Provide the necessary infrastructure to support electric vehicle charging.
3. Provide solar installations/solar readiness zones per the prescribed Energy Design Ratings.

PDF AQ-9: Participate in the local waste management recycling and composting programs.

AQ-1: All off-road diesel construction equipment over 100 horsepower will have Tier 4 low emission “clean diesel” engines (OEM or retrofit) that include diesel oxidation catalysts and diesel particulate filters that meet the latest CARB best available control technology.

Biological Resources

BIO-1: Prior to ground disturbances that would impact potentially suitable nesting habitat for avian species, the Project Applicant shall adhere to the following:

1. Vegetation removal activities shall be scheduled outside the nesting season (September 1 to February 14 for songbirds; September 1 to January 14 for raptors) to the extent feasible to avoid potential impacts to nesting birds and/or ground nesters.
2. Any construction activities that occur during typical nesting season (February 15 to August 31 for songbirds; January 15 to August 31 for raptors) will require that all suitable habitat, on-site and within 300-feet surrounding the site (as feasible), be thoroughly surveyed for the presence of nesting birds by a qualified biologist before commencement ground disturbances. If active nests are identified, the biologist would establish buffers around the vegetation (500 feet for raptors and sensitive species, 200 feet for non-raptors/non-sensitive species). All work within these buffers would be halted until the nesting effort is finished (i.e. the juveniles are surviving independent from the nest). The onsite biologist would review and verify compliance with these nesting boundaries and would verify the nesting effort has finished. Work can resume within these areas when no other active nests are found. Alternatively, a qualified biologist may determine that construction can be permitted within the

buffer areas and would develop a monitoring plan to prevent any impacts while the nest continues to be active (eggs, chicks, etc.). Upon completion of the survey and any follow-up construction avoidance management, a report shall be prepared and submitted to City for mitigation monitoring compliance record keeping.

Geology and Soils

GEO-1: The Project Applicant shall implement the recommendations contained in the Preliminary Geotechnical Investigation and Review of Vesting Tentative Tract Map 19442, Proposed Residential Redevelopment, Aliso Viejo, California, dated November 25, 2025, by NMG Geotechnical, Inc. (Appendix D) to reduce geologic hazards during implementation of the proposed Project. Included in the reports are site-specific recommendations involving such topics as grading and earthwork, slope stability, retaining walls, seismic design, construction materials, geotechnical observation, and testing and plan reviews.

GEO-2: Prior to the issuance of a grading permit, the Applicant shall prepare a final geotechnical report based on the final rough grading plans and the final geotechnical report shall incorporate all of the recommendations included in Preliminary Geotechnical Investigation and Review of Vesting Tentative Tract Map 19442, Proposed Residential Redevelopment, Aliso Viejo, California dated November 25, 2025, by NMG Geotechnical Inc (Appendix D). The geotechnical report included in Appendix D has established that the site is geotechnically suitable for development and a final geotechnical report is required to ensure all construction-level geotechnical recommendations and design parameters are included on the final rough grading plans.

PALEO-1: Prior to the issuance of a grading permit, the Applicant shall prepare for City review and approval a Paleontological Mitigation Monitoring Plan, as follows:

1. All mitigation programs shall be performed by a qualified professional (Project) paleontologist, defined as an individual with a master's or doctorate in paleontology or geology who has proven experience and is knowledgeable in professional paleontological procedures and techniques. Fieldwork may be conducted by a qualified paleontological monitor, defined as an individual who has experience in the collection and salvage of fossil materials. The paleontological monitor shall always work under the direction of a qualified paleontologist.
2. Starting at one foot above the artificial fill/bedrock interface, full-time monitoring shall be conducted in areas of grading or excavation within the Niguel and Monterey formations. Monitoring of artificial fill or disturbed deposits that may be present otherwise is not required.
3. Paleontological monitors will be equipped to salvage fossils as they are unearthed to avoid construction delays. The monitor must be empowered to temporarily halt or divert equipment to allow for the removal of abundant

or large specimens in a timely manner. Monitoring may be reduced if the potentially fossiliferous units are not present in the subsurface, or, if present, are determined upon exposure and examination by qualified paleontological personnel to have low potential to contain fossil resources. The monitor shall notify the project paleontologist, who will then notify any concerned parties of the discovery.

4. Paleontological salvage during trenching and boring activities is typically from the generated spoils and will not delay trenching or drilling activities. Fossils will be collected and placed in cardboard flats or plastic buckets and identified by field number, collector, and date collected. Before the site is vacated and the fossils are moved to a safe place, notes are taken on the map location and stratigraphy of the site. On mass grading projects, discovered fossil sites are protected by flagging to prevent them from being overrun by earthmovers (scrapers) before salvage begins. Fossils will be collected in a similar manner, with notes and photographs being taken before removing the fossils. Precise location of the site is determined through use of handheld Global Positioning System units. If a large terrestrial vertebrate, such as a large bone or a mammoth tusk, is too large to be easily removed by a single monitor, a fossil recovery crew shall excavate around the find(s), encase the find(s) within a plaster and burlap jacket, and remove the find(s) after the plaster is set. For large fossils, use of the contractor's construction equipment may be solicited to help move the jacket to a safe location.
5. In the laboratory, individual fossils will be cleaned of extraneous matrix, any breaks will be repaired, and the specimen, if needed, will be stabilized by soaking in an archivally approved acrylic hardener (e.g., a solution of acetone and Paraloid B-72).
6. Recovered specimens will be prepared to a point of identification and permanent preservation (not display), including screenwashing sediments to recover small invertebrates and vertebrates. Preparation of individual vertebrate fossils is often more time consuming than for accumulations of invertebrate fossils.
7. Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage (e.g., the Orange County Parks' Cooper Center) shall be conducted. The paleontological program should include a written repository agreement prior to initiating mitigation activities. Prior to curation, the lead agency (the City of Aliso Viejo) will be consulted on the repository/museum to receive the fossil material.
8. A final report of findings and significance will be prepared, including lists of all fossils recovered and necessary maps and graphics to accurately record their original location(s). The report, when submitted to and accepted by the appropriate lead agency, will signify satisfactory completion of the project program to mitigate impacts to any potential nonrenewable paleontological resources (i.e., fossils) that might have been lost or otherwise adversely affected without such a program in place.

Hydrology

HYD-1: **Prior to the issuance of building permits,** the storm drain plans shall demonstrate that the storm drain pipes are sufficiently sized to capture and store storm runoff volume in the developed condition in order to discharge the storm runoff at or below the existing peak flow rate leaving the Project site.

Tribal Cultural Resources

TRC-1: Retain a Native American Monitor **Prior to Commencement of Ground-Disturbing Activities**. The project applicant shall retain a Native American Monitor from or approved by the consulting tribe(s). The Monitor shall be retained prior to the commencement of any "ground-disturbing activity" for the subject project at all project locations (i.e., both onsite and any off-site locations included in the project description/definition and/or required in connection with the project, such as public improvement work). "Ground disturbing activity" shall include, but is not limited to, demolition, pavement removal, potholing, auguring, grubbing, tree removal, boring, grading, excavation, drilling, and trenching in areas of previously disturbed soil. A copy of the executed monitoring agreement shall be submitted to the Director of Community Development prior to the earlier date of either: (1) the commencement of any ground-disturbing activity, or (2) the issuance of any permit required to commence any ground-disturbing activity. The Monitor shall complete daily monitoring logs that will provide descriptions of the relevant ground disturbing activities, the type of construction activities performed, locations of ground-disturbing activities, soil types, cultural-related materials, and any other facts, conditions, materials, or discoveries of significance to the Tribes. Monitor logs hall identify and describe any discovered Tribal Cultural Resources (TCRs), including, but not limited to, Native American cultural and historical artifacts, remains, places of significance, etc., (collectively, Tribal Cultural Resources, or TCRs), as well as any discovered Native American (ancestral) human remains and burial goods. Copies of Monitor logs shall be provided to the project applicant and the Director of Community Development upon written request to the Tribe. On-site Tribal monitoring shall conclude upon the latter of the following: (1) written confirmation to the Monitor and the Lead Agency that all ground disturbing activities and phases that may involve ground-disturbing activities on the project site or in connection with the project are complete; or (2) a determination and written notification by the Monitor to the Director of Community Development that no future planned construction activity and/or development/construction phase at the project site possesses the potential to impact to TCRs.

TRC-2: Unanticipated Discovery of Tribal Cultural Resource Objects (Nonfunerary/Non-ceremonial). Upon discovery of any Tribal Cultural Resources (TCRs), all construction activities in the immediate vicinity of the discovery (i.e., not less than the surrounding 50 feet) shall cease. The City shall consult with the project Archaeologist and initiate Native American consultation procedures with the project's consulting Tribes (Gabrieleño Band of Mission

Indians-Kizh Nation and the Juaneño Band of Mission Indians, Acjachemen Nation). The consultation effort is intended to be a meaningful and timely process of seeking, discussing, and considering carefully the views of others in a manner that is cognizant of all parties' cultural values and, where feasible, seeking agreement on the appropriate treatment and disposition of TCRs discovered. A Cultural Resources and Monitoring and Treatment Plan shall be created by the Archaeologist in coordination with the consulting Tribes (Gabrieleño Band of Mission Indians-Kizh Nation and the Juaneño Band of Mission Indians, Acjachemen Nation) and all subsequent finds shall be subject to this plan. Project construction shall not resume within the immediate vicinity of the discovery (i.e., not less than the surrounding 50 feet) until a Cultural Resources and Monitoring Treatment Plan is prepared and implemented. The plan may include, but would not be limited to, reburying, relocating, recording, and/or another culturally appropriate treatment. If it is determined that mutual agreement cannot be reached within 30 days of the initial consultation meeting, the TCR(s) under review shall be reinterred on-site in a location free from future ground-disturbing construction activities. This measure does not apply to the finding of human remains, which must comply with California Health and Safety Code Section 7050.5.

TRC-3: Unanticipated Discovery of Human Remains and Associated Funerary or Ceremonial Objects.

A. Native American human remains are defined in PRC 5097.98 (d)(1) as an inhumation or cremation, and in any state of decomposition or skeletal completeness. Funerary objects, called associated grave goods in Public Resources Code Section 5097.98, are also to be treated according to this statute.
B. If Native American human remains and/or grave goods are discovered or recognized on the project site, then Public Resource Code 5097.9 as well as Health and Safety Code Section 7050.5 shall be followed.
C. Human remains and grave/burial goods shall be treated alike per California Public Resources Code Section 5097.98(d)(1) and (2).
D. Preservation in place (i.e., avoidance) is the preferred manner of treatment for discovered human remains and/or burial goods.
E. Any discovery of human remains/burial goods shall be kept confidential to prevent further disturbance.

Exhibit “B”
Project Plans

Exhibit “C”
Vesting Tentative Tract Map 19442

A0.1 COVER SHEET
A0.2 SITE PLAN
A1.1 GARDEN COURT 5-UNIT FIRST FLOOR PLAN
A1.2 GARDEN COURT 5-UNIT SECOND FLOOR PLAN
A1.3 GARDEN COURT 5-UNIT THIRD FLOOR PLAN
A1.4 GARDEN COURT 10-UNIT FIRST FLOOR PLAN
A1.5 GARDEN COURT 10-UNIT SECOND FLOOR PLAN
A1.6 GARDEN COURT 10-UNIT THIRD FLOOR PLAN
A1.7 GARDEN COURT 10-UNIT ELEVATION
A1.8 GARDEN COURT 10-UNIT ELEVATION
A1.9 GARDEN COURT 13-UNIT FIRST FLOOR PLAN
A1.10 GARDEN COURT 13-UNIT SECOND FLOOR PLAN
A1.11 GARDEN COURT 13-UNIT THIRD FLOOR PLAN
A1.12 GARDEN COURT 2-UNIT FIRST FLOOR PLAN
A1.13 GARDEN COURT 2-UNIT SECOND FLOOR PLAN
A1.14 GARDEN COURT 2-UNIT THIRD FLOOR PLAN
A1.15 GARDEN COURT 4-UNIT FIRST FLOOR PLAN
A1.16 GARDEN COURT 4-UNIT SECOND FLOOR PLAN
A1.17 GARDEN COURT 4-UNIT THIRD FLOOR PLAN
A1.18 GARDEN COURT 6-UNIT FIRST FLOOR PLAN
A1.19 GARDEN COURT 6-UNIT SECOND FLOOR PLAN
A1.20 GARDEN COURT 6-UNIT THIRD FLOOR PLAN
A1.21 GARDEN COURT 6-UNIT ELEVATION
A1.22 GARDEN COURT 6-UNIT ELEVATION
A1.23 GARDEN COURT 7-UNIT FIRST FLOOR PLAN
A1.24 GARDEN COURT 7-UNIT SECOND FLOOR PLAN
A1.25 GARDEN COURT 7-UNIT THIRD FLOOR PLAN
A2.1 ROWTOWN 4-UNIT FIRST FLOOR PLAN
A2.2 ROWTOWN 4-UNIT SECOND FLOOR PLAN
A2.3 ROWTOWN 4-UNIT THIRD FLOOR PLAN
A2.4 ROWTOWN 4-UNIT ELEVATION
A2.5 ROWTOWN 4-UNIT ELEVATION
A2.6 ROWTOWN 4-UNIT ELEVATION
A2.7 ROWTOWN 5-UNIT FIRST FLOOR PLAN
A2.8 ROWTOWN 5-UNIT SECOND FLOOR PLAN
A2.9 ROWTOWN 5-UNIT THIRD FLOOR PLAN
A2.10 ROWTOWN 5-UNIT ELEVATION
A2.11 ROWTOWN 5-UNIT ELEVATION
A2.12 ROWTOWN 5-UNIT ELEVATION
A2.13 ROWTOWN 6-UNIT FIRST FLOOR PLAN
A2.14 ROWTOWN 6-UNIT SECOND FLOOR PLAN
A2.15 ROWTOWN 6-UNIT THIRD FLOOR PLAN
A2.16 ROWTOWN 6-UNIT ELEVATION
A2.17 ROWTOWN 6-UNIT ELEVATION
A2.18 ROWTOWN 6-UNIT ELEVATION
L-1 CONCEPTUAL SITE PLAN
L-2 COMMUNITY POOL AREA AND PASEO
L-3 COMMUNITY ENTRY ENLARGEMENT
L-4 TYPICAL COURTYARD AND PASEO
L-5 CIRCULATION PLAN
L-6 SOLID WASTE PLAN
L-7 CONCEPTUAL WALL AND FENCE PLAN
L-8 COMMUNITY OPEN SPACE
L-9 WATER USE CALCULATIONS
L-10 CONCEPTUAL PLANTING PALETTE
C-1 VESTING TENTATIVE TRACT MAP
C-2 VESTING TENTATIVE TRACT MAP SECTIONS
C-3 VESTING TENTATIVE TRACT MAP EXISTING SITE EXCUMBERANCES
C-4 ENGINEERING SITE PLAN
C-5 PRELIMINARY GRADING PLAN
C-6 PRELIMINARY CUT-FILL MAP
C-7 UTILITY PLAN
E-1.0 SITE LIGHTING NOTES
E-1.1 SITE LIGHTING PLAN
E-1.2 PHOTOMETRIC SITE PLAN
E-1.3 LIGHTING SPECIFICATIONS

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ALISO VIEJO | SHEA HOMES

ALISO VIEJO, CALIFORNIA

NOTE: SQUARE FOOTAGE MAY VARY BASED ON CALCULATION METHODS

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SITE DATA

GARDEN COURTS	**67**
PLAN 1 - 2 BR (7 AFFORDABLE UNITS)	*14*
PLAN 2 - 3 BR	*14*
PLAN 3 - 3 BR	*14*
PLAN 4 - 3 BR	*11*
PLAN 5 - 4 BR	*14*
ROWTOWNS	**70**
PLAN 1 - 3 BR	16
PLAN 2 - 4 BR	26
PLAN 3 - 4 BR	28
TOTAL UNITS	**137**

5% OF THE HOUSING UNITS WILL BE DEED-RESTRICTED TO VERY LOW-INCOME RESIDENTS (50% AMI)

PARKING

GARAGE SPACES	260
STREET SPACES	83
TOTAL SPACES	**343**
SPACES PER UNIT	*2.51*

OPEN SPACE

TOTAL SITE AREA (367,646 SQ.FT.)	**8.44 AC**
CENTRAL PARK	7,000 SQ.FT.
PASEOS/GREEN COURTS	51,400 SQ.FT.
OPEN SPACE SUBTOTAL (15.8%)	**58,000 SQ.FT.**
SLOPE AREA	69,000 SQ.FT.
OPEN SPACE TOTAL (34.7%)	**127,400 SQ.FT.**

10.01.2026

ALISO VIEJO | SHEA HOMES

ALISO VIEJO, CALIFORNIA

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PLAN FIVE		PLAN ONE		PLAN TWO	
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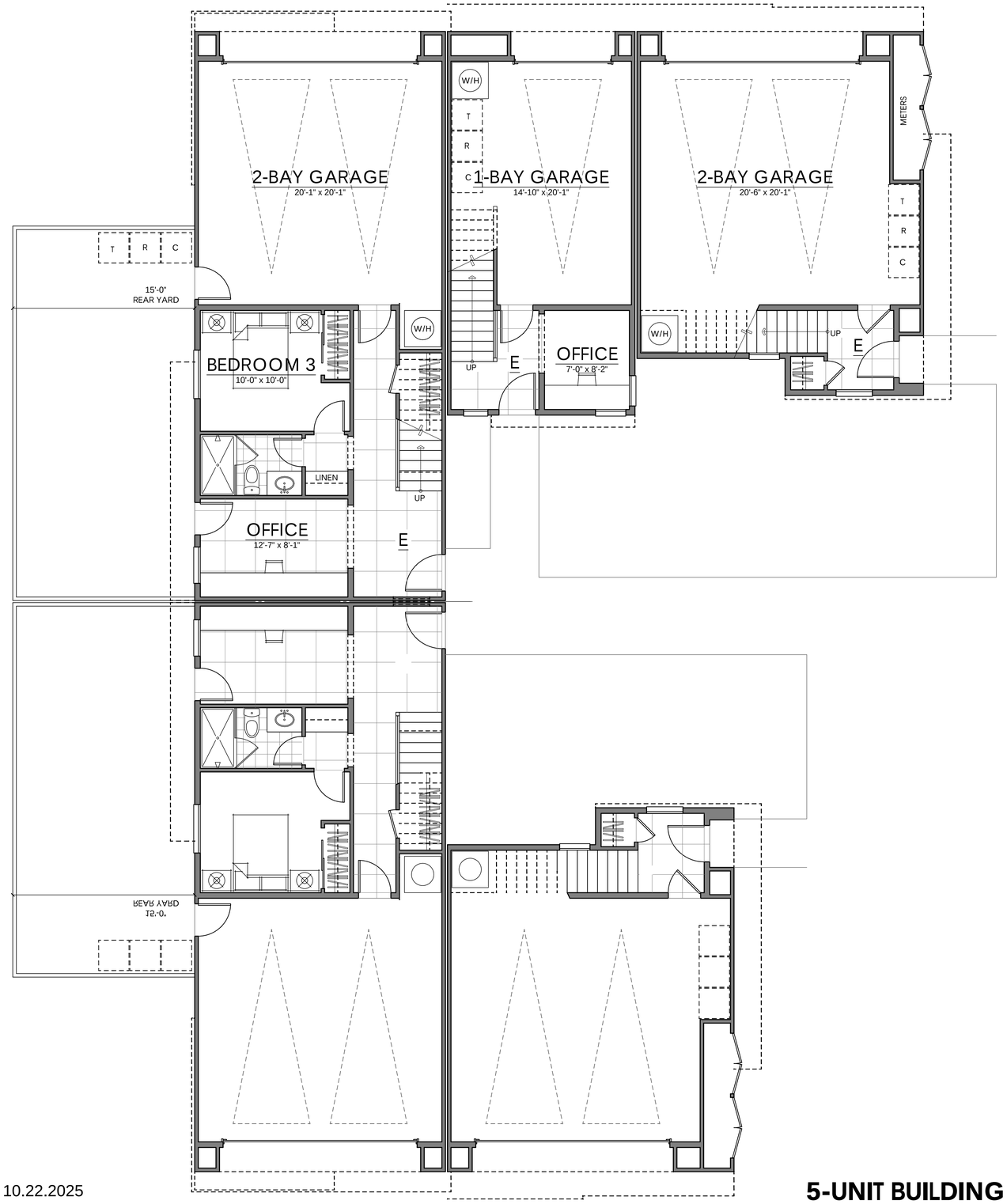
SECOND FLOOR	706 SQ. FT.	SECOND FLOOR	436 SQ. FT.	SECOND FLOOR	621 SQ. FT.
THIRD FLOOR	976 SQ. FT.	THIRD FLOOR	494 SQ. FT.	THIRD FLOOR	713 SQ. FT.
TOTAL LIVING	**2186 SQ. FT.**	**TOTAL LIVING**	**1102 SQ. FT.**	**TOTAL LIVING**	**1456 SQ. FT.**
BALCONY	225 SQ. FT.	BALCONY	65 SQ. FT.	BALCONY	88 SQ. FT.



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5-UNIT BUILDING | FIRST FLOOR

ALISO VIEJO | GARDEN COURTS | SHEA HOMES

ALISO VIEJO, CALIFORNIA

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5-UNIT BUILDING | SECOND FLOOR

ALISO VIEJO | GARDEN COURTS | SHEA HOMES

ALISO VIEJO, CALIFORNIA

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5-UNIT BUILDING | THIRD FLOOR

ALISO VIEJO | GARDEN COURTS | SHEA HOMES

ALISO VIEJO, CALIFORNIA

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BALCONY	225 SQ. FT.	BALCONY	115 SQ. FT.	BALCONY	154 SQ. FT.	BALCONY	65 SQ. FT.	BALCONY	88 SQ. FT.

10.22.2025

10 UNIT BUILDING | FIRST FLOOR

ALISO VIEJO | GARDEN COURTS | SHEA HOMES

ALISO VIEJO, CALIFORNIA

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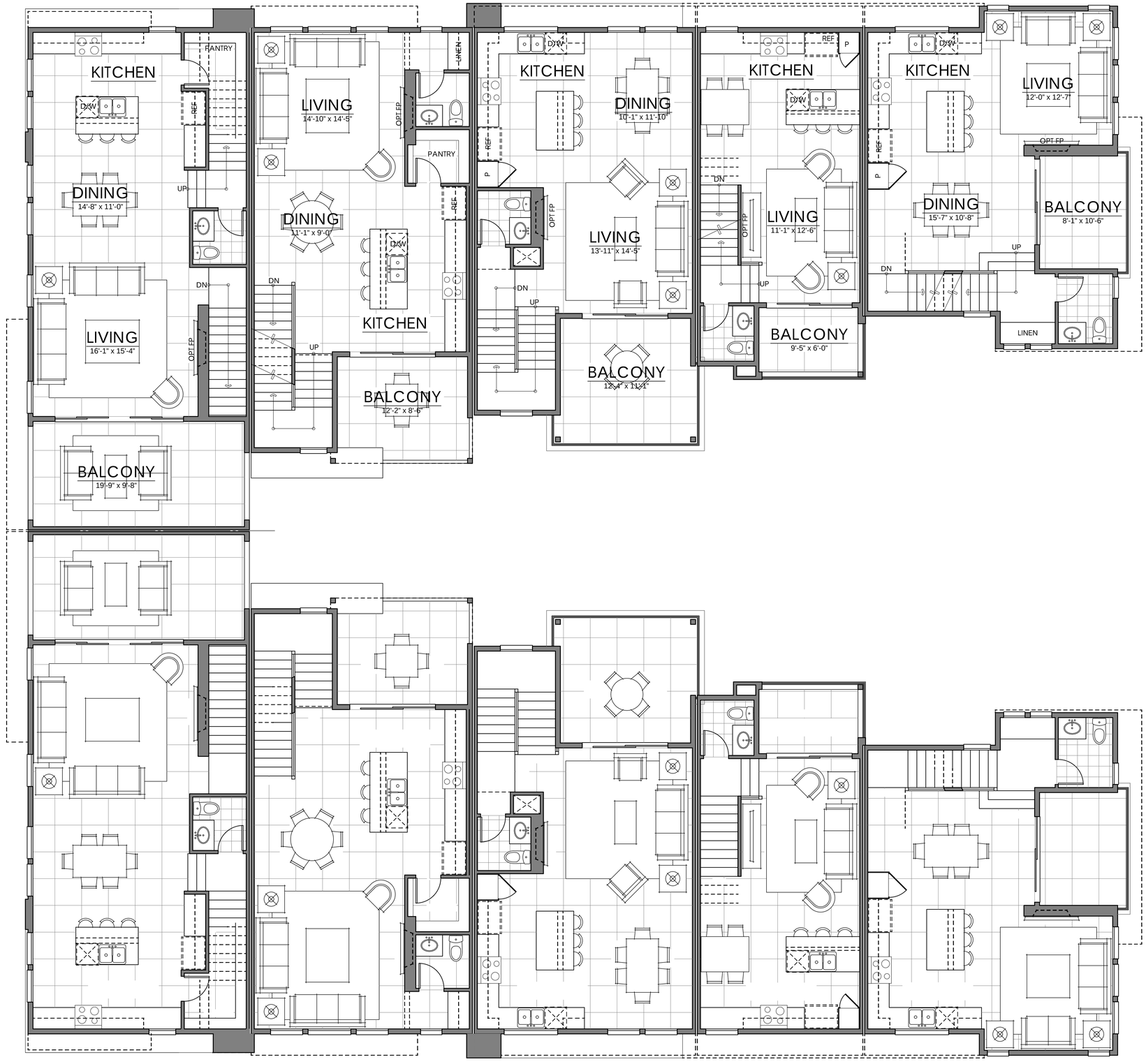

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10.22.2025

10 UNIT BUILDING | SECOND FLOOR

ALISO VIEJO | GARDEN COURTS | SHEA HOMES

ALISO VIEJO, CALIFORNIA

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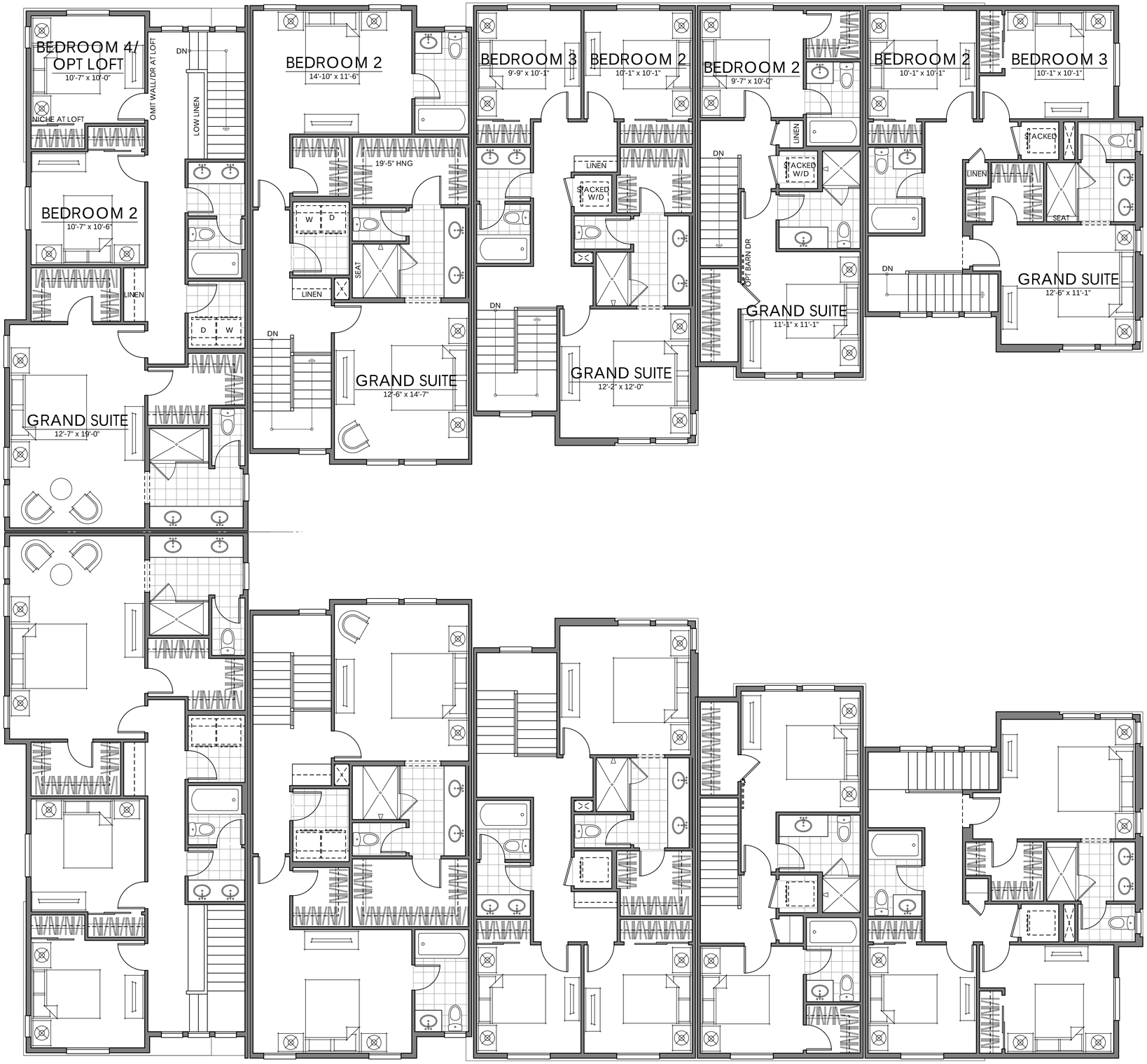

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10.22.2025

10 UNIT BUILDING | THIRD FLOOR

ALISO VIEJO | GARDEN COURTS | SHEA HOMES

ALISO VIEJO, CALIFORNIA

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FRONT ELEVATION

SCALE: 1/4" = 1'-0"

REAR ELEVATION

SCALE: 1/4" = 1'-0"

ALL BUILDINGS WITH (4)OR MORE UNITS SHALL FALL UNDER THE REQUIREMENT OF CHAPTER 11A SECTION 1102A.3.1 FOR THE ACCESSIBILITY OF THE UNITS.

10.22.2025

10-UNIT BUILDING

ALISO VIEJO | GARDEN COURTS | SHEA HOMES

ALISO VIEJO, CALIFORNIA

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LEFT ELEVATION

SCALE: 1/4" = 1'-0"

RIGHT ELEVATION

SCALE: 1/4" = 1'-0"

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10-UNIT BUILDING

ALISO VIEJO | GARDEN COURTS | SHEA HOMES

ALISO VIEJO, CALIFORNIA

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13-UNIT BUILDING | FIRST FLOOR

ALISO VIEJO | GARDEN COURTS | SHEA HOMES

ALISO VIEJO, CALIFORNIA

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10.22.2025

13-UNIT BUILDING | SECOND FLOOR

ALISO VIEJO | GARDEN COURTS | SHEA HOMES

ALISO VIEJO, CALIFORNIA

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13-UNIT BUILDING | THIRD FLOOR

ALISO VIEJO | GARDEN COURTS | SHEA HOMES

ALISO VIEJO, CALIFORNIA

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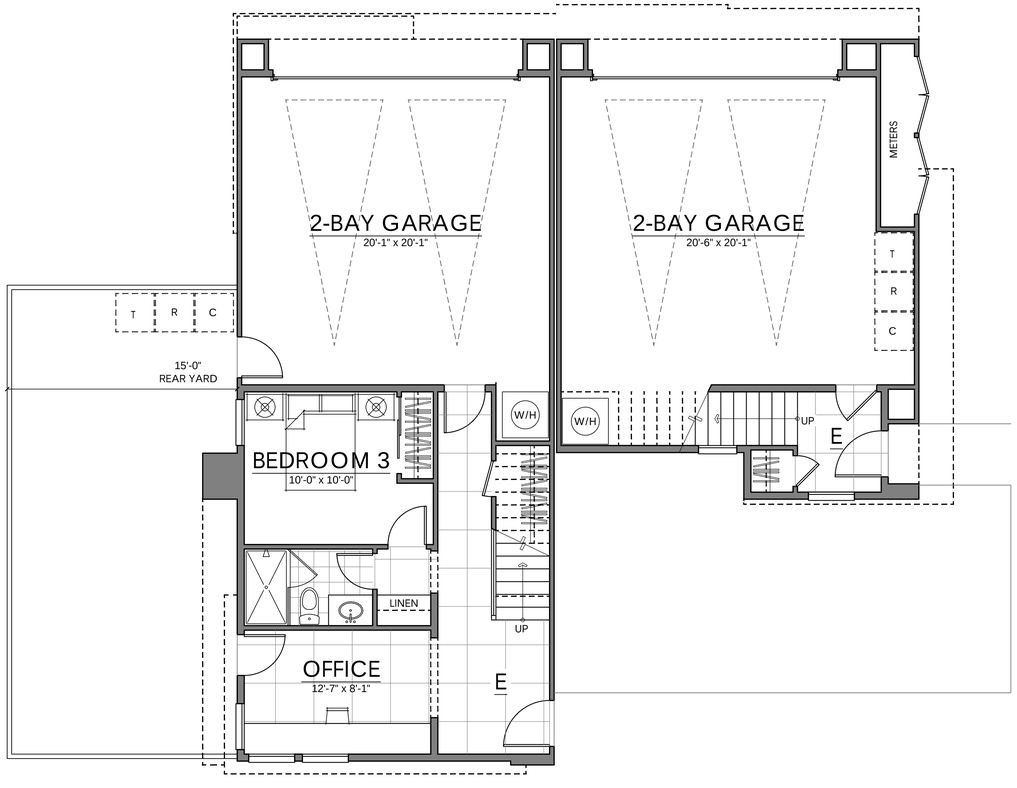

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2-UNIT BUILDING | FIRST FLOOR

ALISO VIEJO | GARDEN COURTS | SHEA HOMES

ALISO VIEJO, CALIFORNIA

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THIRD FLOOR	976 SQ. FT.	THIRD FLOOR	713 SQ. FT.
TOTAL LIVING	**2186 SQ. FT.**	**TOTAL LIVING**	**1456 SQ. FT.**
BALCONY	225 SQ. FT.	BALCONY	88 SQ. FT.

10.22.2025

2-UNIT BUILDING | SECOND FLOOR

ALISO VIEJO | GARDEN COURTS | SHEA HOMES

ALISO VIEJO, CALIFORNIA

NOTE: SQUARE FOOTAGE MAY VARY BASED ON CALCULATION METHODS

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PLAN FIVE		**PLAN TWO**	
FIRST FLOOR	504 SQ. FT.	FIRST FLOOR	122 SQ. FT.
SECOND FLOOR	706 SQ. FT.	SECOND FLOOR	621 SQ. FT.
THIRD FLOOR	976 SQ. FT.	THIRD FLOOR	713 SQ. FT.
TOTAL LIVING	**2186 SQ. FT.**	**TOTAL LIVING**	**1456 SQ. FT.**
BALCONY	225 SQ. FT.	BALCONY	88 SQ. FT.

10.22.2025

2-UNIT BUILDING | THIRD FLOOR

ALISO VIEJO | GARDEN COURTS | SHEA HOMES

ALISO VIEJO, CALIFORNIA

NOTE: SQUARE FOOTAGE MAY VARY BASED ON CALCULATION METHODS

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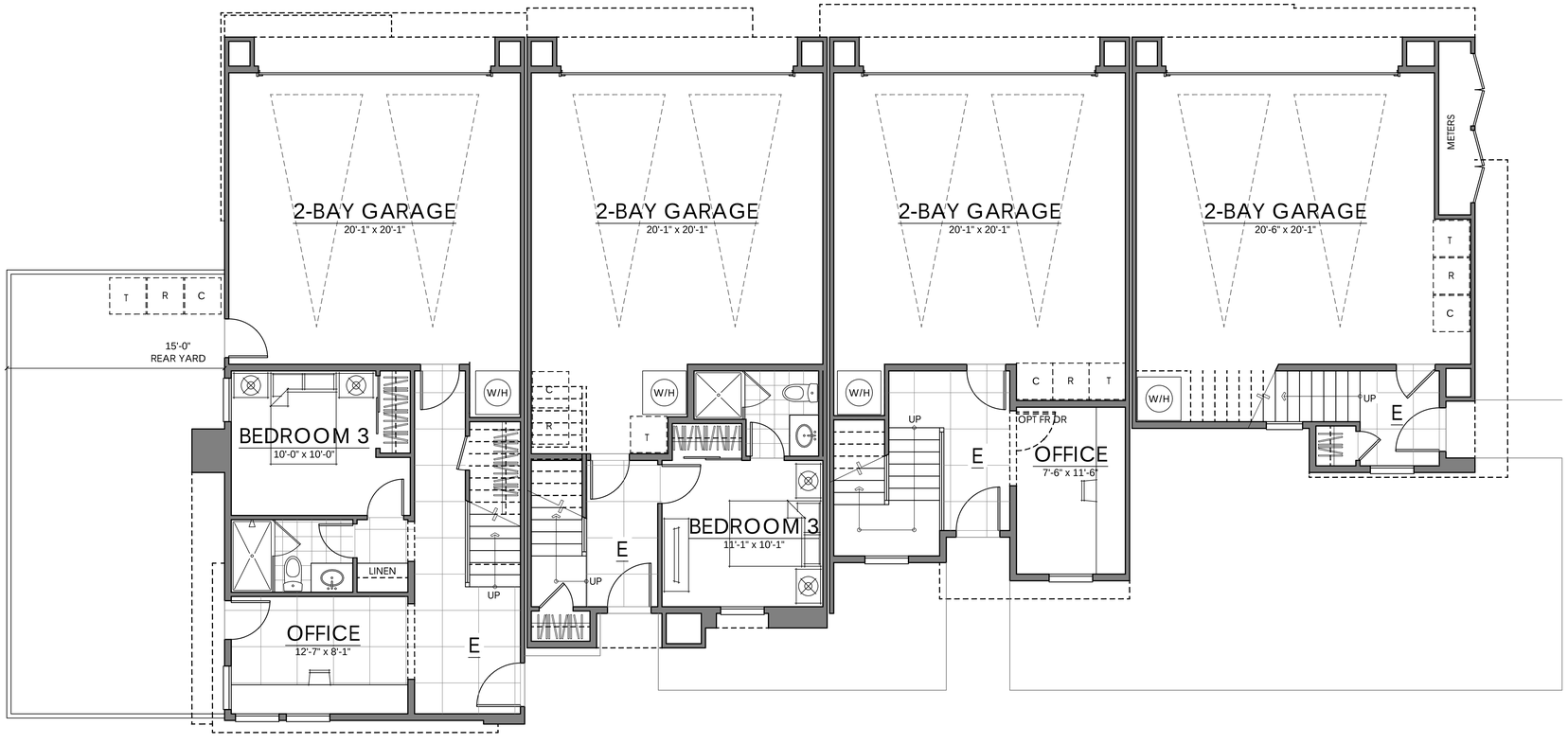

PLAN FIVE		PLAN FOUR		PLAN THREE		PLAN TWO	
FIRST FLOOR	504 SQ. FT.	FIRST FLOOR	326 SQ. FT.	FIRST FLOOR	266 SQ. FT.	FIRST FLOOR	122 SQ. FT.
SECOND FLOOR	706 SQ. FT.	SECOND FLOOR	689 SQ. FT.	SECOND FLOOR	614 SQ. FT.	SECOND FLOOR	621 SQ. FT.
THIRD FLOOR	976 SQ. FT.	THIRD FLOOR	789 SQ. FT.	THIRD FLOOR	746 SQ. FT.	THIRD FLOOR	713 SQ. FT.
TOTAL LIVING	**2186 SQ. FT.**	**TOTAL LIVING**	**1804 SQ. FT.**	**TOTAL LIVING**	**1626 SQ. FT.**	**TOTAL LIVING**	**1456 SQ. FT.**
BALCONY	225 SQ. FT.	BALCONY	115 SQ. FT.	BALCONY	154 SQ. FT.	BALCONY	88 SQ. FT.

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4-UNIT BUILDING | FIRST FLOOR

ALISO VIEJO | GARDEN COURTS | SHEA HOMES

ALISO VIEJO, CALIFORNIA

NOTE: SQUARE FOOTAGE MAY VARY BASED ON CALCULATION METHODS

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PLAN FIVE		PLAN FOUR		PLAN THREE		PLAN TWO	
FIRST FLOOR	504 SQ. FT.	FIRST FLOOR	326 SQ. FT.	FIRST FLOOR	266 SQ. FT.	FIRST FLOOR	122 SQ. FT.
SECOND FLOOR	706 SQ. FT.	SECOND FLOOR	689 SQ. FT.	SECOND FLOOR	614 SQ. FT.	SECOND FLOOR	621 SQ. FT.
THIRD FLOOR	976 SQ. FT.	THIRD FLOOR	789 SQ. FT.	THIRD FLOOR	746 SQ. FT.	THIRD FLOOR	713 SQ. FT.
TOTAL LIVING	**2186 SQ. FT.**	**TOTAL LIVING**	**1804 SQ. FT.**	**TOTAL LIVING**	**1626 SQ. FT.**	**TOTAL LIVING**	**1456 SQ. FT.**
BALCONY	225 SQ. FT.	BALCONY	115 SQ. FT.	BALCONY	154 SQ. FT.	BALCONY	88 SQ. FT.

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4-UNIT BUILDING | SECOND FLOOR

ALISO VIEJO | GARDEN COURTS | SHEA HOMES

ALISO VIEJO, CALIFORNIA

NOTE: SQUARE FOOTAGE MAY VARY BASED ON CALCULATION METHODS

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PLAN FIVE		PLAN FOUR		PLAN THREE		PLAN TWO	
FIRST FLOOR	504 SQ. FT.	FIRST FLOOR	326 SQ. FT.	FIRST FLOOR	266 SQ. FT.	FIRST FLOOR	122 SQ. FT.
SECOND FLOOR	706 SQ. FT.	SECOND FLOOR	689 SQ. FT.	SECOND FLOOR	614 SQ. FT.	SECOND FLOOR	621 SQ. FT.
THIRD FLOOR	976 SQ. FT.	THIRD FLOOR	789 SQ. FT.	THIRD FLOOR	746 SQ. FT.	THIRD FLOOR	713 SQ. FT.
TOTAL LIVING	**2186 SQ. FT.**	**TOTAL LIVING**	**1804 SQ. FT.**	**TOTAL LIVING**	**1626 SQ. FT.**	**TOTAL LIVING**	**1456 SQ. FT.**
BALCONY	225 SQ. FT.	BALCONY	115 SQ. FT.	BALCONY	154 SQ. FT.	BALCONY	88 SQ. FT.

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4-UNIT BUILDING | THIRD FLOOR

ALISO VIEJO | GARDEN COURTS | SHEA HOMES

ALISO VIEJO, CALIFORNIA

NOTE: SQUARE FOOTAGE MAY VARY BASED ON CALCULATION METHODS

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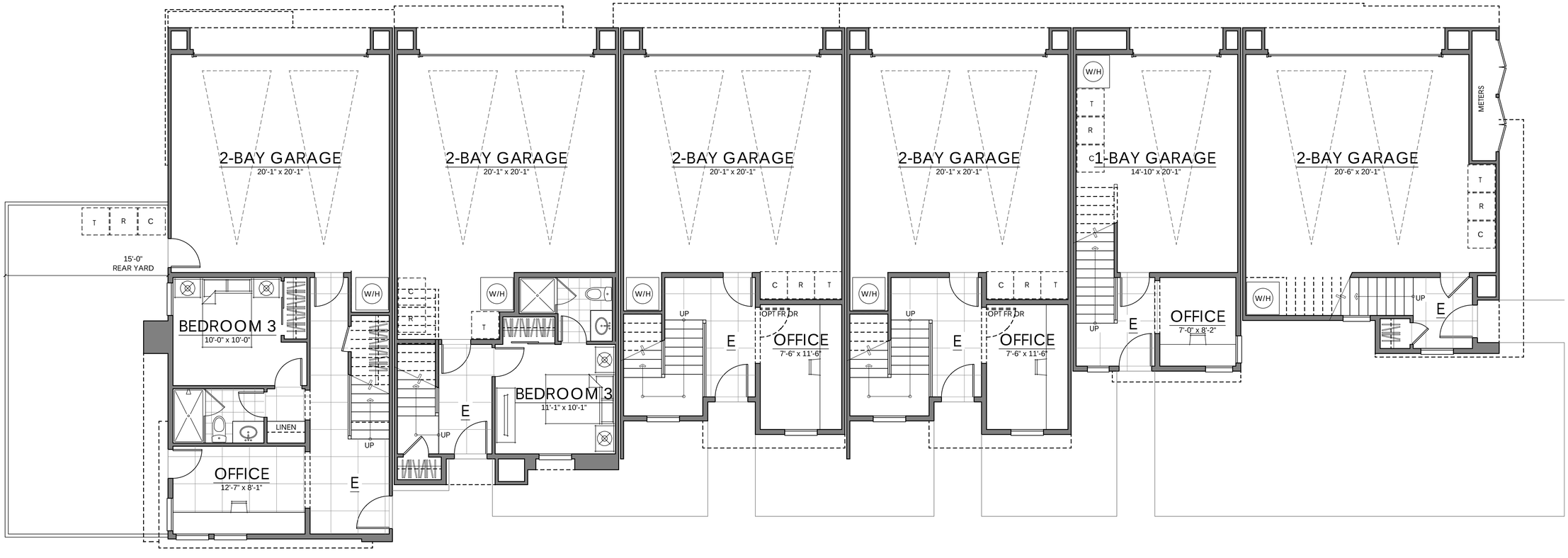

PLAN FIVE		PLAN FOUR		PLAN THREE		PLAN ONE		PLAN TWO	
FIRST FLOOR	504 SQ. FT.	FIRST FLOOR	326 SQ. FT.	FIRST FLOOR	266 SQ. FT.	FIRST FLOOR	172 SQ. FT.	FIRST FLOOR	122 SQ. FT.
SECOND FLOOR	706 SQ. FT.	SECOND FLOOR	689 SQ. FT.	SECOND FLOOR	614 SQ. FT.	SECOND FLOOR	436 SQ. FT.	SECOND FLOOR	621 SQ. FT.
THIRD FLOOR	976 SQ. FT.	THIRD FLOOR	789 SQ. FT.	THIRD FLOOR	746 SQ. FT.	THIRD FLOOR	494 SQ. FT.	THIRD FLOOR	713 SQ. FT.
TOTAL LIVING	**2186 SQ. FT.**	**TOTAL LIVING**	**1804 SQ. FT.**	**TOTAL LIVING**	**1626 SQ. FT.**	**TOTAL LIVING**	**1102 SQ. FT.**	**TOTAL LIVING**	**1456 SQ. FT.**
BALCONY	225 SQ. FT.	BALCONY	115 SQ. FT.	BALCONY	154 SQ. FT.	BALCONY	65 SQ. FT.	BALCONY	88 SQ. FT.

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6-UNIT BUILDING | FIRST FLOOR

ALISO VIEJO | GARDEN COURTS | SHEA HOMES

ALISO VIEJO, CALIFORNIA

NOTE: SQUARE FOOTAGE MAY VARY BASED ON CALCULATION METHODS

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PLAN FIVE		PLAN FOUR		PLAN THREE	
FIRST FLOOR	504 SQ. FT.	FIRST FLOOR	326 SQ. FT.	FIRST FLOOR	266 SQ. FT.
SECOND FLOOR	706 SQ. FT.	SECOND FLOOR	689 SQ. FT.	SECOND FLOOR	614 SQ. FT.
THIRD FLOOR	976 SQ. FT.	THIRD FLOOR	789 SQ. FT.	THIRD FLOOR	746 SQ. FT.
TOTAL LIVING	**2186 SQ. FT.**	**TOTAL LIVING**	**1804 SQ. FT.**	**TOTAL LIVING**	**1626 SQ. FT.**
BALCONY	225 SQ. FT.	BALCONY	115 SQ. FT.	BALCONY	154 SQ. FT.

