PALMDALE

*a place to call home*

**CITY COUNCIL**
**REVISED**
**SUCCESSOR AGENCY**
**HOUSING AUTHORITY**
**INDUSTRIAL DEVELOPMENT AUTHORITY**
**PALMDALE AIRPORT AUTHORITY**
**PALMDALE CIVIC AUTHORITY**
**PALMDALE FINANCING AUTHORITY**
**CITY COUNCIL CHAMBERS**
**38300 SIERRA HIGHWAY**
**SUITE B**
**PALMDALE, CA 93550**
**WEDNESDAY, MAY 15, 2024**
**5:00 PM**
**www.cityofpalmdale.org**

**WELCOME**

1. **CALL MEETING TO ORDER**

**Note: All City Council memberships are reflected in their City Council titles.**

2. **ROLL CALL**
   MAYOR BISHOP, MAYOR PRO TEM LOA, COUNCILMEMBERS OHLSEN, BETTENCOURT, ALARCÓN
   COMMISSIONERS FRAGA-SAENZ, BETTS

3. **PLEDGE OF ALLEGIANCE AND MOMENT OF SILENCE**

4. **PRESENTATIONS**

   4.1 Commendation recognizing Fred Barthe' as the Tom Hilzendeger Veteran of the Year.

   4.2 Certificates recognizing the youth art contest winners for utility box wraps at the parks.

**PUBLIC COMMENT RULES:**

"(California Government Code Section 54954.3).
(a) Every agenda for regular meetings shall provide an opportunity for members of the public to directly address the legislative body on any item of interest to the public, before or during the legislative body's consideration of the item, that is within the subject matter jurisdiction of the legislative body, provided that no action shall be taken on any item not appearing on the agenda unless the action is otherwise authorized by subdivision (b) of Section 54954.2 [section omitted].

(b) (1) The legislative body of a local agency may adopt reasonable regulations to ensure that the intent of the subdivision (a) is carried out, including, but not limited to, regulations limiting the total amount of time allocated for public testimony on particular issues and for each individual speaker.

(2) Notwithstanding paragraph (1), when the legislative body of a local agency limits time for public comment, the legislative body of a local agency shall provide at least twice the allotted time to a member of the public who utilizes a translator to ensure that non-English speakers receive the same opportunity to directly address the legislative body of a local agency."

In furtherance of Section 54954.3 of the Brown Act, the public is allotted to speak a total of two (2) minutes on the entirety of the Consent Calendar, Appointment(s), New Business and Closed Session, with two (2) minutes on each Public Hearing, and, if desired, an additional two (2) minutes on items not on the agenda that are within the subject matter jurisdiction of the City Council. As specified in the Brown Act, a speaker utilizing a translator will receive twice the amount of time specified.

5. **PUBLIC COMMENTS:**
   CONSENT CALENDAR, APPOINTMENT(S), NEW BUSINESS, AND CLOSED SESSION: Now is the time for public participation on items listed on the Consent Calendar, Appointment(s), New Business, and Closed Session. Each speaker is allotted two (2) minutes in total for the entirety of the above sections.

6. **CONSENT CALENDAR**
   All matters listed under the Consent Calendar will be enacted by one motion unless an item(s) is pulled by Council, in which case the item(s) will be removed from the Consent Calendar and will be considered separately following this portion of the Agenda.

   6.1 Waive full reading of the Resolution(s) to be considered and voted on at this meeting. (This allows for reading the title only in lieu of reciting the entire text).

6.2 Approve First Amendment to Agreement with Innovative Concert Lighting, Inc. for lighting production and equipment services at the Palmdale Amphitheater increasing the agreement by $229,786, for a total not to exceed amount of $346,786 for a three-year term through June 30, 2025, with the option to extend two additional one-year terms.

SR Agrmt No. A-7865 First Amendment with Innovative Concert Lighting Inc.docx
Agrmt No. A-7865 First Amendment with Innovative Concert Lighting, Inc.pdf
Agrmt No. A-7865 with Innovative Concert Lighting Inc.pdf

6.3 Approve Second Amendment to the Agreement with Henisey Electric for temporary electrical and general services for special events, increasing the amount of the agreement by $158,000 for a total amount not to exceed $493,000 for a one-year term through June 30, 2025.

SR Agrmt No. A-6998 Second Amendment with Henisey Electric.docx
Agrmt No. A-6998 Second Amendment with Henisey Electric.pdf
Agrmt No. A-6998 First Amendment with Henisey Electric.pdf
Agrmt No. A-6998 with Henisey Electric.pdf

6.4 Approve the Second Amendment to the Agreement with Rich Meier's Landscaping, Inc. for Professional Landscape Maintenance Services, increasing the agreement by $588,000 for a total not to exceed amount of $14,061,877 and extending the contract term by three months to September 30, 2024.

SR Agrmt No. A-6563 Second Amendment with Rich Meier's Landscaping Inc.docx
Agrmt No. A-6563 Second Amendment with Rich Meier's Landscaping, Inc.pdf
Agrmt No. A-6563 First Amendment with Rich Meier's Landscaping, Inc.pdf
Agrmt No. A-6563 with Rich Meiers Landscaping Inc.pdf

6.5 Approve the First Amendment to the Agreement with KTUA for PN 839, McAdam Park Renovation Project, to increase the agreement by $53,763 for the total not to exceed amount of $527,758 with an extension of an additional 135 calendar days for a total of 375 calendar days.

SR Agrmt No. A-8166 First Amendment with KTUA.docx
Agrmt No. A-8166 First Amendment with KTUA.pdf
Exh A KTUA Proposal.pdf
Agrmt No. A-8166 with KTUA.pdf

6.6 Approve Requisition with Velocity Truck Centers for New Rizon E18M Electric Truck with a Dump Body in an amount not to exceed $180,635.

SR Req. No. 240997 with Velocity Truck Centers.docx
Req. No. 240997 Velocity Truck Centers.pdf
Atch 1 Quote Rizon E18M Electric Truck.pdf

6.7 Adopt Resolution No. CC 2024-049, a Resolution of the City Council of the City of Palmdale declaring its intention to order the detachment of parcels from certain assessment districts.

SR Reso. CC 2024-049.docx
Reso. No. CC 2024-049.docx

6.8 Adopt Resolution No. CC 2024-050, a Resolution of the City Council of the City of Palmdale declaring its intention to order the detachment of parcels from certain benefit assessment districts.
SR Reso. No. CC 2024-050.docx
Reso. No. CC 2024-050.docx

6.9 Adopt Resolution No. CC 2024-056, a Resolution of the City Council of the City of Palmdale approving the application to CAL FIRE'S Urban and Community Forest Grant Program.
SR Reso. No. CC 2024-056.docx
Reso. No. CC 2024-056.docx
Reso CAL FIRE UCF Grant.docx

6.10 Adopt Resolution No. CC 2024-051, a Resolution of the City Council of the City of Palmdale approving a Billboard Relocation Agreement with Lamar Central Outdoor, LLC for the removal of four existing billboards to construct one new digital advertising display.
SR Reso. No. CC 2024-051.docx
Reso. No. CC 2024-051.docx
Agrmt No. A-8807 with Lamar Central Outdoor.pdf
Exh A Agrmt No. A-8807.pdf
Exh B Agrmt No. A-8807.pdf
Exh C Agrmt No. A-8807.pdf

6.11 Approve the minutes from the May 1, 2024 meeting.
Minutes 05 01 2024.pdf

## 7. PUBLIC HEARING

7.1 Adopt Resolution No. CC 2024-048, a Resolution of the City Council of the City of Palmdale, approving a form of Density Bonus Agreement with Maison's Palmdale Blvd 150, LLC, to facilitate the construction of Tentative Tract Map 83359 located on the south side of Palmdale Boulevard between 50th Street East and 55th Street East (APN: 3023-002-084).
Cover letter to City Council AGR 24-0002 (A-8767).pdf
Atch 1 City Council SR and Reso No. CC 2024-048.pdf
Atch 2 PMC Section 17.25.020 Density Bonus Agreements.pdf
Atch 3 Planning Commission SR and Reso. No. PC-2024-004.pdf
Atch 4 Government Code 65915.pdf
Atch 5 Case law examples.pdf
Atch 6 Bankers Hill 150 v City of San Diego.pdf
PPT Reso. No. CC 2024 048.pptx

8. **JOINT BUDGET WORKSHOP PRESENTATION CC/SA/HA/IDA/PAA/PCA/PFA**

8.1 Presentation of City of Palmdale Draft Budget for Fiscal Year 2024-25.
SR FY 2025 Draft Budget.docx
Rpt. Draft Budget FY 2024-25.pdf
PPT Draft Budget FY 2024-25.pdf

9. **CITY MANAGER'S REPORT**

10. **COUNCIL REPORTS, ANNOUNCEMENTS AND REQUESTS FOR FUTURE AGENDA ITEMS**

11. **NON-AGENDA PUBLIC COMMENTS:**
Now is the time for public participation on items not listed on the agenda. Each speaker is allotted two (2) minutes total.

12. **PRESENTATION BY CITY ATTORNEY**

12.1 CONFERENCE WITH LEGAL COUNSEL-ANTICIPATED LITIGATION
Initiation of litigation pursuant to paragraph (4) of subdivision (d) of Section 54956.9: one case - Los Angeles County Sheriff's Department

13. **ANNOUNCEMENT BY CITY ATTORNEY**

14. **ADJOURN** meeting to June 5, 2024, at 5:00 p.m. in the City Hall Council Chamber located at 38300 Sierra Highway, Suite B, Palmdale, California.

**Americans with Disabilities Act (ADA) Accommodations**
In accordance with the Americans with Disabilities Act of 1990, if you require a disability-related modification or accommodation to participate in this meeting, please contact the City Clerk's Office at (661) 267-5151 at least 48 hours prior to the meeting.

If you require oral translation, please contact the City Clerk's Office at (661) 267-5151 at least 48 hours prior to the meeting.

# City Council Staff Report

**DATE:** **MAY 15, 2024**

**TO:** **HONORABLE MAYOR AND CITY COUNCIL**

**FROM:** **PARKS AND RECREATION DEPARTMENT**

**DISTRICT:** **ALL**

**SUBJECT:** **APPROVE FIRST AMENDMENT TO AGREEMENT WITH INNOVATIVE CONCERT LIGHTING, INC. FOR LIGHTING PRODUCTION AND EQUIPMENT SERVICES AT THE PALMDALE AMPHITHEATER INCREASING THE AGREEMENT BY $229,786 FOR A TOTAL NOT TO EXCEED AMOUNT OF $346,786 FOR A THREE-YEAR TERM THROUGH JUNE 30, 2025 WITH THE OPTION TO EXTEND TWO ADDITIONAL ONE-YEAR TERMS**

## RECOMMENDATION

Staff recommends that the City Council:

1. Approve First Amendment to Agreement No. A-7865 with Innovative Concert Lighting, Inc. for lighting production and equipment services at the Palmdale Amphitheater increasing the agreement by $229,786, for a total not-to-exceed amount of $346,786 for a three-year term through June 30, 2025, with the option to extend two additional one-year terms;

2. Authorize the City Manager or her designee to execute First Amendment Agreement No. A-7865 with Innovative Concert Lighting, Inc., including minimal and/or non-substantial changes; and,

3. Authorize the City Manager or her designee to exercise the option to extend two additional one-year terms.

## BACKGROUND

The Palmdale Amphitheater hosts a variety of live headliner concerts and community events requiring top-tier lighting production services and equipment. The venue does not have permanently installed stage lighting. Therefore, all associated stage lighting equipment and operation services are contracted to meet artist performance agreements.

## DISCUSSION

Innovative Concert Lighting, Inc. has provided lighting production and equipment services at the Palmdale Amphitheater since July 2022, under Agreement No. A-7865, which expires on June 30, 2025, with the option to extend two additional one-year terms. The vendor has provided exceptional service and has successfully met complicated artist performance requirements.

Increased service demands require the agreement amount to be augmented to cover the expanded two-day Kaleidoscope Art and Music Festival, July 4th Celebration, additional concert performances, artist-specific equipment, and production labor. The approval of the First Amendment to Agreement No. A-7865 will increase the contract by an additional $229,786. This amount will fund services to complete the three-year term and includes additional funds for two additional one-year option to extend.

## FISCAL IMPACT

$229,786; Sufficient funds for these services are budgeted and available in Parks and Recreation accounts for fiscal year 2023-2024. Funding for services in fiscal years 24/25 through 26/27 will be evaluated and approved as part of the annual budget adoption process.

| Actual and Estimated Costs Per Fiscal Year | Cost |
|---|---|
| FY 22/23 & FY 23/24 Actual | $ 81,436 |
| FY 24/25 Projected | $ 82,450 |
| FY 25/26 Estimated | $ 91,450 |
| FY 26/27 Estimated | $ 91,450 |
| **Total Not to Exceed** | **$346,786** |

| Performance | Actual FY 22/23 | Actual FY 23/24 | Projected FY 24/25 |
|---|---|---|---|
| Headline Concert | $31,050 (4 shows) | $21,150 (3 shows) | $51,300 (6 shows) |
| Estimated Additional Stagehand and Equipment | $ 1,200 | $ 6,936 | $10,000 |
| Independence Day Celebration | $ 7,050 | $ 7,050 | $ 7,050 |
| Kaleidoscope Art and Music Festival | N/A | $ 7,000 | $14,100 |
| **TOTAL** | **$39,300** | **$42,136** | **$82,450** |

## STRATEGIC PLAN

Goal IV: Maintain a desirable community where everyone wants to live, work and play.

D. Develop and maintain diverse programs and events that inspire growth, pride, and lifelong learning.

| | |
|---|---|
| Prepared by: | Keri Smith, Director of Parks and Recreation |
| Certified as to availability of Funds: | Janelle Samson, Director of Operations |
| Approved by: | Ronda Perez, City Manager |
| Approved as to form: | William P. Curley, III, City Attorney |

## ATTACHMENTS

Agrmt No. A-7865 First Amendment with Innovative Concert Lighting, Inc.
Agrmt No. A-7865 with Innovative Concert Lighting, Inc.

**1ST AMENDMENT TO AGREEMENT A-7865**
**BETWEEN THE CITY OF PALMDALE AND INNOVATIVE CONCERT LIGHTING, INC.**

This 1st Amendment to Agreement No. A-7865 (“Agreement”) is made and entered into by and between the City of Palmdale (hereinafter called “CITY”) and INNOVATIVE CONCERT LIGHTING, INC. (hereinafter called "CONTRACTOR"). This Contract shall become effective on the date of the last signatory.

WHEREAS, on July 1, 2022 ("Original Agreement") the CITY and CONTRACTOR entered into an agreement to provide:

Professional theatrical lighting production equipment and services at the Palmdale Amphitheater for City special events and rentals.

WHEREAS, the parties desire to amend the Original Agreement to:

Amend increase contract price and amend fee schedule breakdown of services.

NOW THEREFORE, the parties agree as follows:

1. Section 5 of the Agreement, PRICE, is hereby increased by an additional Two Hundred Twenty-Nine Thousand Seven Hundred Eighty-Six Dollars ($229,786.00) bringing the total amount of the contract to Three Hundred Forty-Six Thousand Seven Hundred Eighty-Six Dollars ($346,786.00).

2. Section 5 of the Agreement, PRICE, is hereby amended to include a revised fee schedule (Exhibit A) as follows:

Palmdale Amphitheater (House Package)
Package Pricing
YEAR 4: $8,050.00/Per Event
YEAR 5: $8,050.00/Per Event

Palmdale Amphitheater (Grand Use Package)
Package Pricing
YEAR 4: $9,550.00/Per Event
YEAR 5: $9,550.00/Per Event

Kaleidoscope Art & Music Festival
Package Pricing - 1 Day Event
YEAR 4: $8,050.00/Per Event
YEAR 5: $8,050.00/Per Event

Package Pricing - 2 Day Event (Consecutive Days)
YEAR 4: $16,100.00/for 2 Day Event
YEAR 5: $16,100.00/for 2 Day Event

3. All other terms and conditions remain in full force and effect.

All other terms and conditions of the Original Agreement not amended herein, remain in full force and effect.

**In Witness Whereof,** the parties hereto have caused this Contract to be executed and attested by their respective officers thereunto duly authorized.

CITY OF PALMDALE:

Ronda Perez
City Manager

KS
Signed: 5/2/2024

ADDRESS FOR NOTICE:
CITY OF PALMDALE
827 East Avenue Q-9
Palmdale, CA 93550

INNOVATIVE CONCERT LIGHTING, INC.:

Signed: 5/9/2024

Kirk Milton
President

ADDRESS FOR NOTICE:
INNOVATIVE CONCERT LIGHTING, INC.
200 Kentucky Street
Bakersfield, CA 93305

APPROVE AS TO FORM:

William P. Curley, III
City Attorney

ATTEST:

Roxanne Faber
City Clerk

---------- INTERNAL USE ONLY ----------

■Certificate(s) and Endorsement(s) attached
■Confirmed business name on contract with certificate(s)
■Original contract and previous amendment(s) (if any) are attached
■Attached Agreement Checklist and met all requirements

# Record of Signing

For
Name
Title

**Signed on 2024-05-02 15:10:14 GMT**

Secured by Concord™
DocumentID: 02wRhT1TOVvfscRU2bUPJ7
SigningID: 02wRhT1TCQV9kunn729D7p
Signing date: 5/2/2024
IP Address: 206.171.111.149
Email: ksmith@cityofpalmdale.org

For
Name
Title

**Signed on 2024-05-09 14:05:52 GMT**

Secured by Concord™
DocumentID: 02wRhT1TOVvfscRU2bUPJ7
SigningID: 02wVfGFcLluSuncFgDkgMx
Signing date: 5/9/2024
IP Address: 47.249.181.206
Email: kirk@i-c-l.com

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Signed with www.concordnow.com

ORIGINAL

**AGREEMENT NO. A-7865**
**CONTRACT FOR SERVICES**
**BETWEEN THE CITY OF PALMDALE AND INNOVATIVE CONCERT LIGHTING, INC.**

**This CONTRACT for services** ("Contract" herein) is made and entered into this 1 day of July, 2022, by and between the City of Palmdale, a public body corporate and politic, (hereinafter called "CITY"), and INNOVATIVE CONCERT LIGHTING, INC., a corporation, (hereinafter called "CONTRACTOR"). The term of this Contract is THREE (3) YEARS, commencing on July 1, 2022, with CITY reserving the option to extend the agreement for 2 additional terms of one year each.

**RECITALS**

WHEREAS, CONTRACTOR represents that CONTRACTOR has the expertise and is qualified to perform the services described in this Contract.

NOW THEREFORE, CITY and CONTRACTOR, in consideration of the mutual covenants hereinafter set forth, agree as follows:

## 1 CITY PROJECT MANAGER

To provide the services required by this Contract, CONTRACTOR shall act under the authority and approval of Keri Smith Director/designee, who shall oversee this Contract, the work performed by CONTRACTOR, assist CONTRACTOR with any necessary information, audit billings, and approve payments. The CONTRACTOR shall channel all contacts and requests through the City project manager.

## 2 DESCRIPTION OF WORK

2.1 CONTRACTOR shall provide the following services in a manner satisfactory to CITY:

The following are the Lighting Production Services to be performed:

Service & Rentals

The Palmdale Amphitheater is home to the Summer Concert Series and other concert events. Contractor will provide professional theatrical lighting equipment for up to four (4) live headliner concerts that meet or exceed artist's rider requirements and meets City lighting specifications as follows in the below lighting requirements.

The Palmdale Amphitheater is rented throughout the year for an undetermined number of live headliner concerts and community events that require quality lighting production equipment and services. These live concerts may vary in scale from medium to grand use. Contractor will use the "standard required house package" as indicated below as a base to enhance equipment and cost as necessary to the renter. Payment for services for rentals with be submitted by renter.

Lighting Requirements

The Contractor shall provide complete two-truss lighting system containing a minimum of 120 Par 64's. All trusses and motors that are needed, shall comply with rigging of lighting safety requirements. Additional requirements include:

- Two Source 4 Lekos
- Control Console/Light Board
- Dimmer Racks
- Four Long Throw Spotlights
- Four Station Intercom
- Two Qualified technicians needed to set-up and operate equipment
- Standard number of qualified audio engineers to efficiently handle event size.

Additional Company/Contractor Required Qualifications

- Shall be a full-service theatrical lighting company recognized in the industry that features complete lighting systems and services for live headliner concerts.
- Venue rigger is responsible for installation or related equipment and will coordinate with sound and lighting contractors based upon show requirements.
- Shall specialize in theatrical lighting installs at outdoor venues for live headliner concerts.
- Shall have a minimum of ten years' experience in the professional lighting industry.
- Shall provide lighting and equipment that is UL or CSA Certified per OSHA regulations and requirements.
- Shall be able to provide a variety of quality theatrical lighting packages for different scales of live headliner concerts.
- Shall be able to provide quality theatrical lighting systems that meet the highest industry standards and required City specifications.
- Shall provide professional technicians and programmers on-site for the duration of event with the ability to address lighting problems in a timely manner.
- Contract services such as: sound, lighting, rigging and electrical services are paid from one account, no separate budget.

**Safety Requirements**

- The Contractor shall develop and maintain a safety program in compliance with Public Law 91-596 Occupational Safety and Health Act (OSHA) Series 1910 Contractor personnel shall work in a safe manner and comply with all applicable safety regulations. The Contractor shall be subject to safety inspections of its work sites by the City. Contractor safety records shall be available upon request. All unsafe incidents shall be immediately reported. A copy of the safety program implemented for a resulting contract shall be provided to the City for review and concurrence.

- Accident Reporting The Contractor shall maintain an accurate record of, and shall report to the City, exposure data and all accidents resulting in death, traumatic injury, or occupational disease, incidental to work performed under this contract.
- Damage Reporting The Contractor shall maintain an accurate record of, and shall report to the City, damage to property, materials, supplies and equipment incidental to work performed under this contract. Damage resulting from Contractor negligence, as determined by the City, shall be the responsibility of the Contractor.
- Environmental Protection Compliance with Laws and Regulations. The Contractor shall be knowledgeable of and comply with all applicable interstate, federal, state, and local laws, regulations, and requirements regarding environmental protection. The Contractor shall comply with Federal Environmental Protection Agency law as it applies to hazardous materials handling, transportation, and waste management. The Contractor is solely responsible for any liability regarding the release of substances.

Additional Costs
The Contractor event fees shall include the equipment, fuel, transportation, delivery, set-up, teardown, two spot operators and professional labor necessary to ensure efficient load-in and load-out of own equipment and artist band gear per performance.

Notice of Event Change

Events change throughout the year and may not apply each year. Scheduling of technicians: The contractor agrees to provide technicians for each event on an "as-needed" basis. The City will make every effort to give reasonable notification for its Lighting Production requests.

2.2 CONTRACTOR shall have no claim for compensation for any services or work, which has not been authorized by CITY's Authorization to Proceed.

2.3 CONTRACTOR shall not accept any change of scope, or change in contract provisions, to this Contract unless issued in writing, as a contract change order or amendment and signed by CITY. Any extensions of time must be mutually agreed upon in writing and executed by both parties.

2.4 CONTRACTOR shall maintain in current status all Federal, State, and local licenses and permits required for the operation of the business conducted by the CONTRACTOR as applicable to this contract.

2.5 All work supplied under this Contract shall be fully guaranteed by CONTRACTOR for a minimum period of 60 days from the date of acceptance by CITY. Any defects of design, workmanship, or materials that would result in non-compliance with the Contract specifications shall be fully corrected by CONTRACTOR (including parts and labor) without cost to CITY. The written warranty shall be included with the delivered products to the using Department.

2.6 CITY shall provide to CONTRACTOR, without charge, all data, program information, including reports, records, maps, and other information, now in CITY's possession, which may facilitate the timely performance of the work.

## 3 CONTRACTOR'S KEY PERSONNEL

3.1 **Key Staff.** CITY reserves the right to review and approve CONTRACTOR'S staff including all subcontractors to be assigned to any project by CONTRACTOR during the term of this Contract.

This Contract has been awarded to CONTRACTOR based partially on the key personnel proposed to perform the services required herein. CONTRACTOR shall not change nor substitute any of these key staff for work on this Contract without prior written approval by CITY.

CONTRACTOR's Team and Key Personnel are as follows:

Kirk Milton, President

(661) 324-1130
cat@i-c-l.com

This Services Contract has been awarded to CONTRACTOR based on its representation that those personnel and subcontractors submitted as part of its bid and listed above will perform the portions of the work listed above.

CONTRACTOR shall not deviate nor substitute any of these team members without prior written approval by CITY.

3.2 **Subcontractors.** During the performance of the Agreement, CONTRACTOR may engage such additional SUBCONTRACTORS as may be required for the timely completion of this Agreement. In the event of subcontracting, the sole responsibility for fulfillment of all terms and conditions of this Agreement rests with CONTRACTOR.

CONTRACTOR shall not enter into any Subcontract under this Contract for the performance of this Contract without the advance written approval of CITY. The subcontract shall incorporate by reference the terms and conditions of this Contract.

3.3 **Direct Responsibility.** All services required under this Contract shall be performed by CONTRACTOR, or under CONTRACTOR's direct supervision, and all personnel shall possess the qualifications, permits and licenses required by State and local law to perform such services.

3.3.1 CONTRACTOR shall be solely responsible for the satisfactory work performance of all personnel engaged in performing services required by this Contract, and compliance with all reasonable performance standards established by CITY.

3.3.2 CONTRACTOR shall be responsible for payment of all CONTRACTOR's employees' and subcontractor's wages and benefits and shall comply with all requirements pertaining to the employer's liability, workers' compensation, unemployment insurance, and Social Security.

3.3.3 CONTRACTOR shall indemnify and hold harmless CITY, and its respective officers, agents and employees from and against all claims, demands, damages or costs arising from CONTRACTOR's acts or omissions with respect to any liability, damages, claims, costs and expenses of any nature arising from alleged violations of personnel practices.

## 4 ACCEPTANCE AND DOCUMENTATION

Each task shall be reviewed and approved by the Contract Project Manager to determine acceptable completion.

4.1 **Records**. The CONTRACTOR shall retain and shall contractually require each SUBCONTRACTOR to retain all data and other "records" relating to the acquisition and performance of the Contract for a period of five years after the completion of the Contract.

4.2 **Property of CITY.** All materials, including reports, computer programs and other deliverables, supplied or created under this Contract are the sole property of CITY. CONTRACTOR is not entitled to a patent or copyright on those materials and may not transfer the patent or copyright to anyone else. CONTRACTOR shall not use or release these materials without the prior written consent of CITY.

4.3 **Products.** All equipment, materials, parts, and other components incorporated in the work or services performed pursuant to this Contract shall be new, or the latest model and of the most suitable grade for the purpose intended. All work shall be performed in a skilled and workmanlike manner.

## 5 PRICE

CITY shall pay to CONTRACTOR an amount not to exceed One Hundred and Seventeen Thousand dollars ($117000.00) for the completion of all the work and services described in Section 2, which sum shall include all costs or expenses incurred by CONTRACTOR, payable as follows:

City Event/Palmdale Amphitheater Rental "House Package" - Per Artist/Event: $7,050.00

City Event/Palmdale Amphitheater Rental "Grand Use" - Per Artist/Event: $8,550.00

Renters are responsible for their own fees either for house package or grand use.

5.1 An application for payment form must be submitted to CITY which shall include the following: a clear, detailed invoice reflecting work being billed for, a

summary sheet showing percentage of work completed to date, amount/percent billed to date and current status of all tasks within a project; any/all backup documentation supporting the above items. Work schedule updates must also be included with the payment requests.

5.2 CONTRACTOR shall maintain adequate records and shall permit inspection and audit by CITY of CONTRACTOR's charges under this Contract. CONTRACTOR shall make such records available to CITY during normal business hours upon reasonable notice. Nothing herein shall convert such records into public records, and they will be available only to CITY and any specified public agencies. Such records shall be maintained by CONTRACTOR for one (1) year following completion of the work under this Contract unless a longer period of time is required by state or federal law, in which event CONTRACTOR shall retain its records for the time required by such laws.

5.3 **Payment.** A separate invoice shall be issued for each shipment of material or service performed, and no payment will be issued prior to receipt of material and/or completion of specified services and receipt of a correct invoice.

## 6 TAXES

6.1 CONTRACTOR shall pay all sales, consumer, use, and other similar taxes required to be paid by CONTRACTOR in accordance with state and local laws.

6.2 CONTRACTOR is an independent contractor and shall have no power or authority to incur any debt, obligation, or liability on behalf of CITY. No person employed by CONTRACTOR or acting on its behalf, in connection with this Contract shall be considered the Agent or employee of CITY.

6.3 CONTRACTOR shall be required to obtain a current City of Palmdale business license, as required by the Palmdale Municipal Code, before an Authorization to Proceed is issued.

6.4 When equipment, materials or supplies generally taxable to CONTRACTOR are eligible for a tax exemption due to the nature of the work, CONTRACTOR shall assist the City in applying for and obtaining such tax credits and exemptions, which shall be paid or credited to the City.

## 7 PATENT FEES AND ROYALTIES

CONTRACTOR shall pay all license fees and royalties and assume all costs incident to the use, in the performance of the work or the incorporation in the work of any invention, design, process, program, product or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, program, product or device is specified in the contract documents for use in the performance of the work and if, to the actual knowledge of CITY, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the

existence of such rights shall be disclosed by CITY in the contract documents. CONTRACTOR shall indemnify and hold harmless CITY and anyone directly or indirectly employed by CITY from and against all claims, damages, losses and expenses (including attorneys' fees) arising out of any infringement of patent rights or copyrights incident to the use in the performance of the work, or resulting from the incorporation in the work of any invention, design, process, program, product or device not specified in the contract documents, and shall defend all such claims in connection with any alleged infringement of such rights.

## 8 INDEMNIFICATION

To the fullest extent permitted by law, CONTRACTOR and any subcontractors working on its behalf agree to indemnify CITY, its officers, employees, agents and elected and appointed boards (hereinafter "Indemnified Parties") for any loss, claim, demand, cause of action, cost, expense, damage, obligation or liability which arises out of or is in any way connected with the performance of any work under this agreement, including any acts or omissions, willful misconduct or negligent conduct, whether active or passive, on the part of CONTRACTOR, or its subcontractors, and regardless of any acts, omissions or negligence (whether active or passive) of any person or entity indemnified hereunder. At their own expense, CONTRACTOR and, as applicable, any subcontractors working on its behalf, shall defend any suit, claim or action against the Indemnified Parties founded upon such loss, claim, demand, cause of action, cost, expense, damage, obligation or liability. CONTRACTOR shall ensure that the contract of any subcontractor working under this agreement contain an indemnity agreement, requiring the subcontractor to indemnify and defend the Indemnified Parties pursuant the terms set forth above. CONTRACTOR shall indemnify the Indemnified Parties, and save it harmless from any and all loss, damage, costs, expenses and attorney's fees suffered or incurred on account of any breach of the aforesaid obligations and covenants, and any other provision or covenant of this agreement.

## 9 INSURANCE

9.1 CONTRACTOR, at its expense, shall maintain in effect at all times during the performance of work under this Contract not less than the following coverage and limits of insurance, which shall be maintained with insurers listed "A" or better in the Best's Insurance Guide and authorized to do business in the State of California. **Proof of Insurance, as identified in Section 9.8, must be reviewed and accepted by the City Attorney**.

9.1.1 Workers' Compensation and Employer's Liability

- Workers' Compensation -- coverage as required by the State of California
- Employer's Liability -- $1,000,000.00 each accident
  $1,000,000.00 policy limit bodily injury
  $1,000,000.00 each employee bodily injury by disease

9.1.2 Commercial General Liability

- $2,000,000.00 limit on a per occurrence basis
- $5,000,000.00 general aggregate limit

9.1.3 Commercial Automobile Liability

- $2,000,000.00 combined single limit including owned, non-owned and hired automobile coverage

9.2 All of CONTRACTOR's policies shall contain an endorsement providing that written notice shall be given to CITY at least thirty (30) calendar days prior to termination, cancellation, or reduction of coverage in the policy.

9.3 Policies providing for bodily injury and property damage coverage shall contain the following:

A. An endorsement extending coverage to the City as an additional insured, as respects liability arising out of the performance of any work under the Contract. Such insurance shall be primary insurance, as respects the interest of the City, and any other insurance maintained by the City shall be considered excess coverage and not contributing insurance with the insurance required hereunder. The certificates shall state: "The City of Palmdale, Successor Agency to the Community Redevelopment Agency of the City of Palmdale, Palmdale Civic Authority, Housing Authority, Industrial Development Authority, Airport Authority, their officers, agents, employees and volunteers are named as additional insured".

B. "Severability of Interest" Clause.

9.4 Promptly upon execution of this Contract, and prior to commencement of any work, CONTRACTOR shall deliver to CITY certificates of insurance and endorsements to all required policies demonstrating that CONTRACTOR has the required coverage and showing the required named insured. Within five (5) days of written request from CITY, CONTRACTOR shall deliver to CITY full and complete copies of all insurance policies required by this Contract.

9.5 The requirements as to the types and limits of insurance to be maintained by CONTRACTOR are not intended to and shall not in any manner limit or qualify CONTRACTOR's liabilities and obligations under this Contract.

9.6 Any policy or policies of insurance that CONTRACTOR elects to carry as insurance against loss or damage to its equipment and tools or other personal property used in the performance of this Contract shall include a provision waiving the insurer's right of subrogation against CITY.

9.7 All insurance coverage must be maintained throughout the duration of this Contract.

9.8 Acceptable Proof of Insurance:

9.8.1 ACORD Certificate of Insurance listing all coverage, limits, deductibles and insured; and endorsements for all applicable coverage if agent has authority to issue it; or additional insured Form CG20100704 and CG20370704 or equivalent must be provided for general liability coverage. Additional insured form CA0001 must be provided for automobile liability coverage.

9.8.2 Binders of insurance for all coverage. Agents must confirm that policy endorsements have been ordered from the respective insurance companies. Upon issuance, policy endorsements and a corresponding Certificate of Insurance listing all insurers and coverage must be submitted to the City Attorney.

9.9 Notwithstanding any other provision of this Contract, CITY may immediately terminate this Contract if, at any time CONTRACTOR fails to maintain the required insurance for any period of time or fails to comply with any of the insurance requirements listed above.

**10 TERMINATION WITHOUT CAUSE**

City reserves the right to terminate this Contract or any part thereof for its sole convenience with fifteen (15) days written notice. In the event of such termination, CONTRACTOR shall immediately stop all work hereunder, and shall immediately cause any of its suppliers and subcontractors to cease such work. CONTRACTOR shall also surrender to CITY all finished or unfinished documents, processes, programs and other supplies and materials, which shall be City's property. As compensation in full for services performed to the date of such termination, the CONTRACTOR shall receive an amount equal to the value of the work completed as of the termination date in accordance with the fee schedule or as negotiated between the parties. In no event shall the amount payable upon termination exceed the total maximum compensation provided for in this Contract.

**11 TERMINATION FOR CAUSE**

If CITY determines that CONTRACTOR has failed to supply an adequate working force, or to provide services of proper quality, or has failed in any other respect to satisfactorily perform the services specified in this Contract, CITY shall give written notice to CONTRACTOR specifying all defaults to be remedied within thirty (30) days. Such notice shall set forth the basis for CITY's dissatisfaction and suggest corrective measures. If, after thirty days, CONTRACTOR has failed to implement appropriate corrective measures, CITY may elect to terminate this Contract in whole or in part.

11.1 In the event CITY terminates this Contract, in whole or in part, for cause, CITY may procure, upon such terms and in such manner, as it may deem appropriate, services similar to those terminated.

11.2 CONTRACTOR shall provide all finished or unfinished documents, data, studies, software, drawings, programs, processes, maps, photographs, reports, etc., prepared by CONTRACTOR within fifteen (15) working days after notice of

termination. Upon such termination, CONTRACTOR shall be paid an amount equal to the value of the services provided and work performed as of the date of termination, taking into consideration the costs associated with hiring another CONTRACTOR to complete the services. In ascertaining the value of the work performed up to the date of termination, consideration shall be given to both completed work and work in progress, to complete and incomplete documents when such are delivered to CITY, and to authorized reimbursement expenses. The above is in addition to any other remedies available by law or equity to CITY.

11.3 If, after notice of termination of the Contract under the provisions of this Section 11, it is determined, for any reason, that CONTRACTOR was not in default, or that the default was excusable, then the rights and obligations of the parties shall be the same as if the notice of termination had been issued pursuant to Section 10.

## 12 DISPUTE RESOLUTION

All claims, disputes, and other matters in question between CITY and CONTRACTOR arising out of or relating to this Contract or the breach thereof shall, to the extent reasonably feasible, be resolved through good faith negotiations between the parties.

## 13 OWNERSHIP OF PRODUCT

All product, data, documents, programs and software including, but not limited to, research, field notes, investigations, analysis, studies, processes, software, instructions for use and other manuals, whether complete or incomplete, which are prepared or produced in the performance of this Contract are to be, and remain the property of CITY and shall be delivered to or left with CITY upon the completion or termination of this Agreement. CONTRACTOR shall furnish CITY, upon its request, originals and reproducible and electronic copies of product, data reports, studies and of all other documents listed above. Electronic copies shall be provided in an unprotected format which allows CITY to copy, reproduce and makes changes as CITY deems necessary.

## 14 DELEGATION AND ASSIGNMENT

14.1 CONTRACTOR shall not delegate or assign its duties or rights hereunder, either in whole or in part, without the prior written consent of CITY; provided, however, that claims for money due or to become due to CONTRACTOR from CITY under this Contract may be assigned to a bank, trust company or other financial institution without such approval.

14.2 Any assignment, delegation or subcontract shall be made in the name of CONTRACTOR and shall not bind or purport to bind CITY and shall not release CONTRACTOR from any obligations under this Contract including, but not limited to, the duty to properly supervise and coordinate the work of employees, assignees, delegates and subcontractors. No such assignment, delegation or subcontract shall

result in any increase in the amount of total compensation payable to CONTRACTOR under this Contract.

## 15 NON-DISCRIMINATION AND EQUAL EMPLOYMENT OPPORTUNITY

15.1 In performance of this Contract, CONTRACTOR shall not discriminate against any employee, subcontractor, or applicant for employment because of sex, color, race, religion, ancestry, national origin, disability, medical condition, marital status, sexual orientation, or age. CONTRACTOR will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their sex, color, race, religion, ancestry, national origin, disability, medical condition, marital status, sexual orientation or age. Affirmative action relating to employment shall include, but not be limited to the following: employment, upgrading, demotion or transfer; recruitment; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

15.2 The provisions of subsection 15.1 above shall be included in all solicitations or advertisements placed by or on behalf of CONTRACTOR for personnel to perform any services under this Contract. CITY shall have access to all documents, data and records of CONTRACTOR and its subcontractors for purposes of determining compliance with the equal employment opportunity and non-discrimination provisions of this Section, and all applicable provisions of Executive Order No. 11246 which is incorporated herein by this reference. A copy of Executive Order No. 11246 is available for inspection at, and on file with, the Palmdale City Clerk's Office.

## 16 FINANCIAL INTEREST CERTIFICATION

16.1 CONTRACTOR warrants that no person has been employed or retained to solicit or secure this Contract upon an agreement or understanding for a commission, percentage, brokerage or contingent fee; and that no officer or employee of the CITY has any interest, financially or otherwise, in CONTRACTOR's firm.

16.2 For breach or violation of this warranty, CITY shall have the right to annul this Contract without liability or at its discretion to deduct from the Contract Price or consideration, the full amount of such commission, percentage, brokerage or contingent fee.

## 17 CONFLICT OF INTEREST

17.1 CONTRACTOR stipulates that its officers and employees do not now have a conflict of interest and it further agrees for itself, its officers and its employees that it will not contract for or accept employment for the performance of any work or services with any individual business, corporation or government unit that would create a conflict of interest in the performance of its obligations pursuant to this Contract or which would cause CONTRACTOR to be "financial interested" (as provided in California Government Code Section 1090 et seq. or 87100 et seq.) in any contract or decision made by CITY on any matter.

17.2 CONTRACTOR shall not employ any City official or employee to perform any work required pursuant to this Contract.

17.3 To the extent required by the City Manager or his designee, CONTRACTOR shall complete and file with the City Clerk a Form 700 Statement of Economic Interests disclosing any reportable property interests, income, gifts, investments, or business positions.

**18 COMPLIANCE WITH LAW**

18.1 CONTRACTOR shall comply with all state and federal laws, including but not limited to, the requirement to hire only those persons authorized by federal law to work in the United States. If CONTRACTOR uses any subcontractors to complete this Contract, this same requirement shall be included in all subcontracts and strictly enforced by CONTRACTOR.

18.2 The law of the state of California shall govern this Contract. The venue of any legal action, either formal or informal, shall be the County of Los Angeles.

**19 NOTICES**

Any notice required under this Contract shall be in writing, addressed to the appropriate party at its address on the signature page and given personally or by registered or certified mail postage prepaid, or by a commercial courier service. All notices shall be effective upon the date of receipt.

**20 ENTIRE AGREEMENT AND AMENDMENTS**

20.1 This Contract is the complete Agreement between the parties and supersedes all prior proposals, agreements, and understandings between the parties and may not be modified or terminated orally.

20.2 No attempted waiver of any of the provisions hereof, nor any modification in the nature, extent or duration of the work to be performed by CONTRACTOR hereunder, shall be binding unless in writing and signed by the party against whom the same is sought to be enforced.

20.3 The failure of any party to enforce against another party any provision of this Contract shall not constitute a waiver of that party's right to enforce such a provision at a later time, and shall not serve to vary the terms of this Contract.

**21 ATTORNEY'S FEES**

If any action at law or in equity is brought to enforce or interpret any provisions of this Contract, the prevailing party in such action shall be entitled to reasonable attorney's fees, costs and necessary disbursements, in addition to such other relief as may be sought and awarded.

**In Witness Whereof,** the parties hereto have caused this Contract to be executed and attested by their respective officers thereunto duly authorized.

CITY OF PALMDALE:

KJ Ronda 4/12/2022

Ronda Perez Date
Interim City Manager

ADDRESS FOR NOTICE:
CITY OF PALMDALE
827 East Avenue Q-9
Palmdale, Ca 93550

APPROVE AS TO FORM:

For

Christopher L. Beck
City Attorney

ATTEST:

Shahae S. Smith
City Clerk

INNOVATIVE CONCERT LIGHTING, INC.

5/17/22

Kirk Milton Date
President

ADDRESS FOR NOTICE:
INNOVATIVE CONCERT LIGHTING, INC.
200 Kentucky Street
Bakersfield, CA 93305

ATTEST: If Corporation

Secretary

**Innovative Concert Lighting Pricing**

Exhibit A

| Item No. | Event (Package Total Dollar Amount) | Year 3 - July 1st, 2024 - June 30, 2025 | Year 4 - July 1st, 2025 - June 30, 2026 | Year 5 - July 1st, 2026 - June 30, 2027 |
|---|---|---|---|---|
| 1 | City Concert or Amphitheater "House Package" (Stage Lighting & Production) | $7,050.00 | $8,050.00 | $8,050.00 |
| 2 | Amphitheater "Grand Use" (Stage Lighting & Production) | $8,550.00 | $9,550.00 | $9,550.00 |

| Item No. | Equipment Rental Description | Year 3 - July 1st, 2024 - June 30, 2025 | Year 4 - July 1st, 2025 - June 30, 2026 | Year 5 - July 1st, 2026 - June 30, 2027 |
|---|---|---|---|---|
| 3 | Two source 4 Lekos | Included in "house package" | Included in "house package" | Included in "house package" |
| 4 | Control Console/Light Board | Included in "house package" | Included in "house package" | Included in "house package" |
| 5 | Dimmer Racks | Included in "house package" | Included in "house package" | Included in "house package" |
| 6 | Four Long Throw Spotlights | Included in "house package" | Included in "house package" | Included in "house package" |
| 7 | Four Station Intercom | Included in "house package" | Included in "house package" | Included in "house package" |

# City Council Staff Report

**DATE:** **MAY 15, 2024**

**TO:** **HONORABLE MAYOR AND CITY COUNCIL**

**FROM:** **PARKS AND RECREATION DEPARTMENT**

**DISTRICT:** **ALL**

**SUBJECT:** **APPROVE SECOND AMENDMENT TO AGREEMENT WITH HENISEY ELECTRIC FOR TEMPORARY ELECTRICAL AND GENERAL SERVICES FOR SPECIAL EVENTS, INCREASING THE AGREEMENT BY $158,000 FOR A TOTAL NOT TO EXCEED AMOUNT OF $493,000 FOR A ONE-YEAR TERM THROUGH JUNE 30, 2025**

## RECOMMENDATION

Staff recommends that the City Council:

1. Approve Second Amendment to Agreement No. A-6998 with Henisey Electric for temporary electrical and general services for special events, increasing the agreement by $158,000 for a total not to exceed amount of $493,000 for a one-year term through June 30, 2025; and,

2. Authorize the City Manager or her designee to execute Second Amendment Agreement No. A-6998 with Henisey Electric, including minimal and/or non-substantial changes.

## BACKGROUND

To alleviate the costs of purchasing, replacing, maintaining, transporting, and fueling electrical equipment for large-scale events, the City contracts with Henisey Electric to provide temporary generated power distribution and equipment required to supplement existing power to meet the contractual obligations of performers, vendors, and renters for large-scale events. Examples of services include developing an electrical distribution plan tailored to event needs, managing power supply for the duration of the event, providing power to tour buses, managing house power, avoiding overload, and troubleshooting power malfunctions and emergencies. Henisey Electric provides all electrical equipment needed, such as commercial-grade power generators, commercial-grade cables and connections, distribution power boxes, temporary light trees, projection equipment, audio equipment, and portable outdoor cooling units.

## DISCUSSION

The approval of the Second Amendment will augment the agreement amount by $158,000 to accommodate the updated fee schedule as presented by Henisey. The fee schedule has been updated to reflect market changes that are consistent with local and industry trends and increased service demands from the City. Increased service demands include the two-day Kaleidoscope Art and Music Festival, weekly Farmers Market, Healing and Honor Field event, and additional concert performances. Labor has increased 4.7%, following associated Division of Industrial Relations requirements. Equipment rental charges, including delivery and fuel, will remain the same for the remainder of the contract.

Henisey Electric is a local small business that has responded to the City's needs. They provide a licensed, bonded, and insured electrician who meets all State and Federal regulations. The Contract requires the equipment provided to be inspected and certified for use in California. Henisey Electric has an excellent service history and for many years has assisted in the production of City events, as well as helping the Maintenance Division with various installation projects.

## FISCAL IMPACT

$158,000; Sufficient funds for these services are budgeted and available in Parks and Recreation accounts for FY 2023-24, and future year funding will be proposed through the annual budget process.

## STRATEGIC PLAN

Goal IV: Maintain a desirable community where everyone wants to live, work and play.

D. Develop and maintain diverse programs and events that inspire growth, pride, and lifelong learning.

| | |
|---|---|
| Prepared by: | Keri Smith, Director of Parks and Recreation |
| Certified as to availability of Funds: | Janelle Samson, Director of Operations |
| Approved by: | Ronda Perez, City Manager |
| Approved as to form: | William P. Curley, III, City Attorney |

## ATTACHMENTS

Agrmt. No. A-6998 Second Amendment with Henisey Electric
Agrmt. No. A-6998 First Amendment with Henisey Electric
Agrmt. No. A-6998 with Henisey Electric

**2nd AMENDMENT TO AGREEMENT A-6998**
**BETWEEN THE CITY OF PALMDALE AND HENISEY ELECTRIC**

This 2nd Amendment to Agreement No. A-6998 (“Agreement”) is made and entered into by and between the City of Palmdale (hereinafter called “CITY”) and HENISEY ELECTRIC (hereinafter called "CONTRACTOR"). This Contract shall become effective on the date of the last signatory.

WHEREAS, on July 1, 2020 ("Original Agreement") the CITY and CONTRACTOR entered into an agreement to provide:

Electrical services to provide temporary power and general services for special events and rentals.

WHEREAS, the parties desire to amend the Original Agreement to:

Amend contract for one additional year and to increase the contract price for electrical services.

NOW THEREFORE, the parties agree as follows:

1. Term of the Agreement is hereby amended for one additional year, commencing on July 1, 2024.

2. Section 5 of the Agreement, PRICE is hereby increased by an additional One Hundred Fifty-Eight Thousand Dollars ($158,000.00) and bringing the total amount of the contract to Four Hundred Ninety-Three Thousand Dollars ($493,000.00).

3. Section 5 of the Agreement, PRICE, is hereby amended to include a revised fee schedule, Exhibit A.

4. All other terms and conditions remain in full force and effect.

All other terms and conditions of the Original Agreement not amended herein, remain in full force and effect.

**In Witness Whereof,** the parties hereto have caused this Contract to be executed and attested by their respective officers thereunto duly authorized.

CITY OF PALMDALE:

Ronda Perez
City Manager

KS
Signed: 5/1/2024

ADDRESS FOR NOTICE:
CITY OF PALMDALE
827 East Avenue Q-9
Palmdale, CA 93550

APPROVE AS TO FORM:

William P. Curley, III
City Attorney

ATTEST:

Roxanne Faber
Acting City Clerk

HENISEY ELECTRIC:

Signed: 5/2/2024

Kyle Henisey
Owner

ADDRESS FOR NOTICE:
HENISEY ELECTRIC
18333 W. Avenue B8
Lancaster, CA 93536

---------- INTERNAL USE ONLY ----------

■Certificate(s) and Endorsement(s) attached
■Confirmed business name on contract with certificate(s)
■Original contract and previous amendment(s) (if any) are attached
■Attached Agreement Checklist and met all requirements

# Record of Signing

For
Name
Title

**Signed on 2024-05-01 20:39:11 GMT**

Secured by Concord™
DocumentID: 02wRGCVwpVoSsMUiqnUBQ1
SigningID: 02wRGCVwjT6FGK6mQ5IBcI
Signing date: 5/1/2024
IP Address: 206.171.111.149
Email: ksmith@cityofpalmdale.org

For
Name
Title

**Signed on 2024-05-02 00:49:24 GMT**

Secured by Concord™
DocumentID: 02wRGCVwpVoSsMUiqnUBQ1
SigningID: 02wRMLF2ZeP9Gl44QVbMHc
Signing date: 5/2/2024
IP Address: 199.182.227.127
Email: powerhousekyle@gmail.com

concord™
Where agreements happen.

Signed with www.concordnow.com

**1ST AMENDMENT TO AGREEMENT A-6998**
**BETWEEN THE CITY OF PALMDALE AND HENISEY ELECTRIC**

This 1st Amendment to Agreement No. A-6998 (“Agreement”) is made and entered into by and between the City of Palmdale (hereinafter called “CITY”) and HENISEY ELECTRIC (hereinafter called "CONTRACTOR"). This Contract shall become effective on the date of the last signatory.

WHEREAS, on July 1, 2020 ("Original Agreement") the CITY and CONTRACTOR entered into an agreement to provide:

Electrical service to provide temporary power and general services for special events.

WHEREAS, the parties desire to amend the Original Agreement to:

Amend contract for one additional year and to increase the contract price for electrical services.

NOW THEREFORE, the parties agree as follows:

1. Term of the Agreement is hereby amended for one additional year, commencing on July 1, 2023.

2. Section 5 of the Agreement, PRICE, is hereby increased by an additional One-Hundred Ten Thousand Dollars ($95,000) and bringing the total amount of the contract to Three-Hundred Fifty Thousand Dollars ($335,000).

3. Section 5 of the Agreement, PRICE, is hereby amended to include a revised fee schedule, Exhibit A.

4. All other terms and conditions remain in full force and effect.

All other terms and conditions of the Original Agreement not amended herein, remain in full force and effect.

**In Witness Whereof,** the parties hereto have caused this Contract to be executed and attested by their respective officers thereunto duly authorized.

CITY OF PALMDALE:

Laura Bettencourt
Signed: 6/22/2023

Laura Bettencourt
Mayor

KS
Signed: 6/6/2023

ADDRESS FOR NOTICE:
CITY OF PALMDALE
827 East Avenue Q-9
Palmdale, CA 93550

HENISEY ELECTRIC:

Signed: 6/6/2023

Kyle Henisey
Owner

ADDRESS FOR NOTICE:
HENISEY ELECTRIC
18333 West Avenue B8
Lancaster, CA 93536

APPROVE AS TO FORM:

William Patrick Curley III
Signed: 6/8/2023

William P. Curley, III
Interim City Attorney

ATTEST:

Roxanne Faber
Signed: 6/23/2023

Roxanne Faber
Acting City Clerk

---------- INTERNAL USE ONLY ----------

■Certificate(s) and Endorsement(s) attached
■Confirmed business name on contract with certificate(s)
■Original contract and previous amendment(s) (if any) are attached
■Attached Agreement Checklist and met all requirements

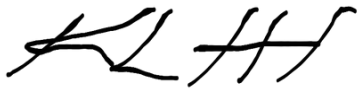
# Record of Signing

For
Name
Title

**Signed on 2023-06-06 19:26:26 GMT**

Secured by Concord™
DocumentID: ODcxNjQxNGEtNz
SigningID: ZmY5Y2JhZDQtMm
Signing date: 6/6/2023
IP Address: 206.171.111.149
Email: ksmith@cityofpalmdale.org

For
Name
Title



**Signed on 2023-06-06 23:19:07 GMT**

Secured by Concord™
DocumentID: ODcxNjQxNGEtNz
SigningID: NGU3MDhiMjQtOG
Signing date: 6/6/2023
IP Address: 199.182.227.127
Email: powerhousekyle@gmail.com

For
Name
Title

**Signed on 2023-06-08 18:09:12 GMT**

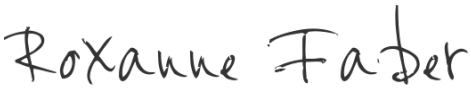
Secured by Concord™
DocumentID: ODcxNjQxNGEtNz
SigningID: MTdjZDc1YTAtOT
Signing date: 6/8/2023
IP Address: 107.131.11.226
Email: wcurley@harperburns.com

For
Name
Title

**Signed on 2023-06-22 22:39:48 GMT**

Secured by Concord™
DocumentID: ODcxNjQxNGEtNz
SigningID: MThkNGZmNzMtNm
Signing date: 6/22/2023
IP Address: 206.171.111.149
Email: lbettencourt@cityofpalmdale.org

For
Name
Title



**Signed on 2023-06-23 18:12:18 GMT**

Secured by Concord™
DocumentID: ODcxNjQxNGEtNz
SigningID: NzlkNTUxZWQtMz
Signing date: 6/23/2023
IP Address: 104.32.99.82
Email: rfaber@cityofpalmdale.org

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Signed with www.concordnow.com

ORIGINAL

**AGREEMENT NO. A-6998**
**CONTRACT FOR SERVICES**
**BETWEEN THE CITY OF PALMDALE AND HENISEY ELECTRIC**

**This CONTRACT for services** ("Contract" herein) is made and entered into this 1 day of July, 2020, by and between the City of Palmdale, a public body corporate and politic, (hereinafter called "CITY"), and Henisey Electric, a corporation in the state of California, (hereinafter called "CONTRACTOR"). The term of this Contract is Three (3) Years, commencing on July 1, 2020, with CITY reserving the option to extend the agreement for 2 additional terms of one year each.

## R E C I T A L S

WHEREAS, CONTRACTOR represents that CONTRACTOR has the expertise and is qualified to perform the services described in this Contract.

NOW THEREFORE, CITY and CONTRACTOR, in consideration of the mutual covenants hereinafter set forth, agree as follows:

## 1 CITY PROJECT MANAGER

To provide the services required by this Contract, CONTRACTOR shall act under the authority and approval of Keri Smith Director/designee, who shall oversee this Contract, the work performed by CONTRACTOR, assist CONTRACTOR with any necessary information, audit billings, and approve payments. The CONTRACTOR shall channel all contacts and requests through the City project manager.

## 2 DESCRIPTION OF WORK

2.1 CONTRACTOR shall provide the following services in a manner satisfactory to CITY:

The Contractor shall furnish all labor, tools, equipment, and all other incidental items required to complete Electrical Services for Special Events assigned in accordance with City requirements & specifications. The Contractor fees shall include any & all taxes,licenses, insurance, labor, equipment fees, fuel, transportation, delivery, set-up and tear-down, and on-site operations. Examples of Electrical Services for Special Events may include but not limited to concerts, festivals, outdoor movies, and rentals.

The electrical services to provide temporary power for special events will require the Contractor to submit a No Charge detailed quote or estimate to the City for each and every Event. Location, Dates, time of events, and required services/equipment are to be determined at a later date. The Contractor shall remove all debris, trash, and unused materials from worksite and leave worksite in a "broom-clean" condition. All work shall be completed in a "workmanlike manner" and in compliance with all building codes, applicable laws and regulations.

General Services Include:
- Contractor is required to make electrical connections to permanent electrical panels. Generated power may be required for any or all events.
- Contractor must be on-site for the duration of the event from load-in to load-out and have the ability to troubleshoot and respond to all electrical issues.
- Contractor must have the knowledge and on-site equipment to respond to and assist City staff with unanticipated event power related issues and emergencies.
o The Contractor on an As-Needed basis may be required to:
- Install permanent electrical equipment or upgrades onsite to improve or enhance event power needs or Patron safety. City approved plans and permits apply.
- Contractor may be required to operate stage-rigging motors and oversee load in and load out of lighting and audio equipment and City owned back line curtain truss as directed by Rigging Contractor.
- Contractor may be required to meet with prospective renters for an on-site pre-event consultation.

2.2 CONTRACTOR shall have no claim for compensation for any services or work, which has not been authorized by CITY's Authorization to Proceed.

2.3 CONTRACTOR shall not accept any change of scope, or change in contract provisions, to this Contract unless issued in writing, as a contract change order or amendment and signed by CITY. Any extensions of time must be mutually agreed upon in writing and executed by both parties.

2.4 CONTRACTOR shall maintain in current status all Federal, State and local licenses and permits required for the operation of the business conducted by the CONTRACTOR as applicable to this contract.

2.5 All work supplied under this Contract shall be fully guaranteed by CONTRACTOR for a minimum period of 60 days from the date of acceptance by CITY. Any defects of design, workmanship, or materials that would result in non-compliance with the Contract specifications shall be fully corrected by CONTRACTOR (including parts and labor) without cost to CITY. The written warranty shall be included with the delivered products to the using Department.

CITY shall provide to CONTRACTOR, without charge, all data, program information, including reports, records, maps and other information, now in CITY's possession, which may facilitate the timely performance of the work.

## 3 CONTRACTOR'S KEY PERSONNEL

3.1 **Key Staff.** CITY reserves the right to review and approve CONTRACTOR'S staff including all subcontractors to be assigned to any project by CONTRACTOR during the term of this Contract.

This Contract has been awarded to CONTRACTOR based partially on the key personnel proposed to perform the services required herein. CONTRACTOR shall not change nor substitute any of these key staff for work on this Contract without prior written approval by CITY.

CONTRACTOR's Team and Key Personnel are as follows:

Kyle Henisey, Owner
Heather Henisey, Senior Management
Shannon Huthchings, Staff

This Services Contract has been awarded to CONTRACTOR based on its representation that those personnel and subcontractors submitted as part of its bid and listed above will perform the portions of the work listed above.

CONTRACTOR shall not deviate nor substitute any of these team members without prior written approval by CITY.

3.2 **Subcontractors.** During the performance of the Agreement, CONTRACTOR may engage such additional SUBCONTRACTORS as may be required for the timely completion of this Agreement. In the event of subcontracting, the sole responsibility for fulfillment of all terms and conditions of this Agreement rests with CONTRACTOR.

CONTRACTOR shall not enter into any Subcontract under this Contract for the performance of this Contract without the advance written approval of CITY. The subcontract shall incorporate by reference the terms and conditions of this Contract.

3.3 **Direct Responsibility.** All services required under this Contract shall be performed by CONTRACTOR, or under CONTRACTOR's direct supervision, and all personnel shall possess the qualifications, permits and licenses required by State and local law to perform such services.

3.3.1 CONTRACTOR shall be solely responsible for the satisfactory work performance of all personnel engaged in performing services required by this Contract, and compliance with all reasonable performance standards established by CITY.

3.3.2 CONTRACTOR shall be responsible for payment of all CONTRACTOR's employees' and subcontractor's wages and benefits, and shall comply with all requirements pertaining to the employer's liability, workers' compensation, unemployment insurance, and Social Security.

3.3.3 CONTRACTOR shall indemnify and hold harmless CITY, and its respective officers, agents and employees from and against all claims, demands, damages or costs arising from CONTRACTOR's acts or omissions with respect to any liability,

damages, claims, costs and expenses of any nature arising from alleged violations of personnel practices.

## 4 ACCEPTANCE AND DOCUMENTATION

Each task shall be reviewed and approved by the Contract Project Manager to determine acceptable completion.

4.1 **Records**. The CONTRACTOR shall retain and shall contractually require each SUBCONTRACTOR to retain all data and other "records" relating to the acquisition and performance of the Contract for a period of five years after the completion of the Contract.

4.2 **Property of CITY.** All materials, including reports, computer programs and other deliverables, supplied or created under this Contract are the sole property of CITY. CONTRACTOR is not entitled to a patent or copyright on those materials and may not transfer the patent or copyright to anyone else. CONTRACTOR shall not use or release these materials without the prior written consent of CITY.

4.3 **Current Products.** All equipment, materials, parts and other components incorporated in the work or services performed pursuant to this Contract shall be new, or the latest model and of the most suitable grade for the purpose intended. All work shall be performed in a skilled and workmanlike manner.

## 5 PRICE

CITY shall pay to CONTRACTOR an amount not to exceed Two Hundred and Forty Thousand Dollars ($240,000.00) for the completion of all the work and services described in Section 1, which sum shall include all costs or expenses incurred by CONTRACTOR, payable as follows:

[continued on next page]

| Labor Rates | | | | |
|---|---|---|---|---|
| **CLASSIFICATION (per DIR Wage Determinations). Please specify the Journeyman and Applicable Apprentice rate for each Classification. (Please specify the rate for each by Standard, Overtime and Holiday). Please specify:** | **Unit of Measure (UOM)** | **Year 1 (July 1, 2020 -June 30, 2021** | **Year 2 (July 1, 2021 -June 30, 2022** | **Year 3 (July 1, 2022 - June 30, 2023** |
| Labor Standard Rate: Journey Level Electrician | Per Hour | $122.00 | $128.00 | $134.00 |
| Labor Overtime Rate: Journey Level Electrician | Per Hour | $183.00 | $192.00 | $201.00 |
| Labor Holiday Rate: Journey Level Electrician | Per Hour | $212.00 | $222.00 | $233.00 |
| Labor Standard Rate: Apprentice Electrician | Per Hour | $52.00 | $54.00 | $57.00 |
| Labor Overtime Rate: Apprentice Electrician | Per Hour | $78.00 | $82.00 | $86.00 |
| Labor Holiday Rate: Apprentice Electrician | Per Hour | $104.00 | $104.00 | $104.00 |
| | Per Hour | $ | $ | $ |
| | Per Hour | $ | $ | $ |
| | Per Hour | $ | $ | $ |

| Equipment Rental Rates | | | | | | | |
|---|---|---|---|---|---|---|---|
| ***Unit of Measure (Estimated time per event is 12 hours)** | | | | | | | |
| **Item No.** | **Description** | **Please identify if equipment is (Owned or Rented)** | **(Please describe equipment's Make and Model)** | **Unit of Measure** | **Year 1 (July 1, 2020 -June 30, 2021** | **Year 2 (July 1, 2021 - June 30, 2022** | **Year 3 (July 1, 2022 - June 30, 2023** |
| 1 | 1400 Amp Studio Quiet Generator (210 KVA) | Owned | Multiquip ES1400 | *Per Event/12HR | $930.00 | $930.00 | $930.00 |
| 2 | 3 phase cam lock | Owned | Lex Products | *Per Event/12HR | $15.00 | $15.00 | $15.00 |
| 3 | Cable and adaptors for shore power, per foot | Owned | Hubbell | *Per Event/12HR | $4.50 | $4.50 | $4.50 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 4 | Cable crossovers | Owned | Bumble Bee | *Per Event/12HR | $12.00 | $12.00 | $12.00 |
| 5 | Cam Lock tie in box | Owned | Lex Products | *Per Event/12HR | $65.00 | $65.00 | $65.00 |
| 6 | 3 phase Distribution panel/box | Owned | Square D / Custom | *Per Event/12HR | $75.00 | $75.00 | $75.00 |
| 7 | Multi-circuit stringer | Owned | Lex Products | *Per Event/12HR | $40.00 | $40.00 | $40.00 |
| 8 | Power feed cables, per foot | Owned | Camlock | *Per Event/12HR | $4.50 | $4.50 | $4.50 |
| 9 | Quad box | Owned | Leviton | *Per Event/12HR | $10.00 | $10.00 | $10.00 |
| 10 | Stage light trees, various colored gels | Owned | Altman W/ 4x275W pars | *Per Event/12HR | $52.00 | $52.00 | $52.00 |
| 11 | Tower tie in box cam lock to lighting company distro | Owned | 4/0 Camlock | *Per Event/12HR | $45.00 | $45.00 | $45.00 |
| 12 | Clamp lights | Owned | Various | *Per Event/12HR | $2.00 | $2.00 | $2.00 |
| 13 | Self-contained portable light towers including fuel and all associated costs | Owned | MQ Power | *Per Event/12HR | $170.00 | $170.00 | $170.00 |
| 14 | Hot/Cold triple basin portable sink units (Los Angeles County Health Department Approved) | Owned | Triple Basin | *Per Event/12HR | $430.00 | $430.00 | $430.00 |
| 15 | 36" Porta-Cool Unit | Owned | Porta-Cool | *Per Event/12HR | $130.00 | $130.00 | $130.00 |
| 16 | Projection System W/7000 Lumen Min. | Owned | | *Per Event/12HR | $750.00 | $750.00 | $750.00 |
| 17 | Ground Stacked Audio System W/200ft Distance Min. | Owned | JBL 4x725 2x728 W/O microphones and mixing console | *Per Event/12HR | $1,400.00 | $1,400.00 | $1,400.00 |
| 18 | Digital DVD Player | Owned | Various | *Per Event/12HR | $0.00 | $0.00 | $0.00 |

5.1 An application for payment form must be submitted to CITY which shall include the following: a clear, detailed invoice reflecting work being billed for, a summary sheet showing percentage of work completed to date, amount/percent billed to date and current status of all tasks within a project; any/all backup documentation supporting the above items. Work schedule updates must also be included with the payment requests.

5.2 CONTRACTOR shall maintain adequate records and shall permit inspection and audit by CITY of CONTRACTOR's charges under this Contract. CONTRACTOR shall make such records available to CITY during normal business hours upon reasonable notice. Nothing herein shall convert such records into public records, and they will be available only to CITY and any specified public agencies. Such records shall be maintained by CONTRACTOR for one (1) year following completion of the work under this Contract unless a longer period of time is required by state or federal law, in which event CONTRACTOR shall retain its records for the time required by such laws.

5.3 **Payment.** A separate invoice shall be issued for each shipment of material or service performed, and no payment will be issued prior to receipt of material and/or completion of specified services and receipt of a correct invoice.

## 6 COMMENCEMENT AND COMPLETION OF WORK

6.1 The execution of this Contract by the parties does not constitute an authorization to proceed. The services of CONTRACTOR shall commence when CITY, acting by and through its Project Manager, has issued an Authorization to Proceed. CONTRACTOR shall complete all the work described in Section 1 and be ready for final acceptance of the work within Thirty (30) Calendar days following CONTRACTOR's receipt of Authorization to Proceed.

6.2 Time is of the essence. All of the time limits for Milestones, if any, and for completion of the work, are of the essence of this Contract.

6.3 Failure of CONTRACTOR to perform any covenant or condition contained herein within the time periods specified therein shall constitute a material breach of this Contract, entitling CITY to terminate this Contract, unless CONTRACTOR applies for and receives an extension of time in accordance with the procedures set forth herein.

## 7 TAXES

7.1 CONTRACTOR shall pay all sales, consumer, use, and other similar taxes required to be paid by CONTRACTOR in accordance with state and local laws.

7.2 CONTRACTOR is an independent contractor and shall have no power or authority to incur any debt, obligation or liability on behalf of CITY. No person

employed by CONTRACTOR or acting on its behalf, in connection with this Contract shall be considered the Agent or employee of CITY.

7.3 CONTRACTOR shall be required to obtain a current City of Palmdale business license, as required by the Palmdale Municipal Code, before an Authorization to Proceed is issued.

7.4 When equipment, materials or supplies generally taxable to CONTRACTOR are eligible for a tax exemption due to the nature of the work, CONTRACTOR shall assist the City in applying for and obtaining such tax credits and exemptions, which shall be paid or credited to the City.

## 8 PATENT FEES AND ROYALTIES

CONTRACTOR shall pay all license fees and royalties and assume all costs incident to the use, in the performance of the work or the incorporation in the work of any invention, design, process, program, product or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, program, product or device is specified in the contract documents for use in the performance of the work and if, to the actual knowledge of CITY, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by CITY in the contract documents. CONTRACTOR shall indemnify and hold harmless CITY and anyone directly or indirectly employed by CITY from and against all claims, damages, losses and expenses (including attorneys' fees) arising out of any infringement of patent rights or copyrights incident to the use in the performance of the work, or resulting from the incorporation in the work of any invention, design, process, program, product or device not specified in the contract documents, and shall defend all such claims in connection with any alleged infringement of such rights.

## 9 INDEMNIFICATION

To the fullest extent permitted by law, CONTRACTOR and any subcontractors working on its behalf agree to indemnify CITY, its officers, employees, agents and elected and appointed boards (hereinafter "Indemnified Parties") for any loss, claim, demand, cause of action, cost, expense, damage, obligation or liability which arises out of or is in any way connected with the performance of any work under this agreement, including any acts or omissions, willful misconduct or negligent conduct, whether active or passive, on the part of CONTRACTOR, or its subcontractors, and regardless of any acts, omissions or negligence (whether active or passive) of any person or entity indemnified hereunder. At their own expense, CONTRACTOR and, as applicable, any subcontractors working on its behalf, shall defend any suit, claim or action against the Indemnified Parties founded upon such loss, claim, demand, cause of action, cost, expense, damage, obligation or liability. CONTRACTOR shall ensure that the contract of any subcontractor working under this agreement contain an indemnity agreement, requiring the subcontractor to indemnify and defend the

Indemnified Parties pursuant the terms set forth above. CONTRACTOR shall indemnify the Indemnified Parties, and save it harmless from any and all loss, damage, costs, expenses and attorney's fees suffered or incurred on account of any breach of the aforesaid obligations and covenants, and any other provision or covenant of this agreement.

## 10 INSURANCE

10.1 CONTRACTOR, at its expense, shall maintain in effect at all times during the performance of work under this Contract not less than the following coverage and limits of insurance, which shall be maintained with insurers listed "A" or better in the Best's Insurance Guide and authorized to do business in the State of California. **Proof of Insurance, as identified in Section 10.8, must be reviewed and accepted by the City Attorney**.

10.1.1 Workers' Compensation and Employer's Liability
-Workers' Compensation—coverage as required by the State of California
-Employer's Liability --$1,000,000.00 each accident
--$1,000,000.00 policy limit bodily injury
--$1,000,000.00 each employee bodily injury by disease

10.1.2 Commercial General Liability
-$2,000,000.00 limit on a per occurrence basis
-$5,000,000.00 general aggregate limit

10.1.3 Commercial Automobile Liability
-$2,000,000.00 combined single limit including owned, non-owned and hired automobile coverage

10.2 All of CONTRACTOR's policies shall contain an endorsement providing that written notice shall be given to CITY at least thirty (30) calendar days prior to termination, cancellation or reduction of coverage in the policy.

10.3 Policies providing for bodily injury and property damage coverage shall contain the following:

A. An endorsement extending coverage to the City as an additional insured, as respects liability arising out of the performance of any work under the Contract. Such insurance shall be primary insurance, as respects the interest of the City, and any other insurance maintained by the City shall be considered excess coverage and not contributing insurance with the insurance required hereunder. The certificates shall state: "The City of Palmdale, Successor Agency to the Community Redevelopment Agency of the City of Palmdale, Palmdale Civic Authority, Housing Authority, Industrial Development Authority, Airport Authority, their officers, agents, employees and volunteers are named as additional insured".

B. "Severability of Interest" Clause.

10.4 Promptly upon execution of this Contract, and prior to commencement of any work, CONTRACTOR shall deliver to CITY certificates of insurance and endorsements to all required policies demonstrating that CONTRACTOR has the required coverage and showing the required named insured. Within five (5) days of written request from CITY, CONTRACTOR shall deliver to CITY full and complete copies of all insurance policies required by this Contract.

10.5 The requirements as to the types and limits of insurance to be maintained by CONTRACTOR are not intended to and shall not in any manner limit or qualify CONTRACTOR's liabilities and obligations under this Contract.

10.6 Any policy or policies of insurance that CONTRACTOR elects to carry as insurance against loss or damage to its equipment and tools or other personal property used in the performance of this Contract shall include a provision waiving the insurer's right of subrogation against CITY.

10.7 All insurance coverage must be maintained throughout the duration of this Contract.

10.8 Acceptable Proof of Insurance:

10.8.1 ACORD Certificate of Insurance listing all coverage, limits, deductibles and insured; and endorsements for all applicable coverage if agent has authority to issue it; or additional insured Form CG20100704 and CG20370704 or equivalent must be provided for general liability coverage. Additional insured form CA0001 must be provided for automobile liability coverage.

10.8.2 Binders of insurance for all coverage. Agents must confirm that policy endorsements have been ordered from the respective insurance companies. Upon issuance, policy endorsements and a corresponding Certificate of Insurance listing all insurers and coverage must be submitted to the City Attorney.

10.9 Notwithstanding any other provision of this Contract, CITY may immediately terminate this Contract if, at any time CONTRACTOR fails to maintain the required insurance for any period of time or fails to comply with any of the insurance requirements listed above.

## 11 TERMINATION WITHOUT CAUSE

City reserves the right to terminate this Contract or any part thereof for its sole convenience with fifteen (15) days written notice. In the event of such termination, CONTRACTOR shall immediately stop all work hereunder, and shall immediately cause any of its suppliers and subcontractors to cease such work. CONTRACTOR shall also surrender to CITY all finished or unfinished documents, processes, programs and other supplies and materials, which shall be City's property. As compensation in full for services performed to the date of such termination, the CONTRACTOR shall receive an amount equal to the value of the work completed as

of the termination date in accordance with the fee schedule or as negotiated between the parties. In no event shall the amount payable upon termination exceed the total maximum compensation provided for in this Contract.

## 12 TERMINATION FOR CAUSE

If CITY determines that CONTRACTOR has failed to supply an adequate working force, or to provide services of proper quality, or has failed in any other respect to satisfactorily perform the services specified in this Contract, CITY shall give written notice to CONTRACTOR specifying all defaults to be remedied within thirty - (30) days. Such notice shall set forth the basis for CITY's dissatisfaction and suggest corrective measures. If, after thirty days, CONTRACTOR has failed to implement appropriate corrective measures, CITY may elect to terminate this Contract in whole or in part.

12.1 In the event CITY terminates this Contract, in whole or in part, for cause, CITY may procure, upon such terms and in such manner, as it may deem appropriate, services similar to those terminated.

12.2 CONTRACTOR shall provide all finished or unfinished documents, data, studies, software, drawings, programs, processes, maps, photographs, reports, etc., prepared by CONTRACTOR within fifteen (15) working days after notice of termination. Upon such termination, CONTRACTOR shall be paid an amount equal to the value of the services provided and work performed as of the date of termination, taking into consideration the costs associated with hiring another CONTRACTOR to complete the services. In ascertaining the value of the work performed up to the date of termination, consideration shall be given to both completed work and work in progress, to complete and incomplete documents when such are delivered to CITY, and to authorized reimbursement expenses. The above is in addition to any other remedies available by law or equity to CITY.

12.3 If, after notice of termination of the Contract under the provisions of this Section 12, it is determined, for any reason, that CONTRACTOR was not in default, or that the default was excusable, then the rights and obligations of the parties shall be the same as if the notice of termination had been issued pursuant to Section 11.

## 13 DISPUTE RESOLUTION

All claims, disputes and other matters in question between CITY and CONTRACTOR arising out of, or relating to this Contract or the breach thereof shall, to the extent reasonably feasible, be resolved through good faith negotiations between the parties.

## 14 OWNERSHIP OF PRODUCT

All product, data, documents, programs and software including, but not limited to, research, field notes, investigations, analysis, studies, processes, software, instructions for use and other manuals, whether complete or incomplete, which are

prepared or produced in the performance of this Contract are to be, and remain the property of CITY and shall be delivered to or left with CITY upon the completion or termination of this Agreement. CONTRACTOR shall furnish CITY, upon its request, originals and reproducible and electronic copies of product, data reports, studies and of all other documents listed above. Electronic copies shall be provided in an unprotected format which allows CITY to copy, reproduce and makes changes as CITY deems necessary.

## 15 DELEGATION AND ASSIGNMENT

15.1 CONTRACTOR shall not delegate or assign its duties or rights hereunder, either in whole or in part, without the prior written consent of CITY; provided, however, that claims for money due or to become due to CONTRACTOR from CITY under this Contract may be assigned to a bank, trust company or other financial institution without such approval.

15.2 Any assignment, delegation or subcontract shall be made in the name of CONTRACTOR and shall not bind or purport to bind CITY and shall not release CONTRACTOR from any obligations under this Contract including, but not limited to, the duty to properly supervise and coordinate the work of employees, assignees, delegates and subcontractors. No such assignment, delegation or subcontract shall result in any increase in the amount of total compensation payable to CONTRACTOR under this Contract.

## 16 NON-DISCRIMINATION AND EQUAL EMPLOYMENT OPPORTUNITY

16.1 In performance of this Contract, CONTRACTOR shall not discriminate against any employee, subcontractor or applicant for employment because of sex, color, race, religion, ancestry, national origin, disability, medical condition, marital status, sexual orientation or age. CONTRACTOR will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their sex, color, race, religion, ancestry, national origin, disability, medical condition, marital status, sexual orientation or age. Affirmative action relating to employment shall include, but not be limited to the following: employment, upgrading, demotion or transfer; recruitment; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

16.2 The provisions of subsection 16.1 above shall be included in all solicitations or advertisements placed by or on behalf of CONTRACTOR for personnel to perform any services under this Contract. CITY shall have access to all documents, data and records of CONTRACTOR and its subcontractors for purposes of determining compliance with the equal employment opportunity and non-discrimination provisions of this Section, and all applicable provisions of Executive Order No. 11246 which is incorporated herein by this reference. A copy of Executive Order No. 11246 is available for inspection at, and on file with, the Palmdale City Clerk's Office.

## 17 FINANCIAL INTEREST CERTIFICATION

17.1 CONTRACTOR warrants that no person has been employed or retained to solicit or secure this Contract upon an agreement or understanding for a commission, percentage, brokerage or contingent fee; and that no officer or employee of the CITY has any interest, financially or otherwise, in CONTRACTOR's firm.

17.2 For breach or violation of this warranty, CITY shall have the right to annul this Contract without liability or at its discretion to deduct from the Contract Price or consideration, the full amount of such commission, percentage, brokerage or contingent fee.

## 18 CONFLICT OF INTEREST

18.1 CONTRACTOR stipulates that its officers and employees do not now have a conflict of interest and it further agrees for itself, its officers and its employees that it will not contract for or accept employment for the performance of any work or services with any individual business, corporation or government unit that would create a conflict of interest in the performance of its obligations pursuant to this Contract or which would cause CONTRACTOR to be "financial interested" (as provided in California Government Code Section 1090 et seq. or 87100 et seq.) in any contract or decision made by CITY on any matter.

18.2 CONTRACTOR shall not employ any City official or employee to perform any work required pursuant to this Contract.

18.3 To the extent required by the City Manager or his designee, CONTRACTOR shall complete and file with the City Clerk a Form 700 Statement of Economic Interests disclosing any reportable property interests, income, gifts, investments or business positions.

## 19 COMPLIANCE WITH LAW

19.1 CONTRACTOR shall comply with all state and federal laws, including but not limited to, the requirement to hire only those persons authorized by federal law to work in the United States. If CONTRACTOR uses any subcontractors to complete this Contract, this same requirement shall be included in all subcontracts and strictly enforced by CONTRACTOR.

19.2 The law of the state of California shall govern this Contract. The venue of any legal action, either formal or informal, shall be the County of Los Angeles.

## 20 NOTICES

Any notice required under this Contract shall be in writing, addressed to the appropriate party at its address on the signature page and given personally or by registered or certified mail postage prepaid, or by a commercial courier service. All notices shall be effective upon the date of receipt.

## 21 ENTIRE AGREEMENT AND AMENDMENTS

21.1 This Contract is the complete Agreement between the parties and supersedes all prior proposals, agreements, and understandings between the parties and may not be modified or terminated orally.

21.2 No attempted waiver of any of the provisions hereof, nor any modification in the nature, extent or duration of the work to be performed by CONTRACTOR hereunder, shall be binding unless in writing and signed by the party against whom the same is sought to be enforced.

21.3 The failure of any party to enforce against another party any provision of this Contract shall not constitute a waiver of that party's right to enforce such a provision at a later time, and shall not serve to vary the terms of this Contract.

## 22 ATTORNEY'S FEES

If any action at law or in equity is brought to enforce or interpret any provisions of this Contract, the prevailing party in such action shall be entitled to reasonable attorney's fees, costs and necessary disbursements, in addition to such other relief as may be sought and awarded.

**In Witness Whereof,** the parties hereto have caused this Contract to be executed and attested by their respective officers thereunto duly authorized.

CITY:
CITY OF PALMDALE

6/5/20

Steven D. Hofbauer Date
Mayor

CONTRACTOR:
HENISEY ELECTRIC

5/27/20

Kyle Henisey Date
Owner

ADDRESS FOR NOTICE:
CITY OF PALMDALE
38260 10th Street East
Palmdale, Ca 93550

ADDRESS FOR NOTICE:
Henisey Electric
18333 West Avenue B8
Lancaster, Ca 93536

APPROVE AS TO FORM:

Wm. Matthew Ditzhazy
City Attorney

ATTEST:

Rebecca J. Smith
City Clerk

ATTEST: If Corporation

Secretary

# City Council Staff Report

**DATE:** **MAY 15, 2024**

**TO:** **HONORABLE MAYOR AND CITY COUNCIL**

**FROM:** **PUBLIC WORKS DEPARTMENT**
**MAINTENANCE DIVISION**

**DISTRICT:** **ALL**

**SUBJECT:** **APPROVE THE SECOND AMENDMENT TO THE AGREEMENT WITH RICH MEIER'S LANDSCAPING, INC. FOR PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES, INCREASING THE AGREEMENT BY $588,000 FOR A TOTAL NOT TO EXCEED AMOUNT OF $14,061,877 AND EXTENDING THE CONTRACT TERM BY THREE MONTHS TO SEPTEMBER 30, 2024**

## RECOMMENDATION

Staff recommends that the City Council:

1. Approve the Second Amendment to Agreement No. A-6563 with Rich Meier's Landscaping, Inc. for Professional Landscape Maintenance Services, increasing the Agreement by $588,000 for a total not to exceed amount of $14,061,877 and extending the contract term by three months to September 30, 2024; and,

2. Authorize the City Manager or her designee to execute the Second Amendment to Agreement No. A-6563 with Rich Meier's Landscaping, Inc., including minimal and/or non-substantial changes.

## BACKGROUND

In April 2019, the City Council awarded and approved Agreement No. A-6563 with Rich Meier's Landscaping for professional landscape maintenance services at City Parks and Facility Grounds, Joe Davies Heritage Air Park, Palmdale Transportation Center, Park and Rides, General Benefit Landscapes, and Fairway Business Park. The Agreement amount was $12,248,980 for a five-year contract, expiring June 30, 2024.

During the first four years, the contractor performed additional service work than initially projected. A first amendment to the Agreement was approved, increasing the contract amount to cover all services needed throughout the contract term. The extra services included landscape and irrigation improvements on capital projects, sports field

renovations, park, and City facility grounds beautification projects, increased pressure washing, and further applications of soil conditioners, moisture managers, and fertilizer.

On January 23, 2024, the City Manager approved the First Amendment to the Agreement increasing the contract by $1,224,897.81 for a total amount of $13,473,877. The amendment represented an increase of 10% to the original contract amount.

On April 23, 2024, the City released Request for Proposal (RFP) No. 24-001-3500 to solicit bids for a new five-year landscape maintenance services contract in Parks, City Facility Grounds, and Transit Sites (Palmdale Transportation Center and Park and Rides). The solicitation will close on June 6, 2024.

A second amendment to Agreement No. A-6563 with Rich Meier's is required to allow staff adequate time to evaluate the RFP responses thoroughly, conduct interviews with the top bidders if necessary, and prepare the resulting contract.

## DISCUSSION

Extending the term for Agreement No. A-6563 with Rich Meier's Landscaping by three months, until September 30, 2024, will ensure the City continues receiving recurring (weekly/biweekly) and additional landscape maintenance services at Parks and Facility Grounds, Palmdale Transportation Center, and Park and Rides while the RFP process is conducted and a new agreement is executed.

These maintenance services include, but are not limited to, the following:

- Morning opening operations, including daily safety inspections;
- Daily reporting of observed issues;
- Turf mowing, edging, detailing, de-thatching, aeration, over-seeding, and top dressing;
- Pruning and rejuvenation of shrubs and ground cover plants;
- Irrigation maintenance, including repairing irrigation mainlines, valves, lateral lines, and sprinklers;
- Litter control, including disposal of trash and debris at City disposal sites;
- Broadleaf weed control in planters, trails, hardscapes, and adjacent right-of-way up to the edge of pavement;
- Fertilization of turf, shrubs, ground cover, and trees;
- Hardscape cleaning, pressure washing, and sanitizing;
- Limited tree maintenance, including pruning, staking, tying, and guying of trees;
- Drainage maintenance of associated flowlines, channels, gutters, and drains; and,
- Disaster/emergency response support.

With this three-month term extension, the contract price will increase by $588,000, for a revised total amount of $14,061,877. This amendment represents a 4.36% increase to the contract amount with an aggregate change of 14.8%. Since the second amendment's cumulative increase exceeds 10% of the original contract price, it requires City Council approval, per Palmdale Municipal Code 03.08.240(C).

## FISCAL IMPACT

$588,000; Sufficient funds for these maintenance services will be budgeted in the following accounts for Fiscal Year 2024-2025: 10133002-723410 (Park Maintenance), 20333005-723410-3410 (Palmdale Transportation Center), and 20333005-723410-3411 (Park and Rides). The term extension is effective July 1, 2024, through September 30, 2024. The current fiscal year has sufficient funds budgeted in applicable accounts under the original contract term.

## STRATEGIC PLAN

Goal III: Invest in infrastructure to improve community livability.

C. Plan and maintain safe and attractive neighborhoods, streets, facilities, and public spaces with exciting programming that promotes active fun for everyone.

| | |
|---|---|
| Prepared by: | Lynn Glidden, P.E., Director of Public Works |
| Certified as to availability of Funds: | Janelle Samson, Director of Operations |
| Approved by: | Ronda Perez, City Manager |
| Approved as to form: | William P. Curley, III, City Attorney |

## ATTACHMENTS

Agrmt No. A-6563 Second Amendment with Rich Meier's Landscaping, Inc.
Agrmt No. A-6563 First Amendment with Rich Meier's Landscaping, Inc.
Agrmt No. A-6563 with Rich Meier's Landscaping, Inc.

**SECOND AMENDMENT TO AGREEMENT A-6563**
**BETWEEN THE CITY OF PALMDALE AND RICH MEIER'S LANDSCAPING, INC.**

This Second Amendment to Agreement No. A-6563 (“Agreement”) is made and entered into by and between the City of Palmdale (hereinafter called “CITY”) and RICH MEIER'S LANDSCAPING, INC. (hereinafter called "CONTRACTOR"). This Contract shall become effective on the date of the last signatory.

WHEREAS, on April 2, 2019 ("Original Agreement") the CITY and CONTRACTOR entered into an agreement to provide:

Professional landscape maintenance services in City parks and facility grounds, Palmdale Transportation Center, Park and Rides, General Benefit landscape areas, and Fairway Business Park.

WHEREAS, on January 23, 2024 ("First Amendment") the CITY and CONTRACTOR entered into an amendment to increase the Original Agreement Price.

WHEREAS, the parties desire to amend the Original Agreement to:

Extend the Contract Term and increase the Contract Price so that CONTRACTOR can continue providing monthly and additional landscape maintenance services at CITY parks and facility grounds, Palmdale Transportation Center, and Park and Rides.

NOW THEREFORE, the parties agree as follows:

1. The CITY shall extend the Contract Term identified in Section 6 of the Original Agreement an additional three (3) months for continued landscape services in parks and facility grounds, Palmdale Transportation Center, and Park and Rides, expiring September 30, 2024. CONTRACTOR shall cease services in General Benefit landscape areas and Fairway Business Park effective July 1, 2024. Services are contingent on City Council's FY 2024-25 Budget approval.

2. The compensation identified in Section 5 is amended to increase the total price of the Agreement by Five Hundred Eighty-Eight Thousand dollars ($588,000.00), not to exceed the amount of Fourteen Million Sixty-One Thousand Eight Hundred Seventy-Seven dollars ($14,061,877.00).

All other terms and conditions of the Original Agreement not amended herein, remain in full force and effect.

**In Witness Whereof,** the parties hereto have caused this Contract to be executed and attested by their respective officers thereunto duly authorized.

CITY OF PALMDALE:

SIGNATURE AREA

Ronda Perez
City Manager

SIGNATURE AREA

ADDRESS FOR NOTICE:
CITY OF PALMDALE
39110 3rd Street East, Suite C
Palmdale, CA 93550

APPROVE AS TO FORM:

SIGNATURE AREA

William P. Curley, III
City Attorney

ATTEST:

SIGNATURE AREA

Roxanne Faber
City Clerk

RICH MEIER'S LANDSCAPING, INC.:

SIGNATURE AREA

Richard Meier
President

ADDRESS FOR NOTICE:
RICH MEIER'S LANDSCAPING, INC.
P.O. Box 1784
Lancaster, CA 93539

---------- INTERNAL USE ONLY ----------

■Certificate(s) and Endorsement(s) attached
■Confirmed business name on contract with certificate(s)
■Original contract and previous amendment(s) (if any) are attached
■Attached Agreement Checklist and met all requirements

**FIRST AMENDMENT TO AGREEMENT A-6563**
**BETWEEN THE CITY OF PALMDALE AND RICH MEIER'S LANDSCAPING, INC.**

This First Amendment to Agreement No. A-6563 (“Agreement”) is made and entered into by and between the City of Palmdale (hereinafter called “CITY”) and RICH MEIER'S LANDSCAPING, INC. (hereinafter called "CONTRACTOR"). This Contract shall become effective on the date of the last signatory.

WHEREAS, on April 2, 2019 ("Original Agreement") the CITY and CONTRACTOR entered into an agreement to provide:

Professional landscape maintenance services in City parks and facility grounds, Palmdale Transportation Center, Park-n-Rides, General Benefit landscape areas, and Fairway Business Park.

WHEREAS, the parties desire to amend the Original Agreement to:

Increase Agreement price to cover monthly landscape services as well as additional landscape work and specialized projects for FY 2024.

NOW THEREFORE, the parties agree as follows:

1. The compensation identified in Section 5 is amended to increase the total price of the Agreement by One Million Two Hundred Twenty-Four Thousand Eight Hundred Ninety Seven dollars and Eighty-One cents ($1,224,897.81), not to exceed the amount of Thirteen Million Four Hundred Seventy-Three Thousand Eight Hundred Seventy-Seven dollars ($13,473,877).

All other terms and conditions of the Original Agreement not amended herein, remain in full force and effect.

**In Witness Whereof,** the parties hereto have caused this Contract to be executed and attested by their respective officers thereunto duly authorized.

CITY OF PALMDALE:

Ronda Perez
Signed: 1/23/2024

Ronda Perez
City Manager

LG
Signed: 1/9/2024

ADDRESS FOR NOTICE:
CITY OF PALMDALE
39110 3rd Street East, Suite C
Palmdale, CA 93550

RICH MEIER'S LANDSCAPING, INC.:

Rich Meier
Signed: 1/16/2024

Richard Meier
President

ADDRESS FOR NOTICE:
RICH MEIER'S LANDSCAPING, INC.
P.O. Box 1784
Lancaster, CA 93539

APPROVE AS TO FORM:

William Patrick Curley III
Signed: 1/22/2024

William P. Curley, III
City Attorney

ATTEST:

Roxanne Faber
Signed: 1/23/2024

Roxanne Faber
Acting City Clerk

---------- INTERNAL USE ONLY ----------

■Certificate(s) and Endorsement(s) attached
■Confirmed business name on contract with certificate(s)
■Original contract and previous amendment(s) (if any) are attached
■Attached Agreement Checklist and met all requirements

# Record of Signing

For
Name
Title

**Signed on 2024-01-09 15:58:15 GMT**

Secured by Concord™
DocumentID: YmZmODc4NmQtNW
SigningID: ZTBkZTY4MjItOW
Signing date: 1/9/2024
IP Address: 206.171.111.149
Email: lglidden@cityofpalmdale.org

For
Name
Title

**Signed on 2024-01-16 15:59:31 GMT**

Secured by Concord™
DocumentID: YmZmODc4NmQtNW
SigningID: MmU5MWJkMTctYj
Signing date: 1/16/2024
IP Address: 47.136.139.189
Email: rmlandscaping@verizon.net

For
Name
Title

**Signed on 2024-01-22 22:25:16 GMT**

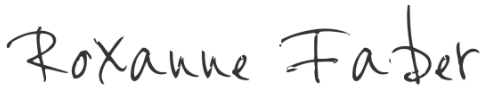
Secured by Concord™
DocumentID: YmZmODc4NmQtNW
SigningID: N2Q0NzFjZmUtMj
Signing date: 1/22/2024
IP Address: 107.131.11.226
Email: wcurley@harperburns.com

For
Name
Title

**Signed on 2024-01-23 04:43:05 GMT**

Secured by Concord™
DocumentID: YmZmODc4NmQtNW
SigningID: MGQ4NGVmZDEtZT
Signing date: 1/23/2024
IP Address: 47.153.243.248
Email: rperez@cityofpalmdale.org

For
Name
Title



**Signed on 2024-01-23 20:57:55 GMT**

Secured by Concord™
DocumentID: YmZmODc4NmQtNW
SigningID: MWE3NjM1ZTQtZT
Signing date: 1/23/2024
IP Address: 206.171.111.149
Email: rfaber@cityofpalmdale.org

concord
Where agreements happen.

Signed with www.concordnow.com

# AGREEMENT NO. A-6563

## CONTRACT FOR PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES BETWEEN THE CITY OF PALMDALE AND RICH MEIER'S LANDSCAPE, INC.

**THIS CONTRACT FOR PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES** ("Contract" herein) is made and entered into this 2nd day of April 2019, by and between the City of Palmdale, a public body corporate and politic, (hereinafter called "CITY"), and RICH MEIER'S LANDSCAPING, INC., a California Corporation, (hereinafter called "CONTRACTOR").

RECITALS

WHEREAS, CONTRACTOR represents that CONTRACTOR has the expertise and is qualified to perform the services described in this Contract.

NOW THEREFORE, CITY and CONTRACTOR, in consideration of the mutual covenants hereinafter set forth, agree as follows:

## 1 CITY PROJECT MANAGER

To provide the services required by this Contract, CONTRACTOR shall act under the authority and approval of the Public Works Director/designee, who shall oversee this Contract, the services performed by the CONTRACTOR, assist CONTRACTOR with any necessary information, audit billings, and approve payments. The CONTRACTOR shall channel all contacts and requests through the City project manager.

## 2 DESCRIPTION OF SERVICES

2.1 CONTRACTOR shall provide Professional Landscape Maintenance Services as more specifically set forth in the Technical Provisions, labeled **Exhibit A - Scope of Work**, attached hereto and made a part hereof by reference and as set forth in the specifications and details included therein. CONTRACTOR shall perform and complete all such services in a manner satisfactory to CITY.

2.2 CONTRACTOR shall have no claim for compensation for any services, which has not been authorized by CITY's Authorization to Proceed.

2.3 CONTRACTOR shall not accept any change of scope, or change in contract provisions, to this contract unless issued in writing, as a contract provisions, to this Contract unless issued in writing, as a contract change order or amendment and signed by CITY. Any extensions of time must be mutually agreed upon in writing and executed by both parties.

2.4 CONTRACTOR shall maintain in current status all Federal, State and local licenses and permits required for the operation of the business conducted by the CONTRACTOR as applicable to this contract.

2.5 All services supplied under this Contract shall be fully guaranteed by CONTRACTOR for the duration of the Contract. Any defects of design, workmanship, or materials that would result in non-compliance with the Contract specifications shall be fully corrected by CONTRACTOR (including parts and labor) without cost to CITY. The written warranty shall be included with the delivered products to the using Department.

2.6 CITY shall provide to CONTRACTOR, without charge, all data, program information, including reports, records, maps and other information, now in CITY's possession, which may facilitate the timely performance of the services.

2.7 **Subcontractors.** CONTRACTOR shall not enter into any subcontract under this Contract for the performance of this Contract without advance written approval of CITY. The subcontract shall incorporate by reference the terms and conditions of this Contract.

2.8 **Direct Responsibility.** All services required under this Contract shall be performed by CONTRACTOR, or under CONTRACTOR'S direct supervision, and all personnel shall possess the qualifications, permits and licenses required by State and local law to perform such services.

2.8.1 CONTRACTOR shall be solely responsible for the satisfactory work performance of all personnel engaged in performing services required by this Contract, and compliance with all reasonable performance standards established by CITY.

2.8.2 CONTRACTOR shall be responsible for payment of all CONTRACTOR's employees' and Subcontractor's wages and benefits, and shall comply with all requirements pertaining to the employer's liability, workers' compensation, unemployment insurance, and Social Security.

2.8.3 CONTRACTOR shall indemnify and hold harmless CITY, and its respective officers, agents and employees from and against all claims, demands, damages or costs arising from CONTRACTOR's acts or omissions with respect to any liability, damages, claims, costs and expenses of any nature arising from alleged violations of personnel practices.

## 3 CONTRACTOR'S PERSONNEL

This Contract has been awarded to CONTRACTOR based on the value to the CITY; this value is partially based on the qualifications of the CONTRACTOR'S Key Personnel, including any subcontractors that are set forth in **Exhibit C – Key Personnel** which is attached hereto and incorporated herein by reference.

3.1 **Staff.** CITY shall review and approve CONTRACTOR'S staff, including those provided by designated and approved subcontractors, to be assigned to this Contract by CONTRACTOR during the term of this Contract.

3.2 **Supervisor.** CONTRACTOR shall provide adequate supervision and direction of their employees, agents, and subcontractors providing services to City hereunder to ensure all work is correctly performed and per the contract requirements.

3.2.1 CONTRACTOR shall designate a Supervisor to fulfill this role, subject to approval of the CITY. The Supervisor shall act as agent for the Contractor, and shall be fully qualified to implement the contract specifications set forth in the contract documents, and shall be available and on-call at all other times as may be required.

3.2.2 The Supervisor's duties shall include, but are not limited to, quality control of services provided hereunder, maintenance of cleanliness standard, work scheduling, sequencing operations, on-site inspections, stock requisitioning, and material issuance, inventory and storage control, report writing, general problem solving, and to investigate all landscape complaints as reported by the City's designated representative.

3.2.3 The Contractor must submit a list of at least three emergency telephone numbers of management level, supervisory personnel, who are authorized to dispatch back-up working crews in the event of an emergency request by the Landscape Supervisor or appointed designee. These emergency telephone numbers shall be different than, in addition to, the daytime office or regular answering service number from where the Contractor does business. The Contractor will update these emergency numbers as required throughout the term of the Agreement.

3.3 **Subcontractors.** CONTRACTOR shall not assign, transfer, or enter into any subcontract under this Agreement, nor any part thereof, without first obtaining the

written consent of the Director of Public Works or his/her designee. If CONTRACTOR is permitted to subcontract any part of this Agreement, CONTRACTOR shall be responsible to CITY for the acts and omissions of its subcontractor as it is for persons directly employed by contractor. Nothing contained in this Agreement shall create any contractual relationship between any subcontractor and CITY. All persons engaged in the work shall be considered employees of CONTRACTOR. The CITY shall deal directly with and shall make all payments to CONTRACTOR.

3.4 **Direct Responsibility.** All services required under this Contract shall be performed by CONTRACTOR, or under CONTRACTOR'S direct supervision, and all personnel shall possess the qualifications, permits and licenses required by State and local law to perform such services.

3.4.1 CONTRACTOR shall be solely responsible for the satisfactory work performance of all personnel engaged in performing services required by this Contract, and compliance with all reasonable performance standards established by CITY.

3.4.2 CONTRACTOR shall be responsible for payment of all CONTRACTOR's employees' and Subcontractor's wages and benefits, and shall comply with all requirements pertaining to the employer's liability, workers' compensation, unemployment insurance, and Social Security.

3.4.3 CONTRACTOR shall indemnify and hold harmless CITY, and its respective officers, agents and employees from and against all claims, demands, damages or costs arising from CONTRACTOR's acts or omissions with respect to any liability, damages, claims, costs and expenses of any nature arising from alleged violations of personnel practices.

## 4. ACCEPTANCE AND DOCUMENTATION.

Each task shall be reviewed and approved by the Contract Project Manager to determine acceptable completion.

4.1 **Records.** The CONTRACTOR shall retain and shall contractually require each Subcontractor to retain all data and other "records" relating to the acquisition and performance of the Contract for a period of three (3) years after the completion of the Contract unless a longer period of time is required by state or federal law, in which event CONTRACTOR shall retain its records for the time required by such laws. CONTRACTOR shall maintain adequate records and shall permit inspection and audit by CITY of CONTRACTOR's charges under this Contract. CONTRACTOR shall make such records available to CITY during normal

business hours upon reasonable notice. Nothing herein shall convert such records into public records, and they will be available on to CITY and any specified public agencies.

4.2 **Property of CITY.** All materials, including reports, computer programs and other deliverables, supplied or created under this Contract are the sole property of CITY. CONTRACTOR is not entitled to a patent or copyright on those materials and may not transfer the patent or copyright to anyone else. CONTRACTOR shall not use or release these materials without the prior written consent of CITY.

4.3 **Current Products.** All equipment, materials, parts and other components incorporated in the work or services performed pursuant to this Contract shall be new, or the latest model and of the most suitable grade for the purpose intended. All work shall be performed in a skilled and workmanlike manner.

**5** **PRICE:** CITY shall pay to CONTRACTOR an amount not to exceed **Twelve Million Two Hundred Forty Eight Thousand Nine Hundred Seventy Nine Dollars and Nineteen Cents ($12,248,979.19)** for the completion of all the services described herein, which sum shall include all costs or expenses incurred by CONTRACTOR, payable as set forth in **Exhibit B – Fee Schedule,** attached hereto and made part hereof by reference.

5.1 **Payment.** An application for payment form must be submitted to CITY which shall include the following: a clear, detailed invoice reflecting services being billed for during the billing period, a summary sheet showing percentage of contract completed to date, amount/percent billed to date and any/all backup documentation supporting the above items. A separate invoice shall be issued for each month of service performed, and no payment will be issued prior to completion of specified services and receipt of a correct invoice.

5.2 **Estimated Quantities.** The quantities shown on **Exhibit B – Fee Schedule** are estimates only, based upon available information. Payment shall be based on actual quantities for each listed item and no warranty is made with respect to the actual quantities. City reserves the right to increase or decrease contract quantities as determined to be in the City's best interest. In no event shall the quantities be reduced to less than fifty percent (50%) of the estimated quantities shown on the **Exhibit B – Fee Schedule**, nor shall they be increased to more than one hundred twenty percent (120%) of the estimated quantities shown on the **Exhibit B – Fee Schedule** without the consent of the CONTRACTOR.

5.3 **Payment.** A separate invoice shall be issued for each shipment of material or service performed, and no payment will be issued prior to receipt of material and/or completion of specified services and receipt of a correct invoice.

## 6 CONTRACT TERM.

6.1 The term of this Contract is five (5) years, commencing July 1, 2019 and expires June 30, 2024.

6.2 The execution of this Contract by the parties does not constitute an authorization to proceed. The services of CONTRACTOR shall commence when CITY, acting by and through its Landscape Supervisor or appointed designee, has issued and Authorization to Proceed.

6.3 **Time is of the essence.** All of the frequency and performance requirements as stated in the Contract Documents are of the essence of this Agreement.

6.4 Failure of CONTRACTOR to perform any covenant or condition contained herein within the time periods specified therein shall constitute a material breach of this Contract, entitling CITY to terminate this Contract, unless CONTRACTOR applies for and receives an extension of time in accordance with the procedures set forth herein.

## 7 TAXES

7.1 CONTRACTOR shall pay all sales, consumer, use, and other similar taxes required to be paid by CONTRACTOR in accordance with state and local laws.

7.2 CONTRACTOR is an independent contractor and shall have no power or authority to incur any debt, obligation or liability on behalf of the CITY. No person employed by CONTRACTOR or acting on its behalf, in connection with this Contract shall be considered the Agent or employee of CITY.

7.3 CONTRACTOR shall be required to obtain a current City of Palmdale business license, as required by the Palmdale Municipal Code, before an Authorization to Proceed is issued.

7.4 When equipment, materials, or supplies generally taxable to CONTRACTOR are eligible for a tax exemption due to the nature of the services, CONTRACTOR shall assist the City in applying for and obtaining such tax credits and exemptions, which shall be paid or credited to the City.

## 8 PATENT FEES AND ROYALTIES

CONTRACTOR shall pay all license fees and royalties and assume all costs incident to the use, in the performance of the services or the incorporation in the services of any invention, design, process, program, product or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, program, product or device is specified in the contract documents for use in the performance of the services and if, to the actual knowledge of CITY, its use is subject to patent rights or copyrights calling for the payment of any license fee or contract documents. CONTRACTOR shall indemnify and hold harmless CITY and anyone directly or indirectly employed by CITY from and against all claims, damages, losses and expenses (including attorneys' fees) arising out of any infringement of patent rights or copyrights incident to the use in the performance of the services, or resulting from the incorporation in the services of any invention, design, process, program, product or device not specified in the contract documents, and shall defend all such claims in connection with any alleged infringement of such rights.

## 9 INDEMNIFICATION

CONTRACTOR agrees to indemnify, defend and hold harmless CITY, its officers, agents and employees, from and against all claims, losses, obligations, or liability which arise out of, or are in any way related to, the CONTRACTOR's acts, errors or omissions, or those of its employees or agents under this Agreement.

## 10 INSURANCE

10.1 CONTRACTOR, at its expense, shall maintain in effect at all times during the performance of services under this Contract not less than the following coverage and limits of insurance, which shall be maintained with insurers listed "A" or better in the Best's Insurance Guide and authorized to do business in the State of California. **Proof of Insurance, as identified in Section 10.8, must be reviewed and accepted by the City Attorney.**

10.1.1 Workers Compensation and Employer's Liability

-Workers Compensation-coverage as required by State of California

-Employer's Liability-- $1,000,000.00 each accident
$1,000,000.00 limit bodily injury
$1,000,000.00 each employee bodily injury by disease

10.1.2 Commercial General Liability
-$2,000,000.00 limit on per occurrence basis
-$5,000,000.00 general aggregate limit

10.1.3 Commercial Automobile Liability
-$5,000,000.00 combined single limit including non-owned and hired automobile coverage

10.1.4 Pollution Liability
-$5,000,000 limit on a per occurrence basis

10.2 All of CONTRACTOR's policies shall contain an endorsement providing that written notice shall be given to CITY at least thirty (30) calendar days prior to termination, cancellation or reduction of coverage in the policy.

10.3 Policies providing for bodily injury and property damage coverage shall contain the following:

A. An endorsement extending coverage to the City as an additional insured, in the same manner as the named insured, as respects liability arising out of the performance of any services under the Contract. Such insurance shall be primary insurance as respects the interest of the City, and any other insurance maintained by the City shall be considered excess coverage and not contributing insurance with the insurance required hereunder. The Certificate and endorsements shall state that: "The City of Palmdale, Palmdale Community Redevelopment Agency, Palmdale Civic Authority, Housing Authority, Industrial Development Authority, Airport Authority, their officers, agents, employees and volunteers are named as additional insureds."

B. "Severability of Interest" clause

10.4 Promptly on execution of this Contract, and prior to commencement of any services, CONTRACTOR shall deliver to CITY copies of all required policies and endorsements to the required policies.

10.5 The requirements as to the types and limits of insurance to be maintained by CONTRACTOR are not intended to and shall not in any manner limit or qualify CONTRACTOR's liabilities and obligations under this Contract.

10.6 Any policy or policies of insurance that CONTRACTOR elects to carry as insurance against loss or damage to its equipment and tools or other personal property used in the performance of this Contract shall include a provision waiving the insurer's right of subrogation against CITY.

10.7 All insurance coverages must be maintained throughout the duration of this Contract.

10.8 Acceptable Proof of Insurance:

10.8.1 ACORD Certificate of Insurance listing all coverages, limits, deductibles and insureds; and endorsements for all applicable coverages if agent has authority to issue it. Additional insured Form CG20101185 or CG20100707 and CG20370704 or equivalent must be provided for general liability coverage. Additional insured for CA0001 must be provided for automobile liability coverage.

10.8.2 Agents must confirm that policy endorsements have been ordered from the respective insurance companies. Upon issuance, policy endorsements listing all insurers must be submitted to the City Attorney.

10.9 Notwithstanding any other provision of this Contract, CITY may immediately terminate this Contract if, at any time CONTRACTOR fails to maintain the required insurance for the period of time or fails to comply with any of the insurance requirements listed above.

**11 BONDING**

CONTRACTOR, at its expense, shall maintain in effect at all times during the performance of services under this Contract not less than the following bonding, which shall be maintained with bond companies listed "A" or better in the Best's Insurance Guide and authorized to do business in the State of California. **Proof of Bonding must be reviewed and accepted by the City Attorney.**

11.1 **Faithful Performance Bond:** shall be fifty percent (50%) of the Contract price for the first two years of the Contract, and each year the contractor shall extend the Faithful Performance Bond for an additional year so that the bond always covers two years. The bonding company shall provide a written notice to the CITY at least thirty (30) calendar days prior to expiration of each Faithful Performance Bond.

11.2 All bonds shall be in a form satisfactory to the City's Attorney.

11.3 Promptly on execution of this Contract, and prior to commencement of any services, CONTRACTOR shall deliver to CITY copies of all required policies and endorsements to the required policies.

11.4 Notwithstanding any other provision of this Contract, CITY may immediately terminate this Contract if, at any time CONTRACTOR fails to maintain the

required bonding for any period of time or fails to comply with any of the bonding requirements listed above.

## 12 TERMINATION WITHOUT CAUSE

CITY reserves the right to terminate this Contract or any part thereof for its sole convenience with thirty (30) days written notice. In the event of such termination, CONTRACTOR shall immediately stop all services hereunder, and shall immediately cause any of its employees and subcontractors to cease such services. CONTRACTOR shall also surrender to CITY all finished or unfinished documents, processes, programs and other supplies or materials, which shall be City's property. As compensation in full for services performed to the date of such termination, the CONTRACTOR shall receive an amount equal to the value of the services completed as of the termination date in accordance with the fee schedule or as negotiated between the parties. In no event shall the amount payable upon termination exceed the total maximum compensation provided for in this Contract.

## 13 TERMINATION FOR CAUSE

If CITY determines that CONTRACTOR has failed to supply an adequate working force, or to provide services of proper quality, or has failed in any other respect to satisfactorily perform the services specified in this Contract, CITY shall give written notice to CONTRACTOR specifying all defaults to be remedied within thirty (30) days. Such notice shall set forth the basis for CITY's dissatisfaction and suggest corrective measures. If, after forty-five days, CONTRACTOR has failed to implement appropriate corrective measures, CITY may elect to terminate this Contract in whole or in part.

13.1 In the event CITY terminates this Contract, in whole or in part, for cause, CITY may procure, upon such terms and in such manner as it may deem appropriate, services similar to those terminated.

13.2 CONTRACTOR shall provide all finished or unfinished documents, data, studies, software, drawings, programs, processes, maps, photographs, reports, etc., prepared by CONTRACTOR within fifteen (15) working days after notice of termination. Upon such termination, CONTRACTOR shall be paid an amount equal to the value of the services provided as of the date of termination, taking into consideration the costs associated with hiring another CONTRACTOR to complete the services. The above is in addition to any other remedies available by law or equity to CITY.

13.3 If, after notice of termination of the Contract under the provisions of this Section 13, it is determined, for any reason, that CONTRACTOR was not in default, or that the default was excusable, then the rights and obligations of the parties shall

be the same as if the notice of termination has been issued pursuant to Section 12.

## 14 DISPUTE RESOLUTION

All claims, disputes and other matters in question between CITY and CONTRACTOR arising out of, or relating to this contract or the breach thereof shall, to the extent reasonably feasible, be resolved through good faith negotiations between the parties.

CITY and CONTRACTOR also recognize the delays, expense, and difficulties involved in proving, through legal or arbitration proceedings, the actual loss suffered by City if the Services or portion of the Services are not completed or remediated as set forth in **Exhibit A – Scope of Work.** Accordingly, instead of requiring any such proof, the parties agree that if any remedial actions are necessary by the City's staff to complete services not performed or completed by the Contractor in accordance with the contract documents, the costs of said remedial actions shall be charged to Contractor at a rate of $60.00 per hour per City Maintenance Worker dispatched, with a 2-hour minimum charge, plus the actual cost of any supplies required.

## 15 OWNERSHIP OF PRODUCT

All product, data, documents, programs and software including, but not limited to, research, field notes, investigations, analysis, studies, processes, software, instructions for use and other manuals, whether complete or incomplete, which are prepared or produced in the performance of this Contract are to be, and remain the property of CITY and shall be delivered to or left with CITY upon the completion or termination of this Agreement. CONTRACTOR shall furnish CITY, upon its request, originals and reproducible and electronic copies of product, data reports, studies and of all other documents listed above. Electronic copies shall be provided in an unprotected format which allows CITY to copy, reproduce and make changes as CITY deems necessary.

## 16 DELEGATION AND ASSIGNMENT

16.1 CONTRACTOR shall not delegate or assign its duties or rights hereunder, either in whole or in part, without the prior written consent of CITY; provided, however, that claims for money due or to become due to CONTRACTOR from CITY under this Contract may be assigned to a bank, trust company or other financial institution without such approval.

16.2 Any assignment, delegation or subcontract shall be made in the name of the CONTRACTOR and shall not bind or purport to bind CITY and shall not release CONTRACTOR from any obligations under this Contract including, but not limited to, the duty to properly supervise and coordinate the work of employees,

assignees, delegates and subcontractors. No such assignment, delegation or subcontract shall result in any increase in the amount of total compensation payable to CONTRACTOR under this Contract.

## 17 NON-DISCRIMINATION AND EQUAL EMPLOYMENT OPPORTUNITY

17.1 In performance of this Contract, CONTRACTOR shall not discriminate against any employee, subcontractor, or applicant for employment because of sex, color, race, religion, ancestry, national origin, disability, medical condition, marital status, sexual orientation or age. CONTRACTOR will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their sex, color, race, religion, ancestry, national origin, disability, medical condition, marital status, sexual orientation or age. Affirmative action relating to employment shall include, but not be limited to the following: employment, upgrading, demotion or transfer; recruitment; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

17.2 The provisions of subsection 17.1 above shall be included in all solicitations or advertisements placed by or on behalf of CONTRACTOR for personnel to perform any services under this Contract. CITY shall have access to all documents, data and records of CONTRACTOR and its subcontractors for purposes of determining compliance with the equal opportunity and non-discrimination provisions of this Section, and all applicable provisions of Executive Order No. 11246 which is incorporated herein by this reference. A copy of Executive Order No. 11246 is available for inspection at, and on file with, the Palmdale City Clerk's Office.

## 18 FINANCIAL INTEREST CERTIFICATION

18.1 CONTRACTOR warrants that no person has been employed or retained to solicit or secure this Contract upon an agreement or understanding for a commission, percentage, brokerage or contingent fee; and that no officer or employee of the CITY has any interest, financially or otherwise, in CONTRACTOR's firm.

18.2 For breach or violation of this warranty, CITY shall have the right to annul this Contract without liability or at its discretion to deduct from the Contract Price or consideration, the full amount of such commission, percentage, brokerage or contingent fee.

## 19 CONFLICT OF INTEREST

19.1 CONTRACTOR stipulates that its officers and employees do not now have a conflict of interest and it further agrees for itself, its officers and its employees that it will not contract for or accept employment for the performance of any work or services with any individual business, corporation or government unit that would create a conflict of interest in the performance of its obligations pursuant to this Contract or which would cause CONTRACTOR to be "financial interested" (as provided in California Government Code Section 1090 et seq. or 87100 et seq.) in any contract or decision made by CITY on any matter.

## 20 COMPLIANCE WITH LAW

20.1 CONTRACTOR shall comply with all state and federal laws, including but not limited to, the requirement to hire only those persons authorized by federal law to work in the United States. If CONTRACTOR uses any subcontractors to complete this Contract, this same requirement shall be included in all subcontracts and strictly enforced by CONTRACTOR.

20.2 The Law of the State of California shall govern this Contract. The venue of any legal action, either formal or informal, shall be the County of Los Angeles.

## 21 NOTICES

Any notice required under this Contract shall be in writing, addressed to the appropriate party at its address on the signature page and given personally or by registered or certified mail postage prepaid, or by commercial courier service. All notices shall be effective upon the date of receipt.

## 22 ENTIRE AGREEMENT AND AMENDMENTS

22.1 This Contract is the complete Agreement between the parties and supersedes all prior proposals, agreements, and understandings between the parties and may not be modified or terminated orally.

22.2 No attempted waiver of any of the provisions hereof, nor any modification in the nature, extent or duration of the services to be performed by CONTRACTOR hereunder, shall be binding unless in writing and signed by the party against whom the same is sought to be enforced.

22.3 The failure of any party to enforce against another party any provision of this Contract shall not constitute a waiver of that party's right to enforce such a provision at a later time, and shall not serve to vary the terms of this Contract.

## 23 ATTORNEY'S FEES

If any action at law or in equity is brought to enforce or interpret any provisions of this Contract, the prevailing party in such action shall be entitled to reasonable attorney's fees, costs and necessary disbursements, in addition to such other relief as may be sought and awarded.

**In Witness Whereof,** the parties hereto have caused this Contract to be executed and attested by their respective officers thereunto duly authorized.

**CITY:**
**CITY OF PALMDALE**

Steve Hofbauer Date
MAYOR

ADDRESS FOR NOTICE:
**CITY OF PALMDALE:**
**Public Works Department**
**39110 3rd Street East**
**Palmdale, California 93550**

(661) 267-5338
(661) 267-5309 Fax

APPROVE AS TO FORM:

Wm. Matthew Ditzhazy
City Attorney

ATTEST:

Rebecca J. Smith
City Clerk

**CONTRACTOR:**
**RICH MEIER'S LANDSCAPING, INC.**

By: Richard Meier 3/12/19 Date
PRESIDENT

ADDRESS FOR NOTICE:
**RICH MEIER'S LANDSCAPING, INC.**
**652 West Avenue L-14**
**Lancaster, California 93534**

(661) 723-2220
(661) 723-2229 Fax

ATTEST: If Corporation

Secretary

# EXHIBIT A
# SCOPE OF WORK

The following are the general expectations for the work to be performed.

- Turf mowing, edging, detailing, de-thatching and aeration
- Pruning and rejuvenation of shrubs and ground cover plants
- Irrigation system inspections and maintenance
- Repairing irrigation mainlines, valves, lateral lines and sprinklers
- Litter control and disposal of trash and debris at City provided waste bins.
- Broad leaf weed control in planters, niches and adjacent right of ways up to the edge of pavement
- Park and City Facility Grounds openings including safety inspections.
- Playground equipment inspections, where applicable.
- Fertilization of turf, shrubs, ground cover, and trees.
- Hardscape pressure washing.
- Limited tree maintenance including pruning, staking, tying, guying of trees.
- Clean drainage structures, inlets, flow-lines and gutters, and drains where applicable.
- Disaster/emergency response support.

It is understood that except as otherwise specifically stated in the contract, the Contractor shall provide and pay for all materials, labor, tools, equipment, transportation of every nature and all other services and facilities of every nature whatsoever, necessary to execute, complete and deliver the work within the specified time, including permits, insurance and licenses (including City of Palmdale Business License) necessary for the execution of the work shall be secured and paid for by the Contractor. **No subcontracting is allowed.**

Work Schedule

CONTRACTOR's working hours, except for those functions described in the Technical Specifications shall be limited to the hours between 6:00 AM and 5:00 PM Monday thru Sunday. Deviation from normal working hours will not be allowed without prior written consent from the Landscape Manager or appointed designee.

CITY observes the following legal holidays:

- New Year's Day
- Martin Luther King Day
- President's Day
- Memorial Day
- Fourth of July
- Labor Day
- Veteran's Day
- Thanksgiving Day
- Day after Thanksgiving
- Christmas Eve

- Christmas Day
- New Year's Eve

**Detailed Professional Landscape Maintenance Service Specifications for City Parks and Facility Grounds, General Benefit Landscapes, Palmdale Transportation Center, Park and Rides, and Fairway Business Park.**

# CITY PARKS AND FACILITY GROUNDS

## SECTION A – CITY PARK AND FACILITY GROUND OPENINGS

### A.1 Park and City Facility Grounds Safety Inspection

A complete inspection of all Park and City facility grounds shall be conducted **daily**, 365 days a year, including holidays and weekends. This inspection will serve to note, report, and mitigate any safety issues or vandalism discovered on a daily basis. CONTRACTOR shall complete the following opening functions no later than 7:30 a.m. at City Facility Grounds and by 8:00 a.m. at City Parks;

1. Delineate hazards and report them immediately.
2. Report any vandalism or material loss, including graffiti.
3. Remove all litter and debris accumulated at the entrances of City facilities to ensure clean passage for City staff and the general public.
4. Remove litter and debris from City Parks and facility grounds.

### A.2 Playground Fall Protection Surface Areas and Exercise Station Equipment

1. All playground equipment fall protection surface areas shall be inspected and neatly groomed **daily**, at the start of each day. Sand, wood chip, and any other playground fall protection surfaces shall be cleaned and/or raked level to remove any foreign or hazardous material(s).
2. All playground equipment shall be inspected daily for signs of wear, damage, fatigue or loose nuts and bolts. Any unsafe condition shall be **immediately** reported to the Landscape Superintendent or appointed designee.
3. Special attention shall be exercised to correct depressions in fall protection surface material around play equipment. Depressions shall be corrected **daily** by distributing sand or wood chips from high areas to low areas.
4. During leveling and distribution of sand or wood chips, no concrete footing shall be left exposed. Footings shall be covered to provide adequate coverage and to prevent a trip hazards.
5. The raking and distribution of sand and wood chips around and below the playground equipment shall have a minimum depth of twelve (12) inches, and this condition shall extend for eight (8) feet

beyond all ends of the playground equipment where possible. CONTRACTOR shall immediately notify Landscape Superintendent or appointed designee if this depth requirement cannot be achieved.

6. All sand, wood chip, and other playground fall protection surface areas shall be maintained free of litter, cans, broken glass, and any other harmful and/or unsightly debris.

7. Equal access play areas and their resilient surfaces shall be thoroughly blown down to remove sand, silt, and other debris during Park opening operations.

8. Sweep walkways around sand and wood chip play and equal access areas, returning sand and wood chips into play areas.

9. Horseshoe pit sand, disc golf tee station, and exercise equipment station surface material shall be inspected and neatly groomed at the start of each day and the surface material cleaned and raked level to remove any foreign and/or hazardous materials.

**A.3 Park Trash Cans**

1. Exterior trash cans and receptacles shall be **emptied** once **daily** Monday through Wednesday, prior to 8:00 a.m. and all waste shall be placed in designated dumpsters.

2. Exterior trash cans and receptacles shall be **emptied** **twice daily** Thursday through Sunday, prior to 8:00 a.m. and again before 2:30 p.m. and all waste shall be placed in designated dumpsters.

3. Trash cans shall be conveniently located for public use and returned to such locations each morning if found displaced.

4. CONTRACTOR shall use CITY provided trash can liners in all trash cans and receptacles.

5. Trash cans, receptacles, and lids shall be cleaned or sanitized as needed.

**A.4 Dumpster Enclosures and Roll-Off Bin Sites**

1. Dumpster enclosure & roll off bin areas shall be kept free of all trash as well as accumulated and/or dumped debris. All trash & debris shall be collected and placed in designated dumpsters **daily**.

2. Dumpster enclosures shall be pressure washed **weekly** or as directed by the Landscape Superintendent or appointed designee.

**A.5 Hardscape Maintenance**

1. City Park and facility entryways, walkways, steps, hard court areas, picnic pavilions, parking lots and artificial turf shall be blown down **daily** during opening operations. All blown debris shall be immediately picked up.

2. City Park and facility entryways, walkways, steps, hard court areas, picnic pavilions, and parking lots shall have all trash, accumulated and/or dumped debris collected and placed in designated dumpsters **daily** during opening operations.

3. When in close proximity to CITY facilities, CONTRACTOR shall **only** use power equipment between the hours of 6:00 a.m. and 7:30 a.m. unless otherwise authorized by Landscape Superintendent or appointed designee.

**A.6 Pressure Washing Operations**

**Civic Center and City Facilities:** All City facility entry ways and walkways including those at the Palmdale Civic Center shall be pressure washed and or power scrubbed to remove all foreign objects from surfaces, such as gum, grease, bird droppings, and/or spills a minimum of **twice per week** or as directed by Landscape Superintendent or appointed designee.

**Picnic Pavilions and Park Furnishings:** All picnic pavilions and park furnishings including tables, benches, bleachers, drinking fountains, trash receptacles, trash cans and lids shall be pressure washed or power scrubbed to remove all foreign objects from surfaces, such as gum, grease, bird droppings, and/or spills as follows:

September 1 thru June 1: **weekly** or as directed by the Landscape Superintendent or appointed designee.

June 1 thru September 1: **twice weekly** or as directed by the Landscape Superintendent or appointed designee.

**Dumpster enclosures:** All dumpster enclosures shall be pressure washed **weekly** or as directed by the Landscape Superintendent or appointed designee.

**Tennis, Basketball & Pickle ball Courts:** All exterior courts shall be pressure washed **weekly** or as directed by the Landscape Superintendent or appointed designee.

**A.7 Park Furnishings**

1. Picnic tables, benches, and bleachers shall be pressure washed and sanitized to ensure public health and safety.

2. Picnic tables, benches, and bleachers shall be checked for graffiti, carvings, looseness of planks or braces, cleanliness, and general repair needs. Any observed issues shall be immediately reported to the Landscape Superintendent or appointed designee.

3. Cooking grills shall have ashes and partially burned charcoal, garbage, and leftover food removed. Grills shall be inspected for general repair needs. Any observed issues shall be immediately reported to the Landscape Superintendent or appointed designee.

5. Entire picnic pavilion areas shall be kept free of all litter and debris.

6. Remove all tacks, staples, strings, and other objects adhered to pavilion structures by Park patrons.

**A.8 Drinking Fountains**

1. CITY shall be responsible for the repair or replacement of drinking fountains and fixtures. CONTRACTOR shall immediately report any malfunctioning or vandalized drinking fountains to Landscape Superintendent or appointed designee.

2. CONTRACTOR shall pressure wash and disinfect exterior, free standing drinking fountains as follows:

September 1 thru June 1: **weekly** or as directed by the Landscape Superintendent or appointed designee.

June 1 thru September 1: **twice weekly** or as directed by the Landscape Superintendent or appointed designee.

**A.9 Swales and Drains**

Drainage infrastructure including inlet structures, channels, gutters, and drains within Park and City facility grounds and up to the edge of asphalt pavement shall be kept free of vegetation, debris and algae to allow the unrestricted flow of water. Plugged drains and missing or damaged grates shall be immediately reported to the Landscape Superintendent or appointed designee.

1. Swales shall be inspected and kept clear of all silt, debris, and litter to allow for continuous flow of water.

2. Drains and collection boxes shall be cleared of all debris and kept in a clean condition.

3. Drain grates shall be inspected to mitigate hazards. CONTRACTOR shall immediately inform the Landscape Superintendent or appointed designee of any broken or missing grates and delineate any hazards for public safety.

**A.10 Frequency**

**Daily:** Safety inspections and removal of litter and debris according to Sections **A.1** through **A.5** and **A.7** shall be performed on a daily basis and must be completed prior to completion of City Park and Facility Grounds openings.

**Weekly or Twice a Week:** Pressure washing and drainage maintenance according to Sections **A.6**, **A.8**, and **A.9** shall be performed in an on-going manner on weekly or twice a week.

**A.11 Compliance-Based Payment and Accountability Expectations**

City will accept ***NO*** less than full completion of the functions described in sections **A.1** through **A.9** during applicable service day and within the full span of Park and City Facility Grounds being serviced. Failure to comply with this expectation will result in deduction of applicable service costs from the

monthly payment, which is calculated by taking the monthly service cost multiplied by twelve and divided by 365 for a daily service value (monthly cost X 12/365). In addition, the Contractor will be responsible for any costs incurred by the City as a result of negligence by the Contractor for not providing service as outlined in the technical specifications.

## SECTION B – TURF MAINTENANCE

### B.1 Pre-Mowing Operation

Prior to initiating a mowing operation, the site is to be inspected by a knowledgeable and responsible employee, who will determine the practicability of initiating the operation. Litter is not to be shredded by mowers; glass bottles are not to be driven over and broken; and excessively wet turf areas are not to be driven across. Damaged sprinkler heads and valve box covers are to be immediately reported to Landscape Superintendent or appointed designee. Recycling mowers are required. Dumped debris, glass, leaves, paper, and other debris shall be removed and disposed in Park dumpsters prior to mowing operations. CONTRACTOR shall maintain appropriate turf grade, including backfilling of depressions or rodent burrows.

### B.2 Turf Mowing

Turf in City Parks and Facility Grounds shall be mowed with power mowers. The mowers shall be maintained and operated so as to provide a smooth even cut. The reel or blade adjustment will provide a uniform, level cut without ridges or depressions. All mower safety features shall be in place at all times to protect operator and the public.

If a mowing operation cannot be thoroughly completed within the designated time frame, the Landscape Superintendent or appointed designee shall be immediately notified via a phone call and notification followed up with an e-mail to the Landscape Section group e-mail address.

### B.3 Cutting Heights

Cutting heights for all turf in City Parks & Facility Grounds shall be 2" or as directed by Landscape Superintendent or appointed designee.

### B.4 Edging

All turf grass borders, including ball diamond aprons and warning tracks, shall be neatly and uniformly edged or trimmed concurrent with every mowing. Turf borders along sidewalks and mow strips shall be cut with vertical blade edger.

Use of string trimmers to perform this task is not acceptable. Only trimming around appurtenances in turf (e.g. valve and meter boxes, controller enclosures, manhole covers etc.) may be accomplished through the use of string trimmers.

**B.5 Clipping Pick Up**

Excessive clippings and/or debris left behind by recycling mowers shall be collected and removed from the site prior to the completion of day's mowing operations or the end of the work day, whichever occurs first.

**B.6 Clean Up**

All walkways, trails, parking lots, roadways, or other areas dirtied by mowing operations shall be cleaned and all debris disposed of in dumpsters prior to the completion of mowing operations at each site. All debris generated from CONTRACTOR operations shall be picked up and disposed of in appropriate dumpsters. No debris shall be blown into streets, roadways, or adjacent properties.

**B.7 Frequency**

Mowing operations shall be performed at such intervals of time so that no more than one-third of the grass blade is removed during each mowing in returning the grass to the accepted height for the species of grass being mowed, and at no less than weekly intervals during the growing season. Work shall be performed on the same day each week. **Estimated mowings per year: 33**

Inclement weather may preclude adherence to the frequency schedule. CONTRACTOR may request alteration of this mowing frequency from the Landscape Superintendent or appointed designee due to inclement weather. All mowing missed due to inclement weather shall be rescheduled and completed within three (3) working days.

**B.8 Sidewalks**

Sidewalks are to be maintained in a weed free condition. This includes the removal of weeds in all paved and/or unpaved surfaces, in joints, cracks, or other crevices within or adjoining to the curb and gutter, up to the edge of asphalt pavement, within the boundaries of all Park and City Facility Grounds.

**B.9 Removal of Leaf Litter**

Accumulation of leaf and needle litter from all landscaped areas including beds, planters, and turf areas shall be removed in an on-going manner and placed in appropriate green waste trash bin(s).

**B.10 Turf Weeding-Additional Services**

CONTRACTOR will supply equipment and labor at a cost in accordance with the Chemical Broadleaf Weed Control bid in **Exhibit D: Fee Schedule of resulting Contract for Services-Additional Services** to mitigate broadleaf weeds in turf as directed by Landscape Superintendent or appointed designee. The CITY will purchase and supply turf broadleaf weed control chemicals.

**B.11 Compliance-Based Payment and Accountability Expectations**

City will accept ***NO*** less than full completion of the functions described in sections **B.1** through **B.9** during applicable service day and within the full span of City Park and City Facility Grounds being

serviced. Failure to comply with this expectation will result in deduction of applicable service costs from the monthly payment, which is calculated by taking the monthly service cost multiplied by twelve and divided by 52 for a weekly service value (Monthly cost X 12/52). In addition, the Contractor will be responsible for any costs incurred by the City as a result of negligence by the Contractor for not providing service as outlined in the Technical Specifications.

## SECTION C – MEADOW TYPE TURF SLOPE MAINTENANCE

### C.1 Pre Trimming Operation

Prior to initiating a trimming operation, the site is to be inspected by a knowledgeable and responsible employee, who will determine the practicability of initiating the operation. Litter is not to be shredded by trimmers; glass bottles are not to be broken; and excessively wet turf areas are not to be trimmed. Damaged sprinkler heads and valve box covers are to be immediately reported to Landscape Superintendent or appointed designee. Dumped debris, glass, leaves, paper, and other debris shall be removed and disposed in Park dumpsters prior to mowing operations. CONTRACTOR shall maintain appropriate turf grade, including backfilling of depressions or rodent burrows.

Dumped debris, glass, leaves, paper, and/or other debris shall be removed and disposed of in appropriate Park dumpsters prior to trimming.

### C.2 Meadow Type Turf Slope Power Trimming

All power string trimmers shall be maintained so as to provide a smooth cut at approximately 12 inches in height. String trimming shall clear any blocked irrigation coverage and should not cut the crown of the grass.

### C.3 Meadow Type Turf Slope Edging

All turf grass borders shall be neatly and uniformly edged concurrent with every mowing. Turf slope borders along sidewalks and mow strips shall be cut with a vertical blade edger. Use of string trimmers to perform this task is not acceptable. Trimming around appurtenances in turf (e.g. valve and meter boxes, controller enclosures, manhole covers etc.) may be accomplished through the use of string trimmers.

### C.4 Cutting Heights

Cutting heights shall be approximately 12 inches above the plane of the slope.

### C.5 Clipping Pick Up

All grass clippings shall be collected and removed from the grounds prior to the completion of day's trimming operations or the end of the work day, whichever occurs first.

### C.6 Clean Up

All walkways, trails, parking lots, roadways, or other areas dirtied by trimming operations shall be cleaned and all debris disposed of in dumpsters prior to the completion of trimming operations at each site. All debris generated from CONTRACTOR operations shall be picked up and disposed of in Park dumpsters. No debris shall be blown into right of ways, streets, or adjacent properties.

### C.7 Frequency

Meadow type turf slope trimming shall be performed **annually** as directed by Landscape Superintendent or appointed designee. Inclement weather may preclude adherence to the frequency schedule. CONTRACTOR may request alteration of this turf slope trimming frequency from the Landscape Superintendent or the appointed designee due to inclement weather. All trimming missed due to inclement weather shall be rescheduled and completed within three (3) working days.

### C.8 Removal of Leaf Litter

Accumulation of leaf and needle litter from all landscaped areas including beds, planters, and turf areas shall be removed in an on-going manner and placed in appropriate green waste trash bin(s).

### C.9 Sidewalks

Sidewalks are to be maintained in a weed free condition. This includes the removal of weeds in all paved and/or unpaved surfaces, in joints, cracks, or other crevices within or adjoining to the curb and gutter, up to the edge of asphalt pavement, and within the boundaries of all City Park and Facilities Grounds.

### C.10 Turf Weeding-Additional Services

CONTRACTOR will supply equipment and labor at a cost in accordance with the Chemical Broadleaf Weed Control bid in **Exhibit D: Fee Schedule of resulting Contract for Services-Additional Services** to mitigate broadleaf weeds in turf as directed by Landscape Superintendent or appointed designee. The CITY will purchase and supply turf broadleaf weed control chemicals.

## SECTION D – PLANTER MAINTENANCE

### D.1 Pruning of Plants and Shrubs

Plants and shrubs shall be pruned and trimmed according to species specific prescribed horticultural practices. Plants and shrubs shall be maintained within the limits of their landscaped areas so as not to encroach into walkways, trails, parking spaces, and private property. All shrubs will be contained to a maximum height of four (4) feet or as otherwise directed by the Landscape Superintendent or appointed designee. Shrubs shall be pruned to maintain an attractive natural appearance wherever possible and to avoid blocking irrigation coverage. At the conclusion of blooming cycles, all spent blooms shall be trimmed or removed on a weekly basis. Shrubs will be re-sheared prior to attaining six (6) inches of new growth.

Vines shall be pruned as often as necessary to maintain a satisfactory appearance and secure attachment to walls and fences. CONTRACTOR will supply equipment and labor to reset vines in accordance with the corresponding bid item in **Exhibit D – Fee Schedule of resulting Contract for Services-Additional Services.**

**D.2 Trimming or Pruning of Ground Cover**

Ground cover shall be pruned according to species specific prescribed horticultural practices and to avoid blocking irrigation coverage as directed by Landscape Superintendent or appointed designee.

**D.3 Edging of Ground Cover**

Ground cover shall be neatly edged and maintained within the limits of landscaped areas so as not to encroach into walkways, trails, parking lots, and/or private property.

**D.4 Weed Control**

Weed abatement, including removal of volunteer trees, shall be done weekly according to accepted best management practices providing for effective on-going weed control after every weekly service. Weed abatement can be performed both chemically and mechanically although chemical control is preferred. Care shall be taken to prevent damage of ground cover and irrigation systems during mechanical weeding operations. CONTRACTOR shall assume the cost of herbicides, pre-emergents, and surfactants utilized for integrated vegetation management. Weed control shall include undeveloped park land at Yellen, Oasis, and Arnie Quinones Parks. CONTRACTOR is responsible and liable for the safe handling and application of all herbicide chemical materials.

**D.5 Green Waste Disposal**

All trimmings shall be removed from City Park and Facility Grounds and disposed of in appropriate dumpsters by completion of day's trimming operations or the end of the work day, whichever occurs first.

**D.6 Removal of Litter and Debris**

Dumped debris, glass, leaves, paper, and/or other debris blown into all planters shall be removed and disposed of in appropriate Park dumpsters on a daily basis.

**D.7 Removal of Leaf Litter**

Accumulation of leaf and needle litter in all landscaped areas including beds, planters, and turf areas shall be removed in an on-going manner and placed in appropriate green waste trash bin(s).

**D.8 Clean Up**

All walkways, trails, parking lots, roadways, or other areas dirtied by trimming operations shall be cleaned and all debris disposed of in dumpsters prior to the completion of trimming operations at each

site. All debris generated from CONTRACTOR operations shall be picked up and disposed of in Park dumpsters. No debris shall be blown into right of ways, streets, or adjacent properties.

D.9 Frequency

**Daily:** Removal of litter and debris **(D.6)** shall be performed on a daily basis and must be completed prior to completion of City Park and Facility Grounds openings.

**Weekly:** Pruning of shrubs **(D.1)**, trimming and edging of ground cover **(D.2** and **D.3)**, weed control in all areas **(D.4)**, green waste disposal **(D.5)**, removal of leaf litter **(D.7)**, and clean up **(D.8)** shall be performed in an on-going manner on a weekly basis.

Inclement weather may preclude adherence to the frequency schedule. The CONTRACTOR may request alteration of this all or nothing frequency requirement from the Landscape Superintendent or the appointed designee due to inclement weather. Work shall be performed on the same day each week. All maintenance missed due to inclement weather shall be rescheduled and completed within three (3) working days.

**D.10 Planter Grade, Watering Basins & Mulching**

CONTRACTOR shall maintain watering basins (wells) for shrubs and trees and appropriate planter grade, including backfilling of depressions or rodent burrows. Mulching may be necessary in planter areas as required by the Landscape Superintendent or appointed designee. Mulch material will be supplied by the CITY and will be made available to the CONTRACTOR at the location where it will be applied.

**D.11 Rejuvenation**

Major rejuvenation pruning operations will be performed during the winter months as directed by Landscape Superintendent or appointed designee.

**D.12 Plant Material Replacement**

The CONTRACTOR shall be responsible for the complete removal and replacement of plant material lost due to the CONTRACTOR'S inappropriate maintenance or negligence, as determined by either the Landscape Superintendent or appointed designee.

**D.13 Seasonal Planting-Additional Services**

In order to sustain optimum aesthetic appearance of Parks and City Facility Grounds, seasonal planting may be required. CONTRACTOR will supply equipment and labor at a cost in accordance with the corresponding plant material installation bid in **Exhibit D – Fee Schedule of resulting Contract for Services-Additional Services** to install CITY provided plant material. Plant material will be made available to the contractor at the CITY Maintenance Yard located at 39110 3rd Street East. **If any planting is required due to CONTRACTOR negligence, CONTRACTOR shall be responsible for the cost of plant replacement including labor and material at no expense to the CITY.**

### D.14 Compliance-Based Payment and Accountability Expectations

City will accept *NO* less than full completion of the above functions described in sections **D.1 through D.8** and **D.10** during applicable service day and within the full span of each site being serviced. Failure to comply with this expectation will result in deduction of applicable service costs from the monthly payment, which is calculated by taking the monthly service cost multiplied by twelve and divided by 52 for a weekly service value (Monthly cost X 12/52). In addition, the Contractor will be responsible for any costs incurred by the City as a result of negligence by the Contractor for not providing service as outlined in the technical specifications.

## SECTION E – IRRIGATION

### E.1 Contractor's Irrigation Scope of Work

CONTRACTOR will be responsible for all irrigation appendages downstream of the backflow prevention device outlet. The CONTRACTOR shall be responsible for, but not limited to, the maintenance, repair and/or replacement of system sleeves, mainlines, irrigation control wires, irrigation control valves, valve diaphragms, valve boxes, quick couplers, quick coupler boxes, gate valves, lateral lines, bubblers, drip tubing and emitters, sprinkler heads, and sprinkler nozzles. The CITY will purchase and provide **ALL** irrigation materials necessary to service irrigation systems. Irrigation materials will be made available to CONTRACTOR at CITY Maintenance Yard located at 39110 3rd Street East.

The CONTRACTOR will be directed to perform seasonal maintenance i.e., clean out the interior of valve boxes, irrigation controllers, and backflow prevention device enclosures, as well as insulating backflow prevention devices and irrigation booster pumps. CITY and CONTRACTOR staff will check irrigation systems with questionable excessive water consumption. All observed deficiencies shall be corrected in accordance to the engineering details in Section 6 of the City's Engineering Standards.

### E.2 City of Palmdale's Scope of Work

The CITY will be responsible for the maintenance, replacement, and programming of all irrigation controllers, enclosures, and associated water conservation equipment. The City will also be responsible for maintenance and/or replacement of backflow prevention devices and enclosures, flow sensors, and pressure regulators.

### E.3 Irrigation Material Use Reporting

CONTRACTOR is responsible for documenting usage of all irrigation materials utilized per site as directed by Landscape Superintendent or appointed designee. Irrigation material usage logs must be submitted in order for additional irrigation material to be issued.

### E.4 Irrigation System Testing and Adjustments

All irrigation systems will be inspected and tested on a weekly basis or as necessary when damage is suspected, observed, or reported. Irrigation system tests shall encompass the entire irrigation system at

each site being serviced. Irrigation system tests shall ensure proper irrigation system coverage through repair of damaged or defective irrigation system parts. CONTRACTOR shall cycle irrigation controller(s) through each station allowing sufficient time as required according to emission device, to check the functions of all facets of the irrigation system, make necessary adjustments, and repair all observed defects. Once adjustments and repairs are completed, CONTRACTOR shall cycle station again to ensure proper operation.

CONTRACTOR shall maintain all sprinkler heads to provide for proper angle, depth, distribution uniformity, and matched precipitation rates, making adjustments to prevent excessive water runoff onto sidewalks, streets, and/ or adjacent properties. CONTRACTOR shall flush lines to clear rocks, mud, debris, and unplug clogged nozzles. Observed irrigation system deficiencies shall be reported to the Landscape Superintendent or appointed designee on a daily basis. The report will include areas that are over irrigated and/or under irrigated.

**E.5 Irrigation System Repairs**

All repairs shall be completed according to the engineering details in Section 6 of the City of Palmdale's Engineering Standards and according to accepted industry standards. When repairing older irrigation systems, the repair will be performed to meet current City of Palmdale Engineering standards. Irrigation system pressure regulating valves, pressure compensating screens, sprinklers, nozzles, bubblers, and drip tubing and emitters shall be replaced to provide matched precipitation rates and distribution uniformity.

CONTRACTOR shall flush lines to clear rocks, mud and debris, and unplug clogged nozzles. All repairs shall be completed within 24 hours of being discovered by CONTRACTOR or being reported to the CONTRACTOR by the Landscape Superintendent or appointed designee. The Landscape Superintendent or appointed designee shall be notified and must approve any irrigation system modification recommended by the CONTRACTOR to improve the irrigation system efficiency.

**E.6 Frequency**

**Daily:** Work shall be performed on the same day each week. Irrigation system repairs **(E.5)** for issues discovered by or reported to the Contractor shall be performed on a daily basis and as required.

**Weekly:** Work shall be performed on the same day each week. Irrigation system testing and adjustments **(E.4)** shall be performed on a weekly basis. Irrigation system repairs **(E.5)** shall be performed weekly, concurrent with irrigation system testing and adjustments.

Inclement weather may preclude adherence to the frequency schedule. The CONTRACTOR may request alteration of this all or nothing frequency requirement from the Landscape Superintendent or the appointed designee due to inclement weather. All maintenance missed due to inclement weather shall be rescheduled and completed within three (3) working days.

### E.7 Irrigation Staff Training Expectation

The CONTRACTOR shall ensure that all personnel working on the irrigation systems are fully trained in all aspects of landscape irrigation system maintenance. CONTRACTOR staff must be able to easily identify and isolate system problems in a thorough and efficient manner. Knowledge of landscape irrigation systems shall include the operation, maintenance, troubleshooting, adjustment, and repair of irrigation systems.

CONTRACTOR Supervisor or Lead Worker in charge of irrigation technicians shall be a professionally Certified Irrigation Contractor by the Irrigation Association and/or a Landscape Industry Certified Technician by the California Landscape Contractors Association.

### E.8 Irrigation System Maintenance Staffing

CONTRACTOR shall provide dedicated irrigation maintenance staff, separate from the landscape maintenance crews. CONTRACTOR shall provide adequate staffing levels to sustain weekly irrigation system maintenance's "all or nothing" expectations and as outlined herein. CONTRACTOR is required to provide fully trained and qualified irrigation maintenance staff as well as the appropriate tools and equipment including wire tracing and locating devices. CONTRACTOR is required to provide effective and consistent Supervision of all staff to ensure compliance with the entire scope of the agreement.

CONTRACTOR shall provide a schedule and roster of irrigation staff to the Landscape Superintendent or appointed designee. Any changes to the irrigation maintenance schedule or staffing levels shall be presented to the Landscape Superintendent or appointed designee for approval before any changes occur. CONTRACTOR shall maintain year round irrigation maintenance staffing levels.

CONTRACTOR irrigation maintenance staff will be made available to assist CITY staff in performing seasonal maintenance such as irrigation system renovations, upgrades to irrigation systems, and preventative maintenance repairs outside of growing season. The intent of this provision is to prepare irrigation systems for the subsequent growing season and possible spring planting.

### E.9 Compliance-Based Payment and Accountability Expectations

City will accept ***NO*** less than full completion of the functions described in sections **(E.4)**, **(E.5)**, and **(E.6)** during applicable service day and within the full span of each irrigation system being serviced. Failure to comply with this expectation will result in deduction of applicable service costs from the monthly payment, which is calculated by taking the monthly service cost multiplied by twelve and divided by 52 for a weekly service value (Monthly cost X 12/52). In addition, the Contractor will be responsible for any costs incurred by the City as a result of negligence by the Contractor for not providing service as outlined in the Technical Specifications.

## SECTION F – CHEMICAL APPLICATIONS

### F.1 Use of Chemicals

CONTRACTOR shall submit a list of all herbicide and pesticide chemicals proposed for use under this contract for approval by the Landscape Superintendent or appointed designee. Chemical materials utilized shall be limited to chemicals approved by the State of California Department of Pesticide Regulation. CONTRACTOR shall provide associated product labels and Material Safety Data Sheets. The use of all restricted materials shall be done according to a Pest Control Advisor's recommendation and shall conform to Los Angeles County Department of Weights and Measures, Agricultural Commissioner regulations.

### F.2 Licenses, Certificates, and Records

Chemicals shall only be applied according to a Pest Control Advisor's recommendation and shall only be applied by trained and qualified applicators. Records of all chemical application operations shall be kept and reported according to all applicable regulatory agency requirements. Chemical application reports shall be provided at the request of the Landscape Superintendent or appointed designee.

### F.3 Chemical Applications

CONTRACTOR shall utilize chemicals in accordance to a Pest Control Advisor's and the product manufacturer's recommendations. Landscape Superintendent or appointed designee shall be notified of all scheduled chemical applications. CONTRACTOR shall furnish all chemicals required for integrated vegetation control.

### F.4 Drift Control

Drift control shall be exercised during all chemical applications. Given the public access of Parks and City facility grounds, all necessary precautionary measures shall be exercised to ensure public and worker safety.

### F.5 Chemical Edging

Chemical edging may be used along walls, enclosures, posts, & fences where the continued use of string trimmers will cause damage or as directed by Landscape Superintendent or appointed designee. Turf around trees that exist in turf areas shall be continually treated with herbicide to provide a six (6) inch to (12) inch buffer in order to protect tree basal flares from mechanical damage. These rings shall be maintained in a weed free condition at all times.

### F.6 Public Notices

CONTRACTOR shall be responsible for posting all required chemical application notifications pursuant to manufacturer recommendation and applicable regulatory agency requirements. No chemical herbicide, rodenticide, or pesticide shall be applied until the Landscape Superintendent or appointed designee

issues written authorization. Restricted materials can only be applied by trained applicators under the oversight of a Qualified Applicator Certificate holder.

## SECTION G – PRE-EVENT SEASON SITE PREPARATION

CONTRACTOR shall complete the following pre-event season maintenance detail work, to be completed according to individual site requirements as outlined below;

**G.1. Amphitheater**

**Complete the following tasks by May 1st each year:**

1. Inspect/repair leaking and broken irrigation system components. Flush out and tune up quick couplers according to City of Palmdale Engineering Detail I-5.
2. Remove dead plant material.
3. Trim plant material at stage left ramp gate.
4. Pressure wash and/or power scrub site to remove all foreign objects from surfaces; such as gum, grease, bird droppings, and/or spills.

**G.2 Best of the West**

**Complete the following tasks by March 1st each year:**

1. Inspect/repair leaking and broken irrigation system components. Flush out and tune up quick couplers according to City of Palmdale Engineering Detail I-5.
2. Detail all planters; remove trash and weeds.
3. Remove dead plant material.
4. Pressure wash and/or power scrub site to remove all foreign objects from surfaces, such as gum, grease, bird droppings, and/or spills.
5. Abate weeds along outfield fence lines and brick dust areas.

**G.3 Poncitlan Square**

**Complete the following tasks before May 1st each year:**

1. Inspect/repair leaking and broken irrigation system components. Flush out and tune up quick couplers according to City of Palmdale Engineering Detail I-5.
2. Detail all planters; remove trash and weeds.

3. Remove dead plant material.

4. Pressure wash and/or power scrub site to remove all foreign objects from surfaces, such as gum, grease, bird droppings, and/or spills.

**G.4 Pelona Vista, Manzanita, McAdams, Joshua, and Domenic Massari Parks**

**Complete the following tasks before March 1st each year.**

1. Inspect/repair leaking and broken irrigation system components. Flush out and tune up quick couplers according to City of Palmdale Engineering Detail I-5.

2. Detail all planters, remove trash and weeds.

3. Remove dead plant material.

4. Pressure wash and/or power scrub site to remove all foreign objects from surfaces, such as gum, grease, bird droppings, and/or spills.

**G.5 Drytown Water Park**

**Complete the following tasks before May 1st each year.**

1. Inspect/repair leaking and broken irrigation system components. Flush out and tune up quick couplers according to City of Palmdale Engineering Detail I-5.

2. Detail all planters; remove trash and weeds.

3. Remove dead plant material.

4. Pressure wash and/or power scrub site to remove all foreign objects from surfaces, such as gum, grease, bird droppings, and/or spills.

## SECTION H – FERTILIZATION-ADDITIONAL SERVICES

**H.1 Turf Fertilization-Additional Services**

Turf shall be free of moisture at the time of fertilizer application. Application of the fertilizer shall be done in irrigated sections of City Parks and Facility Grounds. Fertilizer will be mechanically broadcast according to the manufacturer's recommendations. All fertilized areas shall be thoroughly soaked immediately after the fertilizer is broadcast. CONTRACTOR is responsible for proper calibration and operation of fertilizer spreaders.

The CITY will purchase and supply fertilizer. CONTRACTOR will supply equipment and labor at a cost in accordance with the corresponding fertilization bid in **Exhibit B – Fee Schedule of resulting Contract for services – *Additional Services*** to fertilize City Parks and Facility Grounds. Fertilizer material will be made available to the CONTRACTOR at the CITY Maintenance Yard located at 39110 3rd Street East.

H.2 Plant, Shrub and Vine Fertilization- Additional Services

Fertilizer will be mechanically broadcast according to the manufacturer suggested applications rates. Application of the fertilizer shall be done in irrigated sections of City Parks and Facility Grounds. In point source irrigated landscapes; fertilizer shall be applied in a manner to prevent fertilizer build up in the plant foliage and be hand watered in using hoses and quick couplers. CONTRACTOR is responsible for proper calibration and operation of fertilizer spreaders.

The CITY will purchase and supply fertilizer. CONTRACTOR will supply equipment and labor at a cost in accordance with the corresponding fertilization bid in **Exhibit B – Fee Schedule of resulting Contract for Services – *Additional Services*** to fertilize City Parks and Facility Grounds. Fertilizer material will be made available to the CONTRACTOR at the CITY Maintenance Yard located at 39110 3rd Street East.

H.3 Ground Cover Fertilization-Additional Services

Fertilizer will be mechanically broadcast according to the manufacturer's recommendations. Application of the fertilizer shall be done in irrigated sections of City Parks and Facility Grounds.

CONTRACTOR is responsible for proper calibration and operation of fertilizer spreaders. The CITY will purchase and supply fertilizer. CONTRACTOR will supply equipment and labor at a cost in accordance with the corresponding fertilization bid in **Exhibit D – Fee Schedule of resulting Contract for Services – *Additional Services*** to fertilize City Parks and Facility Grounds. Fertilizer material will be made available to the CONTRACTOR at the CITY Maintenance Yard located at 39110 3rd Street East.

H.4 Fertilization Frequencies

Fertilization shall be done as directed by the Landscape Superintendent or appointed designee. The CITY will purchase and supply fertilizer. CONTRACTOR will supply equipment and labor at a cost in accordance with the corresponding fertilization bid in **Exhibit B – Fee Schedule of resulting Contract for Services – *Additional Services*** to fertilize City Parks and Facility Grounds. Fertilizer material will be made available to CONTRACTOR at the CITY Maintenance Yard located at 39110 3rd Street East.

H.5 Clean Up

All walkways, trails, right of ways, streets, or other areas dirtied by fertilization operations shall be cleaned before moving on to the next City Park or Facility Grounds to be fertilized. No fertilizer shall be left on sidewalks, roadways, or adjacent properties.

## SECTION I – DETHATCH OPERATIONS-ADDITIONAL SERVICES

I.1 De-thatching-Additional Services

All City Parks and Facility Ground turf areas may be dethatched once per year, prior to the spring fertilization.

**I.2 Minimum De-thatching Standards-Additional Services**

De-thatching shall be accomplished by use of a "vertical cut" type de-thatch machine. The Landscape Superintendent or appointed designee shall determine the degree of thatch removal immediately prior to the start of de-thatching operations. All thatch and debris shall be picked up and disposed of offsite prior to the end of the workday. CONTRACTOR shall be responsible for disposing of de-thatch debris in appropriate dumpsters.

**I.3 Irrigation System Protection**

All irrigation system fixtures shall be flagged in order to prevent damage during de-thatching operations. Any irrigation system damage resulting from de-thatching operations shall be immediately repaired at CONTRACTOR expense.

**I.4 Clean Up**

All walkways, trails, right of ways, streets, or other areas dirtied by de-thatching operations shall be cleaned before moving on to the next City Park or Facility Grounds to be de-thatched. No debris shall be left on sidewalks, roadways, or adjacent properties.

## SECTION J – AERATION OPERATIONS-ADDITIONAL SERVICES

**J.1 Aeration-Additional Services**

All City Park and Facility Grounds turf areas may be aerated a minimum of one time each year prior to the summer fertilization. Additional aerations may be required as directed by Landscape Superintendent or appointed designee.

**J.2 Minimum Aeration Standards-Additional Services**

Aeration shall be accomplished by removing 1" diameter by 2" deep cores at a maximum spacing of 6" via use of an approved mechanical aeration machine. All cores shall be removed from the turf and disposed of offsite or thoroughly pulverized within twenty-four (24) hours after aerating.

**J.3 Irrigation System Protection**

All irrigation system fixtures shall be flagged in order to prevent damage during aeration operations. Any irrigation system damage resulting from aeration operations shall be immediately repaired at CONTRACTOR expense.

**J.4 Clean Up**

All walkways, trails, right of ways, streets, or other areas dirtied by aeration operations shall be cleaned before moving on to the next City Park or Facility Grounds. No soil plugs shall be left on sidewalks, roadways, or adjacent properties.

## SECTION K – SPORT FIELD ADDITIONAL SERVICES

### K. 1 Soccer Field Renovation– Additional Services

1. CONTRACTOR will supply equipment and labor at a cost in accordance with the Soccer Field Renovation fee in **Exhibit D: Fee Schedule – *Additional Services*** to renovate turf in soccer fields. The

   CITY will purchase and supply turf seed, mulch (soil/topper), fertilizer, and temporary fencing material to close and renovate soccer fields. CONTRACTOR shall acquire turf renovation materials as directed by Landscape Superintendent or appointed designee.

2. CONTRACTOR shall flag all irrigation heads to prevent irrigation system damage.

3. CONTRACTOR shall fill in low spots or depressions and then stone bury entire field in two opposing directions to a depth of 8"

4. CONTRACTOR shall roll field level and fill in low spots or depressions with material provided by CITY.

5. CONTRACTOR shall hydro seed entire field. Seed and mulch shall be applied according to seed manufacturer recommendations.

6. CONTRACTOR shall ensure irrigation is tuned up and functioning efficiently to sustain turf through development.

7. CONTRACTOR shall maintain in place any temporary fencing to protect renovation site. Temporary fencing shall remain in place according to the direction given by the Landscape Superintendent or appointed designee.

8. CONTRACTOR is responsible for monitoring renovation through establishment.

### K. 2 Ball Diamond Outfield Renovation – Additional Services

1. CONTRACTOR will supply equipment and labor at a cost in accordance with the Ball Diamond Outfield Renovation fee in **Exhibit B: Fee Schedule – *Additional Services*** to renovate turf in ball diamond outfields. The CITY will purchase and supply turf, seed, mulch (soil/topper), fertilizer, and temporary fencing material to close and renovate ball diamond outfields. CONTRACTOR shall acquire turf renovation materials as directed by Landscape Supervisor or appointed designee.

2. CONTRACTOR shall flag all irrigation heads to prevent irrigation system damage.

3. CONTRACTOR shall fill in low spots or depressions and then stone bury entire field in two opposing directions to a depth of 8".

4. CONTRACTOR shall roll field level and fill in low spots or depressions with material provided by CITY.

5. CONTRACTOR shall ensure irrigation is tuned up and functioning efficiently to sustain turf through development.

6. CONTRACTOR shall hydro seed entire field. Seed and mulch shall be applied according to seed manufacturer recommendations.

7. CONTRACTOR shall maintain in place any temporary fencing to protect renovation site. Temporary fencing shall remain in place according as directed by the Landscape Superintendent or appointed designee.

8. CONTRACTOR is responsible for monitoring renovation through establishment.

**K.3 Ball Diamond Infield Game Preparation – Additional Services**

1. CONTRACTOR will supply equipment and labor at a cost in accordance with the Ball Diamond Infield Preparation fee in **Exhibit B: Fee Schedule – *Additional Services*** to prepare ball diamond infields for play. The CITY will purchase and supply brick dust for ball diamond infield preparation. CITY will have brick dust delivered directly to each infield requiring preparation.

2. CONTRACTOR shall inspect infield for hazardous debris i.e., broken glass, rocks, etc. and remove prior to preparation work.

3. CONTRACTOR shall ensure all bases are removed and base plugs are installed prior to dragging operations.

4. CONTRACTOR shall remove accumulations of brick dust and redistribute where necessary to fill in and re-compact depressions.

5. CONTRACTOR shall drag infield surface with a ball diamond groomer approved by Landscape Superintendent or appointed designee.

6. In-field preparation shall be done to provide a level, safe playing surface.

7. Dragging shall be done to prevent accumulations of brick dust onto adjacent turf and drag mat is never to be drug onto turf areas.

8. At the completion of dragging operations, where drag mat is picked up, any infield material accumulation shall be redistributed and debris removed.

**K. 4 Ball Diamond Infield Restoration – Additional Services**

1. CONTRACTOR will supply equipment and qualified labor at a cost in accordance with the Ball Diamond Infield Restoration fee in **Exhibit B – Fee Schedule – *Additional Services*** to restore infield surface grade, proper surface compaction, and re-set/replace base anchors, pitching rubbers, and home plate. CITY will purchase and supply brick dust, base anchors, pitching rubbers, and home

plate for ball diamond infield restoration. CITY will have brick dust delivered directly to site requiring restoration.

2. CONTRACTOR shall flag all irrigation heads to prevent irrigation system damage.
3. CONTRACTOR shall remove base anchors, pitching rubbers, and home plate.
4. CONTRACTOR shall "pot hole" 1 foot from each base fixture and pitcher's mound to determine average depth of infield material at each field. CONTRACTOR will not contaminate infield material with native soils and/or rocks during ripping or grading process.
5. CONTRACTOR shall rip existing infield material using a tractor mounted ripper to a depth of 4".
6. CONTRACTOR shall survey infields and rough laser grade existing ripped material with tractor mounted laser guided controlled grading implement.
7. CONTRACTOR shall restore proper grade and compaction between 6 inches from edge of concrete out to the turf edges by blending new infield material into existing infield material and laser grading blended material with tractor mounted laser guided controlled grading implement.
8. CONTRACTOR shall ensure the center of the infield is the highest point on the field and have a drainage slope of 1%, correcting any existing grading deficiencies that will not allow the flow of water to drain from field.
9. CONTRACTOR shall restore infield skin arc maintaining a smooth transition between infield surface and turf.
10. CONTRACTOR shall ensure infield is ready for play and reset base anchors, pitching rubbers, and home plate according to specifications provided by Recreation and Culture sports staff.

## SECTION L – TREE MAINTENANCE-ADDITIONAL SERVICES

### L.1 Minor Tree Maintenance Operations-Additional Services

CONTRACTOR may be directed to perform minor tree maintenance in Parks and City Facility Grounds including guying, staking, retying, removal of tree stakes, juvenile tree pruning, removal of suckers, water sprouts, and skirting of trees up to 7'.

CONTRACTOR will supply equipment and labor at a cost in accordance with the corresponding tree maintenance bid in **Exhibit B – Fee Schedule** - ***Additional Services*** to service trees in Parks and City Facility Grounds.

### L.2 Pruning-Additional Services

Most routine pruning to remove weak, diseased, or dead limbs can be accomplished at any time during the year with little effect on the tree. As a rule, growth is maximized and wound closure is fastest if

pruning takes place before the spring growth flush. Some trees, such as Maple and Birch, tend to "bleed" if pruned early in the spring. It may be unsightly, but it is of little consequence to the tree.

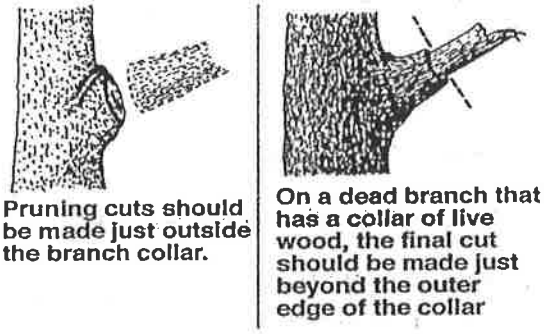
A few tree diseases, such as Oak Wilt, can be spread when pruning wounds allow spores access into the tree. Susceptible trees should not be pruned during active transmission periods.

Heavy pruning just after the spring growth flush should be avoided. At that time, trees have just expended a great deal of energy to produce foliage and early shoot growth. Removal of a large percentage of foliage at this time can stress the tree.[1]

[1] When to prune section contains consumer information provided by International Society of Arboriculture

### L.3 Making Proper Pruning Cuts

Pruning cuts should be made just outside the branch collar. The branch collar contains trunk or parent branch tissue and should not be damaged or removed. If the trunk collar has grown out on a dead limb to be removed, make the cut just beyond the collar. Do not cut the collar.



**Pruning cuts should be made just outside the branch collar.**

**On a dead branch that has a collar of live wood, the final cut should be made just beyond the outer edge of the collar**

If a large limb is to be removed, its weight should first be reduced. Making an undercut about 12 to 18 inches from the limb's point of attachment accomplishes this. Make a second cut from the top, directly above or a few inches farther out on the limb. Doing so removes the limb, leaving the 12- to 18-inch stub. Remove the stub by cutting back to the branch collar. This technique reduces the possibility of tearing the bark. [2]

Tree pruning shall be performed based on the following categories with the intent of developing structurally sound trees symmetrical in appearance with the proper vertical and horizontal clearance. All pruning and trimming operations shall be in accordance with ISA Standards.

(a) All suckers and sprouts shall be cut just outside the attachment collar to the trunk or limbs.

(b) All structural weaknesses such as a split crotch or limbs or severe damage shall be reported to the Landscape Superintendent or appointed designee.

(c) All trimmings and debris shall be removed and disposed of offsite at the end of each work day.

(d) Under no circumstances will stripping of lower branches be permitted in trees of 8" DBH or less. Lower branches shall be retained in a "tipped back" or pinched condition. Upon approval of the Landscape Superintendent or appointed designee, skirting of lower branches may be performed to mitigate irrigation coverage issues.

L.4 Staking and Guying-Additional Services

Trees to be staked or guyed fall into the following categories:

(a) Replacement of missing or damaged stakes where the tree diameter is less than six (6) inches.

(b) Those cases where tree has been damaged and requires additional support.

(c) New trees which have not previously been staked.

The CITY will purchase and supply tree stakes, tree cinch ties, and guy wire hardware. CONTRACTOR to supply equipment and labor at a cost in accordance with the corresponding minor tree maintenance bid in **Exhibit B – Fee Schedule - *Additional Services*** to stake, guy, or re-tie trees. Materials will be made available to the CONTRACTOR at the CITY Maintenance Yard located at 39110 3rd Street East.

## SECTION M – PARK & CITY FACILITY GROUNDS "ALL OR NOTHING" EXPECTATIONS

***City will accept NO less than full completion of the following functions during weekly service.***

**M.1 Park and City Facility Grounds Opening Operations:** City will accept ***NO*** less than full completion of the following functions during applicable weekly service day and within the full span of each City Park and Facility Grounds. Failure to comply with this expectation will result in deduction of applicable service costs from the monthly payment, which is calculated by taking the monthly service cost multiplied by twelve and divided by 365 for a daily service value (Monthly cost X 12/365). In addition, the Contractor will be responsible for any costs incurred by the City as a result of negligence by the Contractor for not providing service as outlined.

1. Safety inspections and litter & debris removal according to Technical Specifications, Section **A.1 and A.5**
2. Trash can emptying according to Technical Specifications, Section **A.3**
3. Dumpster enclosure service according to Technical Specifications, Section **A.4**
4. Hardscape maintenance operations according to Technical Specifications, Section **A.5**
5. Pressure washing according to Technical Specifications, Section **A.6**
6. Playground fall protection surface preparation according to Technical Specifications Section **A.2**

**M.2 Turf:** City will accept ***NO*** less than full completion of the following functions during applicable weekly service day and within the full span of each City Park and Facility Grounds. Failure to comply with this expectation will result in deduction of applicable service costs from the monthly payment, which is calculated by taking the monthly service cost multiplied by twelve and divided by 52 for a weekly service value (Monthly cost X 12/52). In addition, the Contractor will be responsible for any costs incurred by the City as a result of negligence by the Contractor for not providing service as outlined. **Estimated mowing per year: 33**

1. Trash and needle / leaf litter removal according to Technical Specifications, Section **B.1** and **B.9**
2. Mowing and detailing according to Technical Specifications, Section **B.2** through **B.6**
3. Crack weeds according to Technical Specifications, Sections **B.8**
4. Clean up according to Technical Specifications, Sections **B.5** through **B.9**

**M.3 Planter:** City will accept ***NO*** less than full completion of the following functions during applicable weekly service day and within the full span of each City Park and Facility Grounds. Failure to comply with this expectation will result in deduction of applicable service costs from the monthly payment, which is calculated by taking the monthly service cost multiplied by twelve and divided by 52 for a weekly service value (Monthly cost X 12/52). In addition, the Contractor will be responsible for any costs incurred by the City as a result of negligence by the Contractor for not providing service as outlined.

1. Pruning and trimming of plants, shrubs, and ground cover according to Technical Specifications, Sections **D.1** and **D.2**
2. Edging plant material off sidewalks according to Technical Specifications, Section **D.3**
3. Weed control including crack weeds according to Technical Specifications, Section **D.4**
4. Trash and leaf / needle litter removal and clean up according to Technical Specifications, Sections **D.5** through **D.8**
5. Backfilling of depressions or rodent burrows according to Technical Specifications, Sections **D.10**

**M.4 Irrigation:** City will accept ***NO*** less than full completion of the following functions during applicable weekly service day and within the full span of each City Park and Facility Grounds. Failure to comply with this expectation will result in deduction of applicable service costs from the monthly payment, which is calculated by taking the monthly service cost multiplied by twelve and divided by 52 for a weekly service value (Monthly cost X 12/52). In addition, the Contractor will be responsible for any costs incurred by the City as a result of negligence by the Contractor for not providing service as outlined.

1. Appropriate irrigation system tests and adjustments providing for optimal coverage according to Technical Specifications, Sections **E.4** and **E.5**

2. Main line, lateral line, and sprinkler break repairs and job clean up restoring site to pre-existing condition according to Technical Specification, Sections E.4 and E.5

3. Leaky valve repairs according to Technical Specification, Sections E.4 and E.5

**M.5 General Frequencies**

All other maintenance functions included in City Parks and Facility Grounds Technical Specification sections shall observe on-going daily, weekly frequencies as specified in each section.

**M.6 Additional Services Frequencies**

All "additional services" functions outlined in City Parks and Facility Grounds Technical Specifications shall observe as requested frequencies.

# GENERAL BENEFIT LANDSCAPES

## SECTION N – MEDIAN ISLAND AND PLANTER MAINTENANCE

**N.1 Pruning of Plants and Shrubs**

Plants and shrubs shall be pruned and trimmed on a bi-weekly basis, as needed every two weeks using accepted horticultural techniques. Plants and shrubs shall be maintained within the limits of their landscaped areas so as not to encroach into walkways, trails, roadways, parking spaces, and private property. All shrubs will be contained to a maximum height of three (3) feet or as otherwise directed by the Landscape Superintendent or appointed designee. Shrubs shall be pruned to maintain an attractive natural appearance, wherever possible. At the conclusion of blooming cycles, all spent blooms shall be trimmed or removed on a weekly basis. Shrubs will be re-sheared prior to attaining six (6) inches of new growth.

Vines shall be pruned as often as necessary to maintain a satisfactory appearance and secure attachment to walls and fences. CONTRACTOR will supply equipment and labor to reset vines in accordance with the corresponding bid item in **Exhibit D – Fee Schedule of resulting Contract for Services-Additional Services.**

**N.2 Trimming or Pruning of Ground Cover**

Ground cover shall be pruned according to species specific prescribed horticultural practices and as directed by Landscape Superintendent or appointed designee.

**N.3 Edging of Ground Cover**

Ground cover shall be neatly edged and maintained within the limits of landscaped areas so as not to encroach into walkways, trails, roadways, parking lots, and private property.

**N.4 Weed Control**

Weed abatement shall be performed bi-weekly, every two weeks according to accepted best management practices providing for effective on-going weed control after each service. Weed abatement can be performed both chemically and mechanically, although chemical control is preferred. Care shall be taken to prevent damage of ground cover and irrigation systems during mechanical weeding operations. CONTRACTOR shall assume the cost of herbicides, pre-emergents, and surfactants utilized for integrated vegetation management. CONTRACTOR is responsible and liable for the safe handling and application of all herbicide chemical materials. Use of Hula Hoes is strictly prohibited.

**N.5 Green Waste Disposal**

All trimmings shall be removed from General Benefit Landscapes and disposed of in appropriate dumpsters by completion of day's trimming operations or the end of the work day, whichever occurs first.

**N.6 Removal of Litter and Debris**

Dumped debris, glass, leaves, paper, and/or other debris shall be removed and disposed of in appropriate dumpsters on a bi-weekly basis, every two weeks.

**N.7 Removal of Leaf Litter**

Accumulation of leaf and needle litter in all landscaped areas including beds, planters, and turf areas shall be removed in an on-going manner and placed in appropriate green waste trash bin(s).

**N.8 Clean Up**

All walkways, trails, right of ways, streets, or other areas dirtied by trimming operations shall be cleaned and all debris disposed of in appropriate dumpsters prior to the completion of maintenance operations at each site. All debris generated from CONTRACTOR operations shall be picked up and disposed of in appropriate dumpsters. No debris shall be blown into right of ways, streets, or adjacent properties.

**N.9 Frequency**

**Bi-weekly (every two weeks):** Removal of litter and debris **(N.6)**, pruning of shrubs **(N.1)**, trimming and edging of ground cover **(N.2 and N.3)**, weed control in all areas **(N.4)**, green waste disposal **(N.5)**, removal of seasonal leaf litter **(N.7)** and clean up **(N.8)**, and **(N.10)** backfilling of depressions or rodent burrows shall be performed in an on-going manner on a bi-weekly basis, every two weeks.

Inclement weather may preclude adherence to the frequency schedule. CONTRACTOR may request alteration of this all or nothing frequency requirement from the Landscape Superintendent or the appointed designee due to inclement weather. Work shall be performed on the same day in each area every two weeks. All maintenance missed due to inclement weather shall be rescheduled and completed within three (3) working days.

N.10 Planter Grade, Watering Basins, and Mulching

CONTRACTOR shall maintain watering basins (wells) for shrubs and trees and appropriate planter grade, including backfilling of depressions or rodent burrows. Mulching may be necessary in planter areas as required by the Landscape Superintendent or appointed designee. Mulch material will be supplied by the CITY and will be made available to the CONTRACTOR at the location where it will be applied.

N.11 Rejuvenation

Major rejuvenation pruning operations will be performed during the winter months as directed by Landscape Superintendent or appointed designee.

N.12 Plant Material Replacement

The CONTRACTOR shall be responsible for the complete removal and replacement of plant material lost due to the CONTRACTOR's inappropriate maintenance or negligence, as determined by either the Landscape Superintendent or appointed designee.

N.13 Seasonal Planting-Additional Services

In order to sustain optimum aesthetic appearance of General Benefit Landscapes, seasonal planting may be required. CONTRACTOR will supply equipment and labor at a cost in accordance with the corresponding plant material installation bid in **Exhibit D – Fee Schedule of resulting Contract for Services-Additional Services** to install CITY provided plant material. Plant material will be made available to the CONTRACTOR at the CITY Maintenance Yard located at 39110 3rd Street East. **If any planting is required due to CONTRACTOR negligence, CONTRACTOR will be responsible for the cost of plant replacement including labor & material at no expense to the CITY.**

N.14 Compliance-Based Payment and Accountability Expectations

City will accept ***NO*** less than full completion of the above functions described in sections **N.1** through **N.8** and **N.10** during applicable service day and within the full span of each site being serviced. Failure to comply with this expectation will result in deduction of applicable service costs from the monthly payment, which is calculated by taking the monthly service cost multiplied by twelve and divided by 26 for a bi-weekly service value (Monthly cost X 12/26). In addition, the Contractor will be responsible for any costs incurred by the City as a result of negligence by the Contractor for not providing service as outlined in the technical specifications.

## SECTION O – IRRIGATION

O.1 Contractor's Irrigation Scope of Work

CONTRACTOR will be responsible for all irrigation appendages downstream of the backflow prevention device outlet. The CONTRACTOR shall be responsible for, but not limited to, the maintenance, repair, and/or replacement of system sleeves, mainlines, irrigation control wires, irrigation control valves, valve diaphragms, valve boxes, quick couplers, quick coupler boxes, gate valves, lateral lines, bubblers, drip

tubing and emitters, sprinkler heads, and sprinkler nozzles. The CITY will purchase and provide **ALL** irrigation materials necessary to service irrigation systems. Irrigation materials will be made available to the CONTRACTOR at the CITY Maintenance Yard located at 39110 3rd Street East.

The CONTRACTOR will be directed to perform seasonal maintenance i.e., clean out the interior of valve boxes, irrigation controller and backflow prevention device enclosures as well as insulating backflow prevention devices and irrigation booster pumps. CITY and CONTRACTOR staff will check irrigation systems with questionable excessive water consumption. All observed deficiencies shall be corrected in accordance to the engineering details in Section 6 of the City's Engineering Standards.

**O.2 City of Palmdale's Scope of Work**

The CITY will be responsible for the maintenance, replacement, and programming of all irrigation controllers, enclosures, and associated water conservation equipment. The City will also be responsible for maintenance and/or replacement of backflow prevention devices and enclosures, flow sensors, and pressure regulators.

**O.3 Irrigation Material Use Reporting**

CONTRACTOR is responsible for reporting usage of all irrigation materials utilized per site as directed by Landscape Superintendent or appointed designee. Irrigation material usage logs must be submitted in order for additional irrigation material to be issued.

**O.4 Irrigation System Testing and Adjustments**

All irrigation systems will be inspected and tested on a **bi-weekly** basis or as necessary when damage is suspected, observed, or reported. Irrigation system tests shall encompass the entire irrigation system at each site being serviced. Irrigation system tests shall ensure proper irrigation system coverage through repair of damaged or defective irrigation system parts. CONTRACTOR shall cycle irrigation controller(s) through each station allowing sufficient time, as required according to emission device, to check the functions of all facets of the irrigation system, make necessary adjustments, and repair all observed defects. Once adjustments and repairs are completed, CONTRACTOR shall cycle station again to ensure proper operation.

CONTRACTOR shall adjust all irrigation emission devices to provide for proper angle, depth, distribution uniformity, and matched precipitation rates, making adjustments to prevent excessive water runoff onto sidewalks, streets, or adjacent properties. CONTRACTOR shall flush lines to clear rocks, mud and debris, and unplug clogged nozzles. Observed irrigation system deficiencies shall be reported to the Landscape Superintendent or appointed designee on a daily basis. The report will include areas that are over irrigated and/or under irrigated.

**O.5 Irrigation System Repairs**

All repairs shall be completed according to the engineering details in Section 6 of the City of Palmdale's Engineering Standards and according to accepted industry standards. When repairing older irrigation

systems, the repair will be performed to meet current City of Palmdale Engineering standards. Irrigation system pressure regulating valves, pressure compensating screens, sprinklers, nozzles, bubblers, drip tubing, and emitters shall be replaced to provide matched precipitation rates and distribution uniformity.

CONTRACTOR shall flush lines to clear rocks, mud and debris, and unplug clogged nozzles. All repairs shall be completed within 24 hours of being discovered by the CONTRACTOR or of being reported to the CONTRACTOR by the Landscape Superintendent or appointed designee. The Landscape Superintendent or appointed designee shall be notified and must approve any irrigation system modification recommended by the CONTRACTOR to improve the irrigation system efficiency.

**O.6 Frequency**

**Bi-weekly (every two weeks):** Irrigation system repairs **(O.5)** for issues discovered by or reported to the Contractor shall be completed within 24 hours, performed on an on-going basis, and as required. Irrigation system testing & adjustments **(O.4)** shall be performed on a bi-weekly basis. Irrigation system repairs **(O.5)** shall be performed bi-weekly, concurrent with irrigation system testing and adjustments.

Inclement weather may preclude adherence to the frequency schedule. CONTRACTOR may request alteration of this all or nothing frequency requirement from the Landscape Superintendent or the appointed designee due to inclement weather. Work shall be performed on the same day each week. All maintenance missed due to inclement weather shall be rescheduled and completed within three (3) working days.

**O.7 Irrigation Staff Training Expectation**

CONTRACTOR shall ensure that all personnel working on the irrigation systems are fully trained in all aspects of landscape irrigation system maintenance. CONTRACTOR staff must be able to easily identify and isolate system problems in a thorough and efficient manner.

Knowledge of landscape irrigation systems shall include the operation, maintenance, troubleshooting, adjustment, and repair of irrigation systems.

CONTRACTOR Supervisor or Lead Worker in charge of irrigation technicians shall be a professionally Certified Irrigation Contractor by the Irrigation Association and/or a Landscape Industry Certified Technician by the California Landscape Contractors Association.

**O.8 Irrigation System Maintenance Staffing**

CONTRACTOR shall provide dedicated irrigation maintenance staff, separate from the landscape maintenance crews. CONTRACTOR shall provide adequate staffing levels to sustain **bi-weekly** irrigation system maintenance "all or nothing" expectations and as outlined herein. CONTRACTOR is required to provide fully trained and qualified irrigation maintenance staff as well as the appropriate tools and equipment including wire tracing and locating devices. CONTRACTOR is required to provide effective and consistent Supervision of all staff, to ensure compliance with the entire scope of this agreement.

CONTRACTOR shall provide a schedule and roster of irrigation staff to the Landscape Superintendent or appointed designee. Any changes to the irrigation maintenance schedule or staffing levels shall be presented to the Landscape Superintendent or appointed designee for approval and before any changes occur. CONTRACTOR shall maintain year round irrigation maintenance staffing levels.

CONTRACTOR irrigation maintenance staff will be made available to assist CITY staff in performing seasonal maintenance such as irrigation system renovations, upgrades to irrigation systems, and preventative maintenance repairs outside of growing season. The intent of this provision is to prepare irrigation systems for the subsequent growing season and possible spring planting.

**O.9 Compliance-Based Payment and Accountability Expectations**

City will accept ***NO*** less than full completion of the functions described in sections **O.4** and **O.5** during applicable service day and within the full span of each irrigation system being serviced. Failure to comply with this expectation will result in deduction of applicable service costs from the monthly payment, which is calculated by taking the monthly service cost multiplied by twelve and divided by 26 for a **bi-weekly** service value (Monthly cost X 12/26). In addition, the Contractor will be responsible for any costs incurred by the City as a result of negligence by the Contractor for not providing service as outlined in the Technical Specifications.

## SECTION P – CHEMICAL APPLICATIONS

**P.1 Use of Chemicals**

CONTRACTOR shall submit a list of all herbicide and pesticide chemicals proposed for use under this contract for approval by the Landscape Superintendent or appointed designee. Chemical materials utilized shall be limited to chemicals approved by the State of California Department of Pesticide Regulation. CONTRACTOR shall provide associated product labels and Material Safety Data Sheets. The use of all restricted materials shall be done according to a Pest Control Advisor's recommendation and shall conform to Los Angeles County Department of Weights and Measures, Agricultural Commissioner regulations.

**P.2 Licenses, Certificates, and Records**

Chemicals shall only be applied according to a Pest Control Advisor's recommendation and shall only be applied by trained and qualified applicators. Records of all chemical application operations shall be kept and reported according to all applicable regulatory agency requirements. Chemical application reports shall be provided at the request of the Landscape Superintendent or appointed designee.

**P.3 Chemical Applications**

CONTRACTOR shall utilize chemicals in accordance to a Pest Control Advisor's and the product manufacturer recommendations. Landscape Superintendent or appointed designee shall be notified of all scheduled chemical applications. CONTRACTOR shall furnish all chemicals required for integrated vegetation control.

P.4 Drift Control

Drift control shall be exercised during all chemical applications. Given the public access of General Benefit Landscapes, all precautionary measures shall be exercised necessary to ensure public and worker safety.

P.5 Chemical Edging

Chemical edging may be used along walls, enclosures, posts, and fences where the continued use of string trimmers will cause damage. Turf around trees that exist in turf areas shall be continually treated with herbicide to provide a six (6) inch to (12) inch buffer in order to protect tree basal flares from mechanical damage as directed by Landscape Superintendent or appointed designee. These rings shall be maintained in a weed free condition at all times.

P.6 Public Notices

CONTRACTOR shall be responsible for posting all required chemical application notifications pursuant to manufacturer recommendation and applicable regulatory agency requirements. No chemical herbicide, rodenticide, or pesticide shall be applied until the Landscape Superintendent or appointed designee issues written authorization. Restricted materials may only be applied by trained applicators under the oversight of a Qualified Applicator Certificate holder.

## SECTION Q – GENERAL BENEFIT LANDSCAPES "ALL OR NOTHING" FREQUENCIES

***City will accept NO less than full completion of the following functions during bi-weekly service.***

**Q.1 Planter:** City will accept ***NO*** less than full completion of the following functions during applicable bi-weekly service day and within the full span of each General Benefit Landscape. Failure to comply with this expectation will result in deduction of applicable service costs from the monthly payment, which is calculated by taking the monthly service cost multiplied by twelve and divided by 26 for a bi-weekly service value (Monthly cost X 12/26). In addition, the Contractor will be responsible for any costs incurred by the City as a result of negligence by the Contractor for not providing service as outlined.

1. Pruning and trimming of shrubs and ground cover according to Technical Specifications, Sections **N.1** and **N.2**
2. Edging plant material off sidewalks according to Technical Specifications, Section **N.3**
3. Weed control including crack weeds according to Technical Specifications, Section **N.4**
4. Trash and leaf / needle litter removal and clean up according to Technical Specifications, Sections **N.5** through **N.8**
5. Backfilling of depressions or rodent boroughs according to Technical Specifications, Sections **N.10**

**Q.2 Irrigation:** City will accept ***NO*** less than full completion of the following functions during applicable bi-weekly service day and within the full span of each General Benefit Landscape. Failure to comply with this expectation will result in deduction of applicable service costs from the monthly payment, which is calculated by taking the monthly service cost multiplied by twelve and divided by 26 for a bi-weekly service value (Monthly cost X 12/26). In addition, the Contractor will be responsible for any costs incurred by the City as a result of negligence by the Contractor for not providing service as outlined.

1. Appropriate irrigation system tests and adjustments providing for optimal coverage according to Technical Specifications, Sections **O.4** and **O.5**

2. Main line, lateral line, and sprinkler break repairs and job clean up restoring site to pre-existing condition according to Technical Specification, Sections **O.4** and **O.5**

3. Leaky valve repairs according to Technical Specification, Sections **O.4** and **O.5**

**Q.3 General Frequencies**

All other maintenance functions included in General Benefit Landscapes Technical Specification sections shall observe on-going or bi-weekly (every two weeks) frequencies as specified in each section.

**Q.4 Additional Services Frequencies**

All "additional services" functions outlined in the General Benefit Landscapes Technical Specifications shall observe as requested frequencies.

# PALMDALE TRANSPORTATION CENTER

## SECTION R – TRANSPORTATION GENERAL MAINTENANCE ITEMS

**R.1 Palmdale Transportation Center Grounds Morning Operations**

CONTRACTOR shall complete the following site opening functions no later than 8:00 a.m. each day;

1. Delineate hazards immediately.

2. Remove all litter and debris accumulated at the entrances of Clock Tower building to ensure clean passage for City staff and the general public.

3. Remove litter and debris from Palmdale Transportation Center grounds.

**R.2 Palmdale Transportation Center Trash Cans**

1. Exterior trash cans and receptacles shall be emptied once **daily** Monday through Sunday, prior to 8:00 a.m. and all waste shall be placed in designated dumpsters.

2. Trash cans shall be conveniently located for public use and returned to such locations each morning if found displaced.

3. CONTRACTOR shall use CITY provided clear trash can liners in all trash cans and receptacles.

R.3 Dumpster Enclosure

1. All trash, accumulated, and/or dumped debris shall be collected and placed in designated dumpsters **daily**.

2. Dumpster enclosures shall be pressure washed **weekly** or as directed by the Landscape Superintendent or appointed designee.

R.4 Hardscape Maintenance Operations

1. Palmdale Transportation Center entryways, walkways, steps, drop off areas, bus depot, Clock Tower Plaza, train platforms, ticket vending areas, and parking lots shall have all trash, accumulated, and/or dumped debris collected and placed in designated dumpsters **daily** during opening operations.

2. Palmdale Transportation Center entryways, walkways, steps, drop off areas, bus depot, Clock Tower Plaza, train platforms, ticket vending areas, and all other hardscaping around the Clock Tower building shall be blown down **daily** during opening operations.

R.5 Pressure Washing Operations

**Train Platforms and Ticket vending areas:** All hardscaping at and around Clock Tower Plaza shall be pressure washed and/or power scrubbed to remove all foreign objects from surfaces, such as gum, grease, bird droppings, and/or spills **twice a week** or as directed by Landscape Superintendent or appointed designee.

**Dumpster enclosures:** Dumpster enclosure shall be pressure washed **weekly** or as directed by the Landscape Superintendent or appointed designee.

**Bus Depot sidewalks:** All sidewalks at the bus depot, not including the shelters, shall be pressure washed **weekly** or as directed by the Landscape Superintendent or appointed designee.

R.6 Swales, Drains, and Gutters

Drainage infrastructure, including channels and gutters, within Palmdale Transportation Center up to the edge of asphalt pavement shall be kept free of vegetation, debris, and algae to allow the unrestricted flow of water. Plugged drains and missing or damaged grates shall be immediately reported to the Landscape Superintendent or appointed designee.

1. Swales and gutters shall be inspected and kept clear of all silt, debris, and litter to allow for continuous flow of water.

2. Drains and collection boxes, including grates at entrances of Clock Tower building, shall be cleared of all debris and kept in a clean condition.

3. Drain grates shall be inspected to mitigate hazards. CONTRACTOR shall immediately inform the Landscape Superintendent or appointed designee of any broken or missing grates and delineate any hazards for public safety.

R.7 Frequency

**Daily:** Morning operations and removal of litter and debris according to Sections **R.1** through **R.4** shall be performed on a daily basis and must be completed by 8:00 a.m.

**Weekly:** Pressure washing and drainage maintenance according to Sections **R.5** and **R.6** shall be performed in an on-going manner on a weekly basis.

## SECTION S – TURF MAINTENANCE

### S.1 Pre-Mowing Operation

Prior to initiating a mowing operation, the site is to be inspected by a knowledgeable and responsible employee, who will determine the practicability of initiating the operation. Litter is not to be shredded by mowers, glass bottles are not to be driven over and broken, and excessively wet turf areas are not to be driven across. Damaged sprinkler heads and valve box covers are to be immediately reported to Landscape Superintendent or appointed designee. Recycling mowers are required. Dumped debris, glass, leaves, paper, and other debris shall be removed and disposed in dumpster prior to mowing operations. CONTRACTOR shall maintain appropriate turf grade, including backfilling of depressions or rodent boroughs.

### S.2 Turf Mowing

Turf at the Palmdale Transportation Center shall be mowed with 21 deck walk behind power mowers. The mowers shall be maintained and operated so as to provide a smooth even cut. The reel or blade adjustment will provide a uniform, level cut without ridges or depressions. All mower safety features shall be in place at all times to protect operator and the public.

If a mowing operation cannot be thoroughly completed within the designated time frame, the Landscape Superintendent or appointed designee shall be immediately notified via a phone call and notification followed up with an e-mail to the Landscape Section group e-mail address.

### S.3 Cutting Heights

Cutting heights for all turf in Palmdale Transportation Center shall be 2" or as directed by Landscape Superintendent or appointed designee.

### S.4 Edging

All turf grass borders shall be neatly and uniformly edged or trimmed concurrent with every mowing. Turf borders along sidewalks and mow strips shall be cut with vertical blade edger.

Use of string trimmers to perform this task is not acceptable. Only trimming around appurtenances in turf (e.g. valve and meter boxes, controller enclosures, manhole covers etc.) may be accomplished through the use of string trimmers.

S.5 Clipping Pick Up

Excessive clippings and/or debris left behind by recycling mowers shall be collected and removed from the site prior to the completion of that day's mowing operations or the end of the work day, whichever occurs first.

S.6 Clean Up

All walkways, parking lots, roadways, or other areas dirtied by mowing operations shall be cleaned and all debris disposed of in dumpsters prior to the completion of mowing operations at each site. All debris generated from CONTRACTOR operations shall be picked up and disposed of in appropriate dumpsters. No debris shall be blown into planters, right of ways, streets, or adjacent properties.

S.7 Frequency

Mowing operations shall be performed at such intervals of time so that no more than one-third of the grass blade is removed during each mowing in returning the grass to the accepted height for the species of grass being mowed, and at no less than weekly intervals during the growing season. Work shall be performed on the same day each week.

Inclement weather may preclude adherence to the frequency schedule. CONTRACTOR may request alteration of this mowing frequency from the Landscape Superintendent or the appointed designee due to inclement weather. All mowing missed due to inclement weather shall be rescheduled and completed within three (3) working days. **Estimated mowings per year: 33**

S.8 Sidewalks

Sidewalks are to be maintained in a weed free condition. This includes the removal of weeds in all paved and/or unpaved surfaces, in joints, cracks, or other crevices within or adjoining to the curb and gutter, up to the edge of asphalt pavement, within the boundaries of the Palmdale Transportation Center.

S.9 Removal of Leaf Litter

Accumulation of leaf and needle litter from all landscaped areas including beds, planters, and turf areas shall be removed in an on-going manner and placed in appropriate green waste trash bin(s).

S.10 Turf Weeding-Additional Services

CONTRACTOR will supply equipment and labor at a cost in accordance with the Chemical Broadleaf Weed Control in **Exhibit D: Fee Schedule of resulting Contract for Services-Additional Services** to mitigate broadleaf weeds in turf as directed by Landscape Superintendent or appointed designee. The CITY will purchase and supply turf broadleaf weed control chemicals.

S.11 Compliance-Based Payment and Accountability Expectations

City will accept ***NO*** less than full completion of the functions described in sections **S.1** through **S.9** during applicable service day and within the full span of the Palmdale Transportation Center. Failure to comply

with this expectation will result in deduction of applicable service costs from the monthly payment, which is calculated by taking the monthly service cost multiplied by twelve and divided by 52 for a weekly service value (Monthly cost X 12/52). In addition, the Contractor will be responsible for any costs incurred by the City as a result of negligence by the Contractor for not providing service as outlined in the Technical Specifications.

## SECTION T – PLANTER MAINTENANCE

### T.1 Pruning of Plants and Shrubs

Plants and shrubs shall be pruned and trimmed as needed using accepted horticultural techniques. Plants and shrubs shall be maintained within the limits of their landscaped areas so as not to encroach into walkways, trails, parking spaces, and private property. All shrubs will be contained to a maximum height of three (3) feet or as otherwise directed by the Landscape Superintendent or appointed designee. Shrubs shall be pruned to maintain an attractive natural appearance wherever possible. At the conclusion of blooming cycles, all spent blooms shall be trimmed or removed on a weekly basis. Shrubs will be re-sheared prior to attaining six (6) inches of new growth.

Vines shall be pruned as often as necessary to maintain a satisfactory appearance and secure attachment to walls and fences. CONTRACTOR will supply equipment and labor to reset vines in accordance with the corresponding bid item in **Exhibit B – Fee - *Additional Services.***

### T.2 Trimming or Pruning of Ground Cover

Ground cover shall be pruned according to species specific prescribed horticultural practices and as directed by Landscape Superintendent or appointed designee.

### T.3 Edging of Ground Cover

Ground cover shall be neatly edged and maintained within the limits of landscaped areas so as not to encroach into walkways, trails, parking lots, and private property.

### T.4 Weed Control

Weed abatement shall be performed weekly according to accepted best management practices providing for effective on-going weed control after weekly service. Weed abatement may be performed both chemically and mechanically, although chemical control is preferred. Care shall be taken to prevent damage of ground cover and irrigation systems during mechanical weeding operations. CONTRACTOR shall assume the cost of herbicides, pre-emergents, and surfactants utilized for integrated vegetation management. CONTRACTOR responsible and liable for the safe handling and application of all herbicide chemical materials. Use of Hula Hoes is strictly prohibited.

**T.5 Green Waste Disposal**

All trimmings shall be removed from Palmdale Transportation Center grounds and disposed of in Maintenance Yard roll offs by completion of that day's trimming operations or the end of the work day, whichever occurs first.

**T.6 Removal of Litter and Debris**

Dumped debris, glass, leaves, paper, and/or other debris blown into all planters shall be removed and disposed of in appropriate dumpsters on a daily basis.

**T.7 Removal of Leaf Litter**

Accumulation of leaf and needle litter in all landscaped areas including beds, planters, and turf areas shall be removed in an on-going manner and placed in appropriate green waste trash bin(s).

**T.8 Clean Up**

All walkways, trails, parking lots, roadways, or other areas dirtied by trimming operations shall be cleaned and all debris disposed of in appropriate dumpsters prior to the completion of maintenance operations at each site. All debris generated from CONTRACTOR operations shall be picked up and disposed of in Maintenance Yard roll offs. No debris shall be blown into right of ways, streets, or adjacent properties.

**T.9 Frequency**

**Daily:** Removal of litter and debris **(T.6)** shall be performed on a daily basis and must be completed prior to completion of the Palmdale Transportation Center morning operations.

**Weekly:** Pruning of shrubs **(T.1)**, trimming and edging of ground cover **(T.2 and T.3)**, weed control in all areas **(T.4)**, green waste disposal **(T.5)** removal of leaf litter **(T.7)**, clean up **(T.8)**, and backfilling of depressions or rodent boroughs shall be performed in an on-going manner on a weekly basis.

Inclement weather may preclude adherence to the frequency schedule. The CONTRACTOR may request alteration of this all or nothing frequency requirement from the Landscape Superintendent or the appointed designee due to inclement weather. Work shall be performed on the same day each week. All maintenance missed due to inclement weather shall be rescheduled and completed within three (3) working days.

**T.10 Planter Grade, Watering Basins, and Mulching**

CONTRACTOR shall maintain watering basins (wells) for shrubs and trees and appropriate planter grade, including backfilling of depressions or rodent burrows. Mulching may be necessary in planter areas as required by the Landscape Superintendent or appointed designee. Mulch material will be supplied by

**T.11 Rejuvenation**

Major rejuvenation pruning operations will be performed during the winter months as directed by Landscape Superintendent or appointed designee.

**T.12 Plant Material Replacement**

The CONTRACTOR shall be responsible for the complete removal and replacement of plant material lost due to the CONTRACTOR'S inappropriate maintenance or negligence, as determined by either the Landscape Superintendent or appointed designee.

**T.13 Seasonal Planting-Additional Services**

In order to sustain optimum aesthetic appearance of Palmdale Transportation Center, seasonal planting may be required. CONTRACTOR will supply equipment and labor at a cost in accordance with the corresponding plant material installation bid in **Exhibit D – Fee Schedule of resulting Contract for Services-Additional Services** to install CITY provided plant material. Plant material will be made available to the CONTRACTOR at the CITY Maintenance Yard located at 39110 3rd Street East. **If any planting is required due to CONTRACTOR negligence, CONTRACTOR shall be responsible for the cost of plant replacement including labor and material at no expense to the CITY.**

**T.14 Compliance-Based Payment and Accountability Expectations**

City will accept ***NO*** less than full completion of the above functions described in sections **T.1** through **T.8** and **T.10** during applicable service day and within the full span of each site being serviced. Failure to comply with this expectation will result in deduction of applicable service costs from the monthly payment, which is calculated by taking the monthly service cost multiplied by twelve and divided by 52 for weekly service value (Monthly cost X 12/52). In addition, the Contractor will be responsible for any costs incurred by the City as a result of negligence by the Contractor for not providing service as outlined in the Technical Specifications.

## SECTION U – IRRIGATION

**U.1 Contractor's Irrigation Scope of Work**

CONTRACTOR will be responsible for all irrigation appendages downstream of the backflow prevention device outlet. The CONTRACTOR shall be responsible for, but not limited to, the maintenance, repair, and/or replacement of system sleeves, mainlines, irrigation control wires, irrigation control valves, valve diaphragms, valve boxes, quick couplers, quick coupler boxes, gate valves, lateral lines, bubblers, drip tubing and emitters, sprinkler heads and sprinkler nozzles. The CITY will purchase and provide **ALL** irrigation materials necessary to service irrigation systems. Irrigation materials will be made available to the CONTRACTOR at the CITY Maintenance Yard located at 39110 3rd Street East.

The CONTRACTOR will be directed to perform seasonal maintenance i.e., clean out the interior of valve boxes, irrigation controller, and backflow prevention device enclosures, as well as insulating backflow

prevention devices and irrigation booster pumps. CITY and CONTRACTOR staff will check irrigation systems with questionable excessive water consumption. All observed deficiencies shall be corrected in accordance to the engineering standard details in Section 6 of the City's Engineering Standards.

**U.2 City of Palmdale's Scope of Work**

The CITY will be responsible for the maintenance, replacement, and programming of all irrigation controllers, enclosures, and associated water conservation equipment. The City will also be responsible for maintenance and/or replacement of backflow prevention devices and enclosures, flow sensors, and pressure regulators.

**U.3 Irrigation Material Use Reporting**

CONTRACTOR is responsible for reporting usage of all irrigation materials utilized per site as directed by Landscape Superintendent or appointed designee. Irrigation material usage logs must be submitted in order for additional irrigation material to be issued.

**U.4 Irrigation System Testing and Adjustments**

All irrigation systems will be inspected and tested on a weekly basis or as necessary when damage is suspected, observed, or reported. Irrigation system tests shall encompass the entire irrigation system at each site being serviced. Irrigation system tests shall ensure proper irrigation system coverage through repair of damaged or defective irrigation system parts. CONTRACTOR shall cycle irrigation controller(s) through each station allowing sufficient time as required according to emission device, to check the functions of all facets of the irrigation system, make necessary adjustments, and repair all observed defects. Once adjustments and repairs are completed, CONTRACTOR shall cycle station again to ensure proper operation.

CONTRACTOR shall adjust all sprinkler heads to provide for proper angle, depth, distribution uniformity, and matched precipitation rates, making adjustments to prevent excessive water runoff onto sidewalks, streets, or adjacent properties. CONTRACTOR shall flush lines to clear rocks, mud and debris, and unplug clogged nozzles. Observed irrigation system deficiencies shall be reported to the Landscape Superintendent or appointed designee on a daily basis. The report will include areas that are over irrigated and/or under irrigated.

**U.5 Irrigation System Repairs**

All repairs shall be completed according to Section 6 of the City of Palmdale's Engineering Standards and according to accepted industry standards. When repairing older irrigation systems, the repair will be completed to meet current City of Palmdale Engineering standards. Irrigation system pressure regulating valves, pressure compensating screens, sprinklers, nozzles, bubblers, drip tubing, and emitters shall be replaced to provide matched precipitation rates and distribution uniformity.

CONTRACTOR shall flush lines to clear rocks, mud and debris, and unplug clogged nozzles. All repairs shall be completed within 24 hours of being discovered by the CONTRACTOR or of being reported to the

CONTRACTOR by the Landscape Superintendent or appointed designee. The Landscape Superintendent or appointed designee shall be notified and must approve any irrigation system modification recommended by the CONTRACTOR to improve the irrigation system efficiency.

**U.6 Frequency**

**Daily:** Irrigation system repairs **(U.5)** for issues discovered by or reported to the Contractor shall be performed on an on-going daily basis and as required.

**Weekly:** Irrigation system testing & adjustments **(U.4)** shall be performed on a weekly basis. Irrigation system repairs **(U.5)** shall be performed weekly, concurrent with irrigation system testing and adjustments. Inclement weather may preclude adherence to the frequency schedule. The CONTRACTOR may request alteration of this all or nothing frequency requirement from the Landscape Superintendent or the appointed designee due to inclement weather. Work shall be performed on the same day each week. All maintenance missed due to inclement weather shall be rescheduled and completed within three (3) working days.

**U.7 Irrigation Staff Training Expectation**

The CONTRACTOR shall ensure all personnel working on the irrigation systems are fully trained in all aspects of landscape irrigation system maintenance. CONTRACTOR staff must be able to easily identify and isolate system problems in a thorough and efficient manner. Knowledge of landscape irrigation systems shall include the operation, maintenance, troubleshooting, adjustment, and repair of irrigation systems.

CONTRACTOR Supervisor or Lead Worker in charge of irrigation technicians shall be a professionally Certified Irrigation Contractor by the Irrigation Association and/or a Landscape Industry Certified Technician by the California Landscape Contractors Association.

**U.8 Irrigation System Maintenance Staffing**

CONTRACTOR shall provide dedicated irrigation maintenance staff, separate from the landscape maintenance crews. CONTRACTOR shall provide adequate staffing levels to sustain weekly irrigation system maintenance "all or nothing" expectations and as outlined herein. CONTRACTOR is required to provide fully trained and qualified irrigation maintenance staff as well as the appropriate tools and equipment including wire tracing and locating devices. CONTRACTOR is required to provide effective and consistent Supervision of all staff to ensure compliance with the entire scope of this agreement.

CONTRACTOR shall provide a schedule and roster of irrigation staff to the Landscape Superintendent or appointed designee. Any changes to the irrigation maintenance schedule or staffing levels shall be presented to the Landscape Superintendent or appointed designee for approval and before any changes occur. CONTRACTOR shall maintain year round irrigation maintenance staffing levels.

### U.9 Compliance-Based Payment and Accountability Expectations

City will accept ***NO*** less than full completion of the functions described in sections **U.4** and **U.5** during applicable service day and within the full span of each irrigation system being serviced. Failure to comply with this expectation will result in deduction of applicable service costs from the monthly payment, which is calculated by taking the monthly service cost multiplied by twelve and divided by 52 for a weekly service value (Monthly cost X 12/52). In addition, Contractor will be responsible for any costs incurred by the City as a result of negligence by the Contractor for not providing service as outlined in the Technical Specifications.

## SECTION V – CHEMICAL APPLICATIONS

### V.1 Use of Chemicals

CONTRACTOR shall submit a list of all herbicide and pesticide chemicals proposed for use under this contract for approval by the Landscape Superintendent or appointed designee. Chemical materials utilized shall be limited to chemicals approved by the State of California Department of Pesticide Regulation. CONTRACTOR shall provide associated product labels & Material Safety Data Sheets. The use of all restricted materials shall be done according to a Pest Control Advisor's recommendation and shall conform to Los Angeles County Department of Weights and Measures, Agricultural Commissioner regulations.

### V.2 Licenses, Certificates, and Records

Chemicals shall only be applied according to a Pest Control Advisor's recommendation and shall only be applied by trained and qualified applicators. Records of all chemical application operations shall be kept and reported according to all applicable regulatory agency requirements. Chemical application reports shall be provided at the request of the Landscape Superintendent or appointed designee.

### V.3 Chemical Applications

CONTRACTOR shall utilize chemicals in accordance to a Pest Control Advisor's and the product manufacturer recommendations. Landscape Superintendent or appointed designee shall be notified of all scheduled chemical applications. CONTRACTOR shall furnish all chemicals required for integrated vegetation control.

### V.4 Drift Control

Drift control shall be exercised during all chemical applications. Given the public access of Palmdale Transportation Center, all precautionary measures necessary to ensure public and worker safety shall be exercised.

### V.5 Chemical Edging

Chemical edging may be used along walls, enclosures, posts, and fences where the continued use of string trimmers will cause damage. Turf around trees that exist in turf areas shall be continually treated

with herbicide to provide a six (6) inch to (12) inch buffer in order to protect tree basal flares from mechanical damage as directed by Landscape Superintendent or appointed designee. These rings shall be maintained in a weed free condition at all times.

**V.6 Public Notices**

CONTRACTOR shall be responsible for posting all required chemical application notifications pursuant to manufacturer recommendation and applicable regulatory agency requirements. No chemical herbicide, rodenticide, or pesticide shall be applied until the Landscape Superintendent or appointed designee issues written authorization. Restricted materials may only be applied by trained applicators under the oversight of a Qualified Applicator Certificate holder.

## SECTION W – PALMDALE TRANSPORTATION CENTER "ALL OR NOTHING" FREQUENCY EXPECTATIONS

***City will accept NO less than full completion of the following functions during weekly service.***

**W.1 Transportation Center Grounds Morning Operations:** City will accept ***NO*** less than full completion of the following functions during applicable weekly service day and within the full span of the Palmdale Transportation Center. Failure to comply with this expectation will result in deduction of applicable service costs from the monthly payment, which is calculated by taking the monthly service cost multiplied by twelve and divided by 365 for a daily service value (Monthly cost X 12/365). In addition, the Contractor will be responsible for any costs incurred by the City as a result of negligence by the Contractor for not providing service as outlined.

1. Litter and debris removal according to Technical Specifications, Section **R.1**
2. Trash can emptying according to Technical Specifications, Section **R.2**
3. Dumpster enclosure service according to Technical Specifications, Section **R.3**
4. Sweeping operations according to Technical Specifications, Section **R.4**
5. Pressure washing according to Technical Specifications, Section **R.5**

**W.2 Turf:** City will accept ***NO*** less than full completion of the following functions during applicable weekly service day and within the full span of Palmdale Transportation Center. Failure to comply with this expectation will result in deduction of applicable service costs from the monthly payment, which is calculated by taking the monthly service cost multiplied by twelve and divided by 52 for a weekly service value (Monthly cost X 12/52). In addition, the Contractor will be responsible for any costs incurred by the City as a result of negligence by the Contractor for not providing service as outlined. **Estimated mowing per year: 33**

1. Trash and needle / leaf litter removal according to Technical Specifications, Section **S.1** and **S.9**
2. Mowing and detailing according to Technical Specifications, Section **S.2** through **S.7**
3. Crack weeds according to Technical Specifications, Sections **S.8**

4. Clean Up according to Technical Specifications, Sections **S.5** through **S.9**

W.3 Planter: City will accept *NO* less than full completion of the following functions during applicable weekly service day and within the full span of the Palmdale Transportation Center. Failure to comply with this expectation will result in deduction of applicable service costs from the monthly payment, which is calculated by taking the monthly service cost multiplied by twelve and divided by 52 for a weekly service value (Monthly cost X 12/52). In addition, the Contractor will be responsible for any costs incurred by the City as a result of negligence by the Contractor for not providing service as outlined.

1. Pruning and trimming of shrubs and ground cover according to Technical Specifications, Sections **T.1** and **T.2**
2. Edging plant material off sidewalks according to Technical Specifications, Section **T.3**
3. Weed control including crack weeds according to Technical Specifications, Section **T.4**
4. Trash and leaf / needle litter removal and clean up according to Technical Specifications, Sections **T.5** through **T.8**
5. Backfilling of depressions or rodent burrows according to Technical Specifications, Sections **T.10**

W.4 Irrigation: City will accept *NO* less than full completion of the following functions during applicable weekly service day and within the full span of the Palmdale Transportation Center. Failure to comply with this expectation will result in deduction of applicable service costs from the monthly payment, which is calculated by taking the monthly service cost multiplied by twelve and divided by 52 for a weekly service value (Monthly cost X 12/52). In addition, the Contractor will be responsible for any costs incurred by the City as a result of negligence by the Contractor for not providing service as outlined.

1. Appropriate irrigation system tests and adjustments providing for optimal coverage according to Technical Specifications, Sections **U.4** and **U.5**
2. Main line, lateral line, and sprinkler break repairs and job clean up restoring site to pre-existing condition according to Technical Specification, Sections **U.4** and **U.5**
3. Leaky valve repairs according to Technical Specification, Sections **U.4** and **U.5**

W.5 General Frequencies

All other maintenance functions included in Palmdale Transportation Center Technical Specification sections shall observe on-going daily, weekly frequencies as specified in each section.

W.6 Additional Services Frequencies

All "additional services" functions outlined in the Palmdale Transportation Center Technical Specifications shall observe as requested frequencies.

# PARK AND RIDES

## SECTION X – PARK AND RIDES GENERAL MAINTENANCE ITEMS

CONTRACTOR shall complete the following site opening functions no later than 8:00 a.m. each day;

**X.1 Park and Ride Trash Cans**

1. Exterior trash cans and trash can receptacles shall be emptied once **daily** Monday through Sunday, prior to 8:00 a.m. and all waste shall be placed in designated dumpsters.

2. Trash cans shall be conveniently located for public use and returned to such locations each morning if found displaced.

4. CONTRACTOR shall use CITY provided trash can liners in all trash cans and receptacles.

**X.2 Litter and Debris**

1. Park and Rides shall have all trash, accumulated and/or dumped debris collected **daily** by 8:00 a.m. and placed in designated dumpsters.

**X.3 Dumpster Enclosures**

1. All trash, accumulated and/or dumped debris shall be collected **daily** by 8:00 a.m. and placed in designated dumpsters.

**X.4 Swales, Drains & Gutters**

Drainage infrastructure including channels and gutters within each Park and Ride up to the edge of asphalt pavement shall be kept free of vegetation, debris, and algae to allow the unrestricted flow of water. Plugged grates, drains, and missing or damaged grates shall be immediately reported to the Landscape Superintendent or appointed designee.

1. Grates, swales, and gutters shall be inspected and kept clear of all silt, debris, and litter to allow for continuous flow of water.

2. Drains and collection boxes shall be cleared of all debris and kept in a clean condition.

3. Drain grates shall be inspected to mitigate hazards. CONTRACTOR shall immediately inform the Landscape Superintendent or appointed designee of any broken or missing grates and immediately delineate any hazards for public safety.

**X.5 Frequency**

**Daily:** Removal of litter and debris according to Sections **X.1** through **X.4** shall be performed on a daily basis and must be completed by 8:00 a.m.

X.6 Compliance-Based Payment and Accountability Expectations

City will accept *NO* less than full completion of the functions described in sections **X.1** and **X.4** during each service day and within the full span of each Park and Ride being serviced. Failure to comply with this expectation will result in deduction of applicable service costs from the monthly payment, which is calculated by taking the monthly service cost multiplied by twelve and divided by 365 for a daily service value (Monthly cost X 12/365). In addition, the Contractor will be responsible for any costs incurred by the City as a result of negligence by the Contractor for not providing service as outlined in the Technical Specifications.

## SECTION Y –PLANTER MAINTENANCE

Y.1 Pruning of Plants and Shrubs

Plants and shrubs shall be pruned and trimmed on a bi-weekly basis, as needed every two weeks using accepted horticultural techniques. Plants and shrubs shall be maintained within the limits of their landscaped areas so as not to encroach into walkways, trails, roadways, parking spaces, and private property. All shrubs will be contained to a maximum height of three (3) feet or as otherwise directed by the Landscape Superintendent or appointed designee. Shrubs shall be pruned to maintain an attractive natural appearance wherever possible. At the conclusion of blooming cycles, all spent blooms shall be trimmed or removed on a weekly basis. Shrubs will be re-sheared prior to attaining six (6) inches of new growth.

Vines shall be pruned as often as necessary to maintain a satisfactory appearance and secure attachment to walls and fences. CONTRACTOR will supply equipment and labor to reset vines in accordance with the corresponding bid item in **Exhibit D – Fee Schedule of resulting Contract for Services-Additional Services.**

Y.2 Trimming or Pruning of Ground Cover

Ground cover shall be pruned according to species specific prescribed horticultural practices and as directed by Landscape Superintendent or appointed designee.

Y.3 Edging of Ground Cover

Ground cover shall be neatly edged and maintained within the limits of landscaped areas so as not to encroach into walkways, trails, roadways, parking lots, and private property.

Y.4 Weed Control

Weed abatement shall be performed bi-weekly, every two weeks according to accepted best management practices providing for effective on-going weed control after each service. Weed abatement may be performed both chemically and mechanically, although chemical control is preferred. Care shall be taken to prevent damage of ground cover and irrigation systems during mechanical weeding operations. CONTRACTOR shall assume the cost of herbicides, pre-emergents, and surfactants

utilized for integrated vegetation management. CONTRACTOR is responsible and liable for the safe handling and application of all herbicide chemical materials. Use of Hula Hoes is strictly prohibited.

**Y.5 Green Waste Disposal**

All trimmings shall be removed from Park and Rides and disposed of in appropriate dumpsters by completion of day's trimming operations or the end of the work day, whichever occurs first.

**Y.6 Removal of Litter and Debris**

Dumped debris, glass, leaves, paper, and/or other debris blown into all planters shall be removed and disposed of in appropriate dumpsters every morning on a daily basis.

**Y.7 Removal of Leaf Litter**

Accumulation of leaf and needle litter in all landscaped areas including beds, planters, and turf areas shall be removed in an on-going manner and placed in appropriate green waste trash bin(s).

**Y.8 Clean Up**

All walkways, trails, parking lots, roadways, or other areas dirtied by trimming operations shall be cleaned and all debris disposed of in appropriate dumpsters prior to the completion of maintenance operations at each site. All debris generated from CONTRACTOR operations shall be picked up and disposed of in appropriate dumpsters. No debris shall be blown into right of ways, streets or adjacent properties.

**Y.9 Frequency**

**Daily:** Removal of litter and debris **(Y.6)**

**Bi-weekly (every two weeks):** Pruning of shrubs **(Y.1)**, trimming and edging of ground cover **(Y.2 and Y.3)**, weed control in all areas **(Y.4)**, green waste disposal **(Y.5)**, removal of litter and debris **(Y.6)**, removal of leaf litter **(Y.7)**, clean up **(Y.8)**, and backfilling of depressions or rodent burrows **(Y.10)** shall be performed in an on-going manner on a bi-weekly basis, every two weeks.

Inclement weather may preclude adherence to the frequency schedule. CONTRACTOR may request alteration of this all or nothing frequency requirement from the Landscape Superintendent or the appointed designee due to inclement weather. Work shall be performed on the same day in each area every two weeks. All maintenance missed due to inclement weather shall be rescheduled and completed within three (3) working days.

**Y.10 Planter Grade, Watering Basins, and Mulching**

CONTRACTOR shall maintain watering basins (wells) for shrubs and trees and appropriate planter grade, including backfilling of depressions or rodent burrows. Mulching may be necessary in planter areas as required by the Landscape Superintendent or appointed designee. Mulch material will be supplied by the CITY and will be made available to the CONTRACTOR at the location where it will be applied.

**Y.11 Rejuvenation**

Major rejuvenation pruning operations will be performed during the winter months as directed by Landscape Superintendent or appointed designee.

**Y.12 Plant Material Replacement**

The CONTRACTOR shall be responsible for the complete removal and replacement of plant material lost due to the CONTRACTOR'S inappropriate maintenance or negligence, as determined by either the Landscape Superintendent or appointed designee.

**Y.13 Seasonal Planting-Additional Services**

In order to sustain optimum aesthetic appearance the Park and Rides, seasonal planting may be required. CONTRACTOR will supply equipment and labor at a cost in accordance with the corresponding plant material installation bid in **Exhibit D – Fee Schedule of resulting Contract for Services-Additional Services** to install CITY provided plant material. Plant material will be made available to the CONTRACTOR at the CITY Maintenance Yard located at 39110 3rd Street East. **If any planting is required due to CONTRACTOR negligence, CONTRACTOR shall be responsible for the cost of plant replacement including labor and material at no cost to the CITY.**

**Y.14 Compliance-Based Payment and Accountability Expectations**

City will accept ***NO*** less than full completion of the above functions described in sections **Y.1** through **Y.8** and **Y.10** during applicable service day and within the full span of each Park and Ride being serviced. Failure to comply with this expectation will result in deduction of applicable service costs from the monthly payment, which is calculated by taking the monthly service cost multiplied by twelve and divided by 26 for a bi-weekly service value (Monthly cost X 12/26). In addition, the Contractor will be responsible for any costs incurred by the City as a result of negligence by the Contractor for not providing service as outlined in the Technical Specifications.

## SECTION Z – IRRIGATION

**Z.1 Contractor's Irrigation Scope of Work**

CONTRACTOR will be responsible for all irrigation appendages downstream of the backflow prevention device outlet. The CONTRACTOR shall be responsible for, but not limited to, the maintenance, repair, and/or replacement of system sleeves, mainlines, irrigation control wires, irrigation control valves, valve diaphragms, valve boxes, quick couplers, quick coupler boxes, gate valves, lateral lines, bubblers, drip tubing and emitters, sprinkler heads, and sprinkler nozzles. The CITY will purchase and provide **ALL** irrigation materials necessary to service irrigation systems. Irrigation materials will be made available to CONTRACTOR at the CITY Maintenance Yard located at 39110 3rd Street East.

The CONTRACTOR will be directed to perform seasonal maintenance i.e., clean out the interior of valve boxes, irrigation controller and backflow prevention device enclosures as well as insulating backflow

prevention devices and irrigation booster pumps. CITY and CONTRACTOR staff will check irrigation systems with questionable excessive water consumption. All observed deficiencies shall be corrected in accordance to the engineering standard details in Section 6 of the City's Engineering Standards.

**Z.2 City of Palmdale's Scope of Work**

The CITY will be responsible for the maintenance, replacement, and programming of all irrigation controllers, enclosures, and associated water conservation equipment. The City will also be responsible for maintenance and/or replacement of backflow prevention devices and enclosures, flow sensors, and pressure regulators.

**Z.3 Irrigation Material Use Reporting**

CONTRACTOR is responsible for reporting usage of all irrigation materials utilized per site as directed by Landscape Superintendent or appointed designee. Irrigation material usage logs must be submitted in order for additional irrigation material to be issued.

**Z.4 Irrigation System Testing and Adjustments**

All irrigation systems will be inspected and tested on a **bi-weekly** basis (every two weeks) or as necessary when damage is suspected, observed, or reported. Irrigation system tests shall encompass the entire irrigation system at each site being serviced. Irrigation system tests shall ensure proper irrigation system coverage through repair of damaged or defective irrigation system parts. CONTRACTOR shall cycle irrigation controller(s) through each station allowing sufficient time as required according to emission device, to check the functions of all facets of the irrigation system, make necessary adjustments, and repair all observed defects. Once adjustments and repairs are done, CONTRACTOR shall cycle station again to ensure proper operation.

CONTRACTOR shall adjust all sprinkler heads to provide for proper angle, depth, distribution uniformity, and matched precipitation rates, making adjustments to prevent excessive water runoff onto sidewalks, streets, or adjacent properties. CONTRACTOR shall flush lines to clear rocks, mud and debris and unplug clogged nozzles. Observed irrigation system deficiencies shall be reported to the Landscape Superintendent or appointed designee on a daily basis. The report will include areas that are over irrigated and/or under irrigated.

**Z.5 Irrigation System Repairs**

All repairs shall be done according to the engineering standard details in Section 6 of the City of Palmdale's Engineering Standards and according to accepted industry standards. When repairing older irrigation systems, the repair will be completed to meet current City of Palmdale Engineering standards. Irrigation system pressure regulating valves, pressure compensating screens, sprinklers, nozzles, bubblers, drip tubing, and emitters shall be replaced to provide matched precipitation rates and distribution uniformity.

CONTRACTOR shall flush lines to clear rocks, mud and debris, and unplug clogged nozzles. All repairs shall be completed within 24 hours of being discovered by the CONTRACTOR or of being reported to the CONTRACTOR by the Landscape Superintendent or appointed designee. The Landscape Superintendent or appointed designee shall be notified and must approve any irrigation system modification recommended by the CONTRACTOR to improve the irrigation system efficiency.

**Z.6 Frequency**

**Daily:** Irrigation system repairs (**Z.5**) for issues discovered by or reported to the Contractor shall be performed on an on-going basis and as required.

**Bi-weekly (every two weeks):** Irrigation system testing and adjustments (**Z.4**) shall be performed on a bi-weekly basis, every two weeks. Irrigation system repairs (**Z.5**) shall be performed bi-weekly, every two weeks, concurrent with irrigation system testing and adjustments.

Inclement weather may preclude adherence to the frequency schedule. CONTRACTOR may request alteration of this all or nothing frequency requirement from the Landscape Superintendent or the appointed designee due to inclement weather. Work shall be performed on the same day each week. All maintenance missed due to inclement weather shall be rescheduled and completed within three (3) working days.

**Z.7 Irrigation Staff Training Expectation**

CONTRACTOR shall ensure that all personnel working on the irrigation systems are fully trained in all aspects of landscape irrigation system maintenance. CONTRACTOR staff must be able to easily identify and isolate system problems in a thorough and efficient manner.

Knowledge of landscape irrigation systems shall include the operation, maintenance, troubleshooting, adjustment, and repair of irrigation systems.

CONTRACTOR Supervisor or Lead Worker in charge of irrigation technicians shall be a professionally Certified Irrigation Contractor by the Irrigation Association and/or a Landscape Industry Certified Technician by the California Landscape Contractors Association.

**Z.8 Irrigation System Maintenance Staffing**

CONTRACTOR shall provide dedicated irrigation maintenance staff, separate from the landscape maintenance crews. CONTRACTOR shall provide adequate staffing levels to sustain **bi-weekly** irrigation system maintenance "all or nothing" expectations and as outlined herein. CONTRACTOR is required to provide fully trained and qualified irrigation maintenance staff as well as the appropriate tools and equipment including wire tracing and locating devices. CONTRACTOR is required to provide effective and consistent Supervision of all staff to ensure compliance with the entire scope of this agreement.

CONTRACTOR shall provide a schedule and roster of irrigation staff to the Landscape Superintendent or appointed designee. Any changes to the irrigation maintenance schedule or staffing levels shall be

presented to the Landscape Superintendent or appointed designee for approval and before any changes CONTRACTOR irrigation maintenance staff will be made available to assist CITY staff in performing seasonal maintenance such as irrigation system renovations, upgrades to irrigation systems, and preventative maintenance repairs outside of growing season. The intent of this provision is to prepare irrigation systems for the subsequent growing season and possible spring planting.

**Z.9 Compliance-Based Payment and Accountability Expectations**

City will accept ***NO*** less than full completion of the functions described in sections **Z.4** and **Z.5** during applicable bi-weekly service day and within the full span of each irrigation system being serviced. Failure to comply with this expectation will result in deduction of applicable service costs from the monthly payment, which is calculated by taking the monthly service cost multiplied by twelve and divided by 26 for a bi-weekly service value (Monthly cost X 12/26). In addition, the Contractor will be responsible for any costs incurred by the City as a result of negligence by the Contractor for not providing service as outlined in the Technical Specifications.

## SECTION AA – CHEMICAL APPLICATIONS

**AA.1 Use of Chemicals**

CONTRACTOR shall submit a list of all herbicide and pesticide chemicals proposed for use under this contract for approval by the Landscape Superintendent or appointed designee. Chemical materials utilized shall be limited to chemicals approved by the State of California Department of Pesticide Regulation. CONTRACTOR shall provide associated product labels and Material Safety Data Sheets. The use of all restricted materials shall be done according to a Pest Control Advisor's recommendation and shall conform to Los Angeles County Department of Weights and Measures, Agricultural Commissioner regulations.

**AA.2 Licenses, Certificates, and Records**

Chemicals shall only be applied according to a Pest Control Advisor's recommendation and shall only be applied by trained and qualified applicators. Records of all chemical application operations shall be kept and reported according to all applicable regulatory agency requirements. Chemical application reports shall be provided at the request of the Landscape Superintendent or appointed designee.

**AA.3 Chemical Applications**

CONTRACTOR shall utilize chemicals in accordance to a Pest Control Advisor's and the product manufacturer's recommendations. Landscape Superintendent or appointed designee shall be notified of all scheduled chemical applications. CONTRACTOR shall furnish all chemicals required for integrated vegetation control.

**AA.4 Drift Control**

Drift control shall be exercised during all chemical applications. Given the public access of Park and Rides, all necessary precautionary measures shall be exercised to ensure public and worker safety.

**AA.5 Chemical Edging**

Chemical edging may be used along walls, enclosures, posts, and fences where the continued use of string trimmers will cause damage. Turf around trees that exist in turf areas shall be continually treated with herbicide to provide a six (6) inch to (12) inch buffer in order to protect tree basal flares from mechanical damage as directed by Landscape Superintendent or appointed designee. These rings shall be maintained in a weed free condition at all times.

**AA.6 Public Notices**

CONTRACTOR shall be responsible for posting all required chemical application notifications pursuant to manufacturer recommendation and applicable regulatory agency requirements. No chemical herbicide, rodenticide, or pesticide shall be applied until the Landscape Superintendent or appointed designee issues written authorization. Restricted materials can only be applied by trained applicators under the oversight of a Qualified Applicator Certificate holder.

## SECTION BB – PARK AND RIDES "ALL OR NOTHING" FREQUENCY EXPECTATIONS

***City will accept NO less than full completion of the following functions during weekly service.***

**BB.1 Park and Rides General Maintenance:** City will accept ***NO*** less than full completion of the following functions during daily service and within the full span of each Park and Ride serviced. Failure to comply with this expectation will result in deduction of applicable service costs from the monthly payment, which is calculated by taking the monthly service cost multiplied by twelve and divided by 365 for a weekly service value (Monthly cost X 12/365). In addition, the Contractor will be responsible for any costs incurred by the City as a result of negligence by the Contractor for not providing service as outlined.

1. Trash can emptying according to Technical Specifications, Section **X.1**
2. Litter and debris removal according to Technical Specifications, Section **X.2**
3. Dumpster enclosure service according to Technical Specifications, Section **X.3**

**BB.2 Planter:** City will accept ***NO*** less than full completion of the following functions during applicable bi-weekly service day, every two weeks and within the full span of each Park and Ride serviced. Failure to comply with this expectation will result in deduction of applicable service costs from the monthly payment, which is calculated by taking the monthly service cost multiplied by twelve and divided by 26 for a bi-weekly service value (Monthly cost X 12/26). In addition, the Contractor will be responsible for any costs incurred by the City as a result of negligence by the Contractor for not providing service as outlined.

1. Pruning & trimming of plants, shrubs, and ground cover according to Technical Specifications, Sections **Y.1** and **Y.2**
2. Edging plant material off sidewalks according to Technical Specifications, Section **Y.3**
3. Weed control including crack weeds according to Technical Specifications, Section **Y.4**
4. Trash and leaf / needle litter removal and clean up according to Technical Specifications, Sections **Y.5** through **Y.8**
5. Backfilling of depressions or rodent boroughs according to Technical Specifications, Sections **Y.10**

**BB.4 Irrigation:** City will accept *NO* less than full completion of the following functions during applicable bi-weekly service day, every two weeks and within the full span of each Park and Ride serviced. Failure to comply with this expectation will result in deduction of applicable service costs from the monthly payment, which is calculated by taking the monthly service cost multiplied by twelve and divided by 26 for a bi-weekly service value (Monthly cost X 12/26). In addition, the Contractor will be responsible for any costs incurred by the City as a result of negligence by the Contractor for not providing service as outlined.

1. Appropriate irrigation system tests and adjustments providing for optimal coverage according to Technical Specifications, Sections **Z.4** & **Z.5**
2. Main line, lateral line, and sprinkler break repairs and job clean up restoring site to pre-existing condition according to Technical Specification, Sections **Z.4** & **Z.5**
3. Leaky valve repairs according to Technical Specification, Sections **Z.4** & **Z.5**

**BB.5 General Frequencies**

All other maintenance functions included in the Park and Rides Technical Specification sections shall observe on-going daily or bi-weekly frequencies as specified in each section.

**BB.6 Additional Services Frequencies**

All "additional services" functions outlined in the Park and Rides technical specifications shall observe as requested frequencies.

# FAIRWAY BUSINESS PARK

## SECTION CC-PLANTER MAINTENANCE

### CC.1 Pruning of Plants and Shrubs

Plants and shrubs shall be pruned and trimmed as needed on a bi weekly basis, every two weeks, using accepted horticultural techniques. Plants and shrubs shall be maintained within the limits of their landscaped areas so as not to encroach into walkways, trails, roadways, parking spaces, and private property. All shrubs will be contained to a maximum height of four (4) feet or as otherwise directed by

the Landscape Superintendent or appointed designee. Shrubs shall be pruned to maintain an attractive natural appearance wherever possible. At the conclusion of blooming cycles, all spent blooms shall be trimmed or removed on a weekly basis. Shrubs will be re-sheared prior to attaining six (6) inches of new growth.

Vines shall be pruned as often as necessary to maintain a satisfactory appearance and secure attachment to walls and fences. CONTRACTOR will supply equipment and labor to reset vines in accordance with the corresponding bid item in **Exhibit D – Fee Schedule of resulting Contract for Services-Additional Services.**

**CC.2 Trimming or Pruning of Ground Cover**

Ground cover shall be pruned according to species specific prescribed horticultural practices and as directed by Landscape Superintendent or appointed designee.

**CC.3 Edging of Ground Cover**

Ground cover shall be neatly edged and maintained within the limits of landscaped areas so as not to encroach into walkways, parking lots, trails, roadways, and private property.

**CC.4 Weed Control**

Weed abatement shall be completed bi-weekly, every two weeks according to accepted best management practices providing for effective on-going weed control after each service. Weed abatement may be performed both chemically and mechanically, although chemical control is preferred. Care shall be taken to prevent damage of ground cover and irrigation systems during mechanical weeding operations. CONTRACTOR shall assume the cost of herbicides, pre-emergents, and surfactants utilized for integrated vegetation management. CONTRACTOR is responsible and liable for the safe handling and application of all herbicide chemical materials. Use of Hula Hoes is strictly prohibited.

**CC.5 Green Waste Disposal**

All trimmings shall be removed from Fairway Business Park and disposed of in appropriate dumpsters by completion of day's trimming operations or the end of the work day, whichever occurs first.

**CC.6 Removal of Litter and Debris**

Dumped debris, glass, leaves, paper, and/or other debris blown into all planters shall be removed and disposed of in appropriate dumpsters on a bi-weekly basis, every two weeks.

**CC.7 Removal of Leaf Litter**

Accumulation of leaf and needle litter in all landscaped areas including beds, planters, and turf areas shall be removed in an on-going manner and placed in appropriate green waste trash bin(s).

**CC.8 Clean Up**

All walkways, right of ways, roadways, parking lots, or other areas dirtied by trimming operations shall be cleaned and all debris disposed of in appropriate dumpsters prior to the completion of maintenance operations at each site. All debris generated from CONTRACTOR operations shall be picked up and disposed of in appropriate dumpsters. No debris shall be blown into right of ways, streets, or adjacent properties.

**CC.9 Frequency**

**Bi-weekly (every two weeks):** Pruning of shrubs (**CC.1**), trimming and edging of ground cover (**CC.2** and **CC.3**), weed control in all areas (**CC.4**), green waste disposal (**CC.5**), removal of litter and debris (**CC.6**), removal of leaf litter (**CC.7**), clean up (**CC.8**), and (**CC.10**) backfilling of depressions or rodent burrows shall be performed in an on-going manner on a bi-weekly basis, every two weeks.

Inclement weather may preclude adherence to the frequency schedule. CONTRACTOR may request alteration of this all-or nothing frequency requirement from the Landscape Superintendent or the appointed designee due to inclement weather. Work shall be performed on the same day in each area every two weeks. All maintenance missed due to inclement weather shall be rescheduled and completed within three (3) working days.

**CC.10 Watering Basins and Mulching**

CONTRACTOR shall maintain watering basins (wells) for shrubs and trees and appropriate planter grade, including backfilling of depressions or rodent burrows. Mulching may be necessary in planter areas as required by the Landscape Superintendent or appointed designee. Mulch material will be supplied by the CITY and will be made available to the CONTRACTOR at the location where it will be applied.

**CC.11 Rejuvenation**

Major rejuvenation pruning operations will be performed during the winter months as directed by Landscape Superintendent or appointed designee.

**CC.12 Plant Material Replacement**

The CONTRACTOR shall be responsible for the complete removal and replacement of plant material lost due to the CONTRACTOR'S inappropriate maintenance or negligence, as determined by either the Landscape Superintendent or appointed designee.

**CC.13 Seasonal Planting-Additional Services**

In order to sustain optimum aesthetic appearance the Fairway Business Park, seasonal planting may be required. CONTRACTOR will supply equipment and labor at a cost in accordance with the corresponding plant material installation bid in **Exhibit B – Fee Schedule of resulting Contract for Services-Additional Services** to install CITY provided plant material. Plant material will be made available to the CONTRACTOR at the CITY Maintenance Yard located at 39110 3rd Street East. **If any planting is required**

due to CONTRACTOR negligence, CONTRACTOR shall be responsible for the cost of plant replacement including labor and material at no expense to the CITY.

CC.14 Compliance-Based Payment and Accountability Expectations

City will accept *NO* less than full completion of the above functions described in sections **CC.1** through **CC.8** and **CC.10** during applicable bi-weekly service day and within the full span of the Fairway Business Park landscaping maintained. Failure to comply with this expectation will result in deduction of applicable service costs from the monthly payment, which is calculated by taking the monthly service cost multiplied by twelve and divided by 26 for a bi-weekly service value (Monthly cost X 12/26). In addition, the Contractor will be responsible for any costs incurred by the City as a result of negligence by the Contractor for not providing service as outlined in the technical specifications.

## SECTION DD – IRRIGATION

DD.1 Contractor's Irrigation Scope of Work

CONTRACTOR will be responsible for all irrigation appendages downstream of the backflow prevention device outlet. The CONTRACTOR shall be responsible for, but not limited to, the maintenance, repair, and/or replacement of system sleeves, mainlines, irrigation control wires, irrigation control valves, valve diaphragms, valve boxes, quick couplers, quick coupler boxes, gate valves, lateral lines, bubblers, drip tubing and emitters, sprinkler heads, and sprinkler nozzles. The CITY will purchase and provide **ALL** irrigation materials necessary to service irrigation systems. Irrigation materials will be made available to CONTRACTOR at the CITY Maintenance Yard located at 39110 3rd Street East.

The CONTRACTOR will be directed to perform seasonal maintenance i.e., clean out the interior of valve boxes, irrigation controller, and backflow prevention device enclosures, as well as insulating backflow prevention devices and irrigation booster pumps. CITY and CONTRACTOR staff will check irrigation systems with questionable excessive water consumption. All observed deficiencies shall be corrected in accordance to the engineering standard details in Section 6 of the City's Engineering Standards.

DD.2 City of Palmdale's Scope of Work

The CITY will be responsible for the maintenance, replacement, and programming of all irrigation controllers, enclosures, and associated water conservation equipment. The City will also be responsible for maintenance and/or replacement of backflow prevention devices and enclosures, flow sensors, and pressure regulators.

DD.3 Irrigation Material Use Reporting

CONTRACTOR is responsible for reporting usage of all irrigation materials utilized per site as directed by Landscape Superintendent or appointed designee. Irrigation material usage logs must be submitted in order for additional irrigation material to be issued.

**DD.4 Irrigation System Testing and Adjustments**

All irrigation systems will be inspected and tested on a **bi-weekly** basis (every two weeks) or as necessary when damage is suspected, observed, or reported. Irrigation system tests shall encompass the entire irrigation system at each site being serviced. Irrigation system tests shall ensure proper irrigation system coverage through repair of damaged or defective irrigation system parts. CONTRACTOR shall cycle irrigation controller(s) through each station allowing sufficient time as required according to emission device, to check the functions of all facets of the irrigation system, to make necessary adjustments, and repair all observed defects. Once adjustments and repairs are completed, CONTRACTOR shall cycle station again to ensure proper operation.

CONTRACTOR shall adjust all sprinkler heads to provide for proper angle, depth, distribution uniformity, and matched precipitation rates, making adjustments to prevent excessive water runoff onto sidewalks, streets, or adjacent properties. CONTRACTOR shall flush lines to clear rocks, mud and debris, and unplug clogged nozzles. Observed irrigation system deficiencies shall be reported to the Landscape Superintendent or appointed designee on a daily basis. The report will include areas that are over irrigated and/or under irrigated.

**DD.5 Irrigation System Repairs**

All repairs shall be completed according to Section 6 of the City of Palmdale's Engineering Standards and according to accepted industry standards. When repairing older irrigation systems, the repair will be performed to meet current City of Palmdale Engineering standards. Irrigation system pressure regulating valves, pressure compensating screens, sprinklers, nozzles, bubblers, drip tubing, and emitters shall be replaced to provide matched precipitation rates and distribution uniformity.

CONTRACTOR shall flush lines to clear rocks, mud and debris, and unplug clogged nozzles. All repairs shall be completed within 24 hours of being discovered by the CONTRACTOR or of being reported to the CONTRACTOR by the Landscape Superintendent or appointed designee. The Landscape Superintendent or appointed designee shall be notified and must approve any irrigation system modification recommended by the CONTRACTOR to improve the irrigation system efficiency.

**DD.6 Frequency**

**Daily:** Irrigation system repairs (**DD.5**) for issues discovered by or reported to the Contractor shall be performed on an on-going basis and as required.

**Bi-weekly (every two weeks):** Irrigation system testing and adjustments (**DD.4**) shall be performed on a bi-weekly basis. Irrigation system repairs (**DD.5**) shall be performed bi-weekly, every two weeks, concurrent with irrigation system testing and adjustments.

Inclement weather may preclude adherence to the frequency schedule. CONTRACTOR may request alteration of this all or nothing frequency requirement from the Landscape Superintendent or the appointed designee due to inclement weather. Work shall be performed on the same day each week. All

maintenance missed due to inclement weather shall be rescheduled and completed within three (3) working days.

**DD.7 Irrigation Staff Training Expectation**

CONTRACTOR shall ensure that all personnel working on the irrigation systems are fully trained in all aspects of landscape irrigation system maintenance. CONTRACTOR staff must be able to easily identify and isolate system problems in a thorough and efficient manner.

Knowledge of landscape irrigation systems shall include the operation, maintenance, troubleshooting, adjustment, and repair of irrigation systems.

CONTRACTOR Supervisor or Lead Worker in charge of irrigation technicians shall be a professionally Certified Irrigation Contractor by the Irrigation Association and/or a Landscape Industry Certified Technician by the California Landscape Contractors Association.

**DD.8 Irrigation System Maintenance Staffing**

CONTRACTOR shall provide dedicated irrigation maintenance staff, separate from the landscape maintenance crews. CONTRACTOR shall provide adequate staffing levels to sustain **bi-weekly** irrigation system maintenance "all or nothing" expectations and as outlined herein. CONTRACTOR is required to provide fully trained and qualified irrigation maintenance staff as well as the appropriate tools and equipment including wire tracing and locating devices. CONTRACTOR is required to provide effective and consistent Supervision of all staff to ensure compliance with the entire scope of this agreement.

CONTRACTOR shall provide a schedule and roster of irrigation staff to the Landscape Superintendent or appointed designee. Any changes to the irrigation maintenance schedule or staffing levels shall be presented to the Landscape Superintendent or appointed designee for approval and before any changes occur. CONTRACTOR shall maintain year round irrigation maintenance staffing levels.

**DD.9 Compliance-Based Payment and Accountability Expectations**

City will accept ***NO*** less than full completion of the functions described in sections **DD.4** and **DD.5** during bi-weekly service day, every two weeks and within the full span of each irrigation system being serviced. Failure to comply with this expectation will result in deduction of applicable service costs from the monthly payment, which is calculated by taking the monthly service cost multiplied by twelve and divided by 26 for a bi-weekly service value (Monthly cost X 12/26). In addition, the Contractor will be responsible for any costs incurred by the City as a result of negligence by the Contractor for not providing service as outlined in the Technical Specifications.

## SECTION EE – CHEMICAL APPLICATIONS

**EE.1 Use of Chemicals**

CONTRACTOR shall submit a list of all herbicide and pesticide chemicals proposed for use under this contract for approval by the Landscape Superintendent or appointed designee. Chemical materials

utilized shall be limited to chemicals approved by the State of California Department of Pesticide Regulation. CONTRACTOR shall provide associated product labels and Material Safety Data Sheets. The use of all restricted materials shall be done according to a Pest Control Advisor's recommendation and shall conform to Los Angeles County Department of Weights and Measures, Agricultural Commissioner regulations.

**EE.2 Licenses, Certificates, and Records**

Chemicals shall only be applied according to a Pest Control Advisor's recommendation and shall only be applied by trained and qualified applicators. Records of all chemical application operations shall be kept and reported according to all applicable regulatory agency requirements. Chemical application reports shall be provided at the request of the Landscape Superintendent or appointed designee.

**EE.3 Chemical Applications**

CONTRACTOR shall utilize chemicals in accordance to a Pest Control Advisor's and the product manufacturer recommendations. Landscape Superintendent or appointed designee shall be notified of all scheduled chemical applications. CONTRACTOR shall furnish all chemicals required for integrated vegetation control.

**EE.4 Drift Control**

Drift control shall be exercised during all chemical applications. Given the public access of the Fairway Business Park, all necessary precautionary measures shall be exercised to ensure public and worker safety.

**EE.5 Chemical Edging**

Chemical edging may be used along walls, enclosures, posts, and fences where the continued use of string trimmers will cause damage. Turf around trees that exist in turf areas shall be continually treated with herbicide to provide a six (6) inch to (12) inch buffer in order to protect tree basal flares from mechanical damage as directed by Landscape Superintendent or appointed designee. These rings shall be maintained in a weed free condition at all times.

**EE.6 Public Notices**

CONTRACTOR shall be responsible for posting all required chemical application notifications pursuant to manufacturer recommendation and applicable regulatory agency requirements. No chemical herbicide, rodenticide, or pesticide shall be applied until the Landscape Superintendent or appointed designee issues written authorization. Restricted materials can only be applied by trained applicators under the oversight of a Qualified Applicator Certificate holder.

## SECTION FF – FAIRWAY BUSINESS PARK "ALL OR NOTHING" FREQUENCIES

***City will accept NO less than full completion of the following functions during bi-weekly service.***

FF.1 Planter: City will accept ***NO*** less than full completion of the following functions during applicable bi-weekly service day and within the full span of the Fairway Business Park. Failure to comply with this expectation will result in deduction of applicable service costs from the monthly payment, which is calculated by taking the monthly service cost multiplied by twelve and divided by 26 for a weekly service value (Monthly cost X 12/26). In addition, the Contractor will be responsible for any costs incurred by the City as a result of negligence by the Contractor for not providing service as outlined.

6. Pruning and trimming of shrubs and ground cover according to Technical Specifications, Sections **CC.1** and **CC.2**
7. Edging plant material off sidewalks according to Technical Specifications, Section **CC.3**
8. Weed control including crack weeds according to Technical Specifications, Section **CC.4**
9. Trash and leaf / needle litter removal and clean up according to Technical Specifications, Sections **CC.5** through **CC.8**
10. Backfilling of depressions or rodent burrows according to Technical Specifications, Sections **CC.10**

FF.2 Irrigation: City will accept ***NO*** less than full completion of the following functions during applicable bi-weekly service day and within the full span of each Fairway Business Park. Failure to comply with this expectation will result in deduction of applicable service costs from the monthly payment, which is calculated by taking the monthly service cost multiplied by twelve and divided by 26 for a bi-weekly service value (Monthly cost X 12/26). In addition, the Contractor will be responsible for any costs incurred by the City as a result of negligence by the Contractor for not providing service as outlined.

4. Appropriate irrigation system tests and adjustments providing for optimal coverage according to Technical Specifications, Sections **DD.4** and **DD.5**
5. Main line, lateral line, and sprinkler break repairs and job clean up restoring site to pre-existing condition according to Technical Specification, Sections **DD.4** and **DD.5**
6. Leaky valve repairs according to Technical Specification, Sections **DD.4** and **DD.5**

FF.3 General Frequencies

All other maintenance functions included in the Fairway Business Park Technical Specification sections shall observe bi-weekly frequencies, every two weeks as specified in each section.