PLAN ONE		PLAN TWO	
FIRST FLOOR	172 SQ. FT.	FIRST FLOOR	122 SQ. FT.
SECOND FLOOR	436 SQ. FT.	SECOND FLOOR	621 SQ. FT.
THIRD FLOOR	494 SQ. FT.	THIRD FLOOR	713 SQ. FT.
TOTAL LIVING	**1102 SQ. FT.**	**TOTAL LIVING**	**1456 SQ. FT.**
BALCONY	65 SQ. FT.	BALCONY	88 SQ. FT.

10.22.2025

6-UNIT BUILDING | SECOND FLOOR

ALISO VIEJO | GARDEN COURTS | SHEA HOMES

ALISO VIEJO, CALIFORNIA

NOTE: SQUARE FOOTAGE MAY VARY BASED ON CALCULATION METHODS

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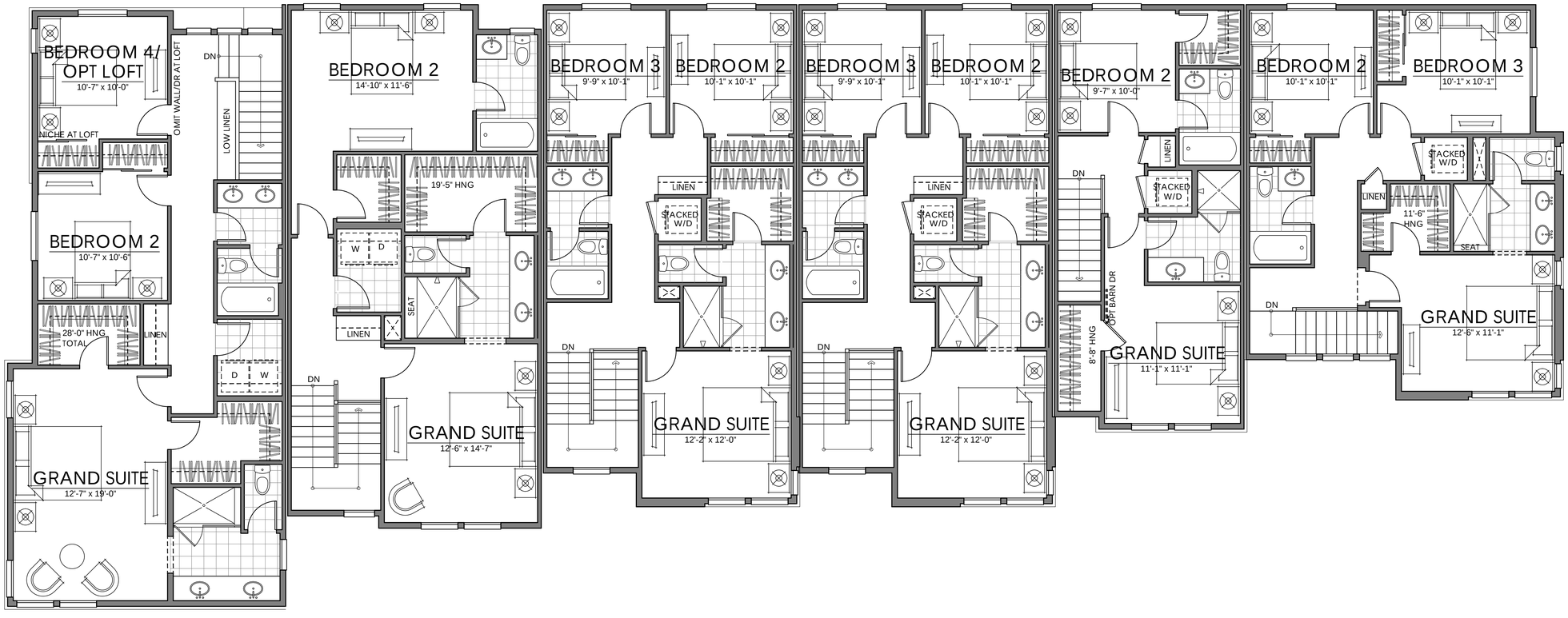

PLAN FIVE		PLAN FOUR		PLAN THREE	
FIRST FLOOR	504 SQ. FT.	FIRST FLOOR	326 SQ. FT.	FIRST FLOOR	266 SQ. FT.
SECOND FLOOR	706 SQ. FT.	SECOND FLOOR	689 SQ. FT.	SECOND FLOOR	614 SQ. FT.
THIRD FLOOR	976 SQ. FT.	THIRD FLOOR	789 SQ. FT.	THIRD FLOOR	746 SQ. FT.
TOTAL LIVING	**2186 SQ. FT.**	**TOTAL LIVING**	**1804 SQ. FT.**	**TOTAL LIVING**	**1626 SQ. FT.**
BALCONY	225 SQ. FT.	BALCONY	115 SQ. FT.	BALCONY	154 SQ. FT.

PLAN ONE		PLAN TWO	
FIRST FLOOR	172 SQ. FT.	FIRST FLOOR	122 SQ. FT.
SECOND FLOOR	436 SQ. FT.	SECOND FLOOR	621 SQ. FT.
THIRD FLOOR	494 SQ. FT.	THIRD FLOOR	713 SQ. FT.
TOTAL LIVING	**1102 SQ. FT.**	**TOTAL LIVING**	**1456 SQ. FT.**
BALCONY	65 SQ. FT.	BALCONY	88 SQ. FT.

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6-UNIT BUILDING | THIRD FLOOR

ALISO VIEJO | GARDEN COURTS | SHEA HOMES

ALISO VIEJO, CALIFORNIA

NOTE: SQUARE FOOTAGE MAY VARY BASED ON CALCULATION METHODS

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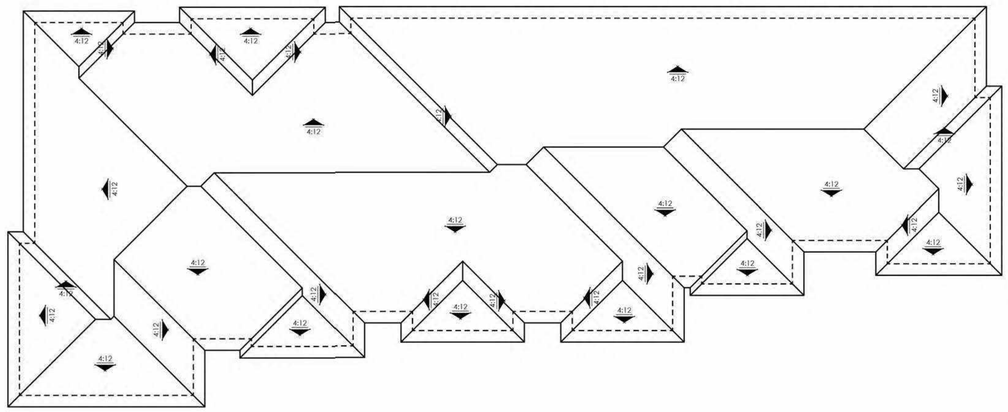

ROOF PLAN

SCALE: 1/8" = 1'-0"

FRONT ELEVATION

SCALE: 1/4" = 1'-0"

REAR ELEVATION

SCALE: 1/4" = 1'-0"

ALL BUILDINGS WITH (4)OR MORE UNITS SHALL FALL UNDER THE REQUIREMENT OF CHAPTER 11A SECTION 1102A.3.1 FOR THE ACCESSIBILITY OF THE UNITS.

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6-UNIT BUILDING

ALISO VIEJO | GARDEN COURTS | SHEA HOMES

ALISO VIEJO, CALIFORNIA

NOTE: SQUARE FOOTAGE MAY VARY BASED ON CALCULATION METHODS

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LEFT ELEVATION

SCALE: 1/4" = 1'-0"

RIGHT ELEVATION

SCALE: 1/4" = 1'-0"

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6-UNIT BUILDING

ALISO VIEJO | GARDEN COURTS | SHEA HOMES

ALISO VIEJO, CALIFORNIA

NOTE: SQUARE FOOTAGE MAY VARY BASED ON CALCULATION METHODS

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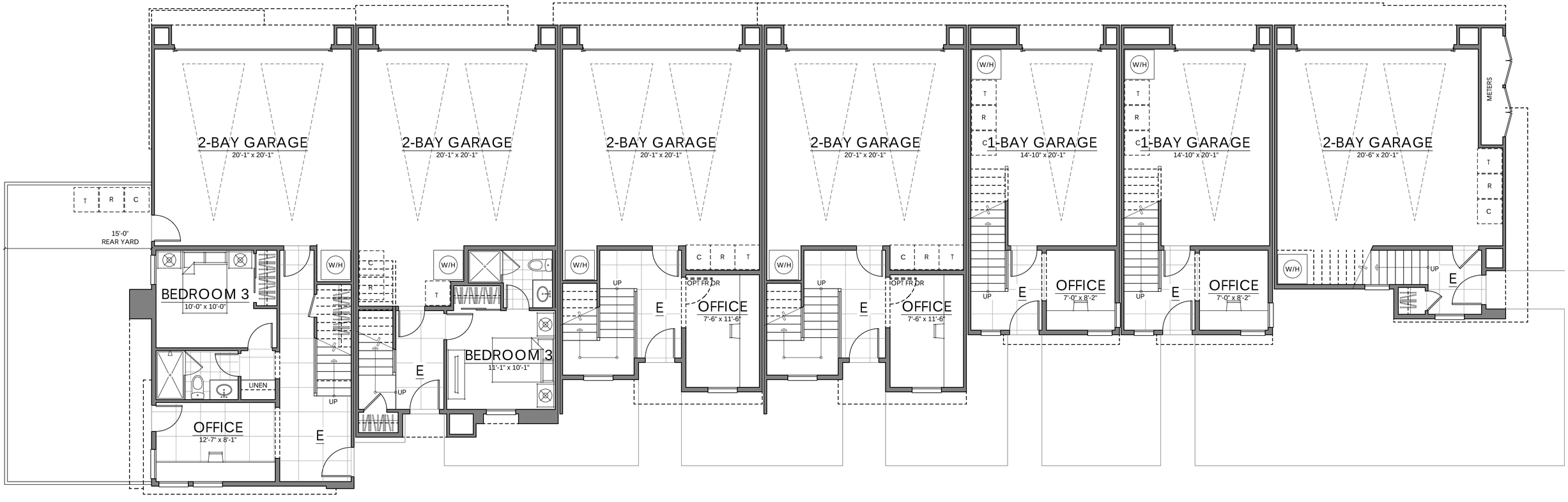

PLAN FIVE		PLAN FOUR		PLAN THREE		PLAN ONE		PLAN TWO	
FIRST FLOOR	504 SQ. FT.	FIRST FLOOR	326 SQ. FT.	FIRST FLOOR	266 SQ. FT.	FIRST FLOOR	172 SQ. FT.	FIRST FLOOR	122 SQ. FT.
SECOND FLOOR	706 SQ. FT.	SECOND FLOOR	689 SQ. FT.	SECOND FLOOR	614 SQ. FT.	SECOND FLOOR	436 SQ. FT.	SECOND FLOOR	621 SQ. FT.
THIRD FLOOR	976 SQ. FT.	THIRD FLOOR	789 SQ. FT.	THIRD FLOOR	746 SQ. FT.	THIRD FLOOR	494 SQ. FT.	THIRD FLOOR	713 SQ. FT.
TOTAL LIVING	**2186 SQ. FT.**	**TOTAL LIVING**	**1804 SQ. FT.**	**TOTAL LIVING**	**1626 SQ. FT.**	**TOTAL LIVING**	**1102 SQ. FT.**	**TOTAL LIVING**	**1456 SQ. FT.**
BALCONY	225 SQ. FT.	BALCONY	115 SQ. FT.	BALCONY	154 SQ. FT.	BALCONY	65 SQ. FT.	BALCONY	88 SQ. FT.

10.22.2025

7-UNIT BUILDING | FIRST FLOOR

ALISO VIEJO | GARDEN COURTS | SHEA HOMES

ALISO VIEJO, CALIFORNIA

NOTE: SQUARE FOOTAGE MAY VARY BASED ON CALCULATION METHODS

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PLAN FIVE		PLAN FOUR		PLAN THREE		PLAN ONE		PLAN TWO	
FIRST FLOOR	504 SQ. FT.	FIRST FLOOR	326 SQ. FT.	FIRST FLOOR	266 SQ. FT.	FIRST FLOOR	172 SQ. FT.	FIRST FLOOR	122 SQ. FT.
SECOND FLOOR	706 SQ. FT.	SECOND FLOOR	689 SQ. FT.	SECOND FLOOR	614 SQ. FT.	SECOND FLOOR	436 SQ. FT.	SECOND FLOOR	621 SQ. FT.
THIRD FLOOR	976 SQ. FT.	THIRD FLOOR	789 SQ. FT.	THIRD FLOOR	746 SQ. FT.	THIRD FLOOR	494 SQ. FT.	THIRD FLOOR	713 SQ. FT.
TOTAL LIVING	**2186 SQ. FT.**	**TOTAL LIVING**	**1804 SQ. FT.**	**TOTAL LIVING**	**1626 SQ. FT.**	**TOTAL LIVING**	**1102 SQ. FT.**	**TOTAL LIVING**	**1456 SQ. FT.**
BALCONY	225 SQ. FT.	BALCONY	115 SQ. FT.	BALCONY	154 SQ. FT.	BALCONY	65 SQ. FT.	BALCONY	88 SQ. FT.

10.22.2025

7-UNIT BUILDING | SECOND FLOOR

ALISO VIEJO | GARDEN COURTS | SHEA HOMES

ALISO VIEJO, CALIFORNIA

NOTE: SQUARE FOOTAGE MAY VARY BASED ON CALCULATION METHODS

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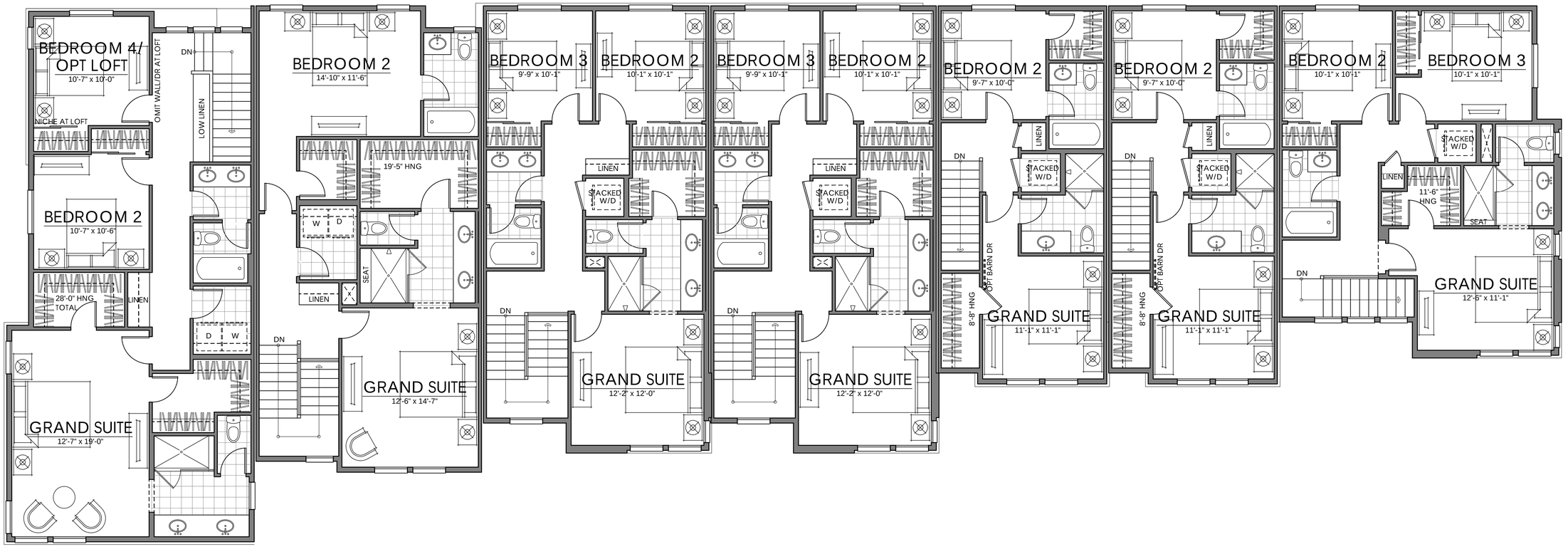

PLAN FIVE		PLAN FOUR		PLAN THREE		PLAN ONE		PLAN TWO	
FIRST FLOOR	504 SQ. FT.	FIRST FLOOR	326 SQ. FT.	FIRST FLOOR	266 SQ. FT.	FIRST FLOOR	172 SQ. FT.	FIRST FLOOR	122 SQ. FT.
SECOND FLOOR	706 SQ. FT.	SECOND FLOOR	689 SQ. FT.	SECOND FLOOR	614 SQ. FT.	SECOND FLOOR	436 SQ. FT.	SECOND FLOOR	621 SQ. FT.
THIRD FLOOR	976 SQ. FT.	THIRD FLOOR	789 SQ. FT.	THIRD FLOOR	746 SQ. FT.	THIRD FLOOR	494 SQ. FT.	THIRD FLOOR	713 SQ. FT.
TOTAL LIVING	**2186 SQ. FT.**	**TOTAL LIVING**	**1804 SQ. FT.**	**TOTAL LIVING**	**1626 SQ. FT.**	**TOTAL LIVING**	**1102 SQ. FT.**	**TOTAL LIVING**	**1456 SQ. FT.**
BALCONY	225 SQ. FT.	BALCONY	115 SQ. FT.	BALCONY	154 SQ. FT.	BALCONY	65 SQ. FT.	BALCONY	88 SQ. FT.

10.22.2025

7-UNIT BUILDING | THIRD FLOOR

ALISO VIEJO | GARDEN COURTS | SHEA HOMES

ALISO VIEJO, CALIFORNIA

NOTE: SQUARE FOOTAGE MAY VARY BASED ON CALCULATION METHODS

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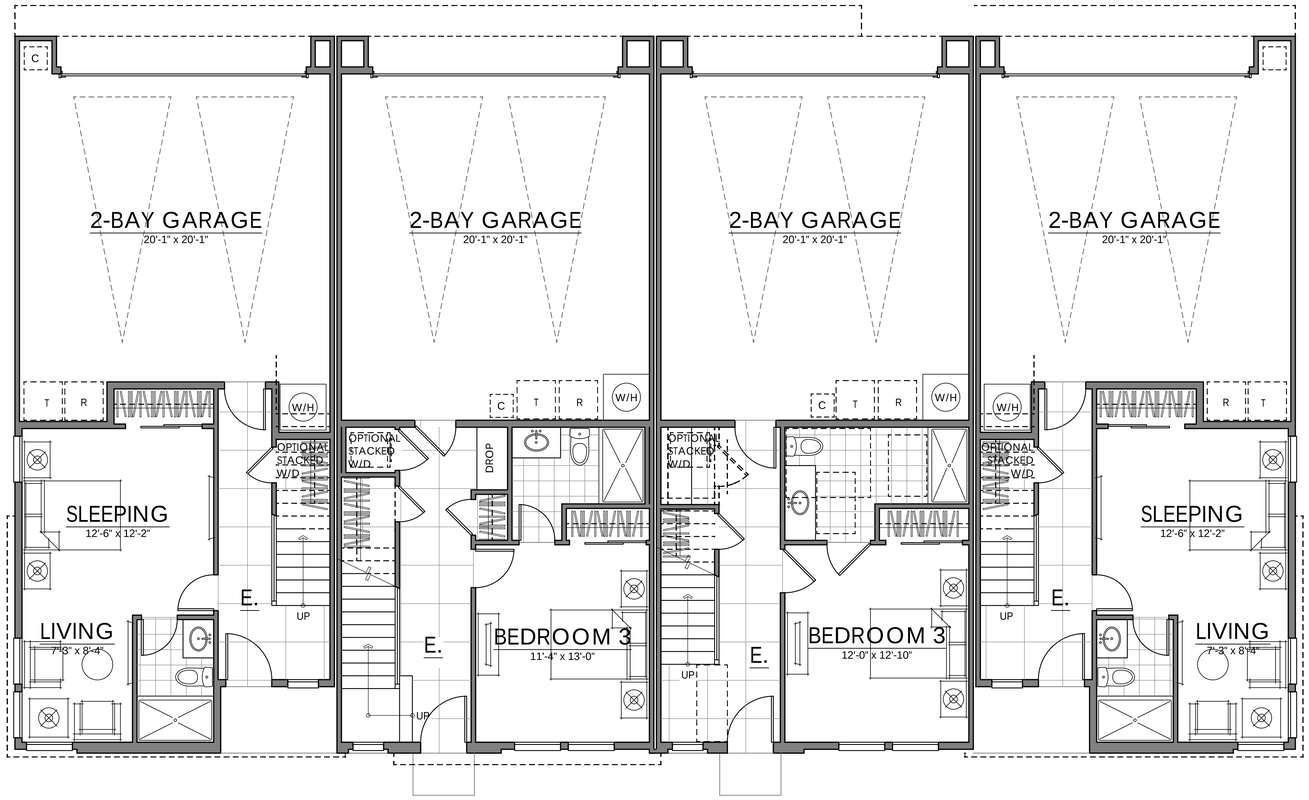

UNIT THREE		UNIT TWO		UNIT ONE		UNIT THREE	
FIRST FLOOR	460 SQ. FT.	FIRST FLOOR	443 SQ. FT.	FIRST FLOOR	443 SQ. FT.	FIRST FLOOR	460 SQ. FT.
SECOND FLOOR	834 SQ. FT.	SECOND FLOOR	854 SQ. FT.	SECOND FLOOR	855 SQ. FT.	SECOND FLOOR	834 SQ. FT.
THIRD FLOOR	955 SQ. FT.	THIRD FLOOR	910 SQ. FT.	THIRD FLOOR	721 SQ. FT.	THIRD FLOOR	955 SQ. FT.
TOTAL LIVING	**2249 SQ. FT.**	**TOTAL LIVING**	**2207 SQ. FT.**	**TOTAL LIVING**	**2019 SQ. FT.**	**TOTAL LIVING**	**2249 SQ. FT.**
BALCONY	189 SQ. FT.	BALCONY	111 SQ. FT.	BALCONY	95 SQ. FT.	BALCONY	189 SQ. FT.

10.22.2025

4-UNIT BUILDING | FIRST FLOOR

ALISO VIEJO | ROWTOWNS | SHEA HOMES

ALISO VIEJO, CALIFORNIA

NOTE: SQUARE FOOTAGE MAY VARY BASED ON CALCULATION METHODS

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UNIT THREE		UNIT TWO		UNIT ONE		UNIT THREE	
FIRST FLOOR	460 SQ. FT.	FIRST FLOOR	443 SQ. FT.	FIRST FLOOR	443 SQ. FT.	FIRST FLOOR	460 SQ. FT.
SECOND FLOOR	834 SQ. FT.	SECOND FLOOR	854 SQ. FT.	SECOND FLOOR	855 SQ. FT.	SECOND FLOOR	834 SQ. FT.
THIRD FLOOR	955 SQ. FT.	THIRD FLOOR	910 SQ. FT.	THIRD FLOOR	721 SQ. FT.	THIRD FLOOR	955 SQ. FT.
TOTAL LIVING	**2249 SQ. FT.**	**TOTAL LIVING**	**2207 SQ. FT.**	**TOTAL LIVING**	**2019 SQ. FT.**	**TOTAL LIVING**	**2249 SQ. FT.**
BALCONY	189 SQ. FT.	BALCONY	111 SQ. FT.	BALCONY	95 SQ. FT.	BALCONY	189 SQ. FT.

10.22.2025

4-UNIT BUILDING | SECOND FLOOR

ALISO VIEJO | ROWTOWNS | SHEA HOMES

ALISO VIEJO, CALIFORNIA

NOTE: SQUARE FOOTAGE MAY VARY BASED ON CALCULATION METHODS

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UNIT THREE		UNIT TWO		UNIT ONE		UNIT THREE	
FIRST FLOOR	460 SQ. FT.	FIRST FLOOR	443 SQ. FT.	FIRST FLOOR	443 SQ. FT.	FIRST FLOOR	460 SQ. FT.
SECOND FLOOR	834 SQ. FT.	SECOND FLOOR	854 SQ. FT.	SECOND FLOOR	855 SQ. FT.	SECOND FLOOR	834 SQ. FT.
THIRD FLOOR	955 SQ. FT.	THIRD FLOOR	910 SQ. FT.	THIRD FLOOR	721 SQ. FT.	THIRD FLOOR	955 SQ. FT.
TOTAL LIVING	**2249 SQ. FT.**	**TOTAL LIVING**	**2207 SQ. FT.**	**TOTAL LIVING**	**2019 SQ. FT.**	**TOTAL LIVING**	**2249 SQ. FT.**
BALCONY	189 SQ. FT.	BALCONY	111 SQ. FT.	BALCONY	95 SQ. FT.	BALCONY	189 SQ. FT.

10.22.2025

4-UNIT BUILDING | THIRD FLOOR

ALISO VIEJO | ROWTOWNS | SHEA HOMES

ALISO VIEJO, CALIFORNIA

NOTE: SQUARE FOOTAGE MAY VARY BASED ON CALCULATION METHODS

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FRONT ELEVATION

SCALE: 1/4" = 1'-0"

ALL BUILDINGS WITH (4)OR MORE UNITS SHALL FALL UNDER THE REQUIREMENT OF CHAPTER 11A SECTION 1102A.3.1 FOR THE ACCESSIBILITY OF THE UNITS.

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REAR ELEVATION

SCALE: 1/4" = 1'-0"

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4-UNIT BUILDING

ALISO VIEJO | ROWTOWNS | SHEA HOMES

ALISO VIEJO, CALIFORNIA

NOTE: SQUARE FOOTAGE MAY VARY BASED ON CALCULATION METHODS

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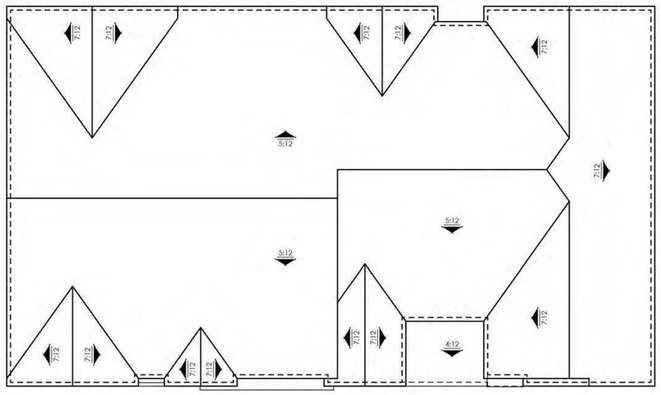

ROOF PLAN

SCALE: 1/8" = 1'-0"

LEFT ELEVATION

SCALE: 1/4" = 1'-0"

RIGHT ELEVATION

SCALE: 1/4" = 1'-0"

A2.6

10.22.2025

4-UNIT BUILDING

ALISO VIEJO | ROWTOWNS | SHEA HOMES

ALISO VIEJO, CALIFORNIA

NOTE: SQUARE FOOTAGE MAY VARY BASED ON CALCULATION METHODS

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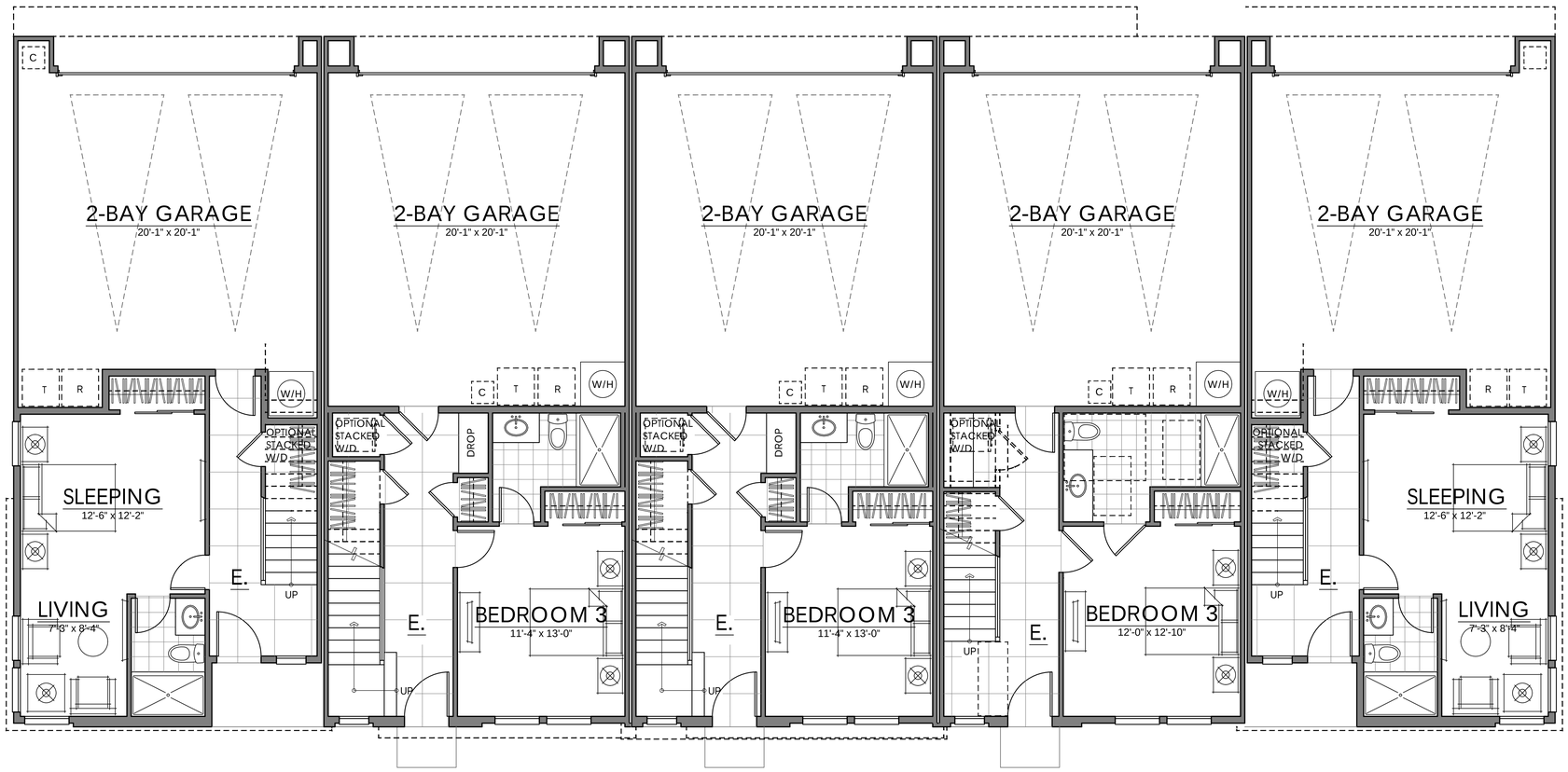

UNIT THREE		UNIT TWO		UNIT TWO		UNIT ONE		UNIT THREE	
FIRST FLOOR	460 SQ. FT.	FIRST FLOOR	443 SQ. FT.	FIRST FLOOR	443 SQ. FT.	FIRST FLOOR	443 SQ. FT.	FIRST FLOOR	460 SQ. FT.
SECOND FLOOR	834 SQ. FT.	SECOND FLOOR	854 SQ. FT.	SECOND FLOOR	854 SQ. FT.	SECOND FLOOR	855 SQ. FT.	SECOND FLOOR	834 SQ. FT.
THIRD FLOOR	955 SQ. FT.	THIRD FLOOR	910 SQ. FT.	THIRD FLOOR	910 SQ. FT.	THIRD FLOOR	721 SQ. FT.	THIRD FLOOR	955 SQ. FT.
TOTAL LIVING	**2249 SQ. FT.**	**TOTAL LIVING**	**2207 SQ. FT.**	**TOTAL LIVING**	**2207 SQ. FT.**	**TOTAL LIVING**	**2019 SQ. FT.**	**TOTAL LIVING**	**2249 SQ. FT.**
BALCONY	189 SQ. FT.	BALCONY	111 SQ. FT.	BALCONY	111 SQ. FT.	BALCONY	95 SQ. FT.	BALCONY	189 SQ. FT.

10.22.2025

5-UNIT BUILDING | FIRST FLOOR

ALISO VIEJO | ROWTOWNS | SHEA HOMES

ALISO VIEJO, CALIFORNIA

NOTE: SQUARE FOOTAGE MAY VARY BASED ON CALCULATION METHODS

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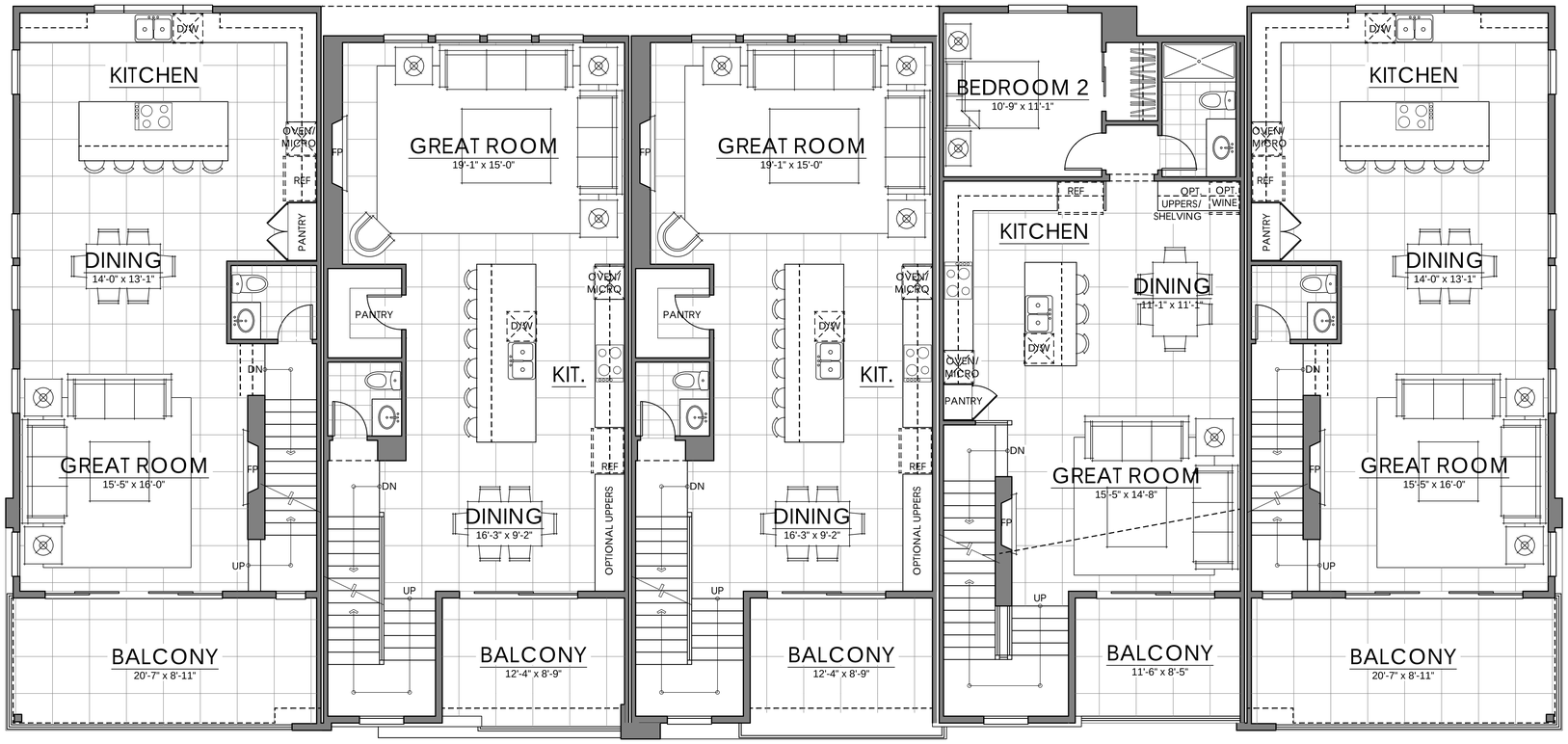

UNIT THREE		UNIT TWO		UNIT TWO		UNIT ONE		UNIT THREE	
FIRST FLOOR	460 SQ. FT.	FIRST FLOOR	443 SQ. FT.	FIRST FLOOR	443 SQ. FT.	FIRST FLOOR	443 SQ. FT.	FIRST FLOOR	460 SQ. FT.
SECOND FLOOR	834 SQ. FT.	SECOND FLOOR	854 SQ. FT.	SECOND FLOOR	854 SQ. FT.	SECOND FLOOR	855 SQ. FT.	SECOND FLOOR	834 SQ. FT.
THIRD FLOOR	955 SQ. FT.	THIRD FLOOR	910 SQ. FT.	THIRD FLOOR	910 SQ. FT.	THIRD FLOOR	721 SQ. FT.	THIRD FLOOR	955 SQ. FT.
TOTAL LIVING	**2249 SQ. FT.**	**TOTAL LIVING**	**2207 SQ. FT.**	**TOTAL LIVING**	**2207 SQ. FT.**	**TOTAL LIVING**	**2019 SQ. FT.**	**TOTAL LIVING**	**2249 SQ. FT.**
BALCONY	189 SQ. FT.	BALCONY	111 SQ. FT.	BALCONY	111 SQ. FT.	BALCONY	95 SQ. FT.	BALCONY	189 SQ. FT.

10.22.2025

5-UNIT BUILDING | SECOND FLOOR

ALISO VIEJO | ROWTOWNS | SHEA HOMES

ALISO VIEJO, CALIFORNIA

NOTE: SQUARE FOOTAGE MAY VARY BASED ON CALCULATION METHODS

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UNIT THREE		UNIT TWO		UNIT TWO		UNIT ONE		UNIT THREE	
FIRST FLOOR	460 SQ. FT.	FIRST FLOOR	443 SQ. FT.	FIRST FLOOR	443 SQ. FT.	FIRST FLOOR	443 SQ. FT.	FIRST FLOOR	460 SQ. FT.
SECOND FLOOR	834 SQ. FT.	SECOND FLOOR	854 SQ. FT.	SECOND FLOOR	854 SQ. FT.	SECOND FLOOR	855 SQ. FT.	SECOND FLOOR	834 SQ. FT.
THIRD FLOOR	955 SQ. FT.	THIRD FLOOR	910 SQ. FT.	THIRD FLOOR	910 SQ. FT.	THIRD FLOOR	721 SQ. FT.	THIRD FLOOR	955 SQ. FT.
TOTAL LIVING	**2249 SQ. FT.**	**TOTAL LIVING**	**2207 SQ. FT.**	**TOTAL LIVING**	**2207 SQ. FT.**	**TOTAL LIVING**	**2019 SQ. FT.**	**TOTAL LIVING**	**2249 SQ. FT.**
BALCONY	189 SQ. FT.	BALCONY	111 SQ. FT.	BALCONY	111 SQ. FT.	BALCONY	95 SQ. FT.	BALCONY	189 SQ. FT.

10.22.2025

5-UNIT BUILDING | THIRD FLOOR

ALISO VIEJO | ROWTOWNS | SHEA HOMES

ALISO VIEJO, CALIFORNIA

NOTE: SQUARE FOOTAGE MAY VARY BASED ON CALCULATION METHODS

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FRONT ELEVATION

SCALE: 1/4" = 1'-0"

ALL BUILDINGS WITH (4)OR MORE UNITS SHALL FALL UNDER THE REQUIREMENT OF CHAPTER 11A SECTION 1102A.3.1 FOR THE ACCESSIBILITY OF THE UNITS.

10.22.2025

5-UNIT BUILDING

ALISO VIEJO | ROWTOWNS | SHEA HOMES

ALISO VIEJO, CALIFORNIA

NOTE: SQUARE FOOTAGE MAY VARY BASED ON CALCULATION METHODS

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REAR ELEVATION

SCALE: 1/4" = 1'-0"

A2.11

10.22.2025

5-UNIT BUILDING

ALISO VIEJO | ROWTOWNS | SHEA HOMES

ALISO VIEJO, CALIFORNIA

NOTE: SQUARE FOOTAGE MAY VARY BASED ON CALCULATION METHODS

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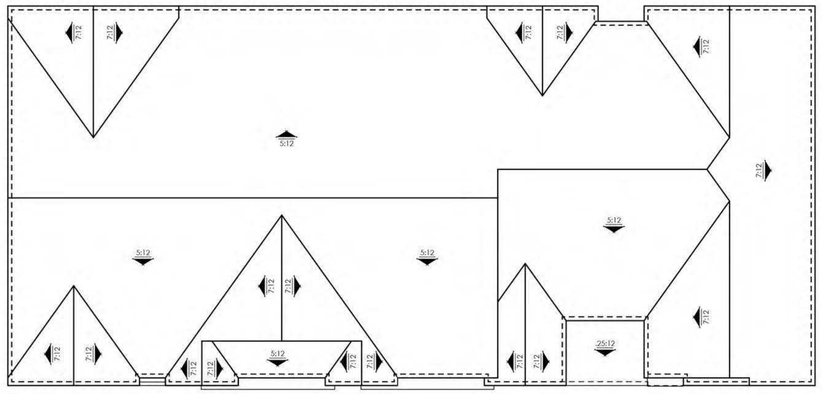

ROOF PLAN

SCALE: 1/8" = 1'-0"

LEFT ELEVATION

SCALE: 1/4" = 1'-0"

RIGHT ELEVATION

SCALE: 1/4" = 1'-0"

A2.12

10.22.2025

5-UNIT BUILDING

ALISO VIEJO | ROWTOWNS | SHEA HOMES

ALISO VIEJO, CALIFORNIA

NOTE: SQUARE FOOTAGE MAY VARY BASED ON CALCULATION METHODS

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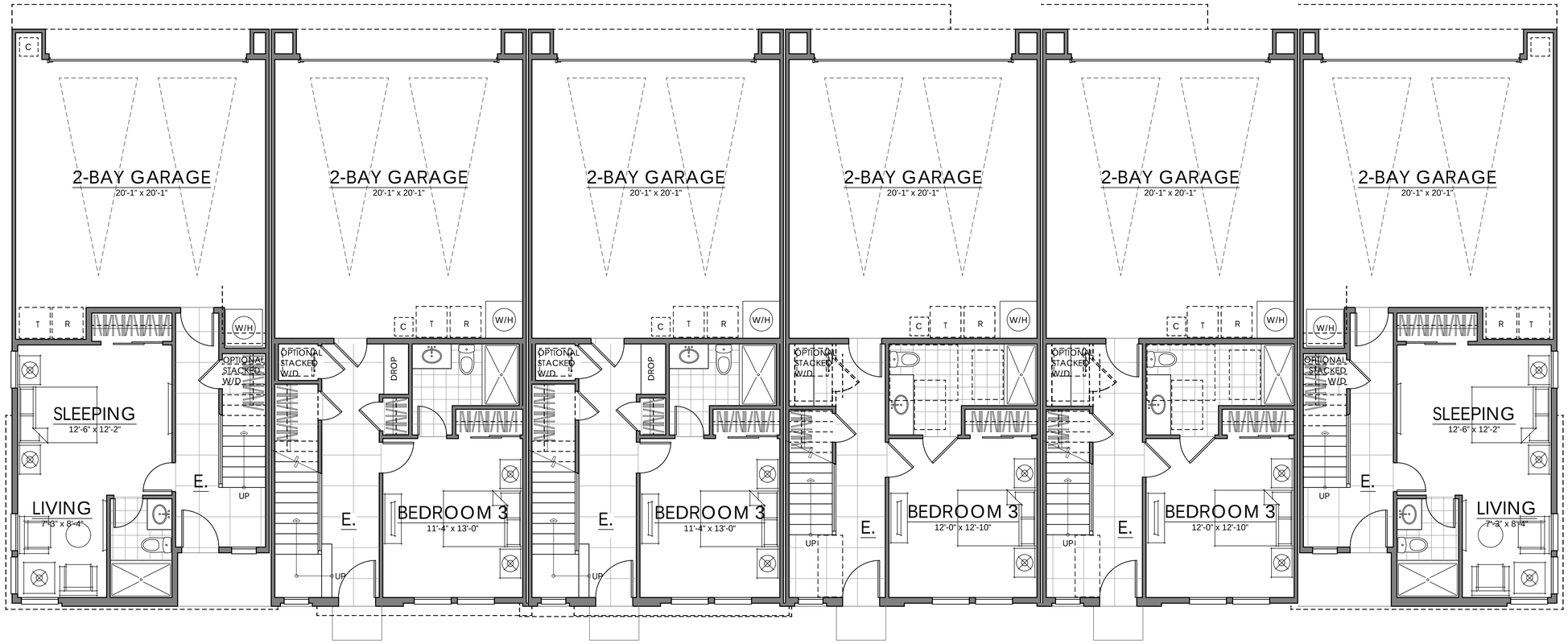

UNIT THREE		UNIT TWO		UNIT TWO		UNIT ONE		UNIT ONE		UNIT THREE	
FIRST FLOOR	460 SQ. FT.	FIRST FLOOR	443 SQ. FT.	FIRST FLOOR	443 SQ. FT.	FIRST FLOOR	443 SQ. FT.	FIRST FLOOR	443 SQ. FT.	FIRST FLOOR	460 SQ. FT.
SECOND FLOOR	834 SQ. FT.	SECOND FLOOR	854 SQ. FT.	SECOND FLOOR	854 SQ. FT.	SECOND FLOOR	855 SQ. FT.	SECOND FLOOR	855 SQ. FT.	SECOND FLOOR	834 SQ. FT.
THIRD FLOOR	955 SQ. FT.	THIRD FLOOR	910 SQ. FT.	THIRD FLOOR	910 SQ. FT.	THIRD FLOOR	721 SQ. FT.	THIRD FLOOR	721 SQ. FT.	THIRD FLOOR	955 SQ. FT.
TOTAL LIVING	**2249 SQ. FT.**	**TOTAL LIVING**	**2207 SQ. FT.**	**TOTAL LIVING**	**2207 SQ. FT.**	**TOTAL LIVING**	**2019 SQ. FT.**	**TOTAL LIVING**	**2019 SQ. FT.**	**TOTAL LIVING**	**2249 SQ. FT.**
BALCONY	189 SQ. FT.	BALCONY	111 SQ. FT.	BALCONY	111 SQ. FT.	BALCONY	95 SQ. FT.	BALCONY	95 SQ. FT.	BALCONY	189 SQ. FT.

10.22.2025

6-UNIT BUILDING | FIRST FLOOR

ALISO VIEJO | ROWTOWNS | SHEA HOMES

ALISO VIEJO, CALIFORNIA

NOTE: SQUARE FOOTAGE MAY VARY BASED ON CALCULATION METHODS

THESE DRAWINGS ARE INTENDED FOR DESIGN DEVELOPMENT AND PRELIMINARY STUDIES ONLY AND ARE NOT TO BE USED FOR ANY OTHER PURPOSE, SUCH AS FINAL PLOTTING OR FINAL ENGINEERING. COPYRIGHT WOODLEY ARCHITECTURAL GROUP, INC. THESE DRAWINGS MAY NOT BE USED OR DUPLICATED WITHOUT THE EXPRESS WRITTEN PERMISSION OF WOODLEY ARCHITECTURAL GROUP, INC.

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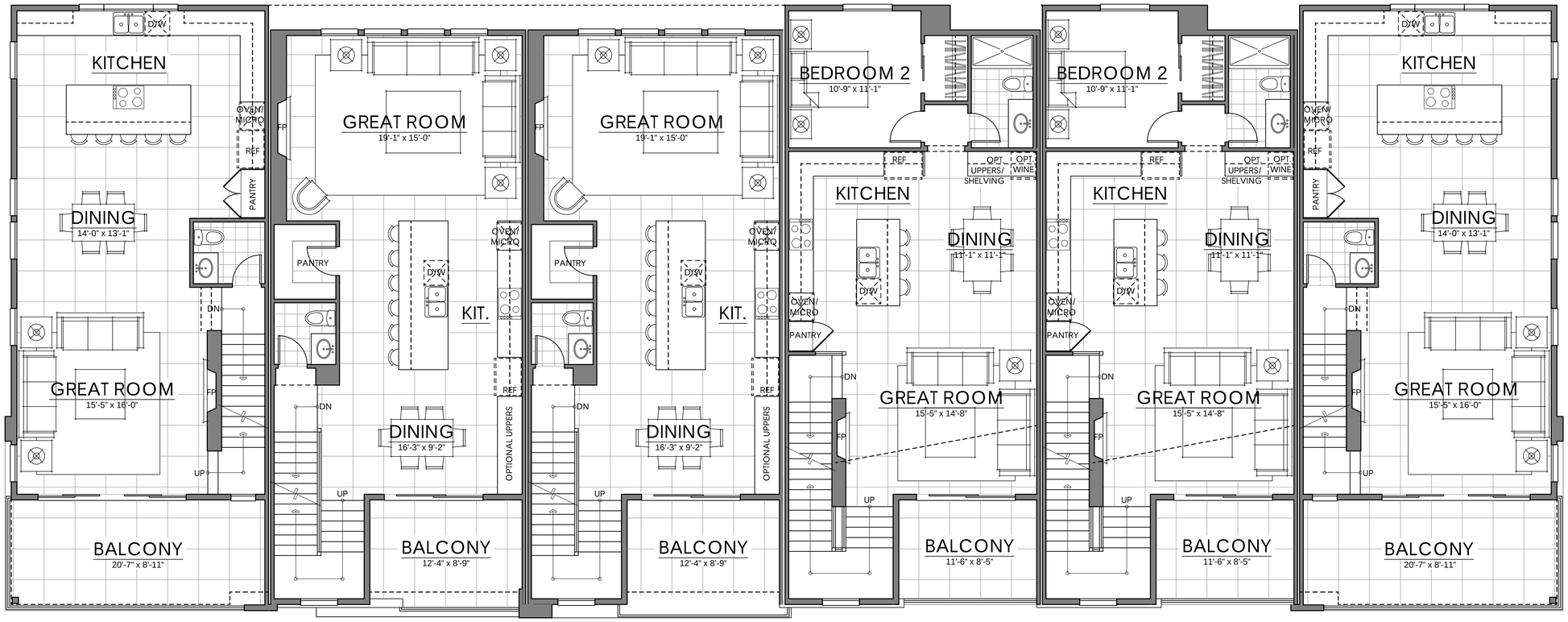

UNIT THREE		UNIT TWO		UNIT TWO		UNIT ONE		UNIT ONE		UNIT THREE	
FIRST FLOOR	460 SQ. FT.	FIRST FLOOR	443 SQ. FT.	FIRST FLOOR	443 SQ. FT.	FIRST FLOOR	443 SQ. FT.	FIRST FLOOR	443 SQ. FT.	FIRST FLOOR	460 SQ. FT.
SECOND FLOOR	834 SQ. FT.	SECOND FLOOR	854 SQ. FT.	SECOND FLOOR	854 SQ. FT.	SECOND FLOOR	855 SQ. FT.	SECOND FLOOR	855 SQ. FT.	SECOND FLOOR	834 SQ. FT.
THIRD FLOOR	955 SQ. FT.	THIRD FLOOR	910 SQ. FT.	THIRD FLOOR	910 SQ. FT.	THIRD FLOOR	721 SQ. FT.	THIRD FLOOR	721 SQ. FT.	THIRD FLOOR	955 SQ. FT.
TOTAL LIVING	**2249 SQ. FT.**	**TOTAL LIVING**	**2207 SQ. FT.**	**TOTAL LIVING**	**2207 SQ. FT.**	**TOTAL LIVING**	**2019 SQ. FT.**	**TOTAL LIVING**	**2019 SQ. FT.**	**TOTAL LIVING**	**2249 SQ. FT.**
BALCONY	189 SQ. FT.	BALCONY	111 SQ. FT.	BALCONY	111 SQ. FT.	BALCONY	95 SQ. FT.	BALCONY	95 SQ. FT.	BALCONY	189 SQ. FT.

10.22.2025

6-UNIT BUILDING | SECOND FLOOR

ALISO VIEJO | ROWTOWNS | SHEA HOMES

ALISO VIEJO, CALIFORNIA

NOTE: SQUARE FOOTAGE MAY VARY BASED ON CALCULATION METHODS

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UNIT THREE		UNIT TWO		UNIT TWO		UNIT ONE		UNIT ONE		UNIT THREE	
FIRST FLOOR	460 SQ. FT.	FIRST FLOOR	443 SQ. FT.	FIRST FLOOR	443 SQ. FT.	FIRST FLOOR	443 SQ. FT.	FIRST FLOOR	443 SQ. FT.	FIRST FLOOR	460 SQ. FT.
SECOND FLOOR	834 SQ. FT.	SECOND FLOOR	854 SQ. FT.	SECOND FLOOR	854 SQ. FT.	SECOND FLOOR	855 SQ. FT.	SECOND FLOOR	855 SQ. FT.	SECOND FLOOR	834 SQ. FT.
THIRD FLOOR	955 SQ. FT.	THIRD FLOOR	910 SQ. FT.	THIRD FLOOR	910 SQ. FT.	THIRD FLOOR	721 SQ. FT.	THIRD FLOOR	721 SQ. FT.	THIRD FLOOR	955 SQ. FT.
TOTAL LIVING	**2249 SQ. FT.**	**TOTAL LIVING**	**2207 SQ. FT.**	**TOTAL LIVING**	**2207 SQ. FT.**	**TOTAL LIVING**	**2019 SQ. FT.**	**TOTAL LIVING**	**2019 SQ. FT.**	**TOTAL LIVING**	**2249 SQ. FT.**
BALCONY	189 SQ. FT.	BALCONY	111 SQ. FT.	BALCONY	111 SQ. FT.	BALCONY	95 SQ. FT.	BALCONY	95 SQ. FT.	BALCONY	189 SQ. FT.

10.22.2025

6-UNIT BUILDING | THIRD FLOOR

ALISO VIEJO | ROWTOWNS | SHEA HOMES

ALISO VIEJO, CALIFORNIA

NOTE: SQUARE FOOTAGE MAY VARY BASED ON CALCULATION METHODS

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FRONT ELEVATION

SCALE: 1/4" = 1'-0"

ALL BUILDINGS WITH (4)OR MORE UNITS SHALL FALL UNDER THE REQUIREMENT OF CHAPTER 11A SECTION 1102A.3.1 FOR THE ACCESSIBILITY OF THE UNITS.

10.22.2025

6-UNIT BUILDING

ALISO VIEJO | ROWTOWNS | SHEA HOMES

ALISO VIEJO, CALIFORNIA

NOTE: SQUARE FOOTAGE MAY VARY BASED ON CALCULATION METHODS

THESE DRAWINGS ARE INTENDED FOR DESIGN DEVELOPMENT AND PRELIMINARY STUDIES ONLY AND ARE NOT TO BE USED FOR ANY OTHER PURPOSE, SUCH AS FINAL PLOTTING OR FINAL ENGINEERING. COPYRIGHT WOODLEY ARCHITECTURAL GROUP, INC. THESE DRAWINGS MAY NOT BE USED OR DUPLICATED WITHOUT THE EXPRESS WRITTEN PERMISSION OF WOODLEY ARCHITECTURAL GROUP, INC.

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REAR ELEVATION

SCALE: 1/4" = 1'-0"

10.22.2025

6-UNIT BUILDING

ALISO VIEJO | ROWTOWNS | SHEA HOMES

ALISO VIEJO, CALIFORNIA

NOTE: SQUARE FOOTAGE MAY VARY BASED ON CALCULATION METHODS

THESE DRAWINGS ARE INTENDED FOR DESIGN DEVELOPMENT AND PRELIMINARY STUDIES ONLY AND ARE NOT TO BE USED FOR ANY OTHER PURPOSE, SUCH AS FINAL PLOTTING OR FINAL ENGINEERING. COPYRIGHT WOODLEY ARCHITECTURAL GROUP, INC. THESE DRAWINGS MAY NOT BE USED OR DUPLICATED WITHOUT THE EXPRESS WRITTEN PERMISSION OF WOODLEY ARCHITECTURAL GROUP, INC.

A2.17

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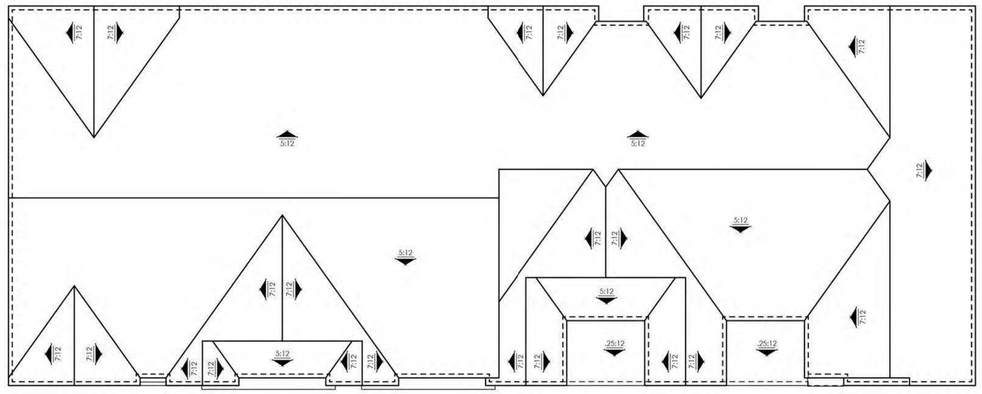
littleton, co 80120 / 303 683.7231
california // 2943 pullman st. suite A
santa ana, ca 92705 / 949 553.8919



ROOF PLAN

SCALE: 1/8" = 1'-0"

LEFT ELEVATION

SCALE: 1/4" = 1'-0"

RIGHT ELEVATION

SCALE: 1/4" = 1'-0"

A2.18

10.22.2025

6-UNIT BUILDING

ALISO VIEJO | ROWTOWNS | SHEA HOMES

ALISO VIEJO, CALIFORNIA

NOTE: SQUARE FOOTAGE MAY VARY BASED ON CALCULATION METHODS

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california // 2943 pullman st. suite A
santa ana, ca 92705 / 949 553.8919

NOTES:

Note:
* Planting within sight triangle shall be maintained under 30" in height.
*Yard buildings are not to exceed 12' in height and are to occur at a 3' minimum from all property lines.

LEGEND

1. Community Pool Area - See Enlargement [L-2]
2. Paseo - See Enlargement [L-2]
3. Existing Roundabout - to Remain
4. Project ID Wall
5. Focal Tree at Entry
6. Typical Courtyard - See Enlargement [L-4]
7. Community Playground - See Enlargement [L-4]
8. Community Dog Park
9. Community Mailboxes
10. Community Parking
11. Existing Slope - Refresh Planting
12. Private Yard/Patio
13. Enhanced Vehicular Paving
14. Gated Entry to Amenity Space

PACIFIC PARK DR

JOURNEY

ALISO CREEK RD

EXISTING OFFSITE - FIRE STATION

EXISTING OFFSITE - GAS STATION

19'-10"
84'-6"
15'
27'
26'-9"
20'-9"
80'-8"
94'-4"
24'-8"
58'-9"
12'
24'
10'
31'
9'-9"
35'

Shea HOMES
Live the difference.

ALISO CREEK - CONCEPTUAL SITE PLAN

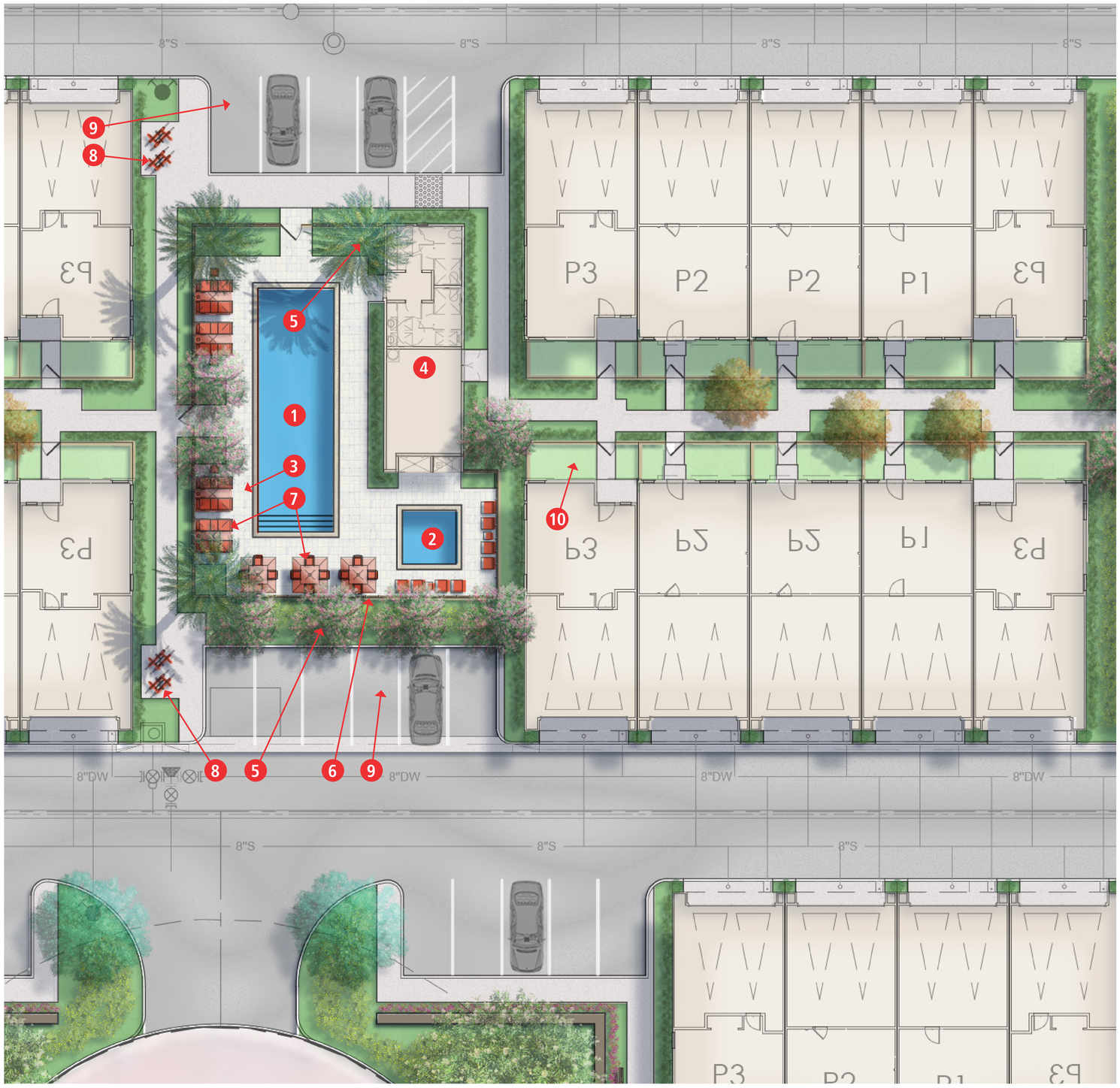
ALISO VIEJO, CA

0 15' 30' 60'
Scale: 1" = 30'-0"

10.02.26

L-1

C2 Collaborative



LEGEND

1. Pool
2. Spa
3. Enhanced Paving at Pool Deck
4. Bathrooms/Pool Equipment Building
5. Palms and Accent Trees
6. Pool Enclosure Fence
7. Loung Seating
8. Bike Racks
9. Community Parking
10. Private Patios

KEYMAP

Scale: 1" = 10'-0"

Shea HOMES
Live the difference.

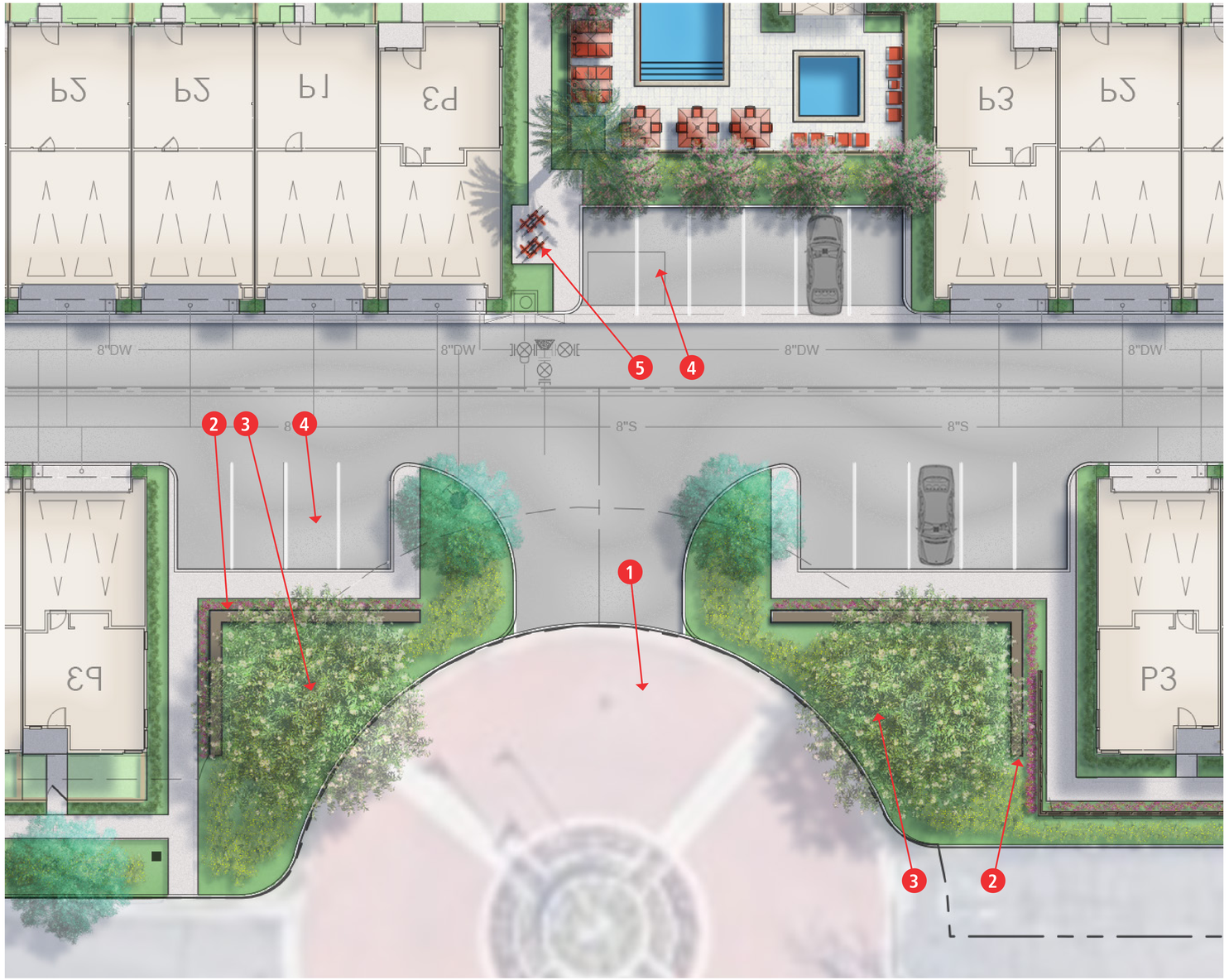
ALISO CREEK - COMMUNITY POOL AREA AND PASEO

ALISO VIEJO, CA

10.02.26

L-2

C2 Collaborative



LEGEND

1. Existing Traffic Circle - to Remain
2. Project ID Wall
3. Focal Tree
4. Community Parking
5. Bike Racks

KEYMAP

Scale: 1" = 10'-0"

ALISO CREEK - COMMUNITY ENTRY ENLARGEMENT

ALISO VIEJO, CA

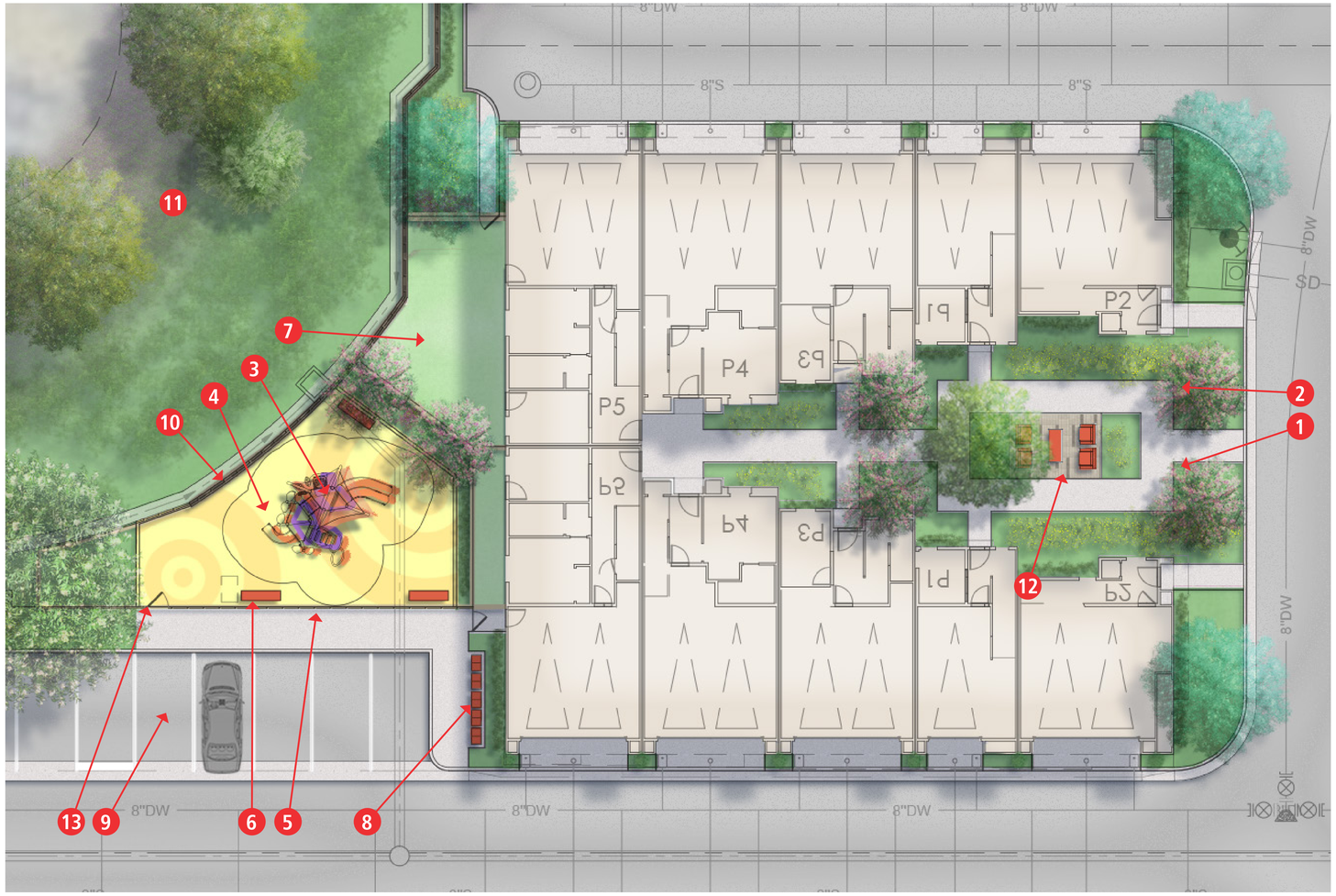
10.02.26

L-3

Shea HOMES Live the difference.

C2 Collaborative

1569



LEGEND

1. Screening Hedge at Courtyard Entry
2. Accent Tree
3. Playground Structure
4. Poured-in-Place Rubberized Surfacing
5. Low Security Fence (3'-6" height)
6. Bench Seating
7. Private Yard
8. Community Mailboxes
9. Community Parking
10. Retaining Wall - per Civil Engineer
11. Existing Slope - Planting to be Refreshed
12. Seating Area
13. Gated Playground Entry (3'-6" height and width)

KEYMAP

Shea HOMES
Live the difference.

ALISO CREEK - TYPICAL COURTYARD AND PASEO

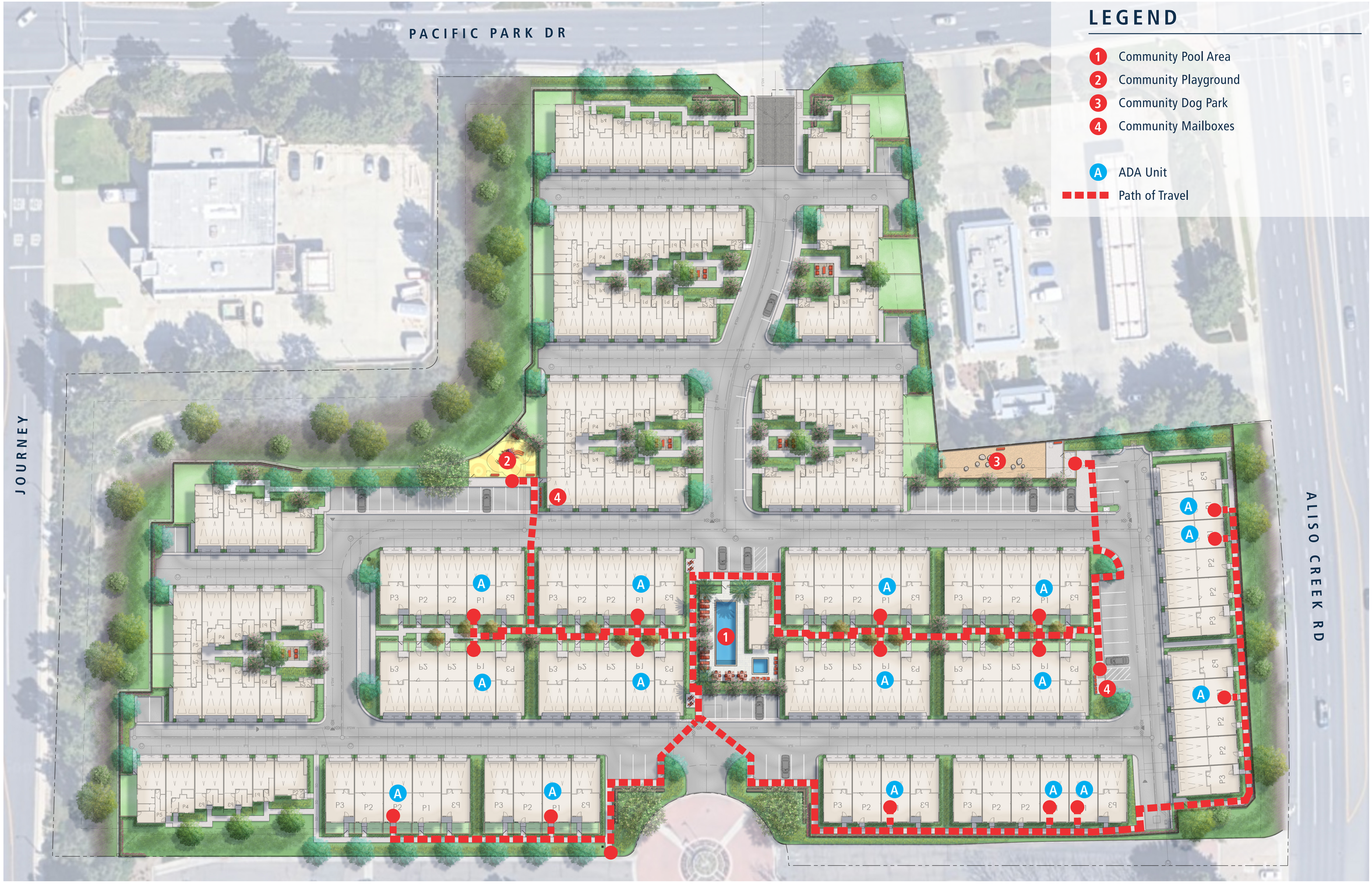
ALISO VIEJO, CA

0 5' 10' 20'
Scale: 1" = 10'-0"

10.02.26

L-4

C2 Collaborative



ALISO CREEK - CIRCULATION PLAN

ALISO VIEJO, CA

Scale: 1" = 30'-0"

10.02.26

L-5

PACIFIC PARK DR

ALISO CREEK RD

TYPICAL BIN LAYOUT

O R T

1'-0" Typ.

- T Trash Receptacle [64 gal.]
- R Recycling Bin [64 gal.]
- O Green Waste/Organics Bin [20 gal.]

Shea HOMES
Live the difference.

ALISO CREEK - SOLID WASTE PLAN

ALISO VIEJO, CA

0 15' 30' 60'
Scale: 1" = 30'-0"

10.02.26

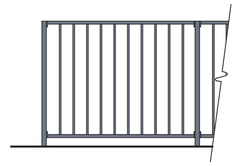
L-6

C2 Collaborative

NOTES:

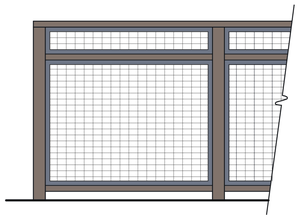
Note:
* Yard buildings are not to exceed 12' in height and are to occur at a 3' minimum from all property lines.

LEGEND

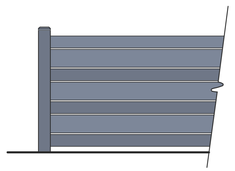


GUARD RAIL/FENCE*
-Tubular Steel
-3'-6" ht.

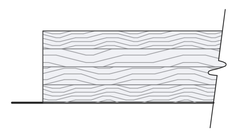
*Install in conditions where drop is 24" or greater.



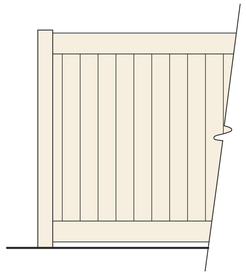
DOG PARK FENCE
-Tubular Steel w/ Wire Mesh
-5'-0" ht.



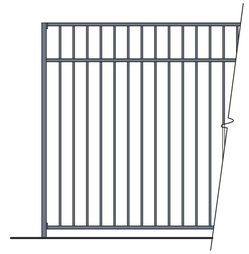
PATIO FENCE
-Painted Metal Panels
-3'-6" ht.



DECORATIVE LOW WALL
-4'-0" ht.



PRIVATE YARD FENCE
-Vinyl
-6'-0" ht.



POOL ENCLOSURE FENCE
-Tubular Steel
-6'-0" ht.

RETAINING WALL
-Splitface Block
-Height varies per Civil

LEGEND

- Common Area Open Space - 43,990 SF
- Private Open Space - 34,372 SF
  - Yards and Patios - 15,945 SF
  - Balconies - 18,427 SF

Shea HOMES
Live the difference.

ALISO CREEK - COMMUNITY OPEN SPACE

ALISO VIEJO, CA

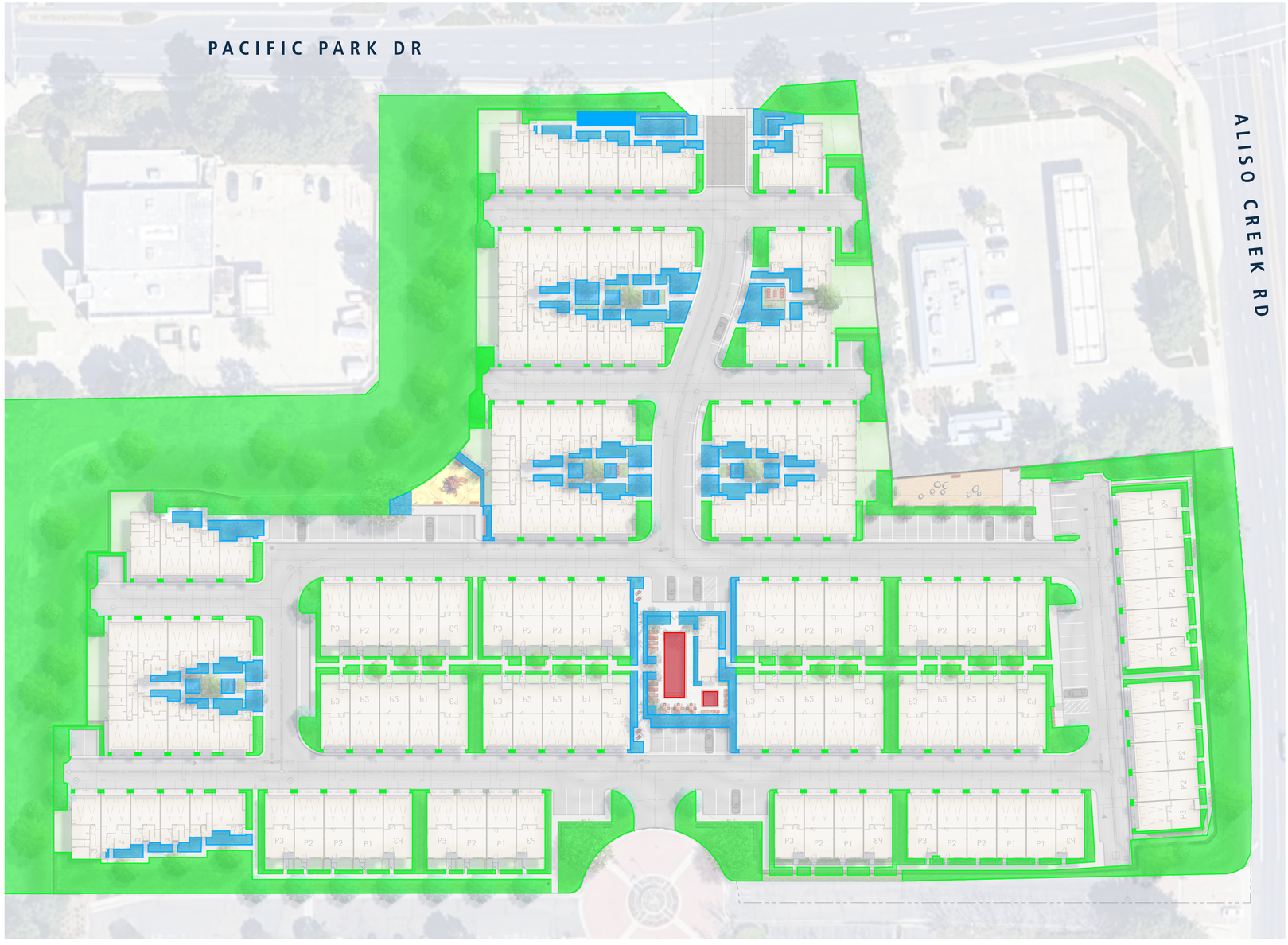
0 20' 40' 80'
Scale: 1"= 40'-0"

10.02.26

L-8

C2 Collaborative

1574



LEGEND

- Low Water Use - 101,440 SF
- Moderate Water Use - 12,490 SF
- Special Landscape Area (Pool and Spa) - 740 SF

ALISO CREEK
Date: 06/11/2025

WATER EFFICIENT WORK SHEET

Maximum Applied Water Allowance (MAWA)
Total MAWA = (Eto x 0.50 x LA in Sq.ft. x 0.62)+(Eto x 1.0 x SLA in Sq.ft. x 0.62)= Gallons per year for LA + SLA

Hydrozone:	Eto:	KL	LA Sq. Ft.	Conversion	SLA Sq. Ft.	MAWA
Landscaped Area	49.6	0.55	113,930	0.62	740	1,774,544

MAWA= Maximum Applied Water Allowance (gallons per year)
Eto= Reference Evapotranspiration from Appendix C (inches per year)
0.50= Evapotraspiration Adjustment Factor (ETAF)
1.0= ETAF for Sprcial Landscaped Area
LA= Landscaped Area includes Special Landscape Area (square feet)
0.62= Conversion Factor (to gallons per square foot)
0.3= the additional ET adjustment Factor for Special Landscape Area (1.0- 0.7= 0.3)
SLA= Speical Landscape Area (square feet)

Applicant to fill in boxes below:

Eto (Reference Evapotranspiration from Appendix C inches per year)	49.6
Landscaped Area includes Special Landscape Area (square feet)	113,930
Speical Landscape Area (square feet)	740

Estimated Annual Water Use:
Total EAWU = (Eto x KL x LA in Sq.ft. / IE)= Gallons per Year

Hydrozone:	Eto:	KL	Sq. Ft.	Conversion	IE	EAWU
Low Water Use	49.6	0.2	101,440	0.62	0.81	770,243
Medium Water Use	49.6	0.5	12,490	0.62	0.81	237,094
High Water Use	49.6	0.8	-	0.62	0.73	-
Total EAWU:			113,930			1,007,337

EAWU= Estimated Applied Water Use (gallons per year)
Eto= Reference Evapotranspiration from Appendix C (inches per year)
Kl= Landscape Coefficient
LA= Landscaped Area (square feet)
0.62= Conversion Factor (to gallons per square foot)
IE= Irrigation Efficiency= IME X DU (See definication in Appendix E for exmaplne IE percentages)
IME= Irrigation Management Efficiency (90%)
DU= Distribution Uniformity of Irrigation Head
Kl= Ks x Kc x Kmc
Ks= species factor (range 1.0- 0.9) (see WUCOLS list for values)
Kd= density factor (range 0.5- 1.3) (see WUCOLS list for density value)
Kmc= microclimatic factor (range 0.5- 1.4) (see WUCOLS)

Table A- PF (Plant Factor)
Cool Season Turf= 0.8
Warm Season Turf= 0.7
High Water Use Plants= 0.7 (can be between 0.7-0.9)
Moderate Water Use Plants= 0.5 (can be between 0.4-0.6)
Low Water Use Plants= 0.2 (can be between 0.1-0.3)
Very Low Water Use Plants= 0.1

IE (Irrigation Efficiency)- Appendix E
Pop-up Stream Rotor= 0.73
Rotor Head= 0.76
Microspray= 0.76
Bubblers= 0.77
Drip Emitters= 0.81
Subsurface Irrigation= 0.81

Irrigation Note:

1. All planting areas shall have a fully automatic irrigation system. Utilization water conserving features such as low-precipitation rate heads; low-flow micro sprays or drip irrigation, water sensors and multi-program controllers with weather station capability and drip circuit features. “Water Efficient Landscapes” irrigation system, scheduling and water use WELO calculations shall be designed to meet the requirements of the specifications of the City of Aliso Viejo.

2. All utility infrastructure and other potential conflicts including off site and below-grade that could affect irrigation design considered.

Shea HOMES Live the difference.

ALISO CREEK - WATER USE CALCULATION

ALISO VIEJO, CA

0 20’ 40’ 80’
Scale: 1” = 40’-0”

10.02.26

C2 Collaborative

TREE SCHEDULE:

FOCAL TREE

BOTANICAL NAME	COMMON NAME	SIZE	FORM	WUCOLS
Olea europaea	Olive	F.D.	Multi	Low
Platanus racemosa	Western Sycamore	36"	Multi	Mod
Quercus virginiana	Southern Live Oak	36"	Std.	Mod

STREET TREE

BOTANICAL NAME	COMMON NAME	SIZE	FORM	WUCOLS
Arbutus 'Marina'	Marina Strawberry Tree	36"	Std.	Low
Lagerstroemia Ssp.	Crape Myrtle	36"	Std.	Low
Ulmus parvifolia	Chinese Elm	36"	Std.	Mod

LARGE ACCENT TREE

BOTANICAL NAME	COMMON NAME	SIZE	FORM	WUCOLS
Magnolia grandiflora	Southern Magnolia	36"	Std.	Mod
Olea e. 'Swan Hill'	Fruitless Olive	36"	Multi	Low
Schinus molle	California Pepper Tree	36"	Std.	Low

PALM AT POOL

BOTANICAL NAME	COMMON NAME	SIZE	FORM	WUCOLS
Phoenix dactylifera	Date Palm	16' BTH	-	Low

MED. ACCENT TREE

BOTANICAL NAME	COMMON NAME	SIZE	FORM	WUCOLS
Cercis canadensis	Eastern Redbud	36"	Multi	Mod
Lagerstroemia Ssp.	Crape Myrtle	36"	Multi	Low
Laurus nobilis	Sweet Bay	24"	Std.	Low
Magnolia 'Little Gem'	Little Gem Magnolia	24"	Std.	Mod
Tristania conferta	Tristania	24"	Std.	Mod

LARGE SLOPE TREE

BOTANICAL NAME	COMMON NAME	SIZE	FORM	WUCOLS
Pinus ssp.	Pine	24"	Std.	Low/Mod
Platanus racemosa	Western Sycamore	24"	Multi	Mod
Tipuana tipu	Tipu Tree	24"	Std.	Low

ACCENT SLOPE TREE

BOTANICAL NAME	COMMON NAME	SIZE	FORM	WUCOLS
Arbutus unedo	Strawberry Tree	24"	Multi	Low
Heteromeles arbutifolia	Toyon	15g	Std.	Low
Rhus lancea	African Sumac	24"	Std.	Low

SHRUB, GROUNDCOVER, AND VINE SCHEDULE:

G.C. PLANTING

BOTANICAL NAME	COMMON NAME	SIZE	SPACING	WUCOLS
Carissa 'Green Carpet'	G.C. Natal Plum	1 gal.	30" o.c.	Low
Rosa Ssp.	Carpet Rose	1 gal.	30" o.c.	Mod
Salvia 'Bee's Bliss'	Sage	1 gal.	36" o.c.	Low
Senecio serpens	Blue Chalksticks	1 gal.	24" o.c.	Low
Trachelospermum jas.	Star Jasmine	1 gal.	24" o.c.	Mod

HEDGE PLANTING

BOTANICAL NAME	COMMON NAME	SIZE	SPACING	WUCOLS
Buxus 'Green Beauty'	Japanese Boxwood	1 gal.	24" o.c.	Mod
Ilex v. 'Stoke's Dwarf'	Yaupon Holly	5 gal.	30" o.c.	Low
Ligustrum j. 'Texanum'	Waxleaf Privet	5 gal.	30" o.c.	Mod
Olea 'Montra'	Little Ollie	5 gal.	48" o.c.	Low
Pittosporum t. 'Variegata'	Mock Orange	5 gal.	48" o.c.	Mod

SHRUB PLANTING

BOTANICAL NAME	COMMON NAME	SIZE	SPACING	WUCOLS
Agave attenuata	Foxtail Agave	5 gal.	24" o.c.	Low
Aloe Ssp.	Aloe	1 gal.	24" o.c.	Low
Baccharis pilularis	Coyote Brush	1 gal.	36" o.c.	Low
Calistemon 'Little John'	Bottlebrush	5 gal.	36"o.c.	Low
Dianella Ssp.	Flax Lily	1 gal.	24" o.c.	Low
Dietes Ssp.	Fortnight Lily	5 gal.	30" o.c.	Low
Hesperaloe parviflora	Red Yucca	5 gal.	36" o.c.	Low
Muhlenbergia rigens	Deer Grass	1 gal.	36" o.c.	Low
Phormium tenax	New Zealand Flax	15 gal.	48" o.c.	Mod
Rhaphiolepis indica	India Hawthorn	5 gal.	36" o.c.	Low
Rosa Ssp.	Rose	5 gal.	36" o.c.	Mod

SLOPE PLANTING

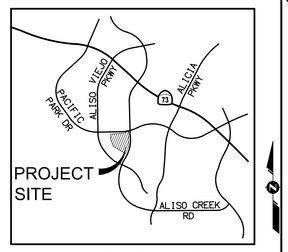
BOTANICAL NAME	COMMON NAME	SIZE	SPACING	WUCOLS
Acacia redolens 'Low Boy'	Prostrate Acacia	1 gal.	60" o.c.	Low
Cistus Ssp.	Rock Rose	5 gal.	48" o.c.	Low
Lantana Ssp.	Trailing Lantana	1 gal.	48" o.c.	Low
Myoporum p. 'Putah Creek'	Creeping Myoporum	1gal.	48" o.c.	Low

GARAGE POCKET

BOTANICAL NAME	COMMON NAME	SIZE	SPACING	WUCOLS
Podocarpus 'Icee Blue'	Icee Blue Yellowwood	5gal.	-	Mod
Prunus 'Bright and Tight'	Carolina Cherry Laurel	5 gal.	-	Mod

VINE PLANTING

BOTANICAL NAME	COMMON NAME	SIZE	SPACING	WUCOLS
Bougainvillea Ssp.	Bougainvillea	5 gal.	6' o.c.	Low
Ficus pumila	Creeping Fig.	1 gal.	12' o.c.	Low
Trachelospermum jas.	Star Jasmine Vine	5 gal.	6' o.c.	Mod



VICINITY MAP
NOT TO SCALE

OWNER/DEVELOPER:

SHEA HOMES
2 ADA, SUITE 200
IRVINE, CA 92618
(949) 526-8800

LEGAL DESCRIPTION:

PARCEL 1 OF PARCEL MAP NO. 93-196, IN THE CITY OF ALISO VIEJO, IN THE COUNTY OF ORANGE, STATE OF CALIFORNIA, AS SHOWN ON A MAP FILED IN BOOK 280 PAGES 26 TO 28 INCLUSIVE OF PARCEL MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA.

SOILS ENGINEER:

NMG GEOTECHNICAL, INC
17991 FITCH,
IRVINE, CA 92614
(949) 442-2442

BENCHMARK:

COUNTY OF ORANGE DESIGNATION: 3X-21-69

3-3/4"OCS ALUMINUM DISK STAMPED 3X-21-69, SET IN THE NE'LY COR. OF A 4'X5' CONCRETE CATCH BASIN. LOCATED AT THE SW'LY COR. OF THE INT. OF ALISO CREEK RD. & LA PAZ RD., 241' W'LY OF THE CL OF LA PAZ RD. & 62' S'LY OF THE CL OF ALISO CREEK RD.

ELEVATION (FEET): 156.965 (NAVD88) (LEVELED 1991)

BASIS OF BEARING:

THE BEARINGS SHOWN HEREON ARE BASED ON THE GRID BEARING OF NORTH 00°47'05"EAST BETWEEN O.C.S. HORIZONTAL CONTROL STATION GPS NO. 7689 AND GPS NO. 7690 PER RECORDS ON FILE IN THE OFFICE OF THE ORANGE COUNTY SURVEYOR. (2017.50 EPOCH)

ALL DISTANCES SHOWN HEREON ARE GROUND DISTANCES, UNLESS OTHERWISE NOTED. TO OBTAIN GRID DISTANCES MULTIPLY GROUND DISTANCES BY 0.99995217.

THIS PROJECT IS LOCATED IN FLOOD ZONE "X" SHOWN ON FEMA PANEL 06059C0428J, EFFECTIVE DATE: 12/03/2009.