FF.4 Additional Services Frequencies

All "additional services" functions outlined in the Fairway Business Park technical specifications shall observe as requested frequencies.

## SECTION GG – PROFESSIONAL LANDSCAPE MAINTENANCE SERVICE COMPREHENSIVE REQUIREMENTS

### GG.1 Drains and Grates

Drainage infrastructure including channels, gutters, grates, and drains within the aforementioned sites and up to the edge of asphalt pavement shall be kept free of vegetation, debris, and algae to allow the unrestricted flow of water. Plugged drains and missing or damaged grates shall be immediately reported to the Landscape Superintendent or appointed designee.

### GG.2 Reporting of Landscape Pests and Disease

During the course of regularly scheduled maintenance, CONTRACTOR shall inspect all areas being serviced for the presence of disease, insect, and/or rodent infestation. CONTRACTOR shall immediately notify the Landscape Superintendent or appointed designee if any disease, insect, and/or rodent infestation is observed.

### GG.3 Reporting of Material Loss

The CONTRACTOR shall immediately notify the Landscape Superintendent or appointed designee of any damage and/or loss resulting from any cause.

### GG.4 General Reporting Requirements

- **Large Roadway Debris – Immediately**
- **Large Dumped Debris – Daily**
- **Stray Shopping Carts – Daily**
- **Graffiti – Daily**
- **General Vandalism – Immediately**

### GG.5 Sound Control

CONTRACTOR shall comply with all applicable sound control and noise level rules, regulations, and ordinances applicable to any work being performed. Noise level requirements shall apply to any and all equipment used on work site or otherwise related to the landscape maintenance operations. Each internal combustion engine used for any purpose at all sites shall be equipped with a muffler as per manufacturer recommendation.

### GG.6 Emergency Response

CONTRACTOR shall have a supervisor available by telephone on a 24 hour basis, 365 days per year assigned to provide direct and prompt attention to requests from CITY for emergency and after-hours service. Response time for emergency and after-hours service requests shall not be greater than one (1) hour.

**GG.7 Schedule Disruption**

CONTRACTOR shall provide professional landscape maintenance services as described in each section of the Technical Specifications of this RFP.

Inclement weather may preclude adherence to the frequency schedule. CONTRACTOR may request alteration of this all or nothing frequency requirement from the Landscape Superintendent or the appointed designee due to inclement weather. Work shall be performed on the same day each week. All maintenance missed due to inclement weather shall be rescheduled and completed within three (3) working days.

**GG.8 Maintenance Schedule**

CONTRACTOR shall submit maintenance schedules to the CITY prior to the commencement of any work. CONTRACTOR'S schedules are to be submitted to ensure sites will be maintained according to expectations outlined in each section of the technical specifications of this RFP. Copies of such schedule shall be available at the CONTRACTOR'S dispatch location and the Public Works Maintenance Yard. Maintenance schedules shall specify each area being serviced and be structured in order to comply with all requirements outlined in the Technical Specifications.

CONTRACTOR shall provide monthly schedule updates to CITY. Any significant changes in maintenance schedules will require submission of proposed revised schedule to CITY for approval.

**GG.9 Equipment**

CONTRACTOR shall furnish, at its own expense, all equipment and materials necessary for the professional performance of the work set forth in this RFP. All equipment must be, and remain, in good state of repair. All equipment will be used according to Manufacturer recommendations.

Trucks and trailers provided for landscape maintenance services shall have the following minimum accessories or features:

- Mobile radio equipped with CONTRACTOR radio frequencies and/or cellular telephone
- Operational and clearly visible rotating or strobe warning light and flashing rear taillights
- Appropriate rear mounted warning signs
- Appropriate markings for high visibility
- Unique identification number

Both sides of each landscape maintenance vehicle shall be clearly marked with the following information in three (3") inch letters:

- **Company Name and/or Logo**
- **Company Telephone Number**

CONTRACTOR will be responsible to rebuild, restore, repair, and otherwise correct damages to any public or private property caused by CONTRACTOR operations.

**GG.10 Communication Equipment**

CONTRACTOR shall provide a toll free telephone answering service to residents and/or businesses in the City of Palmdale, from 7:30 AM to 4:30 PM Monday thru Friday.

Answering service shall have the capability of contacting CONTRACTOR by radio or cellular telephone equipment for the purpose of relaying instructions from the Landscape Superintendent or appointed designee and for receiving resident and/or business complaints.

**GG.11 Permits**

CONTRACTOR shall procure all permits and licenses required to lawfully execute the services specified under this Contract.

**GG.12 Communication and Reporting**

CONTRACTOR shall contact Landscape Superintendent and/or appointed designee on a daily basis to submit work reporting forms, convey messages, return telephone calls to the public, schedule field reviews, etc. The CITY Public Works Maintenance Division's normal business hours are Monday thru Thursday from 7:30 a.m. to 6:00 p.m. The city phone number during normal business hours and for after-hours emergencies is (661) 267-5338.

CONTRACTOR shall investigate all complaints related to the landscape maintenance services provided as requested by the Landscape Superintendent or appointed designee.

Complaints received by CONTRACTOR prior to 2:30 p.m. shall be investigated that same day. Complaints received by CONTRACTOR after 2:30 p.m. shall be investigated before 12:00 PM (Noon) the following workday. E-mail notification of Contractor's findings after investigating and/or resolving complaint shall be immediately sent to the Landscape Section group e-mail.

CONTRACTOR shall provide notification of scheduled work progress and observed issues to the Landscape Section group e-mail address. Reports shall contain following types of information:

- Schedule delays and justification for delays, if applicable
- Number and types of complaints received during week, including action taken
- Disease/pests found
- Observed vandalism
- Material loss

GG.13 Emergencies

Emergency and/or unusual situations may arise which will require immediate and unusual provisions in order to protect the public from danger and/or damage to life and/or property, due directly or indirectly to the execution of work, and it is part of the service required of the CONTRACTOR to make such provisions and to furnish such protection.

CONTRACTOR shall use foresight and take such actions and precautions as CONTRACTOR'S operations make necessary to protect public from danger or damage, or loss of property or life.

CONTRACTOR shall be held financially liable for any and all costs associated with losses resulting from CONTRACTOR negligence.

GG.14 Contractor Employee Expectations

All employees of CONTRACTOR shall be dressed in clean uniforms with suitable identification and no portion of the uniform may be removed while working. Any employee found out of uniform shall be immediately removed from work area. The following items are minimum uniform requirements:

- Shirts and Jackets – Highly visible Class 3 reflective colors and materials.
- Shirt Identification – Employee name and company name/logo
- Trousers – Full length (year round)
- Shoes – Work boot with steel toe
- Head protection – OSHA approved

Any CONTRACTOR employee who fails or refuses to carry out any direction of the Landscape Superintendent or appointed designee, or is in the opinion of the CITY to be incompetent, unfaithful, intemperate or disorderly; uses threatening or abusive language to any person in the course of work while representing the CITY; or is otherwise found to be unsatisfactory, shall be discharged immediately and shall not again be employed on the work associated with CITY except by written consent of CITY.

All CONTRACTOR employees shall have the following basic knowledge skills, and abilities:

- Proper license(s) to operate equipment
- Ability to operate equipment in accordance with manufacturer recommendations
- Mechanical ability to make required operator adjustments to equipment being used
- Knowledge of safety regulations as they relate to professional landscape services and proper traffic control
- American Red Cross Standard First Aid Certification – minimum one crew member per crew
- Demonstrated knowledge of landscape maintenance operations
- Become familiar with and perform all associated Professional Landscape Maintenance Services according to the Technical Specifications outlined herein and Section 6 of the City of Palmdale Engineering Standards.

CONTRACTOR shall provide effective supervision to all CONTRACTOR employees. CONTRACTOR employees will follow direction and/or instructions given by Landscape Superintendent or appointed designee. CONTRACTOR shall provide a list including employee names and 24 hour telephone number(s) of all employees in a supervisory capacity.

**GG.15 Automatic Vehicle Location Device**

Automatic vehicle location device (vehicle location and management system (e.g., GPS)), that will log a timeline of all service vehicle locations is required on all vehicles providing the services specified in the technical specifications. CONTRACTOR must provide CITY with reasonable means to access location device information to verify locations that have been serviced.

**GG.16 Dispute Resolution**

The Landscape Superintendent or appointed designee will have access to all aspects of work outlined herein and shall be accommodated with every reasonable request for acquiring full knowledge of status of contractual obligations, workmanship and character of materials used and employed in this work. When CONTRACTOR varies the period during which work is carried out, CONTRACTOR shall give notice to Landscape Superintendent or appointed designee so appropriate oversight may be conducted. Any inspection of work shall not relieve CONTRACTOR of any obligations to fulfill service requirements.

Any and all questions arising from the performance of this work shall be directed to the Landscape Superintendent or appointed designee. To aid in the resolution of problems, CITY may utilize a mutually acceptable horticulturist or certified arborist to examine and inspect landscape areas to assist Landscape Superintendent or appointed designee in assessing quality of CONTRACTOR'S maintenance. Either Landscape Superintendent or appointed designee will conduct inspection and administration of contract work. All deficiency notices and calculations of payment deductions shall originate with the authorized designees and/or Landscape Superintendent and be ultimately authorized by Landscape Superintendent and/or the Maintenance Division Manager.

## SECTION HH– TRAFFIC CONTROL

**HH.1 Traffic Control Requirements**

CONTRACTOR shall be responsible for design and implementation of all traffic control and safety delineation required at the work site as per the *California Manual on Uniform Traffic Control Devices* latest revision.

**Note: Traffic Control Plans, prepared, signed, and stamped by registered Traffic Engineer or Civil Engineer, on 24" X 36" sheets, shall be submitted to the City Traffic Engineer for approval when any of the following conditions apply:**

- Moving traffic over the striped centerline.
- Reducing the number of travel lanes in a direction by more than one lane.
- Any road closure (one or two-way) or flagger/pilot car operation.

- Any work performed within 250 feet of a traffic signal.

HH.2 Traffic Control Conditions

**The following conditions shall apply:**

1. Access to all private property shall be maintained at all times, unless otherwise approved by the City of Palmdale. Emergency vehicle access shall be maintained at all times.

2. All traffic signs, traffic control devices and control procedures shall be in conformance with the California Manual of Uniform Traffic Control Devices.

3. Additional traffic control may be required to facilitate public safety and traffic flow, if deemed necessary by the Landscape Superintendent or appointed designee. The requirements as outlined above do not constitute the issuance of an encroachment permit. Questions related to applying for an encroachment permit can be directed to the Engineering Division at (661) 267-5272. Any further traffic questions may be directed to City Traffic Engineer.

## SECTION II – GENERAL EXCLUSIONS

**II.1 Exclusions**

The CONTRACTOR shall NOT be responsible for maintenance of the following items, however, CONTRACTOR shall immediately report any issues within the maintenance categories listed below to the Landscape Superintendent or appointed designee.

1. Graffiti removal
2. Fence Repair/Painting
3. Unsafe Sidewalks
4. Vandalism to Marquees and/or Monuments
5. Damage to City infrastructure resulting from traffic collisions

**[End of Exhibit A – Scope of Work]**

**EXHIBIT B**
**FEE SCHEDULE(S)**

**SEE ATTACHED PAGE 84 through PAGE 133**
Professional Landscape Maintenance Services
CITY Facilities and Related Fees

## EXHIBIT C
## KEY PERSONNEL

| NAME (Please Print) | JOB TITLE |
|---|---|
| Richard Meier | President |
| Richard Cambaliza | Maintenance Superintendent |
| Anna Meier | Office Manager |
| Dave Burwell | Chemical Advisor – Applicator |
| Ezequiel Munoz | Supervisor |
| Jesus Reyes | Foreman |
| Randy Cambaliza | Supervisor |
| Maurillo Diaz | Foreman |

The labor and equipment allocated to this Agreement shall be aligned with work plans in CONTRACTOR's work plan(s) submitted in response to RFP 18-002-3500.

CONTRACTOR COPORATE INFORMATION

The names of all persons interested in the forgoing as principals of CONTRACTOR are as follows:

Richard A. Meier, President
Anna Marie Meier, Vice President

**IMPORTANT NOTICE:** If CONTRACTOR is a corporation, state legal name of corporation and names of the president, secretary, treasurer, and manager thereof authorized to execute this Contract; if a co-partnership, state true name of firm, names of all individual co-partners composing firm.

The representations made herein are made under penalty of perjury.

Employers Tax Identification No. 95-4787803. To comply with Internal Revenue Service requirements, the City of Palmdale will report any payments exceeding $600.00 within a calendar year.

CONTRACTOR'S LICENSE NUMBER: 775631

**(IF APPLICABLE)**
Name of Partnership or Firm:

Business Address:

(All partners must sign – use separate sheet if necessary)

Signed: Name:
Title: Address:

Signed: Name:
Title: Address:

**(IF APPLICABLE)**
Name of Corporation:

Business Address: 652 West Avenue L-14, Lancaster, California 93534

Corporation organized under the laws of the State of: California

SEAL

Signature of Corporate Secretary
(Attach Applicable Corporate Resolutions)

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR CITY PARKS AND FACILITY GROUNDS- YEAR 1

| LMD | ADDRESS | DAILY OPENING OPERATIONS | MONTHLY OPENING OPERATIONS COSTS | WEEKLY TURF MAINT. COST | MONTHLY TURF MAINT. COST | WEEKLY PLANTER COST | MONTHLY PLANTER COST | WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Melville J. Courson Park | 38226 10th Street East | $60,000 | $1,825.000 | $105.000 | $455.000 | $519.231 | $2,250.000 | $80.769 | $350.000 | $4,880.000 | $58,560.000 |
| Legacy Commons | 930 East Ave. Q-9 | $16,438 | $500.00 | $53.077 | $230.000 | $378.462 | $1,640.000 | $80,769 | $350.000 | $2,720.000 | $32,640.000 |
| Pelona Vista Park | 37800 Tierra Subida Ave. | $134,795 | $4,100.00 | $323.077 | $1,400.000 | $1,903.846 | $8,250.000 | $845.769 | $3,665.000 | $17,415.000 | $208,980.000 |
| Manzanita Heights Park | 431 Mesa Verde Avenue | $32,877 | $1,000.00 | $79.615 | $345.000 | $276.923 | $1,200.000 | $83.077 | $360.000 | $2,905.000 | $34,860.000 |
| Marie Kerr Park Complex | See comment for specific site info | $174,247 | $5,300.00 | $840.000 | $3,640.000 | $2,160.000 | $9,360.000 | $640.385 | $2,775.000 | $21,075.000 | $252,900.000 |
| Arnie Quinones Park | 41003 50th Street West | $26,301 | $800.00 | $69.231 | $300.000 | $426.923 | $1,850.000 | $78.462 | $340.000 | $3,290.000 | $39,480.000 |
| Desert Sands Park | 39117 3rd Street East. | $123,288 | $3,750.00 | $158.077 | $685.000 | $1,211.538 | $5,250.000 | $155.769 | $675.000 | $10,360.000 | $124,320.000 |
| WorkSource Center | 38510 Sierra Hwy. | $19,726 | $600.00 | $23.077 | $100.000 | $103.846 | $450.000 | $46.154 | $200.000 | $1,350.000 | $16,200.000 |
| Hammack Activity Center | 815 E. Avenue Q-6 | $13,151 | $400.00 | $0.000 | $0.000 | $83.077 | $360.000 | $46.154 | $200.000 | $960.000 | $11,520.000 |
| Heritage Air Park | 2001 East Avenue P | $16,438 | $500.00 | $27.692 | $120.000 | $166.154 | $720.000 | $57.692 | $250.000 | $1,590.000 | $19,080.000 |
| William J. McAdam Park | 38115 30th Street East | $124,932 | $3,800.00 | $230.769 | $1,000.000 | $913.846 | $3,960.000 | $156.923 | $680.000 | $9,440.000 | $113,280.000 |
| Domenic Massari Park | 37716 55th Street East | $126,575 | $3,850.00 | $346.154 | $1,500.000 | $1,730.769 | $7,500.000 | $589.154 | $2,553.000 | $15,403.000 | $184,836.000 |
| Yellen Park | 5100 East Ave. S | $60,822 | $1,850.00 | $219.231 | $950.000 | $1,578.462 | $6,840.000 | $207.692 | $900.000 | $10,540.000 | $126,480.000 |
| Dry Town/Oasis Park | 3850 East Avenue S | $32,877 | $1,000.00 | $184.615 | $800.000 | $747.692 | $3,240.000 | $311.538 | $1,350.000 | $6,390.000 | $76,680.000 |
| Joshua Hills Park | Fairfield & Via del Rio | $39,452 | $1,200.00 | $103.846 | $450.000 | $581.538 | $2,520.000 | $90.000 | $390.000 | $4,560.000 | $54,720.000 |
| Foothill Park | 2525 The Groves | $42,740 | $1,300.00 | $184.615 | $800.000 | $913.846 | $3,960.000 | $128.077 | $555.000 | $6,615.000 | $79,380.000 |

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR CITY PARKS AND FACILITY GROUNDS- YEAR 1

| LMD | ADDRESS | DAILY OPENING OPERATIONS | MONTHLY OPENING OPERATIONS COSTS | WEEKLY TURF MAINT. COST | MONTHLY TURF MAINT. COST | WEEKLY PLANTER COST | MONTHLY PLANTER COST | WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Anaverde Park | 2812 Greenbrier St. | $32.877 | $1,000.00 | $173.077 | $750.000 | $784.615 | $3,400.000 | $80.769 | $350.000 | $5,500.000 | $66,000.000 |
| Palmdale Civic Center | See comment for specific site info | $32.877 | $1,000.00 | $219.231 | $950.000 | $415.385 | $1,800.000 | $34.615 | $150.000 | $3,900.000 | $46,800.000 |
| Palmdale Playhouse | 38334 10th Street East | $27.945 | $850.00 | $0.000 | $0.000 | $138.462 | $600.000 | $40.385 | $175.000 | $1,625.000 | $19,500.000 |
| S.A.V.E.S. | 1002 East Avenue Q-12 | $18.904 | $575.00 | $0.000 | $0.000 | $184.615 | $800.000 | $40.385 | $175.000 | $1,550.000 | $18,600.000 |
| Parks & Recreation | 38260 10th Street East | $28.767 | $875.00 | $0.000 | $0.000 | $346.154 | $1,500.000 | $57.692 | $250.000 | $2,625.000 | $31,500.000 |
| Demonstration Garden | n/w corner Sierra Hwy. & Palmdale Blvd. | $13.151 | $400.00 | $0.000 | $0.000 | $115.385 | $500.000 | $102.692 | $445.000 | $1,345.000 | $16,140.000 |
| St. Claire Parkway | w/s of Sierra Hwy btw Ave. R & Ave. Q | $16.438 | $500.00 | $150.000 | $650.000 | $415.385 | $1,800.000 | $280.385 | $1,215.000 | $4,165.000 | $49,980.000 |
| COMPREHENSIVE TOTALS | | $211.233 | $36,975.000 | $481.154 | $15,125.000 | $2,801.538 | $69,750.000 | $1,007.308 | $18,353.000 | $140,203.000 | $1,682,436.000 |

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR GENERAL BENEFIT AREAS- YEAR 1

| SITE | SITE NUMBER | LOCATION | BI-WEEKLY PLANTER COST | MONTHLY PLANTER COST | BI-WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|
| ALBERTSON'S MEDIAN | 1 | 50TH ST. WEST S/O Ave. N | $23.077 | $50.000 | $16.154 | $35.000 | $85.000 | $1,020.000 |
| RANCHO VISTA MEDIANS | 2 | R.V.BLVD btw 15TH & 10TH WEST | $138.462 | $300.000 | $69.231 | $150.000 | $450.000 | $5,400.000 |
| RANCHO VISTA MEDIANS | 3 | R.V.BLVD btw 10TH WEST & HWY 14 | $46.154 | $100.000 | $23.077 | $50.000 | $150.000 | $1,800.000 |
| RANCHO VISTA MEDIANS | 4 | R.V BLVD. btw HWY 14 & PD PROMENADE | $92.308 | $200.000 | $34.615 | $75.000 | $275.000 | $3,300.000 |
| COUNTRY CLUB PLANTER | 5 | N/S of R.V BLVD. Btw. HWY 14 & COUNTRY CLUB DR. | $92.308 | $200.000 | $23.077 | $50.000 | $250.000 | $3,000.000 |
| RANCHO VISTA MEDIAN | 6 | R.V.BLVD at FAIRWAY DR. | $27.692 | $60.000 | $18.462 | $40.000 | $100.000 | $1,200.000 |
| DESERT SANDS TERRACE | 7 | S/S R.V. BLVD w/o 3RD ST. EAST+W/S 3RD ST. EAST S/O R.V. BLVD | $92.308 | $200.000 | $34.615 | $75.000 | $275.000 | $3,300.000 |
| 10TH WEST MEDIANS | 8 | 10TH WEST btw A.V. MALL AND DESTINATION O-8 | $27.692 | $60.000 | $18.462 | $40.000 | $100.000 | $1,200.000 |
| SIZZLER MEDIAN | 9 | 10TH WEST N/O PALMDALE BLVD. | $32.308 | $70.000 | $18.462 | $40.000 | $110.000 | $1,320.000 |
| PALMDALE BLVD MEDIANS | 10 | PALMDALE BLVD. btw 10th WEST & 5TH WEST | $369.231 | $800.000 | $92.308 | $200.000 | $1,000.000 | $12,000.000 |
| MEDICAL CENTER DR. | 11 | MEDICAL CENTER DR. S/O PALMDALE BLVD | $18.462 | $40.000 | $9.231 | $20.000 | $60.000 | $720.000 |
| PALMDALE BLVD MEDIAN | 12 | PALMDALE BLVD btw 5TH WEST & A.M./P.M. | $46.154 | $100.000 | $18.462 | $40.000 | $140.000 | $1,680.000 |
| HWY 14 INTERCHANGES/MEDIAN | 13 | PALMDALE BLVD SE/O & NW/O HWY 14 | $553.846 | $1,200.000 | $92.308 | $200.000 | $1,400.000 | $16,800.000 |
| PALMDALE BLVD MEDIAN | 14 | PALMDALE BLVD btw HWY 14 NORTH OFFRAMP & DIVISION ST | $64.615 | $140.000 | $27.692 | $60.000 | $200.000 | $2,400.000 |
| PALMDALE BLVD MEDIAN | 15 | PALMDALE BLVD btw DIVISION ST & 3RD ST | $36.923 | $80.000 | $18.462 | $40.000 | $120.000 | $1,440.000 |
| PALMDALE BLVD MEDIAN | 16 | PALMDALE BLVD btw 3RD ST E. & 5TH ST E | $27.692 | $60.000 | $13.846 | $30.000 | $90.000 | $1,080.000 |
| PALMDALE BLVD MEDIAN | 17 | PALMDALE BLVD btw 5TH ST E & 6TH ST E | $27.692 | $60.000 | $13.846 | $30.000 | $90.000 | $1,080.000 |
| BLVD NORTH FRONTAGE PLANTER | 18 | N/S OF PALMDALE BLVD bwt 3RD ST E & 5TH ST E | $138.462 | $300.000 | $18.462 | $40.000 | $340.000 | $4,080.000 |
| PALMDALE BLVD. MEDIAN | 19 | PALMDALE BLVD btw 9TH ST E & 10TH ST E | $18.462 | $40.000 | $13.846 | $30.000 | $70.000 | $840.000 |
| PALMDALE BLVD MEDIAN | 20 | PALMDALE BLVD btw 10TH ST E & 10TH PL E | $18.462 | $40.000 | $13.846 | $30.000 | $70.000 | $840.000 |
| BLVD NORTH FRONTAGE PLANTER | 21 | PALMDALE BLVD & POND | $27.692 | $60.000 | $13.846 | $30.000 | $90.000 | $1,080.000 |

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR GENERAL BENEFIT AREAS- YEAR 1

| SITE | SITE NUMBER | LOCATION | BI-WEEKLY PLANTER COST | MONTHLY PLANTER COST | BI-WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|
| BLVD NORTH FRONTAGE PLANTER | 22 | PALMDALE BLVD & LANDON | $73.846 | $160.000 | $27.692 | $60.000 | $220.000 | $2,640.000 |
| SIERRA BIKE TRAIL | 23 | W/S SIERRA HWY S/O TECHNOLOGY DR | $738.462 | $1,600.000 | $184.615 | $400.000 | $2,000.000 | $24,000.000 |
| SIERRA BIKE TRAIL | 24 | E/S OF SIERRA HWY btw RANCHO VISTA BLVD & AVE M | $923.077 | $2,000.000 | $184.615 | $400.000 | $2,400.000 | $28,800.000 |
| SIERRA HWY MEDIAN | 25 | SIERRA HWY S/O AVE M AT NORTHROP GRUNMAN CREDIT UNION | $36.923 | $80.000 | $18.462 | $40.000 | $120.000 | $1,440.000 |
| WEST PARK MEDIANS | 26 | WEST PARK DR & CORPORATE CT | $73.846 | $160.000 | $18.462 | $40.000 | $200.000 | $2,400.000 |
| AUTOMALL WALL | 27 | OUTSIDE OF AUTOMALL E PERMITER WALL, ACCESS AT AVE Q/HWY 14 | $69.231 | $150.000 | $18.462 | $40.000 | $190.000 | $2,280.000 |
| AVE Q FRONTAGE RD PLANTERS | 28 | AVE Q NORTH & SOUTH FRONTAGE RD btw 3RD ST E & DIVISION ST ALLEY | $138.462 | $300.000 | $36.923 | $80.000 | $380.000 | $4,560.000 |
| DIVISION ST FRONTAGE RD | 29 | E/S OF DIVISION ST btw Q-10 & TAINTOR RD | $27.692 | $60.000 | $13.846 | $30.000 | $90.000 | $1,080.000 |
| 20TH E & AVE R-8 BUFFER ZONE | 30 | N/W CORNER OF 20TH E & AVE. R-8 | $230.769 | $500.000 | $69.231 | $150.000 | $650.000 | $7,800.000 |
| 25TH E BUFFER ZONE | 31 | E/S OF 25TH E N & S SIDES AT DESERT OAK DR | $230.769 | $500.000 | $69.231 | $150.000 | $650.000 | $7,800.000 |
| AVE R FRONTAGE RD PLANTER | 32 | S/S OF AVE R btw 25TH ST E & RUDALL AVE | $126.923 | $275.000 | $34.615 | $75.000 | $350.000 | $4,200.000 |
| AVE R FRONTAGE RD PLANTER | 33 | S/S OF AVE R btw 28TH ST E & 29TH ST E | $27.692 | $60.000 | $18.462 | $40.000 | $100.000 | $1,200.000 |
| AVE R VINE PLANTER | 34 | N/S OF AVE R bwt 29TH ST E & 30TH ST E | $27.692 | $60.000 | $18.462 | $40.000 | $100.000 | $1,200.000 |
| AVE R VINE PLANTER | 35 | N/S OF AVE R E/O & W/O LEMSFORD AVE | $34.615 | $75.000 | $18.462 | $40.000 | $115.000 | $1,380.000 |
| 47TH ST E FRONTAGE RD PLANTER | 36 | E/S OF 47TH ST E btw AVE R-11 & AVE R-12 | $69.231 | $150.000 | $27.692 | $60.000 | $210.000 | $2,520.000 |
| HWY 14 INTERCHANGE PLANTERS | 37 | BOTH SIDES OF AVE S AT HWY 14 W/O CALLE GRILLO | $92.308 | $200.000 | $27.692 | $60.000 | $260.000 | $3,120.000 |
| AVE S BIKE TRAIL | 38 | S/S OF AVE S bwt CALLE GRILLO & SIERRA HWY | $276.923 | $600.000 | $69.231 | $150.000 | $750.000 | $9,000.000 |
| AVE S BIKE TRAIL | 39 | S/S OF AVE S btw SIERRA HWY & 200' E/O WINDY CREEK ST | $230.769 | $500.000 | $57.692 | $125.000 | $625.000 | $7,500.000 |
| AVE S MEDIAN | 40 | AVE S btw 10TH ST E & SWAN DR | $69.231 | $150.000 | $18.462 | $40.000 | $190.000 | $2,280.000 |
| AVE S MEDIAN | 41 | AVE S bwt SHEFFIELD DR & CASA VERDE DR | $36.923 | $80.000 | $18.462 | $40.000 | $120.000 | $1,440.000 |

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## EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR GENERAL BENEFIT AREAS- YEAR 1

| SITE | SITE NUMBER | LOCATION | BI-WEEKLY PLANTER COST | MONTHLY PLANTER COST | BI-WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|
| AVE S BIKE TRAIL / SLOPES | 42 | S/S OF AVE S btw CASA VERDE DR & CEMENTARY RD | $923.077 | $2,000.000 | $230.769 | $500.000 | $2,500.000 | $30,000.000 |
| AVE S MEDIAN | 43 | AVE S btw CASA VERDE DR & 20TH ST E | $69.231 | $150.000 | $27.692 | $60.000 | $210.000 | $2,520.000 |
| AVE S MEDIAN | 44 | AVE S bwt 20TH ST E & CEMENTARY RD | $184.615 | $400.000 | $46.154 | $100.000 | $500.000 | $6,000.000 |
| AVE S MEDIAN | 45 | AVE. S & 35TH ST E | $461.538 | $1,000.000 | $92.308 | $200.000 | $1,200.000 | $14,400.000 |
| AVE S MEDIAN | 46 | AVE. S & 37TH ST E | $369.231 | $800.000 | $69.231 | $150.000 | $950.000 | $11,400.000 |
| AVE S MEDIAN | 47 | AVE. S AT DRYTOWN WATER PARK | $138.462 | $300.000 | $27.692 | $60.000 | $360.000 | $4,320.000 |
| AVE S MEDIAN | 48 | AVE. S & SPRINGFIELD | $92.308 | $200.000 | $18.462 | $40.000 | $240.000 | $2,880.000 |
| AVE S MEDIAN | 49 | AVE. S & 43RD ST | $73.846 | $160.000 | $18.462 | $40.000 | $200.000 | $2,400.000 |
| AVE S MEDIAN | 50 | AVE. S & 45TH ST E | $83.077 | $180.000 | $18.462 | $40.000 | $220.000 | $2,640.000 |
| AVE S NORTH PLANTER / SLOPE | 51 | AVE S btw CASA VERDE DR & 20TH ST E + W/S OF 20TH E TO GABLEWVIEW | $461.538 | $1,000.000 | $92.308 | $200.000 | $1,200.000 | $14,400.000 |
| AVE S NORTH PLANTER / SLOPE | 52 | E/S OF 20TH ST E btw GABLE VIEW & AVE S + AVE S TO CEMENTARY RD | $369.231 | $800.000 | $55.385 | $120.000 | $920.000 | $11,040.000 |
| AVE S VINE PLANTER | 53 | N/S OF AVE S btw 27TH ST E & 30TH ST E | $300.000 | $650.000 | $46.154 | $100.000 | $750.000 | $9,000.000 |
| COMPREHENSIVE TOTALS | | | **$207.692** | **$19,460.000** | **$108.462** | **$4,975.000** | **$685.000** | **$293,220.000** |

A-6563

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR PALMDALE TRANSPORTATION CENTER - YEAR 1

| SITE | LOCATION | DAILY OPENING OPERATIONS COST | MONTHLY OPENING OPERATIONS COST | WEEKLY TURF MAINT. COST | MONTHLY TURF MAINT. COST | WEEKLY PLANTER COST | MONTHLY PLANTER COST | WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PALMDALE TRANSPORTATION CENTER | 39000 Clock Tower Plaza Dr. | $39.452 | $1,200.000 | $80.769 | $350.000 | $900.000 | $3,900.000 | $138.462 | $600.000 | $6,050.000 | $72,600.000 |
| COMPREHENSIVE TOTALS | | $39.452 | $1,200.000 | $80.769 | $350.000 | $900.000 | $3,900.000 | $138.462 | $600.000 | $6,050.000 | $72,600.000 |

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR PARK AND RIDES - YEAR 1

| SITE | LOCATION | DAILY OPENING OPERATIONS COST | MONTHLY OPENING OPERATIONS COST | BI-WEEKLY PLANTER COST | MONTHLY PLANTER COST | BI-WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|---|
| E. Ave. S Park & Ride | 210 East Avenue S | $14.795 | $450.000 | $207.692 | $450.000 | $69.231 | $150.000 | $1,050.000 | $12,600.000 |
| W. Ave. S Park & Ride | 434 West Avenue S | $14.795 | $450.000 | $207.692 | $450.000 | $69.231 | $150.000 | $1,050.000 | $12,600.000 |
| Pelona Vista Park & Ride | 445 West Avenue R-8 | $14.795 | $450.000 | $207.692 | $450.000 | $69.231 | $150.000 | $1,050.000 | $12,600.000 |
| COMPREHENSIVE TOTALS | | | **$450.000** | **$207.692** | **$450.000** | **$69.231** | **$150.000** | **$1,050.000** | **$12,600.000** |

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR FAIRWAY BUSINESS PARK - YEAR 1

| SITE | LOCATION | BI-WEEKLY PLANTER COST | MONTHLY PLANTER COST | BI-WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|
| FAIRWAY BUSINESS PARK | SEE COMMENT FOR LOCATION | $1,200.000 | $2,600.000 | $138.462 | $300.000 | $2,900.000 | $34,800.000 |
| COMPREHENSIVE TOTALS | | $1,200.000 | $2,600.000 | $138.462 | $300.000 | $2,900.000 | $34,800.000 |

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR CITY PARKS AND FACILITY GROUNDS- YEAR 2

| LMD | ADDRESS | DAILY OPENING OPERATIONS | MONTHLY OPENING OPERATIONS COSTS | WEEKLY TURF MAINT. COST | MONTHLY TURF MAINT. COST | WEEKLY PLANTER COST | MONTHLY PLANTER COST | WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Melville J. Courson Park | 38226 10th Street East | $61,808 | $1,880.000 | $107,308 | $465.000 | $530,769 | $2,300.000 | $83,077 | $360.000 | $5,005.000 | $60,060.000 |
| Legacy Commons | 930 East Ave. Q-9 | $16,932 | $515.00 | $54,231 | $235.000 | $390.000 | $1,690.000 | $83.077 | $360.000 | $2,800.000 | $33,600.000 |
| Pelona Vista Park | 37800 Tierra Subida Ave. | $138,740 | $4,220.00 | $332,308 | $1,440.000 | $1,950,000 | $8,450.000 | $871.154 | $3,775.000 | $17,885.000 | $214,620.000 |
| Manzanita Heights Park | 431 Mesa Verde Avenue | $33,863 | $1,030.00 | $81,923 | $355.000 | $285.000 | $1,235.000 | $85,385 | $370.000 | $2,990.000 | $35,880.000 |
| Marie Kerr Park Complex | See comment for specific site info | $179,507 | $5,460.00 | $865,385 | $3,750.000 | $2,224.615 | $9,640.000 | $658,846 | $2,855.000 | $21,705.000 | $260,460.000 |
| Arnie Quinones Park | 41003 50th Street West | $27,123 | $825.00 | $71,538 | $310.000 | $438.462 | $1,900.000 | $80,769 | $350.000 | $3,385.000 | $40,620.000 |
| Desert Sands Park | 39117 3rd Street East. | $126,904 | $3,860.00 | $162,692 | $705.000 | $1,248,462 | $5,410.000 | $160,385 | $695.000 | $10,670.000 | $128,040.000 |
| WorkSource Center | 38510 Sierra Hwy. | $20,384 | $620.00 | $24,231 | $105.000 | $106.154 | $460.000 | $47,308 | $205.000 | $1,390.000 | $16,680.000 |
| Hammack Activity Center | 815 E. Avenue Q-6 | $13,479 | $410.00 | $0.000 | $0.000 | $85,385 | $370.000 | $47,308 | $205.000 | $985.000 | $11,820.000 |
| Heritage Air Park | 2001 East Avenue P | $16,932 | $515.00 | $28,846 | $125.000 | $170,769 | $740.000 | $58,846 | $255.000 | $1,635.000 | $19,620.000 |
| William J. McAdam Park | 38115 30th Street East | $128,548 | $3,910.00 | $237,692 | $1,030.000 | $940.385 | $4,075.000 | $161.538 | $700.000 | $9,715.000 | $116,580.000 |
| Domenic Massari Park | 37716 55th Street East | $130,356 | $3,965.00 | $356,538 | $1,545.000 | $1,782.692 | $7,725.000 | $606.923 | $2,630.000 | $15,865.000 | $190,380.000 |
| Yellen Park | 5100 East Ave. S | $62,630 | $1,905.00 | $225.000 | $975.000 | $1,625.769 | $7,045.000 | $213,462 | $925.000 | $10,850.000 | $130,200.000 |
| Dry Town/Oasis Park | 3850 East Avenue S | $33,863 | $1,030.00 | $190,385 | $825.000 | $769.615 | $3,335.000 | $320.769 | $1,390.000 | $6,580.000 | $78,960.000 |
| Joshua Hills Park | Fairfield & Via del Rio | $40,603 | $1,235.00 | $106,154 | $460.000 | $598,846 | $2,595.000 | $92.308 | $400.000 | $4,690.000 | $56,280.000 |
| Foothill Park | 2525 The Groves | $44,055 | $1,340.00 | $190,385 | $825.000 | $940,385 | $4,075.000 | $131,538 | $570.000 | $6,810.000 | $81,720.000 |

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR CITY PARKS AND FACILITY GROUNDS- YEAR 2

| LMD | ADDRESS | DAILY OPENING OPERATIONS | MONTHLY OPENING OPERATIONS COSTS | WEEKLY TURF MAINT. COST | MONTHLY TURF MAINT. COST | WEEKLY PLANTER COST | MONTHLY PLANTER COST | WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Anaverde Park | 2812 Greenbrier St. | $33.863 | $1,030.00 | $178.846 | $775.000 | $807.692 | $3,500.000 | $83.077 | $360.000 | $5,665.000 | $67,980.000 |
| Palmdale Civic Center | See comment for specific site info | $33.863 | $1,030.00 | $225.000 | $975.000 | $428.077 | $1,855.000 | $35.769 | $155.000 | $4,015.000 | $48,180.000 |
| Palmdale Playhouse | 38334 10th Street East | $28.767 | $875.00 | $0.000 | $0.000 | $141.923 | $615.000 | $41.538 | $180.000 | $1,670.000 | $20,040.000 |
| S.A.V.E.S. | 1002 East Avenue Q-12 | $19.397 | $590.00 | $0.000 | $0.000 | $190.385 | $825.000 | $41.538 | $180.000 | $1,595.000 | $19,140.000 |
| Parks & Recreation | 38260 10th Street East | $29.589 | $900.00 | $0.000 | $0.000 | $356.538 | $1,545.000 | $58.846 | $255.000 | $2,700.000 | $32,400.000 |
| Demonstration Garden | n/w corner Sierra Hwy. & Palmdale Blvd. | $13.479 | $410.00 | $0.000 | $0.000 | $118.846 | $515.000 | $106.154 | $460.000 | $1,385.000 | $16,620.000 |
| St. Claire Parkway | w/s of Sierra Hwy btw Ave. R & Ave. Q | $16.932 | $515.00 | $154.615 | $670.000 | $428.077 | $1,855.000 | $288.462 | $1,250.000 | $4,290.000 | $51,480.000 |
| COMPREHENSIVE TOTALS | | $217.479 | $6,615.000 | $493.846 | $15,570.000 | $2,870.769 | $71,755.000 | $1,037.308 | $18,885.000 | $25,690.000 | $1,731,360.000 |

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR GENERAL BENEFIT AREAS- YEAR 2

| SITE | SITE NUMBER | LOCATION | BI-WEEKLY PLANTER COST | MONTHLY PLANTER COST | BI-WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|
| ALBERTSON'S MEDIAN | 1 | 50TH ST. WEST S/O Ave. N | $24.000 | $52.000 | $16.615 | $36.000 | $88.000 | $1,056.000 |
| RANCHO VISTA MEDIANS | 2 | R.V.BLVD btw 15TH & 10TH WEST | $143.077 | $310.000 | $71.538 | $155.000 | $465.000 | $5,580.000 |
| RANCHO VISTA MEDIANS | 3 | R.V.BLVD btw 10TH WEST & HWY 14 | $47.538 | $103.000 | $23.538 | $51.000 | $154.000 | $1,848.000 |
| RANCHO VISTA MEDIANS | 4 | R.V BLVD. btw HWY 14 & PD PROMENADE | $95.077 | $206.000 | $35.538 | $77.000 | $283.000 | $3,396.000 |
| COUNTRY CLUB PLANTER | 5 | N/S of R.V BLVD. Btw. HWY 14 & COUNTRY CLUB DR. | $95.077 | $206.000 | $24.000 | $52.000 | $258.000 | $3,096.000 |
| RANCHO VISTA MEDIAN | 6 | R.V.BLVD at FAIRWAY DR. | $28.615 | $62.000 | $18.923 | $41.000 | $103.000 | $1,236.000 |
| DESERT SANDS TERRACE | 7 | S/S R.V. BLVD w/o 3RD ST. EAST+W/S 3RD ST. EAST S/O R.V. BLVD | $95.077 | $206.000 | $35.538 | $77.000 | $283.000 | $3,396.000 |
| 10TH WEST MEDIANS | 8 | 10TH WEST btw A.V. MALL AND DESTINATION O-8 | $28.615 | $62.000 | $18.923 | $41.000 | $103.000 | $1,236.000 |
| SIZZLER MEDIAN | 9 | 10TH WEST N/O PALMDALE BLVD. | $33.231 | $72.000 | $18.923 | $41.000 | $113.000 | $1,356.000 |
| PALMDALE BLVD MEDIANS | 10 | PALMDALE BLVD. btw 10th WEST & 5TH WEST | $380.308 | $824.000 | $95.077 | $206.000 | $1,030.000 | $12,360.000 |
| MEDICAL CENTER DR. | 11 | MEDICAL CENTER DR. S/O PALMDALE BLVD | $18.923 | $41.000 | $9.692 | $21.000 | $62.000 | $744.000 |
| PALMDALE BLVD MEDIAN | 12 | PALMDALE BLVD btw 5TH WEST & A.M./P.M. | $47.538 | $103.000 | $18.923 | $41.000 | $144.000 | $1,728.000 |

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR GENERAL BENEFIT AREAS- YEAR 2

| SITE | SITE NUMBER | LOCATION | BI-WEEKLY PLANTER COST | MONTHLY PLANTER COST | BI-WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|
| HWY 14 INTERCHANGES/MEDIAN | 13 | PALMDALE BLVD SE/O & NW/O HWY 14 | $570.462 | $1,236.000 | $95.077 | $206.000 | $1,442.000 | $17,304.000 |
| PALMDALE BLVD MEDIAN | 14 | PALMDALE BLVD btw HWY 14 NORTH OFFRAMP & DIVISION ST | $66.923 | $145.000 | $28.615 | $62.000 | $207.000 | $2,484.000 |
| PALMDALE BLVD MEDIAN | 15 | PALMDALE BLVD btw DIVISION ST & 3RD ST | $37.846 | $82.000 | $18.923 | $41.000 | $123.000 | $1,476.000 |
| PALMDALE BLVD MEDIAN | 16 | PALMDALE BLVD btw 3RD ST E. & 5TH ST E | $28.615 | $62.000 | $13.846 | $30.000 | $92.000 | $1,104.000 |
| PALMDALE BLVD MEDIAN | 17 | PALMDALE BLVD btw 5TH ST E & 6TH ST E | $28.615 | $62.000 | $13.846 | $30.000 | $92.000 | $1,104.000 |
| BLVD NORTH FRONTAGE PLANTER | 18 | N/S OF PALMDALE BLVD bwt 3RD ST E & 5TH ST E | $142.615 | $309.000 | $18.923 | $41.000 | $350.000 | $4,200.000 |
| PALMDALE BLVD. MEDIAN | 19 | PALMDALE BLVD btw 9TH ST E & 10TH ST E | $18.923 | $41.000 | $13.846 | $30.000 | $71.000 | $852.000 |
| PALMDALE BLVD MEDIAN | 20 | PALMDALE BLVD btw 10TH ST E & 10TH PL E | $18.923 | $41.000 | $13.846 | $30.000 | $71.000 | $852.000 |
| BLVD NORTH FRONTAGE PLANTER | 21 | PALMDALE BLVD & POND | $28.615 | $62.000 | $13.846 | $30.000 | $92.000 | $1,104.000 |
| BLVD NORTH FRONTAGE PLANTER | 22 | PALMDALE BLVD & LANDON | $76.154 | $165.000 | $28.615 | $62.000 | $227.000 | $2,724.000 |
| SIERRA BIKE TRAIL | 23 | W/S SIERRA HWY S/O TECHNOLOGY DR | $760.615 | $1,648.000 | $190.154 | $412.000 | $2,060.000 | $24,720.000 |
| SIERRA BIKE TRAIL | 24 | E/S OF SIERRA HWY btw RANCHO VISTA BLVD & AVE M | $950.769 | $2,060.000 | $190.154 | $412.000 | $2,472.000 | $29,664.000 |

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR GENERAL BENEFIT AREAS- YEAR 2

| SITE | SITE NUMBER | LOCATION | BI-WEEKLY PLANTER COST | MONTHLY PLANTER COST | BI-WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|
| SIERRA HWY MEDIAN | 25 | SIERRA HWY S/O AVE M AT NORTHROP GRUNMAN CREDIT UNION | $37.846 | $82.000 | $18.923 | $41.000 | $123.000 | $1,476.000 |
| WEST PARK MEDIANS | 26 | WEST PARK DR & CORPORATE CT | $76.154 | $165.000 | $18.923 | $41.000 | $206.000 | $2,472.000 |
| AUTOMALL WALL | 27 | OUTSIDE OF AUTOMALL E PERMITER WALL, ACCESS AT AVE Q/HWY 14 | $76.154 | $165.000 | $18.462 | $40.000 | $205.000 | $2,460.000 |
| AVE Q FRONTAGE RD PLANTERS | 28 | AVE Q NORTH & SOUTH FRONTAGE RD btw 3RD ST E & DIVISION ST ALLEY | $142.615 | $309.000 | $37.846 | $82.000 | $391.000 | $4,692.000 |
| DIVISION ST FRONTAGE RD | 29 | E/S OF DIVISION ST btw Q-10 & TAINTOR RD | $28.615 | $62.000 | $13.846 | $30.000 | $92.000 | $1,104.000 |
| 20TH E & AVE R-8 BUFFER ZONE | 30 | N/W CORNER OF 20TH E & AVE. R-8 | $237.692 | $515.000 | $71.538 | $155.000 | $670.000 | $8,040.000 |
| 25TH E BUFFER ZONE | 31 | E/S OF 25TH E N & S SIDES AT DESERT OAK DR | $237.692 | $515.000 | $71.538 | $155.000 | $670.000 | $8,040.000 |
| AVE R FRONTAGE RD PLANTER | 32 | S/S OF AVE R btw 25TH ST E & RUDALL AVE | $130.615 | $283.000 | $35.538 | $77.000 | $360.000 | $4,320.000 |
| AVE R FRONTAGE RD PLANTER | 33 | S/S OF AVE R btw 28TH ST E & 29TH ST E | $28.615 | $62.000 | $18.462 | $40.000 | $102.000 | $1,224.000 |
| AVE R VINE PLANTER | 34 | N/S OF AVE R bwt 29TH ST E & 30TH ST E | $28.615 | $62.000 | $18.462 | $40.000 | $102.000 | $1,224.000 |
| AVE R VINE PLANTER | 35 | N/S OF AVE R E/O & W/O LEMSFORD AVE | $35.538 | $77.000 | $18.923 | $41.000 | $118.000 | $1,416.000 |
| 47TH ST E FRONTAGE RD PLANTER | 36 | E/S OF 47TH ST E btw AVE R-11 & AVE R-12 | $71.538 | $155.000 | $28.615 | $62.000 | $217.000 | $2,604.000 |

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR GENERAL BENEFIT AREAS- YEAR 2

| SITE | SITE NUMBER | LOCATION | BI-WEEKLY PLANTER COST | MONTHLY PLANTER COST | BI-WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|
| HWY 14 INTERCHANGE PLANTERS | 37 | BOTH SIDES OF AVE S AT HWY 14 W/O CALLE GRILLO | $95.077 | $206.000 | $28.615 | $62.000 | $268.000 | $3,216.000 |
| AVE S BIKE TRAIL | 38 | S/S OF AVE S bwt CALLE GRILLO & SIERRA HWY | $285.231 | $618.000 | $71.538 | $155.000 | $773.000 | $9,276.000 |
| AVE S BIKE TRAIL | 39 | S/S OF AVE S btw SIERRA HWY & 200' E/O WINDY CREEK ST | $237.692 | $515.000 | $59.077 | $128.000 | $643.000 | $7,716.000 |
| AVE S MEDIAN | 40 | AVE S btw 10TH ST E & SWAN DR | $71.538 | $155.000 | $18.462 | $40.000 | $195.000 | $2,340.000 |
| AVE S MEDIAN | 41 | AVE S bwt SHEFFIELD DR & CASA VERDE DR | $37.846 | $82.000 | $18.923 | $41.000 | $123.000 | $1,476.000 |
| AVE S BIKE TRAIL / SLOPES | 42 | S/S OF AVE S btw CASA VERDE DR & CEMENTARY RD | $950.769 | $2,060.000 | $237.692 | $515.000 | $2,575.000 | $30,900.000 |
| AVE S MEDIAN | 43 | AVE S btw CASA VERDE DR & 20TH ST E | $71.538 | $155.000 | $28.615 | $62.000 | $217.000 | $2,604.000 |
| AVE S MEDIAN | 44 | AVE S bwt 20TH ST E & CEMENTARY RD | $190.154 | $412.000 | $47.538 | $103.000 | $515.000 | $6,180.000 |
| AVE S MEDIAN | 45 | AVE. S & 35TH ST E | $475.385 | $1,030.000 | $95.077 | $206.000 | $1,236.000 | $14,832.000 |
| AVE S MEDIAN | 46 | AVE. S & 37TH ST E | $380.308 | $824.000 | $71.538 | $155.000 | $979.000 | $11,748.000 |
| AVE S MEDIAN | 47 | AVE. S AT DRYTOWN WATER PARK | $142.615 | $309.000 | $28.615 | $62.000 | $371.000 | $4,452.000 |
| AVE S MEDIAN | 48 | AVE. S & SPRINGFIELD | $95.077 | $206.000 | $18.923 | $41.000 | $247.000 | $2,964.000 |

## EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR GENERAL BENEFIT AREAS- YEAR 2

| SITE | SITE NUMBER | LOCATION | BI-WEEKLY PLANTER COST | MONTHLY PLANTER COST | BI-WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|
| AVE S MEDIAN | 49 | AVE. S & 43RD ST | $76.154 | $165.000 | $18.923 | $41.000 | $206.000 | $2,472.000 |
| AVE S MEDIAN | 50 | AVE. S & 45TH ST E | $85.385 | $185.000 | $18.923 | $41.000 | $226.000 | $2,712.000 |
| AVE S NORTH PLANTER / SLOPE | 51 | AVE S btw CASA VERDE DR & 20TH ST E + W/S OF 20TH E TO GABLEWVIEW | $475.385 | $1,030.000 | $95.077 | $206.000 | $1,236.000 | $14,832.000 |
| AVE S NORTH PLANTER / SLOPE | 52 | E/S OF 20TH ST E btw GABLE VIEW & AVE S + AVE S TO CEMENTARY RD | $380.308 | $824.000 | $57.692 | $125.000 | $949.000 | $11,388.000 |
| AVE S VINE PLANTER | 53 | N/S OF AVE S btw 27TH ST E & 30TH ST E | $309.231 | $670.000 | $47.538 | $103.000 | $773.000 | $9,276.000 |
| **COMPREHENSIVE TOTALS** | | | **$214.615** | **$20,058.000** | **$111.692** | **$5,115.000** | **$707.000** | **$302,076.000** |

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR PALMDALE TRANSPORTATION CENTER - YEAR 2

| SITE | LOCATION | DAILY OPENING OPERATIONS COST | MONTHLY OPENING OPERATIONS COST | WEEKLY TURF MAINT. COST | MONTHLY TURF MAINT. COST | WEEKLY PLANTER COST | MONTHLY PLANTER COST | WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PALMDALE TRANSPORTATION CENTER | 39000 Clock Tower Plaza Dr. | $40.636 | $1,236.000 | $83.077 | $360.000 | $927.000 | $4,017.000 | $142.615 | $618.000 | $6,231.000 | $74,772.000 |
| COMPREHENSIVE TOTALS | | $40.636 | $1,236.000 | $83.077 | $360.000 | $927.000 | $4,017.000 | $142.615 | $618.000 | $6,231.000 | $74,772.000 |

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR PARK AND RIDES - YEAR 2

| SITE | LOCATION | DAILY OPENING OPERATIONS COST | MONTHLY OPENING OPERATIONS COST | BI-WEEKLY PLANTER COST | MONTHLY PLANTER COST | BI-WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|---|
| E. Ave. S Park & Ride | 210 East Avenue S | $15.288 | $465.000 | $214.615 | $465.000 | $71.538 | $155.000 | $1,085.000 | $13,020.000 |
| W. Ave. S Park & Ride | 434 West Avenue S | $15.288 | $465.000 | $214.615 | $465.000 | $71.538 | $155.000 | $1,085.000 | $13,020.000 |
| Pelona Vista Park & Ride | 445 West Avenue R-8 | $15.288 | $465.000 | $214.615 | $465.000 | $71.538 | $155.000 | $1,085.000 | $13,020.000 |
| COMPREHENSIVE TOTALS | | | **$465.000** | **$214.615** | **$465.000** | **$71.538** | **$155.000** | **$1,085.000** | **$13,020.000** |

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR FAIRWAY BUSINESS PARK - YEAR 2

| SITE | LOCATION | BI-WEEKLY PLANTER COST | MONTHLY PLANTER COST | BI-WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|
| FAIRWAY BUSINESS PARK | SEE COMMENT FOR LOCATION | $1,236.000 | $2,678.000 | $142.615 | $309.000 | $2,987.000 | $35,844.000 |
| COMPREHENSIVE TOTALS | | $1,236.000 | $2,678.000 | $142.615 | $309.000 | $2,987.000 | $35,844.000 |

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR CITY PARKS AND FACILITY GROUNDS- YEAR 3

| LMD | ADDRESS | DAILY OPENING OPERATIONS | MONTHLY OPENING OPERATIONS COSTS | WEEKLY TURF MAINT. COST | MONTHLY TURF MAINT. COST | WEEKLY PLANTER COST | MONTHLY PLANTER COST | WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Melville J. Courson Park | 39226 10th Street East | $63,649 | $1,936.000 | $110.308 | $478.000 | $546.692 | $2,369.000 | $85.385 | $370.000 | $5,153.000 | $61,836.000 |
| Legacy Commons | 930 East Ave. Q-9 | $17,425 | $530.00 | $55.846 | $242.000 | $401.538 | $1,740.000 | $85.385 | $370.000 | $2,882.000 | $34,584.000 |
| Pelona Vista Park | 37600 Tierra Subida Ave. | $142,882 | $4,346.00 | $342.231 | $1,483.000 | $2,008.385 | $8,703.000 | $897.231 | $3,888.000 | $18,420.000 | $221,040.000 |
| Manzanita Heights Park | 431 Mesa Verde Avenue | $34,849 | $1,060.00 | $84,231 | $365.000 | $293,538 | $1,272.000 | $87.923 | $381.000 | $3,078.000 | $36,936.000 |
| Marie Kerr Park Complex | See comment for specific site info | $184,866 | $5,623.00 | $891,231 | $3,862.000 | $2,291,308 | $9,929.000 | $678,462 | $2,940.000 | $22,354.000 | $268,248.000 |
| Arnie Quinones Park | 41003 50th Street West | $27,945 | $850.00 | $73,615 | $319.000 | $451,615 | $1,957.000 | $83,077 | $360.000 | $3,486.000 | $41,832.000 |
| Desert Sands Park | 39117 3rd Street East | $130,685 | $3,975.00 | $167,538 | $726.000 | $1,285,846 | $5,572.000 | $165,000 | $715.000 | $10,988.000 | $131,856.000 |
| WorkSource Center | 38510 Sierra Hwy. | $20,975 | $638.00 | $24.923 | $108.000 | $109,154 | $473.000 | $48,692 | $211.000 | $1,430.000 | $17,160.000 |
| Hammack Activity Center | 815 E. Avenue Q-6 | $13,874 | $422.00 | $0.000 | $0.000 | $87,923 | $381.000 | $48,692 | $211.000 | $1,014.000 | $12,168.000 |
| Heritage Air Park | 2001 East Avenue P | $17,425 | $530.00 | $29,538 | $128.000 | $175,846 | $762.000 | $60,462 | $262.000 | $1,682.000 | $20,184.000 |
| William J. McAdam Park | 38115 30th Street East | $132,395 | $4,027.00 | $244,615 | $1,060.000 | $968,538 | $4,197.000 | $166,385 | $721.000 | $10,005.000 | $120,060.000 |
| Domenic Massari Park | 37716 55th Street East | $134,236 | $4,083.00 | $367.154 | $1,591.000 | $1,836.000 | $7,956.000 | $624.923 | $2,708.000 | $16,338.000 | $196,056.000 |
| Yellen Park | 5100 East Ave. S | $64,504 | $1,962.00 | $231,692 | $1,004.000 | $1,674,462 | $7,256.000 | $219,692 | $952.000 | $11,174.000 | $134,088.000 |
| Dry Town/Oasis Park | 3850 East Avenue S | $34,849 | $1,060.00 | $195.923 | $849.000 | $792.692 | $3,435.000 | $330.231 | $1,431.000 | $6,775.000 | $81,300.000 |
| Joshua Hills Park | Fairfield & Via del Ric | $41,819 | $1,272.00 | $109.154 | $473.000 | $616.615 | $2,672.000 | $95.077 | $412.000 | $4,829.000 | $57,948.000 |
| Foothill Park | 2525 The Groves | $45,370 | $1,380.00 | $196.154 | $850.000 | $968.538 | $4,197.000 | $135.462 | $587.000 | $7,014.000 | $84,168.000 |

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR CITY PARKS AND FACILITY GROUNDS- YEAR 3

| LMD | ADDRESS | DAILY OPENING OPERATIONS | MONTHLY OPENING OPERATIONS COSTS | WEEKLY TURF MAINT. COST | MONTHLY TURF MAINT COST | WEEKLY PLANTER COST | MONTHLY PLANTER COST | WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Anaverde Park | 2812 Greenbrier St. | $34.849 | $1,060.00 | $184.154 | $798.000 | $831.923 | $3,605.000 | $85.385 | $370.000 | $5,833.000 | $69,996.000 |
| Palmdale Civic Center | See comment for specific site info | $34.849 | $1,060.00 | $231.692 | $1,004.000 | $440.769 | $1,910.000 | $36.692 | $159.000 | $4,133.000 | $49,596.000 |
| Palmdale Playhouse | 38334 10th Street East | $29.622 | $901.00 | $0.000 | $0.000 | $146.077 | $633.000 | $42.692 | $185.000 | $1,719.000 | $20,628.000 |
| S.A.V.E.S. | 1002 East Avenue Q-12 | $19.956 | $607.00 | $0.000 | $0.000 | $196.154 | $850.000 | $42.692 | $185.000 | $1,642.000 | $19,704.000 |
| Parks & Recreation | 38260 10th Street East | $30.477 | $927.00 | $0.000 | $0.000 | $367.154 | $1,591.000 | $60.462 | $262.000 | $2,780.000 | $33,360.000 |
| Demonstration Garden | n/w corner Sierra Hwy. & Palmdale Blvd. | $13.874 | $422.00 | $0.000 | $0.000 | $122.308 | $530.000 | $109.154 | $473.000 | $1,425.000 | $17,100.000 |
| St. Claire Parkway | w/s of Sierra Hwy btw Ave. R & Ave. Q | $17.425 | $530.00 | $159.231 | $690.000 | $440.769 | $1,910.000 | $297.000 | $1,287.000 | $4,417.000 | $53,004.000 |
| COMPREHENSIVE TOTALS | | $223.956 | $6,812.000 | $508.385 | $16,030.000 | $2,956.615 | $73,900.000 | $1,068.000 | $19,440.000 | $26,455.000 | $1,782,852.000 |

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR GENERAL BENEFIT AREAS- YEAR 3

| SITE | SITE NUMBER | LOCATION | BI-WEEKLY PLANTER COST | MONTHLY PLANTER COST | BI-WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|
| ALBERTSON'S MEDIAN | 1 | 50TH ST. WEST S/O Ave. N | $24.462 | $53.000 | $17.077 | $37.000 | $90.000 | $1,080.000 |
| RANCHO VISTA MEDIANS | 2 | R.V.BLVD btw 15TH & 10TH WEST | $147.231 | $319.000 | $73.385 | $159.000 | $478.000 | $5,736.000 |
| RANCHO VISTA MEDIANS | 3 | R.V.BLVD btw 10TH WEST & HWY 14 | $48.923 | $106.000 | $24.000 | $52.000 | $158.000 | $1,896.000 |
| RANCHO VISTA MEDIANS | 4 | R.V BLVD. btw HWY 14 & PD PROMENADE | $97.846 | $212.000 | $36.462 | $79.000 | $291.000 | $3,492.000 |
| COUNTRY CLUB PLANTER | 5 | N/S of R.V BLVD. Btw. HWY 14 & COUNTRY CLUB DR. | $97.846 | $212.000 | $24.462 | $53.000 | $265.000 | $3,180.000 |
| RANCHO VISTA MEDIAN | 6 | R.V.BLVD at FAIRWAY DR. | $29.538 | $64.000 | $19.385 | $42.000 | $106.000 | $1,272.000 |
| DESERT SANDS TERRACE | 7 | S/S R.V. BLVD w/o 3RD ST. EAST+W/S 3RD ST. EAST S/O R.V. BLVD | $97.846 | $212.000 | $36.462 | $79.000 | $291.000 | $3,492.000 |
| 10TH WEST MEDIANS | 8 | 10TH WEST btw A.V. MALL AND DESTINATION O-8 | $29.538 | $64.000 | $19.385 | $42.000 | $106.000 | $1,272.000 |
| SIZZLER MEDIAN | 9 | 10TH WEST N/O PALMDALE BLVD. | $34.154 | $74.000 | $19.385 | $42.000 | $116.000 | $1,392.000 |
| PALMDALE BLVD MEDIANS | 10 | PALMDALE BLVD. btw 10th WEST & 5TH WEST | $391.385 | $848.000 | $97.846 | $212.000 | $1,060.000 | $12,720.000 |
| MEDICAL CENTER DR. | 11 | MEDICAL CENTER DR. S/O PALMDALE BLVD | $19.385 | $42.000 | $10.154 | $22.000 | $64.000 | $768.000 |
| PALMDALE BLVD MEDIAN | 12 | PALMDALE BLVD btw 5TH WEST & A.M./P.M. | $48.923 | $106.000 | $19.385 | $42.000 | $148.000 | $1,776.000 |

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR GENERAL BENEFIT AREAS- YEAR 3

| SITE | SITE NUMBER | LOCATION | BI-WEEKLY PLANTER COST | MONTHLY PLANTER COST | BI-WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|
| HWY 14 INTERCHANGES/MEDIAN | 13 | PALMDALE BLVD SE/O & NW/O HWY 14 | $587.538 | $1,273.000 | $97.846 | $212.000 | $1,485.000 | $17,820.000 |
| PALMDALE BLVD MEDIAN | 14 | PALMDALE BLVD btw HWY 14 NORTH OFFRAMP & DIVISION ST | $68.769 | $149.000 | $29.538 | $64.000 | $213.000 | $2,556.000 |
| PALMDALE BLVD MEDIAN | 15 | PALMDALE BLVD btw DIVISION ST & 3RD ST | $38.769 | $84.000 | $19.385 | $42.000 | $126.000 | $1,512.000 |
| PALMDALE BLVD MEDIAN | 16 | PALMDALE BLVD btw 3RD ST E. & 5TH ST E | $29.538 | $64.000 | $14.308 | $31.000 | $95.000 | $1,140.000 |
| PALMDALE BLVD MEDIAN | 17 | PALMDALE BLVD btw 5TH ST E & 6TH ST E | $29.538 | $64.000 | $14.308 | $31.000 | $95.000 | $1,140.000 |
| BLVD NORTH FRONTAGE PLANTER | 18 | N/S OF PALMDALE BLVD bwt 3RD ST E & 5TH ST E | $146.769 | $318.000 | $19.385 | $42.000 | $360.000 | $4,320.000 |
| PALMDALE BLVD. MEDIAN | 19 | PALMDALE BLVD btw 9TH ST E & 10TH ST E | $19.385 | $42.000 | $14.308 | $31.000 | $73.000 | $876.000 |
| PALMDALE BLVD MEDIAN | 20 | PALMDALE BLVD btw 10TH ST E & 10TH PL E | $19.385 | $42.000 | $14.308 | $31.000 | $73.000 | $876.000 |
| BLVD NORTH FRONTAGE PLANTER | 21 | PALMDALE BLVD & POND | $29.538 | $64.000 | $14.308 | $31.000 | $95.000 | $1,140.000 |
| BLVD NORTH FRONTAGE PLANTER | 22 | PALMDALE BLVD & LANDON | $78.462 | $170.000 | $29.538 | $64.000 | $234.000 | $2,808.000 |
| SIERRA BIKE TRAIL | 23 | W/S SIERRA HWY S/O TECHNOLOGY DR | $783.231 | $1,697.000 | $195.692 | $424.000 | $2,121.000 | $25,452.000 |
| SIERRA BIKE TRAIL | 24 | E/S OF SIERRA HWY btw RANCHO VISTA BLVD & AVE M | $978.923 | $2,121.000 | $195.692 | $424.000 | $2,545.000 | $30,540.000 |

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR GENERAL BENEFIT AREAS- YEAR 3

| SITE | SITE NUMBER- | LOCATION | BI-WEEKLY PLANTER COST | MONTHLY PLANTER COST | BI-WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|
| SIERRA HWY MEDIAN | 25 | SIERRA HWY S/O AVE M AT NORTHROP GRUNMAN CREDIT UNION | $38.769 | $84.000 | $19.385 | $42.000 | $126.000 | $1,512.000 |
| WEST PARK MEDIANS | 26 | WEST PARK DR & CORPORATE CT | $78.462 | $170.000 | $19.385 | $42.000 | $212.000 | $2,544.000 |
| AUTOMALL WALL | 27 | OUTSIDE OF AUTOMALL E PERMITER WALL, ACCESS AT AVE Q/HWY 14 | $78.462 | $170.000 | $18.923 | $41.000 | $211.000 | $2,532.000 |
| AVE Q FRONTAGE RD PLANTERS | 28 | AVE Q NORTH & SOUTH FRONTAGE RD btw 3RD ST E & DIVISION ST ALLEY | $146.769 | $318.000 | $39.231 | $85.000 | $403.000 | $4,836.000 |
| DIVISION ST FRONTAGE RD | 29 | E/S OF DIVISION ST btw Q-10 & TAINTOR RD | $29.538 | $64.000 | $14.308 | $31.000 | $95.000 | $1,140.000 |
| 20TH E & AVE R-8 BUFFER ZONE | 30 | N/W CORNER OF 20TH E & AVE. R-8 | $244.615 | $530.000 | $73.385 | $159.000 | $689.000 | $8,268.000 |
| 25TH E BUFFER ZONE | 31 | E/S OF 25TH E N & S SIDES AT DESERT OAK DR | $244.615 | $530.000 | $73.385 | $159.000 | $689.000 | $8,268.000 |
| AVE R FRONTAGE RD PLANTER | 32 | S/S OF AVE R btw 25TH ST E & RUDALL AVE | $134.308 | $291.000 | $36.462 | $79.000 | $370.000 | $4,440.000 |
| AVE R FRONTAGE RD PLANTER | 33 | S/S OF AVE R btw 28TH ST E & 29TH ST E | $29.538 | $64.000 | $18.923 | $41.000 | $105.000 | $1,260.000 |
| AVE R VINE PLANTER | 34 | N/S OF AVE R bwt 29TH ST E & 30TH ST E | $29.538 | $64.000 | $18.923 | $41.000 | $105.000 | $1,260.000 |
| AVE R VINE PLANTER | 35 | N/S OF AVE R E/O & W/O LEMSFORD AVE | $36.923 | $80.000 | $19.385 | $42.000 | $122.000 | $1,464.000 |
| 47TH ST E FRONTAGE RD PLANTER | 36 | E/S OF 47TH ST E btw AVE R-11 & AVE R-12 | $73.385 | $159.000 | $29.538 | $64.000 | $223.000 | $2,676.000 |

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR GENERAL BENEFIT AREAS- YEAR 3

| SITE | SITE NUMBER | LOCATION | BI-WEEKLY PLANTER COST | MONTHLY PLANTER COST | BI-WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|
| HWY 14 INTERCHANGE PLANTERS | 37 | BOTH SIDES OF AVE S AT HWY 14 W/O CALLE GRILLO | $97.846 | $212.000 | $29.538 | $64.000 | $276.000 | $3,312.000 |
| AVE S BIKE TRAIL | 38 | S/S OF AVE S bwt CALLE GRILLO & SIERRA HWY | $293.538 | $636.000 | $73.385 | $159.000 | $795.000 | $9,540.000 |
| AVE S BIKE TRAIL | 39 | S/S OF AVE S btw SIERRA HWY & 200' E/O WINDY CREEK ST | $244.615 | $530.000 | $60.923 | $132.000 | $662.000 | $7,944.000 |
| AVE S MEDIAN | 40 | AVE S btw 10TH ST E & SWAN DR | $73.385 | $159.000 | $18.923 | $41.000 | $200.000 | $2,400.000 |
| AVE S MEDIAN | 41 | AVE S bwt SHEFFIELD DR & CASA VERDE DR | $38.769 | $84.000 | $19.385 | $42.000 | $126.000 | $1,512.000 |
| AVE S BIKE TRAIL / SLOPES | 42 | S/S OF AVE S btw CASA VERDE DR & CEMENTARY RD | $978.923 | $2,121.000 | $237.692 | $515.000 | $2,636.000 | $31,632.000 |
| AVE S MEDIAN | 43 | AVE S btw CASA VERDE DR & 20TH ST E | $73.385 | $159.000 | $29.538 | $64.000 | $223.000 | $2,676.000 |
| AVE S MEDIAN | 44 | AVE S bwt 20TH ST E & CEMENTARY RD | $195.692 | $424.000 | $48.923 | $106.000 | $530.000 | $6,360.000 |
| AVE S MEDIAN | 45 | AVE. S & 35TH ST E | $489.231 | $1,060.000 | $97.846 | $212.000 | $1,272.000 | $15,264.000 |
| AVE S MEDIAN | 46 | AVE. S & 37TH ST E | $391.385 | $848.000 | $73.385 | $159.000 | $1,007.000 | $12,084.000 |
| AVE S MEDIAN | 47 | AVE. S AT DRYTOWN WATER PARK | $146.769 | $318.000 | $29.538 | $64.000 | $382.000 | $4,584.000 |
| AVE S MEDIAN | 48 | AVE. S & SPRINGFIELD | $97.846 | $212.000 | $19.385 | $42.000 | $254.000 | $3,048.000 |

## EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR GENERAL BENEFIT AREAS- YEAR 3

| SITE | SITE NUMBER | LOCATION | BI-WEEKLY PLANTER COST | MONTHLY PLANTER COST | BI-WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|
| AVE S MEDIAN | 49 | AVE. S & 43RD ST | $97.846 | $212.000 | $19.385 | $42.000 | $254.000 | $3,048.000 |
| AVE S MEDIAN | 50 | AVE. S & 45TH ST E | $87.692 | $190.000 | $19.385 | $42.000 | $232.000 | $2,784.000 |
| AVE S NORTH PLANTER / SLOPE | 51 | AVE S btw CASA VERDE DR & 20TH ST E + W/S OF 20TH E TO GABLEWVIEW | $489.231 | $1,060.000 | $97.846 | $212.000 | $1,272.000 | $15,264.000 |
| AVE S NORTH PLANTER / SLOPE | 52 | E/S OF 20TH ST E btw GABLE VIEW & AVE S + AVE S TO CEMENTARY RD | $391.385 | $848.000 | $59.077 | $128.000 | $976.000 | $11,712.000 |
| AVE S VINE PLANTER | 53 | N/S OF AVE S btw 27TH ST E & 30TH ST E | $318.462 | $690.000 | $48.923 | $106.000 | $796.000 | $9,552.000 |
| COMPREHENSIVE TOTALS | | | **$220.615** | **$20,687.000** | **$114.462** | **$5,244.000** | **$726.000** | **$311,172.000** |

A-6563

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR PALMDALE TRANSPORTATION CENTER - YEAR 3

| SITE | LOCATION | DAILY OPENING OPERATIONS COST | MONTHLY OPENING OPERATIONS COST | WEEKLY TURF MAINT. COST | MONTHLY TURF MAINT. COST | WEEKLY PLANTER COST | MONTHLY PLANTER COST | WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PALMDALE TRANSPORTATION CENTER | 39000 Clock Tower Plaza Dr. | $41.852 | $1,273.000 | $85.385 | $370.000 | $954.692 | $4,137.000 | $146.769 | $636.000 | $6,416.000 | $76,992.000 |
| COMPREHENSIVE TOTALS | | $41.852 | $1,273.000 | $85.385 | $370.000 | $954.692 | $4,137.000 | $146.769 | $636.000 | $6,416.000 | $76,992.000 |

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR PARK AND RIDES - YEAR 3

| SITE | LOCATION | DAILY OPENING OPERATIONS COST | MONTHLY OPENING OPERATIONS COST | BI-WEEKLY PLANTER COST | MONTHLY PLANTER COST | BI-WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|---|
| E. Ave. S Park & Ride | 210 East Avenue S | $15.715 | $478.000 | $220.615 | $478.000 | $73.385 | $159.000 | $1,115.000 | $13,380.000 |
| W. Ave. S Park & Ride | 434 West Avenue S | $15.715 | $478.000 | $220.615 | $478.000 | $73.385 | $159.000 | $1,115.000 | $13,380.000 |
| Pelona Vista Park & Ride | 445 West Avenue R-8 | $15.715 | $478.000 | $220.615 | $478.000 | $73.385 | $159.000 | $1,115.000 | $13,380.000 |
| COMPREHENSIVE TOTALS | | | $478.000 | $220.615 | $478.000 | $73.385 | $159.000 | $1,115.000 | $13,380.000 |

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR FAIRWAY BUSINESS PARK - YEAR 3

| SITE | LOCATION | BI-WEEKLY PLANTER COST | MONTHLY PLANTER COST | BI-WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|
| FAIRWAY BUSINESS PARK | SEE COMMENT FOR LOCATION | $1,272.923 | $2,758.000 | $146.769 | $318.000 | $3,076.000 | $36,912.000 |
| COMPREHENSIVE TOTALS | | $1,272.923 | $2,758.000 | $146.769 | $318.000 | $3,076.000 | $36,912.000 |

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR CITY PARKS AND FACILITY GROUNDS- YEAR 4

| LMD | ADDRESS | DAILY OPENING OPERATIONS | MONTHLY OPENING OPERATIONS COSTS | WEEKLY TURF MAINT. COST | MONTHLY TURF MAINT. COST | WEEKLY PLANTER COST | MONTHLY PLANTER COST | WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Melville J. Courson Park | 39226 10th Street East | $66,444 | $2,021.000 | $113,538 | $492.000 | $563.077 | $2,440.000 | $87,923 | $381.000 | $5,334.000 | $64,008.000 |
| Legacy Commons | 930 East Ave. Q-9 | $17,918 | $545.00 | $57,462 | $249.000 | $413.538 | $1,792.000 | $87,923 | $381.000 | $2,967.000 | $35,604.000 |
| Pelona Vista Park | 37900 Tierra Subida Ave. | $147,156 | $4,476.00 | $352,385 | $1,527.000 | $2,068.615 | $8,964.000 | $924.000 | $4,004.000 | $18,971.000 | $227,652.000 |
| Manzanita Heights Park | 431 Mesa Verde Avenue | $35,868 | $1,091.00 | $86,538 | $375.000 | $302,308 | $1,310.000 | $88.154 | $382.000 | $3,158.000 | $37,896.000 |
| Marie Kerr Park Complex | See comment for specific site info | $190,389 | $5,791.00 | $917.769 | $3,977.000 | $2,359.846 | $10,226.000 | $698.769 | $3,028.000 | $23,022.000 | $276,264.000 |
| Arnie Quinones Park | 41003 50th Street West | $28,767 | $875.00 | $75,692 | $328.000 | $465.000 | $2,015.000 | $85.385 | $370.000 | $3,588.000 | $43,056.000 |
| Desert Sands Park | 39117 3rd Street East. | $134,597 | $4,094.00 | $172,385 | $747.000 | $1,324.385 | $5,739.000 | $169.846 | $736.000 | $11,316.000 | $135,792.000 |
| WorkSource Center | 38510 Sierra Hwy. | $21,600 | $657.00 | $25,615 | $111.000 | $112,385 | $487.000 | $50,077 | $217.000 | $1,472.000 | $17,664.000 |
| Hammack Activity Center | 615 E. Avenue Q-6 | $14,268 | $434.00 | $0.000 | $0.000 | $90,462 | $392.000 | $50,077 | $217.000 | $1,043.000 | $12,516.000 |
| Heritage Air Park | 2001 East Avenue P | $17,918 | $545.00 | $30,231 | $131.000 | $180,923 | $784.000 | $62,077 | $269.000 | $1,729.000 | $20,748.000 |
| William J. McAdam Park | 38115 30th Street East | $136,340 | $4,147.00 | $251,769 | $1,091.000 | $997,385 | $4,322.000 | $171,231 | $742.000 | $10,302.000 | $123,624.000 |
| Domenic Massari Park | 37716 55th Street East | $138,247 | $4,205.00 | $378.000 | $1,638.000 | $1,890.923 | $8,194.000 | $643.615 | $2,789.000 | $16,826.000 | $201,912.000 |
| Yellen Park | 5100 East Ave. S | $66,411 | $2,020.00 | $238.615 | $1,034.000 | $1,724.538 | $7,473.000 | $226.154 | $980.000 | $11,507.000 | $138,084.000 |
| Dry Town/Oasis Park | 3850 East Avenue S | $35,868 | $1,091.00 | $201.692 | $874.000 | $816.462 | $3,538.000 | $339.923 | $1,473.000 | $6,976.000 | $83,712.000 |
| Joshua Hills Park | Fairfield & Via del Rio | $43,068 | $1,310.00 | $112.385 | $487.000 | $635.077 | $2,752.000 | $97.846 | $424.000 | $4,973.000 | $59,676.000 |
| Foothill Park | 2525 The Groves | $46,718 | $1,421.00 | $201.923 | $875.000 | $997.385 | $4,322.000 | $139.385 | $604.000 | $7,222.000 | $86,664.000 |

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR CITY PARKS AND FACILITY GROUNDS- YEAR 4

| LMD | ADDRESS | DAILY OPENING OPERATIONS | MONTHLY OPENING OPERATIONS COSTS | WEEKLY TURF MAINT. COST | MONTHLY TURF MAINT. COST | WEEKLY PLANTER COST | MONTHLY PLANTER COST | WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Anaverde Park | 2812 Greenbrier St. | $35.868 | $1,091.00 | $189.462 | $821.000 | $856.846 | $3,713.000 | $87.923 | $381.000 | $6,006.000 | $72,072.000 |
| Palmdale Civic Center | See comment for specific site info | $35.868 | $1,091.00 | $238.615 | $1,034.000 | $453.923 | $1,967.000 | $37.615 | $163.000 | $4,255.000 | $51,060.000 |
| Palmdale Playhouse | 38334 10th Street East | $30.510 | $928.00 | $0.000 | $0.000 | $150.462 | $652.000 | $43.846 | $190.000 | $1,770.000 | $21,240.000 |
| S.A.V.E.S. | 1002 East Avenue Q-12 | $20.548 | $625.00 | $0.000 | $0.000 | $201.923 | $875.000 | $43.846 | $190.000 | $1,690.000 | $20,280.000 |
| Parks & Recreation | 38260 10th Street East | $31.364 | $954.00 | $0.000 | $0.000 | $378.000 | $1,638.000 | $62.308 | $270.000 | $2,862.000 | $34,344.000 |
| Demonstration Garden | n/w corner Sierra Hwy. & Palmdale Blvd. | $14.268 | $434.00 | $0.000 | $0.000 | $125.769 | $545.000 | $112.385 | $487.000 | $1,466.000 | $17,592.000 |
| St. Claire Parkway | w/s of Sierra Hwy btw Ave. R & Ave. Q | $17.918 | $545.00 | $163.846 | $710.000 | $453.923 | $1,967.000 | $305.769 | $1,325.000 | $4,547.000 | $54,564.000 |
| COMPREHENSIVE TOTALS | | $231.518 | $7,042.000 | $523.385 | $16,501.000 | $3,045.231 | $76,107.000 | $1,099.846 | $20,003.000 | $27,272.000 | $1,836,024.000 |

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR GENERAL BENEFIT AREAS- YEAR 4

| SITE | SITE NUMBER | LOCATION | BI-WEEKLY PLANTER COST | MONTHLY PLANTER COST | BI-WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|
| ALBERTSON'S MEDIAN | 1 | 50TH ST. WEST S/O Ave. N | $24.923 | $54.000 | $17.538 | $38.000 | $92.000 | $1,104.000 |
| RANCHO VISTA MEDIANS | 2 | R.V.BLVD btw 15TH & 10TH WEST | $151.385 | $328.000 | $75.231 | $163.000 | $491.000 | $5,892.000 |
| RANCHO VISTA MEDIANS | 3 | R.V.BLVD btw 10TH WEST & HWY 14 | $50.308 | $109.000 | $24.462 | $53.000 | $162.000 | $1,944.000 |
| RANCHO VISTA MEDIANS | 4 | R.V BLVD. btw HWY 14 & PD PROMENADE | $100.615 | $218.000 | $37.385 | $81.000 | $299.000 | $3,588.000 |
| COUNTRY CLUB PLANTER | 5 | N/S of R.V BLVD. Btw. HWY 14 & COUNTRY CLUB DR. | $100.615 | $218.000 | $24.923 | $54.000 | $272.000 | $3,264.000 |
| RANCHO VISTA MEDIAN | 6 | R.V.BLVD at FAIRWAY DR. | $30.000 | $65.000 | $20.308 | $44.000 | $109.000 | $1,308.000 |
| DESERT SANDS TERRACE | 7 | S/S R.V. BLVD w/o 3RD ST. EAST+W/S 3RD ST. EAST S/O R.V. BLVD | $100.615 | $218.000 | $37.385 | $81.000 | $299.000 | $3,588.000 |
| 10TH WEST MEDIANS | 8 | 10TH WEST btw A.V. MALL AND DESTINATION O-8 | $30.462 | $66.000 | $19.846 | $43.000 | $109.000 | $1,308.000 |
| SIZZLER MEDIAN | 9 | 10TH WEST N/O PALMDALE BLVD. | $35.077 | $76.000 | $19.846 | $43.000 | $119.000 | $1,428.000 |
| PALMDALE BLVD MEDIANS | 10 | PALMDALE BLVD. btw 10th WEST & 5TH WEST | $402.923 | $873.000 | $100.615 | $218.000 | $1,091.000 | $13,092.000 |
| MEDICAL CENTER DR. | 11 | MEDICAL CENTER DR. S/O PALMDALE BLVD | $20.308 | $44.000 | $10.615 | $23.000 | $67.000 | $804.000 |
| PALMDALE BLVD MEDIAN | 12 | PALMDALE BLVD btw 5TH WEST & A.M./P.M. | $50.308 | $109.000 | $20.308 | $44.000 | $153.000 | $1,836.000 |

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR GENERAL BENEFIT AREAS- YEAR 4

| SITE | SITE NUMBER | LOCATION | BI-WEEKLY PLANTER COST | MONTHLY PLANTER COST | BI-WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|
| HWY 14 INTERCHANGES/MEDIAN | 13 | PALMDALE BLVD SE/O & NW/O HWY 14 | $605.077 | $1,311.000 | $100.615 | $218.000 | $1,529.000 | $18,348.000 |
| PALMDALE BLVD MEDIAN | 14 | PALMDALE BLVD btw HWY 14 NORTH OFFRAMP & DIVISION ST | $70.615 | $153.000 | $30.000 | $65.000 | $218.000 | $2,616.000 |
| PALMDALE BLVD MEDIAN | 15 | PALMDALE BLVD btw DIVISION ST & 3RD ST | $39.692 | $86.000 | $20.308 | $44.000 | $130.000 | $1,560.000 |
| PALMDALE BLVD MEDIAN | 16 | PALMDALE BLVD btw 3RD ST E. & 5TH ST E | $30.462 | $66.000 | $14.769 | $32.000 | $98.000 | $1,176.000 |
| PALMDALE BLVD MEDIAN | 17 | PALMDALE BLVD btw 5TH ST E & 6TH ST E | $30.462 | $66.000 | $14.308 | $31.000 | $97.000 | $1,164.000 |
| BLVD NORTH FRONTAGE PLANTER | 18 | N/S OF PALMDALE BLVD bwt 3RD ST E & 5TH ST E | $150.923 | $327.000 | $20.308 | $44.000 | $371.000 | $4,452.000 |
| PALMDALE BLVD. MEDIAN | 19 | PALMDALE BLVD btw 9TH ST E & 10TH ST E | $20.308 | $44.000 | $14.769 | $32.000 | $76.000 | $912.000 |
| PALMDALE BLVD MEDIAN | 20 | PALMDALE BLVD btw 10TH ST E & 10TH PL E | $20.308 | $44.000 | $14.769 | $32.000 | $76.000 | $912.000 |
| BLVD NORTH FRONTAGE PLANTER | 21 | PALMDALE BLVD & POND | $30.462 | $66.000 | $14.769 | $32.000 | $98.000 | $1,176.000 |
| BLVD NORTH FRONTAGE PLANTER | 22 | PALMDALE BLVD & LANDON | $80.769 | $175.000 | $31.385 | $68.000 | $243.000 | $2,916.000 |
| SIERRA BIKE TRAIL | 23 | W/S SIERRA HWY S/O TECHNOLOGY DR | $806.308 | $1,747.000 | $201.231 | $436.000 | $2,183.000 | $26,196.000 |
| SIERRA BIKE TRAIL | 24 | E/S OF SIERRA HWY btw RANCHO VISTA BLVD & AVE M | $1,008.000 | $2,184.000 | $201.231 | $436.000 | $2,620.000 | $31,440.000 |

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR GENERAL BENEFIT AREAS- YEAR 4

| SITE | SITE NUMBER | LOCATION | BI-WEEKLY PLANTER COST | MONTHLY PLANTER COST | BI-WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|
| SIERRA HWY MEDIAN | 25 | SIERRA HWY S/O AVE M AT NORTHROP GRUNMAN CREDIT UNION | $39.692 | $86.000 | $20.308 | $44.000 | $130.000 | $1,560.000 |
| WEST PARK MEDIANS | 26 | WEST PARK DR & CORPORATE CT | $80.769 | $175.000 | $20.308 | $44.000 | $219.000 | $2,628.000 |
| AUTOMALL WALL | 27 | OUTSIDE OF AUTOMALL E PERMITER WALL, ACCESS AT AVE Q/HWY 14 | $80.769 | $175.000 | $19.385 | $42.000 | $217.000 | $2,604.000 |
| AVE Q FRONTAGE RD PLANTERS | 28 | AVE Q NORTH & SOUTH FRONTAGE RD btw 3RD ST E & DIVISION ST ALLEY | $150.923 | $327.000 | $40.154 | $87.000 | $414.000 | $4,968.000 |
| DIVISION ST FRONTAGE RD | 29 | E/S OF DIVISION ST btw Q-10 & TAINTOR RD | $30.462 | $66.000 | $14.769 | $32.000 | $98.000 | $1,176.000 |
| 20TH E & AVE R-8 BUFFER ZONE | 30 | N/W CORNER OF 20TH E & AVE. R-8 | $251.538 | $545.000 | $75.231 | $163.000 | $708.000 | $8,496.000 |
| 25TH E BUFFER ZONE | 31 | E/S OF 25TH E N & S SIDES AT DESERT OAK DR | $251.538 | $545.000 | $75.231 | $163.000 | $708.000 | $8,496.000 |
| AVE R FRONTAGE RD PLANTER | 32 | S/S OF AVE R btw 25TH ST E & RUDALL AVE | $138.000 | $299.000 | $37.385 | $81.000 | $380.000 | $4,560.000 |
| AVE R FRONTAGE RD PLANTER | 33 | S/S OF AVE R btw 28TH ST E & 29TH ST E | $30.000 | $65.000 | $19.385 | $42.000 | $107.000 | $1,284.000 |
| AVE R VINE PLANTER | 34 | N/S OF AVE R bwt 29TH ST E & 30TH ST E | $29.538 | $64.000 | $19.385 | $42.000 | $106.000 | $1,272.000 |
| AVE R VINE PLANTER | 35 | N/S OF AVE R E/O & W/O LEMSFORD AVE | $37.846 | $82.000 | $20.308 | $44.000 | $126.000 | $1,512.000 |
| 47TH ST E FRONTAGE RD PLANTER | 36 | E/S OF 47TH ST E btw AVE R-11 & AVE R-12 | $75.231 | $163.000 | $30.462 | $66.000 | $229.000 | $2,748.000 |

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR GENERAL BENEFIT AREAS- YEAR 4

| SITE | SITE NUMBER | LOCATION | BI-WEEKLY PLANTER COST | MONTHLY PLANTER COST | BI-WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|
| HWY 14 INTERCHANGE PLANTERS | 37 | BOTH SIDES OF AVE S AT HWY 14 W/O CALLE GRILLO | $100.615 | $218.000 | $30.462 | $66.000 | $284.000 | $3,408.000 |
| AVE S BIKE TRAIL | 38 | S/S OF AVE S bwt CALLE GRILLO & SIERRA HWY | $302.308 | $655.000 | $75.231 | $163.000 | $818.000 | $9,816.000 |
| AVE S BIKE TRAIL | 39 | S/S OF AVE S btw SIERRA HWY & 200' E/O WINDY CREEK ST | $251.538 | $545.000 | $62.308 | $135.000 | $680.000 | $8,160.000 |
| AVE S MEDIAN | 40 | AVE S btw 10TH ST E & SWAN DR | $75.231 | $163.000 | $19.385 | $42.000 | $205.000 | $2,460.000 |
| AVE S MEDIAN | 41 | AVE S bwt SHEFFIELD DR & CASA VERDE DR | $39.692 | $86.000 | $20.308 | $44.000 | $130.000 | $1,560.000 |
| AVE S BIKE TRAIL / SLOPES | 42 | S/S OF AVE S btw CASA VERDE DR & CEMENTARY RD | $1,008.000 | $2,184.000 | $244.615 | $530.000 | $2,714.000 | $32,568.000 |
| AVE S MEDIAN | 43 | AVE S btw CASA VERDE DR & 20TH ST E | $75.231 | $163.000 | $30.462 | $66.000 | $229.000 | $2,748.000 |
| AVE S MEDIAN | 44 | AVE S bwt 20TH ST E & CEMENTARY RD | $201.231 | $436.000 | $50.308 | $109.000 | $545.000 | $6,540.000 |
| AVE S MEDIAN | 45 | AVE. S & 35TH ST E | $503.538 | $1,091.000 | $100.615 | $218.000 | $1,309.000 | $15,708.000 |
| AVE S MEDIAN | 46 | AVE. S & 37TH ST E | $402.923 | $873.000 | $75.231 | $163.000 | $1,036.000 | $12,432.000 |
| AVE S MEDIAN | 47 | AVE. S AT DRYTOWN WATER PARK | $150.923 | $327.000 | $30.462 | $66.000 | $393.000 | $4,716.000 |
| AVE S MEDIAN | 48 | AVE. S & SPRINGFIELD | $100.615 | $218.000 | $20.308 | $44.000 | $262.000 | $3,144.000 |

## EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR GENERAL BENEFIT AREAS- YEAR 4

| SITE | SITE NUMBER | LOCATION | BI-WEEKLY PLANTER COST | MONTHLY PLANTER COST | BI-WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|
| AVE S MEDIAN | 49 | AVE. S & 43RD ST | $100.615 | $218.000 | $20.308 | $44.000 | $262.000 | $3,144.000 |
| AVE S MEDIAN | 50 | AVE. S & 45TH ST E | $90.000 | $195.000 | $20.308 | $44.000 | $239.000 | $2,868.000 |
| AVE S NORTH PLANTER / SLOPE | 51 | AVE S btw CASA VERDE DR & 20TH ST E + W/S OF 20TH E TO GABLEWVIEW | $503.538 | $1,091.000 | $100.615 | $218.000 | $1,309.000 | $15,708.000 |
| AVE S NORTH PLANTER / SLOPE | 52 | E/S OF 20TH ST E btw GABLE VIEW & AVE S + AVE S TO CEMENTARY RD | $402.923 | $873.000 | $60.462 | $131.000 | $1,004.000 | $12,048.000 |
| AVE S VINE PLANTER | 53 | N/S OF AVE S btw 27TH ST E & 30TH ST E | $327.692 | $710.000 | $50.308 | $109.000 | $819.000 | $9,828.000 |
| COMPREHENSIVE TOTALS | | | $226.615 | $21,285.000 | $117.231 | $5,397.000 | $745.000 | $320,184.000 |

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR PALMDALE TRANSPORTATION CENTER - YEAR 4

| SITE | LOCATION | DAILY OPENING OPERATIONS COST | MONTHLY OPENING OPERATIONS COST | WEEKLY TURF MAINT. COST | MONTHLY TURF MAINT. COST | WEEKLY PLANTER COST | MONTHLY PLANTER COST | WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PALMDALE TRANSPORTATION CENTER | 39000 Clock Tower Plaza Dr. | $43.101 | $1,311.000 | $87.923 | $381.000 | $983.308 | $4,261.000 | $151.154 | $655.000 | $6,608.000 | $79,296.000 |
| COMPREHENSIVE TOTALS | | $43.101 | $1,311.000 | $87.923 | $381.000 | $983.308 | $4,261.000 | $151.154 | $655.000 | $6,608.000 | $79,296.000 |

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR PARK AND RIDES - YEAR 4

| SITE | LOCATION | DAILY OPENING OPERATIONS COST | MONTHLY OPENING OPERATIONS COST | BI-WEEKLY PLANTER COST | MONTHLY PLANTER COST | BI-WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|---|
| E. Ave. S Park & Ride | 210 East Avenue S | $16.175 | $492.000 | $227.077 | $492.000 | $75.231 | $163.000 | $1,147.000 | $13,764.000 |
| W. Ave. S Park & Ride | 434 West Avenue S | $16.175 | $492.000 | $227.077 | $492.000 | $75.231 | $163.000 | $1,147.000 | $13,764.000 |
| Pelona Vista Park & Ride | 445 West Avenue R-8 | $16.175 | $492.000 | $227.077 | $492.000 | $75.231 | $163.000 | $1,147.000 | $13,764.000 |
| COMPREHENSIVE TOTALS | | | $492.000 | $227.077 | $492.000 | $75.231 | $163.000 | $1,147.000 | $13,764.000 |

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR FAIRWAY BUSINESS PARK - YEAR 4

| SITE | LOCATION | BI-WEEKLY PLANTER COST | MONTHLY PLANTER COST | BI-WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|
| FAIRWAY BUSINESS PARK | SEE COMMENT FOR LOCATION | $1,310.769 | $2,840.000 | $150.923 | $327.000 | $3,167.000 | $38,004.000 |
| COMPREHENSIVE TOTALS | | $1,310.769 | $2,840.000 | $150.923 | $327.000 | $3,167.000 | $38,004.000 |

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR CITY PARKS AND FACILITY GROUNDS- YEAR 5

| LMD | ADDRESS | DAILY OPENING OPERATIONS | MONTHLY OPENING OPERATIONS COSTS | WEEKLY TURF MAINT. COST | MONTHLY TURF MAINT. COST | WEEKLY PLANTER COST | MONTHLY PLANTER COST | WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Melville J. Courson Park | 38226 10th Street East | $68,416 | $2,081.000 | $116,769 | $506.000 | $579,923 | $2,513.000 | $90,462 | $392.000 | $5,492.000 | $65,904.000 |
| Legacy Commons | 930 East Ave. Q-9 | $18,444 | $561.00 | $59,077 | $256.000 | $425,769 | $1,845.000 | $90,462 | $392.000 | $3,054.000 | $36,648.000 |
| Pelona Vista Park | 37800 Tierra Subida Ave. | $151,562 | $4,610.00 | $362,769 | $1,572.000 | $2,130,462 | $9,232.000 | $951,692 | $4,124.000 | $19,538.000 | $234,456.000 |
| Manzanita Heights Park | 431 Mesa Verde Avenue | $36,921 | $1,123.00 | $89,077 | $386.000 | $311,308 | $1,349.000 | $90,692 | $393.000 | $3,251.000 | $39,012.000 |
| Marie Kerr Park Complex | See comment for specific site info | $196,077 | $5,964.00 | $945,231 | $4,096.000 | $2,430,462 | $10,532.000 | $719,538 | $3,118.000 | $23,710.000 | $284,520.000 |
| Arnie Quinones Park | 41003 50th Street West | $29,622 | $901.00 | $77,769 | $337.000 | $478.846 | $2,075.000 | $87,923 | $381.000 | $3,694.000 | $44,328.000 |
| Desert Sands Park | 39117 3rd Street East. | $138,608 | $4,216.00 | $177,462 | $769.000 | $1,364,077 | $5,911.000 | $174,923 | $758.000 | $11,654.000 | $139,848.000 |
| WorkSource Center | 38510 Sierra Hwy. | $22,225 | $676.00 | $26,308 | $114.000 | $115,615 | $501.000 | $51,462 | $223.000 | $1,514.000 | $18,168.000 |
| Hammack Activity Center | 815 E. Avenue Q-6 | $14,696 | $447.00 | $0.000 | $0.000 | $93.000 | $403.000 | $51,462 | $223.000 | $1,073.000 | $12,876.000 |
| Heritage Air Park | 2001 East Avenue P | $18,444 | $561.00 | $30,923 | $134.000 | $186.231 | $807.000 | $63,923 | $277.000 | $1,779.000 | $21,348.000 |
| William J. McAdam Park | 38115 30th Street East | $140,416 | $4,271.00 | $259,154 | $1,123.000 | $1,027.154 | $4,451.000 | $176,308 | $764.000 | $10,609.000 | $127,308.000 |
| Domenic Massari Park | 37716 55th Street East | $142,389 | $4,331.00 | $389,308 | $1,687.000 | $1,947.462 | $8,439.000 | $662,769 | $2,872.000 | $17,329.000 | $207,948.000 |
| Yellen Park | 5100 East Ave. S | $68,384 | $2,080.00 | $245,769 | $1,065.000 | $1,776.231 | $7,697.000 | $232,846 | $1,009.000 | $11,851.000 | $142,212.000 |
| Dry Town/Oasis Park | 3650 East Avenue S | $36,921 | $1,123.00 | $207,692 | $900.000 | $840,923 | $3,644.000 | $350,077 | $1,517.000 | $7,184.000 | $86,208.000 |
| Joshua Hills Park | Fairfield & Via del Rio | $44,351 | $1,349.00 | $115,615 | $501.000 | $654.000 | $2,834.000 | $100,615 | $436.000 | $5,120.000 | $61,440.000 |
| Foothill Park | 2525 The Groves | $48,099 | $1,463.00 | $207,923 | $901.000 | $1,027.154 | $4,451.000 | $143,538 | $622.000 | $7,437.000 | $89,244.000 |

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR CITY PARKS AND FACILITY GROUNDS- YEAR 5

| LMD | ADDRESS | DAILY OPENING OPERATIONS | MONTHLY OPENING OPERATIONS COSTS | WEEKLY TURF MAINT. COST | MONTHLY TURF MAINT. COST | WEEKLY PLANTER COST | MONTHLY PLANTER COST | WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Anaverde Park | 2812 Greenbrier St. | $36.921 | $1,123.00 | $195.000 | $845.000 | $882.462 | $3,824.000 | $90.462 | $392.000 | $6,184.000 | $74,208.000 |
| Palmdale Civic Center | See comment for specific site info | $36.921 | $1,123.00 | $245.769 | $1,065.000 | $467.538 | $2,026.000 | $38.538 | $167.000 | $4,381.000 | $52,572.000 |
| Palmdale Playhouse | 38334 10th Street East | $31.397 | $955.00 | $0.000 | $0.000 | $154.846 | $671.000 | $45.000 | $195.000 | $1,821.000 | $21,852.000 |
| S.A.V.E.S. | 1002 East Avenue Q-12 | $21.140 | $643.00 | $0.000 | $0.000 | $207.923 | $901.000 | $45.000 | $195.000 | $1,739.000 | $20,868.000 |
| Parks & Recreation | 38260 10th Street East | $32.285 | $982.00 | $0.000 | $0.000 | $389.308 | $1,687.000 | $64.154 | $278.000 | $2,947.000 | $35,364.000 |
| Demonstration Garden | n/w corner Sierra Hwy. & Palmdale Blvd. | $14.696 | $447.00 | $0.000 | $0.000 | $129.462 | $561.000 | $115.615 | $501.000 | $1,509.000 | $18,108.000 |
| St. Claire Parkway | w/s of Sierra Hwy btw Ave. R & Ave. Q | $18.444 | $561.00 | $168.692 | $731.000 | $467.538 | $2,026.000 | $314.769 | $1,364.000 | $4,682.000 | $56,184.000 |
| COMPREHENSIVE TOTALS | | $238.422 | $7,252.000 | $538.615 | $16,988.000 | $3,136.154 | $78,380.000 | $1,132.615 | $20,593.000 | $28,084.000 | $1,890,624.000 |

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR GENERAL BENEFIT AREAS- YEAR 5

| SITE | SITE NUMBER | LOCATION | BI-WEEKLY PLANTER COST | MONTHLY PLANTER COST | BI-WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|
| ALBERTSON'S MEDIAN | 1 | 50TH ST. WEST S/O Ave. N | $25.385 | $55.000 | $18.000 | $39.000 | $94.000 | $1,128.000 |
| RANCHO VISTA MEDIANS | 2 | R.V.BLVD btw 15TH & 10TH WEST | $155.538 | $337.000 | $77.077 | $167.000 | $504.000 | $6,048.000 |
| RANCHO VISTA MEDIANS | 3 | R.V.BLVD btw 10TH WEST & HWY 14 | $51.692 | $112.000 | $24.923 | $54.000 | $166.000 | $1,992.000 |
| RANCHO VISTA MEDIANS | 4 | R.V BLVD. btw HWY 14 & PD PROMENADE | $103.385 | $224.000 | $38.308 | $83.000 | $307.000 | $3,684.000 |
| COUNTRY CLUB PLANTER | 5 | N/S of R.V BLVD. Btw. HWY 14 & COUNTRY CLUB DR. | $103.385 | $224.000 | $25.385 | $55.000 | $279.000 | $3,348.000 |
| RANCHO VISTA MEDIAN | 6 | R.V.BLVD at FAIRWAY DR. | $30.923 | $67.000 | $20.769 | $45.000 | $112.000 | $1,344.000 |
| DESERT SANDS TERRACE | 7 | S/S R.V. BLVD w/o 3RD ST. EAST+W/S 3RD ST. EAST S/O R.V. BLVD | $103.385 | $224.000 | $38.308 | $83.000 | $307.000 | $3,684.000 |
| 10TH WEST MEDIANS | 8 | 10TH WEST btw A.V. MALL AND DESTINATION O-8 | $31.385 | $68.000 | $20.308 | $44.000 | $112.000 | $1,344.000 |
| SIZZLER MEDIAN | 9 | 10TH WEST N/O PALMDALE BLVD. | $36.000 | $78.000 | $20.308 | $44.000 | $122.000 | $1,464.000 |
| PALMDALE BLVD MEDIANS | 10 | PALMDALE BLVD. btw 10th WEST & 5TH WEST | $414.923 | $899.000 | $103.385 | $224.000 | $1,123.000 | $13,476.000 |
| MEDICAL CENTER DR. | 11 | MEDICAL CENTER DR. S/O PALMDALE BLVD | $20.769 | $45.000 | $11.077 | $24.000 | $69.000 | $828.000 |
| PALMDALE BLVD MEDIAN | 12 | PALMDALE BLVD btw 5TH WEST & A.M./P.M. | $51.692 | $112.000 | $20.769 | $45.000 | $157.000 | $1,884.000 |

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR GENERAL BENEFIT AREAS- YEAR 5

| SITE | SITE NUMBER | LOCATION | BI-WEEKLY PLANTER COST | MONTHLY PLANTER COST | BI-WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|
| HWY 14 INTERCHANGES/MEDIAN | 13 | PALMDALE BLVD SE/O & NW/O HWY 14 | $623.077 | $1,350.000 | $103.385 | $224.000 | $1,574.000 | $18,888.000 |
| PALMDALE BLVD MEDIAN | 14 | PALMDALE BLVD btw HWY 14 NORTH OFFRAMP & DIVISION ST | $72.462 | $157.000 | $30.923 | $67.000 | $224.000 | $2,688.000 |
| PALMDALE BLVD MEDIAN | 15 | PALMDALE BLVD btw DIVISION ST & 3RD ST | $40.615 | $88.000 | $20.769 | $45.000 | $133.000 | $1,596.000 |
| PALMDALE BLVD MEDIAN | 16 | PALMDALE BLVD btw 3RD ST E. & 5TH ST E | $31.385 | $68.000 | $15.231 | $33.000 | $101.000 | $1,212.000 |
| PALMDALE BLVD MEDIAN | 17 | PALMDALE BLVD btw 5TH ST E & 6TH ST E | $322.154 | $698.000 | $14.769 | $32.000 | $730.000 | $8,760.000 |
| BLVD NORTH FRONTAGE PLANTER | 18 | N/S OF PALMDALE BLVD bwt 3RD ST E & 5TH ST E | $155.077 | $336.000 | $20.769 | $45.000 | $381.000 | $4,572.000 |
| PALMDALE BLVD. MEDIAN | 19 | PALMDALE BLVD btw 9TH ST E & 10TH ST E | $20.769 | $45.000 | $15.231 | $33.000 | $78.000 | $936.000 |
| PALMDALE BLVD MEDIAN | 20 | PALMDALE BLVD btw 10TH ST E & 10TH PL E | $20.769 | $45.000 | $15.231 | $33.000 | $78.000 | $936.000 |
| BLVD NORTH FRONTAGE PLANTER | 21 | PALMDALE BLVD & POND | $31.385 | $68.000 | $15.231 | $33.000 | $101.000 | $1,212.000 |
| BLVD NORTH FRONTAGE PLANTER | 22 | PALMDALE BLVD & LANDON | $83.077 | $180.000 | $32.308 | $70.000 | $250.000 | $3,000.000 |
| SIERRA BIKE TRAIL | 23 | W/S SIERRA HWY S/O TECHNOLOGY DR | $830.308 | $1,799.000 | $207.231 | $449.000 | $2,248.000 | $26,976.000 |
| SIERRA BIKE TRAIL | 24 | E/S OF SIERRA HWY btw RANCHO VISTA BLVD & AVE M | $1,038.000 | $2,249.000 | $207.231 | $449.000 | $2,698.000 | $32,376.000 |

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR GENERAL BENEFIT AREAS- YEAR 5

| SITE | SITE NUMBER | LOCATION | BI-WEEKLY PLANTER COST | MONTHLY PLANTER COST | BI-WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|
| SIERRA HWY MEDIAN | 25 | SIERRA HWY S/O AVE M AT NORTHROP GRUNMAN CREDIT UNION | $40.615 | $88.000 | $20.769 | $45.000 | $133.000 | $1,596.000 |
| WEST PARK MEDIANS | 26 | WEST PARK DR & CORPORATE CT | $83.077 | $180.000 | $20.769 | $45.000 | $225.000 | $2,700.000 |
| AUTOMALL WALL | 27 | OUTSIDE OF AUTOMALL E PERMITER WALL, ACCESS AT AVE Q/HWY 14 | $83.077 | $180.000 | $19.846 | $43.000 | $223.000 | $2,676.000 |
| AVE Q FRONTAGE RD PLANTERS | 28 | AVE Q NORTH & SOUTH FRONTAGE RD btw 3RD ST E & DIVISION ST ALLEY | $155.077 | $336.000 | $41.077 | $89.000 | $425.000 | $5,100.000 |
| DIVISION ST FRONTAGE RD | 29 | E/S OF DIVISION ST btw Q-10 & TAINTOR RD | $31.385 | $68.000 | $15.231 | $33.000 | $101.000 | $1,212.000 |
| 20TH E & AVE R-8 BUFFER ZONE | 30 | N/W CORNER OF 20TH E & AVE. R-8 | $258.923 | $561.000 | $77.077 | $167.000 | $728.000 | $8,736.000 |
| 25TH E BUFFER ZONE | 31 | E/S OF 25TH E N & S SIDES AT DESERT OAK DR | $258.923 | $561.000 | $77.077 | $167.000 | $728.000 | $8,736.000 |
| AVE R FRONTAGE RD PLANTER | 32 | S/S OF AVE R btw 25TH ST E & RUDALL AVE | $142.154 | $308.000 | $38.308 | $83.000 | $391.000 | $4,692.000 |
| AVE R FRONTAGE RD PLANTER | 33 | S/S OF AVE R btw 28TH ST E & 29TH ST E | $30.923 | $67.000 | $19.846 | $43.000 | $110.000 | $1,320.000 |
| AVE R VINE PLANTER | 34 | N/S OF AVE R bwt 29TH ST E & 30TH ST E | $30.462 | $66.000 | $19.846 | $43.000 | $109.000 | $1,308.000 |
| AVE R VINE PLANTER | 35 | N/S OF AVE R E/O & W/O LEMSFORD AVE | $38.769 | $84.000 | $20.769 | $45.000 | $129.000 | $1,548.000 |
| 47TH ST E FRONTAGE RD PLANTER | 36 | E/S OF 47TH ST E btw AVE R-11 & AVE R-12 | $77.077 | $167.000 | $31.385 | $68.000 | $235.000 | $2,820.000 |

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR GENERAL BENEFIT AREAS- YEAR 5

| SITE | SITE NUMBER | LOCATION | BI-WEEKLY PLANTER COST | MONTHLY PLANTER COST | BI-WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|
| HWY 14 INTERCHANGE PLANTERS | 37 | BOTH SIDES OF AVE S AT HWY 14 W/O CALLE GRILLO | $103.385 | $224.000 | $31.385 | $68.000 | $292.000 | $3,504.000 |
| AVE S BIKE TRAIL | 38 | S/S OF AVE S bwt CALLE GRILLO & SIERRA HWY | $311.077 | $674.000 | $77.077 | $167.000 | $841.000 | $10,092.000 |
| AVE S BIKE TRAIL | 39 | S/S OF AVE S btw SIERRA HWY & 200' E/O WINDY CREEK ST | $258.923 | $561.000 | $64.154 | $139.000 | $700.000 | $8,400.000 |
| AVE S MEDIAN | 40 | AVE S btw 10TH ST E & SWAN DR | $77.077 | $167.000 | $19.846 | $43.000 | $210.000 | $2,520.000 |
| AVE S MEDIAN | 41 | AVE S bwt SHEFFIELD DR & CASA VERDE DR | $40.615 | $88.000 | $20.769 | $45.000 | $133.000 | $1,596.000 |
| AVE S BIKE TRAIL / SLOPES | 42 | S/S OF AVE S btw CASA VERDE DR & CEMENTARY RD | $1,038.000 | $2,249.000 | $251.538 | $545.000 | $2,794.000 | $33,528.000 |
| AVE S MEDIAN | 43 | AVE S btw CASA VERDE DR & 20TH ST E | $77.077 | $167.000 | $31.385 | $68.000 | $235.000 | $2,820.000 |
| AVE S MEDIAN | 44 | AVE S bwt 20TH ST E & CEMENTARY RD | $207.231 | $449.000 | $51.692 | $112.000 | $561.000 | $6,732.000 |
| AVE S MEDIAN | 45 | AVE. S & 35TH ST E | $518.308 | $1,123.000 | $103.385 | $224.000 | $1,347.000 | $16,164.000 |
| AVE S MEDIAN | 46 | AVE. S & 37TH ST E | $414.923 | $899.000 | $77.077 | $167.000 | $1,066.000 | $12,792.000 |
| AVE S MEDIAN | 47 | AVE. S AT DRYTOWN WATER PARK | $155.077 | $336.000 | $31.385 | $68.000 | $404.000 | $4,848.000 |
| AVE S MEDIAN | 48 | AVE. S & SPRINGFIELD | $103.385 | $224.000 | $20.769 | $45.000 | $269.000 | $3,228.000 |

## EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR GENERAL BENEFIT AREAS- YEAR 5

| SITE | SITE NUMBER | LOCATION | BI-WEEKLY PLANTER COST | MONTHLY PLANTER COST | BI-WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|
| AVE S MEDIAN | 49 | AVE. S & 43RD ST | $103.385 | $224.000 | $20.769 | $45.000 | $269.000 | $3,228.000 |
| AVE S MEDIAN | 50 | AVE. S & 45TH ST E | $92.308 | $200.000 | $20.769 | $45.000 | $245.000 | $2,940.000 |
| AVE S NORTH PLANTER / SLOPE | 51 | AVE S btw CASA VERDE DR & 20TH ST E + W/S OF 20TH E TO GABLEWVIEW | $518.308 | $1,123.000 | $103.385 | $224.000 | $1,347.000 | $16,164.000 |
| AVE S NORTH PLANTER / SLOPE | 52 | E/S OF 20TH ST E btw GABLE VIEW & AVE S + AVE S TO CEMENTARY RD | $414.923 | $899.000 | $61.846 | $134.000 | $1,033.000 | $12,396.000 |
| AVE S VINE PLANTER | 53 | N/S OF AVE S btw 27TH ST E & 30TH ST E | $337.385 | $731.000 | $51.692 | $112.000 | $843.000 | $10,116.000 |
| COMPREHENSIVE TOTALS | | | $232.615 | $22,532.000 | $120.000 | $5,542.000 | $764.000 | $336,888.000 |

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR PALMDALE TRANSPORTATION CENTER - YEAR 5

| SITE | LOCATION | DAILY OPENING OPERATIONS COST | MONTHLY OPENING OPERATIONS COST | WEEKLY TURF MAINT. COST | MONTHLY TURF MAINT. COST | WEEKLY PLANTER COST | MONTHLY PLANTER COST | WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PALMDALE TRANSPORTATION CENTER | 39000 Clock Tower Plaza Dr. | $44.384 | $1,350.000 | $90.462 | $392.000 | $1,012.615 | $4,388.000 | $155.538 | $674.000 | $6,804.000 | $81,648.000 |
| COMPREHENSIVE TOTALS | | $44.384 | $1,350.000 | $90.462 | $392.000 | $1,012.615 | $4,388.000 | $155.538 | $674.000 | $6,804.000 | $81,648.000 |

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR PARK AND RIDES - YEAR 5

| SITE | LOCATION | DAILY OPENING OPERATIONS COST | MONTHLY OPENING OPERATIONS COST | BI-WEEKLY PLANTER COST | MONTHLY PLANTER COST | BI-WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|---|---|
| E. Ave. S Park & Ride | 210 East Avenue S | $16.636 | $506.000 | $233.538 | $506.000 | $77.077 | $167.000 | $1,179.000 | $14,148.000 |
| W. Ave. S Park & Ride | 434 West Avenue S | $16.636 | $506.000 | $233.538 | $506.000 | $77.077 | $167.000 | $1,179.000 | $14,148.000 |
| Pelona Vista Park & Ride | 445 West Avenue R-8 | $16.636 | $506.000 | $233.538 | $506.000 | $77.077 | $167.000 | $1,179.000 | $14,148.000 |
| COMPREHENSIVE TOTALS | | | $506.000 | $233.538 | $506.000 | $77.077 | $167.000 | $1,179.000 | $14,148.000 |

# EXHIBIT B - PROFESSIONAL LANDSCAPE MAINTENANCE SERVICES FOR FAIRWAY BUSINESS PARK - YEAR 5

| SITE | LOCATION | BI-WEEKLY PLANTER COST | MONTHLY PLANTER COST | BI-WEEKLY IRRIGATION MAINT. COST | MONTHLY IRRIGATION MAINT. COST | OVERALL MONTHLY COST | ANNUAL RATE |
|---|---|---|---|---|---|---|---|
| FAIRWAY BUSINESS PARK | SEE COMMENT FOR LOCATION | $1,350.000 | $2,925.000 | $155.077 | $336.000 | $3,261.000 | $39,132.000 |
| COMPREHENSIVE TOTALS | | $1,350.000 | $2,925.000 | $155.077 | $336.000 | $3,261.000 | $39,132.000 |

# EXHIBIT B - FEE SCHEDULE ADDITIONAL SERVICES

| ITEM NO. | SERVICE DESCRIPTION | UNIT OF MEASURE | YEAR 1 RATE | YEAR 2 RATE | YEAR 3 RATE | YEAR 4 RATE | YEAR 5 RATE |
|---|---|---|---|---|---|---|---|
| 1 | 1 GALLON PLANT INSTALLATION | 1 TO 25 PLANTS | $9.00 | $9.50 | $10.00 | $10.50 | $11.00 |
| 2 | 1 GALLON PLANT INSTALLATION | 26 TO 50 PLANTS | $8.00 | $8.50 | $9.00 | $9.50 | $10.00 |
| 3 | 1 GALLON PLANT INSTALLATION | 51 TO 100 PLANTS | $7.00 | $7.50 | $8.00 | $8.50 | $9.00 |
| 4 | 1 GALLON PLANT INSTALLATION | 101 TO 250 PLANTS | $6.00 | $6.50 | $7.00 | $7.50 | $8.00 |
| 5 | 1 GALLON PLANT INSTALLATION | 251 TO 1000 PLANTS | $5.00 | $5.50 | $6.00 | $6.50 | $7.00 |
| 6 | 5 GALLON PLANT INSTALLATION | 1 TO 25 PLANTS | $20.00 | $20.50 | $21.00 | $21.50 | $22.00 |
| 7 | 5 GALLON PLANT INSTALLATION | 26 TO 50 PLANTS | $19.00 | $19.50 | $20.00 | $20.50 | $21.00 |
| 8 | 5 GALLON PLANT INSTALLATION | 51 TO 100 PLANTS | $18.00 | $18.50 | $19.00 | $19.50 | $20.00 |
| 9 | 5 GALLON PLANT INSTALLATION | 101 TO 250 PLANTS | $17.00 | $17.50 | $18.00 | $18.50 | $19.00 |
| 10 | 5 GALLON PLANT INSTALLATION | 251 TO 1000 PLANTS | $16.00 | $16.50 | $17.00 | $17.50 | $18.00 |
| 11 | 15 GALLON PLANT/TREE INSTALLATION | 1 TO 25 PLANTS | $75.00 | $80.00 | $85.00 | $90.00 | $95.00 |
| 12 | 15 GALLON PLANT/TREE INSTALLATION | 25 TO 50 PLANTS | $70.00 | $75.00 | $80.00 | $85.00 | $90.00 |
| 13 | 15 GALLON PLANT/TREE INSTALLATION | 50 TO 100 PLANTS | $65.00 | $70.00 | $75.00 | $80.00 | $85.00 |
| 14 | 15 GALLON PLANT/TREE INSTALLATION | 100 TO 250 PLANTS | $60.00 | $65.00 | $60.00 | $55.00 | $50.00 |
| 15 | 24" BOX TREE INSTALLATION | PER TREE | $150.00 | $155.00 | $160.00 | $165.00 | $170.00 |
| 16 | 36" BOX TREE INSTALLATION | PER TREE | $250.00 | $255.00 | $260.00 | $265.00 | $270.00 |
| 17 | 48" BOX TREE INSTALLATION | PER TREE | $350.00 | $355.00 | $360.00 | $365.00 | $370.00 |
| 18 | TREE DOUBLE AND TRIPLE STAKING (lodge poles and cinch ties provided by City) | PER TREE | $20.00 | $22.50 | $25.00 | $27.50 | $30.00 |
| 19 | TREE GUYING (cables, hardware and materials provided by City) | PER TREE | $20.00 | $22.50 | $25.00 | $27.50 | $30.00 |
| 20 | GROW & KILL HERBICIDE APPLICATIONS (3 TREATMENTS MIN OF 1 WEEK APART) FOR NEW TURF INSTALLATIONS (Labor & Equipment Only-COP to provide Material) | PER SQUARE FOOT | $0.02 | $0.02 | $0.02 | $0.02 | $0.03 |
| 21 | CHEMICAL BROADLEAF WEED CONTROL-CHEMICAL SPRAY APPLICATION IN TURF (Labor & Equipment Only-C.O.P. to Provide Material) | PER ACRE | $250.00 | $275.00 | $300.00 | $325.00 | $350.00 |
| 22 | TURF SLIT SEEDING | PER SQUARE FOOT | $0.20 | $0.21 | $0.22 | $0.23 | $0.24 |
| 23 | HYDROSEEDING PER SEC. H OF THE CITY OF PALMDALE'S ENGINEERING | PER SQUARE FOOT | $0.15 | $0.16 | $0.17 | $0.18 | $0.19 |
| 24 | TURF SEEDING AND TOPPING (Labor & Equipment Only-C.O.P. to Provide Material) | PER SQUARE FOOT | $0.23 | $0.24 | $0.25 | $0.26 | $0.27 |
| 25 | SOD INSTALATION (Labor & Equipment Only-C.O.P. to Provide Material) | PER SQUARE FOOT | $0.45 | $0.46 | $0.47 | $0.48 | $0.49 |
| 26 | TURF DE-THACHING | PER ACRE | $85.00 | $87.50 | $90.00 | $92.50 | $95.00 |
| 27 | TURF AERATION | PER ACRE | $85.00 | $87.50 | $90.00 | $92.50 | $95.00 |
| 28 | MECHANICAL GRANULAR FERTILIZER APPLICATION (Labor & Equipment-COP to | PER TON | $750.00 | $775.00 | $800.00 | $825.00 | $850.00 |
| 29 | PLANTER DEMOLITION & GRADING - REMOVAL OF EXISTING PLANT MATERIAL INCL. STUMPS, SILT BUILD UP, AND GRADING FOR NEW LANDSCAPE INSTALLATION PER | PER SQUARE FOOT | $2.65 | $2.70 | $2.75 | $2.80 | $2.85 |
| 30 | PLANTER DEMOLITION & GRADING - REMOVAL OF EXISTING PLANT MATERIAL INCL. STUMPS, SILT BUILD UP, AND GRADING FOR NEW LANDSCAPE INSTALLATION PER | PER SQUARE FOOT | $3.70 | $3.75 | $3.80 | $3.85 | $3.90 |
| 31 | POINT SOURCE IRRIGATION SYSTEM INSTALATION (New) per C.O.P. Detail I-27 | PER BUBBLER | $25.00 | $26.00 | $27.00 | $28.00 | $29.00 |
| 32 | IRRIGATION SYS. CONVERSION-SPRAY TO POINT SOURCE per C.O.P. Detail I-27 | PER BUBBLER | $25.00 | $26.00 | $27.00 | $28.00 | $29.00 |
| 33 | SPRAY IRRIGATION SYSTEM INSTALLATION per C.O.P. Details I-11, I-12,I-13 & I-26 | PER SPRINKLER | $45.00 | $46.00 | $47.00 | $48.00 | $49.00 |
| 34 | CONCRETE MOW CURB INSTALLATION PER CITY OF PALMDALE ENGINEERING | PER LINEAR FOOT | $15.00 | $15.50 | $16.00 | $16.50 | $17.00 |
| 35 | CONCRETE SLAB FOR DEVICE ENCLOSURE PAD 6" THICK AND EXTENDING A MIN. | PER SQUARE FOOT | $18.00 | $18.50 | $19.00 | $19.50 | $20.00 |
| 36 | CONCRETE SLAB FLATWORK 4" THICK (Labor & Material) | PER SQUARE FOOT | $6.50 | $6.75 | $7.00 | $7.25 | $7.50 |
| 37 | BLACK STEEL EDGING INSTALLATION (Labor & Material) | PER LINEAR FOOT | $4.00 | $4.25 | $4.50 | $4.75 | $5.00 |
| 38 | DECOMPOSED GRANITE INSTALLATION PER CITY OF PALMDALE ENGINEERING | PER SQUARE FOOT | $1.25 | $1.30 | $1.35 | $1.40 | $1.45 |
| 39 | 3/4" TO 1-1/2" RIVER ROCK INSTALLATION IN PLANTERS | PER SQUARE FOOT | $1.65 | $1.70 | $1.75 | $1.80 | $1.85 |
| 40 | 1-1/2" to 3" RIVER ROCK INSTALLATION IN PLANTERS | PER SQUARE FOOT | $1.95 | $2.00 | $2.05 | $2.10 | $2.15 |

# EXHIBIT B - FEE SCHEDULE ADDITIONAL SERVICES

| ITEM NO. | SERVICE DESCRIPTION | UNIT OF MEASURE | YEAR 1 RATE | YEAR 2 RATE | YEAR 3 RATE | YEAR 4 RATE | YEAR 5 RATE |
|---|---|---|---|---|---|---|---|
| 41 | 3" TO 6" RIVER ROCK INSTALLATION IN PLANTERS | PER SQUARE FOOT | $3.70 | $3.75 | $3.80 | $3.85 | $3.90 |
| 42 | PLAYGROUND EQUIPMENT CLEANING AND SANITATION - DOMENIC MASSARI PARK | PER REQUEST | $125.00 | $130.00 | $135.00 | $140.00 | $145.00 |
| 43 | PLAYGROUND EQUIPMENT CLEANING AND SANITATION - YELLEN PARK | PER REQUEST | $125.00 | $130.00 | $135.00 | $140.00 | $145.00 |
| 44 | PLAYGROUND EQUIPMENT CLEANING AND SANITATION - JOSHUA HILLS PARK | PER REQUEST | $125.00 | $130.00 | $135.00 | $140.00 | $145.00 |
| 45 | PLAYGROUND EQUIPMENT CLEANING AND SANITATION - MCADAMS PARK | PER REQUEST | $125.00 | $130.00 | $135.00 | $140.00 | $145.00 |
| 46 | PLAYGROUND EQUIPMENT CLEANING AND SANITATION - COURSON PARK | PER REQUEST | $125.00 | $130.00 | $135.00 | $140.00 | $145.00 |
| 47 | PLAYGROUND EQUIPMENT CLEANING AND SANITATION - MANZANITA PARK | PER REQUEST | $125.00 | $130.00 | $135.00 | $140.00 | $145.00 |
| 48 | PLAYGROUND EQUIPMENT CLEANING AND SANITATION - DESERT SANDS PARK | PER REQUEST | $125.00 | $130.00 | $135.00 | $140.00 | $145.00 |
| 49 | PLAYGROUND EQUIPMENT CLEANING AND SANITATION - MARIE KERR PARK | PER REQUEST | $125.00 | $130.00 | $135.00 | $140.00 | $145.00 |
| 50 | TRASH BIN ENCLOSURE PRESSURE WASHING | PER REQUEST | $75.00 | $80.00 | $85.00 | $90.00 | $95.00 |
| 51 | TENNIS & BASKETBALL COURT PRESSURE WASHING | PER COURT | $125.00 | $130.00 | $135.00 | $140.00 | $145.00 |
| 52 | PARK PAVILLION PRESSURE WASHING | PER PAVILLION | $75.00 | $80.00 | $85.00 | $90.00 | $95.00 |
| 53 | HARD SURFACE PRESSURE WASHING | PER HOUR | $125.00 | $130.00 | $135.00 | $140.00 | $145.00 |
| 54 | BALL DIAMOND INFIELD GAME PREPRARATION (LABOR & EQUIPMENT INCLUDED) | PER FIELD | $65.00 | $65.00 | $65.00 | $65.00 | $65.00 |
| 55 | BALL DIAMOND INFIELD RESTORATION (LABOR & EQUIPMENT INCLUDED) | PER FIELD | $1,250.00 | $1,250.00 | $1,250.00 | $1,250.00 | $1,250.00 |
| 56 | BALL DIAMOND OUTFIELD RENOVATION (LABOR & EQUIPMENT INCLUDED) | PER FIELD | $3,200.00 | $3,200.00 | $3,200.00 | $3,200.00 | $3,200.00 |
| 57 | SOCCER FIELD RENOVATION (LABOR & EQUIPMENT INCLUDED) | PER FIELD | $3,500.00 | $3,500.00 | $3,500.00 | $3,500.00 | $3,500.00 |
| 58 | FILL IN LOW SPOTS AND DEPPRESIONS, STONE BURY IN TWO OPPOSING | PER SQUARE FOOT | $0.35 | $0.35 | $0.35 | $0.35 | $0.35 |
| 59 | ADDITIONAL SOCCER FIELD MOWING | PER FIELD | $175.00 | $175.00 | $175.00 | $175.00 | $175.00 |
| 60 | ADDITIONAL SOFTBALL FIELD MOWING | PER FIELD | $75.00 | $75.00 | $75.00 | $75.00 | $75.00 |
| 61 | OUTFITTED LANDSCAPE LABORER | PER HOUR | $42.50 | $45.00 | $47.50 | $50.00 | $52.50 |
| 62 | OUTFITTED LANDSCAPE IRRIGATION LABORER | PER HOUR | $45.00 | $47.50 | $50.00 | $52.50 | $55.00 |
| 63 | OUTFITTED LANDSCAPE IRRIGATION TENDER | PER HOUR | $42.50 | $45.00 | $47.50 | $50.00 | $52.00 |
| 64 | LANDSCAPE OPERATING ENGINEER WITH SKIP LOADER | PER HOUR | $125.00 | $125.00 | $125.00 | $125.00 | $125.00 |
| 65 | 1 OUTFITTED LANDSCAPE TRUCK AND TRAILER WITH A 3-MAN CREW ( 1 FOREMAN AND 2 LABORERS) INCL. WEEKENDS | PER HOUR | $145.00 | $145.00 | $145.00 | $145.00 | $145.00 |
| 66 | 1 OUTFITTED IRRIGATION MAINTENANCE TRUCK WITH 1 IRRIGATION TECHNICIAN | PER HOUR | $55.00 | $55.00 | $55.00 | $55.00 | $55.00 |
| 67 | 1 OUTFITTED JUVENILE TREE TRIMMING CREW WITH TRUCK, TRAILER, CERTIFIED | PER HOUR | $145.00 | $145.00 | $145.00 | $145.00 | $145.00 |
| 68 | EMERGENCY CALL OUT: 1 OUTFITTED LANDSCAPE TRUCK AND TRAILER WITH A 3- | PER HOUR | $225.00 | $225.00 | $225.00 | $225.00 | $225.00 |
| 69 | **TOTALS** | | | | | | |

# City Council Staff Report

**DATE:** **MAY 15, 2024**

**TO:** **HONORABLE MAYOR AND CITY COUNCIL**

**FROM:** **PUBLIC WORKS DEPARTMENT**
**CAPITAL IMPROVEMENT PROGRAM DIVISION**

**DISTRICT:** **5**

**SUBJECT:** **APPROVE THE FIRST AMENDMENT TO THE AGREEMENT WITH KTUA FOR PN 839, MCADAM PARK RENOVATION PROJECT, TO INCREASE THE AGREEMENT BY $53,763 FOR THE TOTAL NOT TO EXCEED AMOUNT OF $527,758 WITH AN EXTENSION OF AN ADDITIONAL 135 CALENDAR DAYS FOR A TOTAL OF 375 CALENDAR DAYS**

## RECOMMENDATION

Staff recommends that the City Council:

1. Approve the First Amendment to Agreement No. A-8166 with KTUA for PN 839, McAdam Park Renovation Project to increase the agreement by $53,763, for the total not to exceed amount of $527,758 with an extension of an additional 135 calendar days for a total of 375 calendar days, and;

2. Authorize the City Manager or her designee to execute the First Amendment to Agreement No. A-8166 with KTUA, including minimal and/or non-substantial changes.

## BACKGROUND

On January 11, 2023, the City Council awarded a design contract to KTUA for a renovation project at McAdam Park in the amount of $473,995 for a term of 240 calendar days. On April 13, 2023, Agreement No. A-8166 was executed with KTUA to commence the design work. The scope of the work includes modifications to the park to house the Palmdale Pony League. Modifications to the site will include a new restroom and concession building, a new lighted ballfield, updated Musco lighting on the existing fields, a maintenance storage shed, a revised parking lot layout, and upgrades to the existing playground tot lot. The consultant will prepare construction plans, technical specifications, and construction cost estimates.

## DISCUSSION

During the design development, it was noted that some additional tasks needed to be incorporated into the original scope of work. These tasks include:

1. Recycled Water Irrigation Plan Permitting. McAdam Park uses recycled water for irrigation purposes. Using recycled water for irrigation requires a permit from the County Department of Health. To prepare the standalone plans, application and any follow-up with the County had not been included in the original scope of work. The additional scope includes field visits as required;

2. Entry Monument sign. During a site visit, it was noted that the existing sign is old, in poor condition, and not visible to the public. This scope of work is added to the project;

3. The original work scope included a minor environmental clearance modification. However, upon further evaluation of the scope of work, it was determined that a major modification application was needed to be submitted. The major modification requires a higher level of effort that requires additional fees and studies, and,

4. During the design process, it was noted that a maintenance storage building is needed to house materials, equipment, and tools for the park maintenance. Incorporating the maintenance building was not part of the original scope of work.

In addition to the above scope of work and the time needed to finalize the said scope, it is estimated the contract time should be extended for 135 additional calendar days.

## FISCAL IMPACT

$53,763; The project is funded in Account No. P0130157-724525. Sufficient funds are budgeted and available in FY 2023-24. The total contract amount can be seen in the following table:

| Project Summary | Cost |
|---|---|
| A-8166, Design Contract | $473,995 |
| Amendment No. 1 | $53,763 |
| **Total Contract Amount** | **$527,758** |

## STRATEGIC PLAN

Goal III: Invest in infrastructure to improve community livability.

C. Plan and maintain safe and attractive neighborhoods, streets, facilities, and public spaces with exciting programming that promotes active fun for everyone.

| | |
|---|---|
| Prepared by: | Lynn Glidden, P.E., Director of Public Works |
| Certified as to availability of Funds: | Janelle Samson, Director of Operations |
| Approved by: | Ronda Perez, City Manager |
| Approved as to form: | William P. Curley, III, City Attorney |

## ATTACHMENTS

Agrmt No. A-8166 First Amendment with KTUA
Agrmt No. A-8166 with KTUA

**FIRST AMENDMENT TO AGREEMENT A-8166**
**BETWEEN THE CITY OF PALMDALE AND KTUA**

This FIRST Amendment to Agreement No. A-8166 (“Agreement”) is made and entered into by and between the City of Palmdale (hereinafter called “CITY”) and KTUA (hereinafter called "PROJECT DESIGNER"). This Contract shall become effective on the date of the last signatory.

WHEREAS, on April 13, 2023 ("Original Agreement") the CITY and PROJECT DESIGNER entered into an agreement to provide:

Landscape architectural design services on PN 839 - McAdam Park Renovation, located at 38115 30th Street East.

WHEREAS, the parties desire to amend the Original Agreement to:

Include PROJECT DESIGNER's added Scope of Work, extend time for an additional 135 calendar days, and add increased costs of $53,763.00.

I.
TASK 1: RECYCLED WATER IRRIGATION PLAN PERMITTING

A) Complete required design plans and process the permits.
B) Create a standalone recycled water (RW) irrigation plan package.
C) Facilitate the RW permit process with County of Los Angeles Health Department (COLAHD) and Palmdale Water District (PWD), including the application forms for each respective agency.
D) Order mylars and coordinate agency signings of the title sheet.

E) Notes / Assumptions:
a. Assemble all plan review fees, deposits, permit fees, and inspection fees. CITY to pay agencies fees for RW plan review.
b. CITY to pay any additional fees for re-application or costs associated with re-submitting the plan review package. PROJECT DESIGNER is responsible for all plan corrections and coordination of resubmittal.
c. Estimated RW permitting fees expected to be approximately $10,000.
d. Civil plans are subject to the review and approval of COLAHD and the PWD. Any additional plans required are not included in this proposal.

TASK 1A: RW IRRIGATION PLAN PERMITTING - FIELD VISIT (OPTION)

A) Option for one (1) PROJECT DESIGNER site meeting with Agencies, as needed, during the construction phase.
B) Exclusion: PROJECT DESIGNER will not be present for additional site meetings. CITY Representative will attend all on-site meetings with COLAHD and /or the PWD (Pre-Construction, Construction Review, Irrigation Coverage Review, Cross-Connection Test, etc.)

TASK 2: ENTRY MONUMENT REPLACEMENT

A) Demolition of the existing entry monument for the park.
B) Coordinate the design with the sign manufacturer, the CITY, as well as the design teams structural and electrical engineers.
C) Draft and provide design drawings for the construction of the proposed entry monument.

TASK 3: MAJOR MODIFICATION PERMIT PLAN REQUIREMENTS

A) Includes additional time required for the electrical engineer to complete the required/desired light study and plans not previously included in the original scope.

- Includes showing exterior site lighting improvements and the coordination of the location/screening of the proposed new Utility (SCE) transformer.

TASK 4: METAL STORAGE BUILDING AND EXISTING RESTROOM RENOVATION

A) Includes the demolition of the existing storage building to provide a new 1,125 sf prefab metal storage building.

- Site fencing details will be included to enclose the perimeter of the storage facility.
- This assumes that all existing utilities are present and adequately sized to accommodate the new facility.
- Includes Major Modification drawings, Construction Documents (60%, 90%, 100%), Bidding and Construction Administration support.

B) Includes the renovation of the existing restroom building
- New ADA compliant hardware
- New Title 24 compliant lighting
- Includes Major Modification drawings, Construction Documents (60%, 90%, 100%), Bidding and Construction Administration support.

II.
PROJECT DESIGNER proposed fees shall be on a lump sum basis of FIFTY THOUSAND, EIGHT HUNDRED EIGHTY-THREE Dollars ($50,883.00). This does not include agency permit and inspection fees or the $2,880.00 of optional service.

III.
REIMBURSABLES
Reimbursable costs will be billed on an as-needed basis up to a maximum of $10,000.00 and includes:
1) Special Delivery Costs - at cost.
2) Mylar or plotting costs - at cost. Includes minimal printing on project for in-house use, client review and sub-consultant coordination. Does not include printing multiple sets for costing, review sets and bid sets.
3) All meetings are listed. Additional meetings shall be on an hourly basis or negotiated lump sum fee.
4) All out of town travel and/or lodging expenses (out of San Diego County), are at cost. Air-travel or car rental is at current rates, or private automobile at $0.62 cents/mile.

PROJECT DESIGNER Proposal attached as Exhibit "A"

NOW THEREFORE, the parties agree as follows:

SECTION 1 - Description of Work to include PROJECT DESIGNER's added Scope of Work;

SECTION 4 - Commencement and Completion of Work extends time an additional ONE HUNDRED THIRTY-FIVE (135) calendar days, allowing PROJECT DESIGNER to complete all the work described in SECTION 1 and submit final deliverables within THREE HUNDRED SEVENTY-FIVE (375) CALENDAR Days; and,

SECTION 9 - Compensation increased fee of FIFTY-THREE THOUSAND, SEVEN HUNDRED SIXTY-THREE Dollars ($53,763.00).

SECTION 9.1 For all work and services including the various phases of tasks as described in SECTION 1 Description of Work, CITY shall pay to PROJECT DESIGNER a new combined total not to exceed contract amount of FIVE HUNDRED TWENTY-SEVEN THOUSAND, SEVEN HUNDRED AND FIFTY-EIGHT Dollars ($527,758.00).

TASK 1: RECYCLED WATER IRRIGATION PLAN PERMITTING
PROJECT DESIGNER: $13,540.00
Delane Engineering: $4,000.00
Subtotal: $17,540.00

TASK 1A: RW IRRIGATION PLAN PERMITTING - FIELD VISIT (OPTION)
PROJECT DESIGNER: $2,880.00
Subtotal: $2,880.00

TASK 2: ENTRY MONUMENT REPLACEMENT
PROJECT DESIGNER: $2,380.00
Delane Engineering: $1,880.00
PSE: $4,083.00
Subtotal: $8,348.00

TASK 3: MAJOR MODIFICATION PERMIT PLAN REQUIREMENTS
PROJECT DESIGNER: $700.00
Turpin & Rattan: $4,960.00
AGD: $4,080.00
Subtotal: $9,740.00

TASK 4: METAL STORAGE BUILDING AND EXISTING RESTROOM RENOVATION
PROJECT DESIGNER: $2,560.00
AGD: $12,700.00
Subtotal: $15,260.00

GRAND TOTAL: $50,883.00
Option Total: $2,880.00

Reimbursable costs will be billed on an as-needed basis up to a maximum of $10,000.00.

PROJECT DESIGNER Proposal attached as Exhibit "A"

All other terms and conditions of the Original Agreement not amended herein, remain in full force and effect.

**In Witness Whereof,** the parties hereto have caused this Contract to be executed and attested by their respective officers thereunto duly authorized.

CITY OF PALMDALE:

SIGNATURE AREA

Ronda Perez
City Manager

SIGNATURE AREA

ADDRESS FOR NOTICE:
CITY OF PALMDALE
38250 Sierra Highway
Palmdale, CA 93550

APPROVE AS TO FORM:

SIGNATURE AREA

William P. Curley, III
City Attorney

ATTEST:

SIGNATURE AREA

Roxanne Faber
City Clerk

KTUA:

SIGNATURE AREA

Brooke J.P. Whalen
Principal

ADDRESS FOR NOTICE:
KTUA
3916 Normal Street
San Diego, CA 92103

---------- INTERNAL USE ONLY ----------

■Certificate(s) and Endorsement(s) attached
■Confirmed business name on contract with certificate(s)
■Original contract and previous amendment(s) (if any) are attached
■Attached Agreement Checklist and met all requirements

ktua

3916 Normal Street
San Diego, CA 92103
540 E. Betteravia Road, Suite D 122
Santa Maria, CA 93454
619-294-4477 www.ktua.com

March 26, 2024

City of Palmdale
Department of Public Works
38250 Sierra Highway
Palmdale, CA 93550

Attention: Mr. Hamed Hashemian
Deputy Director of Public Works

Regarding: Amendment to Agreement for Additional Services

Project: William J McAdam Memorial Park Improvements
Palmdale, CA

We appreciate the opportunity to continue working with you on this project and to submit our professional services and fees to prepare and coordinate the necessary recycled water irrigation documentation required for processing through the Palmdale Water Department and the County of Los Angeles Health Department, which was not included in our original scope. Also included is the request to replace and possibly relocate the entry monument sign, parking lot modifications, and additional lighting studies required for the Major Modification Permit.

This Amendment to the prime Agreement, by and between the Landscape Architect, KTUA, and the Client, City of Palmdale, the project titled, McAdam Park, is hereby executed by both parties prior to the performance of the additional services by the Consultant team, as defined in the prime Agreement, and as described herein. This Amendment hereby acknowledges the Client's obligation of payment for the additional services in accordance with the prevailing terms and rates of the prime Agreement.

## I. Scope of Work

Our proposed additional scope of services includes the following:

**TASK 1: RECYCLED WATER IRRIGATION PLAN PERMITTING**

A. Summary: It was brought to our attention after the project was awarded, that McAdam Park utilizes recycled water irrigation. Because of this, site improvements proposed within this project's contract documents will be subject to the respective water agencies' review. Additional services are requested to account for the additional design time necessary to complete the required plans and to process the permitting (and subsequent reviews). See below for more information.
B. Includes time for KTUA to create a standalone recycled water irrigation plan package, in accordance with the County of Los Angeles Health Department (COLAHD) and the Palmdale Public Works Division Water Department (PWD). This includes a recycled water title sheet with

project information, COLAHD standard notes and details and signature and inspection blocks, and PWD standard notes and details and signature blocks as required. The package will incorporate information based on the received as-builts or drawings of record of the site. Coordination with the civil engineering is included as part of the completion of the recycled water plans.

C. KTUA will be responsible for facilitating the recycled water permit processing with COLAHD and PWD, including the application forms for each respective agency. COLAHD and PWD, who are not under the jurisdiction of the City of Palmdale, will each provide their own respective plan review of the recycled water plans. KTUA shall address COLAHD and PWD review comments and incorporate the changes into the contract drawings/documents.
D. Once PWD and COLAHD approves the recycled irrigation plans, KTUA will coordinate having mylars made and the appropriate agencies sign the title sheet.
E. Notes/Assumptions:
    a. KTUA shall assemble all plan review fees/deposits/permit fees, and inspection fees. All fees for RW plan review will be paid to the agencies by the City of Palmdale.
    b. If occurs, the Client may need to pay additional fees for re-application or additional fees/costs associated with re-submitting the plan review package should the final approved plans not be constructed/inspected within COLAHD's and the PWD's maximum review period. KTUA will be responsible for all plan corrections and coordination of resubmittal.
    c. The estimated fee for recycled water permitting includes current agency fees noted publicly on COLAHD and the PWD website for RW Plan Review and Inspections and are expected to be around $10,000. COLAHD and the PWD may notify the RW plan applicant should additional fees be required, changes occur, or additions that may be required for the project.
    d. Civil plans are subject to the review and approval of COLAHD and the PWD. Any additional plans required by COLAHD and the PWD, or other permitting agency have not been included in this proposal.

**TASK 1A: RECYCLED WATER IRRIGATION PLAN PERMITTING – FIELD VISIT (OPTION)**

A. Option for one (1) KTUA site meeting with Agencies, as needed, during the construction phase.
B. Exclusion: KTUA will not be present for additional site meetings (beyond the one option stated above) with Agencies during the construction phase. Client/Client's Representative will attend all on-site meetings with COLAHD and/or the PWD (Pre-Construction, Construction Review, Irrigation Coverage Review, Cross-Connection Test, etc.).

**TASK 2: ENTRY MONUMENT REPLACEMENT**

A. Includes the demolition of the existing entry monument for the park
B. KTUA will coordinate with the sign manufacturer, the City, as well as with the design teams structural and electrical engineers for the design of the proposed entry monument sign.
C. KTUA shall draft and provide design drawings for the construction of the proposed entry monument.

**TASK 3: MAJOR MODIFICATION PERMIT PLAN REQUIREMENTS**

A. Includes additional time required for the electrical engineer to complete the required/desired light study and plans not previously included in the original scope.

- Includes showing exterior site lighting improvements and the coordination of the location/screening of the proposed new Utility (SCE) transformer.

**TASK 4: METAL STORAGE BUILDING and EXISTING RESTROOM RENOVATION**

A. Includes the demolition of the existing storage building to provide a new 1,125 sf prefab metal storage building [redacted] removed.
   - Site fencing details will be included to enclose the perimeter of the storage facility.
   - This assumes that all existing utilities are present and adequately sized to accommodate the new facility.
   - Includes Major Modification drawings, Construction Documents (60%, 90%, 100%), Bidding and Construction Administration support.

B. Includes the renovation of the existing restroom building
   - New ADA compliant hardware
   - New Title 24 compliant lighting
   - Includes Major Modification drawings, Construction Documents (60%, 90%, 100%), Bidding and Construction Administration support.

## II. PROFESSIONAL FEES:

Our proposed fees shall be on a lump sum basis of **$50,883.00** for the tasks described above. This does not include agency permit and inspection fees or optional service indicated below.

**TASK 1: RECYCLED WATER IRRIGATION PLAN PERMITTING**

| | |
|---|---|
| KTUA: | $13,540.00 |
| Delane Engineering: | $4,000.00 |
| **Subtotal:** | **$17,540.00** |

**TASK 1A: RECYCLED WATER IRRIGATION PLAN PERMITTING FIELD VISIT (OPTION)**

| | |
|---|---|
| KTUA: | $2,880.00 |
| **Subtotal:** | **$2,880.00** |

**TASK 2: ENTRY MONUMENT REPLACEMENT**

| | |
|---|---|
| KTUA: | $2,380.00 |
| Delane Engineering: | $1,880.00 |
| PSE: | $4,083.00 |
| **Subtotal:** | **$8,348.00** |

**TASK 3: MAJOR MODIFICATION PERMIT PLAN REQUIREMENTS**

| | |
|---|---|
| KTUA: | $700.00 |
| Turpin & Rattan: | $4,960.00 |
| AGD: | $4,080.00 |
| **Subtotal:** | **$9,740.00** |

**TASK 4: METAL STORAGE BUILDING and EXISTING RESTROOM RENOVATION**

| | |
|---|---|
| KTUA: | $2,560.00 |
| AGD: | $12,700.00 |
| **Subtotal:** | **$15,260.00** |

| | |
|---|---|
| **GRAND TOTAL:** | **$50,883.00** |
| **Option Total:** | **$2,880.00** |

**III. REIMBURSABLES:**

Reimbursable costs will be billed on an as-needed basis up to a maximum of $10,000.00 and include:

1) Special Delivery Costs – at cost
2) Mylar or plotting costs – at cost. Includes minimal printing on project for in-house use, client review & sub-consultant coordination. This proposal does not include printing multiple sets for costing, review sets and bid sets.
3) All meetings are listed, additional meetings shall be on an hourly basis or negotiated lump sum fee.
4) All out of town travel and/or lodging expenses (out of San Diego County), are at cost. Via air-travel or car rental at current rates, or private automobile at $.62 cents/mile.

We look forward to continuing work on this project.
Sincerely,

Brooke J.P. Whalen, Principal

**AGREEMENT NO. A-8166**
**CONTRACT FOR DESIGN PROFESSIONAL SERVICES**
**BETWEEN THE CITY OF PALMDALE AND KTUA**

**THIS CONTRACT FOR DESIGN PROFESSIONAL SERVICES** ("Contract" herein) is made and entered into this 11th day of January, 2023 by and between the City of Palmdale a public body corporate and politic, (hereinafter called "CITY") and KTUA (hereinafter called "PROJECT DESIGNER").

## RECITALS

WHEREAS**,** City desires to engage PROJECT DESIGNER to perform certain technical and professional services, as provided herein, in connection with that certain project identified as PN 839 - McAdam Park Renovation.

WHEREAS, PROJECT DESIGNER represents that PROJECT DESIGNER has the expertise and is qualified to perform the services described in this Contract and is duly registered under the laws of the State of California.

WHEREAS, PROJECT DESIGNER desires to accept such engagement.

**NOW, THEREFORE,** the parties agree as follows:

## 1 DESCRIPTION OF WORK

1.1 The City hereby engages PROJECT DESIGNER, and PROJECT DESIGNER accepts such engagement, to perform the following design professional services in a manner satisfactory to CITY:

PROJECT DESIGNER shall provide landscape architectural design services for the renovation of McAdam Park located at 38115 30th Street East. Design shall include upgrades and improvements to park accessibility, utility infrastructure and sports field lighting, expansion of the existing parking lot, renovation of the existing restroom and storage buildings, and the addition of a new ballfield, concession stand, and accessible restroom building, as more specifically described in the Contract Documents for the above listed Project.

PROJECT DESIGNER shall also study the planning and/or occupancy impacts these improvements have on the existing park entitlements and prepare the appropriate planning and environmental documents as required by the applicable codes and ordinances.

1.2 Project deliverables shall be reviewed and approved by CITY to determine acceptable completion. CITY shall have the right to review and inspect the work during the course of its performance at such times as may be specified by CITY.

1.3 PROJECT DESIGNER shall not accept any change of scope, or change in contract provisions, unless issued in writing, as a contract change order or amendment and signed by CITY. Any extensions of time must be mutually agreed upon in writing and executed by both parties.

1.4 CITY shall provide to PROJECT DESIGNER, without charge, all data, program information, including reports, records, maps, and other information, now in CITY's possession, which may facilitate the timely performance of the work.

## 2 CITY PROJECT MANAGER

To provide the design professional services required by this Contract, PROJECT DESIGNER shall act under the authority and approval of a Project Manager appointed by the Director of Public Works/designee. The City Project Manager will oversee the work under this Contract, assist PROJECT DESIGNER with any necessary information, audit billings, and approve payments. PROJECT DESIGNER shall channel reports, deliverables and special requests through the City Project Manager.

## 3 PROJECT DESIGNER'S KEY PERSONNEL

PROJECT DESIGNER's Team and Key Personnel are as follows:

Brooke Whalen.....Principal Landscape Architect
Josef Gutierrez..... Associate Landscape Architect
Bernard Everling.....Irrigation Design Manager
Gwen Stark.....Landscape Dsigner

Subconsultants:
Baranek Consulting.....Environmental
Kim Baranek.....CEQA Compliance/Environmental Documentation
Andrew Goodwin Designs.....Architect
Cumming.....Cost Estimator
Peterson Structural Engineering.....Structural Engineer
Delane.....Civil Engineer
Earth Systems.....Geotech
Turpin & Rattan.....MEP

This Design Professional Services Contract has been awarded to PROJECT DESIGNER based on its representation that those personnel and subcontractors listed above will perform the portions of the work listed above. PROJECT DESIGNER shall not deviate nor substitute any of these team members without prior written approval by CITY.

## 4 COMMENCEMENT AND COMPLETION OF WORK

The execution of this Contract by the parties does not constitute an authorization to proceed. The services of PROJECT DESIGNER shall commence when CITY, acting by and through its Project Manager, has issued an Authorization to Proceed. PROJECT DESIGNER shall complete all the work described in Section 1 and submit final deliverables within Two Hundred Forty (240) CALENDAR days following PROJECT DESIGNER's receipt of Authorization to Proceed. PROJECT DESIGNER shall have no claim for compensation for any services or work, which has not been authorized by CITY's Authorization to Proceed.

## 5 TAXES

5.1 PROJECT DESIGNER shall pay all sales, consumer, use, and other similar taxes required to be paid by PROJECT DESIGNER in accordance with state and local laws.

5.2 PROJECT DESIGNER is an independent contractor and shall have no power or authority to incur any debt, obligation, or liability on behalf of CITY. No person employed by PROJECT DESIGNER or acting on its behalf, in connection with this Contract shall be considered the Agent or employee of CITY.

5.3 PROJECT DESIGNER shall be required to obtain a current City of Palmdale business license, as required by the Palmdale Municipal Code, before an Authorization to Proceed is issued.

## 6 PATENT FEES AND ROYALTIES

PROJECT DESIGNER shall pay all license fees and royalties and assume all costs incident to the use, in the performance of the work or the incorporation in the work of any invention, design, process, product or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product or device is specified by CITY for use in the performance of the work and if, to the actual knowledge of CITY, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by CITY in the contract documents. PROJECT DESIGNER shall indemnify and hold harmless CITY and anyone directly or indirectly employed by CITY from and against all claims, damages, losses and expenses (including attorneys' fees) arising out of any infringement of patent rights or copyrights incident to the use in the performance of the work, or resulting from the incorporation in the work of any invention, design, process, product or device not specified by CITY, and shall defend all such claims in connection with any alleged infringement of such rights.

## 7 STANDARDS OF PERFORMANCE

7.1 PROJECT DESIGNER shall be responsible for the completeness and accuracy of its services and work and documents resulting there from, and CITY shall not be responsible for discovering deficiencies therein. PROJECT DESIGNER shall correct any such deficiencies or errors without additional compensation and without

cost to CITY, except to the extent any such deficiency is directly attributable to deficiencies in CITY-furnished information.

7.2 PROJECT DESIGNER shall be familiar with CITY's Standard Details and Specifications and other relevant CITY regulations. PROJECT DESIGNER shall ensure there are no conflicts among the Contract Documents including, but not limited to, the CITY's Standard Specifications and Special Provisions for Construction Contracts, the plans and specifications prepared by PROJECT DESIGNER, any standard details or specifications incorporated therein by reference, and the Construction Contract.

## 8 PROJECT DESIGNER'S PERSONNEL

8.1 All services required under this Contract shall be performed by PROJECT DESIGNER, or under PROJECT DESIGNER's direct supervision, and all personnel shall possess the qualifications, permits and licenses required by State and local law to perform such services.

8.2 PROJECT DESIGNER shall be solely responsible for the satisfactory work performance of all personnel engaged in performing services required by this Contract, and compliance with all reasonable performance standards established by CITY.

8.3 PROJECT DESIGNER shall be responsible for payment of all PROJECT DESIGNER's employees' and subcontractor's wages and benefits and shall comply with all requirements pertaining to the employer's liability, workers' compensation, unemployment insurance, and Social Security.

8.4 PROJECT DESIGNER shall indemnify and hold harmless CITY, and its respective officers, agents and employees from and against all claims, demands, damages or costs arising from PROJECT DESIGNER's acts or omissions with respect to any liability, damages, claims, costs and expenses of any nature arising from alleged violations of personnel practices.

8.5 PROJECT DESIGNER shall pay, if required by applicable law, not less than the general prevailing hourly wage rates, as determined by the Director of the Department of Industrial Relations pursuant to the California Labor Code, for each craft, classification, or type of worker needed to perform the Contract. Copies of the prevailing rate of per diem wages are on file in the office of the Director of Public Works.

## 9 COMPENSATION

9.1 For all of work and services including the various phases of tasks as described in Section 1, Scope of Services, CITY shall pay to PROJECT DESIGNER an amount not to exceed the sum of Four Hundred Seventy Three Thousand, Nine Hundred Hinety Five dollars ($473995), as follows:

Task 1 Survey, Initial Study, Major Mod.....$96,210
Task 2 Construction Documents 60%.....$125,926
Task 3A Construction Documents 90%.....$102,270
Task 3B Construction Documents 100%/Final.....$54,501
Task 4 Bid.....$12,215
Task 5 Construction Administration.....$62,590
Task 6 Record Drawings.....$14,283

TOTAL LABOR.....$467,995
Direct Costs.....$6,000

TOTAL LABOR AND DIRECT COSTS.....$473,995

PROJECT DESIGNER shall perform no work in excess of the total contract price without prior approval of CITY. Total contract price includes expenses related to travel to and from CITY to meet with City and to appear before City Council or any other board or commission of CITY.

9.2 An application and certification for payment form must be submitted to CITY which shall include the following: a clear, detailed invoice reflecting hours being billed for, a summary sheet showing percentage of work completed to date, amount/percent billed to date and current status of all tasks within the project; any/all backup documentation supporting the above items. Work schedule updates must also be included in the monthly progress payment requests.

9.3 PROJECT DESIGNER shall maintain adequate records and shall permit inspection and audit by CITY of PROJECT DESIGNER's charges under this Contract. PROJECT DESIGNER shall make such records available to CITY during normal business hours upon reasonable notice. Nothing herein shall convert such records into public records, and they will be available only to CITY and any specified public agencies. Such records shall be maintained by PROJECT DESIGNER for one (1) year following completion of the work under this Contract unless a longer period of time is required by state or federal law, in which event PROJECT DESIGNER shall retain its records for the time required by such laws.

9.4 No payment made hereunder by CITY to PROJECT DESIGNER, shall be construed as an acceptance by CITY of any work or materials, nor as evidence of satisfactory performance by PROJECT DESIGNER of its obligations under this Contract.

## 10 INDEMNIFICATION

To the fullest extent of the law, and consistent with Civil Code section 2782.8, PROJECT DESIGNER agrees to defend, indemnify, hold free and harmless the

CITY, its elected and appointed officials, officers, agents and employees, at PROJECT DESIGNER's sole expense, from and against any and all claims, demands, actions, suits or other legal proceedings brought against CITY, its elected and appointed officials, officers, agents, and employees to the extent arising out of, pertaining to, or relating to the negligence, recklessness, or willful misconduct of the PROJECT DESIGNER, its employees, and/or authorized subcontractors, in performing design professional services pursuant to this Agreement. The defense obligation provided for hereunder shall apply without any advance showing of negligence, recklessness or willful misconduct of the PROJECT DESIGNER, its employees, and/or authorized subcontractors, but shall be required whenever any claim, action, complaint, or suit asserts as its basis the negligence, recklessness, or willful misconduct of PROJECT DESIGNER, its employees, and/or authorized subcontractors, and/or whenever any claim, action, complaint or suit asserts liability against the CITY, its elected and appointed officials, officers, agents, and employees based upon such negligence, recklessness, or willful misconduct, whether or not the PROJECT DESIGNER, its employees, and/or authorized subcontractors are specifically named or otherwise asserted to be liable. Notwithstanding the foregoing, the PROJECT DESIGNER shall not be liable for the defense or indemnification of the CITY for claims, actions, complaints or suits arising out of the sole or active negligence or willful misconduct of the CITY. Further, in no event shall the cost to defend charged to the design professional exceed the design professional's proportionate percentage of fault, unless otherwise specified in Civil Code section 2782.8. This provision shall supersede and replace all other indemnity provisions contained either in the CITY's specifications or PROJECT DESIGNER's Proposal, which shall be of no force and effect.

## 11 INSURANCE

11.1 PROJECT DESIGNER, at its expense, shall maintain in effect at all times during the performance of work under this Contract not less than the following coverage and limits of insurance, which shall be maintained with insurers listed "A" or better in the Best's Insurance Guide and authorized to do business in the State of California. **Proof of Insurance, as identified in Section 11.8, must be reviewed, and accepted by the City Attorney**.

11.1.1 Workers' Compensation and Employer's Liability

- Workers' Compensation -- coverage as required by the State of California
- Employer's Liability -- $1,000,000.00 each accident
  $1,000,000.00 policy limit bodily injury
  $1,000,000.00 each employee bodily injury by disease

11.1.2 Professional Liability (Errors & Omissions) Insurance*

- $2,000,000 limit on a per occurrence basis

11.1.3 Commercial General Liability

- $1,000,000.00 limit on per occurrence basis

- $2,000,000.00 general aggregate limit

11.1.4 Commercial Automobile Liability

- $1,000,000.00 combined single limit including owned, non-owned and hired automobile coverage

11.2 All of PROJECT DESIGNER's policies shall contain an endorsement providing that written notice shall be given to CITY at least thirty (30) calendar days prior to termination, cancellation or reduction of coverage in the policy.

11.3 Policies providing for bodily injury and property damage coverage shall contain the following:

A. An endorsement extending coverage to the City as an additional insured, in the same manner as the named insured, as respects liability arising out of the performance of any work under the Contract. Such insurance shall be primary insurance, as respects the interest of the City, and any other insurance maintained by the City shall be considered excess coverage and not contributing insurance with the insurance required hereunder. The Certificate and endorsements shall state that: "The City of Palmdale, City of Palmdale in its capacity as the Successor Agency to the CRA, Palmdale Civic Authority, Housing Authority, Industrial Development Authority, Airport Authority, their officers, agents, employees and volunteers are named as additional insured".

B. "Severability of Interest" clause.

11.4 Promptly on execution of this Contract, and prior to commencement of any work, PROJECT DESIGNER shall deliver to CITY certificates of insurance and endorsements to all required policies demonstrating that PROJECT DESIGNER has the required coverage and showing the required named insureds. Within five (5) days of written request from CITY, PROJECT DESIGNER shall deliver to CITY full and complete copies of all insurance policies required by this Contract.

11.5 The requirements as to the types and limits of insurance to be maintained by PROJECT DESIGNER are not intended to and shall not in any manner limit or qualify PROJECT DESIGNER's liabilities and obligations under this Contract.

11.6 Any policy or policies of insurance that PROJECT DESIGNER elects to carry as insurance against loss or damage to its equipment and tools or other personal property used in the performance of this Contract shall include a provision waiving the insurer's right of subrogation against CITY.

11.7 All insurance coverages must be maintained throughout the duration of this Contract.

11.8 Acceptable Proof of Insurance:

11.8.1 ACORD Certificate of Insurance listing all coverages, limits, deductibles and insureds; and endorsements for all applicable coverages if agent has authority to issue it; Additional insured Form CG20101185 or CG20100707 and CG20370704 or equivalent must be provided for general liability coverage. Additional insured form CA0001 must be provided for automobile liability coverage.

11.8.2 Agents must confirm that policy endorsements have been ordered from the respective insurance companies. Upon issuance, policy endorsements listing all insurers must be submitted to the City Attorney.

11.8.3 *When professional (E&O) liability coverage is provided on a “claims made basis”, PROJECT DESIGNER will continue to renew the insurance for a period of five (5) years after this Agreement expires or is terminated. Such insurance will have the same coverage and limits as the policy that was in effect during the term of this Agreement, and will cover PROJECT DESIGNER, or its officers, employees, or agents during the time this Agreement was in effect.

11.9 Notwithstanding any other provision of this Contract, CITY may immediately terminate this Contract if, at any time PROJECT DESIGNER fails to maintain the required insurance for any period of time or fails to comply with any of the insurance requirements listed above.

11.10 CONTRACTOR shall require any and all subcontractor's working on its behalf to provide insurance coverages and limits that are based on the scope of work and nature of risk being performed by the subcontractor. Any and all subcontractors working on behalf of CONTRACTOR shall be subject to all other insurance requirements that are stated herein.

Any deviation in this requirement will be CONTRACTOR's sole risk. CONTRACTOR's insurance requirements in Section 11 will not be impacted and/or limited by such deviation.

## 12 TERMINATION WITHOUT CAUSE

City reserves the right to terminate this Contract or any part thereof for its sole convenience with fifteen (15) days written notice. In the event of such termination, PROJECT DESIGNER shall immediately stop all work hereunder, and shall immediately cause any of its suppliers and sub-consultants to cease such work. PROJECT DESIGNER shall also surrender to CITY all finished or unfinished documents or programs and other materials, which shall be City’s property. As compensation in full for services performed to the date of such termination, the PROJECT DESIGNER shall receive an amount equal to the value of the work completed as of the termination date in accordance with the fee schedule or as negotiated between the parties. In no event shall the amount payable upon termination exceed the total maximum compensation provided for in this Contract.

## 13 TERMINATION FOR CAUSE

13.1 If the City determines that the PROJECT DESIGNER has failed to supply an adequate working force, or to provide services of proper quality, or has failed in any other respect to satisfactorily perform the services specified in this Contract, the City shall give written notice to the PROJECT DESIGNER specifying all defaults to be remedied within thirty (30) days. Such notice shall set forth the basis for the City's dissatisfaction and suggest corrective measures. If, after thirty days, the PROJECT DESIGNER has failed to implement the corrective measures, the City may elect to terminate this Contract, in whole or in part.

13.2 In the event the City terminates this Contract in whole or in part as provided herein above, the City may procure, upon such terms and in such manner, as it may deem appropriate, services similar to those terminated.

13.3 If this Contract is terminated as provided above, the City may require the PROJECT DESIGNER to provide all finished or unfinished documents, data, studies, software, drawings, maps, photographs, reports, etc., prepared by the PROJECT DESIGNER. Upon such termination, the PROJECT DESIGNER shall be paid an amount equal to the value of the services provided and work performed as of the date of termination. Such payment by the City may take into consideration the costs associated with hiring another PROJECT DESIGNER to complete the services. In the event no new PROJECT DESIGNER is employed, the PROJECT DESIGNER shall be paid an amount equal to the value of the work performed. In ascertaining the value of the work performed up to the date of termination, consideration shall be given to both completed work and work in progress, to complete and incomplete drawings, and to other documents when such are delivered to CITY, and to authorized reimbursement expenses.

The above is in addition to any other remedies available by law or equity to the City.

13.4 If, after notice of termination of the Contract under the provisions of this Section 13, it is determined, for any reason, that the PROJECT DESIGNER was not in default, or that the default was excusable, then the rights and obligations of the parties shall be the same as if the notice of termination had been issued pursuant to Section 12.

## 14 DISPUTE RESOLUTION

All claims, disputes, and other matters in question between CITY and PROJECT DESIGNER arising out of, or relating to this Contract, or the breach thereof shall, to the extent reasonably feasible, be resolved through good faith negotiations between the parties.

## 15 OWNERSHIP OF DOCUMENTS

All documents, including, but not limited to, tracings, drawings, plans, specifications, original mylars, estimates, field notes, investigations, design analysis and studies which are prepared in the performance of this Contract are to be, and remain the

property of, CITY. PROJECT DESIGNER shall furnish CITY, upon its request, originals or reproducible or electronic copies of technical specifications and of all other documents listed above. PROJECT DESIGNER shall endorse, by his professional seal, all plans and data furnished by him.

## 16 RE-USE OF DOCUMENTS

The parties agree the documents, drawings, specifications, and designs, although the property of CITY, are prepared for a specific project and are not intended nor represented by PROJECT DESIGNER to be suitable for re-use for any other project. Any reuse without written verification or adaptation by PROJECT DESIGNER for the specific purpose intended will be at CITY's sole risk and without liability or legal exposure to PROJECT DESIGNER.

## 17 SUBCONTRACTING, DELEGATION AND ASSIGNMENT

17.1 PROJECT DESIGNER shall not delegate, subcontract or assign its duties or rights hereunder, either in whole or in part, without the prior written consent of CITY; provided, however, that claims for money due or to become due to PROJECT DESIGNER from CITY under this Contract may be assigned to a bank, trust company or other financial institution without such approval. Any proposed delegation, assignment or subcontract shall provide a description of the services covered, identification of the proposed assignee, delegee or subcontractor, and an explanation of why and how the same was selected, including the degree of competition involved. Any proposed agreement with an assignee, delegee or subcontractor shall include the following:

A. The amount involved, together with PROJECT DESIGNER's analysis of such cost or price; and

B. A provision requiring that any subsequent modification or amendment shall be subject to the prior written consent of CITY.

C. The requirement to hire only those persons authorized by federal law to work in the United States.

17.2 Any assignment, delegation or subcontract shall be made in the name of PROJECT DESIGNER and shall not bind or purport to bind CITY and shall not release PROJECT DESIGNER from any obligations under this Contract including, but not limited to, the duty to properly supervise and coordinate the work of employees, assignees, delegees and subcontractors. No such assignment, delegation or subcontract shall result in any increase in the amount of total compensation payable to PROJECT DESIGNER under this Contract.

## 18 NON-DISCRIMINATION AND EQUAL EMPLOYMENT OPPORTUNITY

18.1 In performance of this Contract, PROJECT DESIGNER shall not discriminate against any employee, subcontractor, or applicant for employment because of sex,

color, race, religion, ancestry, national origin, disability, medical condition, marital status, sexual orientation, or age. PROJECT DESIGNER will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, ancestry, sex, national origin, handicap, or age. Affirmative action relating to employment shall include, but not be limited to the following: employment, upgrading, demotion or transfer; recruitment; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

18.2 The provisions of subsection 18.1 above shall be included in all solicitations or advertisements placed by or on behalf of PROJECT DESIGNER for personnel to perform any services under this Contract. CITY shall have access to all documents, data and records of PROJECT DESIGNER and its subcontractors for purposes of determining compliance with the equal employment opportunity and non-discrimination provisions of this Section, and all applicable provisions of Executive Order No. 11246 which is incorporated herein by this reference. A copy of Executive Order No. 11246 is available for inspection at, and on file with, the Palmdale City Clerk's Office.

## 19 FINANCIAL INTEREST CERTIFICATION

19.1 PROJECT DESIGNER warrants that no person has been employed or retained to solicit or secure this Contract upon an agreement or understanding for a commission, percentage, brokerage or contingent fee; and that no officer or employee of the CITY has any interest, financially or otherwise, in PROJECT DESIGNER's firm.

19.2 For breach or violation of this warranty, CITY shall have the right to annul this Contract without liability, or at its discretion to deduct from the Contract Price or consideration, the full amount of such commission, percentage, brokerage or contingent fee.

## 20 CONFLICT OF INTEREST

20.1 PROJECT DESIGNER stipulates that its officers and employees do not now have a conflict of interest and it further agrees for itself, its officers and its employees that it will not contract for or accept employment for the performance of any work or services with any individual business, corporation or government unit that would create a conflict of interest in the performance of its obligations pursuant to this Contract or which would cause PROJECT DESIGNER to be "financial interested" (as provided in California Government Code Section 1090 et seq. or 87100 et seq.) in any contract or decision made by CITY on any matter.

20.2 PROJECT DESIGNER shall not employ any City official or employee to perform any work required pursuant to this Contract.

20.3 If PROJECT DESIGNER is a registered professional engineer or licensed land surveyor and the scope of work requires PROJECT DESIGNER's recommendation of the actual formula to spread the costs of an assessment district's improvements, then PROJECT DESIGNER shall not participate in making that recommendation if the additional elements set forth in Government Code section 87100.1(c) apply. Those additional elements are: (1) PROJECT DESIGNER has received income of $250 or more for professional services in connection with any parcel included in the benefit assessment district within 12 months prior to the creation of the district; and (2) the district includes other parcels in addition to those parcels for which PROJECT DESIGNER received the income. In the event a conflict of interest does arise in that context, City shall select a different PROJECT DESIGNER to recommend the actual formula to spread the costs of the assessment district's improvements and the costs of such services shall be deducted from the compensation to be paid to PROJECT DESIGNER.

20.4 To the extent required by the City Manager/designee, PROJECT DESIGNER shall complete and file with the City Clerk a Form 700 Statement of Economic Interests disclosing any reportable property interests, income, gifts, investments, or business positions.

## 21 COMPLIANCE WITH LAW

21.1 PROJECT DESIGNER shall comply with all state and federal laws, including but not limited to, the requirement to hire only those persons authorized by federal law to work in the United States. If PROJECT DESIGNER uses any subcontractors to complete this Contract, this same requirement shall be included in all subcontracts and strictly enforced by PROJECT DESIGNER.

21.2 The law of the state of California shall govern this Contract. The venue of any legal action, either formal or informal, shall be the County of Los Angeles.

## 22 NOTICES

Any notice required under this Contract shall be in writing, addressed to the appropriate party at its address on the signature page and given personally or by registered or certified mail postage prepaid, or by a commercial courier service. All notices shall be effective upon the date of receipt.

## 23 ENTIRE CONTRACT AND AMENDMENTS

23.1 This Contract is the complete agreement between the parties and supersedes all prior proposals, agreements, and understandings between the parties and may not be modified or terminated orally.

23.2 No attempted waiver of any of the provisions hereof, nor any modification in the nature, extent or duration of the work to be performed by PROJECT DESIGNER

hereunder, shall be binding unless in writing and signed by the party against whom the same is sought to be enforced.

23.3 The failure of any party to enforce against another party any provision of this Contract shall not constitute a waiver of that party's right to enforce such a provision at a later time, and shall not serve to vary the terms of this Contract.

**24 ATTORNEY'S FEES**

If any action at law or in equity is brought to enforce or interpret any provisions of this Contract, the prevailing party in such action shall be entitled to reasonable attorney's fees, costs and necessary disbursements, in addition to such other relief as may be sought and awarded.

**In Witness Whereof,** the parties hereto have caused this Contract to be executed and attested by their respective officers thereunto duly authorized.

CITY OF PALMDALE:

Ronda Perez
Signed: 4/11/2023

Ronda Perez
City Manager

LG
Signed: 3/23/2023

KTUA:

Brooke JP Whalen
Signed: 4/4/2023

Brooke Whalen
Principal

ADDRESS FOR NOTICE:
CITY OF PALMDALE
38300 Sierra Highway
Palmdale, CA 93550

ADDRESS FOR NOTICE:
KTUA
3916 Normal Street, San Diego, CA 92103

APPROVE AS TO FORM:

William Patrick Curley III
Signed: 4/10/2023

William P. Curley, III
Interim City Attorney

ATTEST:

Roxanne Faber
Signed: 4/13/2023

Roxanne Faber
Acting City Clerk

---------- INTERNAL USE ONLY ----------

■Certificate(s) and Endorsement(s) attached
■Confirmed business name on contract with certificate(s)
■Attached Agreement Checklist and met all requirements

Record of Signing

For
Name
Title

Signed: 3/23/2023
Signed on 2023-03-23 21:35:31 GMT

Secured by Concord™
DocumentID: ODhhNGQ4OTMtZT
SigningID: N2I5MWFhZjMtZj
Signing date: 3/23/2023
IP Address: 206.171.111.149
Email: lglidden@cityofpalmdale.org

For
Name
Title

Signed: 4/4/2023
Signed on 2023-04-04 16:07:53 GMT

Secured by Concord™
DocumentID: ODhhNGQ4OTMtZT
SigningID: MWE1NjdjMjgtZj
Signing date: 4/4/2023
IP Address: 12.222.98.162
Email: brooke@ktua.com

For
Name
Title

Signed: 4/10/2023
Signed on 2023-04-10 17:12:41 GMT

Secured by Concord™
DocumentID: ODhhNGQ4OTMtZT
SigningID: YzRjYjRkODktZW
Signing date: 4/10/2023
IP Address: 107.131.11.226
Email: wcurley@harperburns.com

For
Name
Title

Signed: 4/11/2023
Signed on 2023-04-11 18:54:40 GMT

Secured by Concord™
DocumentID: ODhhNGQ4OTMtZT
SigningID: MDZkZGI5ZGEtN2
Signing date: 4/11/2023
IP Address: 166.199.151.33
Email: rperez@cityofpalmdale.org

For
Name
Title

Signed: 4/13/2023
Signed on 2023-04-13 00:24:48 GMT

Secured by Concord™
DocumentID: ODhhNGQ4OTMtZT
SigningID: N2ZiOTFkMDEtOW
Signing date: 4/13/2023
IP Address: 4.7.108.49
Email: rfaber@cityofpalmdale.org

concord™
Where agreements happen.

Signed with www.concordnow.com

# City Council Staff Report

**DATE:** **MAY 15, 2024**

**TO:** **HONORABLE MAYOR AND CITY COUNCIL**

**FROM:** **PUBLIC WORKS DEPARTMENT**
**MAINTENANCE DIVISION**

**DISTRICT:** **ALL**

**SUBJECT:** **APPROVE REQUISITION WITH VELOCITY TRUCK CENTERS FOR NEW RIZON E18M ELECTRIC TRUCK WITH A DUMP BODY IN AN AMOUNT NOT TO EXCEED $180,635**

## RECOMMENDATION

Staff recommends that the City Council:

1. Approve Requisition No. 240997 with Velocity Truck Centers for the purchase of a new Rizon E18M Electric Truck with a Dump Body in an amount not to exceed $180,635; and,

2. Authorize the City Manager or her designee to approve the requisition and resulting purchase order with Velocity Truck Centers, including minimal and/or non-substantial changes.

## BACKGROUND

Illegal dumping is a serious problem that affects our community's quality of life, finances, and the environment. Previously, the Maintenance Division acquired two lightning loaders to address illegal dumping and its negative impacts. This equipment has provided staff with safer, more efficient clean-up methods and helped establish an Illegal Dumping abatement program. Since deploying these trucks, staff have responded to more illegal dumping locations and collected more debris and trash (a 16% increase from last year).

Although illegal dumping operations have improved, the program requires additional support to tackle ongoing concerns. Therefore, a new 1-ton truck was requested and approved upon adopting the Fiscal Year 2023-2024 budget. The City will use Waste Management franchise agreement fees to fund the purchase.

While selecting the approved 1-ton gas-powered vehicle, staff identified the Rizon E18M as a battery-electric, zero-emissions vehicle of the same function and weight class available for immediate purchase.

## DISCUSSION

The new Rizon E18M electric truck with a dump body will offer needed support and additional benefits to the Illegal Dumping program. Its primary use will be as an extra asset during heavy work periods to help provide timely responses for reported incidents. Due to its smaller size and style compared to the lightning loaders, it creates more driver versatility. It will allow staff to access areas where the lightning loaders cannot safely travel to pick up illegally dumped debris. While the lightning loaders ably pick up and haul illegally dumped debris and large, heavier items, separating recyclable materials, such as mattresses, appliances, used motor oil, paint, and tires, from the entire load is challenging. Staff can coordinate site clean-ups with this new truck to separate these items and improve the City's recycling efforts.

Additionally, opting for this electric truck over a gas-powered truck provides environmental and economic benefits. It will help the City meet our Zero-Emission Vehicle (ZEV) program compliance obligation with the California Air Resource Board (CARB).

Staff recommends that the City Council approve Requisition No. 240997 with Velocity Truck Centers for a new Rizon E18M electric truck with a dump body.

## FISCAL IMPACT

$180,635; Funds for the requisition and resulting purchase order with Velocity Truck Centers for the Rizon E18M electric truck are currently budgeted in Fleet Maintenance equipment capitalized (15433006-774400). Staff will also look at alternative funding sources through potential grants and/or outside agency funding. Operating and maintenance costs are projected to be approximately $5,000 annually.

## STRATEGIC PLAN

Goal III. Invest in infrastructure to improve community livability.

A. Seek innovative, cost-effective, customer-focused methods of service delivery.

| | |
|---|---|
| Prepared by: | Lynn Glidden, P.E., Director of Public Works |
| Certified as to availability of Funds: | Janelle Samson, Director of Operations |
| Approved by: | Ronda Perez, City Manager |
| Approved as to form: | William P. Curley, III, City Attorney |

## ATTACHMENTS

Req. No. 240997 with Velocity Truck Centers

Atch 1 Quote for Rizon E18M Electric Truck

| Bill To | Requisition 00240997-00 FY 2024 |
|---|---|
| FINANCE DEPARTMENT | PO 20240617 |
| 38300 SIERRA HWY | Acct No: |
| STE D | 15433006-774400 |
| PALMDALE, CA | Review: |
| 93550 | Buyer: cmantell |
| | Status: Converted Page 1 |

| Vendor | Ship To |
|---|---|
| LOS ANGELES TRUCK CENTERS, LLC | PUBLIC WORKS/MAINTENANCE |
| PO BOX 101284 | 39110 3RD ST EAST |
| | PALMDALE, CA 93550 |
| PASADENA, CA 91189 | adyer@cityofpalmdale.org |
| Tel#562-447-1200 | |
| Fax 909-510-4050 | |

| Date Ordered | Vendor Number | Date Required | Ship Via | Terms | Department |
|---|---|---|---|---|---|
| 04/09/24 | 004969 | 04/09/24 | DESTINATION/NET45 | | STREET MAINTENANCE |

| LN | Description / Account | Qty | Unit Price | Net Price |
|---|---|---|---|---|
| | General Notes<br>for May 15th council meeting | | | |
| 001 | 2024 Rizon E18M Electric Truck<br>with Dump Body<br>Vendor Item | 1.00<br>EA | 180635.00000 | 180635.00 |
| 1 | 15433006-774400 | | 180635.00 | |

Requisition Link

Requisition Total 180635.00

***** General Ledger Summary Section *****

| Account | | Amount | Remaining Budget |
|---|---|---|---|
| 15433006-774400 | | 180635.00 | 394920.03 |
| FLEET MAINTENANCE | EQUIPMENT-CAPITALIZED | | |

***** Approval/Conversion Info *****

| Activity | Date | Clerk | Comment |
|---|---|---|---|
| E-mail | 04/09/24 | Adam Dyer | e-mail notification sent |
| E-mail | 04/09/24 | Bruce Roadhouse | e-mail notification sent |
| E-mail | 04/09/24 | Lynn Glidden | e-mail notification sent |
| E-mail | 04/09/24 | Stephanie Autry | e-mail notification sent |
| E-mail | 04/09/24 | Janelle Samson | e-mail notification sent |
| E-mail | 04/09/24 | Matthew Harris | e-mail notification sent |
| E-mail | 04/09/24 | Candice Mantell | e-mail notification sent |
| E-mail | 04/09/24 | Dawn McIntosh | e-mail notification sent |

| Bill To | Requisition 00240997-00 FY 2024 |
|---|---|
| FINANCE DEPARTMENT | PO 20240617 |
| 38300 SIERRA HWY | Acct No: |
| STE D | 15433006-774400 |
| PALMDALE, CA | Review: |
| 93550 | Buyer: cmantell |
| | Status: Converted Page 2 |

| Vendor | Ship To |
|---|---|
| LOS ANGELES TRUCK CENTERS, LLC | PUBLIC WORKS/MAINTENANCE |
| PO BOX 101284 | 39110 3RD ST EAST |
| | PALMDALE, CA 93550 |
| PASADENA, CA 91189 | adyer@cityofpalmdale.org |
| Tel#562-447-1200 | |
| Fax 909-510-4050 | |

| Date Ordered | Vendor Number | Date Required | Ship Via | Terms | Department |
|---|---|---|---|---|---|
| 04/09/24 | 004969 | 04/09/24 | DESTINATION/NET45 | | STREET MAINTENANCE |

| LN | Description / Account | Qty | Unit Price | Net Price |
|---|---|---|---|---|

Authorized By: _____ Date: _____
Signature

VELOCITY TRUCK CENTERS

SALES
Toll Free (800) 673-0500
Reception (909) 510-4000

PARTS (877) 727-8752
SERVICE (866) 385-8757
COLLISION CENTER (909) 510-4100
13800 Valley Blvd, Fontana CA 92335

www.VelocityTruckCenters.com

# Buyers Order

Deal#: DE-08712
Opp#: 2024-154140
Date: 03/25/2024

*Contact: Bryan Crawford - Mobile: (951)833-4305 - Email: bcrawford@vvgtruck.com*

Bill To: 101124
CITY OF PALMDALE
39110 3RD ST EAST
LOS ANGELES CA 90022 County: Los Angeles
Phone: (661) 267-5440 FAX: (661) 267-5309
adyer@cityofpalmdale.org

Ship To:
CITY OF PALMDALE
39110 3RD ST EAST
LOS ANGELES CA 90022

**Unit#: 1971805** **Stock#: R003944** **New 2024 RIZON E18M** **Price:** **$145,619.00**

VIN: JL6CCE120RK003944 Mileage: 19 GVW: 17995 Color: White

3-4 Yard 11' Valew Dump Body per attached specifications $17,900.00

**To Be Delivered On or About: 04/30/2024** **Unit Price:** **$163,519.00**

| | |
|---|---|
| **Sub Total** | **$163,519.00** |
| Admin Fee | $195.00 |
| Doc Fee | $85.00 |
| CA Tire Recycle Fee | $10.50 |
| Sales Tax (10.250%) | $16,789.40 |
| DMV Electronic Filing | $35.00 |
| **Total Vehicle Sale Price** | **$180,633.90** |
| **Net Total** | **$180,633.90** |

**Lienholder: None...**

Includes Dump Body Per Specification.

***** PRICING IS SUBJECT TO CHANGE DUE TO SUPPLY CHAIN AND PRODUCTION ISSUES. *****

ONLY THOSE ITEMS AND SERVICES SPECIFICALLY WRITTEN ON THIS ORDER ARE INCLUDED IN THE STATED PRICE.
ANY OTHER AGREEMENTS, UNLESS IN WRITING, ARE NOT BINDING ON SELLER.

The numbered pages of this Order comprise the entire agreement affecting this purchase and no other agreement or understanding of any nature concerning this purchase has been made or entered into, or will be recognized. I hereby certify that no credit has been extended to me for the purchase of this motor vehicle except as appears in writing on the face of this agreement. I have read and understand the final page of this agreement and agree to it as a part of this order the same as if it were printed above my signature. I certify that I am of legal age, or older, that I have legal capacity and authority to execute this agreement on behalf of my company, and hereby acknowledge receipt of a copy of this order.

CITY OF PALMDALE
(Purchaser's Name)

X _____
(Purchaser's Signature)

Date

Bryan Crawford
(Salesperson Name)

(Approved By)

Date



This order is not valid unless signed and accepted by dealer

1. TRADE-IN(S). Purchaser shall deliver trade-in(s) in the same condition as at the time of inspection and appraisal by Seller reasonable wear and tear excepted, except as disclosed in the Agreement. Purchase represents that each truck shall be free and clear of all liens and encumbrances and warrants that the trade-in(s) are that type and condition described in this Agreement, including any attachments hereto.

2. TERMS OF PAYMENT. Unless otherwise agreed, net payment shall be due on delivery. Late payments shall bear interest at the rate of 18% per annum, or the maximum permitted by law, whichever is less. If acceptance of delivery is delayed by Purchaser, payment shall become due on the date when Seller is prepared to deliver. If the financial condition of Purchaser at any time does not, in the judgment of Seller, justify continuance of the work to be performed by Seller hereunder on the terms of payment as agreed upon, Seller may suspend such work, or postpone delivery, and require such assurances of Purchaser's performance as Seller deems adequate, including payment in advance, or Seller may cancel this order and shall receive reimbursement for its reasonable and proper cancellation charges. In the event of bankruptcy or insolvency of Purchaser, voluntary or involuntary, Seller shall be entitled to cancel any order then outstanding at any time and seek reimbursement for its reasonable and proper cancellation charges.

3. CANCELLATION. Purchaser may cancel this order only if Seller is able to cancel said order with the manufacturer, and only upon written notice. Upon cancellation or failure to accept delivery, Purchaser shall pay Seller reasonable cancellation changes and expenses, not to be less than Seller's out-of-pocket expenses including carrying costs.

_____

4. SALES AND OTHER TAXES. Unless otherwise specified herein, Seller's price does not include federal excise, sales, use, or other taxes. Consequently, in addition to the price specified herein, the amount of any other excise, sales, use or other tax applicable to the sale or use of the trucks purchased hereunder shall be paid by Purchaser, or in lieu thereof Purchaser shall provide Seller with a tax exemption certificate acceptable to the taxing authorities. Purchaser agrees that all taxes related to this transaction, whether arising at the time of the transaction or in the future, are Purchaser's responsibility and further agrees to promptly pay any such taxes.

5. DELIVERY. All trucks furnished hereunder shall be delivered to Purchaser at the Seller's dealership location or other location as designated in this Agreement. Unless otherwise provided, delivery will be made via carriers and routes designated by manufacturer with freight charges to be included in the purchase price. Delivery dates are approximate and are based upon receipt of all necessary information from Purchaser. Seller shall not be liable for delays in delivery or manufacturing, or other causes beyond Seller's control.

6. TECHNICAL CHANGES. Purchaser acknowledges that the manufacturer and Seller reserve the right to change the specifications of the truck(s) at any time without obligation to make such changes in other trucks previously delivered to Purchaser. In addition, manufacturer and Seller reserve the right to make design changes and substitution of materials subsequent to the receipt of the order which, in manufacturers or Seller's opinion are necessary to improve the truck. Purchaser agrees to accept any such changes as fulfillment of Seller's obligations under this order.

7. REQUIRED EQUIPMENT. This order shall be deemed to include, whether or not specified herein, all equipment or accessories required by the National Highway Traffic Safety Act or other regulations in effect at the time of order of receipt. It is agreed that any additional or different equipment not specified which is required at the time of delivery to meet the foregoing Act or other regulations will be added and the costs shall be paid by Purchaser. Purchaser understands that certain safety equipment is available that is not legally required and is available at Purchasers request for an additional fee.

8. TITLE AND REMEDIES. Until full payment by Purchaser of all amounts due hereunder, Seller reserves the title to all equipment furnished hereunder. If Purchaser defaults in payment or performance hereunder or becomes subject to insolvency, receivership, or bankruptcy proceedings, or makes an assignment for the benefit of creditors, or without the consent of Seller voluntarily or involuntarily sells, transfers, leases, or permits any lien or attachment on the equipment delivered hereunder, Seller may treat all amounts then or thereafter owing hereunder by Purchaser as immediately due and payable (subject only to credits required by law) and Seller may repossess said equipment by any means available by law and shall enjoy any and all other remedies of a secured creditor under the Uniform Commercial Code. Purchaser shall execute and deliver to Seller such financing statements and other documents, as Seller may deem appropriate to evidence, perfect, and protect the priority of its security interest in the truck(s) subject to this order.

9. GENERAL. Any assignment by Purchaser of this order or any rights hereunder, without written consent of Seller, shall be void. Clerical errors in this order may be automatically corrected by giving written notice thereof to Purchaser by a duly authorized representative of Seller. No waiver, alteration, or modification of any of the provisions hereof shall be binding unless and until in writing and signed by a duly authorized representative of Seller. To the extent not covered by other terms herein, including terms of warranty and limitation of liability, etc., the provisions of the Uniform Commercial Code shall govern this sale.

10. IMPORT TARIFFS: Purchaser acknowledges that any import tariffs imposed by the government are the sole responsibility of the Purchaser and will result in an increase in the Seller's price equal to the amount of the obligatory tariff.

This Agreement (including by reference the provisions set out in manufacturer's standard warranty or warranties) shall constitute the entire agreement between Purchaser and Seller, and no understandings or obligations not expressly set forth herein or in manufacturer's standard warranty or warranties are binding upon Purchaser or Seller.

ALL WARRANTIES, IF ANY, BY A MANUFACTURER OR SUPPLIER OTHER THAN SELLER ARE THEIRS, NOT SELLER'S, AND ONLY SUCH MANUFACTURER OR OTHER SUPPLIER SHALL BE LIABLE FOR PERFORMANCE UNDER SUCH WARRANTIES. SELLER HEREBY DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Accepted and Agreed by: _____ _____
(Company Name) (Date)

Signor's Name and Title: _____ X _____
(Please Print Name and Title. Must be an Officer of the company Authorized to approve capital purchases.) (Signature)

Mar 25 2024 12:00PM

RIZON e18M

# 11' VALEW DUMP SPECIFICATIONS

**Valew Dumps are specifically designed for extreme use. All steel gauges have been increased for greater durability.**

- Payload apx 7500#
- 10Ga. High grade steel sides and ends 17"
- 10Ga. High grade steel floor
- Fully boxed top rail
- 3" structural steel cross members on 16" centers
- 5" structural channel longitudinal
- EZ-Latch Tailgate
- Fully boxed perimeter tailgate w/ two vertical braces
- 6" vertical side braces
- All appearance corners have radius bends
- ¼" cab shield w/ window
- 1" top and bottom hinge pins
- Storage Crate Mounted in between cab and body
- SR4016 under body scissor hoist w/ appx 7.44 ton lifting capacity
- Primer and Painted Black in color

**CHASSIS SPECS**

- 18M 17995 GVWR
- 175hp/317lbft torque
- Dual Battery packs 82kwh Installed/usable 74kwh
- Possible range 70-105 miles* load, conditions driver style, battery heath. Based on 50% load factor
- Lvl 2 AC charging 6-9 hours
- DC fast charging 1-1.5 hours
- 64MPH Top speed
- Safety features std.; back up camera, active side assist active brake assist, lane departure warning, anti lock brakes, elec stability control, electronic park lock
- Cab and chassis warranty 5yrs/75K miles HV batteries 5yr/120K mikes
- Rizon connect

VELOCITY TRUCK CENTERS

Contact Bryan Crawford
Truck Sales
951-833-4305 bcrawford@vvgtruck.com
www.VelocityTruckCenters.com

2429 S. Peck Road
Whittier CA 90601

March, 20 2024

To whom it may concern:

Velocity-EV, LLC ("Velocity EV") is the sole and independent general distributor of the RIZON truck brand in the United States as appointed by the Manufacturer – Mitsubishi Fuso Truck and Bus Corporation ("MFTBC").

This letter is to confirm that the below business has been appointed by Velocity EV as Authorized Dealerships for the RIZON truck brand and all of its models:

- Los Angeles Truck Centers (commonly known as Velocity Truck Centers)

Velocity Truck Centers is the only authorized RIZON dealership in the greater Los Angeles area and south to the US-Mexico border.

Sincerely,

Alexander Voets, General Manager, Velocity EV

# City Council Staff Report

**DATE:** **MAY 15, 2024**

**TO:** **HONORABLE MAYOR AND CITY COUNCIL**

**FROM:** **PUBLIC WORKS DEPARTMENT**
**ENGINEERING DIVISION**

**DISTRICT:** **2**

**SUBJECT:** **ADOPT RESOLUTION NO. CC 2024-049, A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PALMDALE DECLARING ITS INTENTION TO ORDER THE DETACHMENT OF PARCELS FROM CERTAIN ASSESSMENT DISTRICTS**

## RECOMMENDATION

Staff recommends that the City Council:

1. Adopt Resolution No. CC 2024-049, a Resolution of the City Council of the City of Palmdale declaring its intention to order the detachment of parcels from certain assessment districts;

2. Authorize the Mayor to execute Resolution No. CC 2024-049, declaring the City's intention to order the detachment of parcels from certain assessment districts; and,

3. Set the time and place of the public hearing for June 5, 2024, at 5:00 p.m.

## BACKGROUND

The City has, by previous Resolution No. CC 2022-108 and Ordinance No. 1596, formed the City of Palmdale Community Facilities District No. 2022-2, Ritter Ranch Maintenance Services (the "CFD"). The CFD is authorized to levy and collect special taxes for certain maintenance services, which were meant to replace the City's existing maintenance assessment districts as a means of funding services (landscaping, streetlights, and park maintenance/improvements). As such, the parcels included in the CFD are being detached from the maintenance assessment districts before the commencement of the CFD levy.

## DISCUSSION

Based on discussions between the Ritter Ranch developer and the City over the course of the formation of the CFD, a desire was expressed to consolidate services into a single funding source, which is in line with the City's program to utilize community facilities districts to fund services rather than maintenance assessment districts. This action will eliminate the potential for duplication of funding by removing parcels from the maintenance assessment districts included in the CFD. Following the Public Hearing on June 5, 2024, the Council will act on removing the parcels.

## FISCAL IMPACT

The cost of the detachment is funded by the developer's deposit and therefore has no fiscal impact to the City.

## STRATEGIC PLAN

Goal III: Invest in infrastructure to improve community viability.

A. Seek innovative, cost-effective, customer-focused methods of service delivery.

C. Plan and maintain safe and attractive neighborhoods, streets, facilities, and public spaces with exciting programming that promotes active fun for everyone.

| | |
|---|---|
| Prepared by: | Lynn Glidden, P.E., Director of Public Works |
| Certified as to availability of Funds: | Janelle Samson, Director of Operations |
| Approved by: | Ronda Perez, City Manager |
| Approved as to form: | William P. Curley, III, City Attorney |

## ATTACHMENTS

Reso. No. CC 2024-049

CITY COUNCIL
CITY OF PALMDALE, CALIFORNIA
RESOLUTION NO. CC 2024-049

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PALMDALE DECLARING ITS INTENTION TO ORDER THE DETACHMENT OF PARCELS FROM CERTAIN ASSESSMENT DISTRICTS

**WHEREAS**, the City Council ("Council") of the City of Palmdale ("City") has, by previous Resolutions approved the formation of, and annexation to, certain Assessment Districts (hereafter referred to as the "Districts"), pursuant to the provisions of the *Landscape and Lighting Act of 1972, Part 2, Division 15 of the California Streets and Highways Code (commencing with Section 22500)* (hereafter referred to as the "Act") to pay the costs and expenses of operating, maintaining and servicing the improvements located within the Districts; and

**WHEREAS**, the Council intends to detach from the Districts the parcels identified in Exhibit A, as a Community Facilities District (CFD No. 2022-2, Ritter Ranch Maintenance Services) is now in place to pay the costs and expenses of operating, maintaining and servicing the improvements located within the District.

NOW THEREFORE, BE IT RESOLVED, THE CITY COUNCIL OF THE CITY OF PALMDALE DOES HEREBY FIND, DETERMINE, RESOLVE, AND ORDER AS FOLLOWS:

**SECTION 1**. Public interest and convenience requires, and it is the intention of this legislative body to detach such property from the Districts.

**SECTION 2**. The parcels to be detached and the Districts they are to be detached from are described in Exhibit A.

**SECTION 3**. Notice is hereby given that June 5, 2024, at 5:00 p.m., or as soon thereafter as the matter may be heard, in the City Council Chambers located at 38300 Sierra Highway, Suite B, Palmdale, California, is the time and place fixed by this legislative body for a Public Hearing on objections to the detachment of parcels from the Districts. Any interested person may file a written protest with the City Clerk prior to the conclusion of the Public Hearing, or, having previously filed a protest, may file a written withdrawal of that protest. A written protest shall state all grounds of objection and a protest by a property owner shall contain a description sufficient to identify the property owned by such property owner. At the Public Hearing, all interested persons shall be afforded the opportunity to hear and be heard.

**SECTION 4**. Pursuant to Section 22609 of the Act, posted and mailed notice may be dispensed with during detachment proceedings and may be initiated by the adoption of this Resolution.

**SECTION 5**. The City Clerk shall certify the adoption of this resolution.

**PASSED, APPROVED** and **ADOPTED** this 15th day of May, 2024.

Approved as to form:

_____
William P. Curley, III
City Attorney

_____
Austin Bishop, Mayor

ATTEST:

_____
Rochelle Scott, City Clerk

I, Rochelle Scott, City Clerk of the City of Palmdale, California, do hereby certify that the foregoing resolution was duly passed, approved, and adopted by the City Council of the City of Palmdale at a regular meeting of said Council held on the 15th day of May, 2024 by the following roll call vote:

AYES: _____

NOES: _____

ABSTAIN: _____ABSENT:_____

Date: _____ _____
Rochelle Scott, City Clerk

**EXHIBIT A**

**THE PARCELS SUBJECT TO DETACHMENT FROM THE DISTRICTS:**

| NAME OF PROPERTY OWNER | ASSESSOR PARCEL NUMBERS |
|---|---|
| RdR Development Holdings, LLC | 3206-020-017 |
| | 3206-026-005 |
| | 3206-026-007 |
| | 3206-027-002 |
| | 3206-027-004 |
| | 3206-027-005 |
| | 3206-027-006 |
| | 3206-027-007 |
| | 3206-027-008 |
| | 3206-027-009 |
| | 3206-027-010 |
| | 3206-027-012 |

**THE DISTRICTS FROM WHICH THE PARCELS WILL DETACH:**

STREETLIGHT MAINTENANCE ASSESSMENT DISTRICT NO. 3

LANDSCAPE MAINTENANCE ASSESSMENT DISTRICT NO. 2006-901

PARK MAINTENANCE AND RECREATION IMPROVEMENT DISTRICT

# City Council Staff Report

**DATE:** **MAY 15, 2024**

**TO:** **HONORABLE MAYOR AND CITY COUNCIL**

**FROM:** **PUBLIC WORKS DEPARTMENT**
**ENGINEERING DIVISION**

**DISTRICT:** **2**

**SUBJECT:** **ADOPT RESOLUTION NO. 2024-050, A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PALMDALE DECLARING ITS INTENTION TO ORDER THE DETACHMENT OF PARCELS FROM CERTAIN BENEFIT ASSESSMENT DISTRICTS**

## RECOMMENDATION

Staff recommends that the City Council:

1. Adopt Resolution No. CC 2024-050, a Resolution of the City Council of the City of Palmdale declaring its intention to order the detachment of parcels from certain benefit assessment districts;

2. Authorize the Mayor to execute Resolution No. CC 2024-050, declaring the City's intention to order the detachment of parcels from certain benefit assessment districts; and,

3. Set the time and place of the public hearing for June 5, 2024, at 5:00 p.m.

## BACKGROUND

The City has, by previous resolution (CC 2022-108) and ordinance (No. 1596), formed the City of Palmdale Community Facilities District No. 2022-2, Ritter Ranch Maintenance Services (the "CFD"). The CFD is authorized to levy and collect special taxes for certain maintenance services, which were meant to replace the City's existing benefit assessment districts as a means of funding these services (drainage facilities maintenance). As such, the parcels included in the CFD are being detached from the benefit assessment district prior to the commencement of the CFD levy.

## DISCUSSION

Based on discussions between the Ritter Ranch developer and the City over the course of the formation of the CFD, a desire was expressed to consolidate services into a single funding source, which is in line with the City's program to utilize community facilities districts to fund services rather than assessment districts. This action will eliminate the potential for duplication of funding by removing parcels from the benefit assessment district that have been included in the CFD. Following the Public Hearing on June 5th, the Council will act on the removal of the parcels.

## FISCAL IMPACT

The cost of the detachment is being funded by the developer's deposit and therefore has no fiscal impact to the City.

## STRATEGIC PLAN

Goal III: Invest in infrastructure to improve community viability.

A. Seek innovative, cost-effective, customer-focused methods of service delivery.

C. Plan and maintain safe and attractive neighborhoods, streets, facilities, and public spaces with exciting programming that promotes active fun for everyone.

| | |
|---|---|
| Prepared by: | Lynn Glidden, P.E., Director of Public Works |
| Certified as to availability of Funds: | Janelle Samson, Director of Operations |
| Approved by: | Ronda Perez, City Manager |
| Approved as to form: | William P. Curley, III, City Attorney |

## ATTACHMENTS

Reso. No. CC 2024-050

CITY COUNCIL
CITY OF PALMDALE, CALIFORNIA
RESOLUTION NO. CC 2024-050

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PALMDALE DECLARING ITS INTENTION TO ORDER THE DETACHMENT OF PARCELS FROM CERTAIN BENEFIT ASSESSMENT DISTRICTS

**WHEREAS**, the City Council ("Council") of the City of Palmdale ("City") has, by previous Resolutions approved the formation of, and annexation to, the City of Palmdale Drainage Benefit Assessment District No. 2006-02 (hereafter referred to as the "District"), pursuant to the provisions of the Benefit Assessment Act of 1982 (the "Act"), being Chapter 6.4 of Part 1 of Division 2 of Title 5 of the Government Code of the State of California (commencing with Section 54703 thereof) (hereafter referred to as the "Act") to pay the costs and expenses of operating, maintaining and servicing the improvements located within the District; and

**WHEREAS**, the Council intends to detach from the District the parcels identified in Exhibit A, as a Community Facilities District (CFD 2022-2, Ritter Ranch Maintenance Services) is now in place to pay the costs and expenses of operating, maintaining, and servicing the improvements located within the District.

NOW THEREFORE, BE IT RESOLVED, THE CITY COUNCIL OF THE CITY OF PALMDALE DOES HEREBY FIND, DETERMINE, RESOLVE, AND ORDER AS FOLLOWS:

**SECTION 1**. Public interest and convenience requires, and it is the intention of this legislative body to detach such property from the District.

**SECTION 2**. The parcels to be detached and the District they are to be detached from are described in Exhibit A.

**SECTION 3**. Notice is hereby given that June 5, 2024, at 5:00 p.m., or as soon thereafter as the matter may be heard, in the City Council Chambers located at 38300 Sierra Highway, Suite B, Palmdale, California, is the time and place fixed by this legislative body for a Public Hearing on objections to the detachment of parcels from the District. Any interested person may file a written protest with the City Clerk prior to the conclusion of the Public Hearing, or, having previously filed a protest, may file a written withdrawal of that protest. A written protest shall state all grounds of objection and a protest by a property owner shall contain a description sufficient to identify the property owned by such property owner. At the Public Hearing, all interested persons shall be afforded the opportunity to hear and be heard.

**SECTION 4**. The City Clerk shall certify the adoption of this resolution.

**PASSED, APPROVED** and **ADOPTED** this 15th day of May, 2024.

Approved as to form:

_____
Austin Bishop, Mayor

ATTEST:

_____
William P. Curley, III
City Attorney

_____
Rochelle Scott, City Clerk

I, Rochelle Scott, City Clerk of the City of Palmdale, California, do hereby certify that the foregoing resolution was duly passed, approved, and adopted by the City Council of the City of Palmdale at a regular meeting of said Council held on the 15th day of May, 2024 by the following roll call vote:

AYES: _____

NOES: _____

ABSTAIN: _____ABSENT:_____

Date: _____ _____
Rochelle Scott, City Clerk

**EXHIBIT A**

**THE PARCELS SUBJECT TO DETACHMENT FROM THE DISTRICT:**

| NAME OF PROPERTY OWNER | ASSESSOR PARCEL NUMBERS |
|---|---|
| RdR Development Holdings, LLC | 3206-020-017 |
| | 3206-026-005 |
| | 3206-026-007 |
| | 3206-027-002 |
| | 3206-027-004 |
| | 3206-027-005 |
| | 3206-027-006 |
| | 3206-027-007 |
| | 3206-027-008 |
| | 3206-027-009 |
| | 3206-027-010 |
| | 3206-027-012 |

**THE DISTRICT FROM WHICH THE PARCELS WILL DETACH:**

DRAINAGE BENEFIT ASSESSMENT DISTRICT NO. 2006-02

# City Council Staff Report

**DATE:** **MAY 15, 2024**

**TO:** **HONORABLE MAYOR AND CITY COUNCIL**

**FROM:** **PUBLIC WORKS DEPARTMENT**
**MAINTENANCE DIVISION**

**DISTRICT:** **ALL**

**SUBJECT:** **ADOPT RESOLUTION NO. CC 2024-056, A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PALMDALE APPROVING THE APPLICATION TO CAL FIRE'S URBAN AND COMMUNITY FOREST GRANT PROGRAM**

## RECOMMENDATION

Staff recommends that the City Council:

1. Adopt Resolution No. CC 2024-056, a Resolution of the City Council of the City of Palmdale approving the application to CAL FIRE's Urban and Community Forest Grant Program; and,

2. Authorize the Mayor to execute Resolution No. CC 2024-056, approving the application to CAL FIRE's Urban and Community Forest Grant Program; and,

3. Authorize the Mayor to execute the CAL FIRE Grant Resolution for funding from the Urban and Community Forestry Grant Program of the California Department of Forestry and Fire Protection.

## BACKGROUND

The City will apply for an Urban Forest Management Plan (UFMP) grant in partnership with TreePeople to develop a comprehensive UFMP that increases tree benefits and reduces risks, ensures cost-efficient maintenance, and promotes community engagement. An adopted resolution is required as part of the grant application.

## DISCUSSION

This grant will fund crucial steps to advance the City's management and improvement of its trees. As a part of this grant, the City would complete an updated inventory, a tree canopy assessment, the development of a UFMP, and tree planting. The UFMP will be

the City's guiding document to ensure that the benefits of a healthy urban forest are available to the community. The UFMP will, at minimum, include a shared vision for the urban forest, an inventory assessment, quantified urban forest benefits, strategic plans, routine maintenance procedures, a street tree planting plan, and an evaluation component. A primary goal of the UFMP will be to increase citywide canopy cover to maximize urban cooling, stormwater mitigation, air pollution mitigation, and improve walkability. Other City policies related to urban forestry will be reviewed and updated to guarantee the continuity of urban forest management. After the UFMP is complete, the grant will fund a community tree-planting campaign. Tree planting sites and species will be guided by the recently completed UFMP. This project will be applied for and completed in partnership with TreePeople.

Once the Resolution is approved by the City Council, City staff and TreePeople will work together to develop a competitive application to submit to CAL FIRE by the end of May 2024.

## FISCAL IMPACT

$0; This action has no fiscal impact. The activities proposed in this project will be funded by the CAL FIRE grant, and there is no matching funds requirement.

## STRATEGIC PLAN

Goal III: Invest in infrastructure to improve community livability.

A. Seek innovative, cost-effective, customer-focused methods of service delivery.

C. Plan and maintain safe and attractive neighborhoods, streets, facilities, and public spaces with exciting programming that promotes active fun for everyone.

| | |
|---|---|
| Prepared by: | Lynn Glidden, P.E., Director of Public Works |
| Certified as to availability of Funds: | Janelle Samson, Director of Operations |
| Approved by: | Ronda Perez, City Manager |
| Approved as to form: | William P. Curley, III, City Attorney |

## ATTACHMENTS

Reso. No. CC 2024-056
Reso CAL FIRE UCF Grant

CITY COUNCIL
CITY OF PALMDALE, CALIFORNIA
RESOLUTION NO. CC 2024-056

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PALMDALE APPROVING THE APPLICATION TO CAL FIRE'S URBAN AND COMMUNITY FOREST GRANT PROGRAM.

**WHEREAS**, the State Department of Forestry and Fire Protection has received federal funds from the USDA Forest Service's Inflation Reduction Act for Urban and Community Forestry; and

**WHEREAS***,* the State Department of Forestry and Fire Protection has been delegated the responsibility for the administration of the program within the State, setting up necessary procedures governing application by local agencies and non-profit organizations under the program; and

**WHEREAS***,* said procedures established by the Department of Forestry and Fire Protection require the applicant to certify by resolution the approval of the application before submission of said application to the State; and

NOW THEREFORE, BE IT RESOLVED, THE CITY COUNCIL OF THE CITY OF PALMDALE DOES HEREBY FIND, DETERMINE, RESOLVE AND ORDER AS FOLLOWS:

**SECTION 1**. Approve the filing of an application for the Urban and Community Forestry grant program funds; and,

**SECTION 2.** Certifies that said applicant has or will have sufficient funds to operate and maintain the project; and,

**SECTION 3.** Certifies that funds under the jurisdiction of the City of Palmdale are available to begin the project.

**SECTION 4.** Certifies that said applicant will expend grant funds before March 30, 2026.

**SECTION 5.** Appoint Ronda Perez, City Manager, or a designee, as an agent of the City of Palmdale to conduct negotiations, execute, and submit all documents including, but not limited to, applications, agreements, amendments, payment requests, and so on, which may be necessary for the completion of the aforementioned project.

**SECTION 6.** The City Clerk shall certify to the adoption of this resolution.

**PASSED, APPROVED** and **ADOPTED** this _____ day of _____, _____.

_____
Austin Bishop, Mayor

Approved as to form:

ATTEST:

_____
William P. Curley, III
City Attorney

_____
Rochelle Scott, City Clerk

I, Rochelle Scott, City Clerk of the City of Palmdale, California, do hereby certify that the foregoing resolution was duly passed, approved, and adopted by the City Council of the City of Palmdale at a regular meeting of said Council held on the _____ day of _____, 20___ by the following roll call vote:

AYES: _____

NOES:_____

ABSTAIN:_____ABSENT:_____

Date: _____ _____
Rochelle Scott, City Clerk

# RESOLUTION

**NOTE: DO NOT CHANGE THE FORMAT OR VERBIAGE IN THIS RESOLUTION FORMAT WITHOUT WRITTEN APPROVAL OF CAL FIRE STAFF.**

Resolution No.: _____

RESOLUTION OF THE _____ OF _____
(*Title of Governing Body*) (*City/County/District/nonprofit*)

FOR FUNDING FROM THE URBAN AND COMMUNITY FORESTRY GRANT PROGRAM OF THE CALIFORNIA DEPARTMENT OF FORESTRY AND FIRE PROTECTION.

WHEREAS, the State Department of Forestry and Fire Protection has received federal funds from the USDA Forest Service's Inflation Reduction Act for Urban and Community Forestry; and

WHEREAS, the State Department of Forestry and Fire Protection has been delegated the responsibility for the administration of the program within the State, setting up necessary procedures governing application by local agencies and non-profit organizations under the program, and

WHEREAS, said procedures established by the Department of Forestry and Fire Protection require the applicant to certify by resolution the approval of application before submission of said application to the State; and

WHEREAS, the applicant will enter an agreement with the State of California to carry out an urban forestry project;

NOW, THEREFORE, BE IT RESOLVED that the _____**:**
*(Title of Governing Body)*

1. Approved the filing of an application for the Urban and Community Forestry grant program funds; and

2. Certifies that said applicant has or will have sufficient funds to operate and maintain the project; and,

3. Certifies that funds under the jurisdiction of _____are available to begin the project.
*(Title of Governing Body)*

4. Certifies that said applicant will expend grant funds prior to March 30, 2026.

5. Appoints _____, or a designee, as agent of the _____to conduct negotiations,
*(Position Title)* *(Title of Governing Body)*
execute and submit all documents including, but not limited to applications, agreements, amendments, payment requests and so on, which may be necessary for the completion of the afore mentioned project.

**Approved and adopted the _____day of _____, 20_____.**

I, the undersigned, hereby certify that the foregoing Resolution, number_____, was duly adopted by the following roll call vote of the _____.
*(City Council/Board of Supervisor/Board of Directors)*

Ayes: _____ Noes: _____ Absent: _____ _____(Clerk signature)

# City Council Staff Report

**DATE:** **MAY 15, 2024**

**TO:** **HONORABLE MAYOR AND CITY COUNCIL**

**FROM:** **ECONOMIC AND COMMUNITY DEVELOPMENT DEPARTMENT**
**ECONOMIC DEVELOPMENT DIVISION**

**DISTRICT:** **ALL**

**SUBJECT:** **ADOPT RESOLUTION NO. CC 2024-051, A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PALMDALE APPROVING A BILLBOARD RELOCATION AGREEMENT WITH LAMAR CENTRAL OUTDOOR, LLC FOR THE REMOVAL OF FOUR EXISTING BILLBOARDS TO CONSTRUCT ONE NEW DIGITAL ADVERTISING DISPLAY**

## RECOMMENDATION

Staff recommends that the City Council:

1. Adopt Resolution No. CC 2024-051, a Resolution of the City Council of the City of Palmdale approving Agreement No. A-8807, a Billboard Relocation Agreement with LAMAR Central Outdoor, LLC (LAMAR) for the removal of four existing billboards to construct one new Digital Advertising Display (DAD); and,

2. Authorize the City Manager, or her designee, to execute the agreement and all related documents, as appropriate, including minimal and/or inconsequential changes.

## BACKGROUND

On March 15, 2023, the City Council adopted Ordinance No. 1603, approving Zoning Ordinance Amendment (ZOA) 21-007, amending Title 17 of the Palmdale Municipal Code (PMC). ZOA 21-007 was necessary to implement the vision of the City's General Plan Update (Palmdale 2045) as well as support new land use patterns, future development, and ensure consistency with applicable laws. In addition, ZOA 21-007 comprehensively modified processes, uses, and development standards to enhance usability, streamline processes, and encourage flexibility.

Chapter 17.88.150 of the PMC outlines requirements for outdoor advertising sign structures (billboards), including the process to approve a Billboard Relocation

Agreement (Agreement) entered into between the City and a billboard owner. The Agreement's primary purpose is to reduce the overall number of outdoor advertising sign structures within the City. The Agreement allows for the relocation of billboards to more suitable locations, provides more attractive and aesthetically pleasing billboard designs, and improves the aesthetic appearance of the City.

## DISCUSSION

In 2023, LAMAR expressed interest in entering into the Agreement with the City. LAMAR proposes to remove four existing static billboards and replace them with one new DAD located along State Route 14, just south of South S. The locations are detailed in Exhibits A and B of the Agreement. Before constructing any outdoor advertising sign structure, LAMAR must obtain a Conditional Use Permit, ensuring that the structure meets all development standards and satisfies certain findings for approval.

Additionally, LAMAR will construct five Government Sign DADs. The City will own and operate three of the signs; one sign will be located at Marie Kerr Park, one sign will be located at Oasis Park/DryTown, and one sign will be located at Pelona Vista Park. The remaining two signs; one located on Rancho Vista Blvd., west of 35$^{th}$ St. West, and one located along State Route 14, south of Palmdale Blvd., will be managed by LAMAR. Exhibit C of the Agreement details the Government Sign locations.

The proposed Agreement aligns with the City's objective of reducing visual clutter by decreasing the number of billboard faces, thus improving the City's aesthetic appeal. Furthermore, it allows the City to promote special events and programs at key locations throughout Palmdale. This ongoing collaboration with LAMAR reflects the City's dedication to enhancing its digital advertising spaces, contributing to its visual appeal and economic growth.

## FISCAL IMPACT

$0; The contractor will construct signs at no cost to the City. The City will be responsible for site preparation. The costs of the site work are expected to be minimal and will be determined during the design phase. Funds are budgeted and available in FY 2024.

## STRATEGIC PLAN

Goal IV: Maintain a desirable community where everyone wants to live, work, and play.

D. Develop and maintain diverse programs and events that inspire growth, pride, and lifelong learning.

| | |
|---|---|
| Prepared by: | Roberto Ramirez, Economic Development Manager |
| Certified as to availability of Funds: | Janelle Samson, Director of Operations |
| Approved by: | Ronda Perez, City Manager |
| Approved as to form: | William P. Curley, III, City Attorney |

**ATTACHMENT**

Reso. No. CC 2024-051
Agrmt No. A-8807 with LAMAR Central Outdoor, LLC
Exh A Agrmt No. A-8807
Exh B Agrmt No. A-8807
Exh C Agrmt No. A-8807

CITY COUNCIL
CITY OF PALMDALE, CALIFORNIA
RESOLUTION NO. CC 2024-051

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PALMDALE APPROVING A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PALMDALE APPROVING A BILLBOARD RELOCATION AGREEMENT WITH LAMAR CENTRAL OUTDOOR, LLC FOR THE REMOVAL OF FOUR EXISTING BILLBOARDS TO CONSTRUCT ONE NEW DIGITAL ADVERTISING DISPLAY

## RECITALS

**WHEREAS,** The City has a compelling interest in making the City attractive to residents, visitors, and business owners and in protecting and improving economic vitality, protecting and enhancing aesthetic character, and promoting traffic safety in, though, and around areas that have a concentration of public facilities and structures;

**WHEREAS,** To accomplish these interests, the City finds it necessary to establish certain classes of government signs, to limit their content and to provide a public convenience by directing motorists and pedestrians to various locations throughout the City;

**WHEREAS**, Lamar Central Outdoor, LLC (the "Company") owns and operates numerous billboard advertising structures within the City of Palmdale;

**WHEREAS,** Company desires to remove four (4) existing billboards ("Existing Billboards") in exchange for the right to erect one Digital Outdoor Display (DAD), in compliance with the Palmdale Municipal Code (PMC);

**WHEREAS**, the California Outdoor Advertising Act, Business and Professions Code § 5200, *et. seq.* (in particular Bus. & Prof. Code § 5412), encourages local entities and display owners to enter into relocation agreements which allow local entities to continue development in a planned manner without expenditure of public funds while allowing the continued maintenance of private investment and a medium of public communications;

**WHEREAS**, the California Outdoor Advertising Act (in particular Bus. & Prof. Code § 5412) specifically empowers, and encourages, local agencies to enter into relocation agreements on whatever terms are agreeable to the City and display owners and to adopt ordinances and resolutions providing for relocation of displays;

**WHEREAS**, the City desires to reduce the number of billboards within the City thereby reducing visual clutter and improving the aesthetic appearance of the City;

**WHEREAS**, Section 17.88.150 (generally) of the PMC allows the relocation or removal of existing outdoor advertising sign structures and incorporation of a DAD upon approval of a Billboard Relocation Agreement (Agreement) and upon compliance with Section 17.88.150 (including but not limited to approval of a conditional use permit);

**WHEREAS**, the City and the Company now wish to enter into an Agreement to memorialize the terms and conditions upon which the Company will have the right to remove certain Existing Billboards and erect one Billboard in accordance with Section 17.88.150, subdvs. (D), of the PMC;

**WHEREAS**, the Company also desires to construct five Government Signs pursuant to PMC Section 17.88.130 and as described in Exhibit C of the Billboard Relocation Agreement;

NOW THEREFORE, BE IT RESOLVED, THE CITY COUNCIL OF THE CITY OF PALMDALE DOES HEREBY FIND, DETERMINE, RESOLVE AND ORDER AS FOLLOWS:

**SECTION 1**. The City Council hereby specifically finds that all of the facts set forth in the Recitals of this Resolution are true and correct.

**SECTION 2.** The Agreement shall be implemented to enhance the aesthetic character of the City, making it attractive for residents, visitors, and business owners.

**SECTION 3.** Pursuant to PMC Section 17.88.130, the City Council authorizes Company to erect the Government Signs in accordance with the Agreement.

**SECTION 4.** To authorize the City Manager, or her designee, to execute the agreement and all related documents, as appropriate.

**PASSED, APPROVED** and **ADOPTED** this 15th day of May 2024.

_____

Approved as to form: Austin Bishop, Mayor

ATTEST:

_____ _____

William P. Curley, III
City Attorney

Rochelle Scott, City Clerk

I, Rochelle Scott, City Clerk of the City of Palmdale, California, do hereby certify that the foregoing resolution was duly passed, approved, and adopted by the City Council of the City of Palmdale at a regular meeting of said Council held on the 15 day of May, 2024 by the following roll call vote:

AYES: _____

NOES: _____

ABSTAIN: _____ ABSENT: _____

Date: _____ _____
Rochelle Scott, City Clerk

# BILLBOARD RELOCATION AGREEMENT

**THIS BILLBOARD RELOCATION AGREEMENT** ("the Agreement") is entered into as of this _____ day of _____, 2023 (the "Effective Date"), by and between the CITY OF PALMDALE, a charter city ("the City"), and LAMAR CENTRAL OUTDOOR, LLC, a Delaware limited liability company ("the Company"). Hereafter the City and the Company are sometimes referred to as "Party" or collectively as the "Parties."

## RECITALS

**WHEREAS**, the Company owns and operates numerous billboard advertising structures within the City of Palmdale;

**WHEREAS,** Company desires to remove four (4) existing billboards as identified in Exhibit "A" to this Agreement (the "Existing Billboards"), in exchange for the right to erect one outdoor advertising sign structure, as described in Exhibit B ("Billboard") in a number not to exceed the net reduction in compliance with the Palmdale Municipal Code (PMC);

**WHEREAS**, the California Outdoor Advertising Act, Business and Professions Code § 5200, *et. seq.* (in particular Bus. & Prof. Code § 5412), encourages local entities and display owners to enter into relocation agreements which allow local entities to continue development in a planned manner without expenditure of public funds while allowing the continued maintenance of private investment and a medium of public communications;

**WHEREAS**, the California Outdoor Advertising Act (in particular Bus. & Prof. Code § 5412) specifically empowers, and encourages, local agencies to enter into relocation agreements on whatever terms are agreeable to the City and display owners and to adopt ordinances and resolutions providing for relocation of displays;

**WHEREAS**, the City desires to reduce the number of billboards within the City thereby reducing visual clutter and improving the aesthetic appearance of the City;

**WHEREAS**, Section 17.88.150 (generally) of the PMC allows the relocation or removal of existing outdoor advertising sign structures and incorporation of DAD's upon approval of a Billboard Relocation Agreement and upon compliance with Section 17.88.150 (including but not limited to approval of a conditional use permit);

**WHEREAS**, the City and the Company now wish to enter into an agreement to memorialize the terms and conditions upon which the Company will have the right to remove certain Existing Billboards and erect one Billboard in accordance with Section 17.88.150, subdvs. (D), of the PMC;

**WHEREAS**, the Company also desires to construct five government signs pursuant to PMC section 17.88.130 and as described in Exhibit C ("Government Signs").

**WHEREAS**, City will own and operate three of the Government Signs identified in Exhibit C as location #1 Marie Kerr Park, #4 Pelona Vista Park, and #5 Dry Town Water Park and Company will own and operate two of the Government Signs identified in Exhibit C as location #2 Rancho Vista Blvd NL280' W/O 25th St. West and #3 14 Freeway EL 1240' S/O Palmdale Blvd;

**WHEREAS,** as a condition precedent to this Agreement, the City at its sole cost and sole liability shall ensure that all underlying properties upon which the Subject Government Signs will sit will be properly zoned for the use of the erection of a double-sided Government Sign, as so contemplated by this Agreement; and

**WHEREAS**, the Company acknowledges that in addition to a valid relocation agreement it must also obtain a conditional use permit in compliance with PMC section 17.88.150(A) and sign permits pursuant to Chapter 17.88 (generally) of the PMC.

## OPERATIVE PROVISIONS

**NOW, THEREFORE**, in consideration of the foregoing Recitals, which Recitals are incorporated herein by reference, and which all Exhibits are herein incorporated, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and consideration of the mutual covenants set forth herein, the Parties hereby agree as follows:

1. Term of Agreement. Unless terminated earlier as provided in this Agreement, this Agreement shall continue in full force and effect for so long as any obligation is owed by either Party pursuant to the terms of this Agreement.

2. Description of Project. The Company shall be entitled to remove the Existing Billboards and erect the Billboard at the locations acceptable to the City, in a number not to exceed the net reduction, and in compliance with the locational requirements of PMC section 17.88.150(B). The Billboard shall be located in substantially the same locations as so contemplated in Exhibit "B", Company shall be entitled to construct the five Government Signs in accordance with PMC section 17.88.130, including its locational requirements. At the Company's sole discretion, it may elect to erect a smaller Billboard. In exchange for, and in consideration of, the City's Agreement to allow the Company to erect the one Billboard and five Government Signs as provided for in this Agreement, the Company shall permanently remove four (4) Existing Billboards and as further described in Section 4.a below.

The City Council has found that this Agreement is in the public interest of the City and its residents. Adopting this Agreement constitutes a present exercise of the City's police power, and this Agreement is consistent with the City's General Plan and the PMC. The proposed relocation sites are compatible with the uses and structures on the site and in the surrounding area. This Agreement is intended to achieve a number of the City's objectives including the reduction of visual clutter by reducing the number of billboards located within the City, without expenditure of public funds, thereby improving the City's

appearance as a whole, while accommodating continued investment in the City and preservation of expectations of developers and property owners and the use of outdoor advertising as an important medium of communication. Additionally, the proposed Billboard would not create a traffic or safety problem with regard to onsite access circulation or visibility, would not interfere with onsite parking or landscaping required by City ordinance or permit and would not otherwise result in a threat to the general health, safety, and welfare of City residents. Accordingly, this Agreement will vest on the Effective Date as listed in the first paragraph and entitle the Parties to the appropriate rights and remedies hereunder. The Parties will not act in a manner as which to impair any portion of this Agreement, including any rights or remedies of the Parties.

3. Government Signs

a. City will own and operate three of the Government Signs identified in Exhibit C as location #1 Marie Kerr Park, #4 Pelona Vista Park, and #5 Dry Town Water Park. The City may relocate #4 Pelona Vista Park, in its sole discretion, to another location within twelve (12) months of the Effective Date.

b. Company will own and operate two of the Government Signs identified in Exhibit C as location #2 Rancho Vista Blvd NL280' W/O 25th St. West and #3 14 Freeway EL 1240’ S/O Palmdale Blvd; In the evening hours between 8 p.m. and 6 a.m., Company must turn down the illumination levels on the Government Sign location #2 Rancho Vista Blvd.

   The Government Signs shall be Daktronics LightDirect digital billboards or another reasonable alternative that allows the same direction and control of light. In its sole distraction, City may allow Company to use another reasonable alternative to Daktronics LightDirect digital billboards.

c. Company will construct #3 14 Freeway EL 1240’ S/O Palmdale Blvd. of the Government Signs first in order to establish a revenue source to fund the City-owned and operated Government Signs. Once #3 14 Freeway EL 1240’ S/O Palmdale Blvd. is fully operational, Company will proceed with the construction of the remaining Government Signs and Billboard as feasible, based primarily upon sourcing power agreements with Southern California Edison (SCE). The construction of the Government Signs shall be completed no later than December 1, 2025. In the event of any delays attributed to SCE that hinder the completion of these signs by the specified date, the Parties will engage in good faith negotiations to mutually agree upon an extension of the deadline.

4. Existing Billboard Removal and Erection of Billboard

a. Permanent Removal of Billboards. In consideration of the City's agreement to permit the Company to erect the Billboard as provided in Section 2 above, the Company hereby agrees to permanently remove all of the Existing Billboards described in Exhibit "A." Removal of the Existing Billboards shall be in accordance with all applicable federal, state and local regulations. The Company shall, at its sole cost and expense, secure all required permits necessary to remove the Existing Billboards, including but not limited to, the City's demolition permits. In consideration for the City's agreement to allow the Company to construct the Billboard as provided in Section 2 above, the Company hereby expressly relinquishes its right to reconstruct or replace the Existing Billboards, subject to the provisions of this Agreement.

b. Timing of Removal. The Company shall apply for demolition permits of the Existing Billboards no later than five years from the Effective Date of this Agreement.

c. In any event the Conditional Use Permit or sign permit for the Billboard is not approved for any reason whatsoever, including but not limited to a project opponent, Caltrans objection, appeal, determination by a Court, or otherwise, Company shall have the right to erect any and all of the Existing Boards that it had removed ("Removed Board(s)"). The erecting of any and all of the Removed Board(s) shall not be unreasonably withheld. The Company shall additionally have no obligation to remove any of the Existing Billboards if the Company, despite reasonable diligence, is unable to obtain the necessary Caltrans permits for the Billboard. Should the City fail to approve the Company's Conditional Use Permit and sign permit applications or should the approval of the Conditional Use Permit and sign permits or Caltrans permits be invalidated, the obligations of the Parties under this Agreement shall terminate and the Agreement shall be of no further force and effect.

5. City Approvals. With the mutual understanding that the Existing Boards will be removed in a timely fashion, the Company shall within five (5) years of the Effective Date of this Agreement, at sole cost and expense of the City, submit for a Conditional Use Permit and a sign permit application(s), with accompanying fees, to the City Planning Department for the development of the Billboard and Government Signs. The Company's ability to construct and install the Billboard and Government Signs are expressly conditioned upon approval of the Conditional Use Permit and necessary sign permits by the City. The Company shall have no obligation to remove any of the Existing Billboards, pursuant to the terms of this Agreement, if the City does not approve the Company's Conditional Use Permit and necessary sign permit applications for the any and all of the Subject DADs, or if a court of competent jurisdiction invalidates the City's approval of the Conditional Use Permit or necessary sign permits. The Company shall additionally have no obligation to remove any of the Existing Billboards if the Company, despite reasonable diligence, is unable to obtain the necessary Caltrans permits for the Government Signs. Should the City fail to approve the necessary sign permit applications

or should the approval of the necessary sign permits or Caltrans permits be invalidated, the obligations of the Parties under this Agreement shall terminate and the Agreement shall be of no further force and effect. The Parties acknowledge that the Government Sign identified in Exhibit C as location #2 Rancho Vista Blvd NL280' W/O 25th St. West will be placed on City-owned property subject to a Property Lease Agreement between the City and the Company. If the Parties do not execute the Lease, the obligations of the Parties under this Agreement shall terminate and the Agreement shall be of no further force or effect.

6. Caltrans Approvals. The parties acknowledge that development of the Billboard and Government Signs is subject to Caltrans permitting authority. Company shall apply for and pursue with reasonable diligence permits from Caltrans for the Billboard and Government Signs. The Company's ability to obtain Caltrans permits is an express condition of the Parties' obligations under this Agreement. City and Caltrans shall cooperate with Company in obtaining the issuance of all discretionary and non-discretionary permits required by Law.

7. CEQA Findings. The City finds that this Agreement, along with the removal of the Existing Billboards and the erection of the Billboard and Government Signs are exempt from CEQA pursuant to Class 3 "Small Structures", 14 CCR Section 15303, which provides in part:

> *Class 3 consists of construction and location of limited numbers of new, small facilities or structures; installation of small new equipment and facilities in small structures; and the conversion of existing small structures from one use to another where only minor modifications are made in the exterior of the structure. The numbers of structures described in this section are the maximum allowable on any legal parcel. Examples of this exemption include but are not limited to:*
>
> *...*
>
> *(c) A store, motel, office, restaurant or similar structure not involving the use of significant amounts of hazardous substances, and not exceeding 2500 square feet in floor area. In urbanized areas, the exemption also applies to up to four such commercial buildings not exceeding 10,000 square feet in floor area on sites zoned for such use if not involving the use of significant amounts of hazardous substances where all necessary public services and facilities are available and the surrounding area is not environmentally sensitive.*

Here, removal and construction of the Existing Billboards and the erection of the Billboard and Government Signs does not exceed 2500 square feet in floor area.

8. Indemnity for Negligence. The Company, as a material part of the consideration to be rendered to the City under the Agreement, shall indemnify the City, agents and employees and any successors or assigns to the City's rights under this Agreement (collectively "the City Parties") and shall hold and save them and each of them harmless from, any and all actions, suits, claims, damages to persons or property, losses, costs, penalties, obligations, errors, omissions or liabilities (hereinafter "Indemnified

Claims and Liabilities") that may be asserted or claimed by any person, firm or entity not a Party to this Agreement, arising out of or in connection with the removal of the Existing Billboards or use and maintenance of the Billboard and Government Signs by the Company, its officers, agents and employees (collectively "the Company Parties"), to the extent any such Indemnified Claims and Liabilities arise from (a) grossly negligent acts or omissions of the Company hereunder, or (b) the Company's grossly negligent performance of or failure to perform any term or covenant of this Agreement, and in connection with the foregoing indemnity:

9. Indemnity for Challenges to the Billboard Relocation Agreement and/or City Approval or Denial of Permits. The Company shall also indemnify, defend and hold harmless the City, from any and all loss, liability, fines, penalties, forfeitures, costs and damages and from any and all claims, demands and actions in law or equity (including attorneys' fees and litigation expenses) (collectively, "Action") by any person or entity, directly or indirectly arising or alleged to have arisen out of or in any way related to the City approval of this Billboard Relocation Agreement or any future City approvals, denials or actions regarding a Conditional Use Permit or sign permit for the relocation of billboards covered by this Billboard Relocation Agreement, including but not limited to claims under the California Constitution or the United States Constitution, from any person not a Party to this Agreement. The City shall have the right to choose, in its sole discretion, legal counsel to represent the City in any such Action. The Company shall pay to the City all costs (including, court costs) and reasonable attorneys' fees incurred by the City in any such Action.

a. The Company shall defend any action or actions filed by any person not a Party to this Agreement in connection with any of said Indemnified Claims and Liabilities and will pay all costs and expenses, including reasonable legal costs and attorneys' fees incurred in connection therewith;

b. The Company shall promptly pay any judgment rendered against the City and the City Parties for any such Indemnified Claims and Liabilities; and the Company shall save and hold the City and the City Parties harmless therefrom; and

c. In the event the City Parties are made a party to any action or proceeding filed or prosecuted against the Company Parties for such Indemnified Claims and Liabilities by a person not a Party to this Agreement, the Company shall pay to the City any and all costs and expenses incurred by the City Parties in such action or proceeding, including but not limited to, legal costs and attorneys' fees.

10. General Provisions.

a. Assignment. The Company may only assign or otherwise transfer this Agreement to any other person, firm, or entity upon presentation to the City of an

assignment and assumption agreement in a form reasonably acceptable to the City Attorney and receipt of the City's written approval of such assignment or transfer by the City Manager; provided, however, that the Company may, from time to time and one or more times, assign this Agreement to one or more persons or entities without the City's approval, but with written notice to the City, as long as the Company, or entities owned or controlled by it have and maintain at least a twenty-five percent (25%) ownership interest in such entities who are the assignees or transferees. After a transfer or assignment as permitted by this Section, the City shall look solely to such assignee or transferee for compliance with the provisions of this Agreement which have been assigned or transferred.

b. Waiver. The waiver by any Party of any breach of any term, covenant or condition herein contained shall not be deemed to be a waiver of any other term, covenant or condition, or of any subsequent breach of the same term, covenant or condition.

c. Notices. All notices and other communications required or permitted to be given hereunder shall be in writing and shall be sent by: (a) certified or registered mail, postage pre-paid, return receipt requested, (b) personal delivery, or (c) a recognized overnight carrier that provides proof of delivery, and shall be addressed as follows:

If to the Company:

Lamar Central Outdoor, LLC
Attn: Vice President / General Manager
104 Enterprise Parkway
Lancaster, CA 93535

With a Copy to:

Stream Kim Hicks Wrage & Alfaro PC
Attn: Ted Stream, Esq.
3403 Tenth Street, Suite 700
Riverside, CA 92501

If to the City:

City of Palmdale
Attn: Director of Economic and Community Development
38250 Sierra Highway
Palmdale, CA 93550

With a Copy to:

City of Palmdale
Attn: City Manager
38300 Sierra Highway
Palmdale, CA 93550

City of Palmdale
Attn: City Attorney
38300 N. Sierra Highway, Suite A
Palmdale, CA 93550

Notices shall be deemed effective upon receipt or rejection only.

d. Authority to Enter Agreement. All Parties have the requisite power and authority to execute, deliver and perform the Agreement. All Parties warrant that the

individuals who have signed the Agreement have the legal power, right, and authority to make this Agreement and bind each respective Party.

e. Amendment/Modification. No supplement, modification, or amendment of this Agreement shall be binding unless executed in writing and signed by all Parties.

f. Miscellaneous. This Agreement embodies the entire Agreement between the Parties and supersedes any prior or contemporaneous understandings between the Parties related to the Agreement. If any provision of this Agreement is held to be invalid, the balance shall remain binding upon the Parties. This Agreement shall be interpreted in accordance with its plain meaning, and not in favor of or against either Party. This Agreement shall be construed according to the laws of the State of California.

g. Attorneys' Fees. In the event of litigation between the Parties arising out of this Agreement, the prevailing Party shall be entitled to recover its reasonable attorneys' fees and other costs and expenses incurred, including attorneys' fees on appeal, and all other reasonable costs and expenses for investigation of such action, including the conducting of discovery, in addition to whatever other relief to which it may be entitled.

h. Time is of the Essence. Time is of the essence of each and every provision of this Agreement.

i. Integration. This Agreement embodies the entire agreement between the Parties and supersedes any prior or contemporaneous understandings between the Parties related to the Agreement.

j. Governing Law. This Agreement shall be interpreted and enforced according to, and the Parties' rights and obligations governed by, the domestic law of the State of California, without regard to its laws regarding choice of applicable law.

k. Counterparts. This Agreement may be signed in counterparts, electronic or originals, each of which shall constitute an original.

[SIGNATURES ON FOLLOWING PAGE]

**IN WITNESS WHEREOF**, the Parties have caused this Agreement to be executed on the date set forth below.

"The City"

CITY OF PALMDALE, a Charter City

By: _____
Ronda Perez, City Manager

ATTEST:

By: _____
Roxanne Faber, Acting City Clerk

APPROVED AS TO FORM:

By: _____
William P. Curley, III, City Attorney

"The Company"

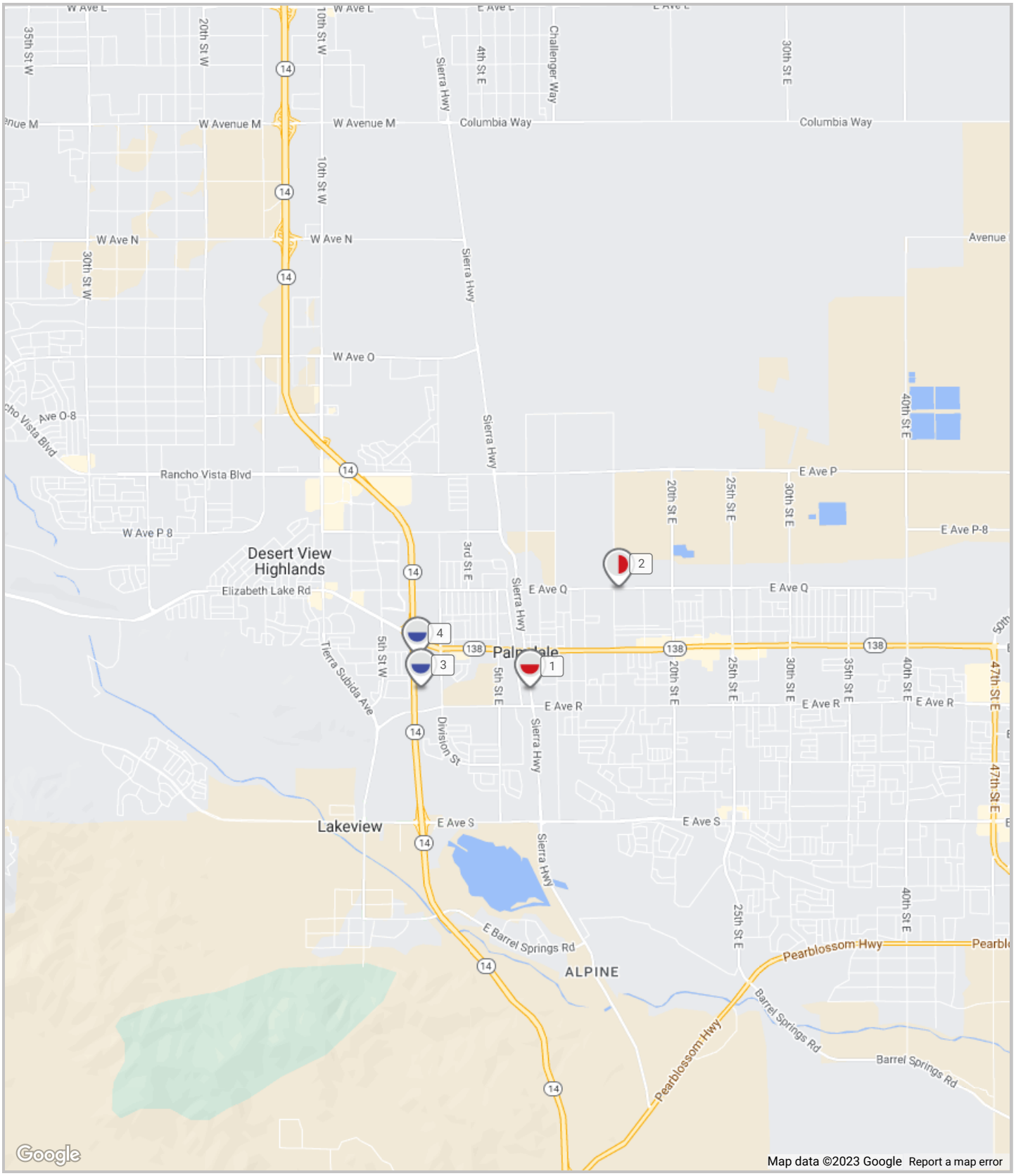
LAMAR CENTRAL OUTDOOR, LLC

By: _____
Vice President / General Manager

ATTEST:

By: _____
Real Estate Manager

# EXHIBIT A
## EXISTING BILLBOARDS



# LOCATION LIST

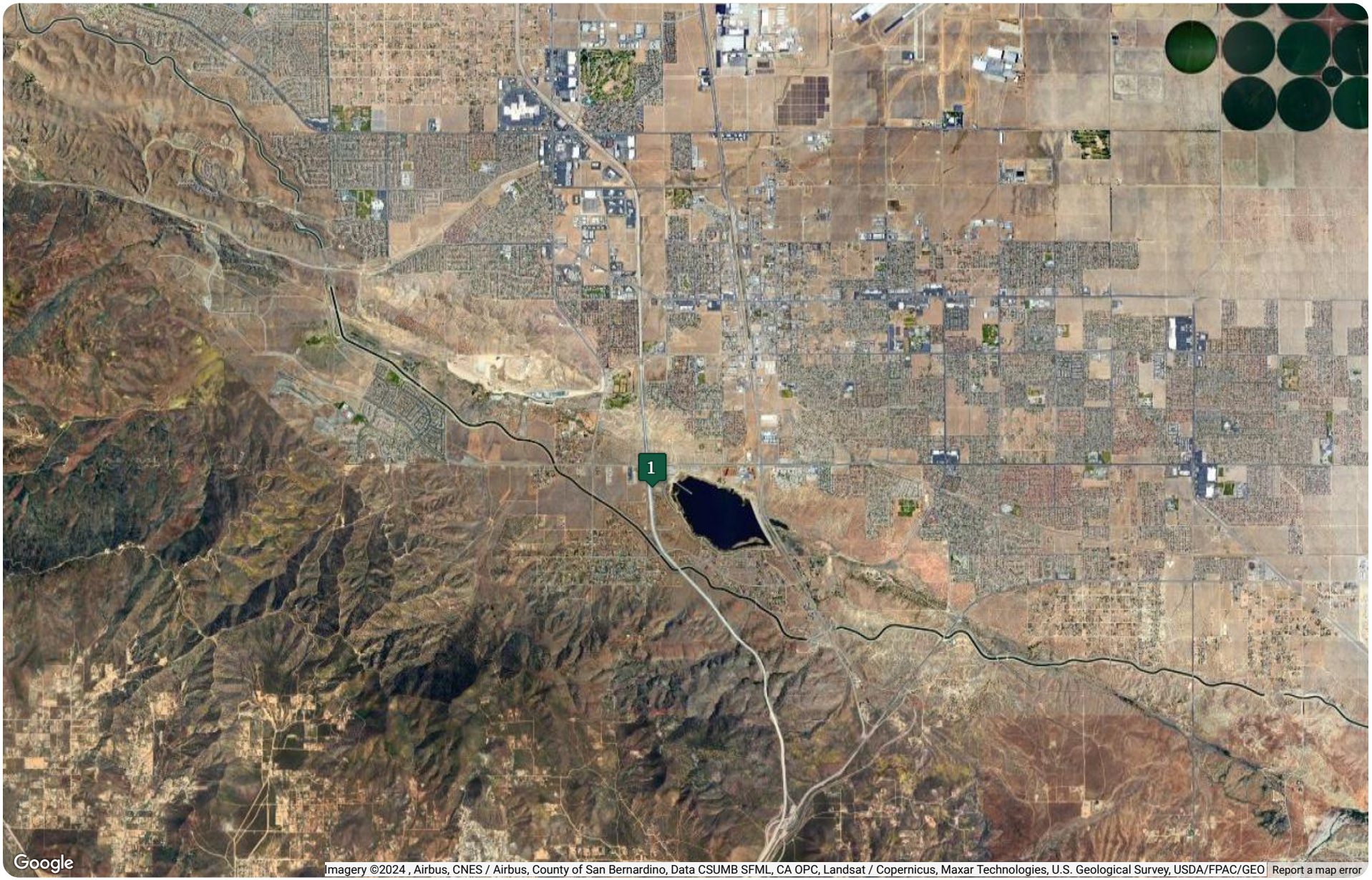
## PROPOSAL FOR TAKE DOWNS IN THE CITY OF PALMDALE

*Impression values based on: Total Population

| Map Icon | Label | Panel # | Geopath Id | Media/Style | Facing | H x W | *Weekly Impressions | Illum. |
|---|---|---|---|---|---|---|---|---|
| | 1 | 4311 | 350545 | Poster / Retro | North | 10' 6" x 22' 9" | 118,396 | YES |
| **Location:** SIERRA HWY WL 500' N/O AVENUE R<br>**Current Advertiser:** TREVINO LAW FIRM | | | | | | | | |
| | 2 | 4484 | 350575 | Poster / Retro | West | 10' 6" x 22' 9" | 22,993 | NO |
| **Location:** AVENUE Q NL @ 15TH STREET EAST<br>**Current Advertiser:** JACOBY & MEYERS | | | | | | | | |
| | 3 | 4331 | 350547 | Permanent Bulletin / Regular | North | 14' 0" x 48' 0" | 312,344 | YES |
| **Location:** AV FWY 14 EL 2000' S/O PALMDALE BLVD<br>**Current Advertiser:** TOWN CENTER SURGERY | | | | | | | | |
| | 4 | 4341 | 350549 | Permanent Bulletin / Regular | North | 14' 0" x 48' 0" | 304,280 | YES |
| **Location:** AV FWY 14 EL 1000' S/O PALMDALE BLVD<br>**Current Advertiser:** THE LAW OFFICE OF JESSE P. DURAN | | | | | | | | |

**Total Weekly Impressions: 758,013**

# EXHIBIT B
## BILLBOARD



# LOCATION LIST

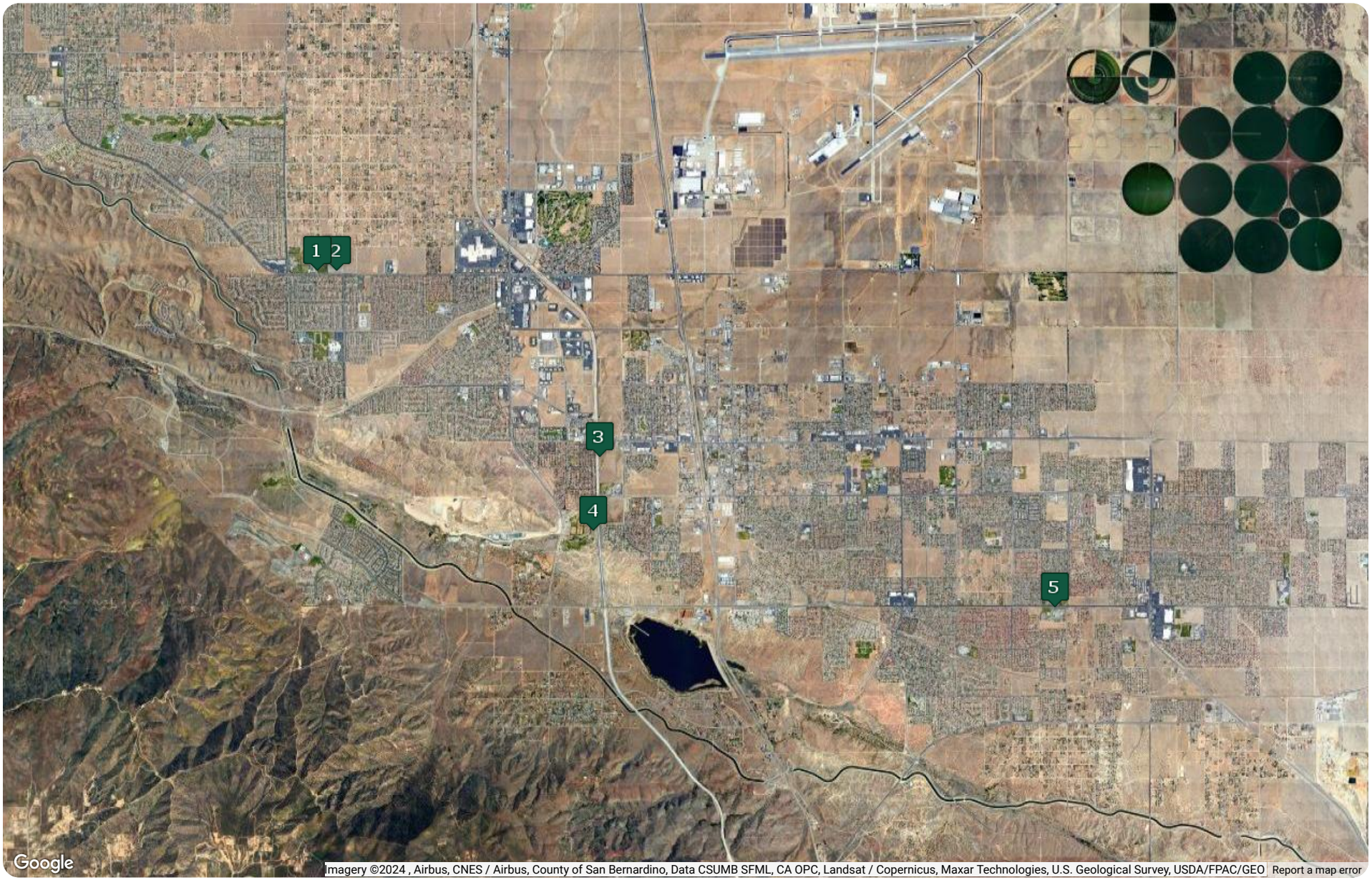
## LAMAR OUTDOOR NEW BUILD CITY OF PALMDALE 2024

**Store Location(s)**

# 1 - 14 Freeway EL 920' S/O Avenue S 14' x 48' V-Shaped Digital Display, 34.555289,-118.131703

# EXHIBIT C

## GOVERNMENT SIGNS



# LOCATION LIST

## CITY OF PALMDALE GOVERNMENT SIGNS LAMAR TO BUILD 2024

**Store Location(s)**

# 1- Marie Kerr Park 34.601969 , -118.177863- City of Palmdale will own and operate this sign

# 2- Rancho Vista Blvd NL 280' W/O 25th St. West 10' 6" x 36' Back to Back Digital, 34.60198, -118.17542 Lamar Outdoor will own and operate this sign

# 3 -14 Freeway EL 1240' S/O Palmdale Blvd 14' x 48' V-Shaped Digital Display, 34.578154, -118.133120- Lamar Outdoor will own and operate this sign

# 4 -Pelona Vista Park 34.57116, -118.13425- City of Palmdale will own and operate this sign

# 5- Dry Town Water Park 34.55786, -118.06181- City of Palmdale will own and operate this sign

**MINUTES**
**CITY COUNCIL/SA/HA**
**CITY HALL COUNCIL CHAMBER**
**38300 SIERRA HIGHWAY,**
**SUITE B PALMDALE, CALIFORNIA**
**MAY 1, 2024**

**www.cityofpalmdale.org**

1) CALL MEETING TO ORDER

Mayor Bishop called the meeting to order at 5:01 pm.