PACIFIC PARK DRIVE
PROPERTY LINE
N89°59'56"E 105.00'
R=2410.00' L=213.26'
Δ=05°04'12"
APN 632-124-01
APN 632-124-07
N00°00'04"W 200.15'
N89°08'26"E 257.18'
N00°00'04"W 12.00'
Δ=01°44'09"
R=58.00'
L=1.76'
Δ=89°08'30"
R=10.00'
L=15.56'
N89°59'56"E 410.36'
N89°59'56"E 359.02'
N84°44'56"E 239.99'
N01°44'05"E 328.64'
N05°15'04"W 280.99'
N05°15'04"W 40.64'
R=2290.00' L=280.21'
Δ=07°00'39"
Δ=14°15'53" R=52.50' L=129.44'
Δ=66°13'12" R=9.50' L=10.98'
Δ=75°02'41" R=9.50' L=12.44'
Δ=15°07'41" R=59.50' L=15.71'
N89°59'56"E 0.71'
JOURNEY
ALISO CREEK ROAD
PRIVATE STREET
PRIVATE COURT
BUILDING 1
BUILDING 2
BUILDING 3
BUILDING 4
BUILDING 5
BUILDING 6
BUILDING 7
BUILDING 8
BUILDING 9
BUILDING 10
BUILDING 11
BUILDING 12
BUILDING 13
BUILDING 14
BUILDING 15
BUILDING 16
BUILDING 17
BUILDING 18
BUILDING 19
BUILDING 20
BUILDING 21
BUILDING 22
BUILDING 23
SETBACK
PROPERTY LINE

LEGEND
* ACCESSIBLE UNITS

30 15 0 30 60 90
SCALE: 1"=30'

REGISTERED PROFESSIONAL ENGINEER AMY L. JARAMILLO NO. 94608 CIVIL STATE OF CALIFORNIA

AMY L. JARAMILLO, R.C.E. NO. 94608 DATE

PREPARED FOR:
SHEA HOMES
15261 LAGUNA CANYON RD
SUITE 100
IRVINE, CA 92618
(949) 526-8800

PREPARED BY:
PROACTIVE ENGINEERING & SURVEYING
27051 Towne Centre Drive, Suite 270
Foothill Ranch, CA 92610 949.716.7460

ENGINEERING SITE PLAN
27181 ALISO CREEK RD
CITY ENGINEERING
SITE PLAN

PLAN PREPARATION:
OCT 2026
C-4
SHEET 1 OF 4

Plotted: Oct 01, 2026 - 11:33am by: A_Jaramillo
Drawing Name: N:\20.197.000\DGN\PLANS\ENT\SP\197-SP-ENG-01-SP.dwg

PACIFIC PARK DRIVE

APN 632-124-01

APN 632-124-07

JOURNEY

ALISO CREEK ROAD

LEGEND

* ACCESSIBLE UNITS

BUILDING 1 · BUILDING 2 · BUILDING 3 · BUILDING 4 · BUILDING 5 · BUILDING 6 · BUILDING 7 · BUILDING 8 · BUILDING 9 · BUILDING 10 · BUILDING 11 · BUILDING 12 · BUILDING 13 · BUILDING 14 · BUILDING 15 · BUILDING 16 · BUILDING 17 · BUILDING 18 · BUILDING 19 · BUILDING 20 · BUILDING 21 · BUILDING 22 · BUILDING 23

PROP. RETAINING WALL · PROP. STORM DRAIN · PROP. V-DITCH · EX. RETAINING WALL TO REMAIN · PROP. LOW FENCE · JOIN EXISTING STORM DRAIN

SCALE: 1"=30'

SECTION A-A
NOT TO SCALE

SECTION B-B
NOT TO SCALE

SECTION C-C
NOT TO SCALE

SECTION D-D
NOT TO SCALE

SECTION E-E
NOT TO SCALE

SECTION F-F
NOT TO SCALE

SECTION G-G
NOT TO SCALE

SECTION H-H
NOT TO SCALE

SECTION I-I
NOT TO SCALE

SECTION J-J
NOT TO SCALE

REGISTERED PROFESSIONAL ENGINEER · AMY L. JARAMILLO · NO. 94608 · CIVIL · STATE OF CALIFORNIA

DATE

AMY L. JARAMILLO, R.C.E. NO. 94608

PREPARED FOR:

SHEA HOMES
15261 LAGUNA CANYON RD
SUITE 100
IRVINE, CA 92618
(949) 526-8800

PREPARED BY:

PROACTIVE ENGINEERING & SURVEYING
27051 Towne Centre Drive, Suite 270
Foothill Ranch, CA 92610 949.716.7460

ENGINEERING SITE PLAN
27181 ALISO CREEK RD

PRELIMINARY GRADING PLAN

PLAN PREPARATION: OCT 2026
C-5
SHEET 2 OF 4

Plotted: Oct 01, 2026 - 1:28pm by: A.Jaramillo
Drawing Name: N:\20.197.000\DGN\PLANS\ENT\SP\197-SP-ENG-02-C5.dwg

RAW EARTHWORK
CUT: 4,200 CY
FILL: 9,800 CY
IMPORT: 5,600 CY

Elevations Table				
Number	Minimum Elevation	Maximum Elevation	Area	Color
1	-8.00	-6.00	0.37	
2	-6.00	-4.00	256.58	
3	-4.00	-2.00	9660.32	
4	-2.00	0.00	117019.29	
5	0.00	2.00	113172.29	
6	2.00	4.00	56666.27	
7	4.00	6.00	2123.01	

30 15 0 30 60 90
SCALE: 1"=30'

AMY L. JARAMILLO, R.C.E. NO. 94608 DATE _____

REGISTERED PROFESSIONAL ENGINEER — AMY L. JARAMILLO — NO. 94608 — CIVIL — STATE OF CALIFORNIA

PREPARED FOR:
SHEA HOMES
SHEA HOMES
15261 LAGUNA CANYON RD
SUITE 100
IRVINE, CA 92618
(949) 526-8800

PREPARED BY:
PROACTIVE ENGINEERING & SURVEYING
27051 Towne Centre Drive, Suite 270
Foothill Ranch, CA 92610 949.716.7460

ENGINEERING SITE PLAN
27181 ALISO CREEK RD
PRELIMINARY CUT-FILL MAP

PLAN PREPARATION: OCT 2026
C-6
SHEET 3 OF 4

Plotted: Oct 01, 2026 - 11:36am by: A_Jaramillo
Drawing Name: N:\20.197.000\DLV\C3D\TNA\197-C3D-EQ.dwg

PACIFIC PARK DRIVE

JOIN EX 12" PVC WATER

EX. SEWER

EX. STORM DRAIN

EX. RECYCLED WATER

LEGEND

- 8"DW — PROPOSED PUBLIC DOMESTIC WATER
- 8"S — PROPOSED PUBLIC SANITARY SEWER
- PROPOSED STORM DRAIN
- PROPOSED FIRE HYDRANT
- PROPOSED CATCH BASIN

APN 632-124-01

APN 632-124-07

JOURNEY

ALISO CREEK ROAD

PROP. V-DITCH

JOIN EX. STORM DRAIN

JOIN EX. 8" PVC WATER

EX. 8" PVC WATER

EX. 8" VCP SEWER

EX. 8" VCP SEWER

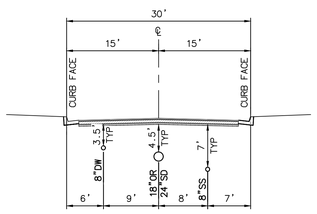
EX. WATER

JOIN EX. 8" VCP SEWER

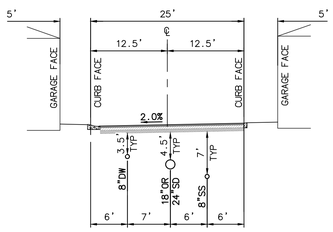
EX.8" PVC WATER

BUILDING 1 PAD=356.3 PAD=355.8
BUILDING 2 PAD=355.8
BUILDING 3 PAD=356.7 PAD=356.2
BUILDING 4 PAD=356.4 PAD=355.9
BUILDING 5 PAD=358.0 PAD=357.5
BUILDING 6 PAD=356.4 PAD=356.9
BUILDING 7 PAD=361.8
BUILDING 8 PAD=361.9 PAD=361.4
BUILDING 9 PAD=362.2 PAD=361.7
BUILDING 10 PAD=360.2 PAD=359.7
BUILDING 11 PAD=360.3 PAD=359.8
BUILDING 12 PAD=360.7 PAD=360.1
BUILDING 13 PAD=359.1 PAD=358.6
BUILDING 14 PAD=359.2 PAD=358.7
BUILDING 15 PAD=359.7 PAD=359.2
BUILDING 16 PAD=357.0 PAD=356.5
BUILDING 17 PAD=357.0 PAD=356.5
BUILDING 18 PAD=356.8 PAD=356.3
BUILDING 19 PAD=355.8 PAD=355.3
BUILDING 20 PAD=355.8 PAD=355.3
BUILDING 21 PAD=355.5 PAD=355.0
BUILDING 22 PAD=354.5 PAD=354.0
BUILDING 23 PAD=354.6 PAD=354.1

SCALE: 1"=30'



SECTION A-A
NOT TO SCALE



SECTION B-B
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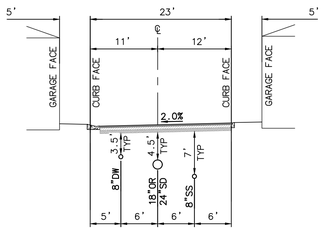


SECTION C-C
NOT TO SCALE

DATE

AMY L. JARAMILLO, R.C.E. NO. 94608

REGISTERED PROFESSIONAL ENGINEER — AMY L. JARAMILLO — NO. 94608 — CIVIL — STATE OF CALIFORNIA

PREPARED FOR:

Shea HOMES

SHEA HOMES
15261 LAGUNA CANYON RD
SUITE 100
IRVINE, CA 92618
(949) 526-8800

PREPARED BY:

PROACTIVE ENGINEERING & SURVEYING
27051 Towne Centre Drive, Suite 270
Foothill Ranch, CA 92610 949.716.7460

ENGINEERING SITE PLAN
27181 ALISO CREEK RD

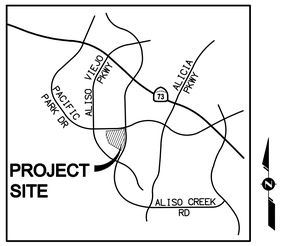
UTILITY PLAN

PLAN PREPARATION: OCT 2026
C-7
SHEET 4 OF 4

Drawing Name: N:\20.197.000\DELIVPLANS\ENT\SP\197-SP-ENG-04-UT.dwg
Plotted: Oct 01, 2026 - 1:31pm by: A_Jaramillo

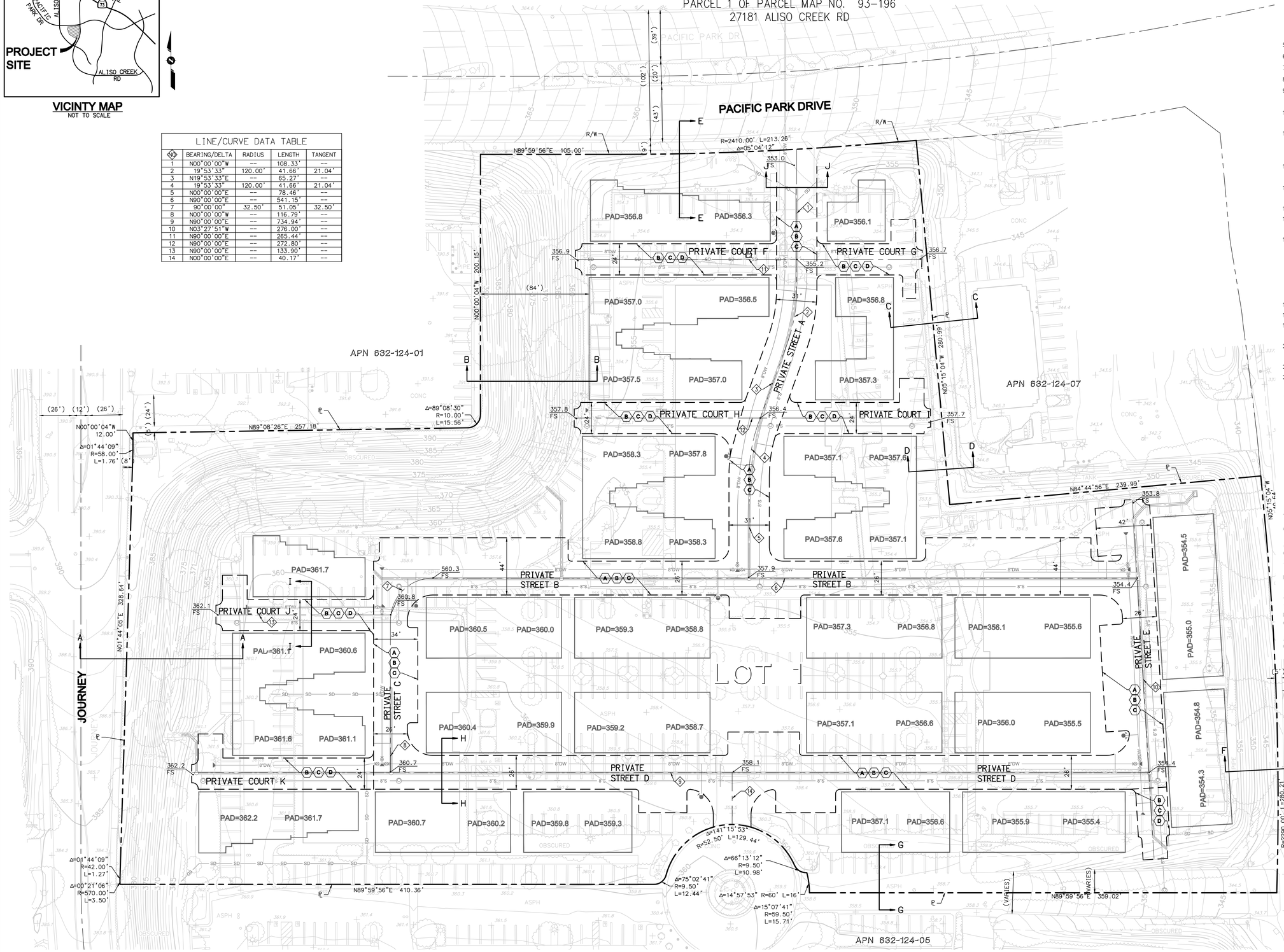
VESTING TENTATIVE TRACT MAP 19442

FOR CONDOMINIUM PURPOSES
APN: 632-124-08
PARCEL 1 OF PARCEL MAP NO. 93-196
27181 ALISO CREEK RD



VICINITY MAP
NOT TO SCALE

LINE/CURVE DATA TABLE				
NO.	BEARING/DELTA	RADIUS	LENGTH	TANGENT
1	N00°00'00"W	--	108.33'	--
2	19°53'33"	120.00'	41.66'	21.04'
3	N19°53'33"E	--	65.27'	--
4	19°53'33"	120.00'	41.66'	21.04'
5	N00°00'00"E	--	78.46'	--
6	N90°00'00"E	--	541.15'	--
7	90°00'00"	32.50'	51.05'	32.50'
8	N00°00'00"W	--	116.79'	--
9	N90°00'00"E	--	734.94'	--
10	N03°27'51"W	--	276.00'	--
11	N90°00'00"E	--	265.44'	--
12	N90°00'00"E	--	272.80'	--
13	N90°00'00"E	--	133.90'	--
14	N00°00'00"E	--	40.17'	--



GENERAL NOTES:

1. SITE AREA: 8.44 ACRES
2. EXISTING LAND USE: PROFESSIONAL OFFICE
3. PROPOSED LAND USE: 137 ATTACHED RESIDENTIAL CONDOMINIUM DWELLING UNITS
4. ADJACENT LAND USES:
   NORTH - TOWN CENTER COMMERCIAL
   SOUTH - PROFESSIONAL OFFICE
   EAST - RESIDENTIAL HIGH DENSITY (RHD)
   WEST - BUSINESS PARK
5. EXISTING GENERAL PLAN USE: PROFESSIONAL OFFICE (PO)
6. PROPOSED GENERAL PLAN USE: RESIDENTIAL MEDIUM DENSITY (9-18 DU/AC)
7. EXISTING ZONING: PROFESSIONAL OFFICE (PO)
8. PROPOSED ZONING: RESIDENTIAL MEDIUM DENSITY (9-18 DU/AC)
9. THIS PROJECT IS LOCATED IN FLOOD ZONE "X" SHOWN ON FEMA PANEL 06059C0428J, EFFECTIVE DATE: 12/03/2009.
10. THE DEVELOPER RESERVES THE RIGHT TO FILE MULTIPLE FINAL MAPS FOR THIS TENTATIVE TRACT MAP.
11. MAINTENANCE OF ALL LETTERED LOTS AND PARKWAYS SHALL BE THE RESPONSIBILITY OF A HOMEOWNER'S ASSOCIATION, PUBLIC AGENCY, OR PRIVATE ENTITY. SEE STATISTICAL SUMMARY AND OWNERSHIP/MAINTENANCE SUMMARY THIS SHEET FOR DETAILED BREAKDOWN.
12. A PORTION OF THE PROPOSED STORM DRAIN SYSTEM WITHIN THE LIMITS OF THIS PROJECT WILL BE PRIVATELY OWNED AND MAINTAINED BY THE HOME OWNER'S ASSOCIATION.
13. DRAINAGE OF THIS PROJECT WILL BE CONVEYED BE MEANS OF A STORM DRAIN SYSTEM CONSISTING OF VARYING SIZES OF STORM DRAIN PIPES, BROW DITCHES AND AREA DRAINS.
14. EXISTING IRRIGATION LINES WILL BE REMOVED, RELOCATED OR PROTECTED IN PLACE.
15. ALL EXISTING EASEMENTS ARE TO REMAIN IN THEIR CURRENT DESIGNATED LOCATIONS UNLESS OTHERWISE NOTED.
16. PRIOR TO THE RECORDATION OF A SUBDIVISION MAP THE APPLICANT SHALL SUBMIT A "BACKBONE" FIRE MASTER PLAN TO THE FIRE CHIEF FOR REVIEW AND APPROVAL. THIS PLAN SHALL INCLUDE THE STREETS AS SHOWN ON THE VESTING TENTATIVE TRACT MAP (VTTM). THIS PLAN SHALL INCLUDE ALL STREETS (WITH SECTIONS), FIRE HYDRANT LOCATIONS, BLUE PAVEMENT MARKERS, WATER AVAILABILITY FOR FIRE FLOW REPORT, AND ANY GATES PROPOSED ACROSS FIRE DEPARTMENT ACCESS.
17. ALL PROPOSED UTILITIES WILL BE UNDERGROUND.
18. SCHOOL DISTRICT IS CAPISTRANO UNIFIED.
19. ALL SIDEWALKS, CURB RETURNS, AND PEDESTRIAN CROSSINGS MUST MEET THE TITLE 24 AND AMERICAN DISABILITIES ACT REQUIREMENTS.
20. AN EASEMENT FOR EMERGENCY ACCESS AND PUBLIC SERVICE VEHICULAR INGRESS AND EGRESS PURPOSES WILL BE PROVIDED OVER PRIVATE COURTS.
21. 137 ATTACHED RESIDENTIAL CONDOMINIUMS ARE PROPOSED.
22. PROJECT IS NOT LOCATED IN A FIRE HAZARD SEVERITY ZONE.

UTILITIES:

WATER & SEWER:	MOULTON NIGUEL WATER DISTRICT (949) 831-2500
ELECTRIC:	SOUTHERN CALIFORNIA EDISON CO. (800) 655-4555
CABLE TV:	AT&T (800) 310-2355
TELEPHONE:	AT&T (800) 310-2355

BENCHMARK:

COUNTY OF ORANGE DESIGNATION: 3X-21-69

3-3/4"OCS ALUMINUM DISK STAMPED 3X-21-69, SET IN THE NE'LY COR. OF A 4'X5' CONCRETE CATCH BASIN. LOCATED AT THE SW'LY COR. OF THE INT. OF ALISO CREEK RD. & LA PAZ RD., 241' W'LY OF THE CL OF LA PAZ RD. & 62' S'LY OF THE CL OF ALISO CREEK RD.

ELEVATION (FEET): 156.965 (NAVD88) (LEVELED 1991)

BASIS OF BEARING:

THE BEARINGS SHOWN HEREON ARE BASED ON THE GRID BEARING OF NORTH 00°47'05"EAST BETWEEN O.C.S. HORIZONTAL CONTROL STATION GPS NO. 7689 AND GPS NO. 7690 PER RECORDS ON FILE IN THE OFFICE OF THE ORANGE COUNTY SURVEYOR. (2017.50 EPOCH)

ALL DISTANCES SHOWN HEREON ARE GROUND DISTANCES, UNLESS OTHERWISE NOTED. TO OBTAIN GRID DISTANCES MULTIPLY GROUND DISTANCES BY 0.99995217.

LEGEND:

10	PROPOSED LOT NUMBER
P= 428.2	PROPOSED PAD ELEVATION
	PROPOSED RETAINING WALL
S	PROPOSED SEWER MAIN
	PROPOSED SEWER MANHOLE
	PROPOSED STORM DRAIN
W	PROPOSED WATER MAIN
	PROPOSED FIRE HYDRANT
CB1	PROPOSED CATCH BASIN
BIO	PROPOSED BIO TREATMENT WATER QUALITY
S	EXISTING SEWER MAIN
W	EXISTING WATER MAIN
SD	EXISTING STORM DRAIN
	EX BUSH UNLESS OTHERWISE NOTED
	EX FENCE
	LOT LINE (LL)/PL/ROW
	EASEMENT

30 15 0 30 60 90
SCALE: 1"=30'

OWNER CONSENT:

AACN PROPERTY HOLDINGS, LLC GIVES CONSENT TO THE FILING OF THIS TENTATIVE MAP.

JAKKI FARR, CFO DATE 09/23/2025

DEVELOPER:

SHEA HOMES
2 ADA, SUITE 200
IRVINE, CA 92618
(949) 526-8800

LEGAL DESCRIPTION:

PARCEL 1 OF PARCEL MAP NO. 93-196, IN THE CITY OF ALISO VIEJO, IN THE COUNTY OF ORANGE, STATE OF CALIFORNIA, AS SHOWN ON A MAP FILED IN BOOK 280 PAGES 26 TO 28 INCLUSIVE OF PARCEL MAPS, RECORDS OF ORANGE COUNTY, CALIFORNIA.

PROPOSED EASEMENTS

- (A) EASEMENT TO MNWD FOR SEWER AND WATER PURPOSES
- (B) EASEMENT FOR EMERGENCY ACCESS PURPOSES TO THE CITY OF ALISO VIEJO
- (C) EASEMENT FOR RECIPROCAL INGRESS/EGRESS FOR ALL UNITS
- (D) EASEMENT TO MNWD FOR WATER ONLY

PREPARED BY:

PROACTIVE ENGINEERING CONSULTANTS
27051 TOWNE CENTRE DRIVE, SUITE 270
FOOTHILL RANCH, CA 92610

ENGINEER'S STATEMENT

THIS MAP HAS BEEN PREPARED UNDER MY SUPERVISION AS DIRECTED BY THE RECORD OWNER AND DEVELOPER OF THE PROPERTY DESCRIBED HEREON.

AMY L. JARAMILLO, R.C.E. NO. 94608 DATE

REGISTERED PROFESSIONAL ENGINEER AMY L. JARAMILLO NO. 94608 CIVIL STATE OF CALIFORNIA

PREPARED FOR: Shea HOMES — SHEA HOMES, 2 ADA, SUITE 200, IRVINE, CA 92618, (949) 526-8800

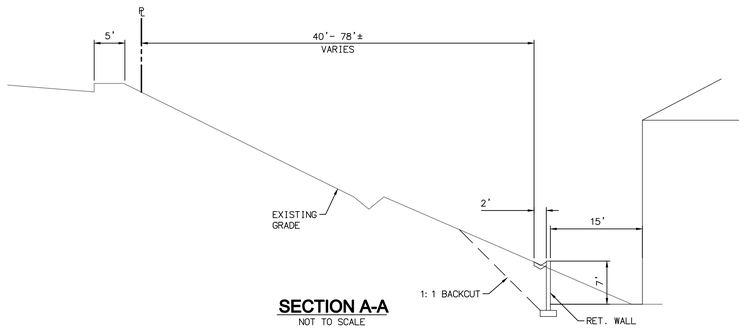
PREPARED BY: PROACTIVE ENGINEERING & SURVEYING, 27051 Towne Centre Drive, Suite 270, Foothill Ranch, CA 92610 949.716.7460

VESTING TENTATIVE TRACT MAP
27181 ALISO CREEK RD

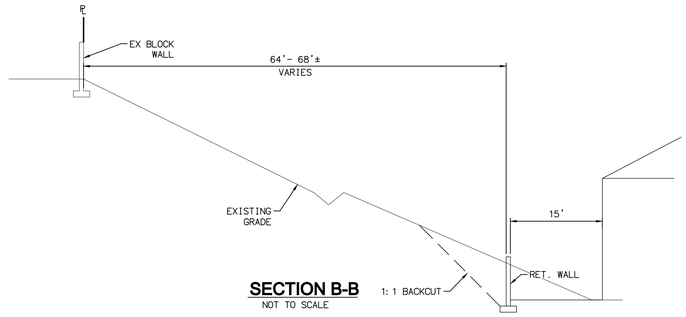
PLAN PREPARATION: AUGUST 2025
C-1
SHEET 1 OF 3

N:\20.197.000\DLV\PLANS\ENT\TM\197-TTM-01.DWG JVTWIST 6/11/25 12:34 pm

1581



SECTION A-A
NOT TO SCALE



SECTION B-B
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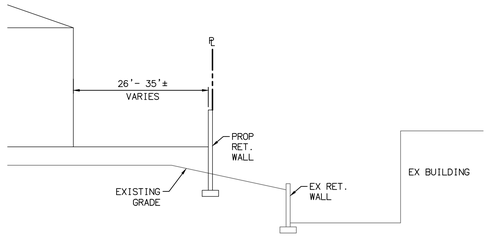

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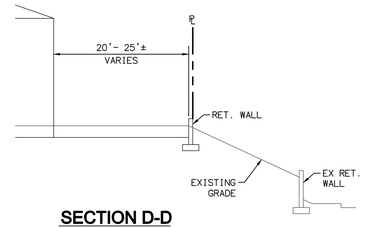

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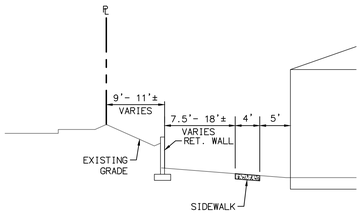

SECTION E-E
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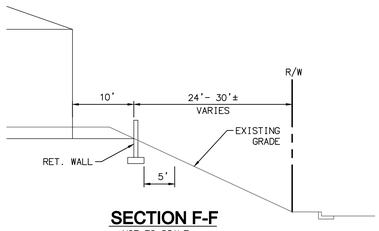

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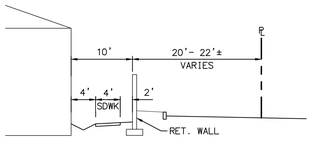

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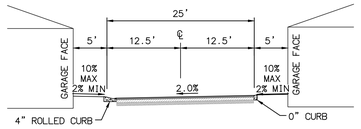

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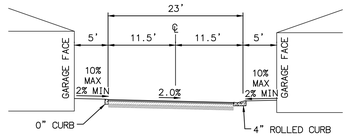
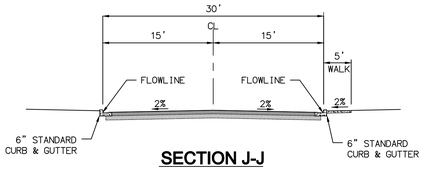


SECTION I-I
NOT TO SCALE



SECTION J-J
NOT TO SCALE

PREPARED FOR:

SHEA HOMES
2 ADA, SUITE 200
IRVINE, CA 92618
(949) 526-8800

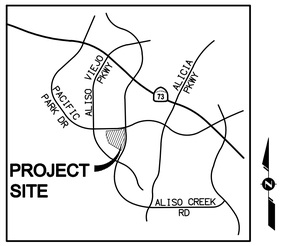
PREPARED BY:

PROACTIVE ENGINEERING & SURVEYING
27051 Towne Centre Drive, Suite 270
Foothill Ranch, CA 92610 949.716.7460

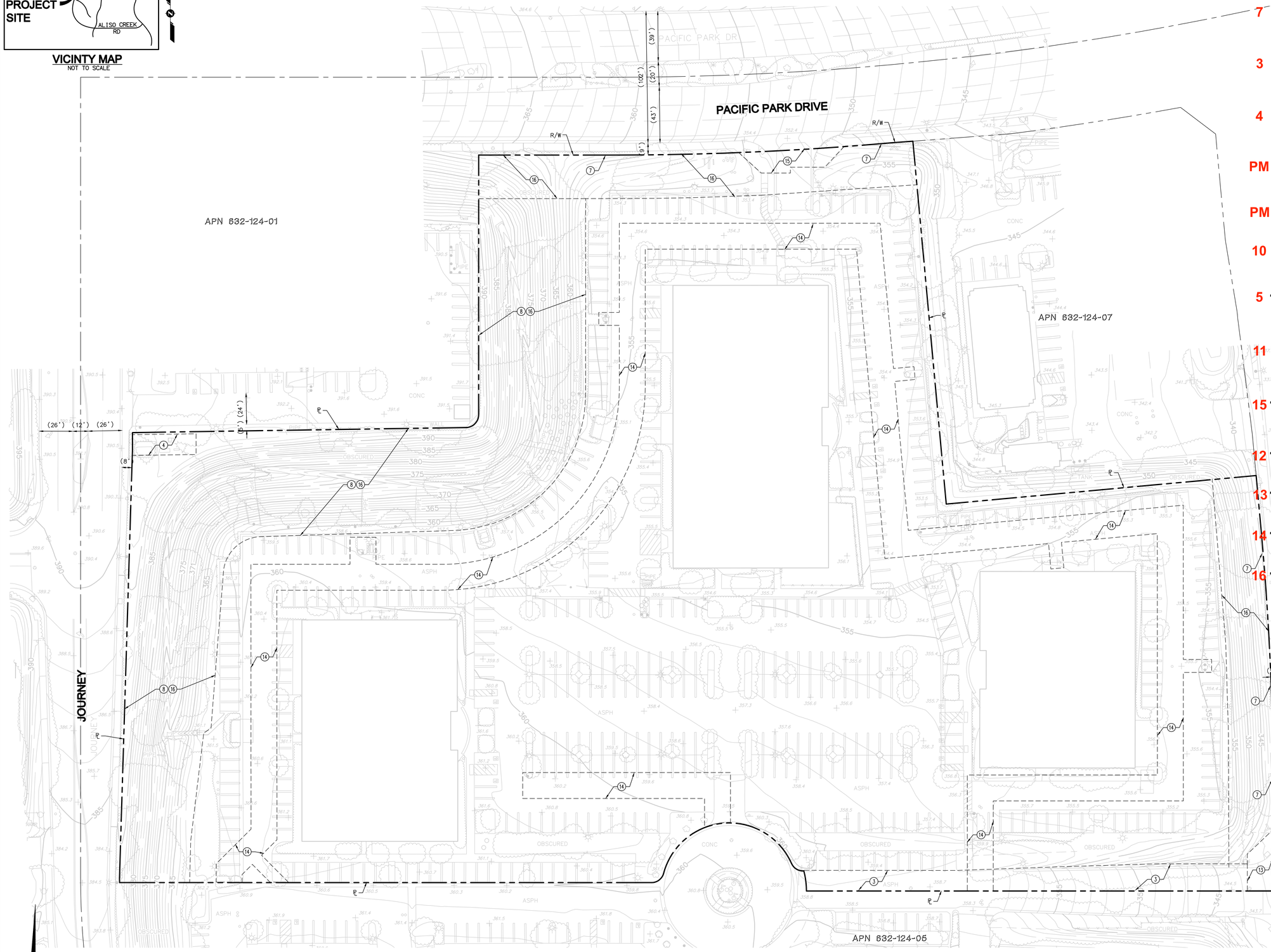
VESTING TENTATIVE TRACT MAP
SECTIONS
27181 ALISO CREEK RD

PLAN PREPARATION:
AUGUST 2025
C-2
SHEET 2 OF 3

N:\20.197.000\DLV\PLANS\ENT\TM\197-TTM-01.DWG JVTWIST 6/11/25 12:34 pm



VICINITY MAP
NOT TO SCALE



EXISTING EASEMENTS & DISPOSITION

6 3 THE TERMS, PROVISIONS AND EASEMENT(S) CONTAINED IN THE DOCUMENT ENTITLED "GRANT OF EASEMENT AND LICENSE AGREEMENT" RECORDED DECEMBER 3, 1990 AS INSTRUMENT NO. 90--636063 OF OFFICIAL RECORDS. THIS ITEM IS PLOTTED HEREON AND DOES AFFECT THE SUBJECT PROPERTY. (PORTION OF THIS DOCUMENT IS BLANKET OVER PARCELS B & C PER TITLE REPORT).

TO REMAIN

7 4 AN EASEMENT FOR UNDERGROUND COMMUNICATION FACILITIES RECORDED JULY 3, 1991 AS INSTRUMENT NO. 91--346221, OF OFFICIAL RECORDS. THIS ITEM IS PLOTTED HEREON AND DOES AFFECT THE SUBJECT PROPERTY.

TO REMAIN

3 5 AN EASEMENT FOR AIRCRAFT OPERATONS, SOUND, AIR SPACE, AVIGATON AND INCIDENTAL PURPOSES ABOVE A MEAN SEA LEVEL OF 974 FEET DEDICATED TO THE COUNTY OF ORANGE ON SAID PARCEL MAP FOR THE PURPOSE AND SUBJECT TO THE SAME CONDITIONS AND LIMITATIONS AS SHOWN IN THAT CERTAIN EASEMENT RECORDED JULY 2, 1979 IN BOOK 13213, PAGE 1111 OF OFFICIAL RECORDS. THIS ITEM IS BLANKET IN NATURE AND DOES AFFECT THE SUBJECT PROPERTY.

TBD

4 6 THE TERMS AND PROVISIONS CONTAINED IN THE DOCUMENT ENTITLED "DECLARATION AND NOTICE CONCERNING AIRCRAFT ENVIRONMENTAL IMPACTS", RECORDED DECEMBER 1, 1983 AS INSTRUMENT NO. 83--549335, OF OFFICIAL RECORDS. THIS ITEM IS BLANKET IN NATURE AND DOES AFFECT THE SUBJECT PROPERTY.

TBD

PM 7 ABUTTER'S RIGHTS OF INGRESS AND EGRESS TO OR FROM ALISO CREEK ROAD AND PACIFIC PARK DRIVE, EXCEPT AT STREET INTERSECTIONS AND APPROVED ACCESS LOCATIONS, HAVE BEEN DEDICATED OR RELINQUISHED ON THE MAP OF PARCEL MAP NO. 93--196 ON FILE IN BOOK 280, PAGE 26, OF PARCEL MAPS. THIS ITEM IS PLOTTED HEREON AND DOES AFFECT THE SUBJECT PROPERTY.

TO REMAIN

PM 8 AN EASEMENT DEDICATED FOR LANDSCAPE MAINTENANCE PURPOSES AS SHOWN ON PARCEL MAP NO. 93--196, BOOK 280 PAGES 26--28. THIS ITEM IS PLOTTED HEREON AND DOES AFFECT THE SUBJECT PROPERTY.

TO BE MODIFIED

10 9 THE TERMS AND PROVISIONS CONTAINED IN THE DOCUMENT ENTITLED "AGREEMENT FOR PARKING CONTROL" RECORDED SEPTEMBER 29, 1994 AS INSTRUMENT NO. 94--0587001, OF OFFICIAL RECORDS. THIS ITEM IS BLANKET IN NATURE AND DOES AFFECT THE SUBJECT PROPERTY.

TBD

5 10 COVENANTS, CONDITIONS, RESTRICTIONS AND EASEMENTS RECORDED DECEMBER 20, 1998 AS INSTRUMENT NO. 88--663664, OF OFFICIAL RECORDS. MODIFICATIONS THEREON RECORDED APRIL 23, 1990 AS INSTRUMENT NO.90--213187, OF OFFICIAL RECORDS. EXTENDED THEREON BY AN INSTRUMENT RECORDED AUGUST 29, 1997, AS INSTRUMENT NO. 19970422675, OF OFFICIAL RECORDS. THIS ITEM IS BLANKET IN NATURE AND DOES AFFECT THE SUBJECT PROPERTY.

TBD

11 11 COVENANTS, CONDITIONS, RESTRICTIONS AND EASEMENTS RECORDED AUGUST 29, 1997, AS INSTRUMENT NO. 19970422676, OF OFFICIAL RECORDS. THIS ITEM IS BLANKET IN NATURE AND DOES AFFECT THE SUBJECT PROPERTY.

TBD

15 12 EASEMENTS FOR PIPELINES AND CONDUITS, TOGETHER \MTH METERING, MEASURING, REGULATING, CATHODIC PROTECTION, COMMUNICATIONS AND OTHER APPURTENANCES FOR THE TRANSPORTATION OF GAS, ENERGY, COMMUNICATIONS, PETROLEUM PRODUCTS AND OTHER SUBSTANCES RECORDED MAY 6, 1999 AS INSTRUMENT NO. 19990331534, OF OFFICIAL RECORDS. THIS ITEM DOES AFFECT THE SUBJECT PROPERTY BUT IS NOT PLOTTED HEREON BECAUSE THE EXACT LOCATION OF SAID EASEMENT CANNOT BE DETERMINED FROM THE DESCRIPTION OF RECORD.

TBD

12 13 EASEMENTS FOR STREET AND HIGHWAY PURPOSES RECORDED MAY 29, 1998 AS INSTRUMENT NO. 19980334309, OF OFFICIAL RECORDS. THIS ITEM IS PLOTTED HEREON AND DOES AFFECT THE SUBJECT PROPERTY.

TO REMAIN

13 14 AN EASEMENT FOR SEWER, WATER, AND RECLAIMED WATER PIPELINES AND APPURTENANT FACILITIES RECORDED FEBRUARY 16, 1999 AS INSTRUMENT NO. 19990108475, OFFICIAL RECORDS. THIS ITEM IS PLOTTED HEREON AND DOES AFFECT THE SUBJECT PROPERTY.

TO BE QUITCLAIMED

14 15 AN EASEMENT FOR STREET AND HIGHWAY PURPOSES RECORDED MARCH 29, 1999 AS INSTRUMENT NO. 19990227818, OF OFFICIAL RECORDS. THIS ITEM IS PLOTTED HEREON AND DOES AFFECT THE SUBJECT PROPERTY.

TO REMAIN

16 16 A DOCUMENT ENTITLED "GRANT DEED OF COMMUNITY ASSOCIATION PROPERTIES EASEMENT (PARCEL 1 OF PARCEL MAP 93--196)", RECORDED JULY 15, 2004 AS INSTRUMENT NO. 20040006430O2, OF OFFICIAL RECORDS. THIS ITEM IS PLOTTED HEREON AS BEING ALL OF THOSE EASEMENTS DEDICATED OR SHOWN ON PARCEL MAP NO. 93--196 FILED IN BOOK 280 PAGES 26 TO 28 OF PARCEL MAPS, AND DOES AFFECT THE SUBJECT PROPERTY.

TO BE MODIFIED

30 15 0 30 60 90
SCALE: 1"=30'

PREPARED FOR:	PREPARED BY:		
Shea HOMES SHEA HOMES 2 ADA, SUITE 200 IRVINE, CA 92618 (949) 526-8600	PROACTIVE ENGINEERING & SURVEYING 27051 Towne Centre Drive, Suite 270 Foothill Ranch, CA 92610 949.716.7460	VESTING TENTATIVE TRACT MAP EXISTING SITE EXCUMBERANCES 27181 ALISO CREEK RD	PLAN PREPARATION: AUGUST 2025 C-3 SHEET 1 OF 3

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1583

ORDINANCE NO. 2026-___

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ALISO VIEJO, CALIFORNIA, APPROVING A DEVELOPMENT AGREEMENT BETWEEN THE CITY AND SHEA HOMES LIMITED PARTNERSHIP FOR THE DEVELOPMENT OF A 137-UNIT RESIDENTIAL TOWNHOME COMMUNITY LOCATED AT 27081 ALISO CREEK ROAD (APN: 632-124-08)

WHEREAS, the City of Aliso Viejo ("City") has found that development agreements strengthen the public planning process, encourage private participation in comprehensive planning by providing a greater degree of certainty in that process, reduce the economic costs of development, allow for the orderly planning of public improvements and services, allocate costs to achieve maximum utilization of public and private resources in the development process, and ensure that appropriate measures to enhance and protect the environment are achieved;

WHEREAS, pursuant to California Government Code section 65864 et seq. and Aliso Viejo Municipal Code ("AVMC") section 15.82.010, the City is authorized to enter into development agreements providing for the development of land under terms and conditions set forth therein;

WHEREAS, on October 24, 2024, Shea Homes Limited Partnership ("Applicant") submitted a general plan amendment, zone change, vesting tentative tract map, site development permit, and a development agreement application to demolish an existing office building to accommodate the construction of a multi-family residential community at 27081 Aliso Creek Road ("Project");

WHEREAS, pursuant to section 21067 of the Public Resources Code, and section 15367 of the State CEQA Guidelines (Cal. Code Regs., tit. 14, § 15000 et seq.), the City is the lead agency for the proposed Project and has prepared an Initial Study/Mitigated Negative Declaration (SCH#2026060921) ("IS/MND") and a Mitigation Monitoring and Reporting Program ("MMRP") for the Project;

WHEREAS, because of the logistics, magnitude of the expenditure and considerable lead time prerequisite to planning and developing the Project, Developer has proposed to enter into a development agreement concerning the Project ("Development Agreement") to provide assurances that the Project can proceed without disruption caused by a change in the City's planning policies and requirements except as provided in the Development Agreement, which assurance will thereby reduce the actual or perceived risk of planning for and proceeding with development of the Project;

WHEREAS, the City Council has determined that by entering into the Development Agreement: (i) the City will promote orderly growth and quality development on the Property in accordance with the goals and policies set forth in the General Plan; (ii) significant benefits will be created for City residents and the public generally from

increased housing, parks and or park improvements, and the public gathering opportunities created by the Project;

WHEREAS, it is the intent of the City and Applicant to establish certain conditions and requirements related to review and development of the Project which are or will be the subject of subsequent development applications and land use entitlements for the Project as well as the Development Agreement;

WHEREAS, the City and Applicant have reached mutual agreement and desire to voluntarily enter into the Development Agreement to facilitate development of the Project subject to the conditions and requirements set forth therein;

WHEREAS, the Development Agreement contains, including, without limitation, property owner's vested right to complete development of the Project with governing land use regulations applicable at the time of approval; defines the scope of the Project; and identifies the public benefit obligations of the Applicant;

WHEREAS, the public benefits include, among other things, park in-lieu fees, as authorized by law and the City's ordinances, to rehabilitate and improve existing open space and recreational facilities in the City, including but not limited to, the Aquatic Center, Iglesia Community Center and Park, and the Ranch ("Facilities") in order to maintain the City's high standard of recreation and community services while accommodating a growing population, including future residents of the proposed subdivision;

WHEREAS, residents throughout the City regularly use the Facilities due to the variety of programs and services offered. Although the Facilities are located outside of the subdivision, future residents of the subdivision will undoubtedly use and benefit from use of the Facilities as well;

WHEREAS, on May 7, 2026, the City Council held a duly noticed public review and provided initial feedback on the concept plans for the Project;

WHEREAS, on October 1, 2026, the City gave public notice of the City Council public hearing for consideration of a Mitigated Negative Declaration (SCH#2026060921), General Plan Amendment GPA-2026-01004, Zone Change ZC-2026-01003, Vesting Tentative Tract Map 19442, Site Development Permit SDP-2025-00004, and Development Agreement DA-2026-01001 for the Project by advertising in a newspaper of general circulation; posting notices at City Hall and the Project site; and mailing notices to owners of property within 300 feet, Applicant, and local agencies that provide water, sewage, electricity and schools;

WHEREAS, on October 21, 2026, the City Council held a duly noticed public hearing and introduced the Ordinance;

WHEREAS, on November 18, 2026, the City held a duly noticed public hearing, at which time all interested persons had the opportunity to appear and be heard; and

WHEREAS, all legal prerequisites to the adoption of this Ordinance have occurred.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF ALISO VIEJO DOES ORDAIN AS FOLLOWS:

Section 1: **Incorporation of Recitals.** The City Council hereby finds and determines that all of the recitals set forth above are true and correct. The above recitals are hereby incorporated as substantive findings of this Ordinance.

Section 2. **CEQA.** Pursuant to the California Environmental Quality Act (Public Resources Code, § 21000 et seq.) and State CEQA Guidelines (California Code of Regulations, title 14, § 15000 et seq.) (Collectively, "CEQA"), the City Council adopted Resolution No. _____, determining that there is no substantial evidence that the approval of the Project associated with the Development Agreement would result in a significant adverse effect on the environment, provided appropriate mitigation measures, as identified in the MMRP, are imposed on the Project.

Section 3. **Findings.** Pursuant to AVMC 15.82.010 (Development Agreement and Other Actions), the City Council determined that approving the Development Agreement is in the best interest of the City and for the common benefit of residents, and hereby makes the following findings of fact and approves the Development Agreement between the City and the Applicant as set forth in Exhibit "A", which are attached hereto and incorporated herein by reference.

1. Public Welfare. Approval of the development agreement will not create conditions materially detrimental to public health, safety and general welfare. The Project is consistent with the policies and regulations of the proposed Medium-Density Residential zoning district. The DA includes provisions to ensure compliance with applicable land use regulations, defines the scope of the Project, and identifies the public benefit obligations of the Applicant. The Project is compatible with adjacent multi-family communities in terms of layout, architectural style, materials, and open space; the site is served by existing infrastructure, including roads, utilities, and public services sufficient to support residential development; that the environmental assessment determined impacts would be less than significant with mitigation; the Project advances the City's housing goals by creating new housing opportunities; and future construction will be subject to plan check review and inspection to ensure compliance with all applicable building and safety standards.

2. General Plan Consistency. The Project is consistent with the goals and policies of the General Plan listed below in that it incorporates landscaping aligned with the City Council-approved plant palette, emphasizing low-water, drought-tolerant species; features building materials, colors, and architectural design that are compatible with the surrounding residential communities; includes a public benefit fee; proposes three affordable housing units restricted to very low-income households, thereby enhancing housing diversity and affordability; and introduces

rezoning to facilitate residential development that includes affordable units in support of the City's housing objectives. The Project is also subject to mitigation measures and conditions of approval that address potential impacts related to air quality, biological resources, geology/soils, hazards and hazardous materials, hydrology/water quality, tribal cultural resources, and utilities/service systems. The DA incorporates, among other provisions, the scope of the Project, compliance with governing regulations, and the Applicant's public benefit obligations. In the General Plan, 'COS' refers to Conservation and Open Space policies, 'H' for Housing policies and goals, and 'LU' for Land Use policies. There is no applicable specific Plan.

- Policy COS-1.2 Reduce the amount of water used for landscaping and increase use of native and low water plants. Maximize use of native, low-water plants for landscaping of areas adjacent to sidewalks or other impermeable surfaces.
- Policy COS-4.2 Encourage and maintain high-quality architectural and landscaping designs that enhance or complement the community's visual character.
- Policy COS-7.5 Ensure that new development provides park land and/or improvements at a fair share ratio, pursuant to the City's Parkland Ordinance.
- Goal H-1: Encourage a diversity of housing types and provide affordability levels within Aliso Viejo to meet the needs of community residents.
- Policy H-1.1 Identify sites appropriate for the development of a variety of housing types and price ranges to meet the needs of all socioeconomic segments of the community through the disbursement of affordable units in projects.
- Policy H-1.2 Encourage through the use of density bonuses and rezoning to allow for residential development, development of affordable housing opportunities throughout the community, as well as development of housing for elderly and low- and moderate-income households near public transportation services.
- Policy H-1.4 Ensure that a portion of future residential development is affordable to low- and very-low-income households by designating certain sites as having the potential to be used for residential uses.
- Policy H-3.8 Review existing zoning policies and explore zoning changes to facilitate the development of affordable housing.
- Policy LU-12.2 As a condition upon new development, require payment of park fees and/or dedication and provision of parkland, recreation facilities and/or multi-use trails that improve the public and private recreation system.

Section 4. **Minor Modifications.** The City Council hereby approves the Development Agreement attached hereto as Exhibit "A" and authorizes the Community Development Director to make any further minor, non-substantive changes and modifications thereto.

Section 5. **Effective Date.** This Ordinance shall not take effect unless and until General Plan Amendment GPA-2026-01004, Zone Change ZC-2026-01003, Vesting

Tentative Tract Map 19442, and Site Development Permit SDP-2025-00004 are each approved by the City Council and have become effective, and the Development Agreement is executed by both parties.

Section 6. **Severability.** If any provision of this Ordinance or its application to any person or circumstance is held to be invalid by a court of competent jurisdiction, such invalidity has no effect on the other provisions or applications of the Ordinance that can be given effect without the invalid provision or application, and to this extent, the provisions of this Ordinance are severable. The City Council declares that it would have adopted this Ordinance irrespective of the invalidity of any portion thereof.

Section 7: **Location of Documents.** The administrative record for the Project is maintained at City Hall located at 12 Journey, Suite 100, Aliso Viejo, CA 92656. The custodian of records is the City Clerk.

Section 8. **City Clerk's Certification.** The City Clerk shall certify to the adoption of this Ordinance and cause a summary thereof to be published five days prior to the date of adoption of this Ordinance, and, within 15 days after adoption, the City Clerk shall cause to be published the aforementioned summary and shall post a certified copy of this Ordinance, together with the vote for and against the same, in the Office of the City Clerk.

Section 9. The Mayor, City Manager, and City Clerk or their designees, are authorized to take such actions to affect execution, recordation, and enforcement of this Ordinance and the Development Agreement.

PASSED, APPROVED AND ADOPTED this 18th day of November, 2026.

_____
Max Duncan, Mayor

APPROVED AS TO FORM:

_____
Scott C. Smith, City Attorney

ATTEST:

_____
Maria Kendig, City Clerk

STATE OF CALIFORNIA)
COUNTY OF ORANGE) ss.
CITY OF ALISO VIEJO)

I, Maria Kendig, City Clerk of the City of Aliso Viejo, California, DO HEREBY CERTIFY that the foregoing is the original of Ordinance No. 2026-__ duly passed and adopted by the City Council of the City of Aliso Viejo at their regular meeting held on the 18th day of November 2026, by the following roll call vote, to wit:

AYES:

NOES:

ABSENT:

_____
MARIA KENDIG,
CITY CLERK

(SEAL)

I hereby certify that the foregoing is the original of Ordinance No. 2026-__ duly passed and adopted by the Aliso Viejo City Council at its regular meeting held November 18, 2026, and that the Summary of the Ordinance was published on _____ and _____ in the Laguna Niguel News.

_____
MARIA KENDIG,
CITY CLERK

(SEAL)

Exhibit “A”
Development Agreement

RECORDED AT REQUEST OF
AND WHEN RECORDED RETURN TO:
City of Aliso Viejo
12 Journey, Suite 100
Aliso Viejo, CA 92656-5335
Attn: City Manager

Fee Exempt - Gov't Code §6103

(Space above for Recorder's Use)

DEVELOPMENT AGREEMENT (DA-2026-01001)

between

THE CITY OF ALISO VIEJO,
a California municipal corporation

and

SHEA HOMES LIMITED PARTNERSHIP, a California limited partnership

DEVELOPMENT AGREEMENT

This Development Agreement ("Agreement") is entered into by and between the City of Aliso Viejo, a California municipal corporation ("City"), and Shea Homes Limited Partnership, a California limited partnership ("Owner") with reference to the following facts:

RECITALS.

A. To strengthen the public planning process, encourage private participation in comprehensive planning and reduce the economic risk of development, the Legislature of the State of California adopted the "Development Agreement Statute," Sections 65864 et seq., of the Government Code. City, a general law city, is authorized by the Development Agreement Statute to enter into development agreements with persons and entities having legal or equitable interests in real property for the purpose of establishing predictability for both City and the property owner in the development process. Owner has requested that City enter into a development agreement for the development of the Property, as defined below. City enters into this Agreement pursuant to the provisions of the California Government Code, the City's General Plan, the City Municipal Code, and applicable City policies.

B. Owner has a legal or equitable interest in that certain real property consisting of approximately 8.44 acres of land located in the City of Aliso Viejo, County of Orange, State of California, more particularly described in Exhibit "A" (the "Property").

C. The Property is identified as Assessor's Parcel Number (APN) 632-124-08. It is located at 27081 Aliso Creek Road, which is generally south of Pacific Park Drive, west of Aliso Creek Road, and north and east of Journey.

D. The Property's General Plan and zoning designations are Professional Office (PO), under which residential uses are not allowed. The Property currently is developed with three two-story office buildings.

E. Owner desires to develop the Property (the "Project") as a for-sale residential community with 137 three-story attached residential units ("Units"), seven (5%) of which will be affordable to households in the "very low" income category (the "Affordable Units").

F. To facilitate development of the Project, Owner has asked the City to approve General Plan Amendment No. GPA-2026-01004 (the "General Plan Amendment") and Zone Change No. ZA-2026-01003 (the "Zone Change") to allow residential uses on the Property, Vesting Tentative Tract Map No. 19442 to subdivide the Property for residential use (the "Tentative Map"), a Density Bonus to allow for waivers of certain development standards to facilitate the construction of the Affordable Units (the "Density Bonus"), Site Development Permit No. SDP-2025-00004, and this Agreement.

G. This Agreement assures that the Project will assist the City in meeting its goals for the provisions of affordable housing by contributing to the City's affordable housing stock.

H. This Agreement further assures that development of the Property may occur in accordance with City's General Plan, as amended by the General Plan Amendment and Zone Change. The development of the Property pursuant to the Existing Land Use Regulations, this Agreement, the Subsequent Land Use Regulations to which Owner has consented in writing, and Subsequent Development Approvals (as each of those terms and phrases is defined within this Agreement) shall be referred to as the "Development Plan."

I. This Agreement constitutes a current exercise of City's police powers to provide predictability to Owner in the development approval process by vesting the permitted use, density, intensity of use, and timing and phasing of development consistent with the Development Plan in exchange for Owner's commitment to provide significant public benefits to City (the "Public Benefits") as set forth in Section 9.

J. The Public Benefits will advance the interests and meet the needs of Aliso Viejo's residents and visitors.

K. In return for Owner's participation and commitment to these significant contributions of private resources for public purposes, City is willing to exercise its authority to enter into this Agreement and to make a commitment of predictability for the development process for the Property. Absent City's willingness to make such a commitment, Owner would be unwilling to enter into this Agreement or make the significant investment of resources identified in this Agreement.

AGREEMENT

City and Owner agree as follows:

1. INTEREST OF OWNER. Owner represents that it has a legal or equitable interest in the Property and is authorized to enter into this Agreement.

2. PUBLIC HEARINGS.

   2.1 On October 21, 2026, after providing notice as required by law, the City Council held a public hearing on this Agreement and made the findings set forth in Section 3.

3. CITY COUNCIL FINDINGS. The City Council finds that:

   3.1 Subject to the approval of the General Plan Amendment and Zone Change becoming effective on or before the Effective Date, this Agreement is consistent with City's General Plan.

   3.2 This Agreement ensures a desirable and functional community environment, provides effective and efficient development of public

facilities, infrastructure, and services appropriate for the development of the Project, enhances effective utilization of resources within the City, provides assurances to Owner in an effort to control the cost of housing and development to the consumer, and provides other significant benefits to the City and its residents.

3.3 This Agreement provides public benefits beyond those which are necessary to mitigate the development of the Project.

3.4 This Agreement strengthens the public planning process, encourages private participation in comprehensive planning, particularly with respect to the implementation of the City's General Plan, and reduces the economic costs of development and government.

3.5 The best interests of the citizens of the City and the public health, safety, and welfare will be served by entering into this Agreement.

4. CONTINUING OBLIGATIONS. This Agreement binds the City now and in the future. By approving this Agreement, the City Council has elected to exercise certain governmental powers at the time of entering into this Agreement rather than deferring its actions to some undetermined future date. The terms and conditions of this Agreement have undergone extensive review by the City staff and the City Council and have been found to be fair, just, and reasonable. City has concluded that the Project will serve the best interests of its citizens and that the public health, safety, and welfare will be best served by entering into this Agreement.

5. DEFINITIONS. In this Agreement, including its Exhibits, unless the context otherwise requires, the following terms and phrases shall have the following meanings:

5.1 "Affordable Units" refer to the seven residential units (5% of the total units) within the Project which will be sold to households in the "Very Low" income category.

5.2 "Agreement" shall mean this Development Agreement between the City and Owner. The term "Agreement" shall include any amendment properly approved and executed pursuant to Section 7.5.

5.3 "Annual Review" means the City's review of Owner's good faith compliance with the terms of this Agreement pursuant to Government Code Section 65865.1, as set forth in Section 10 below.

5.4 "Approval Date" means the date on which the City Council conducted the second reading of the ordinance adopting this Agreement. That date is November 18, 2026.

5.5 "Building Permit" means a building permit for the construction of any of the buildings shown on the Site Development Permit which contains one or more of the residential units within the Project.

5.6 "City" shall mean the City of Aliso Viejo, a California municipal corporation.

5.7 "City Council" shall mean the governing body of the City.

5.8 "City Municipal Code" shall mean the Aliso Viejo Municipal Code. However, changes to the Aliso Viejo Municipal Code occurring between the Approval Date and the Effective Date shall not be considered part of the City Municipal Code for purposes of this Agreement without Owner's prior written consent.

5.9 "Day" refers to a calendar day unless specifically stated as a "business day."

5.10 "Default" shall refer to a Major Default or Minor Default as defined herein.

5.11 "Density Bonus" shall mean the density bonus approved for the Project on the Approval Date.

5.12 "Development" shall mean the improvement of the Property for the purposes of completing the structures, improvements, and facilities comprising the Project including, but not limited to: grading; the construction of infrastructure and private recreational facilities related to the Project located within the Property; the construction of buildings and structures; the installation of landscaping; and other improvements.

5.13 "Development Approvals" shall mean all permits and other entitlements, other than Land Use Regulations, approved or issued by the City for the use of, construction upon, and/or development of the Property. Development Approvals include, without limitation, the following actions, including revisions, addenda, amendments, and modifications to these actions:

a. tentative and final subdivision and tract maps;

b. site development permits;

c. excavation, grading, demolition, construction, encroachment, street improvement, and similar permits;

d. Building Permits;

e. certificates of compliance;

f. street, drainage, utility, stormwater, and landscape permits;

g. occupancy permits;

h. other permits or approvals necessary for the grading, construction, marketing, use and occupancy of the Project; and

i. environmental review documents for the Project.

5.14 "Development Plan" means the Existing Land Use Regulations, the Development Approvals, this Agreement, the Subsequent Land Use Regulations to which Owner has consented in writing, and Subsequent Development Approvals.

5.15 "Effective Date" shall mean the later of: (i) date the ordinance adopting this Agreement becomes effective and (ii) expiration of the period provided by applicable law, including, but not limited to, Government Code Section 65009, for challenging the General Plan Amendment and/or the Zone Change.

5.16 "Existing Land Use Regulations" means all Land Use Regulations in effect on the Effective Date, including the General Plan Amendment and Zone Change (including the number of Units approved for the Project by the General Plan Amendment). However, changes to Land Use Regulations occurring between the Approval Date and the Effective Date shall not be considered part of the Existing Land Use Regulations without Owner's prior written consent. Owner has consented to the General Plan Amendment and Zone Change, which shall be considered part of the Existing Land Use Regulations.

5.17 "Final Map" refers to the final map which may be filed with respect to any Tentative Map, including Vesting Tract Tentative Map No. 19442, as set forth in Section 66456 et seq. of the Subdivision Map Act.

5.18 "General Plan" shall mean the general plan of the City.

5.19 "General Plan Amendment" shall refer to General Plan Amendment No. GPA-2026-010004 for the Property to amend the City's General Plan. A description of the General Plan Amendment is attached as Exhibit "B".

5.20 "Implementing Agreement" refers to any written agreement entered into by Owner and the City for the implementation of obligations established in this Agreement.

5.21 "Land Use Regulations" shall mean all ordinances, resolutions, codes, rules, regulations and official policies of the City, such as the City's General Plan and Municipal Code, governing the development and use of land, including, without limitation, the permitted use of land, the density or intensity of use, subdivision requirements, timing and phasing of development, the maximum height and size of buildings, the provisions for reservation or dedication of land for public purposes, and the design, improvement, construction, initial occupancy standards and specifications,

and impact, building, processing, affordable housing, and all other fees applicable to the development of land within the City. As an exception to this definition, Land Use Regulations do not include provisions of any City ordinance, resolution, code, rule, regulation or official policy governing:

a. The conduct or taxation of businesses, professions, and occupations applicable to all businesses, professions, and occupations in the City;

b. Taxes and assessments of general application upon all residents of the City, provided that the taxes and assessments are not imposed for the purpose of taxing the right, power or privilege of developing or improving land (e.g., excise tax) or to directly finance the acquisition or dedication of open space or any other public improvement in respect of which the Owner is paying any fee (directly or through a Financing District) or providing any improvement pursuant to this Agreement; or

c. The control and abatement of nuisances.

5.22 "Major Default" refers to the material and substantial failure by (1) Owner to timely meet Owner's Public Benefit obligations, or (2) City's failure to issue Subsequent Development Approvals in accordance with its obligations under this Agreement, or (3) either Party to provide the agreed upon cooperation needed to implement the Public Benefits and/or the development of the Property pursuant to the Development Plan, including but not limited to a failure to comply with the terms of any Implementing Agreement. This definition is not intended to expand or limit the legal definition of "materiality," but only to establish the agreement of the Parties as to the nature of a default which could lead to an early termination of this Agreement.

5.23 "Minor Default" means a failure by Owner or City to comply with the terms and conditions of this Agreement which is not a "Major Default" as defined herein.

5.24 "Mortgagee" means a mortgagee of a mortgage, a beneficiary under a deed of trust or any other security-device, a lender, and their successors and assigns.

5.25 "Owner" means Shea Homes Limited Partnership, a California limited partnership, and its successors and assigns as set forth in Section 14.14.

5.26 "Owner's Vested Right" refers to Owner's guaranteed right to develop the Property as set forth in this Agreement, with particular reference to Section 8.

5.27 "Paragraph" means a lettered or numbered paragraph of an Exhibit to this Agreement, unless specifically stated to refer to another document or matter. (Note below that "Section" means a lettered or numbered section of

the main body of this Agreement.) A reference to a Paragraph includes all subparagraphs of that Paragraph.

5.28 The "Parties" means the City and Owner. A "Party" refers to either the City or the Owner.

5.29 "Project" means the development of the Property as set forth in the Development Plan.

5.30 "Property" means the real property described in Exhibit "A".

5.31 "Public Benefits" refers to those benefits provided to the City and the community by Owner pursuant to Section 9 and Exhibit "C" below.

5.32 "Reservation of Authority" means the rights and authority specifically reserved to City which limits the assurances and rights provided to the Owner under this Agreement. The Reservation of Authority is described in Section 8.5.

5.33 "Section" refers to a numbered section of this Agreement, unless specifically stated to refer to another document or matter, such as a statute.

5.34 "Site Development Permit" means Site Development Permit No. SDP-2025-00004 approved for the Project on the Approval Date.

5.35 "Subsequent Development Approvals" means all Development Approvals approved, granted, or issued after the Approval Date for the Project which are required or permitted by the Existing Land Use Regulations or those Subsequent Land Use Regulations to which Owner has consented in writing, and this Agreement.

5.36 "Subsequent Land Use Regulations" means those Land Use Regulations which are both adopted and effective after the Approval Date and which are not included within the definition of Existing Land Use Regulations. "Subsequent Land Use Regulations" include any Land Use Regulations adopted by moratorium by initiative, City action, or otherwise.

5.37 "Tentative Map" shall mean Vesting Tentative Tract Map No. 19442 and any tentative map, as defined in the Subdivision Map Act and the City Municipal Code, for the Project, which supersedes or amends Vesting Tentative Tract Map No. 19442. "Tentative Map" includes all conditions imposed upon the Tentative Map approval pursuant to the Subdivision Map Act and the City Municipal Code.

5.38 "Term" means the term of this Agreement as set forth in Section 7.2 of this Agreement.

5.39 "Unit" means a residential dwelling unit within the Project.

5.40 "Very Low Income Household" means persons and families whose income falls within the specified "Very Low Income" category for Orange County as most recently published by the State Department of Housing and Community Development (HCD) pursuant to California Health and Safety Code Section 50093.

5.41 "Zone Change" means Zone Change No. ZA-2026-01003, which changed the zoning for the Property from Professional Office to Medium Density Residential. The first reading of the ordinance approving the Zone Change occurred on the Approval Date and the Zone Change became effective on the Effective Date.

6. EXHIBITS. All exhibits attached to this Agreement are incorporated as a part of this Agreement. Those exhibits are:

Exhibit	Description
"A"	Legal Description of the Property
"B"	General Plan Amendment
"C"	Public Benefits
"D"	Density Bonus Housing Agreement
"E"	Assignment and Assumption Agreement

7. GENERAL PROVISIONS.

7.1 **Binding Effect of Agreement**. This Agreement shall be recorded against the Property and shall run with the land. The Development shall be carried out only in accordance with the terms of this Agreement. Until released or terminated pursuant to the provisions of this Agreement or until Owner has fully performed its obligations arising out of this Agreement, no portion of the Property shall be released from this Agreement.

7.2 **Term of Agreement.** The Term shall commence on the Effective Date. The Term shall continue for a period of ten (10) years from the Effective Date, subject to the following:

7.2.1 *Extensions of Term*. The Term shall be extended for periods equal to the time during which:

a. Litigation is pending which challenges any matter, including compliance with CEQA or any other local, state, or federal law, related in any way to the approval or implementation of all or any part of the Development Plan. Any such extension shall be equal to the time between the filing of litigation, on the one hand, and the entry of final judgment or dismissal, on the other. All such extensions shall be cumulative.

b. Any application by Owner for state or federal regulatory permits and/or approvals required for the Project has been pending more than one year after its submittal, beginning on the 366th day following its submittal for approval.

c. Any other delay occurs which is beyond the control of the Parties, as described in Section 14.10.

7.2.2 *Earlier Termination.* As provided in Section 7.3 and elsewhere within this Agreement, the Term may end earlier than the end of the Term specified in this Section.

7.3 Termination. This Agreement shall be deemed terminated and of no further effect upon the earlier occurrence of any of the following events:

7.3.1 Expiration of the Term as set forth in Section 7.2;

7.3.2 Entry of a "final judgment" setting aside, voiding, or annulling the adoption of the ordinance approving this Agreement after all appeals are exhausted;

7.3.3 The adoption of a referendum measure overriding or repealing the ordinance approving this Agreement;

7.3.4 Completion of the Project in accordance with the terms of this Agreement, including issuance of all required occupancy permits and acceptance, as required by state law, by City, or the applicable public agency, of all required dedications and the satisfaction of all of Owner's obligations under this Agreement; or

7.3.5 As may be provided by other specific provisions of this Agreement.

7.4 Effect of Termination. Subject to Section 8.8, upon any termination of this Agreement, the only rights or obligations under this Agreement which either Party shall have are:

7.4.1 The completion of obligations which were to have been performed prior to termination, other than those which are separately addressed by Section 12;

7.4.2 The performance and cure rights set forth in Section 12; and

7.4.3 Those obligations that are specifically set forth as surviving this Agreement, such as those described in Section 9 and in Sections 11.1 through 11.7 and Section 14.15.

7.5 Amendment or Cancellation of Agreement. This Agreement may be amended from time to time or canceled only by the written consent of both City and Owner in the same manner as its adoption, as set forth in

California Government Code Section 65868. Any amendment or cancellation shall be in a form suitable for recording in the Official Records of Orange County, California. An amendment or other modification of this Agreement will continue to relate back to the Effective Date of this Agreement (as opposed to the effective date of the amendment or modification), unless the amendment or modification expressly states otherwise.

7.6 Release of Obligations With Respect to Individual Unit Upon Certification of Occupancy. Notwithstanding any other provision of this Agreement:

7.6.1 When any individual unit has been finally subdivided and sold, leased, or made available for lease to a member of the public or any other ultimate user, and a certificate of occupancy has been obtained for the building(s) on the lot, that unit and its owner shall have no further obligations under and shall be released from this Agreement.

7.6.2 Upon the conveyance of any lot, parcel, or other property, whether residential, commercial, or open space, to a homeowners' association, property owners' association, or public or quasi-public entity, that lot, parcel, or property and its owner shall have no further obligations under and shall be released from this Agreement.

No formal action by the City is required to effect these releases, but, upon Owner's request, City shall sign an estoppel certificate or other document to evidence the release.

7.7 Minor Changes. The provisions of this Agreement require a close degree of cooperation between the Parties and "Minor Changes" to the Project may be required from time to time to accommodate design changes, engineering changes, and other refinements related to the details of the Parties' performance. "Minor Changes" shall mean changes to the Project that are otherwise consistent with the Development Plan, and which do not result in a change in the type of use, an increase in the density or intensity of use, significant new or increased environmental impacts that cannot be mitigated, or violations of any applicable health and safety regulations in effect on the Approval Date.

Accordingly, the Parties may mutually consent to adopting "Minor Changes" through their signing of an "Operating Memorandum" reflecting the Minor Changes. Neither the Minor Changes nor any Operating Memorandum shall require public notice or hearing. The City Attorney and City Manager shall be authorized to determine whether proposed modifications and refinements are "Minor Changes" subject to this Section 7.7 or more significant changes requiring amendment of this Agreement.

The City Manager may execute any Operating Memorandum without City Council action.

7.8 Term of Map(s) and Other Project Approvals.

7.8.1 Subdivision Maps. Pursuant to Government Code Section 66452.6, the term of any Tentative Map approved for all or any portion of the Property shall be extended to a date coincident with the Term and, where not prohibited by State law, with any extension of the Term.

7.8.2 Site Development Permits. Site Development Permits for the Project shall have terms that coincide with the term of the subdivision or tract map for the portion of the Property to which a particular Site Development Permit pertains.

7.8.3 Other Development Approvals. Pursuant to Government Code Section 65863.9, any and all other Development Approvals for any portion of the Project shall automatically be extended for a term ending concurrently with the applicable Tentative Map for the Project. Pursuant to Section 7.8.1, those terms shall be the same as the Term of this Agreement.

7.8.4 Decisions of Community Development Director. Any decision of the Community Development Director with respect to Subsequent Development Approvals may be appealed to the City's City Council pursuant to Section 15.70.080 of the Aliso Viejo Municipal Code.

7.9 Relationship of City and Owner. The contractual relationship between City and Owner arising out of this Agreement is one of independent contractor and not agency. This Agreement does not create any third-party beneficiary rights.

7.10 Notices. All notices, demands, and correspondence required or permitted by this Agreement shall be in writing and delivered in person, overnight delivery (e.g., FedEx) or mailed by first class and certified mail, return receipt requested, postage prepaid, addressed as follows:

If to City, to:
City of Aliso Viejo
12 Journey, Suite 100
Aliso Viejo, CA 92656
Attn: City Manager

With a copy to:
Scott C. Smith
18101 Von Karman Avenue
Suite 1000

Irvine, CA 92612

If to Owner, to:
Shea Homes Limited Partnership, a California limited partnership
15261 Laguna Canyon Road, Suite 100
Irvine, CA 92618
Attn: Vice-President, Community Development

With a copy to:
Cox, Castle & Nicholson LLP
3121 Michelson Drive, Suite 200
Irvine, CA 92612
Attn: Tim Paone

City or Owner may change their respective addresses by giving notice in writing to each of the other names and addresses listed above. Thereafter, notices, demands, and correspondence shall be addressed and transmitted to the new address. Notice shall be deemed given upon personal delivery or, for overnight delivery, first class mail, or certified mail, upon receipt as evidenced by the customary receipt provided by the delivery service.

7.11 Waiver of Right to Protest. Execution of this Agreement is made by Owner without protest. Owner knowingly and willingly waives any rights it may have under Government Code Section 66020 or any other provision of law to protest the imposition of any fees, dedications, reservations, or other exactions imposed on the Project as authorized by this Agreement.

8. DEVELOPMENT OF THE PROPERTY.

8.1 Owner's Vested Right. Owner shall have the vested right to complete Development of the Property in accordance with the Development Plan as provided in this Agreement ("Owner's Vested Right"). To enable Owner to complete the Project, Owner's Vested Right shall include, but not be limited to, the rights to (i) develop 130 market-rate for-sale residential Units and seven (7) affordable for-sale units, all in accordance with the Development Plan, (ii) the timely issuance by the City of all Subsequent Development Approvals, and (iii) the timely taking by the City of such other actions that are requested by Owner and consistent with the terms of this Agreement, including, but not limited, to Owner's Vested Right.

Owner's Vested Right shall be subject to the Reservation of Authority set forth in Section 8.5 and all provisions of this Agreement and may not be modified or terminated except as expressly provided by this Agreement.

8.2 Governing Land Use Regulations. The Land Use Regulations applicable to the Project and the Property shall be those contained in the Development Plan. An amendment or other modification of this Agreement will not change these applicable Land Use Regulations unless the amendment or

modification expressly provides otherwise. Subsequent Land Use Regulations shall not apply to the Property except as authorized in Section 8.6 of this Agreement, unless the Owner and the City mutually agree in writing that the Project will be subject to one or more Subsequent Land Use Regulations. To the extent of any inconsistency between this Agreement and any provision of the City's subdivision ordinance (comprising Title 14 of the Aliso Viejo Municipal Code), this Agreement shall control.

Nothing contained in this Section shall be deemed to authorize City to withhold any Building Permit, approval, certificate of occupancy, and/or any other Development Approval based on Owner's failure to comply with any Land Use Regulation that is not applicable to the Project because of this Agreement.

8.3 Permitted Uses. Except as otherwise provided within this Agreement, the permitted uses on the Property shall be as provided in the Development Plan.

8.4 Density and Intensity; Requirement for Reservation and Dedication of Land. Except as otherwise provided within this Agreement, the density and intensity of use for all Development on the Property, and the requirements for reservation and dedication of land, shall be as provided in the Development Plan.

8.5 Reservation of Authority. The following Land Use Regulations or Subsequent Land Use Regulations shall apply to the Property and the Project:

8.5.1 Processing fees and charges imposed by the City to cover the City's estimated or actual costs of reviewing and processing applications for the Project, providing inspections, conducting annual reviews, providing environmental analysis, or for monitoring compliance with this Agreement or any Development Approvals granted or issued, provided such fees and charges are in force and effect on a general basis on the date of filing such applications with the City. This Section shall not be construed to limit the authority of City to charge its then-current, normal and customary application, processing, and permit fees for Subsequent Development Approvals, including Building Permits, which fees are for the sole purpose of reimbursing City's expenses attributable to such application, processing, and permitting and are in force and effect on a City-wide basis at such time as the Subsequent Development Approvals and permits are granted by City, notwithstanding the fact that such fees may have been increased by City subsequent to the Effective Date;

8.5.2 Procedural regulations relating to hearing bodies, petitions, applications, notices, findings, records, hearings, reports, recommendations, appeals, and any other matter of procedure;

8.5.3 The following, provided that (i) they are uniformly applied to all development projects within the City and (ii) are not applied retroactively to any Development Approval issued before their adoption or amendment:

a. Uniform codes governing engineering and construction standards and specifications adopted by the City pursuant to state law. Such codes include, without limitation, the City's Municipal Code, adopted version of the California Building Code, California Plumbing Code, California Mechanical Code, California Electrical Code, California Energy Code, California Green Building Standards Code, California Residential Code, and California Fire Code;

b. Local amendments to those uniform codes which are adopted by the City pursuant to state law, provided they pertain exclusively to the preservation of life and safety; and

c. The City's standards and procedures regarding the granting of encroachment permits and the conveyance of rights and interests which provide for the use of or the entry upon public property.

8.5.4 Regulations which may be in conflict with this Agreement, but which are objectively required (and there are no available reasonable alternatives) to protect the public health and safety in the event of a sudden, unexpected occurrence involving a clear and imminent danger, and demanding immediate action to prevent or mitigate loss of, or damage to, life, health, property, or essential public services within the immediate community. Such regulations must be a valid exercise of the City's police power and must be applied and construed so as to provide Owner, to the maximum extent possible, with the rights and assurances provided in this Agreement. To apply to the Property, such regulations must be adopted after a public hearing and must be based upon findings of necessity established by a preponderance of the evidence. Any regulations, including moratoria, enacted by City and imposed on the Property to protect the public health and safety in the circumstances described above shall toll the Term and any time periods for performance by Owner and City set forth in this Agreement;

8.5.5 Owner shall be issued Building Permits for the Project after permit applications are reviewed and approved by City in the City's customary fashion for such review and approval; and

8.5.6 The exercise of the power of eminent domain.

8.6 County-Mandated Impact Fees. Nothing in this Agreement shall relieve Owner of the responsibility to pay any impact fees established by the County of Orange or associated with any County program and for which Owner is legally responsible. Owner shall pay any such fees the City is required to collect or otherwise collects on behalf of the County of Orange. Owner understands and acknowledges that Exhibit "C" reflects only the City's estimate of fees paid and fees owed, and may not accurately reflect Owner's County fee obligations. The omission of any fee from Exhibit "C" which is due to the County or any other public agency shall not invalidate or otherwise affect Owner's obligation to pay that fee. Nothing in this Agreement limits any credits otherwise available to Owner with respect to the payment of the County fees.

8.7 Adequacy of Required Infrastructure. The City acknowledges and agrees that there will be sufficient capacity to accommodate the Project in the infrastructure and services owned, operated, outsourced, controlled, and/or provided by the City, including, without limitation, traffic circulation, storm drainage, trash collection, and flood control. Where City renders or outsources such services or owns such infrastructure, City shall serve the Project and there shall be no restrictions placed upon Owner concerning hookups or service for the Project, except for reasons beyond City's control. Notwithstanding the foregoing, City does not warrant the adequacy of, and City shall not be responsible or liable for any infrastructure or services that are not owned, operated, outsourced, controlled, and/or provided by City.

8.8 Vested Rights Upon Termination. Termination of the Agreement shall not invalidate any Land Use Regulations or terminate any Subsequent Development Approvals obtained prior to the date of termination. Upon any termination of this Agreement, Owner's vested rights, if any, shall be determined by this Agreement to the extent development has occurred hereunder, and as to the remainder of the Project, by state and federal statutes and case law and the then current factual state of the Development. Subject to that determination of rights and all other applicable law, Owner's right to continue development of the Project pursuant to some or all of the Development Plan shall be subject to the ordinary exercise of the City's police power, including the adoption of a general plan amendment, zoning change, or other Land Use Regulations applicable to the Property. Owner acknowledges that following termination or expiration of this Agreement, except as to any development that has vested, City may amend the general plan designation of the Property and/or the zoning designation applicable to the Property.

8.9 Waiver of Density Bonus. Owner did not request additional residential units as part of the Density Bonus. While this Agreement is in effect, Owner waives any right Owner may have to a density bonus under Government Code Sections 65915 through 65917.5 or the Aliso Viejo Municipal Code. Densities vested hereunder include all densities available as density bonuses under the Aliso Viejo Municipal Code and Government Code Sections 65915 through 65917.5; Owner shall not be entitled to further density bonuses. Nothing in this section limits Owner's right to seek incentives, concessions, and/or waivers under the state Density Bonus Law, as applicable, all of which are expressly reserved.

8.10 Staffing and Expedited Processing. City shall employ all lawful actions capable of being undertaken by City to (i) promptly receive and, when complete, accept all applications for Subsequent Development Approvals and related environmental analysis, if any (collectively, "Applications"), and (ii) expeditiously process and take action upon the Applications in accordance with applicable law.

8.11 Changes in Federal and State Law. The Property may be subject to subsequently enacted state or federal laws or regulations that preempt local regulations or mandate the adoption of local regulations that conflict with the Development Plan. Upon discovery of such a subsequently enacted federal or state law, City or Owner shall provide the other Party with written notice, a copy of the state or federal law or regulation, and a written explanation of the legal or regulatory conflict created. Within ten (10) days thereafter, City and Owner shall meet and confer in good faith in a reasonable attempt to modify this Agreement, as necessary, to comply with such federal or state law or regulation. In such negotiations, City and Owner agree to preserve the terms of this Agreement and the rights of Owner and City as derived from this Agreement to the maximum feasible extent while resolving the conflict. City agrees to cooperate with Owner in resolving the conflict in a manner which minimizes any financial impact of the conflict upon Owner or City. City also agrees to process, in the same expedited manner as set forth for Applications in Section 8.10, Owner's proposed changes to the Development Plan as needed to comply with such federal or state law, and to process those changes in accordance with City procedures. Any delays caused by such changes in state or federal law shall toll the term of this Agreement and the time periods for performance by Owner and City set forth in this Agreement.

8.12 Cooperation in Securing Other Governmental Approvals and Permits. City agrees to make its staff available, at Owner's cost, to assist Owner in securing permits and approvals required by other governmental agencies to assure Owner's ability to (i) implement the Development Plan and (ii) perform its obligations under this Agreement in a timely manner. City does not warrant or represent that any other governmental permits or approvals will be granted.

8.13 Compliance with CEQA. Where the California Environmental Quality Act requires that an environmental analysis be performed in connection with a future discretionary approval granted by the City for the Project, the City, consistent with Section 8.10, shall provide the cooperation needed to expeditiously complete those actions.

8.14 Timing of Development. Because the California Supreme Court held in *Pardee Construction Co. v. City of Camarillo*, 37 Cal. 3d 465 (1984), that the failure of the parties in that case to provide for the timing of development resulted in a later-adopted initiative restricting the timing of development to prevail over the parties' agreement, it is the specific intent of the Parties to provide for the timing of the Project in this Agreement. To do so, the Parties acknowledge and provide that Owner shall have the right, but not the obligation, to complete the Project in such order, at such rate, at such times, and in as many development phases and sub-phases as Owner deems appropriate in its sole subjective business judgment, but subject to the phasing provisions of Exhibit D.

8.15 Conditions, Covenants and Restrictions. Owner shall have the ability to reserve and record such covenants, conditions, and restrictions ("CC&Rs") against the Property as Owner deems appropriate, in its sole and absolute discretion. Such CC&Rs may not conflict with this Agreement or the General Plan. Before recording any CC&Rs, Owner shall provide a copy of the CC&Rs to the City for review and approval by the City Attorney. The City Attorney's review shall be limited to determining if the CC&Rs substantially comply with this Agreement. Within forty-five (45) days after receiving a copy of the proposed CC&Rs from Owner, the City Attorney shall provide Owner with either (i) a statement that the CC&Rs comply with this Agreement ("CC&R Approval") or (ii) written comments identifying each aspect of the CC&Rs which the City Attorney believes not to be in compliance with this Agreement (a "Statement of Non-Compliance"). If the City Attorney fails to provide Owner with either CC&R Approval or a Statement of Non-Compliance within forty-five (45) days following a written request by Owner, City shall be deemed to have approved the CC&Rs and Owner may record the CC&Rs against the Property. If the City Attorney provides a Statement of Non-Compliance, Owner shall have thirty (30) days in which to respond to the Statement of Non-Compliance. Upon submittal of Owner's response, the procedure described above for the initial submittal and City Attorney review of proposed CC&Rs shall again be followed. This procedure shall be followed until Owner either (1) receives CC&R Approval, (2) submits the compliance issues to binding arbitration pursuant to the rules of the American Arbitration Association, (3) files an action for declaratory relief in Orange County Superior Court seeking a judicial determination of the compliance of the proposed CC&Rs, or (4) agreement is otherwise reached between the Parties allowing for the recording of the CC&Rs. The CC&Rs may run with the land and bind Owner's successors and assigns. Except as provided above, any dispute between the Parties regarding the City's approval or rejection of the CC&Rs shall be subject to

immediate and binding arbitration pursuant to the rules of the American Arbitration Association.

9. PUBLIC BENEFITS.

9.1 Intent. This Agreement is entered into by the City in consideration of, and in exchange for, Owner's agreement to contribute to the development and rehabilitation of public recreational facilities, affordable housing, and other services (the "Public Benefits").

9.2 Public Benefits. Owner's development and financial obligations related to the Public Benefits are set forth in this Section 9 and Exhibit "C". This Section 9 and Exhibit "C" shall survive the termination, cancellation, or expiration of this Agreement.

9.3 Independent Nature of Obligations. Owner's Public Benefit obligations are independent of the obligations of any other landowner or any other property which the City intends to participate in providing some or all of the Public Benefits. Provided that Owner satisfies its Public Benefit obligations and is not in Material Default, Owner's Vested Right to complete the full development of the Project shall not be limited, diminished, or otherwise adversely affected by the failure of any other landowner or property to participate in providing the Public Benefits as anticipated by the City. Similarly, the City's obligations to Owner and the Property are independent of the City's obligations to any other property or landowner. Owner acknowledges that the provisions of this paragraph shall not apply to any fee the amount of which is not controlled by the City, including but not limited to fees paid to the Capistrano Unified School District, the County of Orange, and/or any other government agency.

9.4 Affordable Housing Obligations. Owner recognizes the policy stated in the Housing Element of the Aliso Viejo General Plan to encourage the provision of affordable housing in new development. Owner agrees to restrict seven (7) of the Units within the Project to Very Low Income Households (the "Affordable Units") to facilitate the General Plan's affordable housing goal.

9.5 Density Bonus Housing Agreement. Prior to the issuance of the first Building Permit for a Unit within the Project, Owner shall enter into a Density Bonus Housing Agreement with the City, generally in the form attached as Exhibit "D". The Density Bonus Housing Agreement shall set forth the terms, conditions, and restrictions governing the development, affordability, and occupancy of the affordable housing Units. The designation of Units as Affordable Units and the location of the Affordable Units within the Project shall be as set forth in the Density Bonus Housing Agreement. The City shall have no obligation to issue any Building Permit for the Project until the fully executed Density Bonus Housing Agreement has been submitted to and accepted by the City.

Any delay in the issuance of Building Permits resulting from the Owner's failure to timely submit the executed agreement shall be solely the responsibility of the Owner.

9.6 City Public Benefit Fee. As a further Public Benefit, Owner shall pay to the City a Public Benefit Fee as set forth in Exhibit "C" to this Agreement.

10. ANNUAL REVIEW.

10.1 Timing of Annual Review. Pursuant to Government Code Section 65865.1, at least once during every twelve (12) month period of the Term, City shall review the good faith compliance of Owner with the terms of this Agreement ("Annual Review"). The City's failure to timely conduct the Annual Review will not constitute a breach of or otherwise affect the Project.

10.2 Standards for Annual Review. During the Annual Review, Owner shall be required to demonstrate good faith compliance with the terms of this Agreement. "Good faith compliance" shall be established if Owner is in compliance with every term and condition of this Agreement. If the City Council or its designee finds and determines, based on substantial evidence, that Owner is not in good faith compliance, then City may proceed in accordance with Section 12 pertaining to the potential Default of Owner and the opportunities for cure. Owner shall pay a reasonable fee to cover the costs incurred by City (*i.e*., staff time and necessary consultant costs) in connection with the Annual Review.

10.3 Procedures for Annual Review. The Annual Review shall be conducted by the City Council or its designee. Owner shall be given a minimum of thirty (30) days' notice of any date scheduled for an Annual Review. Owner shall not be limited in the information it presents to the City Council for the Annual Review and may, if needed, provide information to the City Council in the first instance at the City Council hearing on the Annual Review. Should the City Council designate a party other than itself to conduct the Annual Review, these same notice and procedural requirements shall apply to the conduct by the designee of the Annual Review.

11. THIRD PARTY LITIGATION.

11.1 General Plan Litigation. City has determined that this Agreement is consistent with its General Plan. Owner has reviewed the General Plan and concurs with City's determination. Neither Owner nor City shall have any liability under this Agreement or otherwise for any failure of City to perform under this Agreement, or for the inability of Owner to develop the Property as contemplated by the Development Plan or this Agreement, if such failure or inability is the result of a judicial determination that part or all of the General Plan is invalid, inadequate, or not in compliance with law.

11.2 Third Party Litigation Concerning Agreement. Owner shall, at Owner's expense (including attorneys' fees), defend, indemnify, and hold City, its officials, officers, employees, agents, and independent contractors, harmless from any third-party claim, action or proceeding against City, its officials, officers, employees agents, or contractors to attack, set aside, void, or annul the approval of this Agreement. City shall promptly notify Owner of any such claim, action or proceeding, and City shall cooperate in the defense at Owner's cost. Owner reserves the right to withdraw its Project application or request that City repeal or rescind Project approvals. If Owner requests such application withdrawal or Project repeal or rescission, Owner shall also pay all costs related to processing those requests and bringing them to City Council for hearing. Notwithstanding the foregoing, Owner shall continue to pay for any and all litigation costs and fees until such litigation has been resolved by a Court (*i.e.*, obtaining a dismissal of the City from the case). For the avoidance of doubt, any damages or judgment shall also solely be paid for by Owner. To the extent that Owner withdraws its Project application or requests that the City rescind or repeal Project approvals, City reserves the right to reduce or abandon its defense of any litigation.

11.3 Indemnity. In addition to the provisions of Section 11.2, Owner shall indemnify and hold City, its officials, officers, agents, employees and independent contractors free and harmless from liability whatsoever or claims based or alleged upon any act or omission of Owner, its officers, agents, employees, subcontractors and independent contractors, for property damage, bodily injury or death (Owner's employees included) or any other element of damage of any kind or nature, relating to or arising from development of the Project, except for claims for damages arising through active negligence or willful misconduct of City, its officials, officers, agents, employees and independent contractors. Owner shall defend, at Owner's expense, including attorneys' fees, City, its officials, officers, agents, employees and independent contractors in any legal action based upon such alleged acts or omissions of Owner, its officers, agents, employees, subcontractors, and independent contractors, in connection with the development of the Project, this Agreement, or the Development Approvals. For the avoidance of doubt, any damages or judgments shall also solely be paid for by Owner.

11.4 Environmental Contamination. Owner shall indemnify and hold City, its officers, agents, employees, and contractors free and harmless from any liability, based or alleged, upon any act or omission of Owner, its officers, agents, employees, subcontractors, predecessors in interest, successors, assigns, and independent contractors, resulting in any violation of any federal, state or local law, ordinance or regulation relating to industrial hygiene or to environmental conditions on, under, or about the Property, including, but not limited to, soil and groundwater conditions, and Owner shall defend, at its expense, including attorneys' fees, City, its officials, officers, agents and employees in any action based or asserted upon any

such alleged act or omission. Notwithstanding anything to the contrary set forth in this Section, Owner shall not be responsible for clean-up and removal of groundwater contamination migrating to or from an adjacent property not owned by Owner.

11.5 City to Reasonably Approve Counsel; Conduct of Litigation. With respect to Sections 11.2 through 11.4, Owner shall have the right to select its own counsel and City reserves the right to either (a) reasonably approve the attorney(s) that Owner selects, hires, or otherwise engages to defend City, which approval shall not be unreasonably withheld or delayed, or (b) conduct its own defense, provided, however, that if City elects to conduct its own defense, Owner shall reimburse City for any and all reasonable expenses incurred for such defense, including attorneys' fees, upon billing and accounting therefore. To the extent that Owner does not timely pay its full share of attorneys' fees and court costs, in addition to any other remedy, the City reserves the right to reduce or abandon its defense of any litigation. Owner shall have the right to audit all billings for such fees and expenses. To the extent that Owner has failed to timely pay its full share of attorneys' fees and court costs under this Section, Owner shall be deemed to have waived any right to participate in the selection of counsel and/or be involved in establishing and implementing litigation strategy, and Owner's rights under this Agreement shall be suspended until Owner has fully reimbursed the City to make up a funding shortfall created by Owner's failure to timely pay. In any joint defense between the City and Owner of matters arising under this Agreement, City shall cooperate fully with Owner's counsel.

11.6 Processing During Third Party Litigation. The filing of any third party lawsuit(s) against City or Owner relating to this Agreement, the General Plan, any Development Approvals, including Subsequent Development Approvals, or other development issues affecting the Property shall not delay or stop the development, processing, or construction of the Project, approval of Subsequent Development Approvals, or issuance of "Ministerial Approvals," unless the third party obtains a court order preventing the activity or invalidating this Agreement or any provision thereof. City shall not stipulate to the issuance of any such order without Owner's prior written consent. For purposes of this Section, the term "Ministerial Approvals" shall mean the issuance of approvals or permits requiring the determination of conformance with Land Use Regulations and Development Approvals, including, without limitation, site plans, site development permits, area plans, design review, development plans, land use plans, grading plans, improvement plans, building plans and specifications, ministerial issuance or approval of one or more Final Maps, zoning clearances, grading permits, improvement permits, stormwater management plans, wall permits, Building Permits, lot line adjustments, conditional and temporary use permits, certificates of use and occupancy, approvals, entitlements, and related matters as may be necessary for the completion of the Project.

11.7 Survival. The provisions of Sections 11.1 through 11.7 inclusive, shall survive the termination, cancellation, or expiration of this Agreement.

12. DEFAULTS AND REMEDIES.

12.1 Major Default Defined. A Major Default, as defined in Section 5.23 of this Agreement, may establish cause for early termination of this Agreement. This provision does not limit the right of either Party to pursue other non-termination remedies permitted by this Section 12 for Minor Defaults.

12.2 Notice and Termination. Before either Party may declare a Major Default or termination of this Agreement or bring a legal action to terminate this Agreement, the procedures of this Section must be followed. In the case of a Major Default arising from the conduct of an Annual Review, the procedures of this Section shall be strictly followed and shall constitute a second and independent review of the good faith compliance of Owner.

The Party asserting a Default (the "Non-Defaulting Party") may elect to do so by providing written notice to the Party alleged to be in Default (the "Defaulting Party") setting forth the nature of the Default and the actions, if any, required by the Defaulting Party to cure the Default. The Defaulting Party shall be deemed in Default if the Defaulting Party fails to cure the Default within thirty (30) business days after the date of such notice (for monetary defaults) or within sixty business (60) days after the date of such notice (for non-monetary defaults) ("cure periods"). If the nature of the alleged Default is such that it cannot reasonably be cured within the applicable cure period, the Defaulting Party shall not be deemed to be in Default if it has commenced efforts to cure the Default within the applicable cure period and continues to diligently pursue completion of the cure.

12.3 Default Remedies. A Party who complies with the notice of Default and opportunity to cure requirements of Section 12.2 may, at its option, institute legal action to cure, correct, or remedy the alleged Default, enjoin any threatened or attempted violation, enforce the terms of this Agreement by specific performance, or pursue any other legal or equitable remedy. These remedies shall be cumulative rather than exclusive, except as otherwise provided by law.

Furthermore, the City, after first following the procedures set forth in Section 12.2, may give notice of its intent to terminate or modify this Agreement for an uncured Major Default, in which event the matter shall be scheduled for consideration and review by the City Council, using the notice and procedure provisions set forth in Section 10.3 for an Annual Review. The "preponderance of evidence" standard of review set forth in Section 12.4, however, shall be employed rather than the "substantial evidence" standard set forth in Section 10.2.

12.4 Standard of Review. Any determination by City that Owner is in Default shall be based on the preponderance of evidence before the City. In any legal action by Owner challenging the City's determination of Default, the court shall conduct a de novo review of Owner's compliance based on the administrative record and determine if the preponderance of evidence supports the City's determination.

12.5 Owner's and City's Exclusive Remedy. City and Owner acknowledge that neither City nor Owner would have entered into this Agreement if it were to be liable for damages under or with respect to all or any part of the Development Plan. Accordingly, except as stated below, neither Party shall sue the other for damages or monetary relief for any matter related to the Development Plan. City may, however, sue Owner for the payment of sums due from Owner to City under provisions of this Agreement which are expressly stated to survive termination of this Agreement. With these exceptions, Owner's and City's litigation remedies shall be limited to declaratory and injunctive relief, mandate, and specific performance.

12.6 Waiver; Remedies Cumulative. All waivers of performance must be in a writing signed by the Party granting the waiver. There are no implied waivers. Failure by City or Owner to insist upon the strict performance of any provision of this Agreement, irrespective of the length of time for which such failure continues, shall not constitute a waiver of the right to demand strict compliance with this Agreement in the future.

A written waiver affects only the specific matter waived and defines the performance waived and the duration of the waiver. Unless expressly stated in a written waiver, future performance of the same or any other condition is not waived.

A Party who complies with the notice of Default and opportunity to cure requirements of Section 12.2, where applicable, and elects to pursue a legal or equitable remedy available under this Agreement does not waive its right to pursue any other remedy available under this Agreement, unless prohibited by statute, court rules, or judicial precedent.

Delays, tolling, and other actions arising under Section 14.10 shall not be considered waivers subject to this Section 12.6.