Note: All City Council memberships are reflected in their City Council titles.

2) ROLL CALL MAYOR BISHOP, MAYOR PRO TEM LOA, COUNCILMEMBERS OHLSEN, BETTENCOURT, ALARCÓN COMMISSIONERS FRAGA-SAENZ, BETTS

PRESENT: Austin Bishop, Richard J. Loa, Eric Ohlsen, Laura Bettencourt, Andrea Alarcón, Christina Fraga-Saenz, Dianne Betts.
ABSENT: None.

3) PLEDGE OF ALLEGIANCE AND MOMENT OF SILENCE

Mayor Pro Tem Loa led the pledge of allegiance.

The following observances were acknowledged: Mental Health Awareness Month, Military Appreciation Month, Municipal Clerk's Week, Public Service Recognition Week, and Peace Officers Memorial Day.

4) PUBLIC COMMENTS:
CONSENT CALENDAR(S), APPOINTMENT(S), NEW BUSINESS, AND CLOSED SESSION:

Public Comments: None.

5) JOINT CONSENT CALENDAR CC/HA

5.1) Approve Project Authorizations under two Master Services Agreements with Absolute International Security, Inc. for unarmed security guard services; one for the Housing Authority of the City of Palmdale in the combined amount not to exceed $2,879,620; and one for the City of Palmdale in the combined amount not to exceed $9,174,920, each for a term of three years with option for two additional one-year terms.

Motion: Approve Project Authorizations under two Master Services Agreements with Absolute International Security, Inc. for unarmed security guard services; one for the Housing Authority of the City of Palmdale in the combined amount not to exceed $2,879,620; and one for the City of Palmdale

in the combined amount not to exceed $9,174,920, each for a term of three years with option for two additional one-year terms.
Moved by Laura Bettencourt, seconded by Eric Ohlsen.

Vote: Motion carried (7-0)
Yes: Austin Bishop, Richard J. Loa, Eric Ohlsen, Laura Bettencourt, Andrea Alarcón, Christina Fraga-Saenz, Dianne Betts.

Mayor Bishop adjourned the Housing Authority at 5:15 pm.

6) CONSENT CALENDAR

6.1) Waive full reading of the Resolution(s) to be considered and voted on at this meeting. (This allows for reading the title only in lieu of reciting the entire text).

6.2) Receive and file the Monthly and Quarterly Investment Activity Reports for March 2024.

6.3) Receive and File the Annual Report on Development Impact Fees for the Fiscal Year Ended June 30, 2023, and adopt findings to commit funds held in the Littlerock Drainage Fee Fund, Fire Facilities Fee Fund, and Sewer Upgrade Fee fund.

6.4) Adopt Resolution No. CC 2024-047, a Resolution of the City Council of the City of Palmdale approving the application for Local Streets and Roads Funds authorized under Article 8 of the Transportation Development Act.

6.5) Award Construction Agreement with Comet Electric, Inc. for PN 867/868, Traffic Signal Modification at Avenue M and 20th Street East and 30th Street East, for a not to exceed amount of $1,309,129 for a term of 75 working days from the date of Notice to Proceed.

6.6) Adopt Resolution No. CC 2024-032, a Resolution of the City Council of the City of Palmdale directing the preparation of the annual Engineer's Report for the continuation of the annual levy of assessments and designating the Engineer of Work for fiscal year 2024-2025 for the City of Palmdale Drainage Benefit Assessment Districts No. 1 and No. 2006-02.

6.7) Adopt Resolution No. CC 2024-035, a Resolution of the City Council of the City of Palmdale directing the preparation of the annual Engineer's Report for the continuation of the annual levy of assessments and designating the Engineer of Work for fiscal year 2024-2025 for the City of Palmdale Landscape Maintenance Assessment Districts and Annexations, Park Maintenance and Recreation Improvement District, and Streetlight Maintenance Assessment Districts and Annexations.

6.8) Adopt Resolution No. CC 2024-046, a Resolution of the City Council of the City of Palmdale adopting a list of projects for Fiscal Year 2024-2025 funded by Senate Bill 1: The Road Repair and Accountability Act of 2017.

6.9) Approve the Second Amendment to Agreement with Sully Miller Contracting Co., for PN 698, Avenue R Complete Streets and Safe Routes Project for a not to exceed amount of $14,245,965, including an additional $1,152,731 contract value and $1,000,000 contingency per the original term of four hundred (400) calendar days.

6.10) Approve the minutes from the April 17, 2024 meeting.

Motion: Approve the items listed on the Consent Calendar. Moved by Richard J. Loa, seconded by Laura Bettencourt.

Vote: Motion carried (5-0)
Yes: Austin Bishop, Richard J. Loa, Eric Ohlsen, Laura Bettencourt, Andrea Alarcón.

7) PUBLIC HEARING

7.1) Public Hearing to receive public comments on the 2024-2025 Draft Action Plan programming estimated $4,454,266 in Consolidated Plan Funds; review, approve and submit the 2024-2025 Action Plan; and execute documents related to the submission of the Action Plan and subrecipient agreements.

Mayor Bishop opened the Public Hearing. Management Analyst Bartlett presented the staff report. Testimony: None.
Mayor Bishop closed the Public Hearing.

Motion: Approve the recommendations and findings as listed in the staff report. Moved by Andrea Alarcón, seconded by Eric Ohlsen.

Vote: Motion carried (5-0)
Yes: Austin Bishop, Richard J. Loa, Eric Ohlsen, Laura Bettencourt, Andrea Alarcón.

7.2) Adopt Resolution No. CC 2024-048, a Resolution of the City Council of the City of Palmdale, approving a form of Density Bonus Agreement with Maison's Palmdale Blvd 150, LLC, to facilitate the construction of Tentative Tract Map 83359 located on the south side of Palmdale Boulevard between 50th Street East and 55th Street East (APN: 3023-002-084).

Mayor Bishop opened the Public Hearing.

City Clerk Scott read the title of Resolution No. CC 2024-048. City Attorney

Curley presented the staff report.

Councilmember Alarcón asked for an overview of Senate Bill 9. City Attorney Curley provided an overview.

Hunt Braly of Poole and Shaffery and Kevin Harbison of Ravello Holdings were there to answer questions regarding the project.

The following individuals provided public input in opposition of the project: Mike Parker, Janet Parker, Carli Galasso, and Corrine Stephenson,

Tina Hughes spoke regarding endangered species and notification of the project.

Tori spoke regarding the approval of the project at the Planning Commission meeting.

Mayor Bishop closed the Public Hearing.

The Council and staff discussed public outreach, the appeal process, notification, application, and signage.

Councilmember Alarcón requested a report back on some recommendations for future development and the public engagement process.

Further discussion followed regarding land use and the general plan, the housing element, public notice, litigation related to density bonus law, and a review of the Planning Commission meeting.

Motion: Continue to June 5, 2024, with specific instruction that the City Attorney's Office review the Planning Commission hearing for any misdirection. Moved by Richard J. Loa, seconded by Eric Ohlsen.

Vote: Motion carried (5-0)
Yes: Austin Bishop, Richard J. Loa, Eric Ohlsen, Laura Bettencourt, Andrea Alarcón.

8) APPOINTMENT

8.1) Discussion, nomination, and appointment of one (1) Council Member to the Antelope Valley Fair Authority.

City Manager Perez provided an oral report on this item.

Mayor Pro Tem Loa spoke regarding his involvement with the fair, and the Multi-Agency Regional Resiliency Center (MARRC). Discussion ensued regarding the benefits of being appointed to the Antelope Valley Fair Authority.

Motion: Appoint Mayor Pro Tem Loa to the Antelope Valley Fair Authority. Moved by Laura Bettencourt, seconded by Austin Bishop.

Vote: Motion carried (5-0)
Yes: Austin Bishop, Richard J. Loa, Eric Ohlsen, Laura Bettencourt, Andrea Alarcón.

9) CITY MANAGER'S REPORT

City Manager Perez reported on the following: Farmer's Market at Oasis Park; Cinco De Mayo Festival; Inkwell Book and Art Festival; Organics Waste Workshop; an award of merit received for our sustainable transportation plan through the American Planning Association; swearing-in of City Prosecutor's who will enforce the municipal code; and the summer concert lineup.

10) COUNCIL REPORTS, ANNOUNCEMENTS AND REQUESTS FOR FUTURE AGENDA ITEMS

Councilmember Alarcón reported on the District 5 town hall meeting and requested the following: 1) reinvigorate the grant program for Measure AV; 2) add a future agenda item amending the Municipal Code to require that each Councilmember from each respective district gets mandatory one appointment to the Measure AV Committee; and 3) encouraged City Manager Perez to bring back a letter to the next meeting written to Caltrans to initiate the conversation on how to cooperatively implement some traffic and speed mitigation measures and public safety measures to protect residents and those who visit our community along Pearblossom Highway.

Councilmember Ohlsen contacted Captain Zagorski of the California Highway Patrol and requested stats and data to incorporate into the Caltrans letter; held a meeting with the Association of Los Angeles Deputy Sheriff's (ALADS) president regarding relieving pressure from the deputies who are understaffed and overworked; suggested joining Lancaster's lawsuit on the Sheriff's Department and the County; attended Sheriff's Boosters car show; reported on stakeholders tour held in Pueblo, Colorado for the Transportation Technology Center; AV Edge Summit; met with Vicky Ventura regarding opportunities for City and Chamber to work together to support small businesses; participated on the iServe Youth Leadership panel; and the Brightline.

Mayor Pro Tem Loa reported on the AV Hispanic Chamber of Commerce lunch and learn event; AV Edge Summit; West Antelope Valley Education Foundation Dinner; announced the 26th Anniversary of the Palmdale Station celebration on June 26th; attended the Poppy Festival; and suggested a meeting with Assemblyman Carrillo, Assemblyman Lackey, and the Senator regarding Pearblossom Highway and fatalities.

Councilmember Bettencourt spoke regarding Highway 138 speed and safety; AV Chambers Waste Management landfill tour; Palmdale Sheriff's Booster car and bike show; Vet at the Park event; SIFI Network event; encouraged citizens to enjoy City parks; and requested an update on Visit Palmdale.

Mayor Bishop reported on his visit to the Transportation Technology Center in Pueblo, Colorado; met with Joe Ennis of Positive Lifestyle regarding organizing clean ups; attended AV Edge Summit; Vets 4 Veterans event; attended NCTC meeting and discussed the 14 freeway completion; participated on the iServe Youth Leadership panel; attended Poppy Festival; Oasis Park car show; Brightline West ground breaking ribbon cutting; Farmer's Market at Oasis Park; Vet at the Park; and

discussed traffic and safety in town and suggested a safe driving campaign.

Councilmember Alarcón asked the Council to consider naming the Farmer's Market after Kimble Goodman.

Mayor Pro Tem Loa spoke regarding the Sheriff's Booster meeting, where they discussed the graffiti problem; suggested a possible agreement with property owners to remove graffiti; and suggested a graffiti campaign to stress to parents educating the parents on their responsibility if their child is caught doing graffiti.

City Manager Perez discussed the Request For Proposal (RFP) for private property graffiti abatement and the enforcement program for big box stores that sell spray paint. Discussion continued regarding graffiti abatement and code enforcement efforts.

11) NON-AGENDA PUBLIC COMMENTS:

The following individuals provided public comments: Eugene Hernandez spoke regarding May Day and AV students making public comments. Councilmember Alarcón provided an update on what the City is doing regarding housing and homelessness. Councilmember Bettencourt responded to the statement of Mr. Hernandez.

Public comments continued: Azrael, Moorish Science Temple of America, introduced himself to the Council; Diego Rubalcava-Alvarez spoke regarding the bus system and safety, legislative platform, and the Israeli war; Yul Gevargis spoke regarding the Hamas and Israeli war, graffiti, and traffic on Pearblossom Highway; Vicky Ventura, AV Chamber of Commerce, thanked Councilmember Ohlsen for scheduling the meeting with City Manager Perez regarding helping small businesses, spoke about graffiti solutions for small businesses, and thanked individuals for attending the car show at Oasis park; Chuck Murphy spoke about the District 5 townhall meeting; and Sylvia spoke regarding Camacho Auto Sales.

12) ADJOURN

Mayor Bishop adjourned the meeting at 7:00 pm to May 15, 2024 at 5:00 pm in the City Hall Council Chamber located at 38300 Sierra Highway, Suite B, Palmdale, California

PASSED, APPROVED, and ADOPTED this 15th day of May 2024.

_____
Austin Bishop, Mayor

ATTEST:

_____
Rochelle Scott, City Clerk

PALMDALE

*a place to call home*

May 1, 2024

AUSTIN BISHOP
*Mayor*

RICHARD J. LOA
*Mayor Pro Tem*

ANDREA ALARCÓN
*Councilmember*

LAURA BETTENCOURT
*Councilmember*

ERIC OHLSEN
*Councilmember*

38300 Sierra Highway

Palmdale, CA 93550-4798

Tel: 661/267-5100

TDD: 661/267-5167

Honorable Mayor and City Councilmembers

Re: California Density Bonus law; City of Palmdale Density Bonus law; City of Palmdale Obligations to approve the Density Bonus Agreement between the City and Maison's Palmdale Blvd 150, LLC

Honorable Mayor and City Council:

The City Council was presented with a statutory Density Bonus Agreement at its regularly scheduled meeting held on April 17, 2024. The findings and actions by the City of Palmdale Planning Commission supported the conclusion that the City Council, pursuant to State and City law, were legally obligated to approve the agreement as presented. Further, the Planning Commission had previously approved the Tentative Tract Map, and the right to develop the project was vested and certain as no appeal of the decision was filed. The neighborhood residents proximate to the approved development attended the City Council meeting and expressed concerns about the development project and the Density Bonus Agreement.

While acknowledging that the City Council most likely had no authority over the approved development project, and little, if any authority to reject and deny the Density Bonus Agreement, the City Council directed staff to review all the circumstances and law, to determine if any discretion remained available to the City Council, and, if so, what that discretion was.

The following discussion reviews the material and substantive facts, history and applicable law on density bonus issues and concludes that this evidence does not provide any discretion to the City Council to either deny the project or to reject the Density Bonus Agreement. The ability of a city to deny a density bonus has been very limited by the enactments of the State Legislature, as will be discussed hereunder. Absent a clearly demonstratable risk to health, safety and welfare of the community, the City Council must approve the request for a density bonus and for concessions and/or waivers from development standards. As noted, there are three available benefits to an applicant seeking to use the density bonus law: they can seek all of them or, instead, only some of the three (density, increase, concessions, or waivers). In the present matter, the applicant is seeking only two of the three potential benefits. These are the concessions to use

asphalt shingles to help manage costs, to assist the project in being available at affordable rates and the reduction in parking space size, for the same reason. These reasons have been found to not present health, safety, and welfare risks and found to be material as to allowing for the units to be marketed as affordable units to future residents. These findings, as made by the Planning Commission and staff at the prior project hearings, leave no lawful basis upon which the City Council can deny the proposed Density Bonus Agreement.

## I. Applicable City Law.

As required by the California Government Code § 65915, the City of Palmdale has, by its Ordinance 1603 (2023), adopted its density bonus agreement law. Section 17.25.020 of the Palmdale Municipal Code (attached as Attachment 2) sets forth the City law.

Subsection 17.25.020.F; guides the City Council's public hearing review of the requested agreement. In summary, the Planning Commission recommends to the City Council its decision as to approving or denying the proposed agreement. The Planning Commission did so and recommended that the City Council approve the agreement. The Planning Commission report is attached as Attachment 2 hereto.

The City Council; must then determine if, as recommended by the Planning Commission, the agreement satisfies both the City General Plan, Specific Plan and approvals and California Government Code § 65915. The evidence, the Planning Commission review and recommendation and staff's analysis all support the finding that both elements are fully satisfied by the facts and the law.

## II. Planning Commission Appeal Period has lapsed.

The Tentative Tract Map (not before the City Council for action now) was heard and acted on by the Planning Commission on March 14, 2024. Palmdale Municipal Code § 17.20.090 holds that a Land-Use decision becomes final after ten (10) days have passed after the approval. That ten (10) days ended on March 24, 2024. No appeal was filed; therefore, the approval is vested and not subject to reconsideration, revision, augmentation or denial. It is complete and the landowners can proceed without further City of Palmdale regulations or discretionary actions by the City Council, Planning Commission or staff. The Planning Commission review and action packet is attached as Attachment 3.

**III. State Law regulating density bonus awards (California Government Code § 65915)**

The City of Palmdale ordinance requires satisfaction of California Government Code § 65915 (Attachment 4, pages six - nine) are instructive as to the mandatory obligation for the City, via the City Council, to approve the agreement. The Los Angeles County Fire Department, Building and Safety division of the Economic and Community Development Department found no health, safety and welfare issues exist as a result of using asphalt shingles or a smaller vehicle parking space, and that these cost saving measures advanced the financial ability of the developers to build this affordable housing project. On such a basis there is no cause to deny this agreement request.

**IV. Is this property in a designated Fire Zone?**

No, this property is not within a designated Fire Zone. This further supports the allowance of asphalt shingles as no substantive health safety or welfare concerns present as caused or resulting from this change.

**V. Is there judicial precedent that supports the requirement that a density bonus agreement that conforms to law must be approved by the City Council, or does the City face judicial penalty?**

Yes, there is a large body of precedent that makes clear the City Council's duty to approve density bonus agreements that conform to law. Attachment 5 presents an overview of the cases addressing California Government Code § 65915.

Attached as Attachment 6, the case titled Bankers Hill 150 v City of San Diego serves as a well explained treatise as to the purpose of density bonus programs and the judicial guidance as to the duty for a city to approve them. The headnotes on pages one through six are very clear and instructive as to the rights and duties of the City, public, and applicant.

**VI. Why is this project located here?**

The Housing Element component of the City's General Plan (adopted after public hearing on January 12, 2022) designates, on a City-wide basis, residential areas suitable for the City's residential needs. The public input then helped the Planning Commission, and thereafter the City Council, establish the City-wide plan for land use, including areas for residential use. A city cannot prohibit a landowner/developer from seeking the benefits of affordable housing or density bonus plans.

The present landowner/developer has chosen to pursue the legal obligations imposed on the City by the State as to facilitating, encouraging, and not impeding housing, especially affordable housing development.

**VII. Do the facts and testimony presented by the Planning Commission findings and recommendations, and the legal authority available to the City Council, support the denial of this requested Density Bonus Agreement?**

No. The evidence, testimony and determinations found by the Planning Commission, together with the recommendations and conclusions of the Los Angeles County Fire Department, the Building and Safety division of the Economic and Community Development Department do not support the denial of the request for approval of the requested density bonus agreement.

**VIII. Conclusion.**

Based on the facts, law and testimony provided as applicable to this Density Bonus Agreement requested, it is recommended that the City Council approve this agreement as presented.

Sincerely,

William P. Curley III

William P. Curley III

City Attorney

**ATTACHMENTS**

1. City Council Staff Report and Reso. No. CC 2024-048
2. PMC Section 17.25.020 Density Bonus Agreements
3. Planning Commission Staff Report and Reso. No. PC-2024-004
4. Government Code Section 65915
5. Case law examples
6. Bankers Hill 150 v City of San Diego

# City Council Staff Report

**DATE:** **MAY 1, 2024**

**TO:** **HONORABLE MAYOR AND CITY COUNCIL**

**FROM:** **ECONOMIC AND COMMUNITY DEVELOPMENT DEPARTMENT PLANNING DIVISION**

**DISTRICT:** **4**

**SUBJECT:** **ADOPT RESOLUTION NO. CC 2024-048; APPROVING A FORM OF DENSITY BONUS AGREEMENT WITH MAISON'S PALMDALE BLVD 150, LLC, TO FACILITATE THE CONSTRUCTION OF TENTATIVE TRACT MAP 83359 LOCATED ON THE SOUTH SIDE OF PALMDALE BOULEVARD BETWEEN 50th STREET EAST AND 55th STREET EAST (APN: 3023-002-084)**

## RECOMMENDATION

The Planning Commission recommends that the City Council:

1. Receive public testimony regarding the proposed Density Bonus Agreement (AGR) 24-0002 (A-8767);

2. Adopt Resolution No. CC 2024-048 approving a form of Density Bonus Agreement (AGR) 24-0002 (A-8767); and,

3. Authorize City Manager or her designee to exercise the option to amend Density Bonus Agreement (AGR) 24-0002 (A-8767), including minimal and or/non-substantial changes.

## BACKGROUND

On March 14, 2024, the Planning Commission adopted Resolution No. PC-2024-004 approving Tentative Tract Map 83359 and recommending City Council approve a form of Density Bonus Agreement (AGR) 24-0002 (A-8767). The Tentative Tract Map will subdivide a 20-acre parcel into 66 parcels to facilitate the future construction of approximately 190 dwelling units comprised of a detached single-family dwelling unit, an accessory dwelling unit (ADU), and a junior accessory dwelling unit (JADU) on the 64 lots dedicated for residential uses. The two remaining parcels will be used for a drainage basin and a parcel dedicated to a shared common area for recreation purposes.

Ten percent of the units will be available to households with incomes that do not exceed the maximum income of low-income households in Los Angeles County, as determined by the California Department of Housing and Community Development. The request includes two concessions from the development standards as allowed by the State Density Bonus Law (California Government Code Section 65915).

On April 17, 2024, the City Council conducted a public hearing and continued the item to May 1, 2024.

## DISCUSSION

A density bonus is an increase in the overall number of housing units that a developer may build on a site in exchange for providing affordable housing. State Density Bonus Law, pursuant to Section 65915 of the California Government Code, offers incentives that are intended to encourage the development of affordable housing, including up to an 80 percent increase in density.

The project site has a General Plan Land Use designation and zone of Single-Family Residential 3 (SFR 3, 7,000 square foot lots; up to six dwelling units per acre). The project site is approximately 20 acres, and the maximum density is 120 detached single-family residential units. Density Bonus Law requires that when 10 percent of all units are for low-income households, the City must grant a 20 percent density bonus over the base density, which would allow an additional four units for this development. Although the maximum density for the project site is 120 units, the residential development does not require an increased density and the applicant proposes to construct a total of 64 detached single-family residential units and 127 ADU's and JADU's for a total of 191 residential units. Under California Fair Housing Laws, the proposed ADUs and JADUs are not subject to a jurisdiction's density requirements.

Of the 191 units proposed, 10 percent of the units are required to be reserved for low-income households. Additionally, the owner has requested cost-saving concessions in accordance with Government Code Section 65915, *et seq*. and PMC Section 17.25.020 (Density Bonus Agreements), as follows:

1. To allow composite shingles for roofing material.

2. To allow a reduction of the required garage width of 20 feet.

The Housing Division has determined that granting the concessions listed above will result in actual and identifiable cost reductions to provide affordable housing. In addition, the proposed project will contribute to the City's Regional Housing Needs Assessment (RHNA) allocation.

**FIGURE 1 – AERIAL MAP**

## FISCAL IMPACT

$0; The applicant paid the fees associated with the submittal of the application.

## STRATEGIC PLAN

Goal III: Invest in infrastructure to improve community livability.

E. Transform housing inventory to meet the changing lifestyle and market demands.

| | |
|---|---|
| Prepared by: | Brenda Magaña, Planning Manager |
| Certified as to availability of Funds: | Janelle Samson, Director of Operations |
| Approved by: | Ronda Perez, City Manager |
| Approved as to form: | William P. Curley, III, City Attorney |

## ATTACHMENTS

Reso. No. CC 2024-048
Reso. No. PC-2024-004

CITY COUNCIL
CITY OF PALMDALE, CALIFORNIA
RESOLUTION NO. CC 2024-048

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PALMDALE APPROVING DENSITY BONUS AGREEMENT (AGR) 24-0002 (A-8767) WITH MAISON'S PALMDALE BLVD 150, LLC; TO FACILITATE THE FUTURE CONSTRUCTION OF APPROXIMATELY 191 DWELLING UNITS COMPRISED OF 64 DETACHED SINGLE-FAMILY DWELLING UNITS AND 127 ACCESSORY DWELLING UNITS AND JUNIOR ACCESSORY DWELLING UNITS AND DRAINAGE BASIN LOCATED ON THE SOUTH SIDE OF PALMDALE BOULEVARD BETWEEN 50th STREET EAST AND 55th STREET EAST (APN: 3023-002-184)

**WHEREAS,** Maison's Palmdale Blvd 150, LLC has filed an application requesting the Planning Commission recommend City Council approve a form of Density Bonus Agreement (AGR) 24-0002 (A-8767), described herein (hereinafter "Application"); and

**WHEREAS,** The Application applies to a parcel located on the south side of Palmdale Boulevard, between 50th Street East and 55th Street East indicated on the Los Angeles Assessor roll as Assessor Parcel Number 3023-002-184, legally described on Exhibit A hereto and shown on the map attached as Exhibit B.

**WHEREAS,** On March 14, 2024, the Planning Commission of the City of Palmdale conducted a duly noticed public hearing on the Application and recommended City Council approval of the Application on that date; and

**WHEREAS,** on April 17, 2024, the City Council of the City of Palmdale conducted a duly noticed public hearing on the Application and continued the item to May 1, 2024, City Council meeting; and

**WHEREAS,** On May 1, 2024, the City Council of the City of Palmdale conducted a duly noticed public hearing on the Application and concluded said hearing on that date. Evidence, both written and oral, was duly presented and considered by the City Council at the aforesaid public hearing, including but not limited to, the staff report dated May 1, 2024; and

**WHEREAS,** All legal prerequisites to the adoption of this Resolution have occurred.

NOW THEREFORE, BE IT RESOLVED, THE CITY COUNCIL OF THE CITY OF PALMDALE DOES HEREBY FIND, DETERMINE, RESOLVE AND ORDER AS FOLLOWS:

**SECTION 1.** The foregoing recitals are true and correct.

**SECTION 2.** The City Council hereby finds as follows with respect to the environmental document prepared for the project:

A Pursuant to the California Environmental Quality Act (CEQA), an Initial Study, Mitigated Negative Declaration, and Mitigation Monitoring and Reporting Program were prepared for the project finding that, with the incorporation of mitigation measures, the project would not have a significant impact on the environment. The proposed project has the potential to have a significant effect on the environment in the following areas: Biological Resources, Cultural Resources, Geology/Soils, and Greenhouse Gas Emissions. Mitigation measures established by the MMRP will be implemented to reduce potential impacts to a level that is less than significant.

B The custodian of records for all other materials which constitute the record of proceedings upon which the City Council's decision is based, is the Planning Manager of the City of Palmdale. These documents are available for public review in the Planning Division of the City of Palmdale located at 38250 Sierra Highway, Palmdale, California 93550, telephone (661) 267-5200.

**SECTION 3.** Based upon substantial evidence presented to the City Council during the above-referenced May 1, 2024, public hearing, including public testimony, and written and oral staff reports, the City Council specifically finds as follows:

A The proposed development agreement conforms with the maps and policies of the General Plan or any applicable Specific Plan;

The proposed project involves the subdivision of a 20-acre parcel for the future construction of 191 dwelling units comprised of detached single-family residences, accessory dwelling units (ADU) and junior accessory dwelling units (JADU). The project is consistent and compatible with both the General Plan and Zoning Ordinance as modified with the DBA, as described in Exhibits C and D. The project site has a General Plan Land Use designation and zone of Single Family Residential 3 (SFR 3), which allows up to six dwelling units per acre. Per State Density Bonus Law, when 10 percent of all units are reserved for low-income households, the City must grant a 20 percent density bonus over the base density, which would allow an additional 4 units for this development. Although the maximum density for the project site is 120 units, the residential development does not require an increased density and the applicant proposes to construct a

total of 64 detached single-family residential units and 127 ADU's and JADU's for a total of 191 residential units. Under California Fair Housing Laws, the proposed ADUs and JADUs are not subject to a jurisdiction's density requirements.

Of the 191 units proposed, 10 percent of the units are required to be reserved for low-income households. Furthermore, Density Bonus Law allows for the granting of concessions to the development standards in order to achieve cost-savings in the production of affordable housing. With the exception of the concessions related to design, the project will comply with the development standards for the SFR 3 zone.

B The proposed Density Bonus Agreement complies with the requirements of California Government Code Section 65915 et. seq. (DBA)

The project site has a General Plan Land Use designation and zone of SFR 3. Density Bonus Law requires that, when 10 percent of all units are for low-income households, the City must grant a 20 percent density bonus over the base density, which would allow an additional 4 units for this development. Although the maximum density for the project site is 120 units, the residential development does not require an increased density and the applicant proposes to construct a total of 64 detached single-family residential units and 127 ADU's and JADU's for a total of 191 residential units.

Of the 191 units proposed, 10 percent of the units are required to be reserved for low-income households. Additionally, the owner has requested cost-saving concessions in accordance with Government Code Section 65915, et seq. and PMC Section 17.25.110, as follows:

1. To allow composite shingles for roofing material.

2. To allow a reduction of the required garage width of 20 feet.

**SECTION 4.** Based on the findings and conclusions set forth in Sections 1, 2, and 3 above, the City Council approves a form of (AGR) 24-0002 (A-8767) set forth in Exhibit C.

**SECTION 5.** The City Clerk shall certify to the adoption of this resolution.

**PASSED, APPROVED** and **ADOPTED** this 1st day of May, 2024.

Approved as to form:

_____
Austin Bishop, Mayor

ATTEST:

_____
William P. Curley, III
City Attorney

_____
Rochelle Scott, City Clerk

I, Rochelle Scott, City Clerk of the City of Palmdale, California, do hereby certify that the foregoing resolution was duly passed, approved, and adopted by the City Council of the City of Palmdale at a regular meeting of said Council held on the 1st day of May, 2024, by the following roll call vote:

AYES: _____

NOES:_____

ABSTAIN:_____ABSENT:_____

Date: _____ _____
Rochelle Scott, City Clerk

## EXHIBIT A

## LEGAL DESCRIPTION FOR DENSITY BONUS AGREEMENT 24-0002 AND TENTATIVE TRACT MAP 83359

THE LAND REFERRED TO HEREIN BELOW IS SITUATED IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

LOT 10 OF TRACT NO, 2916, IN THE CITY OF PALMDALE, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 31, PAGE 13, OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

APN: 3023-002-184

**EXHIBIT B**

**AERIAL MAP FOR TENTATIVE TRACT MAP 83359**

OFFICIAL BUSINESS )
Document entitled to free )
Recording per California )
Government Code Section 27383 )
)
RECORDING REQUESTED BY AND )
WHEN RECORDED MAIL TO: )
)
City of Palmdale )
38300 Sierra Highway, Suite C )
Palmdale, CA 93550 )
Attn: City Clerk )

---

SPACE ABOVE THIS LINE IS FOR RECORDER'S USE

APN: 3023-002-184

**DENSITY BONUS HOUSING AGREEMENT**
**Maison's Palmdale Blvd 150, LLC**
**Agreement No. A-8767**

THIS DENSITY BONUS HOUSING AGREEMENT (this "Agreement"), dated as of _____ ____, 2024, is entered into by and between the City of Palmdale, a municipal corporation of the State of California (the "City"), and Maison's Palmdale Blvd 150, LLC, a Delaware limited liability company and/or its assigns (the "Owner"), as follows:

**RECITALS**

A. The Owner is the owner of a fee interest in certain real property located in the City of Palmdale, County of Los Angeles, State of California, identified as APN 3023-002-184, located at the Southeast corner of East Palmdale Boulevard and Hudsonia Street and legally described in Exhibit "A" attached hereto and incorporated by reference (the "Property").

B. The Owner will construct a 191-unit affordable housing development, 64 three- and four-bedroom single family homes, 64 one-bedroom junior accessory dwelling units, 48 two-bedroom accessory dwelling units ("ADUs"), 15 three-bedroom ADUs, and associated landscaping and parking ("Residential Development" of "Project").

C. The Owner proposes construction of a rental housing development of 189 units for low-income individuals and families and two manager's unit. At least ten percent (10%) of the units that count towards the Project's base density as defined pursuant to Government Code section 65915 (64 units) will be available to and occupied by households whose incomes do not exceed the maximum income of low-income households in Los Angeles County as determined by the California Department of Housing and Community Development.

D. Under California Government Code Section 65915, *et seq*. and Palmdale Municipal Code Section 17.25.020, the City must, upon the request of an applicant, grant a density bonus and/or certain incentives/concessions and/or waivers/modifications for any development applicant that seeks and agrees to construct a minimum number of housing units that are affordable to low or very low-income households (the "Density Bonus Law").

E. The subject site has a General Plan Land Use Designation of Single Family Residential 3 (up to 6 dwelling units per acre) and is zoned Single Family Residential 3 (up to 6 dwelling units per acre). The Density Bonus Law requires that, when an applicant includes at least 10% low-income units, the City must grant a 20% density bonus over the base density, which would allow an additional 4 units per acre in the Residential Development. Because ADUs do not count towards density, the Project does not require a density bonus. To provide for affordable housing cost of the low-income units and fit the Project on the Property as designed, the Owner has requested a cost-saving concession and a waiver in accordance with California Government Code Section 65915, *et seq*. and Palmdale Municipal Code Section 17.25.020, as follows:

a. A concession pursuant to Palmdale Municipal Code Section 17.37.010.D.7, to allow composite shingles for the roofing material.

F. The Owner has also requested one waiver to development standards that, if applied, would have the effect of physically precluding the construction of the Project in accordance with California Government Code Section 65915, subdivision (e)(1), as follows:

a. A waiver to the minimum garage length in Palmdale Municipal Code Section 17.37.010.C.3.b to allow a minimum garage length of 20 feet.

G. The City and the Owner enter into this Agreement pursuant to and in accordance with California Government Code Section 65915, *et seq*., and Section 17.25.020 of the Palmdale Municipal Code, in order to provide housing for lower income households.

H. The City finds that granting the concession and waiver listed under Recital E and F, above, will result in actual and identifiable cost reductions to provide for affordable housing cost, will not have an adverse impact upon public health and safety, the physical environment, or any property that is listed in the California Register of Historical Resources, and is consistent with state and federal law. The City also finds that the Residential Development is consistent with the General Plan.

**NOW, THEREFORE**, in consideration of the mutual covenants and provisions contained herein, the parties hereto agree as follows:

## AGREEMENT

1. Recitals. The Recitals set forth above are true and correct, and incorporated herein.

2. Definitions. For purposes of this Agreement, the terms listed below shall have the meanings thereafter specified:

a. "Adjusted for Household Size Appropriate for the Unit" means a household of two persons in the case of a one-bedroom unit, three persons in the case of a two-bedroom unit, and four persons in the case of a three-bedroom unit.

b. "Affordable Rent" means a rent that, when added to the Utility Allowance, does not exceed thirty (30) percent of sixty (60) percent of the Los Angeles County median income as determined annually by the California Department of Housing and Community Development, Adjusted for Household Size Appropriate for the Unit.

c. "Affordable Unit" means a dwelling unit that will be offered for rent exclusively to an Income Eligible Household at an Affordable Rent pursuant to this Agreement.

d. "Director" means City's Department of Neighborhood Services Director, or his or her designee.

e. "Income Eligible Household" means a Low-Income Household which is eligible to rent a particular Affordable Unit.

f. "Low Income Household" shall have the meaning ascribed to it under California Health and Safety Code Section 50079.5. The upper income limit for Low Income Households shall be the income limits for such households published annually by the California Department of Housing and Community Development with adjustments for household size.

g. "Management Plan" means a plan prepared by the Owner and approved by the Director describing in detail the management of the Affordable Units, including marketing of the Affordable Units, tenant selection criteria and process, waiting list management, application of Utility Allowances in setting Affordable Rents, and similar details of the operation, annual monitoring inspections and file review, and a schedule of initial rents.

h. "Occupancy Date" means the earlier to occur of (i) issuance of a Certificate of Occupancy by the City or (ii) issuance of a Temporary Certificate of Occupancy by the City.

i. "Other Units" means units in the Residential Development that are not Affordable Units. The Other Units may be subject to Other Regulatory Agreements limiting the income of tenants and the rents that can be charged but are not subject to this Agreement.

j. "Other Regulatory Agreement" means any regulatory agreement that specifies maximum rents for units and income limits for tenants in the Residential Development other than this Agreement.

k. "Owner" means the person or entity defined as such in the introductory paragraph of this Agreement and includes all successors and assigns of that person or entity.

l. "Property" shall have the meaning defined in Recital A, as more particularly described in Exhibit "A" attached hereto and incorporated herein.

m. "Residential Development" shall have the meaning given in Recital B.

n. "Utility Allowance" means an amount designated annually by the City as a reasonable estimate of the cost of utilities for the Affordable Unit, for purposes of calculating the applicable Affordable Rent.

3. Approvals. The Residential Development shall be developed in accordance with all applicable provisions of the Palmdale Municipal Code.

4. Affordable Units. The Owner hereby covenants and agrees that at least ten percent (10%) of the base units in the Residential Development (at least 7 units) shall be rented exclusively to Low-Income Households at an Affordable Rent. The Affordable Units also may be subject to an additional affordable housing regulatory agreement ("Other Regulatory Agreement"). In the event of a conflict between this Agreement and Other Regulatory Agreement, the Other Regulatory Agreement shall control. Notwithstanding the foregoing, the rents of the Affordable Units shall not exceed the Affordable Rents as defined in this Agreement and the Term shall be no less than 55 years.

5. Affordable Rents. Affordable Rents for Affordable Units, including Utility Allowances, shall be based on the Los Angeles County Area Median Income published in Title 25, California Code of Regulations, Section 6932 by the California Department of Housing and Community Development, as may be amended from time to time. Affordable Rents may not be increased more frequently than annually to reflect increases in Area Median Income.

6. Term of Affordability Covenants. The covenants to restrict the rental of the Affordable Units in accordance with this Agreement shall remain in effect for a term commencing on the Occupancy Date and continuing for fifty-five (55) years (the "Term"). Prior to recording of this Agreement, the Owner must deliver to the City a Lenders Consent and Subordination Agreement ("Lender Consent"), in the form appended to this Agreement, from each lender that will hold a security interest in the Property. Such Lender Consents shall be recorded as a substantive part of this Agreement.

7. Management Plan. The Owner shall submit the Management Plan for the Director's consideration and approval at least one hundred eighty (180) days prior to the date that

the Owner applies for a Certificate of Occupancy for the Residential Development. Such approval shall not be unreasonably withheld. In addition to other components, the Management Plan shall contain the following:

i. Whenever an Affordable Unit becomes available, the Director shall be notified promptly in writing.

ii. The Owner shall conduct affirmative marketing of the Affordable Units, as they become available from time to time, including wide circulation of information of the availability of Affordable Units for rent during the marketing period required by the Management Plan.

iii. The Owner shall determine the eligibility of Low-Income Households that may lease the Affordable Units in accordance with the Management Plan.

8. Changes in Tenant Income. A tenant who initially qualified as a Low Income Household, but who, due to an increase in income, no longer qualifies as a Low Income Household shall pay as rent an amount that is the least of the amount that would be payable by the tenant under (i) low-income housing tax credit regulations, (ii) State or local law, or (iii) thirty percent (30%) of the household's adjusted gross income.

9. Utilization of Affordable Rental Units. All Affordable Units required by this Agreement shall be leased or rented and fully utilized in accordance with this Agreement; notwithstanding any other provision of law to the contrary, for the Term, no Affordable Unit shall be withdrawn from the market or otherwise held vacant except as may be necessary for reasonable maintenance and repair.

10. No Sublease. A tenant occupying an Affordable Unit may not sublet the unit without the written permission of both the Owner and the City. The City shall not grant permission to lease, rent, or sublet the unit if it finds that the prospective tenant or occupant is not an Income Eligible Household. Any individual who subleases an Affordable Unit in violation of the provisions of this Agreement shall be required to forfeit to the City all monetary amounts so obtained.

11. Lease Agreement. A fully executed copy of the lease agreement for each Affordable Unit, which shall comply with the provisions of this Agreement, shall be delivered to the City's Department of Neighborhood Services, Housing Division within thirty (30) days after the date of its execution.

12. Maintenance of Units. The Owner shall: (a) maintain and operate all units on the Property so as to provide decent, safe, and sanitary housing consistent with federal housing quality standards and the Palmdale Municipal Code; (b) make any required repairs or provide any required cleanup; and (c) provide the Affordable Units with the same levels of services and maintenance as are provided to any of the other dwelling units on the Property.

13. Annual Report. The Owner shall maintain complete and accurate records pertaining to the Affordable Units and shall prepare and provide the Director with a written annual report commencing one year after the Occupancy Date and continuing every year for fifty-five (55) years, regarding the rental status of the units. The report shall include information regarding the name, address, and income of each resident of the Affordable Units, identify the number of bedrooms of the unit and the monthly rent paid by the tenant. So long as permitted by law, concurrently with the submittal of each annual report to the City, the Owner shall pay a monitoring fee to the City in the amount of Fifteen Hundred Dollars ($1,500) with a maximum increase of 2% per year to defray the City's cost of monitoring the Owner's compliance with this Agreement. The Owner's failure to make such required payment shall be a default under this Agreement.

14. Federal and State Laws. Notwithstanding the above provisions, nothing contained herein shall require the Owner or the City to do anything contrary to or refrain from doing anything required by Federal and State laws and regulations promulgated thereunder applicable to the construction, management, maintenance, and rental of Affordable Units in the City of Palmdale.

15. Prohibition Against Discrimination. The Owner shall not discriminate against any tenant or potential tenant on the basis of sex, color, race, ethnicity, religion, ancestry, national origin, age, pregnancy, marital status, family composition, sexual orientation, or the potential or actual occupancy of minor children. The Owner further agrees to take affirmative action to ensure that no such person is discriminated against for any of the above-mentioned reasons.

16. Indemnification. The Owner shall defend, indemnify, and hold harmless the City of Palmdale and its officers, agents, employees, representatives, and volunteers from and against third party actions, including any loss, liability, claim, or judgment, relating solely to this Agreement, including those claims that arise out of: (a) a breach of this Agreement by the Owner; (b) related in any manner to the Owner's administration of this Agreement; or (c) arising out of the City's interest in this Agreement or Affordable Units. This indemnification shall not apply to claims arising out of the negligence or willful misconduct of the City, its officers, agents, employees, representatives, or volunteers.

17. City's Right to Inspect Units and Documents. The City may inspect the Affordable Units (subject to the tenant's privacy rights and lease provisions) and any documents or records relating thereto, at any reasonable time in order to determine the Owner's compliance with this Agreement.

18. Successors and Assigns. This Agreement and its covenants and conditions shall run with the land and be binding upon and inure to the benefit of the City and the Owner, and their respective successors, owners by deed, deed in-lieu of foreclosure, foreclosure or otherwise, and assigns. The City reserves the right to designate another public agency within the City of Palmdale to perform the City's obligations or to exercise the City's rights under this Agreement.

19. Notices. 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 on the date received or the date delivery was refused as indicated on the return receipt, as follows:

To Owner: Maison's Palmdale Blvd. 150, LLC
2007 Cedar Avenue
Manhattan Beach, CA 90266
Attn: Kevin Harbison

with a copy to: Cox, Castle, & Nicholson, LLP
50 California Street
Suite 3200
San Francisco, CA 94111
Attn: Linda C. Klein

To City: City of Palmdale
38250 Sierra Highway
Palmdale, California 93550-4798
Attn: Director of Neighborhood Services

with a copy to: City of Palmdale
38300 Sierra Highway
Palmdale, California 93550-4798
Attn: City Attorney

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

20. Governing Law. The laws of the State of California shall govern this Agreement. Any legal action brought under this Agreement must be instituted in the Superior Court of the County of Los Angeles, State of California, in an appropriate municipal court in that County, or in Federal District Court in the Central District of California.

21. Default. Failure or delay by either party hereto to perform any term or provision of this Agreement, which is not cured within thirty (30) days after receipt of notice from the other party, constitutes a default under this Agreement. The party who so fails or delays must immediately commence to cure, correct, or remedy such failure or delay, and shall complete such cure, correction, or remedy with due diligence. The injured party shall give written notice of default to the party in default specifying the default complained of by the injured party. Except as required to protect against further damages, the injured party may not initiate proceedings against the party in default until thirty (30) days after giving such notice. Failure or delay in giving such notice shall not constitute a waiver of any default, nor shall it change the time of default. If applicable, the City agrees to accept cures tendered by the Investor Limited Partner of the Owner within the cure periods provided in this Agreement.

22. Remedies.

a. Any individual who rents (including subleasing) an Affordable Unit in violation of the provisions of this Agreement shall be required to forfeit to the City all monetary amounts so obtained.

b. The City may institute any appropriate legal actions or proceedings necessary to ensure compliance with this Agreement, including, but not limited to, actions for injunctive relief or damages.

c. It is agreed and understood that the covenants to maintain the Affordable Units as set forth herein are a requirement of the Palmdale Municipal Code and as a condition to receiving zoning and parking concessions/incentives and waivers under the Palmdale Municipal Code, the Owner agrees that a breach of the covenants to maintain the Affordable Units as affordable housing for the Term specified herein constitutes a violation of the Palmdale Municipal Code, subject to enforcement by all legally available means.

23. Attorneys' Fees. In any action brought to declare the rights granted herein or to enforce or to interpret any of the terms of this Agreement, the prevailing party shall be entitled to an award of reasonable attorneys' fees and costs in an amount determined by the court.

24. Non-Waiver. Failure to exercise any right either party hereto may have or be entitled to in the event of default hereunder shall not constitute a waiver of such right or any other right in the event of a subsequent default.

25. Further Assurances and Recordation. The parties hereto shall cause this Agreement to be recorded in the Official Records of the County of Los Angeles. The Owner shall execute any further documents consistent with the terms of this Agreement, including documents in recordable form and do such further acts as may be necessary, desirable, or proper as the City shall from time to time find necessary or appropriate in order to effectuate its purpose in entering into this Agreement.

26. Entire Agreement. This Agreement, including any Lender's Consent and Subordination Agreements, and all attached Exhibits, constitutes the entire agreement between the parties hereto. This Agreement may be executed in counterparts, each of which shall be deemed an original, and all of which together shall constitute one and the same instrument. Each party to this Agreement acknowledges that no representations, inducements, promises, or agreements, orally or otherwise, have been made by any party, or anyone acting on behalf of any party, which are not embodied herein, and that any other agreement, statement, or promise not contained in this Agreement shall not be valid or binding. This Agreement may be amended only by written instrument signed by both the City and the Owner.

27. Third Party Beneficiaries. There are no third-party beneficiaries of or to this Agreement.

28. Amendment of Agreement.

a. Generally. This Agreement may be amended from time to time in whole or in part by mutual consent of the original parties hereto or their successors in interest, in accordance with this Agreement, the Palmdale Municipal Code, and the Density Bonus Law.

b. Administrative Amendments. Notwithstanding subdivision (a) of this Section, any amendment to this Agreement, whether requested by the Owner or by the City, which does not relate to the Term; the number, percentage, or type of Affordable Units; or the number or type of any incentives or concessions given by the City, may be determined by the Director to be an administrative amendment and, if so, the Director shall approve the administrative amendment without notice or hearing, and this Agreement and its pertinent exhibits shall be automatically amended without further action by the parties hereto. A memorandum of the amendment shall be executed and recorded in order to reflect such administrative amendment.

29. Counterparts. This Agreement may be executed by each party hereto on a separate signature page, and when the executed signature pages are combined, shall constitute one single instrument.

[*signatures follow*]

IN WITNESS WHEREOF, the City and the Owner have executed this Agreement as of the date set forth above.

**CITY**

CITY OF PALMDALE,
a municipal corporation

By:

_____
Ronda Perez
City Manager

Dated:

_____

ATTEST:

By:

_____
Roxanne Faber
City Clerk

APPROVED AS TO FORM:

By:

_____
William P. Curley III
City Attorney

KANE, BALLMER & BERKMAN
City Special Counsel

By:

_____
Todd C. Mooney

**OWNER**

MAISON'SPALMDALE BLVD 150, LLC
a Delaware limited liability company,
its Administrative General Partner

Ravello Holdings, Inc.,
a California limited liability company,
its Manager

By:_____
Dilip K. Ram
President

Dated: _____

AHA High Desert MGP, LLC,
a California limited liability company,
its Managing General Partner

Affordable Housing Access, Inc.
a California nonprofit public benefit
corporation
its Manager

By:_____
Vasilios Salamandrakis
President

Dated: _____

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 Los Angeles )

On _____, before me, _____, a Notary Public, 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 _____

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 Los Angeles )

On _____, before me, _____, a Notary Public, 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 _____

**FORM OF**
**LENDER'S CONSENT AND SUBORDINATION AGREEMENT**

NOTICE: THIS LENDER'S CONSENT AND SUBORDINATION RESULTS IN YOUR SECURITY INTERESTS IN THE PROPERTY BECOMING SUBJECT TO AND OF A LOWER PRIORITY THAN THIS DENSITY BONUS HOUSING AGREEMENT

The undersigned (the "Lender"), as owner and holder of security interests ("Security Interests") evidenced by that certain [Deed of Trust With Absolute Assignment of Leases and Rents, Security Agreement and Fixture Filing] made by the Owner as trustor in favor of _____ as beneficiary, dated as of _____ and recorded on _____ as Instrument No._____ in the Official Records of the County of Los Angeles, State of California, hereby acknowledges its consent to the terms and provisions of this Density Bonus Housing Agreement. The undersigned further agrees that its Security Interests are and shall unconditionally be and remain at all times junior, subordinate, and subject to the terms, covenants, conditions, and restrictions of Sections 4, 5, and 6 of this Density Bonus Housing Agreement, provided that in consideration of the Lender's covenants and agreements contained in this Agreement, the City and its designated agencies hereby agree for the benefit of the Lender that concurrently with any notice from the City to the Owner that a default or breach exists under the terms of this Density Bonus Housing Agreement, the City shall send a copy of such notice to the Lender, and the Lender shall have the right, but not the obligation, to cure any defaults within thirty (30) days after the expiration of any cure period set forth in the notice from the City to the Owner regarding such Owner default. The provisions of this consent are intended to supplement, and not to limit, waive, modify, or replace those provisions of law pertaining to notice and cure rights of junior lenders including, without limitation, those set forth in California Civil Code Sections 2924b and 2924c. The Lender intentionally and unconditionally waives, relinquishes, and subordinates the lien or charge of the Security Interests in favor of this Density Bonus Housing Agreement.

AGREED AND ACKNOWLEDGED:

Dated as of: _____ "LENDER"

By. _____
Name: _____
Title: _____

[*notarized signature required*]

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 Los Angeles )

On _____, before me, _____, a Notary Public, 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 _____

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 Los Angeles )

On _____, before me, _____, a Notary Public, 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 _____

EXHIBIT A

Legal Description of Property

THE LAND REFERRED TO HEREIN BELOW IS SITUATED, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

LOT 10 OF TRACT NO, 2916, IN THE CITY OF PALMDALE, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 31, PAGE 13, OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

APN: 3023-002-184

# 17.25.020 Density bonus agreements.

(A) Purpose. This Section provides procedures and requirements for the consideration of density bonus agreements for the purposes specified in, and as authorized by, Section 65915 et seq. of the California Government Code.

(B) Applicability. A density bonus agreement may only be requested for development projects consisting of five or more dwelling units, prior to any density increase.

(C) Review Authority. The Planning Commission shall review an application for a development agreement at a public hearing pursuant to PMC § 17.20.020 (Notification procedures) and shall forward a recommendation, which may include amendments, to the City Council.

(D) Application Procedure.

(1) Only a qualified applicant may file an application for a density bonus agreement. For the purpose of this Section, a qualified applicant is a person who has a legal or equitable interest in the real property that is the subject of the density bonus agreement, or an authorized agent of a person who has a legal or equitable interest. The Director may require an applicant to submit a title report or other evidence satisfactory to the Director to verify the applicant's interest in the real property and the authority of the agent to act on behalf of the applicant.

(2) An application for a density bonus agreement shall be made on a form provided for that purpose by the Department, along with the required fee and/or deposit established by City Council resolution.

(3) Where a density bonus request does not involve an existing development, the application for a density bonus agreement shall be filed concurrently with all other development application(s) for the project.

(4) The applicant shall provide financial data as determined by the Director showing that any requested concession and/or waiver is necessary to make the affordable units economically feasible.

(5) The application shall be accompanied by the appropriate number of draft density bonus agreements as listed on the application. The agreement shall be in a form acceptable to the City Attorney and may include the following provisions as well as any other deemed necessary by the City during review of specific proposals:

(a) The terms and conditions of the agreement shall run with the land which is to be developed, shall be binding upon any or all successor in interest of the applicant, and shall be recorded in the Office of the Los Angeles County Recorder, prior to issuance of any building permits for the project;

(b) The applicant shall give the City the continuing right-of-first-refusal to purchase or lease any or all of the designated units at the fair market value;

(c) The deeds to the designated units shall contain a covenant stating that the applicant or their successor in interest shall not sell, rent, lease, sublet, assign, or otherwise transfer any interests for same without the

written approval of the City confirming that the sales price of the units is consistent with the limits established for very low, low- and/or moderate-income households, which shall be related to the Consumer Price Index; and

(d) The City shall have the authority to enter into other agreements with the applicant or purchasers of the dwelling units, as may be necessary to assure that the required dwelling units are continuously occupied by eligible households.

(6) A density bonus agreement application shall be reviewed and approved by the City Council. However, if the applicant is requesting more concessions than are allowed by right as established in Section 65915 et seq. of the California Government Code, the density bonus agreement shall be reviewed by the Planning Commission with a recommendation to the City Council.

(7) The Director may require additional information if deemed necessary to determine whether the density bonus agreement is consistent with the goals, policies and objectives of the General Plan and any applicable Specific Plan. This may include, but is not limited to, a market feasibility/absorption study for the proposed project.

(E) Action by Planning Commission.

(1) As described in Subsection (D)(6) of this Section, the Planning Commission shall hold a public hearing on an application for a density bonus agreement if the applicant is requesting more concessions than are allowed by right as established in the tables provided in this Section. The hearing shall be scheduled and notice given as prescribed in PMC § 17.20.020 (Notification procedures).

(2) The Planning Commission shall determine whether the density bonus agreement is consistent with the required findings for approval as set forth in Subsection (G) of this Section, and shall recommend to the City Council that the density bonus agreement be approved, approved as amended, or denied.

(F) Action by City Council.

(1) Upon receiving a recommendation from the Planning Commission on a proposed density bonus agreement, the City Council shall hold a public hearing. The hearing shall be scheduled and notice given as prescribed in PMC § 17.20.020 (Notification procedures).

(2) Following the closing of a public hearing, the City Council shall determine if the density bonus agreement is consistent with the findings contained within Subsection (G) of this Section. If determined to be consistent, the City Council shall adopt the development agreement by resolution.

(G) Required Findings for Approval. Prior to taking an action to approve or recommend approval of a density bonus agreement, the Review Authority shall find as follows:

(1) The proposed density bonus agreement is consistent with the maps and policies of the General Plan and any applicable Specific Plan; and

(2) The proposed density bonus agreement complies with the requirements of California Government Code Section 65915 et seq.

(H) Ongoing Review. The Director shall review and examine all approved density bonus agreements at least every 12 months to determine whether the applicant or a successor in interest is demonstrating good faith compliance with the terms of the agreement.

(I) Amendments to Approved Density Bonus Agreements. Any amendment to a previously approved density bonus agreement shall be reviewed pursuant to the same procedures outlined in this Title for a new application.

(J) Incentives and Concessions.

(1) Applicants for density bonuses may, in addition to the density bonus, request the number of incentives or concessions established in Section 65915(d)(2) of the California Government Code.

(2) The City shall grant the concession or incentive requested by the applicant pursuant to Subsection (D)(6) of this Section, unless it makes a written finding, based upon substantial evidence, of either of the following:

(a) The concession or incentive does not result in identifiable cost reductions for affordable housing costs or for rents for the targeted units as defined within PMC Chapter 17.16 (Definitions); or

(b) The concession or incentive would have a specific adverse impact upon public health and safety or the physical environment or on any real property that is listed in the California Register of Historical Resources for which there is no feasible method to mitigate or avoid without rendering the development unaffordable to low-income and moderate-income households.

(3) The granting of a density bonus, concession, or incentive shall not be interpreted, in and of itself, to require a General Plan amendment, zone change, variance, or other discretionary approval. (

# Planning Commission Staff Report

**DATE:** **MARCH 14, 2024**

**TO:** **HONORABLE CHAIR AND PLANNING COMMISSIONERS**

**FROM:** **ECONOMIC AND COMMUNITY DEVELOPMENT DEPARTMENT PLANNING DIVISION**

**APPLICANT:** **MAISON'S PALMDALE BLVD 150, LLC**

**DISTRICT:** **4**

**SUBJECT:** **ADOPT RESOLUTION NO. PC-2024-004 RECOMMENDING CITY COUNCIL APPROVAL OF DENSITY BONUS AGREEMENT 24-0002, APPROVING TENTATIVE TRACT MAP 83359, AND ADOPT THE MITIGATED NEGATIVE DECLARATION AND MITIGATION MONITORING AND REPORTING PROGRAM PREPARED FOR THE PROJECT.**

## RECOMMENDATION

The Planning Commission has the following options:

1. Adopt Resolution No. PC-2024-004 recommending City Council approval of Density Bonus Agreement (AGR) 24-0002 (A-8767), approving Tentative Tract Map (TTM) 83359, and adopt the Mitigated Negative Declaration (MND) and Mitigation Monitoring and Reporting Program (MMRP) prepared for the project.

2. Continue the project and direct staff to return with additional information.

3. Deny the project.

Option 1 is recommended.

## BACKGROUND

The applications were submitted on March 22, 2023, reviewed by staff, and deemed incomplete on May 2, 2023, with some minor revisions required for the site layout and Initial Study. The required revisions were submitted on September 25, 2023, and scheduled for the March 14, 2024, Planning Commission meeting.

*Noticing/Agency Comments*

**TABLE 1 - AFFECTED AGENCIES**

| | Agency | Comments |
|---|---|---|
| **Water Service:** | Los Angeles County Water Works | No comments received |
| | Palmdale Water District | The applicant will need to submit a conceptual water plan |
| **School District(s):** | Antelope Valley Union High School District | No comments received. |
| | Palmdale School District | No comments received. |
| **Other:** | Los Angeles County Sanitation District | The applicant will be required to pay connection fees. |
| | Southern California Gas Company | No comments received. |
| | AT&T | No comments received. |
| | California Department of Fish and Wildlife | The Applicant will be required to obtain an Incidental Take Permit. |

## PROJECT DESCRIPTION

The applicant is requesting approval of a Density Bonus Agreement and Tentative Tract Map application to subdivide a 20-acre parcel into 66 parcels to facilitate the future construction of approximately 190 dwelling units comprised of a detached single-family dwelling unit, an accessory dwelling unit, and a junior accessory dwelling unit on the 64 lots dedicated for residential uses. The two remaining parcels will be used for a drainage basin and a parcel dedicated to a shared common area for recreation purposes.

Ten percent of the units will be available to households with incomes that do not exceed the maximum income of low-income households in Los Angeles County as determined by the California Department of Housing and Community Development. The request includes two concessions from the development standards as allowed by the State Density Bonus Law (California Government Code Section 65915)

The Palmdale Municipal Code (PMC) requires a Density Bonus Agreement and Tentative Map application approval for the proposed project. A Subdivision Development Plan will be required for the approval of the proposed design and individual plot plans for the comprehensive development.

### Density Bonus

A density bonus is an increase in the overall number of housing units that a developer may build on a site in exchange for providing affordable housing. State Density Bonus Law, pursuant to Section 65915 of the California Government Code, offers incentives that are intended to encourage the development of affordable housing, including up to an 80 percent increase in density.

The project site has a General Plan Land Use designation and zone of Single-Family Residential 3 (SFR 3, 7,000 square foot lots; up to 6 dwelling units per acre). The project site is approximately 20 acres and the maximum density is 120 detached single-family residential units. Density Bonus Law requires that, when 10 percent of all units are for low-income households, the City must grant an 20 percent density bonus over the base density, which would allow an additional 4 units for this development. Although the maximum density for the project site is 120 units, the residential development does not require an increased density and the applicant proposes to construct a total of 64 detached single-family residential units and 127 ADU’s and JADU’s for a total of 191 residential units. Under California Fair Housing Laws, the proposed ADUs and JADUs are not subject to a jurisdiction's density requirements.

Of the 191 units proposed, 10 percent of the units are required to be reserved for low-income households. Additionally, the owner has requested cost-saving concessions in accordance with Government Code Section 65915, *et seq*. and PMC Section 17.25.020 (Density Bonus Agreements), as follows:

1. To allow composite shingles for roofing material.

2. To allow a reduction of the required garage width of 20 feet.

The Housing Division has determined that granting the concessions listed above will result in actual and identifiable cost reductions to provide affordable housing. In addition, the proposed project will contribute to the City's Regional Housing Needs Assessment (RHNA) allocation.

**FIGURE 1 – AERIAL MAP**

## ANALYSIS

**TABLE 2- EXISTING LAND USE / ZONING / GENERAL PLAN**

| | Land Use | Zoning | General Plan |
|---|---|---|---|
| **Subject Site** | Vacant parcel | Single Family Residential 3 (SFR 3) | Single Family Residential 3 (SFR 3) |
| **North** | Vacant parcel | Residential Neighborhood 2 (RN 2) | Residential Neighborhood 2 (RN 2) |
| **South** | Single-family residence | Single Family Residential 3 (SFR 3) | Single Family Residential 3 (SFR 3) |
| **East** | Vacant parcel | Single Family Residential 3 (SFR 3) | Single Family Residential 3 (SFR 3) |
| **West** | Single-family residence | Single Family Residential 3 (SFR 3) | Single Family Residential 3 (SFR 3) |

**TABLE 3 - GENERAL PLAN CONSISTENCY**

| Element | Goal, Objective, or Policy | Standard Met? | Justification* |
|---|---|---|---|
| **Land Use** | LUD-3.5: Ensure that there will be adequate water and wastewater system capacity to meet projected demand by continuing to oversee the development of adequate and dependable public services and facilities to support both existing and future development. | Yes | The project is located within the Palmdale Water District and the Los Angeles County Sanitation District. Both agencies have reviewed the project and provided conditions of approval to ensure the project can be adequately served by existing water and wastewater facilities upon approval of development plans. |
| | LUD-5.3:<br>Require new developments to be designed for and provided with adequate public services and infrastructure.<br>Require that these public facilities and services be provided concurrently with development to ensure a high quality of life for residents. | Yes | The project is located within the Palmdale Water District and the Los Angeles County Sanitation District. Both agencies have reviewed the project and provided conditions of approval to ensure the project can be adequately served by existing water and wastewater facilities upon approval of development plans. Additionally, the project has been conditioned by the Engineering Department to provide adequate roadways, curbs, gutters, and sidewalks to adequately serve future residents. |

**TABLE 3 - GENERAL PLAN CONSISTENCY (CONTINUED)**

| Element | Goal, Objective, or Policy | Standard Met? | Justification* |
|---|---|---|---|
| **Land Use** | LUD-6.1: Strongly encourage new subdivisions and master planned projects to include a diversity of housing types and architecture styles, where possible. | Yes | The proposed map will facilitate the future development of a mix of housing types consisting of detached single-family homes, accessory dwelling units, and junior accessory dwelling units to provide diverse housing options to meet the needs of several types of potential residents. |
| | LUD-6.5: Encourage new development to incorporate public plazas, seating, drinking fountains, and gathering places, especially in prominent locations and areas of pedestrian activity. | Yes | The project proposes to dedicate one parcel totaling approximately 35,000 square feet to common space for both indoor and outdoor gathering and recreation. |
| **Economic Development** | ED-5.2: Increase the supply and diversity of housing options to support different types of households including seniors, young adults, families, empty nesters, individuals or families with special needs, and multigenerational families. | Yes | The proposed map will facilitate the future development of a mix of housing types consisting of detached single-family homes, accessory dwelling units, and junior accessory dwelling units to provide diverse housing options to meet the needs of several types of potential residents. |

**TABLE 3 - GENERAL PLAN CONSISTENCY (CONTINUED)**

| Element | Goal, Objective, or Policy | Standard Met? | Justification* |
|---|---|---|---|
| **Equitable and Healthy Communities** | EHC-6.2: Encourage a variety of housing types developed at a range of densities to serve varying household types, including, but not limited to, single-family attached and detached, accessory dwelling units, multi-family apartments, townhomes, duplexes, triplexes, quadplexes, and condominiums. | Yes | The proposed map will facilitate the future development of a mix of housing types consisting of detached single-family homes, accessory dwelling units, and junior accessory dwelling units to provide diverse housing options to meet the needs of several types of potential residents. |
| | EHC-6.4: Promote development of housing types that support multi-generational households and opportunities to age in place. | Yes | The proposed map will facilitate the future development of a mix of housing types consisting of detached single-family homes, accessory dwelling units, and junior accessory dwelling units to provide diverse housing options to meet the needs of several types of potential residents. |

*Justification is based on a review by the case planner of the plans date stamped 'Received September 25, 2023'.

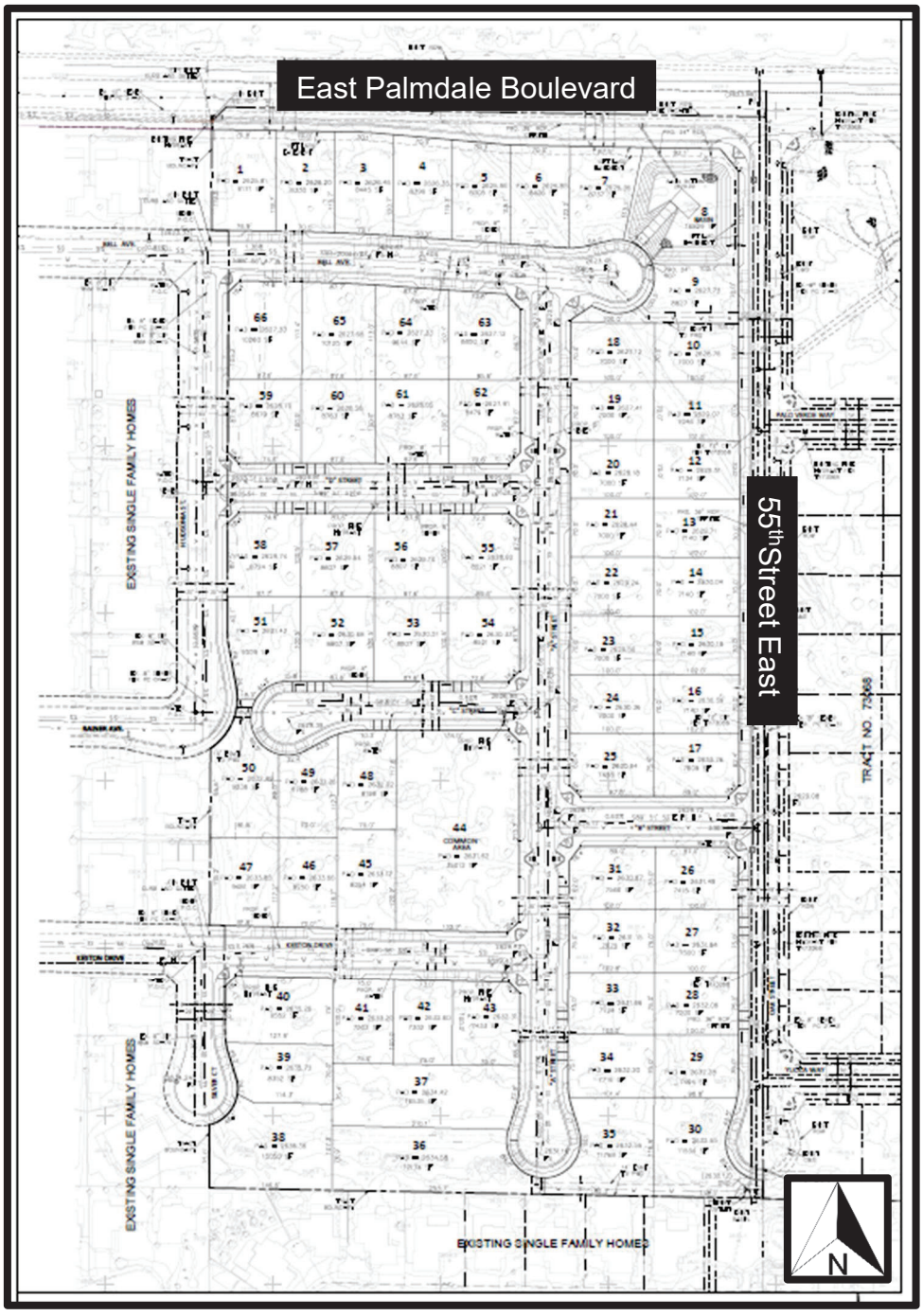
**TABLE 4 - PALMDALE MUNICIPAL CODE STANDARDS**

| | Standard | Standard Met? | Justification* |
|---|---|---|---|
| **Density** | Minimum Density: 0 du/ac<br>Maximum Density: 6 du/ac | Yes | The project proposes a map that would accommodate the development of 64 single-family homes. This would result in approximately 3.2 dwelling units per acre (du/ac).<br><br>*Pursuant to California Fair Housing Laws, ADUs and JADUs are not subject to a jurisdiction's density requirements. |
| **Lot Size** | Minimum: 7,000 square feet | Yes | The proposed map has been designed to allow for a range of lot sizes, the smallest of which is 7,000 square feet, meeting this development standard. |
| **Lot Width** | Minimum: 60 feet | Yes | The project proposes a range of lot sizes, with the narrowest lot measured at 62 feet wide, exceeding the minimum 60-foot width requirement. |
| **Lot Depth** | Minimum: 100 feet | Yes | The project proposes a range of lot sizes, with the shallowest lot measured at 100 feet wide, meeting the minimum 100-foot width requirement. |

*Justification is based on a review by the case planner of the plans date stamped 'Received September 25, 2023'.

*Site Layout*

**FIGURE 2 – TENTATIVE TRACT MAP**



*Access*

Street improvements will be constructed to provide internal circulation as well as connections to existing roads Bell Avenue, Hudsonia Street, Rainer Avenue, Keston Drive, and Oak Street. No streets or driveways proposed by the project will open directly onto Palmdale Boulevard from the project site. The City Engineer and Los Angeles County Fire Department have reviewed the project and determined that it is designed with adequate access to accommodate safe vehicular flow. Furthermore, access to the site will not be affected by the phasing of the development.

## ENVIRONMENTAL REVIEW

Pursuant to the California Environmental Quality Act (CEQA), an Initial Study, to determine whether the project would have a significant effect on the environment, has been prepared. The Initial Study analyzed the potential for environmental impacts and all topics were found to have either no impact, a less than significant impact, or a less than significant impact with mitigation incorporated. Mitigation measures for biological resources, cultural resources, geology/soils, and greenhouse gas emissions were included to reduce impacts to a less significant level. In addition, the western Joshua tree has been designated a protected species under the California Endangered Species Act. Therefore, any removal of western Joshua trees on site must comply with all requirements from CDFW. The applicant must apply for an Incidental Take Permit in accordance with CDFW guidelines to address changes in State regulations relating to western Joshua trees. As such, an MND and MMRP were prepared and circulated in accordance with CEQA Guidelines.

| | |
|---|---|
| Prepared by: | Chantal Power, Contract Planner |
| Approved by: | Brenda Magaña, Planning Manager |
| Approved as to form: | William P. Curley III, City Attorney |

## ATTACHMENTS

Resolution No. PC-2024-004
AGR 24-0002 Density Bonus Agreement A-8767
MND and MMRP

## EXHIBIT A

## LEGAL DESCRIPTION FOR DENSITY BONUS AGREEMENT 24-0002 AND TENTATIVE TRACT MAP 83359

THE LAND REFERRED TO HEREIN BELOW IS SITUATED, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

LOT 10 OF TRACT NO, 2916, IN THE CITY OF PALMDALE, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 31, PAGE 13, OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

APN: 3023-002-184

## EXHIBIT B

## AERIAL MAP FOR TENTATIVE TRACT MAP 83359

**EXHIBIT C**

**GENERAL PLAN CONSISTENCY TABLE FOR AGR 24-0002 AND TTM 83359**

| Element | Goal, Objective, or Policy | Standard Met? | Justification* |
|---|---|---|---|
| **Land Use** | Goal LUD-3.5: Ensure that there will be adequate water and wastewater system capacity to meet projected demand by continuing to oversee the development of adequate and dependable public services and facilities to support both existing and future development. | Yes | The project is located within the Palmdale Water District and the Los Angeles County Sanitation District. Both agencies have reviewed the project and provided conditions of approval to ensure the project can be adequately served by existing water and wastewater facilities upon approval of development plans. |
| | LUD-5.3: Require new developments to be designed for and provided with adequate public services and infrastructure. Require that these public facilities and services be provided concurrently with development to ensure a high quality of life for residents. | Yes | The project is located within the Palmdale Water District and the Los Angeles County Sanitation District. Both agencies have reviewed the project and provided conditions of approval to ensure the project can be adequately served by existing water and wastewater facilities upon approval of development plans. Additionally, the project has been conditioned by the Engineering Department to provide adequate roadways, curbs, gutters, and sidewalks to adequately serve future residents. |

**EXHIBIT C**

**GENERAL PLAN CONSISTENCY TABLE FOR AGR 24-0002 AND TTM 83359 (CONTINUED)**

| Element | Goal, Objective, or Policy | Standard Met? | Justification* |
|---|---|---|---|
| **Land Use** | LUD-6.1:<br>Strongly encourage new subdivisions and master planned projects to include a diversity of housing types and architecture styles, where possible. | Yes | The proposed map will facilitate the future development of a mix of housing types consisting of detached single-family homes, accessory dwelling units, and junior accessory dwelling units to provide diverse housing options to meet the needs of several types of potential residents. |
| | LUD-6.5:<br>Encourage new development to incorporate public plazas, seating, drinking fountains, and gathering places, especially in prominent locations and areas of pedestrian activity. | Yes | The project proposes to dedicate one parcel totaling approximately 35,000 square feet to common space for both indoor and outdoor gathering and recreation. |
| **Economic Development** | ED-5.2:<br>Increase the supply and diversity of housing options to support different types of households including seniors, young adults, families, empty nesters, individuals or families with special needs, and multigenerational families. | Yes | The proposed map will facilitate the future development of a mix of housing types consisting of detached single-family homes, accessory dwelling units, and junior accessory dwelling units to provide diverse housing options to meet the needs of several types of potential residents. |

**EXHIBIT C**

**GENERAL PLAN CONSISTENCY TABLE FOR AGR 24-0002 AND TTM 83359 (CONTINUED)**

| | Standard | Standard Met? | Justification* |
|---|---|---|---|
| **Equitable and Healthy Communities** | EHC-6.2:<br>Encourage a variety of housing types developed at a range of densities to serve varying household types, including, but not limited to, single-family attached and detached, accessory dwelling units, multi-family apartments, townhomes, duplexes, triplexes, quadplexes, and condominiums. | Yes | The proposed map will facilitate the future development of a mix of housing types consisting of detached single-family homes, accessory dwelling units, and junior accessory dwelling units to provide diverse housing options to meet the needs of several types of potential residents.<br>*Pursuant to California Fair Housing Laws, ADUs and JADUs are not subject to a jurisdictions density requirements. |
| | EHC-6.4:<br>Promote development of housing types that support multi-generational households and opportunities to age in place. | Yes | The proposed map will facilitate the future development of a mix of housing types consisting of detached single-family homes, accessory dwelling units, and junior accessory dwelling units to provide diverse housing options to meet the needs of several types of potential residents. |

** Based on the plan set dated September 25, 2023*

## EXHIBIT D

## DEVELOPMENT STANDARDS TABLE FOR AGR 24-0002 AND TTM 83359

| | Standard | Standard Met? | Justification* |
|---|---|---|---|
| **Density** | Minimum Density: 0 du/ac<br>Maximum Density: 6 du/ac | Yes | The project proposes a map that would accommodate the development of 64 single-family homes. This would result in approximately 3.2 dwelling units per acre (du/ac).<br><br>*Pursuant to California Fair Housing Laws, ADUs and JADUs are not subject to a jurisdictions density requirements. |
| **Lot Size** | Minimum: 7,000 square feet | Yes | The proposed map has been designed to allow for a range of lot sizes, the smallest of which is 7,000 square feet, meeting this development standard. |
| **Lot Width** | Minimum: 60 feet | Yes | The project proposes a range of lot sizes, with the narrowest lot measured at 62 feet wide, exceeding the minimum 60 foot width requirement. |
| **Lot Depth** | Minimum: 100 feet | Yes | The project proposes a range of lot sizes, with the shallowest lot measured at 100 feet wide, meeting the minimum 100 foot width requirement. |

** Based on plans dated September 25, 2023*

PLANNING COMMISSION
CITY OF PALMDALE, CALIFORNIA
RESOLUTION NO. PC-2024-004

A RESOLUTION OF THE PLANNING COMMISSION OF THE CITY OF PALMDALE, CALIFORNIA, RECOMMENDING CITY COUNCIL APPROVAL OF DENSITY BONUS AGREEMENT 24-0002 (A-8767), APPROVING TENTATIVE TRACT MAP 83359; A REQUEST TO SUBDIVIDE A 20-ACRE PARCEL INTO 66 PARCELS TO FACILITATE THE FUTURE CONSTRUCTION OF APPROXIMATELY 191 DWELLING UNITS COMPRISED OF 64 DETACHED SINGLE-FAMILY DWELLING UNITS AND 127 ACCESSORY DWELLING UNITS AND JUNIOR ACCESSORY DWELLING UNITS AND DRAINAGE BASIN LOCATED ON THE SOUTH SIDE OF PALMDALE BOULEVARD BETWEEN 50th STREET EAST AND 55th STREET EAST, AND ADOPT THE MITIGATED NEGATIVE DECLARATION AND MITIGATION MONITORING AND REPORTING PROGRAM (APN: 3023-002-184).

## A. RECITALS

**WHEREAS,** Maison's Palmdale Blvd 150, LLC has filed an application requesting the Planning Commission recommend City Council approval of Density Bonus Agreement (AGR) 24-0002 (A-8767), approving Tentative Tract Map (TTM) 83359 to subdivide a 20-acre parcel into 66 lots for the future development of up to approximately 191 dwelling units comprised of a mix of detached single-family dwellings, accessory dwelling units, and junior accessory dwelling units, and adopt the Mitigated Negative Declaration (MND) and Mitigation Monitoring and Reporting Program (MMRP) for the project described herein as "Application".

**WHEREAS,** The Application applies to a parcel located on the south side of Palmdale Boulevard, between 50th Street East and 55th Street East indicated on the Los Angeles Assessor roll as Assessor Parcel Number 3023-002-184, legally described on Exhibit A hereto and shown on the map attached as Exhibit B.

**WHEREAS,** On March 14, 2024, the Planning Commission of the City of Palmdale conducted a duly noticed public hearing on the Application and concluded said hearing on that date.

## B. RESOLUTION

NOW THEREFORE, BE IT RESOLVED, THE PLANNING COMMISSION OF THE CITY OF PALMDALE DOES HEREBY FIND, DETERMINE, RESOLVE AND ORDER AS FOLLOWS:

**SECTION 1**. The Planning Commission hereby finds that all of the facts set forth in the foregoing Recitals are true and correct.

**SECTION 2**. The Planning Commission hereby finds as follows with respect to the environmental document:

A. Pursuant to the California Environmental Quality Act (CEQA), an Initial Study, Mitigated Negative Declaration, and Mitigation Monitoring and Reporting Program were prepared for the project finding that, with the incorporation of mitigation measures, the project would not have a significant impact on the environment. The proposed project has the potential to have a significant effect on the environment in the following areas: Biological Resources, Cultural Resources, Geology/Soils, and Greenhouse Gas Emissions. Mitigation measures established by the MMRP will be implemented to reduce potential impacts to a level that is less than significant.

B. The custodian of records for the MND, and all other materials that constitute the record of proceedings upon which the Planning Commission's decision is based, is the Planning Manager of the City of Palmdale. These documents are available for public review in the Planning Division of the City of Palmdale located at 38250 Sierra Highway, Palmdale, California 93550, telephone (661) 267-5200.

**SECTION 3**. Based upon substantial evidence presented to this Commission during the above-referenced March 14, 2024, public hearing, including public testimony, and written and oral staff report, this Commission specifically finds as follows:

A. The proposed subdivision, together with the provisions for its design and improvement, shall be consistent and compatible with the maps, goals, objectives and policies of the General Plan, Zoning Ordinance and any applicable specific plan. (TTM)

B. The proposed Density Bonus Agreement is consistent with the maps and policies of the General Plan and any applicable Specific Plan. (DBA)

The proposed project involves the subdivision of a 20-acre parcel for the future construction of 191 dwelling units comprised of detached single-family residences, accessory dwelling units (ADU) and junior accessory dwelling units (JADU). The project is consistent and compatible with both the General Plan and Zoning Ordinance as modified with through the DBA, as described in Exhibits C and D. The project site has a General

Plan Land Use designation and zone is Single Family Residential 3 (SFR 3), which allows up to six dwelling units per acre. Per State Density Bonus Law, when 10 percent of all units are reserved for low-income households, the City must grant a 20 percent density bonus over the base density, which would allow an additional 4 units for this development. Although the maximum density for the project site is 120 units, the residential development does not require an increased density and the applicant proposes to construct a total of 64 detached single-family residential units and 127 ADU's and JADU's for a total of 191 residential units. Under California Fair Housing Laws, the proposed ADUs and JADUs are not subject to a jurisdiction's density requirements.

Of the 191 units proposed, 10 percent of the units are required to be reserved for low-income households. Furthermore, Density Bonus Law allows for the granting of concessions to the development standards in order to achieve cost-savings in the production of affordable housing. With the exception of the concessions related to design, the project will comply with the development standards for the SFR 3 zone.

C. The tentative map does not propose to divide land which is subject to contract entered into pursuant to the California Land Conservation Act of 1965, or the land is subject to a land conservation act contract but the resulting parcels following division of the land will not be too small to sustain their agricultural use. (TTM)

A review of the preliminary title report for the subject property revealed that the property in question has not been included in any such contract.

D. The site is physically suitable for the type and proposed density of development proposed by the tentative map. (TTM)

E. The proposed Density Bonus Agreement complies with the requirements of California Government Code Section 65915 et. seq. (DBA)

The project site has a General Plan Land Use designation and zone of SFR 3. Density Bonus Law requires that, when 10 percent of all units are for low-income households, the City must grant a 20 percent density bonus over the base density, which would allow an additional 4 units for this development. Although the maximum density for the project site is 120 units, the residential development does not require an increased density and the applicant proposes to construct a total of 64 detached single-family residential units and 127 ADU's and JADU's for a total of 191 residential units.

Of the 191 units proposed, 10 percent of the units are required to be reserved for low-income households. Additionally, the owner has requested cost-saving concessions in accordance with Government Code Section 65915, et seq. and PMC Section 17.25.110, as follows:

1. To allow composite shingles for roofing material.

2. To allow a reduction of the required garage width of 20 feet.

F. The design of the subdivision and the proposed improvements, with conditions of approval, are either:

1. Not likely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat, or

2. The design of the subdivision and the proposed improvements are likely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat, but an environmental impact report has been prepared and a statement of overriding considerations has been adopted, pursuant to Public Resources Code Section 21081(c), finding that specific economic, social or other considerations make it not feasible to adopt the mitigation measures or project alternatives identified in the environmental impact report.

The application for the proposed tentative map included an Initial Study and Mitigated Negative Declaration. The Initial Study found that the proposed project has the potential to have a significant effect on the Biological Resources. Mitigation measures will be implemented to reduce potential impacts to a level that is less than significant. Mitigation measures to reduce biological resource impacts include biological resources awareness training for all construction personnel, preparation of a desert vegetation preservation plan, obtaining a desert vegetation removal permit and an incidental take permit, as well as payment of mitigation fees into the western Joshua Tree Conservation Fund, a CDFW compliant pre-construction burrowing owl survey, a pre-construction nesting bird survey, and a pre-construction desert kit fox survey. With the implementation of these mitigation measures, the proposed subdivision is not likely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat.

G. The design of the subdivision and the type of improvements are not likely to cause serious public health and safety problems. (TTM)

The project application included an Initial Study that analyzed the potential impacts of the project that have the potential to cause serious public health and safety problems, including air quality, energy, geology and soils, greenhouse gas emissions, hazards and hazardous materials, noise, population and housing, public services, transportation, utilities and service systems, and wildfire and found that all potential impacts created by the project could be mitigated to a level that is less than significant. Additionally, the map has been designed and conditioned to provide adequate access, infrastructure, and utilities for the future development of the site. Furthermore, the final design of the future development will require the review and approval of a Subdivision Development Plan application.

H. The tentative map design provides for future passive or natural heating or cooling opportunities in the subdivision to the extent feasible. (TTM)

The tentative map has been designed to be consistent with surrounding development, to be consistent with the goals and policies of the General Plan, and to be compliant with the development standards for the SFR 3 zone. Furthermore, the final design of the future development will require the review and approval of a Subdivision Development Plan application.

I. The design of the subdivision and the type of improvements will not conflict with easements acquired by the public at large for access through or use of the private property within the proposed subdivision, or the design of the subdivision and the type of improvements will conflict with the easements acquired by the public at large for access through or use of property within the proposed subdivision but alternate easements which are substantially equivalent to those previously acquired by the public will be provided. (TTM)

Access to and from the project site has been designed to tie into existing local roadways while avoiding direct access from the site or individual parcels onto East Palmdale Boulevard. Each proposed parcel has been designed to have direct access to a local roadway. All existing easements are shown on the tentative map and no conflicts have been created by the design of the subdivision or proposed improvements.

J. The proposed subdivision, including any proposed phasing, represents orderly development of the project site and surrounding area. (TTM)

The proposed subdivision has been designed for orderly future development which will require review and approval of a Subdivision Development Plan application prior or construction activities. The design is consistent with the General Plan, Zoning Code, and existing development in the surrounding area.

**SECTION 4**. Based on the findings and conclusions set forth in Sections 1, 2, and 3 above, this Commission hereby recommends City Council approval of AGR 24-0002, approving TTM 83359, and adopt the MND and MMRP subject to the Conditions of Approval as set forth in Exhibit E.

**SECTION 5**. The City Clerk shall certify the adoption of this resolution.

**PASSED, APPROVED,** and **ADOPTED** this 14th day of March, 2024.

Dean Henderson
Chair, Planning Commission

ATTEST:

Sylvia Magallanes, Deputized Clerk

I, Sylvia Magallanes, Deputized Clerk of Palmdale, California, do hereby certify that the foregoing resolution was duly approved, and adopted by the Planning Commission of the City of Palmdale at a regular meeting of said Commission held on the 14th day of March, 2024, by the following roll call vote:

AYES: (3) Chair Henderson, Commissioners Jones and Lujan

NOES: (1) Vice Chair Elize

ABSTAIN: (1) Commissioner Olivarez ABSENT:

Date: 3/26/2024

Sylvia Magallanes, Deputized Clerk

## EXHIBIT A

## LEGAL DESCRIPTION FOR DENSITY BONUS AGREEMENT 24-0002 AND TENTATIVE TRACT MAP 83359

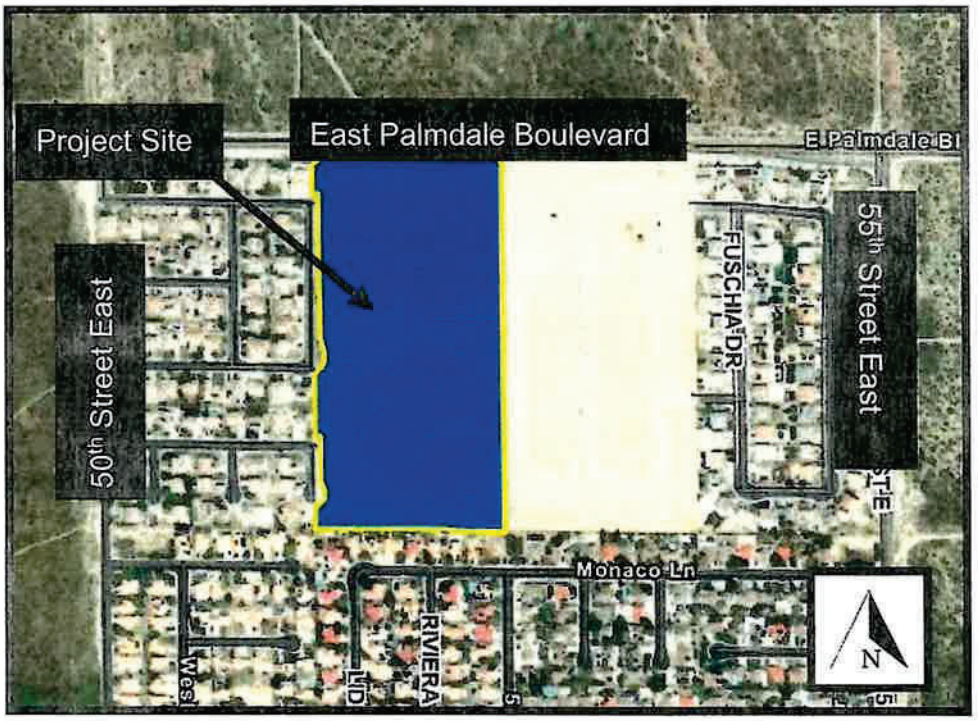
THE LAND REFERRED TO HEREIN BELOW IS SITUATED, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

LOT 10 OF TRACT NO, 2916, IN THE CITY OF PALMDALE, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 31, PAGE 13, OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

APN: 3023-002-184

## EXHIBIT B

## AERIAL MAP FOR TENTATIVE TRACT MAP 83359



## EXHIBIT C

## GENERAL PLAN CONSISTENCY TABLE FOR AGR 24-0002 AND TTM 83359

| Element | Goal, Objective, or Policy | Standard Met? | Justification* |
|---|---|---|---|
| **Land Use** | Goal LUD-3.5: Ensure that there will be adequate water and wastewater system capacity to meet projected demand by continuing to oversee the development of adequate and dependable public services and facilities to support both existing and future development. | Yes | The project is located within the Palmdale Water District and the Los Angeles County Sanitation District. Both agencies have reviewed the project and provided conditions of approval to ensure the project can be adequately served by existing water and wastewater facilities upon approval of development plans. |
| | LUD-5.3: Require new developments to be designed for and provided with adequate public services and infrastructure. Require that these public facilities and services be provided concurrently with development to ensure a high quality of life for residents. | Yes | The project is located within the Palmdale Water District and the Los Angeles County Sanitation District. Both agencies have reviewed the project and provided conditions of approval to ensure the project can be adequately served by existing water and wastewater facilities upon approval of development plans. Additionally, the project has been conditioned by the Engineering Department to provide adequate roadways, curbs, gutters, and sidewalks to adequately serve future residents. |

## EXHIBIT C

## GENERAL PLAN CONSISTENCY TABLE FOR AGR 24-0002 AND TTM 83359 (CONTINUED)

| Element | Goal, Objective, or Policy | Standard Met? | Justification* |
|---|---|---|---|
| **Land Use** | LUD-6.1:<br>Strongly encourage new subdivisions and master planned projects to include a diversity of housing types and architecture styles, where possible. | Yes | The proposed map will facilitate the future development of a mix of housing types consisting of detached single-family homes, accessory dwelling units, and junior accessory dwelling units to provide diverse housing options to meet the needs of several types of potential residents. |
| | LUD-6.5:<br>Encourage new development to incorporate public plazas, seating, drinking fountains, and gathering places, especially in prominent locations and areas of pedestrian activity. | Yes | The project proposes to dedicate one parcel totaling approximately 35,000 square feet to common space for both indoor and outdoor gathering and recreation. |
| **Economic Development** | ED-5.2:<br>Increase the supply and diversity of housing options to support different types of households including seniors, young adults, families, empty nesters, individuals or families with special needs, and multigenerational families. | Yes | The proposed map will facilitate the future development of a mix of housing types consisting of detached single-family homes, accessory dwelling units, and junior accessory dwelling units to provide diverse housing options to meet the needs of several types of potential residents. |

## EXHIBIT C

## GENERAL PLAN CONSISTENCY TABLE FOR AGR 24-0002 AND TTM 83359 (CONTINUED)

| | Standard | Standard Met? | Justification* |
|---|---|---|---|
| **Equitable and Healthy Communities** | EHC-6.2:<br>Encourage a variety of housing types developed at a range of densities to serve varying household types, including, but not limited to, single-family attached and detached, accessory dwelling units, multi-family apartments, townhomes, duplexes, triplexes, quadplexes, and condominiums. | Yes | The proposed map will facilitate the future development of a mix of housing types consisting of detached single-family homes, accessory dwelling units, and junior accessory dwelling units to provide diverse housing options to meet the needs of several types of potential residents.<br>*Pursuant to California Fair Housing Laws, ADUs and JADUs are not subject to a jurisdictions density requirements. |
| | EHC-6.4:<br>Promote development of housing types that support multi-generational households and opportunities to age in place. | Yes | The proposed map will facilitate the future development of a mix of housing types consisting of detached single-family homes, accessory dwelling units, and junior accessory dwelling units to provide diverse housing options to meet the needs of several types of potential residents. |

** Based on the plan set dated September 25, 2023*

## EXHIBIT D

## DEVELOPMENT STANDARDS TABLE FOR AGR 24-0002 AND TTM 83359

| | Standard | Standard Met? | Justification* |
|---|---|---|---|
| **Density** | Minimum Density: 0 du/ac<br>Maximum Density: 6 du/ac | Yes | The project proposes a map that would accommodate the development of 64 single-family homes. This would result in approximately 3.2 dwelling units per acre (du/ac).<br><br>*Pursuant to California Fair Housing Laws, ADUs and JADUs are not subject to a jurisdictions density requirements. |
| **Lot Size** | Minimum: 7,000 square feet | Yes | The proposed map has been designed to allow for a range of lot sizes, the smallest of which is 7,000 square feet, meeting this development standard. |
| **Lot Width** | Minimum: 60 feet | Yes | The project proposes a range of lot sizes, with the narrowest lot measured at 62 feet wide, exceeding the minimum 60 foot width requirement. |
| **Lot Depth** | Minimum: 100 feet | Yes | The project proposes a range of lot sizes, with the shallowest lot measured at 100 feet wide, meeting the minimum 100 foot width requirement. |

** Based on plans dated September 25, 2023*

**EXHIBIT E**

**DRAFT**

**CONDITIONS OF APPROVAL FOR TTM 83359**

**APPROVAL DATE: MARCH 14, 2024**
**EFFECTIVE DATE: MARCH 25, 2024**
**EXPIRATION DATE: MARCH 25, 2027**

These Conditions of Approval apply to Tentative Tract Map (TTM) 83359, a request to subdivide 20 acre(s) into 66 lot(s) to facilitate the future construction of 191 dwelling units comprised of single-family dwelling units, accessory dwelling units and a junior accessory dwelling units on the 64 lots dedicated for residential uses and a drainage basin located on the south side of Palmdale Boulevard between 50th Street East and 55th Street East (APN: 3023-002-184). Any proposed change of use or expansion of the area, or modifications to the site plan or structures shall be submitted to the Planning Division, along with the required application and fee, for review. For the purpose of these conditions, the term "applicant" shall also mean the developer, the owner or any successor(s) in interest to the terms of this approval. For the purposes of these conditions, an * indicates that the condition is a mitigation measure.

**GENERAL CONDITIONS:**

1 This approval shall not become effective for any purposes until any appeal period has passed and the applicant has filed at the office of the Planning Division their notarized affidavit stating that they agree to and accept all of the Conditions of Approval as approved by the Reviewing Authority as set forth in Resolution No. PC-2024-004. (P)

2 Should the City Council deny or revise Density Bonus Agreement (AGR) 24-0002, this TTM shall be modified to ensure consistency with AGR 24-0002, which may require additional review. (P)

3 Should this project not be inaugurated during the initial approval period, an extension of time not to exceed an additional two years as allowed by the Subdivision Map Act for TTM 83359 may be granted by the Review Authority. Applications for time extensions must be filed a minimum of 90 days prior to the expiration date. Requests for time extensions must be accompanied by a formal application, all required exhibits and plans, and required application fees. (P)

4 This approval shall become null and void if a final map has not been timely filed prior to the expiration date in accordance with provisions of the Subdivision Map Act. An extension of time may be granted by the Review Authority upon submittal of a formal application, required exhibits and appropriate fees in accordance with the Palmdale Municipal Code (PMC). In granting any such time extension, the

City may impose new conditions and standards on the tentative map, pursuant to Section 66452.6(e) of the Government Code. (P)(E)

5 Immediately upon approval of this project by the Review Authority, the applicant shall submit to the City a cashier's check or check, payable to Los Angeles County Clerk in the amount of $2,991.75 for the environmental filing fee in compliance with the California Environmental Quality Act (CEQA) Guidelines. Furthermore, if the California Department of Fish and Wildlife (CDFW) determines that this project is not exempt from a filing fee imposed pursuant to Fish and Wildlife Code Section 711.4 because the project has more than a de Minimis impact on fish and wildlife, then the applicant shall also pay to CDFW any fee and any fine which the Department determines to be owed. (P)

6 This Tentative Tract Map is granted for all boundary lines, easements, rights-of-way, and construction of off-site improvements as shown on the map date stamped September 25, 2023, as modified by these Conditions of Approval. Final map(s) shall be in substantial compliance with the tentative map and these Conditions of Approval. (P)(E)

7 The applicant shall comply with all requirements of the PMC, all requirements of the City ordinances, resolutions, and all applicable standards and policies that are in effect at the time that building permits are issued for the development. (P)(E)

8 The applicant shall defend, indemnify, and hold harmless the City its elected and appointed officials, officers, employees, and agents from and against any claim, action, or proceeding against the City, its elected and appointed officials, officers, employees, or agents to attack, set aside, void, or annul any approval or condition of approval of the City concerning this project, including but not limited to any approval or condition of approval of the Review Authority. The City shall promptly notify the applicant of any claim, action, or proceeding concerning the project and the City shall cooperate fully in the defense of the matter. The City reserves the right, at its own option, to choose its own attorney to represent the City, its elected and appointed officials, officers, employees, and agents in the defense of the matter. (P)

9 Pursuant to Government Code Section 66020(a), any party may protest the imposition of any fees, dedications, reservations, or other exactions imposed on this development project. Required fees must be paid in full or arrangements must be made to pay the fee when due. Written notice of payment under protest must be filed with the City at the time of approval or conditional approval of this project or within 90 days after the date of the imposition of the fees, dedications, reservations, or other exactions imposed on this project. (P)

10 The applicant shall be responsible for informing all subcontractors, consultants, engineers, or other business entities providing services related to the project of their responsibilities to comply with all pertinent requirements in the PMC, including the requirement that a business license be obtained by all entities doing business in the City. (P)

11 When exhibits and written conditions of approval are inconsistent, the written conditions shall prevail. (P)(E)

12 Off-site public improvements (streets, drainage, sewers, etc.) may be necessary to adequately serve this subdivision. If off-site public improvements are required, said improvements shall be located within public easements. This tentative map approval is subject to the applicant's acceptance of the City requirements for acquisition of said public easements, including the applicant's financial responsibility. The City Engineer shall have the authority to withhold approval of any affected improvement plans for failure to satisfy this condition. (E)

13 The applicant shall participate in such on-site and off-site water service improvements as may be required by the serving water purveyor. (E)

14 Coordination with utility companies by the applicant's engineer during design shall be required in order to ensure that required public improvements are not in conflict with existing or proposed utilities. (E)

15 The applicant shall comply with all provisions of Municipal Code Chapter 14.05, Water Efficient Landscape Ordinance. (E)

16 The applicant shall comply with all requirements of the Congestion Management Program for the County of Los Angeles and any related City of Palmdale requirements. These shall include, but are not limited to trip reduction, deficiency plan, traffic and public transportation requirements and improvements, and impact fee requirements. (TE)

17 The applicant shall comply with the provisions of PMC Chapter 3.45 (Public Facility Development Impact Fee Requirements). The applicant shall pay the applicable public facility impact fees to the Building and Safety Division in the amount that is in effect at the time such fees are to be collected. (B&S)

18 Intersection sight distance and stopping sight distance shall be shown to meet the required standards both horizontally and vertically at Palmdale Boulevard and 52nd Street East and at all intersections within the project including consideration for walls, landscaping, grading, and vegetation. (TE)

**THE FOLLOWING CONDITIONS SHALL BE MET PRIOR TO THE STAMPING OF THE TENTATIVE MAP FOR CONDITION COMPLIANCE:**

19 All plans, specifications, studies, reports, calculations, maps, notes, legal documents, and designs shall be prepared and signed (and stamped where required) only by those individuals legally authorized to do so. Plans for public improvements shall be prepared, signed, and stamped by a California Registered Civil Engineer. (E)

**THE FOLLOWING CONDITIONS SHALL BE ADDRESSED WITH THE SUBMITTAL OF GRADING PLANS OR PRIOR TO ISSUANCE OF A GRADING PERMIT:**

20 The applicant shall enter into a Subdivision Improvement Agreement and post securities for grading operations with the City and pay all applicable fees. Grading activities extending beyond phase boundaries shall require prior approval of the City Engineer and Planning Manager. Such grading activity shall be reflected in the subdivision improvement agreement of the phase which request such grading. (E)

21 The Tentative Tract Map shall indicate the alignment of all adjacent streets, turn lanes, medians, bus turnouts, traffic control devices, sidewalks, landscape setbacks, and the location of other infrastructure. (TE)

22 Grading and wall plans shall be submitted for review and approval to the Engineering Division. Approval by both the City Engineer and Planning Manager shall be obtained prior to the issuance of a Grading Permit. Perimeter walls shall be consistent with the design and materials of any previously approved adjacent perimeter wall to provide continuity of the streetscape. Final grading and wall concepts shall be in substantial conformance with those shown on the tentative map, conceptual grading plan, and in accordance with the following: (P)(E)

- 22.1 Northerly Boundary - The applicant shall provide a six-foot-high decorative wall constructed of decorative block.
- 22.2 Easterly Boundary - The applicant shall provide a six-foot-high decorative wall constructed of decorative block.
- 22.3 Westerly Boundary - The applicant shall provide a six-foot-high decorative wall constructed of decorative block.
- 22.4 All corner lots shall contain a decorative masonry block wall on the street side of the lot.
- 22.5 All interior property line walls, if proposed, shall be constructed of masonry, wrought iron, durable vinyl, or other similar durable materials as approved by the Planning Manager.

23 In all cases where a required wall is to be located adjacent to the top of a 2:1 or greater slope, the wall shall be set back a minimum of two and one-half (2-1/2) feet from the crest of that slope on the level side. All slope and wall configurations shall meet the setback requirements of the City Building Code. (P)(E)(B&S)

24 The exterior face and footings of all project perimeter walls shall be located no more than two (2) inches from the property line on the subject property. (P)(E)

25 Double boundary walls between developments are prohibited except as approved by the Planning Manager and City Engineer. (P)(E)

26 The final grading plan shall indicate that all rear and interior side yard slopes are up slopes to property lines as indicated on the tentative map. (P)(E)

27 All manufactured slopes on or adjacent to project boundaries shall meet the setback requirements of the current City Building Code. A recorded off-site Slope Acceptance Letter from all affected property owners shall be submitted to the City Engineer prior to approval of grading plans for any slope not meeting these requirements. In addition, slopes are required to meet City Standards with respect to erosion control. (E)(B&S)

28 The applicant shall submit a temporary erosion control and sedimentation plan for approval by the City Engineer prior to grading plan approval and grading permit issuance when grading activity will occur between October 1st and April 15th. Said erosion control plan shall provide appropriate dust control measures, per City and Antelope Valley Air Quality Management District (AVAQMD) Standards, to minimize nuisance from dust at all times. (E)(B&S)

28.1 The applicant shall submit a dust control plan to AVAQMD for review and shall obtain a permit from said agency prior to issuance of a City grading permit. The applicant shall provide proof of compliance with all AVAQMD requirements and applicable fees. (E)

29 This project shall be designed and constructed in accordance with the stormwater pollution control requirements of the Lahontan Region of the California Regional Water Quality Control Board. Prior to the issuance of a grading permit, the applicant shall file a Notice of Intent with the Lahontan Region of the California Regional Water Quality Control Board to comply with the applicable National Pollution Discharge Elimination System (NPDES) requirements. (E)

30 Final landscape and irrigation plans shall be submitted to the City Engineer/Landscape Architect for review and approval. Said plans shall include street tree and slope erosion control plans, as determined necessary by the City Engineer. One copy of the approved plans shall be submitted to the Planning Division. (P)(E)

31 A 10-foot and five-foot landscape easement shall be shown along Palmdale Blvd and Oak Street (in front of Lot 8), respectively. Said easements shall be in addition to any landscaping within the public right-of-way. Such easements are to be granted to the City. (P)(E)

32 The applicant shall submit for review and approval by the City Engineer, final landscaping and irrigation system plans for the areas included in the Landscape Maintenance Assessment District. (E)

33 The applicant shall incorporate into the project design all existing easements within the project boundaries, or obtain abandonment of said easements from the affected easement holder(s). If this requirement cannot be accomplished, the project shall be redesigned accordingly to the satisfaction of the Planning Manager/City Engineer or the Planning Commission. (P)(E)

34 The applicant shall obtain off-site easements from affected property owner(s) for all proposed off-site improvements and grading activities (slopes, drainage, walls, etc.). If said easements cannot be obtained, the project shall be redesigned to incorporate said improvements and grading entirely within the project boundary, to the satisfaction of the Planning Manager and the City Engineer. The City Engineer shall have the authority to withhold approval of any affected improvement plans for failure to satisfy this condition. (P)(E)

35 A drainage acceptance letter from each affected property owner shall be submitted to the City Engineer when the pre-developed storm runoff onto any property is increased, concentrated, diverted, or changed in any form as required by State law. (E)

36 A final hydrology study and hydraulics report shall be prepared for this subdivision and approved by the City Engineer. The hydrology study and hydraulics report shall address on-site and off-site conditions and impacts. (E)

37 An on-site drainage basin (detention) shall be required for this subdivision according to the City of Palmdale's adopted Storm Water Management Policy. Such basin(s) shall be sized and configured as a buildable lot based on the zoning; granted in fee to the City for drainage and landscape purposes; and annexed to the Landscape Community Facilities District. (E)

38 This subdivision shall be designed in accordance with the City's Floodplain Management Ordinance, Master Plan of Drainage, and related criteria within the Engineering Design Standards. (E)

38.1 All drainage facilities shall be designed to be compatible with Master Plan of Drainage (MPD) facilities. Applicant shall provide system piping to allow for the future elimination of the drainage basin. (E)

38.2 Reimbursement for drainage facilities shall only be considered for the applicant's dedication and construction of those facilities depicted on the City's Master Plan of Drainage in accordance with Section 66486 of the Government Code. (E)

39 This subdivision is located within the Pearland Natural Drainage Area/Basin as defined by the City's Master Drainage Plan and approved by Resolution 89-75. The applicant shall comply with the provisions of Chapter 3.38 (Drainage Fee Ordinance) of the Palmdale Municipal Code. The applicant shall pay the applicable drainage fees to the Engineering Division in the amount that is in effect at the time such fees are to be collected. Payment of drainage fees for all areas within the map boundaries which are disturbed by grading are due upon submittal of first rough grade certification. (E)(B&S)

40 The applicant shall submit geotechnical reports, prepared in accordance with the City's Engineering Design Standards, to the City Engineer for review and approval prior to the issuance of a grading permit. (E)

41 The applicant shall comply with all Joshua Tree requirements from the California Department of Fish and Wildlife and all provisions of City of Palmdale Municipal Code Chapter 14.04, Joshua Tree and Native Desert Vegetation Preservation. (P)(E)

**THE FOLLOWING CONDITIONS SHALL BE COMPLETED PRIOR TO OR IN CONJUNCTION WITH RECORDATION OF THE FINAL MAP OR ANY PHASE THEREOF:**

42 The applicant shall petition the City to annex into Community Facilities District No. 2022-1 for the maintenance of landscaping and appurtenant facilities. Such annexation shall be formed concurrently with, or prior to, recordation of the final map at the sole cost and expense of the applicant, and the applicant's deposit of the estimated costs thereof shall be required prior to such actions by the City. If the City is unsuccessful in the annexation to the Community Facilities District, the applicant shall propose an alternative maintenance entity and shall be responsible for the maintenance of the landscaping and appurtenant facilities

until such time that an alternative maintenance entity assumes the maintenance. All costs associated with the annexation of an alternative maintenance entity shall be paid by the applicant. (E)

43 The applicant shall provide written evidence to the Planning and Engineering Divisions that approval has been obtained from the Los Angeles County Fire Department. (F)(P)(E)

44 The applicant shall enter into a subdivision improvement agreement and post securities with the City and pay all applicable fees at the time of subdivision approval for those improvements necessary to support this subdivision, as determined by the City Engineer. If any transfer of ownership/title of land within this proposed subdivision takes place prior to the release of all agreements and securities, the new applicant shall be required to enter into a separate Subdivision Improvement Agreement with the City and pay all applicable fees. Agreement and securities with the prior applicant will be released after the agreement and securities with the new applicant take effect. (E)

45 The applicant shall provide standard street improvements for the South half of Palmdale Blvd across the project frontage. The design shall be based on a 57-foot half width right-of-way on an acceptable centerline profile extending a minimum 300 feet beyond the project where applicable. These improvements shall consist of: (E)

45.1 Curb and gutter,

45.2 Sidewalk (width = eight feet),

45.3 Roadway grading and paving, overlay and/or match-up, as directed by City Engineer,

45.4 Traffic control signs and devices as required by the City Traffic Engineer,

45.5 Pavement transition from the project boundaries to the satisfaction of the City Engineer,

45.6 Accessible curb ramp(s) at all walk returns,

45.7 Roadway drainage device(s),

45.8 Streetlights,

45.9 Raised median,

45.10 Dedicate additional right-of-way to the ultimate half width of 57 feet,

45.11 Dedicate an additional 12 feet of right-of-way for the right turn lane and construct improvements as required by the Traffic Division,

45.12 Dedicate 10-foot Landscape Maintenance District (LMD) easement along Palmdale Blvd for landscape purpose

45.13 Dedicate sufficient right-of-way for corner cut-off in accordance with City's Engineering Design Standard,

45.14 Dedicate the right to restrict vehicular access along Palmdale Blvd to the City of Palmdale

46 The applicant shall provide standard street improvements for the West half of Oak Street across the project frontage. These improvements shall consist of: (E)

46.1 Curb and gutter,

46.2 Sidewalk (width = five feet),

46.3 Roadway grading and paving, overlay and/or match-up, as directed by City Engineer,

46.4 Traffic control signs and devices as required by the City Traffic Engineer,

46.5 Pavement transition from the project boundaries to the satisfaction of the City Engineer,

46.6 Accessible curb ramp(s) at all walk returns,

46.7 Roadway drainage device(s),

46.8 Streetlights,

46.9 Dedicate five feet of LMD easement along Lot 8 frontage for landscape purpose,

46.10 Dedicate and provide 32 feet standard improvements along the West half of Oak Street from Palmdale Blvd to Palo Verde Way,

46.11 Dedicate and provide 30 feet of standard improvements along the West half of Oak Street from Palo Verde Way to the southerly Cul-de-Sac,

46.12 Dedicate and construct a four-foot wide minimum ADA by-pass at all proposed driveway approaches, and

46.13 Construct proper drainage facility/system to mitigate the exiting basin (TR 45073) outlet system.

47 The applicant shall provide standard street improvements for “A” Street, “C” Street, and Silver Court within the project boundary, face of curb to face of curb width of 34 feet (58-foot right-of-way). These improvements consist of: (E)

47.1 Curb and gutter,

47.2 Sidewalk (width = five feet),

47.3 Roadway grading and paving, overlay and/or match-up, as directed by City Engineer,

47.4 Traffic control signs and devices as required by the City Traffic Engineer,

47.5 Pavement transition from the project boundaries to the satisfaction of the City Engineer,

47.8 Accessible curb ramp(s) at all walk returns,

47.9 Roadway drainage device(s),

47.10 Streetlights,

47.11 Dedicate and construct a four foot wide minimum ADA by-pass at all proposed driveway approaches

47.12 “A” Street shall have Bulb outs curb at the “B” Street and “D” Street. Final design and improvements to be approved by Engineering and Traffic

48 The applicant shall provide standard street improvements for “B” Street, Kenston Drive, “D” Street, and Bell Ave within the project boundary, face of curb to face of curb width of 36 feet (60-foot right-of-way). These improvements consist of: (E)

48.1 Curb and gutter,

48.2 Sidewalk (width = five feet),

48.3 Roadway grading and paving, overlay and/or match-up, as directed by City Engineer,

48.4 Traffic control signs and devices as required by the City Traffic Engineer,

48.5 Pavement transition from the project boundaries to the satisfaction of the City Engineer,

48.6 Accessible curb ramp(s) at all walk returns,

48.7 Roadway drainage device(s),

48.9 Streetlights,

48.10 Dedicate and construct a four-foot wide minimum ADA by-pass at all proposed driveway approaches

49 The applicant shall provide standard street improvements for the East half of Hudsonia Street across the project frontage. The design shall be based on a 30-foot half-width right-of-way on an acceptable centerline profile extending a minimum of 300 feet beyond the project where applicable. These improvements shall consist of: (E)

49.1 Curb and gutter,

49.2 Sidewalk (width = five feet),

49.3 Roadway grading and paving, overlay and/or match-up, as directed by City Engineer,

49.4 Traffic control signs and devices as required by the City Traffic Engineer,

49.5 Pavement transition from the project boundaries to the satisfaction of the City Engineer,

49.6 Accessible curb ramp(s) at all walk returns,

49.7 Roadway drainage device(s),

49.8 Streetlights,

49.9 Construct street knuckle at the Rainer Avenue and Hudsonia Street per City Standard

50 Provide a striping and signing plan, subject to the approval of the Traffic/Transportation Engineer prior to the approval of the street improvement plans, and provide striping for left-turn pockets at all approaches to the following intersection(s): Palmdale Boulevard and Oak Street as part of the approval of the street improvement plans. (TE)(E)

51 All areas within the tract designated by the City Engineer as requiring a landscape easement shall be shown as an 'Easement for Landscaping Purposes' on the final map. (E)

52 A sanitary sewer-area study for this subdivision shall be prepared and submitted to the City Engineer for review and approval. A public sanitary sewer system is to be dedicated to the City, with private laterals to each lot. The system shall be designed and installed as the only method of sewage disposal for this subdivision. Coordination and clearance must be obtained from Los Angeles County Sanitation District prior to issuance of a sewer permit. (E)

53 The applicant shall obtain sufficient off-site sewer easements and design and construct an off-site outfall sewer with supplemental size, capacity, and length as required by the City Engineer. The City Engineer shall have the right to withhold approval of any affected improvement plans for failure to satisfy this condition. (E)

54 The subdivision shall comply with all requirements of PMC Chapter 13.05, Sewer Collection Service Charges. (E)

55 Water mains shall be designed to meet or exceed the total flow requirements determined for domestic flow and fire flow for this development. Required domestic flow shall be calculated by the applicant's engineer. Fire flow shall be determined by the Los Angeles County Fire Chief. (E)

56 The plans and specifications for the water delivery system shall be submitted for approval to the responsible water purveyor prior to final approval of this development by the City Engineer. In all cases where water system facilities have not been installed prior to filing this development with the City Engineer for final approval, the applicant shall submit a Labor and Materials bond in addition to one of the following: (E)

56.1 An Agreement and Faithful Performance bond in the amount approved by the City Engineer to be sufficient to guarantee installation of the improvements; or

56.2 An Agreement and evidence satisfactory to the City Engineer showing that the applicant has entered into a contract with the serving water utility for establishing a security guaranteeing payment for the installation of the improvements.

57 Street lighting plans shall be reviewed and approved as part of the approval of the street improvement plans. Street lighting plans shall be submitted to the City Engineer for review and approval and to Southern California Edison Company for their use. (E)

58 The applicant shall petition the City to annex to the City's Community Facilities District for the maintenance of streetlights and appurtenant facilities. Such annexation shall be formed concurrently with, or prior to, recordation of the final map at the sole cost and expense of the applicant, and the applicant's deposit of the estimated costs thereof shall be required prior to such actions by the City. If the City is unsuccessful in the annexation to the Community Facilities District, the Developer shall propose and receive approval for an alternative maintenance entity. The developer shall remain solely responsible for the maintenance of the streetlights and appurtenant facilities until such time that an alternative maintenance entity assumes the maintenance. All costs associated with the formation of an alternative maintenance entity shall be paid by the Developer. (E)

59 The applicant shall provide a complete set of street improvement plans for review and comment to utility providers including but not limited to the following: (E)

59.1 Water District

59.2 Southern California Edison

59.3 Southern California Gas Company

59.4 AT&T

59.5 Cable TV

60 Easements for all on-site utilities, public and private, shall be granted and recorded for maintenance and upkeep. Such easements may include, but are not limited to, sewer, water, electric, gas, telephone, storm drains, detention basins, and landscaping. (E)

61 Will Serve letters will be required before the map is submitted to City Council for approval. The following is a list of the minimum Will Serve letters required: (E)

61.2 Water District

61.3 Southern California Edison

61.4 Southern California Gas Company

61.5 Cable TV

61.6 School District

62 A preliminary title report and subdivision guarantee is needed showing all fee interest holders, all interest holders whose interest could ripen into a fee, all trust deeds, together with the names of the trustee and all easement holders. The account for this title report shall remain open until the final tract map is filed with the County Recorder. No easements shall be granted and recorded until after the final map is recorded, unless approved by the City Engineer and subordinated to any City easements by a certification upon the title sheet of the final map, prior to the grant. (E)

63 The applicant shall prepare Covenant's, Conditions, and Restrictions (CC&R's) for review and approval by the Planning Manager, City Engineer, and City Attorney. Such CC&R's shall include all elements deemed necessary by the City Attorney (guidelines available at the Planning Division). The applicant shall be responsible for all City Attorney costs regarding review of said CC&R's prior to recordation of any phase. (P)(E)

64 In cases where the applicant indicates that multiple final maps will be filed, a Phasing Plan shall be submitted for review and approval by the Planning Manager and City Engineer. Pursuant to Government Code 66456.1, multiple final maps (phasing of tentative map) shall not be authorized for this tentative map until such time as the City of Palmdale has had the opportunity to evaluate the phasing and impose reasonable conditions, related to the phasing. (E)

**THE FOLLOWING CONDITIONS SHALL BE MET PRIOR TO THE ISSUANCE OF BUILDING PERMITS FOR ANY PHASE OF THE SUBDIVISION:**

65 The applicant shall pay all fees at the time fees are determined payable and comply with all requirements of the applicable Federal, State, and Local agencies including, but not limited to, the following as applicable:

Los Angeles County Sanitation District
Los Angeles County Department of Health Services
Los Angeles County Consolidated Fire District
Palmdale Water Districts
Palmdale School District
Westside Union School District
Antelope Valley Union High School District
Antelope Valley Air Quality Management District

The duty of inquiry as to such requirements shall be upon the applicant. Proof of payment shall be provided to the Building and Safety Division prior to issuance of any building permits. (P)(E)(B&S)

66 The applicant shall submit full sized copies of the final recorded map in the form of one set of mylar and three sets of blueline to the City Engineer, and shall also submit an 8-1/2 x 11 inch mylar copy of the final map to the Planning Manager and City Engineer. The applicant shall provide a computerized .dwg format of the final recorded tract map which is compatible with the City's G.I.S. program to the City Engineer. The final map shall be projected in NAD 83 State Plane Zone (five feet). (E)(P)

67 Grading shall be designated "Engineered Grading" per City Building Code and shall be done in accordance with an approved grading plan. All grading work shall be performed according to the phasing plan approved by the Planning Manager and the City Engineer. (P)(E)

68 At completion of rough grading, the applicant shall submit appropriate reports and statements (Certifications) to the City Engineer, for review and approval, prior to release of rough grading. The City of Palmdale Building Code requires these reports and statements from the field or supervising grading engineer, the soils engineer, the geologist, and the grading contractor. (E)(B&S)

69 All sanitary sewer mains to be dedicated to the City are to be provided with as-built plans and have TV video inspection, as required by City Inspector, prior to final acceptance for maintenance. (E)

70 The applicant shall obtain addresses established by the City Engineer, and pay applicable processing fees, for all lots of residential subdivisions. (E)

71 Appropriate right-of-way for an eastbound right-turn lane shall be provided on Palmdale Boulevard at 52nd Street East. Design shall be subject to the approval of the City Engineer. (TE)

72 A striping and signing plan shall be provided for all roadway improvements and shall be subject to the approval of the City Engineer as part of the approval of the street improvement plans. (TE)

**THE FOLLOWING CONDITIONS SHALL BE MET WHILE CONSTRUCTION ACTIVITIES ARE ON-GOING:**

73 From the beginning of the first ground disturbing activity until on hundred (100) percent of the lots for the entire subdivision have been released for occupancy, the following are required of the applicant: 1) have erosion control measures, per an approved Erosion Control and Sedimentation Plan, in place during the rainy season (October 15 - April 15); 2) provide appropriate dust control measures, per City and Antelope Valley Air Quality Management District (AVAQMD) Standards, to minimize nuisance from dust at all times. (E)(B&S)

74 Adequate sanitary disposal facilities shall be required on-site during all phases of construction. (E)(B&S)

75 The applicant shall provide solid waste disposal containers on-site during all phases of construction. The accumulation of refuse and debris which may constitute an unsightly/unsafe public nuisance to surrounding properties is not permitted. (P)

76 In the event of an unforeseen encounter of subsurface materials suspected to be of an archaeological or paleontological nature, all grading or excavation shall cease in the immediate area, and the find left untouched until a qualified professional archaeologist or paleontologist, whichever is appropriate, is contacted and called in to evaluate the find and make recommendations as to disposition, mitigation, and/or salvage. The applicant shall be liable for costs associated with the professional investigation. (P)

77 If this tentative map is to be phased, the applicant shall have all basin(s), and any temporary grading or structures necessary to convey runoff to basin(s), in an operable condition prior to completion of rough grading of proposed streets for the first phase. (E)

78 A signing and striping plan shall be provided for all roadway improvements. (TE)

79 The applicant shall comply with all City and State guidelines and requirements for traffic control during construction and prior to final project acceptance. (TE)

80 The City Engineer shall be notified a minimum of 60 days prior to the anticipated opening of any street to public travel. (TE)

81 Additional pavement shall be constructed in order to provide for striped right turn lanes on Palmdale Boulevard at 52nd Street East. (TE)

**THE FOLLOWING CONDITIONS SHALL BE MET PRIOR TO ISSUANCE OF THE CERTIFICATE OF OCCUPANCY FOR EACH DWELLING UNIT:**

82 The applicant shall comply with the provisions of PMC Chapter 3.40 (Traffic Impact Fee Ordinance). The applicant shall pay the applicable traffic impact fees to the Building and Safety Division in the amount that is in effect at the time such fees are to be collected. (TE)(E)(B&S)

83 The applicant shall comply with the provisions of PMC Chapter 3.42 (Fire Facility Impact Fee Ordinance). The applicant shall pay the applicable fire facility impact fees to the Building and Safety Division in the amount that is in effect at the time such fees are to be collected. (E)(B&S)

84 The applicant shall comply with the provisions of PMC Chapter 3.45 (Public Facility Development Impact Fee Ordinance). The applicant shall pay the applicable public facility impact fees to the Building and Safety Division in the amount that is in effect at the time such fees are to be collected. (E)(B&S)

85 All public improvements within, and necessary to support, a block or construction phase of any final map, must be completed within sixty (60) days from issuance of the first Certificate of Occupancy within the block or construction phase, to the satisfaction of the City Engineer. In no case shall the total occupancy for a final map exceed ninety (90), percent until all public improvements within the final map have been completed to the satisfaction of the City Engineer. (E)

86 Slope erosion control and street trees shall be installed to the satisfaction of the City Engineer. (E)

87 At completion of final grading, the applicant shall submit appropriate statements (Certifications) to the City Engineer prior to release of final grading. The City of Palmdale requires that these be submitted by the field or supervising grading engineer, and/or the landscape architect. (E)

88 The developer or builder shall provide full front yard and street side yard landscaping as approved by the City Engineer and the Planning Manager. (P)(E)

**THE FOLLOWING CONDITIONS SHALL BE MET PRIOR TO ISSUANCE OF THE FINAL CERTIFICATE OF OCCUPANCY FOR ANY PHASE:**

89 The subdivision shall have been graded and constructed in accordance with all approved plans including but not limited to site plans, grading plans, wall plans, and landscape plans. (P)(E)

90 Repair any broken or damaged curb, gutter, sidewalk, and pavement on streets within or along the frontage of the development. Any existing driveways that are not to be used shall be replaced with a standard curb, gutter, and sidewalk. (E)

91 Electric Meter Installations: SCE's rules and policies require that all metering equipment be located to provide 24-hour access to the Utility. Metering equipment may be installed inside a building when located in an illuminated meter room directly accessible from the outside and readily accessible 24 hours a day. Southern California Edison requires their approval on all metering equipment prior to installation. (P)(SCE)(B&S)

92 Primary building address numbers shall be located on the building side where the main entrance is located. The development shall display an additional set of numbers on the secondary frontage (street side) when the building does not front on the street of address. Numbers shall be no less than eight inches in height, if located less than 100 feet from the centerline of the addressed street or 12-inches in height if placed further than 100 feet from the centerline of the addressed street. Numbers shall be of a color contrasting to the background to which they are affixed. (PS)

93 The applicant shall comply with the provisions of PMC Chapter 3.40 (Traffic Impact Fee Requirements). The applicant shall pay the applicable traffic impact fees to the Building and Safety Division in the amount that is in effect at the time such fees are to be collected pursuant to the provisions of PMC Chapter 3.40. (TE)

94 Street name signs shall be purchased and installed in accordance with City of Palmdale standards. The number and location of signs will be as directed by the City Engineer. (TE)

95 The applicant shall design and construct a traffic signal at the Palmdale Boulevard/52$^{nd}$ Street intersection. Design shall be subject to the approval of the City Engineer. (TE)

**THE FOLLOWING CONDITION(S) SHALL BE MET AS AN ON-GOING ELEMENT OF THE PROJECT:**

96 The applicant shall fully cooperate with any adjacent property development to provide improved site access in the future. (TE)

97 The installation of speed humps shall be prohibited as required by PMC Section 10.04.100. If any of these devices are installed while this ordinance is in effect the owner shall be required to remove these devices at their own expense. (TE)

Key to Departmental Conditions:

(B&S) Building and Safety Division (661-267-5353)
(E) Engineering Division (661-267-5272)
(F) Los Angeles County Fire Department (661-949-6319)
(Pk) Parks and Recreation Department (661-267-5611)
(P) Planning Division (661-267-5200)
(PA) Public Art (661-267-5686)
(PS) Public Safety Division (661-267-5170)
(SCE) Southern California Edison (661-726-5617)
(TE) Traffic Engineering (661-267-5300)

OFFICIAL BUSINESS )
Document entitled to free )
Recording per California )
Government Code Section 27383 )
)
RECORDING REQUESTED BY AND )
WHEN RECORDED MAIL TO: )
)
City of Palmdale )
38300 Sierra Highway, Suite C )
Palmdale, CA 93550 )
Attn: City Clerk )

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SPACE ABOVE THIS LINE IS FOR RECORDER'S USE

APN: 3023-002-184

**DENSITY BONUS HOUSING AGREEMENT**
**Maison's Palmdale Blvd 150, LLC**
**Agreement No. A-8767**

THIS DENSITY BONUS HOUSING AGREEMENT (this "Agreement"), dated as of _____ ____, 2024, is entered into by and between the City of Palmdale, a municipal corporation of the State of California (the "City"), and Maison's Palmdale Blvd 150, LLC, a Delaware limited liability company and/or its assigns (the "Owner"), as follows:

**RECITALS**

A. The Owner is the owner of a fee interest in certain real property located in the City of Palmdale, County of Los Angeles, State of California, identified as APN 3023-002-184, located at the Southeast corner of East Palmdale Boulevard and Hudsonia Street and legally described in Exhibit "A" attached hereto and incorporated by reference (the "Property").

B. The Owner will construct a 191-unit affordable housing development, 64 three- and four-bedroom single family homes, 64 one-bedroom junior accessory dwelling units ("JADU's"), 48 two-bedroom accessory dwelling units ("ADUs"), 15 three-bedroom ADUs, and associated landscaping and parking ("Residential Development" of "Project").ne residential building and included amenities (the "Residential Development").

C. The Owner proposes construction of a rental housing development of 191 units for market rate and low income individuals and families. At least ten percent (10%) of the units will be available to and occupied by households whose incomes do not exceed the maximum income of low income households in Los Angeles County as determined by the California Department of Housing and Community Development.

D. Under California Government Code Section 65915, *et seq*. and Palmdale Municipal Code Section 17.25.020, the City must, upon the request of an applicant, grant a density bonus and/or certain incentives/concessions and/or waivers/modifications for any development applicant that seeks and agrees to construct a minimum number of housing units that are affordable to low or very low income households (the "Density Bonus Law").

E. The subject site has a General Plan Land Use Designation of Single Family Residential 3 (up to 6 dwelling units per acre) and is zoned Single Family Residential 3 (up to 6 dwelling units per acre). The Density Bonus Law requires that, when an applicant includes at least 10% low-income units, the City must grant a 20% density bonus over the base density, which would allow an additional 4 units per acre in the Residential Development. Therefore, the Density Bonus Law requires the City to permit the Residential Development's proposed density of 10 dwelling units per acre. Additionally, in order to provide for affordable housing cost of the low-income units, the Owner has requested cost-saving concessions in accordance with California Government Code Section 65915, *et seq*. and Palmdale Municipal Code Section 17.25.020, as follows:

a. A concession pursuant to Palmdale Municipal Code Section 17.37.010.D.7, to allow composite shingles for the roofing material.

F. Owner has also requested one waiver to development standards that, if applied, would have the effect of physically precluding the construction of the Project in accordance with Government Code Section 65915, subdivision (e)(1), as follows:

a. A waiver to the minimum garage depth in Palmdale Municipal Code Section 17.37.101.C.3.b to allow a minimum garage depth of 20 feet.

G. The City and the Owner enter into this Agreement pursuant to and in accordance with California Government Code Section 65915, *et seq*., and Section 17.25.020 of the Palmdale Municipal Code, in order to provide housing for lower income households.

H. The City finds that granting the concessions and waivers listed under Recital E and F, above, will result in actual and identifiable cost reductions to provide for affordable housing cost, will not have an adverse impact upon public health and safety, the physical environment, or any property that is listed in the California Register of Historical Resources, and is consistent with state and federal law. The City also finds that the Residential Development is consistent with the General Plan.

**NOW, THEREFORE**, in consideration of the mutual covenants and provisions contained herein, the parties hereto agree as follows:

## AGREEMENT

1. Recitals. The Recitals set forth above are true and correct, and incorporated herein.

2. Definitions. For purposes of this Agreement, the terms listed below shall have the meanings thereafter specified:

a. "Adjusted for Household Size Appropriate for the Unit" means a household of two persons in the case of a one-bedroom unit, three persons in the case of a two-bedroom unit, and four persons in the case of a three-bedroom unit.

b. "Affordable Rent" means a rent that, when added to the Utility Allowance, does not exceed thirty (30) percent of sixty (60) percent of the Los Angeles County median income as determined annually by the California Department of Housing and Community Development, Adjusted for Household Size Appropriate for the Unit.

c. "Affordable Unit" means a dwelling unit that will be offered for rent exclusively to an Income Eligible Household at an Affordable Rent pursuant to this Agreement.

d. "Director" means City's Department of Neighborhood Services Director, or his or her designee.

e. "Income Eligible Household" means a Low Income Household which is eligible to rent a particular Affordable Unit.

f. "Low Income Household" shall have the meaning ascribed to it under California Health and Safety Code Section 50079.5. The upper income limit for Low Income Households shall be the income limits for such households published annually by the California Department of Housing and Community Development with adjustments for household size.

g. "Management Plan" means a plan prepared by the Owner and approved by the Director describing in detail the management of the Affordable Units, including marketing of the Affordable Units, tenant selection criteria and process, waiting list management, application of Utility Allowances in setting Affordable Rents, and similar details of the operation, annual monitoring inspections and file review, and a schedule of initial rents.

h. "Occupancy Date" means the earlier to occur of (i) issuance of a Certificate of Occupancy by the City or (ii) issuance of a Temporary Certificate of Occupancy by the City.

i. "Owner" means the person or entity defined as such in the introductory paragraph of this Agreement, and includes all successors and assigns of that person or entity.

j. "Property" shall have the meaning defined in Recital A, as more particularly described in Exhibit "A" attached hereto and incorporated herein.

k. "Residential Development" shall have the meaning given in Recital B.

l. "Utility Allowance" means an amount designated annually by the City as a reasonable estimate of the cost of utilities for the Affordable Unit, for purposes of calculating the applicable Affordable Rent.

3. Approvals. The Residential Development shall be developed in accordance with all applicable provisions of the Palmdale Municipal Code.

4. Affordable Units. The Owner hereby covenants and agrees that at least ten percent (10%) of the units in the Residential Development (at least 20 units) shall be rented exclusively to Low Income Households at an Affordable Rent.

5. Affordable Rents. Affordable Rents for Affordable Units, including Utility Allowances, shall be based on the Los Angeles County Area Median Income published in Title 25, California Code of Regulations, Section 6932 by the California Department of Housing and Community Development, as may be amended from time to time. Affordable Rents may not be increased more frequently than annually to reflect increases in Area Median Income.

6. Term of Affordability Covenants. The covenants to restrict the rental of the Affordable Units in accordance with this Agreement shall remain in effect for a term commencing on the Occupancy Date and continuing for fifty-five (55) years (the "Term"). Prior to recording of this Agreement, the Owner must deliver to the City a Lenders Consent and Subordination Agreement ("Lender Consent"), in the form appended to this Agreement, from each lender that will hold a security interest in the Property. Such Lender Consents shall be recorded as a substantive part of this Agreement.

7. Management Plan. The Owner shall submit the Management Plan for the Director's consideration and approval at least one hundred eighty (180) days prior to the date that the Owner applies for a Certificate of Occupancy for the Residential Development. Such approval shall not be unreasonably withheld. In addition to other components, the Management Plan shall contain the following:

i. Whenever an Affordable Unit becomes available, the Director shall be notified promptly in writing.

ii. The Owner shall conduct affirmative marketing of the Affordable Units, as they become available from time to time, including wide circulation of information and public notice of the availability of Affordable Units for rent during the marketing period required by the Management Plan.

iii. The Owner shall determine eligibility of Low Income Households that may

lease the Affordable Units in accordance with the Management Plan.

8. Changes in Tenant Income. A tenant who initially qualified as a Low Income Household, but who, due to an increase in income, no longer qualifies as a Low Income Household shall pay as rent an amount that is the least of the amount that would be payable by the tenant under (i) low income housing tax credit regulations, (ii) State or local law, or (iii) thirty percent (30%) of the household's adjusted gross income.

9. Utilization of Affordable Rental Units. All Affordable Units required by this Agreement shall be leased or rented and fully utilized in accordance with this Agreement; notwithstanding any other provision of law to the contrary, no Affordable Unit shall be withdrawn from the market or otherwise held vacant.

10. No Sublease. A tenant occupying an Affordable Unit may not sublet the unit without the written permission of both the Owner and the City. The City shall not grant permission to lease, rent, or sublet the unit if it finds that the prospective tenant or occupant is not an Income Eligible Household. Any individual who subleases an Affordable Unit in violation of the provisions of this Agreement shall be required to forfeit to the City all monetary amounts so obtained.

11. Lease Agreement. A fully executed copy of the lease agreement for each Affordable Unit, which shall comply with the provisions of this Agreement, shall be delivered to the City's Department of Neighborhood Services, Housing Division within ten (10) days after the date of its execution.

12. Maintenance of Units. The Owner shall: (a) maintain and operate all units on the Property so as to provide decent, safe and sanitary housing consistent with federal housing quality standards and the Palmdale Municipal Code; (b) make any required repairs or provide any required cleanup; and (c) provide the Affordable Units with the same levels of services and maintenance as are provided to any of the other dwelling units on the Property.

13. Annual Report. The Owner shall maintain complete and accurate records pertaining to the Affordable Units and shall prepare and provide the Director with a written annual report commencing one year after the Occupancy Date and continuing every year for fifty-five (55) years, regarding the rental status of the units. The report shall include information regarding the name, address, and income of each resident of the Affordable Units, identify the number of bedrooms of the unit and the monthly rent paid by the tenant. So long as permitted by law, concurrently with the submittal of each annual report to the City, the Owner shall pay a monitoring fee to the City in the amount of Three Thousand Dollars ($3,000) with a maximum increase of 2% per year to defray the City's cost of monitoring the Owner's compliance with this Agreement. The Owner's failure to make such required payment shall be a default under this Agreement.

14. Federal and State Laws. Notwithstanding the above provisions, nothing contained herein shall require the Owner or the City to do anything contrary to or refrain from doing anything

required by Federal and State laws and regulations promulgated thereunder applicable to the construction, management, maintenance, and rental of Affordable Units in the City of Palmdale.

15. Prohibition Against Discrimination. The Owner shall not discriminate against any tenant or potential tenant on the basis of sex, color, race, ethnicity, religion, ancestry, national origin, age, pregnancy, marital status, family composition, sexual orientation, or the potential or actual occupancy of minor children. The Owner further agrees to take affirmative action to ensure that no such person is discriminated against for any of the above-mentioned reasons.

16. Indemnification. The Owner shall defend, indemnify, and hold harmless the City of Palmdale and its officers, agents, employees, representatives, and volunteers from and against any loss, liability, claim, or judgment relating solely to this Agreement, including those claims that arise out of: (a) a breach of this Agreement by the Owner; (b) related in any manner to the Owner's administration of this Agreement; or (c) arising out of the City's interest in this Agreement or Affordable Units. This indemnification shall not apply to claims arising out of the negligence or willful misconduct of the City, its officers, agents, employees, representatives, or volunteers.

17. City's Right to Inspect Units and Documents. The City may inspect the Affordable Units (subject to the tenant's privacy rights and lease provisions) and any documents or records relating thereto, at any reasonable time in order to determine the Owner's compliance with this Agreement.

18. Successors and Assigns. This Agreement and its covenants and conditions shall run with the land and be binding upon and inure to the benefit of the City and the Owner, and their respective successors, owners by deed, deed in-lieu of foreclosure, foreclosure or otherwise, and assigns. The City reserves the right to designate another public agency within the City of Palmdale to perform the City's obligations or to exercise the City's rights under this Agreement.

19. Notices. 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 on the date received or the date delivery was refused as indicated on the return receipt, as follows:

To Owner:
Maison's Palmdale Boulevard 150, LLC
2007 Cedar Avenue
Manhattan Beach, CA 90266
Attn: Kevin Harbison

with a copy to:
Cox, Castle, & Nicholson, LLP
50 California Street
Suite 3200
San Francisco, CA 94111
Attn: Linda C. Klein

To City: City of Palmdale
38250 Sierra Highway
Palmdale, California 93550-4798
Attn: Director of Neighborhood Services

with a copy to: City of Palmdale
38300 Sierra Highway
Palmdale, California 93550-4798
Attn: City Attorney

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

20. Governing Law. The laws of the State of California shall govern this Agreement. Any legal action brought under this Agreement must be instituted in the Superior Court of the County of Los Angeles, State of California, in an appropriate municipal court in that County, or in Federal District Court in the Central District of California.

21. Default. Failure or delay by either party hereto to perform any term or provision of this Agreement, which is not cured within thirty (30) days after receipt of notice from the other party, constitutes a default under this Agreement. The party who so fails or delays must immediately commence to cure, correct, or remedy such failure or delay, and shall complete such cure, correction, or remedy with due diligence. The injured party shall give written notice of default to the party in default specifying the default complained of by the injured party. Except as required to protect against further damages, the injured party may not initiate proceedings against the party in default until thirty (30) days after giving such notice. Failure or delay in giving such notice shall not constitute a waiver of any default, nor shall it change the time of default. If applicable, the City agrees to accept cures tendered by the Investor Limited Partner of the Owner within the cure periods provided in this Agreement.

22. Remedies.

a. Any individual who rents (including subleasing) an Affordable Unit in violation of the provisions of this Agreement shall be required to forfeit to the City all monetary amounts so obtained.

b. The City may institute any appropriate legal actions or proceedings necessary to ensure compliance with this Agreement, including, but not limited to, actions for injunctive relief or damages.

c. It is agreed and understood that the covenants to maintain the Affordable Units as set forth herein are a requirement of the Palmdale Municipal Code and as a condition to receiving zoning and parking concessions/incentives under the Palmdale Municipal Code, the Owner agrees that a breach of the covenants to maintain the Affordable Units as affordable housing for the

Term specified herein constitutes a violation of the Palmdale Municipal Code, subject to enforcement by all legally available means.

23. Attorneys' Fees. In any action brought to declare the rights granted herein or to enforce or to interpret any of the terms of this Agreement, the prevailing party shall be entitled to an award of reasonable attorneys' fees and costs in an amount determined by the court.

24. Non-Waiver. Failure to exercise any right either party hereto may have or be entitled to in the event of default hereunder shall not constitute a waiver of such right or any other right in the event of a subsequent default.

25. Further Assurances and Recordation. The parties hereto shall cause this Agreement to be recorded in the Official Records of the County of Los Angeles. The Owner shall execute any further documents consistent with the terms of this Agreement, including documents in recordable form and do such further acts as may be necessary, desirable, or proper as the City shall from time to time find necessary or appropriate in order to effectuate its purpose in entering into this Agreement.

26. Entire Agreement. This Agreement, including any Lender's Consent and Subordination Agreements, and all attached Exhibits, constitutes the entire agreement between the parties hereto. This Agreement may be executed in counterparts, each of which shall be deemed an original, and all of which together shall constitute one and the same instrument. Each party to this Agreement acknowledges that no representations, inducements, promises, or agreements, orally or otherwise, have been made by any party, or anyone acting on behalf of any party, which are not embodied herein, and that any other agreement, statement, or promise not contained in this Agreement shall not be valid or binding. This Agreement may be amended only by written instrument signed by both the City and the Owner.

27. Third Party Beneficiaries. There are no third party beneficiaries of or to this Agreement.

28. Amendment of Agreement.

a. Generally. This Agreement may be amended from time to time in whole or in part by mutual consent of the original parties hereto or their successors in interest, in accordance with this Agreement, the Palmdale Municipal Code, and the Density Bonus Law.

b. Administrative Amendments. Notwithstanding subdivision (a) of this Section, any amendment to this Agreement, whether requested by the Owner or by the City, which does not relate to the Term; the number, percentage, or type of Affordable Units; or the number or type of any incentives or concessions given by the City, may be determined by the Director to be an administrative amendment and, if so, the Director shall approve the administrative amendment without notice or hearing, and this

Agreement and its pertinent exhibits shall be automatically amended without further action by the parties hereto. A memorandum of the amendment shall be executed and recorded in order to reflect such administrative amendment.

29. Counterparts. This Agreement may be executed by each party hereto on a separate signature page, and when the executed signature pages are combined, shall constitute one single instrument.

[*signatures follow*]

IN WITNESS WHEREOF, the City and the Owner have executed this Agreement as of the date set forth above.

**CITY**
CITY OF PALMDALE,
a municipal corporation

By: _____
Ronda Perez
City Manager

Dated: _____

ATTEST:

By: _____
Roxanne Faber
Acting City Clerk

APPROVED AS TO FORM:

By: _____
William P. Curley III
City Attorney

KANE, BALLMER & BERKMAN
City Special Counsel

By: _____
Todd C. Mooney

**OWNER**
owner
type of organization
By: Maison's Palmdale Boulevard 150, LLC
Delaware limited liability company

By: _____
Name:_____
Title: _____

Dated: _____

By: Organization,
type of company,
its Managing General Partner

By: _____
Name:_____
Title: _____

Dated: _____

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 Los Angeles )

On _____, before me, _____, a Notary Public, 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 _____

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 Los Angeles )

On _____, before me, _____, a Notary Public, 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 _____

**FORM OF**
**LENDER'S CONSENT AND SUBORDINATION AGREEMENT**

NOTICE: THIS LENDER'S CONSENT AND SUBORDINATION RESULTS IN YOUR SECURITY INTERESTS IN THE PROPERTY BECOMING SUBJECT TO AND OF A LOWER PRIORITY THAN THIS DENSITY BONUS HOUSING AGREEMENT

The undersigned (the "Lender"), as owner and holder of security interests ("Security Interests") evidenced by that certain [Deed of Trust With Absolute Assignment of Leases and Rents, Security Agreement and Fixture Filing] made by the Owner as trustor in favor of _____ as beneficiary, dated as of _____ and recorded on _____ as Instrument No._____ in the Official Records of the County of Los Angeles, State of California, hereby acknowledges its consent to the terms and provisions of this Density Bonus Housing Agreement. The undersigned further agrees that its Security Interests are and shall unconditionally be and remain at all times junior, subordinate, and subject to the terms, covenants, conditions, and restrictions of this Density Bonus Housing Agreement, provided that in consideration of the Lender's covenants and agreements contained in this Agreement, the City and its designated agencies hereby agree for the benefit of the Lender that concurrently with any notice from the City to the Owner that a default or breach exists under the terms of this Density Bonus Housing Agreement, the City shall send a copy of such notice to the Lender, and the Lender shall have the right, but not the obligation, to cure any defaults within thirty (30) days after the expiration of any cure period set forth in the notice from the City to the Owner regarding such Owner default. The provisions of this consent are intended to supplement, and not to limit, waive, modify, or replace those provisions of law pertaining to notice and cure rights of junior lenders including, without limitation, those set forth in California Civil Code Sections 2924b and 2924c. The Lender intentionally and unconditionally waives, relinquishes, and subordinates the lien or charge of the Security Interests in favor of this Density Bonus Housing Agreement.

AGREED AND ACKNOWLEDGED:

Dated as of: _____ "LENDER"

By. _____
Name: _____
Title: _____

[*notarized signature required*]

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 Los Angeles )

On _____, before me, _____, a Notary Public, 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 _____

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 Los Angeles )

On _____, before me, _____, a Notary Public, 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 _____

EXHIBIT A

Legal Description of Property

THE LAND REFERRED TO HEREIN BELOW IS SITUATED, IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

LOT 10 OF TRACT NO, 2916, IN THE CITY OF PALMDALE, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 31, PAGE 13, OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

APN: 3023-002-184

# Tentative Tract Map 83359

## Initial Study – Mitigated Negative Declaration

*prepared by*

**Maison's Palmdale Boulevard 150, LLC**
2007 Cedar Avenue
Manhattan Beach, California 90266
Contact: Kevin Harbison

*prepared with the assistance of*

**Rincon Consultants, Inc.**
250 East 1st Street, Suite 1400
Los Angeles, California 90012

**February 2024**

RINCON CONSULTANTS, INC. SINCE 1994

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Appendix F Noise and Vibration Study
Appendix G Traffic Signal Warrant Study
Appendix H Vehicle Miles Traveled Analysis

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# Initial Study

## 1. Project Title

Tentative Tract Map 83359

## 2. Lead Agency Name and Address

City of Palmdale
38300 Sierra Highway
Palmdale, California 93550

## 3. Contact Person and Phone Number

Brenda Mangaña, Planning Manager
(661) 267-5200
38250 Sierra Highway, Dev. Services Bldg.

## 4. Project Location

The Tentative Tract Map 83359 Project (hereafter referred to as "project" or "proposed project") is immediately adjacent to, and south of, East Palmdale Boulevard between 55th Street and 50th Street East in the City of Palmdale. The 20-acre project site is vacant and identified as Assessor Parcel Number (APN) 3023-002-184. The relatively flat site gently slopes northward and is dominated by Western Joshua trees and other vegetation (refer to the Biological Resources Assessment, Appendix B, for details), and disturbed throughout by off-highway-vehicle (OHV) use and trash dumping. The site is located 4.7 miles east of the intersection of Palmdale Boulevard and Sierra Highway. Figure 1 shows the location of the project site in the region and Figure 2 depicts the location of the site in its neighborhood context. Figure 3 depicts the extent of the tentative tract map study area.

## 5. Project Sponsor's Name and Address

Maison's Palmdale Boulevard 150, LLC
2007 Cedar Avenue
Manhattan Beach, California 90266
Contact: Kevin Harbison

## 6. General Plan Designation

The project site has a General Plan land use designation of Single Family Residential 3 (SFR 3). This designation allows for detached single-family subdivisions containing the City's standards 7,000 square foot minimum lot size. This designation allows a maximum density of three to six dwelling units per acre.

# 7. Zoning

The project site is zoned as Single Family Residential 3 (SFR 3). The SFR 3 Zone is established for the development of single-family detached dwellings at gross densities from zero to six dwelling units per acre and a minimum lot size of 7,000 square feet.

# 8. Description of Project

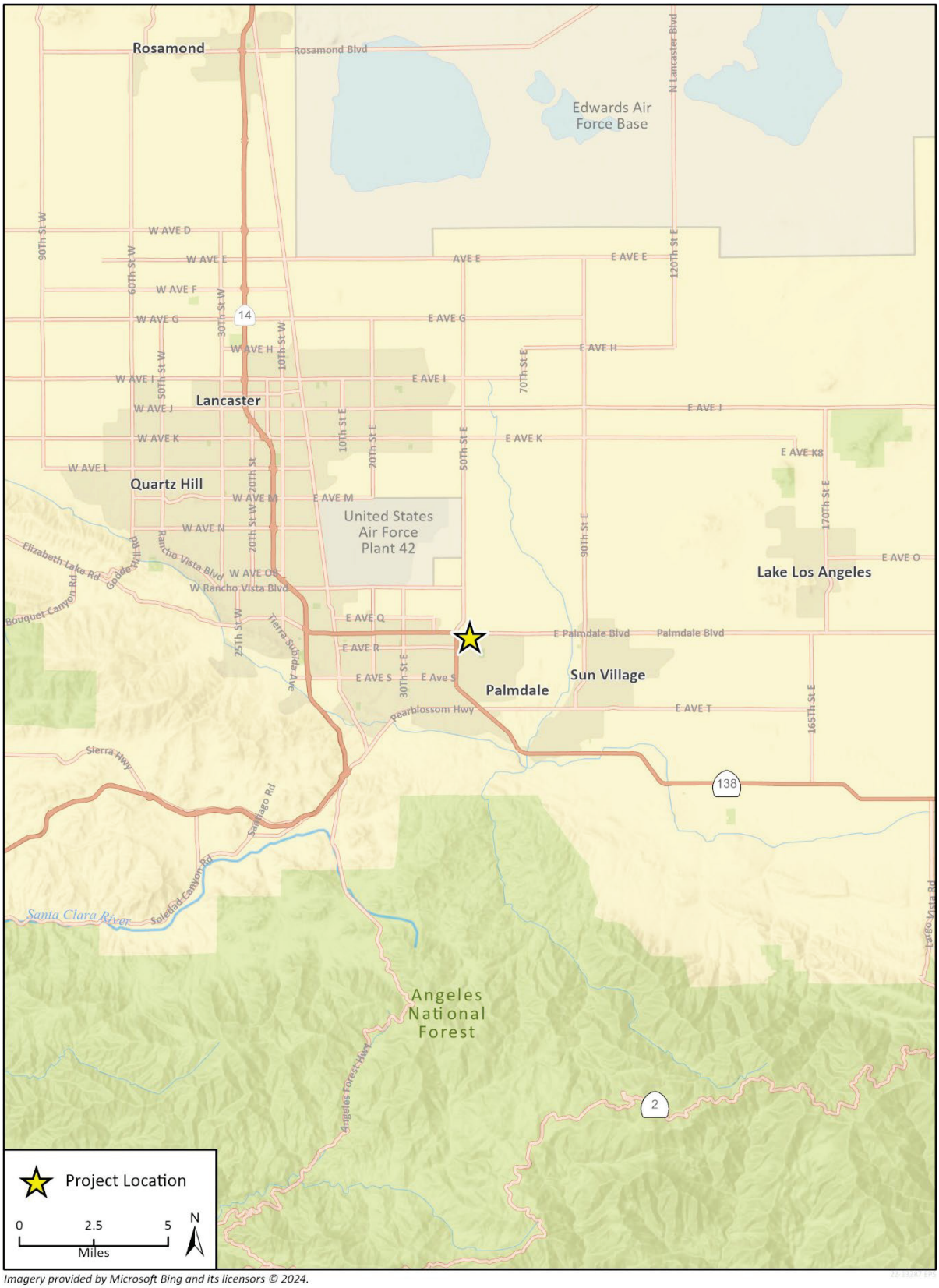
The proposed project would facilitate the development of up to 191-units of single story, single-family homes consisting of three-bedroom housing units, two-bedroom Accessory Dwelling Units and one-bedroom Junior Accessory Dwelling Units that would be offered for rent as a 100 percent affordable project to those qualifying at 30 to 80 percent Area Mean Income (AMI) for Los Angeles County. The project would also include a recreation center and community amenities on a total of 66 lots. The community would be an all-electric community and each residential unit would be constructed with rooftop solar, energy efficient appliances, and installation of all infrastructure improvements as conditioned by the City of Palmdale with approval of Tentative Tract Map (TTM) 83359. Within each lot, primary homes, accessory dwelling units (ADU), and junior ADUs would be separated by six-foot-tall vinyl fences and would be linked together by a network of walking paths and trails. The entire residential development would be enclosed by a six-foot-tall decorative perimeter block wall, except where existing and newly constructed streets would occur. Table 1, below, details a summary of the proposed project.

The entire community would comply with California Tax Credit Allocation Committee's requirement that a minimum of fifteen percent (15 percent) of the Low-Income Units be constructed with mobility features, as defined in California Building Code (CBC) 11B 809.2 through 11B 809.4, and a minimum of ten percent (10 percent) of the Low-Income Units be constructed with communications features, as defined in CBC 11B 809.5. These units shall, to the maximum extent feasible and subject to reasonable health and safety requirements, be distributed throughout the project consistent with 24 CFR Section 8.26.

Indoor community amenities include a community building with a tenant lounge, office spaces, and a fitness center. Outdoor amenities include a pool, spa, grill area, pocket community park, children's play area, and additional community open spaces. Additionally, a community trail network is planned to link the neighborhood and provide additional open spaces and parks for the community to utilize. Monumentation signage for the community would be installed along Palmdale Boulevard.

Streets that would be constructed within the project site and would link the community to East Palmdale Boulevard to the north as well as the existing residential projects to both the east and west of the project. All public rights-of-way would be constructed to the width shown on the TTM and would include road, sidewalks, and curbs and gutters. Americans with Disabilities Act (ADA) curb ramps, appropriate street signage, fire hydrants, and streetlights would also be installed for each street both inside and outside of the development.

**Figure 1 Vicinity Map**




*Imagery provided by Microsoft Bing and its licensors © 2024.*

## Figure 2 Project Location

*Imagery provided by Microsoft Bing and its licensors © 2022.*

**Figure 3 Tentative Tract Map**

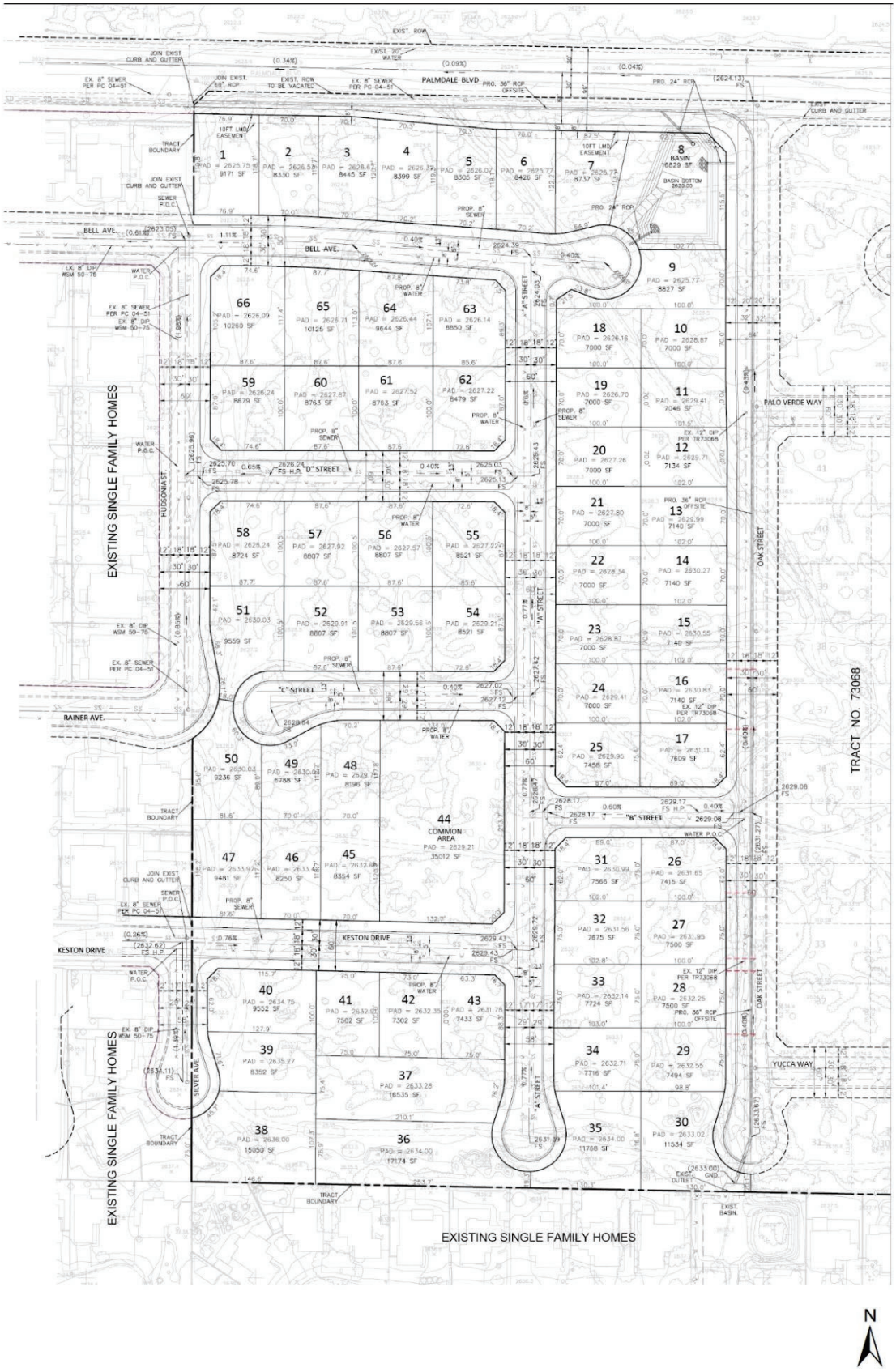


**Table 1 Project Summary**

| | |
|---|---|
| **Lot Size** | |
| Lots 1-7, 9-43, 45-66 (Residential Units) | Range from 7,000 sf to 17,174 sf |
| Lot 8 (Drainage Basin) | 16,829 sf |
| Lot 44 (Common Area) | 35,012 sf |
| **Lot Components** | |
| **Main Residential Unit** | |
| Building Area (Net) | Range from 1,145 sf – to 1,226 sf |
| Garage Area (Net) | 440 sf |
| sensiJunior ADU | 496 sf |
| Front Patio | Range from 88 sf to 90 sf |

### Construction

Construction activities would include site preparation, grading, building construction, asphalt paving, and architectural coating. Construction of the proposed project is anticipated to occur over an approximately one and a half-year (18 month) period beginning in Summer of 2024 and construction will occur for approximately 14 to 15 months.

Construction would occur Monday through Saturday between the hours of 6:30 a.m. and 8:00 p.m. and must receive written permission from the City Engineer to perform such work as construction, repair, excavation, or earth moving work pursuant to the Palmdale Municipal Code (PMC) Chapter 8.28 (Building Construction Hours of Operation and Noise Control).

## 9. Surrounding Land Uses and Setting

The project site is in an urban area designated as SFR 3 and is surrounded by single-family residential neighborhoods off Palmdale Boulevard to the west and south. The parcel immediate to the east of the project site is currently vacant. To the north of the project site, there is vacant land designated as Residential Neighborhood 2 and 3.

## 10. Required Approvals

The proposed project would require approval of a Tentative Tract Map, Design Review approval, and approval of this Initial Study-Mitigated Negative Declaration (IS-MND) by the City of Palmdale. In addition to approvals from the City of Palmdale, an approval from the California Tax Credit Allocation Committee for State tax credits is required.

## 11. Have California Native American Tribes Traditionally and Culturally Affiliated with the Project Area Requested Consultation Pursuant to Public Resources Code Section 21080.3.1?

[The Tribal Consultation summary will be provided when the project application is submitted and the City begins the government-to-government consultation process under AB 52]

*This page intentionally left blank.*

# Environmental Factors Potentially Affected

This project would potentially affect the environmental factors checked below, involving at least one impact that is "Potentially Significant" or "Less than Significant with Mitigation Incorporated" as indicated by the checklist on the following pages.

| | | | | | |
|---|---|---|---|---|---|
| ☐ | Aesthetics | ☐ | Agriculture and Forestry Resources | ☐ | Air Quality |
| ■ | Biological Resources | ■ | Cultural Resources | ☐ | Energy |
| ■ | Geology/Soils | ■ | Greenhouse Gas Emissions | ☐ | Hazards & Hazardous Materials |
| ☐ | Hydrology/Water Quality | ☐ | Land Use/Planning | ☐ | Mineral Resources |
| ☐ | Noise | ■ | Population/Housing | ■ | Public Services |
| ☐ | Recreation | ☐ | Transportation | ☐ | Tribal Cultural Resources |
| ☐ | Utilities/Service Systems | ☐ | Wildfire | ☐ | Mandatory Findings of Significance |

# Determination

Based on 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 to the project have been made by 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 "less than significant with mitigation incorporated" 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 potential 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 |
| Brenda Mangaña | Planning Manager |
| Printed Name | Title |

# Environmental Checklist

## 1 Aesthetics

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Except as provided in Public Resources Code Section 21099, 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 non-urbanized 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 a 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 that would adversely affect daytime or nighttime views in the area? | ☐ | ☐ | ■ | ☐ |

A scenic vista is defined as a public viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public. Public views are those that are experienced from a publicly accessible vantage point, such as a roadway or public park. The California Department of Transportation (Caltrans) manages the California State Scenic Highway Program, which designates State scenic highways. A scenic highway becomes officially designated when the local governing body applies to and is approved by Caltrans for scenic highway designation and adopts a Corridor Protection Program that preserves the scenic quality of the land that is visible from the highway right of way (Caltrans 2022).

The City of Palmdale Planning Area encompasses approximately 174 square miles within a transitional area between the foothills of the San Gabriel and Sierra Pelona Mountains and the Mojave Desert to the north and east (City of Palmdale 2022a). Across the Antelope Valley, elevations range from 500 to 900 feet. The high desert lies on the north side of the San Gabriel Mountains with elevations ranging between 2,500 and 3,000 feet. The project site is in a highly urbanized area that includes residential uses.

*a. Would the project have a substantial adverse effect on a scenic vista?*

A scenic vista is usually defined as a panoramic view from an elevated position or a long-range view from a public vantage point. While the City of Palmdale General Plan does not identify any specific scenic vistas in the city, General Plan Policy Land Use and Community Design (LUD) 5.7 aims for the protection and enhancement of the city's scenic vistas and limit development in areas with high scenic value (City of Palmdale 2022a). In addition, the proposed project does not occur along a view corridor identified in the City's General Plan. Long range views of hillsides surrounding Antelope Valley, such as those near Angeles National Forest, are visible from the project site. PMC Section 17.36.010 (Development Standards – Residential Zones) requires that buildings within an area zoned SFR 3 shall not exceed two stories or 35 feet in height, except when permitted by a conditional use permit. Given the distance between the surrounding hillsides and the project site, and that the proposed residences would not exceed two stories in height, the project would not result in impacts to the scenic quality of hillsides in the city. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*b. Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?*

The nearest designated State scenic highway is State Route 2 (SR-2) located over 16 miles south of the project site (Caltrans 2019). The nearest eligible state scenic highway is State Route 58 (SR 58) located approximately 30 miles north of the project site. Therefore, no officially designated or eligible State scenic highways are near the project site, and the project site does not contain any trees, rock outcroppings, or historic buildings that would be impacted by the proposed project. Therefore, impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*c. Would the project, in non-urbanized 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 a 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?*

The General Plan land use designation of the project site is Single Family Residential (SFR 3) consistent with the SFR 3 zone in the zoning code. Land uses surrounding the project site are similarly zoned as SFR 3. Residences surround the project site to the west, south, and east. Land to the north of the project site is designated as Other Jurisdiction. Thus, the proposed project would be consistent with the current zoning and land uses within the area.

Construction of the proposed project would replace the vacant parcel and utilize building materials that would complement the aesthetics of the existing residences surrounding the site to the west, south, and east. Additionally, the proposed project would comply with PMC Section 17.36.010 (Development Standards – Residential Zones) and Section 17.86.010 (Landscaping Requirements), which defines the requirements for building design and landscaping on the project site. Compliance with the applicable requirements would maximize the aesthetic quality of the proposed project.

While the proposed project would result in visual impacts during construction due to the presence of equipment, vehicles, construction fencing, signage, and lighting, these impacts would be temporary and limited to the construction phase only. Once fully built, the proposed project would result in the permanent impact to the visual character of the project area with the presence of

single-story, single-family homes. As discussed above, the height of the proposed development would be within the height restrictions defined by the PMC Section 17.36.010 (Development Standards – Residential Zones). In addition, the proposed project would include construction best management practices (BMPs) including but not limited to proper storage of equipment, project site maintenance, dust control measures, and limiting hours of construction within the hours mandated by PMC Section 8.28.030 (Construction Noise Prohibited in Residential Zones). Permanent impacts would include the presence of new development on a currently vacant site. The proposed project is located in an urbanized area and the surroundings are fully developed with residential buildings.

In addition, the Land Use and Community Design Element of the City General Plan includes policies regarding the maintenance of community design and character. Some of those policies include, but are not limited to, the following (City of Palmdale 2022a):

**Goal LUD-4: High-quality architecture and site design in the renovation and construction of all buildings.**

Policy LUD-4.5: Use visual and physical design cues within the design of a building and within building entries to emphasize the building entrance and connections to public spaces and public pathways/networks.

Policy LUD-4.7: Allow iconic and memorable building designs, particularly on larger nonresidential properties.

Policy LUD-4.8: Design sites and buildings adjacent to natural areas with transparent design elements. Employ bird-safe design near habitat areas or migratory routes.

**Goal LUD-6: Pedestrian-oriented, human-scale and well-landscaped streets and civic spaces.**

Policy LUD-6.3: For construction of new small-scale housing and minor subdivision projects, design site plans that provide amenities and integrated networks for walking and bicycling.

Policy LUD-6.4: Improve existing parks and public spaces throughout the city to provide beautiful, comfortable, and inviting gathering spaces.

The proposed project complies with Policy LUD-6.3 by ensuring that the streets constructed within the project site would link the community to East Palmdale Boulevard to the north as well as the existing residential projects to both the east and west of the project. In addition, the project would maintain the community's aesthetic by following the design standards outlined in PMC Section 17.36.010 (Development Standards – Residential Zones). The project would contain single-family residences, similar to areas surrounding the project site. Thus, the proposed project would be compatible with the surrounding neighborhoods and consistent with land uses in the area. In addition, the proposed project would be consistent with the General Plan and building heights would be compatible with heights allowed in the surrounding area. Therefore, implementation of the proposed project would result in a less-than-significant impact associated with visual character and scenic quality.

**LESS THAN SIGNIFICANT IMPACT**

*d. Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?*

The proposed project would add temporary and permanent lighting to the project area. During construction, the project would include temporary construction lighting for areas requiring additional lighting. The project would limit construction hours within the PMC Section 8.28.030 (Construction Noise Prohibited in Residential Zones) requirement where construction activities are prohibited between 8:00 p.m. to 6:30 a.m. Other additional lighting sources would come from vehicles and other large operating equipment. Once operational, permanent lighting sources would primarily be from outdoor lighting necessary to ensure safety and additional vehicle lights.

Lighting associated with the proposed project would be required to comply with PMC Section 17.86.030 (Outdoor Lighting), which requires consistent illumination levels with the character and use surrounding of the surrounding development; excessive illumination is prohibited. Additionally, exterior lighting would be required to be located and designed to minimize glare beyond the proposed project site. Glare onto the adjacent properties would be minimized using down casting, cut-off type fixtures, as necessary, that are shielded and would direct lights towards the specific areas needing illumination. For areas that are located near residents, the lowest allowable lighting levels would be used.

Compliance with the PMC would help to mitigate the effects of permanent light and glare induced by the proposed project. Therefore, implementation of the proposed project would result in a less than significant impact.

**LESS THAN SIGNIFICANT IMPACT**

# 2 Agriculture and Forestry Resources

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on 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? | ☐ | ☐ | ☐ | ■ |

*a. Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?*

The California Department of Conservation (DOC), Division of Land Resource Protection, Farmland Mapping and Monitoring Program (FMMP), tracks and categorizes land with respect to agricultural resources. Land is designated as one of the following and each has a specific definition: Prime Farmland, Farmland of Statewide Importance, Unique Farmland, Farmland of Local Importance, Grazing Land, Urban Built-Up Land, and Other Land.

According to the DOC California Important Farmland Finder, the project site is classified as Other Land (DOC 2016). Other Land is defined as land not included in any other mapping territory. Often times, this area can include rural residential land, vacant or disturbed land, semi-agricultural, and rural commercial land (DOC 2019). For the proposed project, the project site would be considered vacant and disturbed land. Areas to the west, south, and east are all classified as Urban and Built-Up Land. Thus, the proposed project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a non-agricultural use. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*b. Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?*

*c. Would the project 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. Would the project result in the loss of forest land or conversion of forest land to non-forest use?*

*e. Would the project 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?*

The current zoning of SFR 3. This designation would be consistent with the SFR (Single Family Residential) General Plan Land Use designations. The project site is not associated with a Williamson Act contract. No agricultural use is present on the project site or within the vicinity of the project. The proposed project would not impact any agricultural uses. In addition, there are no forests or timberlands located within the City of Palmdale. Therefore, the proposed project would not cause the loss of forest land or conversion of forest to non-forest land. Therefore, no impact would occur.

**NO IMPACT**

# 3 Air Quality

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| 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? | ☐ | ☐ | ■ | ☐ |

The project site is within the Mojave Desert Air Basin (MDAB), an inland region in southern California that includes the desert portions of northwestern Los Angeles County, eastern Kern County, northeastern Riverside County, and San Bernardino County. The region is closed off from southern coast of California and central California by mountain ranges with the Sierra Nevada Mountains to the north, the Tehachapi Mountains to the northwest, and the San Gabriel and San Bernardino Mountains to the south. The Sonoran Desert borders the eastern and southern portions of the MDAB. The regional climate in the MDAB is dry-host desert climate characterized by little cloud formation, daytime solar heating, and infrequent precipitation. The air quality within the MDAB is primarily influenced by meteorology, topography, and a wide range of emission sources, such as dense population centers, substantial vehicular traffic, and industry. The Antelope Valley Air Quality Management District (AVAQMD) monitors and regulates local air quality in the eastern portion of the MDAB, which includes the cities of Lancaster and Palmdale (AVAQMD 2022a).

## Air Quality Regulations

### Federal Air Quality Regulations

Ambient Air Quality Standards represent the maximum levels of background pollution considered safe, with an adequate margin of safety, to protect the public health and welfare. The federal Clean Air Act (CAA) was enacted in 1970 and amended in 1977 and 1990 [42 United States Code (USC) 7401] for the purposes of protecting and enhancing the quality of the nation's air resources to benefit public health, welfare, and productivity.

The U.S. Environmental Protection Agency (USEPA) has set primary and secondary National Ambient Air Quality Standards (NAAQS) for ozone, carbon monoxide (CO), nitrogen dioxide ($NO_2$), sulfur

dioxide ($SO_2$), particulate matter with a diameter of up to ten microns ($PM_{10}$) and up to 2.5 microns ($PM_{2.5}$), and lead (Pb). Primary standards are those levels of air quality deemed necessary, with an adequate margin of safety, to protect public health. Table 2 lists the current federal and State standards for regulated pollutants.

**Table 2 Federal and State Ambient Air Quality Standards**

| Pollutant | Averaging Time | Federal Primary Standards | California Standard |
|---|---|---|---|
| Ozone | 1-Hour | – | 0.09 ppm |
| | 8-Hour | 0.070 ppm | 0.070 ppm |
| Carbon Monoxide | 8-Hour | 9.00 ppm | 9.00 ppm |
| | 1-Hour | 35.00 ppm | 20.00 ppm |
| Nitrogen Dioxide | Annual | 0.053 ppm | 0.030 ppm |
| | 1-Hour | 0.100 ppm | 0.180 ppm |
| Sulfur Dioxide | Annual | 0.030 ppm | – |
| | 24-Hour | 0.14 ppm | 0.04 ppm |
| | 1-Hour | 0.075 ppm | 0.25 ppm |
| $PM_{10}$ | Annual | – | 20 µg/m³ |
| | 24-Hour | 150 µg/m³ | 50 µg/m³ |
| $PM_{25}$ | Annual | 12 µg/m³ | 12 µg/m³ |
| | 24-Hour | 35 µg/m³ | – |
| Lead | 30-Day Average | – | 1.5 µg/m³ |
| | 3-Month Average | 0.15 µg/m³ | – |

ppm = parts per million; µg/m³ = micrograms per cubic meter

Source: CARB 2016

## *State Air Quality Regulations*

### CALIFORNIA AMBIENT AIR QUALITY STANDARDS

The California Clean Air Act (CCAA) was enacted in 1988 (California Health & Safety Code Section 39000 et seq.). While USEPA is the federal agency designated to administer air quality regulation, the California Air Resources Board (CARB) is the State equivalent in the California Environmental Protection Agency (CalEPA). Under the CCAA the State has developed the California Ambient Air Quality Standards (CAAQS), which are generally more stringent than the NAAQS. Table 2 lists the current State standards for regulated pollutants. In addition to the federal criteria pollutants, the CAAQS also specify standards for visibility-reducing particles, sulfates, hydrogen sulfide, and vinyl chloride. Like the federal CAA, the CCAA classifies specific geographic areas as either "attainment" or "nonattainment" areas for each pollutant, based on the comparison of measured data within the CAAQS.

California is divided geographically into 15 air basins for managing the air resources of the State on a regional basis. Areas within each air basin are considered to share the same air masses and, therefore, are expected to have similar ambient air quality. If an air basin is not in either federal or State attainment for a criteria pollutant, the basin is classified as a nonattainment area for that pollutant. Under the CAA, once a nonattainment area has achieved the air quality standards for a criteria pollutant, it may be re-designated to an attainment area for that pollutant. To be re-

designated, the area must meet air quality standards and have a 10-year plan for continuing to meet and maintain air quality standards, as well as satisfy other requirements of the federal CAA. Areas that have been re-designated to attainment are called maintenance areas.

The MDAB is designated a nonattainment area for the federal and State eight-hour ozone standards, State one-hour ozone standards, and for State $PM_{10}$ standards. The AVAQMD portion of the MDAB is designated unclassifiable or in attainment for all other federal and State standards (AVAQMD 2022b).

### TOXIC AIR CONTAMINANTS

A toxic air contaminant (TAC) is an air pollutant that may cause or contribute to an increase in mortality or serious illness, or which may pose a present or potential hazard to human health. TACs may result in long-term health effects such as cancer, birth defects, neurological damage, asthma, or genetic damage, or short-term acute effects such as eye watering, respiratory irritation, runny nose, throat pain, and headaches. TACs are considered either carcinogenic or non-carcinogenic based on the nature of the health effects associated with exposure. For carcinogenic TACs, potential health impacts are evaluated in terms of overall relative risk expressed as excess cancer cases per one million exposed individuals. Non-carcinogenic TACs differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis.

TACs include both organic and inorganic chemical substances. One of the main sources of TACs in California is diesel engines that emit exhaust containing solid material known as diesel particulate matter (DPM); however, TACs may be emitted from a variety of common sources, including gasoline stations, motor vehicles, dry cleaners, industrial operations, painting operations, and research and teaching facilities. TACs commonly associated with gasoline dispensing stations include the organic compounds of benzene, toluene, and xylene. Benzene is a known human carcinogen and can result in short-term acute and long-term chronic health impacts (USEPA n.d.).

In 1983, the California Legislature enacted a program to identify the health effects of TACs and to reduce exposure to these contaminants to protect the public health (Assembly Bill [AB] 1807: Health and Safety Code Sections 39650–39674). The Legislature established a two-step process to address the potential health effects from TACs. The first step is the risk assessment (or identification) phase. The second step is the risk management (or control) phase of the process.

The California Air Toxics Program establishes the process for the identification and control of TACs and includes provisions to make the public aware of significant toxic exposures and for reducing risk. Additionally, the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, 1987, Connelly Bill) was enacted in 1987 and requires stationary sources to report the types and quantities of certain substances routinely released into the air. The goals of the Air Toxics "Hot Spots" Act are to collect emission data, identify facilities having localized impacts, ascertain health risks, notify nearby residents of significant risks, and reduce those significant risks to acceptable levels. The Children's Environmental Health Protection Act, California Senate Bill (SB) 25 (Chapter 731, Escutia, Statutes of 1999), focuses on children's exposure to air pollutants. The act requires CARB to review its air quality standards from a children's health perspective, evaluate the statewide air quality monitoring network, and develop any additional air toxic control measures needed to protect children's health.

### STATE IMPLEMENTATION PLAN

The federal CAA Amendments mandate that states submit and implement a State Implementation Plan (SIP) for areas not meeting air quality standards. The SIP includes pollution control measures to demonstrate how the standards will be met through those measures. The SIP is established by incorporating measures established during the preparation of air quality attainment plans and adopted rules and regulations by each local air district, which are submitted for approval to CARB and the USEPA. The goal of an air quality attainment plan is to reduce pollutant concentrations below the NAAQS through the implementation of air pollutant emissions controls. Local air districts and other agencies, such as the Department of Pesticide Regulation and the Bureau of Automotive Repair, prepare SIP elements and submit them to CARB for review and approval. CARB then forwards SIP revisions to the USEPA for approval and publication in the Federal Register. All of the items included in the California SIP are listed in the Code of Federal Regulations (CFR) at 40 CFR 52.220.

As the regional air quality management district, the AVAQMD is responsible for preparing and implementing the portion of the SIP applicable to the portion of the MDAB within its jurisdiction. The air pollution control district for each county adopts rules, regulations, and programs to attain federal and state air quality standards and appropriates money (including permit fees) to achieve these objectives.

## *Local Air Quality Regulations*

### AVAQMD OZONE ATTAINMENT PLAN

Under State law, air districts are required to prepare a plan for air quality improvement for pollutants for which the district is in non-compliance. The AVAQMD adopted the Federal 75 parts per billion (ppb) Ozone Attainment Plan for the Western Mojave Desert Nonattainment Area in March 2017 to reach attainment for federal and State standards. The Ozone Attainment Plan incorporates new scientific data and notable regulatory actions that have occurred since adoption of the 2010 Ozone Attainment Plan including the approval of the new federal 8-hour ozone standard of 0.070 parts per million (ppm) that was finalized in 2015. The Final 2017 Ozone Attainment Plan addresses several State and federal planning requirements and incorporates new scientific information, primarily in the form of updated emissions inventories, ambient measurements, and meteorological air quality models. The Southern California Association of Governments' (SCAG) projections for socio-economic data (e.g., population, housing, employment by industry) and transportation activities from the 2016 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS) are integrated into the 2017 Ozone Attainment Plan. To minimize potential impacts from project emissions, the AVAQMD implements rules and regulations for emissions that may be generated by various uses and activities. Rules and regulations relevant to the proposed project include Rule 403 (Fugitive Dust), Rule 402 (Nuisance), and Rule 1113 (Architectural Coatings).

### 2020-2045 REGIONAL TRANSPORTATION PLAN/SUSTAINABLE COMMUNITIES STRATEGY

SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties. On September 3, 2020, SCAG's Regional Council formally adopted the 2020-2045 RTP/SCS (titled Connect SoCal). The 2020-2045 RTP/SCS builds upon the progress made through implementation of the 2016-2040 RTP/SCS and includes 10 goals focused on promoting economic prosperity, improving mobility, protecting the environment, and supporting

healthy/complete communities. The SCS implementation strategies include focusing growth near destinations and mobility options, promoting diverse housing choices, leveraging technology innovations, and supporting implementation of sustainability policies. The SCS establishes a land use vision of center-focused placemaking, concentrating growth in and near Priority Growth Areas, transferring of development rights, urban greening, creating greenbelts and community separators, and implementing regional advance mitigation (SCAG 2020). The RTP/SCS pertains to air quality because the strategies set forth in the plan would reduce air pollutant emissions from mobile sources.

### CITY OF PALMDALE GENERAL PLAN

The City of Palmdale General Plan (2022) contains goals, policies, and strategies for enhancing community character and quality of life, expanding economic development opportunities, managing growth, addressing impacts of climate change, and improving outcomes for public health and sustainability. The General Plan includes numerous goals and policies in the Air Quality Element through which air quality would be improved and project impacts reduced, as follows:

**Goal AQ-2: Minimize particulates less than 10 microns in size ($PM_{10}$) and minimize activities that generate dust.**

Policy AQ 2-4: Erosion and Dust Control Measures**.** Require erosion and dust control measures for new construction, including covering soil with straw mats or use of chemical soil and dust binders during site grading, followed by hydroseeding and watering disturbed construction areas as soon as possible after grading to prevent fugitive dust.

**Goal AQ-3: Reduction and/or elimination of unnecessary sources of air pollution.**

Policy AQ 3-4: Reduce Reactive Organic Gas**.** Reduce reactive organic gas (ROG) and particulate emissions from building materials and construction methods, by promoting the use of nonsolvent-based, high-solid, or water-based coatings, and requiring compliance with all pertinent AVAQMD rules.

**Goal AQ-4: Reduce air pollution caused by energy consumption.**

Policy AQ 4-2: Energy Conservation. Encourage energy conservation from all sectors of the community by promoting and/or requiring the use of energy efficient appliances, processes, and equipment, and promoting energy audits and retrofits of existing structures.

Policy AQ 4-3: Recycling. Require local government, Palmdale citizens, and local businesses and industries to recycle, as mandated by state law, and to otherwise recycle to the maximum extent possible in accordance with the requirements of the Palmdale Municipal Code.

Policy AQ 4-4: Solar Energy**.** Require new developments to minimize obstruction of direct sunlight for solar energy systems on adjacent properties.

## Criteria Pollutants

### *Ozone*

Ozone is produced by a photochemical reaction (triggered by sunlight) between nitrogen oxides ($NO_X$) and reactive organic gases[1] (ROG). $NO_X$ are formed during the combustion of fuels, while ROG are formed during combustion and evaporation of organic solvents. Because ozone requires sunlight to form, it usually occurs in substantial concentrations between the months of April and October. Ozone is a pungent, colorless, toxic gas with direct health effects on humans including respiratory and eye irritation and possible changes in lung functions. Groups most sensitive to ozone include children, the elderly, people with respiratory disorders, and people who exercise strenuously outdoors.

### *Carbon Monoxide*

CO is a local pollutant produced by the incomplete combustion of carbon-containing fuels, such as gasoline, natural gas, oil, coal, and wood. The primary source of CO, a colorless, odorless, poisonous gas, is automobile traffic. Therefore, elevated concentrations are usually found near areas of high traffic volumes. The health effects from CO are related to its affinity for hemoglobin in the blood. At high concentrations, CO reduces the amount of oxygen in the blood, causing heart difficulty in people with chronic diseases, reduced lung capacity, and impaired mental abilities.

### *Sulfur Dioxide*

$SO_2$ is a combustion product, with the primary source being power plants and heavy industries that use coal or oil as fuel. $SO_2$ is also a product of diesel engine combustion. The health effects of $SO_2$ include lung disease and breathing problems for people with asthma. $SO_2$ in the atmosphere contributes to the formation of acid rain.

### *Nitrogen Dioxide*

$NO_2$ is a byproduct of fuel combustion, with the primary sources being motor vehicles and industrial boilers and furnaces. The principal form of $NO_2$ produced by combustion is nitric oxide (NO), but NO reacts rapidly to form $NO_2$, creating the mixture of NO and $NO_2$ commonly called $NO_X$. $NO_2$ is an acute irritant. A relationship between $NO_2$ and chronic pulmonary fibrosis may exist, and an increase in bronchitis in young children at concentrations below 0.3 parts per million (ppm) may occur. $NO_2$ absorbs blue light, gives a reddish-brown cast to the atmosphere, and reduces visibility. It can also contribute to the formation of ozone/smog and acid rain.

### *Particulate Matter*

Suspended atmospheric $PM_{10}$ and $PM_{2.5}$ are comprised of finely divided solids and liquids such as dust, soot, aerosols, fumes, and mists. The characteristics, sources, and potential health effects associated with $PM_{10}$ and $PM_{2.5}$ can be different. Major man-made sources of $PM_{10}$ are agricultural operations, industrial processes, combustion of fossil fuels, construction, demolition operations, and entrainment of road dust into the atmosphere. Natural sources include windblown dust, wildfire

[1] Organic compound precursors of ozone are routinely described by several variations of three terms: hydrocarbons (HC), organic gases (OG), and organic compounds (OC). These terms are often modified by adjectives such as total, reactive, or volatile, and result in various acronyms, such as TOG (total organic gases), ROG (reactive organic gases), ROC (reactive organic compounds), and VOC (volatile organic compounds). While most of these differ in some significant way from a chemical perspective, two groups are important from an air quality perspective: non-photochemically reactive in the lower atmosphere, or photochemically reactive in the lower atmosphere (ROG and VOC).

smoke, and sea spray salt. The finer $PM_{2.5}$ particulates are generally associated with combustion processes as well as formation in the atmosphere as a secondary pollutant through chemical reactions. $PM_{2.5}$ is more likely to penetrate deeply into the lungs and poses a serious health threat to all groups, but particularly to the elderly, children, and those with respiratory problems. More than half of the $PM_{2.5}$ that is inhaled into the lungs remains there, which can cause permanent lung damage. These materials can damage health by interfering with the body's mechanisms for clearing the respiratory tract or by acting as carriers of an absorbed toxic substance.

## Current Air Quality

CARB operates a network of air quality monitoring stations throughout the MDAB. The purpose of the monitoring stations is to measure ambient concentrations of pollutants and determine whether ambient air quality meets the California and federal standards. The monitoring station located closest to the project site is the Lancaster – 43301 Division Street station located approximately eight miles northwest of the project site. This monitoring station measures ozone, $NO_2$, $PM_{10}$, and $PM_{2.5}$.

Table 3 reports ambient air quality measurements and indicates the number of days that each standard has been exceeded at the Lancaster – 43301 Division Street station. The ambient air quality in the area exceeded the State and Federal 8-hour ozone standard and the Federal $PM_{10}$ standard in 2020, 2021, and 2022. The area also exceeded the State 1-hour ozone standard in 2020 and 2022 and the Federal $PM_{10}$ and $PM_{2.5}$ standards in 2020 and 2021. The area did not exceed other air quality standards in 2020, 2021, or 2022.

**Table 3 Ambient Air Quality at the Monitoring Station**

| Pollutant | 2020 | 2021 | 2022 |
|---|---|---|---|
| 8 Hour Ozone (ppm), 8-Hour Average | 0.083 | 0.079 | 0.082 |
| Number of days above State and Federal standards (>0.070 ppm) | 8 | 3 | 33 |
| Ozone (ppm), Worst Hour | 0.099 | 0.086 | 0.098 |
| Number of days above State standard (>0.09 ppm) | 4 | 0 | 3 |
| Number of days above Federal standard (>0.112 ppm) | 0 | 0 | 0 |
| Nitrogen Dioxide (ppm) - Worst Hour (Federal Measurements) | 0.052 | 0.046 | 0.044 |
| Number of days above State standard (>0.18 ppm) | 0 | 0 | 0 |
| Number of days above Federal standard (0.10 ppm) | 0 | 0 | 0 |
| Particulate Matter 10 microns, $\mu g/m^3$, Worst 24 Hours | 192.3 | 411.2 | 76.2 |
| Number of days above Federal standard (>150 $\mu g/m^3$) | 1 | 1 | 0 |
| Particulate Matter <2.5 microns, $\mu g/m^3$, Worst 24 Hours | 74.7 | 35.7 | 15.1 |
| Number of days above Federal standard (>35 $\mu g/m^3$) | 9 | 1 | 0 |

Source: CARB 2023

## Sensitive Receptors

The term "sensitive receptor" refers to a person in the population who is more susceptible to health effects due to exposure to an air contaminant than the population at large or to a land use that may reasonably be associated with such a person. Examples include residences, schools, playgrounds, childcare centers, churches, athletic facilities, retirement homes, and long-term health care facilities. Sensitive receptors that may be affected by air quality impacts associated with construction and operation of the proposed project include the residents of the single-family developments located adjacent to the western, southern, and eastern project boundaries. There are no other sensitive receptor groups within 1,000 feet of the project site.

## Methodology

Criteria pollutant emissions for project construction and operation were calculated using the California Emissions Estimator Model (CalEEMod), Version 2022.1. 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 potential criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operations from a variety of land use projects. The model was developed for the California Air Pollution Control Officers Association (CAPCOA) in collaboration with the California air districts. CalEEMod allows for the use of default data (e.g., emission factors, trip lengths, meteorology, source inventory) provided by the various California air districts to account for local requirements and conditions, and/or user-defined inputs. The calculation methodology and input data used in CalEEMod can be found in the CalEEMod User's Guide (CAPCOA 2022). The input data and subsequent construction and operation emission estimates for the proposed project are discussed below. CalEEMod output files for the project are included in the Air Quality Greenhouse Gas Emissions Study (Appendix A).

### *Construction Emissions*

Construction input data for CalEEMod include, but are not limited to: (1) the anticipated start and finish dates of construction activity; (2) inventories of construction equipment to be used; and (3) areas to be excavated and graded. The analysis assessed maximum daily emissions from individual construction activities, including site preparation, grading, building construction, paving, and architectural coating. Construction would require heavy equipment during demolition, site preparation, grading, building construction, and paving. Construction equipment estimates are based on surveys of construction projects within California conducted by members of CAPCOA. Note that there would be no demolition phase since the existing site is vacant.

Construction emissions were modeled in CalEEMod to occur over 18 months, starting in January 2024 with completion anticipated in July 2025. Although construction would likely begin in summer of 2024, this analysis conservatively assumes an earlier start date, as emissions factors for construction equipment are lower in later years. Construction emissions associated with development of the proposed project were quantified using the types and quantities of equipment for each construction phase as provided by the applicant. CalEEMod also estimates off-site emissions from worker, vendor, and hauling truck trips. The number of worker and vendor trips are based on CalEEMod defaults. Cut material would be used for construction of the proposed drainage basin; therefore, the project would not require material export or import.

*Operational Emissions*

In CalEEMod, operational sources of criteria pollutant emissions include area, energy, and mobile sources. The project's single-family, ADU, and junior ADU uses were combined and attributed to the "Single Family Housing" land use subtype, while the proposed community amenities were modeled as a 2,630-square foot "Racquet Club." Uncovered parking spaces and internal roadways were modeled as "Parking Lot." The modeling analyzed 191 total dwelling units.

The proposed project would not include natural gas connections, and such emissions are therefore excluded from this analysis. Emissions associated with area sources, including consumer products, landscape maintenance, and architectural coating were calculated in CalEEMod, and standard emission rates were utilized from CARB, USEPA, and emission factor values provided by the local air district (CAPCOA 2022). Mobile emissions are estimated by multiplying the project trip rate, average trip length, and the vehicle emission factors. The traffic consultant, General Technologies and Solutions (GTS), provided project-specific trip generations based on the Institute of Transportation Engineers (ITE) rates for "Single-Family Detached Housing" and "Multifamily Housing (Low-Rise)." The trip rate was estimated to be 1,460 total trips. The project-specific trip generation rates provided are included in the CalEEMod outputs in the Air Quality Greenhouse Gas Emissions Study (Appendix A).

## Significance Thresholds

To determine whether a project would result in a significant impact to air quality, Appendix G of the CEQA Guidelines requires consideration of whether a project would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- 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;
- Expose sensitive receptors to substantial pollutant concentrations; or
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

The AVAQMD has adopted numerical significant emissions thresholds to determine whether an air pollution source could contribute individually or cumulatively to the worsening local or regional air quality. These thresholds, which would apply to temporary construction and long-term operational emission, are shown in Table 4.

**Table 4 Antelope Valley Air Quality Management District Significance Thresholds**

| Pollutant | Annual Threshold (tons/year) | Daily Threshold (lbs/day) |
|---|---|---|
| CO | 100 | 548 |
| $NO_X$ | 25 | 137 |
| VOC | 25 | 137 |
| $SO_X$ | 25 | 137 |
| $PM_{10}$ | 15 | 82 |
| $PM_{2.5}$ | 12 | 65 |

Source: AVAQMD 2016

AVAQMD guidance states that a project would have a significant impact related to TACs if the project would expose sensitive receptors to pollutant concentrations resulting in a cancer risk greater than or equal to 10 in one million and/or a non-cancerous Hazard Index (HI) greater than or equal to one.

*a. Would the project conflict with or obstruct implementation of the applicable air quality plan?*

The AVAQMD is required, pursuant to the federal Clean Air Act, to reduce emissions of criteria pollutants for which the AVAQMD portion of the MDAB is in nonattainment. Strategies to achieve these emissions reductions are developed in the 2023 Federal 70 ppb Ozone Attainment Plan (2023 Ozone Plan), prepared by AVAQMD for the region. Forecasts used in the 2023 Ozone Plan are developed by SCAG, which are based on local general plans and other related documents that are used to develop population, employment, and traffic projections. Consistency with the 2023 Ozone Plan is determined by analyzing a project with the assumptions in the Plan. As such, projects that propose development that is consistent with the growth anticipated by the local land use plan would be consistent with the SCAG growth projections and the 2023 Ozone Plan emissions estimates.

The project involves the construction of 191 residential units that would result in an increase in the city's population. Based on an average household size of 3.4 persons per dwelling unit in the city, the project would house approximately 649 residents (California Department of Finance 2023). The population growth projections used in the 2023 Ozone Plan forecast show that the population of Palmdale will reach 207,000 residents by 2045, an increase of 48,400 from 2016 projections (SCAG 2020). The project's buildout would not exceed the 2023 Ozone Plan population growth forecast for Palmdale. The project's population growth represents approximately 1.3 percent of the total population growth expected in Palmdale between 2016 and 2045. Therefore, the proposed project would be consistent with AQMP growth assumptions and accommodated within and consistent with the 2023 Ozone Plan, and impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*b. Would the project 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?*

Table 5 and Table 6 summarize maximum daily and annual emissions of pollutants throughout the construction period of the project, respectively. Detailed modeling results are provided in Appendix A. Emissions would not exceed AVAQMD significance thresholds during project construction. Therefore, project construction would not result in a cumulatively considerable net increase of a criteria pollutant, and impacts would be less than significant.

**Table 5 Daily Construction Criteria Pollutant Emissions**

| | Maximum Emissions (lbs/day) | | | | | |
|---|---|---|---|---|---|---|
| | **VOC** | **$NO_x$** | **CO** | **$SO_2$** | **$PM_{10}$** | **$PM_{2.5}$** |
| Construction Year 2024 | 5 | 38 | 52 | <1 | 7 | 4 |
| Construction Year 2025 | 70 | 24 | 51 | <1 | 5 | 2 |
| Maximum Emissions | 70 | 38 | 52 | <1 | 7 | 4 |
| AVAQMD Significance Thresholds | 137 | 137 | 548 | 137 | 82 | 65 |
| **Threshold Exceeded?** | **No** | **No** | **No** | **No** | **No** | **No** |

Source: Table 2.2 "Construction Emissions by Year, Unmitigated" emissions. Highest of summer and winter emissions results are shown for maximum daily emissions. See CalEEMod worksheets in Appendix A.

**Table 6 Annual Construction Criteria Pollutant Emissions**

| | Maximum Emissions (tons/year) | | | | | |
|---|---|---|---|---|---|---|
| | **VOC** | **$NO_x$** | **CO** | **$SO_2$** | **$PM_{10}$** | **$PM_{2.5}$** |
| Construction Year 2024 | 1 | 3 | 5 | <1 | 1 | <1 |
| Construction Year 2025 | 1 | 2 | 3 | <1 | <1 | <1 |
| Maximum Emissions | 1 | 3 | 5 | <1 | 1 | <1 |
| AVAQMD Significance Thresholds | 25 | 25 | 100 | 25 | 15 | 12 |
| **Threshold Exceeded?** | **No** | **No** | **No** | **No** | **No** | **No** |

Source: Table 2.2 "Construction Emissions by Year, Unmitigated" emissions. See CalEEMod worksheets in Appendix A.

### *Operational*

Table 7 summarizes emissions associated with operation of the project. The majority of operational emissions generated would be due to mobile emissions from vehicle trips to and from the project site. As shown in Table 7 and Table 8, emissions generated during the operation of project would not exceed AVAQMD significance thresholds. Therefore, the project would not result in a cumulatively considerable net increase of a criteria pollutant, and impacts would be less than significant.

**Table 7 Daily Operational Criteria Pollutant Emissions**

| | Maximum Daily Emissions (lbs/day) | | | | | |
|---|---|---|---|---|---|---|
| **Emission Source** | **ROG** | **$NO_X$** | **CO** | **$SO_2$** | **$PM_{10}$** | **$PM_{2.5}$** |
| Area | 8 | <1 | 27 | <1 | <1 | <1 |
| Energy | 0 | 0 | 0 | 0 | 0 | 0 |
| Mobile | 8 | 6 | 59 | <1 | 10 | 2 |
| Project Emissions | 16 | 6 | 86 | <1 | 10 | 2 |
| AVAQMD Thresholds | 137 | 137 | 548 | 137 | 82 | 65 |
| **Threshold Exceeded?** | **No** | **No** | **No** | **No** | **No** | **No** |

Note: Project emissions may not sum exactly due to rounding

Source: Table 2.5 "Operations Emissions by Sector, Unmitigated" emissions. Highest summer and winter emissions results are shown for maximum daily emissions. See CalEEMod worksheets in Appendix A.

**Table 8 Annual Operational Criteria Pollutant Emissions**

| | Maximum Annual Emissions (tons/year) | | | | | |
|---|---|---|---|---|---|---|
| **Emission Source** | **ROG** | **$NO_X$** | **CO** | **$SO_2$** | **$PM_{10}$** | **$PM_{2.5}$** |
| Area | <1 | <1 | 2 | <1 | <1 | <1 |
| Energy | 0 | 0 | 0 | 0 | 0 | 0 |
| Mobile | 1 | 1 | 9 | <1 | 2 | <1 |
| Project Emissions | 2 | 1 | 12 | <1 | 2 | <1 |
| AVAQMD Thresholds | 25 | 25 | 100 | 25 | 15 | 12 |
| **Threshold Exceeded?** | **No** | **No** | **No** | **No** | **No** | **No** |

Note: Project emissions may not sum exactly due to rounding

Source: Table 2.5 "Operations Emissions by Sector, Unmitigated" emissions. See CalEEMod worksheets in Appendix A.

**LESS THAN SIGNIFICANT IMPACT**

*c. Would the project expose sensitive receptors to substantial pollutant concentrations?*

## *Toxic Air Contaminants*

### CONSTRUCTION

Construction-related activities would result in short-term, project-generated emissions of DPM exhaust emissions from off-road, heavy-duty diesel equipment for site preparation grading, building construction, and other construction activities. DPM was identified as a TAC by CARB in 1998. The potential cancer risk from the inhalation of DPM (discussed in the following paragraphs) outweighs the potential non-cancer health impacts (CARB 2021b).

Generation of DPM from construction projects typically occurs in a single area for a short period. Construction of the proposed project would occur over approximately 18 months. The dose to

which the receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of exposure that a person has with the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the Maximally Exposed Individual. The risks estimated for a Maximally Exposed Individual are higher if a fixed exposure occurs over a longer period of time. According to the Office of Environmental Health Hazard Assessment (OEHHA), health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 30-year exposure period (assumed to be the approximate time that a person spends in a household). OEHHA recommends this risk be bracketed with 9-year and 70-year exposure periods. Health risk assessments should be limited to the period/duration of activities associated with the project.

The maximum $PM_{2.5}$ emissions, which is used to represent DPM emissions for this analysis, would occur during site preparation and grading activities. While site preparation and grading emissions represent the worst-case condition, such activities would occur for three months, less than 3 percent for a 9-year health risk calculation period and less than one percent for a 30-year and 70-year health risk calculation period. $PM_{2.5}$ emissions would decrease for the remaining construction period because construction activities such as building construction, architectural coating, and paving would require less construction equipment. Therefore, DPM generated by project construction is not expected to create conditions where the probability that the Maximally Exposed Individual would contract cancer is greater than 10 in one million. This impact would be less than significant.

### OPERATION

CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (2005) provides recommendations regarding the siting of new sensitive land uses near potential sources of air toxic emissions (e.g., freeways, distribution centers, rail yards, ports, refineries, chrome plating facilities, dry cleaners, and gasoline dispensing facilities). CARB guidelines provide the recommended siting distances both for the development of sensitive land uses in proximity to TAC sources and for the addition of new TAC sources in proximity to existing sensitive land uses. Residential land uses do not generate substantial TAC emissions based on the air toxic sources listed in CARB's guidelines. Therefore, the expected hazardous TACs generated on site (e.g., cleaning solvents, paints, landscape pesticides, etc.) for the proposed land uses would be below thresholds warranting further study under the California Accidental Release Program. The project would not expose off-site sensitive receptors to significant amounts of carcinogenic or TACs. Therefore, operational impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?*

Sensitive receptors in the project vicinity include single-family residences at the project boundaries to the east, south and west. Construction activities would be temporary and transitory and associated odors would cease upon construction completion. Such odors disperse rapidly with distance. Accordingly, the proposed project would not create objectionable odors affecting a substantial number of people during construction, and short-term impacts would be less than significant.

The project does not include land uses typically associated with odor complaints such as sewage treatment plants, landfills, recycling facilities, and agricultural uses. Vehicles approaching, idling, and leaving the site may release odorous exhaust emissions. Odors of this nature disperse rapidly with distance and do not typically result in odor impacts. Additionally, the project site is located adjacent to Palmdale Boulevard, an arterial road, so vehicle exhaust is already prevalent in the project area. For these reasons, operational odor impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

# 4 Biological Resources

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| 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, or 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? | ☐ | ☐ | ☐ | ■ |

A field reconnaissance survey of the biological study area (BSA) was conducted on September 21, 2022, to document the existing site conditions and evaluate the potential for presence of sensitive biological resources. The Biological Resources Assessment is included as Appendix B. In addition, western Joshua trees were documented on the project site during a western Joshua tree assessment conducted on July 21, 2021. One vegetation community, *Yucca brevifolia* Woodland Alliance (Joshua tree woodland), was identified in the BSA. This community generally occurs in alluvial fans, ridges, and gentle to moderate slopes. Canopy, shrub layer, and herbaceous layer is open to intermittent with perennial grasses and seasonal annuals.

One shallow, ephemeral drainage intersects the project site and adjacent parcel which may generally convey stormwater runoff from the residential development to the south and from Palmdale Avenue to the north during significant rain events. This drainage feature is not identified in the National Hydrogeography Dataset or National Wetlands Institute; however, it is identified as a dashed "blue-line stream" in U.S. Geological Survey topographic maps. Due to the presence of a defined bed and bank, indicated by the break in slope, the California Department of Fish and Wildlife (CDFW) may assert jurisdiction over this drainage. As of December 2022, the portion of the drainage in APN 3023-002-016 is under construction and will be filled in pursuant to Streambed Alteration Agreement EPIMS-LAN-23730-R5 and a new temporary nine-foot dirt swale will be constructed to divert flow from the portion of the drainage on APN 3023-002-184 to a stormwater basin south of the project. Grading associated with the proposed project would eliminate the entirety of the remainder of the drainage, as well as the new temporary swale, approximately 0.75 acre, and replace it with underground storm drains which would outlet into an on-site basin. The drainage does not provide surface flows to adjacent waters of the State or waters of the U.S.

*a. Would the project 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?*

The literature search identified 19 special status plant species and 31 special status wildlife species within the nine-quad search area. Of the 19 special status plants and 31 special status wildlife species identified, the BSA contains suitable habitat for western Joshua tree and short-joint beavertail cactus as well as California glossy snake, coast horned lizard, burrowing owl, loggerhead shrike, LeConte's thrasher, and nesting birds. Direct and potentially indirect impacts to these species may occur as a result of construction activities.

## Western Joshua Trees and Short-Joint Beavertail Cacti

Western Joshua tree (State Candidate) has been documented across the project site and short-joint beavertail cactus (California Rare Plant Ranks 1B.2) has a moderate potential to occur. Because short-joint beavertail cactus is identifiable at any season but was not observed during the reconnaissance survey, its abundance on the site is expected to be low, if any. Construction of the project would impact these species directly on-site by permanent removal of 181 western Joshua tree individuals and habitat, and potentially indirectly in the native habitat to the north through construction dust and other human disturbances that may prevent photosynthesis or degrade habitat. The extensive areas of natural habitat to the north would remain suitable for short-joint beavertail cactus and large enough to support robust populations of this species, and proposed activity at the project site would not substantially affect those regional populations. Absent mitigation, impacts to western Joshua trees would be potentially significant and impacts to short-joint beavertail cacti would be less than significant. Implementation of Mitigation Measures BIO-1

and BIO-2 would reduce impacts to western Joshua trees to less than significant and further reduce impacts to short-joint beavertail cacti.

## Burrowing Owls

Burrowing owl are a ground-dwelling species that rely on small mammals and large insects for prey. If owls are present, construction of the project could impact individuals directly by construction-related injury or mortality and permanent removal of habitat, and potentially indirectly in the native habitat to the north due to construction noise, dust, and other human disturbances that may cause a nest to fail. The relatively small project footprint of the site, compared to the amount of available suitable habitat for these species, suggests that site development is unlikely to result in population-level impacts. The presence of extensive areas of natural habitat to the north would remain suitable and large enough to support robust populations of these species, and proposed activity at the project site would not substantially affect those regional populations; therefore, impacts would not be significant. However, implementation of Mitigation Measures BIO-1, BIO-3, and BIO-4 would ensure compliance with federal and State law by avoiding the take of burrowing owls or destruction of their nests.

## Special Status Reptiles

California glossy snake and coast horned lizard (CDFW Species of Special Concern [SSCs])) both have a moderate potential to occur on the project site. If the animals are present, construction of the project would impact these species directly by permanent removal of habitat, and potentially indirectly due to construction noise, dust, and other human disturbances in the native habitat to the north. The relatively small project footprint of the site, compared to the amount of available suitable habitat for these species, suggests that site development is unlikely to result in population-level impacts. The extensive areas of natural habitat to the north would remain suitable and large enough to support robust populations of these species, and proposed activity at the project site would not substantially affect those regional populations. Therefore, potential impacts to special status reptiles would be less than significant.

## Special Status and Nesting Birds

Loggerhead shrike and LeConte's thrasher (CDFW SSCs) as well as migratory or other common nesting birds are protected by the California Fish and Game Code (CFGC) Sections 3503 and 3503.5, and the federal Migratory Bird Treaty Act (MBTA) and may nest in ornamental trees, grass, bare ground, burrows/cavities, man-made structures and shrubs on or adjacent to the project site. Construction of the project thus has the potential to directly (by destroying a nest) or potentially indirectly (construction noise, dust, and other human disturbances that may cause a nest to fail) impact nesting birds protected under the CFGC and MBTA. Absent mitigation, impacts to special status birds would be potentially significant. Implementation of Mitigation Measures BIO-1, and BIO-4 would reduce impacts to these species to less than significant and would also ensure compliance with federal and State law by avoiding take of all nesting birds.

## Desert Kit Fox

While the desert kit fox is not a special-status species, take of this species is prohibited by CDFW regulations (14 CCR 760) and must be avoided. Desert kit fox has moderate potential to occur on the project site due to the presence of suitable habitat, and individuals could be killed or injured by construction equipment if present on the site during construction. Because it is a common species,

impacts to the desert kit fox would not rise to the level of significance under CEQA. However, the survey and avoidance measures described in recommended Mitigation Measure BIO-5 would ensure compliance with CDFW regulations.

### *BIO-1 Environmental Worker Education Training Program*

Before any ground disturbing work (including vegetation clearing and grading) occurs in the construction footprint, a qualified biologist shall conduct a mandatory biological resources awareness training for all construction personnel. Topics to discuss include sensitive species that may be encountered in the project area, photographs to aid in identification of sensitive species that may be encountered, the laws and codes that regulate these species, and the protection measures that must be followed to avoid and minimize impacts. The training shall also include good housekeeping measures and best management practices. If new construction personnel are added to the project, the contractor shall ensure that the new personnel receive the mandatory training before starting work. The subsequent training of personnel may include video of the initial training and/or the use of written materials rather than in-person training by a biologist.

### *BIO-2 Western Joshua Tree Avoidance and Compensatory Mitigation*

- A Desert Vegetation Preservation Plan shall be developed and submitted to the City of Palmdale. The plan shall include:
  - A report and site plan prepared by a desert native plant specialist which depicts the location of each Joshua tree, discusses their age and health, identifies and locates all trees and shrubs which can be saved in place or relocated.
  - A site landscaping plan showing the proposed location of those Joshua trees or, and any other native desert vegetation that will remain on-site.
  - A long-term maintenance program for any desert vegetation preserved on the site. The minimum term of any maintenance program shall be two growing seasons, unless a shorter length of time is determined by the City's Landscape Architect, or in cases where the trees retained on the site are of such health and vigor after one growing season that their survival is assured.
- A desert vegetation removal permit shall be obtained from the City's Landscape Architect, prior to the removal of any native desert vegetation as defined in this chapter.
- A Western Joshua Tree Conservation Act Permit shall be obtained prior to the removal of any Joshua trees.
- Prior to receiving take authorization from the participating agency, the project proponent shall pay mitigation fees to the participating agency for deposit into the Western Joshua Tree Conservation Fund.

### *BIO-3 Burrowing Owl Pre-construction Clearance Survey*

A qualified wildlife biologist shall conduct a pre-construction survey of proposed impact areas to confirm presence/absence of burrowing owl individuals no more than 14 days prior to construction. The survey methodology shall be consistent with the methods outlined in the CDFW *Staff Report on Burrowing Owl Mitigation* (2012). If no active breeding or wintering owls are identified, no further mitigation is required.

If burrowing owl is detected on-site, the following mitigation measures shall be implemented in accordance with the *CDFW Staff Report on Burrowing Owl Mitigation* (2012):

- The project proponent shall hire a qualified wildlife biologist that should be on-site during initial ground-disturbing activities in potential burrowing owl habitat identified throughout the habitat assessment.
- No ground-disturbing activities shall be permitted within a buffer no less than 200 meters (656 feet) from an active burrow, depending on the level of disturbance, unless the qualified biologist determines a reduced buffer would not adversely affect the burrowing owl(s).
- Occupied burrows shall not be disturbed during the nesting season (February 1 to August 31).
- During the nonbreeding (winter) season (September 1 to January 31), ground-disturbing work can proceed near active burrows as long as the work occurs no closer than 50 meters (165 feet) from the burrow, depending on whether the level of disturbance is low, and if the active burrow is not directly affected by the project activity. A smaller/larger buffer may be established by the qualified biologist following monitoring and assessments of the project's effects on the burrowing owls. If active winter burrows are found that would be directly affected by ground-disturbing activities, owls can be excluded from winter burrows according to recommendations made in the *Staff Report on Burrowing Owl Mitigation* (2012). Additionally, if burrowing owls are found on-site, a qualified biologist shall prepare and submit a passive relocation program in accordance with Appendix E (i.e., Example Components for Burrowing Owl Artificial Burrow and Exclusion Plans) of the *CDFW Staff Report on Burrowing Owl Mitigation* (2012) for CDFW review and approval prior to the commencement of disturbance activities on-site.
- Burrowing owls shall not be excluded from burrows until a Burrowing Owl Exclusion Plan is developed based on the recommendations made in Appendix E (i.e., Example Components for Burrowing Owl Artificial Burrow and Exclusion Plans) of the CDFW St*aff Report on Burrowing Owl Mitigation* (2012). The Burrowing Owl Exclusion Plan shall be submitted to CDFW for review and approval prior to the commencement of disturbance activities on-site.
- Prior to passive relocation, the project proponent shall be responsible for acquiring compensatory mitigation at a ratio of 1:1 for lost breeding and/or wintering habitat. Mitigation shall be implemented on- or off-site including permanent conservation and management of burrowing owl habitat through the recordation of a conservation easement, funding of a non-wasting endowment, and implementation of a Mitigation Land Management Plan based on the CDFW *Staff Report on Burrowing Owl Mitigation* (2012) and CDFW guidance. Mitigation lands shall be identified through coordination with CDFW and on, adjacent, or proximate to the impact site where possible and where habitat is suitable to support burrowing owl. If required, compensatory mitigation shall be completed prior to passive relocation of owls and completion of construction.
- When a qualified biologist determines that burrowing owls are no longer occupying the project site and passive relocation is complete, construction activities may begin. A final letter shall be prepared by the qualified biologist documenting the results of the passive relocation. The letter shall be submitted to CDFW.

### *BIO-4 Pre-construction Nesting Bird Surveys*

The following measure is required to maintain compliance with the CFGC Sections 3503 and 3503.5 and the MBTA with respect to nesting birds:

- If construction activities take place during the bird nesting season (generally February 1 through August 31, but variable based on seasonal and annual climatic conditions), nesting bird surveys shall be performed by a qualified biologist within three days prior to project activities to determine the presence/absence, location, and status of any active nests on site and within 100 feet of the site.
- If nesting birds are found on site, a construction buffer of appropriate size (as determined by the qualified biologist) shall be implemented around the active nests and demarcated with fencing or flagging. If ground/burrow nesting birds are identified, demarcation materials that do not provide perching habitat for predatory bird species shall be used. Nests shall be monitored at a minimum of once per week by the qualified biologist until it has been determined that the nest is no longer being used by either the young or adults. No ground disturbance shall occur within this buffer until the qualified biologist confirms that the breeding/nesting is complete, and all the young have fledged and are capable of surviving independently of the nest. If project activities must occur within the buffer, they shall be conducted at a distance that will prevent project-related disturbances, as determined by the qualified biologist.

If no nesting birds are observed during pre-construction surveys, no further actions are necessary.

### *BIO-5 Desert Kit Fox*

A qualified biologist shall conduct a preconstruction survey for desert kit fox no more than 30 days prior to initiation of construction activities. Inactive dens directly impacted by construction activities shall be excavated by hand and backfilled to prevent reuse. Potentially active dens directly impacted by construction activities shall be monitored for three consecutive nights using a tracking medium such as diatomaceous medium or fire clay and/or infrared camera stations at the entrance. If no tracks are observed in the tracking medium or no photos of the target species are captured after three nights, the den shall be excavated and backfilled by hand. If tracks are observed, dens shall be fitted with the one-way trap doors to encourage animals to move off-site. After 48 hours post installation, the den shall be excavated by hand and collapsed. If an active natal den is detected, construction buffer of appropriate size (as determined by the qualified biologist) shall be implemented around the natal den and demarcated with fencing or flagging.

## Significance After Mitigation

Mitigation Measures BIO-1 through BIO-5 require pre-construction survey and biological monitoring be conducted prior to and during ground disturbing activities at the project site. If unanticipated special status species or nesting birds are encountered during ground disturbance, work in the immediate area of the find would stop and a qualified biologist would be contacted immediately. Implementation of Mitigation Measures BIO-1 through BIO-5 would avoid or reduce the project's potentially significant impacts to any sensitive species and nesting birds that may be encountered during ground disturbing activities.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

*b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?*

The proposed project would directly impact 20 gross acres of Joshua tree woodland, as the entire project is subject to clearing and grading. In addition, the proposed project would also indirectly impact the parcel to the north through excessive dust potentially limiting photosynthesis. Implementation of Mitigation Measures BIO-1 and BIO-2 would reduce impacts to sensitive natural communities to less than significant.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

*c. Would the project 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?*

The on-site drainage is potentially subject to CDFW jurisdiction. The drainage contains a distinct bed and bank that generally conveys surface water flow from stormwater runoff away from the residential development to the south. Grading associated with project construction would eliminate the entirety of the drainage, approximately 0.75 acre, and replace it with underground storm drains that would outlet into an on-site basin. These impacts to jurisdictional areas would be considered significant but mitigable. Of the 0.75 acres to be impacted, the project proponent has already mitigated 0.49 acres as part of the adjacent project (EPIMS-LAN-23730-R5). As such, the remaining 0.26 acres still need to be mitigated as part of the proposed project.

Obtaining a permit from CDFW and potentially providing compensatory mitigation, as required by Mitigation Measure BIO-6, would reduce potential direct and indirect impacts to this feature to a less than significant level.

*BIO-6 Jurisdictional Waters and Wetlands*

Prior to ground disturbance activities, the project proponent shall consult with CDFW. Based on such consultation, if permits are required for the project, appropriate permits shall be obtained prior to disturbance of jurisdictional resources. In addition, compensatory mitigation for impacts to jurisdictional features shall be identified prior to disturbance of the features. A 1:1 mitigation ratio shall be used, unless a higher ratio is required by CDFW. Mitigation may take the form of permittee-responsible on-site or off-site mitigation, or purchasing credits from an approved mitigation bank. The project proponent shall comply with the compensatory mitigation required and proof of compliance, along with copies of permits obtained from CDFW shall be provided to the City.

## Significance After Mitigation

Mitigation Measure BIO-6 requires compensatory mitigation of jurisdictional resources on a 1:1 or greater ratio. Implementation of Mitigation Measure BIO-6 would reduce the project's potentially significant impacts to jurisdictional resources on the project site.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

*d. Would the project 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?*

Wildlife corridors are generally defined as connections between habitat areas that allow for physical and genetic exchange between otherwise isolated animal populations. Such linkages may serve a local purpose, such as between foraging and denning areas, or they may be regional in nature, allowing movement across the landscape. Some habitat linkages may serve as migration corridors, wherein animals periodically move away from an area and then subsequently return. Examples of barriers or impediments to movement include housing and other urban development, roads, fencing, or open areas with little vegetative cover.

As discussed above, project site is surrounded by residential developments on the west, south, and east sides; and the site is bounded to the north by Palmdale Boulevard, a heavily traveled road. The project site is disturbed by dumping, and recreational use by pedestrians and OHVs. Potential wildlife movement on the project site could only occur between the natural habitat block to the north and the surrounding residential developments, which does not significantly contribute to a wildlife movement corridor. Therefore, the proposed project would not interfere with the movement of any native wildlife species. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?*

PMC Chapter 14.04 (Joshua Tree and Native Vegetation Preservation)regulates the implementation of the proposed project would result in permanent direct impacts to all western Joshua trees onsite, as the entire project site is subject to clearing and grading. In addition, the proposed project would indirectly impact the parcel to the north through excessive dust potentially limiting photosynthesis. As part of compliance with the PMC, implementation of Mitigation Measures BIO-1 and BIO-2 would reduce potential impacts to western Joshua trees and native desert vegetation to less than significant. No other tree species would be affected by the project. Potential impacts would be less than significant.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

*f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?*

The project site is not located within or near an area subject to an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or any other approved habitat conservation plan at the local, regional, or State levels. Therefore, no impact would occur.

**NO IMPACT**

# 5 Cultural Resources

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5? | ☐ | ☐ | ■ | ☐ |
| b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5? | ☐ | ■ | ☐ | ☐ |
| c. Disturb any human remains, including those interred outside of formal cemeteries? | ☐ | ☐ | ■ | ☐ |

CEQA requires a lead agency to determine whether a project may have a significant effect on historical resources (Public Resources Code Section 21084.1) and Tribal cultural resources (Public Resources Code Section 21074 [a][1][A]-[B]). Tribal cultural resources are discussed in Section 18, *Tribal Cultural Resources* of this IS-MND.

A historical resource is a resource listed in, or determined to be eligible for listing in, the California Register of Historical Resources (CRHR); a resource included in a local register of historical resources; or any object, building, structure, site, area, place, record, or manuscript that a lead agency determines to be historically significant (CEQA Guidelines, Section 15064.5[a][1-3]).

A resource shall be considered historically significant if it:

1. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
2. Is associated with the lives of persons important in our past;
3. 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
4. Has yielded, or may be likely to yield, information important in prehistory or history.

In addition, if it can be demonstrated that a project would cause damage to a unique archaeological resource, the lead agency may require reasonable efforts be made to permit any or all of these resources to be preserved in place or left in an undisturbed state. To the extent that resources cannot be left undisturbed, mitigation measures are required (Public Resources Code Section 21083.2[a], [b]).

Public Resources Code Section 21083.2(g) defines a unique archaeological resource as an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it:

1. Contains information needed to answer important scientific research questions and that there is a demonstrable public interest in that information;
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person.

A Cultural Resources Study was conducted by BFSA Environmental Services (BFSA), a Perennial Company, on November 11, 2022, to locate and record any cultural resources present within the project site and subsequently evaluate any resources as part of the City of Palmdale's environmental review process. The BFSA Cultural Resources Study is included as Appendix C1.

As a part of the Cultural Resources Study an archaeological records search for a one-mile radius was conducted by BFSA through the South Central Coastal Information Center (SCCIC) at CSU Fullerton on October 20, 2022. The SCCIC records search results identified eight previously recorded resources, all historic, located within one mile of the project, none of which are located within the project's boundaries. The records search also identified 29 previous studies conducted within one mile of the project, two of which include the subject property (Norwood 1989; ERCE 1991). Both previous reports include the study of approximately 2,500 acres conducted in support of the City of Palmdale's Eastside General Plan Amendment (GPA90-15). Norwood (1989) initially noted three trash scatters within the current project; however, the scatters were not formally recorded, and only superficial information was collected. Based upon Norwood's assessment, these trash scatters were associated with period between the late 1940s and 1960s.

A field survey was conducted on October 25, 2022, by BFSA. During the survey, a 50- by 50-foot historic trash scatter was identified within the northern third of the project area. It is not clear if this finding corresponds with any of the three trash scatters previously noted within the property by Norwood (1989). However, based upon a review of the identified surface scatter, the finding represents a single episode of transient refuse disposal which occurred between the late 1930s and 1950s. Based upon the results of the current study, the finding is not considered eligible for the California Register of Historical Resources (CRHR) as the scatter does not retain any additional research value given the observable lack of a subsurface component and the limited information the historic artifacts can provide. Further, the integrity of the site has been impacted by recent disturbances to the property.

A Sacred Lands File (SLF) search was also requested from the Native American Heritage Commission (NAHC), which was returned with negative results. The Cultural Resources Study concluded that the property has potential to yield additional archaeological resources that may have been obscured or buried by the previous impacts to the property. As a result, it is recommended that an archaeological monitor be present during future ground disturbances associated with the project to observe grading and identify any historic or prehistoric resources that may be exposed by earthwork.

*a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?*

CEQA Guidelines Section 15064.5 defines "substantial adverse change" as physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource is materially impaired. CEQA Guidelines, Section 15064.5,

subdivision (b)(2), defines "materially impaired" for purposes of the definition of "substantial adverse change" as follows:

> The significance of an historical resource is materially impaired when a project:
>
> 1. 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 California Register of Historical Resources; or
> 2. 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 Public Resources Code or its identification in an historical resources survey meeting the requirements of Section 5024.1(g) of the Public Resources Code, 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
> *3.* Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

As described above and in the Cultural Resources Report provided by BFSA dated November 11, 2022, no eligible historical resources are documented within the project site. In addition, review of historic registers and inventories indicate that no recorded historical landmarks or points of interest are present within the project area. However, the field survey, conducted on October 25, 2022, revealed a 50- by 50-foot scatter of approximately 100 vent hole/hole-in-top and sanitary cans, glass, and ceramic fragments. A close inspection of the artifact scatter and the surrounding soils indicates that the site has no depth. The types of cans identified at the site were utilized most commonly after the 1920s and 1930s, the Cultural Resources Study suggests the finding likely dates to between the late 1930s and 1950s, but it is not considered eligible for the CRHR as the scatter does not retain any additional research value given the observable lack of a subsurface component. Therefore, the project would have a less than significant impact on the significance of a historical resource as defined in Section 15064.5(b) of the CEQA Guidelines.

**LESS THAN SIGNIFICANT IMPACT**

*b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?*

As documented above, the BFSA Cultural Resources Study found no eligible historical or archaeological resources on the project site. However, the study concludes that the project site has the potential to yield archaeological resources that may have been obscured by the previous impacts to the property. As a result, it is recommended that an archaeological monitor be present during future ground disturbances associated with the project to observe grading and identify any historic or prehistoric resources that may be exposed by earthwork. The monitoring program should include Native American observers only in the event that prehistoric deposits are discovered, as described below in Mitigation Measure CR-1. The project would have a less than significant impact with mitigation.

## Mitigation Measure

*CR-1 Archaeological Monitoring Program*

The applicant shall retain a qualified archaeological to spot-check and/or monitor all project-related ground disturbing activities. Archaeological monitoring shall be performed under the direction of an archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for archeology (National Park Service 2020). Monitors will have the authority to halt and redirect work should any archaeological resources be identified during monitoring. If archaeological resources are encountered during ground-disturbing activities, work in the immediate area must halt and the find evaluated for listing in the California Register of Historical Resources (CRHR) and National Register of Historical Place (NRHP). Archaeological monitoring may be reduced or halted at the discretion of the project archaeologist, in consultation with the lead agency, as warranted by conditions such as encountering bedrock, sediments being excavated are fill, or negative findings during the first 50 percent of ground-disturbance. If monitoring is reduced to spot-checking, spot-checking shall occur when ground-disturbance moves to a new location within the project site and when ground disturbance extends to depths not previously reached (unless those depths are within bedrock). In the event that archaeological resources are unexpectedly encountered during ground-disturbing activities, work in the immediate area should be halted within 50 feet of the find and a qualified archaeologist should be contacted immediately to evaluate the find. If the find is prehistoric, then a Native American representative should also be contacted to participate in the evaluation of the find. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for CRHR eligibility. If the discovery proves to be eligible for the CRHR and cannot be avoided by the proposed project, additional work, such as data recovery excavation, may be warranted to mitigate any significant impacts to historical resources. The monitors shall submit a report to the City to document compliance within 30 days of completion of ground disturbing activities.

## Significance After Mitigation

Mitigation Measure CR-1 requires archaeological monitoring be conducted during ground disturbing activities at the project site. If unanticipated archaeological resources are encountered during ground disturbance, work in the immediate area of the find would stop and a qualified archaeologist would be contacted immediately. Implementation of Mitigation Measure CR-1 would avoid or reduce the project's potentially significant impacts to any archaeological resources that may be found during ground disturbing activities.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

*c. Would the project disturb any human remains, including those interred outside of formal cemeteries?*

The project site is not part of a formal cemetery and is not known to have been used for disposal of historic or prehistoric human remains. There are no known human remains on the site. Therefore, human remains are not expected to be encountered during construction of the proposed project. In the unlikely event that human remains are encountered during project construction, State Health and Safety Code Section 7050.5 requires ground disturbance in the area of the find to halt until the County Coroner has made the necessary findings as to the origin and disposition of the remains pursuant to Public Resources Code Section 5097.98. Compliance with these regulations would ensure the proposed project would not result in significant impacts due to disturbing human remains, and impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

# 6 Energy

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a. Result in a 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? | ☐ | ☐ | ■ | ☐ |

The proposed project would consume energy during the construction and operation of the single-family residential units and community amenities. The proposed project would install a photovoltaic (PV) system to create electricity that would power the residential units and the community amenities to heat and cool the buildings. In addition, construction activities consume gasoline and diesel fuels by on-road construction equipment, including worker and vendors trucks mobile emissions to and from the project site. Southern California Edison (SCE) would provide electricity to the project site. The proposed project would not include natural gas connections, as such, natural gas energy consumption excluded from this analysis.

Most of California's electricity is generated in-State with approximately 30 percent imported from the northwestern and southwestern states in 2021 (California Energy Commission [CEC] 2022a). In addition, 33.6 percent of California's electricity supply in 2021 came from renewable energy sources, such as wind, solar photovoltaic, geothermal, and biomass (CEC 2022a). On September 16, 2022, SB 1020 created clean electricity targets for eligible renewable energy resources and zero-carbon resources to supply 90 percent of retail sale electricity by 2035, 95 percent by 2040, 100 percent by 2045, and 100 percent of electricity procured to serve all State agencies by 2035. Table 9 summarizes the electricity consumption for Los Angeles County and SCE, as compared to statewide consumption.

**Table 9 2021 Electricity and Natural Gas Consumption**

| Energy Type | Los Angeles County | SCE | California | Proportion of SCE Consumption | Proportion of Statewide Consumption[1] |
|---|---|---|---|---|---|
| Electricity (GWh) | 65,375 | 81,129[2] | 277,764 | 29% | 24% |

GWh = gigawatt-hours; SCE = Southern California Edison.

[1] For reference, the population of Los Angeles County (9,861,224 persons) is approximately 25.2 percent of the population of California (39,185,605 persons) (California Department of Finance 2022).

Source: CEC 2022a and 2022b

Petroleum-based fuels are used for approximately 83 percent of the State's transportation activity (United States Energy Information Administration [EIA] 2022). Gasoline, which is used by light-duty cars, pickup trucks, and sport utility vehicles, is the most used transportation fuel in California with 13.8 billion gallons sold in 2021 (CEC 2022c). Diesel, which is used primarily by heavy duty-trucks, delivery vehicles, buses, trains, ships, boats and barges, farm equipment, and heavy-duty construction and military vehicles, is the second most used fuel in California with 1.9 billion gallons sold in 2021 (CEC 2022c). Table 10 summarizes the petroleum fuel consumption for Los Angeles County, as compared to statewide consumption.

**Table 10 2021 Annual Gasoline and Diesel Consumption**

| Fuel Type | Los Angeles County (million gallons) | California (million gallons) | Proportion of Statewide Consumption[1] |
|---|---|---|---|
| Gasoline | 3,061 | 13,818 | 7% |
| Diesel | 224 | 1,883 | 9% |

[1] For reference, the population of Los Angeles County (9,861,224 persons) is approximately 25.2 percent of the population of California (39,185,605 persons) (California Department of Finance 2022).
Source: CEC 2022c

## Methodology

Fuel consumption associated with project construction and operation was estimated based on the CalEEMod outputs in the Air Quality Greenhouse Gas Emissions Study (Appendix A). The project assumptions for CalEEMod are described under Section 3, *Air Quality.* The project's fuel consumption during construction activities was estimated based on the applicant-provided construction schedule and the number of construction equipment. Default CalEEMod assumptions for construction vehicle trips (e.g., worker and vendor trips) were used. See Appendix A for construction equipment and vehicle fuel consumption calculations.

Operational fuel consumption was based on the project's anticipated average daily vehicle trips, and the project's residential consumptions of electricity. Default CalEEMod assumption for vehicle miles traveled (VMT) per trip were used. Annual VMT is calculated and found in the CalEEMod outputs. Operational fuel consumption is estimated by multiplying the annual VMT by the default CalEEMod fleet mix and the average fuel economy. See Appendix D for the operational fuel consumption calculations of the project.

*a. Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?*

The proposed project would use nonrenewable and renewable resources for construction and operation of the project. The anticipated use of these resources is detailed in the following subsections. As supported by the discussion below, the proposed project would not result in the wasteful, inefficient, or unnecessary consumption of energy resources that would result in a significant environmental impact.

## Construction Energy Demand

The project would require site preparation and grading, building construction, architectural coating, and landscaping and hardscaping. During construction, energy would be consumed in the form of petroleum-based fuels used to power off-road construction vehicles and equipment on the project site, construction worker travel to and from the project site, and vehicles used to deliver materials to the site. The consumption of electricity and natural gas to power the project's off-road construction vehicles and equipment would be negligible based on standard construction vehicle fleet mix fuel consumption. As shown in Table 11, project construction would require approximately 55,563 gallons of gasoline and approximately 117,207 gallons of diesel fuel. These construction energy estimates are conservative because they assume that the construction equipment used in each phase of construction is operating every day of construction.

**Table 11 Estimated Fuel Consumption during Construction (gallons)**

| Source | Gasoline | Diesel |
|---|---|---|
| Construction Equipment & Hauling Trips | – | 117,207 |
| Construction Worker Vehicle Trips | 55,563 | – |
| See Appendix D for energy calculation sheets | | |

Energy use during construction would be temporary in nature, and construction equipment used would be typical of similar-sized construction projects in the region. In addition, construction contractors would be required to comply with the provisions of California Code of Regulations (CCR) Title 13 Sections 2449 and 2485, which prohibit diesel-fueled commercial motor vehicles and off-road diesel vehicles from idling for more than five minutes and would minimize unnecessary fuel consumption. Construction equipment would be subject to the USEPA Construction Equipment Fuel Efficiency Standard, which would also minimize inefficient, wasteful, or unnecessary fuel consumption. Furthermore, per applicable regulatory requirements such as California's Green Building Standards Code (CALGreen; CCR, Title 24, Part 11), the project would comply with construction waste management practices to divert a minimum of 65 percent of construction and demolition debris. These practices would result in efficient use of energy necessary to construct the project. In the interest of cost-efficiency, construction contractors also would not utilize fuel in a manner that is wasteful or unnecessary. Therefore, the project would not involve the inefficient, wasteful and unnecessary use of energy during construction, and the construction-phase impact related to energy consumption would be less than significant.

## Operational Energy Demand

Operation of the proposed project would increase area energy demand from greater electricity consumption compared to current conditions on the undeveloped site. Electricity would be used for heating and cooling systems, lighting, appliances, water use, and the overall operation of the project buildings. Gasoline and diesel fuel consumption would be used for motor vehicle travel to and from the project site.

Table 12 summarizes estimated operational energy consumption for the proposed project. As shown therein, project operation would require approximately 210,455 gallons of gasoline and 47,371 gallons of diesel for transportation fuels. The project would require 1.44 GWh of electricity per year from a PV system, therefore, electricity consumption is anticipated to have a net zero draw

from the grid. Residential vehicle trips would represent the greatest operational use of energy associated with the proposed project.

**Table 12 Estimated Project Annual Operational Energy Consumption**

| Source | Energy Consumption[1] | MMBtu Conversion (MMBtu) |
|---|---|---|
| **Transportation Fuels[2]** | | |
| Gasoline | 210,455 gallons | 23,105 |
| Diesel | 47,371 gallons | 6,038 |
| **Building Operations** | | |
| Electricity | 1.44 GWh | 4,916 |
| **Total Energy Consumption** | | **34,059** |

MMBtu = million metric British thermal units; GWh = Gigawatt hours

[1] Energy consumption is converted to MMBtu for each source

[2] The estimated number of average daily trips associated with the project is used to determine the energy consumption associated with fuel use from operation of the project. According to CalEEMod calculations (see Appendix A), the project would result in approximately 3,788,152 annual VMT.

Source: Appendices A and D

The project would be required to comply with the standards established in the CCR Title 24, which would minimize the wasteful, inefficient, or unnecessary consumption of energy resources during operation. CALGreen (CCR, Title 24, Part 11) requires implementation of energy efficient light fixtures and building materials into the design of new construction projects. Furthermore, the 2022 Building Energy Efficiency Standards (Title 24, Part 6) requires newly constructed buildings to meet energy performance standards set by the CEC. These standards are specifically crafted for new buildings to result in energy efficient performance. Therefore, the proposed project would not lead to wasteful, inefficient, or unnecessary consumption of energy resources. Potential impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*b. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?*

New development on the project site would increase energy consumption through electricity to power facilities and heating and cooking. In addition, petroleum is used in motor vehicles used by residents. In 2011, the city adopted an Energy Action Plan to achieve energy independence and energy efficiency and conservation to achieve its GHG emission reduction target of 15 percent by the year 2020, consistent with the State's overall target to reduce GHG emissions statewide to 1990 levels by 2020. Since then, the City of Palmdale released its 2045 General Plan in October 2022, establishing a series of goals and policies to reduce GHG emissions and increase sustainability. The Plan's Sustainability, Climate, and Resilience chapter serve as the Climate Action Plan (CAP) for the City of Palmdale. Goals and policies from the 2045 General Plan are described in Section 8, *Greenhouse Gas Emissions.* In addition, the following goals, policies, and actions related to Energy Action Plan include (City of Palmdale 2011):

**Goal 1: Reduce Energy Demand Through Energy Conservation and Efficiency**

**Measure 1.3:** Energy Efficiency in New Development.

**Measure 1.6:** Residential Energy Efficiency.

**Goal 3: Promote Renewable Energy Generation and Use.**

**Measure 3.3**: Residential Renewable Energy. Encourage the residential sector to meet energy needs through on-site renewable energy sources.

The project would also be subject to State requirements for energy efficiency, including the mandatory measures for residential development contained in the 2022 CALGreen and Title 24 Building Energy Efficiency Standards. The proposed project would comply with Title 24 Building Energy Efficiency Standards by including renewable energy on-site using a solar PV system to provide power to the single-family residences and community amenities. Additionally, the project would include water-efficient appliances and fixtures in every residential unit, as well as drought tolerant landscaping and water efficient irrigation systems in accordance with the CALGreen standards, which would reduce the project's water use and energy needed to provide water to the project. These sustainability features align with the energy efficiency goals established in the City's Energy Action Plan and 2045 General Plan. Therefore, the project would not conflict with or obstruct a State or local plan for renewable energy or energy efficiency, and there would be a less than significant impact.

**LESS THAN SIGNIFICANT IMPACT**

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# 7 Geology and Soils

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| 1. 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? | ☐ | ☐ | ■ | ☐ |
| 2. Strong seismic ground shaking? | ☐ | ☐ | ■ | ☐ |
| 3. Seismic-related ground failure, including liquefaction? | ☐ | ☐ | ■ | ☐ |
| 4. 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 wastewater disposal systems where sewers are not available for the disposal of wastewater? | ☐ | ☐ | ☐ | ■ |
| f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | ☐ | ■ | ☐ | ☐ |

A Geologic and Geotechnical Engineering Investigation was prepared by GeoSoils Consultants Inc. on October 27, 2021, to study the soil conditions of the project site. It was concluded that the project site was considered feasible from a geologic and geotechnical engineering standpoint. The report included recommendations to be followed during grading. The report has been included as Appendix E and attached to this report.

*a.1. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving 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?*

*a.2. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?*

The project site is in a seismically active area of southern California, and therefore, could experience strong ground shaking from local and regional faults. A fault that has ruptured in at least the last 11,700 years is considered to have a higher potential of future seismicity and is considered an active fault by the Alquist-Priolo Earthquake Fault Zoning Act. Faults with evidence of longer earthquake frequency events are considered to have a lower potential of future seismicity. According to California Geological Survey (CGS), the project site is not located in an Alquist-Priolo Fault Zone (CGS 2022). However, the site is situated in a region subject to strong earthquakes occurring along active faults such as the San Andreas, Nadeau, Cemetery, Little Rock, and Leona Avenue. The closest known active fault to the site is the San Andreas fault which is located at a distance of approximately 3.2 miles southwest of the site. The possibility of ground acceleration, or shaking at the project site, may be considered as approximately similar to the southern California region as a whole.

To reduce geologic and seismic impacts, the City regulates development through the requirements of the CBC. The purpose of the CBC is to establish minimum standards to safeguard the public health, safety, and general welfare through structural strength, means of egress, and general stability by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all building and structures within its jurisdiction. The earthquake design requirements of the CBC consider the occupancy category of the structure, site class, soil classifications, and various seismic coefficients. The CBC provides standards for various aspects of construction, including but not limited to excavation, grading, earthwork, construction, preparation of the site prior to fill placement, specification of fill materials, fill compaction and field testing, retaining wall design and construction, foundation design and construction, and seismic requirements. It includes provisions to address issues such as, but not limited to, ground shaking. In accordance with California law, project design and construction would be required to comply with provisions of the CBC. Because the project would comply with the CBC and because the project would not exacerbate existing ground shaking hazards, impacts related to seismically induced ground shaking and fault rupture would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*a.3. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?*

*a.4. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?*

Liquefaction is a process whereby soil is temporarily transformed to fluid form during intense and prolonged ground shaking or because of a sudden shock or strain. Typically, liquefaction occurs in areas where there are loose soils and the depth to groundwater is less than 50 feet from the surface. The project site is not located within a mapped liquefaction or landslide area identified by the California Geological Survey (CGS 2022). In addition, according to the Geotechnical Engineering Investigation, the site is underlain by dense alluvium and groundwater levels are below at least 50 feet (Appendix E). As a result, the site is not subject to liquefaction. Due to the relatively flat topography of the site and surrounding areas, the project site is not at risk of landslides.

Furthermore, design and construction of the project would conform to the current seismic design provisions of the CBC, which incorporates the latest seismic design standards for structural loads and materials, as well as provisions from the National Earthquake Hazards Reduction Program, to mitigate losses from an earthquake, including liquefaction, and provide for the latest in earthquake safety. While the project would be susceptible to seismic activity given its location within a seismically active area, the project site is not susceptible to liquefaction or landslides and would be required to minimize this risk, to the extent feasible, through the incorporation of applicable CBC standards. Therefore, the project would not result in substantial adverse impacts related to liquefaction or landslides, and impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*b. Would the project result in substantial soil erosion or the loss of topsoil?*

The proposed project involves the construction of a new single-family residential community on a project site that is currently vacant. Construction activities have the potential to result in soil erosion, particularly during grading and excavation activities. Fugitive dust caused by strong wind and/or earth-moving operations during construction would be minimized through compliance with SCAQMD Rule 403, which prohibits visible particulate matter from crossing property lines. Standard practices to control fugitive dust emissions include watering of active grading sites, covering soil stockpiles with plastic sheeting, and covering soils in haul trucks with secured tarps. In addition, the potential for project construction activities to result in increased erosion and sediment transport by stormwater to surface waters would be minimized because the project would be required to comply with a Construction General Permit, which is issued by the State Water Resources Control Board (SWRCB). The Construction General Permit requires the development of a Storm Water Pollution Prevention Plan (SWPPP), which outlines BMPs to reduce erosion and topsoil loss from stormwater runoff (also refer to the discussion in Section 10, *Hydrology and Water Quality*). Compliance with the Construction General Permit would ensure that BMPs are implemented during construction and minimize substantial soil erosion or the loss of topsoil. Upon completion of construction, the project site would be stabilized with landscaping and paving, and operational activities would not result in soil erosion. Therefore, impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*c. Would the project 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?*

Lateral spreading is the horizontal movement or spreading of soil toward an open face. Lateral spreading may occur when soils liquefy during an earthquake event, and the liquefied soils with overlying soils move laterally to unconfined spaces. Subsidence is the sudden sinking or gradual downward settling of the earth's surface with little or no horizontal movement. Subsidence is caused by a variety of activities that include, but are not limited to, withdrawal of groundwater, pumping of oil and gas from underground, the collapse of underground mines, liquefaction, and hydrocompaction. Collapse potential refers to the potential settlement of a soil under existing stresses upon being wetted.

As discussed under *Impacts 7.a.1* through *7.a.4*, although the proposed project is in a seismically active area, the project site is not located on unstable soils or a geologic unit at risk for liquefaction or landslides. The project site consists of relatively flat land that is surrounded by developed land with no significant slopes that would present a landslide hazard. Furthermore, construction and operation of the project would not involve activities known to cause or trigger subsidence and is not anticipated to adversely affect soil stability or increase the potential for local or regional landslides, subsidence, liquefaction, or collapse. The project would comply with CBC requirements. Because the project would not create or exacerbate conditions related to unstable soils, impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*d. Would the project 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?*

Expansive soils are highly compressible, clay-based soils that tend to expand as they absorb water and shrink as water is drawn away. According to the USDA online Web Soil Survey map the soil on the project site is made up of loamy sand and loamy fine sand with a 0 to 2 precent slope (USDA 2022). The Geotechnical Engineering Investigation concluded that alluvium underlies the project site and consists of sand and gravelly sand, with variable amounts of silt (Appendix E). The alluvium is slightly moist and dense. Sandy and gravelly soils do not typically contain significant levels of clay that could adversely affect building footings.

Furthermore, the proposed project would be required to comply with the most recent CBC requirements, which have been developed to property safeguard structures and occupants from land stability hazards, such as expansive soils. Therefore, impacts related to expansive soils would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*e. Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?*

The project would be served by the City's existing sewer system and no septic tanks are proposed for the project. Therefore, there is no potential for adverse effects due to soil incompatibility with septic tanks. No impact would occur.

**NO IMPACT**

*f. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?*

Paleontological resources, or fossils, are the evidence of once-living organisms preserved in the rock record. They include both the fossilized remains of ancient plants and animals and the traces thereof (e.g., trackways, imprints, burrows, etc.). Paleontological resources are not found in "soil" but are contained within the geologic deposits or bedrock that underlies the soil layer. Typically, fossils are greater than 5,000 years old (i.e., older than middle Holocene in age) and are typically preserved in sedimentary rocks (Society of Vertebrate Paleontology [SVP] 2010). Fossils occur in a non-continuous and often unpredictable distribution within some sedimentary units, and the potential for fossils to occur within sedimentary units depends on several factors. It is possible to evaluate the potential for geologic units to contain scientifically important paleontological resources, and therefore evaluate the potential for impacts to those resources and provide mitigation for paleontological resources if they are discovered during construction of a development project.

A paleontological resource assessment was conducted by BFSA on October 25, 2022 (Appendix C2), the full assessment is included as Appendix E. The paleontological assessment of the project included a review of paleontological literature and fossil locality records for a previous project in the area; a review of the underlying geology; and recommendations to mitigate impacts to potential paleontological resources.

The paleontological resources assessment confirmed the potential for paleontological resources to exist on the project site due to the presence of thin, Holocene alluvial deposits mapped at the surface of the project. Construction activities may result in the destruction, damage, or loss of undiscovered paleontological resources. Therefore, impacts to paleontological resources would be potentially significant. Mitigation Measure GEO-1 requires a mitigation program that establishes monitoring and a recovery protocol in the event that prehistoric deposits are discovered.

## Mitigation Measure

### *GEO-1 Paleontological Resource Impact Mitigation Program*

Prior to the issuance and approval of grading permits for the project the applicant shall submit a Paleontological Resource Impact Mitigation Program (PRIMP). The PRIMP shall include the following:

1. Prior to initiation of any grading, drilling, and/or excavation activities, a preconstruction meeting shall be held and attended by the paleontologist of record, representatives of the grading contractor and subcontractors, the project owner or developer, and a representative of the lead agency. The nature of potential paleontological resources shall be discussed, as well as the protocol that is to be implemented following the discovery of any fossiliferous materials.
2. Monitoring of mass grading and excavation activities in areas identified as likely to contain paleontological resources shall be performed by a qualified/project paleontologist or paleontological monitor. Monitoring shall be performed starting at the surface on a full-time basis; Holocene alluvial deposits should be monitored parttime at the discretion of the project paleontologist. The timing and duration of the monitoring of excavation activities within the alluvial fan deposits shall be at the discussion of the project paleontologist based on the geological conditions observed by the paleontological monitor and/or the project paleontologist.

3. Paleontological monitors shall be equipped to salvage fossils as they are unearthed to avoid construction delays. The monitor shall be empowered to temporarily halt or divert equipment to allow 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 the concerned parties of the discovery.
4. Paleontological salvage during trenching and boring activities is typically from the generated spoils and does not delay the 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. Notes shall be taken on the map location and stratigraphy of the site, which is photographed before it is vacated, and the fossils are removed to a safe place. On mass grading projects, discovered fossil sites shall be 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 with the use of handheld GPS units. If the site involves remains from a large terrestrial vertebrate, such as large bone(s) or a mammoth tusk, that is/are too large to be easily removed by a single monitor, a fossil recovery crew shall excavate around the find, encase the find within a plaster and burlap jacket, and remove it after the plaster is set. For large fossils, use of the contractor's construction equipment may be solicited to help remove the jacket to a safe location.
5. Isolated fossils shall be collected by hand, wrapped in paper, and placed in temporary collecting flats or five-gallon buckets. Notes will be taken on the map location and stratigraphy of the site, which is photographed before it is vacated, and the fossils are removed to a safe place.
6. Particularly small invertebrate fossils typically represent multiple specimens of a limited number of organisms, and a scientifically suitable sample can be obtained from one to several five-gallon buckets of fossiliferous sediment. If it is possible to dry screen the sediment in the field, a concentrated sample may consist of one or two buckets of material. For vertebrate fossils, the test is usually the observed presence of small pieces of bones within the sediments. If present, multiple five-gallon buckets of sediment can be collected and returned to a separate facility to wet-screen the sediment.
7. In accordance with the "Microfossil Salvage" section of the SVP guidelines (2010:7), bulk sampling and screening of fine-grained sedimentary deposits (including carbonate-rich paleosols) must be performed if the deposits are identified to possess indications of producing fossil microvertebrates to test the feasibility of the deposit to yield fossil bones and teeth.
8. In the laboratory, individual fossils shall 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).
9. 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.
10. 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 LACM) shall be conducted. The paleontological program should include a written repository

agreement prior to the initiation of mitigation activities. Prior to curation, the City of Palmdale shall be consulted on the repository/museum to receive the fossil material.

11. A final monitoring and mitigation 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.

## Significance after Mitigation

Implementation of Mitigation Measure GEO-1 during project construction would reduce potential impacts related to paleontological resources to a less than significant level by providing for the recovery, identification, and curation of previously unrecovered fossils. Impacts would be less than significant with mitigation.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

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# 8 Greenhouse Gas Emissions

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| 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 emissions of greenhouse gases? | ☐ | ■ | ☐ | ☐ |

## Overview of Greenhouse Gases

Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period. The term "climate change" is often used interchangeably with the term "global warming," but climate change is preferred because it conveys that other changes are happening in addition to rising temperatures. The baseline against which these changes are measured originates in historical records that identify temperature changes that occurred in the past, such as during previous ice ages. The global climate is changing continuously, as evidenced in the geologic record which indicates repeated episodes of substantial warming and cooling. The rate of change has typically been incremental, with warming or cooling trends occurring over the course of thousands of years. The past 10,000 years have been marked by a period of incremental warming, as glaciers have steadily retreated across the globe. However, scientists have observed acceleration in the rate of warming over the past 150 years. The United Nations Intergovernmental Panel on Climate Change (IPCC) expressed that the rise and continued growth of atmospheric $CO_2$ concentrations is unequivocally due to human activities in the IPCC's Sixth Assessment Report (2021). Human influence has warmed the atmosphere, ocean, and land, which has led the climate to warm at an unprecedented rate in the last 2,000 years. It is estimated that between the period of 1850 through 2019, that a total of 2,390 gigatonnes of anthropogenic $CO_2$ was emitted. It is likely that anthropogenic activities have increased the global surface temperature by approximately 1.07 degrees Celsius between the years 2010 through 2019 (IPCC 2021). Furthermore, since the late 1700s, estimated concentrations of $CO_2$, methane, and nitrous oxide in the atmosphere have increased by over 43 percent, 156 percent, and 17 percent, respectively, primarily due to human activity (USEPA 2021a). Emissions resulting from human activities are thereby contributing to an average increase in Earth's temperature.

Gases that absorb and re-emit infrared radiation in the atmosphere are called GHGs. The gases that are widely seen as the principal contributors to human-induced climate change include carbon dioxide ($CO_2$), methane ($CH_4$), nitrous oxides ($N_2O$), fluorinated gases such as hydrofluorocarbons and perfluorocarbons and sulfur hexafluoride ($SF_6$). Water vapor is excluded from the list of GHGs

because it is short-lived in the atmosphere, and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

GHGs are emitted by natural processes and human activities. Of these gases, $CO_2$ and $CH_4$ are emitted in the greatest quantities from human activities. Emissions of $CO_2$ are usually by-products of fossil fuel combustion, and $CH_4$ results from off-gassing associated with agricultural practices and landfills. Human-made GHGs, many of which have greater heat-absorption potential than $CO_2$, include fluorinated gases and $SF_6$ (USEPA 2021a).

Different types of GHGs have varying global warming potentials (GWP). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas ($CO_2$) is used to relate the amount of heat absorbed to the amount of the gas emitted, referred to as "carbon dioxide equivalent" ($CO_2e$), which is the amount of GHG emitted multiplied by its GWP. Carbon dioxide has a 100-year GWP of one. By contrast, methane has a GWP of 30, meaning its global warming effect is 30 times greater than $CO_2$ on a molecule per molecule basis (IPCC 2021).[2]

The accumulation of GHGs in the atmosphere regulates the earth's temperature. Without the natural heat-trapping effect of GHGs, the earth's surface would be about 33 degrees Celsius (°C) cooler (World Meteorological Organization 2022). However, since 1750, estimated concentrations of $CO_2$, $CH_4$, and $N_2O$ in the atmosphere have increased by 47 percent, 156 percent, and 23 percent, respectively, primarily due to human activity (IPCC 2021). GHG emissions from human activities, particularly the consumption of fossil fuels for electricity production and transportation, are believed to have elevated the concentration of these gases in the atmosphere beyond the level of concentrations that occur naturally.

## Greenhouse Gas Emissions Inventory

### *Global*

In 2015, worldwide anthropogenic total 47,000 million MT of $CO_2e$, which is a 43 percent increase from 1990 GHG levels (USEPA 2021b). Specifically, 34,522 million metric tons (MMT) of $CO_2e$ of $CO_2$, 8,241 MMT of $CO_2e$ of $CH_4$, 2,997 MMT of $CO_2e$ of $N_2O$, and 1,001 MMT of $CO_2e$ of fluorinated gases were emitted in 2015. The largest source of GHG emissions were energy production and use (includes fuels used by vehicles and buildings), which accounted for 75 percent of the global GHG emissions. Agriculture uses and industrial processes contributed 12 percent and six percent, respectively. Waste sources contributed for three percent and two percent was due to international transportation sources. These sources account for approximately 98 percent because there was a net sink of two percent from land-use change and forestry (USEPA 2021b).

### *Federal*

United States GHG emissions were 6,347.7 MMT of $CO_2e$ in 2021 or 5,593.5 MMT $CO_2e$ after accounting for sequestration. Emissions increased by 6.8 percent from 2020 to 2021. The increase from 2020 to 2021 was driven by an increase in $CO_2$ emissions from fossil fuel combustion which increased seven percent relative to previous years and is primarily due to the economic rebounding after the COVID-19 Pandemic. In 2020, the energy sector (including transportation) accounted for

[2] The Intergovernmental Panel on Climate Change's (2021) *Sixth Assessment Report* determined that methane has a GWP of 30. However, the 2017 Climate Change Scoping Plan published by the California Air Resources Board uses a GWP of 25 for methane, consistent with the Intergovernmental Panel on Climate Change's (2007) *Fourth Assessment Report*. Therefore, this analysis utilizes a GWP of 25.

81 percent of nationwide GHG emissions while agriculture, industrial and waste accounted for approximately 10 percent, six percent, and three percent respectively (USEPA 2023).

### *California*

Based on a review of CARB's California Greenhouse Gas Inventory for the years between 2000-2020, California produced 369.2 MMT of $CO_2e$ in 2020, which is 35.3 MMT of $CO_2e$ lower than 2019 levels. The 2019 to 2020 decrease in emissions is likely due in large part to the impacts of the COVID-19 pandemic. The major source of GHG emissions in California is the transportation sector, which comprises 37 percent of the State's total GHG emissions. The industrial sector is the second largest source, comprising 20 percent of the State's GHG emissions while electric power accounts for approximately 16 percent. The magnitude of California's total GHG emissions is due in part to its large size and large population compared to other states. However, a factor that reduces California's per capita fuel use and GHG emissions as compared to other states is its relatively mild climate. In 2016, California achieved its 2020 GHG emission reduction target of reducing emissions to 1990 levels as emissions fell below 431 MMT of $CO_2e$ (CARB 2022). The annual 2030 statewide target emissions level is 260 MMT of $CO_2e$ (CARB 2017).

### *Regional*

The City of Palmdale' CAP includes GHG inventories for the city (City of Palmdale 2022a). In 2017, total community GHG emissions were estimated at 1,042,284 MT $CO_2e$. Out of the total 2017 GHG emissions inventory, on-road transportation (i.e., gasoline and diesel consumption from motor vehicles on local roads and highways) accounted for 59 percent of the emissions, residential energy consumption accounted for 19 percent, and nonresidential energy consumption accounted for 16 percent. The remaining six percent of GHG emissions was due to solid waste, off-road equipment, water and wastewater, and industrial sources.

## Greenhouse Gas Emissions Regulations

### *Federal Regulations*

The U.S. Supreme Court in *Massachusetts et al. v. Environmental Protection Agency et al*. ([2007] 549 U.S. 05-1120) held that the USEPA has the authority to regulate motor-vehicle GHG emissions under the federal Clean Air Act. The USEPA issued a Final Rule for mandatory reporting of GHG emissions in October 2009. This Final Rule applies to fossil fuel suppliers, industrial gas suppliers, direct GHG emitters, and manufacturers of heavy-duty and off-road vehicles and vehicle engines and requires annual reporting of emissions. In 2012, the USEPA issued a Final Rule that establishes the GHG permitting thresholds that determine when CAA permits under the New Source Review Prevention of Significant Deterioration (PSD) and Title V Operating Permit programs are required for new and existing industrial facilities.

In 2014, the U.S. Supreme Court in *Utility Air Regulatory Group v. EPA* (134 S. Ct. 2427 [2014]) held that USEPA may not treat GHGs as an air pollutant for purposes of determining whether a source is a major source required to obtain a PSD or Title V permit. The Court also held that PSD permits that are otherwise required (based on emissions of other pollutants) may continue to require limitations on GHG emissions based on the application of Best Available Control Technology (BACT).

*State Regulations*

### ASSEMBLY BILL 1493 – CALIFORNIA ADVANCED CLEAN CARS PROGRAM

AB 1493 (2002), California's Advanced Clean Cars program (referred to as "Pavley"), requires CARB to develop and adopt regulations to achieve "the maximum feasible and cost-effective reduction of GHG emissions from motor vehicles." On June 30, 2009, USEPA granted the waiver of CAA preemption to California for its GHG emission standards for motor vehicles beginning with the 2009 model year. Pavley I regulates model years from 2009 to 2016 and Pavley II, which is now referred to as "LEV (Low Emission Vehicle) III GHG" regulates model years from 2017 to 2025. The Advanced Clean Cars program coordinates the goals of the Low Emissions Vehicles (LEV), Zero Emissions Vehicles (ZEV), and Clean Fuels Outlet programs, and should provide major reductions in GHG emissions. By 2025, when the rules will be fully implemented, new automobiles will emit 34 percent fewer GHGs and 75 percent fewer smog-forming emissions from their model year 2016 levels (CARB 2011).

### CALIFORNIA GLOBAL WARMING SOLUTIONS ACT OF 2006 (ASSEMBLY BILL 32, AND SENATE BILL 32)

The "California Global Warming Solutions Act of 2006," (AB 32), outlines California's major legislative initiative for reducing GHG emissions. AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020 and requires CARB to prepare a Scoping Plan that outlines the main state strategies for reducing GHG emissions to meet the 2020 deadline. In addition, AB 32 requires CARB to adopt regulations to require reporting and verification of statewide GHG emissions. Based on this guidance, CARB approved a 1990 statewide GHG level and 2020 target of 431 MMT CO2e, which was achieved in 2016. CARB approved the Scoping Plan on December 11, 2008, which included GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among others (CARB 2008). Many of the GHG reduction measures included in the Scoping Plan (e.g., Low Carbon Fuel Standard, Advanced Clean Car standards, and Cap-and-Trade) have been adopted since the Scoping Plan's approval.

The CARB approved the 2013 Scoping Plan update in May 2014 (CARB 2014). The update defined the CARB's climate change priorities for the next five years, set the groundwork to reach post-2020 statewide goals, and highlighted California's progress toward meeting the "near-term" 2020 GHG emission reduction goals defined in the original Scoping Plan. It also evaluated how to align the state's longer term GHG reduction strategies with other state policy priorities, including those for water, waste, natural resources, clean energy, transportation, and land use (CARB 2014).

On September 8, 2016, the governor signed Senate Bill (SB) 32 into law, extending the California Global Warming Solutions Act of 2006 by requiring the state to further reduce GHG emissions to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, the CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, and implementation of recently adopted policies and legislation, such as SB 1383 and SB 100 (discussed later). The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally appropriate quantitative thresholds consistent with statewide per capita goals of six MT $CO_2e$ by 2030 and two MT $CO_2e$ by 2050 (CARB 2017). As stated in the 2017 Scoping Plan, these goals may be appropriate for plan-level analyses

(city, county, sub-regional, or regional level), but not for specific individual projects because they include all emissions sectors in the state (CARB 2017).

## Assembly Bill 1279

AB 1279, the California Climate Crisis Act, was passed on September 16, 2022, and declares the State would achieve net zero GHG emissions as soon as possible, but no later than 2045, and to achieve and maintain net negative GHG emissions thereafter. In addition, the bill states that the State would reduce GHG emissions by 85 percent below 1990 levels no later than 2045.

In response to the passage of AB 1279 and the identification of the 2045 GHG reduction target, CARB published the Final 2022 Climate Change Scoping Plan in November 2022 (CARB 2022b). The 2022 Update builds upon the framework established by the 2008 Climate Change Scoping Plan and previous updates while identifying new, technologically feasible, cost-effective, and equity-focused path to achieve California's climate target. The 2022 Update includes policies to achieve a significant reduction in fossil fuel combustion, further reductions in short-lived climate pollutants, support for sustainable development, increased action on natural and working lands (NWL) to reduce emissions and sequester carbon, and the capture and storage of carbon.

The 2022 Update assesses the progress California is making toward reducing its GHG emissions by at least 40 percent below 1990 levels by 2030, as called for in SB 32 and laid out in the 2017 Scoping Plan, addresses recent legislation and direction from Governor Gavin Newsom, extends and expands upon these earlier plans, and implements a target of reducing anthropogenic emissions to 85 percent below 1990 levels by 2045, as well as taking an additional step of adding carbon neutrality as a science-based guide for California's climate work. As stated in the 2022 Update, "The plan outlines how carbon neutrality can be achieved by taking bold steps to reduce GHGs to meet the anthropogenic emissions target and by expanding actions to capture and store carbon through the state's NWL and using a variety of mechanical approaches" (CARB 2022b). Specifically, the 2022 Update:

- Identifies a path to keep California on track to meet its SB 32 GHG reduction target of at least 40 percent below 1990 emissions by 2030.
- Identifies a technologically feasible, cost-effective path to achieve carbon neutrality by 2045 and a reduction in anthropogenic emissions by 85 percent below 1990 levels.
- Focuses on strategies for reducing California's dependency on petroleum to provide consumers with clean energy options that address climate change, improve air quality, and support economic growth and clean sector jobs.
- Integrates equity and protecting California's most impacted communities as driving principles throughout the document.
- Incorporates the contribution of NWL to the State's GHG emissions, as well as their role in achieving carbon neutrality.
- Relies on the most up-to-date science, including the need to deploy all viable tools to address the existential threat that climate change presents, including carbon capture and sequestration, as well as direct air capture.
- Evaluates the substantial health and economic benefits of taking action.
- Identifies key implementation actions to ensure success.

In addition to reducing emissions from transportation, energy, and industrial sectors, the 2022 Update includes emissions and carbon sequestration in NWL and explores how NWL contributes to long-term climate goals. Under the Scoping Plan Scenario, California's 2030 emissions are anticipated to be 48 percent below 1990 levels, representing an acceleration of the current SB 32 target. Cap-and-Trade regulation continues to play a large factor in the reduction of near-term emissions for meeting the accelerated 2030 reduction target. Every sector of the economy will need to begin to transition in this decade to meet our GHG emissions reduction goals and achieve carbon neutrality no later than 2045. The 2022 Update approaches decarbonization from two perspectives, managing a phasedown of existing energy sources and technologies, as well as increasing, developing, and deploying alternative clean energy sources and technology.

### SENATE BILL 97 – CEQA: GREENHOUSE GAS EMISSIONS

SB 97, signed in August 2007, acknowledges that climate change is an environmental issue that requires analysis in CEQA documents. In March 2010, the California Natural Resources Agency (Resources Agency) adopted amendments to the CEQA Guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted guidelines give lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHG and climate change impacts.

### SENATE BILL 375 – 2008 SUSTAINABLE COMMUNITIES AND CLIMATE PROTECTION ACT

SB 375, signed in August 2008, enhances the state's ability to reach AB 32 goals by directing CARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles by 2020 and 2035. In addition, SB 375 directs each of the state's 18 major Metropolitan Planning Organizations (MPOs) to prepare a "sustainable communities strategy" (SCS) that contains a growth strategy to meet these emission targets for inclusion in the Regional Transportation Plan (RTP). On March 22, 2018, CARB adopted updated regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. SCAG was assigned targets of an 8 percent reduction in GHGs from transportation sources by 2020 and a 19 percent reduction in GHGs from transportation sources by 2035. In the SCAG region, SB 375 also provides the option for the coordinated development of sub regional plans by the sub regional councils of governments and the county transportation commissions to meet SB 375 requirements.

### SENATE BILL 1383 – SHORT-LIVED CLIMATE POLLUTANTS

Adopted in September 2016, SB 1383 requires CARB to approve and begin implementing a comprehensive strategy to reduce emissions of short-lived climate pollutants. The bill requires the California Department of Resources Recycling and Recovery (CalRecycle), in consultation with CARB, to adopt regulations that achieve:

- 50-percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020; and
- 75-percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2025.

The bill also mandates various state and local agencies develop further strategies to reduce emissions generated by specific industries such as agriculture. The stated goal is to achieve the following reduction targets by 2030:

- Methane – 40 percent below 2013 levels
- Hydrofluorocarbons – 40 percent below 2013 levels
- Anthropogenic black carbon – 50 percent below 2013 levels

#### SENATE BILL 100 – CALIFORNIA RENEWABLES PORTFOLIO STANDARD PROGRAM

Adopted on September 10, 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the state's Renewables Portfolio Standard Program, which was last updated by SB 350 in 2015. SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

#### EXECUTIVE ORDER B-55-18 TO ACHIEVE CARBON NEUTRALITY

On September 10, 2018, Governor Brown issued Executive Order B-55-18, which established a new statewide goal of achieving carbon neutrality by 2045 and maintaining net negative emissions thereafter. This goal is in addition to the existing statewide GHG reduction targets established by SB 375, SB 32, SB 1383, and SB 100.

#### ASSEMBLY BILL 341 – CALIFORNIA INTEGRATED WASTE MANAGEMENT ACT

The California Integrated Waste Management Act of 1989, as modified by AB 341, requires each jurisdiction's source reduction and recycling element to include an implementation schedule that shows: (1) diversion of 25 percent of all solid waste by January 1, 1995, through source reduction, recycling, and composting activities; (2) diversion of 50 percent of all solid waste on and after January 1, 2000; and (3) diversion of 75 percent of all solid waste by 2020, and annually thereafter. CalRecycle is required to develop strategies to implement AB 341, including source reduction.

#### CLEAN ENERGY, JOBS, AND AFFORDABILITY ACT OF 2022 (SENATE BILL 1020)

Adopted on September 16, 2022, SB 1020 creates clean electricity targets for eligible renewable energy resources and zero-carbon resources to supply 90 percent of retail sale electricity by 2035, 95 percent by 2040, 100 percent by 2045, and 100 percent of electricity procured to serve all state agencies by 2035. This bill shall not increase carbon emissions elsewhere in the western grid and shall not allow resource shuffling.

### *California Building Standards Code*

The California Code of Regulations (CCR) Title 24 is referred to as the California Building Standards Code. It consists of a compilation of several distinct standards and codes related to building construction including plumbing, electrical, interior acoustics, energy efficiency, and handicap accessibility for persons with physical and sensory disabilities. The current iteration is the 2022 Title 24 standards. The California Building Standards Code's energy-efficiency and green building standards are outlined below.

#### PART 6 – BUILDING ENERGY EFFICIENCY STANDARDS/ENERGY CODE

CCR Title 24, Part 6 is the Building Energy Efficiency Standards or California Energy Code. This code, originally enacted in 1978, establishes energy-efficiency standards for residential and non-residential buildings in order to reduce California's energy demand. New construction and major renovations must demonstrate their compliance with the current Energy Code through submittal

and approval of a Title 24 Compliance Report to the local building permit review authority and the California Energy Commission (CEC). The 2022 Title 24 standards are the applicable building energy efficiency standards for the proposed project because they became effective on January 1, 2023.

### PART 11 – CALIFORNIA GREEN BUILDING STANDARDS

The California Green Building Standards Code, referred to as CALGreen, was added to Title 24 as Part 11, first in 2009 as a voluntary code, which then became mandatory effective January 1, 2011 (as part of the 2010 California Building Standards Code). The 2022 CALGreen includes mandatory minimum environmental performance standards for all ground-up new construction of residential and non-residential structures. It also includes voluntary tiers with stricter environmental performance standards for these same categories of residential and non-residential buildings. Local jurisdictions must enforce the minimum mandatory CALGreen standards and may adopt additional amendments for stricter requirements.

## *Regional and Local Regulations*

### 2020 – 2045 SCAG REGIONAL TRANSPORTATION PLAN

On September 3, 2020, the SCAG's Regional Council formally adopted the 2020-2045 RTP/SCS entitled Connect SoCal. The 2020-2045 RTP/SCS builds upon the progress made through implementation of the 2016-2040 RTP/SCS and includes 10 goals focused on promoting economic prosperity, improving mobility, protecting the environment, and supporting healthy/complete communities. The SCS implementation strategies include focusing growth near destinations and mobility options, promoting diverse housing choices, leveraging technology innovations, and supporting implementation of sustainability policies. The SCS establishes a land use vision of center-focused placemaking, concentrating growth in and near Priority Growth Areas, transferring of development rights, urban greening, creating greenbelts and community separators, and implementing regional advance mitigation (SCAG 2020).

### CITY OF PALMDALE GENERAL PLAN 2045

The City of Palmdale has established a series of goals and policies in the 2045 City of Palmdale General Plan to reduce GHG emissions and increase sustainability. The Sustainability, Climate, and Resilience chapter of the Plan serves as the Climate Action Plan (CAP) for the City of Palmdale. The City of Palmdale developed the CAP to reduce emissions and make Palmdale a more sustainable, healthier, and resilient community. Pursuant with CEQA Guidelines Section 15183.5, the CAP would meet the requirements of a qualified CAP and future residential projects developed under the Plan would be able to tier from the CAP for analysis purposes (City of Palmdale 2022a). The CAP includes the following goals and policies that would be applicable to the project:

**Clean Energy**

- Goal SCR-2: Utilize a fossil fuel free energy system (SB 100).
  - **SCR-2.1 Carbon Free Energy.** Direct EPIC to provide 75 percent carbon-free or renewable electricity to residents and businesses by 2030, achieving 100 percent carbon-free electricity by 2045.
  - **SCR-2.2 Community Solar.** Explore the development of community solar projects and microgrids.

**Buildings**

- Goal SCR-3: Green and decarbonized buildings for new construction and major renovations.
  - **SCR-3.1 Energy Efficient New Construction.** Integrate CALGreen Tier 1 and Tier 2 green building and energy efficiency standards into new construction and major remodels.
  - **SCR-3.2 All-Electric Reach Code.** Consider adopting a local reach code to encourage new buildings to be all-electric.
  - **SCR-3.3 Solar + Storage.** Require installation of photovoltaic panels and battery storage on all residential new construction and nonresidential new construction over 5,000 sq. ft.

**Transportation**

- Goal SCR-4: Reduced greenhouse gas emissions from transportation (SB 379, EO N-79-20).
  - **SCR-4.1 Bike Facilities.** Promote bicycle use with new private development projects through requirements for bicycle parking, lockers and showers, bike share facilities, and when feasible, connections to City bike lanes.
  - **SCR-4.2 Public Transit.** Expand the public transit system, increase frequency of service, and provide shade at transit stops.
  - **SCR-4.4 EV Reach Code.** Adopt EV requirements beyond CALGreen in both number of chargers and charger capacity.
  - **SCR-4.7 Pedestrian and Cyclist Safety.** Improve bicycle and pedestrian modes of travel by improving pedestrian and cyclist safety. Example techniques include increasing the number of sidewalks, pending connected and protected bike lanes, and redesigning high incidence intersections.

**Solid Waste**

- Goal SCR-5: Increased resource capture and reduced waste sent to landfills (SB 1383).
  - **SCR-5.1 Zero Waste Plan.** Create a zero-waste plan that institutes cost-effective diversion programs for municipal operations and the community.
  - **SCR-5.2 Organic Waste Diversion.** Establish programs to comply with State-established requirements for organics and food waste diversion.

**Water and Wastewater**

- Goal SCR-6: Safe and secure water supply.
  - **SCR-6.1 Recycled Water.** Increase availability of local recycled water.
  - **SCR-6.4 Rainwater Capture.** Encourage rainwater capture and use of cisterns for outdoor watering purposes.

## Methodology

GHG emissions were calculated using the same input data as described in Section 3, *Air Quality*, in addition to the following:

- **Construction Emission Amortization:** Consistent with the industry standard, total construction GHG emissions resulting from a project were amortized over 30 years and added to operational GHG emissions to account for their contribution to GHG emissions over the lifetime of the project.

- **Electricity:** Electricity emissions only apply to GHG emissions (as the energy is generated off-site and therefore may not be relevant for local and regional air quality conditions) and are calculated by multiplying the energy use times the carbon intensity of the utility district per kilowatt hour (CAPCOA 2022). The default electricity consumption values in CalEEMod include the CEC-sponsored California Commercial End Use Survey and Residential Appliance Saturation Survey studies.
- **Waste Generation:** Operational emissions from waste generation were also calculated in CalEEMod and are based on the IPCC's methods for quantifying GHG emissions from solid waste using the degradable organic content of waste (CAPCOA 2022). Waste disposal rates by land use and overall composition of municipal solid waste in California was primarily based on data provided by CalRecycle.
- **Water and Wastewater:** Operational emissions from water and wastewater usage calculated in CalEEMod were based on the default electricity intensity from the CEC's 2006 Refining Estimates of Water-Related Energy Use in California using the average values for northern and southern California.

## Significance Thresholds

Based on Appendix G of the CEQA Guidelines, impacts related to GHG emissions from the project would be significant if the project would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions.

The majority of individual projects do not generate sufficient GHG emissions to directly influence climate change. However, physical changes caused by a project can contribute incrementally to cumulative effects that are significant, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, Section 15064[h][1]).

Section 15064.4 of the CEQA Guidelines recommends that lead agencies quantify GHG emissions of projects and consider several other factors that may be used in the determination of significance of GHG emissions from a project, including the extent to which the project may increase or reduce GHG emissions; whether a project exceeds an applicable significance threshold; and the extent to which the project complies with regulations or requirements adopted to implement a plan for the reduction or mitigation of GHG emissions. The City of Palmdale has prepared a qualified CAP pursuant to CEQA Guidelines Section 15183.5(b). The CAP serves as a "qualified plan for the reduction of greenhouse gases" and provides a mechanism for tiering and streamlining of GHG emissions analysis for projects that are consistent with such a plan.

As part of the CAP, the City of Palmdale has established GHG reduction targets consistent with the statewide goal of reducing GHG emissions to 40 percent below 1990 levels by 2030 (478,418 MT $CO_2e$). Additionally, the CAP provides additional reductions beyond what is needed to achieve the 2017 Scoping Plan 2030 goal and advances the City's progress toward the goal of carbon neutrality

by 2045 contained in the 2022 Scoping Plan. To achieve these reductions, the City's CAP has established per-service population emissions targets that are used for this analysis, which are: 2 MT $CO_2e$ per service population by 2030; 1.3 MT $CO_2e$ per service population by 2035; and 1.2 MT $CO_2e$ per service population by 2045. Per-service population emissions are calculated by dividing total community emissions by the residents plus employees.

*a. Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?*

The City of Palmdale CAP is a qualified GHG reduction plan consistent with the requirements of CEQA Guidelines Section 15183.5. In accordance with the CAP, project GHG emissions would be less than significant if it can be demonstrated that the project would be consistent with the CAP and generate less than 2 MT $CO_2e$ per service population per year.

Project construction would generate temporary short-term GHG emissions through travel to and from the worksite and from the operation of construction equipment such as graders, backhoes, and generators. Construction of the project would generate approximately 1,546 MT $CO_2e$ over the entire construction period. As shown in Table 13, the proposed project's amortized construction-related emissions would be 52 MT $CO_2e$.

Operation of the proposed project would generate GHG emissions associated with area sources (e.g., landscape maintenance), energy and water usage, vehicle trips, and wastewater and solid waste generation. Table 13 combines the estimated construction and operational GHG emissions associated with development of the project. As shown therein, the project would generate approximately 2,206 MT of $CO_2e$ per year during operation. Total emissions (amortized construction emissions plus annual operation emissions) would be 3.5 MT of $CO_2e$ per year per SP (conservatively rounded up to the nearest tenth). These emissions would exceed the 2.0 MT of $CO_2e$ per year per service person goal of the City CAP, and impacts would be potentially significant. Implementation of Mitigation Measure GHG-1 below would be required to reduce impacts to a less than significant level.

**Table 13 Combined Annual Greenhouse Gas Emissions**

| Emission Source | Annual Emissions (MT $CO_2e$ per year) |
|---|---|
| **Construction** | |
| 2024 | 1,047 |
| 2025 | 499 |
| **Construction Total** | **1,546** |
| **Amortized over 30 years** | **52** |
| **Operational** | |
| Area | 8 |
| Energy | 325 |
| Mobile | 1,779 |
| Solid Waste | 59 |
| Water | 35 |
| Refrigerant | <1 |
| **Operational Total** | **2,206** |
| **Total Emissions** | **2,258** |

| Emission Source | Annual Emissions (MT $CO_2e$ per year) |
|---|---|
| **Service Population (Residents)** | **657** |
| **Emissions per Service Person[2]** | **3.5** |
| **Threshold** | **2.0** |
| **Threshold Exceeded?** | **Yes** |

MT = metric tons; $CO_2e$ = carbon dioxide equivalents

[2] Emissions per SP rounded up to the nearest tenth.

Notes: Emissions modeling was completed using CalEEMod. See Appendix A for modeling results.

## Mitigation Measure

### *GHG-1 Greenhouse Gas Reduction Plan*

The project applicant shall prepare and implement a GHG Reduction Plan (GHGRP) that demonstrates emissions reductions from project operation by approximately 1,004 MT of $CO_2e$ per year to 1,254 MT of $CO_2e$ per year for the lifetime of the project, or by an amount determined through further analysis of project GHG emissions at the time of GHGRP preparation. Potential GHG reduction measures included in the GHGRP may include, but would not be limited to, the following on-site measures:

- Construction of buildings that achieve energy and water efficiencies beyond those specified in the California Code of Regulations, Title 24 requirements
- Implementation of green building practices and/or cool roofs
- Installation of energy-efficient equipment and appliances exceeding California Green Building Code standards
- Installation of outdoor water conservation and recycling features, such as smart irrigation controllers and reclaimed water usage
- Installation of low-flow bathroom and kitchen fixtures and fittings
- Installation of light emitting diode (LED) lights
- Implementation of waste reduction programs that may include waste minimization, waste diversion, composting, and material reuse/recycling
- Provision of incentives and outreach that promote alternative transportation and transit use to future employees and patrons
- Promotion of alternative fuel vehicles, including through the installation of electric vehicle charging infrastructure beyond those required

If GHG emissions cannot be feasibly reduced through implementation of on-site measures, the following off-site measures may be implemented:

- Directly undertake or fund activities that reduce or sequester GHG emissions ("Direct Reduction Activities") and retire the associated "GHG Mitigation Reduction Credits." A "GHG Mitigation Reduction Credit" shall mean an instrument issued by an Approved Registry and shall represent the estimated reduction or sequestration of 1 MT of $CO_2e$ that shall be achieved by a Direct Reduction Activity that is not otherwise required (CEQA Guidelines Section 15126.4[c][3]). A "GHG Mitigation Reduction Credit" must achieve GHG emission reductions that are real, permanent, quantifiable, verifiable, enforceable, and in addition to any GHG emission reduction required by law or regulation or any other GHG emission reduction that otherwise would occur

in accordance with the criteria set forth in the California Air Resources Board's most recent Process for the Review and Approval of Compliance Offset Protocols in Support of the Cap-and-Trade Regulation (2013). An "Approved Registry" is an accredited carbon registry that follows approved California Air Resources Board Compliance Offset Protocols. At this time, Approved Registries include American Carbon Registry, Climate Action Reserve, and Verra (California Air Resources Board 2018). Credits from other sources will not be allowed unless they are shown to be validated by protocols and methods equivalent to or more stringent than the California Air Resources Board standards. In the event that a project or program providing GHG Mitigation Reduction Credits to the project applicant loses its accreditation, the project applicant shall comply with the rules and procedures of retiring GHG Mitigation Reduction Credits specific to the registry involved and shall undertake additional direct investments to recoup the loss.

- Obtain and retire "Carbon Offsets." "Carbon Offset" shall mean an instrument issued by an Approved Registry and shall represent the past reduction or sequestration of 1 MT of CO2e achieved by a Direct Reduction Activity or any other GHG emission reduction project or activity that is not otherwise required (CEQA Guidelines Section 15126.4[c][3]). A "Carbon Offset" must achieve GHG emission reductions that are real, permanent, quantifiable, verifiable, enforceable, and in addition to any GHG emission reduction required by law or regulation or any other GHG emission reduction that otherwise would occur in accordance with the criteria set forth in the California Air Resources Board's most recent *Process for the Review and Approval of Compliance Offset Protocols in Support of the Cap-and-Trade Regulation* (2013). If the project applicant chooses to meet some of the GHG reduction requirements by purchasing offsets on an annual and permanent basis, the offsets shall be purchased according to the City's preference, which is, in order of the City's preference: (1) within Palmdale; (2) within the air basin; (3) within the State of California; then (4) elsewhere in the United States. In the event that a project or program providing offsets to the project applicant loses its accreditation, the project applicant shall comply with the rules and procedures of retiring offsets specific to the registry involved and shall purchase an equivalent number of credits to recoup the loss.

The GHGRP shall be submitted by the project developer and reviewed and approved by the City of Palmdale as being in compliance with this measure prior to grading or building permit issuance. Applicable elements of the approved GHGRP shall be reflected on project site plans prior to certificate of occupancy. Condition compliance shall include monitoring and verifying implementation of measures included in the GHGRP.

## Significance After Mitigation

To implement Mitigation Measure GHG-1, the project applicant may choose to apply a wide variety of GHG emission reduction measures, including carbon offsets, to reduce project-related emissions to 1,254 MT of $CO_2e$ per year. Therefore, implementation of Mitigation Measure GHG-1 would reduce project-related emissions below the threshold of significance of 1,254 MT of $CO_2e$ per year or 2 MT of $CO_2e$ per service population per year. Impacts would be less than significant with mitigation incorporated.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

*b. Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?*

### *2022 Scoping Plan*

The principal State plans and policies for reducing GHG emissions are AB 32, SB 32, and AB 1279. The quantitative goal of AB 32 is to reduce GHG emissions to 1990 levels by 2020; the goal of SB 32 is to reduce GHG emissions to 40 percent below 1990 levels by 2030; and the goal of AB 1279 is to achieve net zero GHG emissions no later than 2045 and reduce GHG emissions by 85 percent below 1990 levels no later than 2045. The 2022 Scoping Plan expands upon earlier plans to include the AB 1279 targets. The 2022 Scoping Plan's strategies that are applicable to the proposed project include reducing fossil fuel use and vehicle miles traveled (VMT), decarbonizing the electricity sector, maximizing recycling and diversion from landfills, and increasing water conservation. The project would be consistent with these goals through project design, which includes 100 percent electric project design, complying with the latest Title 24 Green Building Code and Building Efficiency Energy Standards, and complying with the AB 341 waste diversion goal of 75 percent. In addition, the project would receive electricity from Southern California Edison (SCE), which is required to reduce GHG emissions by increasing procurement from eligible renewable energy by set target years as required by SB 100. Therefore, the project would not conflict with the 2022 Scoping Plan.

### *Connect SoCal: 2020-2045 SCAG RTP/SCS*

According to the 2020-2045 RTP/SCS, the updated targets for the SCAG region are eight percent below 2005 per capita emission levels by 2020 (this value is unchanged from the previous 2020 CARB target) and 19 percent below 2005 per capita emissions levels by 2035. The revised 2035 target is higher than the previous CARB target of 13 percent for the SCAG region. The 2020-2045 RTP/SCS includes implementation strategies for focusing growth near destinations and mobility options, promoting diverse housing choices, leveraging technology innovations, supporting implementation of sustainability policies, and promoting a green region. Furthermore, specific actions to reduce GHG emissions under the 2020-2045 RTP/SCS include designing transportation options that reduce the reliance on solo car trips, promoting low emission technologies such as electric vehicles and ride sharing, supporting statewide GHG emissions legislation, and pursuing funding opportunities to support local sustainable development projects that reduce GHG emissions.

**Table 14 Project Consistency with the South Coast Association of Governments 2020-2045 RTP/SCS**

| Goals | Consistency |
|---|---|
| **Goal 2: Improve mobility, accessibility, reliability, and travel safety for people and goods** | **Consistent.** The proposed project would include interior roadways, sidewalks, and trails to provide vehicle, bicycle, and pedestrian access to residences. This expanded pedestrian network would provide pedestrian access to local schools and parks, including Domenic Massari Park and Knight High School to the southeast, as well as commercial uses to the west. Therefore, the project would have accessible and reliable travel options and be designed to reduce reliance on solo vehicle trips. |
| **Goal 5: Reduce greenhouse gas emissions and improve air quality** | **Consistent.** The proposed project would include several sustainable design features, including those required by Title 24 and CALGreen standards. The project would include photovoltaic systems and battery storage installed on each residential building. All proposed residential units would be equipped with energy-efficient appliances and lighting, water-efficient fixtures, and water-efficient irrigation systems. The project would meet the requirements of the 2022 California Energy Code. |
| **Goal 6: Support healthy and equitable communities** | **Consistent.** The proposed project would provide housing near city parks, commercial areas, and schools. Furthermore, the project would include design features such as sidewalks and multiple access points to the project site. These features would promote active transportation and foster efficient development patterns within the project site vicinity. |
| **Goal 9: Encourage development of diverse housing types in areas that are supported by multiple transportation options** | **Consistent.** The proposed project would include interior roadways, sidewalks, and trails to provide vehicle, bicycle, and pedestrian access to residences. This expanded pedestrian network would provide pedestrian access to local schools and parks, including Domenic Massari Park and Knight High School to the southeast. The project would be near a commercial downtown area along 47th Street and East Avenue R. The project would include improvement of pedestrian and bicycle facilities, and site access would be provided along several access points. Proposed on-site facilities would establish residences on an underutilized lot adjacent to existing development. Therefore, the project would provide connectivity with planned neighboring residential developments. |

Source: SCAG 2020

### *City of Palmdale Climate Action Plan*

The project's consistency with the City of Palmdale General and CAP policies aimed at reducing GHG emissions are shown in Table 15. Although the project would be consistent with applicable policies from the City of Palmdale General Plan and CAP, it would exceed the CAP's per service population thresholds as shown in Table 13, above. Therefore, the project would be inconsistent with the CAP and impacts would be potentially significant.

**Table 15 Project Consistency with the Palmdale General Plan**

| Policy | Consistency |
|---|---|
| **Goal SCR-4:** Reduced greenhouse gas emissions from transportation.<br>**Policy SCR-4.1 Bike Facilities:** Promote bicycle use with new private development projects through requirements for bicycle parking, lockers and showers, bike share facilities, and when feasible, connections to City bike lanes. | **Consistent.** The proposed project would create sidewalks and pathways within the project site to accommodate pedestrians and cyclists, which would connect to existing and planned off-site pedestrian and bicycle facilities. |
| **Goal SCR-3: Green and decarbonized buildings for new construction and major renovations**.<br>**Policy SCR3.2: All-Electric Reach Code.** Consider adopting a local reach code to encourage new buildings to be all-electric.<br>**Policy SCR-3.3: Solar + Storage.** Require installation of photovoltaic panels and battery storage on all residential new construction and nonresidential new construction over 5,000 sq. ft. | **Consistent.** The project would comply with all standards set forth in the CBC Title 24, which would minimize the wasteful, inefficient, or unnecessary consumption of energy resources during operation. Furthermore, in accordance with the 2022 California Green Building Standards for residential developments, low-rise residences (three stories or less) are required to install on-site photovoltaic arrays. The project would include solar rooftop photovoltaic systems, in addition to battery storage. All proposed residences would be equipped with energy-efficient appliances and lighting, water-efficient fixtures, and water-efficient irrigation systems. As mentioned above under the 2022 Scoping Plan, the project would be consistent with the State's climate goals by increasing renewable energy and providing energy efficiency in the buildings. |

Source: City of Palmdale 2022a

In summary, the plan consistency analysis provided above demonstrates that the project complies with or exceeds the plans, policies, regulations and GHG reduction actions/strategies outlined in SCAG's 2020-2045 RTP/SCS and the 2022 Scoping Plan. However, the project would exceed the per service population threshold established by the City and would therefore be inconsistent with the City's 2045 General Plan and CAP. Therefore, the project would conflict with an applicable plan, policy, or regulation of an agency adopted for the purpose of reducing emissions of GHG emissions. Implementation of Mitigation Measure GHG-1 below would reduce project related emissions to a less than significant level.

## Mitigation Measure

Refer to Mitigation Measure GHG-1, above.

## Significance After Mitigation

Implementation of Mitigation Measure GHG-1 would require the developer to implement a GHG Reduction Plan. Such mitigation would reduce project emissions to below the established threshold and ensure that the project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions. Impacts would be less than significant with mitigation incorporated.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

# 9 Hazards and Hazardous Materials

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| 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 0.25 mile of an existing or proposed school? | ☐ | ☐ | ■ | ☐ |
| d. Be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment? | ☐ | ☐ | ☐ | ■ |
| e. For a project located in 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? | ☐ | ☐ | ☐ | ■ |

*a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?*

Project construction would involve the use of potentially hazardous materials such as vehicle fuels and fluids that could be released should an accidental leak or spill occur. However, standard construction BMPs for the use and handling of such materials, such as the use of secondary containment, would be implemented to avoid or reduce the potential for such conditions to occur. Furthermore, any use of potentially hazardous materials utilized during construction of the proposed project would be subject to all local, State, and federal regulations regarding the handling of potentially hazardous materials. The transport, use, and storage of hazardous materials during construction of the project would be subject to all applicable State and federal laws, such as the Hazardous Materials Transportation Act, Resource Conservation and Recovery Act, California Hazardous Material Management Act, and hazardous waste management and cleanup under CCR Title 22. Therefore, project construction would not create a significant hazard to the public and environment through the routine transport, use, or disposal of hazardous materials.

Operation of the proposed project would likely involve the use of common materials in the regular maintenance of homes and landscaping, such as cleaning and degreasing solvents, fertilizers, and pesticides. However, these maintenance activities would only require minor quantities of such products and would not involve the use of extremely hazardous substances. Use of these materials would be subject to compliance with existing regulations, standards, and guidelines established by the federal, State, and local agencies related to storage, use, and disposal of hazardous materials. The transport, use, and storage of hazardous materials during operation of the project would be subject to all applicable State and federal laws, such as the Hazardous Materials Transportation Act, Resource Conservation and Recovery Act, California Hazardous Material Management Act, and hazardous waste management and cleanup under CCR Title 22. Other than small quantities of materials used in the maintenance of the residential community, operation of the proposed project would not involve the use or storage of substantial quantities of hazardous materials, nor would the project generate large quantities of hazardous waste. Therefore, operation of the proposed project would not create a significant hazard to the public or the environmental through the routine transport, use, or disposal of hazardous materials and impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*b. Would the project 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?*

As described above, construction of the project would involve the use of potentially hazardous materials such as vehicle fuels and fluids that could be released should an accidental leak or spill occur. However, as further discussed in Section 10, *Hydrology and Water Quality*, the SWPPP for the proposed project would include standard construction BMPs for the use and handling of such materials to avoid or reduce the potential for such conditions to occur. Typical construction BMPs include secondary containment and special storage for hazardous materials used on-site, the use of drip pans under vehicles and equipment, and provisioning of spill kits and cleanup plans in the event of an accidental spill. The transport, use, and storage of hazardous materials during construction of the project would be conducted in accordance with all applicable State and federal laws, such as the Hazardous Materials Transportation Act, Resource Conservation and Recovery Act, California Hazardous Material Management Act, and hazardous waste management and cleanup under CCR Title 22. Therefore, project construction would not create a significant hazard to the public or

environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

Operation of the residential homes would not involve the use or storage of significant quantities of hazardous materials. Therefore, project operation is not anticipated to create a significant hazard to the public or environment through the accidental release of hazardous materials. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?*

The nearest school facilities to the project site are Chaparral Prep Academy approximately one mile south of the project site, Mesquite Elementary School 1.2 mile southwest of the project site, and Buena Vista Elementary School 1.6 miles south of the project site.

During construction of the proposed project, hazardous and potentially hazardous materials would be utilized for the transport and operation of vehicles and machinery. As discussed above, the transport, use, and storage of hazardous materials during the construction of the project would be conducted in accordance with all applicable State and federal laws, such as the Hazardous Materials Transportation Act, Resource Conservation and Recovery Act, California Hazardous Material Management Act, and hazardous waste management and cleanup under CCR Title 22. Compliance with these regulations would reduce the potential of accidental spills or hazardous emissions during construction. Furthermore, operation and maintenance of the proposed project would only involve the use of common cleaning and landscape maintenance materials comparable to those materials already in use in the project site vicinity.

Although the project site is in proximity to several schools, none are within 0.25 mile of the site, and the project would not regularly store or use significant quantities of hazardous materials, nor would it generate large quantities of hazardous waste. Therefore, the project would not emit hazardous emissions or handle hazardous or acutely hazardous materials that could result in significant impacts to nearby schools. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*d. Would the project be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?*

Government Code Section 65962.5 requires the CalEPA to develop an updated Cortese List. The California Department of Toxic Substances Control (DTSC) is responsible for a portion of the information contained in the Cortese List. The analysis for this section included a review of the following resources to provide hazardous material release information:

- SWRCB GeoTracker database
- DTSC EnviroStor database
- DTSC Hazardous Waste and Substances Site List (Cortese)

A search of the EnviroStor database and Cortese List did not identify Resource Conservation and Recovery Act (RCRA) sites within 0.25-mile of project site (DTSC 2023a; DTSC 2023b). In addition, according to GeoTracker, there are no LUST or other clean-up sites within 0.25 mile of the project

site (SWRCB 2023). Therefore, the project is not located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and would not create a significant hazard to the public or the environment. Thus, no impact would occur.

**NO IMPACT**

*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?*

The project site is not located within two miles of a public airport or within an airport land use plan. The airport nearest to the project site is the Palmdale Regional Airport located approximately four miles to the northwest. Furthermore, there are no private airstrips in the vicinity of the project site. Therefore, the project would not result in safety hazards related to airports for people residing or working at the project site and its vicinity. No impact would occur.

**NO IMPACT**

*f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?*

The proposed project would involve the construction of 191 single-family housing units. During construction, temporary and occasional lane closures on East Palmdale Boulevard may be required, but two-way traffic would be maintained on these roadways and at construction entry points. Pursuant to Chapter 14.40 of the PMC, as part of the City's requirements for obtaining an excavation and traffic control permit, the contractor is required to submit to the City a construction work site traffic control plan for any street/lane closures for review and approval prior to the commencement of construction activities. The submittal and approval of the construction traffic control plan would ensure that construction would not interfere with local traffic or emergency response and evacuation procedures.

Vehicles, including emergency response vehicles, would be able to access the project site via the main entrance off East Palmdale Boulevard. The proposed project would not modify East Palmdale Boulevard, other than by adding the entrances to the project site. In addition, the project would not result in inadequate emergency access because it would be subject to Fire Department review of site plans, site construction, and the actual structures prior to occupancy to ensure that required fire protection safety features, including building sprinklers and emergency access, are implemented. Therefore, the proposed project would not impair implementation of or physically interfere with an adopted emergency response or evacuation plan. Potential impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?*

Undeveloped wildland areas that are susceptible to wildfires are not located in proximity to the project site. As further discussed in Section 20, *Wildfire,* the project site is not located in a Fire Hazard Severity Zone (FHSZ) or Very High Hazard Severity Zone (VHFHSZ) for wildland fires (California Department of Forestry and Fire Protection [CALFIRE] 2022). The nearest VHFHSZ is located approximately 5.2 miles south of the project site located in a State Responsibility Area near Mt. Emma Road (CALFIRE 2022). The nearest VHFHSZ within a Local Responsibility Area is located

8.7 miles west of the project site (CALFIRE 2022). Therefore, the project would not expose people or structures to a significant risk of loss injury or death involving wildland fires. No impact would occur.

**NO IMPACT**

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# 10 Hydrology and Water Quality

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water 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 off-site; | ☐ | ☐ | ■ | ☐ |
| (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? | ☐ | ☐ | ■ | ☐ |

*a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?*

Construction of the proposed project could result in soil erosion due to earth-moving activities such as excavation, grading, soil stockpiling, and the generation of water pollutants including trash, construction materials, and equipment fluids. Prior to initiation of construction, the project would be required to obtain coverage under a Construction General Permit to comply with Clean Water Act National Pollution Discharge Elimination System (NPDES) requirements, administered by the Los Angeles Regional Water Quality Control Board (LARWQCB). In addition, the project would be required to comply with the LARWQCB's Water Quality Control Plan. Under the conditions of the Construction General Permit and the Water Quality Control Plan, the developer would be required to eliminate or reduce non-storm water discharges, develop and implement a SWPPP for the project construction activities, and perform inspections of the storm water pollution prevention measures and control practices to ensure conformance with the site SWPPP. The Construction General Permit prohibits the discharge of materials other than storm water discharges and prohibits all discharges that contain a hazardous substance in excess of reportable quantities established by 40 CFR 117.3 or 40 CFR 302.4. The General Permit also specifies that construction activities must meet all applicable provisions of Sections 30 and 402 of the Clean Water Act. Compliance with the permit would require the development and implementation of a SWPPP and associated BMPs during project construction. Conformance with Section 402 of the Clean Water Act would ensure that construction of the proposed project would not violate any water quality standards or waste discharge requirements. In addition, Chapter 14.05 Section 14.05.080 of the PMC requires project applicants to complete a soil management report in order to reduce runoff.

The requirements of the applicable City and State ordinances are intended to protect water quality and support attainment of water quality standards in downstream receiving water bodies. Therefore, operation of the project would not violate any water quality standards or waste discharge requirements, nor would it otherwise substantially degrade water quality. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?*

The project site lies above the Antelope Valley Groundwater Basin. Though the project would increase the amount of impervious surface on the site compared to existing conditions, the incorporation of the biofiltration system and underground vault would ensure stormwater is captured and treated on the project site, from which it would be infiltrated into the ground.

The project site lies within the service boundaries of the Palmdale Water District (PWD). PWD primarily sources its water supply from California Aqueduct, Littlerock Dam, the Antelope Valley Groundwater Basin, and the Leslie O. Carter Water Treatment Plant (LOCWTP). As discussed in Section 18, *Utilities and Service Systems,* the proposed project's water demand would not substantially affect the PWD's supplies. According to its 2020 Urban Water Management Plan, PWD would be able to provide reliable water supplies for an average year (PWD 2021). However, PWD anticipates that during single-dry year conditions, demands would exceed existing supplies starting in 2030 and that during multiple dry year conditions, demands would exceed existing supplies starting in 2045 (PWD 2020). PWD is currently in the process of developing the Palmdale Regional Water Augmentation Project, which is anticipated to provide 5,325 AFY for surface water

augmentation or groundwater injection. In addition, PWD has identified numerous short and long-term transfer and exchange opportunities, as described in Section 4.3.3.2, which would provide additional supplies to help overcome supply shortages (PWD 2020). PWD has identified various demand reduction responses for their clients in order to offset interrupted or reduced water supplies. Such measures include use of the PWD Water Use Rebate Program, repairing water leaks, prohibiting outside car washing, restricted landscape watering, shut off of all fountains or outdoor aesthetic water features, and prohibiting the watering of hardscapes. Therefore, it is anticipated that existing supplies in combination with identified future and potential water supply opportunities and demand reduction responses would enable PWD to meet all future water demands under all hydrologic conditions through the end of the planning period.

Therefore, operational water use associated with the proposed project would not significantly deplete groundwater supplies or impede sustainable groundwater management of the Antelope Valley Groundwater Basins. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*c.(i) Would the project 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 result in substantial erosion or siltation on- or off-site?*

*c.(ii) Would the project 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 substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?*

*c.(iii) Would the project 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 that would 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?*

*c.(iv) Would the project 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 impede or redirect flood flows?*

The project would not alter the course of a stream or river since the project site and surrounding area do not contain water bodies. However, the project would alter internal site drainage through the addition of impervious surfaces, which could increase stormwater runoff volume and flow. Drainage improvements for the development would consist of catch basins connected to underground storm drain which outlets into a detention basin located at lot 8 of the TTM. This basin would accept flows from the community and detain from flowing offsite while also infiltrating water back into the groundwater basin. Should a large storm event occur, the basin has been designed with an overflow pump to pump water so that all standing water is removed from the basin within 72-hours. As shown in Figure 3, new drainage features would be constructed on-site to minimize potential flooding and offsite stormwater flows, in accordance with the requirements of the PMC Section 08.04.200 (Adoption of Administrative Provisions for the Palmdale Building Code, Plumbing Code, Mechanical Code, Electrical Code, Residential Code and Green Building Code). The applicable provisions of the PMC are intended to protect water quality and support attainment of water quality standards in downstream receiving water bodies. Compliance with the PMC requires

preparation of a Stormwater Management Plan (SWMP) that illustrates the capabilities of on-site BMPs to capture and treat flows from a ten-year storm event. Furthermore, the SWMP includes an assessment of whether drainage alterations would create a Hydrologic Condition of Concern due to hydromodification, such as changes in watershed hydrologic processes and runoff that result in increased streamflow and sediment transport. As part of the project's final design review, the project would be required to submit a SWMP demonstrating adequate stormwater retention using BMPs.

The project would implement BMPs to capture and retain stormwater on-site, for compliance with the PMC and MS4 Permit requirements. Implementation of BMPs would slow the velocity of water and allow sediment and debris to settle out of the water column, as well as capture stormwater on the site, thereby minimizing the potential for downstream flooding, erosion/siltation, pollution, or exceedances of stormwater drainage system capacity. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*d. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?*

The project site is designated Zone X on the most recent Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map, indicating it is within an area of minimal flood hazard (FEMA 2008). The project site is approximately 48 miles from the Pacific Ocean and not subject to tsunami. The nearest inland water body subject to seiche is the Harold Reservoir, located 4.75 miles southwest of the project site. The project site is not located in the inundation zone for the Harold Reservoir (California Department of Water Resources 2015). Furthermore, the project does not involve storage or processing of pollutants, other than minor quantities of typical household hazardous wastes, such as cleaning agents and landscaping maintenance materials, that would be released due to inundation should such an event occur. Therefore, the project would result in a less-than-significant impact related to the release of pollutants due to project inundation.

**LESS THAN SIGNIFICANT IMPACT**

*e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?*

As discussed under *Threshold 10a* above, project construction and operational activities would be required to comply with the LARWQCB's Water Quality Control Plan, NPDES Construction General Permit, and MS4 Permit by preparing and adhering to a SWPPP and SWMP. With implementation of the required SWPPP and SWMP, the proposed project would adequately treat, detain, and control stormwater flows on the project site and would not conflict with or obstruct the LARWQCB Water Quality Control Plan. As discussed under *Threshold 10b*, the project would receive water from the Antelope Valley Basin through service provided by Palmdale Water Company. These basins are adjudicated, and water demand generated by the proposed project would not conflict with or obstruct the sustainable management of these basins. The project site lies above the Antelope Valley Basin, which was adjudicated in 2015 and is controlled by a court-mandated water management plan to ensure its long-term sustainability. The proposed residential uses on the project site would not be point source generators of water pollutants that could affect the Antelope Valley Basin, and the project does not propose ground water extraction. Therefore, project construction and operation would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

# 11 Land Use and Planning

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| 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? | ☐ | ☐ | ■ | ☐ |

*a. Would the project physically divide an established community?*

The project site is currently vacant. The proposed project involves the construction of 191 single-family residential homes. Primary vehicular access to the site would connect to East Palmdale Boulevard. Pedestrians would be able to access the project site via the sidewalks along East Palmdale Boulevard. Streets that would be constructed within the project would link the community to East Palmdale Boulevard to the north as well as the existing residential projects to both the east and west of the project. No impact would occur.

**NO IMPACT**

*b. Would the project 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?*

The proposed project involves the construction of a residential community on a site with a General Plan land use designation of SFR-3 (Single Family Residential) and a zoning designation of SFR-3 (Single Family Residential), which permits densities of 0 to 6 dwelling units per acre. The proposed project would be consistent with the intent of the General Plan to meet the Regional Housing Needs Assessment housing needs by creating a single-family housing development on a vacant site, thereby adding to the housing stock in the city.

The proposed development would comply with all applicable policies contained in the General Plan and the development standards for the SFR-3 zone. Accordingly, the proposed project would not conflict with the City's General Plan or zoning standards. In addition, as described in Section 3, *Air Quality*, and Section 8, *Greenhouse Gas Emissions*, the proposed project would be consistent with the goals and policies of the AQMP and SCAG's 2020-2045 RTP/SCS upon implementation of Mitigation Measure GHG-1. There are no environmental impacts that would result as a specific consequence of the proposed changes to the site's General Plan land use designation, beyond what is already evaluated and disclosed by this IS-MND. Therefore, the proposed project would not conflict with land use plans, policies, and regulations adopted for the purpose of avoiding or mitigating an environmental effect, and impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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# 12 Mineral Resources

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| 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? | ☐ | ☐ | ☐ | ■ |

*a. Would the project 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. Would the project 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?*

The California Surface Mining and Reclamation Act of 1975 (SMARA) was enacted to promote conservation and protection of significant mineral deposits. According to the California Department of Conservation Mineral Land Classification Maps, the project site is in an area classified as Mineral Resource Zone (MRZ)-2, which indicates that the project area contains identified mineral resources (DOC 1984). Additionally, the City's General Plan states that the city is located in a MRZ-2 area. Though the project site is in an area with identified mineral resources, the project site has not historically been used for mineral resource recovery and is surrounded by urbanized area primarily developed with residential. The project site and its vicinity are therefore not used for or compatible with mineral deposit recovery. In addition, according to the California Geologic Energy Management Division (CalGEM), there are no active oil extraction-sites in the vicinity of the project (CalGEM 2022). Furthermore, the project site is not within the City's Mineral Resource Extraction land use designation or zone. Given the existing conditions of the project site and its surroundings, the proposed project would not result in the loss of availability of a known mineral resource, and there would be no impact.

**NO IMPACT**

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# 13 Noise

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | 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? | ☐ | ☐ | ■ | ☐ |
| 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? | ☐ | ☐ | ☐ | ■ |

## Noise Setting

### *Overview of Noise*

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment (Caltrans 2020a).

#### HUMAN PERCEPTION OF SOUND

Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response. Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes. A doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; dividing the energy in half would result in a 3 dB decrease (Caltrans 2020a).

Human perception of noise has no simple correlation with sound energy: the perception of sound is not linear in terms of dBA or in terms of sound energy. Two sources do not “sound twice as loud” as

one source. It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA, increase or decrease (i.e., twice the sound energy); that a change of 5 dBA is readily perceptible (8 times the sound energy); and that an increase (or decrease) of 10 dBA sounds twice (half) as loud (10.5 times the sound energy) (Caltrans 2020a).

### SOUND PROPAGATION AND SHIELDING

Sound changes in both level and frequency spectrum as it travels from the source to the receiver. The most obvious change is the decrease in the noise level as the distance from the source increases. The manner by which noise reduces with distance depends on factors such as the type of sources (e.g., point or line), the path the sound will travel, site conditions, and obstructions.

Sound levels are described as either a "sound power level" or a "sound pressure level," which are two distinct characteristics of sound. Both share the same unit of measurement, dB. However, sound power (expressed as $L_{pw}$) is the energy converted into sound by the source. As sound energy travels through the air, it creates a sound wave that exerts pressure on receivers, such as an eardrum or microphone, which is the sound pressure level. Sound measurement instruments only measure sound pressure, and noise level limits are typically expressed as sound pressure levels.

Noise levels from a point source (e.g., construction, industrial machinery, air conditioning units) typically attenuate, or drop off, at a rate of 6 dBA per doubling of distance. Noise from a line source (e.g., roadway, pipeline, railroad) typically attenuates at about 3 dBA per doubling of distance (Caltrans 2020a). Noise levels may also be reduced by intervening structures; the amount of attenuation provided by this "shielding" depends on the size of the object and the frequencies of the noise levels. Natural terrain features, such as hills and dense woods, and man-made features, such as buildings and walls, can significantly alter noise levels. Generally, any large structure blocking the line of sight will provide at least a 5-dBA reduction in source noise levels at the receiver (Federal Highway Administration [FHWA] 2011). Structures can substantially reduce exposure to noise as well. The FHWA's guidance indicates that modern building construction generally provides an exterior-to-interior noise level reduction of 10 dBA with open windows and an exterior-to-interior noise level reduction of 20 to 35 dBA with closed windows (FHWA 2011).

### DESCRIPTORS

The impact of noise is not a function of loudness alone. The time of day when noise occurs and the duration of the noise are also important factors of project noise impact. Most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed. The noise descriptors used for this study are the equivalent noise level ($L_{eq}$), Day-Night Average Level (DNL; may also be symbolized as $L_{dn}$), and the community noise equivalent level (CNEL; may also be symbolized as $L_{den}$).

$L_{eq}$ is one of the most frequently used noise metrics; it considers both duration and sound power level. The $L_{eq}$ is defined as the single steady-state A-weighted sound level equal to the average sound energy over a time period. When no time period is specified, a 1-hour period is assumed. The $L_{max}$ is the highest noise level within the sampling period, and the $L_{min}$ is the lowest noise level within the measuring period. Normal conversational levels are in the 60 to 65-dBA $L_{eq}$ range; ambient noise levels greater than 65 dBA $L_{eq}$ can interrupt conversations (Federal Transit Administration [FTA] 2018).

Noise that occurs at night tends to be more disturbing than that occurring during the day. Community noise is usually measured using Day-Night Average Level ($L_{dn}$), which is the 24-hour

average noise level with a +10 dBA penalty for noise occurring during nighttime hours (10:00 p.m. to 7:00 a.m.). Community noise can also be measured using Community Noise Equivalent Level (CNEL or $L_{DEN}$), which is the 24-hour average noise level with a +5 dBA penalty for noise occurring from 7:00 p.m. to 10:00 p.m. and a +10 dBA penalty for noise occurring from 10:00 p.m. to 7:00 a.m. (Caltrans 2020a).[3] The relationship between the peak-hour $L_{eq}$ value and the $L_{dn}$/CNEL depends on the distribution of noise during the day, evening, and night; however noise levels described by $L_{dn}$ and CNEL usually differ by 1 dBA or less. Quiet suburban areas typically have CNEL noise levels in the range of 40 to 50 CNEL, while areas near arterial streets are in the 50 to 60+ CNEL range (FTA 2018).

### *Groundborne Vibration*

Groundborne vibration of concern in environmental analysis consists of the oscillatory waves that move from a source through the ground to adjacent structures. The number of cycles per second of oscillation makes up the vibration frequency, described in terms of Hz. The frequency of a vibrating object describes how rapidly it oscillates. The normal frequency range of most groundborne vibration that can be felt by the human body starts from a low frequency of less than 1 Hz and goes to a high of about 200 Hz (Crocker 2007).

While people have varying sensitivities to vibrations at different frequencies, in general they are most sensitive to low-frequency vibration. Vibration in buildings, such as from nearby construction activities, may cause windows, items on shelves, and pictures on walls to rattle. Vibration of building components can also take the form of an audible low-frequency rumbling noise, referred to as groundborne noise. Groundborne noise is usually only a problem when the originating vibration spectrum is dominated by frequencies in the upper end of the range (60 to 200 Hz), or when foundations or utilities, such as sewer and water pipes, physically connect the structure and the vibration source (FTA 2018). Although groundborne vibration is sometimes noticeable in outdoor environments, it is almost never annoying to people who are outdoors. The primary concern from vibration is that it can be intrusive and annoying to building occupants and vibration-sensitive land uses.

Vibration amplitudes are usually expressed in peak particle velocity (PPV), which is normally described in inches per second (in/sec). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is often used in monitoring of blasting vibration and other construction activities because it is related to the stresses that are experienced by buildings (Caltrans 2020).

### *Project Area Noise Setting*

The most common source of noise in the project site vicinity is vehicular traffic from East Palmdale Boulevard and 47th Street East. To characterize ambient sound levels at and near the project site, three 15-minute sound level measurements and one 24-hour sound level measurement were conducted on Wednesday, September 21, 2022. Short-Term Noise Measurement 1 (ST-1) was taken at the northern edge of the project site to capture noise levels from East Palmdale Boulevard. ST-2 was taken at the southwestern edge of the project site near the adjacent single-family residences. ST-3 was conducted at the center of the project site. Table 16 and Table 17 summarize the results of the noise measurements and Table 18 shows the recorded traffic volumes. Noise measurement locations are shown in Figure 4. Detailed sound level measurement data are included in Appendix F.

[3] Because DNL and CNEL are typically used to assess human exposure to noise, the use of A-weighted sound pressure level (dBA) is implicit. Therefore, when expressing noise levels in terms of DNL or CNEL, the dBA unit is not included.

## Table 16 Project Site Vicinity Sound Level Monitoring Results- Short-Term

| Measurement Location | | Sample Times | Approximate Distance to Primary Noise Source | $L_{eq}$ (dBA) | $L_{min}$ (dBA) | $L_{max}$ (dBA) |
|---|---|---|---|---|---|---|
| ST-1 | Northern Boundary of Project Site | 10:13 – 10:28 a.m. | 50 feet to centerline of East Palmdale Boulevard | 66.2 | 47.6 | 79.0 |
| ST-2 | Southwestern Boundary of Project Site | 9:49 – 10:04 a.m. | 1,200 feet to centerline of East Palmdale Boulevard | 42.0 | 36.9 | 55.9 |
| ST-3 | Center of Project Site | 9:26 – 9:41 a.m. | 650 feet to centerline of East Palmdale Boulevard | 44.3 | 38.9 | 52.7 |

$L_{eq}$ = average noise level equivalent; dBA = A-weighted decibel; $L_{min}$ = minimum instantaneous noise level; $L_{max}$ = maximum instantaneous noise level

Detailed sound level measurement data are included in Appendix F.

## Table 17 Project Site Vicinity Noise Monitoring Results – Long Term

| Sample Time | dBA $L_{eq}$ | Sample Time | dBA $L_{eq}$ |
|---|---|---|---|
| **24-hour Measurement – Center of Project Site, 500 Feet from Palmdale Boulevard – September 21-22, 2022** | | | |
| 10:59 a.m. | 49.7 | 10:59 p.m. | 42.1 |
| 11:59 a.m. | 48.1 | 11:59 p.m. | 48.3 |
| 12:59 p.m. | 48.4 | 12:59 a.m. | 40.3 |
| 1:59 p.m. | 50.6 | 1:59 a.m. | 39.0 |
| 2:59 p.m. | 49.3 | 2:59 a.m. | 41.6 |
| 3:59 p.m. | 51.5 | 3:59 a.m. | 45.0 |
| 4:59 p.m. | 47.8 | 4:59 a.m. | 55.1 |
| 5:59 p.m. | 49.9 | 5:59 a.m. | 50.4 |
| 6:59 p.m. | 53.3 | 6:59 a.m. | 51.5 |
| 7:59 p.m. | 49.5 | 7:59 a.m. | 50.9 |
| 8:59 p.m. | 46.5 | 8:59 a.m. | 50.1 |
| 9:59 p.m. | 48.9 | 9:59 a.m. | 41.2 |
| **24-hour Noise Level (CNEL)** | | | **56.0** |

$L_{eq}$ = average noise level equivalent; dBA = A-weighted decibel; CNEL = Community Noise Equivalent Level

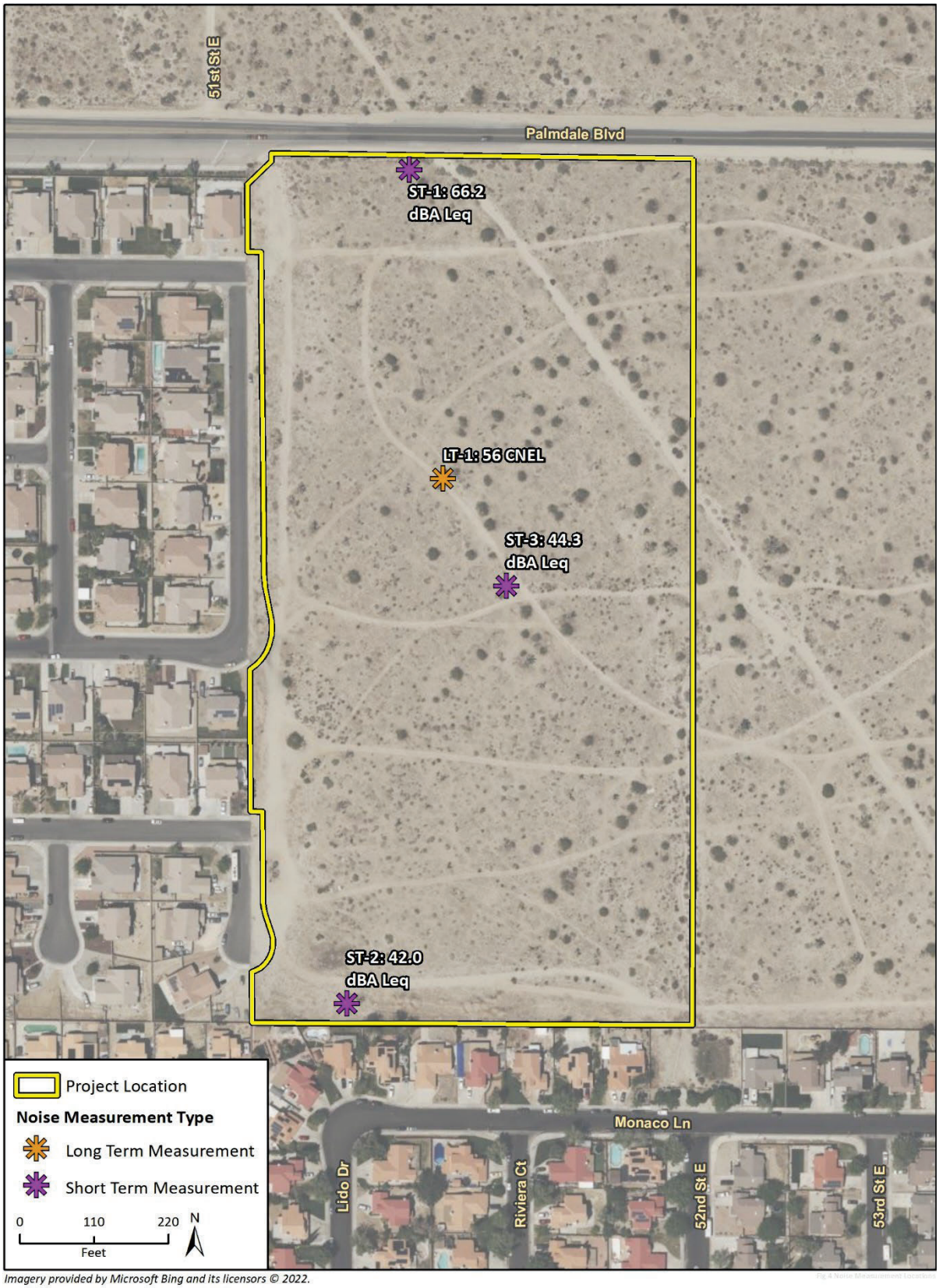
Detailed sound level measurement data are included in Appendix F.

## Table 18 Sound Level Monitoring Traffic Counts

| Measurement | Roadway | Traffic | Autos | Medium Trucks | Heavy Trucks |
|---|---|---|---|---|---|
| ST-1 | East Palmdale Boulevard | 15-minute count | 202 | 3 | 3 |
| | | One-hour Equivalent | 808 | 12 | 12 |
| **Percent** | | | **97%** | **1.5%** | **1.5%** |

Detailed sound level measurement data are included in Appendix F.

**Figure 4 Noise Measurement Locations**

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#### SENSITIVE RECEIVERS

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. In the City of Palmdale, noise sensitive land uses (also referred to as "sensitive receivers") include residences, schools, libraries, hospitals/medical facilities, and assisted living facilities (City of Palmdale 2022a).

Vibration-sensitive receivers, which are similar to noise-sensitive receivers, include residences and institutional uses, such as schools, churches, hospitals and libraries. Vibration-sensitive receivers also include buildings where vibrations may interfere with vibration-sensitive equipment that is affected by vibration levels that may be well below those associated with human annoyance (e.g., recording studies or medical facilities with sensitive equipment). As shown in Figure 2, the nearest sensitive receivers to the project site are the single-family homes adjacent to the project site to the south and west.

## Regulatory Setting

### *Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual*

There are no federal regulations directly applicable to the proposed project. However, the FTA provides reasonable criteria for assessing construction noise impacts based on the potential for adverse community reaction in their Transit Noise and Vibration Impact Assessment Manual (FTA 2018). For residential uses, the daytime noise threshold is 80 dBA Leq for an 8-hour period. In addition, the FTA recommends a vibration limit of 0.2 inches per second (in/sec) peak particle velocity (PPV) for potential building architectural damage at residential buildings and 0.3 in/sec PPV at commercial buildings.

Sections 5 and 6 of manual addresses the federal guidelines used to evaluate a project for potential vibration impacts. The vibration impact analysis is a multi-step process used for determining vibration analysis level, determining vibration impact criteria, and evaluating vibration impact. FTA guidelines state that the threshold of perception for humans is approximately 65 vibration decibels (VdB). A vibration level of 85 VdB can result in strong annoyance, and a vibration level of 100 VdB is the threshold of potential damage (FTA 2018). Construction activity can result in varying degrees of ground vibration depending on the equipment and methods employed, and older and more fragile buildings must receive special consideration. These guidelines are advisory and should be used to assess the impacts of ground borne vibrations created from transit and construction sources.

### *California Building Code*

California Code of Regulations Title 24, Building Standards Administrative Code, Part 2, and the California Building Code codify the state noise insulation standards. These noise standards apply to new construction in California to control interior noise levels as they are affected by exterior noise sources. The regulations specify that interior noise levels for residential and school land uses should not exceed 45 CNEL.

### *City of Palmdale General Plan*

The State of California requires each city and county to adopt a Noise Element as part of its General Plan. Such Noise Elements must contain a Land Use/ Noise Compatibility Matrix. The objective of noise compatibility guidelines is to provide the community with a means of judging the noise

environment that it deems to be generally acceptable. A recommended (but not mandatory) matrix is presented in the "Guidelines for the Preparation and Content of Noise Elements of the General Plan" (Governor's Office of Planning and Research [OPR] 2003). The City of Palmdale Land Use/Noise Compatibility Matrix in the 2022 General Plan Noise Element is based on, and is similar to the California Land Use/Noise Compatibility Matrix. The matrix is used to determine whether a proposed new use would be compatible with the ambient noise environment in which it is proposed as well as whether or not the proposed new use would create noise compatibility conflicts with established uses. The compatibility table, shown in Figure 5, illustrates the ranges of community noise exposure in terms of what is "normally acceptable," "conditionally acceptable," "normally unacceptable," and "clearly unacceptable."

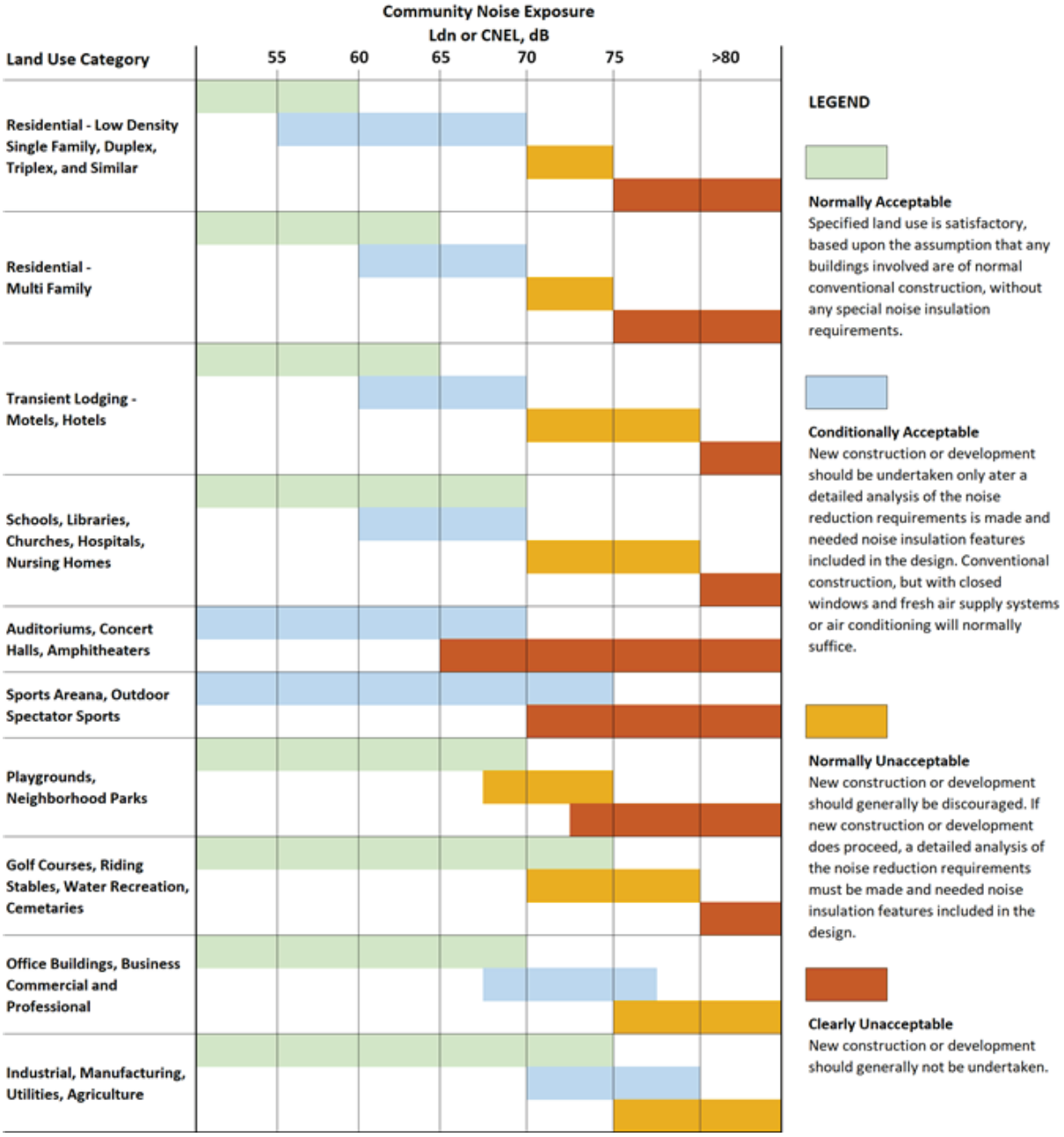
Denotation of a land use as "normally acceptable" implies that the highest noise level in that exposure level is the maximum desirable for existing or conventional construction that does not incorporate any special acoustical treatment. In general, evaluation of land use that falls into the "normally acceptable," "conditionally acceptable," or "normally unacceptable" noise environments should analyze other potential factors that would affect the noise environment. These include consideration of the types of noise source, the sensitivity of the noise receiver, the noise reduction likely to be provided by structures, and the degree to which the noise source may interfere with speech, sleep, or to other activities characteristic of the land use. Generally, the City's Land Use/Noise Compatibility Matrix is used as a guide to define where placement of certain land uses is considered acceptable. The Noise Element of the City's current General Plan also contains policies to maintain an acceptable noise environment in the city. Goals and policies from the proposed Plan relating to noise are listed in the impact analysis discussions in Section 4, *Impact Analysis*.

### *Palmdale Municipal Code*

The City also implements and enforces noise control through the PMC Chapter 9.18 (Disturbing, Excessive, Loud, or Offensive Noise), which sets both daytime and nighttime sound level limits for residential and commercial zones; prohibits any person or property owner in the city from creating any loud, unnecessary, or unusual noise which unreasonably disturbs the peace and quiet of any neighborhood or which causes discomfort or annoyance to any reasonable person of normal sensitiveness residing in the area.

PMC Chapter 8.28 (Building Construction Hours of Operation and Noise Control), prohibits any person or property owner in the City to perform any construction or repair work on any Sunday, or any other day after 8:00 p.m. or before 6:30 a.m., in any residential zone or within 500 feet of any residence, hotel, motel or recreational vehicle park.

## Figure 5 Palmdale General Plan Noise Level Guidance




Source: City of Palmdale 2022a

*a. Would the project result in 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?*

The following discussions address the potential noise level increases associated with construction and operation of the project.

## Construction Noise

Pursuant to Chapter 8.28 (Building Construction Hours of Operation and Noise Control) of the PMC, noise generated by construction activities is not prohibited if it occurs on Monday through Saturday, between the hours of 6:30 a.m. to 8:00 p.m. In addition, the FTA-recommended criterion of 80 dBA $L_{eq}$ for residential daytime receivers is used as a significance threshold for nearby residences. Construction noise was estimated using the FHWA Roadway Construction Noise Model (RCNM) (FHWA 2006). RCNM predicts construction noise levels for a variety of construction operations based on empirical data and the application of acoustical propagation formulas. Using RCNM, construction noise levels were estimated at noise sensitive receivers near the project site. RCNM provides reference noise levels for standard construction equipment, with an attenuation rate of 6 dBA per doubling of distance for stationary equipment.

Variation in power imposes additional complexity in characterizing the noise source level from construction equipment. Power variation is accounted for by describing the noise at a reference distance from the equipment operating at full power and adjusting it based on the duty cycle of the activity to determine the $L_{eq}$ of the operation (FTA 2018). Each phase of construction has a specific equipment mix, depending on the work to be accomplished during that phase. Each phase also has its own noise characteristics; some will have higher continuous noise levels than others, and some have high-impact noise levels.

Construction activity would result in temporary noise in the project site vicinity, exposing surrounding nearby receivers to increased noise levels. Construction noise would typically be higher during the heavier periods of initial construction (i.e., site preparation and grading) and would be lower during the later construction phases (i.e., building construction and paving). Typical heavy construction equipment during project grading could include dozers, loaders, graders, and dump trucks. It is assumed that diesel engines would power all construction equipment. Construction equipment would not all operate at the same time or location. In addition, construction equipment would not be in constant use during the 8-hour operating day.

Project construction would occur nearest to the single-family residences within the southern and western portion of the project site. Over the course of a typical construction day, construction equipment would be located as close as 15 feet to the properties but would typically be located at an average distance farther away due to the nature of construction and the lot size of the project. For example, during a typical construction day when performing construction near these residences, the equipment may operate across a horizontal distance (15 to several hundred feet) from a nearby noise receiver. Therefore, it is assumed that over the course of a typical construction day the construction equipment would operate at an average distance of 100 feet from the single-family residences to the west and south.

Construction noise is typically loudest during activities that involve excavation and soil movement, such as site preparation and grading. Project construction would occur nearest to the single-family residences located west and south of the project site. It is conservatively assumed that over the course of a typical construction day the construction equipment would operate 100 feet from the

nearest sensitive receiver. At a distance of 100 feet, a loader, front end loader and dump truck would generate a noise level of 74.4 dBA $L_{eq}$ (RCNM calculations are included in Appendix F). Therefore, construction noise levels would not exceed the FTA's daytime residential threshold of 80 dBA $L_{eq}$, and impacts would be less than significant.

## Operation Noise

The City of Palmdale has not established operational noise standards. Therefore, operational noise standards based upon USEPA are provided for this analysis. Based upon available sleep criteria data, an interior nighttime level of 35 dBA is considered acceptable (USEPA 1974). Assuming a 15 dBA reduction with windows open, an exterior noise level of 50 dBA $L_{eq}$ would be required to maintain an acceptable interior noise environment of 35 dBA. Off-site project noise (i.e., roadway noise) would result in a significant impact if the project would increase traffic noise levels by 3 dBA, which would be a perceptible increase in traffic noise.

### *HVAC Units*

The main noise source associated with a residential development are heating, ventilation, and air conditioning (HVAC) units). The unit used in this analysis is a Carrier 38HDR060 split-system, which is a typical HVAC unit used on single-family residential sites and has a sound power level of 72 dBA (see Appendix F for manufacturer's specifications). HVAC equipment for single-family residences are typically located at ground-level, on the side or backyard portions of a house. It is assumed that 191 ground-level HVAC units distributed across the project site would be needed, based on 191 dwelling units. The closest future residential lots to nearby receivers would occur on the southern edge of the project site.

Each residence would have at least one ground-level HVAC equipment. Given estimated setbacks, HVAC equipment could be within 20 feet of existing residences. At a distance of 20 feet, an HVAC unit would generate noise levels of 48 dBA, which would not exceed an exterior noise level of 50 dBA $L_{eq}$ at nearby residences that would result in an exceedance of an acceptable interior noise environment of 35 dBA. In addition, future fencing between properties may provide additional noise attenuation. Therefore, operational noise impacts associated with HVAC equipment would be less than significant.

Additional on-site noise sources such as landscape maintenance, low-speed traffic on internal roadways, conversations, open space activities, and trash hauling also would be typical of noise generated by neighboring land uses and would not substantially contribute to overall ambient noise levels. Therefore, on-site operations would have a less than significant impact on noise-sensitive receivers.

### *Off-site Traffic Noise*

The overall increase in traffic noise from the project was estimated using ADT "future with project conditions" data from the Traffic Signal Warrant Study prepared by General Technologies and Solutions, included as Appendix G. These daily ADT scenarios are shown in Table 19. The roadway segment that is expected to experience the greatest increase in trips is Palmdale Boulevard during PM peak hours. Therefore, it is anticipated that traffic at this roadway segment is expected to create the greatest off-site traffic noise impacts when compared to other intersections near the project site. As shown in Table 19, PM peak hour trips would increase by approximately nine percent over existing conditions under the project. A nine percent increase in traffic on a roadway would equate to an increase of 0.4 dBA. Therefore, the project would not double the existing mobile noise source

and would not increase noise levels by 3 dBA, which is considered a barely perceptible noise increase. Therefore, off-site traffic noise impacts would be less than significant.

**Table 19 Daily Vehicle Trip Summary**

| Palmdale Boulevard | Residential Trips |
|---|---|
| Existing Conditions | 16,745[1] |
| Existing Plus Project Conditions | 18,205 |
| **Change in Trips** | **+1,460** |
| **Percent Change in Vehicle Trips (%)** | **9%** |

[1] Existing condition traffic counts are observed traffic counts on Palmdale Avenue as presented in the Traffic Signal Warrant Study (General Technologies and Solutions 2023). For the noise analysis, all project trips were conservatively added to this observed value.

**LESS THAN SIGNIFICANT IMPACT**

*b. Would the project result in generation of excessive groundborne vibration or groundborne noise levels?*

The project would result in the generation of excessive groundborne vibration or groundborne noise levels if vibration levels exceed 0.2 in/sec PPV at residential structures or 0.3 in/sec PPV at commercial structures.

The project does not include any substantial vibration sources associated with operation. Thus, construction activities have the greatest potential to generate ground-borne vibration affecting nearby receivers, especially during grading and excavation of the project site. Table 20 shows vibration levels of anticipated grading and excavation equipment used during construction. The greatest vibratory source during construction in the project vicinity would be a large bulldozer. Neither blasting nor pile driving would be required for construction of the project.

**Table 20 Vibration Levels Measured during Construction Activities**

| Equipment | PPV at 25 ft. (in/sec) |
|---|---|
| Large Bulldozer | 0.089 |
| Loaded Trucks | 0.076 |
| Small Bulldozer | 0.003 |

Source: FTA 2018

Construction activities known to generate excessive ground-borne vibration, such as pile driving, would not be conducted to construct the project. Based on FTA recommendations, limiting vibration levels to below 0.2 in/sec PPV at residential structures would prevent architectural damage regardless of building construction type. The greatest anticipated source of vibration during project construction activities would be from a dozer, which may be used within 15 feet of the nearest off-site sensitive receivers to the to the west and south. A dozer would create approximately 0.089 in/sec PPV at a distance of 25 feet (FTA 2018). This would equal a vibration level of approximately 0.16 in/sec PPV at a distance of 15 feet.[4] This would be lower than the 0.2 in/sec PPV threshold. Therefore, temporary vibration impacts associated with the dozer (and other potential equipment) would be less than significant.

[4] $PPV_{Equipment} = PPV_{Ref} (25/D)^n$ (in/sec), $PPV_{Ref}$ = reference PPV at 25 feet, D = distance ,and n = 1.1

Operation of the project would not include any substantial vibration sources. Therefore, operational vibration impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*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?*

The airport nearest to the project site, Palmdale Regional Airport, is located approximately 3.8 miles to the northwest. The project would not be located within the 65 CNEL noise contour of the Palmdale Regional Airport (City of Palmdale 2022a). Therefore, no substantial noise exposure from airport noise would occur to construction workers, users, or employees of the project, and no impacts would occur.

**NO IMPACT**

# 14 Population and Housing

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project: | | | | |
| a. Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)? | ☐ | ☐ | ■ | ☐ |
| b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? | ☐ | ☐ | ☐ | ■ |

*a. Would the project 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)?*

According to the California Department of Finance (DOF), the City of Palmdale has an estimated population of 165,917 with an average household size of 3.4 persons (DOF 2023). SCAG estimates that the city's population will increase to 207,000 by 2045, which is an increase of approximately 25 percent or 41,083 persons (SCAG 2020). The proposed project involves the construction of 191 units of new single-family housing lots in Palmdale. Construction of the proposed project would increase the existing population by up to approximately 649 residents[5] (a 0.4 percent increase from the existing population) to 166,566, which would be within SCAG's 2045 population forecast. In addition, according to DOF estimates, the city has an existing housing stock of 43,800 units, which SCAG forecasts will increase by 18,000 units (an approximate 41 percent increase) to 61,800 units by 2045 (DOF 2021; SCAG 2020). The project would generate 191 housing units, which would represent approximately 0.3 percent of the projected increase in housing units. Given that the proposed project would not exceed SCAG's 2045 population or housing forecast, the project would not cause a substantial increase in population or induce unplanned population growth. Therefore, impacts associated with population growth would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*b. Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?*

The project site is vacant; therefore, the project would not displace existing housing or people and would not require construction of replacement housing elsewhere. No impact would occur.

**NO IMPACT**

[5] 191 units x 3.4 persons per unit

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# 15 Public Services

| | | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|---|
| a. | Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the 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: | | | | |
| | 1 Fire protection? | ☐ | ☐ | ■ | ☐ |
| | 2 Police protection? | ☐ | ☐ | ■ | ☐ |
| | 3 Schools? | ☐ | ☐ | ■ | ☐ |
| | 4 Parks? | ☐ | ☐ | ■ | ☐ |
| | 5 Other public facilities? | ☐ | ☐ | ■ | ☐ |

*a.1. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or the need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

The City of Palmdale works with the Los Angeles County Fire Department (LACoFD) to provide fire protection and paramedic emergency services to residents and businesses within the city. The nearest fire station is Fire Station No. 93, which is located at 5624 E Avenue R, approximately 0.9 mile southeast of the project site. On October 14, 2022, staff contacted Fire Station No. 93 and spoke with Fireman Sean Strinkle who stated there are a total number of six people on duty at all times including one captain, one engineer, one firefighter, and three paramedics (LACoFD 2022). There is also one fire engine and one paramedic squad engine. The fire station responds to approximately 4,500 incidents per year. The LACoFD has a goal of 4-6 minutes for on scene arrival (City of Palmdale 2022a). Furthermore, Fire station staff indicated that there is capacity to sustain additional residents; therefore, the proposed project would not require new or physically altered fire protection facilities. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*a.2. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or the need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

The City of Palmdale contracts with the Los Angeles County for most emergency services, including police protection services. The Los Angeles County Sheriff's Department provides police protection to services to residents and businesses within the city, across 770 square miles (Los Angeles County Sheriff's Department 2020). The Sheriff's Department is located at 750 East Avenue Q, which is approximately five miles west of the project site. The current average response time for emergency calls within the city is under six minutes for on scene arrival (City of Palmdale 2022a).

The City also requires the payment of development impact fees to meet the demand for public facilities, including police protection services created by the development (City of Palmdale). Therefore, the project would not result in the need for new or physically altered police protection facilities that could have environmental impact. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*a.3. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered schools, or the need for new or physically altered schools, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?*

The project site is served by the Palmdale Unified School District (PUSD) which had an enrollment of 17,805 students in the 2021-2022 academic year (PUSD 2022), and the Antelope Valley Union High School District, which had an enrollment of 23,000 students (AVUHSD 2022). The project site would be served by Golden Poppy Elementary School (Kindergarten-Grade 5), Cactus Middle School (Grade 6 – Grade 8), and Palmdale High School (Grade 9-Grade 12).

The need for new school facilities is typically associated with a population increase that generates an increase in enrollment large enough to cause new schools to be constructed. The proposed project involves construction of a 191-unit residential development. On average, 47.6 percent of families in Palmdale have school-age children (City of Palmdale 2022a). Based on this estimate, 91 of the residential units would have school-aged children. According to Section 14, *Population and Housing*, the average persons per household in Palmdale is 3.4, so conservatively assuming two school-aged children per household, the project would generate approximately 182 students. Compared to the 17,805 students enrolled in PUSD schools for the 2021-2022 school year, the project would incrementally increase existing student enrollment by approximately one percent. In addition, according to the Palmdale School District Student Centric Facilities Master Plan, the district anticipates a drop in student total enrollment from the 2016 base line level in the 2023-2024 school year. The Palmdale School District anticipates a drop in enrollment of Transitionary Kindergarten (TK) to eighth grade from 19,024 to 18,791.6 from the 2016-2017 to 2023-2024 school years (PUSD 2017).

Furthermore, the project applicant would be required to pay the state-mandated school impact fees that would contribute to the funds available for development of new school facilities. Pursuant to Section 65995 (3)(h) of the California Government Code (Senate Bill 50, chaptered August 27, 1998), the payment of statutory fees "...is 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." Therefore, the project would not substantially increase the number of students at local public school or lead to the need for new or physically altered school facilities. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*a.4. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or the need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?*

According to the General Plan, the City owns and operates 19 parks that consist of 351 acres of parkland. The General Plan establishes a park standard of providing five acres of park per 1,000 residents (City of Palmdale 2022a). According to the DOF, the city has an estimated population of 167,398, (DOF 2022). Therefore, the city's existing population and parkland ratio is 2.09 acres per 1,000 residents, which results in approximately 41 percent of the current target for public parks. The city would need an additional 496 acres of parkland to meet the current parkland to resident ratio target. The proposed project could result in the addition of approximately 588 new residents in the city, which would bring the city's population to 167,986, indicating that the city would need additional parkland to meet the current parkland to resident ratio.

The nearest park to the project is Domenic Massari Park, located approximately 3,500 feet south of the project site, which is a 40-acre park that includes a playground area, two picnic pavilions, walking and jogging paths, five soccer fields, and other amenities. Residents under the proposed project may use the existing recreational facilities, which could result in deterioration or need for additional recreational space. The project would provide a pocket community park, a children's play area, and additional community open spaces. Additionally, a community trail network is planned to link the neighborhood and provide additional open spaces and parks for the community to utilize. Furthermore, the project would be required to pay the City's development impact fees or in-lieu fees from development projects to mitigate the impacts associated with the development on the City's existing park system (City of Palmdale 2022a). The proposed project would not create the need for new or expanded park facilities. Impact would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*a.5. Would the project result in substantial adverse physical impacts associated with the provision of other new or physically altered public facilities, or the need for other new or physically altered public facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives?*

The project site is in an urban area already served by public services and facilities, such as utilities and public libraries. Development of the project would result in incremental impacts to the City's public services and facilities such as storm drain usage, solid-waste disposal, water usage, and wastewater disposal. These impacts are analyzed in Section 10, *Hydrology and Water Quality*, and Section 19, *Utilities and Service Systems*. The project's contribution to storm drain usage, solid-waste disposal, water usage, and wastewater disposal would be offset through project-specific features described in the individual resource section analyses indicated above.

The City of Palmdale is served by the Palmdale City Library located approximately 4.5 miles east of the project site at 700 East Palmdale Boulevard. As discussed in Section 14, *Population and Housing*, the proposed project could potentially increase the city's population by up to 588 residents, which would be an increase of approximately 0.35 percent of the city's population. Increased population generated by the proposed project would incrementally increase demand on local public libraries in the vicinity, such as the Palmdale City Library. However, the project would be subject to Palmdale's development impact fees for library facilities. As a result, the proposed project would contribute to the financing of library services through impact fees and property taxes, which would mitigate the need for new or physically altered government facilities that support library use. Therefore, the project would not substantially affect existing governmental facilities or require the need for new or altered governmental facilities. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

# 16 Recreation

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| a. 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? | ☐ | ☐ | ■ | ☐ |
| b. 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? | ☐ | ☐ | ■ | ☐ |

*a. 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?*

*b. 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?*

According to the General Plan, the City owns and operates 19 public parks with a totaling 370 acres of land for public use and 351 acres of existing parkland (City of Palmdale 2022a). According to the DOF, the city has an estimated population of 167,398 (DOF 2022). Therefore, the City's existing population and parkland ratio is 2.09 acres per 1,000 residents, which results in approximately 41 percent of the current target for public parks. According to the general plan, the city would need an additional 496 acres of parkland to meet the current parkland to resident ratio target (City of Palmdale 2022a). The project site is within 3,500 feet south of Domenic Massari Park, and the project would include a pocket community park and amenities such as a pool, fitness center, and recreation space which would help serve the recreational needs of future residents. Additional residents may use the existing recreational facilities, which may result in deterioration or need for additional recreational space. The City currently collects park development impact fees or in-lieu fees from development projects to mitigate the impacts associated with the development on the City's existing park system. Therefore, potential impacts related to recreational facilities would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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# 17 Transportation

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| 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 Section 15064.3, subdivision (b)? | ☐ | ☐ | ■ | ☐ |
| c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)? | ☐ | ☐ | ■ | ☐ |
| d. Result in inadequate emergency access? | ☐ | ☐ | ■ | ☐ |

*a. Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

Regional access to the project site is provided by SR-138, which is approximately one mile north of the project site, and SR-14, which is approximately 5.4 miles west of the project site. Local access to the site is provided by East Palmdale Blvd and East Avenue R. In addition, regional mass transit service is provided by Antelope Valley Transit Authority (AVTA). The site is currently served by AVTA bus routes 3 and 98 along East 47th Street. The nearest bus stop for AVTA bus routes 3 and 98 is approximately 2,000 feet west of the project site at the intersection of East 47th Street and East Ave R. Sidewalks are provided along all roadways around the project site for pedestrian access.

The City adopted the Los Angeles County Public Works *Transportation Impact Analysis (TIA) Guidelines* (July 2020) to assess VMT. In addition to the County's Transportation Impact Analysis Guidelines, City of Palmdale General Plan Circulation Element; Land Use and Community Design Element; and the Palmdale Transit Area Specific Plan, contain the City's goals addressing the circulation system. The project's consistency with the applicable goals, objectives, and policies contained in the Palmdale General Plan is discussed in Table 21, below.

## Table 21 Project Consistency with Palmdale Circulation System Plans

| Goal | Project Consistency |
|---|---|
| **General Plan Circulation Element** | |
| **Goal C1:** Establish, maintain, and enhance a system of streets and highways which will provide for the safe and efficient movement of people and goods throughout the Planning Area, while minimizing adverse impacts on the community. | **Consistent.** The proposed project is within the vicinity of SR-138, which is approximately one mile north of the project site, and SR-14, which is approximately 5.4 miles west of the project site. Local access to the site is provided by East Palmdale Boulevard and East Avenue R, providing accessibility to the site and effective movement of people and goods. The proposed project is within the vicinity of AVTA bus routes 3 and 98 along East 47th Street, enhancing access to alternative mobility options. Therefore, the project would be consistent with Goal C1. |
| **Goal C2:** Reduce the number of trips and vehicle miles traveled by individuals within the Planning Area, to meet regional transportation and air quality goals. | **Consistent**. The project would allow future project residents to easily access public transportation (approximately 2,000 feet from the project site) and retail uses. Therefore, future residents would be within walking and bicycling distance to public transportation and commercial/retail amenities, which would reduce the number of trips and VMT. In conclusion, the project would be consistent with Goal C2. |
| **General Plan Land Use and Community Design Element** | |
| **Goal L1:** Create a vision for long-term growth and development in the City of Palmdale which provides for orderly, functional patterns of land uses within urban areas, a unified and coherent urban form, and a high quality of life for its residents.<br>**Policy L1.1.1**: Through adoption of the Land Use Map, direct future growth to areas which can accommodate development based upon topography, environmental factors, availability of infrastructure, and/or comprehensive planning. These areas include the following:<br>1. Vacant land within urbanized areas (infill lots), where backbone infrastructure is available or planned for;<br>2. Areas governed by adopted Specific Plans;<br>3. Areas in which infrastructure master planning has occurred. | **Consistent.** The proposed project involves the construction of a 191 units of new single-family housing lots in an infill site in a residential area with nearby access to retail, services, and public transit providing for a variety of mobility options for residents. The project would include recreational amenities for residents including shared open space and a recreation center. Therefore, the proposed project would provide a high-quality living environment with convenient access and mobility options and would be consistent with Goal L1 and Policy L1.1.1. |

Source: City of Palmdale General Plan

As illustrated above, the proposed project would not conflict with the goals, objectives, and policies contained in the Palmdale General Plan. The project would continue to be served by and would not interfere with existing and planned roadway, pedestrian, bicycle, and public transit facilities. The proposed project would not alter AVTA's existing transit system or introduce features that would preclude the addition of bike lanes as planned in the Transit Area Specific Plan, nor would the project alter operation of the existing ATVA bus stops in the vicinity of the project site. Therefore, the proposed project would not conflict with a program, plan, ordinance, or policy addressing the circulation system. Potential impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*b. Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?*

In December 2018, the California Natural Resources Agency certified and adopted the updated CEQA Guidelines package. The amended CEQA Guidelines, specifically Section 15064.3, generally require the use of VMT as the primary metric for the evaluation of transportation impacts associated with land use and transportation projects. In general terms, VMT quantifies the amount and distance of automobile travel attributable to a project or region. All agencies and projects state-wide are required to utilize the updated CEQA Guidelines for evaluating transportation impacts as of July 1, 2020.

The updated CEQA Guidelines allow for the lead agency to have discretion in establishing methodologies and thresholds, provided there is substantial evidence to demonstrate that the established procedures promote the intended goals of the legislation. Where quantitative models or methods are unavailable, CEQA Guidelines Section 15064.3 allows agencies to assess VMT qualitatively using factors such as availability of transit and proximity to other destinations. The Office of Planning and Research (OPR) *Technical Advisory on Evaluating Transportation Impacts in CEQA* provides technical considerations regarding methodologies and thresholds with a focus on office, residential, and retail developments as these projects tend to have the greatest influence on VMT.

The VMT Analysis conducted by General Technologies and Solutions (GTS) used the Los Angeles County Public Works Transportation Impact Analysis (TIA) Guidelines, dated July 23, 2020, as a guide in the VMT analysis of this project. Pursuant to the Los Angeles County Public Works TIA Guidelines, certain residential projects that further the State's affordable housing goals are presumed to have a less-than-significant impact on VMT if 100 percent of the units, excluding manager's units, are set aside for lower income households. Based on the screening criteria above, the project is a 100 percent affordable project and therefore VMT impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*c. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?*

The project would be accessible via a proposed access road on East Palmdale Boulevard. Other than the construction of the proposed access road the project would not alter East Palmdale Boulevard (e.g., no roadway widening required). Project site plans indicate the provision of on-site drive aisles to accommodate vehicular access to and circulation throughout the project site. Traffic calming features would include internal roadway speed limits and speed bumps, would be included to ensure safe circulation within the site. Furthermore, development of the proposed residential project would be compatible with the existing land uses surrounding the project site, which also primarily includes single-family residential neighborhoods. Therefore, implementation of the project would not result in substantial hazards due to geometric design features or incompatible uses. Potential impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*d. Would the project result in inadequate emergency access?*

During construction, temporary and occasional lane closures may be required on East Palmdale Boulevard. However, two-way traffic would still be maintained at construction entry points and along East Palmdale Boulevard as required by the City of Palmdale's Encroachment, Grading, and

Landscaping Permit (City of Palmdale 2019). Therefore, project construction would not result in inadequate emergency access to the project site or surroundings, and potential impacts would be less than significant.

Prior to construction, site circulation plans would be reviewed by the LACoFD during the project application process to ensure adequate on-site lane widths and configurations for emergency vehicle ingress and egress. Furthermore, the proposed project would not modify existing roadways in the vicinity, other than by adding new site access points, and therefore, would not affect emergency vehicle use of roadways that surround the project site. The project would be subject to LACoFD review of site plans prior to occupancy to ensure that required fire protection safety features, including building sprinklers and emergency access, are implemented. During project operation, emergency response vehicles would be able to access the project site via the main entrance along East Palmdale Boulevard. Therefore, potential impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

# 18 Tribal Cultural Resources

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code Section 21074 as either a site, feature, place, or 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)? | ☐ | ☐ | ☐ | ☐ |
| 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 Section 5024.1? In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | ☐ | ☐ | ☐ | ☐ |

[Placeholder for summary of City's AB 52 consultation process]

a. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is 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)?*

b. *Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is 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 Section 5024.1?*

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# 19 Utilities and Service Systems

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| 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? | ☐ | ☐ | ■ | ☐ |

*a. Would the project 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?*

*c. Would the project 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?*

The project site is in an urbanized area and served by existing utilities infrastructure. The City of Palmdale is within the service boundaries of the Palmdale Water District. As discussed below under the analysis for *Threshold 19.b*, PWD would have adequate water supplies available for the

proposed project during the normal years. However, PWD anticipates that during a single-dry year conditions, demand will exceed existing supply starting in 2045. PWD anticipates demand exceeding supplies in 2021 and 2023 during a consecutive five-year drought. Additional supplies or a reduction in demand are needed to meet demand; therefore, PWD has identified short-term and long-term transfer and exchange opportunities to provide additional supplies to overcome shortages. In addition, PWD is developing the Palmdale Regional Water Augmentation Project to provide surface water augmentation or groundwater injection. The Water Shortage Contingency Plan also identifies potential demand reduction actions to reduce shortages (PWD 2021). Therefore, potential impacts related to water facilities would be less than significant.

## Wastewater

The project site is within the service boundaries of the Palmdale Water Reclamation Plant (PWRP), which is owned and operated by the Los Angeles County Sanitation District No. 20 (LACSD 2022). The PWRP, north of Palmdale provides primary, secondary, and tertiary treatment of 12 million gallons of wastewater per day (City of Palmdale 2022a). According to CalEEMod outputs in the Air Quality Greenhouse Gas Emissions Study (Appendix A), the project is anticipated to require approximately 16 million gallons of water per year. Assuming that total water demand is equivalent to approximately 120 percent of wastewater generation, the project would generate approximately 13 gallons of wastewater per year, or approximately 35,616 gallons per day, which would account for approximately 0.2 percent of the current daily capacity of 12 million gallons per day (LACSD 2022). Therefore, the PWRP would have adequate capacity to provide wastewater treatment for the proposed project and the proposed project would not require the construction of new or expanded wastewater conveyance or treatment facilities. Potential impacts would be less than significant.

## Stormwater

The project site would continue to connect to the existing storm drain system operated and maintained by the City. The proposed project would increase impervious surfaces over the project site due to the construction of 191 residential units. As discussed in Section 10, *Hydrology and Water Quality*, prior to the initiation of construction, the project would be required to obtain coverage under a Construction General Permit to comply with the NPDES requirement. In addition, the project would be required to comply with the LARWQCB's Water Quality Control Plan. Under the conditions of the Construction General Permit and the Water Quality Control Plan, the developer would be required to eliminate or reduce non-storm water discharges, develop, and implement a SWPPP for the project construction activities, and perform inspections of the storm water pollution prevention measures and control practices to ensure conformance with the site SWPPP and associated BMPs. Therefore, stormwater facilities would be less than significant.

## Electric Power, Natural Gas, and Telecommunications

The proposed project would not cause substantial unplanned population growth (see Section 14 *Population and Housing*) and would not result in wasteful or inefficient use of energy (see Section 6, *Energy*). Project operation would result in an increase in electricity consumption on the project site by 1.5 GWh per year; however, electricity consumption is anticipated to have a net zero draw from the electricity grid since electricity would be generated by a PV system. Therefore, the project would not require the extension or expansion of electrical facilities.

According to CalEEMod outputs in the Air Quality Greenhouse Gas Emissions Study (Appendix A), there would be no estimated natural gas consumption for the project. Therefore, the project would not require additional natural gas storage/transmission facilities. Likewise, the project site is an infill project served by existing telecommunications facilities within the city and would not require the expansion or construction of new telecommunications infrastructure. Telecommunications including cell phone towers, microwave towers, and other telecommunication equipment are located throughout the city. According to the City of Palmdale General Plan, cell phone, fiber optic, and microwave towers are owned by AT&T, CenturyLink, DirectTV, Dish Network, Exede Satellite Internet, Frontier Communications, HughesNet, Sprint, Time Warner, Verizon, and Viasat Satellite. Television/radio towers are in the foothills of the San Gabriel Mountains.

**LESS THAN SIGNIFICANT IMPACT**

*b. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?*

The project site receives its water service from the PWD with water supplies that include imported water, local and regional supplies, groundwater, and recycled water. PWD purchases imported water from the Department of Water Resources. The groundwater used by PWD is pumped from the Antelope Valley Groundwater Basin and has accounted for 35 percent of PWD's supplies since 2016. PWD jointly owns and operates the Littlerock Dam Reservoir, which constitutes PWD's surface water supply source and is located in the hills southwest of the PWD service area. PWD is actively working with the Sanitation Districts of Los Angeles County (LACSD) to develop recycled water supplies for its service area customers and future groundwater recharge projects (PWD 2021).

According to the 2020 Urban Water Management Plan, the PWD would have an adequate supply of water over the next twenty-five years (Table 27). PWD anticipates having adequate supplies to meet demands during normal years. However, PWD anticipates that during single-dry year conditions, demands will exceed supplies starting in 2030 and during multiple-dry year conditions, demands will exceed supplies starting in 2045. Additionally, in a consecutive five-year drought, PWD anticipates demands exceeding supplies in 2021 and 2023. Therefore, additional supplies are assumed to be needed to meet demands under those conditions (PWD 2021).

**Table 22 Normal Year Water Supply and Demand Comparison (acre-feet per year [AFY])**

| | 2025 | 2030 | 2035 | 2040 | 2045 |
|---|---|---|---|---|---|
| Estimated Service Area Population | 126,998 | 132,003 | 138,554 | 145,962 | 153,766 |
| Water Supply Totals | 36,725 | 35,315 | 35,345 | 35,375 | 35,375 |
| Water Demand Totals | 20,220 | 21,310 | 22,980 | 24,780 | 26,250 |

Source: 2020 PWD Urban Water Management Plan

**Table 23 Single and Multiple Dry Year Water Supply and Demand Comparison (AFY)**

| | 2025 | 2030 | 2035 | 2040 | 2045 |
|---|---|---|---|---|---|
| Estimated Service Area Population | 126,998 | 132,003 | 138,554 | 145,962 | 153,766 |
| **Single Dry Year** | | | | | |
| Water Supply Totals | 21,235 | 20,600 | 21,410 | 22,225 | 22,225 |
| Water Demand Totals | 20,220 | 21,310 | 22,980 | 24,780 | 26,250 |
| **Multiple - First Dry Year** | | | | | |
| Water Supply Totals | 28,125 | 26,390 | 26,105 | 25,665 | 25,665 |
| Water Demand Totals | 20,220 | 21,310 | 22, 980 | 24,780 | 26,250 |
| **Multiple - Second Dry Year** | | | | | |
| Water Supply Totals | 28,125 | 26,390 | 26,105 | 26,665 | 26,665 |
| Water Demand Totals | 20,220 | 21,310 | 22,980 | 24,780 | 26,250 |
| **Multiple - Third Dry Year** | | | | | |
| Water Supply Totals | 28,125 | 26,390 | 26,105 | 25,665 | 25,665 |
| Water Demand Totals | 20,220 | 21,310 | 22,980 | 24,780 | 26,250 |
| **Multiple - Fourth Dry Year** | | | | | |
| Water Supply Totals | 28, 125 | 26,390 | 26,105 | 26,665 | 25,665 |
| Water Demand Totals | 20,220 | 21,310 | 22,980 | 24,780 | 26,250 |
| **Multiple - Fifth Dry Year** | | | | | |
| Water Supply Totals | 28,125 | 26,390 | 26,105 | 26,665 | 26,665 |
| Water Demand Totals | 20,220 | 21,310 | 22,980 | 24,780 | 26,250 |

Source: 2020 PWD Urban Water Management Plan

The project would be constructed in accordance with all applicable CBC standards, including those that mandate water-efficient fixtures and features and would also be mandated to adhere to the applicable water conservation measures for landscaping. Potential impacts may be less than significant. According to CalEEMod results in the Air Quality Greenhouse Gas Emissions Study (see Appendix A), the project would demand approximately 44, 265 gallons of water per day, or approximately 49.58 AFY. PWD anticipates water demand to increase by 6,030 AFY between 2025 and 2045. The project's water demand would account for approximately 0.8 percent of PWC's anticipated water demand and therefore would be accommodated by the water supply available for the city during the normal, single dry year, and multiple dry year conditions through the year 2045. Potential impacts related to water supply would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*d. Would the project 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. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?*

AB 341 set a statewide goal for a 75 percent reduction in waste disposal by the year 2020 and established mandatory recycling for commercial businesses. The City is required to comply with this law and report their progress towards achieving the 75 percent reduction goal to CalRecycle. The

City of Palmdale contracts with Antelope Valley Recycling & Disposal Facility, located at 1200 W City Ranch Road. The Antelope Valley Recycling and Disposal Facility has a maximum permitted throughput of 5,548 tons of solid waste per day. The anticipated life for the landfill and its currently permitted capacity is April 2044. The last reported remaining capacity at the landfill was approximately 17,911,225 cubic yards (CalRecycle 2019).

Construction of the proposed project would generate solid waste, including construction debris. This construction debris would include materials such as scrap wood, concrete, and plaster materials. Construction debris would be removed and disposed of in a timely manner and in accordance with all applicable laws and regulations. The handling of all debris and waste generated during construction of the project would be subject to CALGreen requirements and the California Integrated Waste Management Act of 1989 (AB 939) requirements for salvaging, recycling, and reuse of materials from construction activity on the project site. In accordance with CALGreen requirements, the project would be required to achieve a minimum of 65 percent diversion rate for construction waste. Construction and demolition waste would be hauled to the Antelope Valley Recycling and Disposal Facility, located approximately 6.5 miles west of the project site. The removal of construction debris would only occur during the construction period and construction of the proposed project would not contribute to an exceedance of the permitted capacity of any local landfill.

According to the CalEEMod results in the Air Quality Greenhouse Gas Emissions Study (see Appendix A), operation of the proposed project would generate approximately 272.06 tons of solid waste per year or approximately 0.7 ton per day. The project's anticipated daily solid waste generation would account for less than 0.01 percent of the Antelope Valley Recycling and Disposal Facility permitted throughput. Given the existing surplus capacity at the Antelope Valley Recycling and Disposal Facility the solid waste generated by operation of the project would be adequately accommodated by existing landfills. In addition, the proposed project would comply with federal, State, and local statues and regulations related to solid waste, such as AB 939 and the City's recycling programs for residences. Therefore, potential impacts related to solid waste would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

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# 20 Wildfire

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| 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 downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? | ☐ | ☐ | ☐ | ■ |

*a. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?*

A Fire Hazard Severity Zone (FHSZ) is a mapped area that designates zones (based on factors such as fuel, slope, and fire weather) with varying degrees of fire hazard (i.e., moderate, high, and very high). While FHSZs do not predict when or where a wildfire will occur, they do identify areas where wildfire hazards could be more severe and therefore are of greater concern. FHSZs are meant to help limit wildfire damage to structures through planning, prevention, and mitigation activities/requirements that reduce risk. The FHSZs serve several purposes: they are used to designate areas where California's wildland urban interface building codes apply to new buildings, they can be a factor in real estate disclosure, and they can help local governments consider fire hazard severity in the safety elements of their general plans.

The project site is in an urban area of Palmdale surrounded by roads and structures, including residential and commercial buildings. Undeveloped wildland areas are not located near the project site. According to the California FHSZ Viewer, the project site is not located in a FHSZ or VHFHSZ for wildland fires (CALFIRE 2022). The nearest VHFHSZ is located 10.6 miles northwest of the project site on the west side of SR 14. Additionally, as shown in Figure 13.4 of the Safety Element, the project area is not associated with a wildfire hazard zone area (City of Palmdale 2022a). Therefore, the project site would not be subject to substantial risk of wildfire.

The project involves the construction and operation of a 191 single-single family housing development, which would incrementally increase demand for fire protection services. As discussed in Section 15, *Public Services*, the project site is in an urbanized area already served by the LACoFD and would not have a significant impact on fire response times nor create a substantially greater need for additional fire protection services above current capacity. The nearest fire station to the project site is Fire Station No. 93, which is located at 5624 E Avenue R, approximately one mile southeast of the project site, and would provide emergency and evacuation services in the event of a fire. Furthermore, all buildings would be constructed to meet the current building code fire safety requirements. During construction, temporary and occasional lane closures may be required on East Palmdale Boulevard. However, two-way traffic and emergency access to the site would still be maintained at construction entry points and along East Palmdale Boulevard as required by the City of Palmdale's Encroachment, Grading, and Landscaping Permit (City of Palmdale 2019). Therefore, project construction would not result in inadequate emergency access to the project site or surroundings. Impacts would be less than significant.

**LESS THAN SIGNIFICANT IMPACT**

*b. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project, 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?*

As discussed under the response to *Threshold a*, the project site is not located in a FHSZ or VHFHSZ for wildland fires. There are no streams or rivers located on or adjacent to the project site, and the project site and surrounding areas are relatively flat and not at high risk of downslope or downstream flooding or landslides. The project does not involve uses that could exacerbate wildfire risks and risks to project occupants would be mitigated through conformance with the 2022 California Fire Code, 2022 CBC, and California Health and Safety Code, which establish provisions for fire safety related to construction, maintenance and design of buildings and land uses. Therefore, the project would not exacerbate wildfire risks or expose people or structures to risk due to runoff, post-fire slope instability, or drainage changes. Likewise, residents of the project site would not be exposed to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. No impact would occur.

**NO IMPACT**

*c. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project 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?*

The project site is not within or near a VHFHSZ or state responsibility area. The project site is located 10.6 miles east of the nearest mapped VHFHSZ (CALFIRE 2022). The project site is undeveloped but

is within an urbanized area served by existing infrastructure, including roads and utilities. The project would be served by the existing utilities in the project area and would not require the installation or maintenance of associated infrastructure within the FHSZs that may exacerbate fire risk. Therefore, no impact would occur.

**NO IMPACT**

*d. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?*

As discussed under the response to *Threshold a,* the project site is not located in a FHSZ or VHFHSZ for wildland fires. There are no streams or rivers located on or adjacent to the project site, and the project site and surrounding areas are relatively flat and not at high risk of downslope or downstream flooding or landslides. The project does not involve uses that could exacerbate wildfire risks and risks to project occupants would be mitigated through conformance with the 2022 California Fire Code, 2022 CBC, and California Health and Safety Code, which establish provisions for fire safety related to construction, maintenance and design of buildings and land uses. Therefore, the project would not exacerbate wildfire risks or expose people or structures to risk due to runoff, post-fire slope instability, or drainage changes. Likewise, residents of the project site would not be exposed to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. No impact would occur.

**NO IMPACT**

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# 21 Mandatory Findings of Significance

| | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less than Significant Impact | No Impact |
|---|---|---|---|---|
| Does the project: | | | | |
| a. 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. 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. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | ☐ | ■ | ☐ | ☐ |

*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?*

As discussed in Section 4, *Biological Resources*, the project site contains suitable habitat for western Joshua tree and short-joint beavertail cactus as well as California glossy snake, coast horned lizard, burrowing owl, loggerhead shrike, LeConte's thrasher, and nesting birds. Implementation of Mitigation Measures BIO-1 through BIO-6 would address potential impacts to special-status species and natural habitats occurring in the project site. Mitigation Measures BIO-1 and BIO-2 would reduce impacts to western Joshua trees to less than significant and further reduce impacts to short-joint beavertail cacti. The relatively small project footprint of the site, compared to the amount of

available suitable habitat for burrowing owls, suggests that site development is unlikely to result in population-level impacts. However, implementation of Mitigation Measures BIO-1, BIO-3, and BIO-4 would ensure compliance with federal and State law by avoiding the take of burrowing owls or destruction of their nests. Loggerhead shrike and LeConte's thrasher (CDFW SSCs), as well as migratory or other common nesting birds, may rest in ornamental trees, grass, bare ground, burrows/cavities, man-made structures and shrubs on or adjacent to the project site. Construction of the project thus has the potential to directly by destroying a nest or potentially indirectly impact nesting birds protected under the CFGC and MBTA due to construction noise, dust, and other human disturbances that may cause a nest to fail. Implementation of Mitigation Measures BIO-1, and BIO-5 would reduce impacts to these species to a less than significant level, and would also require compliance with federal and State law by avoiding take of nesting birds. The site is a suitable habitat for the Desert kit fox, thus Mitigation Measure BIO-5 requires compliance with CDFW regulations.

As discussed in Section 5, *Cultural Resources,* the Cultural Resources Study reported that no eligible historical or archeological resources are located on the project site. However, the project site has the potential to yield unknown archeological resources. As a result, it is recommended than an archeological monitor be present during future ground disturbances associated with the project to observe grading and identify any historic or prehistoric resources that may be discovered during the construction period. Implementation of Mitigation Measure CR-1 would avoid or reduce the project's potentially significant impacts to any archaeological resources that may be found during ground disturbing activities.

Impacts would be less than significant with the mitigation incorporated; therefore, the project would not substantially degrade the quality of the environment due to impacts associated with biological and cultural resources.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

*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)?*

There are no projects identified in the City of Palmdale Project Postings located within one-mile of the project site (City of Palmdale 2022b). Therefore, as concluded in sections 1 through 20, the project would have no impact, less than significant impact, or less than a significant impact with mitigation incorporated, with respect to all environmental issues considered in the document. Cumulative impacts related to several other resource areas have been addressed in the individual resource sections of this IS-MND, including air quality, GHG emissions, noise, and transportation (see CEQA Guidelines Section 15064(h)(3)).

As discussed in Section 3, *Air Quality*, and Section 8, *Greenhouse Gas Emissions*, the proposed project would generate temporary short-term GHG emissions through travel to and from the worksite and from the operation of construction equipment such as graders, backhoes, and generators. During operation the proposed project would generate GHG emissions associated with area sources (e.g., landscape maintenance), energy and water usage, vehicle trips, and wastewater and solid waste generation. Total emissions (amortized construction emissions plus annual operation emissions) would be 3.3 MT of $CO_2e$ per year per SP (conservatively rounded up to the nearest tenth). These emissions would exceed the 2.0 MT of $CO_2e$ per year per service person goal of the City CAP, and impacts would be potentially significant. Implementation of Mitigation Measure

GHG-1 would be required to reduce impacts to a less than significant level. The impact analyses in these sections use AVAQMD thresholds that already account for cumulative (regional) impacts. Therefore, air quality and GHG emissions associated with operation and construction would be less than significant and would not be cumulatively considerable.

As discussed in Section 13, *Noise,* the proposed project would comply with the construction hours established by the PMC and would remain below the FTA daytime threshold at the nearest noise sensitive receivers in the vicinity of the project site. Therefore, the proposed project would not be anticipated to create a cumulatively considerable noise impact.

As discussed in Section 17, *Transportation*, the project would not conflict with any City policies addressing the circulation network and would not generate substantial VMT. Therefore, the project would not contribute to any cumulatively considerable adverse transportation effects.

This IS-MND determined that, for some of the other resource areas (e.g., agriculture and mineral resources), the proposed project would have no impact in comparison to existing conditions. Therefore, the project would not contribute to cumulative impacts related to these issues. Other issues (e.g., biological resources, cultural resources, geology, hazards, hazardous materials, and tribal cultural resources) are by their nature project specific and impacts at one location do not add to impacts at other locations or create additive impacts. As such, cumulative impacts would be less than significant (not cumulatively considerable).

**LESS THAN SIGNIFICANT IMPACT**

*c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?*

In general, impacts to human beings are associated with air quality, GHG emissions and climate change, hazards and hazardous materials, and noise impacts. As detailed in analyses for air quality, hazards and hazardous materials, and noise, the proposed project would not result, either directly or indirectly, in adverse effects related to these issue areas. In the case of GHG emissions, operations of the proposed project would generate GHG emissions that would exceed the 2.0 MT of $CO_2e$ per year per service person goal of the City CAP, and impacts would be potentially significant. As discussed in Section 8 *Greenhouse Gas Emissions,* implementation of Mitigation Measure GHG-1 would require the project applicant to prepare and implement a GHG Reduction Plan (GHGRP) that demonstrates emissions reductions from project operation by approximately 730 MT of $CO_2e$ per year to 1,198 MT of $CO_2e$ per year for the lifetime of the project, or by an amount determined through further analysis of project GHG emissions at the time of GHGRP preparation in order to reduce impacts to a less than significant level. Compliance with applicable rules and regulations included in this IS-MND would reduce potential impacts on human beings to a less than significant level.

**LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED**

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# Appendix A

Air Quality and Greenhouse Gas Emissions Study

# Tentative Tract Map 83359 Project

## Air Quality and Greenhouse Gas Emissions Study

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# Tentative Tract Map 83359 Project

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## Appendices

Appendix A California Emission Estimator Model (CalEEMod) Outputs

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# 1 Project Description and Impact Summary

## 1.1 Introduction

This report details the analysis of potential air quality and greenhouse gas (GHG) impacts associated with the construction and operation of the proposed Tentative Tract Map (TTM) 83359 Project (herein referred to as "proposed project" or "project") in Palmdale, California. Rincon Consultants, Inc. (Rincon) prepared this study under contract to Maison's Palmdale Boulevard 150, LLC for use by the City of Palmdale in support of environmental documentation being prepared for the project pursuant to the California Environmental Quality Act (CEQA).

## 1.2 Project Summary

### Project Location

The project site is in the City of Palmdale in northern Los Angeles County in southern California. The regional location of the project site is shown in Figure 1. The 20-acre project site (Assessor's Parcel Number 3023-002-184) is located immediately adjacent to, and south of, East Palmdale Boulevard between 55th Street and 50th Street East. The project location is depicted in Figure 2. Surrounding land uses include single family residential uses to the south, east, and west. The vacant parcel of property immediately to the north of the project site across Palmdale Boulevard has an existing land use designation of Business Park and is zoned as Planned Industrial (M-4).

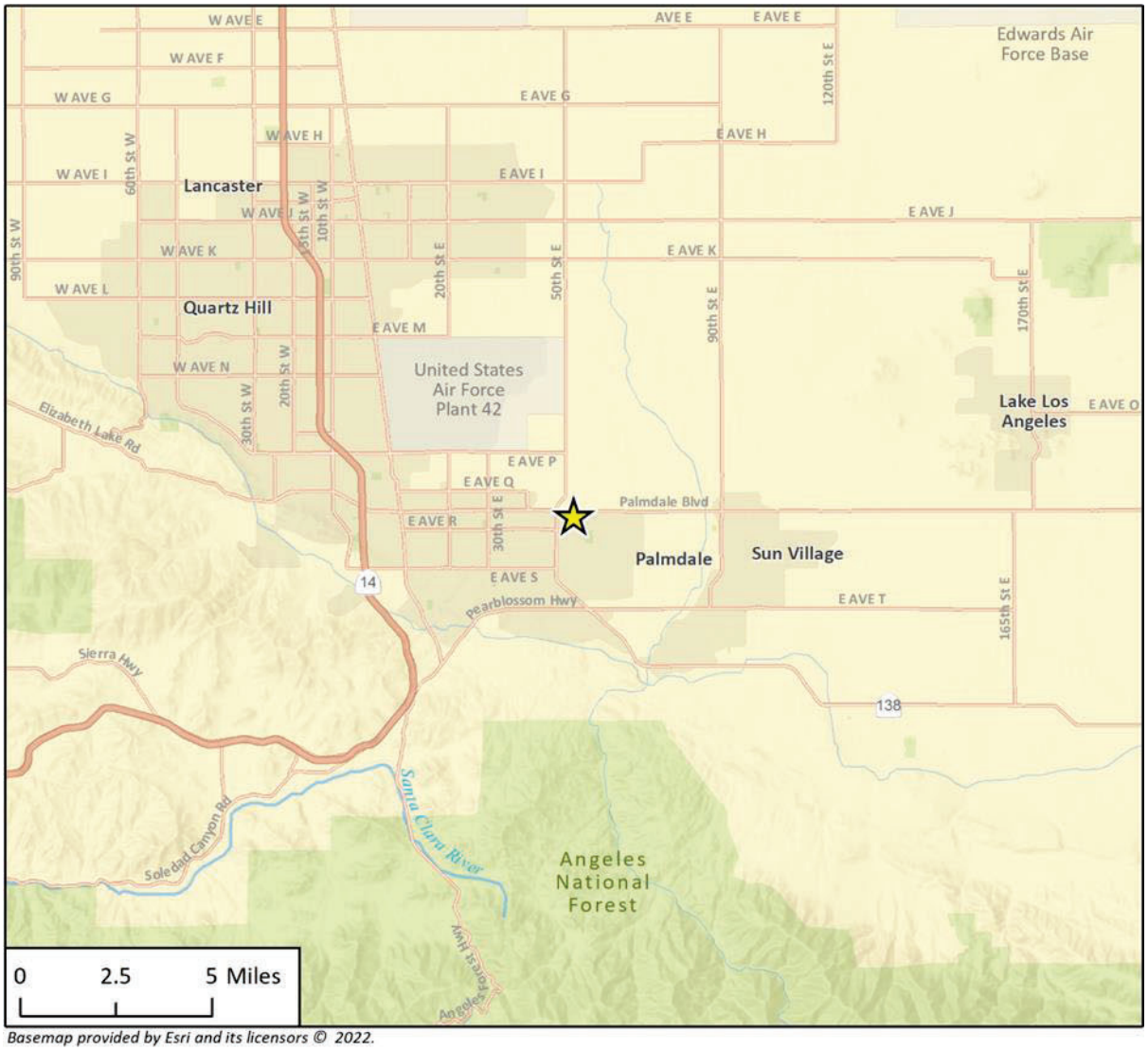
### Project Description

The proposed project would facilitate the development of up to 191 units of single story, single-family homes consisting of three-bedroom housing units, two-bedroom Accessory Dwelling Units and one-bedroom Junior Accessory Dwelling Units that would be offered for rent as a 100% affordable project to those qualifying at 30% to 80% Area Mean Income (AMI) for Los Angeles County. The project would also include a recreation center and community amenities on a total of 66 lots. The community would be all-electric and each residential unit would be constructed with rooftop solar, energy efficient appliances, and installation of all infrastructure improvements as conditioned by the City of Palmdale with approval of Tentative Tract Map (TTM) 83359. Within each lot, primary homes, accessory dwelling units (ADU), and junior ADUs would be linked together by a network of walking paths and trails.

Indoor community amenities include a community building with a tenant lounge, office spaces, and a fitness center. Outdoor amenities include a pool, spa, grill area, pocket community park, children's play area, and additional community open spaces. Additionally, a community trail network is planned to link the neighborhood and provide for additional open spaces and parks for the community to utilize.

Streets that would be constructed within the project site and would link the community to East Palmdale Boulevard to the north as well as the existing residential projects to both the east and west of the project. All public right-of-way would be constructed to the width shown on the TTM and would include road, sidewalks, and curbs and gutters. ADA curb ramps, appropriate street signage, fire hydrants, and streetlights would also be installed for each street both inside and outside of the development.

**Figure 1 Regional Location**



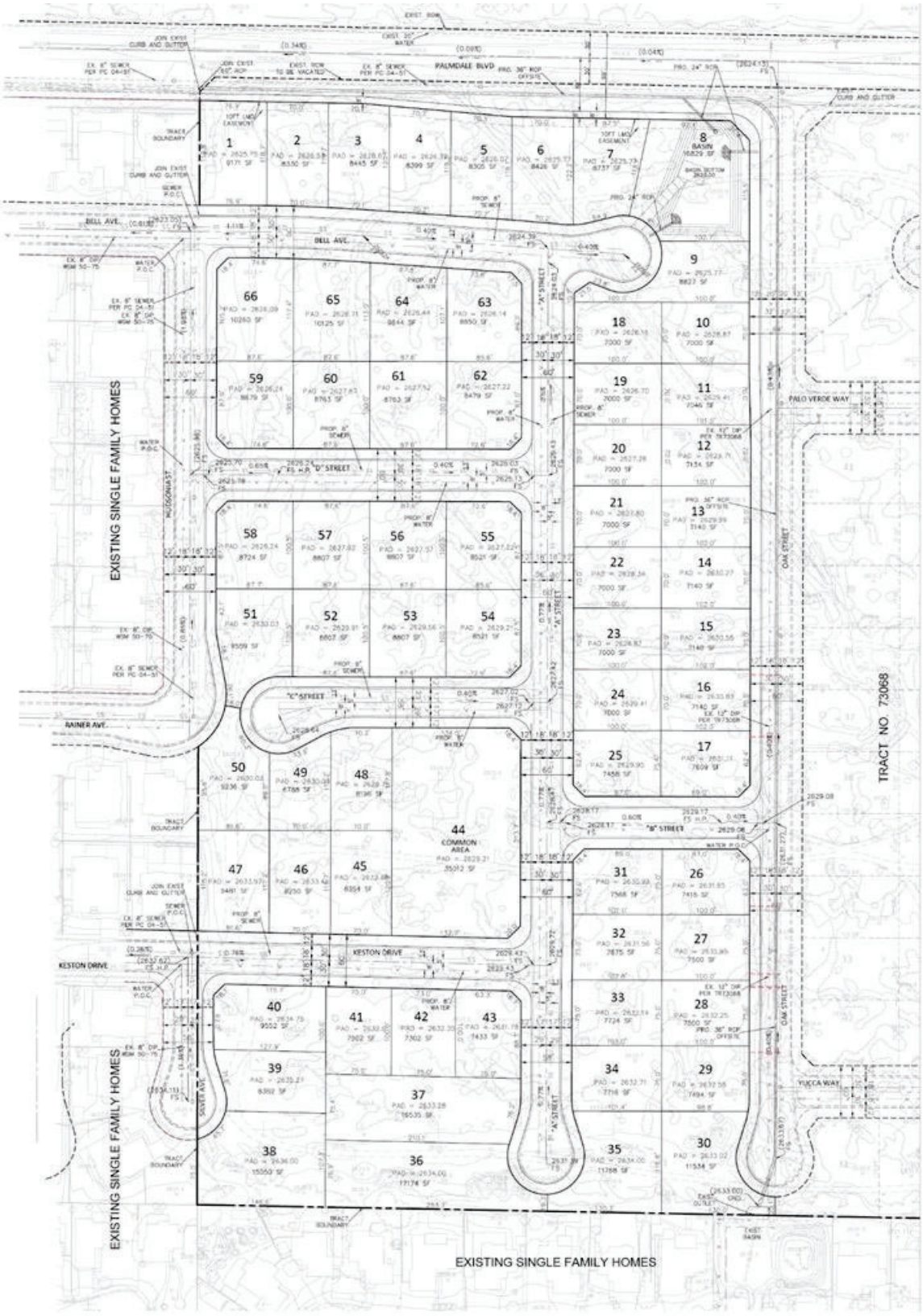

*Basemap provided by Esri and its licensors © 2022.*

Project Location

N

**Figure 2 Project Location**

**Figure 3 Site Plan**



# 2 Background

## 2.1 Air Quality

### Local Climate and Meteorology

The project site is within the Mojave Desert Air Basin (MDAB), an inland region in southern California includes the desert portions of northwestern Los Angeles County, eastern Kern County, northeastern Riverside County, and San Bernardino County. The region is closed off from southern coast of California and central California by mountain ranges with the Sierra Nevada Mountains to the north, the Tehachapi Mountains to the northwest and the San Gabriel and San Bernardino Mountains to the south. The Sonoran Desert borders the eastern and southern portions of the MDAB. The regional climate in the MDAB is dry-host desert climate characterized by little cloud formation, daytime solar heating, and infrequent precipitation. The air quality within the MDAB is primarily influenced by meteorology, topography, and a wide range of emission sources, such as dense population centers, substantial vehicular traffic, and industry. The Antelope Valley Air Quality Management District (AVAQMD) monitors and regulates local air quality in the eastern portion of the MDAB, which includes the cities of Lancaster and Palmdale (AVAQMD 2022a).

### Air Quality Regulations

#### *Federal Air Quality Regulations*

Ambient Air Quality Standards represent the maximum levels of background pollution considered safe, with an adequate margin of safety, to protect the public health and welfare. The federal Clean Air Act (CAA) was enacted in 1970 and amended in 1977 and 1990 [42 United States Code (USC) 7401] for the purposes of protecting and enhancing the quality of the nation's air resources to benefit public health, welfare, and productivity.

The U.S. Environmental Protection Agency (USEPA) has set primary and secondary National Ambient Air Quality Standards (NAAQS) for ozone, carbon monoxide (CO), nitrogen dioxide ($NO_2$), sulfur dioxide ($SO_2$), particulate matter with a diameter of up to ten microns ($PM_{10}$) and up to 2.5 microns ($PM_{2.5}$), and lead (Pb). Primary standards are those levels of air quality deemed necessary, with an adequate margin of safety, to protect public health. Table 1 lists the current federal and state standards for regulated pollutants.

**Table 1 Federal and State Ambient Air Quality Standards**

| Pollutant | Averaging Time | Federal Primary Standards | California Standard |
|---|---|---|---|
| Ozone | 1-Hour | – | 0.09 ppm |
| | 8-Hour | 0.070 ppm | 0.070 ppm |
| Carbon Monoxide | 8-Hour | 9.00 ppm | 9.00 ppm |
| | 1-Hour | 35.00 ppm | 20.00 ppm |
| Nitrogen Dioxide | Annual | 0.053 ppm | 0.030 ppm |
| | 1-Hour | 0.100 ppm | 0.180 ppm |

| Pollutant | Averaging Time | Federal Primary Standards | California Standard |
|---|---|---|---|
| Sulfur Dioxide | Annual | 0.030 ppm | – |
| | 24-Hour | 0.14 ppm | 0.04 ppm |
| | 1-Hour | 0.075 ppm | 0.25 ppm |
| $PM_{10}$ | Annual | – | 20 µg/m$^3$ |
| | 24-Hour | 150 µg/m$^3$ | 50 µg/m$^3$ |
| $PM_{25}$ | Annual | 12 µg/m$^3$ | 12 µg/m$^3$ |
| | 24-Hour | 35 µg/m$^3$ | – |
| Lead | 30-Day Average | – | 1.5 µg/m$^3$ |
| | 3-Month Average | 0.15 µg/m$^3$ | – |

ppm = parts per million; µg/m$^3$ = micrograms per cubic meter

Source: CARB 2016

## *State Air Quality Regulations*

### California Ambient Air Quality Standards

The California Clean Air Act (CCAA) was enacted in 1988 (California Health & Safety Code (H&SC) Section 39000 et seq.). While USEPA is the federal agency designated to administer air quality regulation, the California Air Resources Board (CARB) is the State equivalent in the California Environmental Protection Agency (CalEPA). Under the CCAA the State has developed the California Ambient Air Quality Standards (CAAQS), which are generally more stringent than the NAAQS. Table 1 lists the current State standards for regulated pollutants. In addition to the federal criteria pollutants, the CAAQS also specify standards for visibility-reducing particles, sulfates, hydrogen sulfide, and vinyl chloride. Like the federal CAA, the CCAA classifies specific geographic areas as either "attainment" or "nonattainment" areas for each pollutant, based on the comparison of measured data within the CAAQS.

California is divided geographically into 15 air basins for managing the air resources of the State on a regional basis. Areas within each air basin are considered to share the same air masses and, therefore, are expected to have similar ambient air quality. If an air basin is not in either federal or State attainment for a criteria pollutant, the basin is classified as a nonattainment area for that pollutant. Under the CAA, once a nonattainment area has achieved the air quality standards for a criteria pollutant, it may be re-designated to an attainment area for that pollutant. To be re-designated, the area must meet air quality standards and have a 10-year plan for continuing to meet and maintain air quality standards, as well as satisfy other requirements of the federal CAA. Areas that have been re-designated to attainment are called maintenance areas.

The MDAB is designated a nonattainment area for the federal and State eight-hour ozone standards, State one-hour ozone standards, and for State $PM_{10}$ standards. The AVAQMD portion of the MDAB is designated unclassifiable or in attainment for all other federal and State standards (AVAQMD 2022b).

### Toxic Air Contaminants

A toxic air contaminant (TAC) is an air pollutant that may cause or contribute to an increase in mortality or serious illness or which may pose a present or potential hazard to human health. TACs

may result in long-term health effects such as cancer, birth defects, neurological damage, asthma, or genetic damage, or short-term acute effects such as eye watering, respiratory irritation, runny nose, throat pain, and headaches. TACs are considered either carcinogenic or non-carcinogenic based on the nature of the health effects associated with exposure. For carcinogenic TACs, potential health impacts are evaluated in terms of overall relative risk expressed as excess cancer cases per one million exposed individuals. Non-carcinogenic TACs differ in that there is generally assumed to be a safe level of exposure below which no negative health impact is believed to occur. These levels are determined on a pollutant-by-pollutant basis.

TACs include both organic and inorganic chemical substances. One of the main sources of TACs in California is diesel engines that emit exhaust containing solid material known as diesel particulate matter (DPM); however, TACs may be emitted from a variety of common sources, including gasoline stations, motor vehicles, dry cleaners, industrial operations, painting operations, and research and teaching facilities. TACs commonly associated with gasoline dispensing stations include the organic compounds of benzene, toluene, and xylene. Benzene is a known human carcinogen and can result in short-term acute and long-term chronic health impacts (USEPA n.d.).

In 1983, the California Legislature enacted a program to identify the health effects of TACs and to reduce exposure to these contaminants to protect the public health (Assembly Bill [AB] 1807: Health and Safety Code Sections 39650–39674). The Legislature established a two-step process to address the potential health effects from TACs. The first step is the risk assessment (or identification) phase. The second step is the risk management (or control) phase of the process.

The California Air Toxics Program establishes the process for the identification and control of TACs and includes provisions to make the public aware of significant toxic exposures and for reducing risk. Additionally, the Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, 1987, Connelly Bill) was enacted in 1987 and requires stationary sources to report the types and quantities of certain substances routinely released into the air. The goals of the Air Toxics "Hot Spots" Act are to collect emission data, identify facilities having localized impacts, ascertain health risks, notify nearby residents of significant risks, and reduce those significant risks to acceptable levels. The Children's Environmental Health Protection Act, California Senate Bill 25 (Chapter 731, Escutia, Statutes of 1999), focuses on children's exposure to air pollutants. The act requires CARB to review its air quality standards from a children's health perspective, evaluate the statewide air quality monitoring network, and develop any additional air toxic control measures needed to protect children's health.

### STATE IMPLEMENTATION PLAN

The federal CAA Amendments mandate that states submit and implement a State Implementation Plan (SIP) for areas not meeting air quality standards. The SIP includes pollution control measures to demonstrate how the standards will be met through those measures. The SIP is established by incorporating measures established during the preparation of air quality attainment plans and adopted rules and regulations by each local air district, which are submitted for approval to CARB and the USEPA. The goal of an air quality attainment plan is to reduce pollutant concentrations below the NAAQS through the implementation of air pollutant emissions controls. Local air districts and other agencies, such as the Department of Pesticide Regulation and the Bureau of Automotive Repair, prepare SIP elements and submit them to CARB for review and approval. CARB then forwards SIP revisions to the USEPA for approval and publication in the Federal Register. All of the items included in the California SIP are listed in the Code of Federal Regulations (CFR) at 40 CFR 52.220.

As the regional air quality management district, the AVAQMD is responsible for preparing and implementing the portion of the SIP applicable to the portion of the MDAB within its jurisdiction. The air pollution control district for each county adopts rules, regulations, and programs to attain federal and state air quality standards and appropriates money (including permit fees) to achieve these objectives.

### *Local Air Quality Regulations*

#### AVAQMD Ozone Attainment Plan

Under state law, air districts are required to prepare a plan for air quality improvement for pollutants for which the district is in non-compliance. The AVAQMD adopted the Federal 75 parts per billion (ppb) Ozone Attainment Plan for the Western Mojave Desert Nonattainment Area in March 2017 to reach attainment for federal and State standards. The Ozone Attainment Plan incorporates new scientific data and notable regulatory actions that have occurred since adoption of the 2010 Ozone Attainment Plan including the approval of the new federal 8-hour ozone standard of 0.070 parts per million (ppm) that was finalized in 2015. The Final 2017 Ozone Attainment Plan addresses several State and federal planning requirements and incorporates new scientific information, primarily in the form of updated emissions inventories, ambient measurements, and meteorological air quality models. The Southern California Association of Governments' (SCAG) projections for socio-economic data (e.g., population, housing, employment by industry) and transportation activities from the 2016 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS) are integrated into the 2017 Ozone Attainment Plan. To minimize potential impacts from project emissions, the AVAQMD implements rules and regulations for emissions that may be generated by various uses and activities. Rules and regulations relevant to the proposed project include Rule 403 (Fugitive Dust), Rule 402 (Nuisance), and Rule 1113 (Architectural Coatings).

#### 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy

SCAG is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties. On September 3, 2020, SCAG's Regional Council formally adopted the 2020-2045 RTP/SCS (titled Connect SoCal). The 2020-2045 RTP/SCS builds upon the progress made through implementation of the 2016-2040 RTP/SCS and includes 10 goals focused on promoting economic prosperity, improving mobility, protecting the environment, and supporting healthy/complete communities. The SCS implementation strategies include focusing growth near destinations and mobility options, promoting diverse housing choices, leveraging technology innovations, and supporting implementation of sustainability policies. The SCS establishes a land use vision of center-focused placemaking, concentrating growth in and near Priority Growth Areas, transferring of development rights, urban greening, creating greenbelts and community separators, and implementing regional advance mitigation (SCAG 2020). The RTP/SCS pertains to air quality because the strategies set forth in the plan would reduce air pollutant emissions from mobile sources.

#### City of Palmdale General Plan

The City of Palmdale General Plan (2022) contains goals, policies, and strategies for enhancing community character and quality of life, expanding economic development opportunities, managing growth, addressing impacts of climate change, and improving outcomes for public health

and sustainability. The General Plan includes numerous goals and policies in the Air Quality Element through which air quality would be improved and project impacts reduced, as follows:

- **Goal AQ-2: Minimize particulates less than 10 microns in size ($PM_{10}$) and minimizes activities that generate dust.**
  - **Policy AQ 2-4: Erosion and Dust Control Measures.** Require erosion and dust control measures for new construction, including covering soil with straw mats or use of chemical soil and dust binders during site grading, followed by hydroseeding and watering disturbed construction areas as soon as possible after grading to prevent fugitive dust.
- **Goal AQ-3: Reduction and/or elimination of unnecessary sources of air pollution.**
  - **Policy AQ 3-4: Reduce Reactive Organic Gas.** Reduce reactive organic gas (ROG) and particulate emissions from building materials and construction methods, by promoting the use of nonsolvent-based, high-solid, or water-based coatings, and requiring compliance with all pertinent AVAQMD rules.
- **Goal AQ-4: Reduce air pollution caused by energy consumption.**
  - **Policy AQ 4-2: Energy Conservation.** Encourage energy conservation from all sectors of the community by promoting and/or requiring the use of energy efficient appliances, processes, and equipment, and promoting energy audits and retrofits of existing structures.
  - **Policy AQ 4-3: Recycling.** Require local government, Palmdale citizens, and local businesses and industries to recycle, as mandated by state law, and to otherwise recycle to the maximum extent possible in accordance with the requirements of the Palmdale Municipal Code.
  - **Policy AQ 4-4: Solar Energy.** Require new developments to minimize obstruction of direct sunlight for solar energy systems on adjacent properties.

## Criteria Pollutants

### *Ozone*

Ozone is produced by a photochemical reaction (triggered by sunlight) between nitrogen oxides ($NO_X$) and reactive organic gases[1] (ROG). $NO_X$ are formed during the combustion of fuels, while ROG are formed during combustion and evaporation of organic solvents. Because ozone requires sunlight to form, it usually occurs in substantial concentrations between the months of April and October. Ozone is a pungent, colorless, toxic gas with direct health effects on humans including respiratory and eye irritation and possible changes in lung functions. Groups most sensitive to ozone include children, the elderly, people with respiratory disorders, and people who exercise strenuously outdoors.

[1] Organic compound precursors of ozone are routinely described by several variations of three terms: hydrocarbons (HC), organic gases (OG), and organic compounds (OC). These terms are often modified by adjectives such as total, reactive, or volatile, and result in various acronyms, such as TOG (total organic gases), ROG (reactive organic gases), ROC (reactive organic compounds), and VOC (volatile organic compounds). While most of these differ in some significant way from a chemical perspective, two groups are important from an air quality perspective: non-photochemically reactive in the lower atmosphere, or photochemically reactive in the lower atmosphere (ROG and VOC).

### *Carbon Monoxide*

CO is a local pollutant produced by the incomplete combustion of carbon-containing fuels, such as gasoline, natural gas, oil, coal, and wood. The primary source of CO, a colorless, odorless, poisonous gas, is automobile traffic. Therefore, elevated concentrations are usually found near areas of high traffic volumes. The health effects from CO are related to its affinity for hemoglobin in the blood. At high concentrations, CO reduces the amount of oxygen in the blood, causing heart difficulty in people with chronic diseases, reduced lung capacity, and impaired mental abilities.

### *Sulfur Dioxide*

$SO_2$ is a combustion product, with the primary source being power plants and heavy industries that use coal or oil as fuel. $SO_2$ is also a product of diesel engine combustion. The health effects of $SO_2$ include lung disease and breathing problems for people with asthma. $SO_2$ in the atmosphere contributes to the formation of acid rain.

### *Nitrogen Dioxide*

$NO_2$ is a byproduct of fuel combustion, with the primary sources being motor vehicles and industrial boilers and furnaces. The principal form of $NO_2$ produced by combustion is nitric oxide (NO), but NO reacts rapidly to form $NO_2$, creating the mixture of NO and $NO_2$ commonly called $NO_X$. $NO_2$ is an acute irritant. A relationship between $NO_2$ and chronic pulmonary fibrosis may exist, and an increase in bronchitis in young children at concentrations below 0.3 parts per million (ppm) may occur. $NO_2$ absorbs blue light, gives a reddish-brown cast to the atmosphere, and reduces visibility. It can also contribute to the formation of ozone/smog and acid rain.

### *Particulate Matter*

Suspended atmospheric $PM_{10}$ and $PM_{2.5}$ are comprised of finely divided solids and liquids such as dust, soot, aerosols, fumes, and mists. The characteristics, sources, and potential health effects associated with $PM_{10}$ and $PM_{2.5}$ can be different. Major man-made sources of $PM_{10}$ are agricultural operations, industrial processes, combustion of fossil fuels, construction, demolition operations, and entrainment of road dust into the atmosphere. Natural sources include windblown dust, wildfire smoke, and sea spray salt. The finer $PM_{2.5}$ particulates are generally associated with combustion processes as well as formation in the atmosphere as a secondary pollutant through chemical reactions. $PM_{2.5}$ is more likely to penetrate deeply into the lungs and poses a serious health threat to all groups, but particularly to the elderly, children, and those with respiratory problems. More than half of the $PM_{2.5}$ that is inhaled into the lungs remains there, which can cause permanent lung damage. These materials can damage health by interfering with the body's mechanisms for clearing the respiratory tract or by acting as carriers of an absorbed toxic substance.

## Current Air Quality

CARB operates a network of air quality monitoring stations throughout the MDAB. The purpose of the monitoring stations is to measure ambient concentrations of pollutants and determine whether ambient air quality meets the California and federal standards. The monitoring station located closest to the project site is the Lancaster – 43301 Division Street station located approximately eight miles northwest of the project site. This monitoring station measures ozone, $NO_2$, $PM_{10}$, and $PM_{2.5}$.

Table 2 reports ambient air quality measurements and indicates the number of days that each standard has been exceeded at the Lancaster – 43301 Division Street station. The ambient air quality in the area exceeded the State and Federal 8-hour ozone standard in 2020, 2021, and 2022. The area also exceeded the State 1-hour ozone standard in 2020 and 2022 and the Federal $PM_{10}$ and $PM_{2.5}$ standards in 2020 and 2021. The area did not exceed other air quality standards in 2020, 2021, or 2022.

**Table 2 Ambient Air Quality at the Monitoring Station**

| Pollutant | 2020 | 2021 | 2022 |
|---|---|---|---|
| 8 Hour Ozone (ppm), 8-Hour Average | 0.083 | 0.079 | 0.082 |
| Number of days above State and Federal standards (>0.070 ppm) | 8 | 3 | 33 |
| Ozone (ppm), Worst Hour | 0.099 | 0.086 | 0.098 |
| Number of days above State standard (>0.09 ppm) | 4 | 0 | 3 |
| Number of days above Federal standard (>0.112 ppm) | 0 | 0 | 0 |
| Nitrogen Dioxide (ppm) - Worst Hour (Federal Measurements) | 0.052 | 0.046 | 0.044 |
| Number of days above State standard (>0.18 ppm) | 0 | 0 | 0 |
| Number of days above Federal standard (0.10 ppm) | 0 | 0 | 0 |
| Particulate Matter 10 microns, μg/m$^3$, Worst 24 Hours | 192.3 | 411.2 | 76.2 |
| Number of days above Federal standard (>150 μg/m$^3$) | 1 | 1 | 0 |
| Particulate Matter <2.5 microns, μg/m$^3$, Worst 24 Hours | 74.7 | 35.7 | 15.1 |
| Number of days above Federal standard (>35 μg/m$^3$) | 9 | 1 | 0 |

Source: CARB 2023

### Sensitive Receptors

The term "sensitive receptor" refers to a person in the population who is more susceptible to health effects due to exposure to an air contaminant than the population at large or to a land use that may reasonably be associated with such a person. Examples include residences, schools, playgrounds, childcare centers, churches, athletic facilities, retirement homes, and long-term health care facilities. Sensitive receptors that may be affected by air quality impacts associated with construction and operation of the proposed project include the residents of the single-family developments located adjacent to the western, southern, and eastern project boundaries, and single-family residences located 800 feet to north of the project site. There are no other sensitive receptor groups within 1,000 feet of the project site.

## 2.2 Greenhouse Gases

Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period. The term "climate change" is often used interchangeably with

the term "global warming," but climate change is preferred because it conveys that other changes are happening in addition to rising temperatures. The baseline against which these changes are measured originates in historical records that identify temperature changes that occurred in the past, such as during previous ice ages. The global climate is changing continuously, as evidenced in the geologic record which indicates repeated episodes of substantial warming and cooling. The rate of change has typically been incremental, with warming or cooling trends occurring over the course of thousands of years. The past 10,000 years have been marked by a period of incremental warming, as glaciers have steadily retreated across the globe. However, scientists have observed acceleration in the rate of warming over the past 150 years. The United Nations Intergovernmental Panel on Climate Change (IPCC) expressed that the rise and continued growth of atmospheric $CO_2$ concentrations is unequivocally due to human activities in the IPCC's Sixth Assessment Report (2021). Human influence has warmed the atmosphere, ocean, and land, which has led the climate to warm at an unprecedented rate in the last 2,000 years. It is estimated that between the period of 1850 through 2019, that a total of 2,390 gigatonnes of anthropogenic $CO_2$ was emitted. It is likely that anthropogenic activities have increased the global surface temperature by approximately 1.07 degrees Celsius between the years 2010 through 2019 (IPCC 2021). Furthermore, since the late 1700s, estimated concentrations of $CO_2$, methane, and nitrous oxide in the atmosphere have increased by over 43 percent, 156 percent, and 17 percent, respectively, primarily due to human activity (USEPA 2021a). Emissions resulting from human activities are thereby contributing to an average increase in Earth's temperature.

Gases that absorb and re-emit infrared radiation in the atmosphere are called GHGs. The gases that are widely seen as the principal contributors to human-induced climate change include carbon dioxide ($CO_2$), methane ($CH_4$), nitrous oxides ($N_2O$), fluorinated gases such as hydrofluorocarbons and perfluorocarbons and sulfur hexafluoride ($SF_6$). Water vapor is excluded from the list of GHGs because it is short-lived in the atmosphere, and its atmospheric concentrations are largely determined by natural processes, such as oceanic evaporation.

GHGs are emitted by natural processes and human activities. Of these gases, $CO_2$ and $CH_4$ are emitted in the greatest quantities from human activities. Emissions of $CO_2$ are usually by-products of fossil fuel combustion, and $CH_4$ results from off-gassing associated with agricultural practices and landfills. Human-made GHGs, many of which have greater heat-absorption potential than $CO_2$, include fluorinated gases and $SF_6$ (USEPA 2021a).

Different types of GHGs have varying global warming potentials (GWP). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas ($CO_2$) is used to relate the amount of heat absorbed to the amount of the gas emitted, referred to as "carbon dioxide equivalent" ($CO_2e$), which is the amount of GHG emitted multiplied by its GWP. Carbon dioxide has a 100-year GWP of one. By contrast, methane has a GWP of 30, meaning its global warming effect is 30 times greater than $CO_2$ on a molecule per molecule basis (IPCC 2021).[2]

The accumulation of GHGs in the atmosphere regulates the earth's temperature. Without the natural heat-trapping effect of GHGs, the earth's surface would be about 33 degrees Celsius (°C) cooler (World Meteorological Organization 2021). However, since 1750, estimated concentrations of $CO_2$, $CH_4$, and $N_2O$ in the atmosphere have increased by 47 percent, 156 percent, and 23

[2] The Intergovernmental Panel on Climate Change's (2021) *Sixth Assessment Report* determined that methane has a GWP of 30. However, the 2017 Climate Change Scoping Plan published by the California Air Resources Board uses a GWP of 25 for methane, consistent with the Intergovernmental Panel on Climate Change's (2007) *Fourth Assessment Report*. Therefore, this analysis utilizes a GWP of 25.

percent, respectively, primarily due to human activity (IPCC 2021). GHG emissions from human activities, particularly the consumption of fossil fuels for electricity production and transportation, are believed to have elevated the concentration of these gases in the atmosphere beyond the level of concentrations that occur naturally.

## Greenhouse Gas Emissions Inventory

### *Global*

In 2015, worldwide anthropogenic total 47,000 million MT of $CO_2e$, which is a 43 percent increase from 1990 GHG levels (USEPA 2021b). Specifically, 34,522 million metric tons (MMT) of $CO_2e$ of $CO_2$, 8,241 MMT of $CO_2e$ of $CH_4$, 2,997 MMT of $CO_2e$ of $N_2O$, and 1,001 MMT of $CO_2e$ of fluorinated gases were emitted in 2015. The largest source of GHG emissions were energy 14production and use (includes fuels used by vehicles and buildings), which accounted for 75 percent of the global GHG emissions. Agriculture uses and industrial processes contributed 12 percent and six percent, respectively. Waste sources contributed for three percent and two percent was due to international transportation sources. These sources account for approximately 98 percent because there was a net sink of two percent from land-use change and forestry. (USEPA 2021b).

### *Federal*

United States GHG emissions were 6,347.7 MMT of $CO_2e$ in 2021 or 5,593.5 MMT $CO_2e$ after accounting for sequestration. Emissions increased by 6.8 percent from 2020 to 2021. The increase from 2020 to 2021 was driven by an increase in $CO_2$ emissions from fossil fuel combustion which increased seven percent relative to previous years and is primarily due to the economic rebounding after the COVID-19 Pandemic. In 2020, the energy sector (including transportation) accounted for 81 percent of nationwide GHG emissions while agriculture, industrial and waste accounted for approximately 10 percent, six percent, and three percent respectively (USEPA 2023).

### *California*

Based on a review of the California Air Resource Board (CARB) California Greenhouse Gas Inventory for the years between 2000-2020, California produced 369.2 MMT of $CO_2e$ in 2020, which is 35.3 MMT of $CO_2e$ lower than 2019 levels. The 2019 to 2020 decrease in emissions is likely due in large part to the impacts of the COVID-19 pandemic. The major source of GHG emissions in California is the transportation sector, which comprises 37 percent of the State's total GHG emissions. The industrial sector is the second largest source, comprising 20 percent of the State's GHG emissions while electric power accounts for approximately 16 percent. The magnitude of California's total GHG emissions is due in part to its large size and large population compared to other states. However, a factor that reduces California's per capita fuel use and GHG emissions as compared to other states is its relatively mild climate. In 2016, California achieved its 2020 GHG emission reduction target of reducing emissions to 1990 levels as emissions fell below 431 MMT of $CO_2e$ (CARB 2022). The annual 2030 statewide target emissions level is 260 MMT of $CO_2e$ (CARB 2017).

### *Regional*

The City of Palmdale' Climate Action Plan (CAP) includes GHG inventories for the City (City of Palmdale 2022). In 2017, total community GHG emissions were estimated at 1,042,284 MT $CO_2e$. Out of the total 2017 GHG emissions inventory, on-road transportation (i.e., gasoline and diesel

consumption from motor vehicles on local roads and highways) accounted for 59 percent of the emissions, residential energy consumption accounted for 19 percent, and nonresidential energy consumption accounted for 16 percent. The remaining six percent of GHG emissions was due to solid waste, off-road equipment, water and wastewater, and industrial sources.

## Potential Effects of Climate Change

Globally, climate change has the potential to affect numerous environmental resources through potential impacts related to future air temperatures and precipitation patterns. Scientific modeling predicts that continued GHG emissions at or above current rates would induce more extreme climate changes during the 21st century than were observed during the 20th century. Long-term trends have found that each of the past three decades has been warmer than all the previous decades in the instrumental record, and the decade from 2000 through 2010 has been the warmest. The observed global mean surface temperature for the decade from 2006 to 2015 was approximately 0.87°C (0.75°C to 0.99°C) higher than the global mean surface temperature over the period from 1850 to 1900. Furthermore, several independently analyzed data records of global and regional Land-Surface Air Temperature (LSAT) obtained from station observations agree that LSAT as well as sea surface temperatures have increased. Due to past and current activities, anthropogenic GHG emissions are increasing global mean surface temperature at a rate of 0.2°C per decade. In addition to these findings, there are identifiable signs that global warming is currently taking place, including substantial ice loss in the Arctic over the past two decades (IPCC 2021).

According to *California's Fourth Climate Change Assessment*, statewide temperatures from 1986 to 2016 were approximately 1°F to 2°F higher than those recorded from 1901 to 1960. Potential impacts of climate change in California may include loss in water supply from snowpack, sea level rise, more extreme heat days per year, more large forest fires, and more drought years (State of California 2018). Below is a summary of some of the potential effects that could be experienced in California as a result of climate change.

### *Air Quality*

Higher temperatures, which are conducive to air pollution formation, could worsen air quality in California. Climate change may increase the concentration of ground-level ozone, but the magnitude of the effect, and therefore its indirect effects, are uncertain. As temperatures have increased in recent years, the area burned by wildfires throughout the state has increased, and wildfires have been occurring at higher elevations in the Sierra Nevada Mountains (State of California 2018). If higher temperatures continue to be accompanied by an increase in the incidence and extent of large wildfires, air quality would worsen. However, if higher temperatures are accompanied by wetter, rather than drier conditions, the rains would tend to temporarily clear the air of particulate pollution and reduce the incidence of large wildfires, thereby improving the pollution associated with wildfires. Additionally, severe heat accompanied by drier conditions and poor air quality could increase the number of heat-related deaths, illnesses, and asthma attacks throughout the state (California Natural Resources Agency 2009).

### *Water Supply*

Analysis of paleoclimatic data (such as tree-ring reconstructions of stream flow and precipitation) indicates a history of naturally and widely varying hydrologic conditions in California and the west, including a pattern of recurring and extended droughts. Uncertainty remains with respect to the

overall impact of climate change on future precipitation trends and water supplies in California. This uncertainty regarding future precipitation trends complicates the analysis of future water demand, especially where the relationship between climate change and its potential effect on water demand is not well understood. However, the average early spring snowpack in the western United States, including the Sierra Nevada Mountains, decreased by about 10 percent during the last century. During the same period, sea level rose over 5.9 inches along the central and southern California coast (State of California 2018). The Sierra snowpack provides most of California's water supply by accumulating snow during the state's wet winters and releasing it slowly during the state's dry springs and summers (April and July). The snowmelt currently provides an annual average of 15 million acre-feet of water each year, and it is predicted that the snowpack will be reduced by 25 to 40 percent compared to its historic average by 2050 (California Department of Water Resources 2013). Climate change will also result in less snowfall at lower elevations and reduce the total snowpack, resulting in less available water (California Department of Water Resources 2013). The State of California projects that average spring snowpack in the Sierra Nevada and other mountain catchments in central and northern California will decline by approximately 66 percent from its historical average by 2050 (State of California 2018).

### *Hydrology and Sea Level Rise*

Climate change has the potential to induce substantial sea level rise in the coming century (State of California 2018). The rising sea level increases the likelihood and risk of flooding. The rate of increase of global mean sea levels over the 2001-2010 decade, as observed by satellites, ocean buoys and land gauges, was approximately 3.2 mm per year, which is double the observed 20th century trend of 1.6 mm per year (World Meteorological Organization [WMO] 2013). As a result, global mean sea levels averaged over the last decade were about 8 inches higher than those of 1880 (WMO 2013). Sea levels are rising faster now than in the previous two millennia and the rise is expected to accelerate, even with robust GHG emission control measures. The most recent IPCC report predicts a mean sea–level rise of 10 to 37 inches by 2100 (IPCC 2021). A rise in sea levels could completely erode 31 to 67 percent of southern California beaches, result in flooding of approximately 370 miles of coastal highways during 100-year storm events, jeopardize California's water supply due to saltwater intrusion, and induce groundwater flooding and/or exposure of buried infrastructure (State of California 2018). In addition, increased $CO_2$ emissions can cause oceans to acidify due to the carbonic acid it forms. Increased storm intensity and frequency could affect the ability of flood-control facilities, including levees, to handle storm events.

### *Agriculture*

California has a $50 billion annual agricultural industry that produces over a third of the country's vegetables and two-thirds of the country's fruits and nuts (California Department of Food and Agriculture 2020). Higher $CO_2$ levels can stimulate plant production and increase plant water-use efficiency. However, if temperatures rise and drier conditions prevail, certain regions of agricultural production could experience water shortages of up to 16 percent; water demand could increase as hotter conditions lead to the loss of soil moisture; crop-yield could be threatened by water-induced stress and extreme heat waves; and plants may be susceptible to new and changing pest and disease outbreaks (State of California 2018). In addition, temperature increases could change the time of year certain crops, such as wine grapes, bloom or ripen, and thereby affect their quality (California Climate Change Center 2006).

### *Ecosystems and Wildlife*

Climate change, and the potential resulting changes in weather patterns, could have ecological effects on a global and local scale. Increasing concentrations of GHGs are likely to accelerate the rate of climate change. Scientists project that the annual average maximum daily temperatures in California could rise by 4.4 to 5.8°F in the next 50 years and by 5.6 to 8.8°F in the next century (State of California 2018). Soil moisture is likely to decline in many regions, and intense rainstorms are likely to become more frequent. Rising temperatures could have four major impacts on plants and animals related to (1) timing of ecological events; (2) geographic distribution and range; (3) species' composition and the incidence of nonnative species within communities; and (4) ecosystem processes, such as carbon cycling and storage (Parmesan 2006; State of California 2018). Increases in wildfire would further remove sensitive habitat; increased severity in droughts would potentially starve plants and animals of water; and sea level rise will affect sensitive coastal ecosystems.

## Greenhouse Gas Regulations

### *Federal Regulations*

The U.S. Supreme Court in *Massachusetts et al. v. Environmental Protection Agency et al*. ([2007] 549 U.S. 05-1120) held that the USEPA has the authority to regulate motor-vehicle GHG emissions under the federal Clean Air Act. The USEPA issued a Final Rule for mandatory reporting of GHG emissions in October 2009. This Final Rule applies to fossil fuel suppliers, industrial gas suppliers, direct GHG emitters, and manufacturers of heavy-duty and off-road vehicles and vehicle engines and requires annual reporting of emissions. In 2012, the USEPA issued a Final Rule that establishes the GHG permitting thresholds that determine when CAA permits under the New Source Review Prevention of Significant Deterioration (PSD) and Title V Operating Permit programs are required for new and existing industrial facilities.

In 2014, the U.S. Supreme Court in *Utility Air Regulatory Group v. EPA* (134 S. Ct. 2427 [2014]) held that USEPA may not treat GHGs as an air pollutant for purposes of determining whether a source is a major source required to obtain a PSD or Title V permit. The Court also held that PSD permits that are otherwise required (based on emissions of other pollutants) may continue to require limitations on GHG emissions based on the application of Best Available Control Technology (BACT).

### *State Regulations*

#### ASSEMBLY BILL 1493 - CALIFORNIA ADVANCED CLEAN CARS PROGRAM

AB 1493 (2002), California's Advanced Clean Cars program (referred to as "Pavley"), requires CARB to develop and adopt regulations to achieve "the maximum feasible and cost-effective reduction of GHG emissions from motor vehicles." On June 30, 2009, USEPA granted the waiver of CAA preemption to California for its GHG emission standards for motor vehicles beginning with the 2009 model year. Pavley I regulates model years from 2009 to 2016 and Pavley II, which is now referred to as "LEV (Low Emission Vehicle) III GHG" regulates model years from 2017 to 2025. The Advanced Clean Cars program coordinates the goals of the Low Emissions Vehicles (LEV), Zero Emissions Vehicles (ZEV), and Clean Fuels Outlet programs, and should provide major reductions in GHG emissions. By 2025, when the rules will be fully implemented, new automobiles will emit

34 percent fewer GHGs and 75 percent fewer smog-forming emissions from their model year 2016 levels (CARB 2011).

### CALIFORNIA GLOBAL WARMING SOLUTIONS ACT OF 2006 (ASSEMBLY BILL 32, AND SENATE BILL 32)

The "California Global Warming Solutions Act of 2006," (AB 32), outlines California's major legislative initiative for reducing GHG emissions. AB 32 codifies the statewide goal of reducing GHG emissions to 1990 levels by 2020 and requires CARB to prepare a Scoping Plan that outlines the main state strategies for reducing GHG emissions to meet the 2020 deadline. In addition, AB 32 requires CARB to adopt regulations to require reporting and verification of statewide GHG emissions. Based on this guidance, CARB approved a 1990 statewide GHG level and 2020 target of 431 MMT CO2e, which was achieved in 2016. CARB approved the Scoping Plan on December 11, 2008, which included GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among others (CARB 2008). Many of the GHG reduction measures included in the Scoping Plan (e.g., Low Carbon Fuel Standard, Advanced Clean Car standards, and Cap-and-Trade) have been adopted since the Scoping Plan's approval.

The CARB approved the 2013 Scoping Plan update in May 2014 (CARB 2014). The update defined the CARB's climate change priorities for the next five years, set the groundwork to reach post-2020 statewide goals, and highlighted California's progress toward meeting the "near-term" 2020 GHG emission reduction goals defined in the original Scoping Plan. It also evaluated how to align the state's longer term GHG reduction strategies with other state policy priorities, including those for water, waste, natural resources, clean energy, transportation, and land use (CARB 2014).

On September 8, 2016, the governor signed Senate Bill (SB) 32 into law, extending the California Global Warming Solutions Act of 2006 by requiring the state to further reduce GHG emissions to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, the CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, and implementation of recently adopted policies and legislation, such as SB 1383 and SB 100 (discussed later). The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally appropriate quantitative thresholds consistent with statewide per capita goals of six MT CO2e by 2030 and two MT CO2e by 2050 (CARB 2017). As stated in the 2017 Scoping Plan, these goals may be appropriate for plan-level analyses (city, county, sub-regional, or regional level), but not for specific individual projects because they include all emissions sectors in the state (CARB 2017).

### ASSEMBLY BILL 1279

AB 1279, the California Climate Crisis Act, was passed on September 16, 2022, and declares the State would achieve net zero GHG emissions as soon as possible, but no later than 2045, and to achieve and maintain net negative GHG emissions thereafter. In addition, the bill states that the State would reduce GHG emissions by 85 percent below 1990 levels no later than 2045.

In response to the passage of AB 1279 and the identification of the 2045 GHG reduction target, CARB published the Final 2022 Climate Change Scoping Plan in November 2022 (CARB 2022b). The 2022 Update builds upon the framework established by the 2008 Climate Change Scoping Plan and previous updates while identifying new, technologically feasible, cost-effective, and equity-focused

path to achieve California's climate target. The 2022 Update includes policies to achieve a significant reduction in fossil fuel combustion, further reductions in short-lived climate pollutants, support for sustainable development, increased action on natural and working lands (NWL) to reduce emissions and sequester carbon, and the capture and storage of carbon.

The 2022 Update assesses the progress California is making toward reducing its GHG emissions by at least 40 percent below 1990 levels by 2030, as called for in SB 32 and laid out in the 2017 Scoping Plan, addresses recent legislation and direction from Governor Gavin Newsom, extends and expands upon these earlier plans, and implements a target of reducing anthropogenic emissions to 85 percent below 1990 levels by 2045, as well as taking an additional step of adding carbon neutrality as a science-based guide for California's climate work. As stated in the 2022 Update, "The plan outlines how carbon neutrality can be achieved by taking bold steps to reduce GHGs to meet the anthropogenic emissions target and by expanding actions to capture and store carbon through the state's NWL and using a variety of mechanical approaches" (CARB 2022b). Specifically, the 2022 Update:

- Identifies a path to keep California on track to meet its SB 32 GHG reduction target of at least 40 percent below 1990 emissions by 2030.
- Identifies a technologically feasible, cost-effective path to achieve carbon neutrality by 2045 and a reduction in anthropogenic emissions by 85 percent below 1990 levels.
- Focuses on strategies for reducing California's dependency on petroleum to provide consumers with clean energy options that address climate change, improve air quality, and support economic growth and clean sector jobs.
- Integrates equity and protecting California's most impacted communities as driving principles throughout the document.
- Incorporates the contribution of NWL to the State's GHG emissions, as well as their role in achieving carbon neutrality.
- Relies on the most up-to-date science, including the need to deploy all viable tools to address the existential threat that climate change presents, including carbon capture and sequestration, as well as direct air capture.
- Evaluates the substantial health and economic benefits of taking action.
- Identifies key implementation actions to ensure success.

In addition to reducing emissions from transportation, energy, and industrial sectors, the 2022 Update includes emissions and carbon sequestration in NWL and explores how NWL contribute to long-term climate goals. Under the Scoping Plan Scenario, California's 2030 emissions are anticipated to be 48 percent below 1990 levels, representing an acceleration of the current SB 32 target. Cap-and-Trade regulation continues to play a large factor in the reduction of near-term emissions for meeting the accelerated 2030 reduction target. Every sector of the economy will need to begin to transition in this decade to meet our GHG emissions reduction goals and achieve carbon neutrality no later than 2045. The 2022 Update approaches decarbonization from two perspectives, managing a phasedown of existing energy sources and technologies, as well as increasing, developing, and deploying alternative clean energy sources and technology.

### SENATE BILL 97 - CEQA: GREENHOUSE GAS EMISSIONS

SB 97, signed in August 2007, acknowledges that climate change is an environmental issue that requires analysis in CEQA documents. In March 2010, the California Natural Resources Agency

(Resources Agency) adopted amendments to the CEQA Guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted guidelines give lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHG and climate change impacts.

### SENATE BILL 375 - 2008 SUSTAINABLE COMMUNITIES AND CLIMATE PROTECTION ACT

SB 375, signed in August 2008, enhances the state's ability to reach AB 32 goals by directing CARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles by 2020 and 2035. In addition, SB 375 directs each of the state's 18 major Metropolitan Planning Organizations (MPOs) to prepare a "sustainable communities strategy" (SCS) that contains a growth strategy to meet these emission targets for inclusion in the Regional Transportation Plan (RTP). On March 22, 2018, CARB adopted updated regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035. SCAG was assigned targets of an 8 percent reduction in GHGs from transportation sources by 2020 and a 19 percent reduction in GHGs from transportation sources by 2035. In the SCAG region, SB 375 also provides the option for the coordinated development of sub regional plans by the sub regional councils of governments and the county transportation commissions to meet SB 375 requirements.

### SENATE BILL 1383 - SHORT-LIVED CLIMATE POLLUTANTS

Adopted in September 2016, SB 1383 requires CARB to approve and begin implementing a comprehensive strategy to reduce emissions of short-lived climate pollutants. The bill requires the California Department of Resources Recycling and Recovery (CalRecycle), in consultation with CARB, to adopt regulations that achieve:

- 50-percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020; and
- 75-percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2025.

The bill also mandates various state and local agencies develop further strategies to reduce emissions generated by specific industries such as agriculture. The stated goal is to achieve the following reduction targets by 2030:

- Methane – 40 percent below 2013 levels
- Hydrofluorocarbons – 40 percent below 2013 levels
- Anthropogenic black carbon – 50 percent below 2013 levels

### SENATE BILL 100 - CALIFORNIA RENEWABLES PORTFOLIO STANDARD PROGRAM

Adopted on September 10, 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the state's Renewables Portfolio Standard Program, which was last updated by SB 350 in 2015. SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

### EXECUTIVE ORDER B-55-18 TO ACHIEVE CARBON NEUTRALITY

On September 10, 2018, Governor Brown issued Executive Order B-55-18, which established a new statewide goal of achieving carbon neutrality by 2045 and maintaining net negative emissions

thereafter. This goal is in addition to the existing statewide GHG reduction targets established by SB 375, SB 32, SB 1383, and SB 100.

#### ASSEMBLY BILL 341 - CALIFORNIA INTEGRATED WASTE MANAGEMENT ACT

The California Integrated Waste Management Act of 1989, as modified by AB 341, requires each jurisdiction's source reduction and recycling element to include an implementation schedule that shows: (1) diversion of 25 percent of all solid waste by January 1, 1995, through source reduction, recycling, and composting activities; (2) diversion of 50 percent of all solid waste on and after January 1, 2000; and (3) diversion of 75 percent of all solid waste by 2020, and annually thereafter. CalRecycle is required to develop strategies to implement AB 341, including source reduction.

#### CLEAN ENERGY, JOBS, AND AFFORDABILITY ACT OF 2022 (SENATE BILL 1020)

Adopted on September 16, 2022, SB 1020 creates clean electricity targets for eligible renewable energy resources and zero-carbon resources to supply 90 percent of retail sale electricity by 2035, 95 percent by 2040, 100 percent by 2045, and 100 percent of electricity procured to serve all state agencies by 2035. This bill shall not increase carbon emissions elsewhere in the western grid and shall not allow resource shuffling.

### *California Building Standards Code*

The California Code of Regulations (CCR) Title 24 is referred to as the California Building Standards Code. It consists of a compilation of several distinct standards and codes related to building construction including plumbing, electrical, interior acoustics, energy efficiency, and handicap accessibility for persons with physical and sensory disabilities. The current iteration is the 2022 Title 24 standards. The California Building Standards Code's energy-efficiency and green building standards are outlined below.

#### PART 6 – BUILDING ENERGY EFFICIENCY STANDARDS/ENERGY CODE

CCR Title 24, Part 6 is the Building Energy Efficiency Standards or California Energy Code. This code, originally enacted in 1978, establishes energy-efficiency standards for residential and non-residential buildings in order to reduce California's energy demand. New construction and major renovations must demonstrate their compliance with the current Energy Code through submittal and approval of a Title 24 Compliance Report to the local building permit review authority and the California Energy Commission (CEC). The 2022 Title 24 standards are the applicable building energy efficiency standards for the proposed project because they became effective on January 1, 2023.

#### PART 11 – CALIFORNIA GREEN BUILDING STANDARDS

The California Green Building Standards Code, referred to as CALGreen, was added to Title 24 as Part 11, first in 2009 as a voluntary code, which then became mandatory effective January 1, 2011 (as part of the 2010 California Building Standards Code). The 2022 CALGreen includes mandatory minimum environmental performance standards for all ground-up new construction of residential and non-residential structures. It also includes voluntary tiers with stricter environmental performance standards for these same categories of residential and non-residential buildings. Local jurisdictions must enforce the minimum mandatory CALGreen standards and may adopt additional amendments for stricter requirements.

*Regional and Local Regulations*

### 2020 – 2045 SCAG Regional Transportation Plan

On September 3, 2020, the SCAG's Regional Council formally adopted the 2020-2045 RTP/SCS entitled Connect SoCal. The 2020-2045 RTP/SCS builds upon the progress made through implementation of the 2016-2040 RTP/SCS and includes 10 goals focused on promoting economic prosperity, improving mobility, protecting the environment, and supporting healthy/complete communities. The SCS implementation strategies include focusing growth near destinations and mobility options, promoting diverse housing choices, leveraging technology innovations, and supporting implementation of sustainability policies. The SCS establishes a land use vision of center- focused placemaking, concentrating growth in and near Priority Growth Areas, transferring of development rights, urban greening, creating greenbelts and community separators, and implementing regional advance mitigation (SCAG 2020).

### City of Palmdale General Plan 2045

The City of Palmdale has established a series of goals and policies in the 2045 City of Palmdale General Plan to reduce GHG emissions and increase sustainability. The Sustainability, Climate, and Resilience chapter of the Plan serves as the Climate Action Plan (CAP) for the City of Palmdale. The City of Palmdale developed the CAP to reduce emissions and make Palmdale a more sustainable, healthier, and resilient community. Pursuant with CEQA Guidelines Section 15183.5, the CAP would meet the requirements of a qualified CAP and future residential projects developed under the Plan would be able to tier from the CAP for analysis purposes (City of Palmdale 2022). The CAP includes the following goals and policies that would be applicable to the project:

**Clean Energy**

- **Goal SCR-2: Utilize a fossil fuel free energy system (SB 100).**
  - **SCR-2.1 Carbon Free Energy.** Direct EPIC to provide 75% carbon-free or renewable electricity to residents and businesses by 2030, achieving 100% carbon-free electricity by 2045.
  - **SCR-2.2 Community Solar.** Explore the development of community solar projects and microgrids.

**Buildings**

- **Goal SCR-3: Green and decarbonized buildings for new construction and major renovations.**
  - **SCR-3.1 Energy Efficient New Construction.** Integrate CALGreen Tier 1 and Tier 2 green building and energy efficiency standards into new construction and major remodels.
  - **SCR-3.2 All-Electric Reach Code.** Consider adopting a local reach code to encourage new buildings to be all-electric.
  - **SCR-3.3 Solar + Storage.** Require installation of photovoltaic panels and battery storage on all residential new construction and nonresidential new construction over 5,000 sq. ft.

**Transportation**

- **Goal SCR-4: Reduced greenhouse gas emissions from transportation (SB 379, EO N-79-20).**

- **SCR-4.1 Bike Facilities.** Promote bicycle use with new private development projects through requirements for bicycle parking, lockers and showers, bike share facilities, and when feasible, connections to City bike lanes.
- **SCR-4.2 Public Transit.** Expand the public transit system, increase frequency of service, and provide shade at transit stops.
- **SCR-4.4 EV Reach Code.** Adopt EV requirements beyond CALGreen in both number of chargers and charger capacity.
- **SCR-4.7 Pedestrian and Cyclist Safety.** Improve bicycle and pedestrian modes of travel by improving pedestrian and cyclist safety. Example techniques include increasing the number of sidewalks, pending connected and protected bike lanes, and redesigning high incidence intersections.

**Solid Waste**

- **Goal SCR-5: Increased resource capture and reduced waste sent to landfills (SB 1383).**
  - **SCR-5.1 Zero Waste Plan.** Create a zero-waste plan that institutes cost-effective diversion programs for municipal operations and the community.
  - **SCR-5.2 Organic Waste Diversion.** Establish programs to comply with State-established requirements for organics and food waste diversion.

**Water and Wastewater**

- **Goal SCR-6: Safe and secure water supply.**
  - **SCR-6.1 Recycled Water.** Increase availability of local recycled water.
  - **SCR-6.4 Rainwater Capture.** Encourage rainwater capture and use of cisterns for outdoor watering purposes.

# 3 Impact Analysis

## 3.1 Methodology

Criteria pollutant and GHG emissions for project construction and operation were calculated using the California Emissions Estimator Model (CalEEMod), Version 2022.1. 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 potential criteria pollutant and GHG emissions associated with both construction and operations from a variety of land use projects. The model was developed for the California Air Pollution Control Officers Association (CAPCOA) in collaboration with the California air districts. CalEEMod allows for the use of default data (e.g., emission factors, trip lengths, meteorology, source inventory) provided by the various California air districts to account for local requirements and conditions, and/or user-defined inputs. The calculation methodology and input data used in CalEEMod can be found in the CalEEMod User's Guide (CAPCOA 2022). The input data and subsequent construction and operation emission estimates for the proposed project are discussed below. CalEEMod output files for the project are included in Appendix A to this report.

### Construction Emissions

Project construction would primarily generate temporary criteria pollutant and GHG emissions from construction equipment operation on-site, construction worker vehicle trips to and from the site, and from import of materials to the site. Construction input data for CalEEMod include, but are not limited to: (1) the anticipated start and finish dates of construction activity; (2) inventories of construction equipment to be used; and (3) areas to be excavated and graded. The analysis assessed maximum daily emissions from individual construction activities, including site preparation, grading, building construction, paving, and architectural coating. Construction would require heavy equipment during demolition, site preparation, grading, building construction, and paving. Construction equipment estimates are based on surveys of construction projects within California conducted by members of CAPCOA. Note that there would be no demolition phase since the existing site is vacant.

Construction emissions were modeled in CalEEMod to occur over 18 months, starting in January 2024 with completion anticipated in July 2025. Although construction would likely begin in summer of 2024, this analysis conservatively assumes an earlier start date, as emissions factors for construction equipment are lower in later years. Construction emissions associated with development of the proposed project were quantified using the types and quantities of equipment for each construction phase as provided by the applicant. CalEEMod also estimates off-site emissions from worker, vendor, and hauling truck trips. The number of worker and vendor trips are based on CalEEMod defaults. Cut material would be used for construction of the proposed drainage basin; therefore, the project would not require material export or import.

The quantity, duration, and the intensity of construction activity influences the amount of construction emissions and their related pollutant concentrations that occur at any one time. The emission forecasts modeled for this report reflect conservative assumptions where a relatively large amount of construction is occurring in a relatively intensive manner. If construction is delayed or occurs over a longer period, emissions could be reduced because of (1) a more modern and

cleaner-burning construction equipment fleet mix than assumed in the CalEEMod, and/or (2) a less intensive buildout schedule (i.e., fewer daily emissions occurring over a longer time interval).

Consistent with the industry standard, total construction GHG emissions resulting from a project were amortized over 30 years and added to operational GHG emissions to account for their contribution to GHG emissions over the lifetime of the project.

## Operational Emissions

In CalEEMod, operational sources of criteria pollutant emissions include area, energy, and mobile sources; GHG emissions include water and solid waste sources in addition to area, energy, and mobile sources. The project's single-family, ADU, and junior ADU uses were combined and attributed to the "Single Family Housing" land use subtype, while the proposed community amenities were modeled as a 2,630-square foot "Racquet Club." Uncovered parking spaces and internal roadways were modeled as "Parking Lot." The modeling analyzed 191 total dwelling units.

### *Energy Sources*

Emissions from energy use typically include electricity and natural gas use. However, the proposed project would not include natural gas connections, and such emissions are therefore excluded from this analysis. Electricity emissions only apply to GHG emissions (as the energy is generated off-site and therefore may not be relevant for local and regional air quality conditions) and are calculated by multiplying the energy use times the carbon intensity of the utility district per kilowatt hour (CAPCOA 2022). The default electricity consumption values in CalEEMod include the CEC-sponsored California Commercial End Use Survey and Residential Appliance Saturation Survey studies.

Electricity emissions are calculated by multiplying the energy use times the carbon intensity of the utility district per kilowatt hour (CAPCOA 2022). The project would be served by Southern California Edison (SCE). Therefore, SCE's specific energy intensity factors (i.e., the amount of $CO_2$, $CH_4$, and $N_2O$ per kilowatt-hour) are used in the calculations of GHG emissions.

### *Area Sources*

Emissions associated with area sources, including consumer products, landscape maintenance, and architectural coating were calculated in CalEEMod and standard emission rates were utilized from CARB, USEPA, and emission factor values provided by the local air district (CAPCOA 2022).

### *Waste Sources*

Operational emissions from waste generation were also calculated in CalEEMod and are based on the IPCC's methods for quantifying GHG emissions from solid waste using the degradable organic content of waste (CAPCOA 2022). Waste disposal rates by land use and overall composition of municipal solid waste in California was primarily based on data provided by the California Department of Resources Recycling and Recovery (CalRecycle).

### *Water and Wastewater Sources*

Operational emissions from water and wastewater usage calculated in CalEEMod were based on the default electricity intensity from the CEC's 2006 Refining Estimates of Water-Related Energy Use in California using the average values for northern and southern California.

### *Mobile Sources*

Mobile emissions are estimated by multiplying the project trip rate, average trip length, and the vehicle emission factors. The traffic consultant, General Technologies and Solutions (GTS), provided project-specific trip generations based on the Institute of Transportation Engineers (ITE) rates for "Single-Family Detached Housing" and "Multifamily Housing (Low-Rise)". The trip rate was estimated to be 1,460 total trips. The project-specific trip generation rates provided are included in the CalEEMod outputs in Appendix A.

## 3.2 Significance Thresholds

### Air Quality

To determine whether a project would result in a significant impact to air quality, Appendix G of the CEQA Guidelines requires consideration of whether a project would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- 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;
- Expose sensitive receptors to substantial pollutant concentrations; or
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people.

The AVAQMD has adopted numerical significant emissions thresholds to determine whether an air pollution source could contribute individually or cumulatively to the worsening local or regional air quality. These thresholds, which would apply to temporary construction and long-term operational emission, are shown in Table 3.

**Table 3 AVAQMD Significance Thresholds**

| Pollutant | Annual Threshold (tons/year) | Daily Threshold (lbs/day) |
|---|---|---|
| CO | 100 | 548 |
| $NO_X$ | 25 | 137 |
| VOC | 25 | 137 |
| $SO_X$ | 25 | 137 |
| $PM_{10}$ | 15 | 82 |
| $PM_{2.5}$ | 12 | 65 |

Source: AVAQMD 2016

AVAQMD guidance states that a project would have a significant impact related to TACs if the project would expose sensitive receptors to pollutant concentrations resulting in a cancer risk greater than or equal to 10 in one million and/or a non-cancerous Hazard Index (HI) greater than or equal to one.

### Greenhouse Gas Emissions

Based on Appendix G of the CEQA Guidelines, impacts related to GHG emissions from the project would be significant if the project would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions.

The majority of individual projects do not generate sufficient GHG emissions to directly influence climate change. However, physical changes caused by a project can contribute incrementally to cumulative effects that are significant, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. "Cumulatively considerable" means that the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines, Section 15064[h][1]).

Section 15064.4 of the CEQA Guidelines recommends that lead agencies quantify GHG emissions of projects and consider several other factors that may be used in the determination of significance of GHG emissions from a project, including the extent to which the project may increase or reduce GHG emissions; whether a project exceeds an applicable significance threshold; and the extent to which the project complies with regulations or requirements adopted to implement a plan for the reduction or mitigation of GHG emissions. The City of Palmdale has prepared a qualified CAP pursuant to CEQA Guidelines Section 15183.5(b). The CAP serves as a "qualified plan for the reduction of greenhouse gases" and provides a mechanism for tiering and streamlining of GHG emissions analysis for projects that are consistent with such a plan.

As part of the CAP, the City of Palmdale has established GHG reduction targets consistent with the statewide goal of reducing GHG emissions to 40 percent below 1990 levels by 2030 (478,418 MT $CO_2e$). Additionally, the CAP provides additional reductions beyond what is needed to achieve the 2017 Scoping Plan 2030 goal and advances the City's progress toward the goal of carbon neutrality by 2045 contained in the 2022 Scoping Plan. To achieve these reductions, the City's CAP has established per-service population emissions targets that are used for this analysis, which are: 2 MT $CO_2e$ per service population by 2030; 1.3 MT $CO_2e$ per service population by 2035; and 1.2 MT $CO_2e$ per service population by 2045. Per-service population emissions are calculated by dividing total community emissions by the residents plus employees.

## 3.3 Impact Analysis

### Air Quality

**Air Quality Threshold 1**
Would the project conflict with or obstruct implementation of the applicable air quality plan? *(Less Than Significant)*.

The AVAQMD is required, pursuant to the federal Clean Air Act, to reduce emissions of criteria pollutants for which the AVAQMD portion of the MDAB is in nonattainment. Strategies to achieve these emissions reductions are developed in the 2023 Federal 70 ppb Ozone Attainment Plan (2023

Ozone Plan), prepared by AVAQMD for the region. Forecasts used in the 2023 Ozone Plan are developed by SCAG, which are based on local general plans and other related documents that are used to develop population, employment, and traffic projections. Consistency with the 2023 Ozone Plan is determined by analyzing a project with the assumptions in the Plan. As such, projects that propose development that is consistent with the growth anticipated by the local land use plan would be consistent with the SCAG growth projections and the 2023 Ozone Plan emissions estimates.

The project involves the construction of 191 residential units that would result in an increase in the city's population. Based on an average household size of 3.4 persons per dwelling unit in the city, the project would house approximately 649 residents (California Department of Finance 2023). The population growth projections used in the 2023 Ozone Plan forecast show that the population of Palmdale will reach 207,000 residents by 2045, an increase of 48,400 from 2016 projections (SCAG 2020). The project's buildout would not exceed the 2023 Ozone Plan population growth forecast for Palmdale. The project's population growth represents approximately 1.3 percent of the total population growth expected in Palmdale between 2016 and 2045. Therefore, the proposed project would be consistent with AQMP growth assumptions and accommodated within and consistent with the 2023 Ozone Plan, and impacts would be less than significant.

**Air Quality Threshold 2**
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 *(Less Than Significant)*.

### *Construction*

Table 4 and Table 5 summarizes maximum daily and annual emissions of pollutants throughout the construction period of the project, respectively. Detailed modeling results are provided in Appendix A. Emissions would not exceed AVAQMD significance thresholds during project construction. Therefore, project construction would not result in a cumulatively considerable net increase of a criteria pollutant, and impacts would be less than significant.

**Table 4 Daily Construction Criteria Pollutant Emissions**

| | Maximum Emissions (lbs/day) | | | | | |
|---|---|---|---|---|---|---|
| | VOC | $NO_x$ | CO | $SO_2$ | $PM_{10}$ | $PM_{2.5}$ |
| Construction Year 2024 | 5 | 38 | 52 | <1 | 7 | 4 |
| Construction Year 2025 | 70 | 24 | 51 | <1 | 5 | 2 |
| Maximum Emissions | 70 | 38 | 52 | <1 | 7 | 4 |
| AVAQMD Significance Thresholds | 137 | 137 | 548 | 137 | 82 | 65 |
| **Threshold Exceeded?** | **No** | **No** | **No** | **No** | **No** | **No** |

Source: Table 2.2 "Construction Emissions by Year, Unmitigated" emissions. Highest of summer and winter emissions results are shown for maximum daily emissions. See CalEEMod worksheets in Appendix A.

**Table 5 Annual Construction Criteria Pollutant Emissions**

| | Maximum Emissions (tons/year) | | | | | |
|---|---|---|---|---|---|---|
| | VOC | $NO_x$ | CO | $SO_2$ | $PM_{10}$ | $PM_{2.5}$ |
| Construction Year 2024 | 1 | 3 | 5 | <1 | 1 | <1 |
| Construction Year 2025 | 1 | 2 | 3 | <1 | <1 | <1 |
| Maximum Emissions | 1 | 3 | 5 | <1 | 1 | <1 |
| AVAQMD Significance Thresholds | 25 | 25 | 100 | 25 | 15 | 12 |
| **Threshold Exceeded?** | **No** | **No** | **No** | **No** | **No** | **No** |

Source: Table 2.2 "Construction Emissions by Year, Unmitigated" emissions. See CalEEMod worksheets in Appendix A.

### *Operational*

Table 6 summarizes emissions associated with operation of the project. The majority of operational emissions generated would be due to mobile emissions from vehicle trips to and from the project site. As shown in Table 6 and Table 7, emissions generated during the operation of project would not exceed AVAQMD significance thresholds. Therefore, the project would not result in a cumulatively considerable net increase of a criteria pollutant, and impacts would be less than significant.

**Table 6 Daily Operational Criteria Pollutant Emissions**

| | Maximum Daily Emissions (lbs/day) | | | | | |
|---|---|---|---|---|---|---|
| **Emission Source** | **ROG** | **$NO_X$** | **CO** | **$SO_2$** | **$PM_{10}$** | **$PM_{2.5}$** |
| Area | 8 | <1 | 27 | <1 | <1 | <1 |
| Energy | 0 | 0 | 0 | 0 | 0 | 0 |
| Mobile | 8 | 6 | 59 | <1 | 10 | 2 |
| Project Emissions | 16 | 6 | 86 | <1 | 10 | 2 |
| AVAQMD Thresholds | 137 | 137 | 548 | 137 | 82 | 65 |
| **Threshold Exceeded?** | **No** | **No** | **No** | **No** | **No** | **No** |

Note: Project emissions may not sum exactly due to rounding

Source: Table 2.5 "Operations Emissions by Sector, Unmitigated" emissions. Highest summer and winter emissions results are shown for maximum daily emissions. See CalEEMod worksheets in Appendix A.

**Table 7 Annual Operational Criteria Pollutant Emissions**

| | Maximum Annual Emissions (tons/year) | | | | | |
|---|---|---|---|---|---|---|
| **Emission Source** | **ROG** | **$NO_X$** | **CO** | **$SO_2$** | **$PM_{10}$** | **$PM_{2.5}$** |
| Area | <1 | <1 | 2 | <1 | <1 | <1 |
| Energy | 0 | 0 | 0 | 0 | 0 | 0 |
| Mobile | 1 | 1 | 9 | <1 | 2 | <1 |
| Project Emissions | 2 | 1 | 12 | <1 | 2 | <1 |
| AVAQMD Thresholds | 25 | 25 | 100 | 25 | 15 | 12 |
| **Threshold Exceeded?** | **No** | **No** | **No** | **No** | **No** | **No** |

Note: Project emissions may not sum exactly due to rounding

Source: Table 2.5 "Operations Emissions by Sector, Unmitigated" emissions. See CalEEMod worksheets in Appendix A.

**Air Quality Threshold 3**
Expose sensitive receptors to substantial pollutant concentrations *(Less Than Significant)*.

*Toxic Air Contaminants*

**CONSTRUCTION**

Construction-related activities would result in short-term, project-generated emissions of DPM exhaust emissions from off-road, heavy-duty diesel equipment for site preparation grading, building construction, and other construction activities. DPM was identified as a TAC by CARB in 1998. The potential cancer risk from the inhalation of DPM (discussed in the following paragraphs) outweighs the potential non-cancer health impacts (CARB 2021b).

Generation of DPM from construction projects typically occurs in a single area for a short period. Construction of the proposed project would occur over approximately 18months. The dose to

which the receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of exposure that a person has with the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the Maximally Exposed Individual. The risks estimated for a Maximally Exposed Individual are higher if a fixed exposure occurs over a longer period of time. According to the Office of Environmental Health Hazard Assessment (OEHHA), health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 30-year exposure period (assumed to be the approximate time that a person spends in a household). OEHHA recommends this risk be bracketed with 9-year and 70-year exposure periods. Health risk assessments should be limited to the period/duration of activities associated with the project.

The maximum $PM_{2.5}$ emissions, which is used to represent DPM emissions for this analysis, would occur during site preparation and grading activities. While site preparation and grading emissions represent the worst-case condition, such activities would occur for three months, less than 3 percent for a 9-year health risk calculation period and less than one percent for a 30-year and 70-year health risk calculation period. $PM_{2.5}$ emissions would decrease for the remaining construction period because construction activities such as building construction, architectural coating, and paving would require less construction equipment. Therefore, DPM generated by project, construction is not expected to create conditions where the probability that the Maximally Exposed Individual would contract cancer is greater than 10 in one million. This impact would be less than significant.

### OPERATION

CARB's *Air Quality and Land Use Handbook: A Community Health Perspective* (2005) provides recommendations regarding the siting of new sensitive land uses near potential sources of air toxic emissions (e.g., freeways, distribution centers, rail yards, ports, refineries, chrome plating facilities, dry cleaners, and gasoline dispensing facilities). CARB guidelines provide the recommended siting distances both for the development of sensitive land uses in proximity to TAC sources and for the addition of new TAC sources in proximity to existing sensitive land uses. Residential land uses do not generate substantial TAC emissions based on the air toxic sources listed in CARB's guidelines. Therefore, the expected hazardous TACs generated on site (e.g., cleaning solvents, paints, landscape pesticides, etc.) for the proposed land uses would be below thresholds warranting further study under the California Accidental Release Program. The project would not expose off-site sensitive receptors to significant amounts of carcinogenic or TACs. Therefore, operational impacts would be less than significant.

**Air Quality Threshold 4**
Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people *(Less Than Significant)*.

Sensitive receptors in the project vicinity include single-family residences at the project boundaries to the east, south and west, and approximately 800 feet to the north. Construction activities would be temporary and transitory and associated odors would cease upon construction completion. Such odors disperse rapidly with distance. Accordingly, the proposed project would not create objectionable odors affecting a substantial number of people during construction, and short-term impacts would be less than significant.

The project does not include land uses typically associated with odor complaints such as sewage treatment plants, landfills, recycling facilities, and agricultural uses. Vehicles approaching, idling, and leaving the site may release odorous exhaust emissions. Odors of this nature disperse rapidly with distance and do not typically result in odor impacts. Additionally, the project site is located adjacent to Palmdale Boulevard, an arterial road, so vehicle exhaust is already prevalent in the project area. For these reasons, operational odor impacts would be less than significant.

## Greenhouse Gas Emissions

**GHG Emissions Threshold 1**
Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment? *(Less Than Significant With Mitigation Incorporated)*.

**GHG Emissions Threshold 2**
Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions? *(Less Than Significant With Mitigation Incorporated)*.

## Project-generated Greenhouse Gas Emissions

The City of Palmdale CAP is a qualified GHG reduction plan consistent with the requirements of CEQA Guidelines Section 15183.5. In accordance with the CAP, project GHG emissions would be less than significant if it can be demonstrated that the project would be consistent with the CAP and generate less than 2 MT $CO_2e$ per service population per year.

Project construction would generate temporary short-term GHG emissions through travel to and from the worksite and from the operation of construction equipment such as graders, backhoes, and generators. Construction of the project would generate approximately 1,546 MT $CO_2e$ over the entire construction period. As shown in Table 4, the proposed project's amortized construction-related emissions would be 52 MT $CO_2e$.

Operation of the proposed project would generate GHG emissions associated with area sources (e.g., landscape maintenance), energy and water usage, vehicle trips, and wastewater and solid waste generation. Table 8 combines the estimated construction and operational GHG emissions associated with development of the project. As shown therein, the project would generate approximately 2,206 MT of $CO_2e$ per year during operation. Total emissions (amortized construction emissions plus annual operation emissions) would be 3.5 MT of $CO_2e$ per year per SP (conservatively rounded up to the nearest tenth). These emissions would exceed the 2.0 MT of $CO_2e$ per year per service person goal of the City CAP, and impacts would be potentially significant. Implementation of Mitigation Measure GHG-1 below would be required to reduce impacts to a less than significant level.

**Table 8 Combined Annual GHG Emissions**

| Emission Source | Annual Emissions (MT $CO_2e$ per year) |
|---|---|
| **Construction** | |
| 2024 | 1,047 |
| 2025 | 499 |
| **Construction Total** | **1,546** |
| **Amortized over 30 years** | **52** |
| **Operational** | |

| Emission Source | Annual Emissions (MT $CO_2e$ per year) |
|---|---|
| Area | 8 |
| Energy | 325 |
| Mobile | 1,779 |
| Solid Waste | 59 |
| Water | 35 |
| Refrigerants | <1 |
| **Operational Total** | **2,206** |
| **Total Emissions** | **2,258** |
| **Service Population (Residents)** | **657** |
| **Emissions per Service Person[2]** | **3.5** |
| **Threshold** | **2.0** |
| **Threshold Exceeded?** | **Yes** |

MT = metric tons; $CO_2e$ = carbon dioxide equivalents

[2] Emissions per SP rounded up to the nearest tenth.

Notes: Emissions modeling was completed using CalEEMod. See Appendix A for modeling results.

## Consistency with Applicable Plans

### *2022 Scoping Plan*

The principal state plans and policies for reducing GHG emissions are AB 32, SB 32, and AB 1279. The quantitative goal of AB 32 is to reduce GHG emissions to 1990 levels by 2020; the goal of SB 32 is to reduce GHG emissions to 40 percent below 1990 levels by 2030; and the goal of AB 1279 is to achieve net zero greenhouse gas emissions no later than 2045, and reduce GHG emissions by 85 percent below 1990 levels no later than 2045. The 2022 Scoping Plan expands upon earlier plans to include the AB 1279 targets. The 2022 Scoping Plan's strategies that are applicable to the proposed project include reducing fossil fuel use and vehicle miles traveled; decarbonizing the electricity sector, maximizing recycling and diversion from landfills; and increasing water conservation. The project would be consistent with these goals through project design, which includes 100% electric project design, complying with the latest Title 24 Green Building Code and Building Efficiency Energy Standards, and complying with the AB 341 waste diversion goal of 75 percent. In addition, the project would receive electricity from SCE, which is required to reduce GHG emissions by increasing procurement from eligible renewable energy by set target years as required by SB 100. Therefore, the project would not conflict with the 2022 Scoping Plan.

### *Connect SoCal: 2020-2045 SCAG RTP/SCS*

According to the 2020-2045 RTP/SCS, the updated targets for the SCAG region are eight percent below 2005 per capita emission levels by 2020 (this value is unchanged from the previous 2020 CARB target) and 19 percent below 2005 per capita emissions levels by 2035. The revised 2035 target is higher than the previous CARB target of 13 percent for the SCAG region. The 2020-2045 RTP/SCS includes implementation strategies for focusing growth near destinations and mobility options, promoting diverse housing choices, leveraging technology innovations, supporting implementation of sustainability policies, and promoting a green region. Further specific actions to reduce GHG emissions under the 2020-2045 RTP/SCS include designing transportation options that reduce the reliance on solo car trips, promoting low emission technologies such as electric vehicles

and ride sharing, supporting statewide GHG emissions legislation, and pursuing funding opportunities to support local sustainable development projects that reduce GHG emissions.

**Table 9 Project Consistency with the SCAG 2020-2045 RTP/SCS**

| Goals | Consistency |
|---|---|
| **Goal 2: Improve mobility, accessibility, reliability, and travel safety for people and goods** | **Consistent.** The project would include interior roadways, sidewalks, and trails to provide vehicle, bicycle, and pedestrian access to residences. This expanded pedestrian network would provide pedestrian access to local schools and parks, including Domenic Massari Park and Knight High School to the southeast, as well as commercial uses to the west. Therefore, the project would have accessible and reliable travel options and be designed to reduce reliance on solo vehicle trips. |
| **Goal 5: Reduce greenhouse gas emissions and improve air quality** | **Consistent.** The project would include several sustainable design features, including those required by Title 24 and CALGreen standards. The project would include photovoltaic systems and battery storage installed on each residential building. All proposed residences would be equipped with energy-efficient appliances and lighting, water-efficient fixtures, and water-efficient irrigation systems. The project would meet the requirements of the 2022 California Energy Code. |
| **Goal 6: Support healthy and equitable communities** | **Consistent.** The project would provide housing near city parks, commercial areas, and schools. Furthermore, the project would include design features such as sidewalks and multiple access points to the project site. These features would promote active transportation and foster efficient development patterns within the project site vicinity. |
| **Goal 9: Encourage development of diverse housing types in areas that are supported by multiple transportation options** | **Consistent.** The project would include interior roadways, sidewalks, and trails to provide vehicle, bicycle, and pedestrian access to residences. This expanded pedestrian network would provide pedestrian access to local schools and parks, including Domenic Massari Park and Knight High School to the southeast. The project would be near a commercial downtown area along 47th Street and East Avenue R. The project would include improvement of pedestrian and bicycle facilities, and site access would be provided along several access points. Proposed on-site facilities would establish residences on an underutilized lot adjacent to existing development. Therefore, the project would provide connectivity with planned neighboring residential developments. |

Source: SCAG 2020

### *City of Palmdale Climate Action Plan*

The project's consistency with the City of Palmdale General Plan and CAP policies aimed at reducing GHG emissions are shown in Table 10. Although the project would be consistent with applicable policies from the City of Palmdale General Plan and CAP shown in Table 9, it would exceed the CAP's per service population thresholds as shown in Table 6, above. Therefore, the project would be inconsistent with the CAP, and impacts would be potentially significant.

**Table 10 Project Consistency with the Palmdale General Plan**

| Policy | Consistency |
|---|---|
| **Goal SCR-4:** Reduced greenhouse gas emissions from transportation.<br>**Policy SCR-4.1 Bike Facilities:** Promote bicycle use with new private development projects through requirements for bicycle parking, lockers and showers, bike share facilities, and when feasible, connections to City bike lanes. | **Consistent.** The project would create sidewalks and pathways within the project site to accommodate pedestrians and cyclists, which would connect to existing and planned off-site pedestrian and bicycle facilities. |
| **Goal SCR-3: Green and decarbonized buildings for new construction and major renovations**.<br>**Policy SCR3.2: All-Electric Reach Code.** Consider adopting a local reach code to encourage new buildings to be all-electric.<br>**Policy SCR-3.3: Solar + Storage.** Require installation of photovoltaic panels and battery storage on all residential new construction and nonresidential new construction over 5,000 sq. ft. | **Consistent.** The project would comply with all standards set forth in the CBC Title 24, which would minimize the wasteful, inefficient, or unnecessary consumption of energy resources during operation. Furthermore, in accordance with the 2022 California Green Building Standards for residential developments, low-rise residences (three stories or less) are required to install on-site photovoltaic arrays. The project would include solar rooftop photovoltaic systems, in addition to battery storage. All proposed residences would be equipped with energy-efficient appliances and lighting, water-efficient fixtures, and water-efficient irrigation systems. As mentioned above under the 2022 Scoping Plan, the project would be consistent with the State's climate goals by increasing renewable energy and providing energy efficiency in the buildings. |

Source: City of Palmdale 2022

In summary, the plan consistency analysis provided above demonstrates that the project complies with or exceeds the plans, policies, regulations and GHG reduction actions/strategies outlined in SCAG's 2020-2045 RTP/SCS and the 2022 Scoping Plan. However, the project would exceed the per service population threshold established by the City and would therefore be inconsistent with the City's 2045 General Plan and CAP. Therefore, the project would conflict with an applicable plan, policy, or regulation of an agency adopted for the purpose of reducing emissions of GHG emissions. Implementation of Mitigation Measure GHG-1 below would reduce project related emissions to a less than significant level.

## Mitigation Measures

### *GHG-1 Greenhouse Gas Reduction Plan*

The project applicant shall prepare and implement a GHG Reduction Plan (GHGRP) that demonstrates emissions reductions from project operation by approximately 1,004 MT of $CO_2e$ per year to 1,254 MT of $CO_2e$ per year for the lifetime of the project, or by an amount determined through further analysis of project GHG emissions at the time of GHGRP preparation. Potential GHG reduction measures included in the GHGRP may include, but would not be limited to, the following on-site measures:

- Construction of buildings that achieve energy and water efficiencies beyond those specified in the California Code of Regulations, Title 24 requirements
- Implementation of green building practices and/or cool roofs
- Installation of energy-efficient equipment and appliances exceeding California Green Building Code standards

- Installation of outdoor water conservation and recycling features, such as smart irrigation controllers and reclaimed water usage
- Installation of low-flow bathroom and kitchen fixtures and fittings
- Installation of light emitting diode (LED) lights
- Implementation of waste reduction programs that may include waste minimization, waste diversion, composting, and material reuse/recycling
- Provision of incentives and outreach that promote alternative transportation and transit use to future employees and patrons
- Promotion of alternative fuel vehicles, including through the installation of electric vehicle charging infrastructure beyond those required

If GHG emissions cannot be feasibly reduced through implementation of on-site measures, the following off-site measures may be implemented:

- Directly undertake or fund activities that reduce or sequester GHG emissions ("Direct Reduction Activities") and retire the associated "GHG Mitigation Reduction Credits." A "GHG Mitigation Reduction Credit" shall mean an instrument issued by an Approved Registry and shall represent the estimated reduction or sequestration of 1 MT of $CO_2e$ that shall be achieved by a Direct Reduction Activity that is not otherwise required (CEQA Guidelines Section 15126.4[c][3]). A "GHG Mitigation Reduction Credit" must achieve GHG emission reductions that are real, permanent, quantifiable, verifiable, enforceable, and in addition to any GHG emission reduction required by law or regulation or any other GHG emission reduction that otherwise would occur in accordance with the criteria set forth in the California Air Resources Board's most recent Process for the Review and Approval of Compliance Offset Protocols in Support of the Cap-and-Trade Regulation (2013). An "Approved Registry" is an accredited carbon registry that follows approved California Air Resources Board Compliance Offset Protocols. At this time, Approved Registries include American Carbon Registry, Climate Action Reserve, and Verra (California Air Resources Board 2018). Credits from other sources will not be allowed unless they are shown to be validated by protocols and methods equivalent to or more stringent than the California Air Resources Board standards. In the event that a project or program providing GHG Mitigation Reduction Credits to the project applicant loses its accreditation, the project applicant shall comply with the rules and procedures of retiring GHG Mitigation Reduction Credits specific to the registry involved and shall undertake additional direct investments to recoup the loss.
- Obtain and retire "Carbon Offsets." "Carbon Offset" shall mean an instrument issued by an Approved Registry and shall represent the past reduction or sequestration of 1 MT of CO2e achieved by a Direct Reduction Activity or any other GHG emission reduction project or activity that is not otherwise required (CEQA Guidelines Section 15126.4[c][3]). A "Carbon Offset" must achieve GHG emission reductions that are real, permanent, quantifiable, verifiable, enforceable, and in addition to any GHG emission reduction required by law or regulation or any other GHG emission reduction that otherwise would occur in accordance with the criteria set forth in the California Air Resources Board's most recent *Process for the Review and Approval of Compliance Offset Protocols in Support of the Cap-and-Trade Regulation* (2013). If the project applicant chooses to meet some of the GHG reduction requirements by purchasing offsets on an annual and permanent basis, the offsets shall be purchased according to the City's preference, which is, in order of the City's preference: (1) within Palmdale; (2) within the air basin; (3) within the State of California; then (4) elsewhere in the United States. In the event

that a project or program providing offsets to the project applicant loses its accreditation, the project applicant shall comply with the rules and procedures of retiring offsets specific to the registry involved and shall purchase an equivalent number of credits to recoup the loss.

The GHGRP shall be submitted by the project developer and reviewed and approved by the City of Palmdale as being in compliance with this measure prior to building permit issuance. Applicable elements of the approved GHGRP shall be reflected on project site plans prior to certificate of occupancy. Condition compliance shall include monitoring and verifying implementation of measures included in the GHGRP.

## Significance After Mitigation

To implement Mitigation Measure GHG-1, the project applicant may choose to apply a wide variety of GHG emission reduction measures, including carbon offsets, to reduce project-related emissions to 1,254 MT of $CO_2$e per year. Therefore, implementation of Mitigation Measure GHG-1 would reduce project-related emissions below the threshold of significance of 1,254 MT of $CO_2$e per year or 2 MT of $CO_2$e per service population per year. Impacts would be less than significant with mitigation incorporated.

# 4 Conclusions

## 4.1 Air Quality Summary

As shown in Table 4, Table 5, and Table 6, project construction and operational emissions would not exceed applicable significance thresholds for all criteria pollutants. Furthermore, growth facilitated by the proposed project would not exceed SCAG growth projections, and would not conflict with the AVAQMD's 2023 Ozone Attainment Plan. The project's criteria pollutant emissions impacts would be less than significant.

The project would generate TAC emissions including DPM exhaust emissions associated with use of heavy-duty diesel construction equipment. As discussed under Air Quality Threshold 3, health risks at the nearest sensitive receptors resulting from construction and operation of the project would be well below applicable thresholds. Thus, impacts from the project's TAC emissions would be less than significant.

The project does not include land uses typically associated with odor complaints such as sewage treatment plants, landfills, recycling facilities, and agricultural uses. During construction, the project would temporarily generate diesel exhaust odors from use of heavy-duty equipment and during operation the project would generate vehicle exhaust and fugitive fuel vapors may be released. These types of odors dissipate quickly with distance and do not typically result in odor impacts. Additionally, as the project site is located adjacent to an arterial road, East Palmdale Boulevard, vehicle exhaust is already prevalent. For these reasons, operational odor impacts would be less than significant.

As detailed above, construction and operation of the project would not result in significant air quality impacts.

## 4.2 Greenhouse Gas Emissions Summary

The project would result in an overall GHG emissions of 2,284 MT $CO_2e$ per year. The majority of these emissions would result from vehicle trips to and from the site.

The City of Palmdale has adopted a CAP that meets the requirements under CEQA Guidelines Section 15183.5 for a qualified GHG reduction plan. Therefore, this project-level analysis is streamlined by tiering off the Palmdale CAP. As discussed above, the proposed project's emissions per service population would be approximately 3.5 MT $CO_2e$ per year, which exceeds the threshold set forth in the CAP of 2.0 MT $CO_2e$ per service population per year. Therefore, the project's incremental contribution to a global climate would be potentially significant. Implementation of Mitigation Measure GHG-1 would require the developer to implement a GHG Reduction Plan. Such mitigation would reduce project emissions to below the established threshold and ensure that the project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions.

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# Appendix A

California Emission Estimator Model (CalEEMod) Outputs

# TTM 83359 Detailed Report

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5.3. Construction Vehicles

5.3.1. Unmitigated

5.4. Vehicles

5.4.1. Construction Vehicle Control Strategies

5.5. Architectural Coatings

5.6. Dust Mitigation

5.6.1. Construction Earthmoving Activities

5.6.2. Construction Earthmoving Control Strategies

5.7. Construction Paving

5.8. Construction Electricity Consumption and Emissions Factors

5.9. Operational Mobile Sources

5.9.1. Unmitigated

5.10. Operational Area Sources

5.10.1. Hearths

5.10.1.1. Unmitigated

5.10.2. Architectural Coatings

5.10.3. Landscape Equipment

5.11. Operational Energy Consumption

5.11.1. Unmitigated

5.12. Operational Water and Wastewater Consumption

5.12.1. Unmitigated

5.13. Operational Waste Generation

5.13.1. Unmitigated

5.14. Operational Refrigeration and Air Conditioning Equipment

5.14.1. Unmitigated

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

5.18.1. Biomass Cover Type

5.18.1.1. Unmitigated

5.18.2. Sequestration

5.18.2.1. Unmitigated

6. Climate Risk Detailed Report

6.1. Climate Risk Summary

6.2. Initial Climate Risk Scores

6.3. Adjusted Climate Risk Scores

6.4. Climate Risk Reduction Measures

7. Health and Equity Details

7.1. CalEnviroScreen 4.0 Scores

7.2. Healthy Places Index Scores

7.3. Overall Health & Equity Scores

7.4. Health & Equity Measures

7.5. Evaluation Scorecard

7.6. Health & Equity Custom Measures

8. User Changes to Default Data

# 1. Basic Project Information

## 1.1. Basic Project Information

| Data Field | Value |
|---|---|
| Project Name | TTM 83359 |
| Construction Start Date | 1/1/2024 |
| Operational Year | 2025 |
| Lead Agency | — |
| Land Use Scale | Project/site |
| Analysis Level for Defaults | County |
| Windspeed (m/s) | 4.50 |
| Precipitation (days) | 13.0 |
| Location | 34.578207008203336, -118.0374843667876 |
| County | Los Angeles-Mojave Desert |
| City | Palmdale |
| Air District | Antelope Valley AQMD |
| Air Basin | Mojave Desert |
| TAZ | 3637 |
| EDFZ | 7 |
| Electric Utility | Southern California Edison |
| Gas Utility | Southern California Gas |
| App Version | 2022.1.1.19 |

## 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 |
|---|---|---|---|---|---|---|---|---|

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Single Family Housing | 191 | Dwelling Unit | 20.0 | 173,714 | 749,623 | — | 657 | — |
| Racquet Club | 2.63 | 1000sqft | 0.00 | 2,630 | 0.00 | — | — | — |
| Parking Lot | 20.0 | Space | 0.00 | 0.00 | 0.00 | — | — | — |
| Other Asphalt Surfaces | 360 | 1000sqft | 0.00 | 360,000 | 0.00 | — | — | — |

### 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. | 5.03 | 70.2 | 38.3 | 52.4 | 0.08 | 1.54 | 5.10 | 6.64 | 1.42 | 0.87 | 2.01 | — | 9,861 | 9,861 | 0.37 | 0.50 | 20.8 | 10,039 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 5.01 | 4.22 | 38.3 | 44.9 | 0.08 | 1.54 | 6.68 | 7.28 | 1.42 | 3.40 | 3.95 | — | 9,500 | 9,500 | 0.37 | 0.50 | 0.54 | 9,658 |
| Average Daily (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 3.01 | 4.93 | 18.6 | 29.6 | 0.04 | 0.69 | 2.97 | 3.66 | 0.64 | 0.80 | 1.43 | — | 6,233 | 6,233 | 0.22 | 0.28 | 4.88 | 6,326 |
| Annual (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 0.55 | 0.90 | 3.40 | 5.40 | 0.01 | 0.13 | 0.54 | 0.67 | 0.12 | 0.15 | 0.26 | — | 1,032 | 1,032 | 0.04 | 0.05 | 0.81 | 1,047 |

## 2.2. 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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2024 | 5.03 | 4.23 | 38.3 | 52.4 | 0.08 | 1.54 | 5.10 | 6.64 | 1.42 | 0.87 | 2.01 | — | 9,861 | 9,861 | 0.37 | 0.50 | 20.8 | 10,039 |
| 2025 | 4.32 | 70.2 | 23.9 | 50.8 | 0.06 | 0.80 | 3.57 | 4.37 | 0.73 | 0.87 | 1.60 | — | 9,758 | 9,758 | 0.31 | 0.48 | 19.8 | 9,929 |
| Daily - Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2024 | 5.01 | 4.22 | 38.3 | 44.9 | 0.08 | 1.54 | 6.68 | 7.28 | 1.42 | 3.40 | 3.95 | — | 9,500 | 9,500 | 0.37 | 0.50 | 0.54 | 9,658 |
| 2025 | 4.19 | 3.60 | 24.1 | 43.7 | 0.06 | 0.80 | 3.57 | 4.37 | 0.73 | 0.87 | 1.60 | — | 9,405 | 9,405 | 0.32 | 0.48 | 0.51 | 9,557 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2024 | 3.01 | 2.58 | 18.6 | 29.6 | 0.04 | 0.69 | 2.97 | 3.66 | 0.64 | 0.80 | 1.43 | — | 6,233 | 6,233 | 0.22 | 0.28 | 4.88 | 6,326 |
| 2025 | 1.36 | 4.93 | 7.97 | 14.6 | 0.02 | 0.27 | 1.07 | 1.34 | 0.25 | 0.26 | 0.51 | — | 2,969 | 2,969 | 0.10 | 0.14 | 2.57 | 3,017 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 2024 | 0.55 | 0.47 | 3.40 | 5.40 | 0.01 | 0.13 | 0.54 | 0.67 | 0.12 | 0.15 | 0.26 | — | 1,032 | 1,032 | 0.04 | 0.05 | 0.81 | 1,047 |
| 2025 | 0.25 | 0.90 | 1.45 | 2.66 | < 0.005 | 0.05 | 0.19 | 0.24 | 0.05 | 0.05 | 0.09 | — | 492 | 492 | 0.02 | 0.02 | 0.42 | 499 |

## 2.4. 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. | 12.3 | 15.6 | 6.08 | 85.3 | 0.11 | 0.12 | 9.45 | 9.56 | 0.10 | 2.40 | 2.50 | 116 | 13,508 | 13,624 | 12.3 | 0.56 | 48.1 | 14,146 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 7.48 | 11.1 | 6.36 | 46.4 | 0.10 | 0.08 | 9.45 | 9.53 | 0.08 | 2.40 | 2.48 | 116 | 12,434 | 12,550 | 12.3 | 0.58 | 2.47 | 13,034 |
| Average Daily (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 9.43 | 12.9 | 6.63 | 63.3 | 0.10 | 0.10 | 9.37 | 9.47 | 0.09 | 2.38 | 2.47 | 116 | 12,707 | 12,823 | 12.3 | 0.59 | 21.5 | 13,329 |
| Annual (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Unmit. | 1.72 | 2.36 | 1.21 | 11.5 | 0.02 | 0.02 | 1.71 | 1.73 | 0.02 | 0.43 | 0.45 | 19.2 | 2,104 | 2,123 | 2.04 | 0.10 | 3.55 | 2,207 |

## 2.5. 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 | 8.46 | 7.93 | 5.84 | 58.7 | 0.11 | 0.08 | 9.45 | 9.53 | 0.08 | 2.40 | 2.48 | — | 11,305 | 11,305 | 0.52 | 0.51 | 46.8 | 11,517 |
| Area | 3.83 | 7.71 | 0.24 | 26.6 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | 0.00 | 93.8 | 93.8 | < 0.005 | < 0.005 | — | 94.2 |
| Energy | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 1,956 | 1,956 | 0.12 | 0.01 | — | 1,964 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 13.9 | 153 | 167 | 1.44 | 0.04 | — | 213 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 102 | 0.00 | 102 | 10.2 | 0.00 | — | 357 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.26 | 1.26 |
| Total | 12.3 | 15.6 | 6.08 | 85.3 | 0.11 | 0.12 | 9.45 | 9.56 | 0.10 | 2.40 | 2.50 | 116 | 13,508 | 13,624 | 12.3 | 0.56 | 48.1 | 14,146 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 7.48 | 6.94 | 6.36 | 46.4 | 0.10 | 0.08 | 9.45 | 9.53 | 0.08 | 2.40 | 2.48 | — | 10,325 | 10,325 | 0.56 | 0.53 | 1.21 | 10,499 |
| Area | 0.00 | 4.15 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Energy | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 1,956 | 1,956 | 0.12 | 0.01 | — | 1,964 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 13.9 | 153 | 167 | 1.44 | 0.04 | — | 213 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 102 | 0.00 | 102 | 10.2 | 0.00 | — | 357 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.26 | 1.26 |
| Total | 7.48 | 11.1 | 6.36 | 46.4 | 0.10 | 0.08 | 9.45 | 9.53 | 0.08 | 2.40 | 2.48 | 116 | 12,434 | 12,550 | 12.3 | 0.58 | 2.47 | 13,034 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 7.54 | 7.00 | 6.51 | 50.2 | 0.10 | 0.08 | 9.37 | 9.45 | 0.08 | 2.38 | 2.46 | — | 10,552 | 10,552 | 0.56 | 0.54 | 20.2 | 10,747 |
| Area | 1.89 | 5.91 | 0.12 | 13.1 | < 0.005 | 0.02 | — | 0.02 | 0.01 | — | 0.01 | 0.00 | 46.3 | 46.3 | < 0.005 | < 0.005 | — | 46.4 |
| Energy | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 1,956 | 1,956 | 0.12 | 0.01 | — | 1,964 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 13.9 | 153 | 167 | 1.44 | 0.04 | — | 213 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 102 | 0.00 | 102 | 10.2 | 0.00 | — | 357 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.26 | 1.26 |
| Total | 9.43 | 12.9 | 6.63 | 63.3 | 0.10 | 0.10 | 9.37 | 9.47 | 0.09 | 2.38 | 2.47 | 116 | 12,707 | 12,823 | 12.3 | 0.59 | 21.5 | 13,329 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Mobile | 1.38 | 1.28 | 1.19 | 9.16 | 0.02 | 0.02 | 1.71 | 1.72 | 0.01 | 0.43 | 0.45 | — | 1,747 | 1,747 | 0.09 | 0.09 | 3.35 | 1,779 |
| Area | 0.34 | 1.08 | 0.02 | 2.39 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 0.00 | 7.66 | 7.66 | < 0.005 | < 0.005 | — | 7.69 |
| Energy | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 324 | 324 | 0.02 | < 0.005 | — | 325 |
| Water | — | — | — | — | — | — | — | — | — | — | — | 2.31 | 25.3 | 27.6 | 0.24 | 0.01 | — | 35.3 |
| Waste | — | — | — | — | — | — | — | — | — | — | — | 16.9 | 0.00 | 16.9 | 1.69 | 0.00 | — | 59.1 |
| Refrig. | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.21 | 0.21 |
| Total | 1.72 | 2.36 | 1.21 | 11.5 | 0.02 | 0.02 | 1.71 | 1.73 | 0.02 | 0.43 | 0.45 | 19.2 | 2,104 | 2,123 | 2.04 | 0.10 | 3.55 | 2,207 |

# 3. Construction Emissions Details

## 3.1. Site Preparation (2024) - 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.64 | 1.38 | 13.4 | 12.7 | 0.02 | 0.60 | — | 0.60 | 0.55 | — | 0.55 | — | 2,040 | 2,040 | 0.08 | 0.02 | — | 2,047 |
| Dust From Material Movemen | — | — | — | — | — | — | 6.55 | 6.55 | — | 3.37 | 3.37 | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.13 | 0.11 | 1.10 | 1.04 | < 0.005 | 0.05 | — | 0.05 | 0.05 | — | 0.05 | — | 168 | 168 | 0.01 | < 0.005 | — | 168 |
| Dust From Material Movemen | — | — | — | — | — | — | 0.54 | 0.54 | — | 0.28 | 0.28 | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.02 | 0.20 | 0.19 | < 0.005 | 0.01 | — | 0.01 | 0.01 | — | 0.01 | — | 27.8 | 27.8 | < 0.005 | < 0.005 | — | 27.9 |
| Dust From Material Movemen | — | — | — | — | — | — | 0.10 | 0.10 | — | 0.05 | 0.05 | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.06 | 0.05 | 0.07 | 0.72 | 0.00 | 0.00 | 0.13 | 0.13 | 0.00 | 0.03 | 0.03 | — | 131 | 131 | 0.01 | < 0.005 | 0.02 | 133 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.01 | 0.07 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | — | 11.1 | 11.1 | < 0.005 | < 0.005 | 0.02 | 11.2 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.01 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | — | 1.83 | 1.83 | < 0.005 | < 0.005 | < 0.005 | 1.86 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

## 3.3. Grading (2024) - 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 4.86 | 4.08 | 38.1 | 32.3 | 0.08 | 1.54 | — | 1.54 | 1.42 | — | 1.42 | — | 8,820 | 8,820 | 0.36 | 0.07 | — | 8,850 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dust From Material Movemen | — | — | — | — | — | — | 4.77 | 4.77 | — | 0.52 | 0.52 | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 4.86 | 4.08 | 38.1 | 32.3 | 0.08 | 1.54 | — | 1.54 | 1.42 | — | 1.42 | — | 8,820 | 8,820 | 0.36 | 0.07 | — | 8,850 |
| Dust From Material Movemen | — | — | — | — | — | — | 4.77 | 4.77 | — | 0.52 | 0.52 | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.51 | 0.42 | 3.97 | 3.36 | 0.01 | 0.16 | — | 0.16 | 0.15 | — | 0.15 | — | 918 | 918 | 0.04 | 0.01 | — | 921 |
| Dust From Material Movemen | — | — | — | — | — | — | 0.50 | 0.50 | — | 0.05 | 0.05 | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.09 | 0.08 | 0.72 | 0.61 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 152 | 152 | 0.01 | < 0.005 | — | 153 |
| Dust From Material Movemen | — | — | — | — | — | — | 0.09 | 0.09 | — | 0.01 | 0.01 | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.17 | 0.15 | 0.15 | 2.65 | 0.00 | 0.00 | 0.33 | 0.33 | 0.00 | 0.08 | 0.08 | — | 369 | 369 | 0.02 | 0.01 | 1.56 | 374 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.15 | 0.13 | 0.17 | 1.80 | 0.00 | 0.00 | 0.33 | 0.33 | 0.00 | 0.08 | 0.08 | — | 327 | 327 | 0.02 | 0.01 | 0.04 | 332 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.02 | 0.01 | 0.02 | 0.21 | 0.00 | 0.00 | 0.03 | 0.03 | 0.00 | 0.01 | 0.01 | — | 35.1 | 35.1 | < 0.005 | < 0.005 | 0.07 | 35.6 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.04 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | — | 5.81 | 5.81 | < 0.005 | < 0.005 | 0.01 | 5.89 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

## 3.5. Building Construction (2024) - 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road Equipment | 3.02 | 2.52 | 21.2 | 28.0 | 0.04 | 0.87 | — | 0.87 | 0.80 | — | 0.80 | — | 4,166 | 4,166 | 0.17 | 0.03 | — | 4,180 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 3.02 | 2.52 | 21.2 | 28.0 | 0.04 | 0.87 | — | 0.87 | 0.80 | — | 0.80 | — | 4,166 | 4,166 | 0.17 | 0.03 | — | 4,180 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.61 | 1.34 | 11.3 | 14.9 | 0.02 | 0.46 | — | 0.46 | 0.42 | — | 0.42 | — | 2,217 | 2,217 | 0.09 | 0.02 | — | 2,225 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.29 | 0.24 | 2.06 | 2.72 | < 0.005 | 0.08 | — | 0.08 | 0.08 | — | 0.08 | — | 367 | 367 | 0.01 | < 0.005 | — | 368 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.52 | 1.32 | 1.36 | 23.4 | 0.00 | 0.00 | 2.89 | 2.89 | 0.00 | 0.68 | 0.68 | — | 3,259 | 3,259 | 0.14 | 0.11 | 13.8 | 3,309 |
| Vendor | 0.09 | 0.08 | 2.56 | 1.00 | 0.02 | 0.04 | 0.68 | 0.72 | 0.04 | 0.19 | 0.22 | — | 2,437 | 2,437 | < 0.005 | 0.36 | 6.98 | 2,550 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.31 | 1.19 | 1.46 | 15.9 | 0.00 | 0.00 | 2.89 | 2.89 | 0.00 | 0.68 | 0.68 | — | 2,895 | 2,895 | 0.15 | 0.11 | 0.36 | 2,932 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | 0.08 | 0.08 | 2.70 | 1.02 | 0.02 | 0.04 | 0.68 | 0.72 | 0.04 | 0.19 | 0.22 | — | 2,439 | 2,439 | < 0.005 | 0.36 | 0.18 | 2,546 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.70 | 0.64 | 0.83 | 9.47 | 0.00 | 0.00 | 1.53 | 1.53 | 0.00 | 0.36 | 0.36 | — | 1,586 | 1,586 | 0.08 | 0.06 | 3.18 | 1,608 |
| Vendor | 0.05 | 0.04 | 1.44 | 0.54 | 0.01 | 0.02 | 0.36 | 0.38 | 0.02 | 0.10 | 0.12 | — | 1,298 | 1,298 | < 0.005 | 0.19 | 1.60 | 1,356 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.13 | 0.12 | 0.15 | 1.73 | 0.00 | 0.00 | 0.28 | 0.28 | 0.00 | 0.07 | 0.07 | — | 263 | 263 | 0.01 | 0.01 | 0.53 | 266 |
| Vendor | 0.01 | 0.01 | 0.26 | 0.10 | < 0.005 | < 0.005 | 0.07 | 0.07 | < 0.005 | 0.02 | 0.02 | — | 215 | 215 | < 0.005 | 0.03 | 0.26 | 224 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

## 3.7. Building Construction (2025) - 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.85 | 2.37 | 20.2 | 27.9 | 0.04 | 0.76 | — | 0.76 | 0.70 | — | 0.70 | — | 4,166 | 4,166 | 0.17 | 0.03 | — | 4,180 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 2.85 | 2.37 | 20.2 | 27.9 | 0.04 | 0.76 | — | 0.76 | 0.70 | — | 0.70 | — | 4,166 | 4,166 | 0.17 | 0.03 | — | 4,180 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.82 | 0.69 | 5.84 | 8.08 | 0.01 | 0.22 | — | 0.22 | 0.20 | — | 0.20 | — | 1,207 | 1,207 | 0.05 | 0.01 | — | 1,211 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.15 | 0.13 | 1.07 | 1.47 | < 0.005 | 0.04 | — | 0.04 | 0.04 | — | 0.04 | — | 200 | 200 | 0.01 | < 0.005 | — | 200 |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.38 | 1.27 | 1.26 | 21.9 | 0.00 | 0.00 | 2.89 | 2.89 | 0.00 | 0.68 | 0.68 | — | 3,197 | 3,197 | 0.13 | 0.11 | 12.9 | 3,246 |
| Vendor | 0.09 | 0.08 | 2.44 | 0.94 | 0.02 | 0.04 | 0.68 | 0.72 | 0.04 | 0.19 | 0.22 | — | 2,395 | 2,395 | < 0.005 | 0.34 | 6.96 | 2,503 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 1.26 | 1.15 | 1.36 | 14.8 | 0.00 | 0.00 | 2.89 | 2.89 | 0.00 | 0.68 | 0.68 | — | 2,841 | 2,841 | 0.14 | 0.11 | 0.33 | 2,878 |
| Vendor | 0.08 | 0.08 | 2.59 | 0.97 | 0.02 | 0.04 | 0.68 | 0.72 | 0.04 | 0.19 | 0.22 | — | 2,398 | 2,398 | < 0.005 | 0.34 | 0.18 | 2,499 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.37 | 0.34 | 0.42 | 4.82 | 0.00 | 0.00 | 0.83 | 0.83 | 0.00 | 0.19 | 0.19 | — | 847 | 847 | 0.04 | 0.03 | 1.61 | 859 |
| Vendor | 0.03 | 0.02 | 0.75 | 0.28 | 0.01 | 0.01 | 0.20 | 0.21 | 0.01 | 0.05 | 0.06 | — | 694 | 694 | < 0.005 | 0.10 | 0.87 | 724 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.07 | 0.06 | 0.08 | 0.88 | 0.00 | 0.00 | 0.15 | 0.15 | 0.00 | 0.04 | 0.04 | — | 140 | 140 | 0.01 | 0.01 | 0.27 | 142 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Vendor | < 0.005 | < 0.005 | 0.14 | 0.05 | < 0.005 | < 0.005 | 0.04 | 0.04 | < 0.005 | 0.01 | 0.01 | — | 115 | 115 | < 0.005 | 0.02 | 0.14 | 120 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

## 3.9. Paving (2025) - 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.76 | 0.64 | 7.38 | 9.68 | 0.01 | 0.31 | — | 0.31 | 0.28 | — | 0.28 | — | 1,514 | 1,514 | 0.06 | 0.01 | — | 1,519 |
| Paving | — | 0.00 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.04 | 0.03 | 0.40 | 0.53 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 82.9 | 82.9 | < 0.005 | < 0.005 | — | 83.2 |
| Paving | — | 0.00 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.01 | 0.01 | 0.07 | 0.10 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 13.7 | 13.7 | < 0.005 | < 0.005 | — | 13.8 |
| Paving | — | 0.00 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.09 | 0.09 | 0.09 | 1.49 | 0.00 | 0.00 | 0.20 | 0.20 | 0.00 | 0.05 | 0.05 | — | 217 | 217 | 0.01 | 0.01 | 0.87 | 220 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | 0.01 | 0.06 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | — | 10.9 | 10.9 | < 0.005 | < 0.005 | 0.02 | 11.0 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.01 | 0.00 | 0.00 | < 0.005 | < 0.005 | 0.00 | < 0.005 | < 0.005 | — | 1.80 | 1.80 | < 0.005 | < 0.005 | < 0.005 | 1.83 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

## 3.11. Architectural Coating (2025) - 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Onsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 1.54 | 1.28 | 9.71 | 11.9 | 0.02 | 0.40 | — | 0.40 | 0.37 | — | 0.37 | — | 1,756 | 1,756 | 0.07 | 0.01 | — | 1,762 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Architectural | — | 68.7 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.08 | 0.07 | 0.53 | 0.65 | < 0.005 | 0.02 | — | 0.02 | 0.02 | — | 0.02 | — | 96.2 | 96.2 | < 0.005 | < 0.005 | — | 96.5 |
| Architectural Coatings | — | 3.77 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Off-Road Equipment | 0.02 | 0.01 | 0.10 | 0.12 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 15.9 | 15.9 | < 0.005 | < 0.005 | — | 16.0 |
| Architectural Coatings | — | 0.69 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Onsite truck | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Offsite | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Daily, Summer (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.28 | 0.25 | 0.25 | 4.39 | 0.00 | 0.00 | 0.58 | 0.58 | 0.00 | 0.14 | 0.14 | — | 639 | 639 | 0.03 | 0.02 | 2.58 | 649 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Average Daily | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | 0.01 | 0.01 | 0.02 | 0.18 | 0.00 | 0.00 | 0.03 | 0.03 | 0.00 | 0.01 | 0.01 | — | 32.0 | 32.0 | < 0.005 | < 0.005 | 0.06 | 32.5 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Worker | < 0.005 | < 0.005 | < 0.005 | 0.03 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | < 0.005 | < 0.005 | — | 5.30 | 5.30 | < 0.005 | < 0.005 | 0.01 | 5.38 |
| Vendor | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Hauling | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

# 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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Single Family Housing | 8.46 | 7.93 | 5.84 | 58.7 | 0.11 | 0.08 | 9.45 | 9.53 | 0.08 | 2.40 | 2.48 | — | 11,305 | 11,305 | 0.52 | 0.51 | 46.8 | 11,517 |
| Racquet Club | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Parking Lot | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Other Asphalt Surfaces | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | 8.46 | 7.93 | 5.84 | 58.7 | 0.11 | 0.08 | 9.45 | 9.53 | 0.08 | 2.40 | 2.48 | — | 11,305 | 11,305 | 0.52 | 0.51 | 46.8 | 11,517 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Single Family Housing | 7.48 | 6.94 | 6.36 | 46.4 | 0.10 | 0.08 | 9.45 | 9.53 | 0.08 | 2.40 | 2.48 | — | 10,325 | 10,325 | 0.56 | 0.53 | 1.21 | 10,499 |
| Racquet Club | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Parking Lot | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Other Asphalt Surfaces | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total | 7.48 | 6.94 | 6.36 | 46.4 | 0.10 | 0.08 | 9.45 | 9.53 | 0.08 | 2.40 | 2.48 | — | 10,325 | 10,325 | 0.56 | 0.53 | 1.21 | 10,499 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Single Family Housing | 1.38 | 1.28 | 1.19 | 9.16 | 0.02 | 0.02 | 1.71 | 1.72 | 0.01 | 0.43 | 0.45 | — | 1,747 | 1,747 | 0.09 | 0.09 | 3.35 | 1,779 |
| Racquet Club | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Parking Lot | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Other Asphalt Surfaces | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Total | 1.38 | 1.28 | 1.19 | 9.16 | 0.02 | 0.02 | 1.71 | 1.72 | 0.01 | 0.43 | 0.45 | — | 1,747 | 1,747 | 0.09 | 0.09 | 3.35 | 1,779 |

## 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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Single Family Housing | — | — | — | — | — | — | — | — | — | — | — | — | 1,919 | 1,919 | 0.12 | 0.01 | — | 1,927 |
| Racquet Club | — | — | — | — | — | — | — | — | — | — | — | — | 36.8 | 36.8 | < 0.005 | < 0.005 | — | 36.9 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 1,956 | 1,956 | 0.12 | 0.01 | — | 1,964 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Single Family Housing | — | — | — | — | — | — | — | — | — | — | — | — | 1,919 | 1,919 | 0.12 | 0.01 | — | 1,927 |
| Racquet Club | — | — | — | — | — | — | — | — | — | — | — | — | 36.8 | 36.8 | < 0.005 | < 0.005 | — | 36.9 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 1,956 | 1,956 | 0.12 | 0.01 | — | 1,964 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Single Family Housing | — | — | — | — | — | — | — | — | — | — | — | — | 318 | 318 | 0.02 | < 0.005 | — | 319 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Racquet Club | — | — | — | — | — | — | — | — | — | — | — | — | 6.09 | 6.09 | < 0.005 | < 0.005 | — | 6.11 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | 324 | 324 | 0.02 | < 0.005 | — | 325 |

### 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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Single Family Housing | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Racquet Club | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Parking Lot | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Asphalt Surfaces | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Single Family Housing | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Racquet Club | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Parking Lot | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Asphalt Surfaces | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Single Family Housing | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Racquet Club | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Parking Lot | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Asphalt Surfaces | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |

## 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 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Consumer Products | — | 3.77 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Architect Coatings | — | 0.38 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 3.83 | 3.56 | 0.24 | 26.6 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | — | 93.8 | 93.8 | < 0.005 | < 0.005 | — | 94.2 |
| Total | 3.83 | 7.71 | 0.24 | 26.6 | < 0.005 | 0.03 | — | 0.03 | 0.03 | — | 0.03 | 0.00 | 93.8 | 93.8 | < 0.005 | < 0.005 | — | 94.2 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Hearths | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Consumer Products | — | 3.77 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | — | 0.38 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Total | 0.00 | 4.15 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Hearths | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 | 0.00 | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Consumer Products | — | 0.69 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Architectural Coatings | — | 0.07 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Landscape Equipment | 0.34 | 0.32 | 0.02 | 2.39 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | — | 7.66 | 7.66 | < 0.005 | < 0.005 | — | 7.69 |
| Total | 0.34 | 1.08 | 0.02 | 2.39 | < 0.005 | < 0.005 | — | < 0.005 | < 0.005 | — | < 0.005 | 0.00 | 7.66 | 7.66 | < 0.005 | < 0.005 | — | 7.69 |

## 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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Single Family Housing | — | — | — | — | — | — | — | — | — | — | — | 13.6 | 151 | 165 | 1.41 | 0.03 | — | 210 |
| Racquet Club | — | — | — | — | — | — | — | — | — | — | — | 0.30 | 1.31 | 1.60 | 0.03 | < 0.005 | — | 2.59 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 13.9 | 153 | 167 | 1.44 | 0.04 | — | 213 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Single Family Housing | — | — | — | — | — | — | — | — | — | — | — | 13.6 | 151 | 165 | 1.41 | 0.03 | — | 210 |
| Racquet Club | — | — | — | — | — | — | — | — | — | — | — | 0.30 | 1.31 | 1.60 | 0.03 | < 0.005 | — | 2.59 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 13.9 | 153 | 167 | 1.44 | 0.04 | — | 213 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Single Family Housing | — | — | — | — | — | — | — | — | — | — | — | 2.26 | 25.1 | 27.3 | 0.23 | 0.01 | — | 34.8 |
| Racquet Club | — | — | — | — | — | — | — | — | — | — | — | 0.05 | 0.22 | 0.27 | 0.01 | < 0.005 | — | 0.43 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 2.31 | 25.3 | 27.6 | 0.24 | 0.01 | — | 35.3 |

## 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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Single Family Housing | — | — | — | — | — | — | — | — | — | — | — | 93.9 | 0.00 | 93.9 | 9.39 | 0.00 | — | 329 |
| Racquet Club | — | — | — | — | — | — | — | — | — | — | — | 8.08 | 0.00 | 8.08 | 0.81 | 0.00 | — | 28.3 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 102 | 0.00 | 102 | 10.2 | 0.00 | — | 357 |

| | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Single Family Housing | — | — | — | — | — | — | — | — | — | — | — | 93.9 | 0.00 | 93.9 | 9.39 | 0.00 | — | 329 |
| Racquet Club | — | — | — | — | — | — | — | — | — | — | — | 8.08 | 0.00 | 8.08 | 0.81 | 0.00 | — | 28.3 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 102 | 0.00 | 102 | 10.2 | 0.00 | — | 357 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Single Family Housing | — | — | — | — | — | — | — | — | — | — | — | 15.6 | 0.00 | 15.6 | 1.55 | 0.00 | — | 54.4 |
| Racquet Club | — | — | — | — | — | — | — | — | — | — | — | 1.34 | 0.00 | 1.34 | 0.13 | 0.00 | — | 4.68 |
| Parking Lot | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Other Asphalt Surfaces | — | — | — | — | — | — | — | — | — | — | — | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | — | 0.00 |
| Total | — | — | — | — | — | — | — | — | — | — | — | 16.9 | 0.00 | 16.9 | 1.69 | 0.00 | — | 59.1 |

## 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) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Single Family Housing | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.24 | 1.24 |
| Racquet Club | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.01 | 0.01 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.26 | 1.26 |
| Daily, Winter (Max) | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Single Family Housing | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.24 | 1.24 |
| Racquet Club | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.01 | 0.01 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 1.26 | 1.26 |
| Annual | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Single Family Housing | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.21 | 0.21 |
| Racquet Club | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | < 0.005 | < 0.005 |
| Total | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | 0.21 | 0.21 |

## 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 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 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |

## 4.9. 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 | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| Removed | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — | — |
| 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 |
|---|---|---|---|---|---|---|

| | | | | | | |
|---|---|---|---|---|---|---|
| Site Preparation | Site Preparation | 1/1/2024 | 2/9/2024 | 5.00 | 30.0 | — |
| Grading | Grading | 2/12/2024 | 4/3/2024 | 5.00 | 38.0 | — |
| Building Construction | Building Construction | 4/4/2024 | 5/28/2025 | 5.00 | 300 | — |
| Paving | Paving | 5/29/2025 | 6/25/2025 | 5.00 | 20.0 | — |
| Architectural Coating | Architectural Coating | 6/26/2025 | 7/23/2025 | 5.00 | 20.0 | — |

## 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 |
|---|---|---|---|---|---|---|---|
| Site Preparation | Rubber Tired Dozers | Diesel | Average | 1.00 | 8.00 | 367 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | Diesel | Average | 2.00 | 8.00 | 84.0 | 0.37 |
| Site Preparation | Pumps | Diesel | Average | 1.00 | 8.00 | 11.0 | 0.74 |
| Grading | Graders | Diesel | Average | 1.00 | 8.00 | 148 | 0.41 |
| Grading | Plate Compactors | Diesel | Average | 1.00 | 8.00 | 36.0 | 0.38 |
| Grading | Tractors/Loaders/Backhoes | Diesel | Average | 2.00 | 8.00 | 84.0 | 0.37 |
| Grading | Rubber Tired Loaders | Diesel | Average | 1.00 | 8.00 | 423 | 0.48 |
| Grading | Scrapers | Diesel | Average | 4.00 | 8.00 | 367 | 0.40 |
| Grading | Off-Highway Tractors | Diesel | Average | 1.00 | 8.00 | 38.0 | 0.44 |
| Building Construction | Tractors/Loaders/Backhoes | Diesel | Average | 3.00 | 7.00 | 84.0 | 0.37 |
| Building Construction | Air Compressors | Diesel | Average | 4.00 | 8.00 | 37.0 | 0.48 |
| Building Construction | Excavators | Diesel | Average | 2.00 | 8.00 | 36.0 | 0.38 |
| Building Construction | Forklifts | Diesel | Average | 2.00 | 8.00 | 82.0 | 0.20 |
| Building Construction | Generator Sets | Diesel | Average | 4.00 | 8.00 | 14.0 | 0.74 |
| Building Construction | Rubber Tired Loaders | Diesel | Average | 1.00 | 8.00 | 150 | 0.36 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Building Construction | Skid Steer Loaders | Diesel | Average | 4.00 | 8.00 | 71.0 | 0.37 |
| Building Construction | Trenchers | Diesel | Average | 1.00 | 8.00 | 40.0 | 0.50 |
| Paving | Pavers | Diesel | Average | 2.00 | 8.00 | 81.0 | 0.42 |
| Paving | Paving Equipment | Diesel | Average | 2.00 | 8.00 | 89.0 | 0.36 |
| Paving | Surfacing Equipment | Diesel | Average | 2.00 | 8.00 | 36.0 | 0.38 |
| Architectural Coating | Air Compressors | Diesel | Average | 4.00 | 6.00 | 37.0 | 0.48 |
| Architectural Coating | Forklifts | Diesel | Average | 2.00 | 8.00 | 82.0 | 0.20 |
| Architectural Coating | Generator Sets | Diesel | Average | 4.00 | 8.00 | 14.0 | 0.74 |
| Architectural Coating | Rubber Tired Loaders | Diesel | Average | 1.00 | 8.00 | 150 | 0.36 |

## 5.3. Construction Vehicles

### 5.3.1. Unmitigated

| Phase Name | Trip Type | One-Way Trips per Day | Miles per Trip | Vehicle Mix |
|---|---|---|---|---|
| Site Preparation | — | — | — | — |
| Site Preparation | Worker | 10.0 | 18.5 | LDA,LDT1,LDT2 |
| Site Preparation | Vendor | — | 10.2 | HHDT,MHDT |
| Site Preparation | Hauling | 0.00 | 20.0 | HHDT |
| Site Preparation | Onsite truck | — | — | HHDT |
| Grading | — | — | — | — |
| Grading | Worker | 25.0 | 18.5 | LDA,LDT1,LDT2 |
| Grading | Vendor | — | 10.2 | HHDT,MHDT |
| Grading | Hauling | 0.00 | 20.0 | HHDT |
| Grading | Onsite truck | — | — | HHDT |
| Building Construction | — | — | — | — |
| Building Construction | Worker | 221 | 18.5 | LDA,LDT1,LDT2 |
| Building Construction | Vendor | 79.9 | 10.2 | HHDT,MHDT |

| | | | | |
|---|---|---|---|---|
| Building Construction | Hauling | 0.00 | 20.0 | HHDT |
| Building Construction | Onsite truck | — | — | HHDT |
| Paving | — | — | — | — |
| Paving | Worker | 15.0 | 18.5 | LDA,LDT1,LDT2 |
| Paving | Vendor | — | 10.2 | HHDT,MHDT |
| Paving | Hauling | 0.00 | 20.0 | HHDT |
| Paving | Onsite truck | — | — | HHDT |
| Architectural Coating | — | — | — | — |
| Architectural Coating | Worker | 44.2 | 18.5 | LDA,LDT1,LDT2 |
| Architectural Coating | Vendor | — | 10.2 | HHDT,MHDT |
| Architectural Coating | Hauling | 0.00 | 20.0 | HHDT |
| Architectural Coating | Onsite truck | — | — | HHDT |

## 5.4. Vehicles

### 5.4.1. Construction Vehicle Control Strategies

Non-applicable. No control strategies activated by user.