12.7 Alternative Dispute Resolution. Any dispute between the Parties may, upon the mutual agreement of the Parties, be submitted to mediation, binding arbitration, or any other mutually agreeable form of alternative dispute resolution. While an alternative dispute process is pending, the statute of limitation shall be tolled for any claim or cause of action which either of the Parties may have against the other.

13. ENCUMBRANCES, ASSIGNMENTS, AND RELEASES.

13.1 Discretion to Encumber. This Agreement shall not prevent or limit Owner, in any manner, at Owner's sole discretion, from encumbering some or all of the Property or any improvement on the Property by any mortgage, deed of trust, or other security device to secure financing related to the Property or the Project.

13.2 Mortgagee Protection. City acknowledges that the Lender(s) providing financing secured by the Property and/or its improvements may require certain Agreement interpretations and modifications. City shall, at any time requested by Owner or the lender, meet with Owner and representatives of such lender(s) to negotiate in good faith any such interpretation or modification. City will not unreasonably withhold or delay its consent to any requested interpretation or modification provided such interpretation or modification is consistent with the intent and purposes of this Agreement. Any Mortgagee of the Property shall be entitled to the following rights and privileges:

13.2.1 Neither entering into this Agreement nor a breach of this Agreement shall defeat, render invalid, diminish, or impair the lien of any mortgage or deed of trust on the Property made in good faith and for value.

13.2.2 If City timely receives a request from a Mortgagee requesting a copy of any notice of Default given to Owner under the terms of this Agreement, City shall provide a copy of that notice to the Mortgagee within ten (10) days of sending the notice of Default to Owner. The Mortgagee shall have the right, but not the obligation, to cure the Default during the remaining cure period allowed Owner under Section 12.2 of this Agreement.

13.2.3 Except as otherwise provided within this Agreement, any Mortgagee who comes into possession of some or all of the Property pursuant to foreclosure of a mortgage or deed of trust, or deed in lieu of such foreclosure or otherwise, shall:

a. Take that property subject to the terms of this Agreement and as Owner's successor;

b. Have the rights and obligations of an Assignee as set forth in Sections 13.3 and 13.4;

c. Have the right to rely on the provisions of Section 8 of this Agreement, provided that any development proposed by the Mortgagee is in substantial conformance with the terms of this Agreement; and

d. Not be liable for any defaults, whether material or immaterial, or monetary obligations of Owner arising prior to acquisition of title

to the Property by the Mortgagee, except that the Mortgagee may not pursue development pursuant to this Agreement until all delinquent and current fees and other monetary obligations due under this Agreement for the portions of the Property acquired by the Mortgagee have been paid to City.

13.3 Transfer or Assignment. Subject to Section 13.5, Owner shall have the right to sell, transfer, or assign its rights and obligations under this Agreement (collectively, an "Assignment") in connection with a transfer of Owner's interest in all, any portion of, or any interest in the Property (the "Transferred Property"). No Assignment shall be made unless made together with the sale, transfer, or assignment of all or any portion of Owner's interest in the Property

13.4 Assignment and Assumption Agreement. Concurrent with any Assignment, Owner shall notify City in writing of the Assignment and shall provide City with an executed Assignment and Assumption Agreement, in a form substantially similar to Exhibit "E", executed by the purchaser, transferee, or assignee (collectively, the "Assignee") to expressly and unconditionally assume all remaining duties and obligations of Owner under this Agreement with respect to the Transferred Property. Any Assignment not made in strict compliance with this Section 13.4 shall constitute a default by Owner under this Agreement. Notwithstanding the failure of any Assignee to execute the Assignment and Assumption Agreement, the burdens of this Agreement shall be binding upon such Assignee, but the benefits of this Agreement shall not inure to such Assignee until and unless such agreement is executed.

Prior to completion of the Assignment, Owner shall provide the fully executed Assignment and Assumption Agreement to the City for the City's confirmation that the Assignment and Assumption Agreement complies with the terms of this Section 13.4. The City shall provide confirmation within fourteen (14) calendar days of receipt (See Section 7.10) of the fully executed Assignment and Assumption Agreement from Owner.

13.5 Effect of Assignment. Subject to Section 13.4 and unless otherwise stated within the Assignment, upon an Assignment:

13.5.1 The Assignee shall be liable for the performance of all obligations of Owner with respect to Transferred Property, but shall have no obligations with respect to the portions of the Property, if any, not transferred (the "Retained Property").

13.5.2 The owner of the Retained Property shall be liable for the performance of all obligations of Owner with respect to the Retained Property, but shall have no further obligations with respect to the Transferred Property.

13.5.3 The Assignee's exercise, use, and enjoyment of the Transferred Property shall be subject to the terms of this Agreement to the same extent as if the Assignee were the Owner.

13.6 City's Consent. The City's consent shall not be required except an Assignment must be executed between Owner and any other entity controlling, controlled by, or under common control with Owner, except an Assignment and Assumption Agreement must be executed between the two entities in a form substantially conforming to Exhibit "E". Moreover, the City's consent shall not be required for any other Assignment unless, at the time of the Assignment, Owner has been determined to be in Major Default pursuant to Section 12 and the Major Default has not been cured. If Owner is in Major Default, City shall consent to any Assignment which provides adequate security to City, in the reasonable exercise of City's discretion, to guarantee the cure of the Major Default upon completion of the Assignment.

14. MISCELLANEOUS PROVISIONS.

14.1 Rules of Construction. The singular includes the plural; the masculine gender includes the feminine; "shall" is mandatory; "may" is permissive.

14.2 Entire Agreement. This Agreement constitutes the entire understanding and agreement of City and Owner with respect to the matters set forth in this Agreement. This Agreement supersedes all negotiations or previous agreements between City and Owner respecting the subject matter of this Agreement.

14.3 Recorded Statement Upon Termination. Upon the completion of performance of this Agreement or its cancellation or termination, a statement evidencing completion, cancellation, or termination signed by the appropriate agents of City, shall be recorded in the Official Records of Orange County, California.

14.4 Project as a Private Undertaking. It is specifically understood by City and Owner that (i) the Project is a private development; (ii) City has no interest in or responsibilities for or duty to third parties concerning any improvements to the Property unless City accepts the improvements pursuant to the provisions of this Agreement or in connection with subdivision map approvals; and (iii) Owner shall have the full power and exclusive control of the Property, subject to the obligations of Owner set forth in this Agreement.

14.5 Incorporation of Recitals. Each of the Recitals set forth at the beginning of this Agreement is a part of this Agreement.

14.6 Captions. The captions of this Agreement are for convenience and reference only and shall not define, explain, modify, construe, limit, amplify, or aid in the interpretation, construction, or meaning of any of the provisions of this Agreement.

14.7 Consent. Where the consent or approval of City or Owner is needed to implement Development under this Agreement, the consent or approval shall not be unreasonably withheld, delayed, or conditioned.

14.8 Covenant of Cooperation. City and Owner shall cooperate and deal with each other in good faith and assist each other in the performance of the provisions of this Agreement.

14.9 Execution and Recording. The City Clerk shall cause a copy of this Agreement to be signed by the appropriate representatives of the City and recorded as provided in Government Code Section 65868 within ten (10) days after the Effective Date. The failure of the City to sign and/or record this Agreement shall not affect the validity of and binding obligations set forth within this Agreement.

14.10 Delay for Events Beyond the Parties' Control. Performance by either Party of its obligations under this Agreement shall be excused, and the Term shall be extended, for periods equal to the time during which (1) litigation is pending which challenges any matter, including compliance with CEQA or any other local, state, or federal law, related in any way to the approval or implementation of all or any part of the Development Plan; (2) any application by Owner for state or federal regulatory permits and/or approvals required for the Project has been pending more than one year after its submittal; or (3) a delay is caused by reason of any event beyond the control of City or Owner which prevents or delays performance by City or Owner of obligations under this Agreement. All such extensions shall be cumulative.

For purposes of a Force Majeure Extension, triggering events shall include, by way of example and not limitation, acts of nature, enactment of new conflicting federal or state laws or regulations (example: listing of a species as threatened or endangered), judicial actions such as the issuance of restraining orders and injunctions, epidemics and pandemics, riots, strikes, and damage to or delays in work in process by reason of fire, mud, rain, floods, earthquake, or other such casualties.

If City or Owner seeks excuse from performance, it shall provide written notice of such delay to the other within thirty (30) days of the commencement of such delay. If the delay or default, whether material or immaterial, is beyond the control of City or Owner it shall be excused, and an extension of time for such cause shall be granted in writing for the period of the enforced delay, or longer as may be mutually agreed upon. Any disagreement between the Parties with respect to whether this Section

14.10 applies to a particular delay or default is subject to the filing by either Party of an action for judicial review of the matter, including requests for declaratory and/or injunctive relief.

14.11 Interpretation and Governing Law. In any dispute regarding this Agreement, the Agreement shall be governed and interpreted in accordance with the laws of the State of California. Venue for any litigation concerning this Agreement shall be in Orange County, California.

14.12 Time of Essence. Time is of the essence in the performance of the provisions of this Agreement as to which time is an element.

14.13 Estoppel Certificate. Within ten (10) business days following a written request by either of the Parties, the other Party shall execute and deliver to the requesting Party a statement certifying that (i) either this Agreement is unmodified and in full force and effect or there have been specified (date and nature) modifications to the Agreement, but it remains in full force and effect as modified; and (ii) either there are no known current uncured Major Defaults under this Agreement or that the responding Party alleges that specified (date and nature) Major Defaults exist. The statement shall also provide any other reasonable information requested. The failure to timely deliver this statement shall constitute a conclusive presumption that this Agreement is in full force and effect without modification, except as may be represented by the requesting Party and that there are no uncured Major Defaults in the performance of the requesting Party, except as may be represented by the requesting Party. Owner shall pay to City all reasonable administrative costs incurred by City in connection with the issuance of estoppel certificates under this Section 14.13 prior to City's issuance of such certificates.

14.14 Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the Parties and their respective successors and assigns.

14.15 Future Litigation Expenses.

14.15.1 Payment to Prevailing Party. If either Party brings a legal or equitable proceeding against the other Party which arises in any way out of this Agreement, the prevailing Party shall be entitled to recover its reasonable attorneys' fees and all other reasonable costs and expenses incurred in that proceeding.

14.15.2 Scope of Fees. Attorneys' fees under this Section shall include attorneys' fees on any appeal and in any post-judgment proceedings to collect or enforce the judgment. The provisions in 14.15.1 through 14.15.3 are separate and several and shall survive the termination of this Agreement.

14.15.3 Limitation of Liability. Owner's obligations under this Agreement are solely those of Owner. In no event shall any present, past or future officer, director, shareholder, member, employee, partner, affiliate, manager, representative or agent of Owner (a "Related Party") have any personal liability, directly or indirectly, under this Agreement. Recourse in any way connected with or arising from this Agreement shall not be available against any Related Party.

Owner and City have executed this Agreement on the dates set forth below.

CITY	OWNER
City of Aliso Viejo	Shea Homes Limited Partnership, a California limited partnership
By:_____ Name Mayor	By: _____ Its:
Date:	Date:

ATTEST:

By: _____
City Clerk

APPROVED AS TO FORM:

By:_____
Scott C. Smith
City Attorney

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of_____)

On _____ before me, _____
(insert name and title of the officer)

personally appeared _____
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____(Seal)

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of_____)

On _____ before me, _____
(insert name and title of the officer)

personally appeared _____
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____(Seal)

EXHIBIT "A"
LEGAL DESCRIPTION

EXHIBIT "B"
GENERAL PLAN AMENDMENT
GPA-2026-01004

Property Location – 27081 Aliso Creek Road (see red-circled area below)
Existing Land Use Designation – Professional Office ("PO")
Proposed Land Use Designation – Medium Density Residential (Max. 18 units/acre) ("MDR")

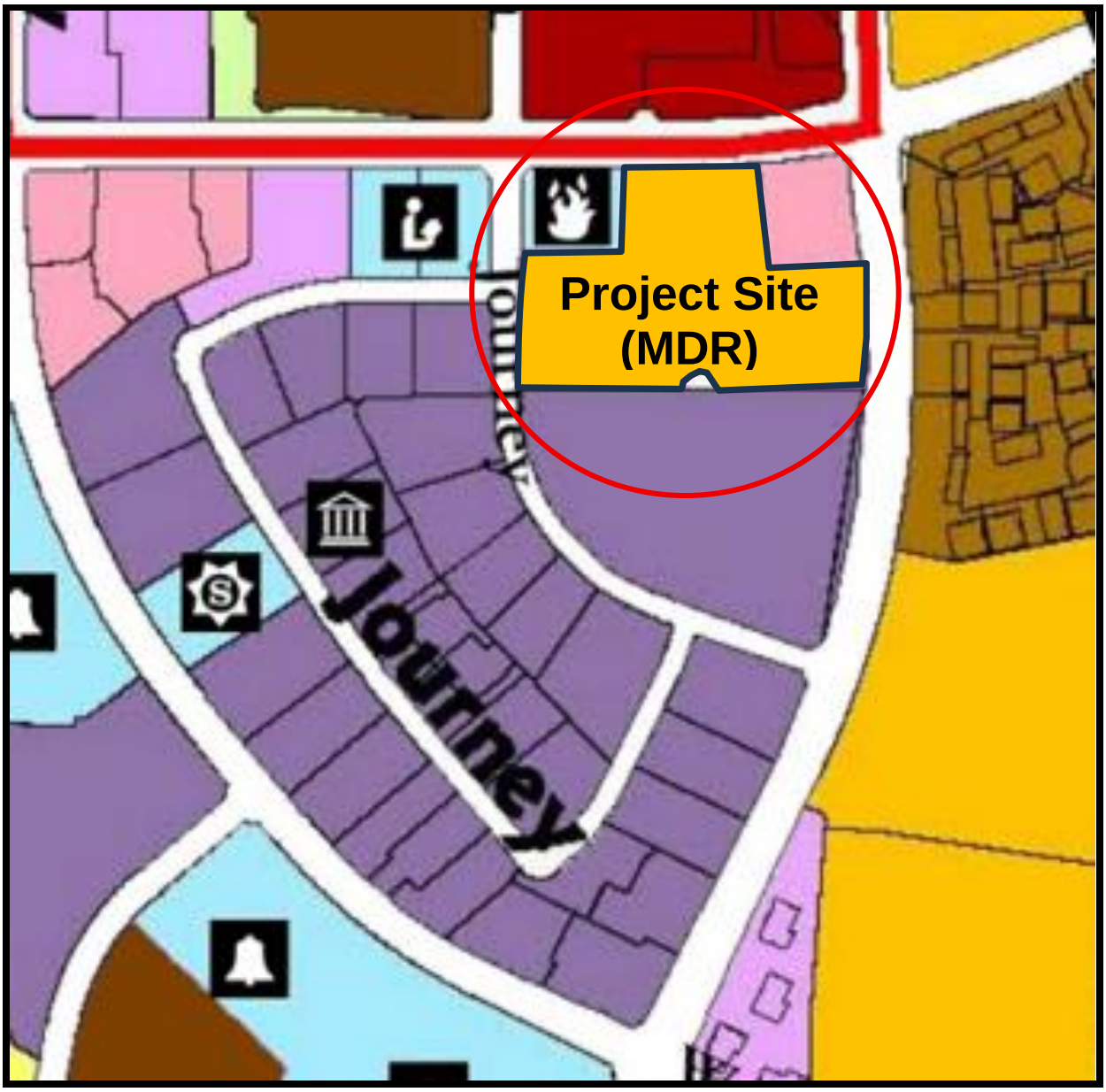


EXHIBIT "C"
PUBLIC BENEFITS

In addition to complying with the Project conditions of approval, Owner has committed by this Agreement to contribute to pay a Public Benefit Fee to the City, as follows:

1. City Public Benefit Fee. Owner shall pay a City Public Benefit Fee of Fourteen Dollars ($14.00) per square foot of Habitable Area. The Public Benefit Fee attributable to each building shall be paid in full prior to the issuance of the Building Permit for such building.

For purposes of this Agreement, "Habitable Area" refers to livable space within the interior walls of a Unit as reflected on the Building Permit and does not include any balcony, patio, or atrium open on one or more sides or any garage or accessory structure.

This fee is inclusive of any and all park in-lieu fees to the extent, if any, required under the Quimby Act and/or Aliso Viejo Municipal Code Chapter 14.16. Because this fee is an obligation arising from a Development Agreement, it is not subject to the Mitigation Fee Act. This Agreement does not limit the purposes for which the City may use City Public Benefit Fees, and the use and timing of such use of City Public Benefit Fees shall be entirely within the City's sole and absolute discretion.

2. Adjustment of Unpaid Fees. Any remaining unpaid portion of the City Public Benefit Fee shall be subject to an annual increase on the anniversary date of the first building permit issued, beginning in the second year following such issuance and continuing annually thereafter. The City Public Benefit Fee shall be increased by a percentage set by the Consumer Price Index, which is defined at the Consumer Price Index for all Urban Consumers (CPI-U), published by the Bureau of Labor Statistics of the United States Department of Labor for Los-Angeles-Riverside-Orange County, All Items (1982-84=100) and utilizing the prior calendar year's average as the annual average. If this Index is discontinued, the Parties shall use any other renamed national index covering the Aliso Viejo metropolitan areas or any other successor or substitute index appropriately adjusted. In no event shall the City Public Benefit Fee be reduced.

3. Prepayment by Owner. At any time during the construction of the Project and subject to Paragraph 2 above, Owner may elect to pay some or all of any remaining unpaid portion of the City Public Benefit Fee.

EXHIBIT "D"
DENSITY BONUS HOUSING AGREEMENT

EXHIBIT "E"
FORM ASSIGNMENT AND ASSUMPTION AGREEMENT

ASSIGNMENT AND ASSUMPTION AGREEEMENT PURSUANT TO DEVELOPMENT AGREEMENT BETWEEN THE CITY OF ALISO VIEJO AND SHEA HOMES LIMITED PARTNERSHIP, A CALIFORNIA LIMITED PARTNERSHIP

This Assignment and Assumption Agreement (the "Agreement") is entered into as of _____, 20__, by Shea Homes Limited Partnership, a California limited partnership ("Owner") a California limited liability company, and _____ ("Assignee").

RECITALS

A. This Agreement pertains to the Development Agreement (the "Development Agreement") entered into by and between the City of Aliso Viejo (the "City") and Owner on or about _____, 2026, with respect to the housing development referenced in the Development Agreement as being located at 27081 Aliso Creek Road in the City (the "Property").

B. Owner intends to convey (the "Assignment") to Assignee that portion of the Property (the "Transferred Property") legally described as follows:

[If the Assignment is of only a portion of the property, identify that portion only.]

C. In connection with the Assignment, Assignee has agreed to assume all remaining obligations of "Owner" set forth within the Development Agreement with respect to the Transferred Property.

D. This Agreement is intended to fulfill the requirements of Section 13.4 of the Development Agreement.

AGREEMENT

Owner and Assignee agree as follows:

1. Assignment of Rights and Delegation of Obligations. By this Agreement and effective upon the date upon which the Assignment is complete, Owner assigns to Assignee all of its rights under the Development Agreement with respect to the Transferred Property and delegates to Assignee all duties and obligations under the Development Agreement with respect to the Transferred Property.

2. Assumption of Obligations. By this Agreement and effective upon the date upon which the Assignment is complete, Assignee expressly and unconditionally assumes all duties and obligations of Owner under the Development Agreement remaining to be performed with respect to the Transferred Property. ***[If the***

Assignment is of only a portion of the property, specifically identify the obligations to be assumed with respect to that portion of the property.]

3. Execution. Owner and Assignee have signed this Agreement on the dates indicated below their respective signatures.

OWNER:

Shea Homes Limited Partnership, a California limited partnership ("Owner")

By: _____
Name: _____
Its: _____
Date: _____

Assignee:

By: _____
Name: _____
Its: _____
Date: _____

CITY'S CONFIRMATION

City confirms that this Assignment and Assumption Agreement complies with the requirements of Section 13.4 of the Development Agreement.

By: _____
Name: _____
Its: _____
Date: _____

RECORDING REQUESTED BY:

AND WHEN RECORDED MAIL TO:

City of Aliso Viejo
12 Journey, Suite 100
Aliso Viejo, CA 92656-5335
Attn: City Manager

Free Recording pursuant to
Government Code 6103 & 27383

DENSITY BONUS HOUSING AGREEMENT

(ALISO VIEJO TOWNHOMES)

This DENSITY BONUS HOUSING AGREEMENT ("**Agreement**"), is made and entered into as of _____, 2026, by and between the City of Aliso Viejo ("**City**"), a California municipal corporation, and Shea Homes Limited Partnership, a California limited partnership ("**Developer**"). City and Developer are sometimes referred to collectively as the "**Parties**" and individually as a "**Party**."

RECITALS

A. Developer owns that certain real property located within the City of Aliso Viejo, County of Orange, State of California, commonly known as 27081 Aliso Creek Road (APN 632-124-08) and more particularly described in the legal description attached as Exhibit A and depicted in Exhibit B ("**Property**").

B. Developer is proposing the demolition of existing commercial structures and the construction of 137 for-sale residential units on the Property ("**Units**"), with related amenities and improvements, as further set forth in Site Development Permit No. SDP-2025-00004 ("**Project**").

C. The Project qualifies for a density bonus under California Government Code section 65915 *et seq*. ("**State Density Bonus Law**"). Under the State Density Bonus Law, the Project will provide seven residential units, representing at least 5% of the total units, for sale to Very Low Income Households ("**Affordable Units**").

D. In accordance with State Density Bonus Law, Developer has requested, and City has granted, waivers or reductions of the following development standards ("**Waivers**"): (i) an increase in the maximum retaining wall height, (ii) an increase in the maximum permitted building height, and (iii) encroachment of hardscape improvements into the required landscaping setback, as described below.

E. This Agreement, including the attached exhibits, sets forth the terms and conditions for implementing the Project's requirement to provide the Affordable Units in exchange for receiving the Waivers.

NOW, THEREFORE, in consideration of the above recitals, which are incorporated herein by this reference, and of the mutual covenants contained herein, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Parties agree as follows:

1. DEFINITIONS AND EXHIBITS

1.1 Definitions. In addition to the terms that may be defined elsewhere in this Agreement, the following terms when used in this Agreement shall be defined as follows:

1.1.1 "**Adjusted for family size appropriate to the unit**" has the meaning provided in California Health and Safety Code section 50052.5(h).

1.1.2 "**Affordable Housing Cost**" means the maximum purchase price that results in an affordable housing cost, adjusted for family size appropriate to the unit, for a Very Low Income Household, as determined pursuant to Health and Safety Code section 50052.5(b) and applicable HCD regulations.

1.1.3 "**Affordable Units**" means the seven Units within the Project to be sold by Developer to Qualified Purchasers in accordance with this Agreement. An "**Affordable Unit**" means one of the Affordable Units.

1.1.4 "**AMI**" means the Orange County, California, area median income, as periodically published by HCD.

1.1.5 "**City**" means the City of Aliso Viejo, California.

1.1.6 "**City Attorney**" means the City Attorney for the City.

1.1.7 "**City Council**" means the City Council of the City.

1.1.8 "**City Deed of Trust**" means a Deed of Trust and Security Agreement executed by a Qualified Purchaser and recorded as a lien against the Affordable Unit acquired by that Qualified Purchaser as required by the terms of the Equity Sharing Agreement, the form of which is attached to the Equity Sharing Agreement.

1.1.9 **"City Indemnitees"** means the City and its officials, officers, employees, representatives, agents, and volunteers.

1.1.10 "**City Manager**" means the City Manager for the City.

1.1.11 "**City Note**" means the promissory note executed by a Qualified Purchaser in favor of City pursuant to the Equity Sharing Agreement, the form of which is attached to the Equity Sharing Agreement.

1.1.12 "**Developer**" means Shea Homes Limited Partnership, a California limited partnership, and its successors and assigns to all or any part of the Property, the Project, or this Agreement. "Developer" does not include an ultimate purchaser of an individual Unit in a retail sale.

1.1.13 "**Development Agreement**" means Development Agreement No. DA-2026-01001, which is one of the Project Approvals..

1.1.14 "**Effective Date**" means the date on which both Developer and City have executed this Agreement.

1.1.15 "**Equity Sharing Agreement**" means that certain Owner Occupancy and Equity Sharing Agreement to be entered into by and between City and each Qualified Purchaser that purchases an Affordable Unit, which shall be recorded against each Affordable Unit in the form attached hereto as Exhibit C.

1.1.16 "**HCD**" means the California Department of Housing and Community Development.

1.1.17 "**Household**" means all persons residing in a Unit.

1.1.18 "**Income Verification Materials**" means those materials specified in Section 4.4 to verify the income of a proposed purchaser of an Affordable Unit.

1.1.19 "**Market Rate Units**" means the Units within the Project to be sold by Developer to a Household without restriction.

1.1.20 "**Project**" means that certain residential development as more particularly described in the Recitals above and Section 2 below.

1.1.21 "**Project Approvals**" means General Plan Amendment No. GPA-2026-01004, Zone Change No. ZA-2026-01003, Site Development Permit No. SDP-2025-00004, Vesting Tentative Tract Map No. 19442 and any final tract map subsequently approved and recorded pursuant to Vesting Tentative Tract Map No. 19442, and Development Agreement No. DA-2026-01001. "Project Approvals" also includes any amendments to those approvals and any new approvals, permits, or other actions approved by the City with respect to the development of the Project.

1.1.22 "**Property**" means that certain real property more particularly described in the legal description in Exhibit A.

1.1.23 **"PSA"** means a purchase and sale agreement for an Affordable Unit.

1.1.24 "**Qualified Purchaser**" means a person or family who complies with the requirements of Sections 4.4 and 4.5 and qualifies as a Very Low Income Household.

1.1.25 "**State Density Bonus Law**" means Government Code section 65915 *et seq.*, as of the Effective Date.

1.1.26 "**Unit**" means a residential dwelling unit within the Project to be constructed by Developer pursuant to the Project Approvals.

1.1.27 "**Very Low Income Household**" means persons and families whose income does not exceed 50 percent of the AMI, adjusted for household size, as determined for the County of Orange in accordance with California Health and Safety Code Section 50105, and implementing regulations published by HCD.

1.1.28 **"Waivers"** means the waivers or reductions of development standards for the Project requested by Developer and granted by City under State Density Bonus Law for: (i) the maximum permitted retaining wall height in the Medium Density Residential district, increasing the maximum permitted retaining wall height to 8 feet; (ii) the maximum permitted building height in the Medium Density Residential district, increasing the maximum permitted building height from 35 feet to 40 feet 11 inches; and (iii) the required 20-foot landscaping setback in the Medium Density Residential district, to allow the encroachment of hardscape improvements into the required landscaping setback.

1.2 Exhibits. The following documents are attached hereto and incorporated herein by this reference:

Exhibit "A" – Legal Description of Property

Exhibit "B" – Map Showing Property and its Location

Exhibit "C" – Equity Sharing Agreement (and attachments)

2. DEVELOPMENT OF THE PROPERTY

2.1 Project. Development of the Property and the Project shall be in accordance with this Agreement and the Project Approvals.

2.2 Market Rate Units. The Project shall have no more than 130 Market Rate Units, with a variety of floor plans, sizes, locations, and amenities, as set forth in the Project Approvals. As the Project is developed, Developer may alter the type and distribution of the Market Rate Units within the Project in Developer's discretion.

2.3 Affordable Units. The Project shall provide seven Affordable Units, each consisting of a two-bedroom, 2.5-bathroom unit. Each of the Affordable Units shall be "Plan 1" Units within "Garden Court" buildings. As shown on Site Development Permit No. SDP-2025-00004 (**"Site Plan"**), "Garden Court" buildings are Buildings 1, 3, 4, 7, 8, 9, 10, 12, and 13.

2.4 Timing of Construction, Access, and Restrictions. Prior to the issuance of the first Building Permit for a Unit within the Project, Owner shall enter into a Density Bonus Housing Agreement with the City. The City shall have no obligation to issue any Building Permit for the Project until the fully executed Density Bonus Housing Agreement has been submitted to and accepted by the City. Developer may, in its sole discretion, modify its phasing plan, including the sequence in which buildings are constructed and the buildings included within each phase.

2.5 Development Concessions, Incentives, and Waivers. In accordance with State Density Bonus Law and City's Density Bonus ordinance, City has approved a Density Bonus application for the Project, which includes the Waivers.

2.6 No Increase in Density or Further Concessions, Incentives, or Waivers. Developer acknowledges and agrees that the Waivers fully satisfy City's duty to grant incentives, concessions, and/or waivers of any building, zoning, or other requirement in connection with the Project, State Density Bonus Law, and City's Density Bonus Ordinance. Additionally, Developer acknowledges and agrees that Developer has not requested, and the Project is not receiving, an increase in density under State Density Bonus Law or City's Density Bonus Ordinance. Subject to City's compliance with the terms of this Agreement and the Development Agreement, Developer releases any and all claims Developer may have against City in any way relating to or arising from City's satisfaction of its obligations under Government Code section 65915 with respect to the Project.

2.7 Permits and Processing; Compliance with Laws. Developer, at its sole cost and expense, or as otherwise set forth in a separate written agreement, shall secure or cause to be secured any and all permits that may be required for development of the Project from City or any other federal, state, or local governmental entity having or claiming jurisdiction over the Property or Project. Except as otherwise provided by the Development Agreement, the construction of the Project shall comply with all Project Approvals and all applicable federal, state, and local laws and regulations.

2.8 Changes to Project and/or This Agreement. This Agreement does not preclude Developer from requesting changes to the Project which could preclude strict compliance with the terms of this Agreement. Before City approves any such change, City and Developer shall meet and confer and agree upon any amendments to this Agreement that City determines are necessary to assure that, following the change, the provision of the Affordable Units remains consistent with State Density Bonus Law and City's Density Bonus Ordinance.

2.9 Mechanic's Liens; Indemnification. Developer shall take all actions necessary to remove any then-existing mechanic's liens or other similar liens (including design professional liens) against the Property or Project, or any part thereof, by reason of work, labor, services, or materials supplied or claimed to have been supplied to Developer or caused by, at the direction of, or on behalf of Developer. Prior to the recording of this Agreement pursuant to Section 3.1 below, Developer shall provide evidence from a reputable title company of any new recordings against the Property or Project. City hereby reserves all rights to post notices of non-responsibility and any other notices as may be appropriate upon a filing of a mechanic's lien. In addition to any other indemnity provided by Developer under this Agreement, Developer shall indemnify, defend, and hold City and its officials, officers, employees, representatives, agents, and volunteers (collectively, "**City Indemnitees**") free and harmless from any liability whatsoever arising from any and all alleged or actual claims, causes of action, liabilities, and damages from any third party by reason of a mechanic's lien or work, labor, services, or materials supplied or claimed to have been supplied to Developer or caused by, at the direction of, or on behalf of Developer. The provisions of this Section 2.9 are subject to the provisions of Section 6.4 below and shall survive termination of this Agreement.

3. RECORDING OF AGREEMENT

3.1 Recording. Prior to the issuance of a building permit for the construction of any of the buildings shown on the Site Development Permit which contains one or more of the residential units within the Project, the Developer shall record or shall cause to be recorded in the Official Records for Orange County, California, an executed original of this Agreement. City shall cooperate with Developer in promptly executing this Agreement in recordable form.

4. SALE OF UNITS

4.1 Conveyance of Units. Developer may construct and convey title to the Units, in phases or all at once in Developer's discretion, at any time after the Effective Date, in accordance with this Agreement, the Project Approvals, and any and all federal, state, and local laws and regulations. Developer shall convey title to each Affordable Unit through a purchase and sale agreement ("**PSA**") to be processed through an escrow. Upon City's request, Developer shall deliver to City a copy of the PSA and a preliminary title report for the conveyance of an Affordable Unit. Subject to Section 7.1, the requirements of this Section 4.1 applicable to the conveyance of individual Affordable Units shall not apply to a bulk sale of all Units, provided that this Agreement binds the bulk-sale purchaser.

4.2 Notice to City. For each phase of development including an Affordable Unit, Developer shall provide City with no less than 30 days written notice prior to the date that Developer intends to commence activities to market, offer, or sell the Affordable Units within that phase. The notice shall designate the location of the Affordable Units in that phase. As sale activities proceed for that phase, Developer may switch a Garden Court Plan 1 Affordable Unit within that phase for a Garden Court Plan 1 Market Rate Unit within the same phase. Developer shall promptly provide City with written notice of any such switch.

4.3 Sale of Individual Affordable Units. Developer shall sell each Affordable Unit at no more than the Affordable Housing Cost and only to a buyer who qualifies as a Qualified Purchaser. At Developer's option, prior to entering into a PSA for an Affordable Unit, Developer may provide written notice to City of the proposed sale price for the Affordable Unit (the "**PSA Notice"**) for the purpose of obtaining City's advance verification that the proposed sale price does not exceed the Affordable Housing Cost. If Developer does not request advance verification under this Section, Developer may enter into a PSA before City verifies the proposed sale price, provided that the PSA makes the sale contingent upon City's verification under Section 4.5. If Developer requests advance verification under this Section, City shall provide such verification within 30 days after receipt of the PSA Notice.

4.4 Income Verification. The proposed purchaser of an Affordable Unit shall provide and certify, for the purpose of City approval, the following information: the Social Security Number of the proposed purchaser; copies of the federal and state income tax returns filed by the proposed purchaser for the prior two calendar years; preceding six months of bank statements of the proposed purchaser; background documentation of any income (e.g., Social Security award letter, stock interest forms, court statement regarding support payments, retirement or pension benefit statement, etc.); copies of the two most current wage earning statements of the proposed purchaser; the purchase price that the proposed purchaser intends to pay for the

Affordable Unit; and any other information that City may reasonably require to verify the income of the proposed purchaser. The proposed purchaser of an Affordable Unit shall also provide, for the purpose of City approval, a written statement signed by the proposed purchaser (in a form acceptable to City) that authorizes City to inspect, use, and rely on the information provided by the proposed purchaser, and waives and releases any right or claim that the proposed purchaser might otherwise have in the absence of such written authorization to maintain the privacy or confidentiality of such information. The information, statements, agreements, and other documents that a proposed purchaser is required to provide pursuant to this Section 4.4 are collectively the "**Income Verification Materials**." Developer shall have the obligation to collect and compile all Income Verification Materials from a proposed purchaser of an Affordable Unit.

4.5 City Verification. Developer shall not convey fee title to any Affordable Unit to a proposed purchaser until such time as City has determined (i) the proposed purchaser intends to occupy the Affordable Unit as a principal residence; (ii) the proposed purchaser is a Very Low Income Household; (iii) if not previously verified pursuant to Section 4.3, the purchase price for the Affordable Unit does not exceed the Affordable Housing Cost; (iv) the proposed purchaser and City have executed the Equity Sharing Agreement, the proposed purchaser has executed the City Note and the City Deed of Trust, and the Equity Sharing Agreement and City Deed of Trust are in recordable form; and (v) the proposed conveyance will not otherwise violate the terms and conditions of this Agreement. Developer shall reasonably cooperate with City in its determination of the matters set forth in clauses (i)-(v) herein. Developer shall have the obligation to deliver to City all Income Verification Materials for a proposed purchaser of an Affordable Unit. City shall respond to a request from Developer for verification of the matters in clauses (i)-(v) herein by written notice, which shall be delivered to Developer within 30 days of City's receipt of all Income Verification Materials and all other information and documents reasonably required by City to make the determinations described in clauses (i) through (v). If City is unable to verify the proposed purchaser's income as provided herein, then the prospective purchaser's income shall be deemed to exceed the maximum allowable limit for a Very Low Income Household. If City determines a proposed conveyance would violate this Agreement, City shall specify the reasons for the violation. If the proposed violation is not corrected to the satisfaction of City within 30 days after the date of the notice specifying the violation, or within such further time as City determines in its sole and absolute discretion is necessary to correct said violation, Developer shall not convey title to the proposed purchaser. City may apply to a court of competent jurisdiction for specific performance of this Agreement, for a declaration that the proposed conveyance is void, or for any such relief as may be appropriate under law or equity. Similarly, if the City fails to timely meet its obligations under this Section 4.5, Developer may apply to a court of competent jurisdiction for specific performance of this Agreement, for a declaration that the proposed conveyance is valid, or for any such relief as may be appropriate under law or equity.

4.6 Quality Standards for Affordable Units. At the time of conveyance of an Affordable Unit from Developer to a Qualified Purchaser, the Affordable Unit shall be consistent in terms of type, design, and materials with the Garden Court Plan 1 Market Rate Units, except to the extent of optional upgrades which may be available to purchasers of the Garden Court Plan 1 Market Rate Units.

4.7 Execution of Equity Sharing Agreement and City Note; Recording of Equity Sharing Agreement and City Deed of Trust. Developer shall cause the Equity Sharing Agreement,

the City Note, and the City Deed of Trust, together with all attachments thereto, to be duly executed, with the Equity Sharing Agreement and City Deed of Trust in recordable form. At the close of escrow, the escrow holder handling the conveyance shall record, or cause to be recorded, the instruments effectuating the conveyance of the Affordable Unit in the Official Records of Orange County, California, including the grant deed conveying title to the Qualified Purchaser, the Equity Sharing Agreement, the City Deed of Trust, and any other instruments necessary to consummate the conveyance and establish the intended priority of liens and encumbrances under this Agreement, the Equity Sharing Agreement, and the City Deed of Trust. Upon recordation, the Equity Sharing Agreement shall run with the Affordable Unit and the City Deed of Trust shall constitute a lien against the Affordable Unit. City shall reasonably cooperate with Developer and each Qualified Purchaser in executing the Equity Sharing Agreement and any other documents requiring City's execution so that such documents may be delivered into escrow for recording at the close of escrow.

4.8 Sale of Units; Indemnification. In addition to any other indemnification provided in this Agreement, Developer shall indemnify, defend, and hold all City Indemnitees free and harmless from and against any liability whatsoever arising from any and all alleged or actual claims, causes of action, liabilities, and damages from any third party by reason of any alleged or actual violation by Developer of any federal, state, or local law or regulation in connection with the sale by Developer of the Units or otherwise arising from any act or omission of Developer in violation of any provision of this Section 4, except to the extent caused by the gross negligence or willful misconduct of any of the City Indemnitees. The provisions of this Section 4.8 are subject to the provisions of Section 6.4 below and shall survive termination of this Agreement.

4.9 Qualified Purchaser Orientation. Developer shall be responsible for marketing the Affordable Units to potential Qualified Purchasers. Developer shall provide designated City staff with a summary of the marketing plan of the Affordable Units. As part of the marketing plan, before the Qualified Purchaser executes the Equity Sharing Agreement and in all events before the close of escrow for the applicable Affordable Unit, Developer shall provide the Qualified Purchaser with an in-person informational session that explains, in plain and simple language, the resale restrictions and other material provisions of the Equity Sharing Agreement. Upon completion of the informational session, Developer shall cause the Qualified Purchaser to execute an agreement, in a form approved by City, acknowledging the Qualified Purchaser's attendance at the informational session and providing for the Qualified Purchaser's waiver and release of Developer and City (on a form approved by City) from any claims or causes of action related to the restrictions on the marketability of the Affordable Unit, provided that the Qualified Purchaser represents that they understand the restrictions on marketability.

5. TERM

5.1 Term. The term of this Agreement commences on the Effective Date and will continue until all of the Affordable Units have been conveyed to Qualified Purchasers and (i) each Qualified Purchaser has entered into a fully executed Equity Sharing Agreement with City in recordable form, (ii) each Qualified Purchaser has executed a City Note and City Deed of Trust in favor of City, and (iii) all of the Equity Sharing Agreements and City Deeds of Trust for all Affordable Units have been recorded. Developer shall provide, upon City's request, evidence that Equity Sharing Agreements and the Deeds of Trust have been recorded for all of the Affordable

Units. Termination of this Agreement shall not affect the continued validity or enforceability of any Equity Sharing Agreement, City Note, or City Deed of Trust executed in connection with an Affordable Unit. Nor shall termination of this Agreement affect any rights or remedies arising from a breach occurring before termination.

6. DEFAULT AND TERMINATION; INDEMNIFICATION

6.1 Default. Failure or delay by any Party to perform any term or provision of this Agreement that is not cured within 30 days after receipt of notice from the other Party specifying the default (or such other period specifically provided herein) constitutes a default under this Agreement; provided, however, if such default is of the nature requiring more than 30 days to cure, the defaulting Party shall avoid default hereunder by commencing to cure within such 30 day period, and thereafter diligently pursuing such cure to completion within an additional 60 days following the conclusion of such 30 day period (for a total of 90 days). Except as required to protect against further damages, the injured Party may not institute proceedings against the Party in default until the time for cure has expired. Failure or delay in giving such notice shall not constitute a waiver of any default, nor shall it change the time of default.

6.2 Rights and Remedies Cumulative. The rights and remedies of the Parties are cumulative, and the exercise by either Party of one or more of its rights or remedies shall not preclude the exercise by it, at the same or different times, of any other rights or remedies for the same default or any other default by the other Party.

6.3 Indemnification. In addition to any other indemnification provided in this Agreement, Developer shall indemnify, defend, and hold all City Indemnitees free and harmless from and against any liability whatsoever arising from any and all alleged or actual claims, causes of action, liabilities, and damages from any third party by reason of any act or omission of Developer in connection with its obligations under this Agreement, except to the extent caused by the gross negligence or willful misconduct of any of the City Indemnitees. The provisions of this Section 6.3 are subject to Section 6.4 below and shall survive termination of this Agreement.

6.4 Cost of Defense; Selection of Counsel. Developer, at Developer's expense, shall defend all City Indemnitees in any legal action for which this Agreement requires Developer's indemnification of City. Developer may select its own counsel in any such proceeding. City shall have the right to approve that counsel, which approval shall not be unreasonably withheld, conditioned, or delayed. City shall reasonably cooperate in any such proceeding, at Developer's expense (including, but not limited to, City's attorneys' fees). Should City decide to mount its own independent legal defense in any such proceeding, City may do so at its own expense. The provisions of this Section 6.4 shall survive termination of this Agreement.

7. ASSIGNMENT; COVENANTS RUN WITH THE LAND

7.1 Assignment. Developer may assign its rights and delegate its obligations under this Agreement only in accordance with Sections 13.3 through 13.5 of the Development Agreement. Any assignee shall expressly assume the obligations under this Agreement applicable to the transferred portion of the Property in the Assignment and Assumption Agreement required

by the Development Agreement. Subject to Section 8.7 below, the effect of any such assignment shall be governed by Section 13.4 of the Development Agreement.

7.2 Covenants Run with the Land. The Property shall be used, occupied and improved subject to the covenants, conditions, and restrictions set forth herein. The covenants, conditions, restrictions, reservations, equitable servitudes, liens and charges set forth in this Agreement shall run with the Property and shall be binding upon Developer and all persons having any right, title or interest in the Property, or any part thereof, their heirs, and successive owners and assigns, and shall inure to the benefit of City and its successors and assigns, and may be enforced by City and its successors and assigns. The covenants established in this Agreement shall, without regard to technical classification and designation, be binding for the benefit and in favor of City and its successors and assigns, and the parties hereto expressly agree that this Agreement and the covenants herein shall run in favor of City. City is deemed the beneficiary of the terms and provisions of this Agreement and of the covenants running with the land, for and in its own right and for the purposes of protecting the interests of the community and other parties, public or private, in whose favor and for whose benefit this Agreement and the covenants running with the land have been provided. Developer hereby declares its understanding and intent that the burden of the covenants set forth herein touch and concern the land and that Developer's interest in the Property may be rendered less valuable thereby. Developer hereby further declares its understanding and intent that this Agreement provides a public benefit and that the covenants set forth herein touch and concern the Property by furthering the health, safety, and welfare of the residents of the City and ensuring the provision of the Affordable Units in accordance with this Agreement and applicable law. Subject to the provisions of this Agreement that expressly survive termination, notwithstanding any other provision of this Agreement, this Agreement shall automatically terminate and be of no further force or effect, without any additional instrument or other action required, as to each of the Market Rate Units upon the closing of the sale of each such Unit.

8. MISCELLANEOUS

8.1 Entire Agreement. This Agreement, including all of its exhibits and attachments, contains the Parties' entire understanding and agreement with respect to the matters set forth herein, and there are no oral or written representations, understandings or ancillary covenants, undertakings or agreements which are not contained or expressly referred to herein. No testimony or evidence of any such representations, understandings or covenants shall be admissible in any proceeding of any kind or nature to interpret or determine this Agreement's terms or conditions.

8.2 Notices. As used in this Agreement, "notice" includes, but is not limited to, the communication of notice, request, demand, approval, statement, report, acceptance, consent, waiver, appointment or other communication required or permitted by this Agreement.

8.2.1 Delivery. All notices shall be in writing and shall be considered given either: (i) when delivered in person to the recipient named below; or (ii) on the date of delivery shown on the return receipt, after deposit in the United States mail in a sealed envelope as either registered or certified mail with return receipt requested, and postage and postal charges prepaid, and addressed to the recipient named below; or (iii) on the date of delivery shown on the delivery receipt, after deposit with a known and reliable next-day document delivery service (such as

FedEx), charges prepaid and addressed to the recipient named below. All notices shall be addressed as follows:

If to City:	City of Aliso Viejo 12 Journey, Suite 100 Aliso Viejo, CA 92656-5335 Attn: City Manager
With a copy to:	Best Best & Krieger LLP 18101 Von Karman Ave. Unit 1000 Irvine, CA 92612 Attn: Scott Smith
If to Developer:	Shea Homes Limited Partnership 15261 Laguna Canyon Road, Suite 100 Irvine, CA 92618 Attn: Vice-President, Community Development
With a copy to:	Cox, Castle & Nicholson LLP 3121 Michelson Drive, Suite 200 Irvine, CA 92612 Attn: Tim Paone

8.2.2 Change of Address. Either Party may, by notice given at any time, require subsequent notices to be given to another person or entity, whether a party or an officer or representative of a party, or to a different address, or both. Notices given before actual receipt of notice of change shall not be invalidated by the change.

8.3 Severability. If any term, provision, covenant or condition of this Agreement shall be determined invalid, void or unenforceable by a court of competent jurisdiction, the remainder of this Agreement shall not be affected thereby to the extent such remaining provisions are not rendered impractical to perform, taking into consideration the purposes of this Agreement.

8.4 Interpretation and Governing Law. This Agreement and any dispute hereunder shall be governed and interpreted in accordance with the laws of the State of California without regard to conflict of law principles. This Agreement shall be construed as a whole according to its fair language and common meaning to achieve the objectives and purposes of the Parties hereto, and the rule of construction to the effect that ambiguities are to be resolved against the drafting Party shall not be employed in interpreting this Agreement, all Parties having been represented by counsel in the negotiation and preparation hereof.

8.5 Section Headings. All section headings and subheadings are inserted for convenience only and shall not affect any construction or interpretation of this Agreement.

8.6 Singular and Plural. As used herein, the singular of any word includes the plural, and vice versa, as context so dictates. Masculine, feminine, and neuter forms of any word include the other as context so dictates.

8.7 Joint and Several Obligations. The allocation of obligations among multiple Developers shall be governed by Sections 13.3 through 13.5 of the Development Agreement. Absent compliance with those provisions, if, at any time during the term of this Agreement, the Property or Project is owned, in whole or in part, by more than one Developer, all obligations of such Developers under this Agreement shall be joint and several, and the default of any such Developer shall constitute a default by all such Developers. Notwithstanding the foregoing, any Mortgagee (as defined in the Development Agreement) acquiring all or any portion of the Property pursuant to Section 13.2.3 of the Development Agreement shall take such Property subject to this Agreement and shall succeed to the rights and obligations of Developer under this Agreement applicable to such Property. A Mortgagee shall not be liable for any default occurring before it acquires title to the applicable Property, but shall be responsible for compliance with this Agreement from and after such acquisition.

8.8 Time of Essence. Time is of the essence in the performance of the provisions of this Agreement as to which time is an element.

8.9 Computation of Days. Unless otherwise specified in this Agreement or any exhibit attached hereto, use of the term "days" shall mean calendar days. For purposes of this Agreement and all exhibits attached hereto, "business days" means every day of the week except Saturdays, Sundays, official State holidays as recognized in Government Code Section 19853(a) or successor statute, and any days on which City is closed for business.