## 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 | 351,771 | 117,257 | 3,945 | 1,315 | — |

## 5.6. Dust Mitigation

### 5.6.1. Construction Earthmoving Activities

| Phase Name | Material Imported (cy) | Material Exported (cy) | Acres Graded (acres) | Material Demolished (sq. ft.) | Acres Paved (acres) |
|---|---|---|---|---|---|
| Site Preparation | — | — | 15.0 | 0.00 | — |

| | | | | | |
|---|---|---|---|---|---|
| Grading | — | — | 171 | 0.00 | — |
| Paving | 0.00 | 0.00 | 0.00 | 0.00 | 2.10 |

### 5.6.2. Construction Earthmoving Control Strategies

Non-applicable. No control strategies activated by user.

## 5.7. Construction Paving

| Land Use | Area Paved (acres) | % Asphalt |
|---|---|---|
| Single Family Housing | 2.10 | 0% |
| Racquet Club | 0.00 | 0% |
| Parking Lot | 0.00 | 100% |
| Other Asphalt Surfaces | 0.00 | 100% |

## 5.8. Construction Electricity Consumption and Emissions Factors

### kWh per Year and Emission Factor (lb/MWh)

| Year | kWh per Year | CO2 | CH4 | N2O |
|---|---|---|---|---|
| 2024 | 0.00 | 532 | 0.03 | < 0.005 |
| 2025 | 0.00 | 532 | 0.03 | < 0.005 |

## 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 |
|---|---|---|---|---|---|---|---|---|
| Single Family Housing | 1,461 | 1,461 | 1,461 | 533,320 | 13,336 | 13,336 | 13,336 | 4,867,676 |
| Racquet Club | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Parking Lot | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Other Asphalt Surfaces | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

## 5.10. Operational Area Sources

### 5.10.1. Hearths

#### 5.10.1.1. Unmitigated

| Hearth Type | Unmitigated (number) |
|---|---|
| Single Family Housing | — |
| Wood Fireplaces | 0 |
| Gas Fireplaces | 0 |
| Propane Fireplaces | 0 |
| Electric Fireplaces | 0 |
| No Fireplaces | 19 |
| Conventional Wood Stoves | 0 |
| Catalytic Wood Stoves | 0 |
| Non-Catalytic Wood Stoves | 0 |
| Pellet Wood Stoves | 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) |
|---|---|---|---|---|
| 351770.85 | 117,257 | 3,945 | 1,315 | — |

### 5.10.3. Landscape Equipment

| Season | Unit | Value |
|---|---|---|
| Snow Days | day/yr | 0.00 |

| | | |
|---|---|---|
| Summer Days | day/yr | 180 |

## 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) |
|---|---|---|---|---|---|
| Single Family Housing | 1,316,973 | 532 | 0.0330 | 0.0040 | 0.00 |
| Racquet Club | 25,229 | 532 | 0.0330 | 0.0040 | 0.00 |
| Parking Lot | 0.00 | 532 | 0.0330 | 0.0040 | 0.00 |
| Other Asphalt Surfaces | 0.00 | 532 | 0.0330 | 0.0040 | 0.00 |

## 5.12. Operational Water and Wastewater Consumption

### 5.12.1. Unmitigated

| Land Use | Indoor Water (gal/year) | Outdoor Water (gal/year) |
|---|---|---|
| Single Family Housing | 7,119,296 | 14,828,146 |
| Racquet Club | 155,546 | 0.00 |
| Parking Lot | 0.00 | 0.00 |
| Other Asphalt Surfaces | 0.00 | 0.00 |

## 5.13. Operational Waste Generation

### 5.13.1. Unmitigated

| Land Use | Waste (ton/year) | Cogeneration (kWh/year) |
|---|---|---|
| Single Family Housing | 174 | — |
| Racquet Club | 15.0 | — |

| | | |
|---|---|---|
| Parking Lot | 0.00 | — |
| Other Asphalt Surfaces | 0.00 | — |

## 5.14. Operational Refrigeration and Air Conditioning Equipment

### 5.14.1. Unmitigated

| Land Use Type | Equipment Type | Refrigerant | GWP | Quantity (kg) | Operations Leak Rate | Service Leak Rate | Times Serviced |
|---|---|---|---|---|---|---|---|
| Single Family Housing | Average room A/C & Other residential A/C and heat pumps | R-410A | 2,088 | < 0.005 | 2.50 | 2.50 | 10.0 |
| Single Family Housing | Household refrigerators and/or freezers | R-134a | 1,430 | 0.12 | 0.60 | 0.00 | 1.00 |
| Racquet Club | Other commercial A/C and heat pumps | R-410A | 2,088 | < 0.005 | 4.00 | 4.00 | 18.0 |
| Racquet Club | Stand-alone retail refrigerators and freezers | R-134a | 1,430 | 0.04 | 1.00 | 0.00 | 1.00 |

## 5.15. Operational Off-Road Equipment

### 5.15.1. Unmitigated

| Equipment Type | Fuel Type | Engine Tier | Number per Day | Hours Per Day | Horsepower | Load Factor |
|---|---|---|---|---|---|---|

## 5.16. Stationary Sources

### 5.16.1. Emergency Generators and Fire Pumps

| Equipment Type | Fuel Type | Number per Day | Hours per Day | Hours per Year | Horsepower | Load Factor |
|---|---|---|---|---|---|---|

### 5.16.2. Process Boilers

| Equipment Type | Fuel Type | Number | Boiler Rating (MMBtu/hr) | Daily Heat Input (MMBtu/day) | Annual Heat Input (MMBtu/yr) |
|---|---|---|---|---|---|

### 5.17. User Defined

| Equipment Type | Fuel Type |
|---|---|

### 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) |
|---|---|---|---|

## 6. Climate Risk Detailed Report

### 6.1. Climate Risk Summary

Cal-Adapt midcentury 2040–2059 average projections for four hazards are reported below for your project location. These are under Representation Concentration Pathway (RCP) 8.5 which assumes GHG emissions will continue to rise strongly through 2050 and then plateau around 2100.

| Climate Hazard | Result for Project Location | Unit |
|---|---|---|
| Temperature and Extreme Heat | 31.1 | annual days of extreme heat |
| Extreme Precipitation | 1.45 | annual days with precipitation above 20 mm |
| Sea Level Rise | 0.00 | meters of inundation depth |
| Wildfire | 0.00 | annual hectares burned |

Temperature and Extreme Heat data are for grid cell in which your project are located. The projection is based on the 98th historical percentile of daily maximum/minimum temperatures from observed historical data (32 climate model ensemble from Cal-Adapt, 2040–2059 average under RCP 8.5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Extreme Precipitation data are for the grid cell in which your project are located. The threshold of 20 mm is equivalent to about ¾ an inch of rain, which would be light to moderate rainfall if received over a full day or heavy rain if received over a period of 2 to 4 hours. Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.
Sea Level Rise data are for the grid cell in which your project are located. The projections are from Radke et al. (2017), as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider different increments of sea level rise coupled with extreme storm events. Users may select from four model simulations to view the range in potential inundation depth for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 50 meters (m) by 50 m, or about 164 feet (ft) by 164 ft.
Wildfire data are for the grid cell in which your project are located. The projections are from UC Davis, as reported in Cal-Adapt (2040–2059 average under RCP 8.5), and consider historical data of climate, vegetation, population density, and large (> 400 ha) fire history. Users may select from four model simulations to view the range in potential wildfire probabilities for the grid cell. The four simulations make different assumptions about expected rainfall and temperature are: Warmer/drier (HadGEM2-ES), Cooler/wetter (CNRM-CM5), Average conditions (CanESM2), Range of different rainfall and temperature possibilities (MIROC5). Each grid cell is 6 kilometers (km) by 6 km, or 3.7 miles (mi) by 3.7 mi.

## 6.2. Initial Climate Risk Scores

| Climate Hazard | Exposure Score | Sensitivity Score | Adaptive Capacity Score | Vulnerability Score |
|---|---|---|---|---|
| Temperature and Extreme Heat | 4 | 0 | 0 | N/A |
| Extreme Precipitation | N/A | N/A | N/A | N/A |
| Sea Level Rise | 1 | 0 | 0 | N/A |
| Wildfire | 1 | 0 | 0 | N/A |
| Flooding | N/A | N/A | N/A | N/A |
| Drought | N/A | N/A | N/A | N/A |
| Snowpack Reduction | N/A | N/A | N/A | N/A |
| Air Quality Degradation | 0 | 0 | 0 | N/A |

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.

The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores do not include implementation of climate risk reduction measures.

## 6.3. Adjusted Climate Risk Scores

| Climate Hazard | Exposure Score | Sensitivity Score | Adaptive Capacity Score | Vulnerability Score |
|---|---|---|---|---|
| Temperature and Extreme Heat | 4 | 1 | 1 | 4 |
| Extreme Precipitation | N/A | N/A | N/A | N/A |
| Sea Level Rise | 1 | 1 | 1 | 2 |
| Wildfire | 1 | 1 | 1 | 2 |
| Flooding | N/A | N/A | N/A | N/A |
| Drought | N/A | N/A | N/A | N/A |
| Snowpack Reduction | N/A | N/A | N/A | N/A |
| Air Quality Degradation | 1 | 1 | 1 | 2 |

The sensitivity score reflects the extent to which a project would be adversely affected by exposure to a climate hazard. Exposure is rated on a scale of 1 to 5, with a score of 5 representing the greatest exposure.
The adaptive capacity of a project refers to its ability to manage and reduce vulnerabilities from projected climate hazards. Adaptive capacity is rated on a scale of 1 to 5, with a score of 5 representing the greatest ability to adapt.
The overall vulnerability scores are calculated based on the potential impacts and adaptive capacity assessments for each hazard. Scores include implementation of climate risk reduction measures.

## 6.4. Climate Risk Reduction Measures

# 7. Health and Equity Details

## 7.1. CalEnviroScreen 4.0 Scores

The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.

| Indicator | Result for Project Census Tract |
|---|---|
| Exposure Indicators | — |
| AQ-Ozone | 88.7 |
| AQ-PM | 16.0 |
| AQ-DPM | 11.0 |
| Drinking Water | 20.4 |

| | |
|---|---|
| Lead Risk Housing | 39.2 |
| Pesticides | 0.00 |
| Toxic Releases | 88.4 |
| Traffic | 22.2 |
| Effect Indicators | — |
| CleanUp Sites | 0.00 |
| Groundwater | 0.00 |
| Haz Waste Facilities/Generators | 46.8 |
| Impaired Water Bodies | 0.00 |
| Solid Waste | 0.00 |
| Sensitive Population | — |
| Asthma | 85.0 |
| Cardio-vascular | 83.5 |
| Low Birth Weights | 73.3 |
| Socioeconomic Factor Indicators | — |
| Education | 80.2 |
| Housing | 57.9 |
| Linguistic | 83.1 |
| Poverty | 65.7 |
| Unemployment | 79.0 |

## 7.2. Healthy Places Index Scores

The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

| Indicator | Result for Project Census Tract |
|---|---|
| Economic | — |
| Above Poverty | 15.87321956 |
| Employed | 4.196073399 |

| | |
|---|---|
| Median HI | 38.27794174 |
| Education | — |
| Bachelor's or higher | 13.93558322 |
| High school enrollment | 100 |
| Preschool enrollment | 11.61298601 |
| Transportation | — |
| Auto Access | 93.63531374 |
| Active commuting | 44.07801873 |
| Social | — |
| 2-parent households | 49.98075196 |
| Voting | 23.23880405 |
| Neighborhood | — |
| Alcohol availability | 78.19838316 |
| Park access | 15.21878609 |
| Retail density | 53.27858334 |
| Supermarket access | 47.76081098 |
| Tree canopy | 16.14269216 |
| Housing | — |
| Homeownership | 80.14885153 |
| Housing habitability | 18.72192994 |
| Low-inc homeowner severe housing cost burden | 4.324393687 |
| Low-inc renter severe housing cost burden | 2.45091749 |
| Uncrowded housing | 26.21583472 |
| Health Outcomes | — |
| Insured adults | 25.31759271 |
| Arthritis | 53.0 |
| Asthma ER Admissions | 28.7 |

| | |
|---|---|
| High Blood Pressure | 47.4 |
| Cancer (excluding skin) | 74.5 |
| Asthma | 19.7 |
| Coronary Heart Disease | 43.7 |
| Chronic Obstructive Pulmonary Disease | 25.1 |
| Diagnosed Diabetes | 21.5 |
| Life Expectancy at Birth | 13.5 |
| Cognitively Disabled | 25.4 |
| Physically  Disabled | 38.4 |
| Heart Attack ER Admissions | 10.4 |
| Mental Health Not Good | 16.4 |
| Chronic Kidney Disease | 35.4 |
| Obesity | 14.7 |
| Pedestrian Injuries | 19.6 |
| Physical Health Not Good | 18.1 |
| Stroke | 29.9 |
| Health Risk Behaviors | — |
| Binge Drinking | 58.7 |
| Current Smoker | 16.1 |
| No Leisure Time for Physical Activity | 24.4 |
| Climate Change Exposures | — |
| Wildfire Risk | 0.0 |
| SLR Inundation Area | 0.0 |
| Children | 5.3 |
| Elderly | 88.9 |
| English Speaking | 47.0 |
| Foreign-born | 61.0 |

| | |
|---|---|
| Outdoor Workers | 15.5 |
| Climate Change Adaptive Capacity | — |
| Impervious Surface Cover | 74.7 |
| Traffic Density | 15.8 |
| Traffic Access | 23.0 |
| Other Indices | — |
| Hardship | 81.7 |
| Other Decision Support | — |
| 2016 Voting | 16.6 |

## 7.3. Overall Health & Equity Scores

| Metric | Result for Project Census Tract |
|---|---|
| CalEnviroScreen 4.0 Score for Project Location (a) | 51.0 |
| Healthy Places Index Score for Project Location (b) | 18.0 |
| Project Located in a Designated Disadvantaged Community (Senate Bill 535) | No |
| Project Located in a Low-Income Community (Assembly Bill 1550) | Yes |
| Project Located in a Community Air Protection Program Community (Assembly Bill 617) | No |

a: The maximum CalEnviroScreen score is 100. A high score (i.e., greater than 50) reflects a higher pollution burden compared to other census tracts in the state.
b: The maximum Health Places Index score is 100. A high score (i.e., greater than 50) reflects healthier community conditions compared to other census tracts in the state.

## 7.4. Health & Equity Measures

No Health & Equity Measures selected.

## 7.5. Evaluation Scorecard

Health & Equity Evaluation Scorecard not completed.

## 7.6. Health & Equity Custom Measures

No Health & Equity Custom Measures created.

# 8. User Changes to Default Data

| Screen | Justification |
|---|---|
| Land Use | Based on average SF of each dwelling type. Landscape area calculated using default value for 64 Single Family units. Internal roadways modeled as other asphalt surfaces |
| Construction: Construction Phases | Phase durations adjusted to match applicant provided duration of 18 months (total). No demolition required. |
| Construction: Off-Road Equipment | per applicant provided equipment list |
| Operations: Vehicle Data | per Traffic Memorandum (GTS 2023) Exhibit 4, Phase I trip generation. |
| Operations: Hearths | All electric; no wood or gas stoves/fireplaces per project description |
| Operations: Energy Use | No natural gas; development is all electric |

# Appendix B

Biological Resources Assessment

# Tentative Tract Map 83359

## Biological Resources Assessment

*prepared for*

**Maison's Palmdale Boulevard 150, LLC**
Kevin Harbison
2007 Cedar Avenue
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**September 2023**

RINCON CONSULTANTS, INC.
Environmental Scientists | Planners | Engineers
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# Tentative Tract Map 83359

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# Executive Summary

This report analyzes potential impacts to biological resources from a proposed single-family residential development project (project) covering 20-gross acres in the city of Palmdale, Los Angeles County, California (Assessor Parcel Number [APN] 3023-002-184). The project includes the development of single story, single-family homes on a total of 66 lots with community amenities. Prior to construction activities, clearing, brushing, and grubbing of vegetation and trees will occur throughout the project site. Following vegetation removal, the entire project site will be graded. An on-site construction staging area will provide space to store materials, vehicles, waste, and for parking. Drainage improvements for the development will consist of catch basins connected to underground storm drain which outlets into a detention basin located in the northeastern most plot of the TTM.

A biologist conducted a survey of the Biological Study Area (BSA) for the project to document biological resources and assess the potential for sensitive resources to occur. The BSA is defined for this project as the 20-gross acre project site and a 100-foot survey buffer where accessible. One vegetation community, *Yucca brevifolia* Woodland Alliance (Joshua tree woodland), was identified in the BSA. This community generally occurs in alluvial fans, ridges, and gentle to moderate slopes. Canopy, shrub layer, and herbaceous layer is open to intermittent with perennial grasses and seasonal annuals.

A query of the California Natural Diversity Database (CNDDB) and California Native Plant Society (CNPS) Rare Plant Inventory includes 19 special status plant species recorded in the 9-quad search area surrounding the project site. One species, short-joint beavertail (*Opuntia basilaris* var. *brachyclada*), has a low potential to occur on the project site. In addition, western Joshua tree (*Yucca brevifolia*), a candidate species for listing under the California Endangered Species Act (CESA), is present on the project site.

The CNDDB query results include 31 special status wildlife species recorded within the 9-quad search area surrounding the project site. The following 5 species have moderate to high potential to occur on the project site: California glossy snake (*Arizona elegans occidentalis*), coast horned lizard (*Phrynosoma blainvillii*), burrowing owl (*Athene cunicularia*), loggerhead shrike (*Lanius ludovicianus*), LeConte's thrasher (*Toxostoma lecontei*). In addition, desert kit fox (*Vulpes macrotis arsipus*), a California Fish and Game Code (CFGC) furbearing mammal, was determined to have a moderate potential to occur on the project site.

One shallow, ephemeral drainage intersects the project site and an adjacent parcel to the east. It may generally convey stormwater runoff from the residential development to the south of the project site and from Palmdale Avenue to the north of the project site during significant rain events. Due to the presence of a defined bed and bank, indicated by the break in slope, the CDFW may assert jurisdiction over this drainage.

Mitigation measures to reduce potential project impacts to special status plants and animals, nesting birds, sensitive natural communities, jurisdictional features, and resources protected by local jurisdictions are included.

# 1 Introduction

Rincon Consultants, Inc. (Rincon) prepared this Biological Resources Assessment (BRA) to document the existing biological conditions for a proposed single-family residential development project (project) within Assessor Parcel Number (APN) 3023-002-184 located in the City of Palmdale, Los Angeles County, California. This BRA is prepared with the intent of serving as the basis for suitable analysis of the potential impacts to biological resources pursuant to the California Environmental Quality Act (CEQA) environmental review process.

## 1.1 Project Location

The project site is located on 20-gross acres in the City of Palmdale, Los Angeles County, California (APN 3023-002-184). The site is situated along East Palmdale Boulevard, approximately 4.7 miles east of the intersection of Palmdale Boulevard and Sierra Highway (Figure 1 and Figure 2). The site is depicted within the *Palmdale, California* United States Geological Survey (USGS) 7.5-minute topographic quadrangle map and in Township 06N, Range 11W, Section 27, San Bernardino base and meridian.

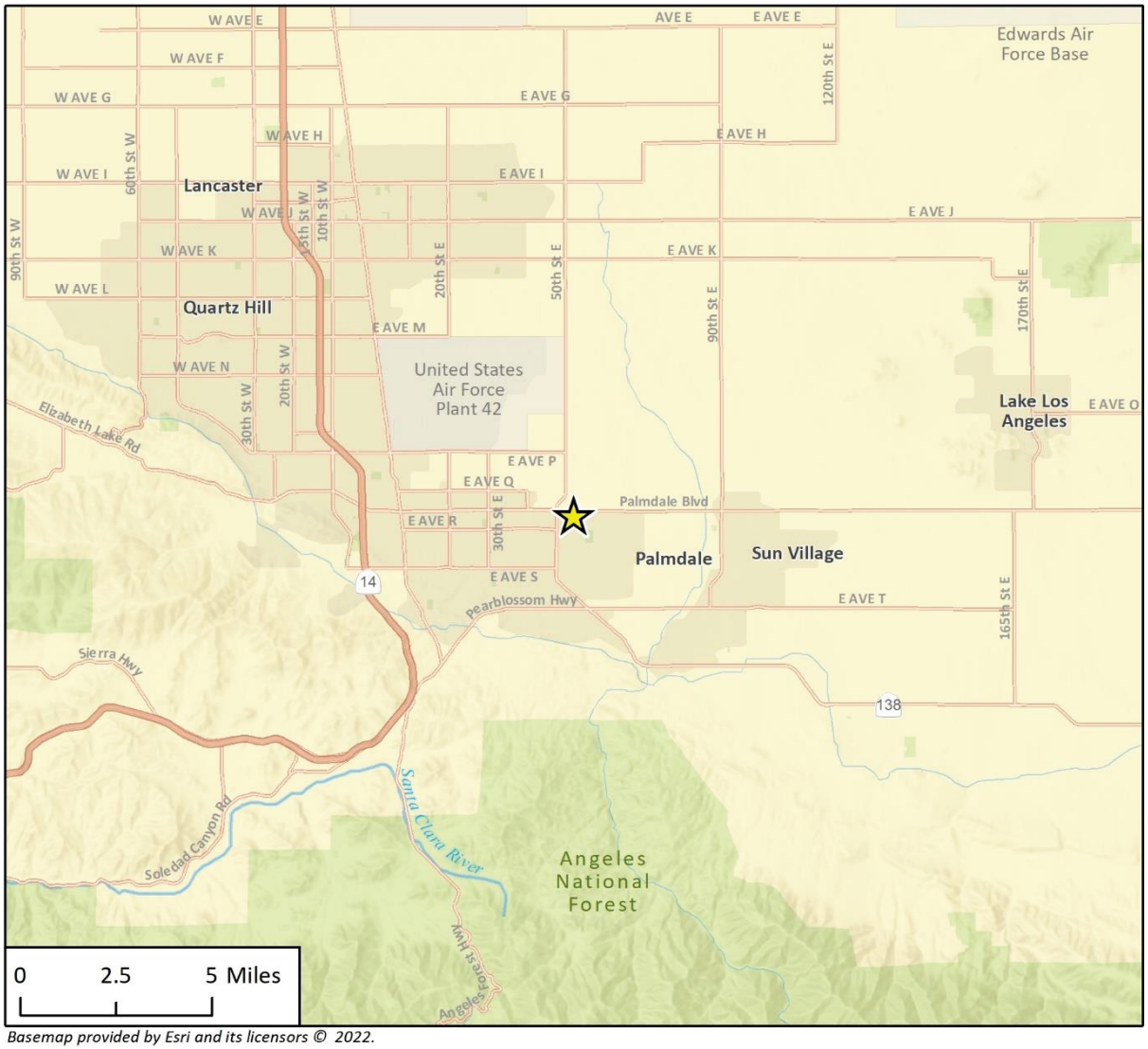
## 1.2 Project Description

The project includes the development of single story, single-family homes with community amenities. Prior to construction activities, clearing, brushing, and grubbing of vegetation and trees will occur throughout the project site. Following vegetation removal, the entire project site will be graded. Standard construction equipment for residential development will be utilized, including backhoes, front end loaders, excavators, dump trucks, concrete trucks, water trucks, forklifts, grade-alls, and manlifts. An on-site construction staging area will provide space to store materials, vehicles, waste, and for parking. Drainage improvements for the development will consist of catch basins connected to underground storm drain which outlets into a detention basin located in the northeastern most plot of the TTM. This basin will accept flows from the community and detain from flowing offsite while also infiltrating water back into the groundwater basin.

## 1.3 Regulatory Summary

Regulated or sensitive resources studied and analyzed herein include special status plant and wildlife species, nesting birds and raptors, sensitive plant communities, jurisdictional waters and wetlands, wildlife movement, regionally protected resources (e.g., from county-wide Habitat Conservation Plans [HCPs] and Natural Community Conservation Plans [NCCPs]), and locally protected resources, such as protected trees. Regulatory authority over biological resources is shared by Federal, State, and local authorities. Primary authority for regulation of general biological resources lies within the land use control and planning authority of local jurisdictions (in this instance, the City of Palmdale).

**Figure 1 Regional Location Map**




*Basemap provided by Esri and its licensors © 2022.*

Project Location

N

## Figure 2 Project Location Map

*Imagery provided by Microsoft Bing and its licensors © 2022.*

### 1.3.1 Definition of Special Status Species

For the purposes of this report, special status species include:

- Species listed as threatened or endangered under the federal Endangered Species Act (ESA); including proposed and candidate species
- Species listed as candidate, threatened, or endangered under the California Endangered Species Act (CESA)
- Species designated as Fully Protected by the California Fish and Game Code (CFGC), and Species of Special Concern (SSC) or Watch List by the California Department of Fish and Wildlife (CDFW)
- Native Plant Protection Act (NPPA) – State Rare (SR)
- California Native Plant Society (CNPS) California Rare Plant Ranks (CRPR) 1A, 1B, 2A and 2B
- Species designated as locally important by the City of Palmdale and/or otherwise protected through ordinances or the General Plan

### 1.3.2 Environmental Statutes

For the purpose of this report, the analysis of potential impacts to biological resources was guided by the following statutes (Appendix A):

- California Environmental Quality Act (CEQA)
- ESA
- CESA
- Federal Clean Water Act (CWA)
- CFGC
- Migratory Bird Treaty Act (MBTA)
- The Bald and Golden Eagle Protection Act
- Porter-Cologne Water Quality Control Act
- City of Palmdale Municipal Code
- City of Palmdale General Plan

### 1.3.3 Guidelines for Determining CEQA Significance

The following threshold criteria, as defined by the CEQA Guidelines Appendix G Initial Study Checklist, were used to evaluate potential environmental effects. Based on these criteria, the proposed project would have a significant effect on biological resources if it would:

a) *Have substantial adverse effects, 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, and regulations or by the California Department of Fish and Wildlife or US 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.*

# 2 Methodology

## 2.1 Biological Study Area

The Biological Study Area (BSA) is defined for this project as the 20-gross acre project site and a 100-foot survey buffer where accessible (Figure 3).

## 2.2 Literature Review

Rincon conducted a literature review to characterize the nature and extent of biological resources on and adjacent to the BSA. The literature review included an evaluation of current and historical aerial photographs of the site (Google Earth), regional and site-specific topographic maps, and climatic data.

Queries of the U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation system (IPaC; UFWS 2022a), CDFW California Natural Diversity Database (CNDDB; CDFW 2022a), and California Native Plant Society (CNPS) online Inventory of Rare and Endangered Plants of California (2022) were conducted to obtain comprehensive information regarding State and federally listed species, and other special status species, considered to have potential to occur within the *Palmdale, California* USGS 7.5-minute topographic quadrangle and the surrounding eight quadrangles (Ritter Ridge, Lancaster West, Lancaster East, Alpine Butte, Littlerock, Juniper Hills, Pacifico Mountains, and Acton). The results of database-queries and lists of special status species were reviewed by Rincon's regional biological experts for accuracy and completeness. The final list of special status biological resources (species and sensitive natural communities) was evaluated based on documented occurrences within the nine-quadrangle search area and biologist's expert opinions on species known to occur in the region. The evaluation results and justification were compiled into a table (Appendix B).

The following resources were reviewed for additional information on existing conditions relating to biological resources within the BSA:

- United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) Web Soil Survey (2022)
- USFWS Critical Habitat Portal (2022b)
- CDFW Biogeographic Information and Observation System (CDFW 2022b)
- CDFW Special Vascular Plants, Bryophytes, and Lichens List (2022c)
- CDFW Special Animals List (2022d)

The vegetation community characterizations for this analysis were based on the classification systems presented in *A Manual of California Vegetation, Second Edition* (MCV2; Sawyer et al. 2009).

A review of the jurisdictional delineation report for the project site and adjacent parcel to the east was conducted (Rincon 2021).

The potential for wildlife movement corridors was evaluated based on the California Essential Habitat Connectivity Project commissioned by the California Department of Transportation and CDFW (Spencer et al. 2010).

**Figure 3 Biological Study Area**

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## 2.3 Field Surveys

### 2.3.1 Reconnaissance Survey

A field reconnaissance survey of the BSA was conducted by Rincon Biologist Amy Leigh Trost on September 21, 2022, to document the existing site conditions and evaluate the potential for presence of sensitive biological resources including special status plant and wildlife species, sensitive plant communities, potentially jurisdictional waters, wildlife corridors and nursery sites, and locally protected resources. Weather conditions during the survey included temperatures of 57 to 68 degrees Fahrenheit, winds of up to three miles per hour, sunny and clear skies. The biologist surveyed the entire BSA on foot where accessible using meandering transects.

The habitat requirements for each regionally occurring special status species were assessed and compared to the type and quality of the habitats observed within the project site during the site visit. The survey was conducted to make an initial determination regarding the presence or absence of terrestrial biological resources including plants, birds, and other wildlife. Site photographs are included in Appendix C.

### 2.3.2 Western Joshua Tree Survey

Western Joshua trees were documented on the project site during a western Joshua tree assessment conducted by Rincon desert botanist Kipp Marzullo on July 21, 2021. The survey was conducted following the *DRAFT Joshua Tree ITP Field Work and Application Guidance* (CDFW 2021). Full coverage pedestrian surveys were conducted and the locations of all western Joshua trees on the site were documented using GPS technology. During the survey, attributes recorded for each individual tree included: single tree or clonal, height/age class; number of branching terminal panicles and phenophase. Each western Joshua tree was assigned a unique identification number, and a physical tag affixed to the north side of the tree at 4.5 feet above natural grade, where feasible/accessible.

## 2.4 Impact Evaluation

Impacts are defined as project-related activities that destroy, damage, alter, or otherwise affect biological resources. This may include injury or mortality to plant or wildlife species, effects on an animal's behavior (such as through harassment or frightening off an animal by construction noise), as well as the loss, modification, or disturbance of natural resources or habitats. Impacts are defined as either direct or indirect, and either permanent or temporary. This section includes a brief overview of the types of impacts analyzed in Section 5 (Impact Analysis and Mitigation Measures) of the BRA.

Direct Impacts are generally those that occur during project implementation and at the same time and location as the cause of the impact. Direct impacts for this project may include injury, death, and/or harassment of special status wildlife species, if present in the work areas or vicinity. Direct impacts may also include the destruction of vegetation communities necessary for special status species breeding, feeding, or sheltering. Direct impacts to plants can include crushing of plants, bulbs, or seeds where present in the impact areas.

Indirect Impacts are those that are reasonably foreseeable and caused by a project but occur later in time and/or potentially at locations of some distance from the source of the impact. If a direct

physical change in the environment in turn causes another change in the environment, then the other change is an indirect impact. Specific examples for this project may include soil compaction that, in the future, following completion of the project, prevents wildlife from digging burrows or allows weedy plant species to thrive. Other examples may include dust that drifts outside of project disturbance areas and covers native plants, thereby decreasing their photosynthetic capacity, and unintentional introduction of invasive species (particularly weedy plant species that outcompete native plant species) that over time negatively affect the local ecology.

Permanent Impacts are those that result in the long-term or irreversible loss of biological resources. Grading a site to make way for urban development that will be present for years to come is an example of a permanent impact.

Temporary Impacts to biological resources are those that are reversible over time, either inherently or with implementation of Mitigation Measures. Examples include the generation of fugitive dust and noise during project implementation. These temporary impacts are anticipated to last during project implementation and shortly thereafter. However, the biological resources are anticipated to return to baseline conditions after project completion.

# 3 Existing Conditions

## 3.1 Physical Characteristics

### 3.1.1 Topography and Geography

The project site is located in the Antelope Valley, which constitutes the western tip of the Mojave Desert. The Antelope Valley is situated between the Tehachapi, Sierra Pelona, and San Gabriel Mountains. The valley opens up to the Victor Valley and Great Basin to the east and the region is largely composed of mid-elevation desert scrub with areas of residential and industrial development primarily concentrated in the Lancaster and Palmdale areas. Vegetation occurring in the Lancaster and Palmdale areas includes California juniper (*Juniperus californica*) woodland, Joshua tree (*Yucca brevifolia*) woodland, and creosote scrub (*Larrea tridentata*). The site is relatively flat and gently slopes northward, with elevations ranging from approximately 2,622 to 2,632 feet above mean sea level. The project site is disturbed throughout by off-highway-vehicle (OHV) use and trash dumping.

### 3.1.2 Watershed and Drainages

The BSA is located in the northeastern section of the Lake Palmdale watershed (HUC-12 180902061501), which is situated within the southern sections of the greater Antelope Valley-Fremont Valley watershed (HUC-8 18090206). The entire Antelope Valley Watershed is a closed basin with a system of Rosamond, Buckhorn, and Rogers dry lakes as the central watershed terminus. Rosamond, Buckhorn, and Rogers Lakes and their tributaries function as an isolated intrastate watershed system, which lacks the presence of a traditionally navigable water (TNW); therefore, not considered jurisdictional with the USACE (SPL-2011-01084-SLP). In past approved jurisdictional determinations by the USACE (SPL-2004-00063-AOA, SPL-2004-00073-KW, 2009-00634-PHT), however, Lake Palmdale and its tributaries have demonstrated a potential nexus to commerce, and are therefore considered within federal jurisdiction. The waters that may occur within the BSA do not provide surface flow to Lake Palmdale or its tributaries and therefore does not support federally jurisdictional waters.

Within in the BSA, one shallow, ephemeral drainage intersects the project site and adjacent parcel which may generally convey stormwater runoff from the residential development to the south and Palmdale Avenue to the north during significant rain events (Figure 4). This drainage feature is not identified in the NHD or NWI; however, it is identified as a “blue-line stream” in USGS topographic maps. The drainage is isolated and restricted to the extent of the property boundaries within the BSA and therefore does not provide surface flows to adjacent waters, including Rosamond, Buckhorn, Rogers, or Palmdale Lakes (Rincon 2021).

### 3.1.3 Soils

According to the USDA NRCS Web Soil Survey data for Los Angeles County, California (USDA NRCS 2022), one soil map unit occurs within the BSA: Cajon loamy fine sand (73%), 0 to 2 percent slopes. This soil type is not considered hydric.

## Figure 4 Jurisdictional Resources

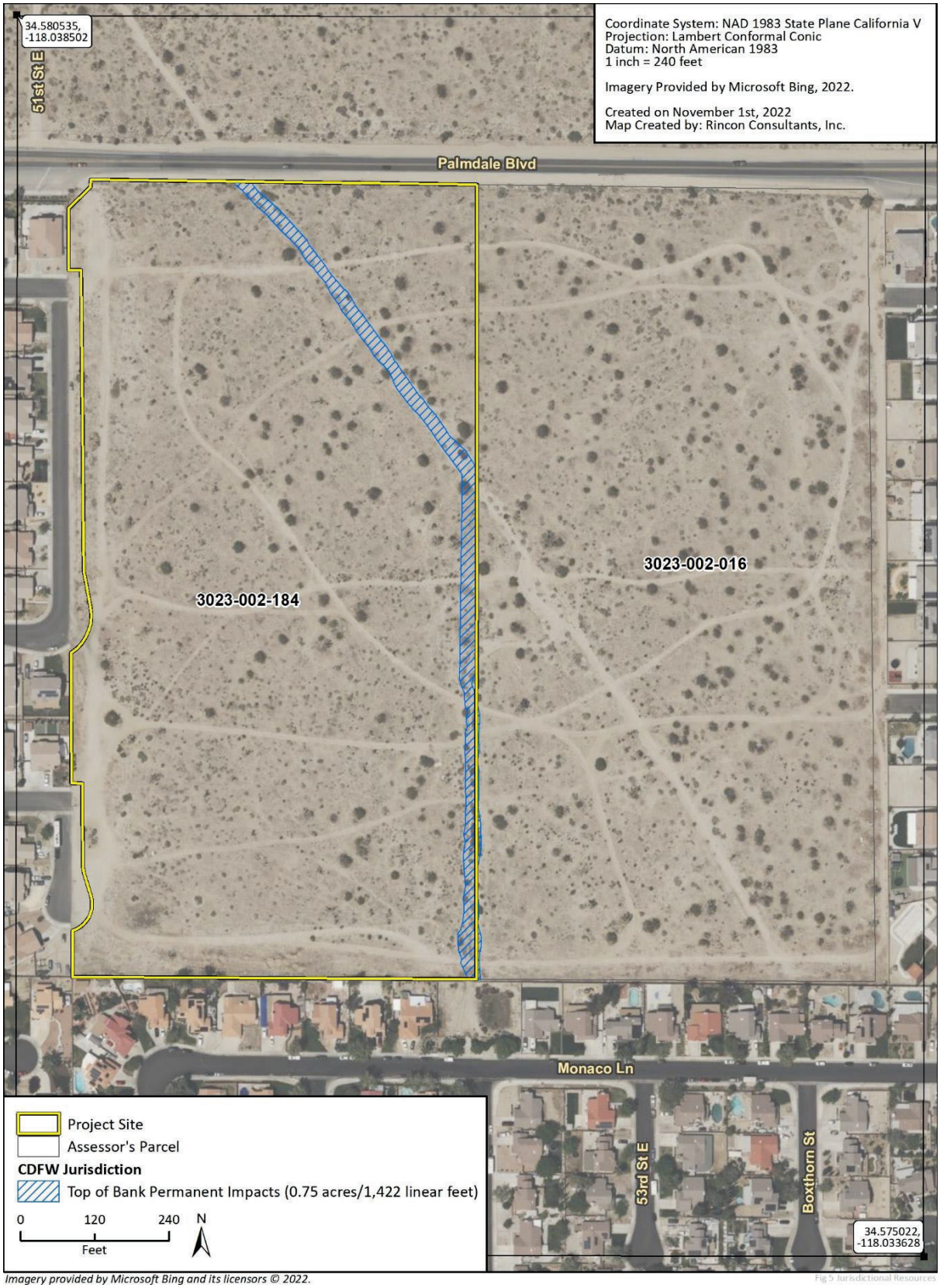


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Fig 5 Jurisdictional Resources

### Cajon Series

The Cajon series is a soil series composed of deep, well drained soils that formed in sandy alluvium from granite rocks. The soil type is common in the Antelope Valley and typical in locations with arid climates with hot, dry summers and somewhat moist winters. Average annual precipitation is 2 to 9 inches, mostly in the form of winter rain. Cajon soils excessively drain and have negligible to low runoff, with rapid permeability. Flooding on Cajon soils is none to rare.

## 3.2 Vegetation and Other Land Cover

Vegetation classification was based on the classification systems provided in *A Manual of California Vegetation, Second Edition* (MCV2; Sawyer et al. 2009). One vegetation community, *Yucca brevifolia* Woodland Alliance (Joshua tree woodland), was identified in the BSA. This community generally occurs in alluvial fans, ridges, and gentle to moderate slopes. Canopy, shrub layer, and herbaceous layer is open to intermittent with perennial grasses and seasonal annuals. The BSA was dominated by Joshua tree (*Yucca brevifolia*), with 1 to 5% tree cover and occurrences of Nevada Mormon tea (*Ephedra nevadensis)*, common fiddleneck (*Amsinckia intermedia)*, fourwing saltbush (*Atriplex canescens)*, downy brome (*Bromus tectorum),* annual bursage *(Ambrosia acanthicarpa)*, California buckwheat (*Eriogonum fasciculatum)*, angled stem buckwheat (*Eriogonum angulosum)*, telegraph weed (*Heterotheca grandiflora)*, Acton brittlebush (*Encelia actonii)*, westerm tansymustard (*Descurainia pinnata)*, creosote bush (*Larrea tridentata)*, winterfat (*Krascheninnikovia lanata*), jimsonweed (*Datura wrightii)*, Russian thistle (*Salsola tragus)*, California croton (*Croton californicus)*, chia (*Salvia columbariae)*, Cooper's box thorn (*Lycium cooperi)*, Indian rice grass (*Stipa hymenoides),* silver cholla (*Cylindropuntia echinocarpa)*, cotton thorn (*Tetradymia comosa)*, and sticky snakeweed (*Gutierrezia microcephala)*.

## 3.3 General Wildlife

Wildlife detected during the reconnaissance survey were common to the region and areas adjacent to residential developments including California ground squirrel (*Otospermophilus beecheyi*), desert cottontail (*Sylvilagus audubonii*), European starling (*Sturnus vulgaris*), house finch (*Haemorhous mexicanus),* common raven (*Corvus corax*), house sparrow (*Passer domesticus*), song sparrow (*Melospiza melodia*), Eurasian collared dove (*Streptopelia decaocto*), and northern mockingbird (*Mimus polyglottos*).

# 4 Sensitive Biological Resources

This section discusses special status species and sensitive biological resources observed in the BSA, and evaluates the potential for the project site to support additional sensitive biological resources. Assessments for the potential occurrence of special status species are based upon known ranges, habitat preferences for the species, species occurrence records from the CNDDB and other sources, species occurrence records from other sites in the vicinity of the survey area, previous reports for the project site, and the results of surveys of the project site. The potential for each special status species to occur in the BSA was evaluated according to the following criteria:

- **No Potential.** Habitat on and adjacent to the site is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime), and species would have been identifiable on the site if present (e.g., oak trees). Protocol surveys (if conducted) did not detect species.
- **Low Potential.** Few of the habitat components (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime) meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site. Protocol surveys (if conducted) did not detect species.
- **Moderate Potential**. Some of the habitat components (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime) meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.
- **High Potential.** All the habitat components (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime) meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.
- **Present.** Species is observed on the site or has been recorded (e.g., CNDDB, other reports) on the site recently (within the last 5 years).

## 4.1 Special Status Species

Local, state, and federal agencies regulate special status species and may require an assessment of their presence or potential presence to be conducted on site prior to the approval of proposed development on a property. A list of special status plant and wildlife species with potential to occur on site was developed based on a review of a 9-quad search of the CNDDB and the CNPS' online Inventory of Rare and Endangered Vascular Plants of California and can be found in Attachment B.

### 4.1.1 Special Status Plant Species

The CNDDB/CNPS query results include 19 special status plant species recorded within the 9-quad search area (Appendix B). Special status plant species typically have specialized habitat requirements, including plant community types, soils and elevational ranges. Of the 19 species, 18 are not expected to occur based on the project site's location and clear lack of suitable habitat (e.g., mountains, forest, elevational ranges). One species, short-joint beavertail (*Opuntia basilaris* var. *brachyclada*, CRPR 1B.2), has a low potential to occur on the project site.

In addition, a total of 181 western Joshua trees (*Yucca brevifolia*), a candidate species for listing under CESA, were documented throughout the project site (Appendix D).

### 4.1.2 Special Status Wildlife Species

The CNDDB query results include 31 special status wildlife species within the 9-quad search area (Attachment B). The potential for special status wildlife species to occur on the site was assessed based on known distribution, habitat requirements, and existing site conditions. Of the 31 species, 4 species were determined to have low potential to occur on the project site. The following 5 species have moderate to high potential to occur on the project site:

- California glossy snake (*Arizona elegans occidentalis*); CDFW SSC
  - The project site provides suitable desert habitat with sandy soils. However, the project site is disturbed by trash dumping and OHV use. This species has a moderate potential to occur on the project site.
- Coast horned lizard (*Phrynosoma blainvillii*); CDFW SSC
  - The project site provides suitable desert habitat with sandy soils. However, the project site is disturbed by trash dumping and OHV use. This species has a moderate potential to occur on the project site.
- Burrowing owl (*Athene cunicularia*); CDFW SSC
  - The project site provides suitable desert habitat with suitable burrows made by California ground squirrels and an abundant prey population (insect, lizard, and small mammal species). However, the project site is disturbed by trash dumping and OHV use. In addition, extensive surveys have been conducted on the adjacent parcel which has similar habitat and no owls have been disturbed. The adjacent parcel is currently under construction. This species has a moderate potential to occur on the project site. Extensive surveys of the adjacent site, which has similar habitat, have not documented any burrowing owls.
- Loggerhead shrike (*Lanius ludovicianus*); CDFW SSC
  - The project site provides suitable Joshua tree woodland habitat with suitable areas for perching, an abundant prey population (lizard and insect species), and shrubs for nesting. This species has a high potential to occur on the project site.
- LeConte's thrasher (*Toxostoma lecontei*); CDFW SSC
  - The project site provides suitable desert habitat for foraging and thorny shrubs for nesting. This species has a high potential to occur on the project site.

In addition, desert kit fox (*Vulpes macrotis arsipus*), a furbearing mammal protected from take under CDFW regulations (14 CCR §460), was determined to have a moderate potential to occur on the project site. The project site provides suitable desert scrub habitat with an abundant prey population (California ground squirrels) in addition to soils suitable for burrowing. However, the project site is on the western edge of the species range. Mohave ground squirrel protocol surveys were conducted in 2022 and no Mohave ground squirrels were detected. Additionally, all records of the species within the area are more than 20 years old. The results of the 2022 surveys have been included in Appendix E.

## 4.2 Sensitive Natural Communities and Critical Habitat

The project site is comprised entirely of Joshua tree woodland, a CDFW Rank S3 natural community which is considered sensitive. No USFWS-designated Critical Habitat occurs on the project site.

## 4.3 Jurisdictional Waters and Wetlands

One shallow, ephemeral drainage intersects the project site and adjacent parcel which may generally convey stormwater runoff from the residential development to the south and from Palmdale Avenue to the north during significant rain events. This drainage feature is not identified in the NHD or NWI; however, it is identified as a dashed "blue-line stream" in USGS topographic maps. Due to the presence of a defined bed and bank, indicated by the break in slope, the CDFW may assert jurisdiction over this drainage (Rincon 2021). As of October 2022, the portion of the drainage in APN 3023-002-016 is under construction and will be filled in pursuant to Streambed Alteration Agreement EPIMS-LAN-23730-R5 and a new temporary 9-foot dirt swale will be constructed to divert flow from the portion of the drainage on APN 3023-002-184 to a stormwater basin south of the project. Grading associated with the project will eliminate the entirety of the remainder of the drainage, as well as the new temporary swale, approximately 0.75 acre (Figure 5), and replace it with underground storm drains which will outlet into an on-site basin. The drainage does not provide surface flows to adjacent waters of the state or waters of the US.

## 4.4 Wildlife Movement

The project site is surrounded by residential developments on the west, south, and east sides and heavily travelled Palmdale Boulevard to the north. The project site is disturbed by dumping and recreational use, pedestrian and OHVs. Potential wildlife movement on the project site could only occur between the natural habitat block to the north and the surrounding residential developments and does not significantly contribute to a wildlife movement corridor.

## 4.5 Resources Protected by Local Policies and Ordinances

### Protected Joshua Trees and Native Vegetation

A total of 181 western Joshua tree were recorded within the project site in 2021 (Appendix D). Attributes recorded for each individual tree included single tree or clonal, height/age class, number of branching terminal panicles, and phenophase (Appendix D). Of the western Joshua trees observed on site, 134 (74%) were characterized as single-growth trees while 47 (26%) were characterized as clonal (Table 1).

**Table 1 Summary of Western Joshua Trees on the Project Site**

| Joshua Tree Type | Total Number | Single | Clonal |
|---|---|---|---|
| Mature | 108 | 85 | 23 |
| Seedling/Juvenile | 73 | 49 | 24 |
| **Total** | **181** | **134** | **47** |

## 4.6 Habitat Conservation Plans

The project site is not located within any HCP, NCCP, or other approved local, regional, or state habitat conservation plan area.

## Figure 5 Jurisdictional Resources to be Impacted

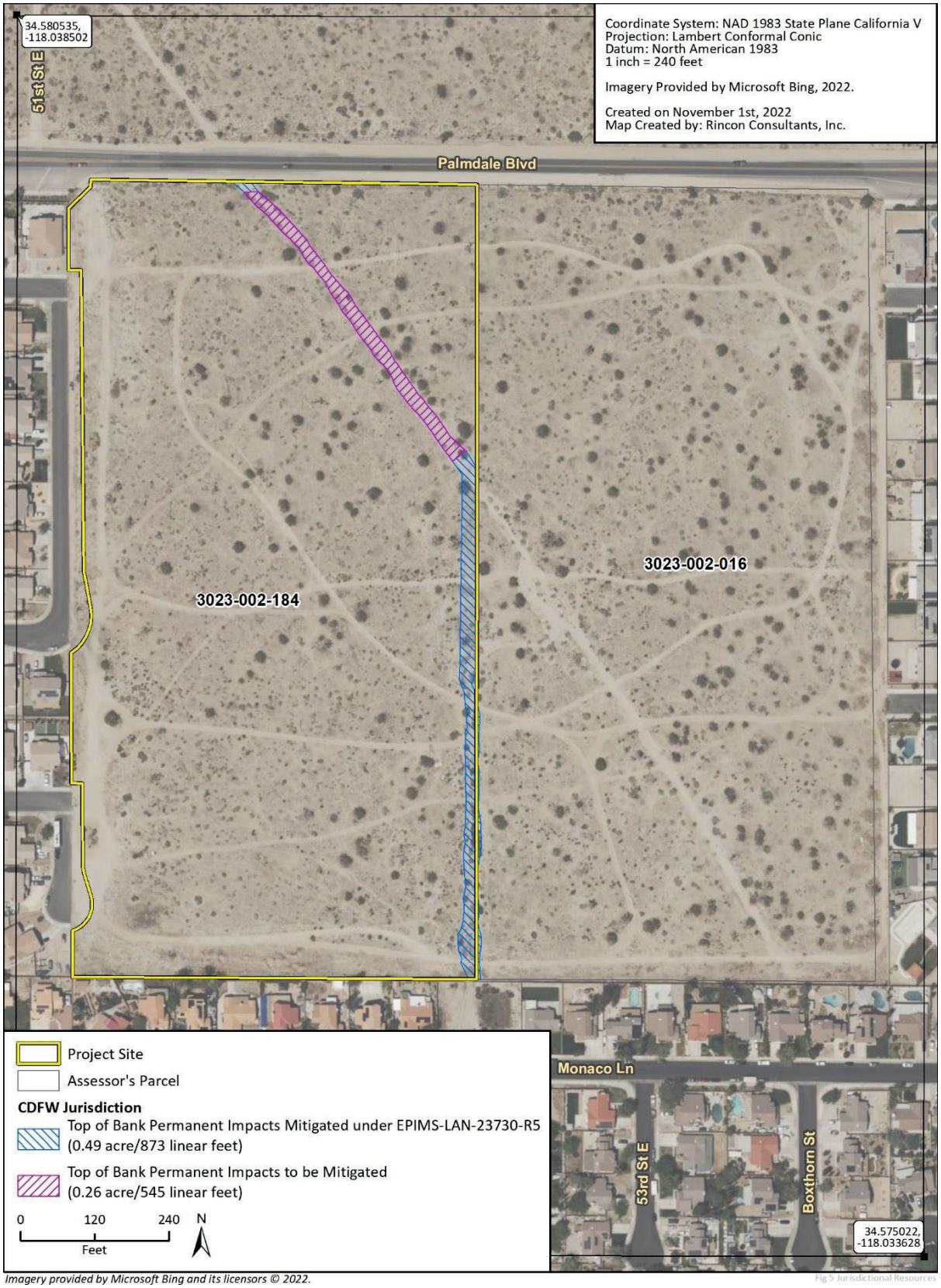


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Fig 5 Jurisdictional Resources

# 5 Impact Analysis and Mitigation Measures

## 5.1 Special Status Species

The proposed project would have a significant effect on biological resources if it would:

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.*

The BSA contains suitable habitat for special status plant species (western Joshua tree and short-joint beavertail cactus), wildlife species (California glossy snake, coast horned lizard, burrowing owl, loggerhead shrike, LeConte's thrasher), and nesting birds. Direct and potentially indirect impacts to these species may occur as a result of construction activities.

### Western Joshua Trees and Short-Joint Beavertail Cacti

Western Joshua tree (State Candidate) has been documented across the project site and short-joint beavertail cactus (CRPR 1B.2) has a moderate potential to occur. Because short-joint beavertail is identifiable at any season but was not observed during the reconnaissance survey, its abundance on the site is expected to be low, if any. Construction of the project will impact these species directly on-site (by permanent removal of 181 western Joshua tree individuals and habitat) and potentially indirectly in the native habitat to the north (through construction dust and other human disturbances that may prevent photosynthesis or degrade habitat). The extensive areas of natural habitat to the north would remain suitable for short-joint beavertail cactus and large enough to support robust populations of this species, and proposed activity at the project site would not substantially affect those regional populations. Absent mitigation, impacts to western Joshua trees would be potentially significant and impacts to short-joint beavertail would be less than significant. Implementation of mitigation measures BIO-1 and BIO-2 would reduce impacts to western Joshua trees to less than significant and further reduce impacts to short-joint beavertail cacti.

### Burrowing Owls

Burrowing owl are a ground-dwelling species that rely on small mammals and large insects for prey. If owls are present, construction of the project could impact individuals directly (by construction-related injury or mortality and permanent removal of habitat) and potentially indirectly in the native habitat to the north (construction noise, dust, and other human disturbances that may cause a nest to fail). The relatively small project footprint of the site, compared to the amount of available suitable habitat for these species, suggests that site development is unlikely to result in population-level impacts. The presence of extensive areas of natural habitat to the north would remain suitable and large enough to support robust populations of these species, and proposed activity at the project site would not substantially affect those regional populations; therefore, impacts would not be significant. However, implementation of mitigation measures BIO-1, BIO-3, and BIO-4 would ensure compliance with federal and state law by avoiding the take of burrowing owls or destruction of their nests.

## Special Status Reptiles

California glossy snake and coast horned lizard (CDFW SSCs) both have a moderate potential to occur on the project site. If the animals are present, construction of the project would impact these species directly (by permanent removal of habitat) and potentially indirectly (construction noise, dust, and other human disturbances) in the native habitat to the north. The relatively small project footprint of the site, compared to the amount of available suitable habitat for these species, suggests that site development is unlikely to result in population-level impacts. The extensive areas of natural habitat to the north would remain suitable and large enough to support robust populations of these species, and proposed activity at the project site would not substantially affect those regional populations. Therefore, potential impacts to special status reptiles would be less than significant and no further action is recommended.

## Special Status and Nesting Birds

Loggerhead shrike and LeConte's thrasher (CDFW SSCs) as well as migratory or other common nesting birds are protected by the CFGC Sections 3503 and 3503.5, and the federal MBTA and may nest in ornamental trees, grass, bare ground, burrows/cavities, man-made structures and shrubs on or adjacent to the project site. Construction of the project thus has the potential to directly (by destroying a nest) or potentially indirectly (construction noise, dust, and other human disturbances that may cause a nest to fail) impact nesting birds protected under the CFGC and MBTA. Absent mitigation, impacts to special status birds would be potentially significant. Implementation of mitigation measures BIO-1 and BIO-4 would reduce impacts to these species to less than significant and would also ensure compliance with federal and state law by avoiding take of all nesting birds.

## Desert Kit Fox

While the desert kit fox is not a special-status species, take of this species is prohibited by CDFW regulations (14 CCR 760) and must be avoided. Desert kit fox has moderate potential to occur on the site due to the presence of suitable habitat, and individuals could be killed or injured by construction equipment if present on the site during construction. Because it is a common species, impacts to the desert kit fox would not rise to the level of significance under CEQA. However, the survey and avoidance measures described in recommended mitigation measure BIO-5 would ensure compliance with CDFW regulations.

### *BIO-1 Environmental Worker Education Training Program*

Before any ground disturbing work (including vegetation clearing and grading) occurs in the construction footprint, a qualified biologist shall conduct a mandatory biological resources awareness training for all construction personnel. Topics to discuss include sensitive species that may be encountered in the project area, photographs to aid in identification of sensitive species that may be encountered, the laws and codes that regulate these species, and the protection measures that must be followed to avoid and minimize impacts. The training shall also include good housekeeping measures and best management practices. If new construction personnel are added to the project, the contractor shall ensure that the new personnel receive the mandatory training before starting work. The subsequent training of personnel may include video of the initial training and/or the use of written materials rather than in-person training by a biologist.

### *BIO-2 Western Joshua Tree Avoidance and Compensatory Mitigation*

- A Desert Vegetation Preservation Plan shall be developed and submitted to the City of Palmdale. The plan shall include:
  - A report and site plan prepared by a desert native plant specialist which depicts the location of each Joshua tree, discusses their age and health, identifies and locates all trees and shrubs which can be saved in place or relocated.
  - A site landscaping plan showing the proposed location of those Joshua trees or, and any other native desert vegetation that will remain on-site.
  - A long-term maintenance program for any desert vegetation preserved on the site. The minimum term of any maintenance program shall be two growing seasons, unless a shorter length of time is determined by the City's Landscape Architect, or in cases where the trees retained on the site are of such health and vigor after one growing season that their survival is assured.
- A desert vegetation removal permit shall be obtained from the City's Landscape Architect, prior to the removal of any native desert vegetation as defined in this chapter.
- A Western Joshua Tree Conservation Act Permit shall be obtained prior to the removal of any Joshua trees.
- Prior to receiving take authorization from the participating agency, the project proponent shall pay mitigation fees to the participating agency for deposit into the Western Joshua Tree Conservation Fund.

### *BIO-3 Burrowing Owl Pre-construction Clearance Survey*

A qualified wildlife biologist shall conduct a pre-construction survey of proposed impact areas to confirm presence/absence of burrowing owl individuals no more than 14 days prior to construction. The survey methodology shall be consistent with the methods outlined in the CDFW *Staff Report on Burrowing Owl Mitigation* (2012). If no active breeding or wintering owls are identified, no further mitigation is required.

If burrowing owl is detected on-site, the following mitigation measures shall be implemented in accordance with the *CDFW Staff Report on Burrowing Owl Mitigation* (2012):

- The project proponent shall hire a qualified wildlife biologist that should be on-site during initial ground-disturbing activities in potential burrowing owl habitat identified throughout the habitat assessment.
- No ground-disturbing activities shall be permitted within a buffer no less than 200 meters (656 feet) from an active burrow, depending on the level of disturbance, unless the qualified biologist determines a reduced buffer would not adversely affect the burrowing owl(s).
- Occupied burrows shall not be disturbed during the nesting season (February 1 to August 31).
- During the nonbreeding (winter) season (September 1 to January 31), ground-disturbing work can proceed near active burrows as long as the work occurs no closer than 50 meters (165 feet) from the burrow, depending on whether the level of disturbance is low, and if the active burrow is not directly affected by the project activity. A smaller/larger buffer may be established by the qualified biologist following monitoring and assessments of the project's effects on the burrowing owls. If active winter burrows are found that would be directly affected by ground-disturbing activities, owls can be excluded from winter burrows according to recommendations

made in the *Staff Report on Burrowing Owl Mitigation* (2012). Additionally, if burrowing owls are found on-site, a qualified biologist shall prepare and submit a passive relocation program in accordance with Appendix E (i.e., Example Components for Burrowing Owl Artificial Burrow and Exclusion Plans) of the *CDFW Staff Report on Burrowing Owl Mitigation* (2012) for CDFW review and approval prior to the commencement of disturbance activities on-site.

- Burrowing owls shall not be excluded from burrows until a Burrowing Owl Exclusion Plan is developed based on the recommendations made in Appendix E (i.e., Example Components for Burrowing Owl Artificial Burrow and Exclusion Plans) of the CDFW St*aff Report on Burrowing Owl Mitigation* (2012). The Burrowing Owl Exclusion Plan shall be submitted to CDFW for review and approval prior to the commencement of disturbance activities on-site.
- Prior to passive relocation, the project proponent shall be responsible for acquiring compensatory mitigation at a ratio of 1:1 for lost breeding and/or wintering habitat. Mitigation shall be implemented on- or off-site including permanent conservation and management of burrowing owl habitat through the recordation of a conservation easement, funding of a non-wasting endowment, and implementation of a Mitigation Land Management Plan based on the CDFW *Staff Report on Burrowing Owl Mitigation* (2012) and CDFW guidance. Mitigation lands shall be identified through coordination with CDFW and on, adjacent, or proximate to the impact site where possible and where habitat is suitable to support burrowing owl. If required, compensatory mitigation shall be completed prior to passive relocation of owls and completion of construction.
- When a qualified biologist determines that burrowing owls are no longer occupying the project site and passive relocation is complete, construction activities may begin. A final letter shall be prepared by the qualified biologist documenting the results of the passive relocation. The letter shall be submitted to CDFW.

### *BIO-4 Pre-construction Nesting Bird Surveys*

The following measure is required to maintain compliance with the CFGC Sections 3503 and 3503.5 and the MBTA with respect to nesting birds:

- If construction activities take place during the bird nesting season (generally February 1 through August 31, but variable based on seasonal and annual climatic conditions), nesting bird surveys shall be performed by a qualified biologist within three days prior to project activities to determine the presence/absence, location, and status of any active nests on site and within 100 feet of the site.
- If nesting birds are found on site, a construction buffer of appropriate size (as determined by the qualified biologist) shall be implemented around the active nests and demarcated with fencing or flagging. If ground/burrow nesting birds are identified, demarcation materials that do not provide perching habitat for predatory bird species shall be used. Nests shall be monitored at a minimum of once per week by the qualified biologist until it has been determined that the nest is no longer being used by either the young or adults. No ground disturbance shall occur within this buffer until the qualified biologist confirms that the breeding/nesting is complete, and all the young have fledged and are capable of surviving independently of the nest. If project activities must occur within the buffer, they shall be conducted at a distance that will prevent project-related disturbances, as determined by the qualified biologist.

If no nesting birds are observed during pre-construction surveys, no further actions are necessary.

*BIO-5 Desert Kit Fox*

A qualified biologist shall conduct a preconstruction survey for desert kit fox no more than 30 days prior to initiation of construction activities. Inactive dens directly impacted by construction activities shall be excavated by hand and backfilled to prevent reuse. Potentially active dens directly impacted by construction activities shall be monitored for three consecutive nights using a tracking medium such as diatomaceous medium or fire clay and/or infrared camera stations at the entrance. If no tracks are observed in the tracking medium or no photos of the target species are captured after three nights, the den shall be excavated and backfilled by hand. If tracks are observed, dens shall be fitted with the one-way trap doors to encourage animals to move off-site. After 48 hours post installation, the den shall be excavated by hand and collapsed. If an active natal den is detected, construction buffer of appropriate size (as determined by the qualified biologist) shall be implemented around the natal den and demarcated with fencing or flagging.

## 5.2 Sensitive Natural Communities and Critical Habitat

The proposed project would have a significant effect on biological resources if it would:

*b) Have a substantial adverse impact 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 US Fish and Wildlife Service.*

The proposed project would directly impact 20-gross acres of Joshua tree woodland, as the entire project is subject to clearing and grading. In addition, the proposed project would also indirectly impact the parcel to the north through excessive dust potentially limiting photosynthesis. Implementation of mitigation measures BIO-1 through BIO-3 would reduce impacts to sensitive natural communities to less than significant.

## 5.3 Jurisdictional Waters and Wetlands

The proposed project would have a significant effect on biological resources if it would:

*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.*

The drainage discussed in Section 4.3 above is potentially subject to CDFW jurisdiction. The drainage contains a distinct bed and bank and generally conveys surface water flow from stormwater runoff from the southern residential development to the south. Grading associated with project construction will eliminate the entirety of the drainage, approximately 0.75 acre, and replace it with underground storm drains which will outlet into an on-site basin. These impacts to jurisdictional areas would be considered significant but mitigable. Of the 0.75 acres to be impacted, the project proponent has already mitigated 0.49 acres as part of the adjacent project (Streambed Alteration Agreement EPIMS-LAN-23730-R5). As such the remaining 0.26 acres still need to be mitigated as part of the proposed project.

Obtaining a permit from CDFW and potentially providing compensatory mitigation, as required by mitigation measure BIO-6, would reduce potential direct and indirect impacts to this feature to a less than significant level.

*BIO-6 Jurisdictional Waters and Wetlands*

Prior to ground disturbance activities, the project proponent shall consult with CDFW. Based on such consultation, if permits are required for the project, appropriate permits shall be obtained prior to disturbance of jurisdictional resources. In addition, compensatory mitigation for impacts to jurisdictional features shall be identified prior to disturbance of the features. A 1:1 mitigation ratio shall be used, unless a higher ratio is required by CDFW. Mitigation may take the form of permittee-responsible on-site or off-site mitigation, or purchasing credits from an approved mitigation bank. The project proponent shall comply with the compensatory mitigation required and proof of compliance, along with copies of permits obtained from CDFW shall be provided to the City.

## 5.4 Wildlife Movement

The proposed project would have a significant effect on biological resources if it would:

*d) Interfere substantially with the movement of any resident or migratory fish or wildlife species or with established resident or migratory wildlife corridors, or impede the use of wildlife nursery sites.*

The project site is surrounded by residential developments on the west, south, and east sides and heavily travelled Palmdale Boulevard to the north. The project site is disturbed by dumping and recreational use, pedestrian and OHVs. Potential wildlife movement on the project site could only occur between the natural habitat block to the north and the surrounding residential developments and does not significantly contribute to a wildlife movement corridor. Therefore, the project would not interfere with the movement of any native wildlife species. Impacts would be less than significant.

## 5.5 Resources Protected by Local Policies and Ordinances

The proposed project would have a significant effect on biological resources if it would:

*e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance*

Implementation of the proposed project would result in permanent direct impacts to all western Joshua trees onsite, as the entire project site is subject to clearing and grading. In addition, the proposed project would also indirectly impact the parcel to the north through excessive dust potentially limiting photosynthesis. As part of compliance with the City of Palmdale Municipal Code, implementation of mitigation measures BIO-1 and BIO-2 would reduce potential impacts to western Joshua trees and native desert vegetation to less than significant. No other tree species would be affected by the project. In addition, the proposed project would be compliant with the City of Palmdale General Plan.

## 5.6 Habitat Conservation Plans

The proposed project would have a significant effect on biological resources if it would:

*f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan.*

The project is not located within any HCP, NCCP, or other approved local, regional, or state habitat conservation plan area. Therefore, the project would not conflict with any existing conservation plans. No impact would occur.

# 6 Limitations, Assumptions, and Use Reliance

This Biological Resources Assessment has been performed in accordance with professionally accepted biological investigation practices conducted at this time and in this geographic area. The biological investigation is limited by the scope of work performed. Reconnaissance biological surveys for certain taxa may have been conducted as part of this assessment but were not performed during a particular blooming period, nesting period, or particular portion of the season when positive identification would be expected if present, and therefore, cannot be considered definitive. The biological surveys are limited also by the environmental conditions present at the time of the surveys. In addition, general biological (or protocol) surveys do not guarantee that the organisms are not present and will not be discovered in the future within the site. In particular, mobile wildlife species could occupy the site on a transient basis, or re-establish populations in the future. Our field studies were based on current industry practices, which change over time and may not be applicable in the future. No other guarantees or warranties, expressed or implied, are provided. The findings and opinions conveyed in this report are based on findings derived from site reconnaissance, jurisdictional areas, review of CNDDB RareFind5, and specified historical and literature sources. Standard data sources relied upon during the completion of this report, such as the CNDDB, may vary with regard to accuracy and completeness. In particular, the CNDDB is compiled from research and observations reported to CDFW that may or may not have been the result of comprehensive or site-specific field surveys. Although Rincon believes the data sources are reasonably reliable, Rincon cannot and does not guarantee the authenticity or reliability of the data sources it has used. Additionally, pursuant to our contract, the data sources reviewed included only those that are practically reviewable without the need for extraordinary research and analysis.

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# Appendix A

Regulatory Framework

# Regulatory Framework

The following is a brief summary of the regulatory context under which biological resources are managed at the federal, state, and local levels. A number of federal and state statutes provide a regulatory structure that guides the protection of biological resources. Agencies with the responsibility for protection of biological resources within the project site include the following:

- U.S. Army Corps of Engineers (wetlands and other waters of the United States)
- U.S. Fish and Wildlife Service (federally listed species and migratory birds)
- National Marine Fisheries Service (marine wildlife and anadromous fishes)
- Lahontan Regional Water Quality Control Board (waters of the State)
- California Department Fish and Wildlife (riparian areas, streambeds, and lakes; state-listed species; nesting birds, marine resources)
- California Coastal Commission
- City of Palmdale

## United States Army Corps of Engineers

The United States Army Corps of Engineers (USACE) is responsible for administering several federal programs related to ensuring the quality and navigability of the nation's waters.

### Clean Water Act Section 404

Congress enacted the Clean Water Act (CWA) "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." Section 404 of the CWA authorizes the Secretary of the Army, acting through the USACE, to issue permits regulating the discharge of dredged or fill materials into the "navigable waters at specified disposal sites."

Section 502 of the CWA further defines "navigable waters" as "waters of the United States, including the territorial seas." "Waters of the United States" are broadly defined at 33 CFR Part 328.3 to include navigable waters, perennial and intermittent streams, lakes, rivers, ponds, as well as wetlands, marshes, and wet meadows. In recent years, the USACE and US Environmental Protection Agency (USEPA) have undertaken several efforts to modernize their regulations defining "waters of the United States" (e.g., the 2015 Clean Water Rule and 2020 Navigable Waters Protection Rule), but these efforts have been frustrated by legal challenges which have invalidated the updated regulations. Thus, the agencies' longstanding definition of "waters of the United States," which dates from 1986, remains in effect albeit with supplemental guidance interpreting applicable court decisions as described below.

#### Waters of the U.S.

In summary, USACE and USEPA regulations define "waters of the United States" as follows:

1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;

2. All interstate waters including interstate wetlands;
3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:
    i. Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
    ii. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
    iii. Which are used or could be used for industrial purpose by industries in interstate commerce;
4. All impoundments of waters otherwise defined as waters of the United States;
5. Tributaries of waters identified in paragraphs (a)(1)-(4) of this section;
6. The territorial sea;
7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in items 1-6 above.

Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with the USEPA.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA are not waters of the United States.

The lateral limits of USACE jurisdiction in non-tidal waters is defined by the "ordinary high-water mark" (OHWM) unless adjacent wetlands are present. The OHWM is a line on the shore or edge of a channel established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed upon the bank, shelving, changes in the character of soil, destruction of vegetation, or the presence of debris (33 CFR 328.3(e)). As such, waters are recognized in the field by the presence of a defined watercourse with appropriate physical and topographic features. If wetlands occur within, or adjacent to, waters of the United States, the lateral limits of USACE jurisdiction extend beyond the OHWM to the outer edge of the wetlands (33 CFR 328.4 (c)). The upstream limit of jurisdiction in the absence of adjacent wetlands is the point beyond which the OHWM is no longer perceptible (33 CFR 328.4; see also 51 FR 41217).

## Wetlands

The USACE defines wetlands as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3). The USACE's delineation procedures identify wetlands in the field based on indicators of three wetland parameters: hydrophytic vegetation, hydric soils, and wetland hydrology. The following is a discussion of each of these parameters.

### *Hydrophytic Vegetation*

Hydrophytic vegetation dominates areas where frequency and duration of inundation or soil saturation exerts a controlling influence on the plant species present. Plant species are assigned

wetland indicator status according to the probability of their occurring in wetlands. More than fifty percent of the dominant plant species must have a wetland indicator status to meet the hydrophytic vegetation criterion. The USACE published the National Wetland Plant List (USACE 2018), which separates vascular plants into the following four basic categories based on plant species frequency of occurrence in wetlands:

- **Obligate Wetland (OBL).** Almost always occur in wetlands
- **Facultative Wetland (FACW).** Usually occur in wetlands, but occasionally found in non-wetlands
- **Facultative (FAC).** Occur in wetlands or non-wetlands
- **Facultative Upland (FACU).** Usually occur in non-wetlands, but may occur in wetlands
- **Obligate Upland (UPL).** Almost never occur in wetlands

The USACE considers OBL, FACW and FAC species to be indicators of wetlands. An area is considered to have hydrophytic vegetation when greater than 50 percent of the dominant species in each vegetative stratum (tree, shrub, and herb) fall within these categories. Any species not appearing on the United States Fish and Wildlife Service's list is assumed to be an upland species, almost never occurring in wetlands. In addition, an area needs to contain at least 5% vegetative cover to be considered as a vegetated wetland.

### *Hydric Soils*

Hydric soils are saturated or inundated for a sufficient duration during the growing season to develop anaerobic or reducing conditions that favor the growth and regeneration of hydrophytic vegetation. Field indicators of wetland soils include observations of ponding, inundation, saturation, dark (low chroma) soil colors, bright mottles (concentrations of oxidized minerals such as iron), gleying (indicates reducing conditions by a blue-grey color), or accumulation of organic material. Additional supporting information includes documentation of soil as hydric or reference to wet conditions in the local soils survey, both of which must be verified in the field.

### *Wetland Hydrology*

Wetland hydrology is inundation or soil saturation with a frequency and duration long enough to cause the development of hydric soils and plant communities dominated by hydrophytic vegetation. If direct observation of wetland hydrology is not possible (as in seasonal wetlands), or records of wetland hydrology are not available (such as stream gauges), assessment of wetland hydrology is frequently supported by field indicators, such as water marks, drift lines, sediment deposits, or drainage patterns in wetlands.

## Applicable Case Law and Agency Guidance

The USACE's regulations defining "waters of the United States" have been subject to legal interpretation, and two influential Supreme Court decisions have narrowed the definition to exclude certain classes of waters that bear an insufficient connection to navigable waters. In *Solid Waste Agency of Northern Cook County v. Army Corps of Engineers* (2001), the United States Supreme Court stated that the USACE's CWA jurisdiction does not extend to ponds that "are not adjacent to open water." In reaching its decision, the Court concluded that the "Migratory Bird Rule," which served as the basis for the USACE's asserted jurisdiction, was not supported by the CWA. The Migratory Bird Rule extended CWA jurisdiction to intrastate waters "which are or would be used as habitat by birds protected by Migratory Bird Treaties or which are or would be used as habitat by

other migratory birds which cross state lines…" The Court was concerned that application of the Migratory Bird Rule resulted in "reading the term 'navigable waters' out of the statute. Highlighting the language of the CWA to determine the statute's jurisdictional reach, the Court stated, "the term 'navigable' has at least the import of showing us what Congress had in mind as its authority for enacting the CWA: its traditional jurisdiction over waters that were or had been navigable in fact or which could reasonably be so made." This decision stands for the proposition that non-navigable isolated, intrastate waters are not waters of the United States and thus are not jurisdictional under the CWA.

In 2006 the United States Supreme Court decided *Rapanos v. United States* and *Carabell v. United States* (collectively "Rapanos"), which were consolidated cases determining the extent of CWA jurisdiction over waters that carry only an infrequent surface flow. The court issued no majority opinion in Rapanos. Instead, the justices authored five separate opinions including the "plurality" opinion, authored by Justice Scalia (joined by three other justices), and a concurring opinion by Justice Kennedy. To guide implementation of the decision, the USACE and USEPA issued a joint guidance memorandum ("Rapanos Guidance Memorandum") in 2008 stating that "regulatory jurisdiction under the CWA exists over a water body if either the plurality's or Justice Kennedy's standard is satisfied."

According to the plurality opinion in Rapanos, "the waters of the United States include only relatively permanent, standing or flowing bodies of water" and do not include "ordinarily dry channels through which water occasionally or intermittently flows." In addition, while all wetlands that meet the USACE definition are considered adjacent wetlands, only those adjacent wetlands that have a continuous surface connection because they directly abut the tributary (e.g., they are not separated by uplands, a berm, dike, or similar feature) are considered jurisdictional under the plurality standard.

Under Justice Kennedy's opinion, "the USACE's jurisdiction over wetlands depends upon the existence of a significant nexus between the wetlands in question and navigable waters in the traditional sense. Wetlands possess the requisite nexus, and thus come within the statutory phrase 'navigable waters,' if the wetlands, either alone or in combination with similarly situated lands in the region, significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as 'navigable.' When, in contrast, wetlands' effects on water quality are speculative or insubstantial, they fall outside the zone fairly encompassed by the statutory term 'navigable waters.'" Justice Kennedy identified "pollutant trapping, flood control, and runoff storage" as some of the critical functions wetlands can perform relative to other waters. He concluded that, given wetlands' ecological role, "mere adjacency" to a non-navigable tributary was insufficient to establish CWA jurisdiction, and that "a more specific inquiry, based on the significant nexus standard, is therefore necessary."

Interpreting these decisions, and according to the Rapanos Guidance Memorandum, the USACE and USEPA will assert jurisdiction over the following waters:

- Traditional navigable waters;
- Wetlands adjacent to traditional navigable waters;
- Non-navigable tributaries of traditional navigable waters that are relatively permanent where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months); and,
- Wetlands that directly abut such tributaries.

The USACE and USEPA will decide jurisdiction over the following waters based on a fact-specific analysis to determine whether they have a significant nexus with a traditional navigable water:

- Non-navigable tributaries that are not relatively permanent;
- Wetlands adjacent to non-navigable tributaries that are not relatively permanent; and,
- Wetlands adjacent to but that do not directly abut a relatively permanent non-navigable tributary.

Where a significant nexus analysis is required, the USACE and USEPA will apply the significant nexus standard as follows:

- A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical and biological integrity of downstream traditional navigable waters; and,
- Significant nexus includes consideration of hydrologic and ecologic factors.

The USACE and USEPA generally will not assert jurisdiction over the following features:

- Swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent, or short duration flow); and,
- Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water.

## Rivers and Harbors Act Section 10

Section 10 of the Rivers and Harbors Act of 1899 requires authorization from the USACE for the construction of any structure in or over any navigable water of the United States. Structures or work outside the limits defined for navigable waters of the United States require a Section 10 permit if the structure or work affects the course, location, or condition of the water body. The law applies to any dredging or disposal of dredged materials, excavation, filling, re-channelization, or any other modification of a navigable water of the United States, and applies to all structures and work. It further includes, without limitation, any wharf, dolphin, weir, boom breakwater, jetty, groin, bank protection (e.g., riprap, revetment, bulkhead), mooring structures such as pilings, aerial or subaqueous power transmission lines, intake or outfall pipes, permanently moored floating vessel, tunnel, artificial canal, boat ramp, aids to navigation, and any other permanent, or semi-permanent obstacle or obstruction. It is important to note that Section 10 applies only to navigable waters, and thus does not apply to work in non-navigable wetlands or tributaries. In some cases, Section 10 authorization is issued by the USACE concurrently with CWA Section 404 authorization, such as when certain Nationwide Permits are used.

# Regional Water Quality Control Board

The State Water Resources Control Board (SWRCB) and nine Regional Water Quality Control Boards (RWQCBs) have jurisdiction over “waters of the State,” which are defined as any surface water or groundwater, including saline waters, within the boundaries of the state (California Water Code sec. 13050(e)). These agencies also have responsibilities for administering portions of the CWA.

## Clean Water Act Section 401

Section 401 of the CWA requires an applicant requesting a federal license or permit for an activity that may result in any discharge into navigable waters (such as a Section 404 Permit) to provide state certification that the proposed activity will not violate state and federal water quality standards. In California, CWA Section 401 Water Quality Certification (Section 401 Certification) is issued by the RWQCBs and by the SWRCB for multi-region projects. The process begins when an applicant submits an application to the RWQCB and informs the USACE (or the applicable agency from which a license or permit was requested) that an application has been submitted. The USACE will then determine a "reasonable period of time" for the RWQCB to act on the application; this is typically 60 days for routine projects and longer for complex projects but may not exceed one year. When the period has elapsed, if the RWQCB has not either issued or denied the application for Section 401 Certification, the USACE may determine that Certification has been waived and issue the requested permit. If a Section 401 Certification is issued it may include binding conditions, imposed either through the Certification itself or through the requested federal license or permit.

## Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act) is the principal law governing water quality regulation in California. It establishes a comprehensive program to protect water quality and the beneficial uses of water. The Porter-Cologne Act applies to surface waters, wetlands, and ground water and to both point and nonpoint sources of pollution. Pursuant to the Porter-Cologne Act (California Water Code section 13000 et seq.), the policy of the State is as follows:

- The quality of all the waters of the State shall be protected
- All activities and factors affecting the quality of water shall be regulated to attain the highest water quality within reason
- The State must be prepared to exercise its full power and jurisdiction to protect the quality of water in the State from degradation

The Porter-Cologne Act established nine RWQCBs (based on watershed boundaries) and the SWRCB, which are charged with implementing its provisions and which have primary responsibility for protecting water quality in California. The SWRCB provides program guidance and oversight, allocates funds, and reviews RWQCB decisions. In addition, the SWRCB allocates rights to the use of surface water. The RWQCBs have primary responsibility for individual permitting, inspection, and enforcement actions within each of nine hydrologic regions. The SWRCB and RWQCBs have numerous nonpoint source related responsibilities, including monitoring and assessment, planning, financial assistance, and management.

Section 13260 of the Porter-Cologne Act requires any person discharging or proposing to discharge waste that could affect the quality of waters of the State to file a Report of Waste Discharge with the appropriate RWQCB. The RWQCB may then authorize the discharge, subject to conditions, by issuing Waste Discharge Requirements (WDRs). While this requirement was historically applied primarily to outfalls and similar point source discharges, the SWRCB's *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State*, effective May 2020, make it clear that the agency will apply the Porter-Cologne Act's requirements to discharges of dredge and fill material as well. The *Procedures* state that they are to be used in issuing CWA Section 401 Certifications and WDRs, and largely mirror the existing review requirements for CWA

Section 404 Permits and Section 401 Certifications, incorporating most elements of the USEPA's *Section 404(b)(1) Guidelines*. Following issuance of the *Procedures*, the SWRCB produced a consolidated application form for dredge/fill discharges that can be used to obtain a CWA Section 401 Water Quality Certification, WDRs, or both.

### Non-Wetland Waters of the State

The SWRCB and RWQCBs have not established regulations for field determinations of waters of the state except for wetlands currently. In many cases the RWQCBs interpret the limits of waters of the State to be bounded by the OHWM unless isolated conditions or ephemeral waters are present. However, in the absence of statewide guidance each RWQCB may interpret jurisdictional boundaries within their region and the SWRCB has encouraged applicants to confirm jurisdictional limits with their RWQCB before submitting applications. As determined by the RWQCB, waters of the State may include riparian areas or other locations outside the OHWM, leading to a larger jurisdictional area over a given water body compared to the USACE.

### Wetland Waters of the State

Procedures for defining wetland waters of the State pursuant to the SWRCB's *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* went into effect May 28, 2020. The SWRCB defines an area as wetland if, under normal circumstances:

(i) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both;

(ii) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and

(iii) the area's vegetation is dominated by hydrophytes or the area lacks vegetation.

The SWRCB's *Implementation Guidance for the Wetland Definition and Procedures for Discharges of Dredge and Fill Material to Waters of the State* (2020), states that waters of the U.S. and waters of the State should be delineated using the standard USACE delineation procedures, taking into consideration that the methods shall be modified only to allow for the fact that a lack of vegetation does not preclude an area from meeting the definition of a wetland.

## United States Fish and Wildlife Service

The United States Fish and Wildlife Service (USFWS) implements several laws protecting the Nation's fish and wildlife resources, including the Endangered Species Act (ESA; 16 United States Code [USC] Sections 153 et seq.), the Migratory Bird Treaty Act (MBTA; 16 USC Sections 703-711) and the Bald and Golden Eagle Protection Act (16 USC Section 668).

## Endangered Species Act

The USFWS and National Marine Fisheries Service (NMFS) share responsibility for implementing the ESA. Generally, the USFWS implements the FESA for terrestrial and freshwater species, while the NMFS implements the FESA for marine and anadromous species. Projects that would result in "take" of any threatened or endangered wildlife species, or a threatened or endangered plant species if occurring on federal land, are required to obtain permits from the USFWS or NMFS through either Section 7 (interagency consultation with a federal nexus) or Section 10 (Habitat Conservation Plan)

of the ESA, depending on the involvement by the federal government in funding, authorizing, or carrying out the project. The permitting process is used to determine if a project would jeopardize the continued existence of a listed species and what measures would be required to avoid jeopardizing the species. "Take" under federal definition means to harass, harm (which includes habitat modification), pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Proposed or candidate species do not have the full protection of the ESA; however, the USFWS and NMFS advise project applicants that they could be elevated to listed status at any time.

## Migratory Bird Treaty Act

The MBTA of 1918 implements four international conservation treaties that the U.S. entered into with Canada in 1916, Mexico in 1936, Japan in 1972, and Russia in 1976. It is intended to ensure the sustainability of populations of all protected migratory bird species. The law has been amended with the signing of each treaty, as well as when any of the treaties were amended, such as with Mexico in 1976 and Canada in 1995. The MBTA prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the USFWS.

The list of migratory bird species protected by the law, in regulations at 50 CFR Part 10.13, is primarily based on bird families and species included in the four international treaties. A migratory bird species is included on the list if it meets one or more of the following criteria:

1. It occurs in the United States or U.S. territories as the result of natural biological or ecological processes and is currently, or was previously listed as, a species or part of a family protected by one of the four international treaties or their amendments.
2. Revised taxonomy results in it being newly split from a species that was previously on the list, and the new species occurs in the United States or U.S. territories as the result of natural biological or ecological processes.
3. New evidence exists for its natural occurrence in the United States or U.S. territories resulting from natural distributional changes and the species occurs in a protected family.

In 2004, the Migratory Bird Treaty Reform Act limited the scope of the MBTA by stating the MBTA applies only to migratory bird species that are native to the United States or U.S. territories, and that a native migratory bird species is one that is present as a result of natural biological or ecological processes. The MBTRA requires the USFWS to publish a list of all nonnative, human-introduced bird species to which the MBTA does not apply, and an updated list was published in 2020. The 2020 update identifies species belonging to biological families referred to in treaties the MBTA implements but are not protected because their presence in the United States or U.S. territories is solely the result of intentional or unintentional human-assisted introductions.

## Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act prohibits anyone, without a permit issued by the USFWS, from "taking" bald or golden eagles, including their parts (including feathers), nests, or eggs. The Act provides criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof." The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb."

"Disturb" means "to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause, based on the best scientific information available, 1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior."

In addition to immediate impacts, this definition also covers impacts that result from human-induced alterations initiated around a previously used nest site during a time when eagles are not present, if, upon the eagle's return, such alterations agitate or bother an eagle to a degree that interferes with or interrupts normal breeding, feeding, or sheltering habits, and causes injury, death or nest abandonment.

# California Department of Fish and Wildlife

The California Department of Fish and Wildlife (CDFW) derives its authority from the Fish and Game Code of California and administers several State laws protecting fish and wildlife resources and the habitats upon which they depend.

## California Endangered Species Act

The California Endangered Species Act (CESA) (Fish and Game Code Section 2050 et. seq.) prohibits take of state listed threatened or endangered. Take under CESA is defined as "Hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill" (Fish and Game Code sec. 86). This definition does not prohibit indirect harm by way of habitat modification, except where such harm is the proximate cause of death of a listed species. Where incidental take would occur during construction or other lawful activities, CESA allows the CDFW to issue an Incidental Take Permit upon finding, among other requirements, that impacts to the species have been minimized and fully mitigated. Unlike the federal ESA, CESA's protections extend to candidate species during the period (typically one year) while the California Fish and Game Commission decides whether the species warrants CESA listing.

## Native Plant Protection Act

The CDFW also has authority to administer the Native Plant Protection Act (NPPA) (Fish and Game Code Section 1900 et seq.). The NPPA requires the CDFW to establish criteria for determining if a species, subspecies, or variety of native plant is endangered or rare, and prohibits the take of listed plant species. Effective in 2015, CDFW promulgated regulations (14 CCR 786.9) under the authority of the NPPA, establishing that the CESA's permitting procedures would be applied to plants listed under the NPPA as "Rare." With this change, there is little practical difference for the regulated public between plants listed under CESA and those listed under the NPPA.

## Fully Protected Species Laws

The CDFW enforces Sections 3511, 4700, 5050, and 5515 of the Fish and Game Code, which prohibit take of species designated as Fully Protected. The CDFW is not allowed to issue an Incidental Take Permit for Fully Protected species; therefore, impacts to these species must be avoided. The exception is situations where a Natural Community Conservation Plan (NCCP) is in place that authorizes take of the fully protected species.

## Avian Protection Laws

California Fish and Game Code sections 3503, 3503.5, and 3513 describe unlawful take, possession, or destruction of native birds, nests, and eggs. Section 3503.5 of the Code protects all birds-of-prey and their eggs and nests against take, possession, or destruction of nests or eggs. Section 3513 makes it a state-level offense to take any bird in violation of the federal Migratory Bird Treaty Act.

## Protection of Lakes and Streambeds

California Fish and Game Code section 1602 states that it is unlawful for any person to "substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake" without first notifying the California Department of Fish and Wildlife (CDFW) of that activity. Thereafter, if CDFW determines and informs the entity that the activity will not substantially adversely affect any existing fish or wildlife resources, the entity may commence the activity. If, however, CDFG determines that the activity may substantially adversely affect an existing fish or wildlife resource, the entity may be required to obtain from CDFW a Streambed Alteration Agreement (SAA), which will include reasonable measures necessary to protect the affected resource(s), before the entity may conduct the activity described in the notification. Upon receiving a complete Notification of Lake/Streambed Alteration, CDFW has 60 days to present the entity with a Draft SAA. Upon review of the Draft SAA by the applicant, any problematic terms are negotiated with CDFW and a final SAA is executed.

The CDFW has not defined the term "stream" for the purposes of implementing its regulatory program under Section 1602, and the agency has not promulgated regulations directing how jurisdictional streambeds may be identified, or how their limits should be delineated. However, four relevant sources of information offer insight as to the appropriate limits of CDFW jurisdiction as discussed below.

- **The plain language of Section 1602 of CFGC** establishes the following general concepts:
  - References "river," "stream," and "lake"
  - References "natural flow"
  - References "bed," "bank," and "channel"
- **Applicable court decisions**, in particular *Rutherford v. State of California* (188 Cal App. 3d 1276 (1987), which interpreted Section 1602's use of "stream" to be as defined in common law. The Court indicated that a "stream" is commonly understood to:
  - Have a source and a terminus
  - Have banks and a channel
  - Convey flow at least periodically, but need not flow continuously and may at times appear outwardly dry
  - Represent the depression between the banks worn by the regular and usual flow of the water
  - Include the area between the opposing banks measured from the foot of the banks from the top of the water at its ordinary stage, including intervening sand bars
  - Include the land that is covered by the water in its ordinary low stage
  - Include lands below the OHWM

- **CDFW regulations** defining "stream" for other purposes, including sport fishing (14 CCR 1.72) and streambed alterations associated with cannabis production (14 CCR 722(c)(21)), which indicate that a stream:
  - Flows at least periodically or intermittently
  - Flows through a bed or channel having banks
  - Supports fish or aquatic life
  - Can be dry for a period of time
  - Includes watercourses where surface or subsurface flow supports or has supported riparian vegetation
- **Guidance documents**, *including A Field Guide to Lake and Streambed Alteration Agreements* (CDFG 1994) and *Methods to Describe and Delineate Episodic Stream Processes on Arid Landscapes for Permitting Utility-Scale Solar Power Plants* (Brady and Vyverberg 2013), which suggest the following:
  - A stream may flow perennially or episodically
  - A stream is defined by the course in which water currently flows, or has flowed during the historic hydrologic course regime (approximately the last 200 years)
  - Width of a stream course can reasonably be identified by physical or biological indicators
  - A stream may have one or more channels (single thread vs. compound form)
  - Features such as braided channels, low-flow channels, active channels, banks associated with secondary channels, floodplains, islands, and stream-associated vegetation, are interconnected parts of the watercourse
  - Canals, aqueducts, irrigation ditches, and other means of water conveyance can be considered streams if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife
  - Biologic components of a stream may include aquatic and riparian vegetation, all aquatic wildlife including fish, amphibians, reptiles, invertebrates, and terrestrial species which derive benefits from the stream system
  - The lateral extent of a stream can be measured in different ways depending on the particular situation and the type of fish or wildlife resource at risk

The tenets listed above, among others, are applied to establish the boundaries of streambeds in various environments. Importance of each factor may be weighted based on site-specific considerations and the applicability of the indicators to the streambed at hand.

# Local Jurisdiction

## City of Palmdale, California

### City of Palmdale General Plan

Within the Environmental Resources Element of the City of Palmdale General Plan, the policies applicable to the proposed project include the following:

- **CON-1.1 Endangered species protection.** Ensure local compliance with the CESA and FESA.
- **CON-1.2 Joshua and Juniper trees.** Continue enforcing the City's Native Vegetation Ordinance to protect western Joshua trees and Juniper trees.
- **CON-1.3 West Mojave Plan.** Comply with the required implementation of the West Mojave Plan for protection of desert tortoise and Mohave ground squirrel.
- **CON-1.4 Significant ecological areas**. Identify and preserve to the greatest extent feasible significant ecological areas (SEA's). Areas to consider for open space preservation include, but are not limited to, Tejon Park, Barrel Springs Southern Trailhead, and the Una Lake area.
- **CON-1.5 Preserve ecological resource areas.** Preserve natural drainage courses and riparian areas where ecological resources exist in significant concentrations.
- **CON-1.6 Increase conservation areas**. Coordinate with state agencies to help achieve the goals of 30x30: to protect 30 percent of California's land by 2030 by identifying optimal sites for land conservation.
- **CON-1.7 Wetland and floodplain areas.** Solicit and utilize all available sources of local, regional, state, and federal funds to acquire significant wetland areas and floodplains to minimize disturbance and prevent damage from erosion, turbidity, siltation, loss of wildlife and vegetation, or the destruction of the natural habitat.

## City of Palmdale Code of Ordinances

**14.04.040 Requirements for removal.**

A. Desert vegetation shall not be removed, nor caused to be removed, on or from any parcel of land, except as provided by the provisions of this chapter.
B. A native desert vegetation removal permit shall be obtained from the City's Landscape Architect, or in lieu thereof, the Director of Public Works' designee, prior to the removal of any native desert vegetation as defined in this chapter.
C. The project proponent or its agent may remove a detached dead western Joshua tree or detached limb of a western Joshua tree. All other removals and all trimming of western Joshua trees authorized by permits issued pursuant to this subsection shall be completed by a desert native plant specialist. A permit may be issued, without payment of mitigation fees, provided that the dead western Joshua tree or the limb(s) to be removed:
    1. Has fallen over and is within 30 feet of a structure;
    2. Is leaning against an existing structure; or
    3. Creates an imminent threat to public health or safety.
D. Census.
    1. The project proponent proposing to relocate or remove a western Joshua tree shall cause a census of western Joshua trees to be conducted on the project site. The census shall count all western Joshua trees on the project site and classify them by size class.
    2. Prior to receiving take authorization from the participating agency, the project proponent shall submit to the participating agency a census report that shall include the following:
        a. The name of the desert native plant specialist who conducted the census and the employer of the desert native plant specialist.
        b. The name of the desert native plant specialist who will relocate western Joshua trees, if applicable, and the employer of the desert native plant specialist.
        c. The date of the census.

d. The date or dates of the proposed relocation of western Joshua trees, if applicable.

e. A map of the project site that depicts: the location of the proposed single-family residence, accessory structure, or public works project; the number and location of all western Joshua trees on the project site; and the proposed placement of each relocated western Joshua tree.

f. Photographs of each western Joshua tree on the project site, including a visual representation of the scale of the height of each tree.

E. Avoidance. To the maximum extent practicable, the project proponent shall avoid take of western Joshua trees on the project site.

F. Minimization.

1. The project proponent shall avoid all ground-disturbing activities within 10 feet of any western Joshua tree if those activities will disturb the soil to a depth of greater than 12 inches.

2. To the maximum extent feasible, the project proponent shall relocate all western Joshua trees that cannot be avoided to another location on the project site.

3. For purposes of this subsection, relocation of a western Joshua tree shall be determined to be infeasible if either of the following applies:

a. Relocation of the western Joshua tree on the project site would pose a threat to public health or safety.

b. Relocation of the western Joshua tree on the project site would interfere with existing roadways, sidewalks, curbs, gutters, utility lines, sewer lines, drainage improvements, foundations, existing structures, or setbacks to any of those structures or improvements.

c. There is no location on the project site that satisfies the requirements listed above.

4. The project proponent shall ensure that relocation of western Joshua trees pursuant to this section satisfies the following requirements:

a. All western Joshua tree relocations shall be completed by a desert native plant specialist.

b. All western Joshua trees to be relocated shall be placed at least 25 feet from any existing or proposed structure or improvement and at least 10 feet from any other western Joshua tree.

c. Within 30 days of completing the relocation, the project proponent shall provide the participating agency with a map of the project site indicating where each western Joshua tree was relocated.

G. Removal. A project proponent may remove western Joshua trees that cannot feasibly be avoided or relocated.

H. Mitigation. Prior to receiving take authorization from the participating agency, the project proponent shall pay mitigation fees to the participating agency for deposit into the Western Joshua Tree Mitigation Fund as follows:

1. For single-family residential projects undertaken on undeveloped parcels and public works projects to erect or construct a new public structure, building, road, or improvement, the project proponent shall pay mitigation fees.

2. For accessory structure projects undertaken on developed parcels and for public works projects to alter, maintain, or repair an existing public structure, building, road, or improvement, the project proponent shall pay mitigation fees.

I. All projects not identified above will be required to obtain an Incidental Take Permit (2081) from the California Department of Fish and Wildlife. (Ord. 1556 § 1, 2020; Ord. 952 § 2, 1992)

**14.04.050 Desert vegetation preservation plan requirements.**

All development proposal applications for sites containing native desert vegetation shall include a desert vegetation preservation plan, submitted with the development application, containing the following:

A. A written report and a site plan which depicts the location of each Joshua tree and California juniper, discusses their age and health, identifies and locates all trees and shrubs which can be saved in place or relocated. The report shall be prepared by a desert native plant specialist.
B. A site landscaping plan showing the proposed location of those Joshua trees or California junipers, and any other native desert vegetation that will remain on-site.
C. A long-term maintenance program for any desert vegetation preserved on the site. The minimum term of any maintenance program shall be two growing seasons, unless a shorter length of time is determined by the City's Landscape Architect, or in lieu thereof, the Director of Public Works' designee in cases where the trees retained on the site are of such health and vigor after one growing season that their survival is assured.
**D.** Such other and further information as the Director of Planning may deem necessary to fulfill the purposes and intent of this chapter in a particular case. (Ord. 952 § 2, 1992)

**14.04.060 Joshua tree relocation methodology.**

A. A tree spade shall be used to prepare the transplant site and excavate the Joshua tree and root system. Soil profile can influence Joshua tree root mass and should be taken into consideration when selecting tree spade size. General tree spade sizing guidelines as follows:
    1. Forty-two-inch spade for western Joshua trees under one meter in height.
    2. Fifty-four-inch spade for western Joshua trees one to two meters in height.
    3. Ninety-inch spade for western Joshua trees two to four and one-half +/- meters in height.
B. Joshua trees to be transplanted shall be prepared by creating earthen berms around the perimeter of the tree for pre-soaking operations.
C. The northern face of each tree shall be marked at the base with spray paint to aid in proper orientation during transplanting. The trees shall be orientated at the receiving site in the same direction as the original location.
D. Only trees less than or equal to 15 feet in height, and in good condition are recommended for transplanting. Each western Joshua tree that is transplanted shall have tree inventory data collected according to the tree inventory technical specifications.
E. A water regimen shall be conducted to insure survivability. All trees shall receive a pre-soaking approximately one week prior to transplanting. Each tree shall have an earthen berm built around the perimeter, large enough to accommodate 20 gallons of water to ensure the root ball will hold together and to minimize transplant shock.
F. Each tree shall be placed in the receiving hole in the appropriate geographic orientation and backfilled with native or mineral amended soil. The original soil line on the trunk should be slightly higher than adjacent grade to allow the transplanted tree to settle to the appropriate

grade. The hole shall be filled with water and the tree will be slightly agitated to dislodge any air bubbles that could create root rot.

G. Earthen berms shall be created around each tree after transplant to ensure western Joshua trees can receive up to five gallons of water per watering event. Each western Joshua tree will be hand watered (top to bottom) every two weeks for up to six weeks following transplanting. All trees shall be watered for one year: The trees should be watered three times in the spring, one time in the summer, and one time in the fall with three gallons of water per watering event. The proponent must notify the Landscape Superintendent, City Arborist or appointed designee in advance of each watering event to ensure compliance with the watering regimen maintenance period.

H. A daily pre-transplant operation safety briefing shall be conducted to ensure all applicable safety regulatory requirements have been met. All personnel working in and around equipment shall wear hard hats, reflective safety vests and protective eye wear.

I. Protection of Public and Private Property. The proponent shall be responsible for the protection of all public and private property and improvements within and adjacent to all work areas including but not limited to: plant material, lawns, sprinkler systems, drains, fencing, block walls, brick or masonry work, sidewalks, street paving, street lights, traffic signals, utility pedestals and all other public or private improvements.

J. Restitution for Public or Private Property Damage. Any improvements removed or damaged, other than those scheduled for removal shall be replaced in kind at the proponent's expense to the absolute satisfaction of the Grounds and Green Spaces Superintendent and/or private property owner. Replacement shall take place no later than five working days from the date of damage, unless otherwise authorized by the Grounds and Green Spaces Superintendent.

K. Underground Service Alert. The proponent shall be responsible for contacting Underground Service Alert, securing a dig-alert ticket, and allowing the time required by law for members to respond and mark their underground infrastructure prior to conducting any western Joshua tree transplanting operations. The proponent shall analyze and respect all utility markings and transplant western Joshua trees with care to avoid contact with any underground infrastructure within the transplant zone. (Ord. 1556 § 1, 2020)

**14.04.070 Desert vegetation preservation criteria.**

All development proposals for land which contains desert vegetation shall be subject to the following provisions regarding the preservation of native desert vegetation both on- and off-site:

A. The minimum standard of preservation shall be:
    1. Two California junipers per gross acre, averaged for the gross site area covered by the development application; or
    2. Where soil conditions or conditions of the California juniper prohibit the preservation of two trees per acre, or where the total number of healthy trees per gross acre is not equal to two per acre, the minimum standard of preservation will be determined by a desert native plant specialist and confirmed by the City's Landscape Architect, or in lieu thereof, the Director of Public Works' designee, in accordance with the following criteria:
        a. Soil characteristics of a proposed area for relocation of vegetation,
        b. Health of the native desert vegetation, including damage to trunk or root system,
        c. Size of the Joshua tree and the location to where the tree will be transplanted,
        d. A suitable top-root ratio;

3. Where possible, a minimum of two California juniper trees per gross acre shall be retained undisturbed on site. California junipers are valuable components of the native desert vegetation and it is desirable to retain specimens whenever possible. However, California junipers do not transplant well, are large plants which are difficult to incorporate into landscaping and are not readily available as nursery stock;
4. To enhance the likelihood of survival, native desert vegetation that cannot be fenced and left undisturbed will not be left in place while grading. The options for preserving trees on site after grading are the following:
    a. Move the vegetation slated to remain on site to a holding area. After grading has been completed, move vegetation once again to a permanent location.
    b. Grade in Phases. Ready the area to receive vegetation first, then transplant and complete grading.

B. The quantity of California junipers calculated under the minimum standard of preservation as determined above shall be preserved by any combination of the following means:
    1. The development proposal shall be prepared in a manner which retains on site those plants that can be incorporated into the design of the development. Development proposals should use native desert vegetation to landscape on-site detention basins, entry statement areas, and other open space sites whenever possible, where xeric landscaping is appropriate;
        a. California junipers retained on site shall be credited toward the two trees per gross acre or other minimum standard of preservation,
        b. Other methods of preservation as shown in subsection (B)(2) shall not apply to California junipers;
    2. Only after all other options are exhausted, proponents may pay an in-lieu fee to the City to fulfill their obligation of preservation of native desert vegetation. The fee will be used to provide partial funding for the maintenance and coordination of the native desert vegetation banks and preserves. The in-lieu fee will be accepted only when preservation of Joshua and/or juniper trees is not possible due to site constraints that preclude the feasible preservation of desert vegetation, and no alternative preservation options remain. When a proponent must pay an in-lieu fee, the fee shall be calculated on the minimum standard of two trees per acre, less any trees preserved by other means. The in-lieu fee amount shall be determined by resolution of the City Council;
        a. Where California junipers are retained on site, they shall be credited toward the minimum standard or two trees per acre. However, where they cannot be retained undisturbed on site, no in-lieu fee is required;
    3. Any native desert vegetation in excess of the minimum standard for preservation may be removed after the public has had the opportunity to transplant native desert vegetation per subsection (B)(2)(a) of this section, and after the native desert vegetation preservation plan and native desert vegetation removal permit has been approved by the City, or, if applicable, after the payment of the in-lieu fee. (Ord. 1556 § 1, 2020; Ord. 952 § 2, 1992. Formerly 14.04.060)

# Appendix B

Special Status Species Evaluation Tables

## Special Status Plant and Wildlife Species in the Regional Vicinity of the Project Site

| Scientific Name<br>Common Name | Status | Habitat Requirements | Potential to Occur in Project Area | Habitat Suitability/ Observations |
|---|---|---|---|---|
| **Plants and Lichens** | | | | |
| *Arctostaphylos glandulosa* ssp. *gabrielensis*<br>San Gabriel manzanita | None/None<br>G5T3/S3<br>1B.2 | Perennial evergreen shrub. Chaparral. Rocky outcrops; can be dominant shrub where it occurs. Elevations: 1950-4920ft. (595-1500m.) Blooms Mar. | No Potential | No suitable chaparral habitat occurs on the project site. |
| *Astragalus hornii* var. *hornii*<br>Horn's milk-vetch | None/None<br>GUT1/S1<br>1B.1 | Annual herb. Meadows and seeps, playas. Alkaline, lake margins. Elevations: 195-2790ft. (60-850m.) Blooms May-Oct. | No Potential | No suitable wetland habitats occur on the project site. |
| *Astragalus preussii* var. *laxiflorus*<br>Lancaster milk-vetch | None/None<br>G4T2/S1<br>1B.1 | Perennial herb. Chenopod scrub. Alkaline clay flats or gravelly or sandy washes and along draws in gullied badlands in California. Elevations: 2295-2295ft. (700-700m.) Blooms Mar-May. | No Potential | No suitable chenopod scrub or alkali soils occur on the project site. |
| *Calochortus palmeri* var. *palmeri*<br>Palmer's mariposa-lily | None/None<br>G3T2/S2<br>1B.2 | Perennial bulbiferous herb. Chaparral, lower montane coniferous forest, meadows and seeps. Mesic. Elevations: 2330-7840ft. (710-2390m.) Blooms Apr-Jul. | No Potential | No chaparral or other suitable habitat types occur on the project site. |
| *Calochortus striatus*<br>alkali mariposa-lily | None/None<br>G3?/S2S3<br>1B.2 | Perennial bulbiferous herb. Chaparral, chenopod scrub, meadows and seeps, mojavean desert scrub. Alkaline, mesic. Elevations: 230-5235ft. (70-1595m.) Blooms Apr-Jun. | No Potential | The project site does contain mojavean desert scrub; however, suitable alkaline or mesic soils do not occur on the project site. |
| *Castilleja gleasoni*<br>Mt. Gleason paintbrush | None/SCR<br>G2/S2<br>1B.2 | Perennial herb (hemiparasitic). Chaparral, lower montane coniferous forest, pinyon and juniper woodland. Granitic. Elevations: 3805-7120ft. (1160-2170m.) Blooms May-Jun(Sep). | No Potential | No chaparral or other suitable habitat types occur on the project site. |
| *Chorizanthe parryi* var. *parryi*<br>Parry's spineflower | None/None<br>G3T2/S2<br>1B.1 | Annual herb. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Openings, Rocky (sometimes), sandy (sometimes). Elevations: 900-4005ft. (275-1220m.) Blooms Apr-Jun. | No Potential | No chaparral or other suitable habitat types occur on the project site. |
| *Claytonia peirsonii* ssp. *peirsonii*<br>Peirson's spring beauty | None/None<br>G2G3T2/S2<br>1B.2 | Perennial herb. Subalpine coniferous forest, upper montane coniferous forest. Granitic, metamorphic, scree, talus. Elevations: 4955-9005ft. (1510-2745m.) Blooms (Mar)May-Jun. | No Potential | No suitable forest habitat occurs on the project site. |

| Scientific Name<br>Common Name | Status | Habitat Requirements | Potential to Occur in Project Area | Habitat Suitability/ Observations |
|---|---|---|---|---|
| *Eriastrum rosamondense*<br>Rosamond eriastrum | None/None<br>G1?/S1?<br>1B.1 | Annual herb. Chenopod scrub, vernal pools. Alkali pool beds separated by very low hummocks with open chenopod scrub. Often sandy soil. Elevations: 2295-3855ft. (700-1175m.) Blooms Apr-May (Jun-Jul). | No Potential | No suitable chenopod scrub or alkali soils occur on the project site. |
| *Lilium parryi*<br>lemon lily | None/None<br>G3/S3<br>1B.2 | Perennial bulbiferous herb. Lower montane coniferous forest, meadows and seeps, riparian forest, upper montane coniferous forest. Wet, mountainous terrain; generally in forested areas; on shady edges of streams, in open boggy meadows and seeps. Elevations: 4005-9005ft. (1220-2745m.) Blooms Jul-Aug. | No Potential | Wet, mountainous terrain does not occur on the project site. |
| *Linanthus concinnus*<br>San Gabriel linanthus | None/None<br>G2/S2<br>1B.2 | Annual herb. Chaparral, lower montane coniferous forest, upper montane coniferous forest. Dry rocky slopes, often in Jeffrey pine/canyon oak forest. Elevations: 4985-9185ft. (1520-2800m.) Blooms Apr-Jul. | No Potential | No suitable forest habitat occurs on the project site. |
| *Loeflingia squarrosa* var. *artemisiarum*<br>sagebrush loeflingia | None/None<br>G5T3/S2<br>2B.2 | Annual herb. Desert dunes, great basin scrub, sonoran desert scrub. Sandy flats and dunes. Sandy areas around clay slicks w/Sarcobatus, Atriplex, Tetradymia, etc. Elevations: 2295-5300ft. (700-1615m.) Blooms Apr-May. | No Potential | No suitable dune habitat or clay slicks occur on the project site. |
| *Lupinus peirsonii*<br>Peirson's lupine | None/None<br>G3/S3<br>1B.3 | Perennial herb. Joshua tree woodland, lower montane coniferous forest, pinyon and juniper woodland, upper montane coniferous forest. Decomposed granite slide and talus, on slopes and ridges. Elevations: 3280-8205ft. (1000-2500m.) Blooms Apr-Jun. | No Potential | While Joshua tree woodland is present, no suitable soils or slopes occur on the project site. The project site is out of the elevation range for this species. |
| *Nemacladus secundiflorus* var. *robbinsii*<br>Robbins' nemacladus | None/None<br>G3T2/S2<br>1B.2 | Annual herb. Chaparral, valley and foothill grassland. Dry, sandy or gravelly slopes. Openings. Elevations: 1150-5580ft. (350-1700m.) Blooms Apr-Jun. | No Potential | No chaparral or other suitable habitat types occur on the project site. |

| Scientific Name<br>Common Name | Status | Habitat Requirements | Potential to Occur in Project Area | Habitat Suitability/ Observations |
|---|---|---|---|---|
| *Opuntia basilaris* var. *brachyclada*<br>short-joint beavertail | None/None<br>G5T3/S3<br>1B.2 | Perennial stem. Chaparral, joshua tree woodland, mojavean desert scrub, pinyon and juniper woodland. Sandy soil or coarse, granitic loam. Elevations: 1395-5905ft. (425-1800m.) Blooms Apr-Jun(Aug). | Low Potential | The project site contains suitable Joshua tree woodland; however, the closest occurrence of this species was approximately 4 miles away in 1989. |
| *Oreonana vestita*<br>woolly mountain-parsley | None/None<br>G3/S3<br>1B.3 | Perennial herb. Lower montane coniferous forest, subalpine coniferous forest, upper montane coniferous forest. High ridges; on scree, talus, or gravel. Elevations: 5300-11485ft. (1615-3500m.) Blooms Mar-Sep. | No Potential | No suitable forest habitat occurs on the project site. |
| *Stylocline masonii*<br>Mason's neststraw | None/None<br>G1/S1<br>1B.1 | Annual herb. Chenopod scrub, pinyon and juniper woodland. Sandy washes. Elevations: 330-3935ft. (100-1200m.) Blooms Mar-May. | No Potential | No suitable chenopod scrub or pinyon and juniper woodland occurs on the project site. |
| *Symphyotrichum greatae*<br>Greata's aster | None/None<br>G2/S2<br>1B.3 | Perennial rhizomatous herb. Broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, riparian woodland. Mesic canyons. Elevations: 985-6595ft. (300-2010m.) Blooms Jun-Oct. | No Potential | No suitable chaparral or forest habitat occurs on the project site. |
| *Thysanocarpus rigidus*<br>rigid fringepod | None/None<br>G1G2/S2<br>1B.2 | Annual herb. Pinyon and juniper woodland. Dry, rocky slopes and ridges of oak and pine woodland in arid mountain ranges. Elevations: 1970-7220ft. (600-2200m.) Blooms Feb-May. | No Potential | No suitable woodland habitat occurs on the project site. |
| **Invertebrates** | | | | |
| *Euphydryas editha quino*<br>quino checkerspot butterfly | FE/None<br>G5T1T2/S1 S2 | Sunny openings within chaparral and coastal sage shrublands in parts of Riverside and San Diego counties. Hills and mesas near the coast. Need high densities of food plants Plantago erecta, P. insularis, and Orthocarpus purpurescens. | No Potential | The project site is outside of the known range of this species. |
| **Fish** | | | | |
| *Catostomus santaanae*<br>Santa Ana sucker | FT/None<br>G1/S1 | Endemic to Los Angeles Basin south coastal streams. Habitat generalists, but prefer sand-rubble-boulder bottoms, cool, clear water, and algae. | No Potential | No suitable stream habitat occurs on the project site. |

| Scientific Name<br>Common Name | Status | Habitat Requirements | Potential to Occur in Project Area | Habitat Suitability/ Observations |
|---|---|---|---|---|
| *Gasterosteus aculeatus williamsoni*<br>unarmored threespine stickleback | FE/SE<br>G5T1/S1<br>FP | Weedy pools, backwaters, and among emergent vegetation at the stream edge in small Southern California streams. Cool (<24 C), clear water with abundant vegetation. | No Potential | No suitable stream habitat occurs on the project site. |
| **Amphibians** | | | | |
| *Anaxyrus californicus*<br>arroyo toad | FE/None<br>G2G3/S2S3<br>SSC | Semi-arid regions near washes or intermittent streams, including valley-foothill and desert riparian, desert wash, etc. Rivers with sandy banks, willows, cottonwoods, and sycamores; loose, gravelly areas of streams in drier parts of range. | No Potential | No suitable washes or streams occur on the project site. |
| *Rana draytonii*<br>California red-legged frog | FT/None<br>G2G3/S2S3<br>SSC | Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat. | No Potential | No suitable deep-water habitat occurs on or near the project site. |
| *Rana muscosa*<br>southern mountain yellow-legged frog | FE/SE<br>G1/S1<br>WL | Disjunct populations known from southern Sierras (northern DPS) and San Gabriel, San Bernardino, and San Jacinto Mtns (southern DPS). Found at 1,000 to 12,000 ft in lakes and creeks that stem from springs and snowmelt. May overwinter under frozen lakes. Often encountered within a few feet of water. Tadpoles may require 2 - 4 yrs to complete their aquatic development. | No Potential | No suitable lakes or creeks occur on or near the project site. |
| **Reptiles** | | | | |
| *Anniella pulchra*<br>Northern California legless lizard | None/None<br>G3/S3<br>SSC | Sandy or loose loamy soils under sparse vegetation. Soil moisture is essential. They prefer soils with a high moisture content. | No Potential | No suitable sandy soils with high moisture content occur on the project site. |
| *Anniella spp.*<br>California legless lizard | None/None<br>G3G4/S3S4<br>SSC | Contra Costa County south to San Diego, within a variety of open habitats.This element represents California records of Anniella not yet assigned to new species within the Anniella pulchra complex. Variety of habitats; generally in moist, loose soil. They prefer soils with a high moisture content. | No Potential | No suitable sandy soils with high moisture content occur on the project site. |

| Scientific Name<br>Common Name | Status | Habitat Requirements | Potential to Occur in Project Area | Habitat Suitability/ Observations |
|---|---|---|---|---|
| *Arizona elegans occidentalis*<br>California glossy snake | None/None<br>G5T2/S2<br>SSC | Patchily distributed from the eastern portion of San Francisco Bay, southern San Joaquin Valley, and the Coast, Transverse, and Peninsular ranges, south to Baja California. Generalist reported from a range of scrub and grassland habitats, often with loose or sandy soils. | Moderate Potential | The project site contains suitable desert scrub habitat with sandy soils; however, it is frequently disturbed. |
| *Emys marmorata*<br>western pond turtle | None/None<br>G3G4/S3<br>SSC | A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying. | No Potential | No suitable ponds or other wetland habitat occur on the project site. |
| *Gopherus agassizii*<br>desert tortoise | FT/ST<br>G3/S2S3 | Most common in desert scrub, desert wash, and Joshua tree habitats; occurs in almost every desert habitat. Require friable soil for burrow and nest construction. Creosote bush habitat with large annual wildflower blooms preferred. | No Potential | The project site contains suitable desert scrub habitat; however, the site is disturbed by trash dumping and OHV use. No tortoises have been seen in the vicinity in the last 30 years. |
| *Phrynosoma blainvillii*<br>coast horned lizard | None/None<br>G3G4/S3S4<br>SSC | Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects. | Moderate Potential | The project site provides suitable sandy soils with open scrub habitat; however, occurrences of this species in the area are from more than 10 years ago. |
| *Thamnophis hammondii*<br>two-striped gartersnake | None/None<br>G4/S3S4<br>SSC | Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 ft elevation. Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth. | No Potential | No suitable freshwater habitats occur on the project site. |
| **Birds** | | | | |
| *Accipiter cooperii*<br>Cooper's hawk | None/None<br>G5/S4<br>WL | Woodland, chiefly of open, interrupted or marginal type. Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains; also, live oaks. | No Potential | No suitable riparian habitat or nesting trees occur on the project site. |

| Scientific Name<br>Common Name | Status | Habitat Requirements | Potential to Occur in Project Area | Habitat Suitability/ Observations |
|---|---|---|---|---|
| *Agelaius tricolor*<br>tricolored blackbird | None/ST<br>G1G2/S1S2<br>SSC | Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony. | No Potential | No suitable open water occurs on the project site. |
| *Aimophila ruficeps canescens*<br>southern California rufous-crowned sparrow | None/None<br>G5T3/S3<br>WL | Resident in Southern California coastal sage scrub and sparse mixed chaparral. Frequents relatively steep, often rocky hillsides with grass and forb patches. | No Potential | No suitable chaparral or coastal sage scrub occurs on the project site. |
| *Aquila chrysaetos*<br>golden eagle | None/None<br>G5/S3<br>FP<br>WL | Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas. | Low Potential | The project site provides suitable foraging habitat; however, it does not contain suitable cliffs for nesting. |
| *Artemisiospiza belli belli*<br>Bell's sage sparrow | None/None<br>G5T2T3/S3<br>WL | Nests in chaparral dominated by fairly dense stands of chamise. Found in coastal sage scrub in south of range. Nest located on the ground beneath a shrub or in a shrub 6-18 inches above ground. Territories about 50 yds apart. | No Potential | No suitable chaparral or coastal sage scrub occurs on the project site. |
| *Athene cunicularia*<br>burrowing owl | None/None<br>G4/S3<br>SSC | Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel. | Moderate potential | The project site contains suitable desert scrub habitat with California ground squirrel burrows; however, it is frequently disturbed. This species was documented approximately 1.5 miles from the project site in 2006. |
| *Buteo regalis*<br>ferruginous hawk | None/None<br>G4/S3S4<br>WL | Open grasslands, sagebrush flats, desert scrub, low foothills and fringes of pinyon and juniper habitats. Eats mostly lagomorphs, ground squirrels, and mice. Population trends may follow lagomorph population cycles. | Low Potential | The project site provides suitable foraging habitat; however, it does not contain suitable trees for nesting. |

| Scientific Name<br>Common Name | Status | Habitat Requirements | Potential to Occur in Project Area | Habitat Suitability/ Observations |
|---|---|---|---|---|
| *Buteo swainsoni*<br>Swainson's hawk | None/ST<br>G5/S3 | Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations. | No Potential | No suitable grasslands or agricultural areas occur on the project site and the project site does not contain suitable trees for nesting. |
| *Charadrius montanus*<br>mountain plover | None/None<br>G3/S2S3<br>SSC | Short grasslands, freshly plowed fields, newly sprouting grain fields, and sometimes sod farms. Short vegetation, bare ground, and flat topography. Prefers grazed areas and areas with burrowing rodents. | No Potential | No suitable grassland habitats occur on the project site. |
| *Falco columbarius*<br>merlin | None/None<br>G5/S3S4<br>WL | Seacoast, tidal estuaries, open woodlands, savannahs, edges of grasslands and deserts, farms and ranches. Clumps of trees or windbreaks are required for roosting in open country. | No Potential | No suitable habitats occur on the project site and the project site does not contain suitable trees for nesting. |
| *Falco mexicanus*<br>prairie falcon | None/None<br>G5/S4<br>WL | Inhabits dry, open terrain, either level or hilly. Breeding sites located on cliffs. Forages far afield, even to marshlands and ocean shores. | Low Potential | The project site provides a suitable foraging habitat for this species; however, it does not provide suitable nesting habitat. |
| *Lanius ludovicianus*<br>loggerhead shrike | None/None<br>G4/S4<br>SSC | Broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub and washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting. | High Potential | The project site, as well as the parcel to the north, provide suitable Joshua tree woodland for this species. |
| *Toxostoma lecontei*<br>Le Conte's thrasher | None/None<br>G4/S3<br>SSC | Desert resident; primarily of open desert wash, desert scrub, alkali desert scrub, and desert succulent scrub habitats. Commonly nests in a dense, spiny shrub or densely branched cactus in desert wash habitat, usually 2-8 feet above ground. | High Potential | Suitable desert habitat occurs on the project site. |
| *Vireo bellii pusillus*<br>least Bell's vireo | FE/SE<br>G5T2/S2 | Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite. | No Potential | No suitable riparian habitat occurs on the project site. |

| Scientific Name<br>Common Name | Status | Habitat Requirements | Potential to Occur in Project Area | Habitat Suitability/ Observations |
|---|---|---|---|---|
| **Mammals** | | | | |
| *Antrozous pallidus*<br>pallid bat | None/None<br>G4/S3<br>SSC | Found in a variety of habitats including deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts in crevices of rock outcrops, caves, mine tunnels, buildings, bridges, and hollows of live and dead trees which must protect bats from high temperatures. Very sensitive to disturbance of roosting sites. | Low Potential | Suitable desert habitat does occur on the project site. Joshua trees on site would provide suitable roosting habitat; however, the site is frequently disturbed. |
| *Chaetodipus fallax pallidus*<br>pallid San Diego pocket mouse | None/None<br>G5T3T4/S3 S4<br>SSC | Occurs in desert and arid coastal border areas in eastern San Diego, Riverside, and San Bernardino Counties. Habitats include desert wash, desert scrub, desert succulent scrub, and pinyon-juniper. Prefers sandy soils, usually with rocks or coarse gravel. | No Potential | The project site is outside of the known range of this species. |
| *Corynorhinus townsendii*<br>Townsend's big-eared bat | None/None<br>G4/S2<br>SSC | Occurs throughout California in a wide variety of habitats. Most common in mesic sites, typically coniferous or deciduous forests. Roosts in the open, hanging from walls & ceilings in caves, lava tubes, bridges, and buildings. This species is extremely sensitive to human disturbance. | No Potential | No suitable forests or roosting substrates occur on the project site. |
| *Xerospermophilus mohavensis*<br>Mohave ground squirrel | None/ST<br>G2G3/S2S3 | Open desert scrub, alkali scrub and Joshua tree woodland. Also feeds in annual grasslands. Restricted to Mojave Desert. Prefers sandy to gravelly soils, avoids rocky areas. Uses burrows at base of shrubs for cover. Nests are in burrows. | No Potential | Trapping was conducted in 2022 and no Mohave ground squirrels were detected. All records of this species within the area are more than 20 years old. |
| **Sensitive Natural Communities** | | | | |
| Mojave Riparian Forest | None/None<br>G1/S1.1 | | Not present | |
| Southern California Threespine Stickleback Stream | None/None<br>GNR/SNR | | Not present | |
| Southern Cottonwood Willow Riparian Forest | None/None<br>G3/S3.2 | | Not present | |
| Southern Riparian Scrub | None/None<br>G3/S3.2 | | Not present | |

| Scientific Name<br>Common Name | Status | Habitat Requirements | Potential to Occur in Project Area | Habitat Suitability/ Observations |
|---|---|---|---|---|
| Southern Sycamore Alder Riparian Woodland | None/None<br>G4/S4 | | Not present | |

Regional Vicinity refers to within a 9-quad search of site.

**Status (Federal/State)**

FE = Federal Endangered
FT = Federal Threatened
FPE = Federal Proposed Endangered
FPT = Federal Proposed Threatened
FD = Federal Delisted
FC = Federal Candidate
SE = State Endangered
ST = State Threatened
SCE = State Candidate Endangered
SCT = State Candidate Threatened
SR = State Rare
SD = State Delisted
SSC = CDFW Species of Special Concern
FP = CDFW Fully Protected
WL = CDFW Watch List

**CRPR (CNPS California Rare Plant Rank)**

1A = Presumed extirpated in California, and rare or extinct elsewhere
1B = Rare, Threatened, or Endangered in California and elsewhere
2A = Presumed extirpated in California, but common elsewhere
2B= Rare, Threatened, or Endangered in California, but more common elsewhere
3 = Need more information (Review List)
4 = Limited Distribution (Watch List)

**CRPR Threat Code Extension**

.1 = Seriously endangered in California (>80% of occurrences threatened/high degree and immediacy of threat)
.2 = Moderately threatened in California (20-80% of occurrences threatened/moderate degree and immediacy of threat)
.3 = Not very endangered in California (<20% of occurrences threatened/low degree and immediacy of threat)

**Other Statuses**

G1 or S1 Critically Imperiled Globally or Subnationally (state)
G2 or S2 Imperiled Globally or Subnationally (state)
G3 or S3 Vulnerable to extirpation or extinction Globally or Subnationally (state)
G4/5 or S4/5 Apparently secure, common and abundant
GH or SH Possibly Extirpated – missing; known from only historical occurrences but still some hope of rediscovery

**Additional notations may be provided as follows**

T – Intraspecific Taxon (subspecies, varieties, and other designations below the level of species)
Q – Questionable taxonomy that may reduce conservation priority
? – Inexact numeric rank

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# Appendix C

Site Photographs

**Photograph 1.** Southwest corner of project site, facing northeast. September 21, 2022.

**Photograph 2.** Southeast corner of project site, facing northwest. September 21, 2022.

**Photograph 3.** Northeast corner of project site, facing southwest. September 21, 2022.

**Photograph 4.** Northwest corner of project site, facing southeast. September 21, 2022.

**Photograph 5.** Example of trash dumps throughout the project site. September 21, 2022.

**Photograph 6.** Example of vehicle tracks present throughout the project site. September 21, 2022.

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# Appendix D

Western Joshua Tree Survey Data

| Object ID* | Height (meters) | Type | Age Class | Number of Branches | Phenophase | Notes |
|---|---|---|---|---|---|---|
| 1 | 1 - 5 | Single Tree | mature | 0 | veg | 1 basal sprout. |
| 2 | < 1 | Clonal | young | 0 | veg | part of close spaced stand |
| 3 | < 1 | Clonal | young | 0 | veg | <Null> |
| 4 | 1 - 5 | Clonal | mature | 1 | veg | <Null> |
| 5 | 1 - 5 | Clonal | mature | 2 | veg | <Null> |
| 6 | 1 - 5 | Clonal | mature | 1 | veg | tree is center of clonal group with 4 basal sprouts. in poor shape with two dead branches and one short live branch |
| 7 | 1 - 5 | Clonal | mature | 0 | veg | <Null> |
| 8 | < 1 | Clonal | young | 0 | <Null> | <Null> |
| 9 | 1 - 5 | Clonal | mature | 0 | <Null> | <Null> |
| 10 | 1 - 5 | Clonal | mature | 3 | veg | <Null> |
| 11 | 1 - 5 | Clonal | mature | 2 | veg | <Null> |
| 12 | 1 - 5 | Clonal | mature | 2 | <Null> | <Null> |
| 13 | 1 - 5 | Clonal | mature | 2 | veg | <Null> |
| 14 | < 1 | Clonal | young | 0 | veg | <Null> |
| 15 | 1 - 5 | Single Tree | mature | 5 | veg | <Null> |
| 16 | 1 - 5 | Single Tree | mature | 9 | <Null> | <Null> |
| 17 | > 5 | Single Tree | mature | 20 | veg | two trunks each with dbh approximately 15 inches |
| 18 | 1 - 5 | Single Tree | juvenile | 5 | veg | 3 basal sprouts included I. branch count |
| 19 | 1 - 5 | Single Tree | mature | 4 | veg | <Null> |
| 20 | 1 - 5 | Single Tree | mature | 3 | veg | <Null> |
| 21 | 1 - 5 | Clonal | mature | 12 | veg | 4 trunks |
| 22 | 1 - 5 | Single Tree | mature | 2 | <Null> | <Null> |
| 23 | 1 - 5 | Single Tree | mature | 6 | <Null> | <Null> |
| 24 | 1 - 5 | Clonal | mature | 0 | veg | <Null> |
| 25 | < 1 | Clonal | young | 0 | veg | <Null> |
| 26 | < 1 | Clonal | young | 2 | veg | one basal sprout |
| 27 | 1 - 5 | Single Tree | mature | 5 | veg | two trunks with several small basal sprouts |
| 28 | 1 - 5 | Single Tree | mature | 7 | veg | two trunks arising from an older fallen tree |
| 29 | 1 - 5 | Single Tree | mature | 0 | veg | <Null> |
| 30 | 1 - 5 | Single Tree | mature | 2 | veg | three trunks. |
| 31 | 1 - 5 | Single Tree | mature | 3 | veg | 4 trunks. |
| 32 | 1 - 5 | Clonal | mature | 2 | veg | 7 basal sprouts |
| 33 | 1 - 5 | Single Tree | mature | 7 | veg | 3 trunks |
| 34 | 1 - 5 | <Null> | <Null> | <Null> | <Null> | dead |
| 35 | 1 - 5 | Single Tree | mature | 6 | veg | two trunks |

| Object ID* | Height (meters) | Type | Age Class | Number of Branches | Phenophase | Notes |
|---|---|---|---|---|---|---|
| 36 | 1 - 5 | Single Tree | young | 0 | veg | two trunks less than 2m |
| 37 | < 1 | Clonal | young | <Null> | <Null> | 6 sprouts within 2 meter area |
| 38 | 1 - 5 | Clonal | mature | 2 | veg | 3 sprouts within two meter area |
| 39 | 1 - 5 | Single Tree | mature | 8 | <Null> | 5 live trunks 1 dead trunk |
| 40 | 1 - 5 | Single Tree | mature | 6 | veg | 4 trunks |
| 41 | > 5 | Clonal | mature | 5 | veg | two trunks. one with dbh 15 inch another 3 inch dbh. 5 sprouts within 2 meter area |
| 42 | 1 - 5 | Clonal | young | 0 | veg | two trees approximately 1.5 meter and a small sprout within 2 meter area |
| 43 | 1 - 5 | Single Tree | mature | 3 | veg | 4 trunks |
| 44 | 1 - 5 | Single Tree | mature | 2 | veg | 2 live trunks 1 dead trunk. |
| 45 | 1 - 5 | <Null> | <Null> | <Null> | <Null> | dead |
| 46 | 1 - 5 | Single Tree | young | 0 | veg | two trunks |
| 47 | < 1 | Clonal | young | 0 | veg | two small trees from fallen canopy of a mostly dead larger tree |
| 48 | 1 - 5 | Clonal | mature | 11 | veg | 3 trunks. |
| 49 | 1 - 5 | Clonal | mature | 2 | veg | 3 trunks on main tree with 5 sprouts within 2 meter area |
| 50 | 1 - 5 | Clonal | young | 0 | veg | one sprout within 1 meter |
| 51 | 1 - 5 | Single Tree | mature | 6 | veg | 3 trunks. 4 sprouts near base of tree. |
| 52 | 1 - 5 | Single Tree | mature | 3 | veg | 3 trunks |
| 53 | 1 - 5 | Single Tree | mature | 5 | veg | 3 trunks. |
| 54 | 1 - 5 | Single Tree | mature | 4 | veg | 6 small trunks and one large |
| 55 | 1 - 5 | Single Tree | young | 0 | veg | 4 trunks. |
| 56 | 1 - 5 | Single Tree | mature | 4 | veg | 1 large trunk and 3 smaller trunks. |
| 57 | 1 - 5 | Single Tree | mature | 2 | veg | <Null> |
| 58 | 1 - 5 | Clonal | young | 0 | veg | 6 young trees |
| 59 | 1 - 5 | Single Tree | mature | 2 | veg | <Null> |
| 60 | 1 - 5 | Single Tree | mature | 4 | veg | <Null> |
| 61 | 1 - 5 | Clonal | young | 0 | veg | 1 tree 1.5 meter high with 4 small sprouts within 2 meters |
| 62 | 1 - 5 | Single Tree | young | 0 | veg | 3 trunks. |
| 63 | 1 - 5 | Single Tree | mature | 4 | veg | <Null> |
| 64 | 1 - 5 | Single Tree | mature | 3 | veg | 1 trunk sprout |
| 65 | 1 - 5 | Single Tree | young | 0 | veg | 2 trunks |
| 66 | 1 - 5 | Single Tree | mature | 3 | veg | 3 trunks |
| 67 | 1 - 5 | Single Tree | mature | 3 | <Null> | <Null> |
| 68 | 1 - 5 | Single Tree | mature | 4 | veg | 5 trunks. |
| 69 | 1 - 5 | Single Tree | young | 2 | veg | two trunks. |
| 70 | 1 - 5 | Single Tree | mature | 2 | veg | <Null> |

| Object ID* | Height (meters) | Type | Age Class | Number of Branches | Phenophase | Notes |
|---|---|---|---|---|---|---|
| 71 | 1 - 5 | Single Tree | mature | 6 | veg | <Null> |
| 72 | 1 - 5 | Single Tree | mature | 2 | veg | 3 sprouts at base |
| 73 | 1 - 5 | Single Tree | young | 0 | veg | two trunks from base of older dead trunk. |
| 74 | 1 - 5 | Single Tree | young | 2 | veg | two trunks and 2 basal sprouts |
| 75 | 1 - 5 | Single Tree | young | 2 | veg | two trunks from base of old dead tree |
| 76 | 1 - 5 | Clonal | mature | 4 | veg | 3 sprouts within 1 meter |
| 77 | 1 - 5 | Single Tree | young | 0 | veg | two trunks 1 sprout |
| 78 | < 1 | Clonal | young | 0 | veg | <Null> |
| 79 | 1 - 5 | Single Tree | young | 0 | veg | <Null> |
| 80 | 1 - 5 | Clonal | young | 3 | veg | 7 trunks. |
| 81 | 1 - 5 | Single Tree | young | 0 | veg | 2 trunks |
| 82 | 1 - 5 | Single Tree | mature | 4 | veg | 3 basal sprouts |
| 83 | 1 - 5 | Single Tree | mature | 4 | veg | two trunks two basal sprouts |
| 84 | 1 - 5 | Single Tree | mature | 3 | veg | <Null> |
| 85 | < 1 | Single Tree | young | 0 | veg | <Null> |
| 86 | 1 - 5 | Single Tree | young | 0 | veg | <Null> |
| 87 | 1 - 5 | Clonal | young | 2 | veg | 3 trunks |
| 88 | 1 - 5 | Single Tree | mature | 4 | veg | <Null> |
| 89 | < 1 | Single Tree | young | 0 | veg | 3 trunks |
| 90 | 1 - 5 | Single Tree | mature | 4 | veg | <Null> |
| 91 | 1 - 5 | Single Tree | mature | 3 | v | 2 trunks |
| 92 | 1 - 5 | Single Tree | mature | 5 | v | <Null> |
| 93 | 1 - 5 | Single Tree | young | 0 | v | 2 trunks and 2 basal sprouts |
| 94 | 1 - 5 | Single Tree | mature | 3 | v | <Null> |
| 95 | 1 - 5 | Single Tree | young | 0 | v | 2 trunks |
| 96 | 1 - 5 | Single Tree | young | 2 | v | from base of old dead tree |
| 97 | 1 - 5 | Single Tree | young | 2 | v | <Null> |
| 98 | 1 - 5 | Single Tree | mature | 4 | v | 2 trunks |
| 99 | 1 - 5 | Single Tree | mature | 0 | v | from base of larger dead tree |
| 100 | 1 - 5 | Single Tree | mature | 2 | v | <Null> |
| 101 | 1 - 5 | Single Tree | mature | 4 | v | <Null> |
| 102 | 1 - 5 | Single Tree | young | 0 | v | 5 trunks from base of old dead tree |
| 103 | < 1 | Single Tree | young | 0 | v | <Null> |
| 104 | 1 - 5 | Single Tree | mature | 2 | v | 2 trunks |
| 105 | 1-5 | Single Tree | young | 0 | v | from base of old dead tree |
| 106 | 1-5 | Clonal | young | 2 | v | 4 sprouts near base |
| 107 | 1-5 | Single Tree | young | 4 | v | <Null> |
| 108 | 1-5 | Clonal | young | 3 | v | sprouts from trunk of fallen tree |
| 109 | 1-5 | Single Tree | young | 0 | v | two trunks with 4 basal sprouts |

| Object ID* | Height (meters) | Type | Age Class | Number of Branches | Phenophase | Notes |
|---|---|---|---|---|---|---|
| 110 | 1-5 | Single Tree | mature | 0 | v | 3 trunks |
| 111 | 1-5 | Single Tree | mature | 2 | v | 1 basal sprout |
| 112 | 1-5 | Clonal | young | 2 | v | 7 trunks |
| 113 | 1-5 | Single Tree | young | 0 | v | <Null> |
| 114 | <1 | Clonal | young | 0 | v | 5 sprouts from fallen tree |
| 115 | 1-5 | Clonal | mature | 3 | v | 2 trunks |
| 116 | 1-5 | Single Tree | mature | 4 | v | <Null> |
| 117 | 1-5 | Single Tree | young | 2 | v | <Null> |
| 118 | 1-5 | Clonal | mature | 4 | v | 3 trunks 1 sprout |
| 119 | 1-5 | Single Tree | mature | 3 | v | <Null> |
| 120 | <1 | Single Tree | young | 0 | v | 3 sprouts from fallen tree |
| 121 | 1-5 | Single Tree | young | 2 | v | 2 trunks |
| 122 | 1-5 | Single Tree | young | 0 | v | 3 trunks |
| 123 | 1-5 | Single Tree | mature | 3 | v | <Null> |
| 124 | 1-5 | Single Tree | mature | 4 | <Null> | <Null> |
| 125 | 1-5 | Single Tree | young | 2 | v | 3 trunks |
| 126 | 1-5 | Single Tree | mature | 1 | v | 3 trunks |
| 127 | 1-5 | Single Tree | mature | 3 | v | 2 trunks and 6 sprouts nearby |
| 128 | 1-5 | Single Tree | young | 0 | v | 2 trunks |
| 129 | 1-5 | Clonal | mature | 3 | v | 3 trunks and 3 small sprouts |
| 130 | 1-5 | Single Tree | young | 3 | v | sprout within 1 meter |
| 131 | 1-5 | Single Tree | mature | 4 | v | 3 trunks |
| 132 | 1-5 | Single Tree | mature | 2 | v | 4 trunks 2 sprouts |
| 133 | 1-5 | Single Tree | mature | 5 | v | <Null> |
| 134 | 1-5 | Clonal | young | 2 | v | 12 trunks >1m 4 sprouts |
| 135 | 1-5 | Single Tree | young | 2 | v | 2 trunks |
| 136 | 1-5 | Single Tree | mature | 4 | v | two branches leaning over on ground |
| 137 | 1-5 | Single Tree | mature | 5 | v | 5 trunks |
| 138 | <Null> | <Null> | <Null> | <Null> | <Null> | dead |
| 139 | 1-5 | Single Tree | mature | 4 | v | 2 trunks |
| 140 | 1-5 | Single Tree | mature | 3 | v | <Null> |
| 141 | 1-5 | Single Tree | mature | 3 | v | <Null> |
| 142 | 1-5 | Single Tree | young | 1 | v | <Null> |
| 143 | 1-5 | Clonal | young | 2 | v | 3 trunks and 4 sprouts <1m |
| 144 | 1-5 | Single Tree | young | 0 | v | 2 trunks |
| 145 | 1-5 | Single Tree | young | 0 | v | <Null> |
| 146 | 1-5 | Single Tree | young | 0 | v | <Null> |
| 147 | 1-5 | Single Tree | mature | 3 | v | <Null> |
| 148 | 1-5 | Single Tree | young | 1 | v | <Null> |
| 149 | 1-5 | Single Tree | mature | 4 | v | 4 trunks |

| Object ID* | Height (meters) | Type | Age Class | Number of Branches | Phenophase | Notes |
|---|---|---|---|---|---|---|
| 150 | 1-5 | Single Tree | mature | 5 | v | <Null> |
| 151 | 1-5 | Clonal | mature | 5 | v | 3 trunks |
| 152 | 1-5 | Single Tree | young | 0 | v | 4 trunks |
| 153 | 1-5 | Single Tree | young | 2 | v | 4 trunks |
| 154 | 1-5 | Single Tree | mature | 3 | v | 4 trunks |
| 155 | 1-5 | Clonal | young | 2 | v | 3 sprouts nearby |
| 156 | 1-5 | Single Tree | young | 0 | v | <Null> |
| 157 | 1-5 | Single Tree | mature | 3 | v | 2 trunks 2 sprouts |
| 159 | 1-5 | Single Tree | mature | 2 | v | <Null> |
| 160 | 1-5 | Single Tree | mature | 8 | v | 3 trunks |
| 161 | 1-5 | Single Tree | mature | 8 | v | <Null> |
| 162 | 1-5 | Single Tree | mature | 5 | v | 3 trunks |
| 163 | 1-5 | Single Tree | mature | 4 | v | 3 trunks 1 sprout |
| 164 | 1-5 | Single Tree | mature | 3 | v | <Null> |
| 165 | 1-5 | Single Tree | mature | 6 | v | 2 trunks |
| 166 | 1-5 | Single Tree | young | 0 | v | 4 trunks |
| 167 | 1-5 | Single Tree | young | 0 | <Null> | <Null> |
| 168 | 1-5 | Single Tree | young | 0 | v | <Null> |
| 169 | 1-5 | Clonal | young | 0 | v | 6 trunks |
| 170 | 1-5 | Single Tree | mature | 5 | v | 2 trunks |
| 171 | 1-5 | Clonal | young | 0 | v | 3 trunks |
| 172 | 1-5 | Single Tree | young | 0 | v | <Null> |
| 173 | 1-5 | Single Tree | mature | 2 | v | <Null> |
| 174 | 1-5 | Single Tree | mature | 3 | v | <Null> |
| 175 | 1-5 | Clonal | mature | 10 | v | 7 trunks with one long one leaning over with canopy on ground |
| 176 | 1-5 | Single Tree | mature | 2 | v | <Null> |
| 177 | <Null> | <Null> | <Null> | <Null> | <Null> | dead |
| 178 | 1-5 | Single Tree | mature | 4 | v | 2 trunks |
| 179 | <1 | Single Tree | young | 0 | v | <Null> |
| 180 | 1-5 | Single Tree | mature | 5 | v | <Null> |
| 181 | <1 | Single Tree | young | 0 | v | <Null> |
| 182 | 1-5 | Single Tree | young | 0 | v | <Null> |
| 183 | 1-5 | Single Tree | mature | 3 | v | <Null> |
| 184 | 1-5 | Single Tree | mature | 5 | v | 5 sprouts at bas3 |
| 185 | 1-5 | Single Tree | mature | 4 | v | <Null> |
| 186 | 1-5 | Clonal | mature | 6 | v | 2 trees and 5 sprouts |
| 187 | <Null> | <Null> | <Null> | <Null> | <Null> | dead |

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# Appendix E

Protocol Mohave Ground Squirrel Trapping Results

**Rincon Consultants, Inc.**

250 East 1st Street, Suite 1400
Los Angeles, California 90012

213 788 4842

info@rinconconsultants.com
www.rinconconsultants.com

July 19, 2022
Project No: 21-11645

Maison's Palmdale Boulevard 150, LLC
2007 Cedar Avenue
Manhattan Beach, California 90266
Contact: Kevin Harbison
Via email: Kevin@ravelloholdings.com

**Subject: Protocol Mohave Ground Squirrel Trapping Results for TTM 83359, Palmdale, Los Angeles County, California**

Dear Mr. Harbison:

Rincon Consultants, Inc. (Rincon) is pleased to present the findings of a focused Mohave ground squirrel (MGS, *Xerospermophilus mohavensis*) live-trapping effort conducted on behalf of Maison's Palmdale Blvd. 150, LLC for the TTM 83359 Project (project). Rincon completed three sessions of trapping to determine presence/absence of the state listed Mohave ground squirrel. Trapping for the project was completed concurrently with the TTM 73068 Project; therefore, the trapping grid spans across both project sites. The results and methods relevant to the TTM 73068 Project were submitted in a separate report and all results presented herein are relevant only to the TTM 83359 Project. Protocol surveys for MGS were required under the Streambed Alteration Agreement (EPIMS-LAN-23730-R5) Measure 2.14.

# Project Location and Description

The project site is located in the eastern portion of Los Angeles County, within the city of Palmdale, California (Attachment A: Figure 1). The approximate center of the trapping grid occurred at 11S 404960m E/3826752m N (UTM coordinate system) and the corner points are as follows:

- Northwest 0404801 m E/3826820 m N (labeled A1 in Attachment A: Figure 1)
- Northeast 0405119 m E/3826823 m N (labeled A10 in Attachment A: Figure 1)
- Southwest 0404801 m E/3826681 m N (labeled E1 in Attachment A: Figure 1)
- Southeast 0405120 m E/3826685 m N (labeled E10 in Attachment A:Figure 1)

The trapping grid covered both the project and the TTM 73068 Project.

The proposed project includes the development of 171 units of new affordable single-family housing units. Development of the project will occur under approved TTM 83359. The initial study and supporting technical studies will be prepared and submitted to the City of Palmdale Planning Commission for approval prior to development.

# Mohave Ground Squirrel Characteristics and Distribution

The MGS is listed as threatened under the California Endangered Species Act. This species has been found in all major desert scrub habitats within the western Mojave Desert in California (Laabs 2006). MGS have been found between Palmdale and Victorville to the south, Owens Lake to the north, eastern escarpment of the Sierra Nevada Mountain range to the west, and to the Mojave River Valley to the east (Leitner 2008).

The MGS is a medium-sized ground squirrel averaging approximately nine inches from nose to tail and displays only slight size differences between sexes (Laabs 2006). The dorsal surface is light gray or brown with a cream-colored ventral surface (Best 1995). The MGS is easily distinguishable from the white-tailed antelope squirrel (*Ammospermophilus leucurus*) which has a white dorsal-lateral stripe along each side. The MGS emerge from aestivation in spring, typically between mid-February and March, when they actively forage for vegetation, seeds, arthropods, and fruit. MGS tend to stay close to its burrow while foraging (Best 1995). Burrows are used for aestivation and hibernation, predator avoidance, and thermoregulation. The breeding season occurs soon after emergence, and gestation lasts approximately 30 days (Best 1995). After acquiring fat stores, the MGS typically enters aestivation in July or August.

Habitat conversion due to agricultural development, suburban and urban land development, energy development, and military base development and operations has contributed to a decline in the abundance of the MGS (Laabs 2006). In addition, the species could be impacted where development occurs near the species habitat. Domestic cat (*Felis catus*) and dog (*Canis familiaris*) could be introduced predators and the use of pesticides or rodenticides may directly affect the species (Desert Managers Mohave Ground Squirrel Work Group 2011). In addition to introduced predators, endemic avian and terrestrial predators of the MGS include the Mohave green rattlesnake (*Crotalus scutulatus*), desert kit fox (*Vulpes macrotis arsipus*), coyote (*Canis latrans*), American badger (*Taxidea taxis*), bobcat (*Lynx rufus*), prairie falcon (*Falco mexicanus*), golden eagle (*Aquila chrysaetos*), and red-tailed hawk (*Buteo jamaicensis*) (Best 1995).

# Methodology

The trapping surveys followed the guidelines described in the *Mohave Ground Squirrel Survey Guidelines* (California Department of Fish and Game [CDFG] 2010). Trapping was conducted by Memorandum of Understanding (MOU) holder Amy Leigh Trost. Three trapping sessions were conducted, the first from March 28 to April 1, 2022, the second from May 12 to May 16, 2022, and the third from June 15 to June 19, 2022. Sherman live traps measuring 3 inches wide, 3.75 inches tall, and 12 inches long were used. Traps were placed in six-inch cardboard box shades assuring air movement around the traps. Traps were spaced approximately 35 meters apart and the five trapping grid lines were oriented on an east-west axis with 10 traps on each line (totaling 50 traps across the two projects) (Attachment A: Figure 1). Each trap was labeled with a unique identifier (ID). Traps were opened within one hour of sunrise and baited with bait containing sunflower-free birdseed, rolled oats and peanut butter powder or sweet feed as suggested by the *Mohave Ground Squirrel Survey Guidelines*. Traps were checked every four hours or sooner and were closed beginning one hour before sunset or when temperatures reached 90 degrees Fahrenheit ($^{o}$F) in the shade measured one foot above ground. Weather conditions and start/stop times for each trap check were recorded. The Survey and Trapping Form found within the *Mohave Ground Squirrel Guidelines* (CDFG 2010) was completed.

The trap ID and species were recorded for each animal at first capture. Each animal was marked with a non-toxic marker to denote recapture. All animals were released unharmed at the trap site immediately following processing. In the event an MGS would be captured additional information was recorded including the weight, sex, age, health and reproductive status and a scat sample was taken.

# Summary of Findings

The trapping grid is located within *Yucca brevifolia* Woodland Alliance (Joshua tree woodland). This community generally occurs in alluvial fans, ridges, gentle to moderate slopes. Canopy, shrub layer, and herbaceous layer is open to intermittent with perennial grasses and seasonal annuals. The trapping grid was dominated by Joshua tree, with occurrences of winterfat (*Krascheninnikovia lanata*), Nevada Mormon tea (*Ephedra nevadensis*), common fiddleneck (*Amsinckia intermedia*), fourwing saltbush (*Atriplex canescens*), downy brome (*Bromus tectorum*), annual bursage (*Ambrosia acanthicarpa*), California buckwheat (*Eriogonum fasciculatum*), angled stem buckwheat (*Eriogonum angulosum*), telegraph weed (*Heterotheca grandiflora*), Acton brittlebush (*Encelia actonii*), westerm tansymustard (*Descurainia pinnata*), creosote bush (*Larrea tridentata*), jimsonweed (*Datura wrightii*), Russian thistle (*Salsola tragus*), California croton (*Croton californicus*), chia (*Salvia columbariae*), Cooper's box thorn (*Lycium cooperi*), Indian rice grass (*Stipa hymenoides*), silver cholla (*Cylindropuntia echinocarpa*), cotton thorn (*Tetradymia comosa*), and sticky snakeweed (*Gutierrezia microcephala*). Vegetation classification was based on the classification systems provided in *A Manual of California Vegetation, Second Edition* (MCV) (Sawyer et al. 2009).

The topography of the trapping grid is relatively flat. Active burrows and sign of California ground squirrel species (*Otospermophilus beecheyi*) and kangaroo rat (*Dipodomys* sp.) were observed within the grid. Disturbance in the form of off-highway vehicle tracks and trash was observed throughout the site. Photographs are presented in Attachment B.

Dates of and conditions during each trapping session are detailed in Table 1, Table 2, and Table 3. Tables 1, 2, and 3 also summarize number of trap checks per day, times traps were opened to the time traps were closed and average weather conditions. High temperatures occurred for most of the May and June sessions resulting trap closures early in the day with less than two trap checks.

**Table 1 March 28 – April 1 Session - Timing and Conditions**

| Trapping Date | Time Traps Open | No. of Trap Checks | Traps Closed | Begin Temp (F) | End Temp (F) | Windspeed (mph) | Precipitation |
|---|---|---|---|---|---|---|---|
| 3/28/2022 | 0635 | 3 | 1900 | 52 | 58 | 0-10 | No |
| 3/29/2022 | 0830 | 3 | 1858 | 50 | 60 | 0-10 | No |
| 3/30/2022 | 0810 | 3 | 1900 | 52 | 64 | 0-5 | No |
| 3/31/2022 | 0725 | 3 | 1850 | 50 | 64 | 0-8 | No |
| 4/1/2022 | 0815 | 3 | 1845 | 50 | 78 | 0-5 | No |

**Table 2 May 12 – May 16 Session - Timing and Conditions**

| Trapping Date | Time Traps Open | No. of Trap Checks | Traps Closed | Begin Temp (F) | End Temp (F) | Windspeed (mph) | Precipitation |
|---|---|---|---|---|---|---|---|
| 5/12/2022 | 0730 | 3 | 2000 | 50 | 64 | 0-8 | No |
| 5/13/2022 | 0620 | 2 | 1490 | 50 | 88 | 0-3 | No |
| 5/14/2022 | 0558 | 2 | 1207 | 52 | 90 | 0-2 | No |
| 5/15/2022 | 0554 | 2 | 1138 | 63 | 90 | 0-6 | No |
| 5/16/2022 | 0546 | 2 | 1215 | 64 | 90 | 0-10 | No |

**Table 3 June 15 – June 19 Session - Timing and Conditions**

| Trapping Date | Time Traps Open | No. of Trap Checks | Traps Closed | Begin Temp (F) | End Temp (F) | Windspeed (mph) | Precipitation |
|---|---|---|---|---|---|---|---|
| 6/15/2022 | 0535 | 2 | 1130 | 62 | 90 | 0-7 | No |
| 6/16/2022 | 0540 | 1 | 1000 | 69 | 90 | 0-3 | No |
| 6/17/2022 | 0535 | 2 | 1327 | 60 | 89 | 0-16 | No |
| 6/18/2022 | 0540 | 4 | 2000 | 69 | 54 | 0-18 | No |
| 6/19/2022 | 0545 | 2 | 1310 | 53 | 90 | 0-8 | No |

A total of 4 white-tailed antelope squirrels and 268 California ground squirrels were captured over the three trapping sessions. Both juvenile and adult life stages were captured of both species and all individuals were in good health. No MGS individuals were captured or observed within the trapping grid. In addition, one white-crowned sparrow (*Zonotrichia leucophrys*) and two desert spiny lizards (*Sceloporus magister*) were incidentally captured and released.

Other species observed within the trapping grid moving though the site included, southern desert horned lizard (*Phrynosoma platyrhinos calidiarum),* Great Basin whiptail (*Aspidoscelis tigris tigris)*, desert cottontail (*Sylvilagus audubonii*), common raven (*Corvus corax),* western bluebird (*Sialia mexicana*), northern mockingbird (*Mimus polyglottos*), and mourning dove (*Zenaida macroura*).

# Conclusions

No MGS individuals were observed or captured during the protocol trapping event within the project site. A total of 4 white-tailed antelope squirrels, including recaptures, and 269 California ground squirrels were captured and released. Therefore, as outlined in the *Mohave Ground Squirrel Survey Guidelines* (2003), the project site harbors no MGS. The results of this survey will expire on June 19, 2023.

Thank you for the opportunity to support with this project. Please do not hesitate to call with any questions.

Sincerely,
**Rincon Consultants, Inc.**

Amy Leigh Trost
Biologist

Christopher Julian
Principal/Senior Regulatory Specialist

## Attachments

Attachment A Figures
Attachment B Representative Photographs

# References

Best, T. L. 1995. *Spermophilus mohavensis*. Mammalian Species 509:1-7.

California Department of Fish and Game. 2003 (revised 2010). *Mohave ground squirrel survey guidelines*. Sacramento, California. 5 pp.

MGSWG (Desert Managers Mohave Ground Squirrel Work Group). 2011. Draft Mohave Ground Squirrel Conservation Strategy. Accessed March 2, 2011. http://www.dmg.gov/documents/DFT_MGS_Consv_Strategy_DMG_082906.pdf

Laabs, D. 2006. *"Mohave ground squirrel." West Mojave Plan Species Accounts*. U.S. Department of the Interior, Bureau of Land Management. January 2006. Accessed June 2, 2014. http://www.blm.gov/ca/pdfs/cdd_pdfs/Mgs1.pdf.

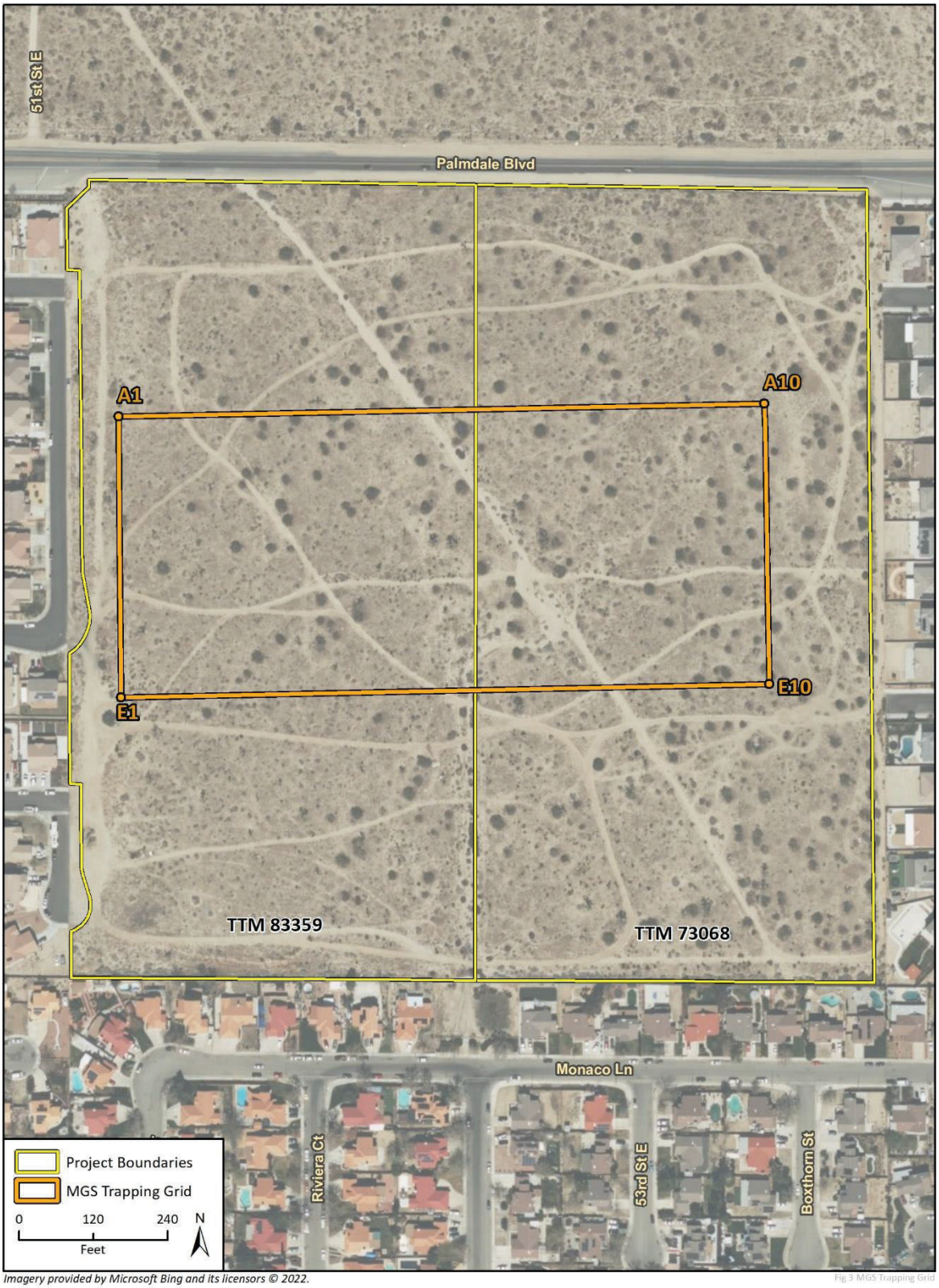
Leitner, P. 2008. *Current Status of the Mohave Ground Squirrel*. California State University-Stanislaus, Endangered Species Recovery Program, Fresno.

Sawyer, J. O., T. Keeler-Wolf, and J.M. Evens. 2009. A Manual of California Vegetation, Second Edition (MCV2). California Native Plant Society, Sacramento, California.

# Attachment 1

Figures

## Figure 1 Project Trapping Location




*Imagery provided by Microsoft Bing and its licensors © 2022.*

Fig 3 MGS Trapping Grid

# Attachment 2

Representative Photographs

**Photograph 1.** Trapping grid facing southeast at trap A1.

**Photograph 2.** Trapping grid facing southwest at trap A10.

**Photograph 3.** Trapping grid facing northeast at trap E1.

**Photograph 4.** Trapping grid facing northwest at trap E10.

**Photograph 5.** Trap station setup under burrobush.

# Appendix C1

Cultural Resources Study

# CULTURAL RESOURCES STUDY FOR THE TTM 83359 PROJECT

## CITY OF PALMDALE
## LOS ANGELES COUNTY, CALIFORNIA

**APN 3023-002-184**

***Lead Agency:***

**City of Palmdale**
**38300 Sierra Highway**
**Palmdale, California 93550**

***Preparer:***

**BFSA Environmental Services,**
**a Perennial Company**
**14010 Poway Road, Suite A**
**Poway, California 92064**

**Signature**

***Project Proponent:***

**Ravello Holdings, Inc.**
**211 Village Commons Boulevard, Suite 11**
**Camarillo, California 93012**

***November 11, 2022***

BFSA Environmental Services
A Perennial Company

# Archaeological Database Information

| | |
|---|---|
| ***Authors:*** | Andrew J. Garrison, M.A. and Brian F. Smith, M.A. |
| ***Consulting Firm:*** | BFSA Environmental Services, a Perennial Company<br>14010 Poway Road, Suite A<br>Poway, California 92064<br>(858) 484-0915 |
| ***Client/Project Proponent:*** | Ravello Holdings, Inc.<br>211 Village Commons Boulevard, Suite 11<br>Camarillo, California 93012 |
| ***Report Date:*** | November 11, 2022 |
| ***Report Title:*** | Cultural Resources Study for the TTM 83359 Project, Palmdale, California (APNs 3023-002-184) |
| ***Type of Study:*** | Phase I Cultural Resources Study |
| ***New Site(s):*** | Temp-1 (historic trash scatter) |
| ***Updated Site(s):*** | None |
| ***USGS Quadrangle:*** | Section 27, Township 6 North, Range 11 West, of the San Bernardino Baseline and Meridian on the *Palmdale, California* (7.5-minute) topographic quadrangle |
| ***Acreage:*** | 20 acres (gross) |
| ***Key Words:*** | Archaeological survey; historic trash scatter (Temp-1); not eligible for the CRHR; no impacts to historical resources as defined by CEQA; monitoring of grading recommended. |

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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 Tentative Tract Map (TTM) 83359 Project located southeast of the intersection of East Palmdale Boulevard and 51st Street in the city of Palmdale, Los Angeles County, California. The project includes Assessor's Parcel Number (APN) 3023-002-184. On the United States Geological Survey (USGS) (7.5-minute), 1:24,000-scale *Palmdale, California* topographic quadrangle map, the project is situated within Section 27, Township 6 North, Range 11 West, of the San Bernardino Baseline and Meridian. As designed, the applicant proposes to subdivide the property for the development of 64 single family residential lots along with associated infrastructure.

The purpose of this investigation was to locate and record any cultural resources present within the project and subsequently evaluate any resources as part of the City of Palmdale's environmental review process conducted in compliance with the California Environmental Quality Act (CEQA) criteria. The cultural resources investigation included the review of an archaeological records search requested from 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 archaeological sites within the project. The search identified eight previously recorded resources within one mile of the project, none of which are recorded within the project. The records search also identified 29 previous studies conducted within one mile of the project, two of which include the subject property (Norwood 1989; ERCE 1991). Both previous reports include the study of approximately 2,500 acres conducted in support of the City of Palmdale's Eastside General Plan Amendment (GPA90-15). Norwood (1989) initially noted three trash scatters within the current project; however, the scatters were not formally recorded, and only cursory information was compiled. Based upon Norwood's assessment, these trash scatters were associated with period between the late 1940s and 1960s. The ERCE (1991) study consists of the Draft Environmental Impact Report (DEIR) for the General Plan Amendment. A Sacred Lands File (SLF) search was also requested from the Native American Heritage Commission (NAHC), which was returned with negative results.

During the survey, a 50- by 50-foot historic trash scatter (Temp-1) was identified within the northern third of the project area. It is not clear if Site Temp-1 corresponds with any of the three trash scatters previously noted within the property by Norwood (1989). However, based upon a review of the identified surface scatter, Site Temp-1 represents a single episode of transient refuse disposal which occurred between the late 1930s and 1950s. Based upon the results of the current study, Site Temp-1 is not considered eligible for the California Register of Historical Resources (CRHR) as the scatter does not retain any additional research value given the observable lack of a subsurface component and the limited information the historic artifacts can provide. Further, the integrity of the site has been impacted by recent disturbances to the property.

Although Temp-1 is not considered CRHR-eligible, the property still has potential to yield

additional archaeological resources that may have been obscured or buried by the previous impacts to the property. As a result, it is recommended that an archaeological monitor be present during future ground disturbances associated with the project to observe grading and identify any historic or prehistoric resources that may be exposed by earthwork. 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 archaeological laboratory of BFSA in Poway, California.

# 1.0 INTRODUCTION

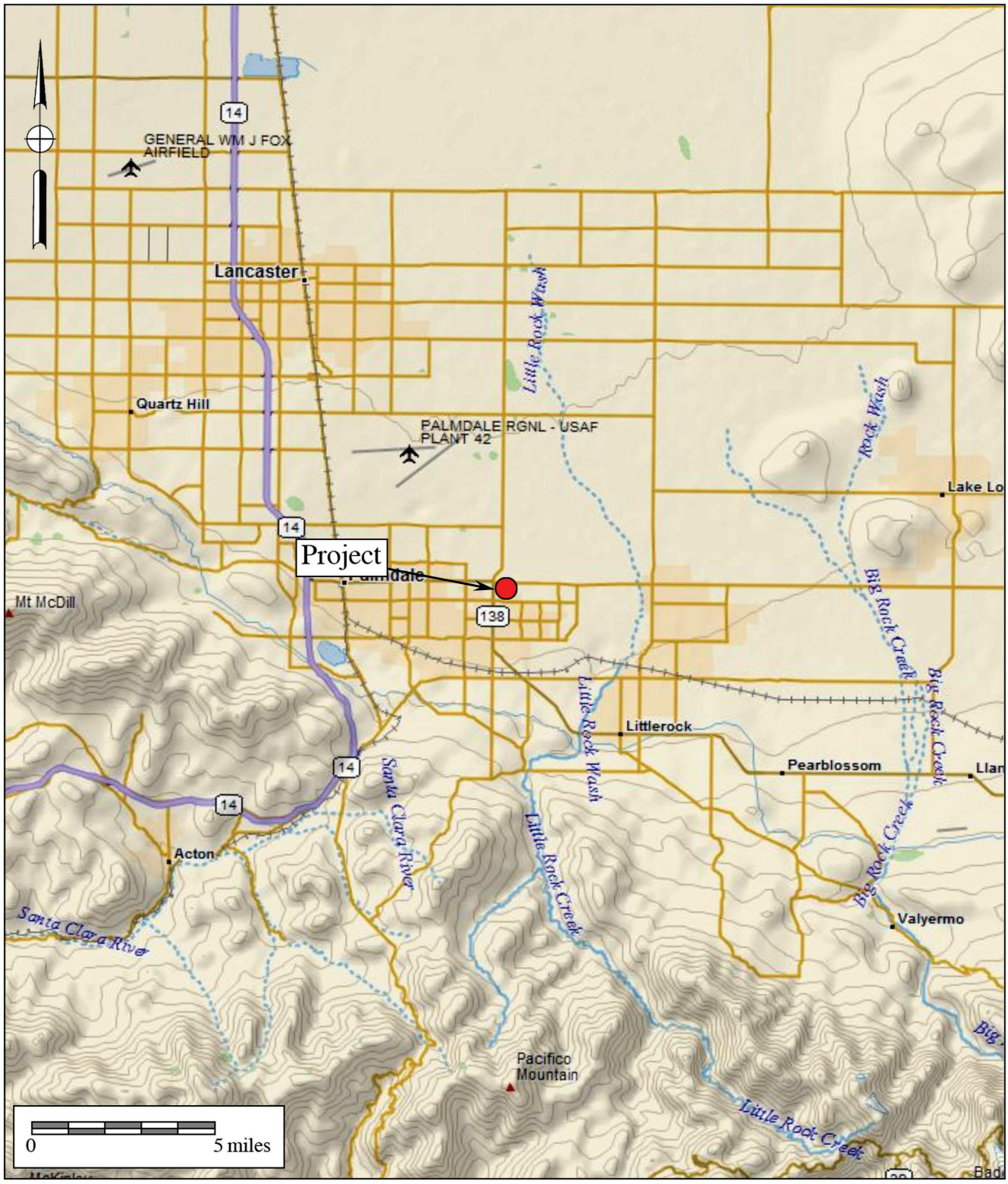
## 1.1 Project Description

The cultural resources study program for the TTM 83359 Project was conducted in order to comply with CEQA and City of Palmdale environmental guidelines. The 20-acre (gross) project is located southeast of the intersection of East Palmdale Boulevard and 51st Street in the city of Palmdale, Los Angeles County, California (Figure 1.1–1). On the USGS 7.5-minute, 1:24,000-scale *Palmdale, California* topographic quadrangle map, the project is situated in Section 27, Township 6 North, Range 11 West, of the San Bernardino Baseline and Meridian (Figure 1.1–2). The project includes APN 3023-002-184 which is currently vacant. As designed, the applicant proposes to subdivide the property for the development of 64 single family residential lots along with associated 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 Mojave Desert and Antelope Valley area of Los Angeles County were focused on freshwater resources, seasonally available plant resources, and migratory faunal species.

## 1.2 Environmental Setting

The project is situated in Antelope Valley northeast of the Sierra Pelona Mountains. Vegetation in the project area is classified as inland sage scrub habitat. Geologically, the project overlies late Holocene-aged alluvial fan deposits (Lancaster et al. 2012). The alluvial fan deposits are described as unconsolidated silt, sand, gravel, cobbles, and boulders. Holocene to late Pleistocene-aged young alluvial fan deposits are mapped immediately west of the project. Further, the specific soil types found within the property are characterized as cajon loamy fine sand, 0 to 2 percent slopes, hummocky (CcA2) (Web Soil Survey 2022).

The subject property is relatively flat, with elevations along the southern boundary averaging 2,630 feet above mean sea level (AMSL) and an average elevation of 2,640 feet AMSL along the southern boundary. A culvert found within the southeast corner of the property is directs water along the eastern boundary of the property before draining into a northwest-trending wash that cuts along the northeastern corner of the project. The property is located within a transitional area between the Creosote Bush Scrub and the Joshua Tree Woodland biotic communities. Vegetation found within the subject property primarily consists of Mojave Desert plant communities, including creosote bush scrub and Joshua trees. Common animal species found within the project vicinity include rattlesnakes, horned lizards, eagles, red-tailed hawks, antelope, ground squirrels, pack rats, Merriam's kangaroo rats, canyon mice, deer mice, desert night lizards, ladder-back woodpeckers, and orioles.

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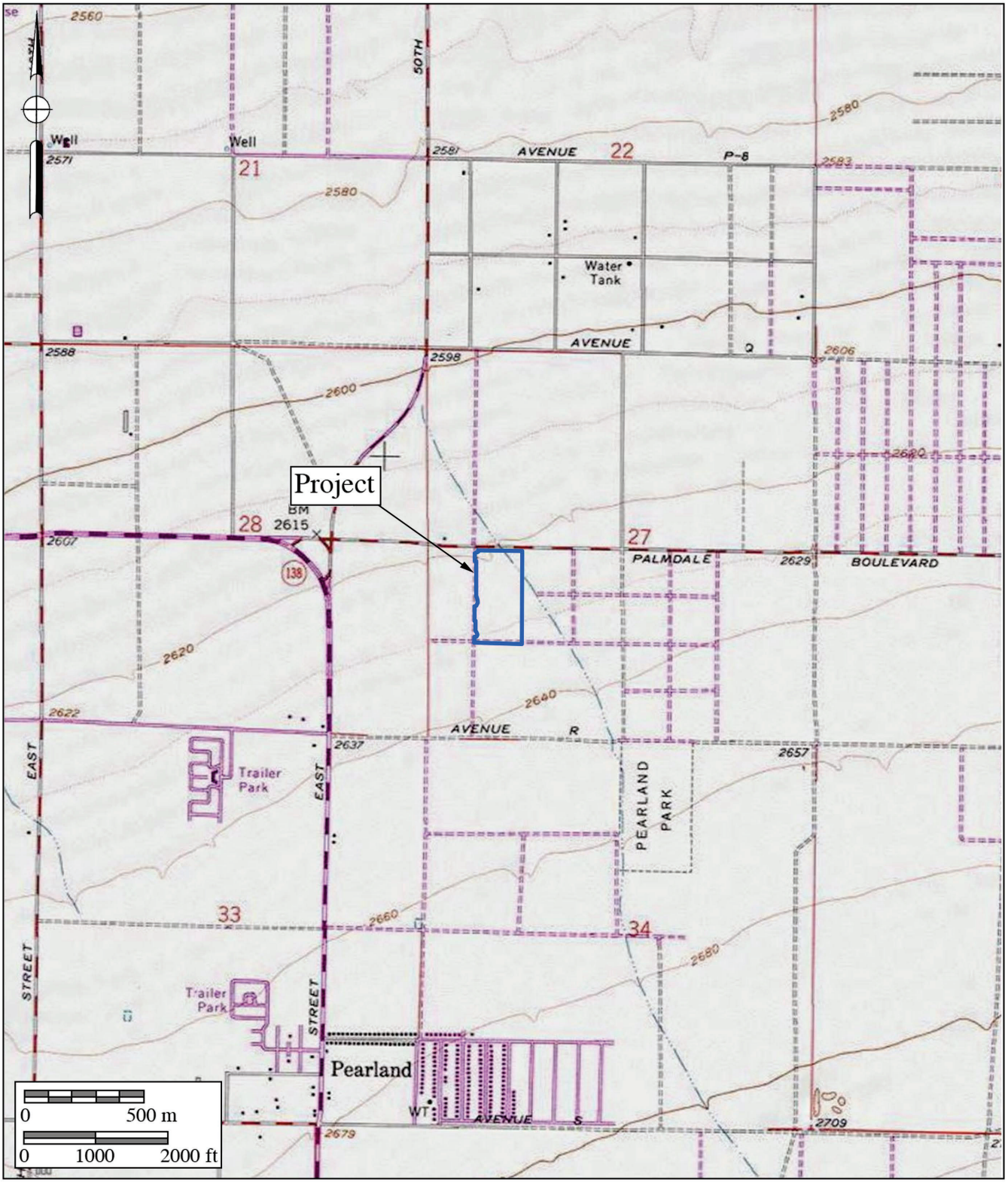
# Figure 1.1–1
## General Location Map

The TTM 83359 Project

DeLorme World Base Map Service (1:250,000 series)

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# Figure 1.1–2
## Project Location Map

The TTM 83359 Project

USGS *Palmdale* Quadrangle (7.5-minute series)

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# Figure 1.1–3
## Project Development Map
The TTM 83359 Project

## 1.3 Cultural Setting

### *1.3.1 Prehistoric Period*

The Antelope Valley occupies the western portion of the Mojave Desert and is an area with limited prehistoric subsistence resources. However, this area has supported a long and occasionally dense prehistoric Native American population. Evidence of villages and camps, burials, quarries, rock features, and bedrock mortars has been documented at archaeological sites across the desert, some of which contain evidence of a lengthy prehistoric time period. The prehistoric cultural sequence for Antelope Valley is generally believed to have begun at the end of the Pleistocene, represented by the fluted point tradition (Glennan 1971, 1987). Although early archaeological remains are not frequently found, when they are, it is generally along the margins of former pluvial lakes or in areas of dune deflation. In contrast, artifacts on the desert floor may be sparse, widely scattered, and mixed with the desert pavements. For the region, archaeologists have reached a broad consensus regarding the general cultural chronology. The identified sequence includes the Paleo Indian Period, the Pinto Period, the Gypsum Period, the Saratoga Springs Period, and the Ethnohistoric Period.

*Paleo Indian Period (12,000 to 7,000 Years Before the Present [YBP])*

The earliest documented evidence of human occupation in the Mojave Desert comes from the Paleo Indian Period, a cultural expression referred to as the Western Pluvial Lakes Tradition (WPLT). The WPLT occurred in the western Great Basin and covered an area that stretched from the now arid lands of southern California to Oregon. A cultural adaptation to pluvial conditions (*e.g.,* lakes, marshes, and grasslands) flourished for thousands of years after approximately 9000 B.C., but it disappeared in response to the warming and drying trends of the Altithermal climatic period (Moratto 1984). One of the most well-known expressions of the WPLT is the Lake Mojave Complex, which is thought to have covered a vast area including parts of the southwestern Great Basin and the Mojave Desert and may have reached as far south as the San Diego area. Artifacts indicative of the Lake Mojave Complex include foliated points and knives, Lake Mojave points, Silver Lake points, and flaked-stone crescents. Similar artifacts have been subsequently recorded along the shoreline of many other pluvial lakes in the Mojave Desert.

*Pinto Period (7,000 to 4,000 YBP)*

The Pinto Period dates to the end of the Pleistocene, when the severe and dramatic environmental change from pluvial to arid conditions began. Pinto Period sites are found mostly near ephemeral lakes and now dry streams and springs, suggesting a wetter climate than the present. Projectile points associated with the Pinto Period are characterized as larger atlatl dart points, as opposed to arrowhead points, which were introduced later. This period has been described as a highly mobile desert economy, with an emphasis upon hunting, that is supplemented by the use of processed seeds (Moratto 1984). Pinto Period artifacts have been interpreted as indications of temporary or seasonal occupations by small groups of people. It is during the Pinto

Period that the familiar milling stone features begin to appear, represented by unshaped manos and metates (Warren and Crabtree 1986:185–187). By approximately 2000 B.C., in conjunction with the onset of the "Little Pluvial" climatic episode (*cf.* Harrington 1957), the transition from the Pinto Period into the Gypsum Period is apparent and characterized by several diagnostic types of medium- and large-sized projectile points among assemblages that seem to reflect a far greater range of cultural influence from areas outside the western Mojave Desert.

*Gypsum Period (4,000 to 1,500 YBP)*

The presence of Humboldt Concave Base, Gypsum Cave, Elko Eared, or Elko Corner-Notched points are believed to be indicative of the Gypsum Period (radiocarbon dated from 4,000 to 1,500 years ago). The Gypsum Period reflects a more intensive desert occupation. Indications of trade with coastal populations are evidenced by shell beads in the archaeological record. An increase in milling stones and manos has been found in association with this period, which indicates an increased use of hard seeds (Moratto 1984). Several scholars associate this period with the division of the Uto-Aztecan language, approximately 3,000 to 2,500 years ago. The major language groups that emerged from this division are Numic, spoken by the Kawaiisu and Piute; Takic, spoken by the Kitanemuk, Serrano, Gabrielino, and other southern California Shoshonean speakers; Hopic, spoken in the southwest; and Tubatulabalic, spoken by the Tubatulabal in the southern Sierra Nevada Mountains. A shift in settlement patterns toward a more sedentary lifestyle occurred during this period, characterized by the emergence of large permanent or semi-permanent village sites and associated cemeteries.

*Saratoga Springs Period (1,500 to 800 YBP)*

The Saratoga Springs Period is characterized by a transition from larger dart points to smaller arrow points. This, combined with evidence from rock art motifs, leads scholars to argue for a shift from atlatls to use of the bow and arrow either during the end of the Gypsum Period or the beginning of the Saratoga Springs Period. This period represents a significant shift in cultural development that demonstrates a seemingly effortless adaptive response to increasingly arid desert conditions in the western Mojave Desert. Major village occupations within Antelope Valley began to appear just prior to the Saratoga Springs Period (*cf.* Sutton 1980; Robinson 1987), at which point bedrock milling features became a common element for the processing of acorns and other resources associated with mortar and pestle use.

As a response to increasingly arid conditions, areas with fairly reliable fresh water sources were intensely occupied over vast lengths of time. This adaptation is of major significance when addressing the prehistory of the Leona Valley and sites along the San Andreas Rift Zone adjacent to Ritter Ridge. Springs and seeps are common occurrences along the San Andreas fault, and soils of the lowlands in the Leona Valley suggest that considerable water resources were present in the area until only fairly recently. It could be expected, then, that sites exhibiting at least some evidence of semi-sedentary habitation would be represented in the vicinity. This period saw an

increase in trade with Arizona and other areas of the Southwest. Evidence in the archaeological record shows that Brown and Buff wares (pottery styles) characteristic of Arizona made their way to the California desert by A.D. 900. It is also believed that the Anasazi mined turquoise in the eastern California desert about this time.

*Ethnohistoric Period (800 YBP to European Contact)*

The presence of the cultures associated with the Late Prehistoric Period, or as it is sometimes referred to, the Shoshonean Period, can be clearly discerned through the comparison of archaeological and ethnohistorical records. Ethnographic data indicates that the Antelope Valley was occupied by speakers of the Takic Shoshonean languages. The Kitanemuk resided in much of the valley and the western foothill areas, while the Tataviam occupied much of the north-facing slopes of the San Gabriel and Sierra Pelona mountains, as well as the areas around Acton, Saugus, and Newhall. Prior to European contact, these cultures consisted of patrilineally organized family bands of advanced sociopolitical organization (Blackburn and Bean 1978:567), most likely related to a very well developed and maintained economic trade network wherein these groups served as intermediaries between coastal, desert, central valley, and southern Sierra Nevada groups (Robinson 1987; Sutton 1980).

The project area for this study is located in what is traditionally the homeland of the Kitanemuk, a small tribe principally located on the southern and western flanks of the Tehachapi Mountains (Blackburn and Bean 1978). The general ecological adaptation and subsistence technology of the Kitanemuk differed little from that of their neighbors to the north or west, such as the Southern Valley Yokuts. Linguistic evidence suggests the presence of some form of the patrilineal system found elsewhere in southern California, but the lineages were not totemic, nor was there evidence of moieties. Precise data on the demographic characteristics and political organization of the Kitanemuk can no longer be obtained. The Kitanemuk may have had contact with the Spanish colonies as early as the 1770s, but little historical information is available today on this small tribe, which had no more than 500 to 1,000 members at the peak of its population. The tribe was apparently represented at the San Fernando, San Gabriel, and San Buenaventura missions. Some Kitanemuks were found on the Tejon Reservation in the 1850s, and later at the Tule River Reservation, where some of their descendants still reside.

### *1.3.2 Historic Period*

Scholars often attribute Father Francisco Garces as the first known European to travel through the Western Mojave in the late 1770s. However, it has been proposed that Pedro Fages, the first governor of Alta California, actually traversed the Western Mojave nearly 10 years before Garces in pursuit of military deserters (Stickel et al. 1980). One source indicates Fages passed Hughes Lake, northwest of the current study area, which would have placed Fages route through the Antelope Valley (Hoover et al. 1966). Nevertheless, little is actually known about Fages' expedition across the desert and Garces, a Jesuit priest, is the first European visitor to have

documented visiting the general area (Stickel et al. 1980). Garces acted as a guide to Juan Bautista de Anza in 1774 on an expedition to establish shorter and quicker routes from the Colorado River to the coastal Spanish missions. Garces further explored the Mojave Desert in 1775 on his own expedition, under the orders of Anza, to better acquaint himself with the Mojave Desert (Stickel et al. 1980). Garces traveled from present day Needles through the Western Mojave with Native Americans from the Colorado River regions as his guides, eventually reaching Mission San Gabriel in March of 1776 (Stickel et al. 1980).

In 1842, Placerita Canyon, located to the south of the current study area, became one of the first important gold mines in southern California (Greenwood and McIntyre 1998), but it was not until Don Alexander and Phineas Banning established a stage line through the southern edge of the Antelope Valley from Los Angeles that the area became better known. Homesteading along the surface water deposits in the 1870s and the construction of the Southern Pacific Railroad line through Antelope Valley in 1876 led to development in the region. Further, the state legislature passed the Wright Act in 1887, which gave private corporations and unincorporated communities the authority to develop and maintain irrigation works (Dumke 1944). The Wright Act and rail travel led to an influx of land speculators to the area. Many farmers journeyed to the Antelope Valley unaware of the scarcity of water and unreliable annual rainfall. Palmdale (originally called "Palmnethal") was founded by a group of approximately 60 to 70 German Lutheran families that had relocated during the mid-1880s to the Antelope Valley to establish homesteads (Conard 1989). By this time, other nearby communities, such as Acton and Lancaster, had been founded under similar circumstances and rail stations were established (Palmdale City Library 2004).

Water and irrigation dominated the history of the Antelope Valley into the mid-twentieth century. However, the development of improved ground water extraction technologies, particularly the electric driven water pump, improved agriculture in the region, leading to a new influx of farmers to the region (Padon and Crownover 1989). Agriculture in the region mainly focused on produce and cattle grazing.

The Antelope Valley was transformed by World War II and the establishment of Muroc Army Airfield in 1942. The population influx caused a boost to the economy and a need for more services. Muroc Army Airfield was put on hiatus shortly after the war, which caused a decline in the local economy. However, this was only temporary, as after the Korean War, the airfield was renamed Edward Air Force Base (Conard 1989). The establishment of Edwards Air Force Base led to the development of a large-scale aerospace industry. Palmdale grew out of the necessity to serve the needs of the military which transformed the region, converting former agricultural land into commercial and residential developments (Conard 1989). Today, the Antelope Valley is experiencing further development as a suburban outgrowth of the Los Angeles metropolitan area.

### 1.4 Results of the Archaeological Records Search

An archaeological records search for a one-mile radius was conducted by BFSA through the SCCIC at CSU Fullerton on October 20, 2022 (Appendix C). The SCCIC records search results

identified eight previously recorded resources, all historic, located within one mile of the project, none of which are located within the project's boundaries (Table 1.4–1). The previously recorded resources consist of five trash scatters, one site containing foundations and a trash scatter, one site containing a septic box, pipe, and foundation remnants, and the Palmdale to Victorville Road.

**Table 1.4–1**
Cultural Resources Within One Mile of the Project

| Site Number | Resource Type |
|---|---|
| P-19-003661; P-19-003662; P-19-003663; P-19-004187; P-19-004189 | Historic trash scatter |
| P-19-004186 | Historic foundations and trash scatter |
| P-19-004185 | Historic septic box, pipe, and foundation remnants |
| P-19-192304 | Historic Palmdale to Victorville Road |

The records search also identified 29 previous studies conducted within one mile of the project. Two of the previous studies include the current project (Norwood 1989; ERCE 1991). Both previous studies were conducted in support of the City of Palmdale's Eastside General Plan Amendment (GPA90-15). The Norwood (1989) study consisted of a survey and site inventory for resources within the General Plan Amendment area (approximately 2,500 acres). The ERCE (1991) study is the DEIR for the General Plan Amendment, which includes the 1989 Norwood study as well as a cultural resources update compiled by Bert Rader and Richard Carrico.

When the current project was surveyed by Norwood in 1989, he noted multiple "trash dumps" within the DEIR area, three of which, identified as Temporary #10, Temporary #11, and Temporary #12, were mapped within the current project (Figure 1.4–1). Norwood compiled cursory information for the resources with an inventory sheet for the three resources which included measurements and locational information. Primarily, the sites were noted to be trash scatters, containing cans, glass, and ceramic artifacts. Although Norwood's map shows the three resources within the project, only the locational information presented for Temporary #11 and Temporary #12 corresponds to the current project location, indicating that Temporary# 10 was either mis-plotted or the descriptive locational data contains errors. Regardless, Norwood (1989) did not formally record any of these trash scatters:

> Trash Dumps - Numerous trash dumps were observed throughout the study area. Practically every road has a scatter and concentrated trash deposits. With the exception of the exploded stove site, the roadside dumps all date to relatively late periods. The age and nature of the dumps is a reflection of the population growth of Palmdale, with most dumps postdating [World War II]. These dumps were not formally recorded or considered significant in terms of CEQA criteria.

**Figure 1.4–1**
**Trash Scatters Previously Identified by Norwood (1989)**

***(Deleted for Public Review; Bound Separately)***

In the cultural resources update provided within the DEIR, Rader and Carrico questioned Norwood's methods for determining which resources were and were not formally recorded:

> The criteria used for recording archaeological sites during the 1989 Norwood may not be in accordance with CEQA guidelines. Under CEQA guidelines a historic resource 50+ years (pre 1939 at the time of their survey) needs to be addressed. Normally the resource is recorded as a historic archaeological site and then the significance of that site is considered on a case by case basis […] The trash deposits approximately 50 to 75 years of age were not part of the Norwood 1989 report on a case by case basis. They were "noted and inventoried, but not institutionally recorded." (ERCE 1991)

However, Rader and Carrico also did not record any of the trash scatters identified by Norwood, and instead recommended that they should be investigated on a case-by-case basis should the parcel containing the resources be slated for development (ERCE 1991). In addition, based upon the information presented in the Norwood (1989) report, none of the trash scatters within the project would have met the 50-year age threshold under CEQA criteria at the time of initial documentation.

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 Resources Directory
- BLM GLO Records
- 1958 *Lancaster* 15-minute USGS maps
- 1930, 1943, and 1957 *Pearland* 7.5-minute USGS maps
- 1959 and 1981 *Palmdale* 7.5-minute USGS maps
- Aerial photographs (1928 through 2021)

These sources did not indicate the presence of any additional archaeological resources within the project. Further, the historic maps or aerial photographs show that no structures have ever existed within the subject property. Further, no direct road access to the property is visible on the 1928 aerial photograph; however, a dry wash that cuts through the northeast corner of the project is visible. Norwood (1989) postulated that this wash could have been used as an access road prior to the development of other road alignments through the area. The 1930 *Pearland* 7.5-minute USGS map does show the alignment of a road north of the project which appears to match the alignment of the current East Palmdale Boulevard. By 1940, East Palmdale Boulevard appears firmly established and paved. A faint trail bisecting the property is visible on the 1948 aerial

photograph, but it does not appear to be wide enough to have been used as an access road. By 1959, a dirt road is visible along the western boundary of the property. An adjacent residential development south of the subject property appears to have been constructed between 1987 and 1990. Impacts to the subject property that appear to have been tied to the development to the south include a culvert in the southeast corner of the project, an associated earthen channel along the southeastern boundary of the property, and a dirt access road in the southern third of the project. By 1994, multiple dirt access roads are visible on the project, while another residential development adjacent to the west was constructed between 2005 and 2008.

BFSA also requested a SLF search from the NAHC to search for the presence of any recorded Native American sacred sites or locations of religious or ceremonial importance within one mile of the project, which was returned with negative results. All correspondence is provided in Appendix D.

## 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 Los Angeles 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 the 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. 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 on, or determined eligible for listing on, 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 on 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 on, or eligibility for inclusion on, 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 on 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 on those resources shall not be considered a significant effect on the environment. It shall be sufficient that both the resource and the effect on it are noted in the Initial Study or Environmental Impact Report, if one is prepared to address impacts on other resources, but they need not be considered further in the CEQA process.

Section 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 eastern Los Angeles County. The scope of work for the cultural resources study conducted for the TTM 83359 Project included the survey of the 20-acre project. 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 here 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 characteristics, 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 take into account 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 area 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 FIELD SURVEY

The cultural resources study of the project consisted of an institutional records search and an intensive cultural resource survey of the entire 20-acre project. This study was conducted in conformance with Section 21083.2 of the California PRC, and 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 (SHPO 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. Project Archaeologist Andrew Garrison and Director of Field Operations Clarence Hoff conducted the intensive pedestrian survey on October 25, 2022. The field methodology employed for the project included walking evenly spaced survey transects set approximately 10 meters apart while visually inspecting the ground surface. The entire project was covered by the survey process, and photographs were taken to document project conditions during the survey.

## 3.2 Results

Ground visibility during the survey was generally good with approximately 75 to 80 percent of the ground surface visible (Plate 3.2–1). Vegetation found within the project consisted of creosote community plants and Joshua trees (Plate 3.2–2). The dry wash which cuts through the northeastern corner of the project, as seen on the 1928 aerial photograph, was also identified during the survey.

The survey identified various impacts to the property. Multiple dirt access roads are located within the project; however, the review of historic aerial photographs (see Section 1.4 of this report) indicated that the dirt access roads are not visible on the property until after 1990s and are therefore not considered cultural resources requiring recordation. The culvert in the southeastern corner and associated earthen ditch along the southeastern boundary, as seen on the 1990 aerial photograph, were also noted (Plate 3.2–3). As stated previously, these features are tied to the development of the residential subdivision constructed between 1987 and 1990 just south of the project. In addition, piles of pushed dirt, modern building materials, and modern trash were noted throughout the project, with concentrations of material noted along the southern and eastern boundaries (Plate 3.2–4).

**Plate 3.2–1: Overview of the project, facing southeast.**

**Plate 3.2–2: Overview of the project, facing south.**

**Plate 3.2–3: View of the modern culvert and earthen ditch located in the southeast corner of the project, facing southeast.**

**Plate 3.2–4: View of pushed dirt and modern building material found throughout the project, facing northwest.**

No prehistoric artifacts or sites were identified during the survey of the project. Despite the previous study by Norwood (1989) indicating the presence of three potential historic trash scatters within the project, the current survey identified the presence of a single scatter of historic material (Figure 3.2–1). Given the ambiguity and lack of detail provided by the Norwood (1989) study, it was not possible to directly correspond the trash scatter identified during the current survey with any of those previously noted by Norwood in 1989. As Norwood (1989) never formally recorded any of the reported resources, the trash scatter located within the subject property as part of the current study was recorded as Site Temp-1 according to the OHP's manual, *Instructions for Recording Historical Resources*, using DPR forms (Appendix B).

### *3.2.1 Site Temp-1*

Site Temp-1 was located in the northern third of the project situated 250 feet east of Hudson Street and 320 feet south of East Palmdale Boulevard, in between two dirt access roads created within the property between 1990 and 1994 (Figure 3.2–2). Site Temp-1 consists of a 50- by 50-foot scatter of approximately 100 vent hole/hole-in-top and sanitary cans, glass, and ceramic fragments (Plates 3.2–5 and 3.2–6). A 20- by 20-foot concentration of material is noted in the middle of the site area, indicating the initial pile of refuse was likely smaller, but has been dispersed by winds, erosion, and the establishment of dirt access roads over time. A close inspection of the artifact scatter and the surrounding soils indicates that the site has no depth. The site has clearly been heavily impacted, as one isolated can from the site was identified approximately 150 feet north of the concentration, just north of a dirt access road (Plate 3.2–7). Further, the presence of bullet holes in multiple cans suggest that further dispersion of the scatter has occurred as a result of rural target shooting activities.

**Plate 3.2–7: View of the isolated vent hole/hole-in-top can from Site Temp-1.**

**Figure 3.2–1**
**Cultural Resource Location Map**

***(Deleted for Public Review; Bound Separately)***

**Figure 3.2–2**
**Feature Location Map**
**Site Temp-1**

***(Deleted for Public Review; Bound Separately)***

**Plate 3.2–5: Overview of Site Temp-1, facing southwest.**

**Plate 3.2–6: View of the central concentration of material at Site Temp-1, facing southwest.**

The primary artifact type identified at Site Temp-1 are metal vent hole/hole-in-top and sanitary cans. The vent hole/hole-in-top, sometimes referred to as solder-dot or matchstick filler, cans allowed for excess moisture to be heated off filled containers through the small hole (Rock 1984). Although earlier iterations of these cans became popular in the 1880s, they were used more extensively by 1900, especially for condensed milk (Rock 1984; Reno 2012; Merritt 2014). By 1920, condensed milk was sold almost exclusively in vent hole/hole-in-top cans, which continued to be utilized through the mid-1980s. However, by the mid-1930s, many manufacturers had switched over to sanitary cans (Rock 1984; Reno 2012; Merritt 2014). Sanitary cans were first produced around 1904, became prevalent around the 1920s, and entirely replacing the vent hole/hole-in-top design during the mid-1930s (Rock 1984; Merritt 2014). In addition to vent hole/hole-in-top and sanitary cans, a cone-shaped beer can was also located within the site area. The cone-shaped beer cans were created in 1935 and utilized through the 1950s before being replaced by pull-tab cans in the 1960s (Romeo 2021).

Given the limited size of assemblage found at Temp-1, it is clear the resource represents a single rural dumping episode and not an episodic use of the location for the dumping of trash. Although the glass found at the site was fragmented, no solarized glass was identified, which generally can be used as a guide to temporally place trash scatters prior to World War I. The types of cans identified at the site were utilized most prevalently after the 1920s and 1930s. As stated previously, the subject property did not ever contain any structures and the review of aerial photographs and maps show that between 1928 and 1930, the alignment of East Palmdale Avenue was created and by 1940, the alignment appears to have been paved. Along with the addition of other access roads within and surrounding the project during the mid- to late twentieth century, Temp-1 was likely created as a result of increased access to the project location. Further, given the presence of a cone-top beer can at the site, the resource most likely dates to between the late 1930s and 1950s.

Based on the review of the historic materials identified within the site, Temp-1 represents a single episode of disposal between the late 1930s and 1950s. The lack of historic occupation of the property and the nature of transient rural dumping indicate that the artifact scatter cannot be directly associated with any historic events or individuals. Site Temp-1 is not considered eligible for the CRHR as the scatter does not retain any additional research value given the observable lack of a subsurface component, the overall lack of integrity demonstrated by previois impacts to the resource, and the limited information the historic artifacts can provide.

# 4.0 RECOMMENDATIONS

The cultural resources study for the TTM 83359 Project was completed in accordance with the City of Palmdale environmental policies and CEQA significance evaluation criteria. One historic trash scatter, Site Temp-1, was identified within the project. Based upon a review of the surface assemblage, Site Temp-1 represents a single episode of disposal which occurred between the late 1930s and 1950s. The site is not considered eligible for the CRHR; however, given that the material found at the site is older than 50 years, BFSA has prepared the applicable DPR forms for submittal to the SCCIC (see Appendix B).

While the current study did not identify any significant historical resources within the project, the property has been impacted by previous development of adjacent properties, the establishment of dirt access roads through the project, and disposal of modern trash. Further, previous studies indicated the possibility of up to three historic trash scatters that may have once bee present within the subject property (Norwood 1989; ERCE 1991). Site Temp-1 cannot be directly tied to any of the resources first identified by Norwood and it is possible that impacts to the project since the 1989 study have disturbed or obscured those resources. In addition, although the records search did not show any prehistoric resources recorded within one mile of the project, the subject property does contain a dry wash, which represents a seasonal source of water. Therefore, the potential for the indavertent discovery of prehistoric resources may exist.

The property still has potential to yield archaeological resources that may have been obscured by the previous impacts to the property. As a result, it is recommended that an archaeological monitor be present during future ground disturbances associated with the project to observe grading and identify any historic or prehistoric resources that may be exposed by earthwork. Monitoring of grading is recommended as a condition of approval for the project. The monitoring program should include Native American observers only in the event that prehistoric deposits are discovered. 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 TTM 83359 Project was directed by Principal Investigator Brian F. Smith. The archaeological fieldwork was conducted by Project Archaeologist Andrew Garrison and Director of Field Operations Clarence Hoff. The report text was prepared by Andrew Garrison and Brian Smith. Emily T. Soong requested the records search at the SCCIC at CSU Fullerton and created the report graphics. Technical editing and report production was conducted by Courtney McNair.

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# APPENDIX A

**Resumes of Key Personnel**

# Brian F. Smith, MA

## Owner, Principal Investigator

Brian F. Smith and Associates, Inc.
14010 Poway Road • Suite A •
Phone: (858) 679-8218 • Fax: (858) 679-9896 • E-Mail: bsmith@bfsa-ca.com

## Education

**Master of Arts, History, University of San Diego, California** **1982**

**Bachelor of Arts, History, and Anthropology, University of San Diego, California** **1975**

## Professional Memberships

Society for California Archaeology

## Experience

**Principal Investigator** **1977–Present**
**Brian F. Smith and Associates, Inc.** **Poway, California**

Brian F. Smith is the owner and principal historical and archaeological consultant for Brian F. Smith and Associates. Over the past 32 years, he has conducted over 2,500 cultural resource studies in California, Arizona, Nevada, Montana, and Texas. These studies include every possible aspect of archaeology from literature searches and large-scale surveys to intensive data recovery excavations. Reports prepared by Mr. Smith have been submitted to all facets of local, state, and federal review agencies, including the US Army Corps of Engineers, the Bureau of Land Management, the Bureau of Reclamation, the Department of Defense, and the Department of Homeland Security. In addition, Mr. Smith has conducted studies for utility companies (Sempra Energy) and state highway departments (CalTrans).

## Professional Accomplishments

These selected major professional accomplishments represent research efforts that have added significantly to the body of knowledge concerning the prehistoric life ways of cultures once present in the southern California area and historic settlement since the late 18th century. Mr. Smith has been principal investigator on the following select projects, except where noted.

Downtown San Diego Mitigation and Monitoring Reporting Programs: Large numbers of downtown San Diego mitigation and monitoring projects, some of which included Broadway Block (2019), 915 Grape Street (2019), 1919 Pacific Highway (2018), Moxy Hotel (2018), Makers Quarter Block D (2017), Ballpark Village (2017), 460 16th Street (2017), Kettner and Ash (2017), Bayside Fire Station (2017), Pinnacle on the Park (2017), IDEA1 (2016), Blue Sky San Diego (2016), Pacific Gate (2016), Pendry Hotel (2015), Cisterra Sempra Office Tower (2014), 15th and Island (2014), Park and G (2014), Comm 22 (2014), 7th and F Street Parking (2013), Ariel Suites (2013), 13th and Marker (2012), Strata (2008), Hotel Indigo (2008), Lofts at 707 10th Avenue Project (2007), Breeza (2007), Bayside at the Embarcadero (2007), Aria (2007), Icon (2007), Vantage Pointe (2007), Aperture (2007), Sapphire Tower (2007), Lofts at 655 Sixth Avenue (2007), Metrowork (2007), The Legend (2006), The Mark (2006), Smart Corner (2006), Lofts at 677 7th Avenue (2005), Aloft on Cortez Hill (2005), Front and Beech Apartments (2003), Bella Via Condominiums (2003), Acqua Vista Residential Tower (2003), Northblock Lofts (2003), Westin Park Place Hotel (2001), Parkloft

Apartment Complex (2001), Renaissance Park (2001), and Laurel Bay Apartments (2001).

1900 and 1912 Spindrift Drive: An extensive data recovery and mitigation monitoring program at the Spindrift Site, an important prehistoric archaeological habitation site stretching across the La Jolla area. The project resulted in the discovery of over 20,000 artifacts and nearly 100,000 grams of bulk faunal remains and marine shell, indicating a substantial occupation area (2013-2014).

San Diego Airport Development Project: An extensive historic assessment of multiple buildings at the San Diego International Airport and included the preparation of Historic American Buildings Survey documentation to preserve significant elements of the airport prior to demolition (2017-2018).

Citracado Parkway Extension: A still-ongoing project in the city of Escondido to mitigate impacts to an important archaeological occupation site. Various archaeological studies have been conducted by BFSA resulting in the identification of a significant cultural deposit within the project area.

Westin Hotel and Timeshare (Grand Pacific Resorts): Data recovery and mitigation monitoring program in the city of Carlsbad consisted of the excavation of 176 one-square-meter archaeological data recovery units which produced thousands of prehistoric artifacts and ecofacts, and resulted in the preservation of a significant prehistoric habitation site. The artifacts recovered from the site presented important new data about the prehistory of the region and Native American occupation in the area (2017).

The Everly Subdivision Project: Data recovery and mitigation monitoring program in the city of El Cajon resulted in the identification of a significant prehistoric occupation site from both the Late Prehistoric and Archaic Periods, as well as producing historic artifacts that correspond to the use of the property since 1886. The project produced an unprecedented quantity of artifacts in comparison to the area encompassed by the site, but lacked characteristics that typically reflect intense occupation, indicating that the site was used intensively for food processing (2014-2015).

Ballpark Village: A mitigation and monitoring program within three city blocks in the East Village area of San Diego resulting in the discovery of a significant historic deposit. Nearly 5,000 historic artifacts and over 500,000 grams of bulk historic building fragments, food waste, and other materials representing an occupation period between 1880 and 1917 were recovered (2015-2017).

Archaeology at the Padres Ballpark: Involved the analysis of historic resources within a seven-block area of the "East Village" area of San Diego, where occupation spanned a period from the 1870s to the 1940s. Over a period of two years, BFSA recovered over 200,000 artifacts and hundreds of pounds of metal, construction debris, unidentified broken glass, and wood. Collectively, the Ballpark Project and the other downtown mitigation and monitoring projects represent the largest historical archaeological program anywhere in the country in the past decade (2000-2007).

4S Ranch Archaeological and Historical Cultural Resources Study: Data recovery program consisted of the excavation of over 2,000 square meters of archaeological deposits that produced over one million artifacts, containing primarily prehistoric materials. The archaeological program at 4S Ranch is the largest archaeological study ever undertaken in the San Diego County area and has produced data that has exceeded expectations regarding the resolution of long-standing research questions and regional prehistoric settlement patterns.

Charles H. Brown Site: Attracted international attention to the discovery of evidence of the antiquity of man in North America. Site located in Mission Valley, in the city of San Diego.

Del Mar Man Site: Study of the now famous Early Man Site in Del Mar, California, for the San Diego Science Foundation and the San Diego Museum of Man, under the direction of Dr. Spencer Rogers and Dr. James R. Moriarty.

Old Town State Park Projects: Consulting Historical Archaeologist. Projects completed in the Old Town State Park involved development of individual lots for commercial enterprises. The projects completed in Old Town include Archaeological and Historical Site Assessment for the Great Wall Cafe (1992), Archaeological Study for the Old Town Commercial Project (1991), and Cultural Resources Site Survey at the Old San Diego Inn (1988).

Site W-20, Del Mar, California: A two-year-long investigation of a major prehistoric site in the Del Mar area of the city of San Diego. This research effort documented the earliest practice of religious/ceremonial activities in San Diego County (circa 6,000 years ago), facilitated the projection of major non-material aspects of the La Jolla Complex, and revealed the pattern of civilization at this site over a continuous period of 5,000 years. The report for the investigation included over 600 pages, with nearly 500,000 words of text, illustrations, maps, and photographs documenting this major study.

City of San Diego Reclaimed Water Distribution System: A cultural resource study of nearly 400 miles of pipeline in the city and county of San Diego.

Master Environmental Assessment Project, City of Poway: Conducted for the City of Poway to produce a complete inventory of all recorded historic and prehistoric properties within the city. The information was used in conjunction with the City's General Plan Update to produce a map matrix of the city showing areas of high, moderate, and low potential for the presence of cultural resources. The effort also included the development of the City's Cultural Resource Guidelines, which were adopted as City policy.

Draft of the City of Carlsbad Historical and Archaeological Guidelines: Contracted by the City of Carlsbad to produce the draft of the City's historical and archaeological guidelines for use by the Planning Department of the City.

The Mid-Bayfront Project for the City of Chula Vista: Involved a large expanse of undeveloped agricultural land situated between the railroad and San Diego Bay in the northwestern portion of the city. The study included the analysis of some potentially historic features and numerous prehistoric

Cultural Resources Survey and Test of Sites Within the Proposed Development of the Audie Murphy Ranch, Riverside County, California: Project manager/director of the investigation of 1,113.4 acres and 43 sites, both prehistoric and historic—included project coordination; direction of field crews; evaluation of sites for significance based on County of Riverside and CEQA guidelines; assessment of cupule, pictograph, and rock shelter sites, co-authoring of cultural resources project report. February- September 2002.

Cultural Resources Evaluation of Sites Within the Proposed Development of the Otay Ranch Village 13 Project, San Diego County, California: Project manager/director of the investigation of 1,947 acres and 76 sites, both prehistoric and historic—included project coordination and budgeting; direction of field crews; assessment of sites for significance based on County of San Diego and CEQA guidelines; co-authoring of cultural resources project report. May-November 2002.

Cultural Resources Survey for the Remote Video Surveillance Project, El Centro Sector, Imperial County: Project manager/director for a survey of 29 individual sites near the U.S./Mexico Border for proposed video surveillance camera locations associated with the San Diego Border barrier Project—project coordination and budgeting; direction of field crews; site identification and recordation; assessment of potential impacts to cultural resources; meeting and coordinating with U.S. Army Corps of Engineers, U.S. Border Patrol, and other government agencies involved; co-authoring of cultural resources project report. January, February, and July 2002.

Cultural Resources Survey and Test of Sites Within the Proposed Development of the Menifee West GPA, Riverside County, California: Project manager/director of the investigation of nine sites, both prehistoric and historic—included project coordination and budgeting; direction of field crews; assessment of sites

for significance based on County of Riverside and CEQA guidelines; historic research; co-authoring of cultural resources project report. January-March 2002.

Cultural Resources Survey and Test of Sites Within the Proposed French Valley Specific Plan/EIR, Riverside County, California: Project manager/director of the investigation of two prehistoric and three historic sites—included project coordination and budgeting; survey of project area; Native American consultation; direction of field crews; assessment of sites for significance based on CEQA guidelines; cultural resources project report in prep. July-August 2000.

Cultural Resources Survey and Test of Sites Within the Proposed Development of the Menifee Ranch, Riverside County, California: Project manager/director of the investigation of one prehistoric and five historic sites—included project coordination and budgeting; direction of field crews; feature recordation; historic structure assessments; assessment of sites for significance based on CEQA guidelines; historic research; co-authoring of cultural resources project report. February-June 2000.

Salvage Mitigation of a Portion of the San Diego Presidio Identified During Water Pipe Construction for the City of San Diego, California: Project archaeologist/director—included direction of field crews; development and completion of data recovery program; management of artifact collections cataloging and curation; data synthesis and authoring of cultural resources project report in prep. April 2000.

Enhanced Cultural Resource Survey and Evaluation for the Tyrian 3 Project, La Jolla, California: Project manager/director of the investigation of a single-dwelling parcel—included project coordination; assessment of parcel for potentially buried cultural deposits; authoring of cultural resources project report. April 2000.

Enhanced Cultural Resource Survey and Evaluation for the Lamont 5 Project, Pacific Beach, California: Project manager/director of the investigation of a single-dwelling parcel—included project coordination; assessment of parcel for potentially buried cultural deposits; authoring of cultural resources project report. April 2000.

Enhanced Cultural Resource Survey and Evaluation for the Reiss Residence Project, La Jolla, California: Project manager/director of the investigation of a single-dwelling parcel—included project coordination; assessment of parcel for potentially buried cultural deposits; authoring of cultural resources project report. March-April 2000.

Salvage Mitigation of a Portion of Site SDM-W-95 (CA-SDI-211) for the Poinsettia Shores Santalina Development Project and Caltrans, Carlsbad, California: Project archaeologist/ director—included direction of field crews; development and completion of data recovery program; management of artifact collections cataloging and curation; data synthesis and authoring of cultural resources project report in prep. December 1999-January 2000.

Survey and Testing of Two Prehistoric Cultural Resources for the Airway Truck Parking Project, Otay Mesa, California: Project archaeologist/director—included direction of field crews; development and completion of testing recovery program; assessment of site for significance based on CEQA guidelines; authoring of cultural resources project report, in prep. December 1999-January 2000.

Cultural Resources Phase I and II Investigations for the Tin Can Hill Segment of the Immigration and Naturalization Services Triple Fence Project Along the International Border, San Diego County, California: Project manager/director for a survey and testing of a prehistoric quarry site along the border—NRHP eligibility assessment; project coordination and budgeting; direction of field crews; feature recordation; meeting and coordinating with U.S. Army Corps of Engineers; co-authoring of cultural resources project report. December 1999-January 2000.

Mitigation of a Prehistoric Cultural Resource for the Westview High School Project for the City of San Diego, California: Project archaeologist/ director—included direction of field crews; development and completion of data recovery program including collection of material for specialized faunal and botanical analyses; assessment of sites for significance based on CEQA guidelines; management of artifact collections cataloging and curation; data synthesis; co-authoring of cultural resources project report, in prep. October 1999-January 2000.

Mitigation of a Prehistoric Cultural Resource for the Otay Ranch SPA-One West Project for the City of Chula Vista, California: Project archaeologist/director—included direction of field crews; development of data recovery program; management of artifact collections cataloging and curation; assessment of site for significance based on CEQA guidelines; data synthesis; authoring of cultural resources project report, in prep. September 1999-January 2000.

Monitoring of Grading for the Herschel Place Project, La Jolla, California: Project archaeologist/ monitor—included monitoring of grading activities associated with the development of a single- dwelling parcel. September 1999.

Survey and Testing of a Historic Resource for the Osterkamp Development Project, Valley Center, California: Project archaeologist/ director—included direction of field crews; development and completion of data recovery program; budget development; assessment of site for significance based on CEQA guidelines; management of artifact collections cataloging and curation; data synthesis; authoring of cultural resources project report. July-August 1999.

Survey and Testing of a Prehistoric Cultural Resource for the Proposed College Boulevard Alignment Project, Carlsbad, California: Project manager/director —included direction of field crews; development and completion of testing recovery program; assessment of site for significance based on CEQA guidelines; management of artifact collections cataloging and curation; data synthesis; authoring of cultural resources project report, in prep. July-August 1999.

Survey and Evaluation of Cultural Resources for the Palomar Christian Conference Center Project, Palomar Mountain, California: Project archaeologist—included direction of field crews; assessment of sites for significance based on CEQA guidelines; management of artifact collections cataloging and curation; data synthesis; authoring of cultural resources project report. July-August 1999.

Survey and Evaluation of Cultural Resources at the Village 2 High School Site, Otay Ranch, City of Chula Vista, California: Project manager/director —management of artifact collections cataloging and curation; assessment of site for significance based on CEQA guidelines; data synthesis; authoring of cultural resources project report. July 1999.

Cultural Resources Phase I, II, and III Investigations for the Immigration and Naturalization Services Triple Fence Project Along the International Border, San Diego County, California: Project manager/director for the survey, testing, and mitigation of sites along border—supervision of multiple field crews, NRHP eligibility assessments, Native American consultation, contribution to Environmental Assessment document, lithic and marine shell analysis, authoring of cultural resources project report. August 1997- January 2000.

Phase I, II, and II Investigations for the Scripps Poway Parkway East Project, Poway California: Project archaeologist/project director—included recordation and assessment of multicomponent prehistoric and historic sites; direction of Phase II and III investigations; direction of laboratory analyses including prehistoric and historic collections; curation of collections; data synthesis; coauthorship of final cultural resources report. February 1994; March-September 1994; September-December 1995.

# Andrew J. Garrison, MA, RPA

## Project Archaeologist

Brian F. Smith and Associates, Inc.
14010 Poway Road • Suite A •
Phone: (858) 679-8218 • Fax: (858) 679-9896 • E-Mail: agarrison@bfsa-ca.com


## Education

**Master of Arts, Public History, University of California, Riverside** **2009**

**Bachelor of Science, Anthropology, University of California, Riverside** **2005**

**Bachelor of Arts, History, University of California, Riverside** **2005**

## Professional Memberships

Register of Professional Archaeologists
Society for California Archaeology
Society for American Archaeology
California Council for the Promotion of History
Society of Primitive Technology
Lithic Studies Society
California Preservation Foundation
Pacific Coast Archaeological Society

## Experience

**Project Archaeologist** **June 2017–Present**
**Brian F. Smith and Associates, Inc.** **Poway, California**

Project management of all phases of archaeological investigations for local, state, and federal agencies including National Register of Historic Places (NRHP) and California Environmental Quality Act (CEQA) level projects interacting with clients, sub-consultants, and lead agencies. Supervise and perform fieldwork including archaeological survey, monitoring, site testing, comprehensive site records checks, and historic building assessments. Perform and oversee technological analysis of prehistoric lithic assemblages. Author or co-author cultural resource management reports submitted to private clients and lead agencies.

**Senior Archaeologist and GIS Specialist** **2009–2017**
**Scientific Resource Surveys, Inc.** **Orange, California**

Served as Project Archaeologist or Principal Investigator on multiple projects, including archaeological monitoring, cultural resource surveys, test excavations, and historic building assessments. Directed projects from start to finish, including budget and personnel hours proposals, field and laboratory direction, report writing, technical editing, Native American consultation, and final report submittal. Oversaw all GIS projects including data collection, spatial analysis, and map creation.

**Preservation Researcher** **2009**
**City of Riverside Modernism Survey** **Riverside, California**

Completed DPR Primary, District, and Building, Structure and Object Forms for five sites for a grant-funded project to survey designated modern architectural resources within the City of Riverside.

**Information Officer** **2005, 2008–2009**
**Eastern Information Center (EIC), University of California, Riverside** **Riverside, California**

Processed and catalogued restricted and unrestricted archaeological and historical site record forms. Conducted research projects and records searches for government agencies and private cultural resource firms.

## Reports/Papers

2019 A Class III Archaeological Study for the Tuscany Valley (TM 33725) Project National Historic Preservation Act Section 106 Compliance, Lake Elsinore, Riverside County, California. Contributing author. Brian F. Smith and Associates, Inc.

2019 A Phase I and II Cultural Resources Assessment for the Jack Rabbit Trail Logistics Center Project, City of Beaumont, Riverside County, California. Brian F. Smith and Associates, Inc.

2019 A Phase I Cultural Resources Assessment for the 10575 Foothill Boulevard Project, Rancho Cucamonga, California. Brian F. Smith and Associates, Inc.

2019 Cultural Resources Study for the County Road and East End Avenue Project, City of Chino, San Bernardino County, California. Brian F. Smith and Associates, Inc.

2019 Phase II Cultural Resource Study for the McElwain Project, City of Murrieta, California. Contributing author. Brian F. Smith and Associates, Inc.

2019 A Section 106 (NHPA) Historic Resources Study for the McElwain Project, City of Murrieta, Riverside County, California. Brian F. Smith and Associates, Inc.

2018 Cultural Resource Monitoring Report for the Sewer Group 818 Project, City of San Diego. Brian F. Smith and Associates, Inc.

2018 Phase I Cultural Resource Survey for the Stone Residence Project, 1525 Buckingham Drive, La Jolla, California 92037. Brian F. Smith and Associates, Inc.

2018 A Phase I Cultural Resources Assessment for the Seaton Commerce Center Project, Riverside County, California. Brian F. Smith and Associates, Inc.

2017 A Phase I Cultural Resources Assessment for the Marbella Villa Project, City of Desert Hot Springs, Riverside County, California. Brian F. Smith and Associates, Inc.

2017 Phase I Cultural Resources Survey for TTM 37109, City of Jurupa Valley, County of Riverside. Brian F. Smith and Associates, Inc.

2017 A Phase I Cultural Resources Assessment for the Winchester Dollar General Store Project, Riverside County, California. Brian F. Smith and Associates, Inc.

2016 John Wayne Airport Jet Fuel Pipeline and Tank Farm Archaeological Monitoring Plan. Scientific Resource Surveys, Inc. On file at the County of Orange, California.

2016 Historic Resource Assessment for 220 South Batavia Street, Orange, CA 92868 Assessor's Parcel Number 041-064-4. Scientific Resource Surveys, Inc. Submitted to the City of Orange as part of

Mills Act application.

2015 Historic Resource Report: 807-813 Harvard Boulevard, Los Angeles. Scientific Resource Surveys, Inc. On file at the South Central Coastal Information Center, California State University, Fullerton.

2015 Exploring a Traditional Rock Cairn: Test Excavation at CA-SDI-13/RBLI-26: The Rincon Indian Reservation, San Diego County, California. Scientific Resource Surveys, Inc.

2014 Archaeological Monitoring Results: The New Los Angeles Federal Courthouse. Scientific Resource Surveys, Inc. On file at the South Central Coastal Information Center, California State University, Fullerton.

2012 Bolsa Chica Archaeological Project Volume 7, Technological Analysis of Stone Tools, Lithic Technology at Bolsa Chica: Reduction Maintenance and Experimentation. Scientific Resource Surveys, Inc.

## Presentations

2017 "Repair and Replace: Lithic Production Behavior as Indicated by the Debitage Assemblage from CA-MRP-283 the Hackney Site." Presented at the Society for California Archaeology Annual Meeting, Fish Camp, California.

2016 "Bones, Stones, and Shell at Bolsa Chica: A Ceremonial Relationship?" Presented at the Society for California Archaeology Annual Meeting, Ontario, California.

2016 "Markers of Time: Exploring Transitions in the Bolsa Chica Assemblage." Presented at the Society for California Archaeology Annual Meeting, Ontario, California.

2016 "Dating Duress: Understanding Prehistoric Climate Change at Bolsa Chica." Presented at the Society for California Archaeology Annual Meeting, Ontario, California.

2014 "New Discoveries from an Old Collection: Comparing Recently Identified OGR Beads to Those Previously Analyzed from the Encino Village Site." Presented at the Society for California Archaeology Annual Meeting, Visalia, California.

2012 Bolsa Chica Archaeology: Part Seven: Culture and Chronology. Lithic demonstration of experimental manufacturing techniques at the April meeting of The Pacific Coast Archaeological Society, Irvine, California.

# APPENDIX B

**Site Record Form**

***(Deleted for Public Review; Bound Separately)***

# APPENDIX C

**Archaeological Records Search Results**

***(Deleted for Public Review; Bound Separately)***

# APPENDIX D

**NAHC Sacred Lands File Search**

***(Deleted for Public Review; Bound Separately)***

# APPENDIX E

**Confidential Maps**

***(Deleted for Public Review; Bound Separately)***

# Appendix C2

Paleontological Assessment

# PALEONTOLOGICAL ASSESSMENT FOR THE TTM 83359 PROJECT

## CITY OF PALMDALE
## LOS ANGELES COUNTY, CALIFORNIA

**APN 3023-002-184**

***Prepared on Behalf of:***

**Ravello Holdings, Inc.**
**211 Village Commons Boulevard, Suite 11**
**Camarillo, California 93012**

***Prepared for:***

**City of Palmdale**
**38300 Sierra Highway**
**Palmdale, California 93550**

***Prepared by:***

**BFSA Environmental Services,**
**a Perennial Company**
**14010 Poway Road, Suite A**
**Poway, California 92064**

***October 25, 2022***

BFSA Environmental Services
A Perennial Company

# Paleontological Database Information

| | |
|---|---|
| ***Author:*** | Todd A. Wirths, M.S., Senior Paleontologist, California Professional Geologist No. 7588 |
| ***Consulting Firm:*** | BFSA Environmental Services, a Perennial Company<br>14010 Poway Road, Suite A<br>Poway, California 92064<br>(858) 679-8218 |
| ***Report Date:*** | October 25, 2022 |
| ***Report Title:*** | Paleontological Assessment for the TTM 83359 Project, City of Palmdale, Los Angeles County, California |
| ***Prepared on Behalf of:*** | Ravello Holdings, Inc.<br>211 Village Commons Boulevard, Suite 11<br>Camarillo, California 93012 |
| ***Prepared for:*** | City of Palmdale<br>38300 Sierra Highway<br>Palmdale, California 93550 |
| ***Prepared by:*** | Brian F. Smith and Associates, Inc.<br>14010 Poway Road, Suite A<br>Poway, California 92064 |
| ***Assessor's Parcel Number:*** | 3023-002-184 |
| ***USGS Quadrangle:*** | Section 27, Township 6 North, Range 11 West of the USGS *Palmdale*, *California* 7.5' Quadrangle. |
| ***Study Area:*** | Approximately 20 acres |
| ***Key Words:*** | Paleontological assessment; Holocene and Pleistocene alluvial fan deposits; monitoring recommended; City of Palmdale. |

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Figure 3 Geologic Map ..... 6

# I. INTRODUCTION AND LOCATION

A paleontological resource assessment has been completed for the Tentative Tract Map (TTM) 83359 Project, located southeast of the intersection of 51st Street East and East Palmdale Boulevard in the city of Palmdale, Los Angeles County, California (Figures 1 and 2). The approximately 20-acre project consists of one parcel, identified as Assessor's Parcel Number 3023-002-184. On the United States Geological Survey 7.5-minute, 1:24,000-scale *Palmdale, California* topographic quadrangle map, the project is located in Section 27, Township 6 North, Range 11 West, of the San Bernardino Baseline and Meridian. The project proposes the construction of a 64-lot residential subdivision, with one storm water detention basin, one common lot, and associated infrastructure. Currently, the property is undeveloped.

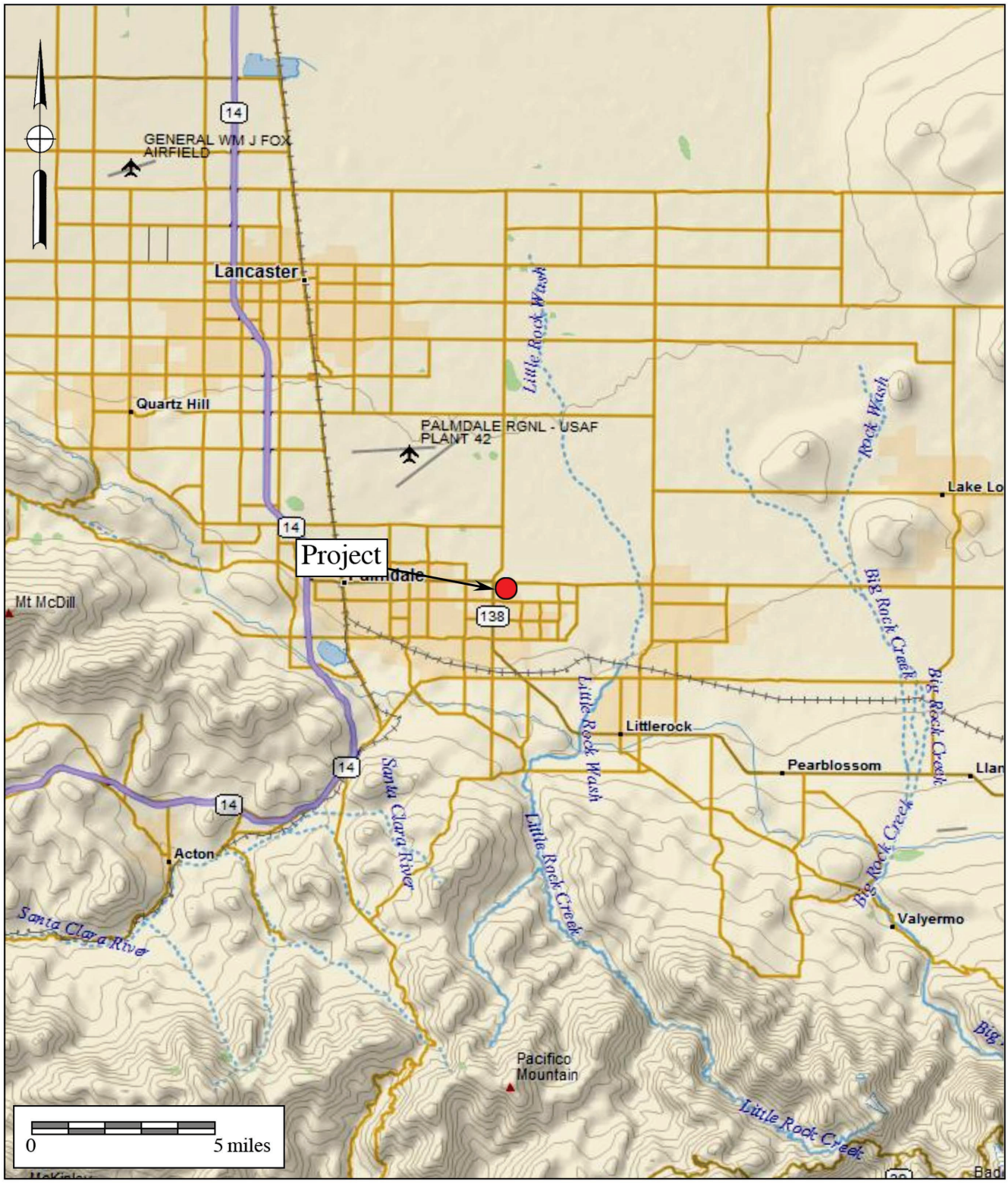
As the lead agency, the City of Palmdale has required the preparation of a paleontological assessment to evaluate the project's potential to yield paleontological resources. The paleontological assessment of the project included a review of paleontological literature and fossil locality records for a previous project in the area; a review of the underlying geology; and recommendations to mitigate impacts to potential paleontological resources, if necessary.

# II. REGULATORY SETTING

The California Environmental Quality Act (CEQA), which is patterned after the National Environmental Policy Act, is the overriding environmental regulation that sets the requirement for protecting California's 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 to the environment, whether the impacts are significant, and provide recommendations, if necessary.



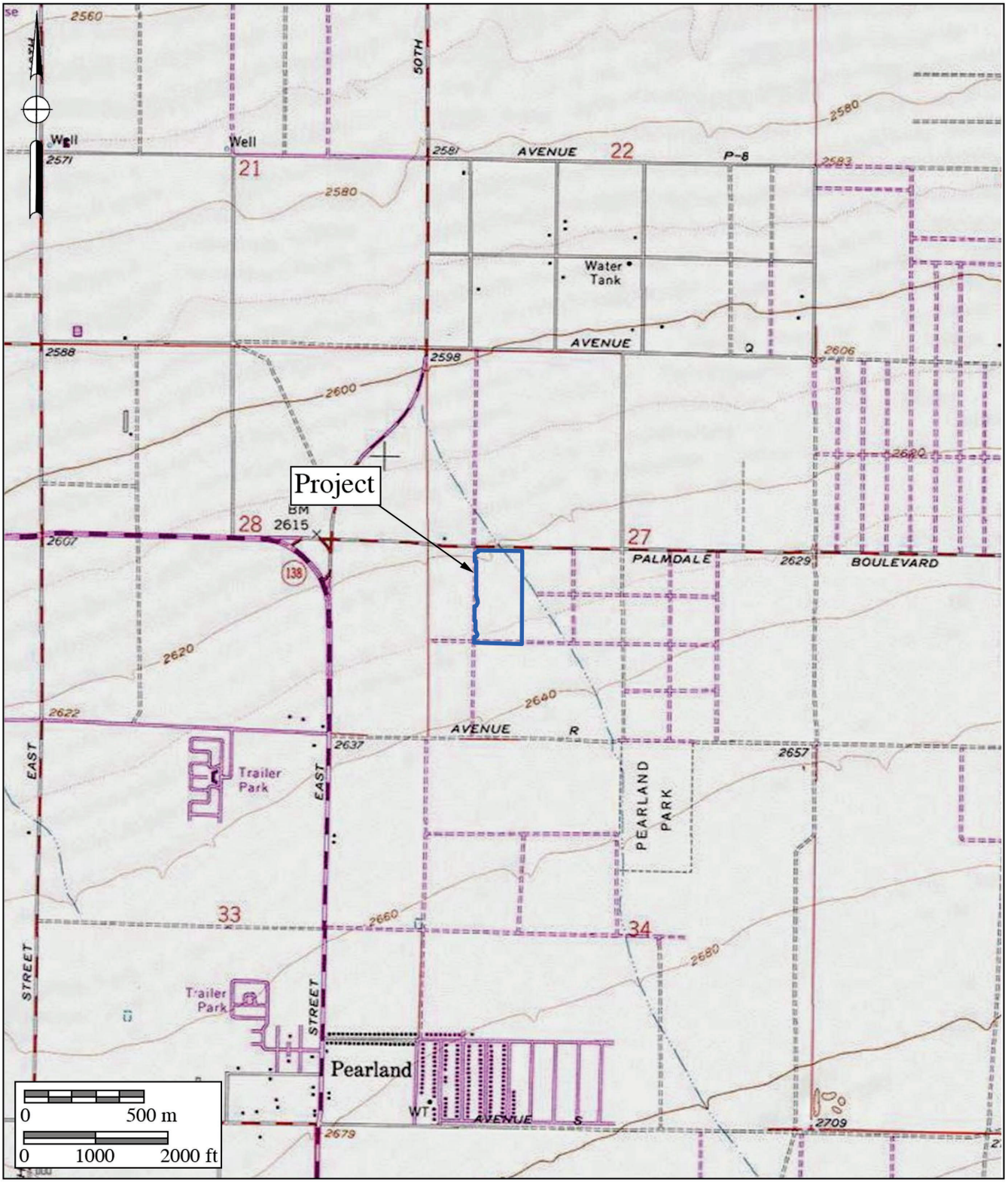

BFSA Environmental Services
A Perennial Company

# Figure 1

## General Location Map

The TTM 83359 Project

DeLorme World Base Map Service (1:250,000 series)

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# Figure 2

## Project Location Map

The TTM 83359 Project

USGS *Palmdale* Quadrangle (7.5-minute series)

In CEQA's Environmental Checklist Form, one of the questions to answer 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 that protects nonrenewable resources, including fossils, which is 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 Palmdale*

The Environmental Resources Element of the General Plan of the City of Palmdale addresses the related issues of resource conservation and open space, and provides a basis to evaluate existing resources and plan for their protection (City of Palmdale 1993). In the Environmental Resources Element, Policy ER7.1.3 states:

> **Policy ER7.1.3:** Require that new development protect significant historic, paleontological, or archaeological resources, or provide for other appropriate mitigation. (City of Palmdale 1993: ER-14).

The City will implement the policy as follows:

> **V. Cultural Resources:** The City will map all known historic, archaeological, and paleontological resources and ensure the protection of these resources. The City will review plans for development in potentially sensitive areas. Development in paleontologically and archaeologically sensitive areas where impacts cannot be mitigated will be discouraged. (City of Palmdale 1993: ER-26)

Applications of paleontological resource sensitivity to geologic formations by the City of Palmdale are summarized in Section V of this report.

The City of Palmdale recently published a Draft Environmental Impact Report that identifies impacts to paleontological resources would be less than significant with mitigation (City

of Palmdale 2022: 4.7-18). Since the potential for adverse impacts to paleontological resources during construction-related earth-disturbance activities exists, Mitigation Measure GEO-1 (presented below) is required:

> If paleontological resources are encountered during ground-disturbing activities, work within 60 feet shall be halted and the project paleontologist shall immediately evaluate the find. If necessary, the evaluation may require preparation of a treatment plan and paleontological testing. If the discovery proves to be significant under CEQA and cannot be avoided by the project, additional work may be warranted, such as data recovery excavation, to mitigate any significant impacts to historical resources. Any reports required to document and/or evaluate unanticipated discoveries shall be submitted to the City of Palmdale for review and approval. Recommendations contained therein shall be implemented throughout the remainder of ground disturbance activities. (City of Palmdale 2022)

## III. GEOLOGY

As shown on Figure 3, the project overlies late Holocene-aged alluvial fan deposits (pale green areas labeled "Qf," after Lancaster et al. 2012). The alluvial fan deposits are described as unconsolidated silt, sand, gravel, cobbles, and boulders. Holocene to late Pleistocene-aged young alluvial fan deposits (pale yellow areas labeled "Qyf") are mapped immediately west 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 [SVP] 2010) but may include younger remains (subfossils) when viewed in the context of local extinction of the organism or habitat, for example. Fossils are considered a nonrenewable resource under state and local guidelines (see Section II).