8.10 Waiver. Failure by a Party to insist upon the strict performance of any of the provisions of this Agreement by the other Party, or the failure by a Party to exercise its rights upon the default of the other Party, shall not constitute a waiver of such Party's right to insist and demand strict compliance by the other Party with the terms of this Agreement thereafter.

8.11 Non-Discrimination. In performing its obligations under this Agreement, Developer shall not discriminate because of race, color, religion, sex, gender, gender identity, gender expression, sexual orientation, marital status, national origin, ancestry, familial status, disability, veteran or military status, source of income, or genetic information, as defined and prohibited by applicable law. Developer affirms that it is an equal opportunity employer and shall comply with all applicable federal, state and local laws and regulations.

8.12 Counterparts. This Agreement may be executed by the Parties in counterparts, which counterparts shall be construed together and have the same effect as if all of the Parties had executed the same instrument.

8.13 Jurisdiction and Venue. Any action at law or in equity under this Agreement or brought by a Party hereto for the purpose of enforcing, construing or determining the validity of any provision of this Agreement shall be filed and tried in the Superior Court of the County of Orange, State of California, and the Parties hereto waive all provisions of law providing for the filing, removal or change of venue to any other court.

8.14 Attorneys' Fees and Costs. If any party to this Agreement institutes any action, suit, counterclaim, appeal or arbitration for any relief against another party, declaratory or otherwise (collectively an "Action"), to enforce the terms hereof or to declare rights hereunder or with respect to any inaccuracies or material omissions in connection with any of the terms, conditions, representations or warranties on the part of the other party to this Agreement, then the prevailing party in such Action, whether by arbitration or final judgment, shall be entitled to have and recover from the other party all costs and expenses of the Action, including reasonable attorneys' fees and costs incurred in bringing and prosecuting such Action and/or enforcing any judgment, order, ruling or award granted therein, all of which shall be deemed to have accrued on the commencement of such Action. For purposes of this Section 8.14, costs shall include, without limitation, in addition to costs incurred in prosecution or defense of the underlying action, reasonable attorneys' fees, costs, expenses and expert fees and costs incurred in the following: (a) post judgment motions and collection actions; (b) discovery; and (c) appeals of any order or judgment. For the purposes of this Agreement the term "prevailing party" shall have the meaning set forth in California Code of Civil Procedure section 1032(a)(4).

8.15 Project as a Private Undertaking. It is specifically understood and agreed by and between the Parties hereto that the development of the Project is a private development, that neither Party is acting as the agent of the other in any respect hereunder, and that each Party is an independent contracting entity with respect to the terms, covenants and conditions contained in this Agreement. No partnership, joint venture or other association of any kind is formed by this Agreement. The only relationship between City and Developer is that of a government entity regulating the development of private property and the development of such property.

8.16 Further Actions and Instruments. Each of the Parties shall cooperate with and provide reasonable assistance to the other to the extent contemplated hereunder in the performance of all obligations under this Agreement and in the satisfaction of the Project and conditions of this Agreement. Upon the request of either Party at any time, the other Party shall promptly execute, with acknowledgment or affidavit if reasonably required, and file or record such required instruments and writings and take any actions as may be reasonably necessary under the terms of this Agreement to carry out the intent and to fulfill the provisions of this Agreement or the Project or to evidence or consummate the transactions contemplated by this Agreement. City hereby authorizes City Manager to take such other actions and negotiate and execute any additional agreements as may be reasonably necessary or proper to fulfill City's obligations under this Agreement. The City Manager may delegate their powers and duties under this Agreement to an authorized management level employee of City.

8.17 Amendment. Any alteration, change, or modification of or to this Agreement, in order to become effective, shall be made in writing and in each instance approved by the City Council and signed on behalf of each Party. Any requested alteration, change, or modification of this Agreement by Developer shall require the payment of fees or deposit by Developer to City, as applicable, for City's review of the request. Each alteration, change, or modification to this Agreement shall be recorded against the Property in the Official Records of Orange County, California.

The Parties have signed this Agreement on the dates indicated below.

DEVELOPER:

Shea Homes Limited Partnership

By: _____
Brooke Doi
Assistant Secretary

Date: _____

Shea Homes Limited Partnership

By: _____
John Danvers
Assistant Secretary

Date: _____

CITY:

City of Aliso Viejo,
a California municipal corporation

By: _____
Name:
Title:
Date:

ATTEST:

_____
City Clerk

APPROVED AS TO FORM:

_____
City Attorney

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of _____)

On _____ before me, _____, Notary Public
(insert name and title of the officer)

personally appeared _____
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ **(Seal)**

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of _____)

On _____ before me, _____, Notary Public
(insert name and title of the officer)

personally appeared _____
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ **(Seal)**

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of _____)

On _____ before me, _____, Notary Public
(insert name and title of the officer)

personally appeared _____
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ **(Seal)**

EXHIBIT A

LEGAL DESCRIPTION OF THE PROPERTY

[insert]

EXHIBIT B

MAP SHOWING PROPERTY AND ITS LOCATION

[insert]

EXHIBIT C

EQUITY SHARING AGREEMENT (AND ATTACHMENTS)

(Attached behind this cover page)

RECORDING REQUESTED BY:

AND WHEN RECORDED MAIL TO:

City of Aliso Viejo
12 Journey, Suite 100
Aliso Viejo, CA 92656-5335
Attn: City Manager

Free Recording pursuant to Government Code 6103 & 27383

OWNER OCCUPANCY AND EQUITY SHARING AGREEMENT
(DENSITY BONUS UNIT)

Owner:	_____
Property:	_____
Purchase Price:	$_____
Original Fair Market Value:	$_____
City Subsidy Amount:	$_____

This Owner Occupancy and Equity Sharing Agreement ("**Equity Sharing Agreement**") is entered into as of this [date], by and between the City of Aliso Viejo, California~~,~~ ("**City**") and [name(s)] (referred to herein as "**Buyer**" and sometimes as "**Owner**").

RECITALS

A. Shea Homes Limited Partnership, a California limited partnership **("Developer")**, applied for and received development entitlements from City for the development of a 137-unit residential project ("**Project**"). Seven units within the Project will be designated affordable units for Very Low Income Households ("**Affordable Units**").

B. Pursuant to Government Code section 65915 *et seq*. ("**State Density Bonus Law**"), projects that include specified levels of affordable housing are entitled to receive certain density bonuses and other incentives to facilitate the economic feasibility of those projects.

C. In accordance with State Density Bonus Law, Developer has proposed to include at least five percent (5%) of the dwelling units in the Project for sale to Very Low Income Households and requested three waivers in order to accommodate the Project.

D. On _____, 2026, City and Developer entered into that certain "**Density Bonus Housing Agreement**" pursuant to which Developer agreed to provide the Affordable Units.

E. Buyer intends to purchase the property located at_____ in the City of Aliso Viejo, California, County of Orange ("**Property**"). The Property, which is one of the seven Affordable Units, is more particularly described in Exhibit A-1.

F. To comply with the requirements of the Density Bonus Housing Agreement, Developer agrees to sell the Property to Buyer for a purchase price of $_____ ("**Original Purchase Price**"). Buyer and City agree that the fair market value of the Property at time of purchase is $_____ ("**Original Fair Market Value**"), which is based on an appraisal conducted at the time of the purchase of the Property by Buyer, or such other method as agreed to by City and Buyer. The Original Purchase Price has been reduced from fair market value as a direct result of the requirements imposed by City on the Project pursuant to the Density Bonus Housing Agreement. City and Buyer acknowledge that the difference between the Original Fair Market Value and the Original Purchase Price, which is equal to $[insert], is a subsidy from City that has enabled Buyer to acquire the Property at an affordable price ("**City Subsidy**").

G. State Density Bonus Law requires City to enter into an agreement with the purchaser of any affordable dwelling unit constructed and sold in exchange for such density bonus that allows City to recapture any initial subsidy and its proportionate share of appreciation. Buyer has agreed to execute and comply with this Equity Sharing Agreement in compliance with such requirements in consideration of the opportunity to purchase the Property at an affordable price, which is below the fair market value of the Property.

H. The purpose of this Equity Sharing Agreement is to: (i) place controls on ownership and occupancy of the Property; (ii) provide City with a First Option when Owner intends to Transfer the Property and preserve City's rights in the event of foreclosure; and (iii) require payment of the City Subsidy and a share of the Property's appreciation to City in accordance with the State Density Bonus Law. In accordance with the foregoing, Owner shall execute a promissory note in favor of City ("**City Note**") to ensure the repayment of the City Subsidy and the City Shared Appreciation, as defined in Section 8.a. The form of the City Note is attached hereto as Exhibit B-1.

I. Buyer is receiving a first mortgage loan ("**First Mortgage Loan**") from [lender name] ("**First Lender**"). The First Mortgage Loan is secured by a deed of trust dated [insert], executed by Buyer in favor of First Lender and recorded in the County of Orange concurrently herewith ("**First Mortgage Deed of Trust**").

J. This Equity Sharing Agreement and the City Note shall be secured by a deed of trust on the Property ("**City Deed of Trust**"). The form of the City Deed of Trust is attached hereto as Exhibit C-1. This Equity Sharing Agreement and the City Deed of Trust shall be subordinate to the lien of the First Mortgage Deed of Trust.

NOW, THEREFORE, in consideration of the benefits received by Buyer and City hereunder, Buyer and City agree as follows:

AGREEMENT

1. DEFINITIONS

The following terms are specially defined for this Equity Sharing Agreement and their definitions can be found in the sections indicated below:

a. "Affordable Housing Cost" — Same meaning as provided in the Density Bonus Housing Agreement.

b. "Buyer" or "Owner" — First sentence on page 1 of this Equity Sharing Agreement

c. "City" — First sentence on page 1 of this Equity Sharing Agreement

d. "City Deed of Trust" — Recital J

e. "City Note" — Recital H

f. "City Shared Appreciation" — Section 8.(a)

g. "City Subsidy" — Recital F

h. "Default" — Section 9

i. "Density Bonus Housing Agreement" – Recital D

j. "Eligible Capital Improvements" — Section 8.(b)

k. "Fair Market Value" — Section 6

l. "First Lender" — Recital I

m. "First Mortgage Deed of Trust" — Recital I

n. "First Mortgage Loan" — Recital I

o. "Original Fair Market Value" — Recital F

p. "Original Purchase Price" — Recital F

q. "Owner's Notice of Intent to Transfer" — Section 6

r. "Property" — Recital E and Section 2

s. "Transfer" — Section 5

t. "Very Low Income Household" – Same meaning as provided in the Density Bonus Housing Agreement.

2. DESCRIPTION OF PROPERTY

This Agreement concerns the real property commonly known as [address], Aliso Viejo, California [zip code], which is more fully described in Exhibit A-1 ("**Property**").

3. BUYER CERTIFICATIONS; OWNER OCCUPANCY REQUIREMENT

a. Owner Occupancy Requirement. The purpose of the City assistance provided pursuant to this Equity Sharing Agreement is to provide Buyer with the opportunity to become a homeowner. Investment in real estate is not the primary purpose of this Equity Sharing Agreement. Therefore, Buyer shall occupy the Property as Buyer's principal place of residence for at least 10 months during each 12-month period. City may grant a temporary waiver of this occupancy requirement for good cause in its sole discretion.

b. Buyer Certifications. Buyer certifies that the financial and other information previously provided in order to qualify to purchase the Property is true and correct as of the date first written above.

4. INSURANCE REQUIREMENTS

Buyer shall maintain insurance on the Property in accordance with Section 5 of the City Deed of Trust.

5. RESTRICTIONS ON RESALE OF THE PROPERTY

Any Transfer of the Property will be subject to the provisions of this Agreement. "**Transfer**" means any sale, assignment or transfer, voluntary or involuntary, of any interest in the Property, including, but not limited to, a fee simple interest, a joint tenancy interest, a life estate, a leasehold interest, an interest evidenced by a land contract by which possession of the Property is transferred and Owner retains title, or a deed of trust. Any Transfer without satisfaction of the provisions of this Agreement is prohibited and shall constitute a default by Owner for which City may exercise any and all remedies under this Agreement, the City Note and the City Deed of Trust. A Transfer shall not include a conveyance: (i) to an existing spouse or domestic partner; (ii) by an Owner to a spouse or domestic partner where the spouse or domestic partner becomes the co-owner of the Property; (iii) between spouses as part of a marriage dissolution proceeding; (iv) by Owner into an inter vivos trust in which Owner is the beneficiary; or (~~iv~~v) refinance of the First Mortgage Loan meeting the requirements of Section 17; provided, however, that Owner shall provide written notice to City of all such conveyances within 30 days of the conveyance and Owner shall continue to occupy the Property as Owner's principal place of residence (except where the conveyance occurs pursuant to subsection (iii) above, in which event the new owner shall occupy the Property and affirmatively assume Owner's obligations under this Agreement, the City Note, and the City Deed of Trust).

6. NOTICE OF INTENDED TRANSFER; CITY'S FIRST OPTION; PREPARATION OF PROPERTY FOR SALE

a. Notice of Intent to Transfer. If Owner intends to Transfer the Property, Owner shall promptly give City written notice of such intent ("**Owner's Notice of Intent to Transfer**"). Owner shall give City the Owner's Notice of Intent to Transfer prior to notifying real estate brokers or lenders of Owner's intent to Transfer the Property and prior to listing of the Property on the Multiple Listing Service. The Owner's Notice of Intent to Transfer shall be sent to City by certified mail, return receipt requested at the address provided in Section 22 below. The Owner's Notice of Intent to Transfer shall include the information necessary for City to determine the City Shared Appreciation of the Property, including the following information:

(1) The address of the Property;

(2) The date of purchase of the Property by Owner;

(3) The Original Fair Market Value of the Property at the time of Owner's purchase as determined by City and Owner and set forth on the first page of this Equity Sharing Agreement;

(4) A copy of the HUD-1 Settlement Statement or equivalent document from the close of escrow on Owner's purchase of the Property;

(5) If Owner has made capital improvements to the Property that Owner wishes to have recognized as Eligible Capital Improvements for purposes of determining the amount payable to City under Section 8, Owner shall provide a description of the improvements, the date the improvements were made, a copy of City's prior written approval of the improvements (if obtained), evidence of the cost of the improvements, and an appraisal documenting the value added to the Property by the Eligible Capital Improvements. If Owner did not obtain City's prior written approval before making the Capital Improvements, Owner may nevertheless identify such capital improvements in the Notice of Intent to Transfer and request that City recognize them as Eligible Capital Improvements. City shall recognize the improvements as Eligible Capital Improvements if City reasonably determines, based upon documentation provided by Owner, that the improvements satisfy the requirements of Section 8(b). The value of any improvements recognized by City as Eligible Capital Improvements shall be determined pursuant to Section 8(b);

(6) The date the Property will be placed on the market;

(7) The name and phone number of the person to contact to schedule inspection of the Property by City; and

(8) (8) The proposed sale price and other material terms upon which Owner proposes to sell the Property.

b. Fair Market Value Appraisal. Prior to the Transfer of the Property, the Fair Market Value of the Property at the time of Transfer shall be determined by a certified MAI or other qualified real estate appraiser approved in advance by City. If possible, the appraisal shall be based upon the sales prices of comparable properties sold in the market area during the preceding three month period. The cost of the appraisal shall be paid by Owner, unless the appraisal is obtained from a new purchaser. Further, in the event that Owner has made Eligible Capital Improvements, the value of which Owner wishes to retain, the appraisal shall determine the value of such Eligible Capital Improvements in accordance with Section 8(b) below. Nothing in this section precludes Owner and City from establishing the Fair Market Value of the Property at the time of Transfer by mutual agreement in lieu of an appraisal pursuant to this section.

c. City's First Option. Upon receipt of a complete Owner's Notice of Intent to Transfer, City shall have the first right to purchase the Property The purchase price payable by City shall equal the Fair Market Value of the Property determined pursuant to subsection (b), less the City Subsidy and City Shared Appreciation that would be payable to City under Section 8 if the Property were Transferred to a person other than City (the "Option Purchase Price"). Except for the determination and payment of the Option Purchase Price as provided herein, City shall purchase the Property on the material terms specified in the Owner's Notice of Intent to Transfer, to the extent those terms are applicable to City's purchase and are not inconsistent with this Equity Sharing Agreement. City shall have such right and option ("**First Option**") for 45 days after City receives a complete Owner's Notice of Intent to Transfer. If not timely exercised, the First Option shall terminate. If City exercises the First Option, the purchase shall close through escrow within 60 days after City's exercise, or on such other date as City and Owner may agree in writing. Upon the closing of City's purchase pursuant to the First Option, the City Subsidy and City Shared Appreciation shall be credited against the Fair Market Value of the Property in determining the Option Purchase Price and shall be deemed paid and satisfied through that credit. The parties intend that the Option Purchase Price permit Owner to retain the value of any Eligible Capital Improvements, Owner's downpayment, and Owner's proportionate share of appreciation, while permitting City to recapture its initial subsidy and proportionate share of appreciation, in accordance with Government Code section 65915(c)(2)(C).

7. SALE OF PROPERTY BY OWNER

a. Subject to Section 6.c above, Owner may Transfer the Property to a person of Owner's choosing at an unrestricted price (supported by an MAI or other qualified appraisal), and City shall release this Equity Sharing Agreement and cause the City Deed of Trust to be reconveyed from the Property, provided that Owner pays the full amount owed under the City Note to the City pursuant to Section 8 below. Owner shall provide City with the following documentation associated with such a Transfer:

(1) The name and address of the purchaser;

(2) The final sales contract and all other related documents which shall set forth all the terms of the sale of the Property, including a HUD-1 Settlement Statement or equivalent document. Said documents shall include at least the following terms: (a) the sales price; and (b) the price to be paid by the

purchaser for Owner's personal property, if any, for the services of Owner, if any, and any credits, allowances or other consideration, if any.

(3) A written certification, from Owner and the purchaser in a form acceptable to City that the sale shall be closed in accordance with the terms of the sales contract and other documents submitted to and approved by City. The certification shall also provide that the purchaser or any other party has not paid and will not pay to Owner, and Owner has not received and will not receive from the purchaser or any other party, money or other consideration, including personal property, in addition to what is set forth in the sales contract and documents submitted to City. The written certification shall also include a provision that in the event a Transfer is made in violation of the terms of this Equity Sharing Agreement or false or misleading statements are made in any documents or certification submitted to City, City shall have the right to foreclose on the Property or file an action at law or in equity as may be appropriate. In any event, any costs, liabilities or obligations incurred by Owner and the purchaser for the return of any moneys paid or received in violation of this Equity Sharing Agreement or for any costs and legal expenses, shall be borne by Owner and/or the purchaser and they shall hold City and its designee harmless and reimburse their expenses, legal fees and costs for any action they reasonably take in good faith in enforcing the terms of this Equity Sharing Agreement.

(4) A copy of the MAI or other qualified appraisal prepared for the Property in accordance with Section 6.(b).

(5) Upon the close of the proposed sale, a copy of the final sales contract, HUD-1 Settlement Statement or equivalent document, escrow instructions, and any other documents which City may reasonably request.

8. PAYMENT TO CITY OF CITY SUBSIDY AND SHARED APPRECIATION

a. Upon a Transfer of the Property to a person other than City pursuant to Section 7, Owner shall pay to City the City Subsidy plus the City Shared Appreciation. The "**City Subsidy**," as defined in Recital F, is equal to the amount by which the Original Fair Market Value of the Property exceeds the Original Purchase Price of the Property. For purposes of this Section 8, "**Adjusted Fair Market Value**" means the Fair Market Value of the Property at the time of Transfer, less the value of any Eligible Capital Improvements determined pursuant to Section 8(b). "**City Shared Appreciation**" shall be calculated pursuant to the City Note but by way of information the following sets forth the method for determining the City Shared Appreciation. If there is any inconsistency between the City Note and this Equity Sharing Agreement with respect to the determination of City Shared Appreciation, the City Note shall control. City Shared Appreciation shall be calculated by dividing the City Subsidy by the Original Fair Market Value of the Property. The resulting percentage, rounded to the closest one-tenth of a percentage point, shall be multiplied by the amount, if any, by which the Adjusted Fair Market Value exceeds the Original Fair Market Value, and the resulting product shall equal the City Shared Appreciation. Notwithstanding the foregoing, if the Adjusted Fair Market Value is lower than the Original Fair

Market Value, the amount payable to City shall instead be determined in accordance with subsection (d).

b. The value of any Eligible Capital Improvements shall be the value of any substantial structural or permanent fixed improvements that Owner has made to the Property after acquiring the Property, provided that such improvements are: (i) made or installed by Owner in conformity with applicable building codes at the time of installation; and (ii) approved or recognized by City in writing, either before construction or pursuant to Section 6(a)(5). The value of Eligible Capital Improvements shall be limited to the appraised increase in the value of the Property attributable to the improvements, as determined by the appraisal performed pursuant to Section 6.(b), taking into account any depreciation in value since installation, and shall not be based on the actual cost of constructing the improvement.

c. The City Subsidy and the City Shared Appreciation shall be a debt of Owner to City, evidenced by this Equity Sharing Agreement and the City Note, and secured by the City Deed of Trust. Owner acknowledges that City shall have no obligation to release the Equity Sharing Agreement or reconvey the City Deed of Trust until the City Subsidy and the City Shared Appreciation are paid to City. City shall utilize the repayment of the City Subsidy and the City Shared Appreciation within five years of receipt of such funds for any of the purposes described in subdivision (e) of section 33334.2 of the Health and Safety Code that promote homeownership.

d. Notwithstanding anything to the contrary in this Section 8, if the Adjusted Fair Market Value is lower than the Original Fair Market Value, the Adjusted Fair Market Value shall be used as the initial market value for purposes of determining the City Subsidy, and the amounts payable to City shall otherwise be calculated in accordance with Government Code section 65915(c)(2)(C), as amended from time to time. In no event shall the amount payable to City under this subsection be less than zero.

9. DEFAULTS

a. The following events shall constitute a "Default" by Owner under this Equity Sharing Agreement:

(1) City determines that Owner has made a misrepresentation to obtain the benefits of purchase of the Property or in connection with its obligations under this Equity Sharing Agreement;

(2) Owner fails to occupy the Property as required pursuant to Section 3 above;

(3) Owner makes a Transfer in violation of this Equity Sharing Agreement;

(4) Owner otherwise fails to comply with the requirements of this Equity Sharing Agreement, the City Note, or the City Deed of Trust and such violation is not corrected to the satisfaction of City within 10 days after the date of written notice by City to Owner of such violation;

(5) A lien is recorded against the Property other than the First Mortgage Deed of Trust, the City Deed of Trust, a lien in favor of City, a lien for nondelinquent taxes or assessments, or any other lien approved by City in writing;

(6) Owner places a mortgage on the Property in violation of Section 17 below;

(7) Owner declares a bankruptcy or makes an assignment of assets for the benefit of creditors.

b. Upon a declaration of Default by City under this Equity Sharing Agreement, City may pursue any or all of the following remedies:

(8) Subject to all applicable notice and cure requirements under the City Note and the City Deed of Trust, declare the City Subsidy and City Shared Appreciation immediately due and payable without further demand, declare a default under the City Note, and invoke the power of sale under the City Deed of Trust;

(9) Apply to a court of competent jurisdiction for any such relief at law or in equity as may be appropriate including, but not limited to, the collection of damages from Owner, which damages shall include City's costs associated with administering City's affordable housing program and the cost to City of providing sufficient assistance to a Very Low Income Household to acquire a market rate home at an affordable housing cost as that term is defined in Health and Safety Code section 50052.5; and

(10) Declare a Default under the City Note and City Deed of Trust and pursue all City remedies thereunder.

10. NOTICE OF DEFAULT AND FORECLOSURE

a. City may record a request for copies of any notice of default and notice of sale under any deed of trust or mortgage encumbering the Property. City may declare a Default under this Equity Sharing Agreement upon receipt of any notice given to City pursuant to Civil Code section 2924b, and may exercise its rights as provided in Section 9.

b. In the event of default and foreclosure, City shall have the same right as Owner to cure defaults and redeem the Property prior to the foreclosure sale. Nothing herein shall be construed as creating any obligation of City to cure any such default, nor shall this right to cure and redeem operate to extend any time limitations in the default provisions of the underlying deed of trust or mortgage.

c. Whether or not City has recorded a request pursuant to subsection (a), City may exercise its rights under this Section upon City's actual receipt of written notice of the foreclosure proceedings from Owner, the First Lender, or any other source. Nothing in this Section shall limit

City's right to bid at, acquire, or otherwise protect its interest in the Property through any foreclosure sale or any other remedy available under applicable law.

11. NON-LIABILITY OF CITY

a. Non-liability for Negligence, Loss, or Damage. Owner acknowledges, understands and agrees that the relationship between Owner and City is solely that of an owner and an administrator of a City affordable housing program, and that City does not undertake or assume any responsibility for or duty to Owner to select, review, inspect, supervise, pass judgment on, or inform Owner of the quality, adequacy or suitability of the Property or any other matter. City owes no duty of care to protect Owner against negligent, faulty, inadequate or defective building or construction or any condition of the Property and Owner agrees that neither Owner nor Owner's heirs, successors or assigns shall ever claim, have or assert any right or action against City for any loss, damage or other matter arising out of or resulting from any condition of the Property and will hold City harmless from any liability, loss or damage for these things.

b. Indemnity. Owner agrees to defend, indemnify, and hold City harmless from all losses, damages, liabilities, claims, actions, judgments, costs, and reasonable attorney's fees that City may incur as a direct or indirect consequence of: (1) Owner's default or failure to perform any obligations as and when required by this Equity Sharing Agreement or the City Deed of Trust; or (2) the failure at any time of any of Owner's representations to City to be true and correct.

12. RESTRICTIONS ON FORECLOSURE PROCEEDS

Subject to the rights of senior lienholders, any proceeds arising from a foreclosure, deed in lieu of foreclosure, or other involuntary Transfer that would otherwise be payable to Owner shall first be applied to the amounts owed to City under the City Note, and only the remaining balance, if any, shall be payable to Owner.

13. RESTRICTION ON INSURANCE PROCEEDS

If the Property is damaged or destroyed and Owner elects not to rebuild or repair the Property, Owner shall pay City the portion of any insurance proceeds received by Owner for such destruction or damage which is equal to the City Subsidy plus the City Shared Appreciation calculated pursuant to Section 8 above, with the total amount of insurance proceeds serving as the Fair Market Value upon Transfer of the Property, provided that in no event shall City receive insurance proceeds in an amount that results in the amount of insurance proceeds available to Owner being less than the Original Purchase Price for the Property as set forth above.

14. TERM OF AGREEMENT

All the provisions of this Equity Sharing Agreement, including the benefits and burdens, run with the Property and this Equity Sharing Agreement shall bind, and the benefit hereof shall inure to, Owner, Owner's heirs, legal representatives, executors, successors in interest and assigns, and to City and its successors, until the earliest to occur of: (i) the Transfer of the Property and payment to City of the City Subsidy and the City Shared Appreciation. in accordance with this

Agreement and the City Note, (ii) the closing of City's purchase of the Property pursuant to City's exercise of the First Option under Section 6(c), or (iii) termination under Section 16 following foreclosure or deed in lieu.

15. SUPERIORITY OF AGREEMENT

Owner covenants that Owner has not, and will not, execute any other agreement with provisions contradictory to or in opposition to the provisions hereof, and that, in any event, except as otherwise provided herein, this Equity Sharing Agreement is controlling as to the rights and obligations between and among Owner and City and their respective successors.

16. SUBORDINATION

a. Notwithstanding any provision herein, this Equity Sharing Agreement shall not diminish or affect the rights of the First Lender under the First Mortgage Deed of Trust or any subsequent First Lender deeds of trust hereafter recorded against the Property in compliance with Section 17 below.

b.

c. Notwithstanding any other provision hereof, the provisions of this Equity Sharing Agreement and the City Deed of Trust shall be subordinate to the lien of the First Mortgage Deed of Trust and shall not impair the rights of the First Lender, or such First Lender's assignees or successors in interest to exercise their remedies under the First Mortgage Deed of Trust in the event of default under the First Mortgage Deed of Trust by Owner. Such remedies under the First Mortgage Deed of Trust include the right of foreclosure or acceptance of a deed or assignment in lieu of foreclosure. After such foreclosure or acceptance of a deed in lieu of foreclosure, this Equity Sharing Agreement and the City Deed of Trust shall be forever terminated and shall have no further effect as to the Property or any transferee thereafter; provided;, however, if the holder of such First Mortgage Deed of Trust acquires title to the Property pursuant to a deed or assignment in lieu of foreclosure, this Equity Sharing Agreement and the City Deed of Trust shall automatically terminate upon such acquisition of title only if: (i) City has been given written notice of the default under the First Mortgage Deed of Trust and a 60-day opportunity to cure such default; and (ii) City has not cured the default within such 60-day period or commenced to cure the default and provided a firm commitment, in form and substance reasonably acceptable to the First Lender, to complete such cure.

17. REFINANCE OF MORTGAGE LOAN

The outstanding principal on the City Note shall not be due upon prepayment and refinancing of the First Mortgage Loan, and this Agreement and the City Deed of Trust shall be subordinated to the refinanced First Mortgage Loan, provided that following such refinance, the principal amount of the refinanced First Mortgage Loan will not exceed the original principal amount of the First Mortgage Loan unless some other amount is approved by City in writing, in City's sole and absolute discretion. Mortgage loans or equity lines of credit junior in lien priority to the City Deed of Trust are not permitted. City and Owner agree that the requirements of this Section 17 are necessary to ensure the continued affordability of the Property to Owner and to minimize the risk of loss of the Property by Owner through default and foreclosure of mortgage

loans. Owner further acknowledges that violation of the provisions of this Section 17 shall constitute a Default under this Equity Sharing Agreement.

18. NONDISCRIMINATION

Owner covenants by and for itself and its successors and assigns that there shall be no discrimination against or segregation of a person or of a group of persons on account of race, color, religion, creed, age, disability, sex, sexual orientation, marital status, ancestry or national origin in the sale, transfer, use, occupancy, tenure or enjoyment of the Property, nor shall Owner or any person claiming under or through Owner establish or permit any such practice or practices of discrimination or segregation with reference to the use, occupancy, or transfer of the Property. The foregoing covenant shall run with the land.

19. INVALID PROVISIONS

If any one or more of the provisions contained in this Equity Sharing Agreement shall for any reason be held to be invalid, illegal or unenforceable by a court of competent jurisdiction, then such provision or provisions shall be deemed severable from the remaining provisions contained in this Equity Sharing Agreement, and this Equity Sharing Agreement shall be construed as if such invalid, illegal or unenforceable provision had never been contained herein.

20. CONTROLLING LAW

The terms of this Equity Sharing Agreement shall be interpreted under the laws of the State of California. The venue for any legal action pertaining to this Agreement shall be Orange County, California.

21. NO WAIVER

No delay or omission in the exercise of any right or remedy of City upon any default by Owner shall impair such right or remedy or be construed as a waiver. City's failure to insist in any one or more instance upon the strict observance of the terms of this Equity Sharing Agreement shall not be considered a waiver of City's right thereafter to enforce the provisions of the Equity Sharing Agreement. City shall not waive its rights to enforce any provision of this Equity Sharing Agreement unless it does so in writing, signed by an authorized agent of City.

22. NOTICES

a. All notices required herein shall be sent by certified mail, return receipt requested or express delivery service with a delivery receipt and shall be deemed to be effective as of the date received or the date delivery was refused as indicated on the return receipt as follows:

To Owner:
_____
_____
_____

At the address of the Property:
_____
_____
Aliso Viejo, CA 9____

To City:
City of Aliso Viejo
12 Journey, Suite 100
Aliso Viejo, CA 92656-5335
Attn: [insert]

With Copy to:
_____
_____
_____

b. The parties may subsequently change addresses by providing written notice of the change in address to the other parties in accordance with this Section.

23. INTERPRETATION OF AGREEMENT

The terms of this Equity Sharing Agreement shall be interpreted so as to avoid speculation on the Property and to ensure to the extent possible that its sales price and mortgage payment remain affordable to Very Low Income Households.

24. EXHIBITS

Any exhibits referred to in this Equity Sharing Agreement are hereby incorporated herein by this reference.

25. ATTORNEYS' FEES

If any action is filed in a court of competent jurisdiction related to this Equity Sharing Agreement, the prevailing party shall be entitled to recover reasonable attorneys' fees and costs from the non-prevailing party.

26. TAX RETURNS

Owner shall execute such documents as are necessary to provide City with access to Owner's filed federal income tax returns.

27. ACKNOWLEDGEMENT OF TERMS

Owner hereby acknowledges that, prior to Owner's execution of this Equity Sharing Agreement, Developer provided Owner with an in-person, informational session, during which Developer explained, in plain and simple language, the resale restrictions and other material provisions of this Equity Sharing Agreement.

28. ENTIRE AGREEMENT

This Equity Sharing Agreement (along with the City Note and City Deed of Trust) sets forth the entire understanding and agreement of City and Owner and any amendment, alteration or interpretation of this Equity Sharing Agreement must be in writing signed by both City and Owner.

IN WITNESS WHEREOF, the parties have executed this Equity Sharing Agreement on or as of the date first written above.

CITY:	BUYER
_____, City Manager City of Aliso Viejo	_____

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of _____)

On _____ before me, _____, Notary Public
(insert name and title of the officer)

personally appeared _____
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ **(Seal)**

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of _____)

On _____ before me, _____, Notary Public
(insert name and title of the officer)

personally appeared _____
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ **(Seal)**

EXHIBIT A-1

Legal Description of Property

[insert]

EXHIBIT B-1

City Note

[Attached behind this cover page]

CITY OF ALISO VIEJO PROMISSORY NOTE

Secured by Deed of Trust

$_____ _____, 202_
And City Shared Appreciation

FOR VALUE RECEIVED, the undersigned [name(s)] ("**Borrower**") promises to pay to the City of Aliso Viejo, a California municipal corporation ("**City**"), at 12 Journey, Suite 100, Aliso Viejo, CA 92656-5335, or such other place as City may designate in writing: (i) a principal amount of $[amount] ("**City Subsidy**"), which amount constitutes a subsidy provided by City to Borrower pursuant to that certain Owner Occupancy and Equity Sharing Agreement entered into by and between Borrower and City dated [date] ("**Equity Sharing Agreement**") for purchase of the Property located at [address] in the City of Aliso Viejo, California ("**Property**"); and (ii) the City Shared Appreciation, as defined herein.

1. Purpose of Loan. Borrower is purchasing the Property, which is being sold by [developer name], a [entity type] ("**Developer**") pursuant to that certain Density Bonus Housing Agreement entered into by and between City and Developer to ensure that a certain number of the housing units being constructed by Developer are sold at an affordable housing cost to Very Low Income Households. The purchase price of the Property has been set substantially below the market value so that the Property will be affordable for purchase by Very Low Income Households. Because the purchase price has been set below the market value, Borrower is required and has agreed to enter into the Equity Sharing Agreement with City, which requires Borrower to pay the City Subsidy and the City Shared Appreciation to City. This Note evidences the obligation of Borrower to pay the City Subsidy and the City Shared Appreciation to City pursuant to the Equity Sharing Agreement.

2. Definitions. The terms set forth in this section shall have the following meanings in this Note.

a. "Borrower" has the meaning set forth in the introductory paragraph on page 1 of this Note.

b. "City" means the City of Aliso Viejo, California.

c. "City Deed of Trust" means the deed of trust and security agreement that secures the Equity Sharing Agreement and this Note on the Property.

d. "City Subsidy" has the meaning provided in the introductory paragraph on page 1 of this Note.

e. "City Shared Appreciation" means and shall be calculated by dividing the City Subsidy by the Original Fair Market Value of the Property. The resulting percentage, rounded to the closest one-tenth of a percentage point, shall be multiplied by the amount, if any, by which the Adjusted Fair Market Value exceeds the Original Fair Market Value,

and the resulting product shall equal the City Shared Appreciation. "Adjusted Fair Market Value" has the meaning provided in Section 8(a) of the Equity Sharing Agreement. City Shared Appreciation shall not be less than zero.

f. "Developer" has the meaning provided in Section 1 of this Note.

g. "Eligible Capital Improvements" has the meaning provided in Section 8(b) of the Equity Sharing Agreement.

h. "Equity Sharing Agreement" has the meaning provided in the introductory paragraph on page 1 of this Note.

i. "Fair Market Value at the time of Transfer" has the meaning provided in Section 6(b) of the Equity Sharing Agreement.

j. "First Mortgage Loan" has the meaning provided in Recital I of the Equity Sharing Agreement.

k. "First Option" has the meaning provided in Section 6(c) of the Equity Sharing Agreement.

l. "Original Fair Market Value" has the meaning set forth in Recital F of the Equity Sharing Agreement.

m. "Original Purchase Price" has the meaning set forth in Recital F of the Equity Sharing Agreement.

n. "Note" means this promissory note.

o. "Property" means the dwelling, and the real property on which the dwelling is located, which secure the City Deed of Trust executed in connection with this Note. The Property's location is provided in the introductory paragraph on page 1 of this Note.

p. "Transfer" has the meaning provided in Section 5 of the Equity Sharing Agreement.

3. Term. The term of this Note commences on the date of this Note and expires upon the earliest to occur of: (i) the date of Transfer of the Property and the payment to City of the City Subsidy and the City Shared Appreciation; (ii) the closing of City's purchase of the Property pursuant to City's exercise of the First Option in accordance with Section 6.(c) of the Equity Sharing Agreement; or (iii) termination of the Equity Sharing Agreement and City Deed of Trust pursuant to Section 16 of the Equity Sharing Agreement following foreclosure or acceptance of a deed or assignment in lieu of foreclosure by the First Lender. Notwithstanding the foregoing, termination of this Note following foreclosure or a deed or assignment in lieu of foreclosure shall not affect City's right to receive any surplus or other proceeds otherwise payable to Borrower, subject to the rights of senior lienholders, as provided in Section 12 of the Equity Sharing

Agreement. Nothing herein shall release Borrower from liability arising from fraud, intentional misrepresentation, waste, or a Transfer made in violation of the Equity Sharing Agreement, except to the extent prohibited by applicable law.

4. Payment.

a. Subject to Subsections 4.b and 4.c below, the total amount of the City Subsidy and the City Shared Appreciation shall immediately become due and payable upon the occurrence of any of the following: (i) an uncured Borrower default (after the applicable notice and cure periods) under this Note, the Equity Sharing Agreement, the City Deed of Trust, or the First Mortgage Loan; (ii) upon a Transfer of the Property as set forth in Section 8 of the Equity Sharing Agreement; or (iii) Borrower ceases to occupy the Property in violation of Section 3 of the Equity Sharing Agreement. For purposes of clauses (i) and (iii), if no Transfer has occurred, the Adjusted Fair Market Value used to calculate City Shared Appreciation shall be determined in accordance with Section 8(a) of the Equity Sharing Agreement, using the Fair Market Value of the Property as of the date of acceleration, as determined by an appraiser selected or approved by City in accordance with Section 6(b) of the Equity Sharing Agreement, less the value of any Eligible Capital Improvements determined pursuant to Section 8(b) of the Equity Sharing Agreement.

b. Upon a Transfer of the Property, if the Adjusted Fair Market Value is lower than the Original Fair Market Value, the amounts payable under this Note shall be determined in accordance with Section 8(d) of the Equity Sharing Agreement.

c. If City's purchase of the Property pursuant to the First Option closes, this Note shall immediately terminate and Borrower shall not be liable for payment of the City Subsidy or the City Shared Appreciation.

5. Security. This Note is secured by the City Deed of Trust, which also secures the Equity Sharing Agreement.

6. No Assumption of Note by Subsequent Buyers; Acceleration. Borrower acknowledges that this Note is given in connection with the purchase of the Property as part of a City program to assist in the purchase of homes by Very Low Income Households. Consequently, this Note is not automatically assumable, but is subject to section 711.5 of the California Civil Code, which allows City to accelerate all amounts due under this Note if any subsequent sale or transfer of the Property of any kind does not comply with the provisions of the Equity Sharing Agreement.

7. Refinance of First Mortgage Loan. The outstanding principal on this Note shall not be due upon prepayment and refinance of the First Mortgage Loan, and the City Deed of Trust and Equity Sharing Agreement shall be subordinated, provided that such refinancing meets the requirements of Section 17 of the Equity Sharing Agreement.

8. Default. Borrower shall be in default under this Note if Borrower is in default under any mortgage loan on the Property (including the First Mortgage Loan) following the expiration of applicable cure periods, or if, after the notice and cure period provided by City to Borrower

pursuant to the notice and cure provisions of the City Deed of Trust, Borrower (i) fails to pay any money when due under this Note; (ii) breaches any representation or covenant made in this Note or the Equity Sharing Agreement in any material respect; or (iii) breaches any provision of the City Deed of Trust or the Equity Sharing Agreement.

9. Acceleration. Subject to Section 4 and following the expiration of all applicable notice and cure periods, upon the occurrence of a default under this Note, the Equity Sharing Agreement, the City Deed of Trust, or the First Mortgage Loan, City shall have the right to declare the City Subsidy and the City Shared Appreciation immediately due and payable.

10. Non-liability for Negligence, Loss, or Damage. Borrower acknowledges, understands and agrees that the relationship between Borrower and City is solely that of borrower and lender, and that City neither undertakes nor assumes any responsibility for or duty to Borrower to select, review, inspect, supervise, pass judgment on, or inform Borrower of the quality, adequacy or suitability of the Property or any other matter. City owes no duty of care to protect Borrower against negligent, faulty, inadequate or defective building or construction or any condition of the Property and Borrower agrees that neither Borrower, or Borrower's heirs, successors or assigns shall ever claim, have or assert any right or action against City for any loss, damage or other matter arising out of or resulting from any condition of the Property and will hold City harmless from any liability, loss or damage for these things.

11. Indemnity. Borrower agrees to defend, indemnify, and hold City harmless from all losses, damages, liabilities, claims, actions, judgments, costs, and reasonable attorney's fees that City may incur as a direct or indirect consequence of:

a. Borrower's default or failure to perform any obligations as and when required by this Note, the City Deed of Trust, and the Equity Sharing Agreement; or

b. The failure at any time of any of Borrower's representations or warranties to be true and correct.

12. No Waiver by City. Failure by City to pursue its legal and equitable remedies upon Borrower's default shall not constitute a waiver of City's right to declare a default and exercise all of its rights under this Note, the City Deed of Trust and the Equity Sharing Agreement. Failure to declare amounts due shall not constitute a waiver on the part of City of the right to declare them due in the event of any subsequent Transfer. Nor shall acceptance by City of any payment provided for herein constitute a waiver of City's right to require prompt payment of any remaining principal owed. A waiver of any term of the Note must be made in writing, signed by an authorized agent of City, and shall be limited to the express written terms of such waiver.

13. Interest. Notwithstanding any other provision of this Note, or any instrument securing the obligations of Borrower under this Note, if, for any reason whatsoever, the payment of any sums by Borrower pursuant to the terms of this Note would result in the payment of interest which would exceed the amount that City may legally charge under the laws of the State of California, then the amount by which payments exceed the lawful interest rate shall automatically

be deducted from the principal balance owing on this Note, so that in no event shall Borrower be obligated under the terms of this Note to pay any interest which would exceed the lawful rate.

14. Attorney's Fees and Costs. Borrower agrees that if any amounts due under this Note are not paid when due, to pay in addition to the City Subsidy and City Shared Appreciation, all costs and expenses of collection and reasonable attorneys' fees paid or incurred by City in connection with the collection or enforcement of this Note, whether or not suit is filed.

15. Joint and Several Obligations. This Note is the joint and several obligation of all makers, sureties, guarantors and endorsers, and shall be binding upon them and their successors and assigns.

16. No Offset. Borrower hereby waives any rights of offset it now has or may hereafter have against City, its successors and assigns, and agrees to make the payments called for herein in accordance with the terms of this Note.

17. Borrower's Waiver. Borrower and any endorsers or guarantors of this Note, for themselves, their heirs, legal representatives, successors and assigns, respectively, severally waive diligence, presentment, protest, and demand, and notice of protest, notice of dishonor and notice of nonpayment of this Note, and expressly waive any rights to be released by reason of any extension of time or change in terms of payment, or change, alteration or release of any security given for the payments hereof, and expressly waive the right to plead any and all statutes of limitations as a defense to any demand on this Note or agreement to pay the same, and jointly and severally agree to pay all costs of collection when incurred, including reasonable attorneys' fees.

18. Notices. All notices required in this Note shall be sent by certified mail, return receipt requested, or express delivery service with a delivery receipt, or personally delivered with a delivery receipt obtained and shall be deemed to be effective as of the date shown on the delivery receipt as the date of delivery, the date delivery was refused, or the date the notice was returned as undeliverable as follows:

To Borrower:

_____
_____
_____

At the address of the Property:

_____
_____
Aliso Viejo, CA _____

To City:

City of Aliso Viejo
12 Journey, Suite 100
Aliso Viejo, CA 92656-5335
Attn: [insert]

The parties may subsequently change addresses by providing written notice of the change in address to the other parties in accordance with this section.

19. Controlling Law. This Note shall be construed in accordance with and be governed by the laws of the State of California.

20. Assignment by City. City may assign its right to receive the proceeds under this Note to any person and upon notice to Borrower by City all payments shall be made to the assignee.

21. Severability. If any provision of this Note shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions hereof shall not in any way be affected or impaired thereby.

22. Entire Agreement. This Note (along with the Equity Sharing Agreement and the City Deed of Trust) sets forth the entire understanding and agreement of City and Borrower and any amendment, alteration or interpretation of this Note must be in writing signed by both City and Borrower.

BORROWER:

_____

_____

EXHIBIT C-1

City Deed of Trust

[Attached behind this cover page]

RECORDING REQUESTED BY:

AND WHEN RECORDED MAIL TO:

City of Aliso Viejo
12 Journey, Suite 100
Aliso Viejo, CA 92656-5335
Attn: [ ]

Free Recording pursuant to
Government Code 6103 & 27383

DEED OF TRUST
AND SECURITY AGREEMENT
(DENSITY BONUS UNIT)

Note to Borrower:
This Deed of Trust Contains
Provisions Restricting Assumptions

THIS DEED OF TRUST AND SECURITY AGREEMENT ("**Deed of Trust**") is made this [date], among the trustor, [name(s)] ("**Borrower**"), whose address is [address], Aliso Viejo, California, [name] Title Company ("**Trustee**") and the City of Aliso Viejo, California ("**City**") as Beneficiary.

Borrower, in consideration of the promises herein recited and the trust herein created, irrevocably grants, transfers, conveys and assigns to Trustee, in trust, with power of sale, the property located in the City of Aliso Viejo, County of Orange, State of California, described in the attached Exhibit "1" and more commonly known as: [address], Aliso Viejo, California [zip code] ("**Property**").

TOGETHER with all the improvements now or hereafter erected on the Property, and all easements, rights, appurtenances, and all fixtures now or hereafter attached to the Property, all of which, including replacements and additions thereto, shall be deemed to be and remain a part of the Property covered by this Deed of Trust; and TOGETHER with all articles of personal property or fixtures now or hereafter attached to or used in and about the building or buildings now erected or hereafter to be erected on the Property which are necessary to the complete and comfortable use and occupancy of such building or buildings for the purposes for which they were or are to be erected, including all other goods and chattels and personal property as are ever used or furnished in operating a building, or the activities conducted therein, similar to the one herein described and referred to, and all renewals or replacements thereof or articles in substitution therefore, whether or not the same as, or shall be attached to said building or buildings in any manner; and all of the foregoing, together with the Property, is herein referred to as the "**Security**;"

To have and to hold the Security together with appurtenances to Trustee, its successors and assigns forever;

TO SECURE to City the performance of the covenants and agreements of Borrower contained in the Owner Occupancy and Equity Sharing Agreement executed by and between Borrower and City ("**Equity Sharing Agreement**");

TO SECURE to City the repayment of the sums evidenced by a promissory note executed by Borrower in favor of City dated [insert] ("**Note**"), which note provides for repayment of a City Subsidy in the amount of $[insert], and City's share of appreciation in the value of the Property, based on City's proportionate assistance to Borrower, as more particularly described in the Note and the Equity Sharing Agreement; and

TO SECURE the payment of all other sums, with interest thereon, advanced in accordance herewith to protect the security of this Deed of Trust; and the performance of the covenants and agreements of Borrower herein contained.