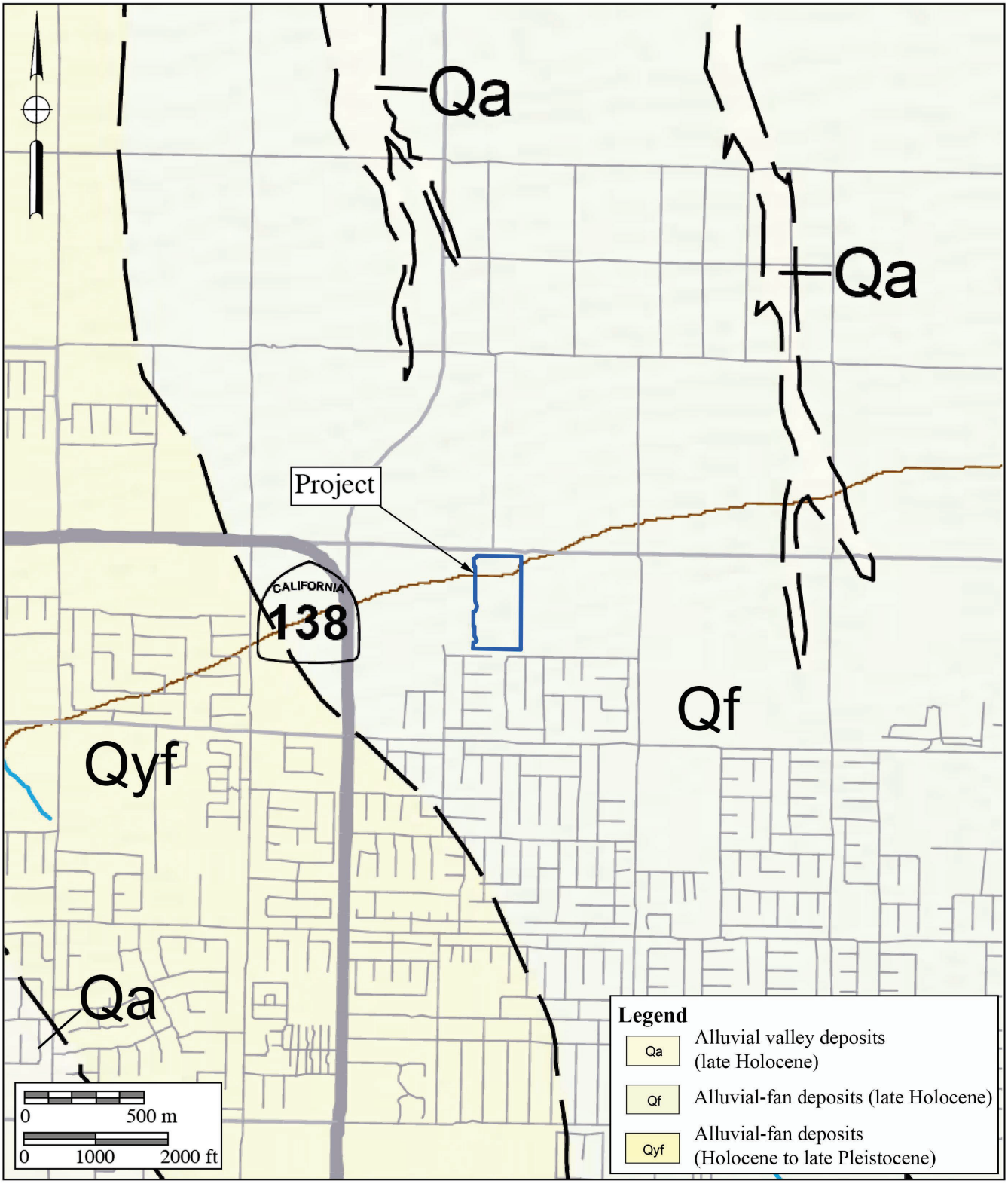


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**Figure 3**

**Geologic Map**

The TTM 83359 Project

Geology after Lancaster et al. (2012)

*Fossil Locality Search*

A paleontological records search was performed by the Los Angeles County Museum of Natural History (LACM) for a prior project located near Palmdale High School (Bell 2022, attached). The record search indicated the closest locality is approximately two to three miles to the southeast of the current project, consisting of Pleistocene microvertebrates represented by the fossilized bones of reptiles, mammals, and birds (LACM locs. 5942–5950). These localities ranged in depth from the near-surface to nine feet, but are mapped in areas identified as late Holocene alluvial fan deposits (Lancaster et al. 2012), implying that at least some Pleistocene-aged deposits are very near the surface with a minimal cover of Holocene deposits. The remaining fossil localities listed by Bell (2022) are several miles distant, mostly in northern Lancaster and beyond.

Record searches performed by the San Bernardino County Museum (SBCM) for prior projects by Brian F. Smith and Associates indicate the nearest fossil localities in similar deposits as the project are located between five and six miles to the west-northwest, consisting of early Holocene and late Pleistocene-aged lizards, birds, and mammals, including rodents, rabbits, and unidentifiable mammalian remains. The preservation of the specimens range from unaltered bones to fossilized bones, depending on the depth of the specimen and the age of the matrix. Also present were freshwater clams and snails. The depth of the specimens ranged from the surface to 15 feet deep, occurring in areas mapped as "Qf," "Qyf," and as late Pleistocene old alluval deposits ("Qoa") (SBCM locs. 9.2.3 – 9.2.7 and 9.2.15 – 9.2.31).

## 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 might have become fossilized over time. Holocene alluvium is generally considered to be geologically too young to contain significant nonrenewable paleontological resources (*i.e.,* fossils) and is thus typically assigned a low paleontological sensitivity. Pleistocene (more than 11,700-year-old) alluvial and alluvial fan deposits in the Inland Empire and Mojave Desert, however, often yield important Ice Age terrestrial vertebrate fossils, such as extinct mammoths, mastodons, giant ground sloths, extinct species of horse, bison, camel, saber-toothed cats, and others (Jefferson 1991, 2009). These Pleistocene sediments are thus accorded a High paleontological resource sensitivity.

*Professional Standards*

The SVP (2010) has drafted guidelines that include four categories of paleontological sensitivity for geologic units (formations) that might be impacted by a proposed project, as listed 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.

Using these criteria, the presence of nearby significant fossil localities yielded by similar alluvial fan deposits as those at the project, the Holocene to late Pleistocene alluvial fan deposits may be considered to have an undetermined to high potential to yield paleontological resources.

*City of Palmdale Assessment*

In the Environmental Resources Element of the City's General Plan, the paleontological sensitivity of geologic formations mapped within the city are classified according to their potential to yield fossil resources (City of Palmdale 1993: ER-44). An assignment of "unknown potential" appears to be applied to the alluvial deposits mapped at the project, stating, "[t]he Pleistocene alluvium which is of high potential is covered by a thin layer of recent alluvium. This layer has an unknown potential for producing paleontologic resources" (City of Palmdale 1993). This statement is roughly in line with the disposition of the nearby fossil localities discussed in Section IV of this report. Correspondingly, Pleistocene lacustrine and fluvial deposits are accorded a high paleontological potential/sensitivity in the Environmental Resources Element.

The analysis of paleontological resources by the Environmental Resources Element concludes, "The City's low-lying areas consist of Quaternary alluvium which is known to contain numerous vertebrate fossils. Although no other paleontological resources have been recorded in the Planning Area, their existence should not be precluded or dismissed" (City of Palmdale 1993: ER-45). A map of paleontological sensitivity indicates the project is within an area designated as having an "undetermined" potential for paleontological resources (City of Palmdale 1993: ER-65).

# VI. CONCLUSIONS AND RECOMMENDATIONS

Research has confirmed the existence of thin, Holocene alluvial deposits mapped at the surface of the project. These deposits overlie potentially fossiliferous Holocene to late Pleistocene-aged young alluvial fan deposits. The known occurrence of significant terrestrial vertebrate fossils at very shallow depths from alluvial deposits from the Mojave Desert and the moderate to high paleontological sensitivity rating assigned to Pleistocene-aged alluvial deposits for yielding paleontological resources all support paleontological monitoring be implemented during mass grading and excavation activities in undisturbed alluvial deposits in order to mitigate any adverse impacts (loss or destruction) to potential nonrenewable paleontological resources. Full-time monitoring of undisturbed alluvial fan deposits at the project is warranted starting at the surface.

The following Paleontological Resource Impact Mitigation Program (PRIMP), outlined below, is based on the findings stated above. A PRIMP, when submitted to the City of Palmdale, should be approved by the City prior to the issuance and approval of grading permits for the project. This suggested PRIMP, when implemented, would reduce impacts to potential paleontological resources to a level below significant:

1. Prior to initiation of any grading, drilling, and/or excavation activities, a preconstruction meeting will be held and attended by the paleontologist of record, representatives of the grading contractor and subcontractors, the project owner or developer, and a representative of the lead agency. The nature of potential paleontological resources shall be discussed, as well as the protocol that is to be implemented following the discovery of any fossiliferous materials.
2. Monitoring of mass grading and excavation activities in areas identified as likely to contain paleontological resources shall be performed by a qualified/project paleontologist or paleontological monitor. Monitoring shall be performed starting at the surface on a full-time basis; Holocene alluvial deposits should be monitored part-time at the discretion of the project paleontologist. The timing and duration of the monitoring of excavation activities within the alluvial fan deposits shall be at the discussion of the project paleontologist based on the geological conditions observed by the paleontological monitor and/or the project paleontologist.
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 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 the concerned

parties of the discovery.

4. Paleontological salvage during trenching and boring activities is typically from the generated spoils and does not delay the 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. Notes will be taken on the map location and stratigraphy of the site, which is photographed before it is vacated, and the fossils are removed to a safe place. On mass grading projects, discovered fossil sites will be 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 with the use of handheld GPS units. If the site involves remains from a large terrestrial vertebrate, such as large bone(s) or a mammoth tusk, that is/are too large to be easily removed by a single monitor, a fossil recovery crew shall excavate around the find, encase the find within a plaster and burlap jacket, and remove it after the plaster is set. For large fossils, use of the contractor's construction equipment may be solicited to help remove the jacket to a safe location.
5. Isolated fossils will be collected by hand, wrapped in paper, and placed in temporary collecting flats or five-gallon buckets. Notes will be taken on the map location and stratigraphy of the site, which is photographed before it is vacated, and the fossils are removed to a safe place.
6. Particularly small invertebrate fossils typically represent multiple specimens of a limited number of organisms, and a scientifically suitable sample can be obtained from one to several five-gallon buckets of fossiliferous sediment. If it is possible to dry screen the sediment in the field, a concentrated sample may consist of one or two buckets of material. For vertebrate fossils, the test is usually the observed presence of small pieces of bones within the sediments. If present, multiple five-gallon buckets of sediment can be collected and returned to a separate facility to wet-screen the sediment.
7. In accordance with the "Microfossil Salvage" section of the SVP guidelines (2010:7), bulk sampling and screening of fine-grained sedimentary deposits (including carbonate-rich paleosols) must be performed if the deposits are identified to possess indications of producing fossil "microvertebrates" to test the feasibility of the deposit to yield fossil bones and teeth.
8. 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).
9. 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.

10. 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 LACM) shall be conducted. The paleontological program should include a written repository agreement prior to the initiation of mitigation activities. Prior to curation, the lead agency (*e.g.,* the City of Palmdale) will be consulted on the repository/museum to receive the fossil material.
11. A final monitoring and mitigation 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.

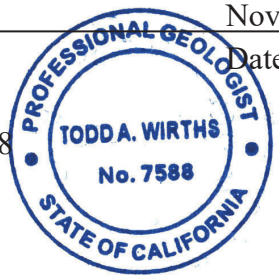
## VII. CERTIFICATION

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.

November 2, 2022

Todd A. Wirths
Senior Paleontologist
California Professional Geologist No. 7588

Date




## VIII. REFERENCES

Bell, A. 2022. Paleontological resources for the Beyond Market and Car Wash Project. Unpublished letter for Brian F. Smith and Associates, Inc., Poway, California, by the Natural History Museum of Los Angeles County, Los Angeles, California.

City of Palmdale. 1993. Environmental resources element of the general plan. https://cityofpalmdale.org/DocumentCenter/View/569/Environmental-Resources-Element-PDF.

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Jefferson, G.T. 1991. A catalogue of late Quaternary vertebrates from California: Part two, mammals. Natural History Museum of Los Angeles County, Technical Reports, no. 7: i-v + 1-129.

Jefferson, G.T. 2009. A catalogue of Blancan and Irvingtonian vertebrates and floras from Arizona, southern California, Nevada, Utah, and northwestern Mexico. Unpublished draft manuscript, Colorado Desert District Stout Research Center, Anza-Borrego Desert State Park, Borrego Springs, California.

Lancaster, J.T., Hernandez, J.L., Haydon, W.D, Dawson, T.E., and Hayhurst, C.A. 2012. Geologic map of Quaternary surficial deposits in southern California: Lancaster 30' x 60' Quadrangle. California Geological Survey Special Report 217, Plate 22.

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: Electronic document, https://vertpaleo.org/wp-content/uploads/2021/01/SVP_Impact_Mitigation_Guidelines-1.pdf.

# APPENDIX A

## Qualifications of Key Personnel

# Todd A. Wirths, MS, PG No. 7588

## Senior Paleontologist

Brian F. Smith and Associates, Inc.
14010 Poway Road • Suite A •
Phone: (858) 679-8218 • Fax: (858) 679-9896 • E-Mail: twirths@bfsa-ca.com

## 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

## Fossil Locality Search Report

Natural History Museum
of Los Angeles County
900 Exposition Boulevard
Los Angeles, CA 90007

tel 213.763.DINO
www.nhm.org

Research & Collections

e-mail: paleorecords@nhm.org

June 12, 2022

Brian F. Smith and Associates, Inc.
Attn: Todd Wirths

re: Paleontological resources for the Beyond Market and Car Wash Project (22-195)

Dear Todd:

I have conducted a thorough search of our paleontology collection records for the locality and specimen data for proposed development at the Beyond Market and Car Wash Project area as outlined on the portion of the Palmdale USGS topographic quadrangle map that you sent to me via e-mail on June 6, 2022. We do not have any fossil localities that lie directly within the proposed project area, but we do have fossil localities nearby from the same sedimentary deposits that occur in the proposed project area, either at the surface or at depth.

The following table shows the closest known localities in the collection of the Natural History Museum of Los Angeles County (NHMLA).

| Locality Number | Location | Formation | Taxa | Depth |
|---|---|---|---|---|
| LACM VP CIT 451 | Near intersection of E Barrel Springs Rd & 47th St E (Palmdale Quad) | Harold Formation | Mastodon (Mammutidae), horse family (Equidae) | Unknown |
| LACM VP 5942-5950 | Along Avenue S from Palmdale to Lake Los Angeles | Unknown formation (Holocene) | Kingsnake (*Lampropeltis*), Lizard (Lacertilia), leopard lizard (*Gambelia*); snake (Ophidia), gopher snake (*Pituophis*); rabbit (*Lagomorpha*), rodent (Rodentia), Pocket gopher (*Thomomys*), pocket mouse (*Chaetodippus*), kangaroo rat (*Dipodomys*); birds (Aves) | 0-9 ft bgs |
| LACM VP 7884 | E of the SE corner of the intersection of East 3rd Street & East Avenue H-13 | Unknown formation (Pleistocene; fluvial brown clayey silt) | Camel (*Camelops hesternus*) | 4 feet bgs |
| LACM VP 7853 | Waste Management of North America Lancaster Landfill | Unknown formation (Pleistocene; sandy loess under a dune deposit strand, | Rabbit (*Sylvagus*), camel family (Camelidae), antelope squirrel (*Ammospermophilus*), kangaroo rat (*Dipodymus*), pocket mouse | 3-11 feet bgs |

| | | | | |
|---|---|---|---|---|
| | | sandy siltstone, siltstone to clayey siltstone) | (*Perognathus*), pack rat (*Neotoma*), deer mouse (*Peromyscus*), vole family (Microtinae), iguana (*Dipsosaurus*), pocket gopher (*Thomomys*), spiny lizard (*Sceloporus*), side blotched lizard (*Uta*), colubrid snakes (*Trimorphodon, Masticophis, Phyllorhynchus*), night lizard (*Xantusia*), western alligator lizard (*Elgaria*), toothy skinks (*Plestiodon*), whiptail lizard (*Aspidocelis*), spiny lizards (Phrynosomatidae), smelt (Osmeridae) | |
| LACM VP 7891 | near the California Aqueduct between the Tehachapi Mountains & the Rosamond Hills north of Willow Springs | Unknown formation (Pleistocene) | Camel (*Hemiauchenia*) | 21 feet bgs |

*VP, Vertebrate Paleontology; IP, Invertebrate Paleontology; bgs, below ground surface*
**Locality is 25 feet below carbon-14 accelerator mass spectrometry date of 43180 +/-710 years*

This records search covers only the records of the NHMLA. It is not intended as a paleontological assessment of the project area for the purposes of CEQA or NEPA. Potentially fossil-bearing units are present in the project area, either at the surface or in the subsurface. As such, NHMLA recommends that a full paleontological assessment of the project area be conducted by a paleontologist meeting Bureau of Land Management or Society of Vertebrate Paleontology standards.

Sincerely,

Alyssa Bell, Ph.D.
Natural History Museum of Los Angeles County

enclosure: invoice

# Appendix D

Fuel Consumption Calculations

# Tentative Tract Map

Last Updated: 12/1/2022

Compression-Ignition Engine Brake-Specific Fuel Consumption (BSFC) Factors **[1]**:

| | | | |
|---|---|---|---|
| HP: 0 to 100 | 0.0588 | HP: Greater than 100 | 0.0529 |

*Values above are expressed in gallons per horsepower-hour/BSFC.*

**CONSTRUCTION EQUIPMENT**

| Construction Equipment | # | Hours per Day | Horsepower | Load Factor | Construction Phase | Fuel Used (gallons) |
|---|---|---|---|---|---|---|
| Pumps | 1 | 8 | 84 | 0.74 | Site Preparation Phase | 6,137 |
| Rubber Tired Dozers | 1 | 8 | 247 | 0.4 | Site Preparation Phase | 8,774 |
| Tractors/Loaders/Backhoes | 2 | 8 | 97 | 0.37 | Site Preparation Phase | 7,086 |
| Graders | 1 | 8 | 187 | 0.41 | Grading Phase | 1,297 |
| Off-Highway Tractors | 1 | 8 | 124 | 0.44 | Grading Phase | 923 |
| Plate Compactors | 1 | 8 | 8 | 0.43 | Grading Phase | 65 |
| Rubber Tired Dozers | 1 | 8 | 247 | 0.4 | Grading Phase | 1,671 |
| Scrapers | 4 | 8 | 367 | 0.48 | Grading Phase | 11,919 |
| Tractors/Loaders/Backhoes | 3 | 8 | 97 | 0.37 | Grading Phase | 2,025 |
| Air Compressors | 4 | 8 | 78 | 0.48 | Building Construction Phase | 12,462 |
| Excavators | 2 | 8 | 158 | 0.38 | Building Construction Phase | 8,988 |
| Forklifts | 2 | 8 | 89 | 0.2 | Building Construction Phase | 2,962 |
| Generator Sets | 4 | 8 | 84 | 0.74 | Building Construction Phase | 20,689 |
| Skid Steer Loaders | 4 | 8 | 65 | 0.37 | Building Construction Phase | 8,005 |
| Tractors/Loaders/Backhoes | 3 | 7 | 97 | 0.37 | Building Construction Phase | 7,839 |
| Trenchers | 1 | 8 | 78 | 0.5 | Building Construction Phase | 3,245 |
| Pavers | 1 | 8 | 130 | 0.42 | Paving Phase | 577 |
| Paving Equipment | 1 | 8 | 132 | 0.36 | Paving Phase | 502 |
| Surfacing Equipment | 1 | 8 | 263 | 0.3 | Paving Phase | 834 |
| Air Compressors | 4 | 8 | 78 | 0.48 | Architiectural Coating | 1,408 |
| Forklifts | 2 | 8 | 89 | 0.2 | Architiectural Coating | 335 |
| Generator Sets | 4 | 8 | 84 | 0.74 | Architiectural Coating | 2,338 |
| Rubber Tired Loaders | 1 | 8 | 203 | 0.36 | Architiectural Coating | 618 |
| | | | | | **Total Fuel Used** | **110,699 (Gallons)** |

| Construction Phase | Days of Operation |
|---|---|
| Site Preparation Phase | 210 |
| Grading Phase | 40 |
| Building Construction Phase | 177 |
| Paving Phase | 25 |
| Architectural Coating Phase | 20 |
| Total Days | 472 |

**WORKER TRIPS**

| Constuction Phase | MPG [2] | Trips | Trip Length (miles) | Fuel Used (gallons) |
|---|---|---|---|---|
| Site Preparation Phase | 24.1 | 10 | 10.8 | 941.08 |
| Grading Phase | 24.1 | 28 | 10.8 | 501.91 |
| Building Construction Phase | 24.1 | 248 | 10.8 | 19671.24 |
| Paving Phase | 24.1 | 8 | 10.8 | 89.63 |
| Architectural Coating Phase | 24.1 | 50 | 10.8 | 448.13 |
| | | **Total** | | **21,651.98** |

## HAULING AND VENDOR TRIPS

| Trip Class | MPG [2] | Trips | Trip Length (miles) | Fuel Used (gallons) |
|---|---|---|---|---|
| **HAULING TRIPS** | | | | |
| Site Preparation Phase | 7.5 | 0 | 20.0 | 0.00 |
| Grading Phase | 7.5 | 0 | 20.0 | 0.00 |
| Building Construction Phase | 7.5 | 0 | 20.0 | 0.00 |
| Paving Phase | 7.5 | 0 | 20.0 | 0.00 |
| Architectural Coating Phase | 7.5 | 0 | 20.0 | 0.00 |
| | | **Total** | | - |
| **VENDOR TRIPS** | | | | |
| 0 | 7.5 | 0 | 7.3 | 0.00 |
| Site Preparation Phase | 7.5 | 0 | 7.3 | 0.00 |
| Grading Phase | 7.5 | 0 | 7.3 | 0.00 |
| Building Construction Phase | 7.5 | 91 | 7.3 | 15677.48 |
| Paving Phase | 7.5 | 0 | 7.3 | 0.00 |
| Architectural Coating Phase | 7.5 | 0 | 7.3 | 0.00 |
| | | **Total** | | **15,677.48** |

| | |
|---|---|
| **Total Gasoline Consumption (gallons)** | **21,652** |
| **Total Diesel Consumption (gallons)** | **126,376** |

**Sources:**

**[1]** United States Environmental Protection Agency. 2021. *Exhaust and Crankcase Emission Factors for Nonroad Compression-Ignition Engines in MOVES3.0.2* . September. Available at: https://www.epa.gov/system/files/documents/2021-08/420r21021.pdf.

**[2]** United States Department of Transportation, Bureau of Transportation Statistics. 2021. *National Transportation Statistics* . Available at: https://www.bts.gov/topics/national-transportation-statistics.

# Tentative Tract Map

Last Updated: 12/1/2022

**Populate one of the following tables (Leave the other blank):**

| Annual VMT | | OR | Daily Vehicle Trips | |
|---|---|---|---|---|
| Annual VMT: | 3,788,152 | | Daily Vehicle Trips: | |
| | | | Average Trip Distance: | |

| Fleet Class | Fleet Mix |
|---|---|
| Light Duty Auto (LDA) | 0.592914 |
| Light Duty Truck 1 (LDT1) | 0.051978 |
| Light Duty Truck 2 (LDT2) | 0.143358 |
| Medium Duty Vehicle (MDV) | 0.118868 |
| Light Heavy Duty 1 (LHD1) | 0.026746 |
| Light Heavy Duty 2 (LHD2) | 0.007323 |
| Medium Heavy Duty (MHD) | 0.011582 |
| Heavy Heavy Duty (HHD) | 0.009144 |
| Other Bus (OBUS) | 0.000678 |
| Urban Bus (UBUS) | 0.000678 |
| Motorcycle (MCY) | 0.000495 |
| School Bus (SBUS) | 0.002501 |
| Motorhome (MH) | 0.006531 |

| Fuel Economy (MPG) [1] | |
|---|---|
| Passenger Vehicles | 24.1 |
| Light-Med Duty Trucks | 17.6 |
| Heavy Trucks/Other | 7.5 |
| Motorcycles | 44 |

**Fleet Mix**

| Vehicle Type | Percent | Fuel Type | Annual VMT: VMT | Vehicle Trips: VMT | Fuel Consumption (Gallons) |
|---|---|---|---|---|---|
| Passenger Vehicles | *59.29%* | *Gasoline* | 2,246,048 | 0.00 | 93,197 |
| Light-Medium Duty Trucks | *31.42%* | *Gasoline* | 1,190,253 | 0.00 | 67,628 |
| Heavy Trucks/Other | *6.52%* | *Diesel* | 246,923 | 0.00 | 32,923 |
| Motorcycle | *0.05%* | *Gasoline* | 1,875 | 0.00 | 43 |

| | |
|---|---|
| **Total Gasoline Consumption (gallons)** | **160,868** |
| **Total Diesel Consumption (gallons)** | **32,923** |

**Sources:**

**[1]** United States Department of Transportation, Bureau of Transportation Statistics. 2021. National Transportation Statistics. Available at: https://www.bts.gov/topics/national-transportation-statistics.

# Appendix E

Geologic and Geotechnical Engineering Investigation

**GEOLOGIC AND GEOTECHNICAL ENGINEERING INVESTIGATION,**
**PROPOSED SINGLE-FAMILY RESIDENTIAL DEVELOPMENT,**
Tract 83359, East Palmdale Boulevard,
Palmdale, California

for

Ravello Holding, Inc.

October 27, 2021 W.O. 7648

MDN 22503

GeoSoils Consultants Inc.

GeoSoils Consultants Inc.
GEOTECHNICAL GEOLOGIC ENVIRONMENTAL

October 27, 2021
W.O. 7648

RAVELLO HOLDINGS, INC.
2007 Cedar Avenue
Manhattan Beach, CA 90266

Attention: Mr. Kevin Harbison

**Subject: Geologic and Geotechnical Engineering Investigation, Proposed Single-Family Residential Development, Tract 83359, East Palmdale Boulevard, Palmdale, California**

Dear Mr. Harbison:

As requested, GeoSoils Consultants, Inc. (GSC) has performed a geologic and geotechnical engineering investigation on the subject tract. The purpose of this investigation is to provide geologic and geotechnical engineering recommendations for site grading and foundations. The report presents the results of our research, field mapping, subsurface exploration, laboratory testing, and provides geotechnical engineering recommendations for site grading. Grading of the site is considered feasible from a geologic and geotechnical engineering prospective, provided the recommendations presented herein are incorporated into the design and implemented during grading.

We appreciate this opportunity to be of service to you. If you have any questions regarding this report, or if we may be of further assistance to you, please do not hesitate to contact us.

Very truly yours,

GEOSOILS CONSULTANTS, INC.

RUDY F. RUBERTI
CEG 1708

KAREN L. MILLER
GE 2257

cc: (1) Addressee

MDN 22503

6634 Valjean Avenue, Van Nuys, California 91406 Phone: (818) 785-2158 Fax: (818) 785-1548

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Appendix A, Field Procedures and Boring Logs
Plates TP-1 to TP-11, Test Pit Logs
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Appendix B, Laboratory Test Results
Plates C-1 to C-6, Consolidation Test Diagrams
Plate SH-1, Shear Test Diagram
Plate L-1, Chemical Test Results

## 1.0 INTRODUCTION

The purpose of this study is to provide geologic and geotechnical engineering data and recommendations to aid in development of the subject site. The following sections provide a summary of past grading activity on the tract, geologic and geotechnical engineering conditions, and recommendations for site grading, fill placement, and foundations.

This report has been prepared in accordance with generally accepted geotechnical engineering practices in the City of Palmdale and the time it was prepared. The report presents a brief description of the site, the geotechnical engineering characteristics of the area, the seismicity of the area, an engineering analysis of the site characteristics, conclusions, and recommendations to develop the site.

Opinions presented in this report are based on an inspection of the site, geologic mapping, subsurface exploration, a review of the regional geologic maps and seismic hazard reports, and our general knowledge of the geologic and soils engineering conditions in the site area. The opinions presented have been arrived at through the exercise of the generally understood standard of care for our profession and standard of engineering practice for the City of Palmdale, as we understand it.

### 1.1 Scope of Services

Our scope of services included the following:

- Site reconnaissance.
- Review of regional geologic maps and seismic hazard reports.
- Excavating, logging, and sampling of 11 backhoe test pits and 3 exploratory boring. The locations of the test pits and borings are shown on the Plate 1 (Geologic Map) and test pit and boring logs are included in Appendix A.
- Preparation of a Geologic Map (Plate 1).

- Laboratory testing (Appendix B).
- Engineering analyses.
- Review of a previous reports by GSC for the adjacent property to the east of the subject site.
- Preparation of this report.

## 1.2 Limitations

The findings and recommendations of this report were prepared in accordance with generally accepted professional geotechnical engineering principles and practice for the City of Palmdale at this time. We make no other warranty, either express or implied. The conclusions and recommendations contained in this report are based on-site conditions disclosed in our subsurface investigation and the referenced reports. However, soil/rock conditions can vary significantly between test pits and borings; therefore, further refinements of our recommendations contained herein may be necessary due to changes in the building plans or what is encountered during site grading.

The recommendations provided in this report are applicable for preliminary development planning for the referenced tract provided that surface water will be kept from infiltrating into the subgrade adjacent to the house foundation systems. This may include, but not be limited to rainwater, roof water, landscape water and/or leaky plumbing. The lots are to be fine graded at the completion of construction to include positive drainage away from the structure and roof water will be collected via gutters, downspouts, and transported to the street in buried drainpipes. Home buyers should be cautioned against constructing open draining planters adjacent to the houses or obstructing the yard drainage in any way.

Since our investigation was based on the site conditions observed, selective laboratory testing, and engineering analyses, the conclusions and recommendations contained herein are professional opinions. Further, these opinions have been derived in accordance with standard engineering practices, and no warranty is expressed or implied.

## 2.0 SITE DISCRIPTION

The subject site is located within the City of Palmdale along the south side of East Palmdale Boulevard and east of Hudsonia Street (Figure 1). The site is vacant with scatter brush and a few dirt roads. The generally level site is bounded to the south and west by existing residential developments, to the north by East Palmdale Boulevard, and to the east by open space.

## 3.0 PROPOSED DEVELOPMENT

Proposed development of the site will consist of a cut/fill grading operation to create 67 lots for single-family residential construction and associated streets. Rough Grading Plans were prepared by Civil Design and Drafting and are included as the base map for Plate 1.

## 4.0 PREVIOUS STUDIES AND GRADING

### 4.1 Previous Studies

GSC prepared a report for Tract 73068 to the east of the subject tract (References). No other studies are known to exist on the subject tract.

### 4.2 Previous Grading

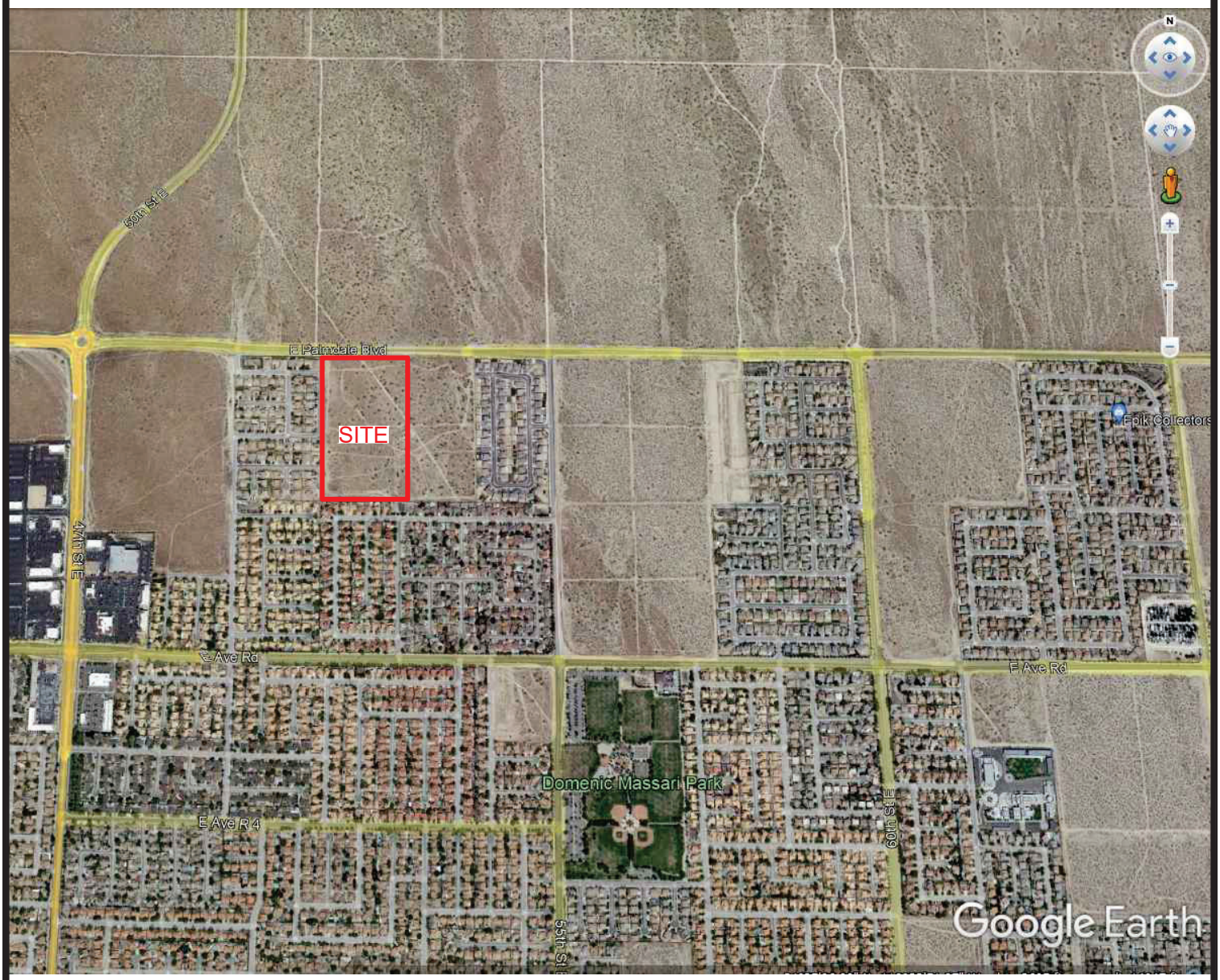
Grading has not been performed on the site. A few dirt roads traverse the site.

## 5.0 GEOLOGIC ENVIRONMENT

Geologic conditions on the subject site were determined through research, field mapping, and subsurface exploration, and the results were superimposed on the Geologic Map, Plate 1. During grading, a geologist should be present to confirm the geologic conditions encountered on the site are consistent with those presented herein. The following sections present our findings concerning subsurface and groundwater conditions.

### 5.1 Regional Geologic Setting

The subject tract is located within the Mojave Desert Geomorphic Provence. The Mojave is a broad interior region of isolated mountain ranges separated by expanses

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SITE LOCATION MAP
ENTATIVE TRACT 83359
PALMDALE, CALIFORNIA
RAVELLO HOLDINGS, LLC.

| | |
|---|---|
| W.O. NO.: | 7648 |
| DATE: | 10/2021 |

FIGURE 1

of desert plains. It has an interior enclosed drainage and many playas. There are two important fault trends that control topography, a prominent NW-SE trend and a secondary east-west trend (apparent alignment with Transverse Ranges is significant). The Mojave province is wedged in a sharp angle between the Garlock Fault (southern boundary Sierra Nevada) and the San Andreas Fault, where it bends east from its northwest trend. The northern boundary of the Mojave is separated from the prominent Basin and Range by the eastern extension of the Garlock Fault. A Regional Geologic Map is included as Figure 2.

### 5.2 Local Geologic Setting

The subject site is located within the Antelope Valley and is underlain by deep deposits of alluvium.

### 5.3 Earth Materials

Alluvium (Qal)

Alluvium underlies the site and consists of interbedded sand and gravelly sand, with variable amounts of silt. The alluvium is slightly moist and dense.

### 5.4 Geologic Structure

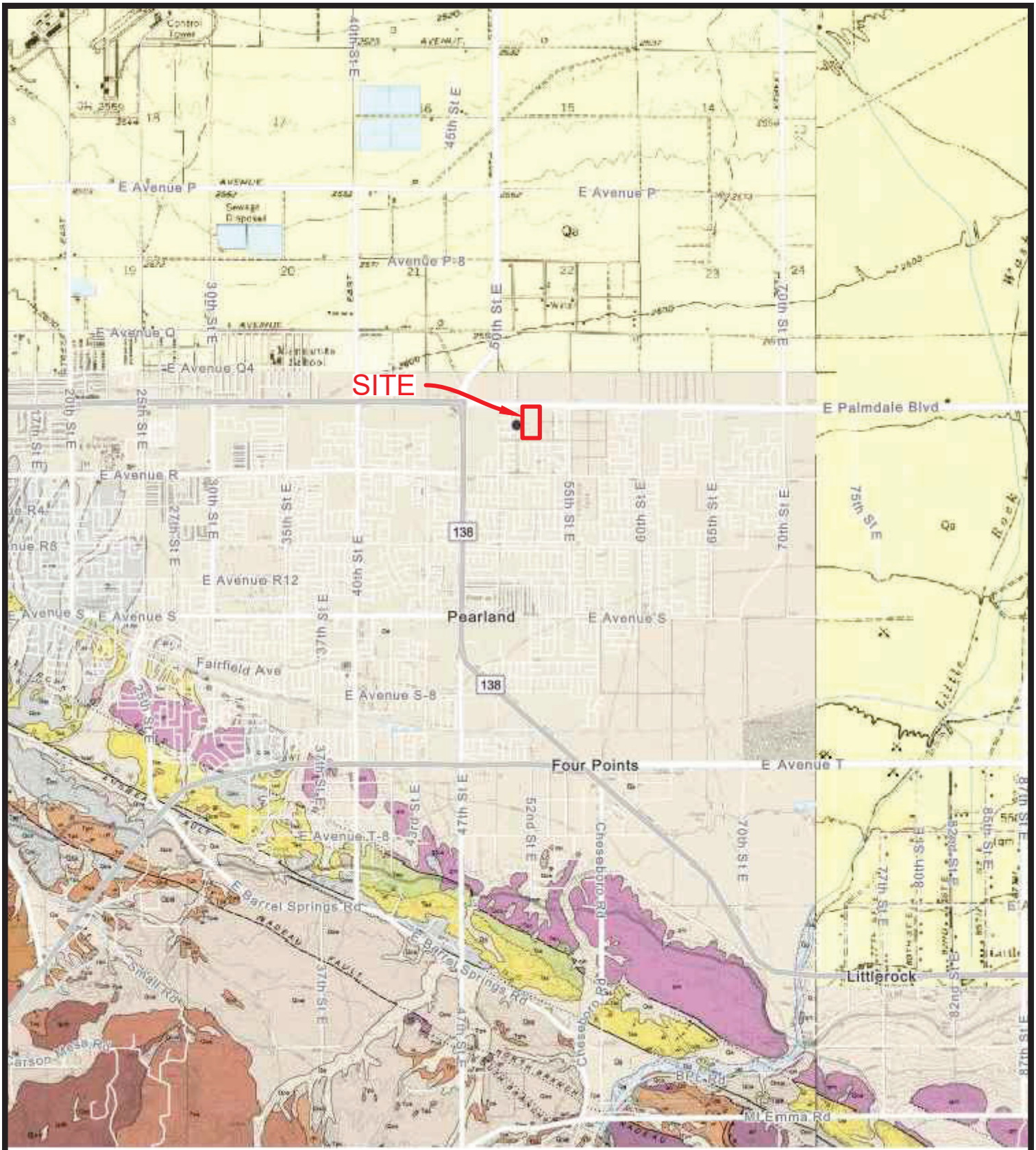
The site is underlain by alluvium and lacks geologic structure.

### 5.5 Mass Wasting

The site is flat and mass wasting does not present a hazard.

### 5.6 Groundwater

Groundwater was not encountered in any of the test pits or borings excavated as part of this study. Perched groundwater conditions may exist within the alluvium during wet periods of the year. Historic high groundwater is over 100 feet below the ground surface.

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REGIONAL GEOLOGIC MAP
ENTATIVE TRACT 83359
PALMDALE, CALIFORNIA
RAVELLO HOLDINGS, LLC.

| | |
|---|---|
| W.O. NO.: | 7648 |
| DATE: | 10/2021 |

FIGURE 2

### 5.7 Expansive Soil

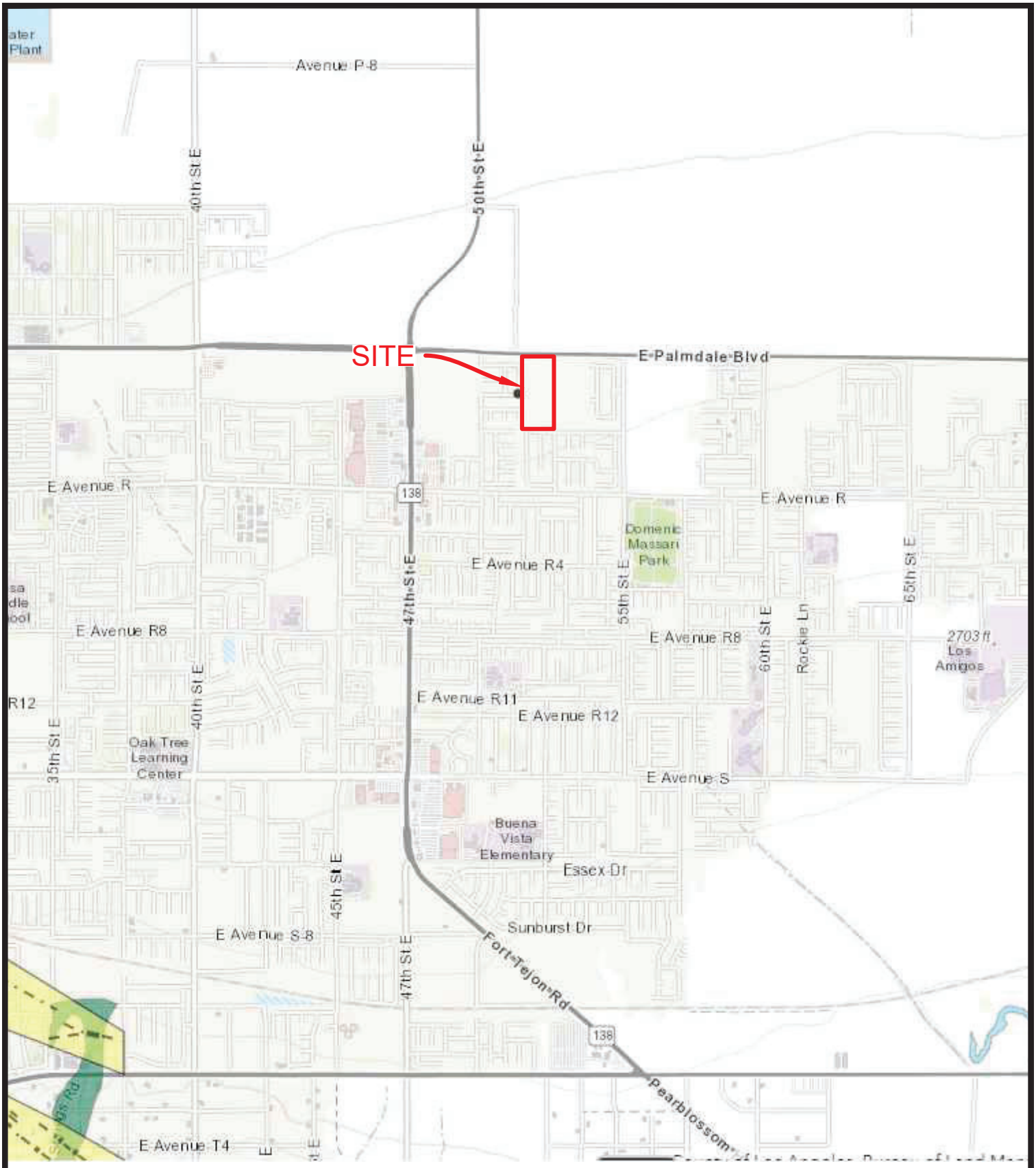
Onsite soil is anticipated to have a very low expansion index. Additional testing will be performed at the completion of grading and the results will be presented in a final compaction report.

## 6.0 FAULTING AND SEISMICITY

The project site is not located within an Alquist-Priolo Earthquake Fault Zone and there are no active faults on or adjacent to the property (Figure 3). Although there are no faults on or adjacent to the property, there are faults near the site that can cause moderate to intense ground shaking during the lifetime of the proposed development. Therefore, earthquake resistant design is recommended.

The closest active fault to the site is the San Andreas Fault, located approximately 3.2 miles to the southwest. The San Andreas Fault is a continental transform fault that extends roughly 1,200 kilometers (750 mi) through California. It forms the tectonic boundary between the Pacific Plate and the North American Plate, and its motion is right-lateral strike-slip. The fault divides into three segments, each with different characteristics and a different degree of earthquake risk. The slip rate along the fault ranges from 20 to 35 mm (0.79 to 1.38 in)/yr.

The southern segment (also known as the Mojave segment) begins near Bombay Beach, California. Box Canyon, near the Salton Sea, contains upturned strata associated with that section of the fault. The fault then runs along the southern base of the San Bernardino Mountains, crosses through the Cajon Pass and continues northwest along the northern base of the San Gabriel Mountains. These mountains are a result of movement along the San Andreas Fault and are commonly called the Transverse Range. In Palmdale, a portion of the fault is easily examined at a roadcut for the Antelope Valley Freeway. The fault continues northwest alongside the Elizabeth Lake Road to the town of Elizabeth Lake. As it passes the towns of Gorman, Tejon Pass and Frazier Park, the fault begins to bend northward, forming the "Big Bend". This restraining bend is thought to be where the fault locks up in Southern California, with an earthquake-recurrence interval of roughly 140 to 60

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SEISMIC HAZARD ZONE MAP
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PALMDALE, CALIFORNIA
RAVELLO HOLDINGS, LLC.

| | |
|---|---|
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| DATE: | 10/2021 |

FIGURE 3

years. Northwest of Frazier Park, the fault runs through the Carrizo Plain, a long, treeless plain where much of the fault is plainly visible. The Elkhorn Scarp defines the fault trace along much of its length within the plain.

The southern segment, which stretches from Parkfield in Monterey County all the way to the Salton Sea, is capable of an 8.1-magnitude earthquake. At its closest, this fault passes about 35 miles (56 km) to the northeast of Los Angeles.

Earthquake Characterization: Earthquakes are characterized by magnitude, which is a quantitative measure of the earthquake strength, based on strain energy released during a seismic event. The magnitude of an earthquake is constant for any given site and is independent of the site in question.

Earthquake Intensity: The intensity of an earthquake at a random site is not constant and is subject to variations. The intensity is an indirect measurement of ground motion at a particular site and is affected by the earthquake magnitude, the distance between the site and the hypocenter (the location on the fault at depth where the energy is released), and the geologic conditions between the site and the hypocenter. Intensity, which is often measured by the Mercalli scale, generally increases with increasing magnitude and decreases with increasing distance from the hypocenter. Topography may also affect the intensity of an earthquake from one site to another. Topographic effects such as steep sided ridges or slopes may result in a higher intensity than sites located in relatively flat-lying areas.

### 6.1 2019 California Building Code (CBC), Seismic Design Criteria

The 2019 CBC (California Building Code) seismic coefficient criteria are provided here for structural design consideration.

Under the Earthquake Design Regulations of Chapter 19, Section 1613 of the CBC 2019, the following coefficients apply for the proposed structures at the site. Class D should be used for the site. The following seismic data is presented for preliminary design purposes.

| 2019 CBC Section 1613, Earthquake Loads | |
|---|---|
| Site Class Definition | D |
| Mapped Spectral Response Acceleration Parameter, $S_s$ (Figure 1613.3.1 for 0.2 second) | 1.889 |
| Mapped Spectral Response Acceleration Parameter, $S_1$ (Figure 1613.3.1 for 1.0 second) | 0.788 |
| Site Coefficient, $F_a$ (Table 1613.3.3(1) short period) | 1.2 |
| Site Coefficient, $F_v$ (Table 1613.3.3(2) 1-second period) | 1.7 |
| Adjusted Maximum Considered Earthquake Spectral Response Acceleration Parameter $S_{MS}$ | 2.266 |
| Adjusted Maximum Considered Earthquake Spectral Response Acceleration Parameter $S_{M1}$ | 1.3 |
| Design Spectral Response Acceleration Parameter, $S_{DS}$ (Eq. 16-39) | 1.511 |
| Design Spectral Response Acceleration Parameter, $S_{D1}$ (Eq. 16-40) | 0.893 |
| Notes: **Longitude: -118.0361, Latitude: 34.5779**<br>1. Site Class Designation: Class D is recommended based on subsurface condition.<br>2. Ss, SMs, and SDs are spectral response accelerations for the period of 0.2 second.<br>3. S1, SM1, and SD1 are spectral response accelerations for the period of 1.0 second.<br>4. These values may only be utilized where the value of the seismic response coefficient, Cs, satisfies equation 12.8-3 or 12.8-4 of the ASCE Standard 7-16 | |

Conformance to the above criteria for seismic excitation does not constitute any kind of guarantee or assurance that significant structural damage or ground failure will not occur if a maximum level earthquake occurs. The primary goal of seismic design is to protect life and not to avoid all damage, since such design may be economically prohibitive. Following a major earthquake, a building may be damaged beyond repair, yet not collapse.

## 6.2 Secondary Earthquake Effects

Ground shaking produced during an earthquake can result in a number of potentially damaging phenomena classified as secondary earthquake effects. These secondary effects include ground rupture, landslides, seiches and tsunamis, seismically induced settlement, and liquefaction. Descriptions of each of these phenomena and how it could potentially affect the proposed site are described as follows:

### 6.2.1 Ground Rupture

Ground rupture occurs when movement on a fault breaks the ground surface and usually occurs along pre-existing fault traces where zones of weakness already exist. The State has established Earthquake Fault Zones for the purpose of mitigating the hazard of fault rupture by prohibiting the location of most human occupancy structures across the traces of active faults.

Earthquake fault zones are regulatory zones that encompass surface traces of active faults with a potential for future surface fault rupture. The site is not located within a State established Earthquake Fault Zone and there are no know active faults within the limits of the property (Figure 3); therefore, the ground rupture hazard potential for the site is considered remote.

### 6.2.2 Landsliding

Landslides are slope failures that occur where the horizontal seismic forces act to induce soil and/or bedrock failures. The most common affect is reactivation or movement on a pre-existing landslide. Typically, existing slides that are stable under static conditions (i.e., factor-of-safety above one) become unstable and move during strong ground shaking. The site is flat and not subject to landslides.

### 6.2.3 Seiches and Tsunamis

A seiche is the resonant oscillation of a body of water, typically a lake or swimming pool caused by earthquake shaking (waves). The hazard exists where water can be splashed out of the body of water and impact nearby structures. No bodies of constant water are near the site, therefore, the hazards associated with seiches are considered low.

Tsunamis are seismic sea waves generated by undersea earthquakes or landslides. When the ocean floor is offset or tilted during an earthquake, a set of waves are generated similar to the concentric waves caused by an object dropped in water.

Tsunamis can have wavelengths of up to 120 miles and travel as fast as 500 miles per hour across hundreds of miles of deep Ocean. Upon reaching shallow coastal waters, the once two-foot high wave can become up to 50 feet in height causing great devastation to structures within reach. Tsunamis can generate seiches as well. Due to the distance of the site relative to the ocean, seiches and tsunamis are not considered a hazard to the site.

6.2.4 Seismic Settlement

Granular soils, in particular, are susceptible to settlement during seismic shaking, whether the soils liquefy or not. During grading, all residual soil will be removed and recompacted in areas of proposed grading and all new fill should be placed on firm alluvium. Therefore, the potential for seismic settlement is considered low.

6.2.5 Liquefaction

Liquefaction describes a phenomenon where cyclic stresses, which are produced by earthquake-induced ground motions, create excess pore pressures in cohesionless soils. As a result, the soils may acquire a high degree of mobility, which can lead to lateral spreading, consolidation and settlement of loose sediments, ground oscillation, flow failure, loss of bearing strength, ground fissuring, and sand boils, and other damaging deformations. This phenomenon occurs only below the water table, but after liquefaction has developed, it can propagate upward into overlying, non-saturated soil as excess pore water escapes. Descriptions of each of the phenomena associated with liquefaction are described as follows:

Lateral Spreading: Lateral spreading is the lateral movement of stiff, surficial blocks of sediments as a result of a subsurface layer liquefying. The lateral movements can cause ground fissures or extensional, open cracks at the surface as the blocks move toward a slope face, such as a stream bank or in the direction of a gentle slope. When the shaking stops, these isolated blocks of sediments come to rest in a place different from their original location and may be tilted.

Ground Oscillation: Ground oscillation occurs when liquefaction occurs at depth but the slopes are too gentle to permit lateral displacement. In this case, individual blocks may separate and oscillate on a liquefied layer. Sand boils and fissures are often associated with this phenomenon.

Flow Failure: A more catastrophic mode of ground failure than either lateral spreading or ground oscillation, involves large masses of liquefied sediment or blocks of intact material riding on a liquefied layer moving at high speeds over large distances. Generally flow failures are associated with ground slopes steeper than those associated with either lateral spreading or ground oscillation.

Bearing Strength Loss: Bearing strength decreases with a decrease in effective stress. Loss of bearing strength occurs when the effective stresses are reduced due to the cyclic loading caused by an earthquake. Even if the soil does not liquefy, the bearing of the soil may be reduced below its value either prior to or after the earthquake. If the bearing strength is sufficiently reduced, structures supported on the sediments can settle, tilt, or even float upward in the case of lightly loaded structures such as gas pipelines.

Ground Fissuring and Sand Boils: Ground fissuring and sand boils are surface manifestations associated with liquefaction and lateral spreading, ground oscillation, and flow failure. As apparent from the above descriptions, the likelihood of ground fissures developing is high when lateral spreading, ground oscillations, and flow failure occur. Sand boils occur when the high pore water pressures are relieved by drainage to the surface along weak spots that may have been created by fissuring. As the water flows to the surface, it can carry sediments, and if the pore water pressures are high enough create a gusher (sand boils) at the point of exit.

- Sediments must be relatively young in age and must not have developed large amounts of cementation;
- Sediments must consist mainly of cohesionless sands and silts;
- The sediment must not have a high relative density;
- Free groundwater must exist in the sediment; and

- The site must be exposed to seismic events of a magnitude large enough to induce straining of soil particles.

The subject site is not located in an area of potential liquefaction (Figure 3). In addition, the site is underlain by dense alluvium and groundwater levels are below at least 50 feet. As a result, the site is not subject to liquefaction.

## 7.0 CONCLUSIONS

The grading of the subject tract is considered feasible from a geologic and geotechnical engineering viewpoint, provided that the recommendations presented in this report are followed during grading.

## 8.0 RECOMMENDATIONS

The following recommendations apply to rough grading of the site.

### 8.1 Removals

The upper 5 feet of alluvium shall be removed and recompacted in areas of proposed grading and below any proposed structures. Deeper removals may be required if soft or dry soil conditions are observed during grading. Removals shall extend a minimum of five feet beyond proposed buildings. Areas to receive fill shall be prepared as discussed below under *Site Preparation* section.

### 8.2 Grading

Grading of the site will consist of a cut/fill operation to create level pads and associated streets. The grading will involve the removing and recompacting of existing near surface alluvium. We offer the following recommendations and construction considerations concerning earthwork grading at the site.

#### 8.2.1 General

Monitoring: We recommend that all earthwork (i.e., clearing, site preparation, fill placement, etc.) should be conducted with engineering control under

observation and testing by the Geotechnical Engineer and in accordance with the requirements within the *Grading* section of this report.

Job Site Safety: At all times, safety should have precedence over production work. If an unsafe job condition is observed, it should be brought to the attention of the grading contractor or the developer's representative. Once this condition is noted, it should be corrected as soon as possible, or work related to the unsafe condition should be terminated.

The contractor for the project should realize that services provided by GSC do not include supervision or direction of the actual work performed by the contractor, his employees, or agents. GSC will use accepted geotechnical engineering and testing procedures; however, our testing and observations will not relieve the contractor of his primary responsibility to produce a completed project conforming to the project plans and specifications. Furthermore, our firm will not be responsible for job or site safety on this project, as this is the responsibility of the contractor.

8.2.2 Site Preparation

Existing Structure Location: The General Contractor should locate all surface and subsurface structures on the site or on the approved grading plan prior to preparing the ground.

Existing Structure Removal: Any underground structures (e.g., septic tanks, wells, pipelines, foundations, utilities, etc.) that have not been located prior to grading should be removed or treated in a manner recommended by the Geotechnical Engineer.

Clearing and Stripping: The construction areas should be cleared and stripped of all vegetation, trees, bushes, sod, topsoil, artificial fill, debris, asphalt, concrete, and other deleterious material prior to fill placement.

Removals: Please refer to the *Removals* section of this report for specific recommendations for removals.

Subgrade Preparation: We recommend that the subgrade for foundations, pavement areas, over-excavations, and for those areas receiving any additional fill be prepared by scarifying the upper 12 inches and moisture conditioning, as required to obtain at least optimum moisture, but not greater than 120 percent of optimum. The scarified areas shall be compacted to at least 90 percent of the maximum laboratory density, as determined by ASTM D-1557-12 compaction method. All areas to receive fill should be observed by the Geotechnical Engineer prior to fill placement.

Subgrade Inspection: Prior to placing fill, the ground surface to receive fill should be observed, tested, and approved by the Geotechnical Engineer.

8.2.3 Fill Placement

Laboratory Testing: Representative samples of materials to be utilized as compacted fill should be analyzed in a laboratory to determine their physical properties. If any material other than that previously tested is encountered during grading, the appropriate analysis of this material should be conducted.

On-Site Fill Material: The on-site soils, in our opinion, are adequate for re-use in controlled fills provided the soils do not contain any organic matter, debris, and that over-sized rocks are buried in accordance with the recommendations under *Rock Fragments*.

Subgrade Verification and Compaction Testing: Regardless of material or location, all fill material should be placed over properly compacted subgrades in accordance with the *Site Preparation* section of this report. The condition of all subgrades shall be verified by the Geotechnical Engineer before fill placement or earthwork grading begins. Earthwork monitoring and field density testing shall be performed during grading to provide a basis for opinions concerning the degree of soil compaction attained.

Fill Placement: Approved on-site material shall be evenly placed, watered, processed, and compacted in controlled horizontal layers not exceeding eight inches in loose thickness, and each layer should be thoroughly compacted with approved equipment. All fill material should be moisture conditioned, as required to obtain at least optimum moisture, but not greater than 120 percent of optimum moisture content. The fill should be placed and compacted in horizontal layers, unless otherwise recommended by the Geotechnical Engineer.

Compaction Criteria - Shallow Fills: For fills less than 40 feet in vertical thickness, each layer shall be compacted to at least 90 percent of the maximum laboratory density for material used as determined by ASTM D-1557-12. The field density shall be determined by the ASTM D-1556-07 method or equivalent. Where moisture content of the fill or density testing yields compaction results less than 90 percent, additional compaction effort and/or moisture conditioning, as necessary, shall be performed, until the fill material is in accordance with the requirements of the Geotechnical Engineer.

Fill Material - Moisture Content: All fill material placed must be moisture conditioned, as required to obtain at least optimum moisture, but not greater than 120 percent. If excessive moisture in the fill results in failing results or an unacceptable “pumping” condition, then the fill should be allowed to dry until the moisture content is within the necessary range to meet the required compaction requirements or reworked until acceptable conditions are obtained.

Keying and Benching: All fills should be keyed and benched through all topsoil, slopewash, alluvium or colluvium or creep material into firm material where the slope receiving fill is steeper than 5:1 (Horizontal: Vertical) or as determined by Geotechnical Engineer. The standard acceptable bench height is four feet into suitable material. The key for side hill fills should be a

minimum of 15 feet within compacted fill or firm materials, with a minimum toe embankment of 2 feet into compacted fill, unless otherwise specified by the Geotechnical Engineer.

Slope Face - Compaction Criteria: The Contractor should be required to obtain a minimum relative compaction of 90 percent out to the finish slope face of fill slopes. This may be achieved by either overbuilding the slope a minimum of five feet, and cutting back to the compacted core, or by direct compaction of the slope face with suitable equipment, or by any other procedure which produces the required compaction. If the method of achieving the required slope compaction selected by the Contractor fails to produce the necessary results, the Contractor should rework or rebuild such slopes until the required degree of compaction is obtained, at no additional cost to the Owner or Geotechnical Engineer. Slope testing will include testing the outer 6 inches to 3 feet of the slope face during and after placement of the fill. In addition, during grading, density tests will be taken periodically on the flat surface of the fill three to five feet horizontally from the face of the slope.

Slope Face - Contractor's Responsibility: The Contractor should prepare a written detailed description of the method or methods he would employ to obtain the required slope compaction. Such documents should be submitted to the Geotechnical Engineer for review and comments prior to the start of grading.

Slope Face - Vegetation: All fill slopes should be planted or protected from erosion by methods specified in the geotechnical report, or required by the controlling governmental agency.

Subgrade Inspection: All processed ground to receive fill and over-excavations should be inspected and approved by the Geotechnical Engineer prior to placing any fill. The Contractor should be responsible for notifying the Geotechnical Engineer when such areas are ready for inspection. Inspection

of the subgrade may also be required by the controlling governmental agency within the respective jurisdictions.

Subgrade Testing: Density tests should also be made on the prepared subgrade to receive fill, unless the areas are underlain by dense alluvium, as required by the Geotechnical Engineer.

Density Testing Intervals: In general, density tests should be conducted at minimum intervals of 2 feet of fill height or every 500 to 1,000 cubic yards. Due to the variability that can occur in fill placement and different fill material characteristics, a higher number of density tests may be warranted to verify that the required compaction is being achieved.

Grading Control: Earthwork monitoring and field density testing shall be performed by the Geotechnical Engineer during grading to provide a basis for opinions concerning the degree of soil compaction attained. The Contractor should receive a copy of the Geotechnical Engineer's *Daily Field Engineering Report* which will indicate the results of field density tests for that day. Where failing tests occur or other field problems arise, the Contractor shall be notified of such conditions by written communication from the Geotechnical Engineer in the form of a conference memorandum, to avoid any misunderstanding arising from oral communication.

Drainage Devices: Drainage terraces should be constructed in compliance with the ordinances of controlling governmental agencies, or with the recommendations of the Geotechnical Engineer or Engineering Geologist.

### 8.2.4 Construction Considerations

Erosion Control: Erosion control measures, when necessary, should be provided by the Contractor during grading and prior to the completion and construction of permanent drainage controls.

Compaction Equipment: It is also the Contractor's responsibility to have suitable and sufficient compaction equipment on the project site to handle the amount of fill being placed and the type of fill material to be compacted. If necessary, excavation equipment should be shut down to permit completion of compaction in accordance with the recommendations contained herein. Sufficient watering devices/equipment should also be provided by the Contractor to achieve optimum moisture content in the fill material.

Final Grading Considerations: Care should be taken by the Contractor during final grading to preserve any berms, drainage terraces, interceptor swales, or other devices of a permanent nature on or adjacent to the property.

## 8.3 Earthwork Adjustment Factors

The following table presents shrinkage factors as based on laboratory testing of the compacted fill.

| EARTHWORK ADJUSTMENT FACTORS | |
|---|---|
| **Material Type** | **Adjustment Factor** |
| Alluvium | 5 to 10% |

## 8.4 Temporary Excavation

Where the necessary space is available, temporary unsurcharged embankments may be sloped back without shoring. The slope should not be cut steeper than the following gradient:

| Height | Temporary Gradient (Horizontal:Vertical) |
|---|---|
| 0 - 3' | Near Vertical |
| above 3' | 1:1 |

In areas where soils with little or no binder are encountered, shoring or flatter excavation slopes shall be made. These recommended temporary excavation slopes do not preclude local ravelling or sloughing.

All applicable requirements of the California Construction and General Industry Safety Orders, the Occupational Safety and Health Act, and the Construction Safety Act should be met.

Where sloped embankments are used, the top of the slope should be barricaded to prevent equipment and heavy storage loads within five feet of the top of the slope. If the temporary construction embankments are to be maintained for long periods, berms should be constructed along the top of the slope to prevent runoff water from eroding the slope faces. The soils exposed in the temporary backcut slopes during excavation should be observed by our personnel so that modifications of the slopes can be made if variations in the soil conditions occur. The temporary excavation slopes should be supported within three weeks.

### 8.5 Excavation Observation

All footing and other excavations should be observed by an Engineering Geologist or Geotechnical Engineering prior to placement of any steel to verify that the proper foundation material has been encountered. The City Inspector should also observe the excavation.

### 8.6 Utility Trenching and Backfill

Utility Trenching: Open excavations and excavations that are shored shall conform to all applicable Federal, State, and local regulations.

Backfill Placement: Approved on-site or imported fill material shall be evenly placed, watered, processed, and compacted in controlled horizontal layers not exceeding eight inches in loose thickness, and each layer should be thoroughly compacted with approved equipment. All fill material should be moisture conditioned, as required to obtain at least optimum moisture, but not greater than 120 percent of optimum moisture content. The fill should be placed and compacted on a horizontal plane, unless otherwise recommended by the Geotechnical Engineer.

Backfill Compaction Criteria: Each layer of utility trench backfill shall be compacted to at least 90 percent of the maximum laboratory density determined by ASTM D-1557-12. The field density shall be determined by the ASTM D-1556-07 method or equivalent. Where moisture content of the fill or density testing yields compaction results less than 90 percent, additional compaction effort and/or moisture conditioning, as necessary, shall be performed, until the compaction criteria is reached.

Exterior Trenches Adjacent to Footings: Exterior trenches, paralleling a footing and extending below a 1H:1V plane projected from the outside bottom edge of the footing, should be compacted to 90 percent of the laboratory standard. Sand backfill, unless it is similar to the in-place fill, should not be allowed in the trench backfill areas. Density testing, along with probing, should be accomplished to verify the desired results.

Pipe Bedding: We recommend that a minimum of 6 inches of bedding material should be placed in the bottom of the utility trench. All bedding materials shall extend at least 4 inches above the top of utilities which require protection during subsequent trench backfilling. All trenches shall be wide enough to allow for compaction around the haunches of the pipe.

Groundwater Migration: Backfilled utility trenches may act as French drains to some extent, and considerable groundwater flow along utility bedding and backfill should be expected. Wherever buried utilities, or structures which they may intersect, could be adversely affected by such drainage, provisions shall be made to collect groundwater migrating along the trench lines. These situations include where buried utilities enter buildings, particularly where they enter below grade mechanical rooms, and where buried utilities enter junction boxes or switching stations that are intended to remain dry. Mitigation measures include, but are not limited to, placement of perforated drain pipes below and continuous with bedding materials, and placement of seepage barriers such as lean mix concrete or controlled density fill (CDF).

## 9.0 FOUNDATION RECOMMENDATIONS

### 9.1 Conventional Foundation Recommendations

The following recommendations are provided for preliminary design purposes and the final expansion index should be determined following grading. In our opinion, conventional or post-tensioned foundations should be used to support the proposed structures. We offer the following site-specific recommendations and comments for purposes of footing design and construction. Foundations should be designed for low expansive soil conditions.

Bearing Subgrades: The proposed improvements should be founded into compacted fill.

Subgrade Verification: All footing subgrades for house foundations should consist of compacted fill. Under no circumstances should footings be cast atop loose, soft, or slough, debris, existing artificial fill, topsoil, or surfaces covered by standing water. We recommend that a representative of GSC verify the condition of all subgrades before any concrete is placed.

Footing Depth and Width: Footings should be continuous and be founded at a minimum depth of 18 inches into compacted fill and have a minimum width of 12 inches. Footings should be reinforced according to structural design.

Bearing Pressures: The allowable bearing capacity values shown in the following table include dead and live loads and may be used for design of footings and foundations. All foundations should be founded in compacted fill and should be reinforced according to structural design. The allowable bearing capacity values may be increased by one-third when considering short duration loading conditions such as seismic or wind loads.

| Bearing Subgrade | Embedment Depth (inches) | Allowable Bearing Capacity (psf) | Bearing Capacity Increase per Foot Deeper | Bearing Capacity Increase per Foot Wider (%) | Maximum Allowable Bearing Capacity (psf) |
|---|---|---|---|---|---|
| Compacted Fill | 18 | 2,000 | 20 | 10 | 4,000 |

Lateral Capacity: To resist lateral loads, the allowable passive earth pressures shown in the following table, expressed as an equivalent fluid pressure, may be used on that portion of shallow foundations which have a minimum embedment depth as previously recommended. When combining passive pressure and frictional resistance, the passive pressure component should be reduced by one-third.

| Soil Type | Allowable Lateral Bearing Pressure (pcf) | Maximum Allowable Lateral Bearing Pressure (pcf) | Coefficient of Friction |
|---|---|---|---|
| Compacted Fill | 250 | 2,500 | 0.4 |

## 9.2 Post-Tensioned Slab Foundation

Post-tensioned slabs should be designed in accordance with the recommendations of either the California Foundation Slab Method or Post-Tensioning Institute. Based on review of laboratory data for the on-site materials, the average soil modulus of subgrade reaction K, to be used for design is 100 pounds per cubic inch. This is equivalent to a surface bearing value of 1,000 pounds per square foot.

### 1. California Foundation Slab (Spanability) Method

It is recommended that slabs be designed for a free span of 15 feet. From a soil expansion/shrinkage standpoint, a common contributing factor to distress of structures using post-tensioned slabs is fluctuation of moisture in soils underlying the perimeter of the slab, compared to the center, causing a "dishing" or "arching" of the slabs. To mitigate this possibility, a combination of soil presaturation and construction of a perimeter "cut off" wall should be employed.

All slab foundation areas should be moisture conditioned to at least optimum moisture, but no more than 5 percent above optimum moisture for a depth of at least 12 inches below subgrade. A continuous perimeter curtain wall should extend to a depth of at least 12 inches below exterior grade for low EI soils to preserve this moisture. The cut-off walls may be integrated into the

slab design or independent of the slab and should be a minimum of six inches wide.

2. **Post-Tensioning Institute Method**

Post-tensioned slabs should have sufficient stiffness to resist excessive bending due to non-uniform swell and shrinkage of subgrade soils. The differential movement can occur at the corner, edge, or center of slab. The potential for differential uplift can be evaluated using the design specifications of the Post-Tensioning Institute. The following table presents suggested minimum coefficients to be used in the Post-Tensioning Institute design method.

| SUGGESTED COEFFICIENTS | |
|---|---|
| Thornthwaite Moisture Index | -20 in/yr |
| Depth to Constant Soil Suction | 9 (feet) |
| Constant Soil Suction: (pf) | 3.8 |

The coefficients are considered minimums and may not be adequate to represent worst case conditions such as adverse drainage, excess watering, and/or improper landscaping and maintenance. The above parameters are applicable provided structures have gutters and downspouts, yard drains, and positive drainage is maintained away from structure perimeters. Also, the values may not be adequate if the soils below the foundation become saturated or dry such that shrinkage occurs. The parameters are provided with the expectation that subgrade soils below the foundations are maintained in a relatively uniform moisture condition. Responsible irrigation of landscaping adjacent to the foundation must be practiced since over-irrigation of landscaping can cause problems. Therefore, it is important that information regarding drainage, site maintenance, settlements and effects of expansive soils be passed on to future homeowners.

Based on the above parameters, the following values were obtained from the Post Tension Institute Design manual. If a stiffer slab is desired, higher values of $y_m$ may be warranted.

| Expansion Index of Soil Subgrade | Low EI |
|---|---|
| $e_m$ center lift | 9.0 feet |
| $e_m$ edge lift | 4.7 feet |
| $Y_m$ center lift | 0.34 inch |
| $Y_m$ edge lift | 0.48 inch |

Deepened footings/edges around the slab perimeter must be used as indicated above to minimize non-uniform surface moisture migration (from an outside source) beneath the slab. An edge depth of at least 12 inches should be considered for low EI soil. The bottom of the deepened footing/edge should be designed to resist tension, using cable or reinforcement per the Structural Engineer. Other applicable recommendations presented under conventional foundation and the California Foundation Slab Method should be adhered to during the design and construction phase of the project.

### 9.3 General Recommendations

1. The above parameters are applicable provided structures have gutters and downspouts and positive drainage is maintained away from structures. Therefore, it is important that information regarding drainage and site maintenance be passed on to future homeowners. All slab foundation areas should be moisture conditioned to at least optimum moisture, but no more than 5 percent above optimum moisture for a depth of at least 12 inches below subgrade for low EI soil. The post-tensioned slab designer should determine if the moisture penetration is sufficient for this design. The subgrade soil moisture should be observed by a Soil Engineer or his/her representative prior to pouring concrete. It is suggested the above stated moisture be obtained and maintained at least a suggested 2 days prior to pouring concrete.

2. A 10-mil Visqueen vapor barrier should be placed underneath habitable area slabs and/or slabs with floor coverings. This barrier can be placed directly on the subgrade soils, but should be overlain by a two-inch layer of imported

sand. This vapor barrier shall be lapped and sealed (especially around the utility perforations) adequately to provide a continuous waterproof barrier under the entire slab.

3. The above recommendations assume, and GeoSoils Consultants, Inc. strongly recommends, that surface water will be kept from infiltrating into the subgrade adjacent to the house foundation system. This may include, but not be limited to rainwater, roof water, landscape water and/or leaky plumbing. The lots are to be fine graded at the completion of construction to include positive drainage away from the structure and roof water will be collected via gutters, downspouts, and transported to the street in buried drainpipes. Homebuyers should be cautioned against constructing open draining planters adjacent to the houses or obstructing the yard drainage in any way.

4. Utility trenches beneath the slabs should be backfilled with compacted native soil materials, free of rocks.

5. Subgrade soil beneath footings and slabs should be premoistened prior to placement of concrete.

6. Standard City of Palmdale structural setback guidelines are applicable, except where superseded by specific recommendations by the Project Geologist and Geotechnical Engineer.

7. Building or structure footings shall be set back a horizontal distance, x, from the face of adjacent descending slope. The horizontal distance is calculated as $x=H/3$, where H is the height of slope. The distance x should not be less than 5 feet nor more than 40 feet. The distance x may be provided by deepening the footings.

8. Prior to placing concrete in the footing excavations, an inspection should be made by our representative to ensure that the footings are free of loose and disturbed soils and are embedded in the recommended material.

## 10. CEMENT TYPE AND CORROSION POTENTIAL

Based on preliminary testing by other consultants, onsite soil has a negligible to moderate sulfate content and is moderately corrosive. Additional testing will be performed at the completion of grading and the results will be presented in a final compaction report. A qualified corrosion engineer shall be consulted to further evaluate the corrosive properties of the soil.

## 11. PRELIMINARY PAVEMENT RECOMMENDATIONS

The R-Value of 54 was obtained from the adjacent Tract 73068 (Reference 6) and used in the following table. Additional R-Values will be taken from street subgrade following grading to confirm the following pavement sections.

The following pavement sections should be considered based on a traffic index provided by the City of Palmdale.

**TABLE I**
**PAVEMENT RECOMMENDATIONS**

| Traffic Index | Subgrade "R"-value | AC Thickness (inches) | Class 2 Aggregate[(1)] Base Thickness (inches) |
|---|---|---|---|
| 4.0 | 54 | 3.0 | 4,0 |
| 5.0 | 54 | 3.0 | 4.5 |
| 10.0 | 54 | 5.0 | 8.0 |

[(1)] CalTrans Class 2 Aggregate Base, R≥78, SE ≥ 22 (or approved equivalent).

The recommended pavement sections provided above are meant as minimums. If thinner or highly variable pavement sections are constructed, increased maintenance and repair could be expected. If the ADT (average daily traffic) or ADTT (average daily truck traffic) increases beyond that intended, as reflected by the traffic indexes used for design, increased maintenance and repair could be required for the pavement section.

## 12.0 CLOSURE

We appreciate this opportunity to be of continued service to you. If you have any questions regarding the content of this report or any other aspects of the project, please do not hesitate to contact us.

## REFERENCES

1. Barrows, A.G., Kahle, J.E. and Beeby, D.J., 1987, Earthquake hazards and tectonic history of the San Andreas Fault Zone, Los Angeles County, California in Hester, R.L. and Hollinger, D.E., editors, San Andreas Fault – Cajon Pass to Palmdale: Pacific Section American Association of Petroleum Geologists, Volume and Guidebook No. 59, p. 1-92.

2. California Geological Survey, dated 2005, Seismic Hazard Zone Report 095, Seismic Hazard Zone Report for the Lancaster West 7.5-Minute Quadrangle, Los Angeles County, California, California Department of Conservation, Division of Mines and Geology, 1997, Guidelines for evaluating and mitigating seismic hazards in California: California Division of Mines and Geology Special Publication 117, 74 p.

3. California Department of Conservation, Division of Mines and Geology, 2004, Recommended criteria for delineating seismic hazard zones: California Division of Mines and Geology Special Publication 118, 12 p.

4. Dibblee, T.W., Jr., 1997, Geologic Map of the Pacifico Mountain and Palmdale Quadrangles, Los Angeles

5. Dibblee, T.W. Jr., 1960, Geologic map of the Lancaster Quadrangle, Los Angeles County, California: U.S. Geological Survey Mineral Investigations Field Studies Map MF-76, map scale 1:62,500

6. GeoSoils Consultants, Inc. dated September 28, 2021, Geologic and Geotechnical Engineering Investigation, Proposed Single-Family Residential Development, Tract 73068, East Palmdale Boulevard, Palmdale, California

## REFERENCE DOCUMENT:

PROVIDENT TITLE COMPANY, 615 N. NASH STREET, SUITE 308
EL SEGUNDO, CA 90245. PHONE: 800-794-8094

PRELIMINARY TITLE REPORT, ORDER NO.: 12386894
DATED AS OF FEBRUARY 25, 2021

## ASSESSOR'S PARCEL NUMBERS:

A.P.N. **3023-002-184**

## SITE AREA:

GROSS AREA = **20 ACRES**

## UTILITY PURVEYORS/PUBLIC SERVICES

| | |
|---|---|
| ELECTRICITY: | SOUTHERN CALIFORNIA EDISON COMPANIES |
| WATER: | LOS ANGELES COUNTY WATER WORKS DISTRICT # 40 |
| WASTE WATER: | LOS ANGELES COUNTY SANITATION DISTRICT NO. 14 |
| GAS: | SOUTHERN CALIFORNIA GAS COMPANY |

## LAND USE DATA

| | |
|---|---|
| JURISDICTION: | CITY OF PALMDALE, LOS ANGELES COUNTY |
| EXISTING ZONING: | R-7,000 (MIN. LOT SIZE 7,000 SQ. FT.) |
| PROPOSED ZONING: | R-7,000 (MIN. LOT SIZE 7,000 SQ. FT.) |
| GENERAL PLAN: | SFR-3 |
| EXISTING USE: | VACANT |
| PROPOSED USE: | 65 SINGLE-FAMILY RESIDENTIAL DWELLING UNITS, BASIN LOT, COMMON AREA LOT |
| PROPOSED DENSITY: | 3.30 DU/AC (GROSS) |

## LEGAL DESCRIPTION:

PROPERTY ADDRESS: VACANT LAND, , CA

ORDER NO: 00138235-994-LT2-DB
DATED: SEPTEMBER 9, 2020 AT 7:30 A.M.
SEE COVER PAGE FOR DETAILS.

**PRELIMINARY REPORT**

1. THE ESTATE OR INTEREST IN THE LAND HEREINAFTER DESCRIBED OR REFERRED TO COVERED BY THIS REPORT IS:
**FEE ESTATE**
2. TITLE TO SAID ESTATE OR INTEREST AT THE DATE HEREOF IS VESTED IN:
**MING JAW LIOU AND CHI LON LIOU, TRUSTEES OF THE MING & CHI LIOU TRUST DATED APRIL 14, 2011**
3. THE LAND REFERRED TO IN THIS REPORT IS DESCRIBED AS FOLLOWS:

**EXHIBIT "A"**

**LEGAL DESCRIPTION**
THE LAND REFERRED TO HEREIN BELOW IS SITUATED , IN THE COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AND IS DESCRIBED AS FOLLOWS:

LOT 10 OF TRACT NO, 2916, IN THE CITY OF PALMDALE, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, AS PER MAP RECORDED IN BOOK 31, PAGE 13, OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

APN: 3023-002-184

END OF LEGAL DESCRIPTION

**PLEASE NOTE:**

**LEGAL DESCRIPTION IS COPIED FROM TITLE REPORT EXHIBIT "A".**

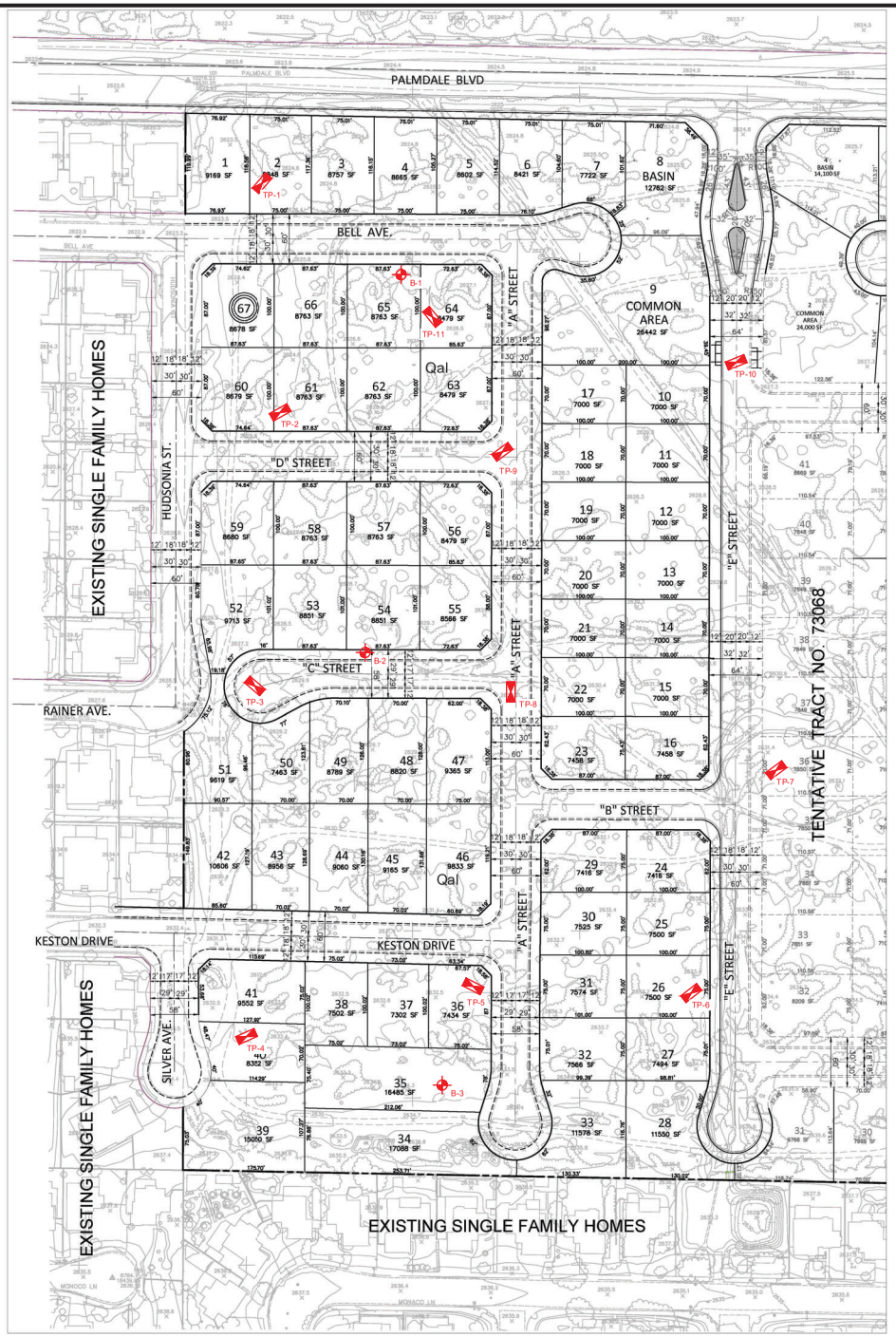
## BASIS OF BEARINGS:

**THE BASIS OF BEARINGS FOR THIS MAP IS NORTH 0°701" EAST HELD ON THE CENTERLINE OF HUDSONIA STREET BETWEEN FOUND MONUMENTS AT LILAC DRIVE AND LILY WAY AS SHOWN ON TRACT No. 060954 RECORDED IN BOOK 1309 PAGES 45-48, INCLUSIVE OF MAPS, IN THE OFFICE OF THE COUNTY RECORDER OF LOS ANGELES COUNTY, STATE OF CALIFORNIA.**

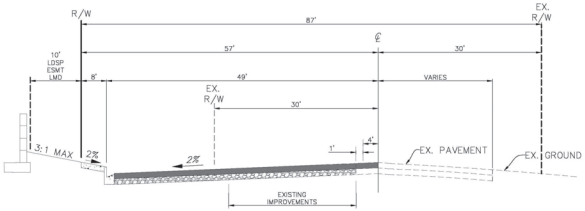
## BENCHMARK:

**BM NUMBER: UL4975**

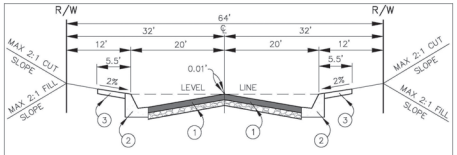
**QUAD YEAR: 2010** **ELEVATION (FEET): 2627.325**
**DESCRIPTION: 2" IP WITH DPW BM TAG IN WELL 6" DN 120' W & 45' N/O C/L INT PALMDALE BL & 55TH ST E 3' N/O PP #4040256E MKR POST 2' N/O MON**



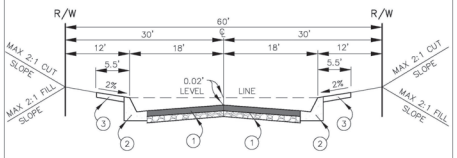
VICINITY MAP
N.T.S.



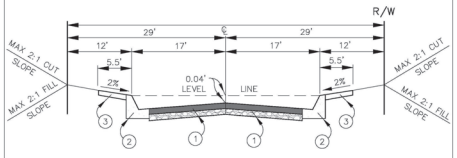

**PALMDALE BLVD.**
NTS



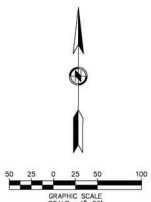

TYPICAL STREET SECTION - 64' R.O.W.
N.T.S.




TYPICAL STREET SECTION - 60' R.O.W.
N. T.S.




TYPICAL STREET SECTION - 58' R.O.W.
N.T.S.




MDN 22503

GSC GeoSoils Consultants Inc. 8634 Valjean Avenue Van Nuys, CA 91406

GEOLOGIC MAP
TENTATIVE TRACT 83359
PALMDALE, CALIFORNIA
RAVELLO HOLDINGS, LLC.

| WORK ORDER | DATE | SCALE |
|---|---|---|
| 7648 | 10/2021 | 1"= 50' |

REVISED: PLATE 1

## EXPLANATION

B-3 APPROXIMATE LOCATION OF BORING

TP-1 APPROXIMATE LOCATION OF TEST PIT

**OWNER/APPLICANT:**
RAVELLO HOLDINGS
211 VILLAGE COMMONS, SUITE 11
CAMARILLO, CA. 93012
(310) 926-6363
REPRESENTATIVE: KEVIN HARRISON

**ENGINEER'S STATEMENT**
THIS MAP WAS PREPARED BY ME OR UNDER MY DIRECTION AND IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE

REGISTERED PROFESSIONAL ENGINEER IMAD ABOUJAWDAH No. 51299 Exp. 9-30-23 CIVIL STATE OF CALIFORNIA

IMAD ABOUJAWDAH P.E. C51299 DATE

APPROVED BY:
DRAWING SCALE: 1"=50'
DRAWN: ISA DESIGNED: ISA
JOB NUMBER: CDD JOB No.

Civil Design & Drafting inc.
885 PATRIOT DRIVE, Unit C
MOORPARK, CA 93021
Phone 805-522-2022
email: CDD@civildesignanddrafting.com

CITY OF PALMDALE
TENTATIVE TRACT NO. 83359
DATE ISSUED: APRIL 21, 2021
SHEET 1 OF 1 SHEETS

October 27, 2021
W.O. 7648

# APPENDIX A

# FIELD EXPLORATION PROCEDURES

October 27, 2021
W.O. 7648

# APPENDIX A

## FIELD EXPLORATION PROCEDURES

Our backhoe test pits and borings were excavated by an independent company working under subcontract to GSC. Samples were obtained via the California ring sampler with a 140 lb hammer and 30-inch drop. Due to the loose sandy nature of the upper soil, undisturbed samples could not be obtained from the test pits.

A representative from our firm continuously observed the backhoe test pits and borings, logged the subsurface conditions, and collected representative soil samples. All samples were stored in watertight containers and later transported to our laboratory for further visual examination and testing, as deemed necessary. After the test pit was completed, the test pit was backfilled with soil cuttings.

The enclosed test pit logs (Plates TP-1 through TP-11) and boring logs (Plates A-1 through A-3) describes the vertical sequence of soils and materials encountered in each test pit, based primarily on our field classifications and supported by our subsequent laboratory examination and testing. Where a soil contact was observed to be gradational, our log indicates the average contact depth. Where a soil type changed between sample intervals, we inferred the contact depth. Our log also included moisture and density results from the laboratory testing performed on these soil samples.

# TEST PIT LOG 1

GeoSoils Consultants, Inc.

**CLIENT:** Ravello Holdings

**ELEVATION:**

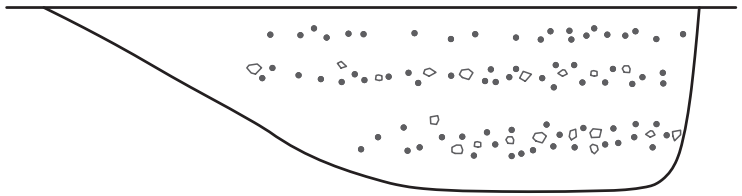
**LOGGED BY:** JM

**W.O.** 7648

**DATE:** 8/12/2021

| DEPTH | MATERIAL | DESCRIPTION | COMMENTS |
|---|---|---|---|
| 0-5' | Alluvium (Qal) | Gray brown silty SAND and silty gravely SAND, dry, moderately loose horizontaly stratified with varying concentration of gravels and sands. | |
| at 4' | | 6 - inches of coarse SAND and gravels, gravels ar up to 3/4 inches in size and sabanaglar in shape | |

**SCALE** **H:** **V:** **PIT ORIENT:** **NATURAL SLOPE ANGLE** **TD** 5.0'



TP-1

# TEST PIT LOG 2

GeoSoils Consultants, Inc.

**CLIENT:** Ravello Holdings

**ELEVATION:**

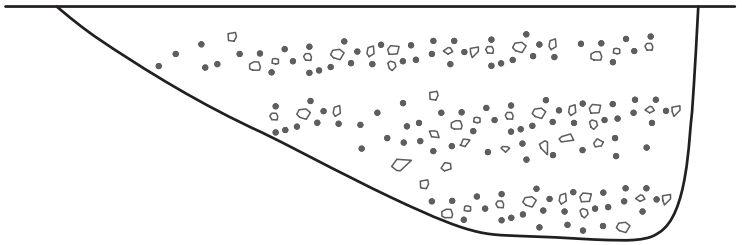
**LOGGED BY:** JM

**W.O.** 7648

**DATE:** 8/12/2021

| DEPTH | MATERIAL | DESCRIPTION | COMMENTS |
|---|---|---|---|
| 0-6' | Alluvium (Qal) | Gray brown, ceravelly SAND and sandy grave. Some silty, loose, dry, cohesinless. Abundent subrounded gravels and small cobble present. Gravels are concentated in horizontal strata, with larger gravels and small cobble concentrated at the bottom of the leaves | Abandant caving |

**SCALE** **H:** **V:** **PIT ORIENT:** **NATURAL SLOPE ANGLE** **TD** 6.0'



TP-2

# TEST PIT LOG 3

GeoSoils Consultants, Inc.

**CLIENT:** Ravello Holdings

**ELEVATION:**

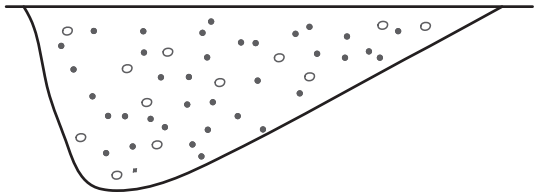
**LOGGED BY:** JM

**W.O.** 7648

**DATE:** 8/12/2021

| DEPTH | MATERIAL | DESCRIPTION | COMMENTS |
|---|---|---|---|
| 0-5' | Alluvium (Qal) | Gray brown, silty graveller SAND, loose, dry, locally stractundess, abundant subrounded pea gravls spread throughout, roots present. | |

**SCALE** **H:** **V:** **PIT ORIENT:** **NATURAL SLOPE ANGLE** **TD** 5.0'



TP-3

# TEST PIT LOG 4

GeoSoils Consultants, Inc.

**CLIENT:** Rabello Holdings

**ELEVATION:**

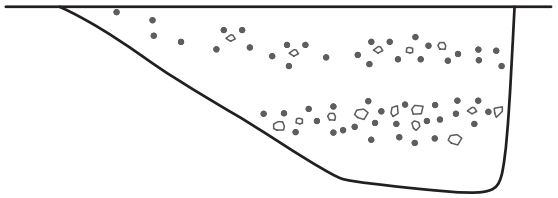
**LOGGED BY:** JV

**W.O.** 7648

**DATE:** 8/12/2021

| DEPTH | MATERIAL | DESCRIPTION | COMMENTS |
|---|---|---|---|
| 0-5 | Alluvium (Qal) | Gray brown, silty gravelly SAND and grevelly SAND, dry, loose, some roots. Some horizontal stratification. | Abundant caving |

**SCALE** **H:** **V:** **PIT ORIENT:** **NATURAL SLOPE ANGLE** **TD** 5.0'



TP-4

# TEST PIT LOG 5

GeoSoils Consultants, Inc.

**CLIENT:** Ravello Holdings

**ELEVATION:**

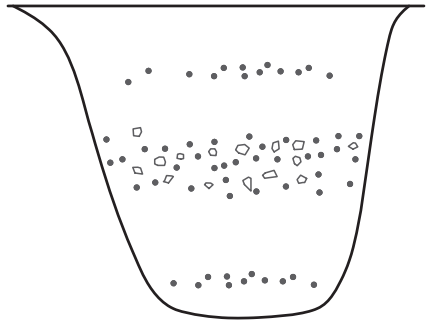
**LOGGED BY:** JV

**W.O.** 7648

**DATE:** 8/12/2021

| DEPTH | MATERIAL | DESCRIPTION | COMMENTS |
|---|---|---|---|
| 0-8' | Alluvium (Qal) | Gray brown, silty SAND, and gravelly SAND, loose, dry, horizontal stratification of gravels and sands. | Abundant caving.<br><br>Test pit logged from surface |

**SCALE** **H:** **V:** **PIT ORIENT:** **NATURAL SLOPE ANGLE** **TD** 8.0'



TP-5

# TEST PIT LOG 6

GeoSoils Consultants, Inc.

**CLIENT:** Ravello Holdings

**ELEVATION:**

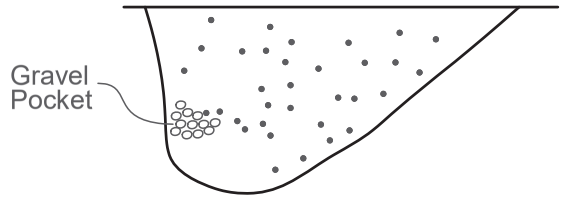
**LOGGED BY:** JM

**W.O.** 7648

**DATE:** 8/12/2021

| DEPTH | MATERIAL | DESCRIPTION | COMMENTS |
|---|---|---|---|
| 0-5' | Alluvium (Qal) | Gray brown, silty SAND and sandy gravel, loose, dry | |

**SCALE** **H:** **V:** **PIT ORIENT:** **NATURAL SLOPE ANGLE** **TD** 5.0'




TP-6

# TEST PIT LOG 7

GeoSoils Consultants, Inc.

**CLIENT:** Ravello Holdings

**ELEVATION:**

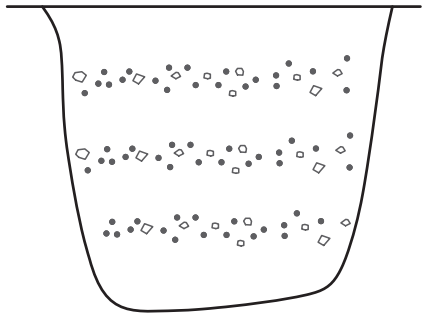
**LOGGED BY:** JM

**W.O.** 7648

**DATE:** 8/12/2021

| DEPTH | MATERIAL | DESCRIPTION | COMMENTS |
|---|---|---|---|
| 0-8' | Alluvium (Qal) | Gray brown, silty SAND, and gravelly SAND, loose, dry, horizontal stratification of gravels and sands. | Abundant caving.<br><br>Test pit logged from surface |

**SCALE** **H:** **V:** **PIT ORIENT:** **NATURAL SLOPE ANGLE** **TD** 8.0'



TP-7

# TEST PIT LOG 8

GeoSoils Consultants, Inc.

**CLIENT:** Ravello Holdings

**ELEVATION:**

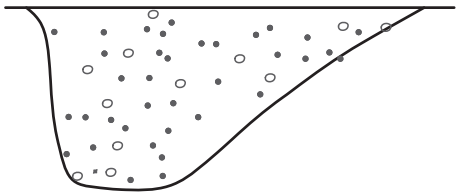
**LOGGED BY:** JM

**W.O.** 7648

**DATE:** 8/12/2021

| DEPTH | MATERIAL | DESCRIPTION | COMMENTS |
|---|---|---|---|
| 0-5' | Alluvium (Qal) | Gray brown, silty SAND and gravely SAND, dry, loose, sitlty soil and roots found in upper 2-feet, pea gravels and sands from 2-5 feet. | Caving in gravels from 2-5 feet deep |

**SCALE** **H:** **V:** **PIT ORIENT:** **NATURAL SLOPE ANGLE** **TD** 5.0'



TP-8

# TEST PIT LOG 9

GeoSoils Consultants, Inc.

**CLIENT:** Ravello Holdings

**ELEVATION:**

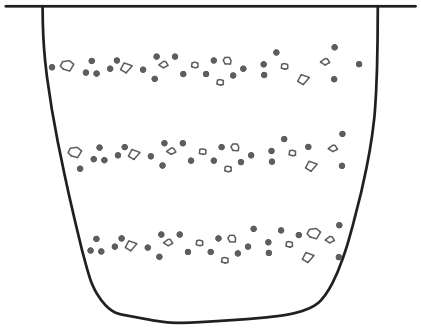
**LOGGED BY:** JM

**W.O.** 7648

**DATE:** 8/12/2021

| DEPTH | MATERIAL | DESCRIPTION | COMMENTS |
|---|---|---|---|
| 0-8' | Alluvium (Qal) | Gray brown, silty SAND, and gravelly SAND, loose, dry, horizontal stratification of gravels and sands. | Abundant caving.<br><br>Test pit logged from surface |

**SCALE** **H:** **V:** **PIT ORIENT:** **NATURAL SLOPE ANGLE** **TD** 8.0'



TP-9

# TEST PIT LOG 10

GeoSoils Consultants, Inc.

**CLIENT:** Ravello Holdings

**ELEVATION:**

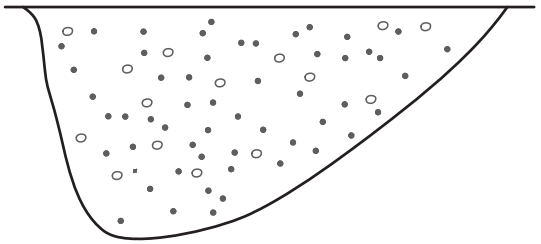
**LOGGED BY:** JM

**W.O.** 7648

**DATE:** 8/12/2021

| DEPTH | MATERIAL | DESCRIPTION | COMMENTS |
|---|---|---|---|
| 0-6' | Alluvium (Qal) | | |
| 0-4' | | Gray brown, silty goravelly SAND, loose, dry, abundant subangler to subroundere pea gravels | Abundant caving |
| 4-6' | | Gray brown, SAND, loose, dry, very fine to medium ground | |

**SCALE** **H:** **V:** **PIT ORIENT:** **NATURAL SLOPE ANGLE** **TD** 6.0'



TP-10

# TEST PIT LOG 11

GeoSoils Consultants, Inc.

**CLIENT:** Rabello Holdings

**ELEVATION:**

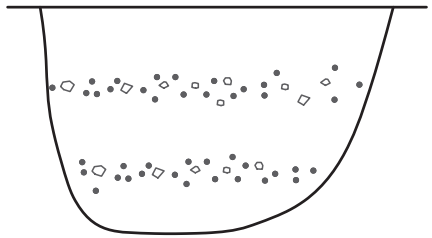
**LOGGED BY:** JM

**W.O.** 7648

**DATE:** 8/12/2021

| DEPTH | MATERIAL | DESCRIPTION | COMMENTS |
|---|---|---|---|
| 0-6' | Alluvium (Qal) | Gray brown, silty SAND, and gravelly SAND, loose, dry, horizontal stratification of gravels and sands. | Abundant caving.<br><br>Test pit logged from surface |

**SCALE** **H:** **V:** **PIT ORIENT:** **NATURAL SLOPE ANGLE** **TD** 6.0'



TP-11

# GEOTECHNICAL BORING LOG

| | | | | | |
|---|---|---|---|---|---|
| **PROJECT NAME** | **Ravello Holdings** | | | **W.O.** | **7648** |
| DRILLING COMPANY | Choice Drilling | DATE STARTED | 8/17/2021 | BORING NO. | B-1 |
| TYPE OF DRILL RIG | Truck Mounted | LOGGED BY | JM | SHEET | |
| DRILLING METHOD | Hollow Stem | HAMMER WT (lbs) | | GROUND ELEV. | |
| DIAMETER OF HOLE (IN) | 8 | DROP (IN) | | GW ELEV. | |
| Boring Location: | | | | | |

| Depth (ft) | Sample Type | Blows / 6" | GEOTECHNICAL DESCRIPTION | Moisture Content (%) | Dry Density (pcf) | Other Tests |
|---|---|---|---|---|---|---|
| 0 | | | **0-30', ALLUVIUM (Qal)** | | | ds<br>max<br>chem<br>expan |
| 5 | | 9/9/10 | 5', Gray, medium to coarse grained sand, cohesionless, dry, moderately dense | 0.3 | 113.6 | cons |
| 10 | | 11/14/16 | 10', Gray, medium to coarse grained sand, cohesionless, dry, moderately dense | 0.4 | | cons |
| 15 | | 18/28/29 | 15', Gray, gravelly sand, well graded, dense, dry | 0.5 | | |
| 20 | | 23/30/29 | 20', Gray, gravelly sand, well graded, dense, dry, cohesionless | | | |
| 25 | | 24/18/20 | 25', No recovery | | | |
| 30 | | 50 for 4" | 30', Gray and brown, sandy gravel, sand, and cobble, dense, dry, only partial sample recovery due to cobble | 1.8 | 106 | |
| | | | TD=30'<br>No groundwater<br>No caving | | | |

**LEGEND**

- Standard Penetration Test
- California Ring
- Rock Core
- Bulk Sample

SIEVE: Grain Size Analysis
MAX: Maximum Dry Density
DS: Direct Shear
CONS: Consolidation
HYDR: Hydrometer Analysis
EXPAN: Expansion Index
CHEM: Chemical Tests

PLATE **A-1**

GSC GeoSoils Consultants Inc.
GEOTECHNICAL · GEOLOGIC · ENVIRONMENTAL

# GEOTECHNICAL BORING LOG

| | | | | | |
|---|---|---|---|---|---|
| **PROJECT NAME** | **Ravello Holdings** | | | **W.O.** | **7648** |
| DRILLING COMPANY | Choice Drilling | DATE STARTED | 8/17/2021 | BORING NO. | B-2 |
| TYPE OF DRILL RIG | Truck Mounted | LOGGED BY | JM | SHEET | |
| DRILLING METHOD | Hollow Stem | HAMMER WT (lbs) | | GROUND ELEV. | |
| DIAMETER OF HOLE (IN) | 8 | DROP (IN) | | GW ELEV. | |
| Boring Location: | | | | | |

| Depth (ft) | Sample Type | Blows / 6" | GEOTECHNICAL DESCRIPTION | Moisture Content (%) | Dry Density (pcf) | Other Tests |
|---|---|---|---|---|---|---|
| 0 | | | **0-30', ALLUVIUM (Qal)** | | | |
| | | 7/10/13 | 2.5', Brownish gray, very fine to coarse grained, gravelly sand, dry, cohesionless, minor rounded pea gravel | 0.7 | 107.3 | |
| 5 | | 11/16/25 | 7.5', No recovery | | | |
| 10 | | 23/24/26 | 12.5', Gray, gravelly sand, moderately dense, dry, well graded | 0.7 | 118.7 | |
| 15 | | 28/37/38 | 17.5', Gray, fine to medium grained sand, dense, dry | 0.9 | 113.2 | cons |
| 20 | | 40/44/50 for 5" | 22.5', Gray, sandy gravel, dense, dry, small cobble present | 0.9 | | |
| 25 | | 50 | 27.5', Gray, sandy gravel, dense, dry, small cobble present | 0.9 | | |
| 30 | | | TD=27.5'<br>No groundwater<br>No caving | | | |

**LEGEND**

- Standard Penetration Test
- California Ring
- Rock Core
- Bulk Sample

SIEVE: Grain Size Analysis
MAX: Maximum Dry Density
DS: Direct Shear
CONS: Consolidation
HYDR: Hydrometer Analysis
EXPAN: Expansion Index
CHEM: Chemical Tests

PLATE **A-2**

GSC GeoSoils Consultants Inc.
GEOTECHNICAL · GEOLOGIC · ENVIRONMENTAL

# GEOTECHNICAL BORING LOG

| | | | | | |
|---|---|---|---|---|---|
| **PROJECT NAME** | **Ravello Holdings** | | | **W.O.** | **7648** |
| DRILLING COMPANY | Choice Drilling | DATE STARTED | 8/17/2021 | BORING NO. | B-3 |
| TYPE OF DRILL RIG | Truck Mounted | LOGGED BY | JM | SHEET | |
| DRILLING METHOD | Hollow Stem | HAMMER WT (lbs) | | GROUND ELEV. | |
| DIAMETER OF HOLE (IN) | 8 | DROP (IN) | | GW ELEV. | |

Boring Location:

| Depth (ft) | Sample Type | Blows / 6" | GEOTECHNICAL DESCRIPTION | Moisture Content (%) | Dry Density (pcf) | Other Tests |
|---|---|---|---|---|---|---|
| 0 | | | **0-30', ALLUVIUM (Qal)** | | | max expan |
| 5 | | 8/10/11 | 5', Gray, gravelly sand, dry, cohesionless, well graded, moderately dense | 0.8 | | |
| | | 4/17/21 | 7.5', Gray, gravelly sand, dry, cohesionless, well graded, moderately dense | 0.9 | | cons |
| 10 | | 14/15/17 | 10', Gray, gravelly sand, well graded, slightly moist, moderately dense | 2.4 | 109.4 | cons |
| 15 | | 14/24/40 | 15', Gray, gravelly sand, well graded, slightly moist, moderately dense | 1.8 | 111.1 | |
| 20 | | 14/20/21 | 20', Brownish gray, sandy gravel, moderately dense, slightly moist, some small cobble | 1.6 | 119.9 | |
| 25 | | 24/29/31 | 25', Brownish gray, sandy gravel, moderately dense, slightly moist, some small cobble | 1.2 | | |
| 30 | | | TD = 30'<br>No groundwater<br>No caving | | | |

**LEGEND**

- Standard Penetration Test
- California Ring
- Rock Core
- Bulk Sample

SIEVE: Grain Size Analysis
MAX: Maximum Dry Density
DS: Direct Shear
CONS: Consolidation
HYDR: Hydrometer Analysis
EXPAN: Expansion Index
CHEM: Chemical Tests

PLATE **A-3**

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October 27, 2021
W.O. 7648

# APPENDIX B

# LABORATORY TESTING PROCEDURES AND RESULTS

# APPENDIX B

## LABORATORY TESTING PROCEDURES AND RESULTS

### Moisture-Density

The in-situ moisture content and dry unit weights were determined for each of the undisturbed ring samples. The data obtained are shown on the boring logs.

### Compaction Tests

Three compaction tests were performed to determine to moisture density relationships of the typical surficial soils encountered on the site. The laboratory standard used was in accordance with ASTM Test Designation D-1557-12. A summary of the compaction test results are shown in Table B-1.

**TABLE B-1**
**COMPACTION TEST RESULTS**

| Test Pit No. and Sample Borimg Depth | Description | Maximum Dry Density (pcf) | Optimum Moisture (%) |
|---|---|---|---|
| B-1 @ 0-5' | Orange brown, silty fine to coarse SAND | 124.0 | 9.5 |
| TP-1 @ 5' | Gray brown, slightly silty, fine to coarse SAND | 121.0 | 9.5 |
| TP-8 @ 3' | Gray brown, slightly silty, fine to coarse SAND | 122.5 | 11.5 |

### Consolidation Tests

Six (6) consolidation tests were performed on selected ring samples. The samples were inundated at an approximate load of one ton per square foot to monitor the hydroconsolidation. Loads were applied to the samples in several increments in geometric progression and resulting deformations were recorded at selected time intervals. Results of the consolidation tests are presented on Plates C-1 to C-6.

### Shear Tests

One shear test was performed in a strain-control type Direct Shear Machine. The shear testing was performed in series corresponding to the date the samples were collected. The sample was sheared under varying confining loads in order to determine the Coulomb shear strength parameters: cohesion (c), and angle of internal friction ($\phi$) for peak and residual strength conditions. The sample was tested in an artificially-saturated condition. The results are plotted and a linear approximation is drawn of the failure curve. The results are shown on the Shear Test Diagram as Plate SH-1.

Ravello Holdings
W.O.: 7648

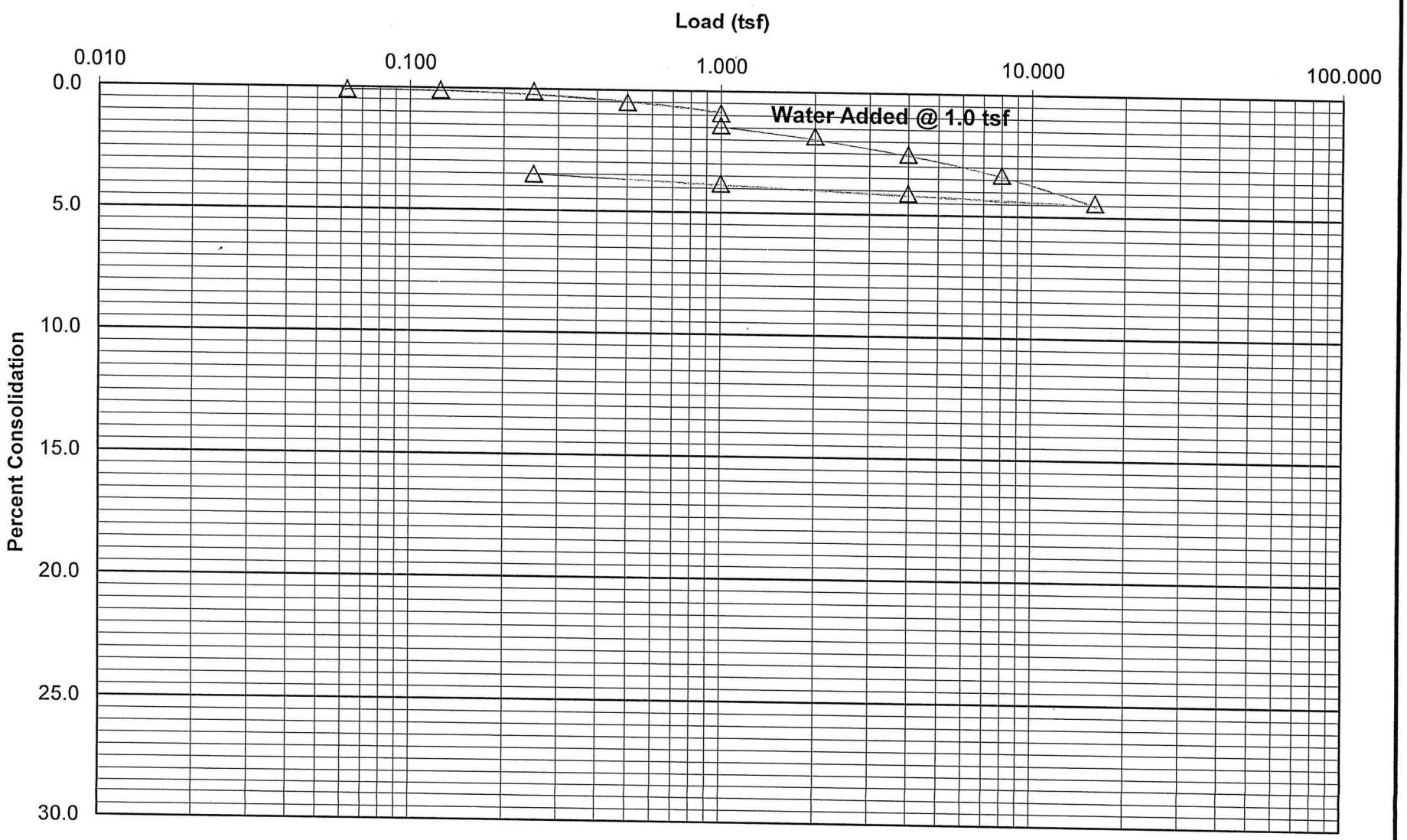
Date of Test: 9/21

# GeoSoils Consultants, Inc.

**Geotechnical Engineering * Engineering Geology**

Moisture(%)
Before: 0.3 After: 13.0

Sample(in.)
Height: 1.00 Diameter: 2.36




**B-1 @ 5.0'**
Light gray brown very fine to coarse SAND.

## Consolidation Diagram

C7648.1

**Plate C-1**

Ravello Holdings
W.O.: 7648

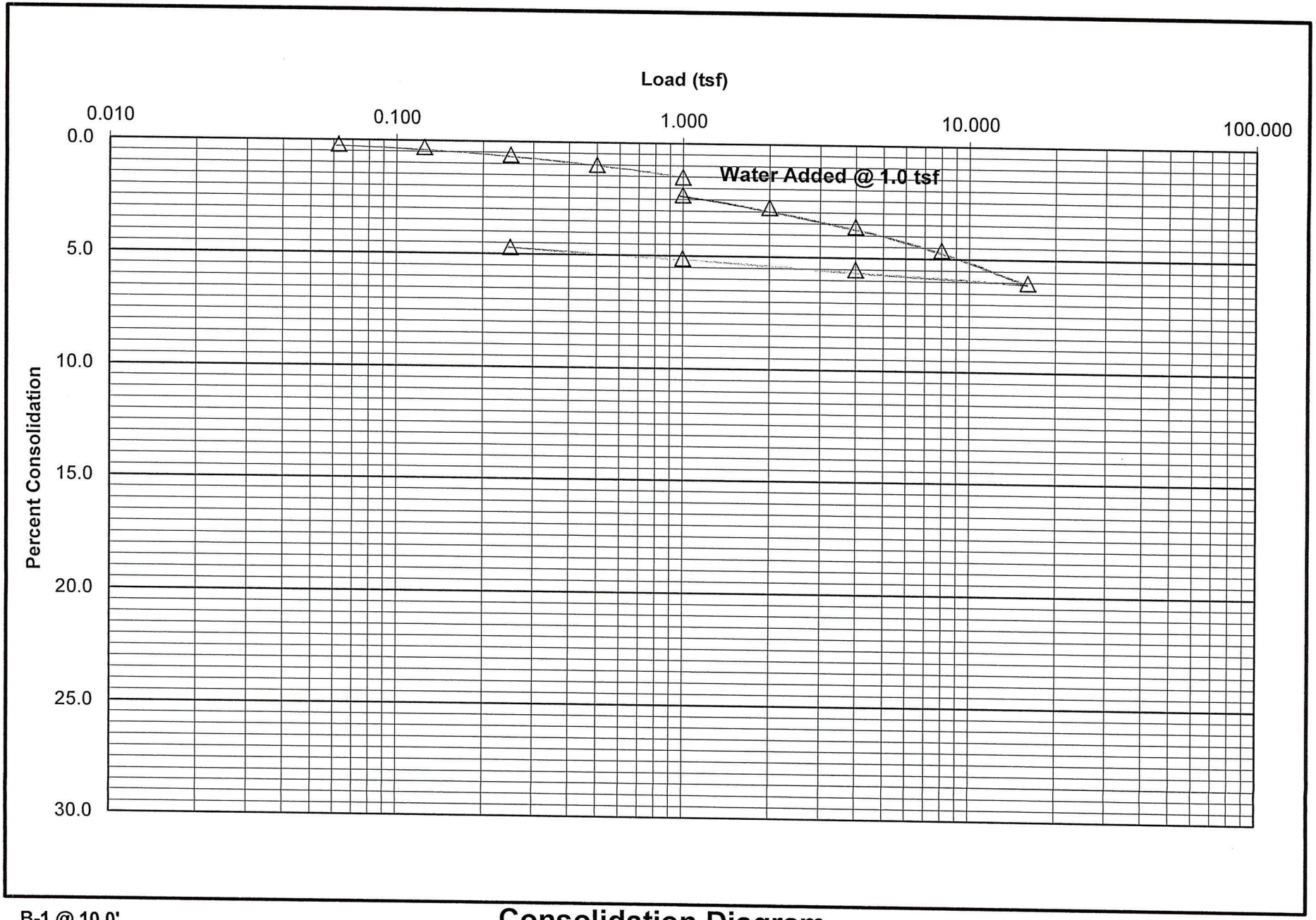
Date of Test: 9/21

# GeoSoils Consultants, Inc.

Geotechnical Engineering * Engineering Geology

Moisture(%)
Before: 0.4 After: 16.6

Sample(in.)
Height: 1.00 Diameter: 2.36




**B-1 @ 10.0'**
Light gray brown very fine to coarse SAND.

## Consolidation Diagram

C7648.2

**Plate C-2**

Ravello Holdings
W.O.: 7648

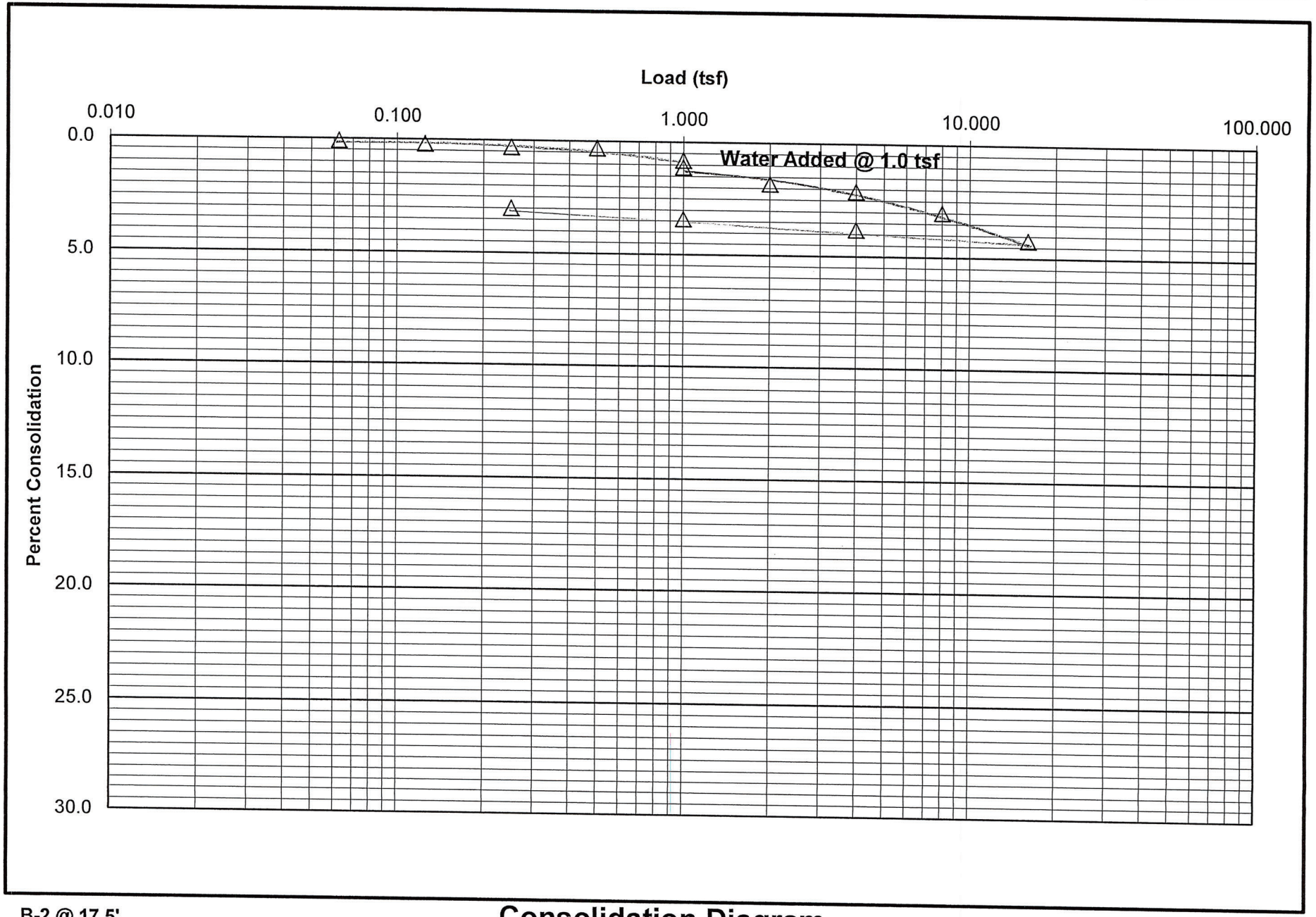
Date of Test: 9/21

# GeoSoils Consultants, Inc.

**Geotechnical Engineering * Engineering Geology**

Moisture(%)
Before: 0.9 After: 17.3

Sample(in.)
Height: 1.00 Diameter: 2.36




**B-2 @ 17.5'**
Light gray brown slightly silty very fine to fine SAND.

## Consolidation Diagram

C7648.3

**Plate C-3**

Ravello Holdings
W.O.: 7648

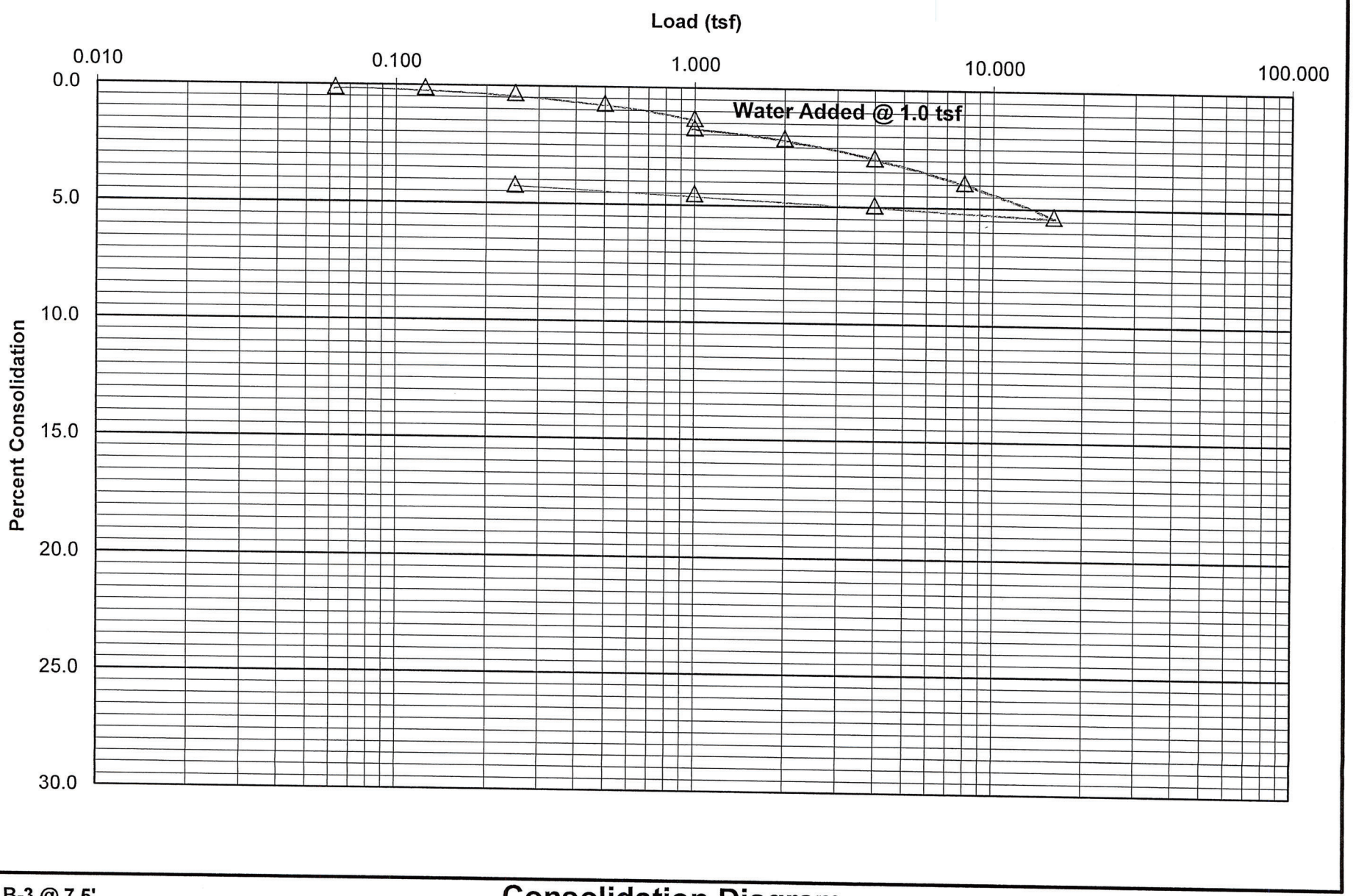
Date of Test: 9/21

# GeoSoils Consultants, Inc.

Geotechnical Engineering * Engineering Geology

Moisture(%)
Before: 0.9 After: 15.8

Sample(in.)
Height: 1.00 Diameter: 2.36




**B-3 @ 7.5'**
Light gray brown very fine to coarse SAND.

## Consolidation Diagram

C7648.4

**Plate C-4**

Ravello Holdings
W.O.: 7648

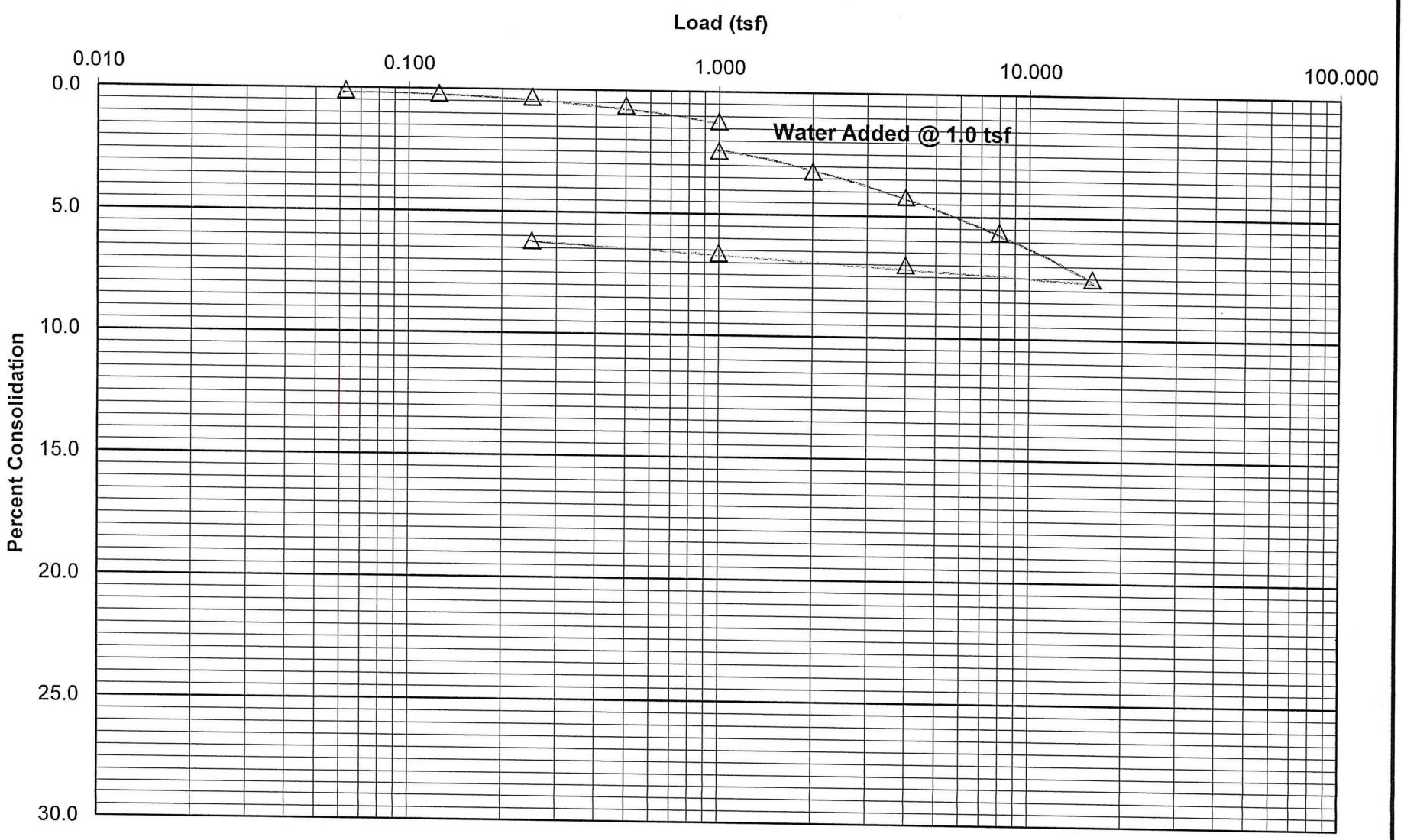
Date of Test: 9/21

# GeoSoils Consultants, Inc.

Geotechnical Engineering * Engineering Geology

Moisture(%)
Before: 2.4 After: 16.3

Sample(in.)
Height: 1.00 Diameter: 2.36




**B-3 @ 10.0'**
Brown silty very fine to coarse SAND.

## Consolidation Diagram

C7648.5

**Plate C-5**

Ravello Holdings
W.O.: 7648

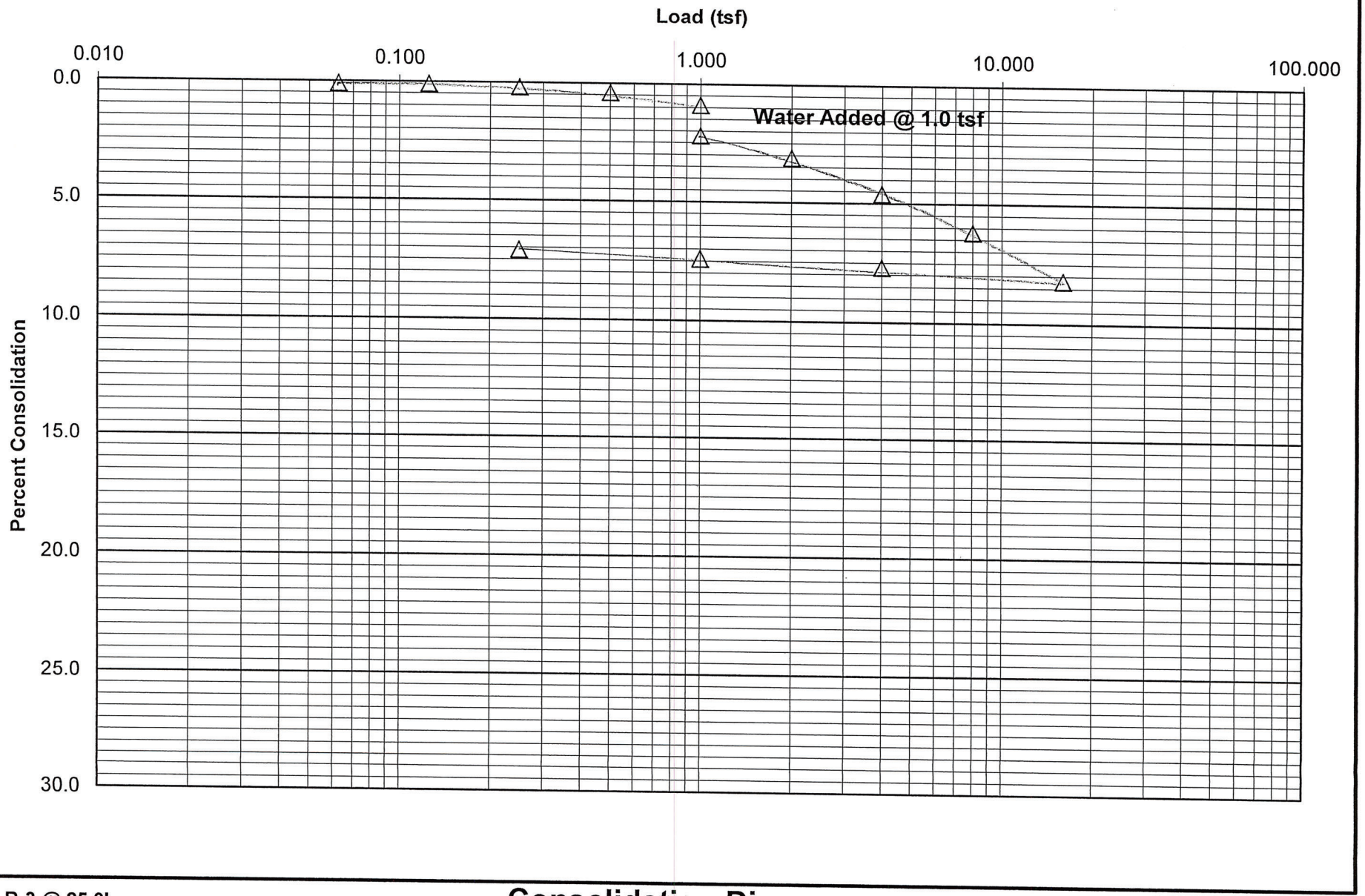
Date of Test: 9/21

# GeoSoils Consultants, Inc.

Geotechnical Engineering * Engineering Geology

Moisture(%)
Before: 1.2 After: 11.1

Sample(in.)
Height: 1.00 Diameter: 2.36




**B-3 @ 25.0'**
Light gray brown very fine to coarse SAND with rock fragments.

## Consolidation Diagram

C7648.6

**Plate C-6**

Ravello Holdings
W.O.: 7648

Date of Test: 9/21

Sample: **B-1 @ 0-5.0'**

# GeoSoils Consultants, Inc.

**Geotechnical Engineering * Engineering Geology**

**PLATE SH-1**

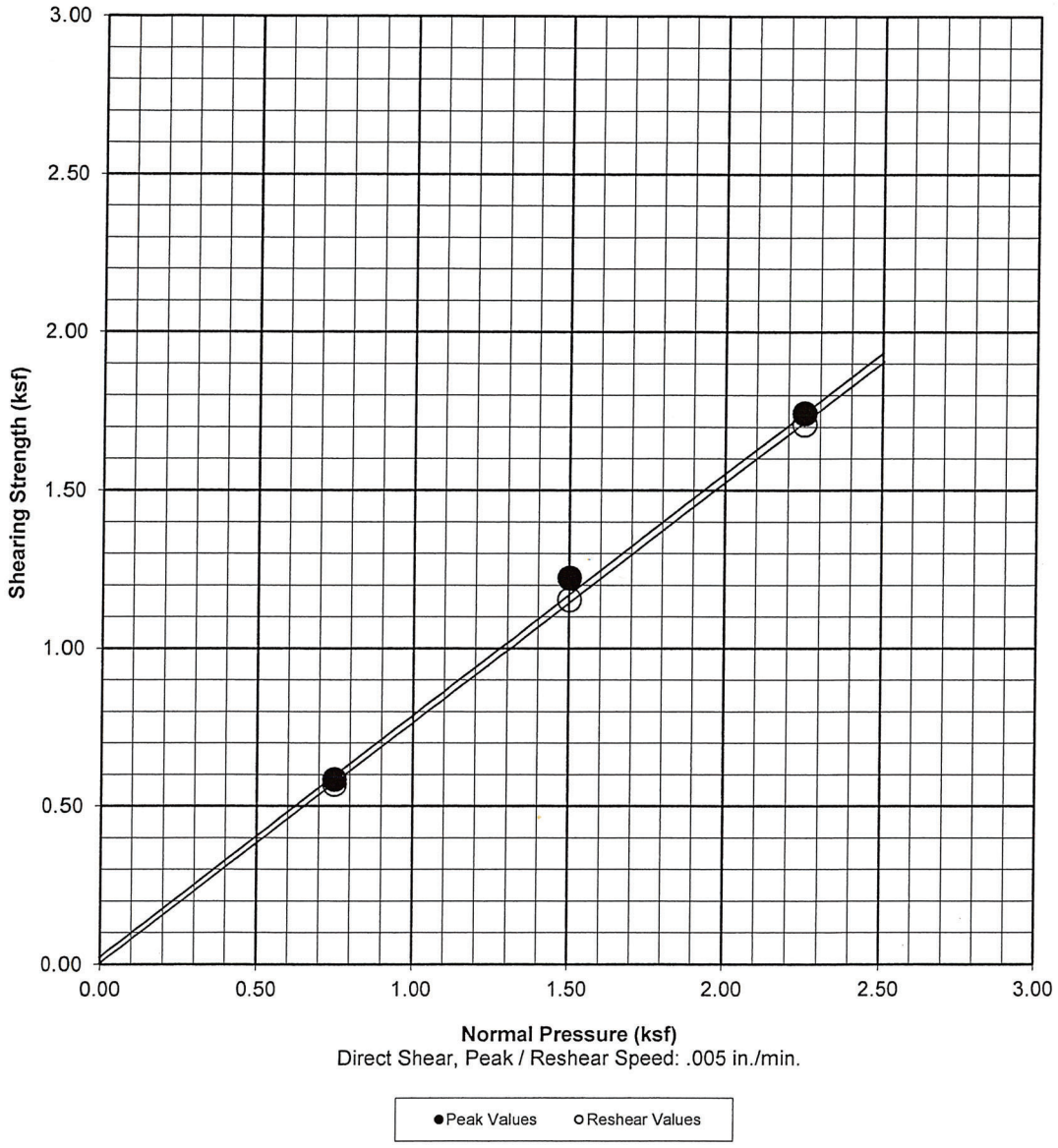
## Shear Test Diagram

**Peak**

C(psf): **20** Phi (degrees): **37.0**

**Reshear**

C(psf): **0** Phi (degrees): **37.0**




Sample **Remolded** to 90% Relative Density, saturated.
Remolded Dry Density = 111.6 PCF

Gray brown slightly silty vf-c SAND.

MAX: 124.0 PCF: 9.5%

16.9% Saturated Moisture Content

7648.1

## Table 1 - Laboratory Tests on Soil Samples

***GeoSoils Consultants, Inc.***
***Ravello Holdings***
***Your #7648, HDR Lab #21-0807LAB***
***8-Sep-21***

| **Sample ID** | | | B-1 @ 0-5' |
|---|---|---|---|
| **Resistivity** | | **Units** | |
| as-received | | ohm-cm | 124,000 |
| minimum | | ohm-cm | 10,800 |
| **pH** | | | 7.6 |
| **Electrical Conductivity** | | mS/cm | 0.07 |
| **Chemical Analyses** | | | |
| **Cations** | | | |
| calcium | $Ca^{2+}$ | mg/kg | 53 |
| magnesium | $Mg^{2+}$ | mg/kg | 4.9 |
| sodium | $Na^{1+}$ | mg/kg | 8.4 |
| potassium | $K^{1+}$ | mg/kg | 21 |
| ammonium | $NH_4^{1+}$ | mg/kg | ND |
| **Anions** | | | |
| carbonate | $CO_3^{2-}$ | mg/kg | 30 |
| bicarbonate | $HCO_3^{1-}$ | mg/kg | 110 |
| fluoride | $F^{1-}$ | mg/kg | 3.6 |
| chloride | $Cl^{1-}$ | mg/kg | 7.5 |
| sulfate | $SO_4^{2-}$ | mg/kg | 11 |
| nitrate | $NO_3^{1-}$ | mg/kg | 14 |
| phosphate | $PO_4^{3-}$ | mg/kg | 4.4 |
| **Other Tests** | | | |
| sulfide | $S^{2-}$ | qual | na |
| Redox | | mV | na |

Minimum resistivity and pH per CTM 643, Chloride per CTM 422, Sulfate per CTM 417

Electrical 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.

Redox = oxidation-reduction potential in millivolts

ND = not detected

na = not analyzed

Plate L-1

431 West Baseline Road · Claremont, CA 91711
Phone: 909.962.5485 · Fax: 909.626.3316

# Appendix F

Noise and Vibration Study

# Tentative Tract Map 83359 Project

## Noise and Vibration Study

*prepared for*

**Maison's Palmdale Boulevard 150, LLC**
Kevin Harbison
2007 Cedar Avenue
Manhattan Beach, California 90266
Contact: Kevin Harbison

*prepared by*

**Rincon Consultants, Inc.**
250 East 1st Street, Suite 1400
Los Angeles, California 90012

**September 2023**

RINCON CONSULTANTS, INC.
Environmental Scientists | Planners | Engineers
rinconconsultants.com

# Tentative Tract Map 83359 Project

## Noise and Vibration Study

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**September 2023**

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# 1 Project Description and Impact Summary

## 1.1 Introduction

This study analyzes the potential noise and vibration impacts of the proposed Tentative Tract Map (TTM) 83359 (project) in the City of Palmdale, Los Angeles County, California. Rincon Consultants, Inc. (Rincon) prepared this study under contract to Maison's Palmdale Boulevard 150, LLC. The purpose of this study is to analyze the project's noise and vibration impacts related to both temporary construction activity and long-term operation of the project. Table 1 provides a summary of project impacts.

**Table 1 Summary of Impacts**

| Issue | Impact | Applicable Recommendations |
|---|---|---|
| Would the project result in 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? | Less than significant impact (Construction)<br>Less than significant impact (Operation) | None<br>None |
| Would the project result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? | Less than significant impact (Construction)<br>Less than significant impact (Operation) | None |
| 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? | No Impact | None |
| Would the project conflict with land use compatibility guidelines for noise? | May conflict with interior noise standards | NOI-1 (On-site Noise Barrier) |

## 1.2 Project Summary

### Project Location

The project site is located immediately adjacent to, and south of, East Palmdale Boulevard between 55th Street and 50th Street East at APN: 3023-002-184. The project site is zoned Single Family Residential (R-1-7,000) with a land use designation of Single Family Residential (SFR-3). Figure 1 shows the regional location of the site, and Figure 2 shows the project site in the existing neighborhood context.

### Project Description

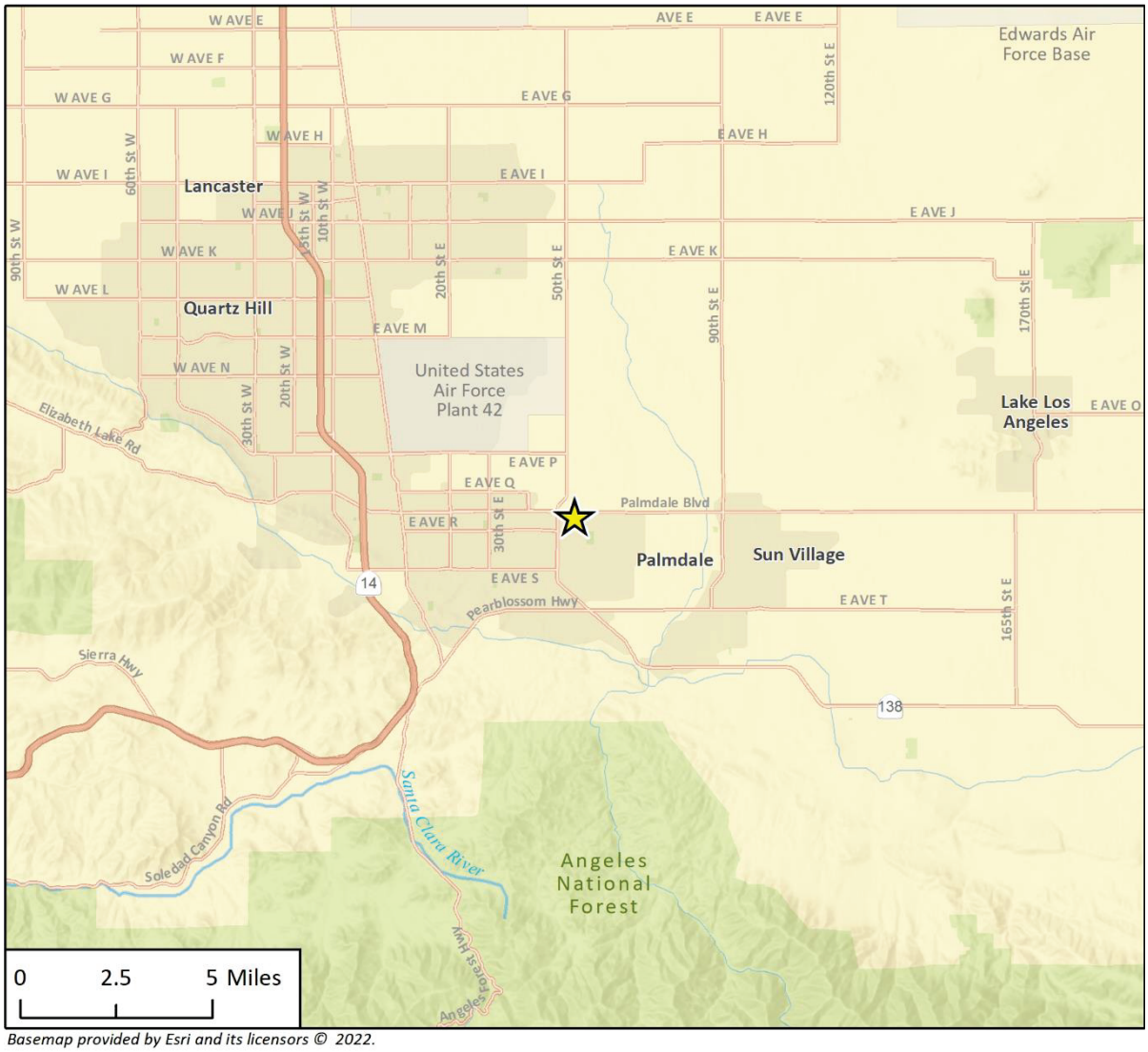
The proposed project would facilitate the development of up to 191 units of single story, single-family homes consisting of three-bedroom housing units, two-bedroom Accessory Dwelling Units and one-bedroom Junior Accessory Dwelling Units that would be offered for rent as a 100% affordable project to those qualifying at 30% to 80% Area Mean Income (AMI) for Los Angeles County. The project would also include a recreation center and community amenities on a total of

66 lots. The community would be an all-electric community and each residential unit would be constructed with rooftop solar, energy efficient appliances, and installation of all infrastructure improvements as conditioned by the City of Palmdale with approval of Tentative Tract Map (TTM) 83359. Within each lot, primary homes, accessory dwelling units (ADU), and junior ADUs would be separated by six-foot-tall vinyl fences and would be linked together by a network of walking paths and trails. The entire residential development would be enclosed by a six-foot-tall decorative perimeter block wall, except where existing and newly constructed streets would occur. Figure 3 shows the project site plan.

Indoor community amenities include a community building with a tenant lounge, office spaces, and a fitness center. Outdoor amenities include a pool, spa, grill area, pocket community park, children's play area, and additional community open spaces. Additionally, a community trail network is planned to link the neighborhood and provide for additional open spaces and parks for the community to utilize. Monumentation signage for the community would be installed along Palmdale Boulevard.

Streets that would be constructed within the project site and would link the community to East Palmdale Boulevard to the north as well as the existing residential projects to both the east and west of the project. All public right-of-way would be constructed to the width shown on the TTM and would include road, sidewalks, and curbs and gutters. ADA curb ramps, appropriate street signage, fire hydrants, and streetlights would also be installed for each street both inside and outside of the development.

**Figure 1 Regional Location**




*Basemap provided by Esri and its licensors © 2022.*

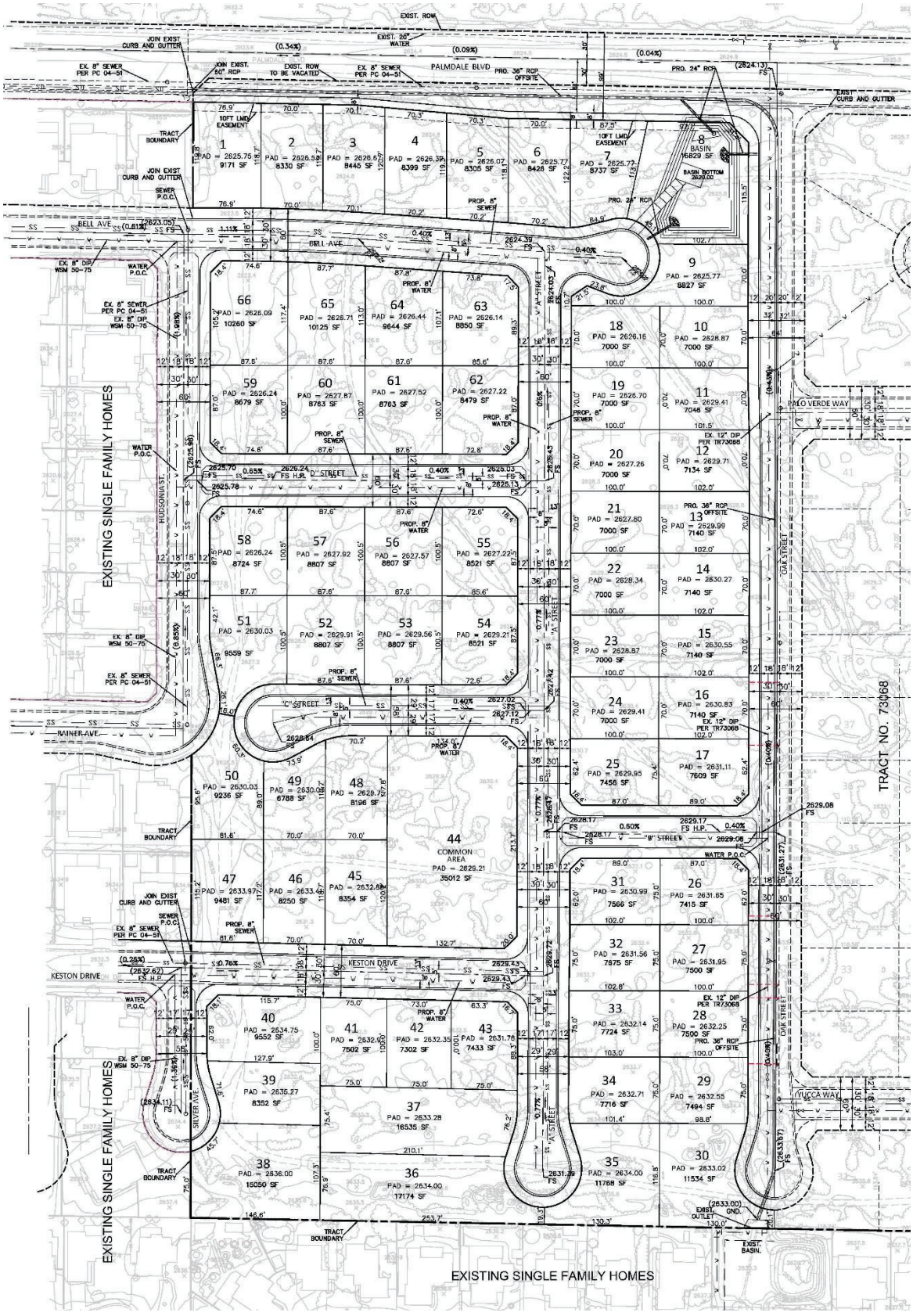
Project Location

N

## Figure 2 Project Location

*Imagery provided by Microsoft Bing and its licensors © 2022.*

**Figure 3 Site Plan**



# 2 Background

## 2.1 Overview of Sound Measurement

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment (California Department of Transportation [Caltrans] 2020a).

### Human Perception of Sound

Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response. Decibels are measured on a logarithmic scale that quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes. A doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; dividing the energy in half would result in a 3 dB decrease (Caltrans 2020a).

Human perception of noise has no simple correlation with sound energy: the perception of sound is not linear in terms of dBA or in terms of sound energy. Two sources do not "sound twice as loud" as one source. It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA, increase or decrease (i.e., twice the sound energy); that a change of 5 dBA is readily perceptible (8 times the sound energy); and that an increase (or decrease) of 10 dBA sounds twice (half) as loud (10.5 times the sound energy) (Caltrans 2020a).

### Sound Propagation and Shielding

Sound changes in both level and frequency spectrum as it travels from the source to the receiver. The most obvious change is the decrease in the noise level as the distance from the source increases. The manner by which noise reduces with distance depends on factors such as the type of sources (e.g., point or line), the path the sound will travel, site conditions, and obstructions.

Sound levels are described as either a "sound power level" or a "sound pressure level," which are two distinct characteristics of sound. Both share the same unit of measurement, the dB. However, sound power (expressed as $L_{pw}$) is the energy converted into sound by the source. As sound energy travels through the air, it creates a sound wave that exerts pressure on receivers, such as an eardrum or microphone, which is the sound pressure level. Sound measurement instruments only measure sound pressure, and noise level limits are typically expressed as sound pressure levels.

Noise levels from a point source (e.g., construction, industrial machinery, air conditioning units) typically attenuate, or drop off, at a rate of 6 dBA per doubling of distance. Noise from a line source (e.g., roadway, pipeline, railroad) typically attenuates at about 3 dBA per doubling of distance (Caltrans 2020a). Noise levels may also be reduced by intervening structures; the amount of attenuation provided by this "shielding" depends on the size of the object and the frequencies of the noise levels. Natural terrain features, such as hills and dense woods, and man-made features,

such as buildings and walls, can significantly alter noise levels. Generally, any large structure blocking the line of sight will provide at least a 5-dBA reduction in source noise levels at the receiver (Federal Highway Administration [FHWA] 2011). Structures can substantially reduce exposure to noise as well. The FHWA's guidance indicates that modern building construction generally provides an exterior-to-interior noise level reduction of 10 dBA with open windows and an exterior-to-interior noise level reduction of 20 to 35 dBA with closed windows (FHWA 2011).

### *Descriptors*

The impact of noise is not a function of loudness alone. The time of day when noise occurs and the duration of the noise are also important factors of project noise impact. Most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed. The noise descriptors used for this study are the equivalent noise level ($L_{eq}$), Day-Night Average Level (DNL; may also be symbolized as $L_{dn}$), and the community noise equivalent level (CNEL; may also be symbolized as $L_{den}$).

$L_{eq}$ is one of the most frequently used noise metrics; it considers both duration and sound power level. The $L_{eq}$ is defined as the single steady-state A-weighted sound level equal to the average sound energy over a time period. When no time period is specified, a 1-hour period is assumed. The $L_{max}$ is the highest noise level within the sampling period, and the $L_{min}$ is the lowest noise level within the measuring period. Normal conversational levels are in the 60 to 65-dBA $L_{eq}$ range; ambient noise levels greater than 65 dBA $L_{eq}$ can interrupt conversations (Federal Transit Administration [FTA] 2018).

Noise that occurs at night tends to be more disturbing than that occurring during the day. Community noise is usually measured using Day-Night Average Level ($L_{dn}$), which is the 24-hour average noise level with a +10 dBA penalty for noise occurring during nighttime hours (10:00 p.m. to 7:00 a.m.). Community noise can also be measured using Community Noise Equivalent Level (CNEL or $L_{DEN}$), which is the 24-hour average noise level with a +5 dBA penalty for noise occurring from 7:00 p.m. to 10:00 p.m. and a +10 dBA penalty for noise occurring from 10:00 p.m. to 7:00 a.m. (Caltrans 2020a).[1] The relationship between the peak-hour $L_{eq}$ value and the $L_{dn}$/CNEL depends on the distribution of noise during the day, evening, and night; however noise levels described by $L_{dn}$ and CNEL usually differ by 1 dBA or less. Quiet suburban areas typically have CNEL noise levels in the range of 40 to 50 CNEL, while areas near arterial streets are in the 50 to 60+ CNEL range (FTA 2018).

## 2.2 Vibration

Groundborne vibration of concern in environmental analysis consists of the oscillatory waves that move from a source through the ground to adjacent structures. The number of cycles per second of oscillation makes up the vibration frequency, described in terms of Hz. The frequency of a vibrating object describes how rapidly it oscillates. The normal frequency range of most groundborne vibration that can be felt by the human body starts from a low frequency of less than 1 Hz and goes to a high of about 200 Hz (Crocker 2007).

While people have varying sensitivities to vibrations at different frequencies, in general they are most sensitive to low-frequency vibration. Vibration in buildings, such as from nearby construction activities, may cause windows, items on shelves, and pictures on walls to rattle. Vibration of building

[1] Because DNL and CNEL are typically used to assess human exposure to noise, the use of A-weighted sound pressure level (dBA) is implicit. Therefore, when expressing noise levels in terms of DNL or CNEL, the dBA unit is not included.

components can also take the form of an audible low-frequency rumbling noise, referred to as groundborne noise. Groundborne noise is usually only a problem when the originating vibration spectrum is dominated by frequencies in the upper end of the range (60 to 200 Hz), or when foundations or utilities, such as sewer and water pipes, physically connect the structure and the vibration source (FTA 2018). Although groundborne vibration is sometimes noticeable in outdoor environments, it is almost never annoying to people who are outdoors. The primary concern from vibration is that it can be intrusive and annoying to building occupants and vibration-sensitive land uses.

Vibration amplitudes are usually expressed in peak particle velocity (PPV), which is normally described in inches per second (in/sec). PPV is defined as the maximum instantaneous positive or negative peak of a vibration signal. PPV is often used in monitoring of blasting vibration and other construction activities because it is related to the stresses that are experienced by buildings (Caltrans 2020).

## 2.3 Sensitive Receivers

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. In the City of Palmdale, noise sensitive land uses (also referred to as “sensitive receivers”) include residences, schools, libraries, hospitals/medical facilities, and assisted living facilities (City of Palmdale 2022).

Vibration-sensitive receivers, which are similar to noise-sensitive receivers, include residences and institutional uses, such as schools, churches, hospitals and libraries. Vibration-sensitive receivers also include buildings where vibrations may interfere with vibration-sensitive equipment that is affected by vibration levels that may be well below those associated with human annoyance (e.g., recording studies or medical facilities with sensitive equipment). As shown in Figure 2, the nearest sensitive receivers to the project site are the single-family homes adjacent to the project site to the south and west.

## 2.4 Project Noise Setting

The most common source of noise in the project site vicinity is vehicular traffic from East Palmdale Boulevard and 47th Street East. To characterize ambient sound levels at and near the project site, three 15-minute sound level measurements and one 24-hour sound level measurement were conducted on Wednesday, September 21, 2022. Short-Term Noise Measurement 1 (ST-1) was taken at the northern edge of the project site to capture noise levels from East Palmdale Boulevard. ST-2 was taken at the southwestern edge of the project site near the adjacent single-family residences. ST-3 was conducted at the center of the project site. Table 2 and Table 3 summarize the results of the noise measurements and Table 4 shows the recorded traffic volumes. Noise measurement locations are shown in Figure 4Table 2. Detailed sound level measurement data are included in Appendix A.

## Table 2 Project Site Vicinity Sound Level Monitoring Results- Short-Term

| Measurement Location | | Sample Times | Approximate Distance to Primary Noise Source | $L_{eq}$ (dBA) | $L_{min}$ (dBA) | $L_{max}$ (dBA) |
|---|---|---|---|---|---|---|
| ST-1 | Northern Boundary of Project Site | 10:13 – 10:28 a.m. | 50 feet to centerline of East Palmdale Boulevard | 66.2 | 47.6 | 79.0 |
| ST-2 | Southwestern Boundary of Project Site | 9:49 – 10:04 a.m. | 1,200 feet to centerline of East Palmdale Boulevard | 42.0 | 36.9 | 55.9 |
| ST-3 | Center of Project Site | 9:26 – 9:41 a.m. | 650 feet to centerline of East Palmdale Boulevard | 44.3 | 38.9 | 52.7 |

$L_{eq}$ = average noise level equivalent; dBA = A-weighted decibel; $L_{min}$ = minimum instantaneous noise level; $L_{max}$ = maximum instantaneous noise level

Detailed sound level measurement data are included in Appendix A.

## Table 3 Project Site Vicinity Noise Monitoring Results – Long Term

| Sample Time | dBA $L_{eq}$ | Sample Time | dBA $L_{eq}$ |
|---|---|---|---|
| **24-hour Measurement – Center of Project Site, 500 Feet from Palmdale Boulevard – September 21-22, 2022** | | | |
| 10:59 a.m. | 49.7 | 10:59 p.m. | 42.1 |
| 11:59 a.m. | 48.1 | 11:59 p.m. | 48.3 |
| 12:59 p.m. | 48.4 | 12:59 a.m. | 40.3 |
| 1:59 p.m. | 50.6 | 1:59 a.m. | 39.0 |
| 2:59 p.m. | 49.3 | 2:59 a.m. | 41.6 |
| 3:59 p.m. | 51.5 | 3:59 a.m. | 45.0 |
| 4:59 p.m. | 47.8 | 4:59 a.m. | 55.1 |
| 5:59 p.m. | 49.9 | 5:59 a.m. | 50.4 |
| 6:59 p.m. | 53.3 | 6:59 a.m. | 51.5 |
| 7:59 p.m. | 49.5 | 7:59 a.m. | 50.9 |
| 8:59 p.m. | 46.5 | 8:59 a.m. | 50.1 |
| 9:59 p.m. | 48.9 | 9:59 a.m. | 41.2 |
| **24-hour Noise Level (CNEL)** | | | **56.0** |

$L_{eq}$ = average noise level equivalent; dBA = A-weighted decibel; CNEL = Community Noise Equivalent Level

Detailed sound level measurement data are included in Appendix A.

## Table 4 Sound Level Monitoring Traffic Counts

| Measurement | Roadway | Traffic | Autos | Medium Trucks | Heavy Trucks |
|---|---|---|---|---|---|
| ST-1 | East Palmdale Boulevard | 15-minute count | 202 | 3 | 3 |
| | | One-hour Equivalent | 808 | 12 | 12 |
| **Percent** | | | **97%** | **1.5%** | **1.5%** |

Detailed sound level measurement data are included in Appendix A.

## Figure 4 Noise Measurement Locations

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## 2.5 Regulatory Setting

### Federal Transit Administration (FTA) Transit Noise and Vibration Impact Assessment Manual

There are no federal regulations directly applicable to the proposed project. However, the FTA provides reasonable criteria for assessing construction noise impacts based on the potential for adverse community reaction in their *Transit Noise and Vibration Impact Assessment Manual* (FTA 2018). For residential uses, the daytime noise threshold is 80 dBA $L_{eq}$ for an 8-hour period. In addition, the FTA recommends a vibration limit of 0.2 inches per second (in/sec) peak particle velocity (PPV) for potential building architectural damage at residential buildings and 0.3 in/sec PPV at commercial buildings.

Sections 5 and 6 of manual addresses the federal guidelines used to evaluate a project for potential vibration impacts. The vibration impact analysis is a multi-step process used for determining vibration analysis level, determining vibration impact criteria, and evaluating vibration impact. FTA guidelines state that the threshold of perception for humans is approximately 65 vibration decibels (VdB). A vibration level of 85 VdB can result in strong annoyance, and a vibration level of 100 VdB is the threshold of potential damage (FTA 2018). Construction activity can result in varying degrees of ground vibration depending on the equipment and methods employed, and older and more fragile buildings must receive special consideration. These guidelines are advisory and should be used to assess the impacts of ground borne vibrations created from transit and construction sources.

### California Building Code

California Code of Regulations Title 24, Building Standards Administrative Code, Part 2, and the California Building Code codify the state noise insulation standards. These noise standards apply to new construction in California to control interior noise levels as they are affected by exterior noise sources. The regulations specify that interior noise levels for residential and school land uses should not exceed 45 CNEL.

### City of Palmdale General Plan

The State of California requires each City and County to adopt a Noise Element as part of its General Plan. Such Noise Elements must contain a Land Use/ Noise Compatibility Matrix. The objective of noise compatibility guidelines is to provide the community with a means of judging the noise environment that it deems to be generally acceptable. A recommended (but not mandatory) matrix is presented in the “Guidelines for the Preparation and Content of Noise Elements of the General Plan” (Department of Health Services 2003). The City of Palmdale Land Use/Noise Compatibility Matrix in the 2022 General Plan Noise Element is based on, and is similar to the California Land Use/Noise Compatibility Matrix. The matrix is used to determine whether a proposed new use would be compatible with the ambient noise environment in which it is proposed as well as whether or not the proposed new use would create noise compatibility conflicts with established uses. The compatibility table, shown in Figure 5, illustrates the ranges of community noise exposure in terms of what is “normally acceptable,” “conditionally acceptable,” “normally unacceptable,” and “clearly unacceptable.”

Denotation of a land use as “normally acceptable” implies that the highest noise level in that exposure level is the maximum desirable for existing or conventional construction that does not incorporate any special acoustical treatment. In general, evaluation of land use that falls into the

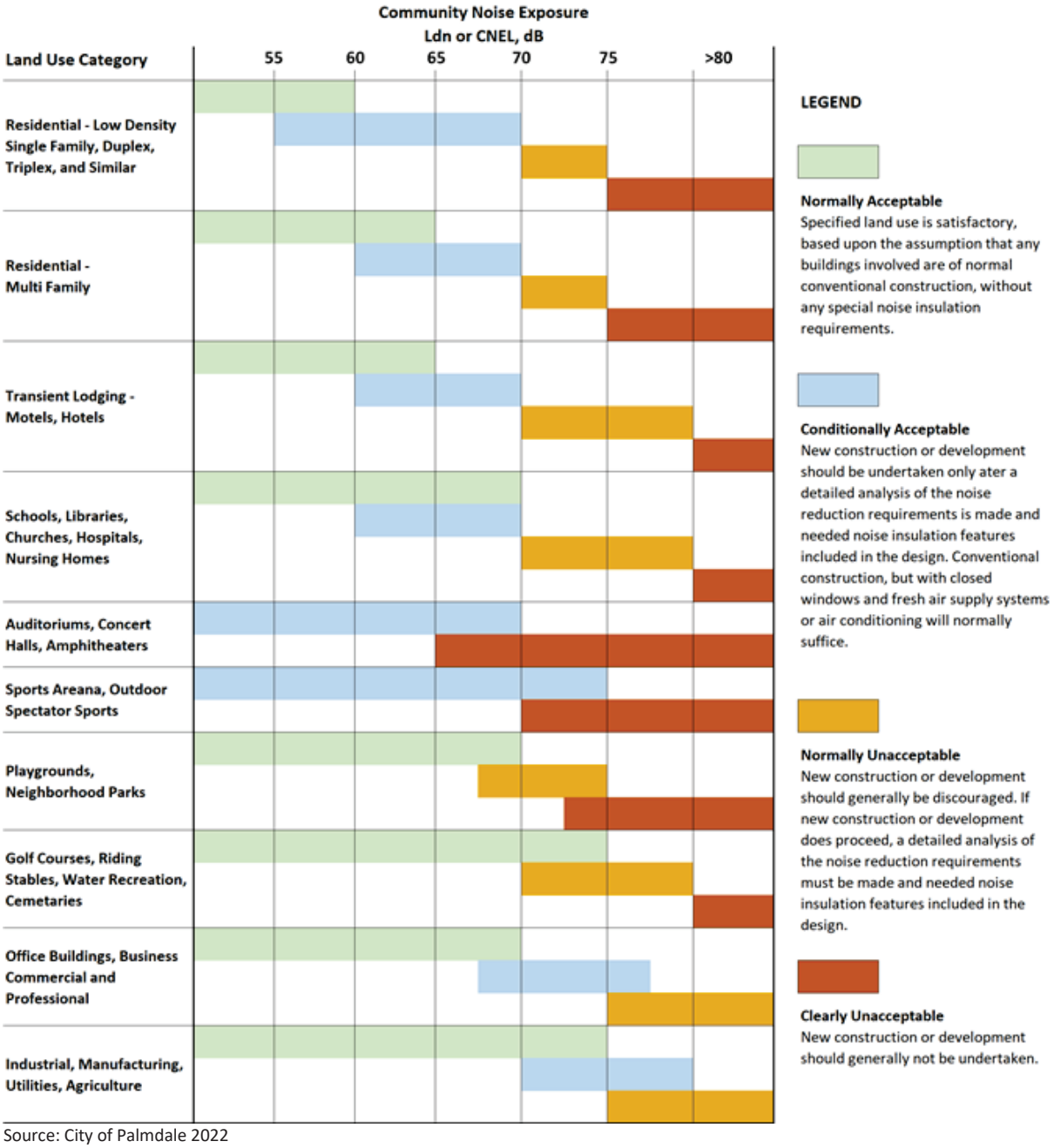
"normally acceptable," "conditionally acceptable," or "normally unacceptable" noise environments should analyze other potential factors that would affect the noise environment. These include consideration of the types of noise source, the sensitivity of the noise receiver, the noise reduction likely to be provided by structures, and the degree to which the noise source may interfere with speech, sleep, or to other activities characteristic of the land use. Generally, the City's Land Use/Noise Compatibility Matrix is used as a guide to define where placement of certain land uses is considered acceptable. The Noise Element of the City's current General Plan also contains policies to maintain an acceptable noise environment in the City. Goals and policies from the proposed Plan relating to noise are listed in the impact analysis discussions in Section 4, *Impact Analysis*.

## Palmdale Municipal Code

The City also implements and enforces noise control through the Palmdale Municipal Code (PMC). PMC Chapter 9.18, *Disturbing, Excessive, Loud, or Offensive Noise*, sets both daytime and nighttime sound level limits for residential and commercial zones; prohibits any person or property owner in the City from creating any loud, unnecessary, or unusual noise which unreasonably disturbs the peace and quiet of any neighborhood or which causes discomfort or annoyance to any reasonable person of normal sensitiveness residing in the area.

PMC Chapter 8.28, *Building Construction Hours of Operation and Noise Control,* prohibits any person or property owner in the City to perform any construction or repair work on any Sunday, or any other day after 8:00 p.m. or before 6:30 a.m., in any residential zone or within 500 feet of any residence, hotel, motel or recreational vehicle park.

## Figure 5 Palmdale General Plan Noise Level Guidance




Source: City of Palmdale 2022

# 3 Methodology

## 3.1 Construction Noise

Construction noise was estimated using the FHWA Roadway Construction Noise Model (RCNM) (FHWA 2006). RCNM predicts construction noise levels for a variety of construction operations based on empirical data and the application of acoustical propagation formulas. Using RCNM, construction noise levels were estimated at noise sensitive receivers near the project site. RCNM provides reference noise levels for standard construction equipment, with an attenuation rate of 6 dBA per doubling of distance for stationary equipment.

Variation in power imposes additional complexity in characterizing the noise source level from construction equipment. Power variation is accounted for by describing the noise at a reference distance from the equipment operating at full power and adjusting it based on the duty cycle of the activity to determine the $L_{eq}$ of the operation (FHWA 2018). Each phase of construction has a specific equipment mix, depending on the work to be accomplished during that phase. Each phase also has its own noise characteristics; some will have higher continuous noise levels than others, and some have high-impact noise levels.

Construction activity would result in temporary noise in the project site vicinity, exposing surrounding nearby receivers to increased noise levels. Construction noise would typically be higher during the heavier periods of initial construction (i.e., site preparation and grading) and would be lower during the later construction phases (i.e., building construction and paving). Typical heavy construction equipment during project grading could include dozers, loaders, graders, and dump trucks. It is assumed that diesel engines would power all construction equipment. Construction equipment would not all operate at the same time or location. In addition, construction equipment would not be in constant use during the 8-hour operating day.

Project construction would occur nearest to the single-family residences within the southern and western portion of the project site. Over the course of a typical construction day, construction equipment would be located as close as 15 feet to the properties but would typically be located at an average distance farther away due to the nature of construction and the lot size of the project. For example, during a typical construction day when performing construction near these residences, the equipment may operate across a horizontal distance (15 to several hundred feet) from a nearby noise receiver. Therefore, it is assumed that over the course of a typical construction day the construction equipment would operate at an average distance of 100 feet from the single-family residences to the west and south.

Construction noise is typically loudest during activities that involve excavation and soil movement, such as site preparation and grading. A potential construction scenario includes a dozer, front end loader and a dump truck during grading to excavate and move soil. At a distance of 100 feet, a dozer, front end loader and a dump truck would generate a noise level of 74.4 dBA $L_{eq}$ (RCNM calculations are included in Appendix B).

## 3.2 Groundborne Vibration

The project does not include any substantial vibration sources associated with operation. Thus, construction activities have the greatest potential to generate ground-borne vibration affecting nearby receivers, especially during grading and excavation of the project site. Table 5 shows vibration levels of anticipated grading and excavation equipment used during construction. The greatest vibratory source during construction in the project vicinity would be a large bulldozer. Neither blasting nor pile driving would be required for construction of the project.

**Table 5 Vibration Levels Measured during Construction Activities**

| Equipment | PPV at 25 ft. (in/sec) |
|---|---|
| Large Bulldozer | 0.089 |
| Loaded Trucks | 0.076 |
| Small Bulldozer | 0.003 |

Source: FTA 2018

## 3.3 Operational Noise Sources

### On-site Noise Sources

The main noise source associated with a residential development are heating, ventilation, and air conditioning (HVAC) units). The unit used in this analysis is a Carrier 38HDR060 split-system, which is a typical HVAC unit used on single-family residential sites and has a sound power level of 72 dBA (see Appendix C for manufacturer's specifications). HVAC equipment for single-family residences is typically located at ground-level, on the side or backyard portions of a house. The closest future residential lots to nearby receivers would occur on the southern edge of the project site.

## 3.4 Traffic Noise

The proposed project would generate additional traffic on area roadways, which would increase traffic noise levels in the area. The project's off-site traffic noise impacts are analyzed based on data from the Traffic Signal Warrant Study prepared for the project (General Technologies and Solutions 2023). The expected project traffic volumes were forecasted using the Institute of Transportation Engineers, Trip Generation Manual, 11th Edition, 2021. The overall increase in traffic noise was estimated using the "Phase 1 Build-out" data from the Traffic Signal Warrant Study.

## 3.5 Significance Thresholds

To determine whether a project would have a significant noise impact, Appendix G of the California Environmental Quality Act (CEQA) Guidelines requires consideration of whether a project would result in:

1. 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
2. Generation of excessive groundborne vibration or groundborne noise levels

3. 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, expose people residing or working in the project area to excessive noise levels

## Construction Noise

Pursuant to Chapter 8.28 of the PMC, noise generated by construction activities is not prohibited if it occurs on Monday through Saturday, between the hours of 6:30 a.m. to 8:00 p.m. In addition, the FTA-recommended criterion of 80 dBA $L_{eq}$ for residential daytime receivers is used as a significance threshold for nearby residences.

## On-site Operational Noise

The City of Palmdale has not established operational noise standards. Therefore, operational noise standards based upon U.S. Environmental Protection Agency (USEPA) are provided for this analysis. Based upon available sleep criteria data, an interior nighttime level of 35 dBA is considered acceptable (USEPA 1974). Assuming a 15 dBA reduction with windows open, an exterior noise level of 50 dBA $L_{eq}$ would be required to maintain an acceptable interior noise environment of 35 dBA.

## Off-site Traffic Noise

Off-site project noise (i.e., roadway noise) would result in a significant impact if the project would increase traffic noise levels by 3 dBA, which would be a perceptible increase in traffic noise.

## Vibration

The project would result in the generation of excessive groundborne vibration or groundborne noise levels if vibration levels exceed 0.2 in/sec PPV at residential structures or 0.3 in/sec PPV at commercial structures.

## Land Use Compatibility

The City has adopted noise guidelines that provide both interior and exterior noise limits for noise compatibility. The proposed project would include single-family residential buildings, which are identified as a noise-sensitive land use. The conditionally acceptable noise level standard for outdoor living areas of new noise-sensitive land uses is 70 dBA CNEL. Outdoor living areas generally include backyards of single-family residences and individual patios or common outdoor activity areas. The maximum noise exposure for indoor living areas in new noise-sensitive land uses is 45 dBA CNEL.

However, as a result of the Supreme Court decision regarding the assessment of the environment's impacts on projects (*California Building Industry Association (CBIA) v. Bay Area Air Quality Management District (BAAQMD)*, 62 Cal. 4th 369 (No. S 213478) issued December 17, 2015), it is generally no longer the purview of the CEQA process to evaluate the impact of existing environmental conditions on any given project. As a result, while the noise from existing sources (e.g., adjacent roadways) is taken into account as part of the baseline condition, the direct effects of exterior noise from nearby noise sources relative to land use compatibility of a proposed project is typically no longer a required topic for impact evaluation under CEQA. Generally, no determination of significance is required except for certain school projects, projects affected by airport noise, and projects that would exacerbate existing conditions (i.e., projects that would have a significant operational impact).

# 4 Impact Analysis

## 4.1 Issue 1

**Issue:** Would the project result in 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?

### Construction

Project construction would occur nearest to the single-family residences located west and south of the project site. It is conservatively assumed that over the course of a typical construction day the construction equipment would operate 100 feet from the nearest sensitive receiver. At a distance of 100 feet, a loader, front end loader and dump truck would generate a noise level of 74.4 dBA $L_{eq}$ (RCNM calculations are included in Appendix B). Therefore, construction noise levels would not exceed the FTA's daytime residential threshold of 80 dBA $L_{eq}$, and impacts would be less than significant.

### Operation

#### *HVAC Units*

Each residence would have at least one ground-level HVAC equipment. Given estimated setbacks, HVAC equipment could be within 20 feet of existing residences. At a distance of 20 feet, an HVAC unit would generate noise levels of 48 dBA, which would not exceed an exterior noise level of 50 dBA $L_{eq}$ at nearby residences that would result in an exceedance of an acceptable interior noise environment of 35 dBA. In addition, future fencing between properties may provide additional noise attenuation. Therefore, operational noise impacts associated with HVAC equipment would be less than significant.

Additional on-site noise sources such as landscape maintenance, low-speed traffic on internal roadways, conversations, open space activities, and trash hauling also would be typical of noise generated by neighboring land uses and would not substantially contribute to overall ambient noise levels. Therefore, on-site operations would have a less than significant impact on noise-sensitive receivers.

#### *Off-site Traffic Noise*

The overall increase in traffic noise from the project was estimated using observed ADT data and estimated project trips from the Traffic Signal Warrant Study prepared by General Technologies and Solutions as shown in Table 6. As shown in Table 6, ADT would increase by approximately 9 percent over existing conditions under the project. A 9 percent increase in traffic on a roadway would equate to an increase of 0.4 dBA. Therefore, the project would not double the existing mobile noise source and would not increase noise levels by 3 dBA, which is considered a barely perceptible noise increase. Therefore, off-site traffic noise impacts would be less than significant.

**Table 6 Daily Vehicle Trip Summary**

| Palmdale Boulevard | Residential Trips |
|---|---|
| Existing Conditions | 16,745[1] |
| Existing Plus Project Conditions | 18,205 |
| **Change in Trips** | **+1,460** |
| **Percent Change in Vehicle Trips (%)** | **9%** |

[1] Existing condition traffic counts are observed traffic counts on Palmdale Avenue as presented in the Traffic Signal Warrant Study (General Technologies and Solutions 2023). For the noise analysis, all project trips were conservatively added to this observed value.

## 4.2 Issue 2

**Issue:** Would the project result in generation of excessive groundborne vibration or ground-borne noise levels?

Construction activities known to generate excessive ground-borne vibration, such as pile driving, would not be conducted to construct the project. Based on FTA recommendations, limiting vibration levels to below 0.2 in/sec PPV at residential structures would prevent architectural damage regardless of building construction type. The greatest anticipated source of vibration during project construction activities would be from a dozer, which may be used within 15 feet of the nearest off-site sensitive receivers to the to the west and south. A dozer would create approximately 0.089 in/sec PPV at a distance of 25 feet (FTA 2018). This would equal a vibration level of approximately 0.16 in/sec PPV at a distance of 15 feet.[2] This would be lower than the 0.2 in/sec PPV threshold. Therefore, temporary vibration impacts associated with the dozer (and other potential equipment) would be less than significant.

Operation of the project would not include any substantial vibration sources. Therefore, operational vibration impacts would be less than significant.

## 4.3 Issue 3

**Issue:** 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?

The airport nearest to the project site, Palmdale Regional Airport, is located approximately 3.8 miles to the northwest. The project would not be located within the 65 CNEL noise contour of the Palmdale Regional Airport (City of Palmdale 2022). Therefore, no substantial noise exposure from airport noise would occur to construction workers, users, or employees of the project, and no impacts would occur.

[2] $PPVEquipment = PPVRef (25/D)^n$ (in/sec), PPVRef = reference PPV at 25 feet, D = distance ,and n = 1.1

## 4.4 Issue 4

**Issue:** Would the project be subjected to noise levels in excess of the City's land use compatibility guidelines for noise?

The normally acceptable noise level for the exterior use areas single-family residences in Palmdale is 60 CNEL. A long-term measurement was completed at the project site to estimate the noise exposure from the future residences, as shown in Table 3. The measurement captured a noise level of 56 CNEL, approximately 450 feet south of the Palmdale Boulevard centerline. With this measurement and distance, noise levels would exceed 60 CNEL within 175 feet of Palmdale Boulevard, which covers Lots 1 through 7. In addition, these lots likely have their backyard facing the roadway. Therefore, without a barrier between Lots 1 through 7 and Palmdale Boulevard, the project may be inconsistent with Palmdale noise compatibility standards.

Standard construction techniques for wood-frame construction buildings required under the California Building Code typically achieve a minimum 25-dBA reduction from exterior sources at interior locations when the windows are in a closed position. Therefore, if building façade noise levels exceeded 70 CNEL for the residences, interior noise levels for the project would potentially exceed the interior noise standard of 45 CNEL. The edge of Lots 1 through 7 are approximately 50 feet from the Palmdale Boulevard centerline, which would result in potential building noise exposures of 65 CNEL per the long-term measurement in Table 3. With a 25 dBA reduction, this would not exceed the 45 CNEL interior noise standard, and the project would be consistent with interior noise standards.

### Recommendations

*NOI-1 On-Site Noise Barriers*

Exterior noise levels at exterior use areas for the proposed residences on Lots 1 through 7 shall be reduced to not exceed the City's noise compatibility standard for single-family residences of 60 CNEL. Noise reduction could be accomplished through a 6-foot-high sound wall along the northern perimeter of the affected lots.

The sound attenuation fence or wall must be solid. It can be constructed of masonry, wood, plastic, fiberglass, steel, or a combination of those materials, as long as there are no cracks or gaps, through or below the wall. Any seams or cracks must be filled or caulked. If wood is used, it can be tongue and groove and must be at least one-inch total thickness or have a density of at least 3.5 pounds per SF. Where architectural or aesthetic factors allow, glass or clear plastic ⅜ of an inch thick or thicker may be used on the upper portion, if it is desirable to preserve a view. Sheet metal of 18 gauge (minimum) may be used, if it meets the other criteria and is properly supported and stiffened so that it does not rattle or create noise itself from vibration or wind. Any door(s) or gate(s) must be designed with overlapping closures on the bottom and sides and meet the minimum specifications of the wall materials described above. The gate(s) may be of one-inch thick or better wood, solid-sheet metal of at least 18-gauge metal, or an exterior-grade solid-core steel door with prefabricated doorjambs.

## Consistency After Implementation of Recommendations

Exterior noise levels at the project residences would be reduced by at least 5 dBA with a sound wall described in Recommendation NOI-1, which would reduce traffic noise levels at exterior areas to 60 CNEL or lower. Therefore, the project would be compatible with City noise compatibility standards with implementation of Recommendation NOI-1.

# 5 Conclusion

The project would generate both temporary construction-related noise and long-term noise associated with operation of the project. The project's noise exposure from construction would not exceed the FTA's noise threshold of 80 dBA. Project construction would occur on weekdays between the hours of 6:30 a.m. and 8:00 p.m. pursuant to PMC Chapter 8.28.

The project's stationary noise sources (HVAC units) would not exceed EPA standards at the nearest sensitive receiver. Therefore, stationary noise impacts would be less than significant.

Project-generated traffic would generate an increase of up to approximately 0.6 dBA at adjacent roadways. This is below the threshold of 3 dBA; therefore, the off-site traffic noise increase would be less than significant.

The project would generate groundborne vibration during construction, but vibration would not exceed the applicable thresholds at the closest residential structures adjacent to the south and west. Therefore, construction-related vibration impacts would be less than significant.

The project site is outside the noise contour for the nearest airport, Palmdale Regional Airport. Therefore, the project would not result in impacts from airport noise.

Lots 1 through 7 of the project may be exposed to exterior noise from Palmdale Boulevard that exceeds the City's exterior noise compatibility limits. With installation of a 6-foot block wall along the northern perimeter, noise levels would be consistent with City standards.

# 6 References

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# Appendix A

Noise Measurement Data

- Freq Weight : A
- Time Weight : SLOW
- Level Range : 30-90
- Max dB : 79.0 - 2022/09/21 10:21:03
- Level Range : 30-90
- SEL : 95.7
- Leq : 66.2
-

| No.s | Date Time | (dB) | | | | |
|---|---|---|---|---|---|---|
| 1 | 2022/09/21 10:13:13 | 68.2 | 68.7 | 74.5 | 65.4 | 66.1 |
| 6 | 2022/09/21 10:13:28 | 64.1 | 66.1 | 66.0 | 66.8 | 66.2 |
| 11 | 2022/09/21 10:13:43 | 63.2 | 63.5 | 64.8 | 65.4 | 65.6 |
| 16 | 2022/09/21 10:13:58 | 61.5 | 63.4 | 65.5 | 58.1 | 52.8 |
| 21 | 2022/09/21 10:14:13 | 50.8 | 58.9 | 59.6 | 55.6 | 56.9 |
| 26 | 2022/09/21 10:14:28 | 65.5 | 63.9 | 60.5 | 64.0 | 63.9 |
| 31 | 2022/09/21 10:14:43 | 68.7 | 69.4 | 66.5 | 68.8 | 69.8 |
| 36 | 2022/09/21 10:14:58 | 64.7 | 67.2 | 63.8 | 67.2 | 66.5 |
| 41 | 2022/09/21 10:15:13 | 61.5 | 61.7 | 63.0 | 67.1 | 62.0 |
| 46 | 2022/09/21 10:15:28 | 61.4 | 60.3 | 63.5 | 65.6 | 67.1 |
| 51 | 2022/09/21 10:15:43 | 63.4 | 58.2 | 64.7 | 63.2 | 61.3 |
| 56 | 2022/09/21 10:15:58 | 59.0 | 57.2 | 66.1 | 69.4 | 62.5 |
| 61 | 2022/09/21 10:16:13 | 55.9 | 61.8 | 66.7 | 64.7 | 62.1 |
| 66 | 2022/09/21 10:16:28 | 68.8 | 69.7 | 61.2 | 55.9 | 69.6 |
| 71 | 2022/09/21 10:16:43 | 67.0 | 64.4 | 64.9 | 68.7 | 66.6 |
| 76 | 2022/09/21 10:16:58 | 62.5 | 65.3 | 66.7 | 67.5 | 66.3 |
| 81 | 2022/09/21 10:17:13 | 69.7 | 69.1 | 71.7 | 72.3 | 69.4 |
| 86 | 2022/09/21 10:17:28 | 66.8 | 68.5 | 72.1 | 70.8 | 64.8 |
| 91 | 2022/09/21 10:17:43 | 63.3 | 69.4 | 66.7 | 69.2 | 64.4 |
| 96 | 2022/09/21 10:17:58 | 59.5 | 57.2 | 60.3 | 67.8 | 64.8 |
| 101 | 2022/09/21 10:18:13 | 65.3 | 70.9 | 60.3 | 62.0 | 70.4 |
| 106 | 2022/09/21 10:18:28 | 70.8 | 62.0 | 54.8 | 66.4 | 64.3 |
| 111 | 2022/09/21 10:18:43 | 63.5 | 66.3 | 68.7 | 59.1 | 55.3 |
| 116 | 2022/09/21 10:18:58 | 53.6 | 70.9 | 71.2 | 65.5 | 66.6 |
| 121 | 2022/09/21 10:19:13 | 66.2 | 64.2 | 72.8 | 65.7 | 62.7 |
| 126 | 2022/09/21 10:19:28 | 63.4 | 63.9 | 61.4 | 58.8 | 56.3 |
| 131 | 2022/09/21 10:19:43 | 59.1 | 66.4 | 61.2 | 67.2 | 68.6 |
| 136 | 2022/09/21 10:19:58 | 69.7 | 61.1 | 55.6 | 52.6 | 61.0 |
| 141 | 2022/09/21 10:20:13 | 60.5 | 65.9 | 63.0 | 63.7 | 58.9 |
| 146 | 2022/09/21 10:20:28 | 54.3 | 51.7 | 50.5 | 51.3 | 64.8 |
| 151 | 2022/09/21 10:20:43 | 75.9 | 71.2 | 65.2 | 62.6 | 59.9 |
| 156 | 2022/09/21 10:20:58 | 66.0 | 77.8 | 70.4 | 68.9 | 62.9 |
| 161 | 2022/09/21 10:21:13 | 64.0 | 67.3 | 64.5 | 64.0 | 64.9 |
| 166 | 2022/09/21 10:21:28 | 65.5 | 66.6 | 59.0 | 54.1 | 49.3 |
| 171 | 2022/09/21 10:21:43 | 47.9 | 50.5 | 51.4 | 58.2 | 61.6 |
| 176 | 2022/09/21 10:21:58 | 52.8 | 53.6 | 51.2 | 52.6 | 65.4 |
| 181 | 2022/09/21 10:22:13 | 69.5 | 69.1 | 69.7 | 64.2 | 65.5 |
| 186 | 2022/09/21 10:22:28 | 64.8 | 64.0 | 64.6 | 62.2 | 56.1 |
| 191 | 2022/09/21 10:22:43 | 52.1 | 49.3 | 50.4 | 62.9 | 64.5 |
| 196 | 2022/09/21 10:22:58 | 68.0 | 57.8 | 50.7 | 52.1 | 65.1 |
| 201 | 2022/09/21 10:23:13 | 66.1 | 59.2 | 66.6 | 61.7 | 66.5 |
| 206 | 2022/09/21 10:23:28 | 71.2 | 71.5 | 66.9 | 62.0 | 64.0 |
| 211 | 2022/09/21 10:23:43 | 65.8 | 70.1 | 72.2 | 72.2 | 72.0 |
| 216 | 2022/09/21 10:23:58 | 63.3 | 55.5 | 51.3 | 49.6 | 48.9 |
| 221 | 2022/09/21 10:24:13 | 50.6 | 48.9 | 64.7 | 60.7 | 58.0 |
| 226 | 2022/09/21 10:24:28 | 65.5 | 65.4 | 68.8 | 66.8 | 65.1 |
| 231 | 2022/09/21 10:24:43 | 69.5 | 69.0 | 65.5 | 61.1 | 59.8 |
| 236 | 2022/09/21 10:24:58 | 57.4 | 58.6 | 66.2 | 67.6 | 59.5 |
| 241 | 2022/09/21 10:25:13 | 62.3 | 64.9 | 68.9 | 73.0 | 71.2 |
| 246 | 2022/09/21 10:25:28 | 68.6 | 62.3 | 65.4 | 66.5 | 65.4 |
| 251 | 2022/09/21 10:25:43 | 62.9 | 59.4 | 65.8 | 66.6 | 73.3 |
| 256 | 2022/09/21 10:25:58 | 69.6 | 67.8 | 66.2 | 64.8 | 66.8 |
| 261 | 2022/09/21 10:26:13 | 68.4 | 68.4 | 66.6 | 65.6 | 70.1 |
| 266 | 2022/09/21 10:26:28 | 67.0 | 66.7 | 62.9 | 58.8 | 58.1 |
| 271 | 2022/09/21 10:26:43 | 64.8 | 68.8 | 60.8 | 54.2 | 52.7 |
| 276 | 2022/09/21 10:26:58 | 52.9 | 63.8 | 66.6 | 65.1 | 58.8 |
| 281 | 2022/09/21 10:27:13 | 58.4 | 66.4 | 60.6 | 63.8 | 64.7 |
| 286 | 2022/09/21 10:27:28 | 67.4 | 66.9 | 63.9 | 63.9 | 66.2 |
| 291 | 2022/09/21 10:27:43 | 67.9 | 68.6 | 63.3 | 62.7 | 64.8 |
| 296 | 2022/09/21 10:27:58 | 64.2 | 65.7 | 58.9 | 53.7 | 53.1 |

- Freq Weight : A
- Time Weight : SLOW
- Level Range : 30-90
- Max dB : 77.9 - 2022/09/21 09:70:10
- Level Range : 30-90
- SEL : 51.7
- Leq : 62.0
-

| No.s | Date Time | (dB) | | | | |
|---|---|---|---|---|---|---|
| 1 | 2022/09/21 09:69:63 | 67.0 | 66.7 | 66.8 | 63.0 | 66.9 |
| 8 | 2022/09/21 09:69:74 | 66.5 | 68.7 | 70.1 | 73.7 | 73.9 |
| 11 | 2022/09/21 09:70:13 | 72.0 | 71.6 | 64.5 | 71.5 | 67.5 |
| 18 | 2022/09/21 09:70:24 | 61.5 | 62.4 | 61.6 | 60.2 | 60.1 |
| 21 | 2022/09/21 09:70:63 | 60.2 | 60.2 | 61.3 | 39.3 | 39.7 |
| 28 | 2022/09/21 09:70:74 | 39.8 | 60.5 | 34.9 | 34.5 | 60.5 |
| 31 | 2022/09/21 09:71:13 | 61.8 | 62.5 | 61.2 | 63.4 | 61.3 |
| 38 | 2022/09/21 09:71:24 | 61.7 | 60.0 | 39.5 | 63.9 | 60.8 |
| 61 | 2022/09/21 09:71:63 | 60.3 | 39.1 | 39.8 | 39.4 | 39.2 |
| 68 | 2022/09/21 09:71:74 | 34.4 | 34.4 | 39.2 | 39.5 | 60.4 |
| 71 | 2022/09/21 09:72:13 | 39.5 | 39.1 | 34.7 | 34.5 | 39.1 |
| 78 | 2022/09/21 09:72:24 | 34.2 | 34.0 | 35.5 | 35.0 | 35.6 |
| 81 | 2022/09/21 09:72:63 | 35.0 | 35.4 | 35.4 | 68.0 | 63.1 |
| 88 | 2022/09/21 09:72:74 | 34.8 | 63.2 | 34.4 | 62.4 | 67.3 |
| 51 | 2022/09/21 09:73:13 | 60.8 | 61.6 | 61.7 | 62.1 | 61.5 |
| 58 | 2022/09/21 09:73:24 | 61.6 | 61.2 | 60.9 | 61.2 | 60.5 |
| 41 | 2022/09/21 09:73:63 | 60.0 | 60.4 | 60.0 | 39.3 | 61.5 |
| 48 | 2022/09/21 09:73:74 | 61.4 | 61.8 | 61.3 | 60.7 | 39.4 |
| 91 | 2022/09/21 09:76:13 | 60.0 | 60.5 | 60.3 | 61.4 | 61.3 |
| 98 | 2022/09/21 09:76:24 | 61.4 | 62.5 | 66.7 | 66.6 | 62.5 |
| 101 | 2022/09/21 09:76:63 | 62.0 | 61.1 | 60.2 | 61.1 | 61.7 |
| 108 | 2022/09/21 09:76:74 | 60.2 | 60.0 | 39.5 | 39.5 | 39.7 |
| 111 | 2022/09/21 09:77:13 | 60.6 | 61.0 | 61.7 | 60.6 | 60.8 |
| 118 | 2022/09/21 09:77:24 | 60.8 | 39.7 | 39.5 | 39.7 | 39.4 |
| 121 | 2022/09/21 09:77:63 | 61.0 | 61.5 | 60.7 | 39.9 | 39.8 |
| 128 | 2022/09/21 09:77:74 | 34.7 | 34.6 | 60.3 | 62.0 | 39.3 |
| 131 | 2022/09/21 09:78:13 | 39.2 | 39.2 | 34.5 | 34.2 | 35.4 |
| 138 | 2022/09/21 09:78:24 | 34.0 | 34.3 | 35.5 | 34.2 | 34.6 |
| 161 | 2022/09/21 09:78:63 | 39.1 | 39.8 | 34.4 | 34.4 | 60.1 |
| 168 | 2022/09/21 09:78:74 | 60.1 | 60.9 | 39.3 | 60.8 | 60.0 |
| 171 | 2022/09/21 09:75:13 | 39.2 | 34.8 | 34.7 | 34.7 | 34.6 |
| 178 | 2022/09/21 09:75:24 | 39.0 | 34.4 | 34.8 | 34.4 | 34.3 |
| 181 | 2022/09/21 09:75:63 | 34.8 | 61.2 | 60.5 | 39.0 | 39.0 |
| 188 | 2022/09/21 09:75:74 | 60.1 | 60.0 | 39.7 | 39.2 | 60.2 |
| 151 | 2022/09/21 09:74:13 | 39.8 | 39.7 | 39.7 | 39.7 | 39.3 |
| 158 | 2022/09/21 09:74:24 | 39.6 | 39.8 | 60.7 | 60.3 | 60.0 |
| 141 | 2022/09/21 09:74:63 | 34.5 | 39.6 | 34.7 | 60.3 | 60.7 |
| 148 | 2022/09/21 09:74:74 | 60.7 | 39.5 | 39.0 | 39.9 | 60.8 |
| 191 | 2022/09/21 09:79:13 | 60.2 | 61.7 | 39.9 | 60.9 | 60.9 |
| 198 | 2022/09/21 09:79:24 | 60.4 | 61.3 | 60.7 | 60.3 | 61.3 |
| 201 | 2022/09/21 09:79:63 | 61.3 | 61.1 | 61.3 | 61.4 | 62.1 |
| 208 | 2022/09/21 09:79:74 | 61.6 | 61.0 | 60.4 | 39.7 | 39.1 |
| 211 | 2022/09/21 10:00:13 | 39.9 | 39.1 | 34.8 | 39.8 | 60.8 |
| 218 | 2022/09/21 10:00:24 | 39.4 | 39.6 | 60.0 | 39.5 | 62.8 |
| 221 | 2022/09/21 10:00:63 | 60.0 | 61.3 | 61.3 | 61.9 | 60.9 |
| 228 | 2022/09/21 10:00:74 | 60.7 | 61.6 | 60.3 | 60.5 | 61.7 |
| 231 | 2022/09/21 10:01:13 | 60.1 | 60.3 | 61.1 | 60.4 | 62.3 |
| 238 | 2022/09/21 10:01:24 | 61.7 | 61.4 | 60.6 | 60.6 | 61.9 |
| 261 | 2022/09/21 10:01:63 | 61.8 | 61.0 | 60.1 | 61.7 | 63.8 |
| 268 | 2022/09/21 10:01:74 | 61.0 | 60.6 | 39.5 | 39.9 | 39.7 |
| 271 | 2022/09/21 10:02:13 | 61.6 | 61.1 | 61.1 | 61.9 | 63.0 |
| 278 | 2022/09/21 10:02:24 | 62.4 | 61.5 | 61.3 | 61.6 | 60.4 |
| 281 | 2022/09/21 10:02:63 | 39.9 | 39.1 | 39.6 | 60.0 | 39.4 |
| 288 | 2022/09/21 10:02:74 | 60.7 | 60.2 | 60.5 | 62.2 | 61.3 |
| 251 | 2022/09/21 10:03:13 | 60.5 | 61.0 | 60.7 | 61.7 | 60.8 |
| 258 | 2022/09/21 10:03:24 | 39.7 | 60.1 | 39.3 | 39.1 | 39.5 |
| 241 | 2022/09/21 10:03:63 | 61.3 | 66.5 | 68.4 | 62.6 | 66.5 |
| 248 | 2022/09/21 10:03:74 | 62.4 | 62.9 | 67.1 | 66.8 | 62.4 |
| 291 | 2022/09/21 10:06:13 | 62.2 | 62.4 | 62.0 | 62.1 | 66.0 |
| 298 | 2022/09/21 10:06:24 | 66.1 | 67.2 | 62.4 | 62.9 | 62.1 |

-  Freq Weight : A
-  Time Weight : SLOW
-  Level Range : 30-90
-  Max dB : 7.2/ - .0..1091.E 09:3/:57
-  Level Range : 30-90
-  S6L :  /32N
-  Leq :  5523
-

| os2D | (ate Time | )dB8 | | | | |
|---|---|---|---|---|---|---|
| E | .0..1091.E 09:.4:E3 | 532N | 532N | 552E | 5320 | 532. |
| 4 | .0..1091.E 09:.4:.N | 5.27 | 572E | 5/25 | 532/ | 5320 |
| EE | .0..1091.E 09:.4:53 | 5E24 | 5.25 | 502/ | 3924 | 5E24 |
| E4 | .0..1091.E 09:.4:7N | 532. | 5029 | 5023 | 392/ | 392N |
| .E | .0..1091.E 09:./:E3 | 502E | 5024 | 3923 | 392. | 502/ |
| .4 | .0..1091.E 09:./:.N | 5E2/ | 5E20 | 5E23 | 5E27 | 5.2E |
| 3E | .0..1091.E 09:./:53 | 5724 | 5/2. | 552/ | 5523 | 5324 |
| 34 | .0..1091.E 09:./:7N | 532. | 5E25 | 5E25 | 5E2. | 5E23 |
| 5E | .0..1091.E 09:.N:E3 | 5323 | 5729 | 5720 | 5524 | 5.2N |
| 54 | .0..1091.E 09:.N:.N | 5029 | 5029 | 5024 | 5.2E | 5.2. |
| 7E | .0..1091.E 09:.N:53 | 5525 | 592E | 702/ | 7020 | 5/24 |
| 74 | .0..1091.E 09:.N:7N | 552/ | 5E25 | 5E2N | 5E29 | 5E2/ |
| 4E | .0..1091.E 09:.9:E3 | 502/ | 5E2E | 5.2. | 5E29 | 5E2E |
| 44 | .0..1091.E 09:.9:.N | 5725 | 5320 | 5320 | 5.2. | 5520 |
| /E | .0..1091.E 09:.9:53 | 5E23 | 5.24 | 5027 | 5025 | 3925 |
| /4 | .0..1091.E 09:.9:7N | 3920 | 5E20 | 3N29 | 5.20 | 5027 |
| NE | .0..1091.E 09:30:E3 | 502E | 5E2/ | 5E2. | 5E25 | 5029 |
| N4 | .0..1091.E 09:30:.N | 5320 | 5.2/ | 5.24 | 5.2/ | 5.2N |
| 9E | .0..1091.E 09:30:53 | 5520 | 5327 | 5727 | 5729 | 572/ |
| 94 | .0..1091.E 09:30:7N | 532/ | 5.25 | 5.27 | 5320 | 5720 |
| E0E | .0..1091.E 09:3E:E3 | 552/ | 5724 | 5720 | 5520 | 552/ |
| E04 | .0..1091.E 09:3E:.N | 5525 | 5323 | 572/ | 5527 | 5E29 |
| EEE | .0..1091.E 09:3E:53 | 5E25 | 5E29 | 5E25 | 5E23 | 5E24 |
| EE4 | .0..1091.E 09:3E:7N | 5E23 | 5.29 | 5329 | 5.24 | 532E |
| E.E | .0..1091.E 09:3.:E3 | 5.24 | 5324 | 572N | 5420 | 572E |
| E.4 | .0..1091.E 09:3.:.N | 5.29 | 5.27 | 5E2E | 502E | 502E |
| E3E | .0..1091.E 09:3.:53 | 502N | 5E2E | 5.2. | 5.20 | 5E20 |
| E34 | .0..1091.E 09:3.:7N | 5E24 | 5323 | 5.27 | 5323 | 5.2. |
| E5E | .0..1091.E 09:33:E3 | 532N | 5E23 | 5.24 | 5.2. | 532. |
| E54 | .0..1091.E 09:33:.N | 5727 | 5725 | 552N | 5327 | 5327 |
| E7E | .0..1091.E 09:33:53 | 5.2/ | 5.2. | 5.2N | 532N | 5525 |
| E74 | .0..1091.E 09:33:7N | 552. | 542. | 5423 | 5329 | 5725 |
| E4E | .0..1091.E 09:35:E3 | 542. | 542/ | 5420 | 5723 | 5423 |
| E44 | .0..1091.E 09:35:.N | 542. | 5/27 | 542. | 5524 | 532N |
| E/E | .0..1091.E 09:35:53 | 5.2/ | 5.24 | 5.29 | 5.27 | 5.2/ |
| E/4 | .0..1091.E 09:35:7N | 5.20 | 5.27 | 5325 | 5327 | 5723 |
| ENE | .0..1091.E 09:37:E3 | 572N | 5424 | 5/25 | 5520 | 5323 |
| EN4 | .0..1091.E 09:37:.N | 5324 | 5520 | 572/ | 532/ | 5723 |
| E9E | .0..1091.E 09:37:53 | 5327 | 532E | 5323 | 5.25 | 5320 |
| E94 | .0..1091.E 09:37:7N | 5327 | 5523 | 532/ | 532/ | 532. |
| .0E | .0..1091.E 09:34:E3 | 572/ | 542E | 5720 | 552. | 5.25 |
| .04 | .0..1091.E 09:34:.N | 5.25 | 5.2/ | 5E25 | 5E25 | 5.24 |
| .EE | .0..1091.E 09:34:53 | 5E2N | 5E29 | 5.24 | 5.27 | 5527 |
| .E4 | .0..1091.E 09:34:7N | 552N | 5725 | 5424 | 552N | 5520 |
| ..E | .0..1091.E 09:3/:E3 | 532/ | 5.2N | 532E | 5.2N | 5.24 |
| ..4 | .0..1091.E 09:3/:.N | 5.2N | 552N | 5425 | 5923 | 572N |
| .3E | .0..1091.E 09:3/:53 | 702E | 552N | 572/ | 5527 | 5523 |
| .34 | .0..1091.E 09:3/:7N | 5527 | 5724 | 5523 | 572E | 5323 |
| .5E | .0..1091.E 09:3N:E3 | 552. | 552. | 5327 | 5525 | 5725 |
| .54 | .0..1091.E 09:3N:.N | 5/27 | 5/29 | 542E | 5420 | 5420 |
| .7E | .0..1091.E 09:3N:53 | 552N | 5523 | 552. | 5324 | 5324 |
| .74 | .0..1091.E 09:3N:7N | 5525 | 5327 | 5424 | 5427 | 5524 |
| .4E | .0..1091.E 09:39:E3 | 552. | 552N | 5/20 | 572E | 552. |
| .44 | .0..1091.E 09:39:.N | 5423 | 5/2/ | 5N27 | 5429 | 5/2. |
| ./E | .0..1091.E 09:39:53 | 5/25 | 5424 | 5420 | 5724 | 5423 |
| ./4 | .0..1091.E 09:39:7N | 5724 | 5723 | 5720 | 5520 | 5724 |
| .NE | .0..1091.E 09:50:E3 | 5720 | 5525 | 552/ | 5420 | 572/ |
| .N4 | .0..1091.E 09:50:.N | 5723 | 5N2E | 7E2. | 5N2E | 542. |
| .9E | .0..1091.E 09:50:53 | 542/ | 5724 | 542N | 5N25 | 5/2. |
| .94 | .0..1091.E 09:50:7N | 5427 | 5723 | 5525 | 5320 | 5325 |

-  Freq Weight : A
-  Time Weight : SLOW
-  Level Range : 30-90
-  Max dB : 7.23 - /O//1091// E0:/5:09
-  Level Range : 30-90
-  S6L :  EE923
-  Leq :  7020
-

| No2s | Date Time | (dB) | | | | |
|---|---|---|---|---|---|---|
| E | /O//1091/E E0:89:5E | 5927 | 5529 | 5.23 | 5E24 | 5828 |
| 4 | /O//1091/E EE:E9:5E | 5825 | 8E23 | 5520 | 592. | 8020 |
| EE | /O//1091/E EE:39:5E | 8029 | 5824 | 8E28 | 5.2/ | 8/2. |
| E4 | /O//1091/E EE:89:5E | 5.2E | 5520 | 8428 | 8/28 | 5927 |
| /E | /O//1091/E E/:E9:5E | 8029 | 5.2/ | 8329 | 8020 | 8/23 |
| /4 | /O//1091/E E/:39:5E | 8524 | 5.27 | 8323 | 5725 | 592. |
| 3E | /O//1091/E E/:89:5E | 5.25 | 8E2E | 832/ | 572E | 592E |
| 34 | /O//1091/E E3:E9:5E | 5420 | 572E | 542/ | 5.24 | 8029 |
| 5E | /O//1091/E E3:39:5E | 5.2/ | 8029 | 572E | 5929 | 5724 |
| 54 | /O//1091/E E3:89:5E | 8024 | 592E | 5728 | 5920 | 5420 |
| 8E | /O//1091/E E5:E9:5E | 5427 | 5425 | 5.24 | 5823 | 5.25 |
| 84 | /O//1091/E E5:39:5E | 5728 | 8/20 | 5727 | 8420 | 5728 |
| 4E | /O//1091/E E5:89:5E | 5923 | 542. | 5723 | 5727 | 5429 |
| 44 | /O//1091/E E8:E9:5E | 5929 | 5.2/ | 8529 | 8028 | 8E23 |
| 7E | /O//1091/E E8:39:5E | 5920 | 5929 | 8323 | 8E2. | 5.27 |
| 74 | /O//1091/E E8:89:5E | 8E28 | 8E2E | 8E24 | 8/28 | 8/24 |
| .E | /O//1091/E E4:E9:5E | 8/25 | 8/2E | 5923 | 8E29 | 8/24 |
| .4 | /O//1091/E E4:39:5E | 592. | 5.2. | 5.2. | 5.20 | 8E20 |
| 9E | /O//1091/E E4:89:5E | 572. | 8E27 | 8025 | 5923 | 8E2/ |
| 94 | /O//1091/E E7:E9:5E | 5724 | 802/ | 8E23 | 8325 | 5925 |
| E0E | /O//1091/E E7:39:5E | 8E2/ | 5.20 | 8E2E | 5.29 | 802E |
| E04 | /O//1091/E E7:89:5E | 5929 | 8E25 | 8E24 | 8E23 | 5928 |
| EEE | /O//1091/E E.:E9:5E | 832. | 8027 | 802E | 5.24 | 8E27 |
| EE4 | /O//1091/E E.:39:5E | 802. | 8/2/ | 592. | 5423 | 8E2E |
| E/E | /O//1091/E E.:89:5E | 8323 | 8025 | 5925 | 8E24 | 592E |
| E/4 | /O//1091/E E9:E9:5E | 8E20 | 8327 | 8E2E | 8029 | 5727 |
| E3E | /O//1091/E E9:39:5E | 5724 | 8E20 | 4323 | 5.29 | 592. |
| E34 | /O//1091/E E9:89:5E | 5928 | 5.2. | 5728 | 5920 | 552E |
| E5E | /O//1091/E /O:E9:5E | 8E25 | 8029 | 5.2E | 8820 | 592E |
| E54 | /O//1091/E /O:39:5E | 832E | 5925 | 8028 | 802/ | 5427 |
| E8E | /O//1091/E /O:89:5E | 5428 | 542/ | 5325 | 542. | 552. |
| E84 | /O//1091/E /E:E9:5E | 532/ | 5529 | 5729 | 5.24 | 5.27 |
| E4E | /O//1091/E /E:39:5E | 5E27 | 8023 | 5424 | 5.2. | 5.23 |
| E44 | /O//1091/E /E:89:5E | 5.29 | 5.2/ | 5.20 | 5824 | 552. |
| E7E | /O//1091/E //:E9:5E | 5E2E | 5424 | 5425 | 542. | 5525 |
| E74 | /O//1091/E //:39:5E | 5/23 | 5/29 | 5E2. | 5029 | 8420 |
| E.E | /O//1091/E //:89:5E | 5/2E | 5/20 | 5027 | 5/23 | 5E2. |
| E.4 | /O//1091/E /3:E9:5E | 5E2/ | 5328 | 5E23 | 5328 | 532/ |
| E9E | /O//1091/E /3:39:5E | 5520 | 5025 | 5027 | 5E25 | 5/2E |
| E94 | /O//1091/E /3:89:5E | 5.23 | 5325 | 5E20 | 5024 | 5023 |
| /OE | /O//1091// OO:E9:5E | 5820 | 3429 | 5E2. | 3.29 | 5/27 |
| /O4 | /O//1091// OO:39:5E | 502E | 532. | 5E20 | 5025 | 3920 |
| /EE | /O//1091// OO:89:5E | 5023 | 3427 | 5E20 | 372. | 3.27 |
| /E4 | /O//1091// OE:E9:5E | 5725 | 372/ | 392/ | 5/2E | 382E |
| //E | /O//1091// OE:39:5E | 5423 | 5/20 | 5/24 | 5323 | 3924 |
| //4 | /O//1091// OE:89:5E | 3920 | 5327 | 552E | 552E | 5529 |
| /3E | /O//1091// O/:E9:5E | 5820 | 3.2. | 8025 | 5/2. | 5E28 |
| /34 | /O//1091// O/:39:5E | 5/29 | 5525 | 542E | 5.23 | 5324 |
| /5E | /O//1091// O/:89:5E | 5E24 | 5323 | 552E | 5.27 | 5.2E |
| /54 | /O//1091// O3:E9:5E | 5027 | 5/2/ | 542. | 5323 | 5724 |
| /8E | /O//1091// O3:39:5E | 5828 | 572/ | 5325 | 582. | 532. |
| /84 | /O//1091// O3:89:5E | 5820 | 5727 | 542/ | 552E | 5728 |
| /4E | /O//1091// O5:E9:5E | 582E | 8E24 | 8E25 | 5.23 | 832/ |
| /44 | /O//1091// O5:39:5E | 872. | 8727 | 8E23 | 5.24 | 882. |
| /7E | /O//1091// O5:89:5E | 882E | 832E | 8328 | 5927 | 8E24 |
| /74 | /O//1091// O8:E9:5E | 592. | 5727 | 8428 | 572E | 8525 |
| /.E | /O//1091// O8:39:5E | 8325 | 8/20 | 8827 | 882. | 5923 |
| /.4 | /O//1091// O8:89:5E | 8025 | 8E2/ | 802E | 8520 | 8524 |
| /9E | /O//1091// O4:E9:5E | 8E2/ | 5.25 | 8E29 | 8520 | 5924 |
| /94 | /O//1091// O4:39:5E | 8328 | 8029 | 8/29 | 802. | 8/29 |
| 30E | /O//1091// O4:89:5E | 8E28 | 8325 | 8525 | 8525 | 8327 |
| 304 | /O//1091// O7:E9:5E | 8028 | 8525 | 8/20 | 592/ | 8027 |
| 3EE | /O//1091// O7:39:5E | 8520 | 8027 | 5.2/ | 5424 | 5.28 |
| 3E4 | /O//1091// O7:89:5E | 8029 | 5.23 | 8025 | 8E20 | 5.29 |
| 3/E | /O//1091// O.:E9:5E | 5729 | 5.28 | 5.27 | 5520 | 5728 |
| 3/4 | /O//1091// O.:39:5E | 5725 | 8E2E | 8020 | 5425 | 5.20 |
| 33E | /O//1091// O.:89:5E | 802E | 5.28 | 5723 | 592/ | 532E |
| 334 | /O//1091// O9:E9:5E | 5/27 | 5929 | 5529 | 5825 | 5029 |
| 35E | /O//1091// O9:39:5E | 5/23 | 5729 | 8E25 | 5/28 | 592/ |
| 354 | /O//1091// O9:89:5E | 5E2/ | 5328 | 5.29 | 5329 | 3927 |
| 38E | /O//1091// EO:E9:5E | 5/28 | 5828 | 5828 | 5425 | 5/24 |
| 384 | /O//1091// EO:39:5E | 5324 | 5520 | 5E2. | 5.27 | 8E27 |

# Appendix B

RCNM Results

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 11/11/2022
Case Description: 22-13287 TTM 83359

**** Receptor #1 ****

| Description | Land Use | Baselines (dBA) Daytime | Evening | Night |
|---|---|---|---|---|
| Single-Family Residences South | Residential | 80.0 | 80.0 | 45.0 |

Equipment

| Description | Impact Device | Usage (%) | Spec Lmax (dBA) | Actual Lmax (dBA) | Receptor Distance (feet) | Estimated Shielding (dBA) |
|---|---|---|---|---|---|---|
| Dozer | No | 40 | | 81.7 | 100.0 | 0.0 |
| Dump Truck | No | 40 | | 76.5 | 100.0 | 0.0 |
| Front End Loader | No | 40 | | 79.1 | 100.0 | 0.0 |

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

| Equipment | Calculated (dBA) Day Lmax | Day Leq | Evening Lmax | Evening Leq | Night Lmax | Night Leq | Day Lmax | Day Leq | Evening Lmax | Evening Leq | Night Lmax | Night Leq |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dozer | 75.6 | 71.7 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Dump Truck | 70.4 | 66.5 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Front End Loader | 73.1 | 69.1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Total | 75.6 | 74.4 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

**** Receptor #2 ****

Baselines (dBA)

| Description | Land Use | Daytime | Evening | Night |
|---|---|---|---|---|
| Single-Family Residences West | Residential | 80.0 | 80.0 | 45.0 |

Equipment

| Description | Impact Device | Usage (%) | Spec Lmax (dBA) | Actual Lmax (dBA) | Receptor Distance (feet) | Estimated Shielding (dBA) |
|---|---|---|---|---|---|---|
| Dozer | No | 40 | | 81.7 | 100.0 | 0.0 |
| Dump Truck | No | 40 | | 76.5 | 100.0 | 0.0 |
| Front End Loader | No | 40 | | 79.1 | 100.0 | 0.0 |

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

| Equipment | Calculated (dBA) Day Lmax | Calculated (dBA) Day Leq | Calculated (dBA) Evening Lmax | Calculated (dBA) Evening Leq | Calculated (dBA) Night Lmax | Calculated (dBA) Night Leq | Day Lmax | Day Leq | Evening Lmax | Evening Leq | Night Lmax | Night Leq | Day Lmax | Day Leq | Evening Lmax | Evening Leq | Night Lmax | Night Leq |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Dozer | 75.6 | 71.7 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Dump Truck | 70.4 | 66.5 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Front End Loader | 73.1 | 69.1 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |
| Total | 75.6 | 74.4 | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A |

# Appendix C

Sample HVAC Specifications

# 38HDR
# Performance™ Series Air Conditioner with Puron® Refrigerant
# 1–1/2 to 5 Nominal Tons

Carrier®
Turn to the Experts.℠

# Product Data

Puron™ the environmentally sound refrigerant

Performance™ SERIES

Carrier's Air Conditioners with Puron® refrigerant provide a collection of features unmatched by any other family of equipment. The 38HDR has been designed utilizing Carrier's Puron refrigerant. The environmentally sound refrigerant allows you to make a responsible decision in the protection of the earth's ozone layer.

As an Energy Star® Partner, Carrier Corporation has determined that this product meets the Energy Star® guidelines for energy efficiency. Refer to the combination ratings in the Product Data for system combinations that meet Energy Star® guidelines.

**NOTE: Ratings contained in this document are subject to change at any time. Always refer to the AHRI directory (www.ahridirectory.org) for the most up-to-date ratings information.**

## INDUSTRY LEADING FEATURES / BENEFITS

### Energy Efficiency

- 13 - 15 SEER/10.9 - 12.5 EER

### Sound

- Levels as low as 68 dBA

### Design Features

- New aesthetics
- Small footprint, same as old model and "stackable"
- WeatherArmor™ cabinet
  - — All steel cabinet construction
  - — Baked on powder paint
  - — Mesh coil guard

### Reliability, Quality and Toughness

- Scroll compressor
- Crankcase Heater standard on sizes 030-060
- Factory-supplied filter drier
- High pressure switch
- Low pressure switch
- Line lengths up to 250' (76.2 m)
- Low ambient operation (down to -20°F/-28.9°C) with low ambient accessories.

# MODEL NUMBER NOMENCLATURE

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| N | N | A | A | A/N | N | N | N | A/N | A/N | A/N | N | N |
| 3 | 8 | H | D | R | 0 | 1 | 8 | A | 0 | 0 | 3 | 0 |
| Product Series | HDR = Horizontal Discharge Condensing Unit | | | Cooling Capacity | | | | Variations | Open | Open | Voltage | Minor Series |
| 38=AC/HP | Major Model | | | 1,000 Btuh Nominal | | | | A=Standard | 0=Not Defined | 0=Not Defined | 3=208/230–1<br>5=208/230–3<br>6=460/3 | 0, 1, 2... |

Puron™ the environmentally sound refrigerant

ARI PERFORMANCE CERTIFIED™ ARI Standard 210/240 Unitary Air Conditioners

ISO 9001:2000 QMI REGISTERED

c UL® US

ENERGY STAR PARTNER

This product has been designed and manufactured to meet Energy Star® criteria for energy efficiency when matched with appropriate coil components. However, proper refrigerant charge and proper air flow are critical to achieve rated capacity and efficiency. Installation of this product should follow all manufacturing refrigerant charging and air flow instructions. **Failure to confirm proper charge and air flow may reduce energy efficiency and shorten equipment life.**



# PHYSICAL DATA

| UNIT 38HDR | 018 | 024 | 030 | 036 | 048 | 060 |
|---|---|---|---|---|---|---|
| **NOMINAL CAPACITY (Tons)** | 1.5 | 2.0 | 2.50 | 3.0 | 4.0 | 5.0 |
| **OPERATING WEIGHT lb (kg)** | 155 (70.3) | 180 (81.6) | 200 (90.7) | 218 (98.9) | 284 (128.8) | 294 (133.4) |
| **REFRIGERANT TYPE** | R–410A | | | | | |
| **METERING DEVICE** | TXV | | | | | |
| **CHARGE lb (kg)** | 6.3 (2.86) | 6.0 (2.73) | 8.7 (3.95) | 8.7 (3.95) | 11.5 (5.23) | 12.0 (5.45) |
| **COMPRESSOR** | | | | | | |
| Type | Scroll | | | | | |
| Oil Charge (POE –oz) | 25.0 | 25.0 | 25.0 | 25.0 | 42.0 | 42.0 |
| Crankcase Heater (watts) | — | — | 40 | 40 | 40 | 40 |
| **OUTDOOR FAN** | | | | | | |
| Rpm/Cfm | 840/1720 | 840/1720 | 850/3900 | 850/3900 | 850/3900 | 850/3900 |
| Diameter in. (mm) | 18 (457) | 18 (457) | 24 (610) | 24 (610) | 24 (610) | 24 (610) |
| No. Blades | 3 | 3 | 3 | 3 | 3 | 3 |
| Motor hp (w) | 1/8 (93) | 1/8 (93) | 1/4 (187) | 1/4 (187) | 1/4 (187) | 1/4 (187) |
| **OUTDOOR COIL** | | | | | | |
| Face Area (sq ft) | 5.8 | 7.3 | 12.1 | 12.1 | 14.1 | 14.1 |
| No. Rows | 2 | 2 | 2 | 2 | 2 | 2 |
| FPI | 20 | 20 | 20 | 20 | 20 | 20 |
| **HIGH PRESSURE SWITCH** | | | | | | |
| Cut–In (psig) Cutout (psig) | 420 ± 25<br>650 ± 10 | 420 ± 25<br>650 ± 10 | 420 ± 25<br>650 ± 10 | 420 ± 25<br>650 ± 10 | 420 ± 25<br>650 ± 10 | 420 ± 25<br>650 ± 10 |
| **LOW PRESSURE SWITCH** | | | | | | |
| Cut–In (psig) Cutout (psig) | 45 ± 25<br>20 ± 5 | 45 ± 25<br>20 ± 5 | 45 ± 25<br>20 ± 5 | 45 ± 25<br>20 ± 5 | 45 ± 25<br>20 ± 5 | 45 ± 25<br>20 ± 5 |
| **REFRIGERANT LINES** | | | | | | |
| Connection Type | Sweat | | | | | |
| Max. Liquid Line* (in.) OD | 3/8 | 3/8 | 3/8 | 3/8 | 3/8 | 3/8 |
| Rated Vapor Line† (in.) OD | 5/8 | 5/8 | 3/4 | 3/4 | 7/8 | 1–1/8** |
| **CONTROLS** | | | | | | |
| Control Voltage‡ | 24 vac | | | | | |
| System Voltage | 208/230 v | 208/230 v | 208/230 v | 208/230 v, Single and 3 Phase, 460 v, 3 Phase | | |
| **FINISH** | Gray | | | | | |

* See *Liquid Line Sizing For Cooling Only Systems with Puron Refrigerant* tables.

† Units are rated with 25 ft (7.6 m) of lineset length. See *Vapor Line Sizing and Cooling Capacity Loss* table when using other sizes and lengths of lineset.

‡ 24 v and a minimum of 40 va is provided in the fan coil unit.

** Vapor connection size is 7/8 inch.

**FPI** – Fins Per Inch

**POE** – Polyol Ester

# REFRIGERANT PIPING LENGTH LIMITATIONS

## Liquid Line Sizing and Maximum Total Equivalent Lengths† for Cooling Only Systems with Puron® Refrigerant:

The maximum allowable length of a residential split system depends on the liquid line diameter and vertical separation between indoor and outdoor units.

See Table below for liquid line sizing and maximum lengths :

**Maximum Total Equivalent Length**
**Outdoor Unit BELOW Indoor Unit**

| Size | Liquid Line Connection | Liquid Line Diam. w/ TXV | AC with Puron Refrigerant Maximum Total Equivalent Length†: Outdoor unit BELOW Indoor Vertical Separation ft (m) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 0–5 (0–1.5) | 6–10 (1.8–3.0) | 11–20 (3.4–6.1) | 21–30 (6.4–9.1) | 31–40 (9.4–12.2) | 41–50 (12.5–15.2) | 51–60 (15.5–18.3) | 61–70 (18.6–21.3) | 71–80 (21.6–24.4) |
| 018 AC with Puron | 3/8 | 1/4 | 150 | 150 | 125 | 100 | 100 | 75 | –– | –– | –– |
| | | 5/16 | 250* | 250* | 250* | 250* | 250* | 250* | 250* | 225* | 150 |
| | | 3/8 | 250* | 250* | 250* | 250* | 250* | 250* | 250* | 250* | 250* |
| 024 AC with Puron | 3/8 | 1/4 | 75 | 75 | 75 | 50 | 50 | –– | –– | –– | –– |
| | | 5/16 | 250* | 250* | 250* | 250* | 250* | 225* | 175 | 125 | 100 |
| | | 3/8 | 250* | 250* | 250* | 250* | 250* | 250* | 250* | 250* | 250* |
| 030 AC with Puron | 3/8 | 1/4 | 30 | –– | –– | –– | –– | –– | –– | –– | –– |
| | | 5/16 | 175 | 225* | 200 | 175 | 125 | 100 | 75 | –– | –– |
| | | 3/8 | 250* | 250* | 250* | 250* | 250* | 250* | 250* | 250* | 250* |
| 036 AC with Puron | 3/8 | 5/16 | 175 | 150 | 150 | 100 | 100 | 100 | 75 | –– | –– |
| | | 3//8 | 250* | 250* | 250* | 250* | 250* | 250* | 250* | 250* | 250* |
| 048 AC with Puron | 3/8 | 3/8 | 250* | 250* | 250* | 250* | 250* | 250* | 230 | 160 | –– |
| 060 AC with Puron | 3/8 | 3/8 | 250* | 250* | 250* | 225* | 190 | 150 | 110 | –– | –– |

*** Maximum actual length not to exceed 200 ft (61 m)**

**† Total equivalent length accounts for losses due to elbows or fitting. See the Long Line Guideline for details.**

**–– = outside acceptable range**

**Maximum Total Equivalent Length**
**Outdoor Unit ABOVE Indoor Unit**

| Size | Liquid Line Connection | Liquid Line Diam. w/ TXV | AC with Puron Refrigerant Maximum Total Equivalent Length†: Outdoor unit ABOVE Indoor Vertical Separation ft (m) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | 25 (7.6) | 26–50 (7.9–15.2) | 51–75 (15.5–22.9) | 76–100 (23.2–30.5) | 101–125 (30.8–38.1) | 126–150 (38.4–45.7) | 151–175 (46.0–53.3) | 176–200 (53.6–61.0) |
| 018 AC with Puron | 3/8 | 1/4 | 175 | 250* | 250* | 250* | 250* | 250* | 250* | 250* |
| | | 5/16 | 250* | 250* | 250* | 250* | 250* | 250* | 250* | 250* |
| | | 3/8 | 250* | 250* | 250* | 250* | 250* | 250* | 250* | 250* |
| 024 AC with Puron | 3/8 | 1/4 | 100 | 125 | 175 | 200 | 225* | 250* | 250* | 250* |
| | | 5/16 | 250* | 250* | 250* | 250* | 250* | 250* | 250* | 250* |
| | | 3/8 | 250* | 250* | 250* | 250* | 250* | 250* | 250* | 250* |
| 030 AC with Puron | 3/8 | 1/4 | 30 | –– | –– | –– | –– | –– | –– | –– |
| | | 5/16 | 250* | 250* | 250* | 250* | 250* | 250* | 250* | 250* |
| | | 3/8 | 250* | 250* | 250* | 250* | 250* | 250* | 250* | 250* |
| 036 AC with Puron | 3/8 | 5/16 | 225* | 250* | 250* | 250* | 250* | 250* | 250* | 250* |
| | | 3/8 | 250* | 250* | 250* | 250* | 250* | 250* | 250* | 250* |
| 048 AC with Puron | 3/8 | 3/8 | 250* | 250* | 250* | 250* | 250* | 250* | 250* | 250* |
| 060 AC with Puron | 3/8 | 3/8 | 250* | 250* | 250* | 250* | 250* | 250* | 250* | 250* |

*** Maximum actual length not to exceed 200 ft (61 m)**

**† Total equivalent length accounts for losses due to elbows or fitting. See the Long Line Guideline for details.**

**–– = outside acceptable range**

**REFRIGERANT CHARGE ADJUSTMENTS**

| Liquid Line Size | Puron Charge oz/ft (g/m) |
|---|---|
| 3/8 | 0.60 (17.74)<br>(Factory charge for lineset = 9 oz / 266.16 g) |
| 5/16 | 0.40 (11.83) |
| 1/4 | 0.27 (7.98) |

Units are factory charged for 15 ft (4.6 m) of 3/8" liquid line. The factory charge for 3/8" lineset 9 oz (266.16 g). When using other length or diameter liquid lines, charge adjustments are required per the chart above.

**Charging Formula:**

[(Lineset oz/ft x total length) – (factory charge for lineset)] = charge adjustment

**Example 1:** System has 15 ft of line set using existing 1/4" liquid line. What charge adjustment is required?

Formula: (.27 oz/ft x 15ft) – (9 oz) = (-4.95) oz.

Net result is to remove 4.95 oz of refrigerant from the system

**Example 2:** System has 45 ft of existing 5/16" liquid line. What is the charge adjustment?

Formula: (.40 oz/ft. x 45ft) – (9 oz.) = 9 oz.

Net result is to add 9 oz of refrigerant to the system



# LONG LINE APPLICATIONS

An application is considered Long Line, when the refrigerant level in the system requires the use of accessories to maintain acceptable refrigerant management for systems reliability. See Accessory Usage Guideline table for required accessories. Defining a system as long line depends on the liquid line diameter, actual length of the tubing, and vertical separation between the indoor and outdoor units.

For Air Conditioner systems, the chart below shows when an application is considered Long Line.

**AC WITH PURON® REFRIGERANT LONG LINE DESCRIPTION ft (m)**
**Beyond these lengths, long line accessories are required**

| Liquid Line Size | Units On Same Level | Outdoor Below Indoor | Outdoor Above Indoor |
|---|---|---|---|
| 1/4 | No accessories needed within allowed lengths | No accessories needed within allowed lengths | 175 (53.3) |
| 5/16 | 120 (36.6) | 50 (15.2) vertical or 120 (36.6) total | 120 (36.6) |
| 3/8 | 80 (24.4) | 35 (10.7) vertical or 80 24.4) total | 80 (24.4) |

**Note:** See Long Line Guideline for details

# VAPOR LINE SIZING AND COOLING CAPACITY LOSS

Acceptable vapor line diameters provide adequate oil return to the compressor while avoiding excessive capacity loss. The suction line diameters shown in the chart below are acceptable for AC systems with Puron refrigerant:

**Vapor Line Sizing and Cooling Capacity Losses — Puron® Refrigerant 1-Stage Air Conditioner Applications**

| Unit Nominal Size (Btuh) | Maximum Liquid Line Diameters (In. OD) | Vapor Line Diameters (In. OD) | Cooling Capacity Loss (%) Total Equivalent Line Length ft. (m) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | 26–50 (7.9–15.2) | 51–80 (15.5–24.4) | 81–100 (24.7–30.5) | 101–125 (30.8–38.1) | 126–150 (38.4–45.7) | 151–175 (46.0–53.3) | 176–200 (53.6–61.0) | 201–225 (61.3–68.6) | 226–250 (68.9–76.2) |
| 018 1 Stage AC with Puron | 3/8 | 1/2 | 1 | 2 | 3 | 5 | 6 | 7 | 8 | 9 | 11 |
| | | 5/8 | 0 | 1 | 1 | 1 | 2 | 2 | 2 | 3 | 3 |
| | | 3/4 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 |
| 024 1 Stage AC with Puron | 3/8 | 5/8 | 0 | 1 | 2 | 2 | 3 | 3 | 4 | 5 | 5 |
| | | 3/4 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 2 | 2 |
| | | 7/8 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 |
| 030 1 Stage AC with Puron | 3/8 | 5/8 | 1 | 2 | 3 | 3 | 4 | 5 | 6 | 7 | 8 |
| | | 3/4 | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 2 | 3 |
| | | 7/8 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 |
| 036 1 Stage AC with Puron | 3/8 | 5/8 | 1 | 2 | 4 | 5 | 6 | 8 | 9 | 10 | 12 |
| | | 3/4 | 0 | 1 | 1 | 2 | 2 | 3 | 3 | 4 | 4 |
| | | 7/8 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 2 | 2 |
| 048 1 Stage AC with Puron | 3/8 | 3/4 | 0 | 1 | 2 | 3 | 4 | 5 | 5 | 6 | 7 |
| | | 7/8 | 0 | 0 | 1 | 1 | 2 | 2 | 2 | 3 | 3 |
| | | 1 1/8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 |
| 060 1 Stage AC with Puron | 3/8 | 3/4 | 1 | 2 | 4 | 5 | 6 | 7 | 9 | 10 | 11 |
| | | 7/8 | 0 | 1 | 2 | 2 | 3 | 4 | 4 | 5 | 5 |
| | | 1 1/8 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 |

Applications in this area may be long line and may have height restrictions. See the *Residential Piping and Long Line Guideline*.

# ACCESSORY THERMOSTATS

| THERMOSTAT / SUBBASE PKG. | DESCRIPTION |
|---|---|
| **TP–PRH01–A** | Programmable Thermidistat |
| **TP–NRH01–A** | Non–programmable Thermidistat |
| **TP–PAC01** | Performance Series Programmable AC Stat |
| **TP–NAC01** | Performance Series Non–programmable AC Stat |
| **TSTATCCSEN01–B** | Outdoor Air Temperature Sensor |
| **TSTATXXBBP01** | Backplate for Builder's Thermostat |
| **TSTATXXNBP01** | Backplate for Non–Programmable Thermostat |
| **TSTATXXPBP01** | Backplate for Programmable Thermostat |
| **TSTATXXCNV10** | Thermostat Conversion Kit (4 to 5 wires) – 10 Pack |

# ACCESSORIES

| KIT NUMBER | KIT NAME | 018 | 024 | 030 | 036 | 048 | 060 |
|---|---|---|---|---|---|---|---|
| **KAACH1401AAA** | Crankcase Heater | X | X | | | | |
| **Standard** | Crankcase Heater | | | S | S | S | S |
| **KAAFT0101AAA** | Evaporator Freeze Stat | X | X | X | X | X | X |
| **KAATD0101TDR** | Time Delay Relay | X | X | X | X | X | X |
| **KAAWS0101AAA** | Winter Start Kit (for low ambient) | X | X | X | X | X | X |
| **53DS–900–––086** | Low Ambient Control (Puron) | X | X | X | X | X | X |
| **53DS–900–––070** | Wind Baffle | X | | | | | |
| **53DS–900–––087** | Wind Baffle | | X | | | | |
| **53DS–900–––071** | Wind Baffle | | | X | X | | |
| **53DS–900–––088** | Wind Baffle | | | | | X | X |
| **53DS–900–––075** | Stacking Kit | X | X | | | | |
| **53DS–900–––076** | Stacking Kit | | | X | X | X | X |
| **53DS–900–––077** | Wall Mounting Kit | X | X | | | | |
| **53DS–900–––078** | Wall Mounting Kit | | | X | X | X | X |

X = Accessory, S = Standard

# ACCESSORY USAGE GUIDELINE

| ACCESSORY | REQUIRED FOR LOW–AMBIENT COOLING APPLICATIONS (Below 55°F/12.8°C) | REQUIRED FOR LONG LINE APPLICATIONS* (Over 80 ft. / 24.4 m) | REQUIRED FOR SEA COAST APPLICATIONS (Within 2 miles / 3.2 km) |
|---|---|---|---|
| **Compressor Start Assist Capacitor and Relay** | Yes | Yes | No |
| **Crankcase Heater** | Yes | Yes | No |
| **Evaporator Freeze Thermostat** | Yes | No | No |
| **Hard Shutoff TXV** | Yes | Yes | Yes |
| **Liquid Line Solenoid Valve** | No | See Longline Application Guideline | No |
| **Low–ambient Control** | Yes | No | No |
| **Winter Start Control** | Yes | No | No |

* For tubing line sets between 80 and 200 ft. (24.38 and 60.96 m) and/or 35 ft. (10.7 m) vertical differential, refer to Residential Piping and Longline Guideline.

## Accessory Description and Usage (Listed Alphabetically)

**1. Crankcase Heater**

An electric resistance heater which mounts to the base of the compressor to keep the lubricant warm during off cycles. Improves compressor lubrication on restart and minimizes the chance of liquid slugging.

Usage Guideline:

Required in low ambient cooling applications.

Required in long line applications.

Suggested in all commercial applications.

**2. Evaporator Freeze Thermostat**

An SPST temperature-actuated switch that stops unit operation when evaporator reaches freeze-up conditions.

Usage Guideline:

Required when low ambient kit has been added.

**3. Low-Ambient Control**

A fan-speed control device activated by a temperature sensor, designed to control condenser fan motor speed in response to the saturated, condensing temperature during operation in cooling mode only. For outdoor temperatures down to -20°F (-28.9°C), it maintains condensing temperature at 100°F ±10°F (37.8°C ± 5.5°C).

Usage Guideline:

A Low Ambient Controller must be used when cooling operation is used at outdoor temperatures below 55°F (12.8°C).

Suggested for all commercial applications.

**4. Outdoor Air Temperature Sensor**

Designed for use with Carrier Thermostats listed in this publication. This device enables the thermostat to display the outdoor temperature. This device also

is required to enable special thermostat features such as auxiliary heat lock out.

Usage Guideline:

Suggested for all Carrier thermostats listed in this publication.

**5. Thermostatic Expansion Valve (TXV)**

A modulating flow-control valve which meters refrigerant liquid flow rate into the evaporator in response to the superheat of the refrigerant gas leaving the evaporator.

Kit includes valve, adapter tubes, and external equalizer tube. Hard shut off types are available.

**NOTE**: When using a hard shut off TXV with single phase reciprocating compressors, a Compressor Start Assist Capacitor and Relay is required.

Usage Guideline:

Accessory required to meet ARI rating and system reliability, where indoor not equipped.

Hard shut off TXV or LLS required in air conditioner long line applications.

Required for use on all zoning systems.

**6. Time-Delay Relay**

An SPST delay relay which briefly continues operation of indoor blower motor to provide additional cooling after the compressor cycles off.

**NOTE**: Most indoor unit controls include this feature. For those that do not, use the guideline below.

Usage Guideline:

Accessory required to meet ARI rating, where indoor not equipped.

**7. Winter Start Control**

This control is designed to alleviate nuisance opening of the low-pressure switch by bypassing it for the first 3 minutes of operation.

# ELECTRICAL DATA

| 38HDR UNIT SIZE | V–PH–Hz | VOLTAGE RANGE* | | COMPRESSOR | | OUTDOOR FAN MOTOR | | | MIN CKT AMPS | FUSE/CKT BKR AMPS |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Min | Max | RLA | LRA | FLA | NEC Hp | kW Out | | |
| **018–31** | 208/230–1–60 | 187 | 253 | 9.0 | 48.0 | 0.8 | 0.125 | 0.09 | 12.1 | 20 |
| **024–32** | 208/230–1–60 | 187 | 253 | 13.5 | 58.3 | 0.8 | 0.125 | 0.09 | 17.7 | 25 |
| **030–31** | 208/230–1–60 | 187 | 253 | 14.1 | 73.0 | 1.5 | 0.250 | 0.19 | 19.1 | 30 |
| **036–31** | 208/230–1–60 | 187 | 253 | 14.1 | 77.0 | 1.5 | 0.250 | 0.19 | 19.1 | 30 |
| | 208/230–3–60 | 187 | 253 | 9.2 | 71.0 | 1.5 | 0.250 | 0.19 | 13.0 | 20 |
| | 460–3–60 | 414 | 506 | 5.6 | 38.0 | 0.8 | 0.250 | 0.19 | 7.9 | 10 |
| **048–32** | 208/230–1–60 | 187 | 253 | 19.9 | 109.0 | 1.5 | 0.250 | 0.19 | 26.4 | 40 |
| | 208/230–3–60 | 187 | 253 | 13.1 | 83.1 | 1.5 | 0.250 | 0.19 | 17.9 | 25 |
| | 460–3–60 | 414 | 506 | 6.1 | 41.0 | 0.8 | 0.250 | 0.19 | 8.4 | 15 |
| **060–32** | 208/230–1–60 | 187 | 253 | 26.4 | 134.0 | 1.5 | 0.250 | 0.19 | 34.5 | 60 |
| | 208/230–3–60 | 187 | 253 | 16.0 | 110.0 | 1.5 | 0.250 | 0.19 | 21.5 | 30 |
| | 460–3–60 | 414 | 506 | 7.8 | 52.0 | 0.8 | 0.250 | 0.19 | 10.6 | 15 |

* Permissible limits of the voltage range at which the unit will operate satisfactorily

**FLA** – Full Load Amps

**HACR** – Heating, Air Conditioning, Refrigeration

**LRA** – Locked Rotor Amps

**NEC** – National Electrical Code

**RLA** – Rated Load Amps (compressor)

**NOTE**: Control circuit is 24–V on all units and requires external power source. Copper wire must be used from service disconnect to unit. All motors/compressors contain internal overload protection.