BORROWER AND CITY COVENANT AND AGREE AS FOLLOWS:

1. Borrower's Estate. Borrower is lawfully seized of the estate hereby conveyed and has the right to grant and convey the Security, that other than this Deed of Trust, the Security is encumbered only by: (1) a deed of trust executed by Borrower in connection with a loan made to Borrower by [lender name] ("**First Lender**"), dated [date], executed by Borrower in favor of First Lender, securing a first mortgage loan ("**First Mortgage Loan**") to assist in the purchase of the Property ("First Mortgage Deed of Trust"); (2) the Equity Sharing Agreement; and (3) any other deeds of trust or encumbrances approved by City. Borrower agrees to warrant and defend generally the title to the Security against all claims and demands, subject to any declarations, easements or restrictions listed in a schedule of exceptions to coverage in any title insurance policy insuring City's interest in the Security. As used in this Deed of Trust, the term "First Lender" shall include all successors and assigns of First Lender.

2. Repayment. Borrower will promptly repay, when due, all amounts due under the Note. The Note contains the following provisions concerning repayment under certain conditions:

> Borrower acknowledges that this Note is given in connection with the purchase of the Property as part of a City program to assist in the purchase of homes by Very Low Income Households. Consequently, this Note is not automatically assumable, but is subject to section 711.5 of the California Civil Code, which allows the City to accelerate all amounts due under this Note if any subsequent sale or transfer of the Property of any kind does not comply with the provisions of the Equity Sharing Agreement.

3. Equity Sharing Agreement. Borrower will observe and perform all of the covenants and agreements of the Equity Sharing Agreement.

4. Charges; Liens. Borrower will pay all taxes, assessments and other charges, fines and impositions attributable to the Security which may attain a priority over this Deed of Trust, by

making any payment, when due, directly to the payee thereof. Borrower will promptly furnish to City all notices of amounts due under this paragraph, and in the event Borrower makes payment directly, Borrower will promptly discharge any lien which has priority over this Deed of Trust; provided, that Borrower will not be required to discharge the lien of the First Mortgage Deed of Trust (securing the First Mortgage Loan) or any other lien described in this paragraph so long as Borrower will agree in writing to the payment of the obligation secured by such lien in a manner acceptable to City, or will, in good faith, contest such lien by, or defend enforcement of such lien in, legal proceedings which operate to prevent the enforcement of the lien or forfeiture of the Security or any part thereof.

5. Hazard Insurance.

NOTICE REQUIRED BY CALIFORNIA CIVIL CODE SECTION 2955.5: NO LENDER SHALL REQUIRE A BORROWER, AS A CONDITION OF RECEIVING OR MAINTAINING A LOAN SECURED BY REAL PROPERTY, TO PROVIDE HAZARD INSURANCE COVERAGE AGAINST RISKS TO THE IMPROVEMENTS ON THAT REAL PROPERTY IN AN AMOUNT EXCEEDING THE REPLACEMENT VALUE OF THE IMPROVEMENTS ON THE PROPERTY.

BORROWER ACKNOWLEDGES THAT THE FOREGOING DISCLOSURE WAS PROVIDED IN WRITING BEFORE BORROWER EXECUTED THE NOTE, THIS DEED OF TRUST, OR ANY OTHER SECURITY DOCUMENT RELATING TO THE CITY LOAN.

Borrower will keep the improvements on the Security insured under a standard fire and extended coverage insurance policy in such amounts and for such periods as City may reasonably require; provided, however, that City shall not require hazard insurance coverage in an amount exceeding the replacement value of the improvements on the Security. Subject to that limitation, the required coverage shall not be less than the amount necessary to prevent Borrower from becoming a co-insurer under the terms of the policy.

The insurance carrier providing this insurance shall be licensed to do business in the State of California and be chosen by Borrower subject to approval by City; provided, that such approval will not be withheld if the insurer is also approved by the First Lender.

All insurance policies and renewals thereof will be in a form acceptable to City and will include a standard mortgagee clause with standard lender's endorsement in favor of the holder of the First Mortgage Loan and City as their interests may appear and in a form acceptable to City. City shall have the right to hold, or cause its designated agent to hold, the policies and renewals thereof, and Borrower shall promptly furnish to City, or its designated agent, the original insurance policies or certificates of insurance, all renewal notices and all receipts of paid premiums. In the event of loss, Borrower will give prompt notice to the insurance carrier and City or its designated agent. City, or its designated agent, may make proof of loss if not made promptly by Borrower. City shall receive 30 days advance notice of cancellation of any insurance policies required under this section.

Unless City and Borrower otherwise agree in writing, insurance proceeds, subject to the rights of the First Lender, will be applied to restoration or repair of the Security damaged, provided such restoration or repair is economically feasible and the Security of this Deed of Trust is not thereby impaired. If such restoration or repair is not economically feasible or if the Security of this Deed of Trust would be impaired, the insurance proceeds will be used to repay the loan under this Deed of Trust, with the excess, if any, paid to Borrower. If the Security is abandoned by Borrower, or if Borrower fails to respond to City, or its designated agent, within 30 days from the date notice is mailed by either of them to Borrower that the insurance carrier offers to settle a claim for insurance benefits, City, or its designated agent, is authorized to collect and apply the insurance proceeds at City's option either to restoration or repair of the Security or to repay the amounts due under the Note.

If the Security is acquired by City, all right, title and interest of Borrower in and to any insurance policy and in and to the proceeds thereof resulting from damage to the Security prior to the sale or acquisition will pass to City to the extent of the sums secured by this Deed of Trust immediately prior to such sale or acquisition subject to the rights of First Lender.

6. Preservation and Maintenance of Security. Borrower will keep the Security in good repair and will not commit waste or permit impairment or deterioration of the Security.

7. Protection of City's Security. If Borrower fails to perform the covenants and agreements contained in this Deed of Trust or if any action or proceeding is commenced which materially affects City's interest in the Security, including, but not limited to, default under the First Mortgage Deed of Trust securing the First Mortgage Loan, eminent domain, insolvency, code enforcement, or arrangements or proceedings involving a bankrupt or decedent, then City, at City's option, upon notice to Borrower, may make such appearances, disburse such sums and take such action as it determines necessary to protect City's interest, including but not limited to, disbursement of reasonable attorneys' fees and entry upon the Security to make repairs.

Any amounts disbursed by City pursuant to this paragraph shall become an indebtedness of Borrower secured by this Deed of Trust. Unless Borrower and City agree to other terms of payment, such amount shall be payable upon notice from City to Borrower requesting payment thereof and shall bear interest from the date of disbursement at the maximum rate permitted by applicable law. Nothing contained in this paragraph will require City to incur any expense or take any action hereunder.

8. Inspection. City may make or cause to be made reasonable entries upon and inspections of the Security; provided that City will give Borrower reasonable notice of inspection.

9. Forbearance by City Not a Waiver. Any forbearance by City in exercising any right or remedy will not be a waiver of the exercise of any such right or remedy. The procurement of insurance or the payment of taxes or other liens or charges by City will not be a waiver of City's right to accelerate the maturity of the indebtedness secured by this Deed of Trust.

10. Remedies Cumulative. All remedies provided in this Deed of Trust are distinct and cumulative to any other right or remedy under this Deed of Trust or any other document, or afforded by law or equity, and may be exercised concurrently, independently or successively.

11. Successors and Assigns Bound. The covenants and agreements herein contained shall bind, and the rights hereunder shall inure to, the respective successors and assigns of City and Borrower subject to the provisions of this Deed of Trust.

12. Joint and Several Liability. All covenants and agreements of Borrower shall be joint and several.

13. Notice. Except for any notice required under applicable law to be given in another manner: (a) any notice to Borrower provided for in this Deed of Trust will be given by certified mail, addressed to Borrower at the address shown in the first paragraph of this Deed of Trust or such other address as Borrower may designate by notice to City as provided herein; and (b) any notice to City will be given by express delivery, return receipt requested, to City at 12 Journey, Suite 100, Aliso Viejo, CA, 92656-5335, Attn: [insert], or to such other address as City may designate by notice to Borrower as provided above. Notice shall be effective as of the date received by the recipient as shown on the return receipt.

14. Governing Law. This Deed of Trust shall be governed by the laws of the State of California.

15. Severability. If any provision or clause of this Deed of Trust, the Note, or the Equity Sharing Agreement conflicts with applicable law, such conflict will not affect other provisions of this Deed of Trust, the Note, or the Equity Sharing Agreement which can be given effect without the conflicting provision, and to this end the provisions of the Deed of Trust, the Note, and the Equity Sharing Agreement are declared to be severable.

16. Captions. The captions and headings in this Deed of Trust are for convenience only and are not to be used to interpret or define the provisions hereof.

17. Acceleration; Remedies. Upon Borrower's breach of any covenant or agreement of Borrower in this Deed of Trust, including, but not limited to, the covenants to pay, when due, any sums secured by this Deed of Trust, City, prior to acceleration, will mail by express delivery, return receipt requested notice to Borrower specifying: (1) the breach; (2) the action required to cure such breach; (3) a date, not less than 30 days from the date the notice is received by Borrower as shown on the return receipt, by which such breach is to be cured; and (4) that failure to cure such breach on or before the date specified in the notice may result in acceleration of the sums secured by this Deed of Trust and sale of the Security. The notice will also inform Borrower of Borrower's right to reinstate after acceleration and the right to bring a court action to assert the nonexistence of default or any other defense of Borrower to acceleration and sale. If the breach is not cured on or before the date specified in the notice, City, at City's option, may: (a) declare all of the sums secured by this Deed of Trust to be immediately due and payable without further demand and may invoke the power of sale and any other remedies permitted by California law; (b) either in person or by agent, with or without bringing any action or proceeding, or by a receiver appointed by a

court, and without regard to the adequacy of its security, enter upon the Security and take possession thereof (or any part thereof) and of any of the Security, in its own name or in the name of Trustee, and do any acts which it deems necessary or desirable to preserve the value or marketability of the Security, or part thereof or interest therein, increase the income therefrom or protect the security thereof. The entering upon and taking possession of the Security shall not cure or waive any breach hereunder or invalidate any act done in response to such breach and, notwithstanding the continuance in possession of the Security, City shall be entitled to exercise every right provided for in this Deed of Trust, or by law upon occurrence of any uncured breach, including the right to exercise the power of sale; (c) commence an action to foreclose this Deed of Trust as a mortgage, appoint a receiver, or specifically enforce any of the covenants hereof; (d) deliver to Trustee a written declaration of default and demand for sale, pursuant to the provisions for notice of sale found at California Civil Code Sections 2924, et seq., as amended from time to time; or (e) exercise all other rights and remedies provided herein, in the instruments by which Borrower acquires title to any Security, or in any other document or agreement now or hereafter evidencing, creating or securing all or any portion of the obligations secured hereby, or provided by law.

City shall be entitled to collect all reasonable costs and expenses incurred in pursuing the remedies provided in this paragraph, including, but not limited to, reasonable attorney's fees and costs.

18. Borrower's Right to Reinstate. Notwithstanding City's acceleration of the sums secured by this Deed of Trust, Borrower will have the right to have any proceedings begun by City to enforce this Deed of Trust discontinued at any time prior to five business days before sale of the Security pursuant to the power of sale contained in this Deed of Trust or at any time prior to entry of a judgment enforcing this Deed of Trust if: (a) Borrower pays City all sums that would then be due under the Note and this Deed of Trust had no acceleration occurred; (b) Borrower cures all breaches of any other covenants or agreements of Borrower contained in this Deed of Trust; (c) Borrower pays all reasonable expenses incurred by City and Trustee in enforcing the covenants and agreements of Borrower contained in this Deed of Trust, and in enforcing City's and Trustee's remedies, including, but not limited to, reasonable attorney's fees; and (d) Borrower takes such action as City may reasonably require to assure that the lien of this Deed of Trust, City's interest in the Security and Borrower's obligation to pay the sums secured by this Deed of Trust shall continue unimpaired. Upon such payment and cure by Borrower, this Deed of Trust and the obligations secured hereby will remain in full force and effect as if no acceleration had occurred.

19. Reconveyance. Upon payment or forgiveness of all sums secured by this Deed of Trust, City will request Trustee to reconvey the Security and will surrender this Deed of Trust and the Note to Trustee. Trustee will reconvey the Security without warranty and without charge to the person or persons legally entitled thereto. Such person or persons will pay all costs of recordation, if any.

20. Substitute Trustee. City, at City's option, may from time to time remove Trustee and appoint a successor trustee to any Trustee appointed hereunder. The successor trustee will succeed to all the title, power and duties conferred upon the Trustee herein and by applicable law.

21. Superiority of First Lender Documents. Notwithstanding any provision herein, this Deed of Trust shall not diminish or affect the rights of First Lender under the First Mortgage Deed of Trust or any subsequent First Lender deeds of trust hereafter recorded against the Security in compliance with the requirements of Section 17 of the Equity Sharing Agreement.

Notwithstanding any other provision hereof, the provisions of this Deed of Trust shall be subordinate to the lien of the First Mortgage Deed of Trust and shall not impair the rights of the First Lender, or such lender's assignee or successor in interest, to exercise its remedies under its First Mortgage Deed of Trust in the event of default under its First Mortgage Deed of Trust by Borrower. Such remedies under the First Mortgage Deed of Trust include the right of foreclosure or acceptance of a deed or assignment in lieu of foreclosure. After such foreclosure or acceptance of a deed in lieu of foreclosure, this Deed of Trust shall be forever terminated and shall have no further effect as to the Property or any transferee thereafter; provided, however, if the holder of such First Mortgage Deed of Trust acquires title to the Property pursuant to a deed or assignment in lieu of foreclosure, this Deed of Trust shall automatically terminate upon such acquisition of title only if: (i) City has been given written notice of the default under the First Mortgage Deed of Trust and a 60-day opportunity to cure such default; and (ii) City has not cured the default within such 60-day period or commenced to cure the default and provided a firm commitment, in form and substance reasonably acceptable to the First Lender, to complete such cure.

22. Request for Notice. Pursuant to Civil Code section 2924b, City requests that a copy of any notice of default and notice of sale under any deed of trust or mortgage senior to this Deed of Trust be mailed to City at the address set forth in Section 13 of this Deed of Trust.

IN WITNESS WHEREOF, Borrower has executed this Deed of Trust as of the date first written above.

BORROWER:

_____

_____

ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California
County of _____)

On _____ before me, _____, Notary Public
(insert name and title of the officer)

personally appeared _____
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ **(Seal)**

EXHIBIT 1

Legal Description of Property

ALISO VIEJO

27081 Aliso Creek Road

So Kim

October 21, 2026

Staff's Recommendation

Approve the following applications to allow Shea Homes to construct a 137-unit townhome community at 27081 Aliso Creek Road.

- General Plan Amendment
- Zone Change
- Vesting Tentative Tract Map
- Site Development Permit
- Development Agreement
- Adoption of Mitigated Negative Declaration

Existing Site

Site Information

- 8.44 acres
- Office property

Surrounding Uses

- North – Town Center
- East – Residential
- South – Commercial
- West – City hall, office, commercial

Proposed Project

Demolish existing office buildings to build 137 for-sale townhomes

- Three-stories
- Unit sizes 1,100 to 2,200 SF
- Two to four bedrooms
- Seven affordable units

Project Design & Amenities

- Central park and swimming pool
- Smaller playground and dog park
- Landscaped courtyards and walkways
- Preserves existing open space areas

Parking & Access

Parking

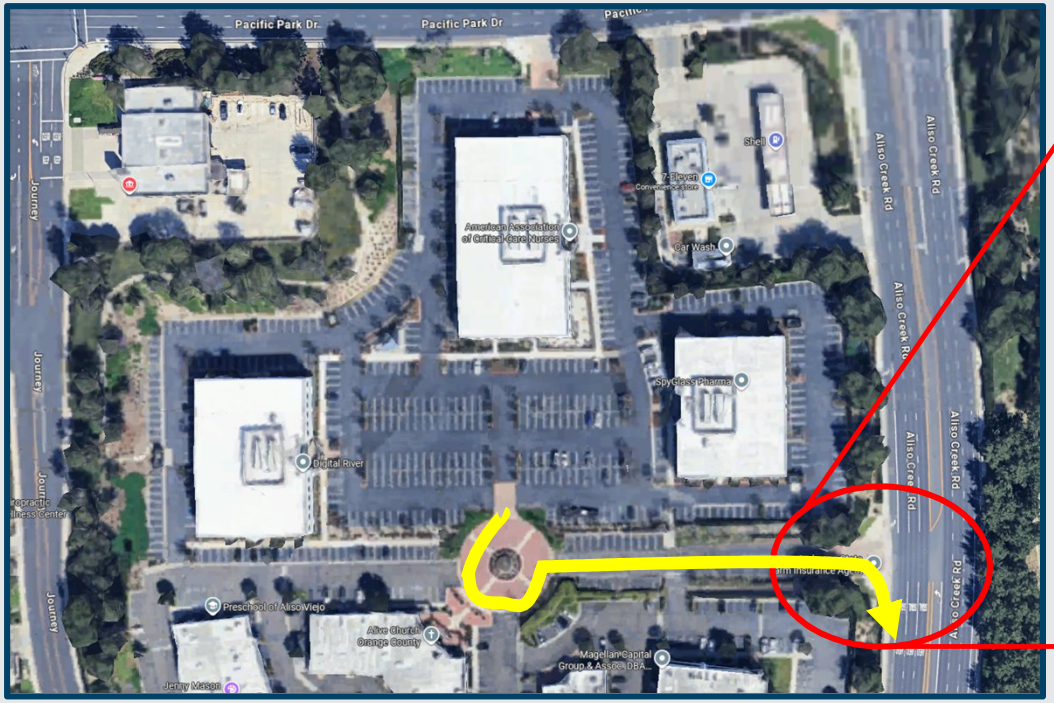
- 260 resident garage spaces
- 83 open guest spaces

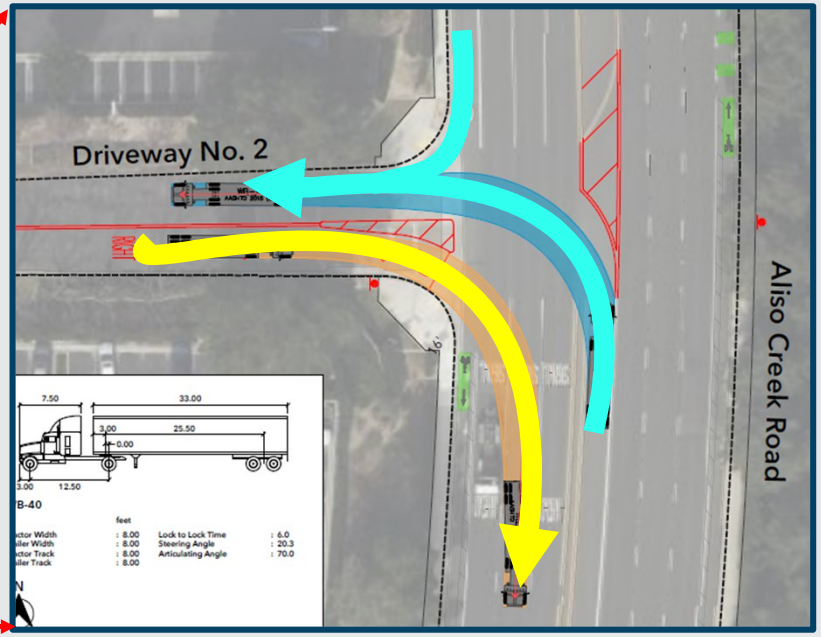
Access

Existing driveways retained

- North – Pacific Park Drive
- East – Aliso Creek Road

Changes to Turning Lanes





General Plan & Zoning Changes

- Professional Office to Medium Density Residential
- Better use of underutilized office property
- Provides additional housing, including affordable housing
- Compatible with nearby residential uses
- Creates a transition between residential and commercial areas

Development Agreement

Purpose

- For the Developer - ensures that the developer can move forward with the project under the approved rules and standards
- For the City – ensures that the developer delivers agreed upon community benefits

Community Benefit Contribution

- Approximately $3.66 million

Staff's Recommendation

Adopt Resolutions to Approve:

- Adoption of the Mitigated Negative Declaration (Environmental Document)
- General Plan Amendment (Professional Office to Medium Density Residential)
- Vesting Tentative Tract Map (Subdivision)
- Site Development Permit (Residential Development)

Introduce Ordinances to Approve:

- Zone Change (Professional Office to Medium Density Residential)
- Development Agreement

City of Aliso Viejo
AGENDA ITEM

DATE: October 21, 2026

TO: Mayor and City Council

FROM: Shaun Pelletier, City Engineer

SUBJECT: CONSIDERATION OF AN ORDINANCE ADOPTING CHAPTER 11.14 TO TITLE 11 OF THE ALISO VIEJO MUNICIPAL CODE RELATING TO THE PROTECTION, PLANTING, MAINTENANCE, AND REMOVAL OF TREES ON PUBLIC PROPERTY; AND FINDING THE ACTION TO BE EXEMPT FROM CEQA UNDER CEQA GUIDELINES

Recommended Actions:

1. Find that the ordinance is exempt from review under the California Environmental Quality Act (CEQA) pursuant to Title 14 of the California Code of Regulations, Section 15061(b)(3); and

2. Introduce for first reading by title only an ordinance entitled: AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ALISO VIEJO, CALIFORNIA, ADOPTING CHAPTER 11.14 TO TITLE 11 OF THE ALISO VIEJO MUNICIPAL CODE RELATING TO THE PROTECTION, PLANTING, MAINTENANCE, AND REMOVAL OF TREES ON PUBLIC PROPERTY; AND FINDING THE ACTION TO BE EXEMPT FROM CEQA UNDER CEQA GUIDELINES; and

3. Authorize the City Manager to execute a Tree City Memorandum of Understanding with the Aliso Viejo Community Association; and

4. Authorize Staff to submit an application to the Arbor Day Foundation for Tree City USA recognition.

Fiscal Impact:

There is no significant fiscal impact with the MOU or adoption of the ordinance. The City's landscape and tree maintenance contracts will not require modification, or any subsequent cost increases because of the ordinance. Based on historical practices, little to no permitting or enforcement is anticipated. Participation in Arbor Day may require

minimal staff hours, and ordering Tree City USA signs would cost approximately $150 each, totaling $1,200 for 8 signs located at each of the City's entry points.

Background:

Tree City USA is a national recognition program administered by the Arbor Day Foundation in cooperation with the National Association of State Foresters. The program was designed to raise awareness of the value of community trees, set foundational standards for communities of all sizes, and celebrate community improvement.

For incorporated cities, the Foundation requires four (4) standards be met to qualify for the recognition:

1. A tree board or department with legal responsibility for public tree-care;
2. A public tree-care ordinance;
3. At least $2 per capita in annual expenditures on community tree-care activities and;
4. Annual Arbor Day observance and proclamation.

The Municipal Code does not include any public tree-care language, and the City will therefore need to adopt an ordinance to be eligible to apply for Tree City USA recognition.

Discussion:

The Aliso Viejo Community Association (AVCA) owns and maintains most parks, parkways, trails, slopes, landscaped common areas, and greenbelts within the City, including more than 20,000 trees. Since the City's incorporation, the City and AVCA have partnered to monitor and foster tree planting and initial care; and tree maintenance, removal, and management on their respective properties. AVCA will remain an important partner in tree care throughout the City and together seek to obtain Tree City USA recognition.

The Tree City USA standards are proposed to be met as follows:

1. Designate Public Works as the Tree Department as all public tree maintenance contracts and activities are already under its purview.
2. The City will adopt a public tree-care ordinance.
3. Tree-care budget and reported expenditures will meet or exceed the required $2 per capita ($104,352).
4. Coordinate and partner with AVCA on upcoming Arbor Day observations, and the City Council will issue an annual Arbor Day proclamation.

The proposed ordinance is focused on public trees and does not include a private-tree permitting program. Public trees are defined as any located on public property. Public property means real property owned, leased, managed, or controlled by the City,

including parks, landscaped areas, public facilities, and public rights-of-way. Private property projects will continue to assess trees and landscaping on a case-by-case basis during the permitting process.

The ordinance formalizes and enhances criteria that have been in practice and includes the following:

- Legal authority and administration designated to the Public Works Director
- Tree protection during construction
- Mitigation for tree removal
- Planting specifications
- Public tree management
- Pest, hazard and nuisance abatement
- Enforcement procedures

The ordinance does not impact current maintenance contracts scope or cost. Should any private or City capital improvement projects impact public trees, the costs would be accounted for through those projects.

If the ordinance is adopted, staff will submit the Tree City USA application by the December 31 deadline. If the Arbor Day Foundation approves the application, staff will order and install signs and may promote the recognition on social media.

Staff respectfully request that City Council approve the recommended actions including reading of the ordinance, execution of the MOU with AVCA, and submitting the Tree City USA application.

Attachments:

1. Ordinance
2. Ordinance Exhibit A
3. Memorandum of Understanding
4. Presentation

ORDINANCE NO. 2026-XXX

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF ALISO VIEJO, CALIFORNIA, ADOPTING CHAPTER 11.14 TO TITLE 11 OF THE ALISO VIEJO MUNICIPAL CODE RELATING TO THE PROTECTION, PLANTING, MAINTENANCE, AND REMOVAL OF TREES ON PUBLIC PROPERTY; AND FINDING THE ACTION TO BE EXEMPT FROM CEQA UNDER CEQA GUIDELINES

WHEREAS, the City of Aliso Viejo ("City") is a municipal corporation, duly organized under the constitution and laws of the State of California; and

WHEREAS, pursuant to Cal. Const. Art. XI, Sec. 7 and under the City's general police powers, the City is empowered to make and enforce within its limits all local, police, sanitary, and other ordinances and regulations not in conflict with general law and charged with responsibility for the health, safety, and welfare of its citizens ; and

WHEREAS, trees located on streets, in parks, and on other public property comprise an important part of the City's community forest and provide shade, stormwater management, air-quality, habitat, aesthetic, and other public benefits; and

WHEREAS, reasonable standards for planting, pruning, protecting, maintaining, and removing public trees will reduce hazards, improve public safety, preserve public resources, and promote a healthy and resilient community forest; and

WHEREAS, the City Council desires to establish a clear administrative process for work affecting public trees, require appropriate replacement of street trees removed at the request of adjacent property owners, and authorize enforcement and restoration remedies; and

WHEREAS, given the foregoing, the City Council desires to adopt Chapter 11.14 to Title 11 of the Aliso Viejo Municipal Code to protect the health, safety and appearance of the City by protecting and growing the community forest; and

WHEREAS, on _____, 2026, the City Council considered the staff report, recommendations by staff and the City Attorney, and public testimony regarding proposed Chapter 11.14 to Title 11 of the Aliso Viejo Municipal Code; and

WHEREAS, any and all other legal prerequisites relating to the adoption of this Ordinance have occurred.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF ALISO VIEJO, CALIFORNIA, DOES ORDAIN AS FOLLOWS:

SECTION 1. Incorporation of Recitals. The recitals above are each incorporated by reference and adopted as findings by the City Council as if fully set forth herein.

SECTION 2. CEQA. The City Council finds that the proposed amendments to the Aliso Viejo Municipal Code are exempt from the requirements of the California Environmental Quality Act (CEQA) pursuant to Title 14 of the California Code of Regulations, Section 15061(b)(3) because it can be seen with certainty that adoption of regulations protecting and maintaining trees on public property will not have a significant effect on the environment. The routine maintenance of existing landscaping is also categorically exempt under State CEQA Guidelines section 15301(h), and new gardening or landscaping is categorically exempt under State CEQA Guidelines section 15304(b). The City Council further finds that no exception in State CEQA Guidelines section 15300.2 applies. Any future activity requiring separate discretionary approval remains subject to any environmental review required by law. The City Council directs staff to file a notice of exemption following adoption of this Ordinance.

SECTION 3. Chapter 11.14 to Title 11 of the Aliso Viejo Municipal Code is adopted as set forth in Exhibit A, attached hereto and incorporated herein by this reference.

SECTION 4. Legislative Intent. The City Council's actions are made upon review of the Staff Report, all oral and written comments, and all documentary evidence presented on the Ordinance.

SECTION 5. Publication. The City Clerk shall certify to the adoption of this Ordinance and cause it, or a summary of it, to be published once within 15 days of adoption in a newspaper of general circulation printed and published within the City of Aliso Viejo, and shall post a certified copy of this Ordinance, including the vote for and against the same, in the Office of the City Clerk in accordance with California Government Code, section 36933.

SECTION 6. Severability. If any provision of this Ordinance or its application to any person or circumstance is held invalid, such invalidity has no effect on the other provisions or applications of the Ordinance that can be given effect without the invalid provision or application, and to this extent, the provisions of this ordinance are severable. The City Council declares that it would have adopted this Ordinance irrespective of the invalidity of any portion thereof.

SECTION 7. Effective Date. This Ordinance shall become effective 30 days after its adoption.

PASSED, APPROVED AND ADOPTED this _____ day of_____, 2026.

_____
Max Duncan
Mayor

ATTEST:

_____
Maria Kendig
City Clerk

APPROVED AS TO FORM:

_____
Scott C. Smith
City Attorney

STATE OF CALIFORNIA)
COUNTY OF ORANGE) ss
CITY OF ALISO VIEJO)

I, MARIA KENDIG, City Clerk of the City of Aliso Viejo, California, DO HEREBY CERTIFY that foregoing Ordinance No. 2026-___ was duly passed and adopted by the City Council of the City of Aliso Viejo at their regular meeting held on the ___ day of _____, 2026, by the following roll call vote, to wit:

AYES:
NOES:
ABSENT:
ABSTAIN:

_____
Maria Kendig
City Clerk

(SEAL)

EXHIBIT A

EXHIBIT A

Chapter 11.14
PUBLIC TREES

11.15.010 Purpose.

The purpose of this chapter is to protect and expand the community forest by regulating the planting, maintenance, pruning, protection, and removal of trees on public property. This chapter is intended to reduce hazards, improve public safety, promote the health and longevity of public trees, preserve the ecosystem services they provide, and enhance the appearance of City streets, parks, and other public places.

11.15.020 Definitions.

For purposes of this chapter, the following definitions apply:

“Adjacent property owner” means the owner of real property that abuts the portion of a public right-of-way in which a street tree is located.

“Caliper” means the diameter of a nursery tree trunk measured in accordance with the current edition of the American Standard for Nursery Stock, ANSI Z60.1, or a successor standard approved by the Director.

“City Arborist” means an arborist employed or retained by the City who holds a current certification from the International Society of Arboriculture, or another qualified person designated by the Director.

“Director” means the City’s Public Works Director or their designee.

“Diameter at breast height (DBH)” means the diameter of a tree trunk measured at four and one-half feet above the adjacent natural grade. For a multi-trunk tree, DBH is the aggregate diameter of all trunks measured at that height. If a trunk branches below that height or cannot reasonably be measured there, the City Arborist shall determine DBH using accepted arboricultural practice.

“Hazardous tree” means a tree that the City Arborist determines presents an unreasonable risk of failure that could cause personal injury or property damage, taking into account the likelihood of failure, the likelihood of impact, and the consequences of failure.

“Invasive species” means a tree species determined by the City Arborist to be invasive based on an applicable federal, state, regional, or locally adopted list or on documented invasive characteristics in the City.

“Protected tree” means a public tree with a DBH of 12 inches or greater.

“Public property” means real property owned, leased, managed, or controlled by the City, including parks, landscaped areas, public facilities, and public rights-of-way.

“Public tree” means a tree located on public property, including a street tree.

“Significant pruning” means topping; removing more than 25 percent of a tree’s live crown during any 12-month period; removing a branch or root that materially affects the tree’s health, structural integrity, or natural form; or performing other pruning that the City Arborist determines could materially impair the tree’s health or safety. Routine pruning performed in accordance with applicable City standards and ANSI A300 is not significant pruning.

“Street tree” means a public tree located within a public street right-of-way.

“Tree protection zone” means the area within protective fencing established by the City Arborist or an approved tree-protection plan and, when no specific area has been established, the area extending to the dripline of the tree.

11.15.030 Administration and authority.

A. The Director is responsible for administering this chapter and may designate City staff, the City Arborist, contractors, or consultants to oversee or perform tree planting, inspection, maintenance, pruning, protection, treatment, and removal.

B. The Director may adopt administrative procedures, permit forms, standard conditions, technical specifications, approved tree lists, and arboricultural standards consistent with this chapter.

C. The Director may inspect public trees and work affecting public trees at reasonable times and may require an applicant or responsible person to provide an arborist report, tree-protection plan, site plan, or other information reasonably necessary to administer this chapter.

11.15.040 Written approval required.

A. Except as provided in subsection D, no person shall remove, significantly prune, cut, injure, poison, destroy, relocate, or materially disturb the roots of a public tree without prior written approval from the Director or City Arborist. Written approval may be issued as a public-tree permit, an encroachment permit, an approved construction plan, a City work order, or another written authorization that identifies the approved work.

B. An application shall identify the tree and location, describe the proposed work and the reason for it, and include any plans, reports, photographs, fees, or other materials required by the Director.

C. The Director or City Arborist may approve, conditionally approve, or deny an application after considering tree health and structure; public safety; conflicts with utilities, access, visibility, or public improvements; species suitability; feasible alternatives; effects

on the community forest; and compliance with this chapter. Approval may include conditions governing the method and timing of work, contractor qualifications, tree protection, replacement planting, irrigation, monitoring, and establishment of care.

D. Prior written approval is not required for:

1. Emergency work that is reasonably necessary to address an imminent threat to life or property. The person performing emergency work shall notify the Director as soon as practicable, shall limit the work to what is reasonably necessary to address the emergency, and shall provide documentation upon request.

2. Work performed by or under the direction of the City in accordance with an approved City work order, maintenance program, contract, or plan.

3. Routine maintenance performed by a public utility within the scope of its legal authority and in accordance with applicable safety requirements; provided, however, that the utility shall coordinate with the Director in advance when practicable and shall comply with applicable City permits and standards.

E. Written approval under this section does not authorize entry onto private property or relieve any person from obtaining any other permit or authorization required by law.

11.15.050 Tree protection during construction.

A. Before construction, grading, excavation, demolition, staging, or similar activity begins on a site containing or adjacent to a public tree that may be affected by the work, the responsible person shall install and maintain protective fencing around the tree protection zone. Fencing shall remain in place until the Director authorizes its removal.

B. No person shall store materials or equipment; park, operate, or wash vehicles or equipment; place fill or debris; trench, excavate, compact soil, or alter grade; discharge substances; or attach signs, ropes, cables, or other objects within a tree protection zone, except as expressly authorized in writing by the Director or City Arborist.

C. The Director may require additional protection measures, including, but not limited to, trunk wrapping, root protection, irrigation, monitoring by a certified arborist, alternative construction methods, or adjustment of the tree protection zone.

D. All tree-protection measures required by this section shall be shown on applicable construction plans and are conditions of the related City permit or approval.

11.15.060 Mitigation for removal of street trees.

A. When the City authorizes removal of a street tree at the request of an adjacent property owner, the adjacent property owner shall provide two replacement trees for each street tree removed. Each replacement tree shall have a minimum caliper of two inches at the time of planting.

B. Replacement trees shall be planted at the removal site when the Director determines that location is suitable. If on-site replacement is infeasible or inconsistent with City standards, the replacement trees shall be planted at another location on public property approved by the Director.

C. Replacement trees shall be planted within 90 calendar days after removal unless the Director approves a later date in writing.

D. The replacement obligation in this section does not apply when the City Arborist determines in writing that the removed tree is:

1. Dead;

2. Diseased or infested and removal is reasonably necessary to protect other trees or public safety;

3. Hazardous; or

4. An invasive species.

E. The replacement obligation in this section does not apply to removal of a street tree by a public utility acting within the scope of its legal authority. This exemption does not waive any permit, notice, coordination, or restoration requirement otherwise applicable to the utility.

F. Replacement required by this section is separate from, and does not limit, restoration or restitution imposed for an unlawful removal or damage under Section 11.15.110.

11.15.070 Planting specifications.

A. Tree quality. Each tree planted on public property shall be healthy, well-formed, typical of its species and variety, and free from significant defects, pests, and disease. Nursery stock shall comply with the current edition of ANSI Z60.1 unless the Director approves an equivalent standard.

B. Tree size. At the time of planting, each canopy tree shall have a minimum trunk diameter of two inches measured four and one-half feet above grade and a minimum height of eight feet. A replacement tree required by Section 11.15.060 shall also have a minimum caliper of two inches.

C. Planting location. Trees shall be located so that, at maturity, they will not unreasonably interfere with utilities, public improvements, pedestrian or vehicle access, or required sight distance. Unless the Director approves an alternative location in writing based on site-specific conditions and applicable utility requirements, no tree may be planted within 10 feet of a utility line or within the visibility triangle of a street intersection.

D. Planting practice. Trees shall be planted in accordance with sound nursery and arboricultural practices. The root flare shall be visible at and set level with the finished soil surface. The root ball shall rest on firm, undisturbed soil or on a bed of suitable topsoil at least six inches deep where required to provide suitable growing conditions. All containers, wire, rope, burlap, and other materials shall be removed or treated as directed by the City Arborist to prevent interference with root growth. Mulch shall be applied to a minimum depth of three inches around the base of each newly planted tree.

11.15.080 Management and maintenance of public trees.

A. The City shall be responsible for routine maintenance of public trees, including, but not limited to inspection, pruning, watering, removal of deadwood, pest and disease management, and removal when reasonably necessary to promote tree health or public safety.

B. City maintenance shall be performed in accordance with accepted arboricultural practices and applicable City standards. Nothing in this section requires the City to preserve a particular public tree or to perform maintenance on demand.

C. No adjacent property owner or other person acquires ownership of or a compensable interest in a public tree by planting, watering, maintaining, or otherwise caring for the tree. No person may undertake such work except as authorized by the City.

11.15.090 Pests, disease, hazardous trees, and nuisance abatement.

A. A public tree found by the City to be infested with a communicable pest or disease, or to be dead or dying because of such a pest or disease, shall be treated or removed as soon as practicable when reasonably necessary to prevent spread to other trees or to protect public safety.

B. A public tree determined by the City to be hazardous because of pests or disease is declared a public nuisance and may be treated, pruned, removed, or otherwise abated at the direction of the Director.

C. When delay creates an imminent threat to life or property or materially increases the risk that a communicable pest or disease will spread, the Director may order or perform immediate abatement without prior notice. Otherwise, nuisance abatement shall be conducted in accordance with applicable provisions of Chapter 1.06.

11.15.100 Appeals.

A person aggrieved by a written decision of the Director or City Arborist under this chapter may appeal the decision in accordance with Chapter 1.10. Unless required by law or ordered by a court of competent jurisdiction, an appeal does not stay action reasonably determined by the Director to be necessary to address an imminent threat to life or property or prevent the spread of a communicable pest or disease.

11.15.110 Enforcement, penalties, and restoration.

A. The City Manager or their designee is responsible for enforcing this chapter.

B. It is unlawful for any person to violate this chapter, fail to comply with a condition of an approval issued under this chapter, or cause or permit another person to do so. Without limiting the foregoing, it is unlawful to remove, significantly prune, damage, or destroy a protected tree without the written approval required by Section 11.15.040.

C. A violation may be enforced by administrative citation under Chapter 1.06. A civil or administrative fine not exceeding $500 may be assessed for each violation. Each public tree unlawfully removed, significantly pruned, damaged, or destroyed constitutes a separate violation. Each day that a continuing violation, including failure to maintain required tree-protection measures or install required replacement trees, remains uncorrected after the correction date stated in a notice or citation constitutes a separate violation.

D. In addition to any fine or other remedy, a responsible person may be required to restore the site and replace each unlawfully removed or damaged tree with a tree of equal size and a species approved by the Director, when feasible. If equal-size replacement is infeasible, the responsible person may be required to install replacement trees in the number, sizes, species, and locations determined by the Director or pay the City's reasonable replacement value, including, but not limited to, appraisal, removal, purchase, installation, irrigation, inspection, and administrative costs.

TREE CITY MEMORANDUM OF UNDERSTANDING

1. Parties and Date.

This Memorandum of Understanding ("MOU") is made and entered into as of the _____ day of _____, 2026 ("Effective Date") by and between the CITY OF ALISO VIEJO, a California municipal corporation ("CITY") and the ALISO VIEJO COMMUNITY ASSOCIATION, a California public benefit corporation ("AVCA" or "Association"). AVCA and CITY are sometimes referred to herein singularly as a "Party" and collectively as the "Parties."

2. Recitals.

2.1 AVCA serves as the master homeowners association for all neighborhoods in the City of Aliso Viejo and was established to protect, preserve and maintain twenty-one parks and many miles of slopes along the major roads within the City.

2.2 AVCA was incorporated in 1982 in an unincorporated area of Orange County, at a time when it was practically and financially infeasible for the County to operate and maintain local community facilities such parks, trails, open space, public thoroughfares, greenbelts, and streetscapes, including trees. The resulting community structure was one under which those quasi-municipal functions were assumed by AVCA and funded through fees paid by AVCA residents.

2.4 CITY incorporated in 2001, assuming responsibility for one park and limited street improvements and landscaping.

2.5 AVCA owns and maintains the vast majority of parks, parkways, trails, slopes, landscaped common areas, and greenbelts within the City, including more than 20,000 trees.

2.6 Since the City's incorporation, the Parties have partnered to monitor and foster tree planting and initial care; tree maintenance, removal, and management; utility line clearance; and volunteer opportunities on their respective parks and greenbelts ("Community Tree Care").

2.7 Representatives of the AVCA Board of Directors and the City Council meet regularly to discuss their joint efforts, including Community Tree Care.

2.8 The Parties' current, collective annual budgets for Community Tree Care is approximately $600,000.

2.9 CITY is in the process of submitting an application to the Arbor Day Foundation to be recognized as a Tree City USA, as a manifestation of the Parties' shared intent to protect and preserve the community's trees located in public places.

2.10 CITY and AVCA desire to enter into this MOU to memorialize their continued mutual intent and commitment to their public-private partnership to preserve and perpetuate Aliso Viejo's urban forest, which is a notable element of the community's exceptional quality of life.

3. Agreement.

3.1 Term of Agreement

This Agreement shall commence upon the Effective Date and shall continue through December 31, 2031. This Agreement shall automatically renew for one additional year each January 1st beginning in 2032 unless either Party provides written notice of termination pursuant to Section 3.2.

3.2 Termination of Agreement

Notwithstanding the provisions of Section 3.1, above, either Party shall have the right to terminate this Agreement with sixty (60) days' written notice to the other Party.

3.3 Tree City USA

The Parties acknowledge that their historical expenditures for Community Tree Care have satisfied the Tree City USA investment standard. The Parties intend to continue making expenditures that satisfy that standard in the future. The annual amount of such expenditures may fluctuate from year to year and will remain subject to each Party's independent budgeting, governance, and operational needs.

3.4 Shared Commitment

The Parties hereby commit to their shared Community Tree Care goals as follows:

3.4.1 CITY shall govern its Community Tree Care activities in accordance with the provisions of the Ordinance for public trees, as defined therein.

3.4.2 AVCA acknowledges the principles reflected in the Ordinance and will consider such principles when managing trees on property owned or maintained by AVCA, while retaining sole discretion regarding maintenance practices, budgeting, prioritization, and implementation.

3.4.3 CITY will require owners proposing removal of street trees on CITY property to conform to the provisions of Aliso Viejo Municipal Code Section 11.15.060 by providing two replacement trees for each street tree removed, with a minimum caliper of two inches at the time of planting.

3.4.4 The Parties intend to continue meeting periodically to discuss coordination of community tree care, Arbor Day activities, and Tree City USA

participation. Nothing herein requires either Party to undertake any specific expenditure, maintenance activity, regulatory action, or program.

3.5 Consent of Parties

Whenever consent or approval of either Party is required, that Party shall not unreasonably withhold such consent or approval.

3.6 Notices

Any notice provided for herein shall be sent by, and deemed given when deposited in the United States mail, registered and postage prepaid, to the Parties at the following addresses, or to such other address as a Party may designate by notice to:

CITY: City of Aliso Viejo
12 Journey, Suite 100
Aliso Viejo, CA 92656
Attention: City Manager

AVCA: Aliso Viejo Community Association
130 Vantis Dr., Suite 110
Aliso Viejo, CA 92656
Attention: General Manager

3.7 Entire Agreement

This Agreement contains all of the covenants, terms, provisions and agreements between CITY and AVCA relating in any manner to Tree City USA participation. No prior agreement or understanding of the Parties with respect to the matters referred to herein shall be valid or of any force or effect, and no covenant, term, provision or agreement of this Agreement can be altered or amended except in writing, signed by both Parties hereto.

[*SIGNATURES ON FOLLOWING PAGE***]**

IN WITNESS WHEREOF, the Parties hereto have caused this Agreement to be executed as of the Effective Date.

"CITY"

CITY OF ALISO VIEJO,
a California municipal corporation

By: _____
Max Duncan
Mayor

ATTEST:
By:_____
Maria Kendig
City Clerk

APPROVED AS TO FORM:
BEST BEST & KRIEGER LLP

By:_____
Scott C. Smith
City Attorney

"AVCA"

ALISO VIEJO COMMUNITY ASSOCIATION,
a California public benefit corporation

By: _____

By: _____

APPROVED AS TO FORM:
WHITNEY CURRY, APC
By:_____
Anne Rawlinson
Legal Counsel to AVCA

ALISO VIEJO

Public Tree-Care Ordinance

Aliso Viejo Community Association Partnership
Tree City USA

Shaun Pelletier, Public Works Director & City Engineer

City Council
October 21, 2026

Staff Recommendation

That the City Council adopt a Public Tree-Care Ordinance and partner with AVCA to apply for Tree City USA recognition

Tree City USA

- National recognition program administered by the Arbor Day Foundation
- Program only for incorporated communities, homeowner associations are not eligible on their own
- Four Standards
  1. Tree Board or Department with Legal Responsibility for Tree Care
  2. Public Tree-Care Ordinance
  3. Minimum Community Tree-Care Expenditures of $2 per capita
  4. Annual Arbor Day Proclamation and Observance

Partnership

- Aliso Viejo Community Association (AVCA) owns and maintains most parks, parkways, trails, slopes, landscaped common areas, and greenbelts within the City, including more than 20,000 trees
- City and AVCA have historically partnered to monitor and foster tree planting, tree maintenance, and tree management on their respective properties
- City Council and AVCA Board have discussed jointly obtaining Tree City USA recognition for the benefit of the entire community

Standard One - Tree Department

- Designate Public Works as the Tree Department
- Public Works currently manage all public tree maintenance contracts and activities

Standard Two - Ordinance

- Adoption of Public Tree-Care Ordinance
- Public trees are defined as any located on public property
- Public property means real property owned, leased, managed, or controlled by the City, including parks, landscaped areas, public facilities, and public rights-of-way
- Private property projects will continue to assess trees and landscaping on a case-by-case basis during the permitting process

Standard Two (cont.)

- Legal authority and administration designated to the Public Works Director
- Tree protection during construction
- Mitigation for tree removal
- Planting specifications
- Public tree management
- Pest, hazard and nuisance abatement
- Enforcement procedures

Standard Three - Expenditures

- Community tree-care annual budget and reported expenditures will meet or exceed the required $2 per capita ($104,352)
- No changes to existing contracts or budgets are required

Standard Four - Arbor Day

- Coordinate and partner with AVCA on upcoming Arbor Day Observations
- City Council to issue an annual Arbor Day proclamation

Next Steps

- Submit application
- Order and install signs when approved
- Promote recognition on social media

Staff Recommendation

That the City Council adopt a Public Tree-Care Ordinance and partner with AVCA to apply for Tree City USA recognition