Complies with 2007 requirements of ASHRAE Standards 90.1



# A-WEIGHTED SOUND POWER (dBA)

| Unit Size | Standard Rating (dBA) | Typical Octave Band Spectrum ( dBA ) (without tone adjustment) | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 |
| **018–31** | 68 | 52.0 | 57.5 | 60.5 | 63.5 | 60.5 | 57.5 | 46.5 |
| **024–32** | 69 | 57.5 | 61.5 | 63.0 | 61.0 | 60.0 | 56.0 | 45.0 |
| **030–31** | 72 | 56.5 | 63.0 | 65.0 | 66.0 | 64.0 | 62.5 | 57.0 |
| **036–31** | 72 | 65.0 | 61.5 | 63.5 | 65.0 | 64.5 | 61.0 | 54.5 |
| **048–32** | 72 | 58.5 | 61.0 | 64.0 | 67.5 | 66.0 | 64.0 | 57.0 |
| **060–32** | 72 | 63.0 | 61.5 | 64.0 | 66.5 | 66.0 | 64.5 | 55.5 |

**NOTE**: Tested in accordance with ARI Standard 270–08 (not listed in AHRI).

# CHARGING SUBCOOLING (TXV-TYPE EXPANSION DEVICE)

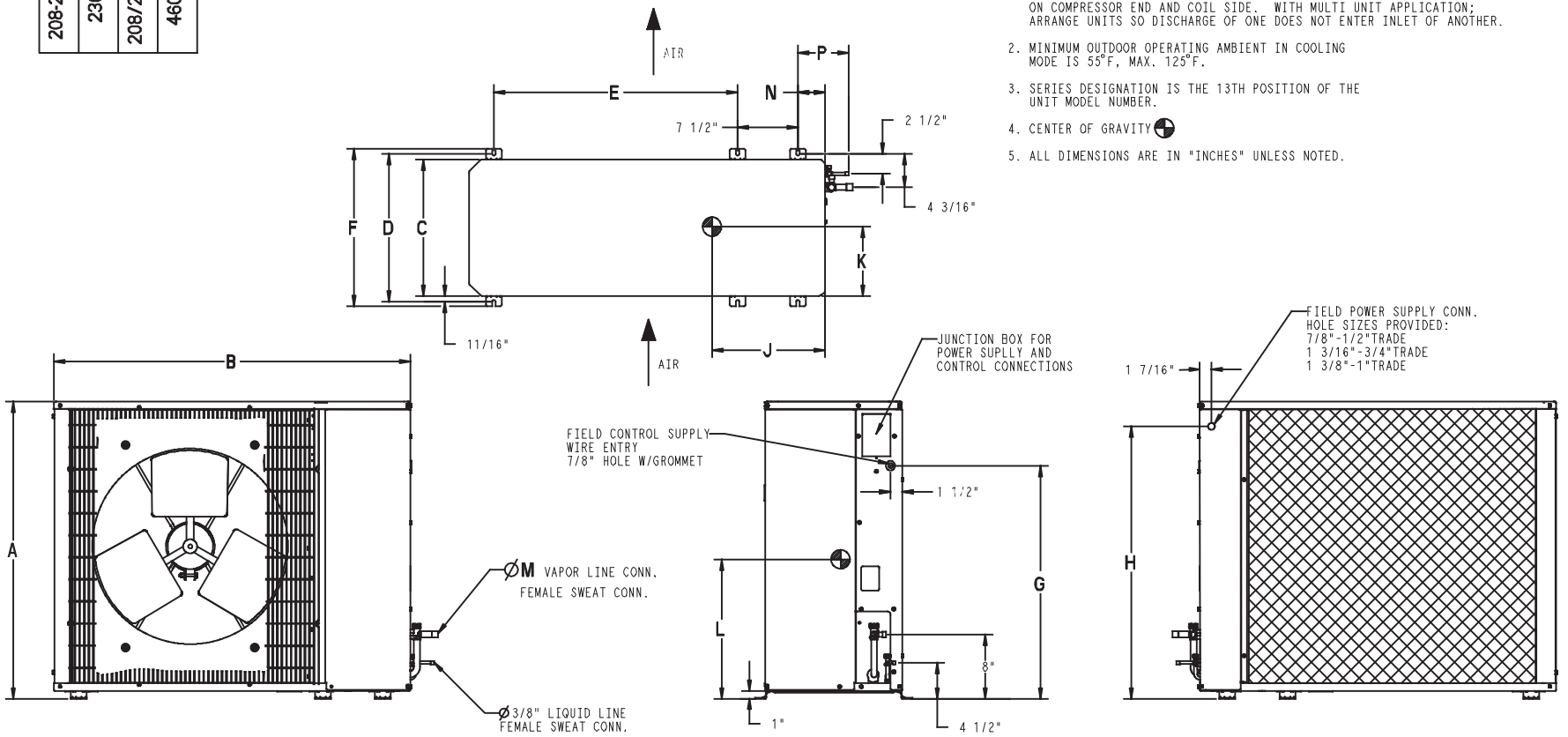
| UNIT SIZE–VOLTAGE, SERIES | REQUIRED SUBCOOLING °F (°C) |
|---|---|
| **018–31** | 12 (6.7) |
| **024–32** | 12 (6.7) |
| **030–31** | 12 (6.7) |
| **036–31** | 12 (6.7) |
| **048–32** | 12 (6.7) |
| **060–32** | 12 (6.7) |

# DIMENSIONS - ENGLISH

| UNIT | SERIES | ELECTRICAL CHARACTERISTICS | | | | A | B | C | D | E | F | G | H | J | K | L | M | N | P | OPERATING WEIGHT(lbs) | SHIPPING WEIGHT(lbs) | SHIPPING DIMENSIONS (L x W x H) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 38HDR018 | 1 | X | O | O | O | 25 1/8" | 36 15/16" | 14 9/16" | 16" | 23 7/16" | 17 3/16" | 17 1/8" | 22" | 13" | 6 5/8" | 11 1/4" | 5/8" | 2 15/16" | 6" | 155 | 171 | 42 9/10" X 18" X 28 1/10" |
| 38HDR024 | 1,2 | X | O | O | O | 31 1/8" | 36 15/16" | 14 9/16" | 16" | 23 7/16" | 17 3/16" | 23 1/8" | 28" | 14" | 6 3/4" | 11 5/8" | 5/8" | 2 15/16" | 6" | 180 | 198 | 42 9/10" X 18" X 34 1/10" |
| 38HDR030 | 1 | X | O | O | O | 37 3/16" | 44 9/16" | 17 1/16" | 18 7/16" | 30 1/2" | 19 5/8" | 29 3/16" | 34 1/16" | 13 11/16" | 8 1/8" | 15 7/8" | 3/4" | 3 7/16" | 6 1/2" | 200 | 223 | 50 1/2" X 20 1/2" X 40 2/10" |
| 38HDR036 | 1 | X | O | X | X | 37 3/16" | 44 9/16" | 17 1/16" | 18 7/16" | 30 1/2" | 19 5/8" | 29 3/16" | 34 1/16" | 13 11/16" | 8 1/8" | 15 7/8" | 3/4" | 3 7/16" | 6 1/2" | 218 | 240 | 50 1/2" X 20 1/2" X 40 2/10" |
| 38HDR048 | 1,2 | X | O | X | X | 43 3/16" | 44 9/16" | 17 1/16" | 18 7/16" | 30 1/2" | 19 5/8" | 35 3/16" | 40 1/16" | 14 1/2" | 8 1/2" | 18 7/8" | 7/8" | 3 7/16" | 6 1/2" | 284 | 309 | 50 1/2" X 20 1/2" X 46 2/10" |
| 38HDR060 | 1,2 | X | O | X | X | 43 3/16" | 44 9/16" | 17 1/16" | 18 7/16" | 30 1/2" | 19 5/8" | 35 3/16" | 40 1/16" | 14 1/2" | 8 1/2" | 18 7/8" | 7/8" | 3 7/16" | 6 1/2" | 294 | 319 | 50 1/2" X 20 1/2" X 46 2/10" |
| | | 208-230-1-60 | 230-1-60 | 208/230-3-60 | 460-3-60 | | | | | | | | | | | | | | | | | |

X = YES
O = NO

1. REQUIRED CLEARANCES: WITH COIL FACING WALL; ALLOW 6" MIN CLEARANCE ON COIL SIDE AND COIL END AND 36" MIN CLEARANCE ON COMPRESSOR END AND FAN SIDE. WITH FAN FACING WALL; ALLOW 8" MIN CLEARANCE ON FAN SIDE AND COIL END AND 36" MIN CLEARANCE ON COMPRESSOR END AND COIL SIDE. WITH MULTI UNIT APPLICATION; ARRANGE UNITS SO DISCHARGE OF ONE DOES NOT ENTER INLET OF ANOTHER.
2. MINIMUM OUTDOOR OPERATING AMBIENT IN COOLING MODE IS 55°F, MAX. 125°F.
3. SERIES DESIGNATION IS THE 13TH POSITION OF THE UNIT MODEL NUMBER.
4. CENTER OF GRAVITY
5. ALL DIMENSIONS ARE IN "INCHES" UNLESS NOTED.




| UNIT SIZE | MINIMUM MOUNTING PAD DIMENSIONS |
|---|---|
| 18,24 | 23" X 42" |
| 30,36,48,60 | 24" X 50" |

# COMBINATION RATINGS

| ARI Ref. No. | Model Number | Indoor Model | Furnace Model | Capacity | EER | SEER |
|---|---|---|---|---|---|---|
| 1085392 | 38HDR018−31 | †CNPV*1814A**+TDR | | 17,000 | 11.0 | 13.0 |
| 1117974 | 38HDR018−31 | 40QAC024−−−3 | | 18,000 | 11.5 | 13.0 |
| 1085396 | 38HDR018−31 | CAP**1814A** | 58CV(A,X)070−12 | 17,000 | 11.5 | 14.0 |
| 3015375 | 38HDR018−31 | CAP**1814A** | 58PH*045−08 | 17,000 | 11.5 | 14.0 |
| 1085394 | 38HDR018−31 | CAP**1814A**+TDR | | 17,000 | 10.9 | 13.0 |
| 1085400 | 38HDR018−31 | CAP**2414A** | 58CV(A,X)070−12 | 17,400 | 11.5 | 14.0 |
| 3015376 | 38HDR018−31 | CAP**2414A** | 58PH*045−08 | 17,400 | 12.0 | 14.5 |
| 1085398 | 38HDR018−31 | CAP**2414A**+TDR | | 17,400 | 11.0 | 13.0 |
| 1085456 | 38HDR018−31 | CAP**2417A** | 58CV(A,X)070−12 | 17,400 | 11.5 | 14.0 |
| 1085406 | 38HDR018−31 | CAP**2417A** | 58CV(A,X)090−16 | 17,400 | 11.5 | 14.0 |
| 3112072 | 38HDR018−31 | CAP**2417A** | 58MEB040−12 | 17,400 | 12.0 | 14.5 |
| 3112073 | 38HDR018−31 | CAP**2417A** | 58MEB060−12 | 17,400 | 12.0 | 14.5 |
| 1390388 | 38HDR018−31 | CAP**2417A** | 58MV(B,C)060−14 | 17,400 | 11.5 | 14.0 |
| 1085402 | 38HDR018−31 | CAP**2417A**+TDR | | 17,400 | 11.0 | 13.0 |
| 1085432 | 38HDR018−31 | CNPF*2418A**+TDR | | 17,400 | 11.0 | 13.0 |
| 1085428 | 38HDR018−31 | CNPH*2417A** | 58CV(A,X)070−12 | 17,400 | 11.5 | 14.0 |
| 1085430 | 38HDR018−31 | CNPH*2417A** | 58CV(A,X)090−16 | 17,400 | 11.5 | 14.0 |
| 3112076 | 38HDR018−31 | CNPH*2417A** | 58MEB040−12 | 17,400 | 12.0 | 14.5 |
| 3112077 | 38HDR018−31 | CNPH*2417A** | 58MEB060−12 | 17,400 | 12.0 | 14.5 |
| 1390392 | 38HDR018−31 | CNPH*2417A** | 58MV(B,C)060−14 | 17,400 | 11.5 | 14.0 |
| 1390396 | 38HDR018−31 | CNPH*2417A** | 58MV(B,C)080−14 | 17,400 | 11.5 | 14.0 |
| 3015379 | 38HDR018−31 | CNPH*2417A** | 58PH*045−08 | 17,400 | 12.0 | 14.5 |
| 1085420 | 38HDR018−31 | CNPH*2417A**+TDR | | 17,400 | 11.0 | 13.0 |
| 1085408 | 38HDR018−31 | CNPV*1814A** | 58CV(A,X)070−12 | 17,000 | 11.5 | 14.0 |
| 3015377 | 38HDR018−31 | CNPV*1814A** | 58PH*045−08 | 17,000 | 11.5 | 14.0 |
| 1085412 | 38HDR018−31 | CNPV*2414A** | 58CV(A,X)070−12 | 17,400 | 11.5 | 14.0 |
| 3015378 | 38HDR018−31 | CNPV*2414A** | 58PH*045−08 | 17,400 | 12.0 | 14.5 |
| 1085410 | 38HDR018−31 | CNPV*2414A**+TDR | | 17,400 | 11.0 | 13.0 |
| 1085458 | 38HDR018−31 | CNPV*2417A** | 58CV(A,X)070−12 | 17,400 | 11.5 | 14.0 |
| 1085418 | 38HDR018−31 | CNPV*2417A** | 58CV(A,X)090−16 | 17,400 | 11.5 | 14.0 |
| 3112074 | 38HDR018−31 | CNPV*2417A** | 58MEB040−12 | 17,400 | 12.0 | 14.5 |
| 3112075 | 38HDR018−31 | CNPV*2417A** | 58MEB060−12 | 17,400 | 12.0 | 14.5 |
| 1390390 | 38HDR018−31 | CNPV*2417A** | 58MV(B,C)060−14 | 17,400 | 11.5 | 14.0 |
| 1085414 | 38HDR018−31 | CNPV*2417A**+TDR | | 17,400 | 11.0 | 13.0 |
| 1085442 | 38HDR018−31 | CSPH*2412A** | 58CV(A,X)070−12 | 17,400 | 11.5 | 14.0 |
| 1085444 | 38HDR018−31 | CSPH*2412A** | 58CV(A,X)090−16 | 17,400 | 11.5 | 14.0 |
| 3112078 | 38HDR018−31 | CSPH*2412A** | 58MEB040−12 | 17,400 | 12.0 | 14.5 |
| 3112079 | 38HDR018−31 | CSPH*2412A** | 58MEB060−12 | 17,400 | 12.0 | 14.5 |
| 1390394 | 38HDR018−31 | CSPH*2412A** | 58MV(B,C)060−14 | 17,400 | 11.5 | 14.0 |
| 1390398 | 38HDR018−31 | CSPH*2412A** | 58MV(B,C)080−14 | 17,400 | 11.5 | 14.0 |
| 3015380 | 38HDR018−31 | CSPH*2412A** | 58PH*045−08 | 17,400 | 12.0 | 14.5 |
| 1085434 | 38HDR018−31 | CSPH*2412A**+TDR | | 17,400 | 11.0 | 13.0 |
| 1086232 | 38HDR018−31 | FE4ANF002+UI | | 17,400 | 11.5 | 14.0 |
| 1085450 | 38HDR018−31 | FF1ENP018 | | 17,400 | 11.0 | 13.0 |
| 1085452 | 38HDR018−31 | FF1ENP024 | | 17,400 | 11.0 | 13.0 |
| 1085454 | 38HDR018−31 | FV4BNF002 | | 17,400 | 11.5 | 14.0 |
| 3404623 | 38HDR018−31 | FV4CNF002 | | 17,400 | 11.5 | 14.0 |
| 1085446 | 38HDR018−31 | FX4CNF018 | | 17,000 | 11.5 | 14.0 |
| 1085448 | 38HDR018−31 | FX4CNF024 | | 17,400 | 11.5 | 14.0 |
| | | | | | | |
| 3465486 | 38HDR024−32 | †CNPV*2414A**+TDR | | 23,400 | 11.0 | 13.0 |
| 3465806 | 38HDR024−32 | 40QAC024−3 | | 22,800 | 11.5 | 13.0 |
| 3465488 | 38HDR024−32 | CAP**2414A** | 58CV(A,X)070−12 | 23,400 | 11.5 | 14.0 |
| 3465489 | 38HDR024−32 | CAP**2414A** | 58PH*045−08 | 23,400 | 11.5 | 14.0 |
| 3465487 | 38HDR024−32 | CAP**2414A**+TDR | | 23,400 | 11.0 | 13.0 |
| 3465492 | 38HDR024−32 | CAP**2417A** | 58CV(A,X)090−16 | 23,400 | 11.5 | 14.0 |
| 3465493 | 38HDR024−32 | CAP**2417A** | 58MEB040−12 | 23,400 | 12.0 | 14.5 |
| 3465494 | 38HDR024−32 | CAP**2417A** | 58MEB060−12 | 23,400 | 12.0 | 14.5 |
| 3465495 | 38HDR024−32 | CAP**2417A** | 58MEB080−12 | 23,400 | 12.0 | 14.5 |
| 3465491 | 38HDR024−32 | CAP**2417A** | 58MV(B,C)060−14 | 23,400 | 11.5 | 14.0 |
| 3465490 | 38HDR024−32 | CAP**2417A**+TDR | | 23,400 | 11.0 | 13.0 |
| 3465497 | 38HDR024−32 | CAP**3014A** | 58CV(A,X)070−12 | 23,400 | 11.5 | 14.0 |
| 3465498 | 38HDR024−32 | CAP**3014A** | 58PH*045−08 | 23,600 | 12.0 | 14.5 |
| 3465496 | 38HDR024−32 | CAP**3014A**+TDR | | 23,600 | 11.0 | 13.0 |
| 3465501 | 38HDR024−32 | CAP**3017A** | 58CV(A,X)090−16 | 23,600 | 11.5 | 14.0 |
| 3465502 | 38HDR024−32 | CAP**3017A** | 58MEB040−12 | 23,600 | 12.0 | 14.5 |
| 3465503 | 38HDR024−32 | CAP**3017A** | 58MEB060−12 | 23,600 | 12.0 | 14.5 |
| 3465504 | 38HDR024−32 | CAP**3017A** | 58MEB080−12 | 23,600 | 12.0 | 14.5 |
| 3465500 | 38HDR024−32 | CAP**3017A** | 58MV(B,C)060−14 | 23,600 | 11.5 | 14.0 |
| 3465499 | 38HDR024−32 | CAP**3017A**+TDR | | 23,600 | 11.0 | 13.0 |
| 3465554 | 38HDR024−32 | CNPF*2418A**+TDR | | 23,400 | 11.0 | 13.0 |
| 3465529 | 38HDR024−32 | CNPH*2417A** | 58CV(A,X)070−12 | 23,400 | 11.5 | 14.0 |
| 3465530 | 38HDR024−32 | CNPH*2417A** | 58CV(A,X)090−16 | 23,400 | 11.5 | 14.0 |
| 3465531 | 38HDR024−32 | CNPH*2417A** | 58CV(A,X)110−20 | 23,400 | 11.5 | 14.0 |
| 3465532 | 38HDR024−32 | CNPH*2417A** | 58CV(A,X)135−22 | 23,400 | 11.5 | 14.0 |
| 3465533 | 38HDR024−32 | CNPH*2417A** | 58CV(A,X)155−22 | 23,400 | 11.5 | 14.0 |
| 3465535 | 38HDR024−32 | CNPH*2417A** | 58MEB040−12 | 23,400 | 12.0 | 14.5 |
| 3465536 | 38HDR024−32 | CNPH*2417A** | 58MEB060−12 | 23,400 | 12.0 | 14.5 |
| 3465537 | 38HDR024−32 | CNPH*2417A** | 58MEB080−12 | 23,400 | 12.0 | 14.5 |

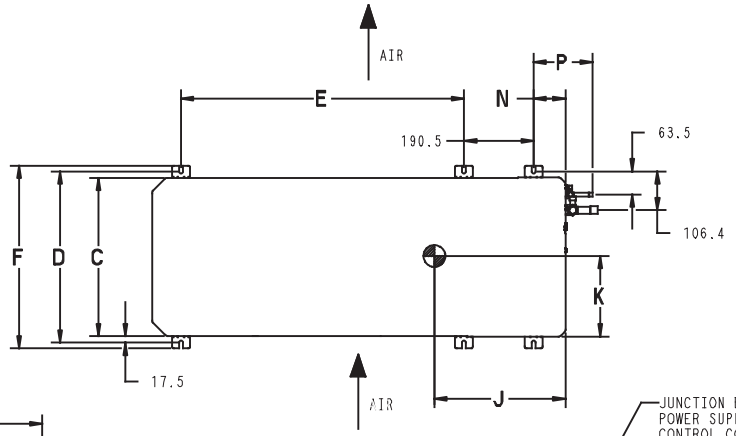
See notes on page 26

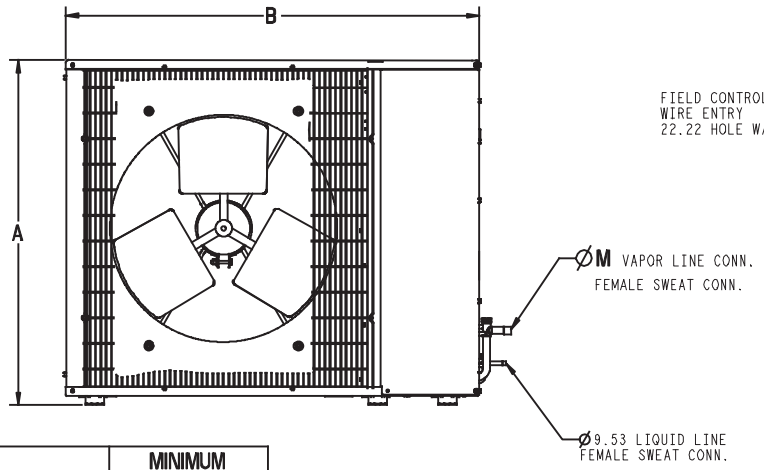
# DIMENSIONS - SI

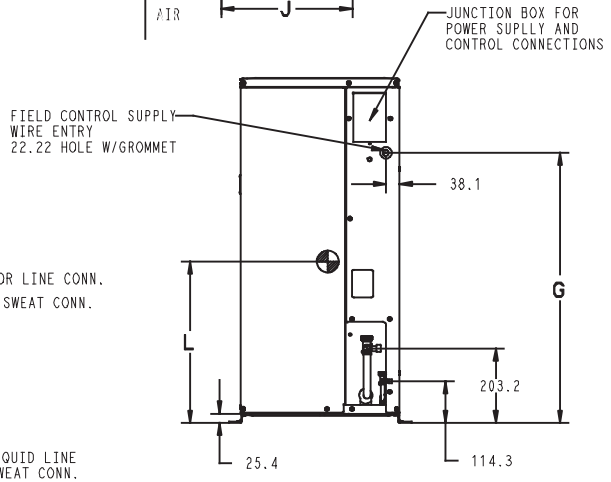
| UNIT | SERIES | ELECTRICAL CHARACTERISTICS | | | | A | B | C | D | E | F | G | H | J | K | L | M | N | P | OPERATING WEIGHT(KG) | SHIPPING WEIGHT(KG) | SHIPPING DIMENSIONS (L x W x H) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 38HDR018 | 1 | X | O | O | O | 638.2 | 938.2 | 369.9 | 406.4 | 595.3 | 436.6 | 435.0 | 558.8 | 330.2 | 168.3 | 285.8 | 15.9 | 74.6 | 152.4 | 70.4 | 77.7 | 1090.2 X 457.7 X 714.3 |
| 38HDR024 | 1,2 | X | O | O | O | 790.6 | 938.2 | 369.9 | 406.4 | 595.3 | 436.6 | 587.4 | 711.2 | 355.6 | 171.5 | 295.3 | 15.9 | 74.6 | 152.4 | 81.8 | 90.0 | 1090.2 X 457.7 X 866.7 |
| 38HDR030 | 1 | X | O | O | O | 944.6 | 1131.9 | 433.4 | 468.3 | 774.7 | 498.5 | 741.4 | 865.2 | 347.7 | 206.4 | 403.2 | 19.0 | 87.3 | 165.1 | 90.9 | 101.4 | 1282.7 X 520.7 X 1020.7 |
| 38HDR036 | 1 | X | O | X | X | 944.6 | 1131.9 | 433.4 | 468.3 | 774.7 | 498.5 | 741.4 | 865.2 | 347.7 | 206.4 | 403.2 | 19.0 | 87.3 | 165.1 | 99.0 | 109.0 | 1282.7 X 520.7 X 1020.7 |
| 38HDR048 | 1,2 | X | O | X | X | 1097.0 | 1131.9 | 433.4 | 468.3 | 774.7 | 498.5 | 893.8 | 1017.6 | 368.3 | 215.9 | 479.4 | 22.2 | 87.3 | 165.1 | 129.0 | 140.4 | 1282.7 X 520.7 X 1173.1 |
| 38HDR060 | 1,2 | X | O | X | X | 1097.0 | 1131.9 | 433.4 | 468.3 | 774.7 | 498.5 | 893.8 | 1017.6 | 368.3 | 215.9 | 479.4 | 22.2 | 87.3 | 165.1 | 133.6 | 145.0 | 1282.7 X 520.7 X 1173.1 |
| | | 208-230-1-60 | 230-1-60 | 208/230-3-60 | 460-3-60 | | | | | | | | | | | | | | | | | |

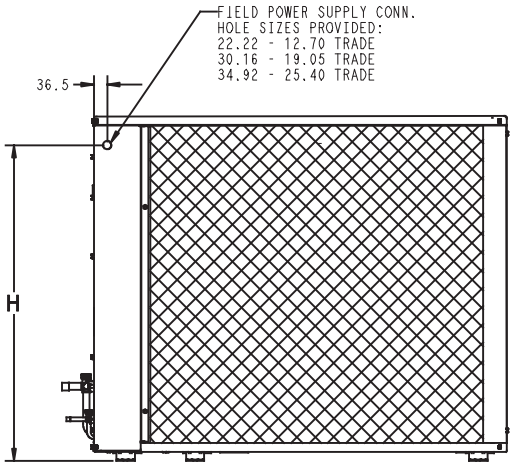
X = YES
O = NO

1. REQUIRED CLEARANCES: WITH COIL FACING WALL; ALLOW 152.4 MIN CLEARANCE ON COIL SIDE AND COIL END AND 914.4 MIN CLEARANCE ON COMPRESSOR END AND FAN SIDE. WITH FAN FACING WALL; ALLOW 203.2 MIN CLEARANCE ON FAN SIDE AND COIL END AND 914.4 MIN CLEARANCE ON COMPRESSOR END AND COIL SIDE. WITH MULTI UNIT APPLICATION; ARRANGE UNITS SO DISCHARGE OF ONE DOES NOT ENTER INLET OF ANOTHER.
2. MINIMUM OUTDOOR OPERATING AMBIENT IN COOLING MODE IS 12.8°C, MAX. 51.7°C.
3. SERIES DESIGNATION IS THE 13TH POSITION OF THE UNIT MODEL NUMBER.
4. CENTER OF GRAVITY
5. ALL DIMENSIONS ARE IN "MM" UNLESS NOTED.




| UNIT SIZE | MINIMUM MOUNTING PAD DIMENSIONS |
|---|---|
| 18,24 | 584.2 X 1066.8 |
| 30,36,48,60 | 609.6 X 1270.0 |

# COMBINATION RATINGS (CONT.)

| ARI Ref. No. | Model Number | Indoor Model | Furnace Model | Capacity | EER | SEER |
|---|---|---|---|---|---|---|
| 3465524 | 38HDR024–32 | CNPH*2417A** | 58MV(B,C)060–14 | 23,400 | 11.5 | 14.0 |
| 3465525 | 38HDR024–32 | CNPH*2417A** | 58MV(B,C)080–14 | 23,400 | 11.5 | 14.0 |
| 3465526 | 38HDR024–32 | CNPH*2417A** | 58MV(B,C)080–20 | 23,200 | 11.5 | 14.0 |
| 3465527 | 38HDR024–32 | CNPH*2417A** | 58MV(B,C)100–20 | 23,400 | 11.5 | 14.0 |
| 3465528 | 38HDR024–32 | CNPH*2417A** | 58MV(B,C)120–20 | 23,400 | 11.5 | 14.0 |
| 3465523 | 38HDR024–32 | CNPH*2417A** | 58MVB040–14 | 23,400 | 11.5 | 14.0 |
| 3465534 | 38HDR024–32 | CNPH*2417A** | 58PH*045–08 | 23,400 | 11.5 | 14.0 |
| 3465522 | 38HDR024–32 | CNPH*2417A**+TDR | | 23,400 | 11.0 | 13.0 |
| 3465545 | 38HDR024–32 | CNPH*3017A** | 58CV(A,X)070–12 | 23,400 | 11.5 | 14.0 |
| 3465546 | 38HDR024–32 | CNPH*3017A** | 58CV(A,X)090–16 | 23,600 | 11.5 | 14.0 |
| 3465547 | 38HDR024–32 | CNPH*3017A** | 58CV(A,X)110–20 | 23,600 | 11.5 | 14.0 |
| 3465548 | 38HDR024–32 | CNPH*3017A** | 58CV(A,X)135–22 | 23,600 | 11.5 | 14.0 |
| 3465549 | 38HDR024–32 | CNPH*3017A** | 58CV(A,X)155–22 | 23,600 | 11.5 | 14.0 |
| 3465551 | 38HDR024–32 | CNPH*3017A** | 58MEB040–12 | 23,600 | 12.0 | 14.5 |
| 3465552 | 38HDR024–32 | CNPH*3017A** | 58MEB060–12 | 23,600 | 12.0 | 14.5 |
| 3465553 | 38HDR024–32 | CNPH*3017A** | 58MEB080–12 | 23,600 | 12.0 | 14.5 |
| 3465540 | 38HDR024–32 | CNPH*3017A** | 58MV(B,C)060–14 | 23,600 | 11.5 | 14.0 |
| 3465541 | 38HDR024–32 | CNPH*3017A** | 58MV(B,C)080–14 | 23,400 | 11.5 | 14.0 |
| 3465542 | 38HDR024–32 | CNPH*3017A** | 58MV(B,C)080–20 | 23,400 | 11.5 | 14.0 |
| 3465543 | 38HDR024–32 | CNPH*3017A** | 58MV(B,C)100–20 | 23,600 | 11.5 | 14.0 |
| 3465544 | 38HDR024–32 | CNPH*3017A** | 58MV(B,C)120–20 | 23,600 | 11.5 | 14.0 |
| 3465539 | 38HDR024–32 | CNPH*3017A** | 58MVB040–14 | 23,600 | 11.5 | 14.0 |
| 3465550 | 38HDR024–32 | CNPH*3017A** | 58PH*045–08 | 23,600 | 12.0 | 14.5 |
| 3465538 | 38HDR024–32 | CNPH*3017A**+TDR | | 23,600 | 11.0 | 13.0 |
| 3465505 | 38HDR024–32 | CNPV*2414A** | 58CV(A,X)070–12 | 23,400 | 11.5 | 14.0 |
| 3465506 | 38HDR024–32 | CNPV*2414A** | 58PH*045–08 | 23,400 | 11.5 | 14.0 |
| 3465509 | 38HDR024–32 | CNPV*2417A** | 58CV(A,X)090–16 | 23,400 | 11.5 | 14.0 |
| 3465510 | 38HDR024–32 | CNPV*2417A** | 58MEB040–12 | 23,400 | 12.0 | 14.5 |
| 3465511 | 38HDR024–32 | CNPV*2417A** | 58MEB060–12 | 23,400 | 12.0 | 14.5 |
| 3465512 | 38HDR024–32 | CNPV*2417A** | 58MEB080–12 | 23,400 | 12.0 | 14.5 |
| 3465508 | 38HDR024–32 | CNPV*2417A** | 58MV(B,C)060–14 | 23,400 | 11.5 | 14.0 |
| 3465507 | 38HDR024–32 | CNPV*2417A**+TDR | | 23,400 | 11.0 | 13.0 |
| 3465514 | 38HDR024–32 | CNPV*3014A** | 58CV(A,X)070–12 | 23,400 | 11.5 | 14.0 |
| 3465515 | 38HDR024–32 | CNPV*3014A** | 58PH*045–08 | 23,600 | 11.5 | 14.0 |
| 3465513 | 38HDR024–32 | CNPV*3014A**+TDR | | 23,600 | 11.0 | 13.0 |
| 3465518 | 38HDR024–32 | CNPV*3017A** | 58CV(A,X)090–16 | 23,600 | 11.5 | 14.0 |
| 3465519 | 38HDR024–32 | CNPV*3017A** | 58MEB040–12 | 23,600 | 12.0 | 14.5 |
| 3465520 | 38HDR024–32 | CNPV*3017A** | 58MEB060–12 | 23,600 | 12.0 | 14.5 |
| 3465521 | 38HDR024–32 | CNPV*3017A** | 58MEB080–12 | 23,600 | 12.0 | 14.5 |
| 3465517 | 38HDR024–32 | CNPV*3017A** | 58MV(B,C)060–14 | 23,600 | 11.5 | 14.0 |
| 3465516 | 38HDR024–32 | CNPV*3017A**+TDR | | 23,600 | 11.0 | 13.0 |
| 3465562 | 38HDR024–32 | CSPH*2412A** | 58CV(A,X)070–12 | 23,400 | 11.5 | 14.0 |
| 3465563 | 38HDR024–32 | CSPH*2412A** | 58CV(A,X)090–16 | 23,400 | 11.5 | 14.0 |
| 3465564 | 38HDR024–32 | CSPH*2412A** | 58CV(A,X)110–20 | 23,400 | 11.5 | 14.0 |
| 3465565 | 38HDR024–32 | CSPH*2412A** | 58CV(A,X)135–22 | 23,400 | 11.5 | 14.0 |
| 3465566 | 38HDR024–32 | CSPH*2412A** | 58CV(A,X)155–22 | 23,400 | 11.5 | 14.0 |
| 3465568 | 38HDR024–32 | CSPH*2412A** | 58MEB040–12 | 23,400 | 12.0 | 14.5 |
| 3465569 | 38HDR024–32 | CSPH*2412A** | 58MEB060–12 | 23,400 | 12.0 | 14.5 |
| 3465570 | 38HDR024–32 | CSPH*2412A** | 58MEB080–12 | 23,400 | 12.0 | 14.5 |
| 3465557 | 38HDR024–32 | CSPH*2412A** | 58MV(B,C)060–14 | 23,400 | 11.5 | 14.0 |
| 3465558 | 38HDR024–32 | CSPH*2412A** | 58MV(B,C)080–14 | 23,400 | 11.5 | 14.0 |
| 3465559 | 38HDR024–32 | CSPH*2412A** | 58MV(B,C)080–20 | 23,400 | 11.5 | 14.0 |
| 3465560 | 38HDR024–32 | CSPH*2412A** | 58MV(B,C)100–20 | 23,400 | 11.5 | 14.0 |
| 3465561 | 38HDR024–32 | CSPH*2412A** | 58MV(B,C)120–20 | 23,400 | 11.5 | 14.0 |
| 3465556 | 38HDR024–32 | CSPH*2412A** | 58MVB040–14 | 23,400 | 11.5 | 14.0 |
| 3465567 | 38HDR024–32 | CSPH*2412A** | 58PH*045–08 | 23,400 | 11.5 | 14.0 |
| 3465555 | 38HDR024–32 | CSPH*2412A**+TDR | | 23,400 | 11.0 | 13.0 |
| 3465578 | 38HDR024–32 | CSPH*3012A** | 58CV(A,X)070–12 | 23,600 | 11.5 | 14.0 |
| 3465579 | 38HDR024–32 | CSPH*3012A** | 58CV(A,X)090–16 | 23,600 | 11.5 | 14.0 |
| 3465580 | 38HDR024–32 | CSPH*3012A** | 58CV(A,X)110–20 | 23,600 | 11.5 | 14.0 |
| 3465581 | 38HDR024–32 | CSPH*3012A** | 58CV(A,X)135–22 | 23,600 | 11.5 | 14.0 |
| 3465582 | 38HDR024–32 | CSPH*3012A** | 58CV(A,X)155–22 | 23,600 | 11.5 | 14.0 |
| 3465584 | 38HDR024–32 | CSPH*3012A** | 58MEB040–12 | 23,600 | 12.0 | 14.5 |
| 3465585 | 38HDR024–32 | CSPH*3012A** | 58MEB060–12 | 23,600 | 12.0 | 14.5 |
| 3465586 | 38HDR024–32 | CSPH*3012A** | 58MEB080–12 | 23,600 | 12.0 | 14.5 |
| 3465573 | 38HDR024–32 | CSPH*3012A** | 58MV(B,C)060–14 | 23,600 | 11.5 | 14.0 |
| 3465574 | 38HDR024–32 | CSPH*3012A** | 58MV(B,C)080–14 | 23,600 | 11.5 | 14.0 |
| 3465575 | 38HDR024–32 | CSPH*3012A** | 58MV(B,C)080–20 | 23,400 | 11.5 | 14.0 |
| 3465576 | 38HDR024–32 | CSPH*3012A** | 58MV(B,C)100–20 | 23,600 | 11.5 | 14.0 |
| 3465577 | 38HDR024–32 | CSPH*3012A** | 58MV(B,C)120–20 | 23,600 | 11.5 | 14.0 |
| 3465572 | 38HDR024–32 | CSPH*3012A** | 58MVB040–14 | 23,600 | 11.5 | 14.0 |
| 3465583 | 38HDR024–32 | CSPH*3012A** | 58PH*045–08 | 23,600 | 12.0 | 14.5 |
| 3465571 | 38HDR024–32 | CSPH*3012A**+TDR | | 23,600 | 11.0 | 13.0 |
| 3465594 | 38HDR024–32 | FE4AN(B,F)003+UI | | 23,800 | 12.0 | 14.5 |
| 3465592 | 38HDR024–32 | FE4ANF002+UI | | 23,600 | 12.0 | 14.5 |
| 3465596 | 38HDR024–32 | FE5ANB004+UI | | 24,000 | 12.0 | 14.5 |
| 3465597 | 38HDR024–32 | FF1ENP024 | | 22,800 | 11.0 | 13.0 |
| 3465606 | 38HDR024–32 | FF1ENP025 | | 23,400 | 11.5 | 14.0 |
| 3465600 | 38HDR024–32 | FF1ENP030 | | 23,000 | 11.0 | 13.0 |

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# COMBINATION RATINGS (CONT.)

| ARI Ref. No. | Model Number | Indoor Model | Furnace Model | Capacity | EER | SEER |
|---|---|---|---|---|---|---|
| 3465608 | 38HDR024–32 | FF1ENP031 | | 23,600 | 11.5 | 14.0 |
| 3465609 | 38HDR024–32 | FF1ENP037 | | 23,800 | 11.5 | 14.0 |
| 3465603 | 38HDR024–32 | FV4BN(B,F)003 | | 23,800 | 12.0 | 14.5 |
| 3465601 | 38HDR024–32 | FV4BNF002 | | 23,600 | 12.0 | 14.5 |
| 3465613 | 38HDR024–32 | FV4CN(B,F)003 | | 23,800 | 12.0 | 14.5 |
| 3465611 | 38HDR024–32 | FV4CNF002 | | 23,600 | 12.0 | 14.5 |
| 3465589 | 38HDR024–32 | FX4CNF024 | | 23,400 | 11.5 | 14.0 |
| 3465590 | 38HDR024–32 | FX4CNF030 | | 23,800 | 11.5 | 14.0 |
| 3465587 | 38HDR024–32 | FY4ANF024 | | 23,200 | 11.0 | 13.0 |
| 3465588 | 38HDR024–32 | FY4ANF030 | | 23,600 | 11.0 | 13.0 |
| | | | | | | |
| 1085620 | 38HDR030–31 | †CNPV*3014A**+TDR | | 28,000 | 11.0 | 13.0 |
| 1117978 | 38HDR030–31 | 40QAC036–––3 | | 29,000 | 12.0 | 13.0 |
| 1085624 | 38HDR030–31 | CAP**3014A** | 58CV(A,X)070–12 | 28,000 | 11.5 | 14.0 |
| 1085622 | 38HDR030–31 | CAP**3014A**+TDR | | 28,000 | 11.0 | 13.0 |
| 1085788 | 38HDR030–31 | CAP**3017A** | 58CV(A,X)070–12 | 28,000 | 11.5 | 14.0 |
| 1085630 | 38HDR030–31 | CAP**3017A** | 58CV(A,X)090–16 | 28,000 | 11.5 | 14.0 |
| 3112104 | 38HDR030–31 | CAP**3017A** | 58MEB040–12 | 28,000 | 12.0 | 14.5 |
| 3112105 | 38HDR030–31 | CAP**3017A** | 58MEB060–12 | 28,000 | 12.0 | 14.5 |
| 3112106 | 38HDR030–31 | CAP**3017A** | 58MEB080–12 | 28,000 | 12.0 | 14.5 |
| 3112107 | 38HDR030–31 | CAP**3017A** | 58MEB080–16 | 28,000 | 12.0 | 14.5 |
| 1390448 | 38HDR030–31 | CAP**3017A** | 58MV(B,C)060–14 | 28,000 | 11.5 | 14.0 |
| 3015389 | 38HDR030–31 | CAP**3017A** | 58PH*070–16 | 28,000 | 11.5 | 14.0 |
| 1085626 | 38HDR030–31 | CAP**3017A**+TDR | | 28,000 | 11.0 | 13.0 |
| 1085634 | 38HDR030–31 | CAP**3614A** | 58CV(A,X)070–12 | 28,600 | 11.5 | 14.0 |
| 1085632 | 38HDR030–31 | CAP**3614A**+TDR | | 28,600 | 11.0 | 13.0 |
| 1085790 | 38HDR030–31 | CAP**3617A** | 58CV(A,X)070–12 | 28,600 | 11.5 | 14.0 |
| 1085640 | 38HDR030–31 | CAP**3617A** | 58CV(A,X)090–16 | 28,600 | 11.5 | 14.0 |
| 3112108 | 38HDR030–31 | CAP**3617A** | 58MEB040–12 | 28,600 | 12.0 | 14.5 |
| 3112109 | 38HDR030–31 | CAP**3617A** | 58MEB060–12 | 28,600 | 12.0 | 14.5 |
| 3112110 | 38HDR030–31 | CAP**3617A** | 58MEB080–12 | 28,600 | 12.0 | 14.5 |
| 3112111 | 38HDR030–31 | CAP**3617A** | 58MEB080–16 | 28,600 | 12.0 | 14.5 |
| 1390450 | 38HDR030–31 | CAP**3617A** | 58MV(B,C)060–14 | 28,600 | 11.5 | 14.0 |
| 3015390 | 38HDR030–31 | CAP**3617A** | 58PH*070–16 | 28,600 | 12.0 | 14.5 |
| 1085636 | 38HDR030–31 | CAP**3617A**+TDR | | 28,600 | 11.0 | 13.0 |
| 1085794 | 38HDR030–31 | CAP**3621A** | 58CV(A,X)090–16 | 28,600 | 11.5 | 14.0 |
| 1085650 | 38HDR030–31 | CAP**3621A** | 58CV(A,X)110–20 | 28,600 | 11.5 | 14.0 |
| 1390464 | 38HDR030–31 | CAP**3621A** | 58MV(B,C)060–14 | 28,600 | 11.5 | 14.0 |
| 1390468 | 38HDR030–31 | CAP**3621A** | 58MV(B,C)080–14 | 28,600 | 11.5 | 14.0 |
| 1390480 | 38HDR030–31 | CAP**3621A** | 58MV(B,C)080–20 | 28,600 | 11.5 | 14.0 |
| 1390492 | 38HDR030–31 | CAP**3621A** | 58MV(B,C)100–20 | 28,600 | 11.5 | 14.0 |
| 3015391 | 38HDR030–31 | CAP**3621A** | 58PH*090–16 | 28,600 | 12.0 | 14.5 |
| 1085642 | 38HDR030–31 | CAP**3621A**+TDR | | 28,600 | 11.0 | 13.0 |
| 1085724 | 38HDR030–31 | CNPF*3618A**+TDR | | 28,600 | 11.0 | 13.0 |
| 1085690 | 38HDR030–31 | CNPH*3017A** | 58CV(A,X)070–12 | 28,000 | 11.5 | 14.0 |
| 1085692 | 38HDR030–31 | CNPH*3017A** | 58CV(A,X)090–16 | 28,000 | 11.5 | 14.0 |
| 1085694 | 38HDR030–31 | CNPH*3017A** | 58CV(A,X)110–20 | 28,000 | 11.5 | 14.0 |
| 1085696 | 38HDR030–31 | CNPH*3017A** | 58CV(A,X)135–22 | 28,000 | 11.5 | 14.0 |
| 1085698 | 38HDR030–31 | CNPH*3017A** | 58CV(A,X)155–22 | 28,000 | 11.5 | 14.0 |
| 3112120 | 38HDR030–31 | CNPH*3017A** | 58MEB040–12 | 28,000 | 12.0 | 14.5 |
| 3112121 | 38HDR030–31 | CNPH*3017A** | 58MEB060–12 | 28,000 | 12.0 | 14.5 |
| 3112122 | 38HDR030–31 | CNPH*3017A** | 58MEB080–12 | 28,000 | 12.0 | 14.5 |
| 3112123 | 38HDR030–31 | CNPH*3017A** | 58MEB080–16 | 28,000 | 12.0 | 14.5 |
| 1390456 | 38HDR030–31 | CNPH*3017A** | 58MV(B,C)060–14 | 28,000 | 11.5 | 14.0 |
| 1390472 | 38HDR030–31 | CNPH*3017A** | 58MV(B,C)080–14 | 28,000 | 11.5 | 14.0 |
| 1390484 | 38HDR030–31 | CNPH*3017A** | 58MV(B,C)080–20 | 28,000 | 11.5 | 14.0 |
| 1390496 | 38HDR030–31 | CNPH*3017A** | 58MV(B,C)100–20 | 28,000 | 11.5 | 14.0 |
| 1390504 | 38HDR030–31 | CNPH*3017A** | 58MV(B,C)120–20 | 28,000 | 11.5 | 14.0 |
| 3015395 | 38HDR030–31 | CNPH*3017A** | 58PH*070–16 | 28,000 | 11.5 | 14.0 |
| 3015396 | 38HDR030–31 | CNPH*3017A** | 58PH*090–16 | 28,000 | 11.5 | 14.0 |
| 1085676 | 38HDR030–31 | CNPH*3017A**+TDR | | 28,000 | 11.0 | 13.0 |
| 1085714 | 38HDR030–31 | CNPH*3617A** | 58CV(A,X)070–12 | 28,600 | 11.5 | 14.0 |
| 1085716 | 38HDR030–31 | CNPH*3617A** | 58CV(A,X)090–16 | 28,600 | 11.5 | 14.0 |
| 1085718 | 38HDR030–31 | CNPH*3617A** | 58CV(A,X)110–20 | 28,600 | 11.5 | 14.0 |
| 1085720 | 38HDR030–31 | CNPH*3617A** | 58CV(A,X)135–22 | 28,600 | 11.5 | 14.0 |
| 1085722 | 38HDR030–31 | CNPH*3617A** | 58CV(A,X)155–22 | 28,600 | 11.5 | 14.0 |
| 3112124 | 38HDR030–31 | CNPH*3617A** | 58MEB040–12 | 28,600 | 12.0 | 14.5 |
| 3112125 | 38HDR030–31 | CNPH*3617A** | 58MEB060–12 | 28,600 | 12.0 | 14.5 |
| 3112126 | 38HDR030–31 | CNPH*3617A** | 58MEB080–12 | 28,600 | 12.0 | 14.5 |
| 3112127 | 38HDR030–31 | CNPH*3617A** | 58MEB080–16 | 28,600 | 12.0 | 14.5 |
| 1390458 | 38HDR030–31 | CNPH*3617A** | 58MV(B,C)060–14 | 28,600 | 11.5 | 14.0 |
| 1390474 | 38HDR030–31 | CNPH*3617A** | 58MV(B,C)080–14 | 28,600 | 11.5 | 14.0 |
| 1390486 | 38HDR030–31 | CNPH*3617A** | 58MV(B,C)080–20 | 28,600 | 11.5 | 14.0 |
| 1390498 | 38HDR030–31 | CNPH*3617A** | 58MV(B,C)100–20 | 28,600 | 11.5 | 14.0 |
| 1390506 | 38HDR030–31 | CNPH*3617A** | 58MV(B,C)120–20 | 28,600 | 11.5 | 14.0 |
| 3015397 | 38HDR030–31 | CNPH*3617A** | 58PH*070–16 | 28,600 | 12.0 | 14.5 |
| 3015398 | 38HDR030–31 | CNPH*3617A** | 58PH*090–16 | 28,600 | 12.0 | 14.5 |
| 1085700 | 38HDR030–31 | CNPH*3617A**+TDR | | 28,600 | 11.0 | 13.0 |
| 1085652 | 38HDR030–31 | CNPV*3014A** | 58CV(A,X)070–12 | 28,000 | 11.5 | 14.0 |

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# COMBINATION RATINGS (CONT.)

| ARI Ref. No. | Model Number | Indoor Model | Furnace Model | Capacity | EER | SEER |
|---|---|---|---|---|---|---|
| 1085796 | 38HDR030−31 | CNPV*3017A** | 58CV(A,X)070−12 | 28,000 | 11.5 | 14.0 |
| 1085658 | 38HDR030−31 | CNPV*3017A** | 58CV(A,X)090−16 | 28,000 | 11.5 | 14.0 |
| 3112112 | 38HDR030−31 | CNPV*3017A** | 58MEB040−12 | 28,000 | 12.0 | 14.5 |
| 3112113 | 38HDR030−31 | CNPV*3017A** | 58MEB060−12 | 28,000 | 12.0 | 14.5 |
| 3112114 | 38HDR030−31 | CNPV*3017A** | 58MEB080−12 | 28,000 | 12.0 | 14.5 |
| 3112115 | 38HDR030−31 | CNPV*3017A** | 58MEB080−16 | 28,000 | 12.0 | 14.5 |
| 1390452 | 38HDR030−31 | CNPV*3017A** | 58MV(B,C)060−14 | 28,000 | 11.5 | 14.0 |
| 3015392 | 38HDR030−31 | CNPV*3017A** | 58PH*070−16 | 28,000 | 11.5 | 14.0 |
| 1085654 | 38HDR030−31 | CNPV*3017A**+TDR | | 28,000 | 11.0 | 13.0 |
| 1085798 | 38HDR030−31 | CNPV*3617A** | 58CV(A,X)070−12 | 28,600 | 11.5 | 14.0 |
| 1085664 | 38HDR030−31 | CNPV*3617A** | 58CV(A,X)090−16 | 28,600 | 11.5 | 14.0 |
| 3112116 | 38HDR030−31 | CNPV*3617A** | 58MEB040−12 | 28,600 | 12.0 | 14.5 |
| 3112117 | 38HDR030−31 | CNPV*3617A** | 58MEB060−12 | 28,600 | 12.0 | 14.5 |
| 3112118 | 38HDR030−31 | CNPV*3617A** | 58MEB080−12 | 28,600 | 12.0 | 14.5 |
| 3112119 | 38HDR030−31 | CNPV*3617A** | 58MEB080−16 | 28,600 | 12.0 | 14.5 |
| 1390454 | 38HDR030−31 | CNPV*3617A** | 58MV(B,C)060−14 | 28,600 | 11.5 | 14.0 |
| 3015393 | 38HDR030−31 | CNPV*3617A** | 58PH*070−16 | 28,600 | 12.0 | 14.5 |
| 1085660 | 38HDR030−31 | CNPV*3617A**+TDR | | 28,600 | 11.0 | 13.0 |
| 1085802 | 38HDR030−31 | CNPV*3621A** | 58CV(A,X)090−16 | 28,600 | 11.5 | 14.0 |
| 1085674 | 38HDR030−31 | CNPV*3621A** | 58CV(A,X)110−20 | 28,600 | 11.5 | 14.0 |
| 1390466 | 38HDR030−31 | CNPV*3621A** | 58MV(B,C)060−14 | 28,600 | 11.5 | 14.0 |
| 1390470 | 38HDR030−31 | CNPV*3621A** | 58MV(B,C)080−14 | 28,600 | 11.5 | 14.0 |
| 1390482 | 38HDR030−31 | CNPV*3621A** | 58MV(B,C)080−20 | 28,600 | 11.5 | 14.0 |
| 1390494 | 38HDR030−31 | CNPV*3621A** | 58MV(B,C)100−20 | 28,600 | 11.5 | 14.0 |
| 3015394 | 38HDR030−31 | CNPV*3621A** | 58PH*090−16 | 28,600 | 12.0 | 14.5 |
| 1085666 | 38HDR030−31 | CNPV*3621A**+TDR | | 28,600 | 11.0 | 13.0 |
| 1085740 | 38HDR030−31 | CSPH*3012A** | 58CV(A,X)070−12 | 28,000 | 11.5 | 14.0 |
| 1085742 | 38HDR030−31 | CSPH*3012A** | 58CV(A,X)090−16 | 28,000 | 11.5 | 14.0 |
| 1085744 | 38HDR030−31 | CSPH*3012A** | 58CV(A,X)110−20 | 28,000 | 11.5 | 14.0 |
| 1085746 | 38HDR030−31 | CSPH*3012A** | 58CV(A,X)135−22 | 28,000 | 11.5 | 14.0 |
| 1085748 | 38HDR030−31 | CSPH*3012A** | 58CV(A,X)155−22 | 28,000 | 11.5 | 14.0 |
| 3112128 | 38HDR030−31 | CSPH*3012A** | 58MEB040−12 | 28,000 | 12.0 | 14.5 |
| 3112129 | 38HDR030−31 | CSPH*3012A** | 58MEB060−12 | 28,000 | 12.0 | 14.5 |
| 3112130 | 38HDR030−31 | CSPH*3012A** | 58MEB080−12 | 28,000 | 12.0 | 14.5 |
| 3112131 | 38HDR030−31 | CSPH*3012A** | 58MEB080−16 | 28,000 | 12.0 | 14.5 |
| 1390460 | 38HDR030−31 | CSPH*3012A** | 58MV(B,C)060−14 | 28,000 | 11.5 | 14.0 |
| 1390476 | 38HDR030−31 | CSPH*3012A** | 58MV(B,C)080−14 | 28,000 | 11.5 | 14.0 |
| 1390488 | 38HDR030−31 | CSPH*3012A** | 58MV(B,C)080−20 | 28,000 | 11.5 | 14.0 |
| 1390500 | 38HDR030−31 | CSPH*3012A** | 58MV(B,C)100−20 | 28,000 | 11.5 | 14.0 |
| 1390508 | 38HDR030−31 | CSPH*3012A** | 58MV(B,C)120−20 | 28,000 | 11.5 | 14.0 |
| 3015399 | 38HDR030−31 | CSPH*3012A** | 58PH*070−16 | 28,000 | 11.5 | 14.0 |
| 3015400 | 38HDR030−31 | CSPH*3012A** | 58PH*090−16 | 28,000 | 11.5 | 14.0 |
| 1085726 | 38HDR030−31 | CSPH*3012A**+TDR | | 28,000 | 11.0 | 13.0 |
| 1085764 | 38HDR030−31 | CSPH*3612A** | 58CV(A,X)070−12 | 28,600 | 11.5 | 14.0 |
| 1085766 | 38HDR030−31 | CSPH*3612A** | 58CV(A,X)090−16 | 28,600 | 11.5 | 14.0 |
| 1085768 | 38HDR030−31 | CSPH*3612A** | 58CV(A,X)110−20 | 28,600 | 11.5 | 14.0 |
| 1085770 | 38HDR030−31 | CSPH*3612A** | 58CV(A,X)135−22 | 28,600 | 11.5 | 14.0 |
| 1085772 | 38HDR030−31 | CSPH*3612A** | 58CV(A,X)155−22 | 28,600 | 11.5 | 14.0 |
| 3112132 | 38HDR030−31 | CSPH*3612A** | 58MEB040−12 | 28,600 | 12.0 | 14.5 |
| 3112133 | 38HDR030−31 | CSPH*3612A** | 58MEB060−12 | 28,600 | 12.0 | 14.5 |
| 3112134 | 38HDR030−31 | CSPH*3612A** | 58MEB080−12 | 28,600 | 12.0 | 14.5 |
| 3112135 | 38HDR030−31 | CSPH*3612A** | 58MEB080−16 | 28,600 | 12.0 | 14.5 |
| 1390462 | 38HDR030−31 | CSPH*3612A** | 58MV(B,C)060−14 | 28,600 | 11.5 | 14.0 |
| 1390478 | 38HDR030−31 | CSPH*3612A** | 58MV(B,C)080−14 | 28,600 | 11.5 | 14.0 |
| 1390490 | 38HDR030−31 | CSPH*3612A** | 58MV(B,C)080−20 | 28,600 | 11.5 | 14.0 |
| 1390502 | 38HDR030−31 | CSPH*3612A** | 58MV(B,C)100−20 | 28,600 | 11.5 | 14.0 |
| 1390510 | 38HDR030−31 | CSPH*3612A** | 58MV(B,C)120−20 | 28,600 | 11.5 | 14.0 |
| 3015401 | 38HDR030−31 | CSPH*3612A** | 58PH*070−16 | 28,600 | 12.0 | 14.5 |
| 3015402 | 38HDR030−31 | CSPH*3612A** | 58PH*090−16 | 28,600 | 12.0 | 14.5 |
| 1085750 | 38HDR030−31 | CSPH*3612A**+TDR | | 28,600 | 11.0 | 13.0 |
| 1086240 | 38HDR030−31 | FE4AN(B,F)003+UI | | 28,600 | 11.5 | 14.0 |
| 1086242 | 38HDR030−31 | FE4AN(B,F)005+UI | | 29,000 | 12.5 | 15.0 |
| 1086238 | 38HDR030−31 | FE4ANF002+UI | | 28,600 | 11.5 | 14.0 |
| 1085782 | 38HDR030−31 | FF1ENP030 | | 28,000 | 11.0 | 13.0 |
| 1085784 | 38HDR030−31 | FF1ENP036 | | 28,600 | 11.0 | 13.0 |
| 1085786 | 38HDR030−31 | FV4BNF002 | | 28,600 | 11.5 | 14.0 |
| 3404625 | 38HDR030−31 | FV4CNF002 | | 28,600 | 11.5 | 14.0 |
| 1085780 | 38HDR030−31 | FX4CN(B,F)036 | | 28,600 | 11.5 | 14.0 |
| 1085778 | 38HDR030−31 | FX4CNF030 | | 28,000 | 11.5 | 14.0 |
| 1085774 | 38HDR030−31 | FY4ANF030 | | 28,000 | 11.0 | 13.0 |
| 1085776 | 38HDR030−31 | FY4ANF036 | | 28,600 | 11.0 | 13.0 |
| | | | | | | |
| 1085804 | 38HDR036−31 | †CNPV*4221A**+TDR | | 33,400 | 11.0 | 13.0 |
| 1117980 | 38HDR036−31 | 40QAC036−−−3 | | 33,000 | 11.4 | 13.0 |
| 1085808 | 38HDR036−31 | CAP**3614A** | 58CV(A,X)070−12 | 32,600 | 11.5 | 13.5 |
| 3015403 | 38HDR036−31 | CAP**3614A** | 58PH*045−08 | 33,000 | 11.5 | 14.0 |
| 1085806 | 38HDR036−31 | CAP**3614A**+TDR | | 32,600 | 11.0 | 13.0 |
| 1085982 | 38HDR036−31 | CAP**3617A** | 58CV(A,X)070−12 | 33,000 | 11.5 | 14.0 |
| 1085814 | 38HDR036−31 | CAP**3617A** | 58CV(A,X)090−16 | 33,000 | 11.5 | 14.0 |

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# COMBINATION RATINGS (CONT.)

| ARI Ref. No. | Model Number | Indoor Model | Furnace Model | Capacity | EER | SEER |
|---|---|---|---|---|---|---|
| 3112136 | 38HDR036−31 | CAP**3617A** | 58MEB040−12 | 33,000 | 12.0 | 14.5 |
| 3112137 | 38HDR036−31 | CAP**3617A** | 58MEB060−12 | 33,000 | 12.0 | 14.5 |
| 3112138 | 38HDR036−31 | CAP**3617A** | 58MEB080−12 | 33,000 | 12.0 | 14.5 |
| 3112139 | 38HDR036−31 | CAP**3617A** | 58MEB080−16 | 33,000 | 12.0 | 14.5 |
| 1390512 | 38HDR036−31 | CAP**3617A** | 58MV(B,C)060−14 | 33,000 | 11.5 | 13.5 |
| 3015404 | 38HDR036−31 | CAP**3617A** | 58PH*070−16 | 33,000 | 11.5 | 14.0 |
| 1085810 | 38HDR036−31 | CAP**3617A**+TDR | | 33,000 | 11.0 | 13.0 |
| 1085986 | 38HDR036−31 | CAP**3621A** | 58CV(A,X)090−16 | 33,000 | 11.5 | 14.0 |
| 1085824 | 38HDR036−31 | CAP**3621A** | 58CV(A,X)110−20 | 33,000 | 11.5 | 14.0 |
| 3112140 | 38HDR036−31 | CAP**3621A** | 58MEB100−20 | 33,000 | 12.0 | 14.5 |
| 1390524 | 38HDR036−31 | CAP**3621A** | 58MV(B,C)060−14 | 33,000 | 11.5 | 14.0 |
| 1390532 | 38HDR036−31 | CAP**3621A** | 58MV(B,C)080−14 | 33,000 | 11.5 | 13.5 |
| 1390550 | 38HDR036−31 | CAP**3621A** | 58MV(B,C)080−20 | 33,000 | 11.5 | 13.5 |
| 1390568 | 38HDR036−31 | CAP**3621A** | 58MV(B,C)100−20 | 33,000 | 11.5 | 14.0 |
| 3015405 | 38HDR036−31 | CAP**3621A** | 58PH*090−16 | 33,000 | 12.0 | 14.5 |
| 3015406 | 38HDR036−31 | CAP**3621A** | 58PH*110−20 | 33,000 | 12.0 | 14.5 |
| 1085816 | 38HDR036−31 | CAP**3621A**+TDR | | 33,000 | 11.0 | 13.0 |
| 1085990 | 38HDR036−31 | CAP**4221A** | 58CV(A,X)090−16 | 33,400 | 11.5 | 14.0 |
| 1085834 | 38HDR036−31 | CAP**4221A** | 58CV(A,X)110−20 | 33,400 | 11.5 | 14.0 |
| 3112141 | 38HDR036−31 | CAP**4221A** | 58MEB100−20 | 33,400 | 12.0 | 14.5 |
| 1390526 | 38HDR036−31 | CAP**4221A** | 58MV(B,C)060−14 | 33,400 | 11.5 | 14.0 |
| 1390534 | 38HDR036−31 | CAP**4221A** | 58MV(B,C)080−14 | 33,400 | 11.5 | 13.5 |
| 1390552 | 38HDR036−31 | CAP**4221A** | 58MV(B,C)080−20 | 33,400 | 11.5 | 14.0 |
| 1390570 | 38HDR036−31 | CAP**4221A** | 58MV(B,C)100−20 | 33,400 | 11.5 | 14.0 |
| 3015407 | 38HDR036−31 | CAP**4221A** | 58PH*090−16 | 33,400 | 12.0 | 14.5 |
| 3015408 | 38HDR036−31 | CAP**4221A** | 58PH*110−20 | 33,400 | 12.0 | 14.5 |
| 1085826 | 38HDR036−31 | CAP**4221A**+TDR | | 33,400 | 11.0 | 13.0 |
| 1085998 | 38HDR036−31 | CAP**4224A** | 58CV(A,X)110−20 | 33,400 | 11.5 | 14.0 |
| 1085842 | 38HDR036−31 | CAP**4224A** | 58CV(A,X)135−22 | 33,400 | 11.5 | 14.0 |
| 1085844 | 38HDR036−31 | CAP**4224A** | 58CV(A,X)155−22 | 33,400 | 11.5 | 14.0 |
| 1390548 | 38HDR036−31 | CAP**4224A** | 58MV(B,C)080−14 | 33,400 | 11.5 | 14.0 |
| 1390566 | 38HDR036−31 | CAP**4224A** | 58MV(B,C)080−20 | 33,400 | 11.5 | 14.0 |
| 1390584 | 38HDR036−31 | CAP**4224A** | 58MV(B,C)100−20 | 33,400 | 11.5 | 14.0 |
| 1390586 | 38HDR036−31 | CAP**4224A** | 58MV(B,C)120−20 | 33,400 | 11.5 | 13.5 |
| 1085836 | 38HDR036−31 | CAP**4224A**+TDR | | 33,400 | 11.0 | 13.0 |
| 1085918 | 38HDR036−31 | CNPF*3618A**+TDR | | 33,000 | 11.0 | 13.0 |
| 1085884 | 38HDR036−31 | CNPH*3617A** | 58CV(A,X)070−12 | 33,000 | 11.5 | 13.5 |
| 1085886 | 38HDR036−31 | CNPH*3617A** | 58CV(A,X)090−16 | 33,000 | 11.5 | 13.5 |
| 1085888 | 38HDR036−31 | CNPH*3617A** | 58CV(A,X)110−20 | 33,000 | 11.5 | 13.5 |
| 1085890 | 38HDR036−31 | CNPH*3617A** | 58CV(A,X)135−22 | 33,000 | 11.5 | 13.5 |
| 1085892 | 38HDR036−31 | CNPH*3617A** | 58CV(A,X)155−22 | 33,000 | 11.5 | 14.0 |
| 3112156 | 38HDR036−31 | CNPH*3617A** | 58MEB040−12 | 33,000 | 12.0 | 14.5 |
| 3112157 | 38HDR036−31 | CNPH*3617A** | 58MEB060−12 | 33,000 | 12.0 | 14.5 |
| 3112158 | 38HDR036−31 | CNPH*3617A** | 58MEB080−12 | 33,000 | 12.0 | 14.5 |
| 3112159 | 38HDR036−31 | CNPH*3617A** | 58MEB080−16 | 33,000 | 12.0 | 14.5 |
| 3112160 | 38HDR036−31 | CNPH*3617A** | 58MEB100−20 | 33,000 | 12.0 | 14.5 |
| 1390516 | 38HDR036−31 | CNPH*3617A** | 58MV(B,C)060−14 | 33,000 | 11.5 | 13.5 |
| 1390540 | 38HDR036−31 | CNPH*3617A** | 58MV(B,C)080−14 | 33,000 | 11.5 | 13.5 |
| 1390558 | 38HDR036−31 | CNPH*3617A** | 58MV(B,C)080−20 | 33,000 | 11.5 | 13.5 |
| 1390576 | 38HDR036−31 | CNPH*3617A** | 58MV(B,C)100−20 | 33,000 | 11.5 | 13.5 |
| 1390588 | 38HDR036−31 | CNPH*3617A** | 58MV(B,C)120−20 | 33,000 | 11.5 | 13.5 |
| 3015414 | 38HDR036−31 | CNPH*3617A** | 58PH*045−08 | 33,000 | 11.5 | 14.0 |
| 3015415 | 38HDR036−31 | CNPH*3617A** | 58PH*070−16 | 33,000 | 11.5 | 14.0 |
| 3015416 | 38HDR036−31 | CNPH*3617A** | 58PH*090−16 | 33,000 | 12.0 | 14.5 |
| 3015417 | 38HDR036−31 | CNPH*3617A** | 58PH*110−20 | 33,000 | 12.0 | 14.5 |
| 1085870 | 38HDR036−31 | CNPH*3617A**+TDR | | 33,000 | 11.0 | 13.0 |
| 1085908 | 38HDR036−31 | CNPH*4221A** | 58CV(A,X)070−12 | 33,400 | 11.5 | 14.0 |
| 1085910 | 38HDR036−31 | CNPH*4221A** | 58CV(A,X)090−16 | 33,400 | 11.5 | 14.5 |
| 1085912 | 38HDR036−31 | CNPH*4221A** | 58CV(A,X)110−20 | 33,400 | 11.5 | 14.5 |
| 1085914 | 38HDR036−31 | CNPH*4221A** | 58CV(A,X)135−22 | 33,400 | 11.5 | 14.5 |
| 1085916 | 38HDR036−31 | CNPH*4221A** | 58CV(A,X)155−22 | 33,400 | 11.5 | 14.5 |
| 3112161 | 38HDR036−31 | CNPH*4221A** | 58MEB040−12 | 33,400 | 12.0 | 14.5 |
| 3112162 | 38HDR036−31 | CNPH*4221A** | 58MEB060−12 | 33,400 | 12.0 | 14.5 |
| 3112163 | 38HDR036−31 | CNPH*4221A** | 58MEB080−12 | 33,400 | 12.0 | 14.5 |
| 3112164 | 38HDR036−31 | CNPH*4221A** | 58MEB080−16 | 33,400 | 12.0 | 14.5 |
| 3112165 | 38HDR036−31 | CNPH*4221A** | 58MEB100−20 | 33,400 | 12.0 | 14.5 |
| 1390518 | 38HDR036−31 | CNPH*4221A** | 58MV(B,C)060−14 | 33,400 | 11.5 | 14.0 |
| 1390542 | 38HDR036−31 | CNPH*4221A** | 58MV(B,C)080−14 | 33,400 | 11.5 | 14.0 |
| 1390560 | 38HDR036−31 | CNPH*4221A** | 58MV(B,C)080−20 | 33,400 | 11.5 | 14.0 |
| 1390578 | 38HDR036−31 | CNPH*4221A** | 58MV(B,C)100−20 | 33,400 | 11.5 | 14.0 |
| 1390590 | 38HDR036−31 | CNPH*4221A** | 58MV(B,C)120−20 | 33,400 | 11.5 | 14.5 |
| 3015418 | 38HDR036−31 | CNPH*4221A** | 58PH*045−08 | 33,400 | 11.5 | 14.0 |
| 3015419 | 38HDR036−31 | CNPH*4221A** | 58PH*070−16 | 33,400 | 11.5 | 14.0 |
| 3015420 | 38HDR036−31 | CNPH*4221A** | 58PH*090−16 | 33,400 | 12.0 | 14.5 |
| 3015421 | 38HDR036−31 | CNPH*4221A** | 58PH*110−20 | 33,400 | 12.0 | 14.5 |
| 1085894 | 38HDR036−31 | CNPH*4221A**+TDR | | 33,400 | 11.0 | 13.0 |
| 1086000 | 38HDR036−31 | CNPV*3617A** | 58CV(A,X)070−12 | 33,000 | 11.5 | 14.0 |
| 1085850 | 38HDR036−31 | CNPV*3617A** | 58CV(A,X)090−16 | 33,000 | 11.5 | 13.5 |
| 3112142 | 38HDR036−31 | CNPV*3617A** | 58MEB040−12 | 33,000 | 12.0 | 14.5 |

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# COMBINATION RATINGS (CONT.)

| ARI Ref. No. | Model Number | Indoor Model | Furnace Model | Capacity | EER | SEER |
|---|---|---|---|---|---|---|
| 3112143 | 38HDR036−31 | CNPV*3617A** | 58MEB060−12 | 33,000 | 12.0 | 14.5 |
| 3112144 | 38HDR036−31 | CNPV*3617A** | 58MEB080−12 | 33,000 | 12.0 | 14.5 |
| 3112145 | 38HDR036−31 | CNPV*3617A** | 58MEB080−16 | 33,000 | 12.0 | 14.5 |
| 1390514 | 38HDR036−31 | CNPV*3617A** | 58MV(B,C)060−14 | 33,000 | 11.5 | 13.5 |
| 3015409 | 38HDR036−31 | CNPV*3617A** | 58PH*070−16 | 33,000 | 11.5 | 14.0 |
| 1085846 | 38HDR036−31 | CNPV*3617A**+TDR | | 33,000 | 11.0 | 13.0 |
| 1086004 | 38HDR036−31 | CNPV*3621A** | 58CV(A,X)090−16 | 33,000 | 11.5 | 14.5 |
| 1085860 | 38HDR036−31 | CNPV*3621A** | 58CV(A,X)110−20 | 33,000 | 11.5 | 13.5 |
| 3112146 | 38HDR036−31 | CNPV*3621A** | 58MEB100−20 | 33,000 | 12.0 | 14.5 |
| 1390528 | 38HDR036−31 | CNPV*3621A** | 58MV(B,C)060−14 | 33,000 | 11.5 | 14.5 |
| 1390536 | 38HDR036−31 | CNPV*3621A** | 58MV(B,C)080−14 | 33,000 | 11.5 | 13.5 |
| 1390554 | 38HDR036−31 | CNPV*3621A** | 58MV(B,C)080−20 | 33,000 | 11.5 | 13.5 |
| 1390572 | 38HDR036−31 | CNPV*3621A** | 58MV(B,C)100−20 | 33,000 | 11.5 | 13.5 |
| 3015410 | 38HDR036−31 | CNPV*3621A** | 58PH*090−16 | 33,000 | 12.0 | 14.5 |
| 3015411 | 38HDR036−31 | CNPV*3621A** | 58PH*110−20 | 33,000 | 12.0 | 14.5 |
| 1085852 | 38HDR036−31 | CNPV*3621A**+TDR | | 33,000 | 11.0 | 13.0 |
| 3112149 | 38HDR036−31 | CNPV*4217A** | 58CV(A,X)090−16 | 33,400 | 12.0 | 14.5 |
| 3112151 | 38HDR036−31 | CNPV*4217A** | 58MEB040−12 | 33,400 | 12.0 | 14.5 |
| 3112152 | 38HDR036−31 | CNPV*4217A** | 58MEB060−12 | 33,400 | 12.0 | 14.5 |
| 3112153 | 38HDR036−31 | CNPV*4217A** | 58MEB080−12 | 33,400 | 12.0 | 14.5 |
| 3112154 | 38HDR036−31 | CNPV*4217A** | 58MEB080−16 | 33,400 | 12.0 | 14.5 |
| 3112148 | 38HDR036−31 | CNPV*4217A** | 58MV(B,C)060−14 | 33,400 | 12.0 | 14.5 |
| 3112150 | 38HDR036−31 | CNPV*4217A** | 58PH*070−16 | 33,400 | 12.0 | 14.5 |
| 3112147 | 38HDR036−31 | CNPV*4217A**+TDR | | 33,400 | 11.0 | 13.0 |
| 1086008 | 38HDR036−31 | CNPV*4221A** | 58CV(A,X)090−16 | 33,400 | 11.5 | 14.5 |
| 1085868 | 38HDR036−31 | CNPV*4221A** | 58CV(A,X)110−20 | 33,400 | 11.5 | 14.5 |
| 3112155 | 38HDR036−31 | CNPV*4221A** | 58MEB100−20 | 33,400 | 12.0 | 14.5 |
| 1390530 | 38HDR036−31 | CNPV*4221A** | 58MV(B,C)060−14 | 33,400 | 11.5 | 14.5 |
| 1390538 | 38HDR036−31 | CNPV*4221A** | 58MV(B,C)080−14 | 33,400 | 11.5 | 14.0 |
| 1390556 | 38HDR036−31 | CNPV*4221A** | 58MV(B,C)080−20 | 33,400 | 11.5 | 14.0 |
| 1390574 | 38HDR036−31 | CNPV*4221A** | 58MV(B,C)100−20 | 33,400 | 11.5 | 14.0 |
| 3015412 | 38HDR036−31 | CNPV*4221A** | 58PH*090−16 | 33,400 | 12.0 | 14.5 |
| 3015413 | 38HDR036−31 | CNPV*4221A** | 58PH*110−20 | 33,400 | 12.0 | 14.5 |
| 1085934 | 38HDR036−31 | CSPH*3612A** | 58CV(A,X)070−12 | 33,000 | 11.5 | 14.0 |
| 1085936 | 38HDR036−31 | CSPH*3612A** | 58CV(A,X)090−16 | 33,000 | 11.5 | 14.5 |
| 1085938 | 38HDR036−31 | CSPH*3612A** | 58CV(A,X)110−20 | 33,000 | 11.5 | 14.5 |
| 1085940 | 38HDR036−31 | CSPH*3612A** | 58CV(A,X)135−22 | 33,000 | 11.5 | 14.5 |
| 1085942 | 38HDR036−31 | CSPH*3612A** | 58CV(A,X)155−22 | 33,000 | 11.5 | 14.5 |
| 3112166 | 38HDR036−31 | CSPH*3612A** | 58MEB040−12 | 33,000 | 12.0 | 14.5 |
| 3112167 | 38HDR036−31 | CSPH*3612A** | 58MEB060−12 | 33,000 | 12.0 | 14.5 |
| 3112168 | 38HDR036−31 | CSPH*3612A** | 58MEB080−12 | 33,000 | 12.0 | 14.5 |
| 3112169 | 38HDR036−31 | CSPH*3612A** | 58MEB080−16 | 33,000 | 12.0 | 14.5 |
| 3112170 | 38HDR036−31 | CSPH*3612A** | 58MEB100−20 | 33,000 | 12.0 | 14.5 |
| 1390520 | 38HDR036−31 | CSPH*3612A** | 58MV(B,C)060−14 | 33,000 | 11.5 | 14.5 |
| 1390544 | 38HDR036−31 | CSPH*3612A** | 58MV(B,C)080−14 | 33,000 | 11.5 | 14.0 |
| 1390562 | 38HDR036−31 | CSPH*3612A** | 58MV(B,C)080−20 | 33,000 | 11.5 | 14.0 |
| 1390580 | 38HDR036−31 | CSPH*3612A** | 58MV(B,C)100−20 | 33,000 | 11.5 | 14.5 |
| 1390592 | 38HDR036−31 | CSPH*3612A** | 58MV(B,C)120−20 | 33,000 | 11.5 | 14.5 |
| 3015422 | 38HDR036−31 | CSPH*3612A** | 58PH*045−08 | 33,000 | 11.5 | 14.0 |
| 3015423 | 38HDR036−31 | CSPH*3612A** | 58PH*070−16 | 33,000 | 11.5 | 14.0 |
| 3015424 | 38HDR036−31 | CSPH*3612A** | 58PH*090−16 | 33,000 | 12.0 | 14.5 |
| 3015425 | 38HDR036−31 | CSPH*3612A** | 58PH*110−20 | 33,000 | 12.0 | 14.5 |
| 1085920 | 38HDR036−31 | CSPH*3612A**+TDR | | 33,000 | 11.0 | 13.0 |
| 1085958 | 38HDR036−31 | CSPH*4212A** | 58CV(A,X)070−12 | 33,400 | 11.5 | 14.0 |
| 1085960 | 38HDR036−31 | CSPH*4212A** | 58CV(A,X)090−16 | 33,400 | 11.5 | 14.5 |
| 1085962 | 38HDR036−31 | CSPH*4212A** | 58CV(A,X)110−20 | 33,400 | 11.5 | 14.5 |
| 1085964 | 38HDR036−31 | CSPH*4212A** | 58CV(A,X)135−22 | 33,400 | 11.5 | 14.5 |
| 1085966 | 38HDR036−31 | CSPH*4212A** | 58CV(A,X)155−22 | 33,400 | 11.5 | 14.5 |
| 3112171 | 38HDR036−31 | CSPH*4212A** | 58MEB040−12 | 33,400 | 12.0 | 14.5 |
| 3112172 | 38HDR036−31 | CSPH*4212A** | 58MEB060−12 | 33,400 | 12.0 | 14.5 |
| 3112173 | 38HDR036−31 | CSPH*4212A** | 58MEB080−12 | 33,400 | 12.0 | 14.5 |
| 3112174 | 38HDR036−31 | CSPH*4212A** | 58MEB080−16 | 33,400 | 12.0 | 14.5 |
| 3112175 | 38HDR036−31 | CSPH*4212A** | 58MEB100−20 | 33,400 | 12.0 | 14.5 |
| 1390522 | 38HDR036−31 | CSPH*4212A** | 58MV(B,C)060−14 | 33,400 | 11.5 | 14.0 |
| 1390546 | 38HDR036−31 | CSPH*4212A** | 58MV(B,C)080−14 | 33,400 | 11.5 | 14.0 |
| 1390564 | 38HDR036−31 | CSPH*4212A** | 58MV(B,C)080−20 | 33,400 | 11.5 | 14.0 |
| 1390582 | 38HDR036−31 | CSPH*4212A** | 58MV(B,C)100−20 | 33,400 | 11.5 | 14.0 |
| 1390594 | 38HDR036−31 | CSPH*4212A** | 58MV(B,C)120−20 | 33,400 | 11.5 | 14.0 |
| 3015426 | 38HDR036−31 | CSPH*4212A** | 58PH*045−08 | 33,400 | 11.5 | 14.0 |
| 3015427 | 38HDR036−31 | CSPH*4212A** | 58PH*070−16 | 33,400 | 11.5 | 14.0 |
| 3015428 | 38HDR036−31 | CSPH*4212A** | 58PH*090−16 | 33,400 | 12.0 | 14.5 |
| 3015429 | 38HDR036−31 | CSPH*4212A** | 58PH*110−20 | 33,400 | 12.0 | 14.5 |
| 1085944 | 38HDR036−31 | CSPH*4212A**+TDR | | 33,400 | 11.0 | 13.0 |
| 1086246 | 38HDR036−31 | FE4AN(B,F)003+UI | | 33,000 | 11.5 | 14.0 |
| 1086248 | 38HDR036−31 | FE4AN(B,F)005+UI | | 33,400 | 12.5 | 15.0 |
| 1086250 | 38HDR036−31 | FE4ANB006+UI | | 33,400 | 12.5 | 15.0 |
| 1086244 | 38HDR036−31 | FE4ANF002+UI | | 33,000 | 11.5 | 13.5 |
| 1085976 | 38HDR036−31 | FF1ENP036 | | 33,000 | 11.0 | 13.0 |
| 1085980 | 38HDR036−31 | FV4BNB006 | | 33,400 | 12.5 | 15.0 |

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# COMBINATION RATINGS (CONT.)

| ARI Ref. No. | Model Number | Indoor Model | Furnace Model | Capacity | EER | SEER |
|---|---|---|---|---|---|---|
| 1085978 | 38HDR036−31 | FV4BNF002 | | 33,000 | 11.5 | 13.5 |
| 3404627 | 38HDR036−31 | FV4CNB006 | | 33,400 | 12.5 | 15.0 |
| 3404626 | 38HDR036−31 | FV4CNF002 | | 33,000 | 11.5 | 13.5 |
| 1085972 | 38HDR036−31 | FX4CN(B,F)036 | | 33,000 | 11.5 | 14.0 |
| 1085974 | 38HDR036−31 | FX4CN(B,F)042 | | 33,400 | 11.5 | 14.0 |
| 1085968 | 38HDR036−31 | FY4ANF036 | | 33,000 | 11.0 | 13.0 |
| 1085970 | 38HDR036−31 | FY4ANF042 | | 33,400 | 11.0 | 13.0 |
| | | | | | | |
| 1117042 | 38HDR036−51 | †CNPV*4221A**+TDR | | 33,400 | 11.0 | 13.0 |
| 1117982 | 38HDR036−51 | 40QAC036−−−3 | | 33,000 | 11.4 | 13.0 |
| 1117046 | 38HDR036−51 | CAP**3614A** | 58CV(A,X)070−12 | 32,600 | 11.5 | 13.5 |
| 3015466 | 38HDR036−51 | CAP**3614A** | 58PH*045−08 | 33,000 | 11.5 | 14.0 |
| 1117044 | 38HDR036−51 | CAP**3614A**+TDR | | 32,600 | 11.0 | 13.0 |
| 1117228 | 38HDR036−51 | CAP**3617A** | 58CV(A,X)070−12 | 33,000 | 11.5 | 14.0 |
| 1117052 | 38HDR036−51 | CAP**3617A** | 58CV(A,X)090−16 | 33,000 | 11.5 | 14.0 |
| 3116284 | 38HDR036−51 | CAP**3617A** | 58MEB040−12 | 33,000 | 12.0 | 14.5 |
| 3116285 | 38HDR036−51 | CAP**3617A** | 58MEB060−12 | 33,000 | 12.0 | 14.5 |
| 3116286 | 38HDR036−51 | CAP**3617A** | 58MEB080−12 | 33,000 | 12.0 | 14.5 |
| 3116287 | 38HDR036−51 | CAP**3617A** | 58MEB080−16 | 33,000 | 12.0 | 14.5 |
| 1390596 | 38HDR036−51 | CAP**3617A** | 58MV(B,C)060−14 | 33,000 | 11.5 | 13.5 |
| 3015467 | 38HDR036−51 | CAP**3617A** | 58PH*070−16 | 33,000 | 11.5 | 14.0 |
| 1117048 | 38HDR036−51 | CAP**3617A**+TDR | | 33,000 | 11.0 | 13.0 |
| 1117232 | 38HDR036−51 | CAP**3621A** | 58CV(A,X)090−16 | 33,000 | 11.5 | 14.0 |
| 1145786 | 38HDR036−51 | CAP**3621A** | 58CV(A,X)110−20 | 33,000 | 11.5 | 14.0 |
| 3116288 | 38HDR036−51 | CAP**3621A** | 58MEB100−20 | 33,000 | 12.0 | 14.5 |
| 1390602 | 38HDR036−51 | CAP**3621A** | 58MV(B,C)060−14 | 33,000 | 11.5 | 14.0 |
| 1390616 | 38HDR036−51 | CAP**3621A** | 58MV(B,C)080−14 | 33,000 | 11.5 | 13.5 |
| 1390634 | 38HDR036−51 | CAP**3621A** | 58MV(B,C)080−20 | 33,000 | 11.5 | 13.5 |
| 1390658 | 38HDR036−51 | CAP**3621A** | 58MV(B,C)100−20 | 33,000 | 11.5 | 14.0 |
| 3015468 | 38HDR036−51 | CAP**3621A** | 58PH*090−16 | 33,000 | 12.0 | 14.5 |
| 3015469 | 38HDR036−51 | CAP**3621A** | 58PH*110−20 | 33,000 | 12.0 | 14.5 |
| 1117054 | 38HDR036−51 | CAP**3621A**+TDR | | 33,000 | 11.0 | 13.0 |
| 1117236 | 38HDR036−51 | CAP**4221A** | 58CV(A,X)090−16 | 33,400 | 11.5 | 14.0 |
| 1145796 | 38HDR036−51 | CAP**4221A** | 58CV(A,X)110−20 | 33,400 | 11.5 | 14.0 |
| 3116289 | 38HDR036−51 | CAP**4221A** | 58MEB100−20 | 33,400 | 12.0 | 14.5 |
| 1390604 | 38HDR036−51 | CAP**4221A** | 58MV(B,C)060−14 | 33,400 | 11.5 | 14.0 |
| 1390624 | 38HDR036−51 | CAP**4221A** | 58MV(B,C)080−14 | 33,400 | 11.5 | 13.5 |
| 1390642 | 38HDR036−51 | CAP**4221A** | 58MV(B,C)080−20 | 33,400 | 11.5 | 14.0 |
| 1390660 | 38HDR036−51 | CAP**4221A** | 58MV(B,C)100−20 | 33,400 | 11.5 | 14.0 |
| 3015470 | 38HDR036−51 | CAP**4221A** | 58PH*090−16 | 33,400 | 12.0 | 14.5 |
| 3015471 | 38HDR036−51 | CAP**4221A** | 58PH*110−20 | 33,400 | 12.0 | 14.5 |
| 1145788 | 38HDR036−51 | CAP**4221A**+TDR | | 33,400 | 11.0 | 13.0 |
| 1117244 | 38HDR036−51 | CAP**4224A** | 58CV(A,X)110−20 | 33,400 | 11.5 | 14.0 |
| 1145804 | 38HDR036−51 | CAP**4224A** | 58CV(A,X)135−22 | 33,400 | 11.5 | 14.0 |
| 1145806 | 38HDR036−51 | CAP**4224A** | 58CV(A,X)155−22 | 33,400 | 11.5 | 14.0 |
| 1390622 | 38HDR036−51 | CAP**4224A** | 58MV(B,C)080−14 | 33,400 | 11.5 | 14.0 |
| 1390640 | 38HDR036−51 | CAP**4224A** | 58MV(B,C)080−20 | 33,400 | 11.5 | 14.0 |
| 1390656 | 38HDR036−51 | CAP**4224A** | 58MV(B,C)100−20 | 33,400 | 11.5 | 14.0 |
| 1390674 | 38HDR036−51 | CAP**4224A** | 58MV(B,C)120−20 | 33,400 | 11.5 | 13.5 |
| 1145798 | 38HDR036−51 | CAP**4224A**+TDR | | 33,400 | 11.0 | 13.0 |
| 1117156 | 38HDR036−51 | CNPF*3618A**+TDR | | 33,000 | 11.0 | 13.0 |
| 1145846 | 38HDR036−51 | CNPH*3617A** | 58CV(A,X)070−12 | 33,000 | 11.5 | 13.5 |
| 1145848 | 38HDR036−51 | CNPH*3617A** | 58CV(A,X)090−16 | 33,000 | 11.5 | 13.5 |
| 1145850 | 38HDR036−51 | CNPH*3617A** | 58CV(A,X)110−20 | 33,000 | 11.5 | 13.5 |
| 1145852 | 38HDR036−51 | CNPH*3617A** | 58CV(A,X)135−22 | 33,000 | 11.5 | 13.5 |
| 1145854 | 38HDR036−51 | CNPH*3617A** | 58CV(A,X)155−22 | 33,000 | 11.5 | 14.0 |
| 3116304 | 38HDR036−51 | CNPH*3617A** | 58MEB040−12 | 33,000 | 12.0 | 14.5 |
| 3116305 | 38HDR036−51 | CNPH*3617A** | 58MEB060−12 | 33,000 | 12.0 | 14.5 |
| 3116306 | 38HDR036−51 | CNPH*3617A** | 58MEB080−12 | 33,000 | 12.0 | 14.5 |
| 3116307 | 38HDR036−51 | CNPH*3617A** | 58MEB080−16 | 33,000 | 12.0 | 14.5 |
| 3116308 | 38HDR036−51 | CNPH*3617A** | 58MEB100−20 | 33,000 | 12.0 | 14.5 |
| 1390612 | 38HDR036−51 | CNPH*3617A** | 58MV(B,C)060−14 | 33,000 | 11.5 | 13.5 |
| 1390630 | 38HDR036−51 | CNPH*3617A** | 58MV(B,C)080−14 | 33,000 | 11.5 | 13.5 |
| 1390648 | 38HDR036−51 | CNPH*3617A** | 58MV(B,C)080−20 | 33,000 | 11.5 | 13.5 |
| 1390666 | 38HDR036−51 | CNPH*3617A** | 58MV(B,C)100−20 | 33,000 | 11.5 | 13.5 |
| 1390676 | 38HDR036−51 | CNPH*3617A** | 58MV(B,C)120−20 | 33,000 | 11.5 | 13.5 |
| 3015477 | 38HDR036−51 | CNPH*3617A** | 58PH*045−08 | 33,000 | 11.5 | 14.0 |
| 3015478 | 38HDR036−51 | CNPH*3617A** | 58PH*070−16 | 33,000 | 11.5 | 14.0 |
| 3015479 | 38HDR036−51 | CNPH*3617A** | 58PH*090−16 | 33,000 | 12.0 | 14.5 |
| 3015480 | 38HDR036−51 | CNPH*3617A** | 58PH*110−20 | 33,000 | 12.0 | 14.5 |
| 1145832 | 38HDR036−51 | CNPH*3617A**+TDR | | 33,000 | 11.0 | 13.0 |
| 1145870 | 38HDR036−51 | CNPH*4221A** | 58CV(A,X)070−12 | 33,400 | 11.5 | 14.0 |
| 1145872 | 38HDR036−51 | CNPH*4221A** | 58CV(A,X)090−16 | 33,400 | 11.5 | 14.5 |
| 1145874 | 38HDR036−51 | CNPH*4221A** | 58CV(A,X)110−20 | 33,400 | 11.5 | 14.5 |
| 1117152 | 38HDR036−51 | CNPH*4221A** | 58CV(A,X)135−22 | 33,400 | 11.5 | 14.5 |
| 1117154 | 38HDR036−51 | CNPH*4221A** | 58CV(A,X)155−22 | 33,400 | 11.5 | 14.5 |
| 3116309 | 38HDR036−51 | CNPH*4221A** | 58MEB040−12 | 33,400 | 12.0 | 14.5 |
| 3116310 | 38HDR036−51 | CNPH*4221A** | 58MEB060−12 | 33,400 | 12.0 | 14.5 |
| 3116311 | 38HDR036−51 | CNPH*4221A** | 58MEB080−12 | 33,400 | 12.0 | 14.5 |

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# COMBINATION RATINGS (CONT.)

| ARI Ref. No. | Model Number | Indoor Model | Furnace Model | Capacity | EER | SEER |
|---|---|---|---|---|---|---|
| 3116312 | 38HDR036−51 | CNPH*4221A** | 58MEB080−16 | 33,400 | 12.0 | 14.5 |
| 3116313 | 38HDR036−51 | CNPH*4221A** | 58MEB100−20 | 33,400 | 12.0 | 14.5 |
| 1390614 | 38HDR036−51 | CNPH*4221A** | 58MV(B,C)060−14 | 33,400 | 11.5 | 14.0 |
| 1390632 | 38HDR036−51 | CNPH*4221A** | 58MV(B,C)080−14 | 33,400 | 11.5 | 14.0 |
| 1390650 | 38HDR036−51 | CNPH*4221A** | 58MV(B,C)080−20 | 33,400 | 11.5 | 14.0 |
| 1390668 | 38HDR036−51 | CNPH*4221A** | 58MV(B,C)100−20 | 33,400 | 11.5 | 14.0 |
| 1390678 | 38HDR036−51 | CNPH*4221A** | 58MV(B,C)120−20 | 33,400 | 11.5 | 14.5 |
| 3015481 | 38HDR036−51 | CNPH*4221A** | 58PH*045−08 | 33,400 | 11.5 | 14.0 |
| 3015482 | 38HDR036−51 | CNPH*4221A** | 58PH*070−16 | 33,400 | 11.5 | 14.0 |
| 3015483 | 38HDR036−51 | CNPH*4221A** | 58PH*090−16 | 33,400 | 12.0 | 14.5 |
| 3015484 | 38HDR036−51 | CNPH*4221A** | 58PH*110−20 | 33,400 | 12.0 | 14.5 |
| 1145856 | 38HDR036−51 | CNPH*4221A**+TDR | | 33,400 | 11.0 | 13.0 |
| 1117246 | 38HDR036−51 | CNPV*3617A** | 58CV(A,X)070−12 | 33,000 | 11.5 | 14.0 |
| 1145812 | 38HDR036−51 | CNPV*3617A** | 58CV(A,X)090−16 | 33,000 | 11.5 | 13.5 |
| 3116290 | 38HDR036−51 | CNPV*3617A** | 58MEB040−12 | 33,000 | 12.0 | 14.5 |
| 3116291 | 38HDR036−51 | CNPV*3617A** | 58MEB060−12 | 33,000 | 12.0 | 14.5 |
| 3116292 | 38HDR036−51 | CNPV*3617A** | 58MEB080−12 | 33,000 | 12.0 | 14.5 |
| 3116293 | 38HDR036−51 | CNPV*3617A** | 58MEB080−16 | 33,000 | 12.0 | 14.5 |
| 1390610 | 38HDR036−51 | CNPV*3617A** | 58MV(B,C)060−14 | 33,000 | 11.5 | 13.5 |
| 3015472 | 38HDR036−51 | CNPV*3617A** | 58PH*070−16 | 33,000 | 11.5 | 14.0 |
| 1145808 | 38HDR036−51 | CNPV*3617A**+TDR | | 33,000 | 11.0 | 13.0 |
| 1117250 | 38HDR036−51 | CNPV*3621A** | 58CV(A,X)090−16 | 33,000 | 11.5 | 14.5 |
| 1145822 | 38HDR036−51 | CNPV*3621A** | 58CV(A,X)110−20 | 33,000 | 11.5 | 13.5 |
| 3116294 | 38HDR036−51 | CNPV*3621A** | 58MEB100−20 | 33,000 | 12.0 | 14.5 |
| 1390606 | 38HDR036−51 | CNPV*3621A** | 58MV(B,C)060−14 | 33,000 | 11.5 | 14.5 |
| 1390626 | 38HDR036−51 | CNPV*3621A** | 58MV(B,C)080−14 | 33,000 | 11.5 | 13.5 |
| 1390644 | 38HDR036−51 | CNPV*3621A** | 58MV(B,C)080−20 | 33,000 | 11.5 | 13.5 |
| 1390662 | 38HDR036−51 | CNPV*3621A** | 58MV(B,C)100−20 | 33,000 | 11.5 | 13.5 |
| 3015473 | 38HDR036−51 | CNPV*3621A** | 58PH*090−16 | 33,000 | 12.0 | 14.5 |
| 3015474 | 38HDR036−51 | CNPV*3621A** | 58PH*110−20 | 33,000 | 12.0 | 14.5 |
| 1145814 | 38HDR036−51 | CNPV*3621A**+TDR | | 33,000 | 11.0 | 13.0 |
| 3116297 | 38HDR036−51 | CNPV*4217A** | 58CV(A,X)090−16 | 33,400 | 12.0 | 14.5 |
| 3116299 | 38HDR036−51 | CNPV*4217A** | 58MEB040−12 | 33,400 | 12.0 | 14.5 |
| 3116300 | 38HDR036−51 | CNPV*4217A** | 58MEB060−12 | 33,400 | 12.0 | 14.5 |
| 3116301 | 38HDR036−51 | CNPV*4217A** | 58MEB080−12 | 33,400 | 12.0 | 14.5 |
| 3116302 | 38HDR036−51 | CNPV*4217A** | 58MEB080−16 | 33,400 | 12.0 | 14.5 |
| 3116296 | 38HDR036−51 | CNPV*4217A** | 58MV(B,C)060−14 | 33,400 | 12.0 | 14.5 |
| 3116298 | 38HDR036−51 | CNPV*4217A** | 58PH*070−16 | 33,400 | 12.0 | 14.5 |
| 3116295 | 38HDR036−51 | CNPV*4217A**+TDR | | 33,400 | 11.0 | 13.0 |
| 1117254 | 38HDR036−51 | CNPV*4221A** | 58CV(A,X)090−16 | 33,400 | 11.5 | 14.5 |
| 1145830 | 38HDR036−51 | CNPV*4221A** | 58CV(A,X)110−20 | 33,400 | 11.5 | 14.5 |
| 3116303 | 38HDR036−51 | CNPV*4221A** | 58MEB100−20 | 33,400 | 12.0 | 14.5 |
| 1390608 | 38HDR036−51 | CNPV*4221A** | 58MV(B,C)060−14 | 33,400 | 11.5 | 14.5 |
| 1390628 | 38HDR036−51 | CNPV*4221A** | 58MV(B,C)080−14 | 33,400 | 11.5 | 14.0 |
| 1390646 | 38HDR036−51 | CNPV*4221A** | 58MV(B,C)080−20 | 33,400 | 11.5 | 14.0 |
| 1390664 | 38HDR036−51 | CNPV*4221A** | 58MV(B,C)100−20 | 33,400 | 11.5 | 14.0 |
| 3015475 | 38HDR036−51 | CNPV*4221A** | 58PH*090−16 | 33,400 | 12.0 | 14.5 |
| 3015476 | 38HDR036−51 | CNPV*4221A** | 58PH*110−20 | 33,400 | 12.0 | 14.5 |
| 1117172 | 38HDR036−51 | CSPH*3612A** | 58CV(A,X)070−12 | 33,000 | 11.5 | 14.0 |
| 1117174 | 38HDR036−51 | CSPH*3612A** | 58CV(A,X)090−16 | 33,000 | 11.5 | 14.5 |
| 1117176 | 38HDR036−51 | CSPH*3612A** | 58CV(A,X)110−20 | 33,000 | 11.5 | 14.5 |
| 1117178 | 38HDR036−51 | CSPH*3612A** | 58CV(A,X)135−22 | 33,000 | 11.5 | 14.5 |
| 1117180 | 38HDR036−51 | CSPH*3612A** | 58CV(A,X)155−22 | 33,000 | 11.5 | 14.5 |
| 3116314 | 38HDR036−51 | CSPH*3612A** | 58MEB040−12 | 33,000 | 12.0 | 14.5 |
| 3116315 | 38HDR036−51 | CSPH*3612A** | 58MEB060−12 | 33,000 | 12.0 | 14.5 |
| 3116316 | 38HDR036−51 | CSPH*3612A** | 58MEB080−12 | 33,000 | 12.0 | 14.5 |
| 3116317 | 38HDR036−51 | CSPH*3612A** | 58MEB080−16 | 33,000 | 12.0 | 14.5 |
| 3116318 | 38HDR036−51 | CSPH*3612A** | 58MEB100−20 | 33,000 | 12.0 | 14.5 |
| 1390598 | 38HDR036−51 | CSPH*3612A** | 58MV(B,C)060−14 | 33,000 | 11.5 | 14.5 |
| 1390618 | 38HDR036−51 | CSPH*3612A** | 58MV(B,C)080−14 | 33,000 | 11.5 | 14.0 |
| 1390636 | 38HDR036−51 | CSPH*3612A** | 58MV(B,C)080−20 | 33,000 | 11.5 | 14.0 |
| 1390652 | 38HDR036−51 | CSPH*3612A** | 58MV(B,C)100−20 | 33,000 | 11.5 | 14.5 |
| 1390670 | 38HDR036−51 | CSPH*3612A** | 58MV(B,C)120−20 | 33,000 | 11.5 | 14.5 |
| 3015485 | 38HDR036−51 | CSPH*3612A** | 58PH*045−08 | 33,000 | 11.5 | 14.0 |
| 3015486 | 38HDR036−51 | CSPH*3612A** | 58PH*070−16 | 33,000 | 11.5 | 14.0 |
| 3015487 | 38HDR036−51 | CSPH*3612A** | 58PH*090−16 | 33,000 | 12.0 | 14.5 |
| 3015488 | 38HDR036−51 | CSPH*3612A** | 58PH*110−20 | 33,000 | 12.0 | 14.5 |
| 1117158 | 38HDR036−51 | CSPH*3612A**+TDR | | 33,000 | 11.0 | 13.0 |
| 1117196 | 38HDR036−51 | CSPH*4212A** | 58CV(A,X)070−12 | 33,400 | 11.5 | 14.0 |
| 1117198 | 38HDR036−51 | CSPH*4212A** | 58CV(A,X)090−16 | 33,400 | 11.5 | 14.5 |
| 1117200 | 38HDR036−51 | CSPH*4212A** | 58CV(A,X)110−20 | 33,400 | 11.5 | 14.5 |
| 1117202 | 38HDR036−51 | CSPH*4212A** | 58CV(A,X)135−22 | 33,400 | 11.5 | 14.5 |
| 1117204 | 38HDR036−51 | CSPH*4212A** | 58CV(A,X)155−22 | 33,400 | 11.5 | 14.5 |
| 3116319 | 38HDR036−51 | CSPH*4212A** | 58MEB040−12 | 33,400 | 12.0 | 14.5 |
| 3116320 | 38HDR036−51 | CSPH*4212A** | 58MEB060−12 | 33,400 | 12.0 | 14.5 |
| 3116321 | 38HDR036−51 | CSPH*4212A** | 58MEB080−12 | 33,400 | 12.0 | 14.5 |
| 3116322 | 38HDR036−51 | CSPH*4212A** | 58MEB080−16 | 33,400 | 12.0 | 14.5 |
| 3116323 | 38HDR036−51 | CSPH*4212A** | 58MEB100−20 | 33,400 | 12.0 | 14.5 |
| 1390600 | 38HDR036−51 | CSPH*4212A** | 58MV(B,C)060−14 | 33,400 | 11.5 | 14.0 |

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# COMBINATION RATINGS (CONT.)

| ARI Ref. No. | Model Number | Indoor Model | Furnace Model | Capacity | EER | SEER |
|---|---|---|---|---|---|---|
| 1390620 | 38HDR036−51 | CSPH*4212A** | 58MV(B,C)080−14 | 33,400 | 11.5 | 14.0 |
| 1390638 | 38HDR036−51 | CSPH*4212A** | 58MV(B,C)080−20 | 33,400 | 11.5 | 14.0 |
| 1390654 | 38HDR036−51 | CSPH*4212A** | 58MV(B,C)100−20 | 33,400 | 11.5 | 14.0 |
| 1390672 | 38HDR036−51 | CSPH*4212A** | 58MV(B,C)120−20 | 33,400 | 11.5 | 14.0 |
| 3015489 | 38HDR036−51 | CSPH*4212A** | 58PH*045−08 | 33,400 | 11.5 | 14.0 |
| 3015490 | 38HDR036−51 | CSPH*4212A** | 58PH*070−16 | 33,400 | 11.5 | 14.0 |
| 3015491 | 38HDR036−51 | CSPH*4212A** | 58PH*090−16 | 33,400 | 12.0 | 14.5 |
| 3015492 | 38HDR036−51 | CSPH*4212A** | 58PH*110−20 | 33,400 | 12.0 | 14.5 |
| 1117182 | 38HDR036−51 | CSPH*4212A**+TDR | | 33,400 | 11.0 | 13.0 |
| 1117216 | 38HDR036−51 | FE4AN(B,F)003+UI | | 33,000 | 11.5 | 14.0 |
| 1117218 | 38HDR036−51 | FE4AN(B,F)005+UI | | 33,400 | 12.5 | 15.0 |
| 1117220 | 38HDR036−51 | FE4ANB006+UI | | 33,400 | 12.5 | 15.0 |
| 1117214 | 38HDR036−51 | FE4ANF002+UI | | 33,000 | 11.5 | 13.5 |
| 1117222 | 38HDR036−51 | FF1ENP036 | | 33,000 | 11.0 | 13.0 |
| 1117226 | 38HDR036−51 | FV4BNB006 | | 33,400 | 12.5 | 15.0 |
| 1117224 | 38HDR036−51 | FV4BNF002 | | 33,000 | 11.5 | 13.5 |
| 3404631 | 38HDR036−51 | FV4CNB006 | | 33,400 | 12.5 | 15.0 |
| 3404630 | 38HDR036−51 | FV4CNF002 | | 33,000 | 11.5 | 13.5 |
| 1117210 | 38HDR036−51 | FX4CN(B,F)036 | | 33,000 | 11.5 | 14.0 |
| 1117212 | 38HDR036−51 | FX4CN(B,F)042 | | 33,400 | 11.5 | 14.0 |
| 1117206 | 38HDR036−51 | FY4ANF036 | | 33,000 | 11.0 | 13.0 |
| 1117208 | 38HDR036−51 | FY4ANF042 | | 33,400 | 11.0 | 13.0 |
| | | | | | | |
| 1117484 | 38HDR036−61 | †CNPV*4221A**+TDR | | 33,400 | 11.0 | 13.0 |
| 1117984 | 38HDR036−61 | 40QAC036−−−3 | | 33,000 | 11.4 | 13.0 |
| 1117488 | 38HDR036−61 | CAP**3614A** | 58CV(A,X)070−12 | 32,600 | 11.5 | 13.5 |
| 3015493 | 38HDR036−61 | CAP**3614A** | 58PH*045−08 | 33,000 | 11.5 | 14.0 |
| 1117486 | 38HDR036−61 | CAP**3614A**+TDR | | 32,600 | 11.0 | 13.0 |
| 1117670 | 38HDR036−61 | CAP**3617A** | 58CV(A,X)070−12 | 33,000 | 11.5 | 14.0 |
| 1117494 | 38HDR036−61 | CAP**3617A** | 58CV(A,X)090−16 | 33,000 | 11.5 | 14.0 |
| 3116353 | 38HDR036−61 | CAP**3617A** | 58MEB040−12 | 33,000 | 12.0 | 14.5 |
| 3116354 | 38HDR036−61 | CAP**3617A** | 58MEB060−12 | 33,000 | 12.0 | 14.5 |
| 3116355 | 38HDR036−61 | CAP**3617A** | 58MEB080−12 | 33,000 | 12.0 | 14.5 |
| 3116356 | 38HDR036−61 | CAP**3617A** | 58MEB080−16 | 33,000 | 12.0 | 14.5 |
| 1390680 | 38HDR036−61 | CAP**3617A** | 58MV(B,C)060−14 | 33,000 | 11.5 | 13.5 |
| 3015494 | 38HDR036−61 | CAP**3617A** | 58PH*070−16 | 33,000 | 11.5 | 14.0 |
| 1117490 | 38HDR036−61 | CAP**3617A**+TDR | | 33,000 | 11.0 | 13.0 |
| 1117674 | 38HDR036−61 | CAP**3621A** | 58CV(A,X)090−16 | 33,000 | 11.5 | 14.0 |
| 1117504 | 38HDR036−61 | CAP**3621A** | 58CV(A,X)110−20 | 33,000 | 11.5 | 14.0 |
| 3116357 | 38HDR036−61 | CAP**3621A** | 58MEB100−20 | 33,000 | 12.0 | 14.5 |
| 1390692 | 38HDR036−61 | CAP**3621A** | 58MV(B,C)060−14 | 33,000 | 11.5 | 14.0 |
| 1390700 | 38HDR036−61 | CAP**3621A** | 58MV(B,C)080−14 | 33,000 | 11.5 | 13.5 |
| 1390718 | 38HDR036−61 | CAP**3621A** | 58MV(B,C)080−20 | 33,000 | 11.5 | 13.5 |
| 1390736 | 38HDR036−61 | CAP**3621A** | 58MV(B,C)100−20 | 33,000 | 11.5 | 14.0 |
| 3015495 | 38HDR036−61 | CAP**3621A** | 58PH*090−16 | 33,000 | 12.0 | 14.5 |
| 3015496 | 38HDR036−61 | CAP**3621A** | 58PH*110−20 | 33,000 | 12.0 | 14.5 |
| 1117496 | 38HDR036−61 | CAP**3621A**+TDR | | 33,000 | 11.0 | 13.0 |
| 1117678 | 38HDR036−61 | CAP**4221A** | 58CV(A,X)090−16 | 33,400 | 11.5 | 14.0 |
| 1117514 | 38HDR036−61 | CAP**4221A** | 58CV(A,X)110−20 | 33,400 | 11.5 | 14.0 |
| 3116358 | 38HDR036−61 | CAP**4221A** | 58MEB100−20 | 33,400 | 12.0 | 14.5 |
| 1390694 | 38HDR036−61 | CAP**4221A** | 58MV(B,C)060−14 | 33,400 | 11.5 | 14.0 |
| 1390702 | 38HDR036−61 | CAP**4221A** | 58MV(B,C)080−14 | 33,400 | 11.5 | 13.5 |
| 1390720 | 38HDR036−61 | CAP**4221A** | 58MV(B,C)080−20 | 33,400 | 11.5 | 14.0 |
| 1390738 | 38HDR036−61 | CAP**4221A** | 58MV(B,C)100−20 | 33,400 | 11.5 | 14.0 |
| 3015497 | 38HDR036−61 | CAP**4221A** | 58PH*090−16 | 33,400 | 12.0 | 14.5 |
| 3015498 | 38HDR036−61 | CAP**4221A** | 58PH*110−20 | 33,400 | 12.0 | 14.5 |
| 1117506 | 38HDR036−61 | CAP**4221A**+TDR | | 33,400 | 11.0 | 13.0 |
| 1117686 | 38HDR036−61 | CAP**4224A** | 58CV(A,X)110−20 | 33,400 | 11.5 | 14.0 |
| 1117522 | 38HDR036−61 | CAP**4224A** | 58CV(A,X)135−22 | 33,400 | 11.5 | 14.0 |
| 1117524 | 38HDR036−61 | CAP**4224A** | 58CV(A,X)155−22 | 33,400 | 11.5 | 14.0 |
| 1390716 | 38HDR036−61 | CAP**4224A** | 58MV(B,C)080−14 | 33,400 | 11.5 | 14.0 |
| 1390734 | 38HDR036−61 | CAP**4224A** | 58MV(B,C)080−20 | 33,400 | 11.5 | 14.0 |
| 1390752 | 38HDR036−61 | CAP**4224A** | 58MV(B,C)100−20 | 33,400 | 11.5 | 14.0 |
| 1390754 | 38HDR036−61 | CAP**4224A** | 58MV(B,C)120−20 | 33,400 | 11.5 | 13.5 |
| 1117516 | 38HDR036−61 | CAP**4224A**+TDR | | 33,400 | 11.0 | 13.0 |
| 1117598 | 38HDR036−61 | CNPF*3618A**+TDR | | 33,000 | 11.0 | 13.0 |
| 1117564 | 38HDR036−61 | CNPH*3617A** | 58CV(A,X)070−12 | 33,000 | 11.5 | 13.5 |
| 1117566 | 38HDR036−61 | CNPH*3617A** | 58CV(A,X)090−16 | 33,000 | 11.5 | 13.5 |
| 1117568 | 38HDR036−61 | CNPH*3617A** | 58CV(A,X)110−20 | 33,000 | 11.5 | 13.5 |
| 1117570 | 38HDR036−61 | CNPH*3617A** | 58CV(A,X)135−22 | 33,000 | 11.5 | 13.5 |
| 1117572 | 38HDR036−61 | CNPH*3617A** | 58CV(A,X)155−22 | 33,000 | 11.5 | 14.0 |
| 3116373 | 38HDR036−61 | CNPH*3617A** | 58MEB040−12 | 33,000 | 12.0 | 14.5 |
| 3116374 | 38HDR036−61 | CNPH*3617A** | 58MEB060−12 | 33,000 | 12.0 | 14.5 |
| 3116375 | 38HDR036−61 | CNPH*3617A** | 58MEB080−12 | 33,000 | 12.0 | 14.5 |
| 3116376 | 38HDR036−61 | CNPH*3617A** | 58MEB080−16 | 33,000 | 12.0 | 14.5 |
| 3116377 | 38HDR036−61 | CNPH*3617A** | 58MEB100−20 | 33,000 | 12.0 | 14.5 |
| 1390684 | 38HDR036−61 | CNPH*3617A** | 58MV(B,C)060−14 | 33,000 | 11.5 | 13.5 |
| 1390708 | 38HDR036−61 | CNPH*3617A** | 58MV(B,C)080−14 | 33,000 | 11.5 | 13.5 |
| 1390726 | 38HDR036−61 | CNPH*3617A** | 58MV(B,C)080−20 | 33,000 | 11.5 | 13.5 |

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# COMBINATION RATINGS (CONT.)

| ARI Ref. No. | Model Number | Indoor Model | Furnace Model | Capacity | EER | SEER |
|---|---|---|---|---|---|---|
| 1390744 | 38HDR036−61 | CNPH*3617A** | 58MV(B,C)100−20 | 33,000 | 11.5 | 13.5 |
| 1390756 | 38HDR036−61 | CNPH*3617A** | 58MV(B,C)120−20 | 33,000 | 11.5 | 13.5 |
| 3015504 | 38HDR036−61 | CNPH*3617A** | 58PH*045−08 | 33,000 | 11.5 | 14.0 |
| 3015505 | 38HDR036−61 | CNPH*3617A** | 58PH*070−16 | 33,000 | 11.5 | 14.0 |
| 3015506 | 38HDR036−61 | CNPH*3617A** | 58PH*090−16 | 33,000 | 12.0 | 14.5 |
| 3015507 | 38HDR036−61 | CNPH*3617A** | 58PH*110−20 | 33,000 | 12.0 | 14.5 |
| 1117550 | 38HDR036−61 | CNPH*3617A**+TDR | | 33,000 | 11.0 | 13.0 |
| 1117588 | 38HDR036−61 | CNPH*4221A** | 58CV(A,X)070−12 | 33,400 | 11.5 | 14.0 |
| 1117590 | 38HDR036−61 | CNPH*4221A** | 58CV(A,X)090−16 | 33,400 | 11.5 | 14.5 |
| 1117592 | 38HDR036−61 | CNPH*4221A** | 58CV(A,X)110−20 | 33,400 | 11.5 | 14.5 |
| 1117594 | 38HDR036−61 | CNPH*4221A** | 58CV(A,X)135−22 | 33,400 | 11.5 | 14.5 |
| 1117596 | 38HDR036−61 | CNPH*4221A** | 58CV(A,X)155−22 | 33,400 | 11.5 | 14.5 |
| 3116378 | 38HDR036−61 | CNPH*4221A** | 58MEB040−12 | 33,400 | 12.0 | 14.5 |
| 3116379 | 38HDR036−61 | CNPH*4221A** | 58MEB060−12 | 33,400 | 12.0 | 14.5 |
| 3116380 | 38HDR036−61 | CNPH*4221A** | 58MEB080−12 | 33,400 | 12.0 | 14.5 |
| 3116381 | 38HDR036−61 | CNPH*4221A** | 58MEB080−16 | 33,400 | 12.0 | 14.5 |
| 3116382 | 38HDR036−61 | CNPH*4221A** | 58MEB100−20 | 33,400 | 12.0 | 14.5 |
| 1390686 | 38HDR036−61 | CNPH*4221A** | 58MV(B,C)060−14 | 33,400 | 11.5 | 14.0 |
| 1390710 | 38HDR036−61 | CNPH*4221A** | 58MV(B,C)080−14 | 33,400 | 11.5 | 14.0 |
| 1390728 | 38HDR036−61 | CNPH*4221A** | 58MV(B,C)080−20 | 33,400 | 11.5 | 14.0 |
| 1390746 | 38HDR036−61 | CNPH*4221A** | 58MV(B,C)100−20 | 33,400 | 11.5 | 14.0 |
| 1390758 | 38HDR036−61 | CNPH*4221A** | 58MV(B,C)120−20 | 33,400 | 11.5 | 14.5 |
| 3015508 | 38HDR036−61 | CNPH*4221A** | 58PH*045−08 | 33,400 | 11.5 | 14.0 |
| 3015509 | 38HDR036−61 | CNPH*4221A** | 58PH*070−16 | 33,400 | 11.5 | 14.0 |
| 3015510 | 38HDR036−61 | CNPH*4221A** | 58PH*090−16 | 33,400 | 12.0 | 14.5 |
| 3015511 | 38HDR036−61 | CNPH*4221A** | 58PH*110−20 | 33,400 | 12.0 | 14.5 |
| 1117574 | 38HDR036−61 | CNPH*4221A**+TDR | | 33,400 | 11.0 | 13.0 |
| 1117688 | 38HDR036−61 | CNPV*3617A** | 58CV(A,X)070−12 | 33,000 | 11.5 | 14.0 |
| 1117530 | 38HDR036−61 | CNPV*3617A** | 58CV(A,X)090−16 | 33,000 | 11.5 | 13.5 |
| 3116359 | 38HDR036−61 | CNPV*3617A** | 58MEB040−12 | 33,000 | 12.0 | 14.5 |
| 3116360 | 38HDR036−61 | CNPV*3617A** | 58MEB060−12 | 33,000 | 12.0 | 14.5 |
| 3116361 | 38HDR036−61 | CNPV*3617A** | 58MEB080−12 | 33,000 | 12.0 | 14.5 |
| 3116362 | 38HDR036−61 | CNPV*3617A** | 58MEB080−16 | 33,000 | 12.0 | 14.5 |
| 1390682 | 38HDR036−61 | CNPV*3617A** | 58MV(B,C)060−14 | 33,000 | 11.5 | 13.5 |
| 3015499 | 38HDR036−61 | CNPV*3617A** | 58PH*070−16 | 33,000 | 11.5 | 14.0 |
| 1117526 | 38HDR036−61 | CNPV*3617A**+TDR | | 33,000 | 11.0 | 13.0 |
| 1117692 | 38HDR036−61 | CNPV*3621A** | 58CV(A,X)090−16 | 33,000 | 11.5 | 14.5 |
| 1117540 | 38HDR036−61 | CNPV*3621A** | 58CV(A,X)110−20 | 33,000 | 11.5 | 13.5 |
| 3116363 | 38HDR036−61 | CNPV*3621A** | 58MEB100−20 | 33,000 | 12.0 | 14.5 |
| 1390696 | 38HDR036−61 | CNPV*3621A** | 58MV(B,C)060−14 | 33,000 | 11.5 | 14.5 |
| 1390704 | 38HDR036−61 | CNPV*3621A** | 58MV(B,C)080−14 | 33,000 | 11.5 | 13.5 |
| 1390722 | 38HDR036−61 | CNPV*3621A** | 58MV(B,C)080−20 | 33,000 | 11.5 | 13.5 |
| 1390740 | 38HDR036−61 | CNPV*3621A** | 58MV(B,C)100−20 | 33,000 | 11.5 | 13.5 |
| 3015500 | 38HDR036−61 | CNPV*3621A** | 58PH*090−16 | 33,000 | 12.0 | 14.5 |
| 3015501 | 38HDR036−61 | CNPV*3621A** | 58PH*110−20 | 33,000 | 12.0 | 14.5 |
| 1117532 | 38HDR036−61 | CNPV*3621A**+TDR | | 33,000 | 11.0 | 13.0 |
| 3116366 | 38HDR036−61 | CNPV*4217A** | 58CV(A,X)090−16 | 33,400 | 12.0 | 14.5 |
| 3116368 | 38HDR036−61 | CNPV*4217A** | 58MEB040−12 | 33,400 | 12.0 | 14.5 |
| 3116369 | 38HDR036−61 | CNPV*4217A** | 58MEB060−12 | 33,400 | 12.0 | 14.5 |
| 3116370 | 38HDR036−61 | CNPV*4217A** | 58MEB080−12 | 33,400 | 12.0 | 14.5 |
| 3116371 | 38HDR036−61 | CNPV*4217A** | 58MEB080−16 | 33,400 | 12.0 | 14.5 |
| 3116365 | 38HDR036−61 | CNPV*4217A** | 58MV(B,C)060−14 | 33,400 | 12.0 | 14.5 |
| 3116367 | 38HDR036−61 | CNPV*4217A** | 58PH*070−16 | 33,400 | 12.0 | 14.5 |
| 3116364 | 38HDR036−61 | CNPV*4217A**+TDR | | 33,400 | 11.0 | 13.0 |
| 1117696 | 38HDR036−61 | CNPV*4221A** | 58CV(A,X)090−16 | 33,400 | 11.5 | 14.5 |
| 1117548 | 38HDR036−61 | CNPV*4221A** | 58CV(A,X)110−20 | 33,400 | 11.5 | 14.5 |
| 3116372 | 38HDR036−61 | CNPV*4221A** | 58MEB100−20 | 33,400 | 12.0 | 14.5 |
| 1390698 | 38HDR036−61 | CNPV*4221A** | 58MV(B,C)060−14 | 33,400 | 11.5 | 14.5 |
| 1390706 | 38HDR036−61 | CNPV*4221A** | 58MV(B,C)080−14 | 33,400 | 11.5 | 14.0 |
| 1390724 | 38HDR036−61 | CNPV*4221A** | 58MV(B,C)080−20 | 33,400 | 11.5 | 14.0 |
| 1390742 | 38HDR036−61 | CNPV*4221A** | 58MV(B,C)100−20 | 33,400 | 11.5 | 14.0 |
| 3015502 | 38HDR036−61 | CNPV*4221A** | 58PH*090−16 | 33,400 | 12.0 | 14.5 |
| 3015503 | 38HDR036−61 | CNPV*4221A** | 58PH*110−20 | 33,400 | 12.0 | 14.5 |
| 1117614 | 38HDR036−61 | CSPH*3612A** | 58CV(A,X)070−12 | 33,000 | 11.5 | 14.0 |
| 1117616 | 38HDR036−61 | CSPH*3612A** | 58CV(A,X)090−16 | 33,000 | 11.5 | 14.5 |
| 1117618 | 38HDR036−61 | CSPH*3612A** | 58CV(A,X)110−20 | 33,000 | 11.5 | 14.5 |
| 1117620 | 38HDR036−61 | CSPH*3612A** | 58CV(A,X)135−22 | 33,000 | 11.5 | 14.5 |
| 1117622 | 38HDR036−61 | CSPH*3612A** | 58CV(A,X)155−22 | 33,000 | 11.5 | 14.5 |
| 3116383 | 38HDR036−61 | CSPH*3612A** | 58MEB040−12 | 33,000 | 12.0 | 14.5 |
| 3116384 | 38HDR036−61 | CSPH*3612A** | 58MEB060−12 | 33,000 | 12.0 | 14.5 |
| 3116385 | 38HDR036−61 | CSPH*3612A** | 58MEB080−12 | 33,000 | 12.0 | 14.5 |
| 3116386 | 38HDR036−61 | CSPH*3612A** | 58MEB080−16 | 33,000 | 12.0 | 14.5 |
| 3116387 | 38HDR036−61 | CSPH*3612A** | 58MEB100−20 | 33,000 | 12.0 | 14.5 |
| 1390688 | 38HDR036−61 | CSPH*3612A** | 58MV(B,C)060−14 | 33,000 | 11.5 | 14.5 |
| 1390712 | 38HDR036−61 | CSPH*3612A** | 58MV(B,C)080−14 | 33,000 | 11.5 | 14.0 |
| 1390730 | 38HDR036−61 | CSPH*3612A** | 58MV(B,C)080−20 | 33,000 | 11.5 | 14.0 |
| 1390748 | 38HDR036−61 | CSPH*3612A** | 58MV(B,C)100−20 | 33,000 | 11.5 | 14.5 |
| 1390760 | 38HDR036−61 | CSPH*3612A** | 58MV(B,C)120−20 | 33,000 | 11.5 | 14.5 |
| 3015512 | 38HDR036−61 | CSPH*3612A** | 58PH*045−08 | 33,000 | 11.5 | 14.0 |

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# COMBINATION RATINGS (CONT.)

| ARI Ref. No. | Model Number | Indoor Model | Furnace Model | Capacity | EER | SEER |
|---|---|---|---|---|---|---|
| 3015513 | 38HDR036−61 | CSPH*3612A** | 58PH*070−16 | 33,000 | 11.5 | 14.0 |
| 3015514 | 38HDR036−61 | CSPH*3612A** | 58PH*090−16 | 33,000 | 12.0 | 14.5 |
| 3015515 | 38HDR036−61 | CSPH*3612A** | 58PH*110−20 | 33,000 | 12.0 | 14.5 |
| 1117600 | 38HDR036−61 | CSPH*3612A**+TDR | | 33,000 | 11.0 | 13.0 |
| 1117638 | 38HDR036−61 | CSPH*4212A** | 58CV(A,X)070−12 | 33,400 | 11.5 | 14.0 |
| 1117640 | 38HDR036−61 | CSPH*4212A** | 58CV(A,X)090−16 | 33,400 | 11.5 | 14.5 |
| 1117642 | 38HDR036−61 | CSPH*4212A** | 58CV(A,X)110−20 | 33,400 | 11.5 | 14.5 |
| 1117644 | 38HDR036−61 | CSPH*4212A** | 58CV(A,X)135−22 | 33,400 | 11.5 | 14.5 |
| 1117646 | 38HDR036−61 | CSPH*4212A** | 58CV(A,X)155−22 | 33,400 | 11.5 | 14.5 |
| 3116388 | 38HDR036−61 | CSPH*4212A** | 58MEB040−12 | 33,400 | 12.0 | 14.5 |
| 3116389 | 38HDR036−61 | CSPH*4212A** | 58MEB060−12 | 33,400 | 12.0 | 14.5 |
| 3116390 | 38HDR036−61 | CSPH*4212A** | 58MEB080−12 | 33,400 | 12.0 | 14.5 |
| 3116391 | 38HDR036−61 | CSPH*4212A** | 58MEB080−16 | 33,400 | 12.0 | 14.5 |
| 3116392 | 38HDR036−61 | CSPH*4212A** | 58MEB100−20 | 33,400 | 12.0 | 14.5 |
| 1390690 | 38HDR036−61 | CSPH*4212A** | 58MV(B,C)060−14 | 33,400 | 11.5 | 14.0 |
| 1390714 | 38HDR036−61 | CSPH*4212A** | 58MV(B,C)080−14 | 33,400 | 11.5 | 14.0 |
| 1390732 | 38HDR036−61 | CSPH*4212A** | 58MV(B,C)080−20 | 33,400 | 11.5 | 14.0 |
| 1390750 | 38HDR036−61 | CSPH*4212A** | 58MV(B,C)100−20 | 33,400 | 11.5 | 14.0 |
| 1390762 | 38HDR036−61 | CSPH*4212A** | 58MV(B,C)120−20 | 33,400 | 11.5 | 14.0 |
| 3015516 | 38HDR036−61 | CSPH*4212A** | 58PH*045−08 | 33,400 | 11.5 | 14.0 |
| 3015517 | 38HDR036−61 | CSPH*4212A** | 58PH*070−16 | 33,400 | 11.5 | 14.0 |
| 3015518 | 38HDR036−61 | CSPH*4212A** | 58PH*090−16 | 33,400 | 12.0 | 14.5 |
| 3015519 | 38HDR036−61 | CSPH*4212A** | 58PH*110−20 | 33,400 | 12.0 | 14.5 |
| 1117624 | 38HDR036−61 | CSPH*4212A**+TDR | | 33,400 | 11.0 | 13.0 |
| 1117658 | 38HDR036−61 | FE4AN(B,F)003+UI | | 33,000 | 11.5 | 14.0 |
| 1117660 | 38HDR036−61 | FE4AN(B,F)005+UI | | 33,400 | 12.5 | 15.0 |
| 1117662 | 38HDR036−61 | FE4ANB006+UI | | 33,400 | 12.5 | 15.0 |
| 1117656 | 38HDR036−61 | FE4ANF002+UI | | 33,000 | 11.5 | 13.5 |
| 1117664 | 38HDR036−61 | FF1ENP036 | | 33,000 | 11.0 | 13.0 |
| 1117668 | 38HDR036−61 | FV4BNB006 | | 33,400 | 12.5 | 15.0 |
| 1117666 | 38HDR036−61 | FV4BNF002 | | 33,000 | 11.5 | 13.5 |
| 3404635 | 38HDR036−61 | FV4CNB006 | | 33,400 | 12.5 | 15.0 |
| 3404634 | 38HDR036−61 | FV4CNF002 | | 33,000 | 11.5 | 13.5 |
| 1117652 | 38HDR036−61 | FX4CN(B,F)036 | | 33,000 | 11.5 | 14.0 |
| 1117654 | 38HDR036−61 | FX4CN(B,F)042 | | 33,400 | 11.5 | 14.0 |
| 1117648 | 38HDR036−61 | FY4ANF036 | | 33,000 | 11.0 | 13.0 |
| 1117650 | 38HDR036−61 | FY4ANF042 | | 33,400 | 11.0 | 13.0 |
| | | | | | | |
| 3465144 | 38HDR048−32 | †CNPV*4821A**+TDR | | 47,000 | 11.0 | 13.0 |
| 3465807 | 38HDR048−32 | 40QAC048−3 | | 45,500 | 11.5 | 13.0 |
| 3465146 | 38HDR048−32 | CAP**4817A** | 58CV(A,X)090−16 | 46,500 | 11.5 | 13.5 |
| 3465148 | 38HDR048−32 | CAP**4817A** | 58MEB080−16 | 46,500 | 11.5 | 14.0 |
| 3465147 | 38HDR048−32 | CAP**4817A** | 58PH*070−16 | 46,500 | 11.5 | 13.5 |
| 3465145 | 38HDR048−32 | CAP**4817A**+TDR | | 46,500 | 11.0 | 13.0 |
| 3465152 | 38HDR048−32 | CAP**4821A** | 58CV(A,X)110−20 | 46,500 | 11.5 | 13.5 |
| 3465155 | 38HDR048−32 | CAP**4821A** | 58MEB100−20 | 46,500 | 11.5 | 14.0 |
| 3465150 | 38HDR048−32 | CAP**4821A** | 58MV(B,C)080−20 | 46,000 | 11.5 | 13.5 |
| 3465151 | 38HDR048−32 | CAP**4821A** | 58MV(B,C)100−20 | 46,500 | 11.5 | 13.5 |
| 3465153 | 38HDR048−32 | CAP**4821A** | 58PH*090−16 | 46,500 | 11.5 | 14.0 |
| 3465154 | 38HDR048−32 | CAP**4821A** | 58PH*110−20 | 46,500 | 11.5 | 14.0 |
| 3465149 | 38HDR048−32 | CAP**4821A**+TDR | | 47,000 | 11.0 | 13.0 |
| 3465158 | 38HDR048−32 | CAP**4824A** | 58CV(A,X)135−22 | 46,500 | 11.5 | 13.5 |
| 3465159 | 38HDR048−32 | CAP**4824A** | 58CV(A,X)155−22 | 46,500 | 11.5 | 13.5 |
| 3465161 | 38HDR048−32 | CAP**4824A** | 58MEB120−20 | 46,500 | 11.5 | 14.0 |
| 3465157 | 38HDR048−32 | CAP**4824A** | 58MV(B,C)120−20 | 46,500 | 11.5 | 13.5 |
| 3465160 | 38HDR048−32 | CAP**4824A** | 58PH*135−20 | 46,500 | 11.5 | 14.0 |
| 3465156 | 38HDR048−32 | CAP**4824A**+TDR | | 47,000 | 11.0 | 13.0 |
| 3465165 | 38HDR048−32 | CAP**6021A** | 58CV(A,X)110−20 | 47,000 | 11.5 | 13.5 |
| 3465168 | 38HDR048−32 | CAP**6021A** | 58MEB100−20 | 47,000 | 12.0 | 14.5 |
| 3465163 | 38HDR048−32 | CAP**6021A** | 58MV(B,C)080−20 | 47,000 | 11.5 | 13.5 |
| 3465164 | 38HDR048−32 | CAP**6021A** | 58MV(B,C)100−20 | 47,000 | 11.5 | 13.5 |
| 3465166 | 38HDR048−32 | CAP**6021A** | 58PH*090−16 | 47,000 | 12.0 | 14.5 |
| 3465167 | 38HDR048−32 | CAP**6021A** | 58PH*110−20 | 47,000 | 12.0 | 14.5 |
| 3465162 | 38HDR048−32 | CAP**6021A**+TDR | | 47,500 | 11.0 | 13.0 |
| 3465171 | 38HDR048−32 | CAP**6024A** | 58CV(A,X)135−22 | 47,000 | 11.5 | 13.5 |
| 3465172 | 38HDR048−32 | CAP**6024A** | 58CV(A,X)155−22 | 47,000 | 11.5 | 14.0 |
| 3465174 | 38HDR048−32 | CAP**6024A** | 58MEB120−20 | 47,000 | 12.0 | 14.5 |
| 3465170 | 38HDR048−32 | CAP**6024A** | 58MV(B,C)120−20 | 47,000 | 11.5 | 13.5 |
| 3465173 | 38HDR048−32 | CAP**6024A** | 58PH*135−20 | 47,000 | 12.0 | 14.5 |
| 3465169 | 38HDR048−32 | CAP**6024A**+TDR | | 47,500 | 11.0 | 13.0 |
| 3465221 | 38HDR048−32 | CNPF*4818A**+TDR | | 46,000 | 11.0 | 13.0 |
| 3465197 | 38HDR048−32 | CNPH*4821A** | 58CV(A,X)090−16 | 46,500 | 11.5 | 13.5 |
| 3465198 | 38HDR048−32 | CNPH*4821A** | 58CV(A,X)110−20 | 46,500 | 11.5 | 13.5 |
| 3465199 | 38HDR048−32 | CNPH*4821A** | 58CV(A,X)135−22 | 46,500 | 11.5 | 13.5 |
| 3465200 | 38HDR048−32 | CNPH*4821A** | 58CV(A,X)155−22 | 46,500 | 11.5 | 13.5 |
| 3465204 | 38HDR048−32 | CNPH*4821A** | 58MEB080−16 | 46,500 | 11.5 | 14.0 |
| 3465205 | 38HDR048−32 | CNPH*4821A** | 58MEB100−20 | 46,500 | 11.5 | 14.0 |
| 3465206 | 38HDR048−32 | CNPH*4821A** | 58MEB120−20 | 46,500 | 11.5 | 14.0 |
| 3465194 | 38HDR048−32 | CNPH*4821A** | 58MV(B,C)080−20 | 46,500 | 11.5 | 13.5 |

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# COMBINATION RATINGS (CONT.)

| ARI Ref. No. | Model Number | Indoor Model | Furnace Model | Capacity | EER | SEER |
|---|---|---|---|---|---|---|
| 3465195 | 38HDR048−32 | CNPH*4821A** | 58MV(B,C)100−20 | 46,500 | 11.5 | 13.5 |
| 3465196 | 38HDR048−32 | CNPH*4821A** | 58MV(B,C)120−20 | 46,500 | 11.5 | 13.5 |
| 3465201 | 38HDR048−32 | CNPH*4821A** | 58PH*090−16 | 46,500 | 11.5 | 13.5 |
| 3465202 | 38HDR048−32 | CNPH*4821A** | 58PH*110−20 | 46,500 | 11.5 | 13.5 |
| 3465203 | 38HDR048−32 | CNPH*4821A** | 58PH*135−20 | 46,500 | 11.5 | 13.5 |
| 3465193 | 38HDR048−32 | CNPH*4821A**+TDR | | 47,000 | 11.0 | 13.0 |
| 3465211 | 38HDR048−32 | CNPH*6024A** | 58CV(A,X)090−16 | 47,000 | 11.5 | 13.5 |
| 3465212 | 38HDR048−32 | CNPH*6024A** | 58CV(A,X)110−20 | 47,000 | 11.5 | 13.5 |
| 3465213 | 38HDR048−32 | CNPH*6024A** | 58CV(A,X)135−22 | 47,000 | 11.5 | 13.5 |
| 3465214 | 38HDR048−32 | CNPH*6024A** | 58CV(A,X)155−22 | 47,000 | 11.5 | 14.0 |
| 3465218 | 38HDR048−32 | CNPH*6024A** | 58MEB080−16 | 47,000 | 11.5 | 14.0 |
| 3465219 | 38HDR048−32 | CNPH*6024A** | 58MEB100−20 | 47,000 | 12.0 | 14.5 |
| 3465220 | 38HDR048−32 | CNPH*6024A** | 58MEB120−20 | 47,000 | 12.0 | 14.5 |
| 3465208 | 38HDR048−32 | CNPH*6024A** | 58MV(B,C)080−20 | 47,000 | 11.5 | 13.5 |
| 3465209 | 38HDR048−32 | CNPH*6024A** | 58MV(B,C)100−20 | 47,000 | 11.5 | 13.5 |
| 3465210 | 38HDR048−32 | CNPH*6024A** | 58MV(B,C)120−20 | 47,000 | 11.5 | 13.5 |
| 3465215 | 38HDR048−32 | CNPH*6024A** | 58PH*090−16 | 47,000 | 12.0 | 14.5 |
| 3465216 | 38HDR048−32 | CNPH*6024A** | 58PH*110−20 | 47,000 | 12.0 | 14.5 |
| 3465217 | 38HDR048−32 | CNPH*6024A** | 58PH*135−20 | 47,000 | 12.0 | 14.5 |
| 3465207 | 38HDR048−32 | CNPH*6024A**+TDR | | 47,500 | 11.0 | 13.0 |
| 3465177 | 38HDR048−32 | CNPV*4821A** | 58CV(A,X)110−20 | 46,500 | 11.5 | 13.5 |
| 3465180 | 38HDR048−32 | CNPV*4821A** | 58MEB100−20 | 46,500 | 11.5 | 13.5 |
| 3465175 | 38HDR048−32 | CNPV*4821A** | 58MV(B,C)080−20 | 46,500 | 11.5 | 13.5 |
| 3465176 | 38HDR048−32 | CNPV*4821A** | 58MV(B,C)100−20 | 46,500 | 11.5 | 13.5 |
| 3465178 | 38HDR048−32 | CNPV*4821A** | 58PH*090−16 | 46,500 | 11.5 | 14.0 |
| 3465179 | 38HDR048−32 | CNPV*4821A** | 58PH*110−20 | 46,500 | 11.5 | 14.0 |
| 3465183 | 38HDR048−32 | CNPV*4824A** | 58CV(A,X)135−22 | 46,500 | 11.5 | 13.5 |
| 3465184 | 38HDR048−32 | CNPV*4824A** | 58CV(A,X)155−22 | 46,500 | 11.5 | 13.5 |
| 3465186 | 38HDR048−32 | CNPV*4824A** | 58MEB120−20 | 46,500 | 11.5 | 14.0 |
| 3465182 | 38HDR048−32 | CNPV*4824A** | 58MV(B,C)120−20 | 46,500 | 11.5 | 13.5 |
| 3465185 | 38HDR048−32 | CNPV*4824A** | 58PH*135−20 | 46,500 | 11.5 | 14.0 |
| 3465181 | 38HDR048−32 | CNPV*4824A**+TDR | | 47,000 | 11.0 | 13.0 |
| 3465189 | 38HDR048−32 | CNPV*6024A** | 58CV(A,X)135−22 | 47,000 | 11.5 | 13.5 |
| 3465190 | 38HDR048−32 | CNPV*6024A** | 58CV(A,X)155−22 | 47,000 | 11.5 | 14.0 |
| 3465192 | 38HDR048−32 | CNPV*6024A** | 58MEB120−20 | 47,000 | 12.0 | 14.5 |
| 3465188 | 38HDR048−32 | CNPV*6024A** | 58MV(B,C)120−20 | 47,000 | 11.5 | 13.5 |
| 3465191 | 38HDR048−32 | CNPV*6024A** | 58PH*135−20 | 47,000 | 12.0 | 14.5 |
| 3465187 | 38HDR048−32 | CNPV*6024A**+TDR | | 47,500 | 11.0 | 13.0 |
| 3465226 | 38HDR048−32 | CSPH*4812A** | 58CV(A,X)090−16 | 46,500 | 11.5 | 13.5 |
| 3465227 | 38HDR048−32 | CSPH*4812A** | 58CV(A,X)110−20 | 46,500 | 11.5 | 13.5 |
| 3465228 | 38HDR048−32 | CSPH*4812A** | 58CV(A,X)135−22 | 46,500 | 11.5 | 13.5 |
| 3465229 | 38HDR048−32 | CSPH*4812A** | 58CV(A,X)155−22 | 46,500 | 11.5 | 13.5 |
| 3465233 | 38HDR048−32 | CSPH*4812A** | 58MEB080−16 | 46,500 | 11.5 | 14.0 |
| 3465234 | 38HDR048−32 | CSPH*4812A** | 58MEB100−20 | 46,500 | 11.5 | 14.0 |
| 3465235 | 38HDR048−32 | CSPH*4812A** | 58MEB120−20 | 46,500 | 11.5 | 14.0 |
| 3465223 | 38HDR048−32 | CSPH*4812A** | 58MV(B,C)080−20 | 46,500 | 11.5 | 13.5 |
| 3465224 | 38HDR048−32 | CSPH*4812A** | 58MV(B,C)100−20 | 46,500 | 11.5 | 13.5 |
| 3465225 | 38HDR048−32 | CSPH*4812A** | 58MV(B,C)120−20 | 46,500 | 11.5 | 13.5 |
| 3465230 | 38HDR048−32 | CSPH*4812A** | 58PH*090−16 | 46,500 | 11.5 | 14.0 |
| 3465231 | 38HDR048−32 | CSPH*4812A** | 58PH*110−20 | 46,500 | 11.5 | 14.0 |
| 3465232 | 38HDR048−32 | CSPH*4812A** | 58PH*135−20 | 46,500 | 11.5 | 14.0 |
| 3465222 | 38HDR048−32 | CSPH*4812A**+TDR | | 47,000 | 11.0 | 13.0 |
| 3465240 | 38HDR048−32 | CSPH*6012A** | 58CV(A,X)090−16 | 47,000 | 11.5 | 13.5 |
| 3465241 | 38HDR048−32 | CSPH*6012A** | 58CV(A,X)110−20 | 47,000 | 11.5 | 14.0 |
| 3465242 | 38HDR048−32 | CSPH*6012A** | 58CV(A,X)135−22 | 47,000 | 11.5 | 14.0 |
| 3465243 | 38HDR048−32 | CSPH*6012A** | 58CV(A,X)155−22 | 47,000 | 11.5 | 14.0 |
| 3465247 | 38HDR048−32 | CSPH*6012A** | 58MEB080−16 | 47,000 | 12.0 | 14.5 |
| 3465248 | 38HDR048−32 | CSPH*6012A** | 58MEB100−20 | 47,000 | 12.0 | 14.5 |
| 3465249 | 38HDR048−32 | CSPH*6012A** | 58MEB120−20 | 47,000 | 12.0 | 14.5 |
| 3465237 | 38HDR048−32 | CSPH*6012A** | 58MV(B,C)080−20 | 47,000 | 11.5 | 13.5 |
| 3465238 | 38HDR048−32 | CSPH*6012A** | 58MV(B,C)100−20 | 47,000 | 11.5 | 13.5 |
| 3465239 | 38HDR048−32 | CSPH*6012A** | 58MV(B,C)120−20 | 47,000 | 11.5 | 13.5 |
| 3465244 | 38HDR048−32 | CSPH*6012A** | 58PH*090−16 | 47,000 | 12.0 | 14.5 |
| 3465245 | 38HDR048−32 | CSPH*6012A** | 58PH*110−20 | 47,000 | 12.0 | 14.5 |
| 3465246 | 38HDR048−32 | CSPH*6012A** | 58PH*135−20 | 47,000 | 12.0 | 14.5 |
| 3465236 | 38HDR048−32 | CSPH*6012A**+TDR | | 47,500 | 11.0 | 13.0 |
| 3465254 | 38HDR048−32 | FE4AN(B,F)005+UI | | 47,000 | 11.5 | 13.5 |
| 3465255 | 38HDR048−32 | FE4ANB006+UI | | 47,500 | 11.5 | 14.0 |
| 3465256 | 38HDR048−32 | FV4BN(B,F)005 | | 47,000 | 11.5 | 14.0 |
| 3465257 | 38HDR048−32 | FV4BNB006 | | 47,500 | 11.5 | 14.0 |
| 3465252 | 38HDR048−32 | FX4CN(B,F)048 | | 47,000 | 11.5 | 13.5 |
| 3465253 | 38HDR048−32 | FX4CN(B,F)060 | | 47,500 | 11.5 | 14.0 |
| 3465251 | 38HDR048−32 | FY4ANB060 | | 47,500 | 11.0 | 13.0 |
| 3465250 | 38HDR048−32 | FY4ANF048 | | 47,000 | 11.0 | 13.0 |
| | | | | | | |
| 3465258 | 38HDR048−52 | †CNPV*4821A**+TDR | | 47,000 | 11.0 | 13.0 |
| 3465808 | 38HDR048−52 | 40QAC048−3 | | 45,500 | 11.5 | 13.0 |
| 3465260 | 38HDR048−52 | CAP**4817A** | 58CV(A,X)090−16 | 46,500 | 11.5 | 13.5 |
| 3465262 | 38HDR048−52 | CAP**4817A** | 58MEB080−16 | 46,500 | 11.5 | 14.0 |

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# COMBINATION RATINGS (CONT.)

| ARI Ref. No. | Model Number | Indoor Model | Furnace Model | Capacity | EER | SEER |
|---|---|---|---|---|---|---|
| 3465261 | 38HDR048–52 | CAP**4817A** | 58PH*070–16 | 46,500 | 11.5 | 13.5 |
| 3465259 | 38HDR048–52 | CAP**4817A**+TDR | | 46,500 | 11.0 | 13.0 |
| 3465266 | 38HDR048–52 | CAP**4821A** | 58CV(A,X)110–20 | 46,500 | 11.5 | 13.5 |
| 3465269 | 38HDR048–52 | CAP**4821A** | 58MEB100–20 | 46,500 | 11.5 | 14.0 |
| 3465264 | 38HDR048–52 | CAP**4821A** | 58MV(B,C)080–20 | 46,000 | 11.5 | 13.5 |
| 3465265 | 38HDR048–52 | CAP**4821A** | 58MV(B,C)100–20 | 46,500 | 11.5 | 13.5 |
| 3465267 | 38HDR048–52 | CAP**4821A** | 58PH*090–16 | 46,500 | 11.5 | 14.0 |
| 3465268 | 38HDR048–52 | CAP**4821A** | 58PH*110–20 | 46,500 | 11.5 | 14.0 |
| 3465263 | 38HDR048–52 | CAP**4821A**+TDR | | 47,000 | 11.0 | 13.0 |
| 3465272 | 38HDR048–52 | CAP**4824A** | 58CV(A,X)135–22 | 46,500 | 11.5 | 13.5 |
| 3465273 | 38HDR048–52 | CAP**4824A** | 58CV(A,X)155–22 | 46,500 | 11.5 | 13.5 |
| 3465275 | 38HDR048–52 | CAP**4824A** | 58MEB120–20 | 46,500 | 11.5 | 14.0 |
| 3465271 | 38HDR048–52 | CAP**4824A** | 58MV(B,C)120–20 | 46,500 | 11.5 | 13.5 |
| 3465274 | 38HDR048–52 | CAP**4824A** | 58PH*135–20 | 46,500 | 11.5 | 14.0 |
| 3465270 | 38HDR048–52 | CAP**4824A**+TDR | | 47,000 | 11.0 | 13.0 |
| 3465279 | 38HDR048–52 | CAP**6021A** | 58CV(A,X)110–20 | 47,000 | 11.5 | 13.5 |
| 3465282 | 38HDR048–52 | CAP**6021A** | 58MEB100–20 | 47,000 | 12.0 | 14.5 |
| 3465277 | 38HDR048–52 | CAP**6021A** | 58MV(B,C)080–20 | 47,000 | 11.5 | 13.5 |
| 3465278 | 38HDR048–52 | CAP**6021A** | 58MV(B,C)100–20 | 47,000 | 11.5 | 13.5 |
| 3465280 | 38HDR048–52 | CAP**6021A** | 58PH*090–16 | 47,000 | 12.0 | 14.5 |
| 3465281 | 38HDR048–52 | CAP**6021A** | 58PH*110–20 | 47,000 | 12.0 | 14.5 |
| 3465276 | 38HDR048–52 | CAP**6021A**+TDR | | 47,500 | 11.0 | 13.0 |
| 3465285 | 38HDR048–52 | CAP**6024A** | 58CV(A,X)135–22 | 47,000 | 11.5 | 13.5 |
| 3465286 | 38HDR048–52 | CAP**6024A** | 58CV(A,X)155–22 | 47,000 | 11.5 | 14.0 |
| 3465288 | 38HDR048–52 | CAP**6024A** | 58MEB120–20 | 47,000 | 12.0 | 14.5 |
| 3465284 | 38HDR048–52 | CAP**6024A** | 58MV(B,C)120–20 | 47,000 | 11.5 | 13.5 |
| 3465287 | 38HDR048–52 | CAP**6024A** | 58PH*135–20 | 47,000 | 12.0 | 14.5 |
| 3465283 | 38HDR048–52 | CAP**6024A**+TDR | | 47,500 | 11.0 | 13.0 |
| 3465335 | 38HDR048–52 | CNPF*4818A**+TDR | | 46,000 | 11.0 | 13.0 |
| 3465311 | 38HDR048–52 | CNPH*4821A** | 58CV(A,X)090–16 | 46,500 | 11.5 | 13.5 |
| 3465312 | 38HDR048–52 | CNPH*4821A** | 58CV(A,X)110–20 | 46,500 | 11.5 | 13.5 |
| 3465313 | 38HDR048–52 | CNPH*4821A** | 58CV(A,X)135–22 | 46,500 | 11.5 | 13.5 |
| 3465314 | 38HDR048–52 | CNPH*4821A** | 58CV(A,X)155–22 | 46,500 | 11.5 | 13.5 |
| 3465318 | 38HDR048–52 | CNPH*4821A** | 58MEB080–16 | 46,500 | 11.5 | 14.0 |
| 3465319 | 38HDR048–52 | CNPH*4821A** | 58MEB100–20 | 46,500 | 11.5 | 14.0 |
| 3465320 | 38HDR048–52 | CNPH*4821A** | 58MEB120–20 | 46,500 | 11.5 | 14.0 |
| 3465308 | 38HDR048–52 | CNPH*4821A** | 58MV(B,C)080–20 | 46,500 | 11.5 | 13.5 |
| 3465309 | 38HDR048–52 | CNPH*4821A** | 58MV(B,C)100–20 | 46,500 | 11.5 | 13.5 |
| 3465310 | 38HDR048–52 | CNPH*4821A** | 58MV(B,C)120–20 | 46,500 | 11.5 | 13.5 |
| 3465315 | 38HDR048–52 | CNPH*4821A** | 58PH*090–16 | 46,500 | 11.5 | 13.5 |
| 3465316 | 38HDR048–52 | CNPH*4821A** | 58PH*110–20 | 46,500 | 11.5 | 13.5 |
| 3465317 | 38HDR048–52 | CNPH*4821A** | 58PH*135–20 | 46,500 | 11.5 | 13.5 |
| 3465307 | 38HDR048–52 | CNPH*4821A**+TDR | | 47,000 | 11.0 | 13.0 |
| 3465325 | 38HDR048–52 | CNPH*6024A** | 58CV(A,X)090–16 | 47,000 | 11.5 | 13.5 |
| 3465326 | 38HDR048–52 | CNPH*6024A** | 58CV(A,X)110–20 | 47,000 | 11.5 | 13.5 |
| 3465327 | 38HDR048–52 | CNPH*6024A** | 58CV(A,X)135–22 | 47,000 | 11.5 | 13.5 |
| 3465328 | 38HDR048–52 | CNPH*6024A** | 58CV(A,X)155–22 | 47,000 | 11.5 | 14.0 |
| 3465332 | 38HDR048–52 | CNPH*6024A** | 58MEB080–16 | 47,000 | 11.5 | 14.0 |
| 3465333 | 38HDR048–52 | CNPH*6024A** | 58MEB100–20 | 47,000 | 12.0 | 14.5 |
| 3465334 | 38HDR048–52 | CNPH*6024A** | 58MEB120–20 | 47,000 | 12.0 | 14.5 |
| 3465322 | 38HDR048–52 | CNPH*6024A** | 58MV(B,C)080–20 | 47,000 | 11.5 | 13.5 |
| 3465323 | 38HDR048–52 | CNPH*6024A** | 58MV(B,C)100–20 | 47,000 | 11.5 | 13.5 |
| 3465324 | 38HDR048–52 | CNPH*6024A** | 58MV(B,C)120–20 | 47,000 | 11.5 | 13.5 |
| 3465329 | 38HDR048–52 | CNPH*6024A** | 58PH*090–16 | 47,000 | 12.0 | 14.5 |
| 3465330 | 38HDR048–52 | CNPH*6024A** | 58PH*110–20 | 47,000 | 12.0 | 14.5 |
| 3465331 | 38HDR048–52 | CNPH*6024A** | 58PH*135–20 | 47,000 | 12.0 | 14.5 |
| 3465321 | 38HDR048–52 | CNPH*6024A**+TDR | | 47,500 | 11.0 | 13.0 |
| 3465291 | 38HDR048–52 | CNPV*4821A** | 58CV(A,X)110–20 | 46,500 | 11.5 | 13.5 |
| 3465294 | 38HDR048–52 | CNPV*4821A** | 58MEB100–20 | 46,500 | 11.5 | 13.5 |
| 3465289 | 38HDR048–52 | CNPV*4821A** | 58MV(B,C)080–20 | 46,500 | 11.5 | 13.5 |
| 3465290 | 38HDR048–52 | CNPV*4821A** | 58MV(B,C)100–20 | 46,500 | 11.5 | 13.5 |
| 3465292 | 38HDR048–52 | CNPV*4821A** | 58PH*090–16 | 46,500 | 11.5 | 14.0 |
| 3465293 | 38HDR048–52 | CNPV*4821A** | 58PH*110–20 | 46,500 | 11.5 | 14.0 |
| 3465297 | 38HDR048–52 | CNPV*4824A** | 58CV(A,X)135–22 | 46,500 | 11.5 | 13.5 |
| 3465298 | 38HDR048–52 | CNPV*4824A** | 58CV(A,X)155–22 | 46,500 | 11.5 | 13.5 |
| 3465300 | 38HDR048–52 | CNPV*4824A** | 58MEB120–20 | 46,500 | 11.5 | 14.0 |
| 3465296 | 38HDR048–52 | CNPV*4824A** | 58MV(B,C)120–20 | 46,500 | 11.5 | 13.5 |
| 3465299 | 38HDR048–52 | CNPV*4824A** | 58PH*135–20 | 46,500 | 11.5 | 14.0 |
| 3465295 | 38HDR048–52 | CNPV*4824A**+TDR | | 47,000 | 11.0 | 13.0 |
| 3465303 | 38HDR048–52 | CNPV*6024A** | 58CV(A,X)135–22 | 47,000 | 11.5 | 13.5 |
| 3465304 | 38HDR048–52 | CNPV*6024A** | 58CV(A,X)155–22 | 47,000 | 11.5 | 14.0 |
| 3465306 | 38HDR048–52 | CNPV*6024A** | 58MEB120–20 | 47,000 | 12.0 | 14.5 |
| 3465302 | 38HDR048–52 | CNPV*6024A** | 58MV(B,C)120–20 | 47,000 | 11.5 | 13.5 |
| 3465305 | 38HDR048–52 | CNPV*6024A** | 58PH*135–20 | 47,000 | 12.0 | 14.5 |
| 3465301 | 38HDR048–52 | CNPV*6024A**+TDR | | 47,500 | 11.0 | 13.0 |
| 3465340 | 38HDR048–52 | CSPH*4812A** | 58CV(A,X)090–16 | 46,500 | 11.5 | 13.5 |
| 3465341 | 38HDR048–52 | CSPH*4812A** | 58CV(A,X)110–20 | 46,500 | 11.5 | 13.5 |
| 3465342 | 38HDR048–52 | CSPH*4812A** | 58CV(A,X)135–22 | 46,500 | 11.5 | 13.5 |
| 3465343 | 38HDR048–52 | CSPH*4812A** | 58CV(A,X)155–22 | 46,500 | 11.5 | 13.5 |

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# COMBINATION RATINGS (CONT.)

| ARI Ref. No. | Model Number | Indoor Model | Furnace Model | Capacity | EER | SEER |
|---|---|---|---|---|---|---|
| 3465347 | 38HDR048–52 | CSPH*4812A** | 58MEB080–16 | 46,500 | 11.5 | 14.0 |
| 3465348 | 38HDR048–52 | CSPH*4812A** | 58MEB100–20 | 46,500 | 11.5 | 14.0 |
| 3465349 | 38HDR048–52 | CSPH*4812A** | 58MEB120–20 | 46,500 | 11.5 | 14.0 |
| 3465337 | 38HDR048–52 | CSPH*4812A** | 58MV(B,C)080–20 | 46,500 | 11.5 | 13.5 |
| 3465338 | 38HDR048–52 | CSPH*4812A** | 58MV(B,C)100–20 | 46,500 | 11.5 | 13.5 |
| 3465339 | 38HDR048–52 | CSPH*4812A** | 58MV(B,C)120–20 | 46,500 | 11.5 | 13.5 |
| 3465344 | 38HDR048–52 | CSPH*4812A** | 58PH*090–16 | 46,500 | 11.5 | 14.0 |
| 3465345 | 38HDR048–52 | CSPH*4812A** | 58PH*110–20 | 46,500 | 11.5 | 14.0 |
| 3465346 | 38HDR048–52 | CSPH*4812A** | 58PH*135–20 | 46,500 | 11.5 | 14.0 |
| 3465336 | 38HDR048–52 | CSPH*4812A**+TDR | | 47,000 | 11.0 | 13.0 |
| 3465354 | 38HDR048–52 | CSPH*6012A** | 58CV(A,X)090–16 | 47,000 | 11.5 | 13.5 |
| 3465355 | 38HDR048–52 | CSPH*6012A** | 58CV(A,X)110–20 | 47,000 | 11.5 | 14.0 |
| 3465356 | 38HDR048–52 | CSPH*6012A** | 58CV(A,X)135–22 | 47,000 | 11.5 | 14.0 |
| 3465357 | 38HDR048–52 | CSPH*6012A** | 58CV(A,X)155–22 | 47,000 | 11.5 | 14.0 |
| 3465361 | 38HDR048–52 | CSPH*6012A** | 58MEB080–16 | 47,000 | 12.0 | 14.5 |
| 3465362 | 38HDR048–52 | CSPH*6012A** | 58MEB100–20 | 47,000 | 12.0 | 14.5 |
| 3465363 | 38HDR048–52 | CSPH*6012A** | 58MEB120–20 | 47,000 | 12.0 | 14.5 |
| 3465351 | 38HDR048–52 | CSPH*6012A** | 58MV(B,C)080–20 | 47,000 | 11.5 | 13.5 |
| 3465352 | 38HDR048–52 | CSPH*6012A** | 58MV(B,C)100–20 | 47,000 | 11.5 | 13.5 |
| 3465353 | 38HDR048–52 | CSPH*6012A** | 58MV(B,C)120–20 | 47,000 | 11.5 | 13.5 |
| 3465358 | 38HDR048–52 | CSPH*6012A** | 58PH*090–16 | 47,000 | 12.0 | 14.5 |
| 3465359 | 38HDR048–52 | CSPH*6012A** | 58PH*110–20 | 47,000 | 12.0 | 14.5 |
| 3465360 | 38HDR048–52 | CSPH*6012A** | 58PH*135–20 | 47,000 | 12.0 | 14.5 |
| 3465350 | 38HDR048–52 | CSPH*6012A**+TDR | | 47,500 | 11.0 | 13.0 |
| 3465368 | 38HDR048–52 | FE4AN(B,F)005+UI | | 47,000 | 11.5 | 13.5 |
| 3465369 | 38HDR048–52 | FE4ANB006+UI | | 47,500 | 11.5 | 14.0 |
| 3465370 | 38HDR048–52 | FV4BN(B,F)005 | | 47,000 | 11.5 | 14.0 |
| 3465371 | 38HDR048–52 | FV4BNB006 | | 47,500 | 11.5 | 14.0 |
| 3465366 | 38HDR048–52 | FX4CN(B,F)048 | | 47,000 | 11.5 | 13.5 |
| 3465367 | 38HDR048–52 | FX4CN(B,F)060 | | 47,500 | 11.5 | 14.0 |
| 3465365 | 38HDR048–52 | FY4ANB060 | | 47,500 | 11.0 | 13.0 |
| 3465364 | 38HDR048–52 | FY4ANF048 | | 47,000 | 11.0 | 13.0 |
| | | | | | | |
| 3465372 | 38HDR048–62 | †CNPV*4821A**+TDR | | 47,000 | 11.0 | 13.0 |
| 3465809 | 38HDR048–62 | 40QAC048–3 | | 45,500 | 11.5 | 13.0 |
| 3465374 | 38HDR048–62 | CAP**4817A** | 58CV(A,X)090–16 | 46,500 | 11.5 | 13.5 |
| 3465376 | 38HDR048–62 | CAP**4817A** | 58MEB080–16 | 46,500 | 11.5 | 14.0 |
| 3465375 | 38HDR048–62 | CAP**4817A** | 58PH*070–16 | 46,500 | 11.5 | 13.5 |
| 3465373 | 38HDR048–62 | CAP**4817A**+TDR | | 46,500 | 11.0 | 13.0 |
| 3465380 | 38HDR048–62 | CAP**4821A** | 58CV(A,X)110–20 | 46,500 | 11.5 | 13.5 |
| 3465383 | 38HDR048–62 | CAP**4821A** | 58MEB100–20 | 46,500 | 11.5 | 14.0 |
| 3465378 | 38HDR048–62 | CAP**4821A** | 58MV(B,C)080–20 | 46,000 | 11.5 | 13.5 |
| 3465379 | 38HDR048–62 | CAP**4821A** | 58MV(B,C)100–20 | 46,500 | 11.5 | 13.5 |
| 3465381 | 38HDR048–62 | CAP**4821A** | 58PH*090–16 | 46,500 | 11.5 | 14.0 |
| 3465382 | 38HDR048–62 | CAP**4821A** | 58PH*110–20 | 46,500 | 11.5 | 14.0 |
| 3465377 | 38HDR048–62 | CAP**4821A**+TDR | | 47,000 | 11.0 | 13.0 |
| 3465386 | 38HDR048–62 | CAP**4824A** | 58CV(A,X)135–22 | 46,500 | 11.5 | 13.5 |
| 3465387 | 38HDR048–62 | CAP**4824A** | 58CV(A,X)155–22 | 46,500 | 11.5 | 13.5 |
| 3465389 | 38HDR048–62 | CAP**4824A** | 58MEB120–20 | 46,500 | 11.5 | 14.0 |
| 3465385 | 38HDR048–62 | CAP**4824A** | 58MV(B,C)120–20 | 46,500 | 11.5 | 13.5 |
| 3465388 | 38HDR048–62 | CAP**4824A** | 58PH*135–20 | 46,500 | 11.5 | 14.0 |
| 3465384 | 38HDR048–62 | CAP**4824A**+TDR | | 47,000 | 11.0 | 13.0 |
| 3465393 | 38HDR048–62 | CAP**6021A** | 58CV(A,X)110–20 | 47,000 | 11.5 | 13.5 |
| 3465396 | 38HDR048–62 | CAP**6021A** | 58MEB100–20 | 47,000 | 12.0 | 14.5 |
| 3465391 | 38HDR048–62 | CAP**6021A** | 58MV(B,C)080–20 | 47,000 | 11.5 | 13.5 |
| 3465392 | 38HDR048–62 | CAP**6021A** | 58MV(B,C)100–20 | 47,000 | 11.5 | 13.5 |
| 3465394 | 38HDR048–62 | CAP**6021A** | 58PH*090–16 | 47,000 | 12.0 | 14.5 |
| 3465395 | 38HDR048–62 | CAP**6021A** | 58PH*110–20 | 47,000 | 12.0 | 14.5 |
| 3465390 | 38HDR048–62 | CAP**6021A**+TDR | | 47,500 | 11.0 | 13.0 |
| 3465399 | 38HDR048–62 | CAP**6024A** | 58CV(A,X)135–22 | 47,000 | 11.5 | 13.5 |
| 3465400 | 38HDR048–62 | CAP**6024A** | 58CV(A,X)155–22 | 47,000 | 11.5 | 14.0 |
| 3465402 | 38HDR048–62 | CAP**6024A** | 58MEB120–20 | 47,000 | 12.0 | 14.5 |
| 3465398 | 38HDR048–62 | CAP**6024A** | 58MV(B,C)120–20 | 47,000 | 11.5 | 13.5 |
| 3465401 | 38HDR048–62 | CAP**6024A** | 58PH*135–20 | 47,000 | 12.0 | 14.5 |
| 3465397 | 38HDR048–62 | CAP**6024A**+TDR | | 47,500 | 11.0 | 13.0 |
| 3465449 | 38HDR048–62 | CNPF*4818A**+TDR | | 46,000 | 11.0 | 13.0 |
| 3465425 | 38HDR048–62 | CNPH*4821A** | 58CV(A,X)090–16 | 46,500 | 11.5 | 13.5 |
| 3465426 | 38HDR048–62 | CNPH*4821A** | 58CV(A,X)110–20 | 46,500 | 11.5 | 13.5 |
| 3465427 | 38HDR048–62 | CNPH*4821A** | 58CV(A,X)135–22 | 46,500 | 11.5 | 13.5 |
| 3465428 | 38HDR048–62 | CNPH*4821A** | 58CV(A,X)155–22 | 46,500 | 11.5 | 13.5 |
| 3465432 | 38HDR048–62 | CNPH*4821A** | 58MEB080–16 | 46,500 | 11.5 | 14.0 |
| 3465433 | 38HDR048–62 | CNPH*4821A** | 58MEB100–20 | 46,500 | 11.5 | 14.0 |
| 3465434 | 38HDR048–62 | CNPH*4821A** | 58MEB120–20 | 46,500 | 11.5 | 14.0 |
| 3465422 | 38HDR048–62 | CNPH*4821A** | 58MV(B,C)080–20 | 46,500 | 11.5 | 13.5 |
| 3465423 | 38HDR048–62 | CNPH*4821A** | 58MV(B,C)100–20 | 46,500 | 11.5 | 13.5 |
| 3465424 | 38HDR048–62 | CNPH*4821A** | 58MV(B,C)120–20 | 46,500 | 11.5 | 13.5 |
| 3465429 | 38HDR048–62 | CNPH*4821A** | 58PH*090–16 | 46,500 | 11.5 | 13.5 |
| 3465430 | 38HDR048–62 | CNPH*4821A** | 58PH*110–20 | 46,500 | 11.5 | 13.5 |
| 3465431 | 38HDR048–62 | CNPH*4821A** | 58PH*135–20 | 46,500 | 11.5 | 13.5 |

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# COMBINATION RATINGS (CONT.)

| ARI Ref. No. | Model Number | Indoor Model | Furnace Model | Capacity | EER | SEER |
|---|---|---|---|---|---|---|
| 3465421 | 38HDR048–62 | CNPH*4821A**+TDR | | 47,000 | 11.0 | 13.0 |
| 3465439 | 38HDR048–62 | CNPH*6024A** | 58CV(A,X)090–16 | 47,000 | 11.5 | 13.5 |
| 3465440 | 38HDR048–62 | CNPH*6024A** | 58CV(A,X)110–20 | 47,000 | 11.5 | 13.5 |
| 3465441 | 38HDR048–62 | CNPH*6024A** | 58CV(A,X)135–22 | 47,000 | 11.5 | 13.5 |
| 3465442 | 38HDR048–62 | CNPH*6024A** | 58CV(A,X)155–22 | 47,000 | 11.5 | 14.0 |
| 3465446 | 38HDR048–62 | CNPH*6024A** | 58MEB080–16 | 47,000 | 11.5 | 14.0 |
| 3465447 | 38HDR048–62 | CNPH*6024A** | 58MEB100–20 | 47,000 | 12.0 | 14.5 |
| 3465448 | 38HDR048–62 | CNPH*6024A** | 58MEB120–20 | 47,000 | 12.0 | 14.5 |
| 3465436 | 38HDR048–62 | CNPH*6024A** | 58MV(B,C)080–20 | 47,000 | 11.5 | 13.5 |
| 3465437 | 38HDR048–62 | CNPH*6024A** | 58MV(B,C)100–20 | 47,000 | 11.5 | 13.5 |
| 3465438 | 38HDR048–62 | CNPH*6024A** | 58MV(B,C)120–20 | 47,000 | 11.5 | 13.5 |
| 3465443 | 38HDR048–62 | CNPH*6024A** | 58PH*090–16 | 47,000 | 12.0 | 14.5 |
| 3465444 | 38HDR048–62 | CNPH*6024A** | 58PH*110–20 | 47,000 | 12.0 | 14.5 |
| 3465445 | 38HDR048–62 | CNPH*6024A** | 58PH*135–20 | 47,000 | 12.0 | 14.5 |
| 3465435 | 38HDR048–62 | CNPH*6024A**+TDR | | 47,500 | 11.0 | 13.0 |
| 3465405 | 38HDR048–62 | CNPV*4821A** | 58CV(A,X)110–20 | 46,500 | 11.5 | 13.5 |
| 3465408 | 38HDR048–62 | CNPV*4821A** | 58MEB100–20 | 46,500 | 11.5 | 13.5 |
| 3465403 | 38HDR048–62 | CNPV*4821A** | 58MV(B,C)080–20 | 46,500 | 11.5 | 13.5 |
| 3465404 | 38HDR048–62 | CNPV*4821A** | 58MV(B,C)100–20 | 46,500 | 11.5 | 13.5 |
| 3465406 | 38HDR048–62 | CNPV*4821A** | 58PH*090–16 | 46,500 | 11.5 | 14.0 |
| 3465407 | 38HDR048–62 | CNPV*4821A** | 58PH*110–20 | 46,500 | 11.5 | 14.0 |
| 3465411 | 38HDR048–62 | CNPV*4824A** | 58CV(A,X)135–22 | 46,500 | 11.5 | 13.5 |
| 3465412 | 38HDR048–62 | CNPV*4824A** | 58CV(A,X)155–22 | 46,500 | 11.5 | 13.5 |
| 3465414 | 38HDR048–62 | CNPV*4824A** | 58MEB120–20 | 46,500 | 11.5 | 14.0 |
| 3465410 | 38HDR048–62 | CNPV*4824A** | 58MV(B,C)120–20 | 46,500 | 11.5 | 13.5 |
| 3465413 | 38HDR048–62 | CNPV*4824A** | 58PH*135–20 | 46,500 | 11.5 | 14.0 |
| 3465409 | 38HDR048–62 | CNPV*4824A**+TDR | | 47,000 | 11.0 | 13.0 |
| 3465417 | 38HDR048–62 | CNPV*6024A** | 58CV(A,X)135–22 | 47,000 | 11.5 | 13.5 |
| 3465418 | 38HDR048–62 | CNPV*6024A** | 58CV(A,X)155–22 | 47,000 | 11.5 | 14.0 |
| 3465420 | 38HDR048–62 | CNPV*6024A** | 58MEB120–20 | 47,000 | 12.0 | 14.5 |
| 3465416 | 38HDR048–62 | CNPV*6024A** | 58MV(B,C)120–20 | 47,000 | 11.5 | 13.5 |
| 3465419 | 38HDR048–62 | CNPV*6024A** | 58PH*135–20 | 47,000 | 12.0 | 14.5 |
| 3465415 | 38HDR048–62 | CNPV*6024A**+TDR | | 47,500 | 11.0 | 13.0 |
| 3465454 | 38HDR048–62 | CSPH*4812A** | 58CV(A,X)090–16 | 46,500 | 11.5 | 13.5 |
| 3465455 | 38HDR048–62 | CSPH*4812A** | 58CV(A,X)110–20 | 46,500 | 11.5 | 13.5 |
| 3465456 | 38HDR048–62 | CSPH*4812A** | 58CV(A,X)135–22 | 46,500 | 11.5 | 13.5 |
| 3465457 | 38HDR048–62 | CSPH*4812A** | 58CV(A,X)155–22 | 46,500 | 11.5 | 13.5 |
| 3465461 | 38HDR048–62 | CSPH*4812A** | 58MEB080–16 | 46,500 | 11.5 | 14.0 |
| 3465462 | 38HDR048–62 | CSPH*4812A** | 58MEB100–20 | 46,500 | 11.5 | 14.0 |
| 3465463 | 38HDR048–62 | CSPH*4812A** | 58MEB120–20 | 46,500 | 11.5 | 14.0 |
| 3465451 | 38HDR048–62 | CSPH*4812A** | 58MV(B,C)080–20 | 46,500 | 11.5 | 13.5 |
| 3465452 | 38HDR048–62 | CSPH*4812A** | 58MV(B,C)100–20 | 46,500 | 11.5 | 13.5 |
| 3465453 | 38HDR048–62 | CSPH*4812A** | 58MV(B,C)120–20 | 46,500 | 11.5 | 13.5 |
| 3465458 | 38HDR048–62 | CSPH*4812A** | 58PH*090–16 | 46,500 | 11.5 | 14.0 |
| 3465459 | 38HDR048–62 | CSPH*4812A** | 58PH*110–20 | 46,500 | 11.5 | 14.0 |
| 3465460 | 38HDR048–62 | CSPH*4812A** | 58PH*135–20 | 46,500 | 11.5 | 14.0 |
| 3465450 | 38HDR048–62 | CSPH*4812A**+TDR | | 47,000 | 11.0 | 13.0 |
| 3465468 | 38HDR048–62 | CSPH*6012A** | 58CV(A,X)090–16 | 47,000 | 11.5 | 13.5 |
| 3465469 | 38HDR048–62 | CSPH*6012A** | 58CV(A,X)110–20 | 47,000 | 11.5 | 14.0 |
| 3465470 | 38HDR048–62 | CSPH*6012A** | 58CV(A,X)135–22 | 47,000 | 11.5 | 14.0 |
| 3465471 | 38HDR048–62 | CSPH*6012A** | 58CV(A,X)155–22 | 47,000 | 11.5 | 14.0 |
| 3465475 | 38HDR048–62 | CSPH*6012A** | 58MEB080–16 | 47,000 | 12.0 | 14.5 |
| 3465476 | 38HDR048–62 | CSPH*6012A** | 58MEB100–20 | 47,000 | 12.0 | 14.5 |
| 3465477 | 38HDR048–62 | CSPH*6012A** | 58MEB120–20 | 47,000 | 12.0 | 14.5 |
| 3465465 | 38HDR048–62 | CSPH*6012A** | 58MV(B,C)080–20 | 47,000 | 11.5 | 13.5 |
| 3465466 | 38HDR048–62 | CSPH*6012A** | 58MV(B,C)100–20 | 47,000 | 11.5 | 13.5 |
| 3465467 | 38HDR048–62 | CSPH*6012A** | 58MV(B,C)120–20 | 47,000 | 11.5 | 13.5 |
| 3465472 | 38HDR048–62 | CSPH*6012A** | 58PH*090–16 | 47,000 | 12.0 | 14.5 |
| 3465473 | 38HDR048–62 | CSPH*6012A** | 58PH*110–20 | 47,000 | 12.0 | 14.5 |
| 3465474 | 38HDR048–62 | CSPH*6012A** | 58PH*135–20 | 47,000 | 12.0 | 14.5 |
| 3465464 | 38HDR048–62 | CSPH*6012A**+TDR | | 47,500 | 11.0 | 13.0 |
| 3465482 | 38HDR048–62 | FE4AN(B,F)005+UI | | 47,000 | 11.5 | 13.5 |
| 3465483 | 38HDR048–62 | FE4ANB006+UI | | 47,500 | 11.5 | 14.0 |
| 3465484 | 38HDR048–62 | FV4BN(B,F)005 | | 47,000 | 11.5 | 14.0 |
| 3465485 | 38HDR048–62 | FV4BNB006 | | 47,500 | 11.5 | 14.0 |
| 3465480 | 38HDR048–62 | FX4CN(B,F)048 | | 47,000 | 11.5 | 13.5 |
| 3465481 | 38HDR048–62 | FX4CN(B,F)060 | | 47,500 | 11.5 | 14.0 |
| 3465479 | 38HDR048–62 | FY4ANB060 | | 47,500 | 11.0 | 13.0 |
| 3465478 | 38HDR048–62 | FY4ANF048 | | 47,000 | 11.0 | 13.0 |
| | | | | | | |
| 3465024 | 38HDR060–32 | †CNPV*6024A**+TDR | | 57,000 | 11.0 | 13.0 |
| 3465810 | 38HDR060–32 | 40QAC060–3 | | 56,000 | 11.0 | 13.0 |
| 3465026 | 38HDR060–32 | CAP**6021A** | 58CV(A,X)110–20 | 56,000 | 11.0 | 13.2 |
| 3465029 | 38HDR060–32 | CAP**6021A** | 58MEB100–20 | 56,000 | 11.0 | 13.5 |
| 3465027 | 38HDR060–32 | CAP**6021A** | 58PH*090–16 | 56,000 | 11.0 | 13.2 |
| 3465028 | 38HDR060–32 | CAP**6021A** | 58PH*110–20 | 56,000 | 11.0 | 13.5 |
| 3465025 | 38HDR060–32 | CAP**6021A**+TDR | | 57,000 | 11.0 | 13.0 |
| 3465031 | 38HDR060–32 | CAP**6024A** | 58CV(A,X)135–22 | 56,000 | 11.0 | 13.5 |
| 3465032 | 38HDR060–32 | CAP**6024A** | 58CV(A,X)155–22 | 56,000 | 11.0 | 13.5 |

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# COMBINATION RATINGS (CONT.)

| ARI Ref. No. | Model Number | Indoor Model | Furnace Model | Capacity | EER | SEER |
|---|---|---|---|---|---|---|
| 3465034 | 38HDR060–32 | CAP**6024A** | 58MEB120–20 | 56,000 | 11.0 | 13.5 |
| 3465033 | 38HDR060–32 | CAP**6024A** | 58PH*135–20 | 56,000 | 11.0 | 13.5 |
| 3465030 | 38HDR060–32 | CAP**6024A**+TDR | | 57,000 | 11.0 | 13.0 |
| 3465040 | 38HDR060–32 | CNPH*6024A** | 58CV(A,X)110–20 | 56,000 | 11.0 | 13.2 |
| 3465041 | 38HDR060–32 | CNPH*6024A** | 58CV(A,X)135–22 | 56,000 | 11.0 | 13.5 |
| 3465042 | 38HDR060–32 | CNPH*6024A** | 58CV(A,X)155–22 | 56,000 | 11.0 | 13.5 |
| 3465046 | 38HDR060–32 | CNPH*6024A** | 58MEB080–16 | 56,000 | 11.0 | 13.2 |
| 3465047 | 38HDR060–32 | CNPH*6024A** | 58MEB100–20 | 56,000 | 11.0 | 13.5 |
| 3465048 | 38HDR060–32 | CNPH*6024A** | 58MEB120–20 | 56,000 | 11.0 | 13.5 |
| 3465043 | 38HDR060–32 | CNPH*6024A** | 58PH*090–16 | 56,000 | 11.0 | 13.2 |
| 3465044 | 38HDR060–32 | CNPH*6024A** | 58PH*110–20 | 56,000 | 11.0 | 13.5 |
| 3465045 | 38HDR060–32 | CNPH*6024A** | 58PH*135–20 | 56,000 | 11.0 | 13.5 |
| 3465039 | 38HDR060–32 | CNPH*6024A**+TDR | | 57,000 | 11.0 | 13.0 |
| 3465035 | 38HDR060–32 | CNPV*6024A** | 58CV(A,X)135–22 | 56,000 | 11.0 | 13.5 |
| 3465036 | 38HDR060–32 | CNPV*6024A** | 58CV(A,X)155–22 | 56,000 | 11.0 | 13.5 |
| 3465038 | 38HDR060–32 | CNPV*6024A** | 58MEB120–20 | 56,000 | 11.0 | 13.5 |
| 3465037 | 38HDR060–32 | CNPV*6024A** | 58PH*135–20 | 56,000 | 11.0 | 13.5 |
| 3465051 | 38HDR060–32 | CSPH*6012A** | 58CV(A,X)110–20 | 56,000 | 11.0 | 13.5 |
| 3465052 | 38HDR060–32 | CSPH*6012A** | 58CV(A,X)135–22 | 56,000 | 11.0 | 13.5 |
| 3465053 | 38HDR060–32 | CSPH*6012A** | 58CV(A,X)155–22 | 56,000 | 11.0 | 13.5 |
| 3465057 | 38HDR060–32 | CSPH*6012A** | 58MEB080–16 | 56,000 | 11.0 | 13.2 |
| 3465058 | 38HDR060–32 | CSPH*6012A** | 58MEB100–20 | 56,000 | 11.0 | 13.5 |
| 3465059 | 38HDR060–32 | CSPH*6012A** | 58MEB120–20 | 56,000 | 11.0 | 13.5 |
| 3465050 | 38HDR060–32 | CSPH*6012A** | 58MV(B,C)120–20 | 56,000 | 11.0 | 13.2 |
| 3465054 | 38HDR060–32 | CSPH*6012A** | 58PH*090–16 | 56,000 | 11.0 | 13.5 |
| 3465055 | 38HDR060–32 | CSPH*6012A** | 58PH*110–20 | 56,000 | 11.0 | 13.5 |
| 3465056 | 38HDR060–32 | CSPH*6012A** | 58PH*135–20 | 56,000 | 11.0 | 13.5 |
| 3465049 | 38HDR060–32 | CSPH*6012A**+TDR | | 57,000 | 11.0 | 13.0 |
| 3465062 | 38HDR060–32 | FE4ANB006+UI | | 57,500 | 11.0 | 13.5 |
| 3465063 | 38HDR060–32 | FV4BNB006 | | 57,500 | 11.0 | 13.5 |
| 3465061 | 38HDR060–32 | FX4CN(B,F)060 | | 57,500 | 11.0 | 13.5 |
| 3465060 | 38HDR060–32 | FY4ANB060 | | 57,000 | 11.0 | 13.0 |
| | | | | | | |
| 3465064 | 38HDR060–52 | †CNPV*6024A**+TDR | | 57,000 | 11.0 | 13.0 |
| 3465811 | 38HDR060–52 | 40QAC060–3 | | 56,000 | 11.0 | 13.0 |
| 3465066 | 38HDR060–52 | CAP**6021A** | 58CV(A,X)110–20 | 56,000 | 11.0 | 13.2 |
| 3465069 | 38HDR060–52 | CAP**6021A** | 58MEB100–20 | 56,000 | 11.0 | 13.5 |
| 3465067 | 38HDR060–52 | CAP**6021A** | 58PH*090–16 | 56,000 | 11.0 | 13.2 |
| 3465068 | 38HDR060–52 | CAP**6021A** | 58PH*110–20 | 56,000 | 11.0 | 13.5 |
| 3465065 | 38HDR060–52 | CAP**6021A**+TDR | | 57,000 | 11.0 | 13.0 |
| 3465071 | 38HDR060–52 | CAP**6024A** | 58CV(A,X)135–22 | 56,000 | 11.0 | 13.5 |
| 3465072 | 38HDR060–52 | CAP**6024A** | 58CV(A,X)155–22 | 56,000 | 11.0 | 13.5 |
| 3465074 | 38HDR060–52 | CAP**6024A** | 58MEB120–20 | 56,000 | 11.0 | 13.5 |
| 3465073 | 38HDR060–52 | CAP**6024A** | 58PH*135–20 | 56,000 | 11.0 | 13.5 |
| 3465070 | 38HDR060–52 | CAP**6024A**+TDR | | 57,000 | 11.0 | 13.0 |
| 3465080 | 38HDR060–52 | CNPH*6024A** | 58CV(A,X)110–20 | 56,000 | 11.0 | 13.2 |
| 3465081 | 38HDR060–52 | CNPH*6024A** | 58CV(A,X)135–22 | 56,000 | 11.0 | 13.5 |
| 3465082 | 38HDR060–52 | CNPH*6024A** | 58CV(A,X)155–22 | 56,000 | 11.0 | 13.5 |
| 3465086 | 38HDR060–52 | CNPH*6024A** | 58MEB080–16 | 56,000 | 11.0 | 13.2 |
| 3465087 | 38HDR060–52 | CNPH*6024A** | 58MEB100–20 | 56,000 | 11.0 | 13.5 |
| 3465088 | 38HDR060–52 | CNPH*6024A** | 58MEB120–20 | 56,000 | 11.0 | 13.5 |
| 3465083 | 38HDR060–52 | CNPH*6024A** | 58PH*090–16 | 56,000 | 11.0 | 13.2 |
| 3465084 | 38HDR060–52 | CNPH*6024A** | 58PH*110–20 | 56,000 | 11.0 | 13.5 |
| 3465085 | 38HDR060–52 | CNPH*6024A** | 58PH*135–20 | 56,000 | 11.0 | 13.5 |
| 3465079 | 38HDR060–52 | CNPH*6024A**+TDR | | 57,000 | 11.0 | 13.0 |
| 3465075 | 38HDR060–52 | CNPV*6024A** | 58CV(A,X)135–22 | 56,000 | 11.0 | 13.5 |
| 3465076 | 38HDR060–52 | CNPV*6024A** | 58CV(A,X)155–22 | 56,000 | 11.0 | 13.5 |
| 3465078 | 38HDR060–52 | CNPV*6024A** | 58MEB120–20 | 56,000 | 11.0 | 13.5 |
| 3465077 | 38HDR060–52 | CNPV*6024A** | 58PH*135–20 | 56,000 | 11.0 | 13.5 |
| 3465091 | 38HDR060–52 | CSPH*6012A** | 58CV(A,X)110–20 | 56,000 | 11.0 | 13.5 |
| 3465092 | 38HDR060–52 | CSPH*6012A** | 58CV(A,X)135–22 | 56,000 | 11.0 | 13.5 |
| 3465093 | 38HDR060–52 | CSPH*6012A** | 58CV(A,X)155–22 | 56,000 | 11.0 | 13.5 |
| 3465097 | 38HDR060–52 | CSPH*6012A** | 58MEB080–16 | 56,000 | 11.0 | 13.2 |
| 3465098 | 38HDR060–52 | CSPH*6012A** | 58MEB100–20 | 56,000 | 11.0 | 13.5 |
| 3465099 | 38HDR060–52 | CSPH*6012A** | 58MEB120–20 | 56,000 | 11.0 | 13.5 |
| 3465090 | 38HDR060–52 | CSPH*6012A** | 58MV(B,C)120–20 | 56,000 | 11.0 | 13.2 |
| 3465094 | 38HDR060–52 | CSPH*6012A** | 58PH*090–16 | 56,000 | 11.0 | 13.5 |
| 3465095 | 38HDR060–52 | CSPH*6012A** | 58PH*110–20 | 56,000 | 11.0 | 13.5 |
| 3465096 | 38HDR060–52 | CSPH*6012A** | 58PH*135–20 | 56,000 | 11.0 | 13.5 |
| 3465089 | 38HDR060–52 | CSPH*6012A**+TDR | | 57,000 | 11.0 | 13.0 |
| 3465102 | 38HDR060–52 | FE4ANB006+UI | | 57,500 | 11.0 | 13.5 |
| 3465103 | 38HDR060–52 | FV4BNB006 | | 57,500 | 11.0 | 13.5 |
| 3465101 | 38HDR060–52 | FX4CN(B,F)060 | | 57,500 | 11.0 | 13.5 |
| 3465100 | 38HDR060–52 | FY4ANB060 | | 57,000 | 11.0 | 13.0 |
| | | | | | | |
| 3465104 | 38HDR060–62 | †CNPV*6024A**+TDR | | 57,000 | 11.0 | 13.0 |
| 3465812 | 38HDR060–62 | 40QAC060–3 | | 56,000 | 11.0 | 13.0 |
| 3465106 | 38HDR060–62 | CAP**6021A** | 58CV(A,X)110–20 | 56,000 | 11.0 | 13.2 |
| 3465109 | 38HDR060–62 | CAP**6021A** | 58MEB100–20 | 56,000 | 11.0 | 13.5 |

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# COMBINATION RATINGS (CONT.)

| ARI Ref. No. | Model Number | Indoor Model | Furnace Model | Capacity | EER | SEER |
|---|---|---|---|---|---|---|
| 3465107 | 38HDR060–62 | CAP**6021A** | 58PH*090–16 | 56,000 | 11.0 | 13.2 |
| 3465108 | 38HDR060–62 | CAP**6021A** | 58PH*110–20 | 56,000 | 11.0 | 13.5 |
| 3465105 | 38HDR060–62 | CAP**6021A**+TDR | | 57,000 | 11.0 | 13.0 |
| 3465111 | 38HDR060–62 | CAP**6024A** | 58CV(A,X)135–22 | 56,000 | 11.0 | 13.5 |
| 3465112 | 38HDR060–62 | CAP**6024A** | 58CV(A,X)155–22 | 56,000 | 11.0 | 13.5 |
| 3465114 | 38HDR060–62 | CAP**6024A** | 58MEB120–20 | 56,000 | 11.0 | 13.5 |
| 3465113 | 38HDR060–62 | CAP**6024A** | 58PH*135–20 | 56,000 | 11.0 | 13.5 |
| 3465110 | 38HDR060–62 | CAP**6024A**+TDR | | 57,000 | 11.0 | 13.0 |
| 3465120 | 38HDR060–62 | CNPH*6024A** | 58CV(A,X)110–20 | 56,000 | 11.0 | 13.2 |
| 3465121 | 38HDR060–62 | CNPH*6024A** | 58CV(A,X)135–22 | 56,000 | 11.0 | 13.5 |
| 3465122 | 38HDR060–62 | CNPH*6024A** | 58CV(A,X)155–22 | 56,000 | 11.0 | 13.5 |
| 3465126 | 38HDR060–62 | CNPH*6024A** | 58MEB080–16 | 56,000 | 11.0 | 13.2 |
| 3465127 | 38HDR060–62 | CNPH*6024A** | 58MEB100–20 | 56,000 | 11.0 | 13.5 |
| 3465128 | 38HDR060–62 | CNPH*6024A** | 58MEB120–20 | 56,000 | 11.0 | 13.5 |
| 3465123 | 38HDR060–62 | CNPH*6024A** | 58PH*090–16 | 56,000 | 11.0 | 13.2 |
| 3465124 | 38HDR060–62 | CNPH*6024A** | 58PH*110–20 | 56,000 | 11.0 | 13.5 |
| 3465125 | 38HDR060–62 | CNPH*6024A** | 58PH*135–20 | 56,000 | 11.0 | 13.5 |
| 3465119 | 38HDR060–62 | CNPH*6024A**+TDR | | 57,000 | 11.0 | 13.0 |
| 3465115 | 38HDR060–62 | CNPV*6024A** | 58CV(A,X)135–22 | 56,000 | 11.0 | 13.5 |
| 3465116 | 38HDR060–62 | CNPV*6024A** | 58CV(A,X)155–22 | 56,000 | 11.0 | 13.5 |
| 3465118 | 38HDR060–62 | CNPV*6024A** | 58MEB120–20 | 56,000 | 11.0 | 13.5 |
| 3465117 | 38HDR060–62 | CNPV*6024A** | 58PH*135–20 | 56,000 | 11.0 | 13.5 |
| 3465131 | 38HDR060–62 | CSPH*6012A** | 58CV(A,X)110–20 | 56,000 | 11.0 | 13.5 |
| 3465132 | 38HDR060–62 | CSPH*6012A** | 58CV(A,X)135–22 | 56,000 | 11.0 | 13.5 |
| 3465133 | 38HDR060–62 | CSPH*6012A** | 58CV(A,X)155–22 | 56,000 | 11.0 | 13.5 |
| 3465137 | 38HDR060–62 | CSPH*6012A** | 58MEB080–16 | 56,000 | 11.0 | 13.2 |
| 3465138 | 38HDR060–62 | CSPH*6012A** | 58MEB100–20 | 56,000 | 11.0 | 13.5 |
| 3465139 | 38HDR060–62 | CSPH*6012A** | 58MEB120–20 | 56,000 | 11.0 | 13.5 |
| 3465130 | 38HDR060–62 | CSPH*6012A** | 58MV(B,C)120–20 | 56,000 | 11.0 | 13.2 |
| 3465134 | 38HDR060–62 | CSPH*6012A** | 58PH*090–16 | 56,000 | 11.0 | 13.5 |
| 3465135 | 38HDR060–62 | CSPH*6012A** | 58PH*110–20 | 56,000 | 11.0 | 13.5 |
| 3465136 | 38HDR060–62 | CSPH*6012A** | 58PH*135–20 | 56,000 | 11.0 | 13.5 |
| 3465129 | 38HDR060–62 | CSPH*6012A**+TDR | | 57,000 | 11.0 | 13.0 |
| 3465142 | 38HDR060–62 | FE4ANB006+UI | | 57,500 | 11.0 | 13.5 |
| 3465143 | 38HDR060–62 | FV4BNB006 | | 57,500 | 11.0 | 13.5 |
| 3465141 | 38HDR060–62 | FX4CN(B,F)060 | | 57,500 | 11.0 | 13.5 |
| 3465140 | 38HDR060–62 | FY4ANB060 | | 57,000 | 11.0 | 13.0 |

† Tested combination

**EER** — Energy Efficiency Ratio

**SEER** — Seasonal Energy Efficiency Ratio

**TDR —** Time–Delay Relay. In most cases, only 1 method should be used to achieve TDR function. Using more than 1 method in a system may cause degradation in performance. Use either the accessory Time–Delay Relay KAATD0101TDR or a furnace equipped with TDR. Most Carrier furnaces are equipped with TDR.

**TXV** — Thermostatic Expansion Valve

**NOTES:**

1. Ratings are net values reflecting the effects of circulating fan motor heat. Supplemental electric heat is not included.
2. Tested outdoor/indoor combinations have been tested in accordance with DOE test procedures for central air conditioners. Ratings for other combinations are determined under DOE computer simulation procedures.
3. Determine actual CFM values obtainable for your system by referring to fan performance data in fan coil or furnace coil literature.
4. Do not apply with capillary tube coils as performance and reliability are significantly affected.

# DETAILED COOLING CAPACITIES*

| EVAPORATOR AIR | | CONDENSER ENTERING AIR TEMPERATURES °F (°C) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 75 (23.9) | | | 85 (29.4) | | | 95 (35) | | | 105 (40.6) | | | 115 (46.1) | | | 125 (51.7) | | |
| CFM | EWB °F (°C) | Capacity MBtuh† | | Total System KW** | Capacity MBtuh† | | Total System KW** | Capacity MBtuh† | | Total System KW** | Capacity MBtuh† | | Total System KW** | Capacity MBtuh† | | Total System KW** | Capacity MBtuh† | | Total System KW** |
| | | Total | Sens‡ | | Total | Sens‡ | | Total | Sens‡ | | Total | Sens‡ | | Total | Sens‡ | | Total | Sens‡ | |
| 38HDR018 Outdoor Section With CNPV*1814A** Indoor Section | | | | | | | | | | | | | | | | | | | |
| 525 | 72 (22.2) | 20.28 | 9.40 | 1.22 | 19.31 | 9.07 | 1.36 | 18.30 | 8.73 | 1.52 | 17.26 | 8.38 | 1.69 | 16.14 | 8.01 | 1.87 | 14.90 | 7.61 | 2.07 |
| | 67(19.4) | 18.53 | 11.50 | 1.22 | 17.65 | 11.17 | 1.36 | 16.72 | 10.82 | 1.52 | 15.76 | 10.47 | 1.69 | 14.72 | 10.09 | 1.87 | 13.59 | 9.69 | 2.07 |
| | 62 (16.7) | 16.93 | 13.58 | 1.23 | 16.13 | 13.24 | 1.37 | 15.29 | 12.89 | 1.52 | 14.43 | 12.52 | 1.69 | 13.57 | 13.57 | 1.87 | 12.71 | 12.71 | 2.07 |
| | 57 (13.9) | 16.35 | 16.35 | 1.23 | 15.72 | 15.72 | 1.37 | 15.05 | 15.05 | 1.52 | 14.34 | 14.34 | 1.69 | 13.57 | 13.57 | 1.87 | 12.71 | 12.71 | 2.07 |
| 600 | 72(22.2) | 20.65 | 9.87 | 1.25 | 19.63 | 9.53 | 1.39 | 18.59 | 9.18 | 1.54 | 17.50 | 8.83 | 1.71 | 16.34 | 8.46 | 1.90 | 15.05 | 8.05 | 2.10 |
| | 67(19.4) | 18.90 | 12.25 | 1.25 | 17.97 | 11.91 | 1.39 | 17.00 | 11.56 | 1.55 | 16.00 | 11.20 | 1.72 | 14.93 | 10.82 | 1.90 | 13.75 | 10.41 | 2.10 |
| | 62 (16.7) | 17.33 | 14.61 | 1.25 | 16.51 | 14.26 | 1.39 | 15.67 | 15.61 | 1.55 | 14.91 | 14.91 | 1.72 | 14.08 | 14.08 | 1.90 | 13.16 | 13.16 | 2.10 |
| | 57 (13.9) | 17.07 | 17.07 | 1.25 | 16.39 | 16.39 | 1.39 | 15.67 | 15.67 | 1.55 | 14.91 | 14.91 | 1.72 | 14.08 | 14.08 | 1.90 | 13.16 | 13.16 | 2.10 |
| 675 | 72 (22.2) | 20.91 | 10.30 | 1.27 | 19.86 | 9.96 | 1.41 | 18.78 | 9.61 | 1.57 | 17.67 | 9.26 | 1.74 | 16.47 | 8.88 | 1.93 | 15.15 | 8.46 | 2.13 |
| | 67 (19.4) | 19.16 | 12.97 | 1.27 | 18.20 | 12.62 | 1.42 | 17.20 | 12.27 | 1.57 | 16.18 | 11.90 | 1.74 | 15.07 | 11.52 | 1.93 | 13.87 | 11.09 | 2.13 |
| | 62 (16.7) | 17.70 | 17.52 | 1.28 | 16.94 | 16.94 | 1.42 | 16.17 | 16.17 | 1.57 | 15.37 | 15.37 | 1.74 | 14.49 | 14.49 | 1.93 | 13.52 | 13.52 | 2.13 |
| | 57(13.9) | 17.67 | 17.67 | 1.28 | 16.94 | 16.94 | 1.42 | 16.17 | 16.17 | 1.57 | 15.37 | 15.37 | 1.74 | 14.49 | 14.49 | 1.93 | 13.52 | 13.52 | 2.13 |

| COOLING INDOOR MODEL | CAPACITY | POWER | FURNACE MODEL |
|---|---|---|---|
| *CNPV*1814A** | 1.00 | 1.00 | |
| 40QAC(Q)024–3 | 1.06 | 1.01 | |
| CAP**1814A** | 1.00 | 1.01 | |
| CAP**2414A** | 1.02 | 1.02 | |
| CAP**2417A** | 1.02 | 1.02 | |
| CNPF*2418A** | 1.02 | 1.02 | |
| CNPH*2417A** | 1.02 | 1.02 | |
| CNPV*2414A** | 1.02 | 1.02 | |
| CNPV*2417A** | 1.02 | 1.02 | |
| CSPH*2412A** | 1.02 | 1.02 | |
| FE4ANF002 | 1.02 | 0.98 | |
| FF1ENP018 | 1.00 | 1.05 | |
| FF1ENP024 | 1.02 | 1.07 | |
| FV4BNF002 | 1.02 | 0.99 | |
| FX4CNF018 | 1.00 | 0.96 | |
| FX4CNF024 | 1.02 | 0.98 | |
| FY4ANF018 | 1.00 | 1.05 | |
| FY4ANF024 | 1.02 | 1.07 | |
| CAP**1814A** | 1.00 | 0.96 | 58CV(A,X)070–12 |
| CAP**2414A** | 1.02 | 0.98 | 58CV(A,X)070–12 |
| CNPH*2417A** | 1.02 | 0.98 | 58CV(A,X)070–12 |
| CNPV*1814A** | 0.10 | 0.10 | 58CV(A,X)070–12 |
| CNPV*2414A** | 1.02 | 0.98 | 58CV(A,X)070–12 |
| CSPH*2412A** | 1.02 | 0.98 | 58CV(A,X)070–12 |
| CAP**2417A** | 1.02 | 0.98 | 58CV(A,X)090–16 |
| CNPH*2417A** | 1.02 | 0.98 | 58CV(A,X)090–16 |
| CNPV*2417A** | 1.02 | 0.98 | 58CV(A,X)090–16 |
| CSPH*2412A** | 1.02 | 0.98 | 58CV(A,X)090–16 |
| CAP**2417A** | 1.02 | 0.94 | 58MEB040–12 |
| CNPH*2417A** | 1.02 | 0.94 | 58MEB040–12 |
| CNPV*2417A** | 1.02 | 0.94 | 58MEB040–12 |
| CSPH*2412A** | 1.02 | 0.94 | 58MEB040–12 |
| CAP**2417A** | 1.02 | 0.94 | 58MEB060–12 |
| CNPH*2417A** | 1.02 | 0.94 | 58MEB060–12 |
| CNPV*2417A** | 1.02 | 0.94 | 58MEB060–12 |
| CSPH*2412A** | 1.02 | 0.94 | 58MEB060–12 |
| CAP**2417A** | 1.02 | 0.98 | 58MV(B,C)060–14 |
| CNPH*2417A** | 1.02 | 0.98 | 58MV(B,C)060–14 |
| CNPV*2417A** | 1.02 | 0.98 | 58MV(B,C)060–14 |
| CSPH*2412A** | 1.02 | 0.98 | 58MV(B,C)060–14 |
| CNPH*2417A** | 1.02 | 0.98 | 58MV(B,C)080–14 |

| COOLING INDOOR MODEL | CAPACITY | POWER | FURNACE MODEL |
|---|---|---|---|
| CSPH*2412A** | 1.02 | 0.98 | 58MV(B,C)080–14 |
| CNPH*2417A** | 1.02 | 0.98 | 58MVB040–14 |
| CSPH*2412A** | 1.02 | 0.98 | 58MVB040–14 |
| CAP**1814A** | 0.10 | 0.10 | 58PH*045–08 |
| CAP**2414A** | 1.02 | 0.94 | 58PH*045–08 |
| CNPH*2417A** | 1.02 | 0.94 | 58PH*045–08 |
| CNPV*1814A** | 1.00 | 0.96 | 58PH*045–08 |
| CNPV*2414A** | 1.02 | 0.94 | 58PH*045–08 |
| CSPH*2412A** | 1.02 | 0.94 | 58PH*045–08 |

See notes on pg. 34

# DETAILED COOLING CAPACITIES* (CONT.)

| EVAPORATOR AIR | | CONDENSER ENTERING AIR TEMPERATURES °F (°C) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 75 (23.9) | | | 85 (29.4) | | | 95 (35) | | | 105 (40.6) | | | 115 (46.1) | | | 125 (51.7) | | |
| CFM | EWB °F (°C) | Capacity MBtuh† | | Total System KW** | Capacity MBtuh† | | Total System KW** | Capacity MBtuh† | | Total System KW** | Capacity MBtuh† | | Total System KW** | Capacity MBtuh† | | Total System KW** | Capacity MBtuh† | | Total System KW** |
| | | Total | Sens‡ | | Total | Sens‡ | | Total | Sens‡ | | Total | Sens‡ | | Total | Sens‡ | | Total | Sens‡ | |
| 38HDR024 Outdoor Section With CNPV*2414A** Indoor Section | | | | | | | | | | | | | | | | | | | |
| 700 | 72 (22.2) | 28.11 | 13.59 | 1.69 | 26.70 | 13.09 | 1.89 | 25.17 | 12.55 | 2.10 | 23.54 | 11.98 | 2.33 | 21.76 | 11.38 | 2.58 | 19.78 | 10.71 | 2.84 |
| | 67(19.4) | 25.68 | 16.61 | 1.68 | 24.41 | 16.11 | 1.87 | 23.04 | 15.58 | 2.09 | 21.58 | 15.02 | 2.32 | 19.98 | 14.42 | 2.57 | 18.21 | 13.77 | 2.83 |
| | 62 (16.7) | 23.47 | 19.61 | 1.67 | 22.34 | 19.11 | 1.86 | 21.13 | 18.58 | 2.08 | 19.86 | 18.01 | 2.31 | 18.57 | 18.57 | 2.55 | 17.23 | 17.23 | 2.82 |
| | 57 (13.9) | 22.67 | 22.67 | 1.67 | 21.77 | 21.77 | 1.86 | 20.81 | 20.81 | 2.07 | 19.75 | 19.75 | 2.31 | 18.57 | 18.57 | 2.55 | 17.23 | 17.23 | 2.82 |
| 800 | 72(22.2) | 28.62 | 14.25 | 1.73 | 27.14 | 13.73 | 1.93 | 25.53 | 13.18 | 2.14 | 23.83 | 12.61 | 2.37 | 21.98 | 11.99 | 2.62 | 19.92 | 11.32 | 2.88 |
| | 67(19.4) | 26.18 | 17.67 | 1.72 | 24.84 | 17.16 | 1.91 | 23.40 | 16.61 | 2.13 | 21.88 | 16.05 | 2.36 | 20.22 | 15.43 | 2.61 | 18.38 | 14.76 | 2.87 |
| | 62 (16.7) | 24.02 | 21.07 | 1.71 | 22.85 | 20.54 | 1.90 | 21.63 | 21.51 | 2.12 | 20.48 | 20.48 | 2.35 | 19.20 | 19.20 | 2.60 | 17.75 | 17.75 | 2.86 |
| | 57 (13.9) | 23.64 | 23.64 | 1.71 | 22.68 | 22.68 | 1.90 | 21.62 | 21.62 | 2.12 | 20.48 | 20.48 | 2.35 | 19.20 | 19.20 | 2.60 | 17.75 | 17.75 | 2.86 |
| 900 | 72 (22.2) | 28.99 | 14.87 | 1.77 | 27.45 | 14.34 | 1.96 | 25.78 | 13.78 | 2.18 | 24.03 | 13.20 | 2.41 | 22.12 | 12.57 | 2.66 | 20.00 | 11.89 | 2.92 |
| | 67 (19.4) | 26.54 | 18.68 | 1.76 | 25.15 | 18.16 | 1.95 | 23.66 | 17.61 | 2.17 | 22.09 | 17.03 | 2.40 | 20.38 | 16.40 | 2.65 | 18.50 | 15.71 | 2.91 |
| | 62 (16.7) | 24.51 | 22.41 | 1.75 | 23.41 | 23.41 | 1.94 | 22.28 | 22.28 | 2.16 | 21.06 | 21.06 | 2.39 | 19.70 | 19.70 | 2.64 | 18.15 | 18.15 | 2.91 |
| | 57(13.9) | 24.45 | 24.45 | 1.75 | 23.41 | 23.41 | 1.94 | 22.28 | 22.28 | 2.16 | 21.06 | 21.06 | 2.39 | 19.70 | 19.70 | 2.64 | 18.15 | 18.15 | 2.91 |

| COOLING INDOOR MODEL | CAPACITY | POWER | FURNACE MODEL |
|---|---|---|---|
| *CNPV*2414A** | 1.00 | 1.00 | |
| 40QAC024–3 | 0.97 | 0.93 | |
| CAP**2414A** | 1.00 | 1.00 | |
| CAP**2417A** | 1.00 | 1.00 | |
| CAP**3014A** | 1.01 | 1.01 | |
| CAP**3017A** | 1.01 | 1.01 | |
| CNPF*2418A** | 1.00 | 1.00 | |
| CNPH*2417A** | 1.00 | 1.00 | |
| CNPH*3017A** | 1.01 | 1.01 | |
| CNPV*2417A** | 1.00 | 1.00 | |
| CNPV*3014A** | 1.01 | 1.01 | |
| CNPV*3017A** | 1.01 | 1.01 | |
| CSPH*2412A** | 1.00 | 1.00 | |
| CSPH*3012A** | 1.01 | 1.01 | |
| FE4AN(B,F)003 | 1.02 | 0.93 | |
| FE4ANF002 | 1.01 | 0.92 | |
| FE5ANB004 | 1.03 | 0.94 | |
| FF1ENP024 | 0.97 | 0.97 | |
| FF1ENP025 | 1.00 | 0.96 | |
| FF1ENP030 | 0.98 | 0.98 | |
| FF1ENP031 | 1.01 | 0.96 | |
| FF1ENP037 | 1.02 | 0.97 | |
| FV4BN(B,F)003 | 1.02 | 0.93 | |
| FV4BNF002 | 1.01 | 0.92 | |
| FV4CN(B,F)003 | 1.02 | 0.93 | |
| FV4CNF002 | 1.01 | 0.92 | |
| FX4CNF024 | 1.00 | 0.96 | |
| FX4CNF030 | 1.02 | 0.97 | |
| FY4ANF024 | 0.99 | 0.99 | |
| FY4ANF030 | 1.01 | 1.01 | |
| CAP**2414A** | 1.00 | 0.96 | 58CV(A,X)070–12 |
| CAP**3014A** | 1.00 | 0.96 | 58CV(A,X)070–12 |
| CNPH*2417A** | 1.00 | 0.96 | 58CV(A,X)070–12 |
| CNPH*3017A** | 1.00 | 0.96 | 58CV(A,X)070–12 |
| CNPV*2414A** | 1.00 | 0.96 | 58CV(A,X)070–12 |
| CNPV*3014A** | 1.00 | 0.96 | 58CV(A,X)070–12 |
| CSPH*2412A** | 1.00 | 0.96 | 58CV(A,X)070–12 |
| CSPH*3012A** | 1.01 | 0.96 | 58CV(A,X)070–12 |
| CAP**2417A** | 1.00 | 0.96 | 58CV(A,X)090–16 |
| CAP**3017A** | 1.01 | 0.96 | 58CV(A,X)090–16 |
| CNPH*2417A** | 1.00 | 0.96 | 58CV(A,X)090–16 |
| CNPH*3017A** | 1.01 | 0.96 | 58CV(A,X)090–16 |

| COOLING INDOOR MODEL | CAPACITY | POWER | FURNACE MODEL |
|---|---|---|---|
| CNPV*2417A** | 1.00 | 0.96 | 58CV(A,X)090–16 |
| CNPV*3017A** | 1.01 | 0.96 | 58CV(A,X)090–16 |
| CSPH*2412A** | 1.00 | 0.96 | 58CV(A,X)090–16 |
| CSPH*3012A** | 1.01 | 0.96 | 58CV(A,X)090–16 |
| CNPH*2417A** | 1.00 | 0.96 | 58CV(A,X)110–20 |
| CNPH*3017A** | 1.01 | 0.96 | 58CV(A,X)110–20 |
| CSPH*2412A** | 1.00 | 0.96 | 58CV(A,X)110–20 |
| CSPH*3012A** | 1.01 | 0.96 | 58CV(A,X)110–20 |
| CNPH*2417A** | 1.00 | 0.96 | 58CV(A,X)135–22 |
| CNPH*3017A** | 1.01 | 0.96 | 58CV(A,X)135–22 |
| CSPH*2412A** | 1.00 | 0.96 | 58CV(A,X)135–22 |
| CSPH*3012A** | 1.01 | 0.96 | 58CV(A,X)135–22 |
| CNPH*2417A** | 1.00 | 0.96 | 58CV(A,X)155–22 |
| CNPH*3017A** | 1.01 | 0.96 | 58CV(A,X)155–22 |
| CSPH*2412A** | 1.00 | 0.96 | 58CV(A,X)155–22 |
| CSPH*3012A** | 1.01 | 0.96 | 58CV(A,X)155–22 |
| CAP**2417A** | 1.00 | 0.92 | 58MEB040–12 |
| CAP**3017A** | 1.01 | 0.92 | 58MEB040–12 |
| CNPH*2417A** | 1.00 | 0.92 | 58MEB040–12 |
| CNPH*3017A** | 1.01 | 0.92 | 58MEB040–12 |
| CNPV*2417A** | 1.00 | 0.92 | 58MEB040–12 |
| CNPV*3017A** | 1.01 | 0.92 | 58MEB040–12 |
| CSPH*2412A** | 1.00 | 0.92 | 58MEB040–12 |
| CSPH*3012A** | 1.01 | 0.92 | 58MEB040–12 |
| CAP**2417A** | 1.00 | 0.92 | 58MEB060–12 |
| CAP**3017A** | 1.01 | 0.92 | 58MEB060–12 |
| CNPH*2417A** | 1.00 | 0.92 | 58MEB060–12 |
| CNPH*3017A** | 1.01 | 0.92 | 58MEB060–12 |
| CNPV*2417A** | 1.00 | 0.92 | 58MEB060–12 |
| CNPV*3017A** | 1.01 | 0.92 | 58MEB060–12 |
| CSPH*2412A** | 1.00 | 0.92 | 58MEB060–12 |
| CSPH*3012A** | 1.01 | 0.92 | 58MEB060–12 |
| CAP**2417A** | 1.00 | 0.92 | 58MEB080–12 |
| CAP**3017A** | 1.01 | 0.92 | 58MEB080–12 |
| CNPH*2417A** | 1.00 | 0.92 | 58MEB080–12 |
| CNPH*3017A** | 1.01 | 0.92 | 58MEB080–12 |
| CNPV*2417A** | 1.00 | 0.92 | 58MEB080–12 |
| CNPV*3017A** | 1.01 | 0.92 | 58MEB080–12 |
| CSPH*2412A** | 1.00 | 0.92 | 58MEB080–12 |
| CSPH*3012A** | 1.01 | 0.92 | 58MEB080–12 |
| CAP**2417A** | 1.00 | 0.96 | 58MV(B,C)060–14 |
| CAP**3017A** | 1.01 | 0.96 | 58MV(B,C)060–14 |

| COOLING INDOOR MODEL | CAPACITY | POWER | FURNACE MODEL |
|---|---|---|---|
| CNPH*2417A** | 1.00 | 0.96 | 58MV(B,C)060–14 |
| CNPH*3017A** | 1.01 | 0.96 | 58MV(B,C)060–14 |
| CNPV*2417A** | 1.00 | 0.96 | 58MV(B,C)060–14 |
| CNPV*3017A** | 1.01 | 0.96 | 58MV(B,C)060–14 |
| CSPH*2412A** | 1.00 | 0.96 | 58MV(B,C)060–14 |
| CSPH*3012A** | 1.01 | 0.96 | 58MV(B,C)060–14 |
| CNPH*2417A** | 1.00 | 0.96 | 58MV(B,C)080–14 |
| CNPH*3017A** | 1.00 | 0.96 | 58MV(B,C)080–14 |
| CSPH*2412A** | 1.00 | 0.96 | 58MV(B,C)080–14 |
| CSPH*3012A** | 1.01 | 0.96 | 58MV(B,C)080–14 |
| CNPH*2417A** | 0.99 | 0.95 | 58MV(B,C)080–20 |
| CNPH*3017A** | 1.00 | 0.96 | 58MV(B,C)080–20 |
| CSPH*2412A** | 1.00 | 0.96 | 58MV(B,C)080–20 |
| CSPH*3012A** | 1.00 | 0.96 | 58MV(B,C)080–20 |
| CNPH*2417A** | 1.00 | 0.96 | 58MV(B,C)100–20 |
| CNPH*3017A** | 1.01 | 0.96 | 58MV(B,C)100–20 |
| CSPH*2412A** | 1.00 | 0.96 | 58MV(B,C)100–20 |
| CSPH*3012A** | 1.01 | 0.96 | 58MV(B,C)100–20 |
| CNPH*2417A** | 1.00 | 0.96 | 58MV(B,C)120–20 |
| CNPH*3017A** | 1.01 | 0.96 | 58MV(B,C)120–20 |
| CSPH*2412A** | 1.00 | 0.96 | 58MV(B,C)120–20 |
| CSPH*3012A** | 1.01 | 0.96 | 58MV(B,C)120–20 |
| CNPH*2417A** | 1.00 | 0.96 | 58MVB040–14 |
| CNPH*3017A** | 1.01 | 0.96 | 58MVB040–14 |
| CSPH*2412A** | 1.00 | 0.96 | 58MVB040–14 |
| CSPH*3012A** | 1.01 | 0.96 | 58MVB040–14 |
| CAP**2414A** | 1.00 | 0.96 | 58PH*045–08 |
| CAP**3014A** | 1.01 | 0.92 | 58PH*045–08 |
| CNPH*2417A** | 1.00 | 0.96 | 58PH*045–08 |
| CNPH*3017A** | 1.01 | 0.92 | 58PH*045–08 |
| CNPV*2414A** | 1.00 | 0.96 | 58PH*045–08 |
| CNPV*3014A** | 1.01 | 0.96 | 58PH*045–08 |
| CSPH*2412A** | 1.00 | 0.96 | 58PH*045–08 |
| CSPH*3012A** | 1.01 | 0.92 | 58PH*045–08 |

See notes on pg. 34

# DETAILED COOLING CAPACITIES* (CONT.)

| EVAPORATOR AIR | | CONDENSER ENTERING AIR TEMPERATURES °F (°C) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 75 (23.9) | | | 85 (29.4) | | | 95 (35) | | | 105 (40.6) | | | 115 (46.1) | | | 125 (51.7) | | |
| CFM | EWB °F (°C) | Capacity MBtuh† | | Total System KW** | Capacity MBtuh† | | Total System KW** | Capacity MBtuh† | | Total System KW** | Capacity MBtuh† | | Total System KW** | Capacity MBtuh† | | Total System KW** | Capacity MBtuh† | | Total System KW** |
| | | Total | Sens‡ | | Total | Sens‡ | | Total | Sens‡ | | Total | Sens‡ | | Total | Sens‡ | | Total | Sens‡ | |
| 38HDR030 Outdoor Section With CNPV*3014A** Indoor Section | | | | | | | | | | | | | | | | | | | |
| 875 | 72 (22.2) | 33.74 | 16.03 | 2.06 | 32.29 | 15.52 | 2.29 | 30.76 | 14.99 | 2.54 | 29.12 | 14.43 | 2.81 | 27.36 | 13.84 | 3.11 | 25.42 | 13.19 | 3.44 |
| | 67(19.4) | 30.65 | 19.58 | 2.06 | 29.32 | 19.06 | 2.29 | 27.90 | 18.51 | 2.54 | 26.39 | 17.94 | 2.81 | 24.76 | 17.34 | 3.11 | 22.97 | 16.69 | 3.43 |
| | 62 (16.7) | 28.07 | 23.01 | 2.07 | 26.73 | 22.59 | 2.29 | 25.47 | 22.03 | 2.54 | 24.10 | 21.45 | 2.81 | 22.76 | 22.72 | 3.11 | 21.45 | 21.45 | 3.43 |
| | 57 (13.9) | 27.14 | 27.14 | 2.07 | 26.16 | 26.16 | 2.29 | 25.11 | 25.11 | 2.53 | 24.01 | 24.01 | 2.80 | 22.78 | 22.78 | 3.11 | 21.43 | 21.43 | 3.43 |
| 1000 | 72(22.2) | 34.29 | 16.79 | 2.11 | 32.87 | 16.29 | 2.34 | 31.28 | 15.69 | 2.58 | 29.58 | 15.18 | 2.86 | 27.57 | 14.54 | 3.17 | 25.64 | 13.91 | 3.49 |
| | 67(19.4) | 31.27 | 20.81 | 2.11 | 29.84 | 20.29 | 2.34 | 28.40 | 19.75 | 2.58 | 26.82 | 19.17 | 2.86 | 24.99 | 18.52 | 3.16 | 23.21 | 17.87 | 3.49 |
| | 62 (16.7) | 28.72 | 24.92 | 2.11 | 27.38 | 24.26 | 2.34 | 26.11 | 26.11 | 2.58 | 24.94 | 24.94 | 2.85 | 23.54 | 23.54 | 3.16 | 22.22 | 22.22 | 3.48 |
| | 57 (13.9) | 28.28 | 28.28 | 2.11 | 27.23 | 27.23 | 2.34 | 26.13 | 26.13 | 2.58 | 24.94 | 24.94 | 2.85 | 23.54 | 23.54 | 3.16 | 22.22 | 22.22 | 3.48 |
| 1125 | 72 (22.2) | 34.76 | 17.52 | 2.16 | 33.30 | 17.00 | 2.39 | 31.65 | 16.46 | 2.63 | 29.90 | 15.89 | 2.91 | 28.03 | 15.27 | 3.21 | 25.95 | 14.60 | 3.53 |
| | 67 (19.4) | 31.86 | 21.48 | 2.16 | 30.25 | 21.46 | 2.38 | 28.76 | 20.92 | 2.63 | 27.14 | 20.32 | 2.90 | 25.39 | 19.69 | 3.21 | 23.44 | 18.98 | 3.54 |
| | 62 (16.7) | 29.27 | 29.04 | 2.16 | 28.12 | 28.12 | 2.38 | 26.98 | 26.98 | 2.63 | 25.71 | 25.71 | 2.90 | 24.35 | 24.35 | 3.20 | 22.84 | 22.84 | 3.53 |
| | 57(13.9) | 29.23 | 29.23 | 2.16 | 28.13 | 28.13 | 2.38 | 26.99 | 26.99 | 2.63 | 25.71 | 25.71 | 2.90 | 24.23 | 24.23 | 3.21 | 22.85 | 22.85 | 3.53 |

| COOLING INDOOR MODEL | CAPACITY | POWER | FURNACE MODEL |
|---|---|---|---|
| *CNPV*3014A** | 1.00 | 1.00 | |
| CAP**3014A** | 1.00 | 1.00 | |
| CAP**3017A** | 1.00 | 1.00 | |
| CAP**3614A** | 1.02 | 1.02 | |
| CAP**3617A** | 1.02 | 1.02 | |
| CAP**3621A** | 1.02 | 1.02 | |
| CNPF*3618A** | 1.02 | 1.02 | |
| CNPH*3017A** | 1.00 | 1.00 | |
| CNPH*3617A** | 1.02 | 1.02 | |
| CNPV*3017A** | 1.00 | 1.00 | |
| CNPV*3617A** | 1.02 | 1.02 | |
| CNPV*3621A** | 1.02 | 1.02 | |
| CSPH*3012A** | 1.00 | 1.00 | |
| CSPH*3612A** | 1.02 | 1.02 | |
| 40QAC(Q)036–3 | 1.04 | 1.06 | |
| FE4AN(B,F)003 | 1.02 | 0.98 | |
| FE4AN(B,F)005 | 1.04 | 0.91 | |
| FE4ANF002 | 1.02 | 0.98 | |
| FE5ANB004 | 1.00 | 0.88 | |
| FF1ENP030 | 1.00 | 1.00 | |
| FF1ENP036 | 1.02 | 1.02 | |
| FV4BN(B,F)003 | 1.03 | 0.98 | |
| FV4BN(B,F)005 | 1.04 | 0.99 | |
| FV4BNF002 | 1.02 | 0.98 | |
| FX4CN(B,F)036 | 1.02 | 0.98 | |
| FX4CNF030 | 1.00 | 0.96 | |
| FY4ANF030 | 1.00 | 1.00 | |
| FY4ANF036 | 1.02 | 1.02 | |
| CAP**3014A** | 1.00 | 0.96 | 58CV(A,X)070–12 |
| CAP**3614A** | 1.02 | 0.98 | 58CV(A,X)070–12 |
| CNPH*3017A** | 1.00 | 0.96 | 58CV(A,X)070–12 |
| CNPH*3617A** | 1.02 | 0.98 | 58CV(A,X)070–12 |
| CNPV*3014A** | 1.02 | 0.98 | 58CV(A,X)070–12 |
| CSPH*3012A** | 1.00 | 0.96 | 58CV(A,X)070–12 |
| CSPH*3612A** | 1.02 | 0.98 | 58CV(A,X)070–12 |
| CAP**3017A** | 1.00 | 0.96 | 58CV(A,X)090–16 |
| CAP**3617A** | 1.02 | 0.98 | 58CV(A,X)090–16 |
| CNPH*3017A** | 1.00 | 0.96 | 58CV(A,X)090–16 |
| CNPH*3617A** | 1.02 | 0.98 | 58CV(A,X)090–16 |
| CNPV*3017A** | 1.00 | 0.96 | 58CV(A,X)090–16 |
| CNPV*3617A** | 1.02 | 0.98 | 58CV(A,X)090–16 |
| CSPH*3012A** | 1.00 | 0.96 | 58CV(A,X)090–16 |

| COOLING INDOOR MODEL | CAPACITY | POWER | FURNACE MODEL |
|---|---|---|---|
| CSPH*3612A** | 1.02 | 0.98 | 58CV(A,X)090–16 |
| CAP**3621A** | 1.02 | 0.98 | 58CV(A,X)110–20 |
| CNPH*3017A** | 1.00 | 0.96 | 58CV(A,X)110–20 |
| CNPH*3617A** | 1.02 | 0.98 | 58CV(A,X)110–20 |
| CNPV*3621A** | 1.02 | 0.98 | 58CV(A,X)110–20 |
| CSPH*3012A** | 1.00 | 0.96 | 58CV(A,X)110–20 |
| CSPH*3612A** | 1.02 | 0.98 | 58CV(A,X)110–20 |
| CNPH*3017A** | 1.00 | 0.96 | 58CV(A,X)135–22 |
| CNPH*3617A** | 1.02 | 0.98 | 58CV(A,X)135–22 |
| CSPH*3012A** | 1.00 | 0.96 | 58CV(A,X)135–22 |
| CSPH*3612A** | 1.02 | 0.98 | 58CV(A,X)135–22 |
| CNPH*3017A** | 1.00 | 0.96 | 58CV(A,X)155–22 |
| CNPH*3617A** | 1.02 | 0.98 | 58CV(A,X)155–22 |
| CSPH*3012A** | 1.00 | 0.96 | 58CV(A,X)155–22 |
| CSPH*3612A** | 1.02 | 0.98 | 58CV(A,X)155–22 |
| CAP**3017A** | 1.00 | 0.92 | 58MEB040–12 |
| CAP**3617A** | 1.02 | 0.94 | 58MEB040–12 |
| CNPH*3017A** | 1.00 | 0.92 | 58MEB040–12 |
| CNPH*3617A** | 1.02 | 0.94 | 58MEB040–12 |
| CNPV*3017A** | 1.00 | 0.92 | 58MEB040–12 |
| CNPV*3617A** | 1.02 | 0.94 | 58MEB040–12 |
| CSPH*3012A** | 1.00 | 0.92 | 58MEB040–12 |
| CSPH*3612A** | 1.02 | 0.94 | 58MEB040–12 |
| CAP**3017A** | 1.00 | 0.92 | 58MEB060–12 |
| CAP**3617A** | 1.02 | 0.94 | 58MEB060–12 |
| CNPH*3017A** | 1.00 | 0.92 | 58MEB060–12 |
| CNPH*3617A** | 1.02 | 0.94 | 58MEB060–12 |
| CNPV*3017A** | 1.00 | 0.92 | 58MEB060–12 |
| CNPV*3617A** | 1.02 | 0.94 | 58MEB060–12 |
| CSPH*3012A** | 1.00 | 0.92 | 58MEB060–12 |
| CSPH*3612A** | 1.02 | 0.94 | 58MEB060–12 |
| CAP**3017A** | 1.00 | 0.92 | 58MEB080–12 |
| CAP**3617A** | 1.02 | 0.94 | 58MEB080–12 |
| CNPH*3017A** | 1.00 | 0.92 | 58MEB080–12 |
| CNPH*3617A** | 1.02 | 0.94 | 58MEB080–12 |
| CNPV*3017A** | 1.00 | 0.92 | 58MEB080–12 |
| CNPV*3617A** | 1.02 | 0.94 | 58MEB080–12 |
| CSPH*3012A** | 1.00 | 0.92 | 58MEB080–12 |
| CSPH*3612A** | 1.02 | 0.94 | 58MEB080–12 |
| CAP**3017A** | 1.00 | 0.92 | 58MEB080–16 |
| CAP**3617A** | 1.02 | 0.94 | 58MEB080–16 |
| CNPH*3017A** | 1.00 | 0.92 | 58MEB080–16 |

| COOLING INDOOR MODEL | CAPACITY | POWER | FURNACE MODEL |
|---|---|---|---|
| CNPH*3617A** | 1.02 | 0.94 | 58MEB080–16 |
| CNPV*3017A** | 1.00 | 0.92 | 58MEB080–16 |
| CNPV*3617A** | 1.02 | 0.94 | 58MEB080–16 |
| CSPH*3012A** | 1.00 | 0.92 | 58MEB080–16 |
| CSPH*3612A** | 1.02 | 0.94 | 58MEB080–16 |
| CAP**3017A** | 1.00 | 0.96 | 58MV(B,C)060–14 |
| CAP**3617A** | 1.02 | 0.98 | 58MV(B,C)060–14 |
| CNPH*3017A** | 1.00 | 0.96 | 58MV(B,C)060–14 |
| CNPH*3617A** | 1.02 | 0.98 | 58MV(B,C)060–14 |
| CNPV*3017A** | 1.00 | 0.96 | 58MV(B,C)060–14 |
| CNPV*3617A** | 1.02 | 0.98 | 58MV(B,C)060–14 |
| CSPH*3012A** | 1.00 | 0.96 | 58MV(B,C)060–14 |
| CSPH*3612A** | 1.02 | 0.98 | 58MV(B,C)060–14 |
| CAP**3621A** | 1.02 | 0.98 | 58MV(B,C)080–14 |
| CNPH*3017A** | 1.00 | 0.96 | 58MV(B,C)080–14 |
| CNPH*3617A** | 1.02 | 0.98 | 58MV(B,C)080–14 |
| CNPV*3621A** | 1.02 | 0.98 | 58MV(B,C)080–14 |
| CSPH*3012A** | 1.00 | 0.96 | 58MV(B,C)080–14 |
| CSPH*3612A** | 1.02 | 0.98 | 58MV(B,C)080–14 |
| CAP**3621A** | 1.02 | 0.98 | 58MV(B,C)080–20 |
| CNPH*3017A** | 1.00 | 0.96 | 58MV(B,C)080–20 |
| CNPH*3617A** | 1.02 | 0.98 | 58MV(B,C)080–20 |
| CNPV*3621A** | 1.02 | 0.98 | 58MV(B,C)080–20 |
| CSPH*3012A** | 1.00 | 0.96 | 58MV(B,C)080–20 |
| CSPH*3612A** | 1.02 | 0.98 | 58MV(B,C)080–20 |
| CAP**3621A** | 1.02 | 0.98 | 58MV(B,C)100–20 |
| CNPH*3017A** | 1.00 | 0.96 | 58MV(B,C)100–20 |
| CNPH*3617A** | 1.02 | 0.98 | 58MV(B,C)100–20 |
| CNPV*3621A** | 1.02 | 0.98 | 58MV(B,C)100–20 |
| CSPH*3012A** | 1.00 | 0.96 | 58MV(B,C)100–20 |
| CSPH*3612A** | 1.02 | 0.98 | 58MV(B,C)100–20 |
| CNPH*3017A** | 1.00 | 0.96 | 58MV(B,C)120–20 |
| CNPH*3617A** | 1.02 | 0.98 | 58MV(B,C)120–20 |
| CSPH*3012A** | 1.00 | 0.96 | 58MV(B,C)120–20 |
| CSPH*3612A** | 1.02 | 0.98 | 58MV(B,C)120–20 |
| CNPH*3617A** | 1.02 | 0.98 | 58MVB040–14 |
| CSPH*3012A** | 1.00 | 0.96 | 58MVB040–14 |
| CSPH*3612A** | 1.02 | 0.98 | 58MVB040–14 |
| CAP**3017A** | 1.00 | 0.96 | 58PH*070–16 |
| CAP**3617A** | 1.02 | 0.94 | 58PH*070–16 |
| CNPH*3017A** | 1.00 | 0.96 | 58PH*070–16 |
| CNPH*3617A** | 1.02 | 0.94 | 58PH*070–16 |

# DETAILED COOLING CAPACITIES* (CONT.)

**38HDR030 Outdoor Section With CNPV*3014A** Indoor Section**

| COOLING INDOOR MODEL | CAPACITY | POWER | FURNACE MODEL |
|---|---|---|---|
| CNPV*3017A** | 1.00 | 0.96 | 58PH*070–16 |
| CNPV*3617A** | 1.02 | 0.94 | 58PH*070–16 |
| CSPH*3012A** | 1.00 | 0.96 | 58PH*070–16 |
| CSPH*3612A** | 1.02 | 0.94 | 58PH*070–16 |
| CAP**3621A** | 1.02 | 0.94 | 58PH*090–16 |
| CNPH*3017A** | 1.00 | 0.96 | 58PH*090–16 |
| CNPH*3617A** | 1.02 | 0.94 | 58PH*090–16 |
| CNPV*3621A** | 1.02 | 0.94 | 58PH*090–16 |
| CSPH*3012A** | 1.00 | 0.96 | 58PH*090–16 |
| CSPH*3612A** | 1.02 | 0.94 | 58PH*090–16 |

See notes on pg. 34

# DETAILED COOLING CAPACITIES* (CONT.)

| EVAPORATOR AIR | | CONDENSER ENTERING AIR TEMPERATURES °F (°C) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 75 (23.9) | | | 85 (29.4) | | | 95 (35) | | | 105 (40.6) | | | 115 (46.1) | | | 125 (51.7) | | |
| CFM | EWB °F (°C) | Capacity MBtuh† | | Total System KW** | Capacity MBtuh† | | Total System KW** | Capacity MBtuh† | | Total System KW** | Capacity MBtuh† | | Total System KW** | Capacity MBtuh† | | Total System KW** | Capacity MBtuh† | | Total System KW** |
| | | Total | Sens‡ | | Total | Sens‡ | | Total | Sens‡ | | Total | Sens‡ | | Total | Sens‡ | | Total | Sens‡ | |
| 38HDR036 Outdoor Section With CNPV*4221A** Indoor Section | | | | | | | | | | | | | | | | | | | |
| 1050 | 72 (22.2) | 39.85 | 18.85 | 2.42 | 38.03 | 18.23 | 2.68 | 36.08 | 17.58 | 2.98 | 33.99 | 16.89 | 3.30 | 31.72 | 16.14 | 3.65 | 29.20 | 15.33 | 4.03 |
| | 67(19.4) | 36.33 | 23.19 | 2.42 | 34.67 | 22.57 | 2.68 | 32.91 | 21.91 | 2.98 | 31.02 | 21.23 | 3.30 | 28.99 | 20.49 | 3.65 | 26.73 | 19.69 | 4.04 |
| | 62 (16.7) | 33.23 | 27.51 | 2.42 | 31.75 | 26.88 | 2.68 | 30.20 | 26.20 | 2.98 | 28.60 | 28.45 | 3.30 | 27.06 | 27.06 | 3.65 | 25.34 | 25.34 | 4.03 |
| | 57 (13.9) | 32.46 | 32.46 | 2.42 | 31.26 | 31.26 | 2.68 | 29.98 | 29.98 | 2.98 | 28.59 | 28.59 | 3.30 | 27.06 | 27.06 | 3.65 | 25.34 | 25.34 | 4.03 |
| 1200 | 72(22.2) | 40.51 | 19.77 | 2.48 | 38.61 | 19.14 | 2.74 | 36.57 | 18.47 | 3.04 | 34.40 | 17.77 | 3.36 | 32.04 | 17.01 | 3.71 | 29.42 | 16.18 | 4.09 |
| | 67(19.4) | 36.97 | 24.67 | 2.48 | 35.23 | 24.04 | 2.74 | 33.40 | 23.38 | 3.04 | 31.45 | 22.68 | 3.36 | 29.33 | 21.93 | 3.71 | 27.00 | 21.10 | 4.09 |
| | 62 (16.7) | 34.01 | 29.52 | 2.48 | 32.53 | 32.23 | 2.74 | 31.11 | 31.11 | 3.04 | 29.61 | 29.61 | 3.36 | 27.97 | 27.97 | 3.71 | 26.12 | 26.12 | 4.09 |
| | 57 (13.9) | 33.78 | 33.78 | 2.48 | 32.49 | 32.49 | 2.74 | 31.11 | 31.11 | 3.04 | 29.62 | 29.62 | 3.36 | 27.97 | 27.97 | 3.71 | 26.12 | 26.12 | 4.09 |
| 1350 | 72 (22.2) | 40.99 | 20.64 | 2.54 | 39.02 | 19.99 | 2.80 | 36.91 | 19.31 | 3.09 | 34.67 | 18.60 | 3.42 | 32.24 | 17.83 | 3.77 | 29.54 | 16.99 | 4.15 |
| | 67 (19.4) | 37.43 | 26.09 | 2.54 | 35.65 | 25.45 | 2.80 | 33.76 | 24.78 | 3.10 | 31.75 | 24.06 | 3.42 | 29.58 | 23.29 | 3.77 | 27.20 | 22.42 | 4.15 |
| | 62 (16.7) | 34.86 | 34.86 | 2.54 | 33.49 | 33.49 | 2.80 | 32.02 | 32.02 | 3.10 | 30.44 | 30.44 | 3.42 | 28.70 | 28.70 | 3.77 | 26.73 | 26.73 | 4.15 |
| | 57(13.9) | 34.86 | 34.86 | 2.54 | 33.49 | 33.49 | 2.80 | 32.03 | 32.03 | 3.10 | 30.44 | 30.44 | 3.42 | 28.70 | 28.70 | 3.77 | 26.73 | 26.73 | 4.15 |

| COOLING INDOOR MODEL | CAPACITY | POWER | FURNACE MODEL |
|---|---|---|---|
| *CNPV*4221A** | 1.00 | 1.00 | |
| 40QAC(Q)036–3 | 0.96 | 0.92 | |
| CAP**3614A** | 0.98 | 0.98 | |
| CAP**3617A** | 0.99 | 0.99 | |
| CAP**3621A** | 0.99 | 0.99 | |
| CAP**4221A** | 1.00 | 1.00 | |
| CAP**4224A** | 1.00 | 1.00 | |
| CNPF*3618A** | 0.99 | 0.99 | |
| CNPH*3617A** | 0.99 | 0.99 | |
| CNPH*4221A** | 1.00 | 1.00 | |
| CNPV*3617A** | 0.99 | 0.99 | |
| CNPV*3621A** | 0.99 | 0.99 | |
| CNPV*4217A** | 0.99 | 0.99 | |
| CSPH*3612A** | 0.99 | 0.99 | |
| CSPH*4212A** | 1.00 | 1.00 | |
| FE4AN(B,F)003 | 0.99 | 0.95 | |
| FE4AN(B,F)005 | 1.00 | 0.88 | |
| FE4ANB006 | 1.00 | 0.88 | |
| FE4ANF002 | 0.99 | 0.95 | |
| FE5ANB004 | 1.04 | 0.91 | |
| FF1ENP036 | 0.99 | 0.99 | |
| FV4BN(B,F)003 | 0.99 | 0.91 | |
| FV4BN(B,F)005 | 1.02 | 0.93 | |
| FV4BNB006 | 1.00 | 0.88 | |
| FV4BNF002 | 0.99 | 0.95 | |
| FX4CN(B,F)036 | 0.99 | 0.95 | |
| FX4CN(B,F)042 | 1.00 | 0.96 | |
| FY4ANF036 | 0.99 | 0.99 | |
| FY4ANF042 | 1.00 | 1.00 | |
| CAP**3614A** | 0.98 | 0.93 | 58CV(A,X)070–12 |
| CNPH*3617A** | 0.99 | 0.95 | 58CV(A,X)070–12 |
| CNPH*4221A** | 1.00 | 0.96 | 58CV(A,X)070–12 |
| CSPH*3612A** | 0.99 | 0.95 | 58CV(A,X)070–12 |
| CSPH*4212A** | 1.00 | 0.96 | 58CV(A,X)070–12 |
| CAP**3617A** | 0.99 | 0.95 | 58CV(A,X)090–16 |
| CNPH*3617A** | 0.99 | 0.95 | 58CV(A,X)090–16 |
| CNPH*4221A** | 1.00 | 0.96 | 58CV(A,X)090–16 |
| CNPV*3617A** | 0.99 | 0.95 | 58CV(A,X)090–16 |
| CNPV*4217A** | 1.00 | 0.92 | 58CV(A,X)090–16 |
| CSPH*3612A** | 0.99 | 0.95 | 58CV(A,X)090–16 |
| CSPH*4212A** | 1.00 | 0.96 | 58CV(A,X)090–16 |
| CAP**3621A** | 0.99 | 0.95 | 58CV(A,X)110–20 |

| COOLING INDOOR MODEL | CAPACITY | POWER | FURNACE MODEL |
|---|---|---|---|
| CAP**4221A** | 1.00 | 0.96 | 58CV(A,X)110–20 |
| CNPH*3617A** | 0.99 | 0.95 | 58CV(A,X)110–20 |
| CNPH*4221A** | 1.00 | 0.96 | 58CV(A,X)110–20 |
| CNPV*3621A** | 0.99 | 0.95 | 58CV(A,X)110–20 |
| CNPV*4221A** | 1.00 | 0.96 | 58CV(A,X)110–20 |
| CSPH*3612A** | 0.99 | 0.95 | 58CV(A,X)110–20 |
| CSPH*4212A** | 1.00 | 0.96 | 58CV(A,X)110–20 |
| CAP**4224A** | 1.00 | 0.96 | 58CV(A,X)135–22 |
| CNPH*3617A** | 0.99 | 0.95 | 58CV(A,X)135–22 |
| CNPH*4221A** | 1.00 | 0.96 | 58CV(A,X)135–22 |
| CSPH*3612A** | 0.99 | 0.95 | 58CV(A,X)135–22 |
| CSPH*4212A** | 1.00 | 0.96 | 58CV(A,X)135–22 |
| CAP**4224A** | 1.00 | 0.96 | 58CV(A,X)155–22 |
| CNPH*3617A** | 0.99 | 0.95 | 58CV(A,X)155–22 |
| CNPH*4221A** | 1.00 | 0.96 | 58CV(A,X)155–22 |
| CSPH*3612A** | 0.99 | 0.95 | 58CV(A,X)155–22 |
| CSPH*4212A** | 1.00 | 0.96 | 58CV(A,X)155–22 |
| CAP**3617A** | 0.99 | 0.91 | 58MEB040–12 |
| CNPH*3617A** | 0.99 | 0.91 | 58MEB040–12 |
| CNPH*4221A** | 1.00 | 0.92 | 58MEB040–12 |
| CNPV*3617A** | 0.10 | 0.09 | 58MEB040–12 |
| CNPV*4217A** | 1.00 | 0.92 | 58MEB040–12 |
| CSPH*3612A** | 0.99 | 0.91 | 58MEB040–12 |
| CSPH*4212A** | 1.00 | 0.92 | 58MEB040–12 |
| CAP**3617A** | 0.99 | 0.91 | 58MEB060–12 |
| CNPH*3617A** | 0.99 | 0.91 | 58MEB060–12 |
| CNPH*4221A** | 1.02 | 0.93 | 58MEB060–12 |
| CNPV*3617A** | 0.99 | 0.91 | 58MEB060–12 |
| CNPV*4217A** | 1.00 | 0.92 | 58MEB060–12 |
| CSPH*3612A** | 0.99 | 0.91 | 58MEB060–12 |
| CSPH*4212A** | 1.00 | 0.92 | 58MEB060–12 |
| CAP**3617A** | 0.99 | 0.91 | 58MEB080–12 |
| CNPH*3617A** | 0.99 | 0.91 | 58MEB080–12 |
| CNPH*4221A** | 1.00 | 0.92 | 58MEB080–12 |
| CNPV*3617A** | 0.99 | 0.91 | 58MEB080–12 |
| CNPV*4217A** | 1.00 | 0.92 | 58MEB080–12 |
| CSPH*3612A** | 0.99 | 0.91 | 58MEB080–12 |
| CSPH*4212A** | 1.00 | 0.92 | 58MEB080–12 |
| CAP**3617A** | 0.99 | 0.91 | 58MEB080–16 |
| CNPH*3617A** | 0.99 | 0.91 | 58MEB080–16 |
| CNPH*4221A** | 1.00 | 0.92 | 58MEB080–16 |
| CNPV*3617A** | 0.99 | 0.91 | 58MEB080–16 |

| COOLING INDOOR MODEL | CAPACITY | POWER | FURNACE MODEL |
|---|---|---|---|
| CNPV*4217A** | 1.00 | 0.92 | 58MEB080–16 |
| CSPH*3612A** | 0.99 | 0.91 | 58MEB080–16 |
| CSPH*4212A** | 1.00 | 0.92 | 58MEB080–16 |
| CAP**3621A** | 0.99 | 0.91 | 58MEB100–20 |
| CAP**4221A** | 1.00 | 0.92 | 58MEB100–20 |
| CNPH*3617A** | 0.99 | 0.91 | 58MEB100–20 |
| CNPH*4221A** | 1.00 | 0.92 | 58MEB100–20 |
| CNPV*3621A** | 0.99 | 0.91 | 58MEB100–20 |
| CNPV*4221A** | 1.00 | 0.92 | 58MEB100–20 |
| CSPH*3612A** | 0.99 | 0.91 | 58MEB100–20 |
| CSPH*4212A** | 1.00 | 0.92 | 58MEB100–20 |
| CAP**3617A** | 0.99 | 0.95 | 58MV(B,C)060–14 |
| CNPH*3617A** | 0.99 | 0.95 | 58MV(B,C)060–14 |
| CNPH*4221A** | 1.00 | 0.96 | 58MV(B,C)060–14 |
| CNPV*3617A** | 0.99 | 0.95 | 58MV(B,C)060–14 |
| CNPV*4217A** | 1.00 | 0.92 | 58MV(B,C)060–14 |
| CSPH*3612A** | 0.99 | 0.95 | 58MV(B,C)060–14 |
| CSPH*4212A** | 1.00 | 0.96 | 58MV(B,C)060–14 |
| CAP**3621A** | 0.99 | 0.95 | 58MV(B,C)080–14 |
| CAP**4221A** | 1.00 | 0.96 | 58MV(B,C)080–14 |
| CNPH*3617A** | 0.99 | 0.95 | 58MV(B,C)080–14 |
| CNPH*4221A** | 1.00 | 0.96 | 58MV(B,C)080–14 |
| CNPV*3621A** | 0.99 | 0.95 | 58MV(B,C)080–14 |
| CNPV*4221A** | 1.00 | 0.96 | 58MV(B,C)080–14 |
| CSPH*3612A** | 0.99 | 0.95 | 58MV(B,C)080–14 |
| CSPH*4212A** | 1.00 | 0.96 | 58MV(B,C)080–14 |
| CAP**3621A** | 0.99 | 0.95 | 58MV(B,C)080–20 |
| CAP**4221A** | 1.00 | 0.96 | 58MV(B,C)080–20 |
| CNPH*3617A** | 0.99 | 0.95 | 58MV(B,C)080–20 |
| CNPH*4221A** | 1.00 | 0.96 | 58MV(B,C)080–20 |
| CNPV*3621A** | 0.99 | 0.95 | 58MV(B,C)080–20 |
| CNPV*4221A** | 1.00 | 0.96 | 58MV(B,C)080–20 |
| CSPH*3612A** | 0.99 | 0.95 | 58MV(B,C)080–20 |
| CSPH*4212A** | 1.00 | 0.96 | 58MV(B,C)080–20 |
| CAP**3621A** | 0.99 | 0.95 | 58MV(B,C)100–20 |
| CAP**4221A** | 1.00 | 0.96 | 58MV(B,C)100–20 |
| CNPH*3617A** | 0.99 | 0.95 | 58MV(B,C)100–20 |
| CNPH*4221A** | 1.00 | 0.96 | 58MV(B,C)100–20 |
| CNPV*3621A** | 0.99 | 0.95 | 58MV(B,C)100–20 |
| CNPV*4221A** | 1.00 | 0.96 | 58MV(B,C)100–20 |
| CSPH*3612A** | 0.99 | 0.95 | 58MV(B,C)100–20 |
| CSPH*4212A** | 1.00 | 0.96 | 58MV(B,C)100–20 |

# DETAILED COOLING CAPACITIES* (CONT.)

**38HDR036 Outdoor Section With CNPV*4221A** Indoor Section**

| COOLING INDOOR MODEL | CAPACITY | POWER | FURNACE MODEL |
|---|---|---|---|
| CAP**4224A** | 1.00 | 0.96 | 58MV(B,C)120–20 |
| CNPH*3617A** | 0.99 | 0.95 | 58MV(B,C)120–20 |
| CNPH*4221A** | 1.00 | 0.96 | 58MV(B,C)120–20 |
| CSPH*3612A** | 0.99 | 0.95 | 58MV(B,C)120–20 |
| CSPH*4212A** | 1.00 | 0.96 | 58MV(B,C)120–20 |
| CAP**4224A** | 1.00 | 0.96 | 58MVB040–14 |
| CNPH*3617A** | 0.99 | 0.95 | 58MVB040–14 |
| CNPH*4221A** | 1.00 | 0.96 | 58MVB040–14 |
| CSPH*3612A** | 0.99 | 0.95 | 58MVB040–14 |
| CSPH*4212A** | 1.00 | 0.96 | 58MVB040–14 |
| CAP**3614A** | 0.99 | 0.95 | 58PH*045–08 |
| CNPH*3617A** | 0.99 | 0.95 | 58PH*045–08 |
| CNPH*4221A** | 1.00 | 0.96 | 58PH*045–08 |
| CSPH*3612A** | 0.99 | 0.95 | 58PH*045–08 |
| CSPH*4212A** | 1.00 | 0.96 | 58PH*045–08 |
| CAP**3617A** | 0.99 | 0.95 | 58PH*070–16 |
| CNPH*3617A** | 0.99 | 0.95 | 58PH*070–16 |
| CNPH*4221A** | 1.00 | 0.96 | 58PH*070–16 |
| CNPV*3617A** | 0.99 | 0.95 | 58PH*070–16 |
| CNPV*4217A** | 1.00 | 0.92 | 58PH*070–16 |
| CSPH*3612A** | 0.99 | 0.95 | 58PH*070–16 |
| CSPH*4212A** | 1.00 | 0.96 | 58PH*070–16 |
| CAP**3621A** | 0.99 | 0.91 | 58PH*090–16 |
| CAP**4221A** | 1.00 | 0.92 | 58PH*090–16 |
| CNPH*3617A** | 0.99 | 0.91 | 58PH*090–16 |
| CNPH*4221A** | 1.00 | 0.92 | 58PH*090–16 |
| CNPV*3621A** | 0.99 | 0.91 | 58PH*090–16 |
| CNPV*4221A** | 1.00 | 0.92 | 58PH*090–16 |
| CSPH*3612A** | 0.99 | 0.91 | 58PH*090–16 |
| CSPH*4212A** | 1.00 | 0.92 | 58PH*090–16 |
| CAP**3621A** | 0.99 | 0.91 | 58PH*110–20 |
| CAP**4221A** | 1.02 | 0.93 | 58PH*110–20 |
| CNPH*3617A** | 0.99 | 0.91 | 58PH*110–20 |
| CNPH*4221A** | 1.02 | 0.93 | 58PH*110–20 |
| CNPV*3621A** | 0.99 | 0.91 | 58PH*110–20 |
| CNPV*4221A** | 1.00 | 0.92 | 58PH*110–20 |
| CSPH*3612A** | 0.99 | 0.91 | 58PH*110–20 |
| CSPH*4212A** | 1.00 | 0.92 | 58PH*110–20 |

See notes on pg. 34

# DETAILED COOLING CAPACITIES* (CONT.)

| EVAPORATOR AIR | | CONDENSER ENTERING AIR TEMPERATURES °F (°C) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 75 (23.9) | | | 85 (29.4) | | | 95 (35) | | | 105 (40.6) | | | 115 (46.1) | | | 125 (51.7) | | |
| CFM | EWB °F (°C) | Capacity MBtuh† | | Total System KW** | Capacity MBtuh† | | Total System KW** | Capacity MBtuh† | | Total System KW** | Capacity MBtuh† | | Total System KW** | Capacity MBtuh† | | Total System KW** | Capacity MBtuh† | | Total System KW** |
| | | Total | Sens‡ | | Total | Sens‡ | | Total | Sens‡ | | Total | Sens‡ | | Total | Sens‡ | | Total | Sens‡ | |
| 38HDR048 Outdoor Section With CNPV*4821A** Indoor Section | | | | | | | | | | | | | | | | | | | |
| 1460 | 72 (22.2) | 57.22 | 27.09 | 3.31 | 54.16 | 26.03 | 3.74 | 50.83 | 24.90 | 4.20 | 47.23 | 23.69 | 4.69 | 43.24 | 22.38 | 5.21 | 38.87 | 20.99 | 5.76 |
| | 67(19.4) | 52.21 | 33.21 | 3.33 | 49.49 | 32.17 | 3.76 | 46.57 | 31.08 | 4.22 | 43.40 | 29.91 | 4.71 | 39.95 | 28.66 | 5.23 | 36.03 | 27.26 | 5.77 |
| | 62 (16.7) | 47.74 | 39.31 | 3.35 | 45.37 | 38.29 | 3.78 | 42.88 | 37.19 | 4.23 | 40.25 | 39.91 | 4.72 | 37.64 | 37.64 | 5.23 | 34.63 | 34.63 | 5.78 |
| | 57 (13.9) | 46.44 | 46.44 | 3.36 | 44.53 | 44.53 | 3.78 | 42.48 | 42.48 | 4.23 | 40.21 | 40.21 | 4.72 | 37.65 | 37.65 | 5.23 | 34.63 | 34.63 | 5.78 |
| 1650 | 72(22.2) | 58.13 | 28.26 | 3.37 | 54.91 | 27.17 | 3.81 | 51.42 | 26.01 | 4.27 | 47.67 | 24.78 | 4.76 | 43.52 | 23.45 | 5.28 | 39.26 | 22.10 | 5.84 |
| | 67(19.4) | 53.07 | 35.09 | 3.40 | 50.21 | 34.03 | 3.83 | 47.16 | 32.91 | 4.29 | 43.87 | 31.73 | 4.78 | 40.28 | 30.44 | 5.30 | 36.23 | 28.99 | 5.85 |
| | 62 (16.7) | 48.75 | 41.89 | 3.42 | 46.32 | 40.79 | 3.85 | 43.85 | 43.85 | 4.30 | 41.42 | 41.42 | 4.79 | 38.64 | 38.64 | 5.31 | 35.37 | 35.37 | 5.85 |
| | 57 (13.9) | 48.17 | 48.17 | 3.43 | 46.11 | 46.11 | 3.85 | 43.88 | 43.88 | 4.30 | 41.42 | 41.42 | 4.79 | 38.64 | 38.64 | 5.31 | 35.37 | 35.37 | 5.85 |
| 1850 | 72 (22.2) | 58.83 | 29.41 | 3.45 | 55.48 | 28.31 | 3.88 | 51.86 | 27.12 | 4.35 | 47.97 | 25.87 | 4.84 | 43.73 | 24.52 | 5.36 | 39.89 | 23.26 | 5.92 |
| | 67 (19.4) | 53.74 | 36.97 | 3.48 | 50.78 | 35.90 | 3.91 | 47.62 | 34.76 | 4.37 | 44.22 | 33.55 | 4.86 | 40.51 | 32.22 | 5.38 | 36.39 | 30.70 | 5.93 |
| | 62 (16.7) | 49.74 | 44.35 | 3.50 | 47.48 | 47.48 | 3.92 | 45.09 | 45.09 | 4.38 | 42.44 | 42.44 | 4.87 | 39.46 | 39.46 | 5.38 | 35.96 | 35.96 | 5.93 |
| | 57(13.9) | 49.69 | 49.69 | 3.50 | 47.49 | 47.49 | 3.92 | 45.09 | 45.09 | 4.38 | 42.45 | 42.45 | 4.87 | 39.46 | 39.46 | 5.38 | 35.97 | 35.97 | 5.93 |

| COOLING INDOOR MODEL | CAPACITY | POWER | FURNACE MODEL |
|---|---|---|---|
| *CNPV*4821A** | 1.00 | 1.00 | |
| 40QAC048–3 | 0.97 | 0.93 | |
| CAP**4817A** | 0.99 | 0.99 | |
| CAP**4821A** | 1.00 | 1.00 | |
| CAP**4824A** | 1.00 | 1.00 | |
| CAP**6021A** | 1.01 | 1.01 | |
| CAP**6024A** | 1.01 | 1.01 | |
| CNPF*4818A** | 0.98 | 0.98 | |
| CNPH*4821A** | 1.00 | 1.00 | |
| CNPH*6024A** | 1.01 | 1.01 | |
| CNPV*4824A** | 1.00 | 1.00 | |
| CNPV*6024A** | 1.01 | 1.01 | |
| CSPH*4812A** | 1.00 | 1.00 | |
| CSPH*6012A** | 1.01 | 1.01 | |
| FE4AN(B,F)005 | 1.00 | 0.96 | |
| FE4ANB006 | 1.01 | 0.97 | |
| FV4BN(B,F)005 | 1.00 | 0.96 | |
| FV4BNB006 | 1.01 | 0.97 | |
| FX4CN(B,F)048 | 1.00 | 0.96 | |
| FX4CN(B,F)060 | 1.01 | 0.97 | |
| FY4ANB060 | 1.01 | 1.01 | |
| FY4ANF048 | 1.00 | 1.00 | |
| CAP**4817A** | 0.99 | 0.95 | 58CV(A,X)090–16 |
| CNPH*4821A** | 0.99 | 0.95 | 58CV(A,X)090–16 |
| CNPH*6024A** | 1.00 | 0.96 | 58CV(A,X)090–16 |
| CSPH*4812A** | 0.99 | 0.95 | 58CV(A,X)090–16 |
| CSPH*6012A** | 1.00 | 0.96 | 58CV(A,X)090–16 |
| CAP**4821A** | 0.99 | 0.95 | 58CV(A,X)110–20 |
| CAP**6021A** | 1.00 | 0.96 | 58CV(A,X)110–20 |
| CNPH*4821A** | 0.99 | 0.95 | 58CV(A,X)110–20 |
| CNPH*6024A** | 1.00 | 0.96 | 58CV(A,X)110–20 |
| CNPV*4821A** | 0.99 | 0.95 | 58CV(A,X)110–20 |
| CSPH*4812A** | 0.99 | 0.95 | 58CV(A,X)110–20 |
| CSPH*6012A** | 1.00 | 0.96 | 58CV(A,X)110–20 |
| CAP**4824A** | 0.99 | 0.95 | 58CV(A,X)135–22 |
| CAP**6024A** | 1.00 | 0.96 | 58CV(A,X)135–22 |
| CNPH*4821A** | 0.99 | 0.95 | 58CV(A,X)135–22 |
| CNPH*6024A** | 1.00 | 0.96 | 58CV(A,X)135–22 |
| CNPV*4824A** | 0.99 | 0.95 | 58CV(A,X)135–22 |
| CNPV*6024A** | 1.00 | 0.96 | 58CV(A,X)135–22 |
| CSPH*4812A** | 0.99 | 0.95 | 58CV(A,X)135–22 |
| CSPH*6012A** | 1.00 | 0.96 | 58CV(A,X)135–22 |

| COOLING INDOOR MODEL | CAPACITY | POWER | FURNACE MODEL |
|---|---|---|---|
| CAP**4824A** | 0.99 | 0.95 | 58CV(A,X)155–22 |
| CAP**6024A** | 1.00 | 0.96 | 58CV(A,X)155–22 |
| CNPH*4821A** | 0.99 | 0.95 | 58CV(A,X)155–22 |
| CNPH*6024A** | 1.00 | 0.96 | 58CV(A,X)155–22 |
| CNPV*4824A** | 0.99 | 0.95 | 58CV(A,X)155–22 |
| CNPV*6024A** | 1.00 | 0.96 | 58CV(A,X)155–22 |
| CSPH*4812A** | 0.99 | 0.95 | 58CV(A,X)155–22 |
| CSPH*6012A** | 1.00 | 0.96 | 58CV(A,X)155–22 |
| CAP**4817A** | 0.99 | 0.95 | 58MEB080–16 |
| CNPH*4821A** | 0.99 | 0.95 | 58MEB080–16 |
| CNPH*6024A** | 1.00 | 0.96 | 58MEB080–16 |
| CSPH*4812A** | 0.99 | 0.95 | 58MEB080–16 |
| CSPH*6012A** | 1.00 | 0.92 | 58MEB080–16 |
| CAP**4821A** | 0.99 | 0.95 | 58MEB100–20 |
| CAP**6021A** | 1.00 | 0.92 | 58MEB100–20 |
| CNPH*4821A** | 0.99 | 0.95 | 58MEB100–20 |
| CNPH*6024A** | 1.00 | 0.92 | 58MEB100–20 |
| CNPV*4821A** | 0.99 | 0.95 | 58MEB100–20 |
| CSPH*4812A** | 0.99 | 0.95 | 58MEB100–20 |
| CSPH*6012A** | 1.00 | 0.92 | 58MEB100–20 |
| CAP**4824A** | 0.99 | 0.95 | 58MEB120–20 |
| CAP**6024A** | 1.00 | 0.92 | 58MEB120–20 |
| CNPH*4821A** | 0.99 | 0.95 | 58MEB120–20 |
| CNPH*6024A** | 1.00 | 0.92 | 58MEB120–20 |
| CNPV*4824A** | 0.99 | 0.95 | 58MEB120–20 |
| CNPV*6024A** | 1.00 | 0.92 | 58MEB120–20 |
| CSPH*4812A** | 0.99 | 0.95 | 58MEB120–20 |
| CSPH*6012A** | 1.00 | 0.92 | 58MEB120–20 |
| CAP**4821A** | 0.98 | 0.94 | 58MV(B,C)080–20 |
| CAP**6021A** | 1.00 | 0.96 | 58MV(B,C)080–20 |
| CNPH*4821A** | 0.99 | 0.95 | 58MV(B,C)080–20 |
| CNPH*6024A** | 1.00 | 0.96 | 58MV(B,C)080–20 |
| CNPV*4821A** | 0.99 | 0.95 | 58MV(B,C)080–20 |
| CSPH*4812A** | 0.99 | 0.95 | 58MV(B,C)080–20 |
| CSPH*6012A** | 1.00 | 0.96 | 58MV(B,C)080–20 |
| CAP**4821A** | 0.99 | 0.95 | 58MV(B,C)100–20 |
| CAP**6021A** | 1.00 | 0.96 | 58MV(B,C)100–20 |
| CNPH*4821A** | 0.99 | 0.95 | 58MV(B,C)100–20 |
| CNPH*6024A** | 1.00 | 0.96 | 58MV(B,C)100–20 |
| CNPV*4821A** | 0.99 | 0.95 | 58MV(B,C)100–20 |
| CSPH*4812A** | 0.99 | 0.95 | 58MV(B,C)100–20 |
| CSPH*6012A** | 1.00 | 0.96 | 58MV(B,C)100–20 |

| COOLING INDOOR MODEL | CAPACITY | POWER | FURNACE MODEL |
|---|---|---|---|
| CAP**4824A** | 0.99 | 0.95 | 58MV(B,C)120–20 |
| CAP**6024A** | 1.00 | 0.96 | 58MV(B,C)120–20 |
| CNPH*4821A** | 0.99 | 0.95 | 58MV(B,C)120–20 |
| CNPH*6024A** | 1.00 | 0.96 | 58MV(B,C)120–20 |
| CNPV*4824A** | 0.99 | 0.95 | 58MV(B,C)120–20 |
| CNPV*6024A** | 1.00 | 0.96 | 58MV(B,C)120–20 |
| CSPH*4812A** | 0.99 | 0.95 | 58MV(B,C)120–20 |
| CSPH*6012A** | 1.00 | 0.96 | 58MV(B,C)120–20 |
| CAP**4817A** | 0.99 | 0.95 | 58PH*070–16 |
| CAP**4821A** | 0.99 | 0.95 | 58PH*090–16 |
| CAP**6021A** | 1.00 | 0.92 | 58PH*090–16 |
| CNPH*4821A** | 0.99 | 0.95 | 58PH*090–16 |
| CNPH*6024A** | 1.00 | 0.92 | 58PH*090–16 |
| CNPV*4821A** | 0.99 | 0.95 | 58PH*090–16 |
| CSPH*4812A** | 0.99 | 0.95 | 58PH*090–16 |
| CSPH*6012A** | 1.00 | 0.92 | 58PH*090–16 |
| CAP**4821A** | 0.99 | 0.95 | 58PH*110–20 |
| CAP**6021A** | 1.00 | 0.92 | 58PH*110–20 |
| CNPH*4821A** | 0.99 | 0.95 | 58PH*110–20 |
| CNPH*6024A** | 1.00 | 0.92 | 58PH*110–20 |
| CNPV*4821A** | 0.99 | 0.95 | 58PH*110–20 |
| CSPH*4812A** | 0.99 | 0.95 | 58PH*110–20 |
| CSPH*6012A** | 1.00 | 0.92 | 58PH*110–20 |
| CAP**4824A** | 0.99 | 0.95 | 58PH*135–20 |
| CAP**6024A** | 1.00 | 0.92 | 58PH*135–20 |
| CNPH*4821A** | 0.99 | 0.95 | 58PH*135–20 |
| CNPH*6024A** | 1.00 | 0.92 | 58PH*135–20 |
| CNPV*4821A** | 0.99 | 0.95 | 58PH*135–20 |
| CNPV*6024A** | 1.00 | 0.92 | 58PH*135–20 |
| CSPH*4812A** | 0.99 | 0.95 | 58PH*135–20 |
| CSPH*6012A** | 1.00 | 0.92 | 58PH*135–20 |

See notes on pg. 34

# DETAILED COOLING CAPACITIES** (CONT.)

| EVAPORATOR AIR | | CONDENSER ENTERING AIR TEMPERATURES °F (°C) | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 75 (23.9) | | | 85 (29.4) | | | 95 (35) | | | 105 (40.6) | | | 115 (46.1) | | | 125 (51.7) | | |
| CFM | EWB °F (°C) | Capacity MBtuh† | | Total System KW** | Capacity MBtuh† | | Total System KW** | Capacity MBtuh† | | Total System KW** | Capacity MBtuh† | | Total System KW** | Capacity MBtuh† | | Total System KW** | Capacity MBtuh† | | Total System KW** |
| | | Total | Sens‡ | | Total | Sens‡ | | Total | Sens‡ | | Total | Sens‡ | | Total | Sens‡ | | Total | Sens‡ | |
| 38HDR060 Outdoor Section With CNPV*6024A** Indoor Section | | | | | | | | | | | | | | | | | | | |
| 1750 | 72 (22.2) | 68.88 | 33.36 | 4.20 | 65.13 | 32.05 | 4.64 | 60.97 | 30.62 | 5.12 | 56.47 | 29.10 | 5.64 | 51.66 | 27.52 | 6.20 | 46.31 | 25.80 | 6.80 |
| | 67(19.4) | 63.28 | 41.18 | 4.15 | 59.98 | 39.91 | 4.59 | 56.34 | 38.52 | 5.08 | 52.38 | 37.05 | 5.60 | 48.00 | 35.44 | 6.17 | 43.23 | 33.69 | 6.77 |
| | 62 (16.7) | 58.24 | 48.95 | 4.11 | 55.37 | 47.69 | 4.55 | 52.27 | 46.30 | 5.04 | 48.91 | 48.85 | 5.57 | 45.63 | 45.63 | 6.15 | 41.69 | 41.69 | 6.76 |
| | 57 (13.9) | 56.77 | 56.77 | 4.09 | 54.45 | 54.45 | 4.54 | 51.86 | 51.86 | 5.03 | 48.95 | 48.95 | 5.57 | 45.63 | 45.63 | 6.15 | 41.69 | 41.69 | 6.76 |
| 2000 | 72(22.2) | 69.89 | 34.93 | 4.31 | 65.94 | 33.59 | 4.75 | 61.58 | 32.12 | 5.23 | 56.96 | 30.59 | 5.74 | 52.01 | 29.02 | 6.31 | 47.30 | 27.45 | 6.92 |
| | 67(19.4) | 64.28 | 43.75 | 4.26 | 60.81 | 42.45 | 4.70 | 57.00 | 41.04 | 5.18 | 52.88 | 39.53 | 5.71 | 48.32 | 37.86 | 6.27 | 43.82 | 36.17 | 6.88 |
| | 62 (16.7) | 59.48 | 52.47 | 4.22 | 56.55 | 51.08 | 4.66 | 53.58 | 53.58 | 5.15 | 50.40 | 50.40 | 5.68 | 46.78 | 46.78 | 6.26 | 42.62 | 42.62 | 6.87 |
| | 57 (13.9) | 58.96 | 58.96 | 4.21 | 56.42 | 56.42 | 4.66 | 53.58 | 53.58 | 5.15 | 50.40 | 50.40 | 5.68 | 46.78 | 46.78 | 6.26 | 42.60 | 42.60 | 6.87 |
| 2250 | 72 (22.2) | 70.60 | 36.41 | 4.42 | 66.50 | 35.04 | 4.86 | 61.97 | 33.55 | 5.33 | 57.25 | 32.02 | 5.85 | 52.14 | 30.44 | 6.41 | 48.41 | 29.01 | 7.04 |
| | 67 (19.4) | 65.01 | 46.21 | 4.37 | 61.41 | 44.89 | 4.81 | 57.46 | 43.44 | 5.29 | 53.20 | 41.88 | 5.81 | 48.56 | 40.17 | 6.37 | 44.28 | 38.42 | 6.99 |
| | 62 (16.7) | 60.67 | 60.67 | 4.33 | 58.00 | 58.00 | 4.78 | 54.94 | 54.94 | 5.26 | 51.52 | 51.52 | 5.79 | 47.63 | 47.63 | 6.36 | 43.18 | 43.18 | 6.98 |
| | 57(13.9) | 60.73 | 60.73 | 4.33 | 58.00 | 58.00 | 4.78 | 54.94 | 54.94 | 5.26 | 51.52 | 51.52 | 5.79 | 47.63 | 47.63 | 6.36 | 43.14 | 43.14 | 6.98 |

| COOLING INDOOR MODEL | CAPACITY | POWER | FURNACE MODEL |
|---|---|---|---|
| *CNPV*6024A** | 1.00 | 1.00 | |
| 40QAC060–3 | 0.98 | 0.98 | |
| CAP**6021A** | 1.00 | 1.00 | |
| CAP**6024A** | 1.00 | 1.00 | |
| CNPH*6024A** | 1.00 | 1.00 | |
| CSPH*6012A** | 1.00 | 1.00 | |
| FE4ANB006 | 1.01 | 1.01 | |
| FV4BNB006 | 1.01 | 1.01 | |
| FX4CN(B,F)060 | 1.01 | 1.01 | |
| FY4ANB060 | 1.00 | 1.00 | |
| CAP**6021A** | 0.98 | 0.98 | 58CV(A,X)110–20 |
| CNPH*6024A** | 0.98 | 0.98 | 58CV(A,X)110–20 |
| CSPH*6012A** | 0.98 | 0.98 | 58CV(A,X)110–20 |
| CAP**6024A** | 0.98 | 0.98 | 58CV(A,X)135–22 |

| COOLING INDOOR MODEL | CAPACITY | POWER | FURNACE MODEL |
|---|---|---|---|
| CNPH*6024A** | 0.98 | 0.98 | 58CV(A,X)135–22 |
| CNPV*6024A** | 0.98 | 0.98 | 58CV(A,X)135–22 |
| CSPH*6012A** | 0.98 | 0.98 | 58CV(A,X)135–22 |
| CAP**6024A** | 0.98 | 0.98 | 58CV(A,X)155–22 |
| CNPH*6024A** | 0.98 | 0.98 | 58CV(A,X)155–22 |
| CNPV*6024A** | 0.98 | 0.98 | 58CV(A,X)155–22 |
| CSPH*6012A** | 0.98 | 0.98 | 58CV(A,X)155–22 |
| CNPH*6024A** | 0.98 | 0.98 | 58MEB080–16 |
| CSPH*6012A** | 0.98 | 0.98 | 58MEB080–16 |
| CAP**6021A** | 0.98 | 0.98 | 58MEB100–20 |
| CNPH*6024A** | 0.98 | 0.98 | 58MEB100–20 |
| CSPH*6012A** | 0.98 | 0.98 | 58MEB100–20 |
| CAP**6024A** | 0.98 | 0.98 | 58MEB120–20 |
| CNPH*6024A** | 0.98 | 0.98 | 58MEB120–20 |

| COOLING INDOOR MODEL | CAPACITY | POWER | FURNACE MODEL |
|---|---|---|---|
| CNPV*6024A** | 0.98 | 0.98 | 58MEB120–20 |
| CSPH*6012A** | 0.98 | 0.98 | 58MEB120–20 |
| CSPH*6012A** | 0.98 | 0.98 | 58MV(B,C)120–20 |
| CAP**6021A** | 0.98 | 0.98 | 58PH*090–16 |
| CNPH*6024A** | 0.98 | 0.98 | 58PH*090–16 |
| CSPH*6012A** | 0.98 | 0.98 | 58PH*090–16 |
| CAP**6021A** | 0.98 | 0.98 | 58PH*110–20 |
| CNPH*6024A** | 0.98 | 0.98 | 58PH*110–20 |
| CSPH*6012A** | 0.98 | 0.98 | 58PH*110–20 |
| CAP**6024A** | 0.98 | 0.98 | 58PH*135–20 |
| CNPH*6024A** | 0.98 | 0.98 | 58PH*135–20 |
| CNPV*6024A** | 0.98 | 0.98 | 58PH*135–20 |
| CSPH*6012A** | 0.98 | 0.98 | 58PH*135–20 |

**NOTE**: When the required data fall between the published data, interpolation may be performed. Extrapolation is not an acceptable practice.

* Detailed cooling capacities are based on indoor and outdoor unit at the same elevation per the latest edition of AHRI standard 210/240. If additional tubing length and/or indoor unit is located above outdoor unit, a slight variation in capacity may occur.

† Total and sensible capacities are net capacities. Blower motor heat has been subtracted.

‡ Sensible capacities shown are based on 80° F (27° C) entering air at the indoor coil. For sensible capacities at other than 80° F (27° C), deduct 835 Btuh (245 kW) per 1000 CFM (480 L/S) of indoor coil air for each degree below 80° F (27° C), or add 835 Btuh (245 kW) per 1000 CFM (480 L/S) of indoor coil air per degree above 80° F (27° C).
When the required data fall between the published data, interpolation may be performed.

** Total system kW is total of indoor and outdoor unit kilowatts.

# CONDENSER ONLY RATINGS*

| SST °F (°C) | | CONDENSER ENTERING AIR TEMPERATURES °F (°C) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 55 (12.8) | 65 (18.3) | 75 (23.9) | 85 (29.4) | 95 (35) | 105 (40.6) | 115 (46.1) | 125 (51.7) |
| **38HDR018–31** | | | | | | | | | |
| 30 (–1.6) | TCG | 16.20 | 15.30 | 14.30 | 13.40 | 12.40 | 11.40 | 10.30 | 9.20 |
| | SDT | 67.40 | 77.00 | 86.50 | 96.00 | 105.50 | 114.90 | 124.40 | 133.70 |
| | KW | 0.86 | 0.98 | 1.11 | 1.26 | 1.42 | 1.59 | 1.77 | 1.96 |
| 35 (1.7) | TCG | 17.90 | 16.90 | 15.90 | 14.80 | 13.80 | 12.70 | 11.60 | 10.40 |
| | SDT | 68.50 | 78.00 | 87.50 | 97.00 | 106.40 | 115.80 | 125.20 | 134.50 |
| | KW | 0.86 | 0.98 | 1.11 | 1.26 | 1.42 | 1.59 | 1.78 | 1.98 |
| 40 (4.4) | TCG | 19.70 | 18.60 | 17.50 | 16.40 | 15.20 | 14.10 | 12.90 | 11.60 |
| | SDT | 69.70 | 79.10 | 88.60 | 98.00 | 107.40 | 116.80 | 126.10 | 135.30 |
| | KW | 0.85 | 0.97 | 1.11 | 1.26 | 1.42 | 1.60 | 1.79 | 1.99 |
| 45 (7.2) | TCG | 21.60 | 20.40 | 19.20 | 18.00 | 16.80 | 15.50 | 14.20 | 12.80 |
| | SDT | 70.90 | 80.30 | 89.70 | 99.00 | 108.40 | 117.70 | 127.00 | 136.10 |
| | KW | 0.85 | 0.97 | 1.11 | 1.26 | 1.42 | 1.60 | 1.79 | 2.00 |
| 50 (10) | TCG | 23.60 | 22.30 | 21.10 | 19.70 | 18.40 | 17.00 | 15.60 | 14.10 |
| | SDT | 72.20 | 81.50 | 90.80 | 100.10 | 109.40 | 118.60 | 127.80 | 136.90 |
| | KW | 0.85 | 0.97 | 1.11 | 1.26 | 1.42 | 1.60 | 1.79 | 2.00 |
| 55 (12.8) | TCG | 25.70 | 24.30 | 22.90 | 21.50 | 20.00 | 18.60 | 17.00 | 15.40 |
| | SDT | 73.50 | 82.70 | 92.00 | 101.20 | 110.40 | 119.60 | 128.70 | 137.70 |
| | KW | 0.85 | 0.97 | 1.10 | 1.25 | 1.42 | 1.60 | 1.79 | 2.00 |
| **38HDR024–32** | | | | | | | | | |
| 30 (–1.6) | TCG | 22.10 | 20.90 | 19.60 | 18.30 | 16.90 | 15.50 | 14.00 | 12.40 |
| | SDT | 69.00 | 78.50 | 88.00 | 97.40 | 106.80 | 116.10 | 125.30 | 134.50 |
| | KW | 1.08 | 1.24 | 1.41 | 1.60 | 1.80 | 2.02 | 2.25 | 2.48 |
| 35 (1.7) | TCG | 24.30 | 23.00 | 21.70 | 20.30 | 18.80 | 17.20 | 15.60 | 13.80 |
| | SDT | 70.30 | 79.80 | 89.20 | 98.60 | 107.90 | 117.10 | 126.30 | 135.40 |
| | KW | 1.09 | 1.24 | 1.42 | 1.61 | 1.82 | 2.04 | 2.28 | 2.52 |
| 40 (4.4) | TCG | 26.80 | 25.30 | 23.90 | 22.30 | 20.70 | 19.00 | 17.20 | 15.30 |
| | SDT | 71.70 | 81.10 | 90.50 | 99.80 | 109.10 | 118.20 | 127.30 | 136.30 |
| | KW | 1.10 | 1.26 | 1.43 | 1.62 | 1.83 | 2.06 | 2.30 | 2.55 |
| 45 (7.2) | TCG | 29.40 | 27.80 | 26.20 | 24.50 | 22.70 | 20.90 | 18.90 | 16.70 |
| | SDT | 73.20 | 82.60 | 91.90 | 101.10 | 110.20 | 119.30 | 128.30 | 137.10 |
| | KW | 1.11 | 1.27 | 1.44 | 1.64 | 1.85 | 2.08 | 2.32 | 2.57 |
| 50 (10) | TCG | 32.10 | 30.40 | 28.60 | 26.80 | 24.80 | 22.70 | 20.50 | 18.10 |
| | SDT | 74.80 | 84.10 | 93.30 | 102.40 | 111.50 | 120.40 | 129.20 | 137.90 |
| | KW | 1.12 | 1.28 | 1.46 | 1.65 | 1.86 | 2.09 | 2.33 | 2.59 |
| 55 (12.8) | TCG | 35.00 | 33.10 | 31.20 | 29.10 | 26.90 | 24.60 | 22.20 | 19.50 |
| | SDT | 76.40 | 85.60 | 94.70 | 103.80 | 112.70 | 121.50 | 130.20 | 138.60 |
| | KW | 1.13 | 1.29 | 1.47 | 1.66 | 1.88 | 2.10 | 2.35 | 2.60 |
| **38HDR030–31** | | | | | | | | | |
| 30 (–1.6) | TCG | 26.20 | 24.70 | 23.20 | 21.70 | 20.10 | 18.40 | 16.80 | 15.30 |
| | SDT | 72.00 | 82.30 | 92.90 | 103.80 | 115.00 | 126.90 | 139.00 | 148.90 |
| | KW | 1.30 | 1.48 | 1.69 | 1.92 | 2.19 | 2.50 | 2.84 | 3.12 |
| 35 (1.7) | TCG | 28.80 | 27.30 | 25.70 | 24.10 | 22.40 | 20.60 | 18.90 | 17.40 |
| | SDT | 73.10 | 83.50 | 94.00 | 104.80 | 116.10 | 127.70 | 139.50 | 149.30 |
| | KW | 1.30 | 1.49 | 1.69 | 1.93 | 2.21 | 2.52 | 2.86 | 3.15 |
| 40 (4.4) | TCG | 31.70 | 30.10 | 28.40 | 26.60 | 24.80 | 23.00 | 21.20 | 19.60 |
| | SDT | 74.30 | 84.70 | 95.20 | 105.90 | 117.10 | 128.60 | 140.00 | 149.70 |
| | KW | 1.31 | 1.49 | 1.70 | 1.94 | 2.22 | 2.53 | 2.87 | 3.18 |
| 45 (7.2) | TCG | 34.80 | 33.10 | 31.20 | 29.40 | 27.40 | 25.50 | 23.60 | 21.90 |
| | SDT | 75.60 | 85.90 | 96.40 | 107.10 | 118.10 | 129.40 | 140.60 | 150.10 |
| | KW | 1.31 | 1.50 | 1.71 | 1.95 | 2.22 | 2.54 | 2.88 | 3.19 |
| 50 (10) | TCG | 38.20 | 36.20 | 34.30 | 32.30 | 30.30 | 28.20 | 26.20 | 24.40 |
| | SDT | 76.90 | 87.20 | 97.60 | 108.20 | 119.20 | 130.30 | 141.10 | 150.50 |
| | KW | 1.32 | 1.50 | 1.71 | 1.95 | 2.23 | 2.55 | 2.89 | 3.20 |
| 55 (12.8) | TCG | 41.70 | 39.70 | 37.60 | 35.50 | 33.30 | 31.10 | 29.00 | 27.10 |
| | SDT | 78.30 | 88.50 | 98.90 | 109.40 | 120.20 | 131.20 | 141.80 | 150.90 |
| | KW | 1.32 | 1.51 | 1.72 | 1.96 | 2.24 | 2.55 | 2.89 | 3.20 |
| **38HDR036–31** | | | | | | | | | |
| 30 (–1.6) | TCG | 30.10 | 28.50 | 26.80 | 25.10 | 23.30 | 21.50 | 19.60 | 17.60 |
| | SDT | 70.90 | 80.80 | 90.90 | 101.00 | 111.20 | 121.60 | 132.30 | 143.30 |
| | KW | 1.50 | 1.71 | 1.94 | 2.20 | 2.50 | 2.83 | 3.19 | 3.58 |
| 35 (1.7) | TCG | 33.20 | 31.50 | 29.70 | 27.80 | 25.90 | 24.00 | 21.90 | 19.90 |
| | SDT | 72.00 | 82.00 | 92.00 | 102.10 | 112.30 | 122.80 | 133.30 | 143.80 |
| | KW | 1.50 | 1.71 | 1.95 | 2.21 | 2.52 | 2.85 | 3.21 | 3.60 |
| 40 (4.4) | TCG | 36.50 | 34.60 | 32.70 | 30.70 | 28.70 | 26.60 | 24.40 | 22.30 |
| | SDT | 73.30 | 83.20 | 93.20 | 103.20 | 113.40 | 123.60 | 134.10 | 144.50 |
| | KW | 1.51 | 1.72 | 1.95 | 2.22 | 2.52 | 2.85 | 3.23 | 3.63 |
| 45 (7.2) | TCG | 40.10 | 38.10 | 36.00 | 33.80 | 31.70 | 29.40 | 27.10 | 24.80 |
| | SDT | 74.60 | 84.40 | 94.40 | 104.50 | 113.80 | 124.50 | 135.20 | 145.30 |
| | KW | 1.51 | 1.72 | 1.96 | 2.23 | 2.51 | 2.86 | 3.26 | 3.65 |
| 50 (10) | TCG | 43.90 | 41.70 | 39.50 | 37.10 | 34.90 | 32.40 | 30.00 | 27.60 |
| | SDT | 75.90 | 85.80 | 95.70 | 105.90 | 115.50 | 125.90 | 136.20 | 146.00 |
| | KW | 1.52 | 1.73 | 1.97 | 2.24 | 2.54 | 2.89 | 3.27 | 3.66 |
| 55 (12.8) | TCG | 48.00 | 45.70 | 43.30 | 40.70 | 38.30 | 35.70 | 33.10 | 30.50 |
| | SDT | 77.40 | 87.10 | 97.00 | 107.10 | 116.70 | 126.80 | 137.00 | 146.70 |
| | KW | 1.53 | 1.74 | 1.98 | 2.25 | 2.55 | 2.89 | 3.28 | 3.66 |

See notes on page 38

# CONDENSER ONLY RATINGS* CONTINUED

| SST °F (°C) | | CONDENSER ENTERING AIR TEMPERATURES °F (°C) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | 55 (12.8) | 65 (18.3) | 75 (23.9) | 85 (29.4) | 95 (35) | 105 (40.6) | 115 (46.1) | 125 (51.7) |
| **38HDR048–32** | | | | | | | | | |
| **30 (–1.6)** | TCG | 48.40 | 45.50 | 42.50 | 39.50 | 36.20 | 32.90 | 30.60 | 28.10 |
| | SDT | 67.90 | 77.30 | 86.70 | 96.00 | 105.40 | 114.70 | 124.30 | 133.80 |
| | KW | 2.05 | 2.39 | 2.75 | 3.15 | 3.56 | 4.01 | 4.49 | 5.00 |
| **35 (1.7)** | TCG | 53.40 | 50.20 | 46.90 | 43.40 | 39.60 | 35.70 | 34.00 | 25.50 |
| | SDT | 69.10 | 78.40 | 87.80 | 97.00 | 106.20 | 115.40 | 125.10 | 133.00 |
| | KW | 2.02 | 2.37 | 2.74 | 3.14 | 3.56 | 4.01 | 4.51 | 4.99 |
| **40 (4.4)** | TCG | 58.70 | 55.10 | 51.40 | 47.50 | 43.10 | 38.30 | 33.00 | 27.10 |
| | SDT | 70.40 | 79.60 | 88.90 | 98.00 | 107.10 | 116.10 | 124.80 | 133.40 |
| | KW | 1.99 | 2.35 | 2.72 | 3.13 | 3.55 | 4.01 | 4.49 | 4.99 |
| **45 (7.2)** | TCG | 64.30 | 60.30 | 56.20 | 51.60 | 46.90 | 41.20 | 35.20 | 28.90 |
| | SDT | 71.80 | 80.90 | 90.00 | 99.10 | 108.10 | 116.80 | 125.40 | 133.80 |
| | KW | 1.96 | 2.32 | 2.70 | 3.11 | 3.54 | 4.00 | 4.48 | 4.99 |
| **50 (10)** | TCG | 70.30 | 65.80 | 61.10 | 55.80 | 50.40 | 44.20 | 37.30 | 34.60 |
| | SDT | 73.30 | 82.30 | 91.20 | 100.10 | 108.90 | 117.50 | 125.90 | 135.30 |
| | KW | 1.92 | 2.29 | 2.68 | 3.09 | 3.52 | 3.98 | 4.46 | 5.01 |
| **55 (12.8)** | TCG | 76.50 | 71.40 | 66.00 | 60.30 | 54.00 | 47.00 | 50.70 | 41.10 |
| | SDT | 74.80 | 83.60 | 92.50 | 101.20 | 109.80 | 118.20 | 129.40 | 137.00 |
| | KW | 1.88 | 2.25 | 2.64 | 3.06 | 3.49 | 3.95 | 4.57 | 5.05 |
| **38HDR060–32** | | | | | | | | | |
| **30 (–1.6)** | TCG | 59.30 | 55.30 | 50.90 | 46.20 | 40.40 | 37.90 | 33.80 | 30.30 |
| | SDT | 70.10 | 79.30 | 88.40 | 97.40 | 106.20 | 115.80 | 124.90 | 134.20 |
| | KW | 2.59 | 2.93 | 3.31 | 3.73 | 4.19 | 4.72 | 5.31 | 5.90 |
| **35 (1.7)** | TCG | 64.70 | 60.20 | 55.50 | 50.00 | 43.30 | 42.40 | 31.50 | 33.10 |
| | SDT | 71.40 | 80.50 | 89.50 | 98.40 | 106.90 | 116.90 | 124.20 | 134.90 |
| | KW | 2.62 | 2.97 | 3.34 | 3.76 | 4.21 | 4.76 | 5.25 | 5.93 |
| **40 (4.4)** | TCG | 69.90 | 65.30 | 60.10 | 53.80 | 55.90 | 47.40 | 31.70 | 35.60 |
| | SDT | 72.70 | 81.70 | 90.60 | 99.30 | 110.10 | 118.10 | 124.20 | 135.50 |
| | KW | 2.66 | 3.00 | 3.38 | 3.78 | 4.34 | 4.81 | 5.24 | 5.96 |
| **45 (7.2)** | TCG | 76.00 | 70.80 | 64.80 | 57.40 | 56.00 | 54.60 | 48.50 | 47.70 |
| | SDT | 74.10 | 83.00 | 91.80 | 100.20 | 110.00 | 119.90 | 128.60 | 138.80 |
| | KW | 2.71 | 3.04 | 3.40 | 3.80 | 4.32 | 4.89 | 5.43 | 6.08 |
| **50 (10)** | TCG | 82.20 | 76.70 | 69.30 | 70.90 | 61.80 | 58.60 | 30.50 | 52.10 |
| | SDT | 75.60 | 84.40 | 92.80 | 103.40 | 111.40 | 120.90 | 123.80 | 139.80 |
| | KW | 2.75 | 3.09 | 3.42 | 3.99 | 4.38 | 4.93 | 5.16 | 6.13 |
| **55 (12.8)** | TCG | 95.20 | 87.70 | 88.40 | 74.60 | 75.40 | 53.90 | 46.10 | 60.30 |
| | SDT | 78.80 | 87.10 | 97.50 | 104.30 | 114.70 | 119.50 | 127.70 | 141.70 |
| | KW | 2.85 | 3.13 | 3.74 | 3.95 | 4.56 | 4.78 | 5.33 | 6.25 |

* AHRI listing applies only to systems shown in Combination Ratings table.

**KW** – Outdoor Unit Kilowatts Only.

**SDT** – Saturated Temperature Leaving Compressor (°F)

**SST** – Saturated Temperature Entering Compressor (°F/°C)

**TCG** – Gross Cooling Capacity (1000 Btuh)

# GUIDE SPECIFICATIONS
# GENERAL

**System Description**

Outdoor-mounted, air-cooled, split-system air conditioner unit suitable for ground or rooftop installation. Unit consists of a hermetic compressor, an air-cooled coil, propeller-type condenser fan, and a control box. Unit will discharge supply air horizontally as shown on contract drawings. Unit will be used in a refrigeration circuit to match up to a packaged fan coil or coil unit.

**Quality Assurance**

- — Unit will be rated in accordance with the latest edition of ARI Standard 210.
- — Unit will be certified for capacity and efficiency, and listed in the latest ARI directory.
- — Unit construction will comply with latest edition of ANSI/ ASHRAE and with NEC.
- — Unit will be constructed in accordance with UL standards and will carry the UL label of approval. Unit will have c-UL approval.
- — Unit cabinet will be capable of withstanding Federal Test
  Method Standard No. 141 (Method 6061) 500-hr salt spray test.
- — Air-cooled condenser coils will be leak tested and pressure tested
- — Unit constructed in ISO9001 approved facility.

**Delivery, Storage, and Handling**

- — Unit will be shipped as single package only and is stored and handled per unit manufacturer's recommendations.

**Warranty (for inclusion by specifying engineer)**

- — U.S. and Canada only.

# PRODUCTS

**Equipment**

- — Factory assembled, single piece, air-cooled air conditioner unit. Contained within the unit enclosure is all factory wiring, piping, controls, compressor, refrigerant charge Puron® (R-410A), and special features required prior to field start-up.

Unit Cabinet

- — Unit cabinet will be constructed of galvanized steel, bonderized, and coated with a powder coat paint.

Fans

- — Condenser fan will be direct-drive propeller type, discharging air horizontally.
- — Condenser fan motors will be totally enclosed, 1-phase type with class B insulation and permanently lubricated bearings. Shafts will be corrosion resistant.
- — Fan blades will be statically and dynamically balanced.
- — Condenser fan openings will be equipped with coated steel wire safety guards.

Compressor

- — Compressor will be hermetically sealed.
- — Compressor will be mounted on rubber vibration isolators.

Condenser Coil

- — Condenser coil will be air cooled.
- — Coil will be constructed of aluminum fins mechanically bonded to copper tubes which are then cleaned, dehydrated, and sealed.

Refrigeration Components

- — Refrigeration circuit components will include liquid-line front-seating shutoff valve with sweat connections, vapor-line front-seating shutoff valve with sweat connections, system charge of Puron® (R-410A) refrigerant, and compressor oil.
- — Unit will be equipped with high-pressure switch, low pressure switch and filter drier for Puron refrigerant.

**Operating Characteristics**

- — The capacity of the unit will meet or exceed _____ Btuh at a suction temperature of _____ °F/°C. The power consumption at full load will not exceed _____ kW.
- — Combination of the unit and the evaporator or fan coil unit will have a total net cooling capacity of _____ Btuh or greater at conditions of _____ CFM entering air temperature at the evaporator at _____ °F/°C wet bulb and _____ °F/°C dry bulb, and air entering the unit at _____ °F/°C.
- — The system will have a SEER of _____ Btuh/watt or greater at DOE conditions.

**Electrical Requirements**

- — Nominal unit electrical characteristics will be _____ v, single phase, 60 hz. The unit will be capable of satisfactory operation within voltage limits of _____ v to _____ v.
- — Nominal unit electrical characteristics will be _____ v, three phase, 60 hz. The unit will be capable of satisfactory operation within voltage limits of _____ v to _____ v.
- — Unit electrical power will be single point connection.
- — Control circuit will be 24v.

**Special Features**

- — Refer to section of this literature identifying accessories and descriptions for specific features and available enhancements.

# SYSTEM DESIGN SUMMARY

1. Intended for outdoor installation with free air inlet and outlet. Outdoor fan external static pressure available is less than 0.01-in. wc.
2. Minimum outdoor operating air temperature without low-ambient operation accessory is 55°F (12.8°C).
3. Maximum outdoor operating air temperature is 125°F (51.7°C).
4. For reliable operation, unit should be level in all horizontal planes.
5. For interconnecting refrigerant tube lengths greater than 80 ft (23.4 m) and/or 35 ft (10.7 m) vertical differential, consult Residential Piping and Longline Guideline and Service Manual available from equipment distributor.
6. If any refrigerant tubing is buried, provide a 6 in. (152.4 mm) vertical rise to the valve connections at the unit. Refrigerant tubing lengths up to 36 in. (914.4 mm) may be buried without further consideration. Do not bury refrigerant lines longer than 36 in. (914.4 mm).
7. Use only copper wire for electric connection at unit. Aluminum and clad aluminum are not acceptable for the type of connector provided.
8. Do not apply capillary tube indoor coils to these units.
9. Factory-supplied filter drier must be installed.



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Replaces: 38HDR–3PD

# Appendix G

Traffic Signal Warrant Study

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# MEMORANDUM

| | | | |
|---|---|---|---|
| **Date:** | July 6, 2023 | **GTS:** | 210806.07 |
| **To:** | City of Palmdale | | |
| **From:** | Rawad Hani, PE, TE | | |
| **Subject:** | Traffic Signal Warrant Study for the intersection of E Palmdale Blvd and the proposed access road for the Palmdale Two residential development | | |

This memorandum presents the results of the Traffic Signal Warrant Study carried out by GTS for the intersection of East Palmdale Boulevard and the proposed access road for the Palmdale Two residential development.

As illustrated in the following sections, the analysis of all applicable Traffic Signal Warrants has shown that a traffic signal is not warranted for the initial phase of development (Scenario 1, with one 20-acre parcel developed), but is warranted for Scenario 2, in which both 20-acre parcels at the site are developed.

## Introduction

As part of the traffic impact analysis scoping, the City of Palmdale requested GTS to complete a Traffic Control Device Warrant Analysis for the intersection of East Palmdale Boulevard and the proposed access road for the Palmdale Two residential development. GTS carried out an analysis per the California Manual of Uniform Traffic Control Devices (CA-MUTCD) guidelines in order to verify whether a traffic signal is justified and recommended based on meeting the standard guidelines.

### *Project Location*

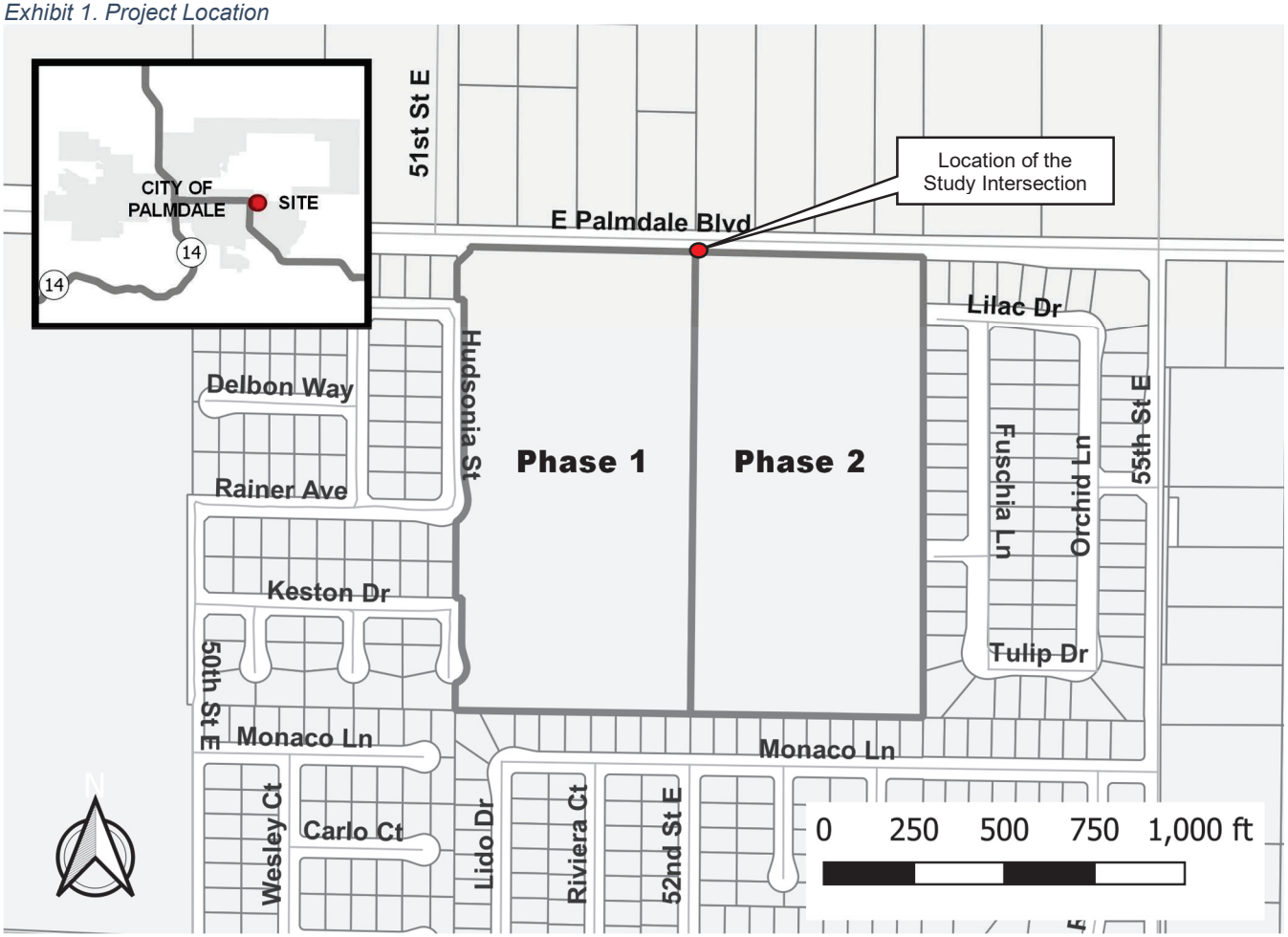
The Palmdale Two development project proposes to subdivide an approximately 20-acre parcel (currently vacant) into 66 lots for the purpose of constructing 64 single-family residences with 63 accessory dwelling units (ADUs) and 64 junior accessory dwelling units (JADUs), one detention basin, and one common amenities lot. The site is located directly south of East Palmdale Boulevard and east of Hudsonia Street in the City of Palmdale. It is bounded to the east by a vacant parcel, to the west and south by single-family residential development, and to the north by Palmdale Boulevard. The location is shown in Exhibit 1 and labeled “Phase 1”.

Subsequently, it is expected that the adjacent 20-acre parcel to the east of Phase 1 will also be developed with 72 single-family homes, 71 ADUs, and 27 JADUs. This parcel is also currently vacant. It is bounded to the west by vacant land (the Phase 1 site), to the east and south by single-family residential development, and to the north by Palmdale Boulevard. This location is labeled as “Phase 2” in Exhibit 1.

The proposed access road will serve both Phase 1 and Phase 2 once completed. Therefore, this Warrant Study analyzes two scenarios: (A) Phase 1 alone, and (B) Phase 1 and 2.

The subject intersection will be a “T” intersection with East Palmdale Boulevard running in the east-west direction and the access road for the proposed development intersecting perpendicularly on the south side of East Palmdale Boulevard.

*Exhibit 1. Project Location*




## *Existing Conditions*

East Palmdale Boulevard has a street-width of approximately 22 feet and is classified as a minor arterial roadway. It has one travel lane in each direction (eastbound and westbound), separated by a double yellow centerline. Both sides of the roadway have unpaved shoulders and no curb, gutter, or sidewalk. The posted speed limit is 55 miles per hour. There is vacant land on the north side of the road and a mix of residential developments and large vacant parcels on the south side.

Exhibit 2 shows an aerial view of the existing site area and Exhibit 3 shows a street view looking along East Palmdale Boulevard next to the site.

*Exhibit 2. Aerial View (Source: Nearmap)*

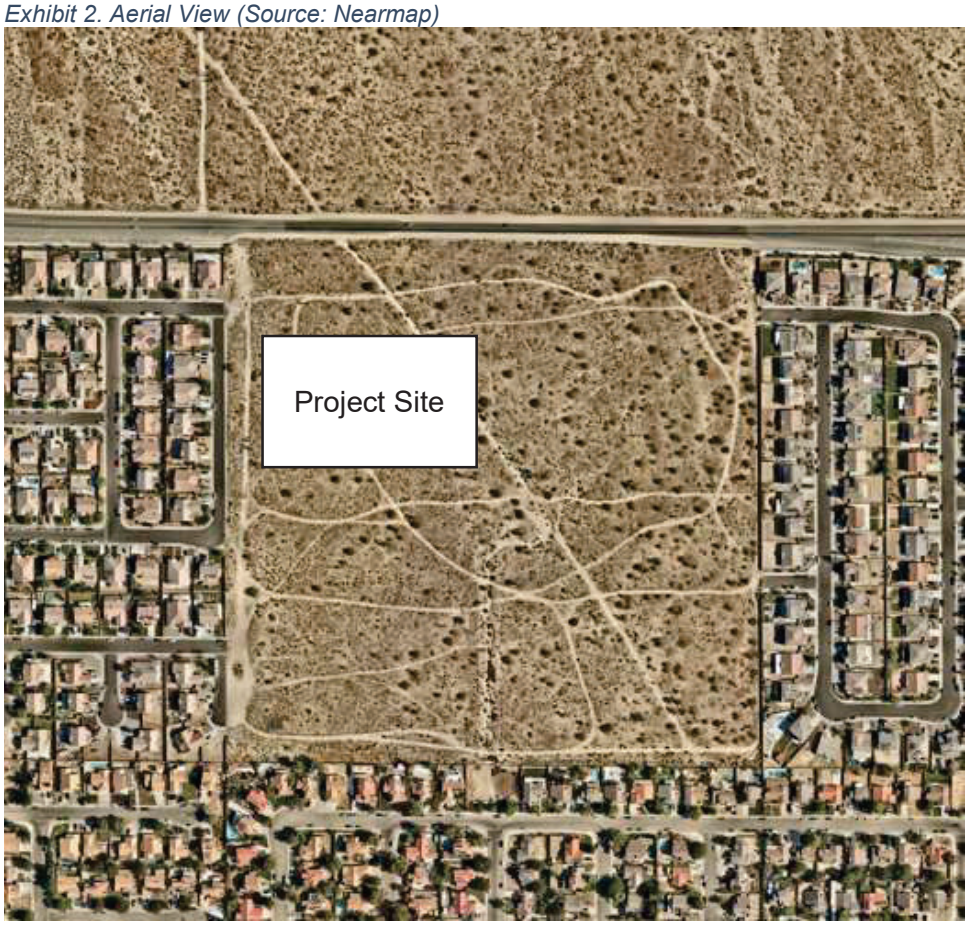



*Exhibit 3. Street View (Source: Google Maps Street View)*

# Project Trip Generation

The expected traffic volumes for the two scenarios were forecasted using the *Institute of Transportation Engineers (ITE), Trip Generation Manual, 11th Edition, 2021*.

Exhibit 4 shows the projected trip generation for Scenario A (Phase 1 alone). Exhibit 5 shows the projected trip generation for Scenario B (Phases 1 and 2).

Exhibit 6 shows the vehicle time of day distribution for Scenarios A and B based on the same ITE guide.

*Exhibit 4. Scenario A (Phase 1 Build-out) Trip Generation*

| | | | | AM Peak Hour | | | PM Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|
| **Land Use** | **Land Use Code** | **Units** | **Daily** | **In** | **Out** | **Total** | **In** | **Out** | **Total** |
| ***Trip Rates*** | | | | | | | | | |
| Single-family Detached Housing[1] | LU 210 | DU | 9.430 | 0.195 | 0.555 | 0.750 | 0.634 | 0.356 | 0.990 |
| Multifamily Housing (Low-Rise)[2] | LU 220 | DU | 6.740 | 0.113 | 0.357 | 0.470 | 0.353 | 0.217 | 0.570 |
| ***Project Trip Generation*** | | | | | | | | | |
| Palmdale Single-Family Housing Trips | 64 | DU | 604 | 12 | 36 | 48 | 41 | 23 | 63 |
| ADUs | 63 | DU | 425 | 7 | 23 | 30 | 22 | 14 | 36 |
| JADUs | 64 | DU | 431 | 7 | 23 | 30 | 23 | 14 | 36 |
| Total Trip Generation | | | 1,460 | 26 | 82 | 108 | 86 | 51 | 135 |

[1] Trip rates from the Institute of Transportation Engineers, *Trip Generation, 11th Edition,* 2021. Land Use Code 210 - Single-family Detached Housing.

[2] Trip rates from the Institute of Transportation Engineers, *Trip Generation, 11th Edition,* 2021. Land Use Code 221 - Multifamily Housing (Low-rise).

DU: Dwelling Units

*Exhibit 5. Scenario B (Phase 1 and Phase 2 Build-out) Trip Generation*

| | | | | AM Peak Hour | | | PM Peak Hour | | |
|---|---|---|---|---|---|---|---|---|---|
| **Land Use** | **Land Use Code** | **Units** | **Daily** | **In** | **Out** | **Total** | **In** | **Out** | **Total** |
| ***Trip Rates*** | | | | | | | | | |
| Single-family Detached Housing[1] | LU 210 | DU | 9.430 | 0.195 | 0.555 | 0.750 | 0.634 | 0.356 | 0.990 |
| Multifamily Housing (Low-Rise)[2] | LU 220 | DU | 6.740 | 0.113 | 0.357 | 0.470 | 0.353 | 0.217 | 0.570 |
| ***Project Trip Generation*** | | | | | | | | | |
| Palmdale Single-Family Housing Trips | 137 | DU | 1,282 | 27 | 75 | 102 | 86 | 48 | 135 |
| ADUs | 135 | DU | 903 | 15 | 48 | 63 | 47 | 29 | 76 |
| JADUs | 69 | DU | 613 | 10 | 33 | 43 | 32 | 20 | 52 |
| Total Trip Generation | | | 2,799 | 52 | 156 | 208 | 165 | 97 | 263 |

[1] Trip rates from the Institute of Transportation Engineers, *Trip Generation, 11th Edition,* 2021. Land Use Code 210 - Single-family Detached Housing.

[2] Trip rates from the Institute of Transportation Engineers, *Trip Generation, 11th Edition,* 2021. Land Use Code 221 - Multifamily Housing (Low-rise).

DU: Dwelling Units

*Exhibit 6. Vehicle Time of Day Distribution on Project Access Road*[1]

| | Scenario A (Phase 1 Build-out) | | | Scenario B (Phase 1 and Phase 2 Build-out) | | |
|---|---|---|---|---|---|---|
| Time[2] | Total | Entering | Exiting | Total | Entering | Exiting |
| 12:00 - 1:00 AM | 8 | 5 | 2 | 14 | 10 | 4 |
| 1:00 - 2:00 AM | 5 | 3 | 2 | 9 | 5 | 3 |
| 2:00 - 3:00 AM | 4 | 2 | 2 | 8 | 5 | 3 |
| 3:00 - 4:00 AM | 4 | 2 | 2 | 8 | 4 | 4 |
| 4:00 - 5:00 AM | 11 | 2 | 9 | 21 | 5 | 16 |
| 5:00 - 6:00 AM | 21 | 4 | 17 | 39 | 7 | 32 |
| 6:00 - 7:00 AM | 58 | 11 | 47 | 111 | 21 | 90 |
| 7:00 - 8:00 AM | 95 | 18 | 76 | 182 | 36 | 146 |
| 8:00 - 9:00 AM | 87 | 25 | 62 | 167 | 49 | 119 |
| 9:00 - 10:00 AM | 61 | 22 | 38 | 117 | 43 | 74 |
| 10:00 - 11:00 AM | 60 | 23 | 37 | 117 | 46 | 72 |
| 11:00 - 12:00 PM | 68 | 33 | 36 | 132 | 64 | 69 |
| 12:00 - 1:00 PM | 71 | 37 | 35 | 139 | 71 | 68 |
| 1:00 - 2:00 PM | 73 | 35 | 37 | 141 | 69 | 72 |
| 2:00 - 3:00 PM | 85 | 46 | 39 | 164 | 88 | 76 |
| 3:00 - 4:00 PM | 97 | 56 | 42 | 188 | 108 | 80 |
| 4:00 - 5:00 PM | 121 | 75 | 46 | 234 | 144 | 90 |
| 5:00 - 6:00 PM | 133 | 79 | 54 | 255 | 150 | 104 |
| 6:00 - 7:00 PM | 114 | 67 | 46 | 217 | 128 | 88 |
| 7:00 - 8:00 PM | 86 | 53 | 33 | 163 | 100 | 63 |
| 8:00 - 9:00 PM | 78 | 51 | 27 | 148 | 97 | 51 |
| 9:00 - 10:00 PM | 58 | 39 | 19 | 109 | 74 | 36 |
| 10:00 - 11:00 PM | 40 | 26 | 13 | 73 | 49 | 25 |
| 11:00 - 12:00 AM | 22 | 14 | 8 | 42 | 27 | 15 |

[1] Source: Institute of Transportation Engineers, *Trip Generation, 11th Edition,* 2021

# Traffic Signal Warrants Analysis

The traffic signal warrants analysis was carried out as per the guidelines set in the State of California Manual on Uniform Traffic Control Devices (CA-MUTCD) 2014 Edition Revision 6. The CA-MUTCD contains minimum guidelines regarding traffic volumes, collisions, speeds, pedestrian crossings, and other criteria in order to satisfy the requirements for the recommendation of a traffic signal. The traffic signal guidelines in Chapter 4C. Traffic Control Signal Needs Studies of the CA-MUTCD can be accessed at https://dot.ca.gov/programs/safety-programs/camutcd/camutcd-files.

As stated in these CA-MUTCD guidelines, an engineering study of traffic conditions, pedestrian characteristics, and physical characteristics of the location shall be performed to determine whether installation of a traffic control signal is justified at a particular location.
The investigation of the need for a traffic control signal shall include an analysis of factors related to the existing operation and safety at the study location and the potential to improve these conditions, and the applicable factors contained in the following traffic signal warrants:

- Warrant 1, Eight-Hour Vehicular Volume
- Warrant 2, Four-Hour Vehicular Volume
- Warrant 3, Peak Hour
- Warrant 4, Pedestrian Volume
- Warrant 5, School Crossing
- Warrant 6, Coordinated Signal System
- Warrant 7, Crash Experience
- Warrant 8, Roadway Network
- Warrant 9, Intersection Near a Grade Crossing

If any, or a combination, of these warrants is met then a traffic signal should be considered. Yet, as also stated in the CA-MUTCD, “the satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.” It should also be noted that if the warrant criteria in these guidelines are not met, the installation of an un-warranted traffic signal is typically not recommended as it may place the City in a position of potential liability.

The following pages present the analysis of each of the warrants for Scenario A and Scenario B. In order to evaluate traffic volume warrants, 24-hour Average Daily Traffic *(*ADT*)* machine counts were collected on East Palmdale Boulevard at the proposed intersection location on Wednesday, June 22, 2022. All traffic volume data collected for this intersection are included in Appendix A.

For the purposes of this analysis, it is assumed that the proposed development will be completed in 2025. Therefore, traffic volumes on East Palmdale Boulevard are increased by 1.5% per year (as agreed upon with the City) to account for expected future population growth and the accompanying growth in travel demand.

## *Scenario A. Phase 1 Build-out Traffic Signal Warrants*

### Warrant 1, Eight-Hour Vehicular Volume

Per the CA-MUTCD, the eight-hour vehicular volume warrant applies under two conditions:

- Condition A (Minimum Vehicular Volume): at locations where a large volume of intersecting traffic is the principal reason to consider installing a traffic control signal.
- Condition B (Interruption of Continuous Traffic): at locations where Condition A is not satisfied and where the traffic volume on a major street is so heavy that traffic on a minor intersecting street suffers excessive delay or conflict in entering or crossing the major street.

For the intersection under consideration, Table 1 summarizes the vehicular volumes entering the intersection from E Palmdale Blvd (major street) and from the Project access road (minor street). As noted earlier the volumes were forecasted to 2025 conditions by using a 1.5% growth factor. Exhibit 7 shows that the minor street traffic is considerably less (approximately 4%) of the major street traffic.

*Exhibit 7. Traffic Volumes Entering the Intersection (Phase 1 Build-out)*

| Street | Direction | ADT Volume[1] | Directional Split | Highest Hourly Volume |
|---|---|---|---|---|
| E Palmdale Blvd | Eastbound | 9,089 | 52 % | 886 veh. (5:00 to 6:00 PM) |
| | Westbound | 8,421 | 48 % | 617 veh. (7:00 to 8:00 AM) |
| Project Access Road | Northbound | 730 | 50 % | 76 veh. (7:00 to 8:00 AM) |

[1] Year 2025 Average Daily Traffic Volumes

All traffic volume data were applied to the Traffic Signal Warrants Worksheet presented on the following page in Exhibit 8. The intersection traffic volume data do not meet the minimum volumes required for conditions A or B.

Therefore, Warrant 1 is not met.

*Exhibit 8. Warrant 1 (CA-MUTCD) for Scenario A*

COUNT DATE 6/22/2022

DIST ____ CO ____ RTE ____ PM ____ CALC AG DATE 10/31/2022

CHK ____ DATE ____

Major St: E Palmdale Blvd — Critical Approach Speed 55 mph

Minor St: Project Site - Scenario 1 — Critical Approach Speed ____ mph

Speed limit or critical speed on major street traffic > 40 mph..... ☒ or ☐ } RURAL (R)

In built up area of isolated community of < 10,000 population..... ☐ ☐ URBAN (U)

**WARRANT 1 - Eight Hour Vehicular Volume** **SATISFIED YES ☐ NO ☒**

**(Condition A or Condition B or combination of A and B must be satisfied)**

**Condition A - Minimum Vehicle Volume** **100% SATISFIED YES ☐ NO ☒**

**80% SATISFIED YES ☐ NO ☒**

| APPROACH LANES | MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS) 1 U | 1 R | 2 or More U | 2 or More R | 6:00 | 7:00 | 8:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | Hour |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Both Approaches Major Street | 500 (400) | 350 (280) | 600 (480) | 420 (336) | 641 | 850 | 839 | 1140 | 1178 | 1257 | 1326 | 1148 | |
| Highest Approach Minor Street | 150 (120) | 105 (84) | 200 (160) | 140 (112) | 47 | 76 | 62 | 39 | 42 | 46 | 54 | 46 | |

**Condition B - Interruption of Continuous Traffic** **100% SATISFIED YES ☐ NO ☒**

**80% SATISFIED YES ☐ NO ☒**

| APPROACH LANES | MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS) 1 U | 1 R | 2 or More U | 2 or More R | 6:00 | 7:00 | 8:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | Hour |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Both Approaches Major Street | 750 (600) | 525 (420) | 900 (720) | 630 (504) | 641 | 850 | 839 | 1140 | 1178 | 1257 | 1326 | 1148 | |
| Highest Approach Minor Street | 75 (60) | 53 (42) | 100 (80) | 70 (56) | 47 | 76 | 62 | 39 | 42 | 46 | 54 | 46 | |

**Combination of Conditions A & B** **SATISFIED YES ☐ NO ☒**

| REQUIREMENT | CONDITION | ✓ | FULFILLED |
|---|---|---|---|
| TWO CONDITIONS SATISFIED 80% | A. MINIMUM VEHICULAR VOLUME | | Yes ☐ No ☒ |
| | AND, B. INTERRUPTION OF CONTINUOUS TRAFFIC | | |
| AND, AN ADEQUATE TRIAL OF OTHER ALTERNATIVES THAT COULD CAUSE LESS DELAY AND INCONVENIENCE TO TRAFFIC HAS FAILED TO SOLVE THE TRAFFIC PROBLEMS | | | Yes ☐ No ☐ |

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

### Warrant 2, Four-Hour Vehicular Volume

This signal warrant is intended for intersections where the volume of intersecting traffic is the principal reason to consider installing a traffic control signal.

Per the CA-MUTCD, "the need for a traffic control signal shall be considered if an engineering study finds that, for each of any 4 hours of an average day, the plotted points representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the higher-volume minor-street approach (one direction only) all fall above the applicable curve in Figure 4C-1 or Figure 4C-2 for the existing combination of approach lanes."

The analysis shown in Exhibit 9 illustrates that Warrant 2 is not met.

### Warrant 3, Peak Hour

This warrant is intended for unusual cases of facilities that attract or discharge large numbers of vehicles over a short time. Per CA-MUTCD, a signal is warranted at a location where traffic conditions are such that for a minimum of 1 hour of an average day, the minor-street traffic suffers undue delay when entering or crossing the major street.

This warrant requires the criteria in "either of the following two categories are met:

A. If all three of the following conditions exist for the same 1 hour (any four consecutive 15-minute periods) of an average day:
    1. The total stopped time delay experienced by the traffic on one minor-street approach (one direction only) controlled by a STOP sign equals or exceeds: 4 vehicle-hours for a one-lane approach or 5 vehicle-hours for a two-lane approach; and
    2. The volume on the same minor-street approach (one direction only) equals or exceeds 100 vehicles per hour for one moving lane of traffic or 150 vehicles per hour for two moving lanes; and
    3. The total entering volume serviced during the hour equals or exceeds 650 vehicles per hour for intersections with three approaches or 800 vehicles per hour for intersections with four or more approaches.
B. The plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding vehicles per hour on the higher-volume minor-street approach (one direction only) for 1 hour (any four consecutive 15-minute periods) of an average day falls above the applicable curve in Figure 4C-3 or Figure 4C-4 for the existing combination of approach lanes."

No special facilities that attract or discharge large numbers of vehicles over a short time currently exist or are planned for the project area. Moreover, the analysis shown in Exhibit 10 illustrates that Warrant 3 is not met.

*Exhibit 9. Warrant 2 (CA-MUTCD) for Scenario A*

**WARRANT 2 - Four Hour Vehicular Volume** **SATISFIED* YES ☐ NO ☒**

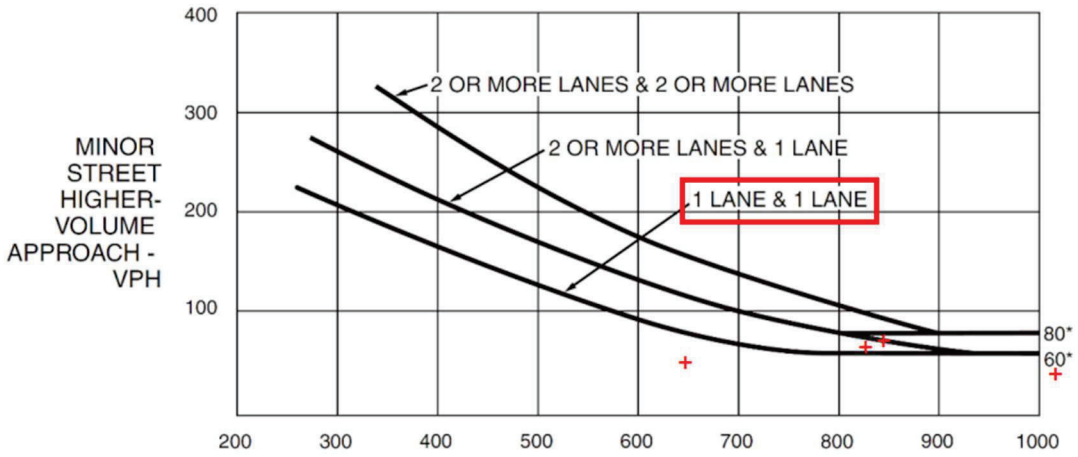
Record hourly vehicular volumes for any four hours of an average day.

| APPROACH LANES | One | 2 or More | 6:00 | 7:00 | 8:00 | 17:00 |
|---|---|---|---|---|---|---|
| | | | Hour | | | |
| Both Approaches - Major Street | X | | 641 | 850 | 839 | 1326 |
| Higher Approach - Minor Street | X | | 47 | 76 | 62 | 54 |

| | | |
|---|---|---|
| *All plotted points fall above the applicable curve in Figure 4C-1. (URBAN AREAS) | Yes ☐ | No ☐ |
| OR, All plotted points fall above the applicable curve in Figure 4C-2. (RURAL AREAS) | Yes ☐ | No ☒ |

**Figure 4C-2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)**

**(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)**




*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane.

*Exhibit 10. Warrant 3 (CA-MUTCD) for Scenario A*

**WARRANT 3 - Peak Hour** **SATISFIED YES ☐ NO ☒**
**(Part A or Part B must be satisfied)**

**PART A** **SATISFIED YES ☐ NO ☒**

**(All parts 1, 2, and 3 below must be satisfied for the same one hour, for any four consecutive 15-minute periods)**

| | |
|---|---|
| 1. The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach, or five vehicle-hours for a two-lane approach; AND | Yes ☐ No ☐ |
| 2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND | Yes ☐ No ☒ |
| 3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches. | Yes ☐ No ☐ |

**PART B** **SATISFIED YES ☐ NO ☒**

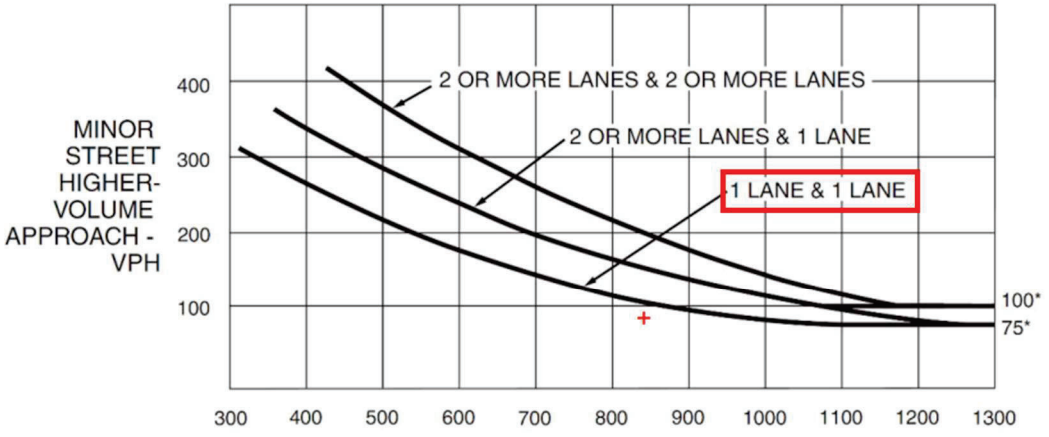
| APPROACH LANES | One | 2 or More | 7:00 Hour |
|---|---|---|---|
| Both Approaches - Major Street | X | | 76 |
| Higher Approach - Minor Street | X | | 850 |

| | |
|---|---|
| The plotted point falls above the applicable curve in Figure 4C-3. (URBAN AREAS) | Yes ☐ No ☐ |
| OR, The plotted point falls above the applicable curve in Figure 4C-4. (RURAL AREAS) | Yes ☐ No ☒ |

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

**Figure 4C-4. Warrant 3, Peak Hour (70% Factor)**

**(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)**




*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

### Warrant 4, Pedestrian Volume

This warrant addresses cases where pedestrians experience excessive delays in crossing the major street due to heavy traffic volumes on a major street.

Per CA-MUTCD, a signal "at an intersection or midblock crossing shall be considered if an engineering study finds that one of the following criteria is met:

A. For each of any 4 hours of an average day, the plotted points representing the vehicles per hour on the major street (total of both approaches) and the corresponding pedestrians per hour crossing the major street (total of all crossings) all fall above the curve in Figure 4C-5; or
B. For 1 hour (any four consecutive 15-minute periods) of an average day, the plotted point representing the vehicles per hour on the major street (total of both approaches) and the corresponding pedestrians per hour crossing the major street (total of all crossings) falls above the curve in Figure 4C-7."

There is currently very limited pedestrian activity in the project area. Even as the project site is developed, the area north of Palmdale Blvd across from the project is undeveloped. As such, Warrant 4 is not considered applicable.

### Warrant 5, School Crossing

This warrant is intended to assist schoolchildren in crossing major streets.

Per CA-MUTCD, a signal shall be considered when "the frequency and adequacy of gaps in the vehicular traffic stream as related to the number and size of groups of schoolchildren at an established school crossing across the major street shows that the number of adequate gaps in the traffic stream during the period when the schoolchildren are using the crossing is less than the number of minutes in the same period (see Section 7A.03) and there are a minimum of 20 schoolchildren during the highest crossing hour."

There are no school crossings in the intersection project area, Warrant 5 is not considered applicable.

### Warrant 6, Coordinated Signal System

This warrant is intended to address cases where a signal is needed to ensure progressive movement (synchronization) in a coordinated signal system to maintain proper platooning of vehicles.

Warrant 6 is not applicable for the location at hand.

### Warrant 7, Crash Experience

This warrant is intended at locations where a signal is being considered due to the severity and frequency of crashes.

Per the CA-MUTCD, one of the necessary conditions for this warrant is to have five or more "reported crashes, of types susceptible to correction by a traffic control signal that have occurred within a 12-month period".

The Transportation Injury Mapping System (TIMS) was checked for the most recent 3-year period spanning from 2019 to 2021 and no collisions were recorded.

Therefore, Warrant 7 is not met.

### Warrant 8, Roadway Network

Per the CA-MUTCD, installing a traffic signal at the intersection of two or more major routes “might be justified to encourage concentration and organization of traffic flow on a roadway network.”
Warrant 8 is not met as the project site location is not a major street.

### Warrant 9, Intersection Near a Grade Crossing

This warrant is intended for use when the proximity of the intersection to an at-grade crossing is the main reason to install a traffic signal.
As there is no grade crossings near the studied intersection, Warrant 9 is not met.

### *Scenario B. Phase 1 and Phase 2 Build-out Traffic Signal Warrants*

This scenario assumes that both Phase 1 and Phase 2 are built-out. Under this scenario the forecasted 2025 volumes at the subject intersection are illustrated in Exhibit 11.
The time-of-day distribution of traffic existing the project area (entering the study intersection) was presented earlier under Exhibit 6.

*Exhibit 11. Traffic Volumes Entering the Intersection (Phase 1 Build-out)*

| Street | Direction | ADT Volume[1] | Directional Split | Highest Hourly Volume |
|---|---|---|---|---|
| E Palmdale Blvd | Eastbound | 9,089 | 52 % | 886 veh. (5:00 to 6:00 PM) |
| | Westbound | 8,421 | 48 % | 617 veh. (7:00 to 8:00 AM) |
| Project Access Road | Northbound | 1,400 | 50 % | 76 veh. (7:00 to 8:00 AM) |

[1] Year 2025 Average Daily Traffic Volumes

## Warrant 1, Eight-Hour Vehicular Volume

Scenario B (full build-out of Phase 1 and Phase 2) traffic volume data were applied to the Traffic Signal Warrants Worksheet presented on the following page in Exhibit 12.
While Condition A (Minimum Vehicle Volume) was not satisfied, Condition B (Interruption of Continuous Traffic) was met.
Therefore, Warrant 1 is met and the intersection would be warranted for installing a traffic signal.

## Warrant 2, Four-Hour Vehicular Volume

The analysis shown in Exhibit 13 illustrates that Warrant 2 is also met under Scenario B.

## Warrant 3, Peak Hour

As discussed previously, this warrant is intended for facilities that attract or discharge large numbers of vehicles over a short time. Although the traffic volumes do satisfy this warrant as shown in Exhibit 14, a signal would likely not be recommended based on this warrant alone.

*Exhibit 12. Warrant 1 (CA-MUTCD) for Scenario B*

COUNT DATE 6/22/2022

DIST ____ CO ____ RTE ____ PM ____ CALC AG DATE 7/13/2023

CHK . ____ DATE ____

Major St: E Palmdale Blvd — Critical Approach Speed 55 mph

Minor St: Project Site - Scenario 2 — Critical Approach Speed ____ mph

Speed limit or critical speed on major street traffic > 40 mph..... ☒ or ☐ } RURAL (R)

In built up area of isolated community of < 10,000 population..... ☐ URBAN (U)

**WARRANT 1 - Eight Hour Vehicular Volume** **SATISFIED YES ☒ NO ☐**

**(Condition A or Condition B or combination of A and B must be satisfied)**

**Condition A - Minimum Vehicle Volume** **100% SATISFIED YES ☐ NO ☒**

**80% SATISFIED YES ☐ NO ☒**

| | MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U | R | U | R | | | | | | | | | |
| APPROACH LANES | 1 | | 2 or More | | 6:00 | 7:00 | 8:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | Hour |
| Both Approaches Major Street | 500 (400) | 350 (280) | 600 (480) | 420 (336) | 641 | 850 | 839 | 1140 | 1178 | 1257 | 1326 | 1148 | |
| Highest Approach Minor Street | 150 (120) | 105 (84) | 200 (160) | 140 (112) | 90 | 146 | 119 | 76 | 80 | 90 | 104 | 88 | |

**Condition B - Interruption of Continuous Traffic** **100% SATISFIED YES ☒ NO ☐**

**80% SATISFIED YES ☐ NO ☐**

| | MINIMUM REQUIREMENTS (80% SHOWN IN BRACKETS) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | U | R | U | R | | | | | | | | | |
| APPROACH LANES | 1 | | 2 or More | | 6:00 | 7:00 | 8:00 | 14:00 | 15:00 | 16:00 | 17:00 | 18:00 | Hour |
| Both Approaches Major Street | 750 (600) | 525 (420) | 900 (720) | 630 (504) | 641 | 850 | 839 | 1140 | 1178 | 1257 | 1326 | 1148 | |
| Highest Approach Minor Street | 75 (60) | 53 (42) | 100 (80) | 70 (56) | 90 | 146 | 119 | 76 | 80 | 90 | 104 | 88 | |

**Combination of Conditions A & B** **SATISFIED YES ☐ NO ☐**

| REQUIREMENT | CONDITION | ✓ | FULFILLED |
|---|---|---|---|
| TWO CONDITIONS SATISFIED 80% | A. MINIMUM VEHICULAR VOLUME | | Yes ☐ No ☐ |
| | AND, B. INTERRUPTION OF CONTINUOUS TRAFFIC | | |
| AND, AN ADEQUATE TRIAL OF OTHER ALTERNATIVES THAT COULD CAUSE LESS DELAY AND INCONVENIENCE TO TRAFFIC HAS FAILED TO SOLVE THE TRAFFIC PROBLEMS | | | Yes ☐ No ☐ |

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

*Exhibit 13. Warrant 2 (CA-MUTCD) for Scenario B*

**WARRANT 2 - Four Hour Vehicular Volume** **SATISFIED* YES ☒ NO ☐**

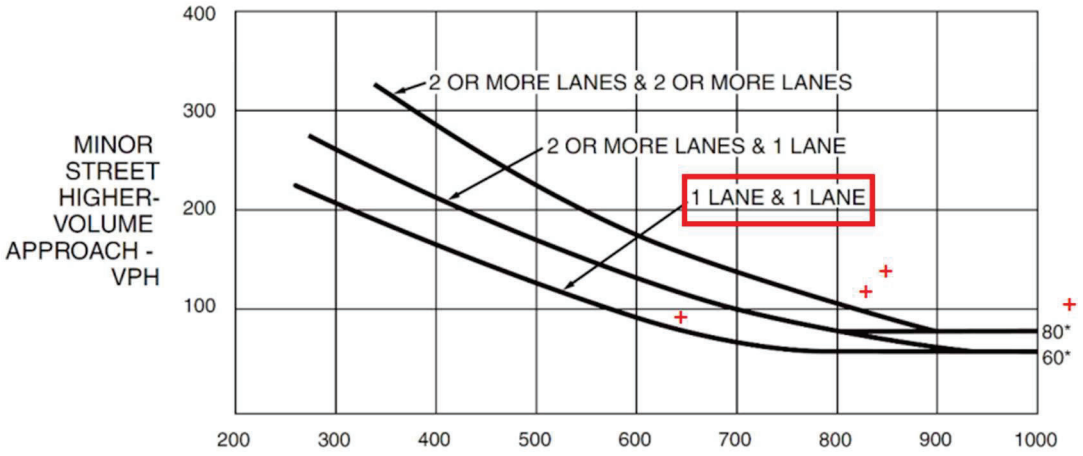
Record hourly vehicular volumes for any four hours of an average day.

| APPROACH LANES | One | 2 or More | 6:00 | 7:00 | 8:00 | 17:00 | Hour |
|---|---|---|---|---|---|---|---|
| Both Approaches - Major Street | X | | 641 | 850 | 839 | 1326 | |
| Higher Approach - Minor Street | X | | 90 | 146 | 119 | 104 | |

| | |
|---|---|
| *All plotted points fall above the applicable curve in Figure 4C-1. (URBAN AREAS) | Yes ☐ No ☐ |
| OR, All plotted points fall above the applicable curve in Figure 4C-2. (RURAL AREAS) | Yes ☒ No ☐ |

**Figure 4C-2. Warrant 2, Four-Hour Vehicular Volume (70% Factor)**

**(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)**




*Note: 80 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor-street approach with one lane.

*Exhibit 14. Warrant 3 (CA-MUTCD) for Scenario B*

**WARRANT 3 - Peak Hour** **SATISFIED YES ☒ NO ☐**
**(Part A or Part B must be satisfied)**

**PART A** **SATISFIED YES ☐ NO ☐**

**(All parts 1, 2, and 3 below must be satisfied for the same one hour, for any four consecutive 15-minute periods)**

| | |
|---|---|
| 1. The total delay experienced by traffic on one minor street approach (one direction only) controlled by a STOP sign equals or exceeds four vehicle-hours for a one-lane approach, or five vehicle-hours for a two-lane approach; AND | Yes ☐ No ☐ |
| 2. The volume on the same minor street approach (one direction only) equals or exceeds 100 vph for one moving lane of traffic or 150 vph for two moving lanes; AND | Yes ☐ No ☐ |
| 3. The total entering volume serviced during the hour equals or exceeds 800 vph for intersections with four or more approaches or 650 vph for intersections with three approaches. | Yes ☐ No ☐ |

**PART B** **SATISFIED YES ☒ NO ☐**

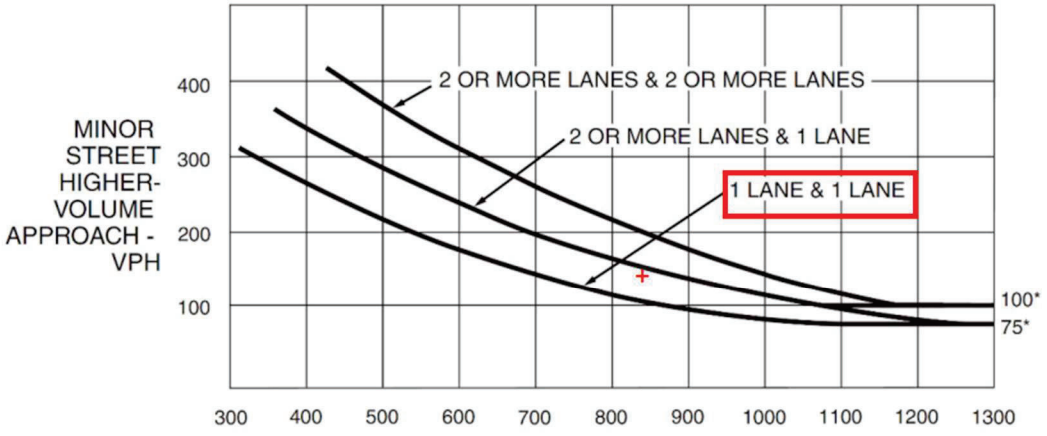
| APPROACH LANES | One | 2 or More | Hour 7:00 |
|---|---|---|---|
| Both Approaches - Major Street | X | | 850 |
| Higher Approach - Minor Street | X | | 146 |

| | |
|---|---|
| The plotted point falls above the applicable curve in Figure 4C-3. (URBAN AREAS) | Yes ☐ No ☐ |
| OR, The plotted point falls above the applicable curve in Figure 4C-4. (RURAL AREAS) | Yes ☒ No ☐ |

The satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal.

**Figure 4C-4. Warrant 3, Peak Hour (70% Factor)**

**(COMMUNITY LESS THAN 10,000 POPULATION OR ABOVE 40 MPH ON MAJOR STREET)**




*Note: 100 vph applies as the lower threshold volume for a minor-street approach with two or more lanes and 75 vph applies as the lower threshold volume for a minor-street approach with one lane.

### Warrant 4, Pedestrian Volume

As noted in the previous section under Scenario A, there is currently very limited pedestrian activity in the project area which is yet to be developed. As such, Warrant 4 was not applicable.

### Warrant 5, School Crossing

With no schools or school crossings in the intersection project area, Warrant 5 was not applicable.

### Warrant 6, Coordinated Signal System

As presented in the previous section, Warrant 6 was not applicable for the location at hand.

### Warrant 7, Crash Experience

Warrant 7 was not met, as no collisions were recorded in the most recent 3-year period.

### Warrant 8, Roadway Network

As illustrated in the previous section, this warrant applies at the intersection of two or more major routes. As the project access and E Palmdale Blvd are not major routes, then Warrant 8 was not met.

### Warrant 9, Intersection Near a Grade Crossing

As noted in the previous section, there are no grade crossings near the studied intersection. As such, Warrant 9 was not met.

## Summary and Recommendations

The traffic signal warrants analysis was carried out for the intersection of East Palmdale Boulevard and the proposed access road for the Palmdale Two residential development in the City of Palmdale as per the guidelines set in the State of California Manual on Uniform Traffic Control Devices (CA-MUTCD) 2014 Edition Revision 6.

In order to justify and recommend the installation of traffic control signals, as shown above there are nine (9) CA-MUTCD Traffic Signal Warrants that should be analyzed. If any, or a combination, of these warrants is met then a traffic signal should be considered. Yet, as also stated in the CA-MUTCD, the "satisfaction of a traffic signal warrant or warrants shall not in itself require the installation of a traffic control signal." If the warrant criteria in these guidelines are not met, the installation of an un-warranted traffic signal is typically not recommended as it may place the City in a position of potential liability.

The analysis of all applicable Traffic Signal Warrants has shown that a traffic signal was not warranted for the initial phase of development (Scenario A, with one 20-acre parcel developed), but is warranted for Scenario B, in which both 20-acre parcels are developed.

Rawad Hani, PE, TE
July 14, 2023

# Appendix A. Traffic Counts

# Counts Unlimited, Inc.

PO Box 1178
Corona, CA 92878
Phone: (951) 268-6268
email: counts@countsunlimited.com

City of Palmdale
Palmdale Boulevard
B/ 51st Street - 55th Street
24 Hour Directional Volume Count

PDEPA5155
Site Code: 081-22597

| Start Time | 6/22/2022 Wed | Eastbound Morning | Eastbound Afternoon | Hour Totals Morning | Hour Totals Afternoon | Westbound Morning | Westbound Afternoon | Hour Totals Morning | Hour Totals Afternoon | Combined Totals Morning | Combined Totals Afternoon |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 12:00 | | 27 | 136 | | | 17 | 126 | | | | |
| 12:15 | | 22 | 120 | | | 16 | 122 | | | | |
| 12:30 | | 31 | 134 | | | 14 | 125 | | | | |
| 12:45 | | 20 | 130 | 100 | 520 | 13 | 116 | 60 | 489 | 160 | 1009 |
| 01:00 | | 11 | 125 | | | 10 | 121 | | | | |
| 01:15 | | 23 | 145 | | | 8 | 122 | | | | |
| 01:30 | | 18 | 149 | | | 8 | 101 | | | | |
| 01:45 | | 13 | 159 | 65 | 578 | 8 | 104 | 34 | 448 | 99 | 1026 |
| 02:00 | | 14 | 144 | | | 13 | 122 | | | | |
| 02:15 | | 15 | 136 | | | 12 | 106 | | | | |
| 02:30 | | 13 | 152 | | | 9 | 125 | | | | |
| 02:45 | | 27 | 162 | 69 | 594 | 7 | 143 | 41 | 496 | 110 | 1090 |
| 03:00 | | 17 | 138 | | | 14 | 104 | | | | |
| 03:15 | | 12 | 155 | | | 23 | **121** | | | | |
| 03:30 | | 17 | 151 | | | 38 | **154** | | | | |
| 03:45 | | 12 | 170 | 58 | 614 | 46 | **134** | 121 | 513 | 179 | 1127 |
| 04:00 | | 6 | 194 | | | 37 | **114** | | | | |
| 04:15 | | 14 | 171 | | | 64 | 120 | | | | |
| 04:30 | | 22 | 183 | | | 100 | 128 | | | | |
| 04:45 | | 27 | 174 | 69 | 722 | 63 | 118 | 264 | 480 | 333 | 1202 |
| 05:00 | | 35 | **212** | | | 80 | 86 | | | | |
| 05:15 | | 44 | **212** | | | 102 | 122 | | | | |
| 05:30 | | 33 | **216** | | | 116 | 118 | | | | |
| 05:45 | | 33 | **207** | 145 | 847 | 103 | 95 | 401 | 421 | 546 | 1268 |
| 06:00 | | 46 | 195 | | | 92 | 94 | | | | |
| 06:15 | | 47 | 181 | | | 100 | 103 | | | | |
| 06:30 | | 37 | 155 | | | 110 | 112 | | | | |
| 06:45 | | 61 | 166 | 191 | 697 | 120 | 92 | 422 | 401 | 613 | 1098 |
| 07:00 | | 49 | 174 | | | 105 | 78 | | | | |
| 07:15 | | 57 | 140 | | | **118** | 78 | | | | |
| 07:30 | | 67 | 129 | | | **199** | 85 | | | | |
| 07:45 | | 50 | 117 | 223 | 560 | **168** | 81 | 590 | 322 | 813 | 882 |
| 08:00 | | 62 | 127 | | | **133** | 63 | | | | |
| 08:15 | | 70 | 116 | | | 118 | 72 | | | | |
| 08:30 | | 73 | 122 | | | 157 | 54 | | | | |
| 08:45 | | 64 | 103 | 269 | 468 | 125 | 53 | 533 | 242 | 802 | 710 |
| 09:00 | | 73 | 118 | | | 109 | 52 | | | | |
| 09:15 | | 68 | 118 | | | 120 | 45 | | | | |
| 09:30 | | 66 | 89 | | | 138 | 43 | | | | |
| 09:45 | | 87 | 73 | 294 | 398 | 123 | 36 | 490 | 176 | 784 | 574 |
| 10:00 | | 94 | 64 | | | 123 | 36 | | | | |
| 10:15 | | 90 | 59 | | | 116 | 21 | | | | |
| 10:30 | | 88 | 70 | | | 127 | 25 | | | | |
| 10:45 | | **111** | 51 | 383 | 244 | 105 | 25 | 471 | 107 | 854 | 351 |
| 11:00 | | **115** | 44 | | | 106 | 22 | | | | |
| 11:15 | | **117** | 35 | | | 109 | 14 | | | | |
| 11:30 | | **107** | 30 | | | 112 | 14 | | | | |
| 11:45 | | 111 | 25 | 450 | 134 | 137 | 17 | 464 | 67 | 914 | 201 |
| Total | | 2316 | 6376 | 2316 | 6376 | 3891 | 4162 | 3891 | 4162 | 6207 | 10538 |
| Combined Total | | 8692 | | 8692 | | 8053 | | 8053 | | 16745 | |
| AM Peak | - | 10:45 | - | - | - | 07:15 | - | - | - | - | - |
| Vol. | - | 450 | - | - | - | 618 | - | - | - | - | - |
| P.H.F. | | 0.962 | | | | 0.776 | | | | | |
| PM Peak | - | - | 05:00 | - | - | - | 03:15 | - | - | - | - |
| Vol. | - | - | 847 | - | - | - | 523 | - | - | - | - |
| P.H.F. | | | 0.980 | | | | 0.849 | | | | |
| Percentage | | 26.6% | 73.4% | | | 48.3% | 51.7% | | | | |

ADT/AADT ADT 16,745 AADT 16,745

# Appendix H

Vehicle Miles Traveled Analysis

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info@gentecsol.com | www.gentecsol.com
11900 W Olympic Blvd #450, Los Angeles, CA 90064
**GTS | General Technologies and Solutions**

# MEMORANDUM

| | | |
|---|---|---|
| **Date:** | July 6, 2023 | **GTS:** 210806.06 |
| **To:** | Kevin Harbison (Ravello Holdings) | |
| **From:** | Rawad Hani, GTS | |
| **Subject:** | Vehicle Miles Traveled (VMT) Analysis - Palmdale Residential Development<br>Southeast corner of E. Palmdale Blvd and Hudsonia St (APN: 3023-002-184), Palmdale, CA | |

This memorandum pertains to the vehicle miles traveled (VMT) screening analysis for the proposed residential development for the parcel APN: 3023-002-184 at southeast corner of E. Palmdale Blvd and Hudsonia St, in the City of Palmdale, Los Angeles County, CA (City). The project consists of 64 single family residences, 63 accessory dwelling units (ADUs) and 64 junior accessory dwelling units (JADUs) on an approximately 20 Acre site.

A VMT analysis has previously evaluated the project using 2016 Southern California Association of Governments' (SCAG) Regional Transportation Plan/Sustainable Communities Strategies (RTP/SCS) travel demand model.

As the project may be offered as an affordable development, this memorandum presents the VMT screening analysis for the 100% affordable scenario/option.

## Background & Methodology

On December 28, 2018, the California Office of Administrative Law cleared the revised California Environmental Quality Act (CEQA) guidelines for use. Among the changes to the guidelines was removal of vehicle delay and level of service from consideration under CEQA. With the adopted guidelines, transportation impacts are to be evaluated based on a project's effect on vehicle miles traveled (VMT).

While the City is actively working on developing their own guidelines for VMT, at the time of the analysis the City is using the *Los Angeles County Public Works – Transportation Impact Analysis (TIA) Guidelines - dated July 23, 2020* as a guide in the VMT analysis of development projects.

## VMT Screening Analysis

Pursuant to the above mentioned *Los Angeles County Public Works – Transportation Impact Analysis (TIA) Guidelines of July 23, 2020* (which in turn is in line with Senate Bill 743 Technical Guidance published by the State's Office of Planning and Research), certain residential projects that further the State's affordable housing goals are presumed to have less than significant impact on VMT if 100% of the units, excluding manager's units, are set aside for lower income households.

As such if the project is developed as 100% affordable, it is presumed to have less than significant impact on VMT, further analysis is not required, and a less than significant determination can be made.

## Conclusion

Based on the screening criteria noted above, the 100% affordable project is presumed to have less than significant impact on VMT.

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**GOVERNMENT CODE - GOV**

**TITLE 7. PLANNING AND LAND USE [65000 - 66499.58]** *( Heading of Title 7 amended by Stats. 1974, Ch. 1536. )*

**DIVISION 1. PLANNING AND ZONING [65000 - 66342]** *( Heading of Division 1 added by Stats. 1974, Ch. 1536. )*

**CHAPTER 4.3. Density Bonuses and Other Incentives [65915 - 65918]** *( Chapter 4.3 added by Stats. 1979, Ch. 1207. )*

**65915.** (a) (1) When an applicant seeks a density bonus for a housing development within, or for the donation of land for housing within, the jurisdiction of a city, county, or city and county, that local government shall comply with this section. A city, county, or city and county shall adopt an ordinance that specifies how compliance with this section will be implemented. Except as otherwise provided in subdivision (s), failure to adopt an ordinance shall not relieve a city, county, or city and county from complying with this section.

(2) A local government shall not condition the submission, review, or approval of an application pursuant to this chapter on the preparation of an additional report or study that is not otherwise required by state law, including this section. This subdivision does not prohibit a local government from requiring an applicant to provide reasonable documentation to establish eligibility for a requested density bonus, as described in subdivision (b), and parking ratios, as described in subdivision (p).

(3) In order to provide for the expeditious processing of a density bonus application, the local government shall do all of the following:

(A) Adopt procedures and timelines for processing a density bonus application.

(B) Provide a list of all documents and information required to be submitted with the density bonus application in order for the density bonus application to be deemed complete. This list shall be consistent with this chapter.

(C) Notify the applicant for a density bonus whether the application is complete in a manner consistent with the timelines specified in Section 65943.

(D) (i) If the local government notifies the applicant that the application is deemed complete pursuant to subparagraph (C), provide the applicant with a determination as to the following matters:

(I) The amount of density bonus, calculated pursuant to subdivision (f), for which the applicant is eligible.

(II) If the applicant requests a parking ratio pursuant to subdivision (p), the parking ratio for which the applicant is eligible.

(III) If the applicant requests incentives or concessions pursuant to subdivision (d) or waivers or reductions of development standards pursuant to subdivision (e), whether the applicant has provided adequate information for the local government to make a determination as to those incentives, concessions, waivers, or reductions of development standards.

(ii) Any determination required by this subparagraph shall be based on the development project at the time the application is deemed complete. The local government shall adjust the amount of density bonus and parking ratios awarded pursuant to this section based on any changes to the project during the course of development.

(b) (1) A city, county, or city and county shall grant one density bonus, the amount of which shall be as specified in subdivision (f), and, if requested by the applicant and consistent with the applicable requirements of this section, incentives or concessions, as described in subdivision (d), waivers or reductions of development standards, as described in subdivision (e), and parking ratios, as described in subdivision (p), if an applicant for a housing development seeks and agrees to construct a housing development, excluding any units permitted by the density bonus awarded pursuant to this section, that will contain at least any one of the following:

(A) Ten percent of the total units of a housing development, including a shared housing building development, for rental or sale to lower income households, as defined in Section 50079.5 of the Health and Safety Code.

(B) Five percent of the total units of a housing development, including a shared housing building development, for rental or sale to very low income households, as defined in Section 50105 of the Health and Safety Code.

(C) A senior citizen housing development, as defined in Sections 51.3 and 51.12 of the Civil Code, or a mobilehome park that limits residency based on age requirements for housing for older persons pursuant to Section 798.76 or 799.5 of the Civil Code. For purposes of this subparagraph, "development" includes a shared housing building development.

(D) Ten percent of the total dwelling units of a housing development are sold to persons and families of moderate income, as defined in Section 50093 of the Health and Safety Code, provided that all units in the development are offered to the public for purchase.

(E) Ten percent of the total units of a housing development for transitional foster youth, as defined in Section 66025.9 of the Education Code, disabled veterans, as defined in Section 18541, or homeless persons, as defined in the federal McKinney-Vento Homeless Assistance Act (42 U.S.C. Sec. 11301 et seq.). The units described in this subparagraph are subject to a recorded affordability restriction of 55 years and shall be provided at the same affordability level as very low income units.

(F) (i) Twenty percent of the total units for lower income students in a student housing development that meets the following requirements:

(I) All units in the student housing development shall be used exclusively for undergraduate, graduate, or professional students enrolled full time at an institution of higher education accredited by the Western Association of Schools and Colleges or the Accrediting Commission for Community and Junior Colleges. In order to be eligible under this subclause, the developer shall, as a condition of receiving a certificate of occupancy, provide evidence to the city, county, or city and county that the developer has entered into an operating agreement or master lease with one or more institutions of higher education for the institution or institutions to occupy all units of the student housing development with students from that institution or institutions. An operating agreement or master lease entered into pursuant to this subclause is not violated or breached if, in any subsequent year, there are insufficient students enrolled in an institution of higher education to fill all units in the student housing development.

(II) The applicable 20-percent units shall be used for lower income students.

(III) The rent provided in the applicable units of the development for lower income students shall be calculated at 30 percent of 65 percent of the area median income for a single-room occupancy unit type.

(IV) The development shall provide priority for the applicable affordable units for lower income students experiencing homelessness. A homeless service provider, as defined in paragraph (3) of subdivision (e) of Section 103577 of the Health and Safety Code, or institution of higher education that has knowledge of a person's homeless status may verify a person's status as homeless for purposes of this subclause.

(ii) For purposes of calculating a density bonus granted pursuant to this subparagraph, the term "unit" as used in this section means one rental bed and its pro rata share of associated common area facilities. The units described in this subparagraph are subject to a recorded affordability restriction of 55 years.

(G) One hundred percent of all units in the development, including total units and density bonus units, but exclusive of a manager's unit or units, are for lower income households, as defined by Section 50079.5 of the Health and Safety Code, except that up to 20 percent of the units in the development, including total units and density bonus units, may be for moderate-income households, as defined in Section 50053 of the Health and Safety Code. For purposes of this subparagraph, "development" includes a shared housing building development.

(2) For purposes of calculating the amount of the density bonus pursuant to subdivision (f), an applicant who requests a density bonus pursuant to this subdivision shall elect whether the bonus shall be awarded on the basis of subparagraph (A), (B), (C), (D), (E), (F), or (G) of paragraph (1).

(c) (1) (A) An applicant shall agree to, and the city, county, or city and county shall ensure, the continued affordability of all very low and low-income rental units that qualified the applicant for the award of the density bonus for 55 years or a longer period of time if required by the construction or mortgage financing assistance program, mortgage insurance program, or rental subsidy program.

(B) (i) Except as otherwise provided in clause (ii), rents for the lower income density bonus units shall be set at an affordable rent, as defined in Section 50053 of the Health and Safety Code.

(ii) For housing developments meeting the criteria of subparagraph (G) of paragraph (1) of subdivision (b), rents for all units in the development, including both base density and density bonus units, shall be as follows:

(I) The rent for at least 20 percent of the units in the development shall be set at an affordable rent, as defined in Section 50053 of the Health and Safety Code.

(II) The rent for the remaining units in the development shall be set at an amount consistent with the maximum rent levels for lower income households, as those rents and incomes are determined by the California Tax Credit Allocation Committee.

(2) (A) An applicant shall agree to ensure, and the city, county, or city and county shall ensure, that a for-sale unit that qualified the applicant for the award of the density bonus meets one of the following conditions:

(i) The unit is initially sold to and occupied by a person or family of very low, low, or moderate income, as required, and it is offered at an affordable housing cost, as that cost is defined in Section 50052.5 of the Health and Safety Code and is subject to an equity sharing agreement.

(ii) If the unit is not purchased by an income-qualified person or family within 180 days after the issuance of the certificate of occupancy, the unit is purchased by a qualified nonprofit housing corporation that meets all of the following requirements pursuant to a recorded contract that satisfies all of the requirements specified in paragraph (10) of subdivision (a) of Section 402.1 of the Revenue and Taxation Code:

(I) The nonprofit corporation has a determination letter from the Internal Revenue Service affirming its tax-exempt status pursuant to Section 501(c)(3) of the Internal Revenue Code and is not a private foundation as that term is defined in Section 509 of the Internal Revenue Code.

(II) The nonprofit corporation is based in California.

(III) All of the board members of the nonprofit corporation have their primary residence in California.

(IV) The primary activity of the nonprofit corporation is the development and preservation of affordable home ownership housing in California that incorporates within their contracts for initial purchase a repurchase option that requires a subsequent purchaser of the property that desires to resell or convey the property to offer the qualified nonprofit corporation the right to repurchase the property prior to selling or conveying that property to any other purchaser pursuant to an equity sharing agreement or affordability restrictions on the sale and conveyance of the property that ensure that the property will be preserved for lower income housing for at least 45 years for owner-occupied housing units and will be sold or resold only to persons or families of very low, low, or moderate income, as defined in Section 50052.5 of the Health and Safety Code.

(B) For purposes of this paragraph, a "qualified nonprofit housing corporation" is a nonprofit housing corporation organized pursuant to Section 501(c)(3) of the Internal Revenue Code that has received a welfare exemption under Section 214.15 of the Revenue and Taxation Code for properties intended to be sold to low-income families who participate in a special no-interest loan program.

(C) The local government shall enforce an equity sharing agreement required pursuant to clause (i) or (ii) of subparagraph (A), unless it is in conflict with the requirements of another public funding source or law or may defer to the recapture provisions of the public funding source. The following apply to the equity sharing agreement:

(i) Upon resale, the seller of the unit shall retain the value of any improvements, the downpayment, and the seller's proportionate share of appreciation.

(ii) Except as provided in clause (v), the local government shall recapture any initial subsidy, as defined in clause (iii), and its proportionate share of appreciation, as defined in clause (iv), which amount shall be used within five years for any of the purposes described in subdivision (e) of Section 33334.2 of the Health and Safety Code that promote homeownership.

(iii) For purposes of this subdivision, the local government's initial subsidy shall be equal to the fair market value of the home at the time of initial sale minus the initial sale price to the moderate-income household, plus the amount of any downpayment

assistance or mortgage assistance. If upon resale the market value is lower than the initial market value, then the value at the time of the resale shall be used as the initial market value.

(iv) For purposes of this subdivision, the local government's proportionate share of appreciation shall be equal to the ratio of the local government's initial subsidy to the fair market value of the home at the time of initial sale.

(v) If the unit is purchased or developed by a qualified nonprofit housing corporation pursuant to clause (ii) of subparagraph (A) the local government may enter into a contract with the qualified nonprofit housing corporation under which the qualified nonprofit housing corporation would recapture any initial subsidy and its proportionate share of appreciation if the qualified nonprofit housing corporation is required to use 100 percent of the proceeds to promote homeownership for lower income households as defined by Section 50079.5 of the Health and Safety Code within the jurisdiction of the local government.

(3) (A) An applicant shall be ineligible for a density bonus or any other incentives or concessions under this section if the housing development is proposed on any property that includes a parcel or parcels on which rental dwelling units are located or, if the dwelling units have been vacated or demolished in the five-year period preceding the application, have been subject to a recorded covenant, ordinance, or law that restricts rents to levels affordable to persons and families of lower or very low income; subject to any other form of rent or price control through a public entity's valid exercise of its police power; or occupied by lower or very low income households, unless the proposed housing development replaces those units, and either of the following applies:

(i) The proposed housing development, inclusive of the units replaced pursuant to this paragraph, contains affordable units at the percentages set forth in subdivision (b).

(ii) Each unit in the development, exclusive of a manager's unit or units, is affordable to, and occupied by, either a lower or very low income household.

(B) For the purposes of this paragraph, "replace" shall mean either of the following:

(i) If any dwelling units described in subparagraph (A) are occupied on the date of application, the proposed housing development shall provide at least the same number of units of equivalent size to be made available at affordable rent or affordable housing cost to, and occupied by, persons and families in the same or lower income category as those households in occupancy. If the income category of the household in occupancy is not known, it shall be rebuttably presumed that lower income renter households occupied these units in the same proportion of lower income renter households to all renter households within the jurisdiction, as determined by the most recently available data from the United States Department of Housing and Urban Development's Comprehensive Housing Affordability Strategy database. For unoccupied dwelling units described in subparagraph (A) in a development with occupied units, the proposed housing development shall provide units of equivalent size to be made available at affordable rent or affordable housing cost to, and occupied by, persons and families in the same or lower income category as the last household in occupancy. If the income category of the last household in occupancy is not known, it shall be rebuttably presumed that lower income renter households occupied these units in the same proportion of lower income renter households to all renter households within the jurisdiction, as determined by the most recently available data from the United States Department of Housing and Urban Development's Comprehensive Housing Affordability Strategy database. All replacement calculations

resulting in fractional units shall be rounded up to the next whole number. If the replacement units will be rental dwelling units, these units shall be subject to a recorded affordability restriction for at least 55 years. If the proposed development is for-sale units, the units replaced shall be subject to paragraph (2).

(ii) If all dwelling units described in subparagraph (A) have been vacated or demolished within the five-year period preceding the application, the proposed housing development shall provide at least the same number of units of equivalent size as existed at the highpoint of those units in the five-year period preceding the application to be made available at affordable rent or affordable housing cost to, and occupied by, persons and families in the same or lower income category as those persons and families in occupancy at that time, if known. If the incomes of the persons and families in occupancy at the highpoint is not known, it shall be rebuttably presumed that low-income and very low income renter households occupied these units in the same proportion of low-income and very low income renter households to all renter households within the jurisdiction, as determined by the most recently available data from the United States Department of Housing and Urban Development's Comprehensive Housing Affordability Strategy database. All replacement calculations resulting in fractional units shall be rounded up to the next whole number. If the replacement units will be rental dwelling units, these units shall be subject to a recorded affordability restriction for at least 55 years. If the proposed development is for-sale units, the units replaced shall be subject to paragraph (2).

(C) Notwithstanding subparagraph (B), for any dwelling unit described in subparagraph (A) that is or was, within the five-year period preceding the application, subject to a form of rent or price control through a local government's valid exercise of its police power and that is or was occupied by persons or families above lower income, the city, county, or city and county may do either of the following:

(i) Require that the replacement units be made available at affordable rent or affordable housing cost to, and occupied by, low-income persons or families. If the replacement units will be rental dwelling units, these units shall be subject to a recorded affordability restriction for at least 55 years. If the proposed development is for-sale units, the units replaced shall be subject to paragraph (2).

(ii) Require that the units be replaced in compliance with the jurisdiction's rent or price control ordinance, provided that each unit described in subparagraph (A) is replaced. Unless otherwise required by the jurisdiction's rent or price control ordinance, these units shall not be subject to a recorded affordability restriction.

(D) For purposes of this paragraph, "equivalent size" means that the replacement units contain at least the same total number of bedrooms as the units being replaced.

(E) Subparagraph (A) does not apply to an applicant seeking a density bonus for a proposed housing development if the applicant's application was submitted to, or processed by, a city, county, or city and county before January 1, 2015.

(d) (1) An applicant for a density bonus pursuant to subdivision (b) may submit to a city, county, or city and county a proposal for the specific incentives or concessions that the applicant requests pursuant to this section, and may request a meeting with the city, county, or city and county. The city, county, or city and county shall grant the concession or incentive requested by the applicant unless the city, county, or city and county makes a written finding, based upon substantial evidence, of any of the following:

(A) The concession or incentive does not result in identifiable and actual cost reductions, consistent with subdivision (k), to provide for affordable housing costs, as defined in

Section 50052.5 of the Health and Safety Code, or for rents for the targeted units to be set as specified in subdivision (c).

(B) The concession or incentive would have a specific, adverse impact, as defined in paragraph (2) of subdivision (d) of Section 65589.5, upon public health and safety or on any real property that is listed in the California Register of Historical Resources and for which there is no feasible method to satisfactorily mitigate or avoid the specific, adverse impact without rendering the development unaffordable to low-income and moderate-income households.

(C) The concession or incentive would be contrary to state or federal law.

(2) The applicant shall receive the following number of incentives or concessions:

(A) One incentive or concession for projects that include at least 10 percent of the total units for lower income households, at least 5 percent for very low income households, or at least 10 percent for persons and families of moderate income in a development in which the units are for sale.

(B) Two incentives or concessions for projects that include at least 17 percent of the total units for lower income households, at least 10 percent for very low income households, or at least 20 percent for persons and families of moderate income in a development in which the units are for sale.

(C) Three incentives or concessions for projects that include at least 24 percent of the total units for lower income households, at least 15 percent for very low income households, or at least 30 percent for persons and families of moderate income in a development in which the units are for sale.

(D) Five incentives or concessions for a project meeting the criteria of subparagraph (G) of paragraph (1) of subdivision (b). If the project is located within one-half mile of a major transit stop or is located in a very low vehicle travel area in a designated county, the applicant shall also receive a height increase of up to three additional stories, or 33 feet.

(E) One incentive or concession for projects that include at least 20 percent of the total units for lower income students in a student housing development.

(F) Four incentives or concessions for projects that include at least 16 percent of the units for very low income households or at least 45 percent for persons and families of moderate income in a development in which the units are for sale.

(3) The applicant may initiate judicial proceedings if the city, county, or city and county refuses to grant a requested density bonus, incentive, or concession. If a court finds that the refusal to grant a requested density bonus, incentive, or concession is in violation of this section, the court shall award the plaintiff reasonable attorney's fees and costs of suit. This subdivision shall not be interpreted to require a local government to grant an incentive or concession that has a specific, adverse impact, as defined in paragraph (2) of subdivision (d) of Section 65589.5, upon health or safety, and for which there is no feasible method to satisfactorily mitigate or avoid the specific, adverse impact. This subdivision shall not be interpreted to require a local government to grant an incentive or concession that would have an adverse impact on any real property that is listed in the California Register of Historical Resources. The city, county, or city and county shall establish procedures for carrying out this section that shall include legislative body approval of the means of compliance with this section.

(4) The city, county, or city and county shall bear the burden of proof for the denial of a requested concession or incentive.

(e) (1) In no case may a city, county, or city and county apply any development standard that will have the effect of physically precluding the construction of a development meeting the criteria of subdivision (b) at the densities or with the concessions or incentives permitted by this section. Subject to paragraph (3), an applicant may submit to a city, county, or city and county a proposal for the waiver or reduction of development standards that will have the effect of physically precluding the construction of a development meeting the criteria of subdivision (b) at the densities or with the concessions or incentives permitted under this section, and may request a meeting with the city, county, or city and county. If a court finds that the refusal to grant a waiver or reduction of development standards is in violation of this section, the court shall award the plaintiff reasonable attorney's fees and costs of suit. This subdivision shall not be interpreted to require a local government to waive or reduce development standards if the waiver or reduction would have a specific, adverse impact, as defined in paragraph (2) of subdivision (d) of Section 65589.5, upon health or safety, and for which there is no feasible method to satisfactorily mitigate or avoid the specific, adverse impact. This subdivision shall not be interpreted to require a local government to waive or reduce development standards that would have an adverse impact on any real property that is listed in the California Register of Historical Resources, or to grant any waiver or reduction that would be contrary to state or federal law.

(2) A proposal for the waiver or reduction of development standards pursuant to this subdivision shall neither reduce nor increase the number of incentives or concessions to which the applicant is entitled pursuant to subdivision (d).

(3) A housing development that receives a waiver from any maximum controls on density pursuant to clause (ii) of subparagraph (D) of paragraph (3) of subdivision (f) shall only be eligible for a waiver or reduction of development standards as provided in subparagraph (D) of paragraph (2) of subdivision (d) and clause (ii) of subparagraph (D) of paragraph (3) of subdivision (f), unless the city, county, or city and county agrees to additional waivers or reductions of development standards.

(f) For the purposes of this chapter, "density bonus" means a density increase over the otherwise maximum allowable gross residential density as of the date of application by the applicant to the city, county, or city and county, or, if elected by the applicant, a lesser percentage of density increase, including, but not limited to, no increase in density. The amount of density increase to which the applicant is entitled shall vary according to the amount by which the percentage of affordable housing units exceeds the percentage established in subdivision (b).

(1) For housing developments meeting the criteria of subparagraph (A) of paragraph (1) of subdivision (b), the density bonus shall be calculated as follows:

| Percentage Low-Income Units | Percentage Density Bonus |
|---|---|
| 10 | 20 |
| 11 | 21.5 |
| 12 | 23 |
| 13 | 24.5 |
| 14 | 26 |
| 15 | 27.5 |

| | |
|---|---|
| 16 | 29 |
| 17 | 30.5 |
| 18 | 32 |
| 19 | 33.5 |
| 20 | 35 |
| 21 | 38.75 |
| 22 | 42.5 |
| 23 | 46.25 |
| 24 | 50 |

(2) For housing developments meeting the criteria of subparagraph (B) of paragraph (1) of subdivision (b), the density bonus shall be calculated as follows:

| Percentage Very Low Income Units | Percentage Density Bonus |
|---|---|
| 5 | 20 |
| 6 | 22.5 |
| 7 | 25 |
| 8 | 27.5 |
| 9 | 30 |
| 10 | 32.5 |
| 11 | 35 |
| 12 | 38.75 |
| 13 | 42.5 |
| 14 | 46.25 |
| 15 | 50 |

(3) (A) For housing developments meeting the criteria of subparagraph (C) of paragraph (1) of subdivision (b), the density bonus shall be 20 percent of the number of senior housing units.

(B) For housing developments meeting the criteria of subparagraph (E) of paragraph (1) of subdivision (b), the density bonus shall be 20 percent of the number of the type of units giving rise to a density bonus under that subparagraph.

(C) For housing developments meeting the criteria of subparagraph (F) of paragraph (1) of subdivision (b), the density bonus shall be 35 percent of the student housing units.

(D) For housing developments meeting the criteria of subparagraph (G) of paragraph (1) of subdivision (b), the following shall apply:

(i) Except as otherwise provided in clauses (ii) and (iii), the density bonus shall be 80 percent of the number of units for lower income households.

(ii) If the housing development is located within one-half mile of a major transit stop, the city, county, or city and county shall not impose any maximum controls on density.

(iii) If the housing development is located in a very low vehicle travel area within a designated county, the city, county, or city and county shall not impose any maximum controls on density.

(4) For housing developments meeting the criteria of subparagraph (D) of paragraph (1) of subdivision (b), the density bonus shall be calculated as follows:

| Percentage Moderate-Income Units | Percentage Density Bonus |
|---|---|
| 10 | 5 |
| 11 | 6 |
| 12 | 7 |
| 13 | 8 |
| 14 | 9 |
| 15 | 10 |
| 16 | 11 |
| 17 | 12 |
| 18 | 13 |
| 19 | 14 |
| 20 | 15 |
| 21 | 16 |
| 22 | 17 |
| 23 | 18 |
| 24 | 19 |
| 25 | 20 |
| 26 | 21 |
| 27 | 22 |
| 28 | 23 |
| 29 | 24 |
| 30 | 25 |
| 31 | 26 |
| 32 | 27 |
| 33 | 28 |
| 34 | 29 |
| 35 | 30 |
| 36 | 31 |

| | |
|---|---|
| 37 | 32 |
| 38 | 33 |
| 39 | 34 |
| 40 | 35 |
| 41 | 38.75 |
| 42 | 42.5 |
| 43 | 46.25 |
| 44 | 50 |

(5) All density calculations resulting in fractional units shall be rounded up to the next whole number. The granting of a density bonus shall not require, or be interpreted, in and of itself, to require a general plan amendment, local coastal plan amendment, zoning change, or other discretionary approval.

(g) (1) When an applicant for a tentative subdivision map, parcel map, or other residential development approval donates land to a city, county, or city and county in accordance with this subdivision, the applicant shall be entitled to a 15-percent increase above the otherwise maximum allowable residential density for the entire development, as follows:

| Percentage Very Low Income | Percentage Density Bonus |
|---|---|
| 10 | 15 |
| 11 | 16 |
| 12 | 17 |
| 13 | 18 |
| 14 | 19 |
| 15 | 20 |
| 16 | 21 |
| 17 | 22 |
| 18 | 23 |
| 19 | 24 |
| 20 | 25 |
| 21 | 26 |
| 22 | 27 |
| 23 | 28 |
| 24 | 29 |
| 25 | 30 |
| 26 | 31 |
| 27 | 32 |
| 28 | 33 |

| | |
|---|---|
| 29 | 34 |
| 30 | 35 |

(2) This increase shall be in addition to any increase in density mandated by subdivision (b), up to a maximum combined mandated density increase of 35 percent if an applicant seeks an increase pursuant to both this subdivision and subdivision (b). All density calculations resulting in fractional units shall be rounded up to the next whole number. Nothing in this subdivision shall be construed to enlarge or diminish the authority of a city, county, or city and county to require a developer to donate land as a condition of development. An applicant shall be eligible for the increased density bonus described in this subdivision if all of the following conditions are met:

(A) The applicant donates and transfers the land no later than the date of approval of the final subdivision map, parcel map, or residential development application.

(B) The developable acreage and zoning classification of the land being transferred are sufficient to permit construction of units affordable to very low income households in an amount not less than 10 percent of the number of residential units of the proposed development.

(C) The transferred land is at least one acre in size or of sufficient size to permit development of at least 40 units, has the appropriate general plan designation, is appropriately zoned with appropriate development standards for development at the density described in paragraph (3) of subdivision (c) of Section 65583.2, and is or will be served by adequate public facilities and infrastructure.

(D) The transferred land shall have all of the permits and approvals, other than building permits, necessary for the development of the very low income housing units on the transferred land, not later than the date of approval of the final subdivision map, parcel map, or residential development application, except that the local government may subject the proposed development to subsequent design review to the extent authorized by subdivision (i) of Section 65583.2 if the design is not reviewed by the local government before the time of transfer.

(E) The transferred land and the affordable units shall be subject to a deed restriction ensuring continued affordability of the units consistent with paragraphs (1) and (2) of subdivision (c), which shall be recorded on the property at the time of the transfer.

(F) The land is transferred to the local agency or to a housing developer approved by the local agency. The local agency may require the applicant to identify and transfer the land to the developer.

(G) The transferred land shall be within the boundary of the proposed development or, if the local agency agrees, within one-quarter mile of the boundary of the proposed development.

(H) A proposed source of funding for the very low income units shall be identified not later than the date of approval of the final subdivision map, parcel map, or residential development application.

(h) (1) When an applicant proposes to construct a housing development that conforms to the requirements of subdivision (b) and includes a childcare facility that will be located on the premises of, as part of, or adjacent to, the project, the city, county, or city and county shall grant either of the following:

(A) An additional density bonus that is an amount of square feet of residential space that is equal to or greater than the amount of square feet in the childcare facility.

(B) An additional concession or incentive that contributes significantly to the economic feasibility of the construction of the childcare facility.

(2) The city, county, or city and county shall require, as a condition of approving the housing development, that the following occur:

(A) The childcare facility shall remain in operation for a period of time that is as long as or longer than the period of time during which the density bonus units are required to remain affordable pursuant to subdivision (c).

(B) Of the children who attend the childcare facility, the children of very low income households, lower income households, or families of moderate income shall equal a percentage that is equal to or greater than the percentage of dwelling units that are required for very low income households, lower income households, or families of moderate income pursuant to subdivision (b).

(3) Notwithstanding any requirement of this subdivision, a city, county, or city and county shall not be required to provide a density bonus or concession for a childcare facility if it finds, based upon substantial evidence, that the community has adequate childcare facilities.

(4) "Childcare facility," as used in this section, means a child daycare facility other than a family daycare home, including, but not limited to, infant centers, preschools, extended daycare facilities, and schoolage childcare centers.

(i) "Housing development," as used in this section, means a development project for five or more residential units, including mixed-use developments. For the purposes of this section, "housing development" also includes a subdivision or common interest development, as defined in Section 4100 of the Civil Code, approved by a city, county, or city and county and consists of residential units or unimproved residential lots and either a project to substantially rehabilitate and convert an existing commercial building to residential use or the substantial rehabilitation of an existing multifamily dwelling, as defined in subdivision (d) of Section 65863.4, where the result of the rehabilitation would be a net increase in available residential units. For the purpose of calculating a density bonus, the residential units shall be on contiguous sites that are the subject of one development application, but do not have to be based upon individual subdivision maps or parcels. The density bonus shall be permitted in geographic areas of the housing development other than the areas where the units for the lower income households are located.

(j) (1) The granting of a concession or incentive shall not require or be interpreted, in and of itself, to require a general plan amendment, local coastal plan amendment, zoning change, study, or other discretionary approval. For purposes of this subdivision, "study" does not include reasonable documentation to establish eligibility for the concession or incentive or to demonstrate that the incentive or concession meets the definition set forth in subdivision (k). This provision is declaratory of existing law.

(2) Except as provided in subdivisions (d) and (e), the granting of a density bonus shall not require or be interpreted to require the waiver of a local ordinance or provisions of a local ordinance unrelated to development standards.

(k) For the purposes of this chapter, concession or incentive means any of the following:

(1) A reduction in site development standards or a modification of zoning code requirements or architectural design requirements that exceed the minimum building standards approved by the California Building Standards Commission as provided in Part 2.5 (commencing with

Section 18901) of Division 13 of the Health and Safety Code, including, but not limited to, a reduction in setback and square footage requirements and in the ratio of vehicular parking spaces that would otherwise be required that results in identifiable and actual cost reductions, to provide for affordable housing costs, as defined in Section 50052.5 of the Health and Safety Code, or for rents for the targeted units to be set as specified in subdivision (c).

(2) Approval of mixed-use zoning in conjunction with the housing project if commercial, office, industrial, or other land uses will reduce the cost of the housing development and if the commercial, office, industrial, or other land uses are compatible with the housing project and the existing or planned development in the area where the proposed housing project will be located.

(3) Other regulatory incentives or concessions proposed by the developer or the city, county, or city and county that result in identifiable and actual cost reductions to provide for affordable housing costs, as defined in Section 50052.5 of the Health and Safety Code, or for rents for the targeted units to be set as specified in subdivision (c).

(l) Subdivision (k) does not limit or require the provision of direct financial incentives for the housing development, including the provision of publicly owned land, by the city, county, or city and county, or the waiver of fees or dedication requirements.

(m) This section does not supersede or in any way alter or lessen the effect or application of the California Coastal Act of 1976 (Division 20 (commencing with Section 30000) of the Public Resources Code). Any density bonus, concessions, incentives, waivers or reductions of development standards, and parking ratios to which the applicant is entitled under this section shall be permitted in a manner that is consistent with this section and Division 20 (commencing with Section 30000) of the Public Resources Code.

(n) If permitted by local ordinance, nothing in this section shall be construed to prohibit a city, county, or city and county from granting a density bonus greater than what is described in this section for a development that meets the requirements of this section or from granting a proportionately lower density bonus than what is required by this section for developments that do not meet the requirements of this section.

(o) For purposes of this section, the following definitions shall apply:

(1) "Designated county" includes the Counties of Alameda, Contra Costa, Los Angeles, Marin, Napa, Orange, Riverside, Sacramento, San Bernardino, San Diego, San Mateo, Santa Barbara, Santa Clara, Solano, Sonoma, and Ventura, and the City and County of San Francisco.

(2) "Development standard" includes a site or construction condition, including, but not limited to, a height limitation, a setback requirement, a floor area ratio, an onsite open-space requirement, a minimum lot area per unit requirement, or a parking ratio that applies to a residential development pursuant to any ordinance, general plan element, specific plan, charter, or other local condition, law, policy, resolution, or regulation that is adopted by the local government or that is enacted by the local government's electorate exercising its local initiative or referendum power, whether that power is derived from the California Constitution, statute, or the charter or ordinances of the local government.

(3) "Located within one-half mile of a major transit stop" means that any point on a proposed development, for which an applicant seeks a density bonus, other incentives or concessions, waivers or reductions of development standards, or a vehicular parking ratio pursuant to this section, is within one-half mile of any point on the property on which a major transit stop is located, including any parking lot owned by the transit authority or other local agency operating the major transit stop.

(4) "Lower income student" means a student who has a household income and asset level that does not exceed the level for Cal Grant A or Cal Grant B award recipients as set forth in paragraph (1) of subdivision (k) of Section 69432.7 of the Education Code. The eligibility of a student to occupy a unit for lower income students under this section shall be verified by an affidavit, award letter, or letter of eligibility provided by the institution of higher education in which the student is enrolled or by the California Student Aid Commission that the student receives or is eligible for financial aid, including an institutional grant or fee waiver from the college or university, the California Student Aid Commission, or the federal government.

(5) "Major transit stop" has the same meaning as defined in subdivision (b) of Section 21155 of the Public Resources Code.

(6) "Maximum allowable residential density" or "base density" means the greatest number of units allowed under the zoning ordinance, specific plan, or land use element of the general plan, or, if a range of density is permitted, means the greatest number of units allowed by the specific zoning range, specific plan, or land use element of the general plan applicable to the project. Density shall be determined using dwelling units per acre. However, if the applicable zoning ordinance, specific plan, or land use element of the general plan does not provide a dwelling-units-per-acre standard for density, then the local agency shall calculate the number of units by:

(A) Estimating the realistic development capacity of the site based on the objective development standards applicable to the project, including, but not limited to, floor area ratio, site coverage, maximum building height and number of stories, building setbacks and stepbacks, public and private open-space requirements, minimum percentage or square footage of any nonresidential component, and parking requirements, unless not required for the base project. Parking requirements shall include considerations regarding number of spaces, location, design, type, and circulation. A developer may provide a base density study and the local agency shall accept it, provided that it includes all applicable objective development standards.

(B) Maintaining the same average unit size and other project details relevant to the base density study, excepting those that may be modified by waiver or concession to accommodate the bonus units, in the proposed project as in the study.

(7) (A) (i) "Shared housing building" means a residential or mixed-use structure, with five or more shared housing units and one or more common kitchens and dining areas designed for permanent residence of more than 30 days by its tenants. The kitchens and dining areas within the shared housing building shall be able to adequately accommodate all residents. If a local ordinance further restricts the attributes of a shared housing building beyond the requirements established in this section, the local definition shall apply to the extent that it does not conflict with the requirements of this section.

(ii) A "shared housing building" may include other dwelling units that are not shared housing units, provided that those dwelling units do not occupy more than 25 percent of the floor area of the shared housing building. A shared housing building may include 100 percent shared housing units.

(B) "Shared housing unit" means one or more habitable rooms, not within another dwelling unit, that includes a bathroom, sink, refrigerator, and microwave, is used for permanent residence, that meets the "minimum room area" specified in Section R304 of the California Residential Code (Part 2.5 of Title 24 of the California Code of Regulations), and complies with the definition of "guestroom" in Section R202 of the California Residential Code. If a local ordinance further restricts the attributes of a shared housing

building beyond the requirements established in this section, the local definition shall apply to the extent that it does not conflict with the requirements of this section.

(8) (A) "Total units" or "total dwelling units" means a calculation of the number of units that:

(i) Excludes a unit added by a density bonus awarded pursuant to this section or any local law granting a greater density bonus.

(ii) Includes a unit designated to satisfy an inclusionary zoning requirement of a city, county, or city and county.

(B) For purposes of calculating a density bonus granted pursuant to this section for a shared housing building, "unit" means one shared housing unit and its pro rata share of associated common area facilities.

(9) "Very low vehicle travel area" means an urbanized area, as designated by the United States Census Bureau, where the existing residential development generates vehicle miles traveled per capita that is below 85 percent of either regional vehicle miles traveled per capita or city vehicle miles traveled per capita. For purposes of this paragraph, "area" may include a travel analysis zone, hexagon, or grid. For the purposes of determining "regional vehicle miles traveled per capita" pursuant to this paragraph, a "region" is the entirety of incorporated and unincorporated areas governed by a multicounty or single-county metropolitan planning organization, or the entirety of the incorporated and unincorporated areas of an individual county that is not part of a metropolitan planning organization.

(p) (1) Except as provided in paragraphs (2), (3), and (4), upon the request of the developer, a city, county, or city and county shall not require a vehicular parking ratio, inclusive of parking for persons with a disability and guests, of a development meeting the criteria of subdivisions (b) and (c), that exceeds the following ratios:

(A) Zero to one bedroom: one onsite parking space.

(B) Two to three bedrooms: one and one-half onsite parking spaces.

(C) Four and more bedrooms: two and one-half parking spaces.

(2) (A) Notwithstanding paragraph (1), if a development includes at least 20 percent low-income units for housing developments meeting the criteria of subparagraph (A) of paragraph (1) of subdivision (b) or at least 11 percent very low income units for housing developments meeting the criteria of subparagraph (B) of paragraph (1) of subdivision (b), is located within one-half mile of a major transit stop, and there is unobstructed access to the major transit stop from the development, then, upon the request of the developer, a city, county, or city and county shall not impose a vehicular parking ratio, inclusive of parking for persons with a disability and guests, that exceeds 0.5 spaces per unit. Notwithstanding paragraph (1), if a development includes at least 40 percent moderate-income units for housing developments meeting the criteria of subparagraph (D) of paragraph (1) of subdivision (b), is located within one-half mile of a major transit stop, as defined in subdivision (b) of Section 21155 of the Public Resources Code, and the residents of the development have unobstructed access to the major transit stop from the development then, upon the request of the developer, a city, county, or city and county shall not impose a vehicular parking ratio, inclusive of parking for persons with a disability and guests, that exceeds 0.5 spaces per bedroom.

(B) For purposes of this subdivision, "unobstructed access to the major transit stop" means a resident is able to access the major transit stop without encountering natural or constructed impediments. For purposes of this subparagraph, "natural or constructed

impediments" includes, but is not limited to, freeways, rivers, mountains, and bodies of water, but does not include residential structures, shopping centers, parking lots, or rails used for transit.

(3) Notwithstanding paragraph (1), if a development meets the criteria of subparagraph (G) of paragraph (1) of subdivision (b), then, upon the request of the developer, a city, county, or city and county shall not impose vehicular parking standards if the development meets any of the following criteria:

(A) The development is located within one-half mile of a major transit stop and there is unobstructed access to the major transit stop from the development.

(B) The development is a for-rent housing development for individuals who are 55 years of age or older that complies with Sections 51.2 and 51.3 of the Civil Code and the development has either paratransit service or unobstructed access, within one-half mile, to fixed bus route service that operates at least eight times per day.

(C) The development is either a special needs housing development, as defined in Section 51312 of the Health and Safety Code, or a supportive housing development, as defined in Section 50675.14 of the Health and Safety Code. A development that is a special needs housing development shall have either paratransit service or unobstructed access, within one-half mile, to fixed bus route service that operates at least eight times per day.

(4) If the total number of parking spaces required for a development is other than a whole number, the number shall be rounded up to the next whole number. For purposes of this subdivision, a development may provide onsite parking through tandem parking or uncovered parking, but not through onstreet parking.

(5) This subdivision shall apply to a development that meets the requirements of subdivisions (b) and (c), but only at the request of the applicant. An applicant may request parking incentives or concessions beyond those provided in this subdivision pursuant to subdivision (d).

(6) This subdivision does not preclude a city, county, or city and county from reducing or eliminating a parking requirement for development projects of any type in any location.

(7) Notwithstanding paragraphs (2) and (3), if a city, county, city and county, or an independent consultant has conducted an areawide or jurisdictionwide parking study in the last seven years, then the city, county, or city and county may impose a higher vehicular parking ratio not to exceed the ratio described in paragraph (1), based upon substantial evidence found in the parking study, that includes, but is not limited to, an analysis of parking availability, differing levels of transit access, walkability access to transit services, the potential for shared parking, the effect of parking requirements on the cost of market-rate and subsidized developments, and the lower rates of car ownership for low-income and very low income individuals, including seniors and special needs individuals. The city, county, or city and county shall pay the costs of any new study. The city, county, or city and county shall make findings, based on a parking study completed in conformity with this paragraph, supporting the need for the higher parking ratio.

(8) A request pursuant to this subdivision shall neither reduce nor increase the number of incentives or concessions to which the applicant is entitled pursuant to subdivision (d).

(q) Each component of any density calculation, including base density and bonus density, resulting in fractional units shall be separately rounded up to the next whole number. The Legislature finds and declares that this provision is declaratory of existing law.

(r) This chapter shall be interpreted liberally in favor of producing the maximum number of total housing units.

(s) Notwithstanding any other law, if a city, including a charter city, county, or city and county has adopted an ordinance or a housing program, or both an ordinance and a housing program, that incentivizes the development of affordable housing that allows for density bonuses that exceed the density bonuses required by the version of this section effective through December 31, 2020, that city, county, or city and county is not required to amend or otherwise update its ordinance or corresponding affordable housing incentive program to comply with the amendments made to this section by the act adding this subdivision, and is exempt from complying with the incentive and concession calculation amendments made to this section by the act adding this subdivision as set forth in subdivision (d), particularly subparagraphs (B) and (C) of paragraph (2) of that subdivision, and the amendments made to the density tables under subdivision (f).

(t) When an applicant proposes to construct a housing development that conforms to the requirements of subparagraph (A) or (B) of paragraph (1) of subdivision (b) that is a shared housing building, the city, county, or city and county shall not require any minimum unit size requirements or minimum bedroom requirements that are in conflict with paragraph (7) of subdivision (o).

(u) (1) The Legislature finds and declares that the intent behind the Density Bonus Law is to allow public entities to reduce or even eliminate subsidies for a particular project by allowing a developer to include more total units in a project than would otherwise be allowed by the local zoning ordinance in exchange for affordable units. It further reaffirms that the intent is to cover at least some of the financing gap of affordable housing with regulatory incentives, rather than additional public subsidy.

(2) It is therefore the intent of the Legislature to make modifications to the Density Bonus Law by the act adding this subdivision to further incentivize the construction of very low, low-, and moderate-income housing units. It is further the intent of the Legislature in making these modifications to the Density Bonus Law to ensure that any additional benefits conferred upon a developer are balanced with the receipt of a public benefit in the form of adequate levels of affordable housing. The Legislature further intends that these modifications will ensure that the Density Bonus Law creates incentives for the construction of more housing across all areas of the state.

(v) (1) Provided that the resulting housing development would not restrict more than 50 percent of the total units to moderate-income, lower income, or very low income households, a city, county, or city and county shall grant an additional density bonus calculated pursuant to paragraph (2) when an applicant proposes to construct a housing development that conforms to the requirements of paragraph (1) of subdivision (b), agrees to include additional rental or for-sale units affordable to very low income households or moderate income households, and meets any of the following requirements:

(A) The housing development conforms to the requirements of subparagraph (A) of paragraph (1) of subdivision (b) and provides 24 percent of the total units to lower income households.

(B) The housing development conforms to the requirements of subparagraph (B) of paragraph (1) of subdivision (b) and provides 15 percent of the total units to very low income households.

(C) The housing development conforms to the requirements of subparagraph (D) of paragraph (1) of subdivision (b) and provides 44 percent of the total units to moderate-income households.

(2) A city, county, or city and county shall grant an additional density bonus for a housing development that meets the requirements of paragraph (1), calculated as follows:

| Percentage Very Low Income Units | Percentage Density Bonus |
|---|---|
| 5 | 20 |
| 6 | 23.75 |
| 7 | 27.5 |
| 8 | 31.25 |
| 9 | 35 |
| 10 | 38.75 |

| Percentage Moderate-Income Units | Percentage Density Bonus |
|---|---|
| 5 | 20 |
| 6 | 22.5 |
| 7 | 25 |
| 8 | 27.5 |
| 9 | 30 |
| 10 | 32.5 |
| 11 | 35 |
| 12 | 38.75 |
| 13 | 42.5 |
| 14 | 46.25 |
| 15 | 50 |

(3) The increase required by paragraphs (1) and (2) shall be in addition to any increase in density granted by subdivision (b).

(4) The additional density bonus required under this subdivision shall be calculated using the number of units excluding any density bonus awarded by this section.

*(Amended by Stats. 2023, Ch. 784, Sec. 1.3. (SB 713) Effective January 1, 2024.)*

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Cases (44)

government code 65915 Show/hide term highlights

Sort by: Relevance

1. Bankers Hill 150 v. City of San Diego

CA Courts of Appeal Cases from 1905 | Court of Appeal of California, Fourth Appellate District, Division One | Jan 07, 2022 | 74 Cal. App. 5th 755

**Overview:** A city did not abuse its discretion under Code Civ. Proc., § 1094.5, subd. (b) , by approving a mixed-use project that included affordable housing units because the project qualified for Density Bonus Law, Gov. Code, § 65915 et seq. , benefits and the city council found that there was no basis to deny a requested deviation from setback requirements.

Headnotes Opinions Summary

Terms: Opinion

... a state law known as the Density Bonus Law. ( Gov. Code, § 65915 et seq. ) The Density Bonus Law incentivizes the construction of affordable housing by allowing a developer to add additional housing units to a project beyond the zoned capacity and secure ...

View this passage in full document

2. Wollmer v. City of Berkeley

CA Courts of Appeal Cases from 1905 | Court of Appeal of California, First Appellate District, Division Five | Oct 30, 2009 | 179 Cal. App. 4th 933

**Overview:** Because additional residential units awarded pursuant to Gov. Code, § 65915 , were excluded from a city's calculation of the base number of residential units, the city correctly determined the number of residential units for the base project, and there was therefore no error in its calculation of the number of density bonus units.

Headnotes Opinions Summary Oth

Terms: Opinion

... the City's approvals violated the state density bonus law ( Gov. Code, § 65915 ), Berkeley Municipal Code, and California Environmental Quality Act ( Pub. Resources Code, § 21000 et seq. ; CEQA). While we affirm in all respects, the published portion of this opinion addresses ...

View this passage in full document

☐ 3. Latinos Unidos Del Valle De Napa Y Solano v. County of Napa

CA Courts of Appeal Cases from 1905 | Court of Appeal of California, First Appellate District, Division Three | Jul 11, 2013 | 217 Cal. App. 4th 1160

**Overview:** By excluding units satisfying a local inclusionary requirement from the number of units required for the density bonus, a county violated the mandatory duty imposed on municipalities to award a density bonus when a developer agreed to dedicate the percentage of units specified by the Density Bonus Law, Gov. Code, § 65915 , to affordable housing.

Headnotes Opinions Summary Oth

Terms: Summary

... defendant county to comply with the Density Bonus Law, Gov. **Code, § 65915** , and to take other actions. By excluding units satisfying a local inclusionary requirement from the number of units required for the density bonus, a county violated the mandatory duty imposed ...

View this passage in full document

☐ 4. PR/JSM Rivara LLC v. Community Redevelopment Agency

CA Courts of Appeal Cases from 1905 | Court of Appeal of California, Second Appellate District, Division Four | Dec 17, 2009 | 180 Cal. App. 4th 1475

**Overview:** Trial court properly declined to set aside design guidelines for a city's redevelopment project area where the design guidelines implemented the redevelopment plan and were thus not a zoning ordinance within the meaning of the government code, and where private developers failed to show the design guidelines were inconsistent with the general plan.

Headnotes Opinions Summary Oth

Terms: Other

... incentive, in the form of a density increase, which local **governments** provide in return for a developer's voluntary inclusion of affordable housing units within a project. (See Gov. **Code, §§ 65915–65918** .) The term 'density bonus' is defined in ...

View this passage in full document

☐ 5. Building Industry Assn. v. City of Oceanside

CA Courts of Appeal Cases from 1905 | Court of Appeal of California, Fourth Appellate District, Division One | Jul 19, 1994 | 27 Cal. App. 4th 744

**Overview:** City's zoning ordinance, which conflicted with city's general plan and state planning and zoning laws, was invalid at the time it was passed because planning and zoning laws invalidated any zoning ordinance which conflicted with general plan.

Headnotes Opinions Oth

Terms: Opinion

... (1) the PFME of the City's general plan, or (2) **Government** Code § 65008 , or (3) **Government** Code § 65913.1 , or (4) **Government Code § 65915** . ([ Building Industry v. Superior Court , supra ,] 211 Cal.App.3d 277, 294, 295 and 297 .) The Court considered a ...

View this passage in full document

☐ 6. ⚠ Friends of Lagoon Valley v. City of Vacaville

CA Courts of Appeal Cases from 1905 | Court of Appeal of California, First Appellate District, Division Three | Aug 28, 2007 | 154 Cal. App. 4th 807

**Overview:** Substantial evidence supported a city's conclusion that a project was consistent with applicable plans as required by Gov. Code, § 66473.5 ; payment of traffic impact fees was a reasonable mitigation program, and the city acted within its discretion in reducing the size of an office business park and increasing the number of residential units.

Headnotes Opinions Oth

## Terms: Opinion

... the minimum number necessary to qualify for a bonus. ( Gov. **Code**, § **65915**, subd. (g) .) Because the statute imposes a mandatory duty on local **governments**, and provides a means for developers to enforce this duty through civil proceedings ( Gov. **Code**, § **65915**, subd. ...

View this passage in full document

☐ 7. ❶ Schreiber v. City of Los Angeles

CA Courts of Appeal Cases from 1905 | Court of Appeal of California, Second Appellate District, Division Six | Sep 28, 2021 | 69 Cal. App. 5th 549

**Overview:** In a challenge to the approval of a development project by the City of Los Angeles, the appellate court held that neither the density bonus law nor the Los Angeles City ordinance implementing it required the applicant to provide financial documentation to prove that the requested concessions would render the development economically feasible.

Headnotes Opinions Oth

## Terms: Opinion

... Tangeman , J. TANGEMAN , J. — (1) The density bonus law ( Gov. **Code**, § **65915** ) requires that cities and counties allow increased building density, and grant concessions and waivers of permit requirements, in exchange for an applicant's agreement to dedicate a specified ...

View this passage in full document

☐ 8. ⚠ Wollmer v. City of Berkeley

CA Courts of Appeal Cases from 1905 | Court of Appeal of California, First Appellate District, Division Four | Mar 11, 2011 | 193 Cal. App. 4th 1329

**Overview:** Density bonus did not preclude fair market rents under the federal Section 8 housing program, 42 U.S.C. § 1437f , in excess of maximum rents under Health & Saf. Code, §§ 50053, subd. (b)(2) , 50098 , because affordable rent under Gov. Code, § 65915, subd. (c)(1) , pertained to the amount paid by the tenant and did not limit rent subsidies.

Headnotes Opinions Summary

Terms: Opinion

... as defined in Section 50053 of the Health and Safety Code." ( § 65915, subd. (c)(1) , italics added.) In turn that provision establishes maximum ceilings for an "affordable rent." As pertinent to this appeal, Health and Safety Code section 50053 states: "For ...

View this passage in full document

☐ 9. Kalnel Gardens, LLC v. City of Los Angeles

CA Courts of Appeal Cases from 1905 | Court of Appeal of California, Second Appellate District, Division Eight | Sep 29, 2016 | 3 Cal. App. 5th 927

**Overview:** Because the Density Bonus Act, Gov. Code, § 65915 , and the Mello Act, Gov. Code, §§ 65590-65590.1 , were subordinate to the Coastal Act, Pub. Resources Code, § 30000 et seq. , a city could reject a housing project in the coastal zone under Pub. Resources Code, § 30251 , even if a density bonus would have applied.

Headnotes Opinions Summary

Terms: Opinion

... Act ( Gov. Code, § 65589.5 ; HAA), the Density Bonus Act ( Gov. Code, § 65915 ) and the Mello Act ( Gov. Code, § 65590 ). The low-income housing units also entitled Kalnel to certain other zoning concessions, including a height variance above the usual 25-foot limit. ...

View this passage in full document

☐ 10. Build v. City of Manhattan Beach

CA Superior Courts - Trial Orders | Superior Court of California, County of Los Angeles | Nov 30, 2023 | 2023 Cal. Super. LEXIS 101952

Opinions

Terms: Opinion

... the development unaffordable to low- and moderate-income households...." Just like Government Code § 65915(d)(1)(B), section 10.94.040(B)(2) of the Manhattan Beach Municipal Code requires the City to make a written finding concerning the specific, adverse impact that the requested incentive ...

View this passage in full document

< 1 2 3 ... 5 >

# Bankers Hill 150 v. City of San Diego, 74 Cal. App. 5th 755

**Copy Citation**

Court of Appeal of California, Fourth Appellate District, Division One

January 7, 2022, Opinion Filed

D077963

**Reporter**

**74 Cal. App. 5th 755** * | 289 Cal. Rptr. 3d 268 ** | 2022 Cal. App. LEXIS 83 *** | 2022 WL 305064

BANKERS HILL 150 et al., Plaintiffs and Appellants, v. CITY OF SAN DIEGO, Defendant and Respondent; GREYSTAR GP II, LLC, et al., Real Parties in Interest and Respondents.

**Subsequent History:** [***1] The Publication Status of this Document has been Changed by the Court from Unpublished to Published February 2, 2022.

Time for Granting or Denying Review Extended Bankers Hill 150 v. City of San Diego, 2022 Cal. LEXIS 1597 (Cal., Mar. 22, 2022)

Review denied by, Request denied by Bankers Hill 150 v. City of San Diego, 2022 Cal. LEXIS 2665 (Cal., May 11, 2022)

**Prior History:** APPEAL from a judgment of the Superior Court of San Diego County, No. 37-2019-00020725-CU-WM-CTL, Gregory W. Pollack, Judge.

Bankers Hill 150 v. City of San Diego, 2022 Cal. App. Unpub. LEXIS 105, 2022 WL 69108 (Cal. App. 4th Dist., Jan. 7, 2022)

**Disposition:** Affirmed.

## Core Terms

Density, Bonus, policies, general plan, community plan, height, Uptown, setback, affordable housing, development standards, zoning, transitions, approve, views, Regulations, developer, Street, neighborhood, includes, parcels, reductions, contends, housing development, deviation, adjacent, Staff, planning commission, state law, residential, plans

## Case Summary

**Overview**

HOLDINGS: [1]-A city did not abuse its discretion under Code Civ. Proc., § 1094.5, subd. (b), by approving a mixed-use project that included affordable housing units because the project qualified for the benefits of the Density Bonus Law, Gov. Code, § 65915 et seq., the city council expressly found that there was no substantial evidence that would support denying a requested deviation from setback requirements, and the city was obligated to waive conflicting development standards in the absence of a showing that any exception to the Density Bonus Law applied; [2]-The city did not abuse its discretion in finding the project was consistent with land use plans because the city council made adequate findings of consistency with applicable policies and because the Housing Accountability Act, Gov. Code, § 65589.5, did not allow denial based on subjective development standards.

**Outcome**

Judgment affirmed.

Public Health & Welfare Law > Housing & Public Buildings > Low Income Housing

**HN1** **Housing & Public Buildings, Low Income Housing**

The Density Bonus Law, Gov. **Code**, § **65915** et seq., incentivizes the construction of affordable housing by allowing a developer to add additional housing units to a project beyond the zoned capacity and secure other incentives in exchange for a commitment from the developer to include deed-restricted affordable units in the project. When a developer meets the requirements of the Density Bonus Law, a local **government** is obligated to permit increased building density, grant incentives, and waive any conflicting local development standards unless certain limited exceptions apply. More like this Headnote

*Shepardize*® - Narrow by this Headnote (1)

Environmental Law > Land Use & Zoning > Comprehensive & General Plans
Business & Corporate Compliance > Environmental & Natural Resources > Land Use & Zoning > Comprehensive & General Plans

**HN2** **Land Use & Zoning, Comprehensive & General Plans**

California law requires each city to adopt a general plan for its physical development. The general plan guides future development in a city and contains the fundamental policy decisions guiding such development. More like this Headnote

*Shepardize*® - Narrow by this Headnote (0)

Administrative Law > Judicial Review > Standards of Review > Abuse of Discretion
View more legal topics

**HN3** **Standards of Review, Abuse of Discretion**

An appellate court's review in administrative mandate proceedings is limited to determining whether the agency prejudicially abused its discretion by not proceeding in a manner required by law, by reaching a decision not supported by its findings, or by making findings not supported by the evidence. Code Civ. Proc., § 1094.5, subd. (b). In conducting its review, the appellate court is not constrained by the trial court's decision, but instead independently reviews the city's actions. More like this Headnote

*Shepardize*® - Narrow by this Headnote (2)

Public Health & Welfare Law > Housing & Public Buildings > Low Income Housing

**HN4** **Housing & Public Buildings, Low Income Housing**

Although application of the Density Bonus Law, Gov. **Code**, § **65915** et seq., can be complicated, its aim is fairly simple: When a developer agrees to construct a certain percentage of the units in a housing development for low- or very-low-income households, or to construct a senior citizen housing development, the city or county must grant the developer one or more itemized concessions and a density bonus, which allows the developer to increase the density of the development by a certain percentage above the maximum allowable limit under local zoning law. In other words, the Density Bonus Law rewards a developer who agrees to build a certain percentage of low-income housing with the opportunity to build more residences than would otherwise be permitted by the applicable local regulations. More like this Headnote

*Shepardize*® - Narrow by this Headnote (0)

Public Health & Welfare Law > Housing & Public Buildings > Low Income Housing

**HN5** **Housing & Public Buildings, Low Income Housing**

When a developer agrees to include a specified percentage of affordable housing in a project, the Density Bonus Law, Gov. **Code**, § **65915** et seq., grants that developer (1) a density bonus; (2) incentives and concessions; (3) waivers

Business & Corporate Compliance > Real Property > Zoning > Ordinances
Real Property Law > Zoning > Ordinances
View more legal topics

**HN6 Zoning, Ordinances**
A density bonus allows for additional units, above the maximum allowed by zoning, to be added to a project based on the amount of affordable housing included in the project. Gov. **Code**, § **65915**, subd. (f), includes tables that prescribe a density bonus percentage, which progressively increases as a developer agrees to add a greater percentage of affordable units in the project. The higher the percentage of affordable units, the higher the percentage of the density bonus allowing a developer to exceed the zoned density. More like this Headnote

*Shepardize*® - Narrow by this Headnote (0)

Business & Corporate Compliance > Real Property > Zoning > Building & Housing Codes
Real Property Law > Zoning > Building & Housing Codes
Evidence > Burdens of Proof > Allocation
View more legal topics

**HN7 Zoning, Building & Housing Codes**
The incentives and concessions provided by the Density Bonus Law, Gov. **Code**, § **65915** et seq., are intended to assist in lowering the cost to build a project that includes affordable housing by allowing the developer to avoid development standards. § 65915, subd. (d)(1). An incentive or concession is defined as a reduction in site development standards or a modification of zoning code requirements or architectural design requirements that exceed the minimum building standards that results in identifiable and actual cost reductions. § 65915, subd. (k)(1). A site development standard includes setbacks, height limitations, and other requirements imposed by any ordinance, general plan element, specific plan, charter, or other local condition, law, policy, resolution, or regulation. § 65915, subds. (k)(1), (o)(1). The applicant is not required to prove the requested incentives will lead to cost reductions; the incentive is presumed to result in cost reductions and the city bears the burden to demonstrate otherwise if it intends to deny the incentive. More like this Headnote

*Shepardize*® - Narrow by this Headnote (1)

Real Property Law > Zoning > Variances
Business & Corporate Compliance > Real Property > Zoning > Variances

**HN8 Zoning, Variances**
"Concession" and "incentive" are synonymous in the Density Bonus Law, Gov. **Code**, § **65915** et seq. More like this Headnote

*Shepardize*® - Narrow by this Headnote (0)

Business & Corporate Compliance > Real Property > Zoning > Building & Housing Codes
Real Property Law > Zoning > Building & Housing Codes
**Governments** > Local **Governments** > Ordinances & Regulations
View more legal topics

**HN9 Zoning, Building & Housing Codes**
A city must offer a waiver or reduction of development standards that would have the effect of physically precluding the construction of a development at the density, or with the requested incentives, permitted by the Density Bonus Law, Gov. **Code**, § **65915** et seq. § 65915, subd. (e)(1). For example, if a city ordinance imposes a building height limitation, a city must waive that limitation for a development that is eligible for a density bonus if imposing the height limit would physically preclude construction of the proposed building with the requested incentives and at the density allowed by the Density Bonus Law. There are no financial criteria for granting a waiver. More like this Headnote

*Shepardize*® - Narrow by this Headnote (1)

***HN10*** **Zoning, Historic Preservation**

The Density Bonus Law, Gov. **Code**, § **65915** et seq., includes very limited exceptions to its requirements and places the burden on a city to establish an exception applies. A concession or incentive may be refused if the city can establish it would not result in identifiable and actual cost reductions to provide for affordable housing costs. § 65915, subd. (d)(1)(A). The only other exceptions to the requirement to grant incentives and concessions or waivers and reductions of standards require the city to find, based on substantial evidence, that doing so (1) would have a specific, adverse impact upon public health and safety; (2) would have an adverse impact on any historic resource; or (3) would be contrary to state or federal law. § 65915, subds. (d)(1)(B)-(C), (e)(1). More like this Headnote

*Shepardize*® - Narrow by this Headnote (1)

**Governments** > Local **Governments** > Ordinances & Regulations

***HN11*** **Local Governments, Ordinances & Regulations**

The Density Bonus Law, Gov. **Code**, § **65915** et seq., requires cities to adopt an ordinance to implement the state law and preempts any inconsistent local provisions. § 65915, subd. (a). More like this Headnote

*Shepardize*® - Narrow by this Headnote (1)

Administrative Law > Judicial Review > Standards of Review > Abuse of Discretion

***HN12*** **Standards of Review, Abuse of Discretion**

A public agency abuses its discretion by not proceeding in a manner required by law when reaching a decision. Code Civ. Proc., § 1094.5, subd. (b). More like this Headnote

*Shepardize*® - Narrow by this Headnote (2)

Real Property Law > Zoning > Variances
Business & Corporate Compliance > Real Property > Zoning > Variances
Real Property Law > Subdivisions > State Regulations

***HN13*** **Zoning, Variances**

When a developer proposes a project that qualifies for a density bonus, the law provides a developer with broad discretion to design projects with additional amenities even if doing so would conflict with local development standards. Nothing in the Density Bonus Law, Gov. **Code**, § **65915** et seq., requires the applicant to strip the project of amenities, such as an interior courtyard, that would require a waiver of development standards. Standards may be waived that physically preclude construction of a housing development meeting the requirements for a density bonus. § 65915, subd. (e)(1). The statute does not say that what must be precluded is a project with no amenities, or that amenities may not be the reason a waiver is needed. Similarly, amendments to the law have deleted a prior requirement that an applicant for a waiver of development standards must show that the waiver was necessary to render the project economically feasible. More like this Headnote

*Shepardize*® - Narrow by this Headnote (1)

Business & Corporate Compliance > Real Property > Zoning > Building & Housing Codes
Real Property Law > Zoning > Building & Housing Codes
View more legal topics

***HN14*** **Zoning, Building & Housing Codes**

Unless one of the statutory exceptions applies, so long as a proposed housing development project meets the criteria of the Density Bonus Law, Gov. **Code**, § **65915** et seq., by including the necessary affordable units, a city may not apply any development standard that would physically preclude construction of that project as designed, even if the building includes amenities beyond the bare minimum of building components. More like this Headnote

*Shepardize*® - Narrow by this Headnote (1)

doing so would have a specific, adverse impact upon health or safety, and for which there is no feasible method to satisfactorily mitigate or avoid the specific adverse impact or would have an adverse impact on any real property that is listed in the California Register of Historical Resources, or to grant any waiver or reduction that would be contrary to state or federal law. § 65915, subd. (e)(1). More like this Headnote

*Shepardize*® - Narrow by this Headnote (1)

Environmental Law > Land Use & Zoning > Comprehensive & General Plans
Business & Corporate Compliance > Environmental & Natural Resources > Land Use & Zoning > Comprehensive & General Plans
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***HN16*** **Land Use & Zoning, Comprehensive & General Plans**

A city's land use decisions, including approval of a project, must be consistent with the applicable policies expressed in the city's general plan. General plans ordinarily do not state specific mandates or prohibitions. Rather, they state policies and set forth goals. More like this Headnote

*Shepardize*® - Narrow by this Headnote (0)

Environmental Law > Land Use & Zoning > Comprehensive & General Plans
Business & Corporate Compliance > Environmental & Natural Resources > Land Use & Zoning > Comprehensive & General Plans

***HN17*** **Land Use & Zoning, Comprehensive & General Plans**

A project is consistent with a general plan if it will further the objectives and policies of the general plan and not obstruct their attainment. To be consistent with a general plan, a project must be compatible with the objectives, policies, general land uses, and programs specified in the general plan. The question is not whether there is a direct conflict between some mandatory provision of a general plan and some aspect of a project, but whether the project is compatible with, and does not frustrate, the general plan's goals and policies. The requirement that a project be consistent with a general plan does not require the project to rigidly conform to the general plan. California law does not require perfect conformity between a proposed project and the applicable general plan. General and specific plans attempt to balance a range of competing interests. It follows that it is nearly, if not absolutely, impossible for a project to be in perfect conformity with each and every policy set forth in the applicable plan. It is enough that the proposed project will be compatible with the objectives, policies, general land uses and programs specified in the applicable plan. More like this Headnote

*Shepardize*® - Narrow by this Headnote (2)

Administrative Law > Judicial Review > Standards of Review > Substantial Evidence
Civil Procedure > ... > Writs > Common Law Writs > Mandamus

***HN18*** **Standards of Review, Substantial Evidence**

An agency abuses its discretion if it makes findings not supported by the evidence. Code Civ. Proc., § 1094.5, subd. (b). Although the substantial evidence standard of review is typical, the Housing Accountability Act (HAA), Gov. Code, § 65589.5, imposes a slightly different standard when an agency is considering approval of a housing development project. Instead of asking, as is common in administrative mandamus actions, whether the agency's findings are supported by substantial evidence, the reviewing court inquires whether there is substantial evidence that would allow a reasonable person to conclude that the housing development project complies with pertinent standards. The effect of § 65589.5, subd. (f)(4), is simply to hold local **governments** to a standard of objectivity in their decisionmaking, such that if a reasonable person could find a housing development in compliance, it will be so deemed. If a municipality wishes to enforce limitations on housing developments, it must promulgate standards that are not so malleable that reasonable minds could differ on whether they are met. In short, the HAA does not wrest control from local **governments** so much as require them to proceed by way of clear rules adopted in advance, rather than by ad hoc decisions to accept or reject proposed housing. More like this Headnote

*Shepardize*® - Narrow by this Headnote (2)

development project on the basis that it is inconsistent with development standards only if those standards are objective. A standard is subjective, rather than objective, if it cannot be applied without personal interpretation or subjective judgment. More like this Headnote

*Shepardize*® - Narrow by this Headnote (2)

Business & Corporate Compliance > Real Property > Zoning > Building & Housing Codes
Real Property Law > Zoning > Building & Housing Codes
View more legal topics

***HN20*** **Zoning, Building & Housing Codes**
San Diego's Uptown Community Plan requires development transitions only for parcels zoned for large buildings that border areas with different zoning allowing only small-scale buildings. The plan discusses the transitions between higher density areas to lower density areas and clarifies the importance of transitions between neighborhoods where maximum building heights differ as a result of zoning. The plan recognizes the need for transitions along a singular transition line between areas zoned for different densities, with the massing of higher scale buildings placed along the portion of the site farthest away from that line. Similarly, in Policy LU-2.10, the Community Plan reflects the need to ensure adequate transition between commercial/mixed-use and residential uses. These policies reflect that the anticipated transitions occur between areas with different zoning, not between an existing building and a newly-proposed building on neighboring parcels sharing the same or similar zoning. San Diego's Land Development Code, in S.D. Mun. Code, § 131.0543, subd. (c)(1), also recognizes the need for transitions only between areas with different zoning by requiring projects to include setbacks for larger commercial and mixed-use buildings only when they abut parcels with low-density residential zoning. More like this Headnote

*Shepardize*® - Narrow by this Headnote (0)

Environmental Law > Land Use & Zoning > Comprehensive & General Plans
Business & Corporate Compliance > Environmental & Natural Resources > Land Use & Zoning > Comprehensive & General Plans
**Governments** > Local **Governments** > Ordinances & Regulations

***HN21*** **Land Use & Zoning, Comprehensive & General Plans**
Under San Diego's Community Plan Implementation Overlay Zone, the city may approve permits for buildings that exceed a height of 65 feet in the Bankers Hill area only if the buildings comply with the applicable regulations of the San Diego Municipal Code and are consistent with the applicable policies in San Diego's General Plan and Uptown Community Plan. More like this Headnote

*Shepardize*® - Narrow by this Headnote (0)

## ▼ Headnotes/Summary

**Summary**
**[*755]** CALIFORNIA OFFICIAL REPORTS SUMMARY

The trial court denied a petition for writ of mandate challenging a city's approval of a mixed-use project that included affordable housing units. (Superior Court of San Diego County, No. 37-2019-00020725-CU-WM-CTL, Gregory W. Pollack, Judge.)

*The Court of Appeal affirmed, holding that the city did not abuse its discretion* (Code Civ. Proc., § 1094.5, subd. (b)) because the project qualified for the benefits of the Density Bonus Law (Gov. **Code**, § **65915** et seq.), the city council expressly found that there was no substantial evidence that would support denying a requested deviation from setback requirements, and the city was obligated to waive conflicting development standards in the absence of a showing that any exception to the Density Bonus Law applied. The city did not abuse its discretion in finding the project was consistent with land use plans because the city council made adequate findings of consistency with

**Headnotes**

CALIFORNIA OFFICIAL REPORTS HEADNOTES

***CA(1)*** **(1) Zoning and Planning § 16—Housing Programs and Projects—Density Bonus Law—Obligations of Local Government.**

The Density Bonus Law (Gov. **Code**, § **65915** et seq.) incentivizes the construction of affordable housing by allowing a developer to add additional housing units to a project beyond the zoned capacity and secure other incentives in exchange for a commitment from the developer to include deed-restricted affordable units in the project. When a developer meets the requirements of the Density Bonus Law, a local **government** is obligated to permit increased building density, grant incentives, and waive any conflicting local development standards unless certain limited exceptions apply.

***CA(2)*** **(2) Zoning and Planning § 15—Plans—Adoption of General Plan.**

California law requires each city to adopt a general plan for its physical development. The general plan guides future development in a city and contains the fundamental policy decisions guiding such development.

***CA(3)*** **(3) Administrative Law § 111—Judicial Review—Methods—Administrative Mandamus—Scope and Extent of Review—Abuse of Discretion.**

An appellate court's review in administrative mandate proceedings is limited to determining whether the agency prejudicially abused its discretion by not proceeding in a manner required by law, by reaching a decision not supported by its findings, or by making findings not supported by the evidence (Code Civ. Proc., § 1094.5, subd. (b)). In conducting its review, the appellate court is not constrained by the trial court's decision, but instead independently reviews the city's actions.

***CA(4)*** **(4) Zoning and Planning § 16—Housing Programs and Projects—Density Bonus Law—Obligations of Local Government.**

Although application of the Density Bonus Law (Gov. **Code**, § **65915** et seq.) can be complicated, its aim is fairly simple: When a developer agrees to construct a certain percentage of the units in a housing development for low- or very-low-income households, or to construct a senior citizen housing development, the city or county must grant the developer one or more itemized concessions and a density bonus, which allows the developer to increase the density of the development by a certain percentage above the maximum allowable limit under local zoning law. In other words, the Density Bonus Law rewards a developer who agrees to build a certain percentage of low-income housing with the opportunity to build more residences than would otherwise be permitted by the applicable local regulations.

**[*757]** ***CA(5)*** **(5) Zoning and Planning § 16—Housing Programs and Projects—Density Bonus Law—Obligations of Local Government.**

When a developer agrees to include a specified percentage of affordable housing in a project, the Density Bonus Law (Gov. **Code**, § **65915** et seq.) grants that developer (1) a density bonus; (2) incentives and concessions; (3) waivers or reductions of development standards; and (4) prescribed parking ratios (§ 65915, subd. (b)(1)).

***CA(6)*** **(6) Zoning and Planning § 16—Housing Programs and Projects—Density Bonus Law—Obligations of Local Government—Providing Density Bonus.**

A density bonus allows for additional units, above the maximum allowed by zoning, to be added to a project based on the amount of affordable housing included in the project. Gov. **Code**, § **65915**, subd. (f), includes tables that

***CA(7)*** **(7) Zoning and Planning § 16—Housing Programs and Projects—Density Bonus Law—Obligations of Local Government—Providing Incentives and Concessions.**

The incentives and concessions provided by the Density Bonus Law (Gov. Code, § 65915 et seq.) are intended to assist in lowering the cost to build a project that includes affordable housing by allowing the developer to avoid development standards (§ 65915, subd. (d)(1)). An incentive or concession is defined as a reduction in site development standards or a modification of zoning code requirements or architectural design requirements that exceed the minimum building standards that results in identifiable and actual cost reductions (§ 65915, subd. (k)(1)). A site development standard includes setbacks, height limitations, and other requirements imposed by any ordinance, general plan element, specific plan, charter, or other local condition, law, policy, resolution, or regulation (§ 65915, subds. (k)(1), (o)(1)). The applicant is not required to prove the requested incentives will lead to cost reductions; the incentive is presumed to result in cost reductions and the city bears the burden to demonstrate otherwise if it intends to deny the incentive.

***CA(8)*** **(8) Zoning and Planning § 16—Housing Programs and Projects—Density Bonus Law—Obligations of Local Government—Providing Incentives and Concessions.**

"Concession" and "incentive" are synonymous in the Density Bonus Law (Gov. Code, § 65915 et seq.).

**[*758]** ***CA(9)*** **(9) Zoning and Planning § 16—Housing Programs and Projects—Density Bonus Law—Obligations of Local Government—Waiver or Reduction of Development Standards.**

A city must offer a waiver or reduction of development standards that would have the effect of physically precluding the construction of a development at the density, or with the requested incentives, permitted by the Density Bonus Law (Gov. Code, § 65915 et seq.) (§ 65915, subd. (e)(1)). For example, if a city ordinance imposes a building height limitation, a city must waive that limitation for a development that is eligible for a density bonus if imposing the height limit would physically preclude construction of the proposed building with the requested incentives and at the density allowed by the Density Bonus Law. There are no financial criteria for granting a waiver.

***CA(10)*** **(10) Zoning and Planning § 16—Housing Programs and Projects—Density Bonus Law—Exceptions and Required Findings.**

The Density Bonus Law (Gov. Code, § 65915 et seq.) includes very limited exceptions to its requirements and places the burden on a city to establish an exception applies. A concession or incentive may be refused if the city can establish it would not result in identifiable and actual cost reductions to provide for affordable housing costs (§ 65915, subd. (d)(1)(A)). The only other exceptions to the requirement to grant incentives and concessions or waivers and reductions of standards require the city to find, based on substantial evidence, that doing so (1) would have a specific, adverse impact upon public health and safety; (2) would have an adverse impact on any historic resource; or (3) would be contrary to state or federal law (§ 65915, subds. (d)(1)(B)-(C), (e)(1)).

***CA(11)*** **(11) Zoning and Planning § 16—Housing Programs and Projects—Density Bonus Law—Local Implementation and Preemption of Inconsistent Local Provisions.**

The Density Bonus Law (Gov. Code, § 65915 et seq.) requires cities to adopt an ordinance to implement the state law and preempts any inconsistent local provisions (§ 65915, subd. (a)).

***CA(12)*** **(12) Administrative Law § 111—Judicial Review—Methods—Administrative Mandamus—Scope and Extent of Review—Abuse of Discretion—Not Proceeding in Manner Required.**

***CA(13)*** **(13) Zoning and Planning § 16—Housing Programs and Projects—Density Bonus Law—Obligations of Local Government—Waiver or Reduction of Development Standards.**

When a developer proposes a **[*759]** project that qualifies for a density bonus, the law provides a developer with broad discretion to design projects with additional amenities even if doing so would conflict with local development standards. Nothing in the Density Bonus Law (Gov. Code, § 65915 et seq.) requires the applicant to strip the project of amenities, such as an interior courtyard, that would require a waiver of development standards. Standards may be waived that physically preclude construction of a housing development meeting the requirements for a density bonus (§ 65915, subd. (e)(1)). The statute does not say that what must be precluded is a project with no amenities, or that amenities may not be the reason a waiver is needed. Similarly, amendments to the law have deleted a prior requirement that an applicant for a waiver of development standards must show that the waiver was necessary to render the project economically feasible.

***CA(14)*** **(14) Zoning and Planning § 16—Housing Programs and Projects—Density Bonus Law—Obligations of Local Government—Waiver or Reduction of Development Standards.**

Unless one of the statutory exceptions applies, so long as a proposed housing development project meets the criteria of the Density Bonus Law (Gov. Code, § 65915 et seq.) by including the necessary affordable units, a city may not apply any development standard that would physically preclude construction of that project as designed, even if the building includes amenities beyond the bare minimum of building components.

***CA(15)*** **(15) Zoning and Planning § 16—Housing Programs and Projects—Density Bonus Law—Obligations of Local Government—Waiver or Reduction of Development Standards.**

Under the Density Bonus Law (Gov. Code, § 65915 et seq.), a city may only impose development standards if not doing so would have a specific, adverse impact upon health or safety, and for which there is no feasible method to satisfactorily mitigate or avoid the specific adverse impact or would have an adverse impact on any real property that is listed in the California Register of Historical Resources, or to grant any waiver or reduction that would be contrary to state or federal law (§ 65915, subd. (e)(1)).

***CA(16)*** **(16) Zoning and Planning § 15—Plans—Consistency with Policies in General Plan.**

A city's land use decisions, including approval of a project, must be consistent with the applicable policies expressed in the city's general plan. General plans ordinarily do not state specific mandates or prohibitions. Rather, they state policies and set forth goals.

***CA(17)*** **(17) Zoning and Planning § 16—Plans—Consistency with Policies in General Plan—Project Compatibility.**

A project is consistent with a general plan if it will further the objectives and policies of the general plan **[*760]** and not obstruct their attainment. To be consistent with a general plan, a project must be compatible with the objectives, policies, general land uses, and programs specified in the general plan. The question is not whether there is a direct conflict between some mandatory provision of a general plan and some aspect of a project, but whether the project is compatible with, and does not frustrate, the general plan's goals and policies. The requirement that a project be consistent with a general plan does not require the project to rigidly conform to the general plan. California law does not require perfect conformity between a proposed project and the applicable general plan. General and specific plans attempt to balance a range of competing interests. It follows that it is nearly, if not absolutely, impossible for a project to be in perfect conformity with each and every policy set forth in the applicable plan. It is enough that the proposed project will be compatible with the objectives, policies, general land uses and programs specified in the applicable plan.

An agency abuses its discretion if it makes findings not supported by the evidence (Code Civ. Proc., § 1094.5, subd. (b)). Although the substantial evidence standard of review is typical, the Housing Accountability Act (HAA) (Gov. Code, § 65589.5) imposes a slightly different standard when an agency is considering approval of a housing development project. Instead of asking, as is common in administrative mandamus actions, whether the agency's findings are supported by substantial evidence, the reviewing court inquires whether there is substantial evidence that would allow a reasonable person to conclude that the housing development project complies with pertinent standards. The effect of § 65589.5, subd. (f)(4), is simply to hold local **governments** to a standard of objectivity in their decisionmaking, such that if a reasonable person could find a housing development in compliance, it will be so deemed. If a municipality wishes to enforce limitations on housing developments, it must promulgate standards that *are not so malleable that reasonable minds could differ on whether they are met. In short, the HAA does not wrest* control from local **governments** so much as require them to proceed by way of clear rules adopted in advance, rather than by ad hoc decisions to accept or reject proposed housing.

***CA(19)*** **(19) Zoning and Planning § 16—Housing Programs and Projects—Housing Accountability Act—Objective Development Standards.**

Under the Housing Accountability Act (Gov. Code, § 65589.5) an agency may deny approval of a housing development project on the basis that it is inconsistent with development standards only if those **[*761]** standards *are objective. A standard is subjective, rather than objective, if it cannot be applied without personal interpretation or* subjective judgment.

***CA(20)*** **(20) Zoning and Planning § 15—Plans—Development Transitions.**

San Diego's uptown community plan requires development transitions only for parcels zoned for large buildings that border areas with different zoning allowing only small-scale buildings. The plan discusses the transitions between higher density areas to lower density areas and clarifies the importance of transitions between neighborhoods where maximum building heights differ as a result of zoning. The plan recognizes the need for transitions along a singular transition line between areas zoned for different densities, with the massing of higher scale buildings placed along the portion of the site farthest away from that line. Similarly, in policy LU-2.10, the community plan reflects the need to ensure adequate transition between commercial/mixed-use and residential uses. These policies reflect that the anticipated transitions occur between areas with different zoning, not between an existing building and a newly proposed building on neighboring parcels sharing the same or similar zoning. San Diego's land development code, in San Diego Mun. Code, § 131.0543, subd. (c)(1), also recognizes the need for transitions only between areas with different zoning by requiring projects to include setbacks for larger commercial and mixed-use buildings only when they abut parcels with low-density residential zoning.

***CA(21)*** **(21) Zoning and Planning § 25—Permits—Power to Grant—Buildings Exceeding Specified Height.**

Under San Diego's community plan implementation overlay zone, the city may approve permits for buildings that exceed a height of 65 feet in the Bankers Hill area only if the buildings comply with the applicable regulations of the San Diego Municipal Code and are consistent with the applicable policies in San Diego's general plan and uptown community plan.

***CA(22)*** **(22) Zoning and Planning § 16—Housing Programs and Projects—Density Bonus Law—Obligations of Local Government—Waiver or Reduction of Development Standards—Approval Required Regardless of Plan Consistency.**

A community association failed to establish a city abused its discretion by approving a mixed-use project that included affordable housing units because the city council made adequate findings that the evidence in the record demonstrated that the project was consistent with the applicable policies found in the general plan, a specific plan, and the city's land development code. Moreover, even if the project were inconsistent with the standards set forth in

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**Judges:** Opinion by Haller, Acting P. J., with O'Rourke and Guerrero, JJ., concurring.

**Opinion by:** Haller, Acting P. J.

## Opinion

[**272] **HALLER, Acting P. J.**—Bankers Hill 150 and Bankers Hill/Park West Community Association (collectively, the Association) appeal the judgment entered after the trial court denied their petition for writ of mandate challenging a decision by the City of San Diego (City) to approve a development application for the 6th & Olive project (the Project), a 20-story mixed-use building with a total of 204 dwelling units in the Bankers Hill neighborhood near downtown San Diego.

Generally, [***2] the Association believes the Project is inconsistent with the neighborhood because it is too dense, too tall, and too close to the street. The Association contends the City abused its discretion in approving the Project because it was inconsistent with development standards and policies set forth in the City's "General Plan" and the "Uptown Community Plan," which govern development in the Project's neighborhood. More specifically, it asserts the building's design improperly obstructs views, fails to complement neighboring Balboa Park, and towers over adjacent smaller-scale buildings. The Association asserts that the City could not reasonably approve the Project given its inconsistencies with the standards for development in the community.

*CA(1)* **(1)** In making its arguments, the Association sidesteps a critical factor in the City's decisionmaking process: the application of a state law known as the Density Bonus Law. (Gov. Code, § 65915 et seq.) *HN1* The Density Bonus **[*763]** Law incentivizes the construction of affordable housing by allowing [**273] a developer to add additional housing units to a project beyond the zoned capacity and secure other "incentives" in exchange for a commitment from the developer to include deed-restricted affordable [***3] units in the project. When a developer meets the requirements of the Density Bonus Law, a local **government** is obligated to permit increased building density, grant incentives, and waive any conflicting local development standards unless certain limited exceptions apply.

Here, the Project qualified for the benefits of the Density Bonus Law and the evidence does not support any of the limited exceptions to its application. Because the City was obligated to waive those standards if they conflicted with the Project's design, the Association's claim that the Project conflicts with certain development standards does not establish a basis for denying the Project.

Regardless, we conclude that the City did not abuse its discretion in finding the Project to be consistent with the City's land use plans. Several policies cited by the Association do not apply to the Project and the evidence in the record supports the City's conclusion that the Project does not conflict with the applicable policies. Accordingly, we affirm the judgment.

### I. FACTUAL AND PROCEDURAL BACKGROUND

#### A. *The Project*

St. Paul's Cathedral (St. Paul's), located at the corner of Fifth Avenue and Nutmeg Street in the Bankers Hill neighborhood [***4] of San Diego, has served the community since the 1950's. With the cathedral itself located on the south end of the block, St. Paul's used the remainder of a city block for church offices, a surface parking lot, and a small apartment building. To the east, a large grassy area of Balboa Park is located across Sixth Avenue. While the neighboring parcels to the north (across Olive Street) and west (across Fifth Avenue) include older buildings ranging from one to three-stories, the parcel to the south (across Nutmeg Street) and other nearby parcels have seen recent development of large, mixed-use buildings.

the City for a revised **[*764]** project. The new 6th & Olive Project, at issue here, was proposed to include a total [***5] of 204 dwelling units. The Project would be 20 stories tall and reach a height of approximately 223 feet. The Project would also include new office space for St. Paul's and a large courtyard shared by St. Paul's and the new building. An underground parking garage for the building would include spaces to be used by St. Paul's.

As part of its permit application, Greystar offered to include 18 units with deed restrictions to make them affordable to very low-income households, defined as households with a combined annual gross income at or below 50 percent of the area median income. (See Health & Saf. Code, § 50105 [definition of "very low income households"].) Greystar represented that the inclusion of these affordable units would qualify the Project for a density bonus and development incentives under the Density Bonus Law and what the City refers to as its own "Affordable Housing Regulations." With this density bonus, [**274] Greystar sought to exceed the maximum zoned capacity of 147 units to add an additional 57 units. Additionally, Greystar relied on the Density Bonus Law to request development incentives to avoid a setback on one street, eliminate two on-site loading spaces for trucks, and reduce the number of private [***6] storage areas for residents.

B. *The City's Approval Process*

As all parties agree, under the City's development review procedures, Greystar's application for permits required the discretionary approval of the City's planning commission (Planning Commission), with a right to appeal the commission's decision to the City Council. To approve the permits, the planning commission was required to find that the proposed development would not "adversely impact the applicable land use plan."

***CA(2)*** **(2)** As applied to the Project, the City's land use plan is found in three documents: (1) the City's General Plan, (2) the Uptown Community Plan, and (3) the Land Development Code. ***HN2*** State law requires each city to adopt a general plan for its physical development. (See, e.g., *Naraghi Lakes Neighborhood Preservation Assn. v. City of Modesto* (2016) 1 Cal.App.5th 9, 17 [204 Cal. Rptr. 3d 67] (*Naraghi Lakes*).) The General Plan guides future development in a city and contains the fundamental policy decisions guiding such development. (*Ibid.*) In the City, the General Plan provides a framework, but then incorporates more detailed community plans, like the Uptown Community Plan, as an "essential and integral component" of the General Plan. The Land Development Code, found in the Municipal Code, includes additional implementing regulations related [***7] to zoning and land use, most of which are not relevant to the issues on appeal. Compatibility with these plans is a central focus of the City's discretionary review process.

**[*765]**

Before reaching the Planning Commission, the Project was considered by Uptown Planners, the community planning group designated to review projects in the uptown community to determine their consistency with the Uptown Community Plan. 1 Although styled as an approval of the Project, the group voted to recommend the City support a building with a different design, including a maximum height of 170 feet, the inclusion of as much affordable housing as possible, and a modification of the proposed design to "activate public space at the base of the project with the community."

City staff prepared a report to the Planning Commission to aid in review of the Project and recommended the Project be approved. The staff report concluded the Project was consistent with the General Plan, the Uptown Community Plan, and the Land Development Code. The report noted that the Project "is located within the Community Plan's Mixed-Use Corridor, which promotes very-high residential densities along major commercial transit corridors." Staff [***8] explained how the Project's architectural design was consistent with the goals of the community plan by including a façade varied in depth and materials, several building entrances and "façade articulation using balconies and upper-story setbacks along Sixth Avenue to minimize view obstructions to Balboa Park and provide a transition in scale from St. Paul's Cathedral." Staff commended the Project for adding "visual variety and [**275] interest" by incorporating windows along the street level and balconies with glass railings. The report also noted that the Project included a large outdoor terrace in an upper floor.

Regarding the height of the Project, the report noted that under the "Community Plan Implementation Overlay Zone (CPIOZ)," the Project was subject to additional review because it exceeded 65 feet in height. Staff concluded that because the Project complied with all applicable policies, it was permitted to exceed the 65-foot height threshold.

Counsel for the Association submitted a letter to the Planning Commission opposing the Project. The letter asserted that the Project "proposes to develop at greater intensity than currently allowed for height, setback, loading spaces, private [***9] storage area, driveway width, and exterior refuse and recyclable material area. Each of these will create

At the Planning Commission hearing, members of the public spoke both in favor and opposed to the Project. A representative of Greystar, the Project applicant, spoke to note that the Project relied on the incentives provided by the Density Bonus Law such that the opponents' request to decrease the height of the building was contradictory to the inclusion of the affordable units. Following a discussion, the Planning Commission unanimously approved the Project.

Uptown Planners, the community planning group, appealed the Planning Commission's approval to the City Council. In its appeal, Uptown Planners asserted (1) the use of an environmental impact report (EIR) addendum was improper; (2) the Project's height would result in significant shading in Balboa Park; (3) the [***10] additional height would intrude into a flight path for airplanes flying to San Diego airport; (4) the Project would "tower" over the adjacent neighborhood; (5) the lack of a setback on Olive Street would impair views; (6) the top floors would include luxury housing units and should be eliminated; and (7) the Project required a new EIR.

Before the City Council hearing on the appeal, the Association's counsel sent a letter repeating its prior challenges to the Project and asserting the City was violating CEQA. The Association also submitted a "petition opposing height of 6th & Olive Project" signed by members of the community suggesting that a shorter building height of 170 feet was "an acceptable compromise."

In a report to the City Council, staff noted that the inclusion of affordable units entitled the Project to a density bonus and incentives allowing for a deviation from regulations, including the setback requirement. Staff also stated that the height increase "allows for the inclusion of 18 on-site affordable units that would be affordable to very low-income households." Staff concluded that "with the approved incentives and deviations, the project is in conformance with all applicable [***11] regulations and policies as set forth in the [Land Development Code] and [Uptown Community Plan]. The requested incentives and deviations are consistent with the intent of the [**276] State's Density Bonus Law, [and] the City's Affordable Housing Regulations."

At the City Council hearing, opponents challenged the height of the building and opined the inclusion of affordable units did not warrant the **[*767]** incentives given to eliminate the setback and increase the height of the Project. The senior pastor for St. Paul's spoke in favor of the Project, stating that the provision of affordable housing for the increased height "is a worthwhile tradeoff." A representative of Greystar explained that maximizing the density "allows" for the affordable units. That same representative later informed the City Council that if the height of the building was reduced, "I'm quite certain that we wouldn't be able to provide any onsite affordable housing." Another St. Paul's representative also explained that making the building shorter "would ruin the economics that allow for the onsite affordable housing."

The City Council voted unanimously to deny the appeal and approve the Project. In the approved resolution, the [***12] City Council found that the Project was "consistent with the goals and policies of the General Plan and [Uptown Community Plan]" and complied with the applicable regulations of the Land Development Code. The City Council also found the Project "would help implement the goals and policies" of the community plan's urban design element and development form policies. The resolution also noted the application of the City's Affordable Housing Regulations and the Density Bonus Law. The resolution concluded by denying the appeal, affirming the decision of the Planning Commission, and granting the necessary permits for the Project.

C. *Trial Court Proceedings*

The Association filed a petition for writ of mandate challenging the City Council's decision. The petition alleged that the Project (1) violated the City's General Plan and the Uptown Community Plan; (2) violated the Municipal Code; (3) violated state law, including the Density Bonus Law; and (4) that the City Council failed to adopt findings supported by substantial evidence in the record.

In its opening brief in the trial court, the Association did not discuss the Density Bonus Law and argued only that the Project violated the City's General [***13] Plan and Uptown Community Plan and that the City Council failed to adopt adequate findings. The brief focused on the Project's deviation from the setback requirements and its "height and massing."

In an opposition brief, the City asserted that the Association's failure to discuss the City's Affordable Housing Regulations and the Density Bonus Law, which specifically authorized the setback deviation and increased density, "represents a fatal flaw in their brief." The City also argued that the Project was entirely consistent with the applicable plans and that the City Council made adequate findings.

regarding all aspects of the project before approving it."

After the hearing, the trial court denied the Association's petition. The court found the Project was consistent with the Uptown Community Plan, largely because many of the [***14] policies cited by the Association were inapplicable to the Project. The court also found that the Project's use of [**277] incentives was appropriate and noted that the deviation from the required setback "was specifically authorized by the City's Affordable Housing Regulations and State Density Bonus Law." The court further noted that the Association "failed to apprise the Court of this fact" and that the failure to address the issue "is fatal to Petitioners."

The trial court also found the Project was consistent with the General Plan and that the City made the required findings to approve the Project. The court therefore denied the writ petition and directed the City to prepare a judgment. The Association filed a timely appeal from the subsequent judgment.

## II. DISCUSSION

### A. *Governing Principles*

***CA(3)*** **(3)** In its petition for writ of mandate, the Association contends that the City erred in approving the Project. ***HN3*** Our review is limited to determining whether the City prejudicially abused its discretion in approving the Project by not proceeding in a manner required by law, by reaching a decision not supported by its findings, or by making findings not supported by the evidence. (Code Civ. Proc., § 1094.5, subd. (b); *Save Our Heritage Organisation v. City of San Diego* (2015) 237 Cal.App.4th 163, 172–173 [187 Cal. Rptr. 3d 754] (*Save Our Heritage*).) In conducting our [***15] review, we are not constrained by the trial court's decision, but instead independently review the City's actions. (*Naraghi Lakes, supra*, 1 Cal.App.5th at p. 10.)

The Association focuses on its claim that the Project was not consistent with the City's General Plan and the Uptown Community Plan and that the City's findings to the contrary were inadequate and not supported by substantial evidence. However, before reaching the Association's claims regarding the City's purported abuse of discretion based on making findings not supported by the evidence, we must consider the scope of the City's discretion under applicable state law.

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### B. *The City Proceeded in the Manner Required by the Density Bonus Law*

Throughout its challenge to this Project, the Association has sidestepped the implications of the Density Bonus Law and the City's related Affordable Housing Regulations. The Association does not directly address the issue in its opening brief and then asserts in its reply brief, in a single paragraph with no citation to any authority, that the "density bonus is not a free pass." (Capitalization omitted.) As we explain, while not a "free pass," the Density Bonus Law shapes the City's discretion in reviewing the Project and undermines the [***16] Association's contention that the City was obligated to deny the Project.

#### 1. *Legal Background*

***CA(4)*** **(4)** **Government** Code section 65915 (section 65915), commonly referred to as the "Density Bonus Law," was first enacted in 1979 with the aim to address the shortage of affordable housing in California. (*Latinos Unidos Del Valle De Napa Y Solano v. County of Napa* (2013) 217 Cal.App.4th 1160, 1164 [159 Cal. Rptr. 3d 284] (*Latinos Unidos*).) ***HN4*** "'Although application of the statute can be complicated, its aim is fairly simple: When a developer agrees to construct a certain percentage of the units in a housing development for low- or very-low-income households, or to construct a senior citizen housing development, the city or county must grant the developer one or more itemized concessions and a "density bonus," which allows the developer to increase the density of the development by a certain percentage above the maximum allowable limit under local zoning law. [Citation.] [**278] In other words, the Density Bonus Law "reward[s] a developer who agrees to build a certain percentage of low-income housing with the opportunity to build more residences than would otherwise be permitted by the applicable local regulations."'" (*Ibid.*; see also *Schreiber v. City of Los Angeles* (2021) 69 Cal.App.5th 549, 554–555 [284 Cal. Rptr. 3d 587] (*Schreiber*).)

CA(6) (6) First, HN6 the *density bonus* allows for additional units, above the maximum allowed by zoning, to be added to a project based on the amount of **[*770]** affordable housing included in the Project. Subdivision (f) of section 65915 includes tables that prescribe a density bonus percentage, which progressively increases as a developer agrees to add a greater percentage of affordable units in the Project. The higher the percentage of affordable units, the higher the percentage of the density bonus allowing a developer to exceed the zoned density. (*Ibid.*)

CA(7) (7) Second, HN7 the *incentives and concessions* are intended to assist in lowering the cost to build a project that includes affordable housing by allowing the developer to avoid development standards. 4 (§ 65915, subd. (d)(1).) An "incentive or concession" is defined as a "reduction in site development standards or a modification of zoning code requirements or architectural design requirements that exceed the minimum building standards ... that results in identifiable and actual cost reductions." [***18] (*Id.*, subd. (k)(1).) The law states that a "site development standard" includes setbacks, height limitations, and other requirements imposed by "any ordinance, general plan element, specific plan, charter, or other local condition, law, policy, resolution, or regulation." (*Id.*, subds. (k)(1), (o)(1).) The applicant is not required to prove the requested incentives will lead to cost reductions; the incentive is presumed to result in cost reductions and the city bears the burden to demonstrate otherwise if it intends to deny the incentive. (*Schreiber, supra*, 69 Cal.App.5th at p. 555.)

CA(9) (9) Third, HN9 a city must offer a *waiver or reduction* of development standards that would have the effect of physically precluding the construction of a development at the density, or with the requested incentives, permitted by the Density Bonus Law. (§ 65915, subd. (e)(1).) For example, if a city ordinance imposes a building height limitation, a city must waive that limitation for a development that is eligible for a density bonus if imposing the height limit would physically preclude construction of the proposed building with the requested incentives and at the density allowed by the Density Bonus Law. There are no financial criteria for granting a waiver. (*Schreiber, supra*, 69 Cal.App.5th at p. 556.)

HN10 CA(10) (10) The Density Bonus [***19] Law includes very limited exceptions to its requirements and places the burden on a city to establish an exception applies. A concession or incentive [**279] may be refused if the city can establish it would not result in identifiable and actual cost reductions to provide for affordable housing costs. (§ 65915, subd. (d)(1)(A).) The only other exceptions to the requirement to grant incentives and concessions or waivers and reductions of standards require the city to find, based on substantial evidence, that doing so (1) would have "a specific, adverse impact ... upon public **[*771]** health and safety," (2) would have an adverse impact on any historic resource, or (3) would be contrary to state or federal law. 5 (*Id.*, subds. (d)(1)(B)-(C), (e)(1).)

HN11 CA(11) (11) The Density Bonus Law requires cities to adopt an ordinance to implement the state law and preempts any inconsistent local provisions. (§ 65915, subd. (a); *Friends of Lagoon Valley v. City of Vacaville* (2007) 154 Cal.App.4th 807, 830 [65 Cal. Rptr. 3d 251] (*Friends of Lagoon Valley*); *Latinos Unidos, supra*, 217 Cal.App.4th at p. 1169; see also *Schreiber, supra*, 69 Cal.App.5th at p. 558.) Here, the City's own implementing ordinance, which it refers to as its Affordable Housing Regulations, is found in section 143.0740 of the Land Development Code. The Affordable Housing Regulations largely mirror the requirements of the Density Bonus Law, but also provide some additional incentives not directly relevant to the issues raised in this appeal. 6

2. *[***20] Additional Factual Background*

In its initial application, Greystar informed the City that it intended to include affordable units in the Project to secure a density bonus and incentives under the Density Bonus Law and the City's Affordable Housing Regulations.

An analyst at the San Diego Housing Commission reviewed the application and noted that Greystar "requests a density bonus pursuant to California **Government** Code Sections 65915-65918 and [the] San Diego Municipal Code." The analyst concluded that by proposing to designate 12 percent of the Project's units as affordable to very low-income households, the developer was entitled to "a 38.75% density bonus and 3 development incentives."

Thus, as calculated by staff, by including 12 percent of its units as units affordable to very low-income residents, the Project was entitled to a 38.75 percent density bonus under the City's regulations as they existed at the time the Project was approved. 7 As applied, the result is that while the applicable zoning allowed a building on the Project site to include 147 dwelling units, **[*772]** the density bonus of 38.75 percent (or 57 units) allowed the Project to be built at an increased density of 204 residential units. 8

setback would make the building shape "inefficient and create an awkward circulation and unit layouts." Greystar also sought other incentives not relevant to the issues on appeal.

In a report, City staff concluded that the Project "qualifies as an affordable housing density bonus residential development and ... is entitled to certain benefits, including density bonus, reduced parking standards, and development incentives." The same report notes that "[s]taff determined the requested incentives are consistent with the intent of the State's Density Bonus Law." In its resolution denying the appeal and affirming the Planning Commission's approval, [***22] the City Council expressly found that the "development incentives request is consistent with the intent of the State's Density Bonus Law and there is no substantial evidence pursuant to the [Municipal Code] or State law to deny applicant's request for incentives." The City Council also concluded the Project was consistent with all applicable development standards, suggesting no waivers or reductions were necessary under the Density Bonus Law.

3. *Analysis*

***HN12*** ***CA(12)*** **(12)** A public agency, like the City, abuses its discretion by not proceeding in a manner required by law when reaching a decision. (Code Civ. Proc., § 1094.5, subd. (b).) Our analysis, therefore, begins with the City's discretion under the law, specifically the Density Bonus Law, to either approve or deny the Project. Seeking to overturn the City's approval, the Association contends the City should have denied the Project due to its alleged violation of **[*773]** development standards regarding setbacks and building size. However, as we shall explain, under the Density Bonus Law, the City could deny the Project due to those alleged violations only if it made specific findings that certain exceptions applied. The Association does not contend the evidence establishes that the City could [***23] have made any of those specific findings and, therefore, we conclude the Project was entitled to the benefits of the Density Bonus Law and the City properly exercised its discretion to approve the Project.

In challenging the City's approval, the Association focuses primarily on the Project's deviation from setback requirements along Olive Street. In arguing the Project is inconsistent with the City's land use plans, the Association contends that because of the deviation from the setback requirement, the Project did not "maintain and enhance views of Balboa Park," included inadequate "façade articulation," improperly transitioned from the neighboring shorter buildings, and did not respect the scale of neighboring buildings. Due to the alleged inconsistencies caused by the lack of a setback, the Association contends the City abused its discretion in approving the Project.

[**281]

As discussed above, Greystar expressly requested an incentive under the Density Bonus Law to avoid the setback requirement. Pursuant to subdivision (d) of section 65915, the City could deny the requested incentive *only* if it found the incentive (1) does not result in identifiable and actual cost reductions, (2) would have a specific adverse impact upon [***24] public health and safety or the physical environment or upon a historical resource, or (3) would be contrary to state or federal law. (*Id.*, subd. (d)(1)(A)-(C).) The City Council expressly found that there was no substantial evidence to support the denial of the requested incentive.[9] The Association makes no showing that the City Council erred in making this finding. Thus, the City properly granted the incentive and the Association's argument that the City abused its discretion in doing so fails.

Many of the Association's other arguments regarding inconsistencies with development standards focus on the effect caused by the Project's reduced setback on views, transitions, and architectural design standards. These arguments imply that even if the Project was granted a reduced setback, the City could deny the Project simply by relying on inconsistencies with other development standards. Similarly, the Association focuses on the height and "massing" of the Project and argues that given the Project's inconsistency with development standards, "the City is precluded from permitting development above 65 feet" on the parcel at issue. In other words, the Association asserts that the City should [***25] have required the Project to meet all development standards by being shorter and smaller.

**[*774]**

However, as discussed above, Greystar was entitled under the Density Bonus Law to a waiver of any development standard that would have the effect of physically precluding the construction of the Project at the permitted density and with the requested incentive unless the City could make the specified findings to warrant an exception from the Density Bonus Law. (§ 65915, subd. (e)(1).) In other words, once Greystar established its eligibility for the density bonus and requested the setback reduction as an incentive, it was entitled to a waiver of any development standards that would preclude

possible only if the building was designed as proposed. In other words, imposing the setback requirement, [***26] decreasing the height, or redistributing the units would preclude construction of the Project. This reality was confirmed by representatives of Greystar, who told the City Council that reducing the height of the building would result in the elimination of "onsite affordable housing" and "would ruin the economics that allow for the onsite affordable housing." If the City had denied the requested incentives or failed to waive any inconsistent design standards, it would have physically precluded construction of the Project, including the affordable units, and defeated the Density Bonus Law's goal of increasing affordable housing.

The Association contends on appeal that the Project's design was not dictated by [**282] the density bonus and related incentives, but rather by the inclusion of a large courtyard to be used by the church and the community. The Association relies on the suggestion by a city councilmember that without the courtyard the Project could have been "built more horizontally" (i.e., shorter) to imply that if the courtyard were eliminated, the Project could be redesigned to be shorter and less bulky. Arguably, this would allow the Project to comply with some, if not all, of the [***27] design standards that the Association asserts are inconsistent with the Project design.

***CA(13)*** **(13)** This precise argument was raised and rejected in *Wollmer v. City of Berkeley* (2011) 193 Cal.App.4th 1329 [122 Cal. Rptr. 3d 781] (*Wollmer*), which also involved a density bonus project designed with a courtyard. The First District considered the history of the Density Bonus Law's language and concluded that ***HN13*** when a developer proposes a project that qualifies for a density bonus, the law provides a developer with broad discretion to design projects with additional amenities even if doing so would conflict with local **[*775]** development standards. The court held that nothing in the Density Bonus Law "requires the applicant to strip the project of amenities, such as an interior courtyard, that would require a waiver of development standards. Standards may be waived that physically preclude construction of a housing development meeting the requirements for a density bonus, period. (§ 65915, subd. (e)(1).) The statute does not say that what must be precluded is a project with no amenities, or that amenities may not be the reason a waiver is needed." (*Id.* at pp. 1346–1347.) Similarly, amendments to the law in 2008 had the effect of "delet[ing] the requirement that an applicant for a waiver of development standards must show that the waiver [***28] was necessary to render the project economically feasible." (*Id.* at p. 1346.)

***CA(14)*** **(14)** The *Wollmer* court explained that a city would be in violation of the Density Bonus Law if it failed to waive development standards that would physically preclude construction of a project. (*Wollmer, supra*, 193 Cal.App.4th at p. 1347.) "If the project were not built, it goes without saying that housing units for lower income households would not be built and the purpose of the [D]ensity [B]onus [L]aw to encourage such development would not be achieved." (*Ibid.*) ***HN14*** Thus, unless one of the statutory exceptions applies, so long as a proposed housing development project meets the criteria of the Density Bonus Law by including the necessary affordable units, a city may not apply any development standard that would physically preclude construction of that project as designed, even if the building includes "amenities" beyond the bare minimum of building components.

***CA(15)*** **(15)** As applied here, the interpretation of section 65915 set forth by the court in *Wollmer* leads us to conclude that the City (or, by extension, the Association via this lawsuit) could not demand Greystar remove the courtyard or redesign its building to satisfy the Association's subjective concerns. ***HN15*** Under the Density Bonus Law, a City may only [***29] impose such development standards if *not* doing so "would have a specific, adverse impact ... upon health or safety, and for which there is no feasible method to satisfactorily mitigate or avoid the specific adverse impact" or "would have an adverse impact on any real property that is listed in the California Register of Historical Resources, or to grant any waiver or reduction that would be contrary to state or federal law." (§ 65915, subd. (e)(1).)

As discussed above, the Association makes no showing that any of these exceptions [**283] apply here. Thus, even if we assume the Project as designed is inconsistent with some of the City's design standards, the Density Bonus Law would preclude the City from applying those standards to deny this project. Accordingly, regardless of the merit of the Association's contentions on appeal, it fails to establish a basis for relief because the City's discretion to deny the Project application was constrained by state law. On this basis, the Association's arguments fail.

**[*776]**

C. *The City's Finding the Project Is Consistent With Its Land Use Plans Is Supported by the Evidence.*

Aside from the constraints imposed by the Density Bonus Law, the Association fails to establish that the [***30] Project conflicts with any of the applicable design standards that it relies upon to establish the City abused its discretion in approving the Project.

*CA(17)* **(17)** A project is consistent with a general plan if "'it will further the objectives and policies of the general plan and not obstruct their attainment.'" (*Corona-Norco Unified School Dist. v. City of Corona* (1993) 17 Cal.App.4th 985, 994 [21 Cal. Rptr. 2d 803].) To be consistent with a general plan, a project "'must be "compatible with" the objectives, policies, general land uses and programs specified in the general plan.'" (*Napa Citizens*, at p. 378.) "The question is not whether there is a direct conflict between some mandatory provision of a general plan and some aspect of a project, but whether the project is compatible with, and does not frustrate, the general plan's goals and policies." (*Ibid.*) The requirement that a project be consistent with a general plan does not require the project to rigidly conform to the [***31] general plan. (*San Franciscans Upholding the Downtown Plan v. City and County of San Francisco* (2002) 102 Cal.App.4th 656, 678 [125 Cal. Rptr. 2d 745].) "State law does not require perfect conformity between a proposed project and the applicable general plan." (*Friends of Lagoon Valley, supra*, 154 Cal.App.4th at p. 817.) "'[G]eneral and specific plans attempt to balance a range of competing interests. It follows that it is nearly, if not absolutely, impossible for a project to be in perfect conformity with each and every policy set forth in the applicable plan. ... It is enough that the proposed project will be *compatible with* the objectives, policies, general land uses and programs specified in the applicable plan.'" (*Holden v. City of San Diego* (2019) 43 Cal.App.5th 404, 412 [255 Cal. Rptr. 3d 873] (*Holden*); see also *Save Our Heritage, supra*, 237 Cal.App.4th at p. 186.)

In its respondents' brief, the City asserted that we must give significant deference to an agency's finding that a project is consistent with its own general plan it adopted. (See *Holden, supra*, 43 Cal.App.5th at p. 412.) However, in a recent decision, the First District held that when a court reviews an agency's decision on a *housing* development project, a recent **[*777]** change to state law requires a more stringent review. (*California Renters Legal Advocacy & Education Fund v. City of San Mateo* (2021) 68 Cal.App.5th 820 [283 Cal. Rptr. 3d 877] (*California Renters*).) [**284] The relevant statute, known as the Housing Accountability Act (HAA) (Gov. Code, § 65589.5) "cabins the discretion of a local agency to reject proposals for new housing." (*California Renters*, at p. 844.) Thus, the First District concluded that it would be inappropriate for a court to defer to a city's interpretation [***32] and, instead, the court "must engage in '"more rigorous independent review ... in order to prevent the City from circumventing what was intended to be a strict limitation on its authority."'" (*Ibid.*)

The discussion in *California Renters* was framed by the circumstances of that case, in which the city denied a housing development project. Here, the City approved the Project, which lessens the need for a more stringent, independent review. Regardless, the level of deference to be afforded to the City's decision does not alter our ultimate conclusion that the City did not abuse its discretion in approving the Project. 10

*HN18* *CA(18)* **(18)** An agency abuses its discretion if it makes findings not supported by the evidence. (Code Civ. Proc., § 1094.5, subd. (b).) Although the parties contend we apply the typical substantial evidence standard of review, the HAA imposes a slightly different standard when an agency is considering approval of a housing development project. "[I]nstead of asking, as is common in administrative mandamus actions, 'whether the City's findings are supported by substantial evidence' [citation], we inquire whether there is 'substantial evidence that would allow a reasonable person to conclude that the housing development project' complies with [***33] pertinent standards." (*California Renters, supra*, 68 Cal.App.5th at p. 837.) "The effect of subdivision (f)(4) is simply to hold local **governments** to a standard of objectivity in their decisionmaking, such that if a *reasonable* person could find a housing development in compliance, it will be so deemed. If a municipality wishes to enforce limitations on housing developments, it must promulgate standards that are not so malleable that reasonable minds could differ on whether they are met. In short, the HAA does not wrest control from local **governments** so much as require them to proceed by way of clear rules adopted in advance, rather than by ad hoc decisions to accept or reject proposed housing." (*Id.* at pp. 850–851; see Gov. Code, § 65589.5, subd. (f)(4).)

*CA(19)* **(19)** Additionally, the recent decision in *California Renters* clarified that *HN19* under the HAA, an agency may deny approval of a housing development project on the basis that it is inconsistent with development standards *only* if those standards are "objective." (*California Renters, supra*, 68 Cal.App.5th at **[*778]** pp. 839–840.) A standard is subjective, rather than objective, if it "cannot be applied without personal interpretation or subjective judgment." (*Id.* at p. 840.)

Here, the Association relies on several development standards that appear entirely subjective. For example, the Association relies on standards suggesting a new building should "sensitively [***34] and adequately transition to adjacent lower height buildings," "complement" the natural environment, and include design features that "enhance" views. As the record demonstrates, personal opinions differ on how well the [**285] Project is designed when considered under these standards. In its supplemental letter brief, the Association acknowledges that under the HAA, the City could rely only on "objective" standards to deny the Project, but does not discuss whether the standards at issue in this case are

whether it is applicable; and (2) if applicable, whether the evidence supports the City's conclusion the Project is consistent with the policy.

1. *Policy UD-1.3*

The Association begins by relying on policy UD-1.3 of the Uptown Community Plan, which [***35] sets forth the goal that buildings be designed to "maintain view corridors along public rights-of-way and to enhance pedestrian and auto views to Balboa Park, Mission Bay, and San Diego Bay." However, the Uptown Community Plan identifies the community's "view corridors" in figure 4-3 and does *not* classify the view down Olive Street to be one of those corridors. The nearest identified "view corridors" are found along Laurel Street and at Quince Street. The Project has no effect on those view corridors. Policy UD-1.3 also requires projects to "enhance" views, which we consider in our discussion of policies UD-4.1, UD-4.5, and UD-4.6.

2. *Policies UD-4.79 and UD-4.80*

Policies UD-4.79 and UD-4.80 note that the uptown community's "residential neighborhoods" are composed of small-scale buildings and require new buildings in these neighborhoods to be "[d]esign[ed] to conform to the predominant scale of the neighborhood" and include designs "to sensitively **[*779]** and adequately transition to adjacent lower height buildings." However, the Project is *not* in a "residential neighborhood." The Uptown Community Plan recognizes in figures 4-1 and 4-4 that the Project is instead located in a "mixed use" zone. [***36] The Association admits this fact on appeal. As the City also notes, a large portion of the Project site and many of the adjacent parcels are zoned as "Community Commercial," *not* residential. The Community Plan makes clear that different policies, UD-4.71 through UD-4.74, apply in such areas given the "eclectic variety of buildings in [Uptown's] commercial and mixed-use areas" and the Association offers no argument that the Project does not comply with those policies. Thus, the Community Plan's policies applicable to "residential neighborhoods" do not apply to the Project.

3. *Policies UD-4.90 and UD-4.91*

Policies UD-4.90 and UD-4.91 discuss "development transitions," which seek to "minimize the visual intrusiveness" of large buildings placed next to small-scale buildings. To do so, the policies suggest imposing a "transition plane" to limit the height of new buildings. The Association contends these policies apply to every parcel in the community to limit the size of new, large buildings when they are constructed next to existing, smaller buildings.

***CA(20)*** **(20)** This contention is not supported by the plain language of the Uptown Community Plan. Instead, ***HN20*** the plan requires these transitions only for parcels [***37] zoned for large buildings that border areas with different [**286] zoning allowing only small-scale buildings. The plan discusses the transitions between "higher density areas to lower density areas" and clarifies the importance of transitions between neighborhoods "where maximum building heights differ ... *as a result of zoning*." (Italics added.) The plan recognizes the need for transitions along a singular "transition line" between areas zoned for different densities, with the massing of higher scale buildings placed along the portion of the site farthest away from that line. Similarly, in Policy LU-2.10, the Community Plan reflects the need to "[e]nsure adequate transition between commercial/mixed-use and residential uses." These policies reflect that the anticipated transitions occur between areas with different zoning, not between an existing building and a newly proposed building on neighboring parcels sharing the same or similar zoning. The Land Development Code, in San Diego Municipal Code section 131.0543, subdivision (c)(1), also recognizes the need for transitions only between areas with different zoning by requiring projects to include setbacks for larger commercial and mixed-use buildings *only* when they abut parcels with low-density residential [***38] zoning. 11

**[*780]**

Although not dispositive, the evidence also establishes that the Association's interpretation of these policies conflicts with other recent development. The Association focuses on the Project's transition to the shorter "Abbey" building across Olive Street. However, the record includes several photographs and diagrams revealing that immediately to the north of the Abbey, a "14 story high rise known as the Park Bankers Hill" was recently constructed without the transition that the

4. *General Plan Policy UD-A.3*

Turning to the City's General Plan, policy UD-A.3 sets forth the goal to "[d]esign development adjacent to natural features in a sensitive manner to highlight and complement the natural environment in areas [***39] designated for development." The Association contends that the Project does not "complement" neighboring Balboa Park, which it contends is part of the City's "natural environment."

In response, the City contends that the General Plan distinguishes between "natural features" and "park lands" such that all parks, including Balboa Park, are not "natural features." In reply, the Association highlights a discussion in the General Plan that lists parks as part of the "natural environment."

Our interpretation of the General Plan suggests the correct answer lies between the positions of the two parties: while a particular park may be considered part of the "natural environment" because it includes "natural features" based on its unique characteristics, not all parks fall within that category. The General Plan and the Uptown Community Plan suggest that some parks within the City have been left in a natural state and may include [**287] "natural features," but the General Plan also notes that Balboa Park "*modified* the natural environment," implying it is no longer a purely natural environment. (Italics added.) In a similar case, this court recognized that Balboa Park is a "*developed urban* park" and constituted [***40] an "urban use" of land. (*Banker's Hill, Hillcrest, Park West Community Preservation Group v. City of San Diego* (2006) 139 Cal.App.4th 249, 255, 271 [42 Cal.Rptr.3d 537], italics added.) As such, the area of Balboa Park adjacent to the Project is not a "natural feature" warranting minimal development on adjoining parcels.

Indeed, even if policy UD-A.3 of the General Plan applies, the record reflects that the Project "complements" Balboa Park in the manner envisioned **[*781]** by the Community Plan, which designates the parcels bordering Balboa Park as having the highest zoned density of the entire community. As one planning commissioner noted, the goal of the Community Plan was to design Sixth Avenue along Balboa Park to replicate "Central Park West" in Manhattan by having "a line of buildings ... [demarcating] the boundary with the ... regional park." Rather than violating these policies, the Project fits within the City's plan for the neighborhood at its interface with Balboa Park.

Additionally, in policy UD-3.44 of the Community Plan, buildings along Sixth Avenue are instructed to "[e]nhance the adjacency of Balboa Park ... through similar themed landscaping [and] increased setbacks." Similarly, in policy [***41] UD-3.45, the plan specifies that new development should "provide a 10-foot minimum setback from property line for lots fronting the west side of Sixth Avenue (south of Upas Street) in order to establish a 30-foot total building setback from building face to curb. The resulting yard shall be landscaped and palm tree species shall be planted adjacent to sidewalks to form a parallel row of trees with Balboa Park."

The Project exceeds these requirements by providing a 15-foot setback along Sixth Avenue. The Project includes numerous trees, including a row of palm trees, and other landscaping along Sixth Avenue. This design complements Balboa Park in the manner envisioned by the Community Plan. Although the Association may prefer a different design, it fails to establish any error by the City in approving the Project. 12

5. *Policies UD-4.1, UD-4.5, and UD-4.6*

In the Community Plan, policies UD-4.5 and UD-4.6 seek to have new development include "façade articulation through the use of balconies, terraces and/or upper-story setbacks on high-rise buildings" to minimize view obstructions and enhance views of Balboa Park. This language mirrors a part of policy UD-1.3, which also requires projects [***42] to "enhance views" of Balboa Park. Similarly, policy UD-4.1 seeks to improve the pedestrian environment by requiring varied and articulated street façades "through the use of such features as notched setbacks, projecting bays, balconies, recessed storefront entrances, sidewalk cafes, window bays, and pedestrian passages to create visual interest."

The administrative record includes evidence supporting the conclusion that the Project satisfies these policies. [**288] The Project includes balconies, a terrace **[*782]** on an upper-story setback, and a roof deck. On the street level, the Project includes a large courtyard and pedestrian passage, recessed entrances, and alternating stone and glass to provide a varied articulation on the façade. The City Council relied on these features to find the Project to be consistent with the Community Plan's Urban Design standards.

Moreover, the Association's opening brief focuses on *private* views of Balboa Park, not *public* views. The Association asserts that "[t]he three buildings west of the Project site" will have their views impacted by the Project and complains that the Project "would block views from the two and three story buildings long [*sic*] Fifth Avenue." This focus on views from private buildings is misplaced. The Uptown Community Plan explains that "[w]hile views are common from vantage points under private ownership, ... public views refer to those that are accessible from public vantage points such as public rights-of-way, parks, and landmarks." Thus, the Uptown Community focuses in policy UD-1.4 on ensuring that *public views* are not obstructed. The Association fails to establish that the minimal balconies with translucent glass railings will unreasonably obstruct public views.

6. *Community Plan Implementation Overlay Zone*

***CA(21)*** **(21)** Finally, the Association contends the Project is inconsistent with the "Community Plan Implementation Overlay Zone," [***44] or "CPIOZ." The CPIOZ is referenced in the Uptown Community Plan, but also found in the City's Land Development Code. ***HN21*** Under the CPIOZ, the City may approve permits for buildings that exceed a height of 65 feet in the area where the Project is proposed only if the buildings "comply with the applicable regulations of the Municipal Code and are consistent with the applicable policies in the General Plan and Uptown Community Plan."

The Association contends the City could not approve the Project, which exceeds 65 feet in height, under the CPIOZ because of the other violations of the General Plan and Community Plan. However, as we have discussed, we conclude the City Council did not abuse its discretion in finding the Project did not violate the applicable policies.

**[*783]**

At most, the Project is inconsistent with the specific setback requirements along Olive Street. However, the Association cannot rely on that deviation from the setback or the building's height as a basis for denial of the Project under the CPIOZ because, as we discussed, Greystar specifically requested an incentive under the Density Bonus Law and the City's affordable housing regulations to avoid that setback and the Project's [***45] height was largely the result of its density bonus. Thus, the height limit imposed by the City's CPIOZ ordinance must be waived if imposing that height limit would physically preclude construction of the Project as designed unless the City could make a written finding, supported by substantial evidence, that the Project meets one of the statutory exceptions. (§ 65915, subd. (e)(1).) To the extent the CPIOZ height limit ordinance requires [**289] the City to deny a project entitled to a density bonus, incentive, or waiver of a development standard under the Density Bonus Law, it is preempted. (*Latinos Unidos, supra*, 217 Cal.App.4th at p. 1169.)

***CA(22)*** **(22)** In conclusion, the Association fails to establish the City abused its discretion by approving the Project because the City Council made adequate findings that the evidence in the record demonstrates that the Project is consistent with the applicable policies found in the General Plan, Uptown Community Plan, and Land Development Code. Moreover, even if the Project is inconsistent with the standards set forth in those plans, the City was nevertheless compelled to approve the Project under the Density Bonus Law based on the record before us. Accordingly, the Association fails to establish any basis for relief.

**III. DISPOSITION [***46]**

The judgment is affirmed. The City is entitled to its costs on appeal.

O'Rourke, J., and Guerrero, J., concurred.

**Footnotes**

[1] As explained by the City in its review documents, staff directed Greystar to present the Project to Uptown Planners because that group "is officially recognized by the City as a representative of the community, and an advisor to the City in actions that would affect the community."

The City's staff report noted the Project was eligible for a reduced parking ratio, but Greystar voluntarily elected to exceed the number of required parking spaces.

4 HN8 CA(8) (8) "'Concession' and 'incentive' are synonymous in the statute." (Schreiber, supra, 69 Cal.App.5th at p. 555.)

5 At the time of Project approval, the Density Bonus Law also included an exception that applied if a project would have a specific, adverse impact upon the "physical environment." A recent amendment removed that exception, which is not directly relevant to the issues considered on appeal.

6 A city's local ordinance may provide for a density bonus or incentives that exceed the Density Bonus Law. (See, e.g., Friends of Lagoon Valley, supra, 154 Cal.App.4th at pp. 824–830.)

7 The Density Bonus Law has been frequently amended, but the recent amendments do not materially affect the issues in this case. The specific density bonus that would apply to the Project under the current state law matches the City's Affordable Housing Regulations in effect at the time the Project was approved. (§ 65915, subd. (f)(2).) As noted in footnote 6, a city's density bonus may exceed the density bonus permitted by state law.

8 Precisely, the 38.75 percent density bonus over the permitted 147 units allowed for an additional 56.9625 units, but the Density Bonus Law requires cities to round up to the next whole number. (§ 65915, subd. (f)(5).) The Association challenged the calculation of the density bonus during the approval process and in the trial court, but does not raise that issue in its opening brief. Accordingly, the issue is forfeited. (See, e.g., Jay v. Mahaffey (2013) 218 Cal.App.4th 1522, 1542 [161 Cal. Rptr. 3d 700].)

9 The City was not required to substantiate this "negative finding" with evidence. (Schreiber, supra, 69 Cal.App.5th at p. 559.)

10 In supplemental briefing requested by the court, the parties recognize the HAA is applicable to the Project and do not challenge the application of that law in California Renters.

11 We grant the City's unopposed request for judicial notice of the relevant Municipal Code sections. However, we deny the request for judicial notice of an internal memorandum discussing building transitions that was not included in the administrative record and for which the trial court denied a request for judicial notice.

12 In its appeal to the City Council, the Association focused on the shadowing of areas of Balboa Park by the Project as a basis for finding the Project to be incompatible with the park. It does not raise this argument on appeal and, accordingly, has forfeited any claim premised on shadowing.

Document: Bankers Hill 150 v. City of San Diego, 74 Cal. App. 5th 755



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Economic and Community Development Department
Planning Division

# AGR 24-0002

# Maison's Palmdale Blvd 150, LLC

## City Council

## May 1, 2024

# Tentative Tract Map 83359

- Located south side of East Palmdale Boulevard between 50th Street East and east of 55th Street East

# Density Bonus Agreement

- Density bonus - Increase in the overall number of housing units that may be built on a site in exchange for including affordable housing units in a project
- General Plan Land Use designation and zone of SFR 3
- 120 units are allowed; the applicant proposes to construct a total of 64 detached single-family residential units and 127 ADU’s and JADU’s for a total of 191 residential units. Under California Fair Housing Laws, the proposed ADUs and JADUs are not subject to a jurisdiction's density requirements

# Recommendation

Adopt Resolution No. CC-2024-048 recommending City Council approve AGR 24-0002 (A-8767).

# Joint Staff Report

**DATE:** **MAY 15, 2024**

**TO:** **HONORABLE MAYOR AND CITY COUNCIL**
**HONORABLE CHAIR AND COMMISSIONERS**
**HONORABLE CHAIR AND MEMBERS**
**HONORABLE CHAIR AND DIRECTORS**

**FROM:** **OPERATIONS DEPARTMENT**
**FINANCE DIVISION**

**DISTRICT:** **ALL**

**SUBJECT:** **PRESENTATION OF CITY OF PALMDALE DRAFT BUDGET FOR FISCAL YEAR 2024-25**

## RECOMMENDATION

Staff recommends that the Legislative Bodies:

1. Review the draft budget and provide recommendations for adoption.

## BACKGROUND

The City is required to adopt an operational budget each year that serves as the City's financial plan for the Fiscal Year beginning July 1 through June 30; and defines the City's priorities for providing services to the community.

According to the Palmdale Municipal Code: Chapter 3.04 Budget Adoption Procedures, the City Manager shall submit a proposed budget to the City Council no later than May 31 each year. Additionally, the City Council shall conduct a public hearing on the proposed budget before adoption and shall adopt a budget prescribing the City's spending policy for the ensuing fiscal year annually on or before the thirtieth day of June.

## DISCUSSION

In alignment with the City's strategic plan, the draft Annual Budget for Fiscal Year 2024-25 is presented for your review and consideration.

The draft budget represents spending plans for all City funds, including General Fund, Special Revenue Funds, Capital Project Funds, Internal Service Funds, and Enterprise Funds.

## GENERAL FUND

*Revenues*

1. Property Taxes are anticipated to increase by 5% due to property valuations.
2. Sales Taxes are expected to increase by 2% based on economic performance in the City.
3. Use of Property revenues are expected to increase by 15%, primarily due to a one-time payment from the newly negotiated contract with Waste Management.
4. Licenses and permits are expected to decrease by 9%, primarily due to development activity and the timing of permit issuance.
5. Development charges for services are expected to decrease by 5% due to increases in plan checks and inspections anticipated in FY 2024-25.
6. Other revenues are expected to increase in FY 2024-25 due to a one-time anticipated economic development property sale.

*Expenditures*

1. Salaries and benefits are expected to increase by 10.2% year over year. This is the result of FY 2023-24 projections being reduced to account for vacancy savings that have been realized throughout the year. FY 2024-25 proposed budget would fully fund those positions that have been filled or are currently in recruitment phases. The FY 2024-25 salary and benefits include a proposed 3% increase (2% COLA and 1% wage increase) to employees. Salaries and benefits also reflect recommended updates to the City's Classification and Pay Plan.
2. The LA County Sheriff Contract is expected to increase by 3.6%. However, the cost of the contract, is being covered by multiple funding sources, including the General Fund and Measure AV. The liability portion of the contract is expected to increase by $319,850 or 0.5%.
3. The LA County Animal Care & Control contract is expected to increase by $930,000.
4. Transfers to Reserves for FY 2024-25 include:
    a. Pension Trust Fund to stabilize fluctuations in CalPERS rates: $1.25 million
    b. Fleet maintenance to fund ongoing replacement of the City's fleet: $250,000
    c. Information Technology to fund the ongoing upgrade of the City's technology infrastructure: $250,000
    d. Drytown Waterpark to fund the ongoing capital costs relating to maintenance and improvements of the park: $520,000

MEASURE AV

Based on economic trends and projections performed by the City's sales tax consultants, Measure AV is expected to generate approximately $22.8 million in FY 2024-25.

Proposed expenditures under Measure AV fund are outlined by project and/or program in greater detail on the attached budget sheets. Below are some highlights of programs proposed for funding:

1. Public Safety
    a. Animal Care: $300,000
    b. Emergency Management: $231,900
    c. Community Compliance: $2.1 million
    d. LA County Sheriff Contract: $7.4 million
2. Beautification/Infrastructure/CIP
    a. Safe and Clean Parks: $11.8 million
    b. Graffiti Abatement: $1.1 million
    c. CIP – Multi-Year Projects: $9.3 million
3. Community Programs
    a. SAVES: $444,090
    b. Unhoused Programs: $150,000
    c. Senior Programs: $416,710
    d. Community Programs:
        i. Veteran support: $25,000
        ii. Recreation scholarships: $20,000
        iii. Community partnerships: $50,000
    e. Community events: $900,000
4. Economic Development
    a. Business retention and partnership programs: $1.1 million
    b. Film & Tourism: $75,000
    c. Property acquisition and entitlement: $500,000

AMERICAN RESCUE PLAN ACT FUNDS (ARPA)

The City received an allocation of $34.5 million as a result of the American Rescue Plan Act. The City received the first of two disbursements of funds in July 2021, and the second in July 2022. U.S. Department of Treasury released the Final Rule on April 1, 2022, implementing the statutory provisions on eligible and ineligible uses of funds.

In accordance with the Final Rule, staff has prepared a proposed budget and plan to fully commit all funds by the deadline prescribed by the U.S. Treasury. Details can be found in the attachments provided.

SPECIAL REVENUE FUNDS

Special Revenue and other funds consist of transportation funds, grants, and other forms of restricted funding. The use of money in certain funds is governed by memorandums of understanding, contracts, or law. Required audits are conducted each year to ensure compliance with granting agencies.

One of the largest sources of revenue used by the City to pay for the maintenance, repair, and improvement of streets and facilities is transportation funding. These are sales tax revenues collected by the State or County and allocated to the City based on a percentage of the population.

The table below shows the FY 2024-25 proposed Transportation fund expenditures:

| Transportation Funds | FY 2023-24 Projected | FY 2024-25 Proposed |
|---|---|---|
| Gas Tax Fund | $7,901,900 | $7,197,030 |
| Prop A Fund | $7,525,540 | $11,930,920 |
| Prop C Fund | $9,192,370 | $6,248,920 |
| Local Transp Fund Art 3 | $24,150 | $409,000 |
| Local Transp Fund Art 8 | $14,266,970 | $10,049,040 |
| Measure R Fund | $6,377,890 | $95,982,800 |
| Measure M Fund | $5,792,880 | $6,609,100 |
| **Expenditure Total** | **$51,081,700** | **$138,426,810** |

The City uses these funds specifically to fund street repair maintenance and improvement activities such as traffic engineering, geographical information system software and staffing, bus stop and transportation center maintenance, and public works staffing. Depending on the funding source, balances may carry over from year to year to complete larger projects.

The City receives an allocation from Los Angeles County Measure H funds to address homelessness. Measure H is a ¼ cent sales tax collected by the County. Approximately $ 5.7 million is collected annually from Palmdale residents. The City receives an annual allocation from the Couty for City programs. The allocation for FY 2024-25 is anticipated to be $568,000.

## CAPITAL IMPROVEMENT PROGRAM

The proposed FY 2024-25 Capital Improvement budget includes various projects totaling $197.8 million. Many of the proposed projects are multi-year projects, and the total amount represents funds carried from year to year through the life of the projects and may not be fully expended in the single year shown. Capital improvement projects are funded primarily through grants and other restricted funds. The attached schedule comprehensively lists all previously approved and proposed capital improvement projects.

## PERSONNEL

With the need to maintain and enhance certain services, additions to personnel are necessary. In addition to adding personnel, the City is working towards being more competitive in the tight job market we are currently encountering. As such, we are proposing to continue the following additional benefits:

- Deferred compensation match of $1,200 per year for all full-time employees;
- Wellness incentive of $500 per Fiscal Year for all full-time employees; and,
- Bilingual pay of $100 per month for eligible full-time and part-time staff.

The table below provides a summary of the proposed personnel actions:
FY 2024-25.

| | | FY 2024-25 | |
|---|---|---|---|
| **Position** | **Funding Source** | **Number** | **Amount** |
| Office Assistant | Housing Asset Funds | 1 | $72,060 |
| Maintenance Leadworker | Landscape Maint. Funds | 1 | $93,500 |
| Maintenance Specialist | Measure AV | 1 | $96,000 |
| **Total** | | **3** | **$262,060** |

## CONCLUSION

The draft FY 2024-25 Budget underscores the City's unwavering dedication to the prosperity and well-being of our community. Despite the ongoing challenge of expenditures outpacing revenues, our commitment to prudent fiscal management ensures that essential programs and services remain robust and sustainable.

This budget focuses steadfastly on public safety, quality of life enhancements, and infrastructure investments, reflecting our responsiveness to our residents' evolving needs. By prioritizing these key areas, we aim to foster a safe, thriving environment where all individuals can flourish.

Furthermore, our approach to budgeting embraces flexibility and adaptability, recognizing that the document is a living entity subject to refinement as circumstances dictate. Through ongoing collaboration and strategic decision-making, we will continue to refine and optimize our financial resources to best serve the community.

As we progress, we thank all stakeholders for their valuable input and support throughout the budgeting process. Together, we stand poised to navigate the challenges ahead and build a brighter future for our great city, grounded in fiscal responsibility, innovation, and inclusivity.

## FISCAL IMPACT

$0; There is no fiscal impact associated with this action. The Fiscal Year 2024-25 Operating Budget will serve as the financial guideline for program implementation for the upcoming year. The proposed budget complies with all Financial Policies, including the General Fund Reserve Requirement. 30% General Fund reserves are being proposed for FY 2024-25. It is anticipated that revenues will be sufficient to cover the expenditures proposed.

## STRATEGIC PLAN

Goal II: Ensure long-term fiscal health of the City and maintain funding for services.

A. Manage resources, costs, and liabilities to ensure the City's long-term fiscal health.

| | |
|---|---|
| Prepared by: | Janelle Samson, Director of Operations |
| Certified as to availability of Funds: | Janelle Samson, Director of Operations |
| Approved by: | Ronda Perez, City Manager |
| Approved as to form: | William P. Curley, III, City Attorney |

## ATTACHMENTS

Rpt. Draft Budget FY 2024-25
PPT Draft Budget FY 2024-25

# Fiscal Year 2024-25
# Draft Annual Operating and Capital Budget

CITY OF PALMDALE
FIVE YEAR GENERAL FUND AND CONSOLIDATED FUNDS PROJECTION

| | | | | | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 |
|---|---|---|---|---|---|---|---|---|---|
| | | FY 2023 Actuals | FY 2024 Adopted | FY 2024 Projected | FY 2025 Proposed | FY 2026 Projected | FY 2027 Projected | FY 2027 Projected | FY 2027 Projected |
| 1 | **BEGINNING FUND BALANCE** | 73,269,500 | 92,576,350 | 92,576,350 | 84,637,770 | 78,381,780 | 69,876,891 | 60,802,202 | 54,719,754 |
| 2 | REVENUES/TRANSFERS IN | | | | | | | | |
| 3 | Property Tax | 29,208,527 | 27,069,450 | 30,297,750 | 31,738,000 | 33,324,900 | 34,991,150 | 36,740,710 | 38,577,750 |
| 4 | Sales And Use Tax | 27,808,626 | 28,265,620 | 27,429,330 | 28,092,130 | 28,653,970 | 29,227,050 | 29,811,590 | 30,407,820 |
| 5 | Transient Occupancy Tax | 4,608,941 | 4,896,000 | 4,896,000 | 4,950,000 | 5,098,500 | 5,251,460 | 5,409,000 | 5,571,270 |
| 6 | Franchise Fees | 7,595,391 | 6,379,910 | 8,191,870 | 17,366,960 | 8,437,630 | 8,606,380 | 8,778,510 | 8,954,080 |
| 7 | Use Of Property | 3,783,921 | 3,043,870 | 2,980,680 | 3,441,330 | 3,510,160 | 3,580,360 | 3,651,970 | 3,725,010 |
| 8 | License And Permits | 5,525,829 | 3,954,070 | 5,531,700 | 5,009,580 | 5,109,770 | 5,211,970 | 5,316,210 | 5,422,530 |
| 9 | Charges For Services | 1,524,521 | 1,379,920 | 1,234,810 | 1,276,100 | 1,339,910 | 1,393,510 | 1,449,250 | 1,507,220 |
| 10 | Development Charges For Services | 3,190,946 | 2,489,150 | 2,293,250 | 2,414,150 | 2,486,570 | 2,561,170 | 2,638,010 | 2,717,150 |
| 11 | Fines And Forfeitures | 784,947 | 799,800 | 755,290 | 962,910 | 982,170 | 1,001,810 | 1,021,850 | 1,042,290 |
| 12 | Other Revenue | 5,790,501 | 10,824,820 | 10,555,370 | 9,280,000 | 6,500,000 | 6,000,000 | 6,000,000 | 6,000,000 |
| 13 | Gain (Loss) Fair Value of Investments | -654,783 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 14 | Transfer In | 14,281,368 | 12,726,540 | 24,423,610 | 12,663,810 | 8,150,000 | 8,150,000 | 8,150,000 | 8,150,000 |
| 15 | **Total Revenues** | **103,448,734** | **101,829,150** | **118,589,660** | **117,194,970** | **103,593,580** | **105,974,860** | **108,967,100** | **112,075,120** |
| 16 | EXPENDITURES/TRANSFERS OUT | | | | | | | | |
| 17 | Salaries | 16,911,909 | 19,861,550 | 18,790,740 | 20,635,660 | 21,461,090 | 22,319,530 | 22,319,530 | 23,212,310 |
| 18 | Benefits | 6,226,421 | 9,665,740 | 8,413,730 | 9,314,190 | 9,686,760 | 10,074,230 | 10,074,230 | 10,477,200 |
| 19 | Organizational Development | 443,678 | 748,090 | 703,950 | 809,320 | 750,000 | 750,000 | 750,000 | 750,000 |
| 20 | Operating | 8,841,748 | 8,207,550 | 21,257,710 | 12,163,700 | 12,285,340 | 12,408,190 | 12,408,190 | 12,532,270 |
| 21 | Contract Services | 13,732,984 | 17,128,640 | 17,590,810 | 21,886,320 | 22,105,180 | 22,326,230 | 22,326,230 | 22,549,490 |
| 22 | Capital Outlay | 1,806,038 | 1,681,830 | 2,142,180 | 8,210,160 | 1,000,000 | 1,000,000 | 1,000,000 | 1,000,000 |
| 23 | County Contracts - Law Enforcement | 12,992,270 | 19,499,530 | 18,842,870 | 21,137,500 | 22,300,060 | 23,526,560 | 23,526,560 | 24,820,520 |
| 24 | County Contracts - Liability | 2,773,013 | 3,307,590 | 3,307,590 | 3,627,440 | 3,699,989 | 3,773,989 | 3,773,989 | 3,849,468 |
| 25 | County Contracts - Animal Control | 1,491,007 | 1,600,000 | 2,270,000 | 3,200,000 | 3,200,000 | 3,200,000 | 3,200,000 | 3,200,000 |
| 26 | Utilities | 2,318,811 | 2,823,230 | 2,926,560 | 2,978,870 | 3,038,450 | 3,099,220 | 3,099,220 | 3,161,200 |
| 27 | Debt Service | 6,045,840 | 6,351,720 | 2,315,830 | 2,291,600 | 2,291,600 | 2,291,600 | 2,291,600 | 2,291,600 |
| 28 | Transfers Out/Internal Svc Alloc. | 10,558,167 | 8,934,000 | 25,424,770 | 14,926,200 | 8,000,000 | 8,000,000 | 8,000,000 | 8,000,000 |
| 29 | Transfer Out to Reserves | - | 2,266,500 | 2,541,500 | 2,270,000 | 2,280,000 | 2,280,000 | 2,280,000 | 2,280,000 |
| 30 | **Total Expenditures** | **84,141,884** | **102,075,970** | **126,528,240** | **123,450,960** | **112,098,469** | **115,049,549** | **115,049,549** | **118,124,058** |
| | | | | | | | | | |
| 31 | Surplus/(Deficit) (Revenue - Expenditures) | 19,306,850 | (246,820) | (7,938,580) | (6,255,990) | (8,504,889) | (9,074,689) | (6,082,449) | (6,048,938) |
| 32 | **FUND BALANCE BEFORE RESERVES/RESTRICTIONS** | **92,576,350** | **92,329,530** | **84,637,770** | **78,381,780** | **69,876,891** | **60,802,202** | **54,719,754** | **48,670,815** |
| | | | | | | | | | |
| 33 | **20 % Reserve Requirement (30% Recommended)** | **16,828,377** | **30,622,791** | **37,958,472** | **37,035,288** | **22,419,694** | **23,009,910** | **23,009,910** | **23,624,812** |
| 34 | Restricted, Nonspendable and Assigned | **23,493,168** | **25,000,000** | **30,000,000** | **30,000,000** | **30,000,000** | **25,000,000** | **25,000,000** | **25,000,000** |
| 35 | **ENDING AVAILABLE BALANCE** | **52,254,805** | **36,706,739** | **16,679,298** | **11,346,492** | **17,457,197** | **12,792,293** | **6,709,844** | **46,004** |

CITY OF PALMDALE
ESTIMATED FUND BALANCE
FISCAL YEAR 2024

| Fund | Fund Description | FY 2024 Beginning Available Fund Balance | FY 2024 Revenues | FY 2024 Operating Expenditures | FY 2024 Capital Expenditures | Reserve Requirement | Nonspendable, Restricted and Assigned | FY 2024 Projected Ending Available Fund Balance |
|---|---|---|---|---|---|---|---|---|
| 101, 150, 151 | General Fund | 92,576,350 | 118,589,660 | 124,599,030 | 1,929,210 | 38,040,972 | 30,000,000 | 16,596,798 |
| 153 | Information Technology | 3,680,952 | 5,320,900 | 4,370,900 | 700,000 | 3,300,000 | | 630,952 |
| 154 | Fleet Maintenance | 4,655,397 | 3,474,210 | 1,701,100 | 1,457,110 | 4,000,000 | | 971,397 |
| 156 | Public Art Fund | 1,491,630 | 250,000 | 63,410 | - | | | 1,678,220 |
| 157 | Measure AV | 24,565,678 | 22,307,000 | 12,370,660 | 17,597,580 | 2,996,824 | | 13,907,614 |
| 158 | American Rescue Funds | 323,465 | 16,244,110 | 8,421,560 | 7,442,550 | | | 703,465 |
| 200 | PEG Fund | 753,699 | 265,000 | 149,610 | 200,000 | | | 669,089 |
| 201 | Gas Tax Fund | 8,803,877 | 5,039,570 | 540,800 | 7,361,100 | | | 5,941,547 |
| 202 | Public Safety Fund | 1,354,668 | 732,500 | 150,000 | - | | | 1,937,168 |
| 203 | Prop A Fund | 9,964,023 | 4,867,980 | 3,430,560 | 4,094,980 | | | 7,306,463 |
| 204/214 | Prop C Funds | 14,099,022 | 9,021,080 | 579,900 | 8,612,470 | | | 13,927,732 |
| 205 | Air Quality Improvement Fund | 312,647 | 10,320 | - | - | | | 322,967 |
| 206 | Local Transp Fund Art 3 | (2,753) | 222,760 | - | 24,150 | | | 195,857 |
| 207 | Local Transp Fund Art 8 | 2,720,834 | 11,546,140 | 9,869,760 | 4,397,210 | | | 4 |
| 208/218 | Measure R Funds | 9,923,012 | 7,626,050 | - | 6,377,890 | | | 11,171,172 |
| 209/219 | Measure M Funds | 9,545,366 | 5,087,750 | - | 5,792,880 | | | 8,840,236 |
| 210 | Road Maint & Rehab Acct Fund | 7,477,865 | 3,140,760 | - | 8,247,600 | | | 2,371,025 |
| 211 | Measure A LA County Parks | (6,350) | 2,597,710 | - | 2,591,360 | | | - |
| 220 | Park Development Fund | 7,345,074 | 1,050,000 | 269,600 | 8,115,880 | | | 9,594 |
| 221 | Traffic Impact Fund | 1,488,105 | 410,000 | 861,000 | 300,000 | | | 737,105 |
| 222-230 | Drainage Funds | 10,301,471 | 3,440,020 | 137,900 | 310,000 | | | 13,293,591 |
| 227 | Fire Facilities Impact Fund | 8,644,380 | 1,300,000 | 65,000 | - | | | 9,879,380 |
| 228 | Sewer Upgrade Fund | 482,095 | - | - | 100,000 | | | 382,095 |
| 229 | Public Facilities Fund | 1,692,169 | 495,000 | - | 502,780 | | | 1,684,389 |
| 240 | Federal Funds Fund | (386,297) | 13,967,860 | - | 13,581,560 | | | 3 |
| 241 | State Grants Fund | (1,176,868) | 5,299,910 | 2,260,470 | 1,861,870 | | | 702 |
| 242 | Misc Grant/Developer Contrib | 2,850,972 | 1,560,510 | 773,320 | 544,150 | | | 3,094,012 |
| 243 | Federal Home Program | 7,898,494 | 374,580 | 358,350 | - | | | 7,914,724 |
| 244 | Federal Jobs Programs | (18,012) | 105,520 | 87,500 | - | | | 8 |
| 245 | HOME ARP Fund | (1,355) | 57,590 | 23,400 | - | | | 32,835 |
| 250 | Park Assessments Fund | 2,797,415 | 3,129,100 | 2,604,550 | 627,250 | | | 2,694,715 |
| 251 | Landscape Maintenance Fund | 14,021,830 | 7,463,000 | 8,015,750 | 250,000 | | | 13,219,080 |
| 252 | Street Lighting Assmnt Distr | 20,327,807 | 1,300,400 | 1,141,700 | - | | | 20,486,507 |
| 253 | Drainage Benefit Assessment | 1,377,967 | 151,700 | 48,000 | - | | | 1,481,667 |
| 254 | Sewer Maint Assessment Dist | 30,166,683 | 6,540,700 | 4,723,370 | 705,720 | 9,050,005 | | 22,228,288 |
| 255 | Street Light County District | 15,649,854 | 3,569,500 | 4,032,860 | - | | | 15,186,494 |
| 256 | Street Light Dist #2 Anaverde | 866,390 | 185,200 | 200,270 | - | | | 851,320 |
| 257 | Street Light Dist #3 Ritter | 345,370 | 72,100 | 99,170 | - | | | 318,300 |
| 258 | Enhanced Infrastructure Financing Dis | 297,756 | 300,000 | - | - | | | 597,756 |
| 259 | CFD 2022-1 Maintenance Service Dis | - | 16,500 | 16,500 | - | | | - |
| 260 | Solid Waste | 1,077,751 | 852,960 | 806,930 | - | | | 1,123,781 |
| 280 | CDBG Fund | 2,137,433 | 1,375,500 | 1,257,670 | 130,000 | | | 2,125,263 |
| 281 | SAVES Grant Fund | (8,512) | 50,000 | 41,490 | - | | | (2) |
| 291 | Housing Authority Fund | 1,456,441 | 78,750 | 71,010 | - | | | 1,464,181 |
| 292 | Housing Facilities Fund | (2,462,215) | 8,244,400 | 7,452,230 | 336,000 | | | (2,006,045) |
| 293 | Housing Asset Fund | 49,686,425 | 1,902,640 | 3,662,020 | 609,070 | | | 47,317,975 |
| 300 | Water Park | 4,087,392 | 2,325,500 | 2,032,120 | 15,000 | | | 4,365,772 |
| 350 | Palmdale CCA | (1,078,410) | 68,286,990 | 68,330,220 | - | 2,049,910 | | (3,171,550) |
| 460 | Successor Agency | 8,730,744 | 65,292,690 | 66,193,740 | - | | | 7,829,694 |
| 480 | AD88-1 10Th St West Improv | (65,787) | - | - | - | | | (65,787) |
| 481 | AD90-2 7Th St West Improvement | 146,247 | - | - | 20,640 | | | 125,607 |
| 482 | CFD 2003-1 Improvement Fund | 13,093 | - | - | - | | | 13,093 |
| 483 | CFD 91-1 Sierra Gateway Improv | 158,266 | - | - | - | | | 158,266 |
| 484 | CFD 93-1 Ritter Ranch Impr Fund | 2,670,897 | 17,000 | - | - | | | 2,687,897 |
| 523 | Debt Svc-Pwr Pl Land $19.9 COP | - | - | - | - | | | - |
| 524 | Debt Svc-Revenue Bonds | - | 10,000 | - | - | | | 10,000 |
| 525 | Debt Svc-PFA | 124 | 4,896,360 | 4,896,130 | - | | | 354 |
| 580 | OPEB Fiduciary Trust Funds | 4,524,040 | 374,000 | 395,000 | - | | | 4,503,040 |
| 710 | Palmdale Community Foundation | 236,486 | 57,170 | 73,770 | - | | | 219,886 |
| 730 | AD 88-1 10Th St West Redemption | 67,885 | 5,000 | - | - | | | 72,885 |
| 732 | AD 90-2 7Th St West Redemption | (125,572) | 3,000 | - | - | | | (122,572) |
| 733 | AD 87-1 Rancho Vista Rdmpt Fund | 128,037 | 2,000 | - | - | | | 130,037 |
| 734 | CFD 03-1 Anaverde Redemption | 1,953,387 | 1,546,000 | 1,544,900 | - | | | 1,954,487 |
| 735 | CFD 2005-1 Redemption Fund | 1,685,706 | 1,069,830 | 969,200 | - | | | 1,786,336 |
| 736 | CFD 91-1 Sierra Gateway Redempt | (74,481) | 87,660 | 111,920 | - | | | (98,741) |
| 737 | AD 91-2 52Nd St West Redemption | 23,128 | 400 | - | - | | | 23,528 |
| 738 | CFD 93-1 Ritter Ranch Rdmpt Fnd | 237,403 | 2,500 | 50,580 | - | | | 189,323 |
| 739 | AD 2006-01 Godde Hill Rdmp Fd | 271,332 | 136,720 | 137,600 | - | | | 270,452 |
| 740 | CFD 16-1 Joshua Ranch Wtr Rdmp | 2,287,550 | 847,300 | 833,400 | - | | | 2,301,450 |
| | **Total** | **394,975,472** | **424,597,060** | **350,825,930** | **104,836,010** | **59,437,711** | **30,000,000** | **274,472,881** |

CITY OF PALMDALE
ESTIMATED FUND BALANCE
FISCAL YEAR 2025

| Fund | Fund Description | FY 2025 Beginning Available Fund Balance | FY 2025 Revenues | FY 2025 Operating Expenditures | FY 2025 Capital Expenditures | Reserve Requirement | Nonspendable, Restricted and Assigned | FY 2025 Projected Ending Available Fund Balance |
|---|---|---|---|---|---|---|---|---|
| 101, 150, 151 | General Fund | 84,637,770 | 117,194,970 | 116,424,010 | 7,026,950 | 37,035,288 | 30,000,000 | 11,346,492 |
| 153 | Information Technology | 3,930,952 | 5,170,070 | 4,184,070 | 736,000 | 3,300,000 | | 880,952 |
| 154 | Fleet Maintenance | 4,971,397 | 3,600,800 | 1,688,300 | 1,642,500 | 4,000,000 | | 1,241,397 |
| 156 | Public Art Fund | 1,678,220 | 250,000 | 107,000 | 235,000 | | | 1,586,220 |
| 157 | Measure AV | 16,904,438 | 22,811,000 | 14,937,900 | 21,165,730 | 3,610,363 | | 1,445 |
| 158 | American Rescue Funds | 703,465 | 7,052,440 | 935,270 | 5,732,170 | | | 1,088,465 |
| 200 | PEG Fund | 669,089 | 265,000 | 154,740 | 200,000 | | | 579,349 |
| 201 | Gas Tax Fund | 5,941,547 | 4,869,040 | 1,027,600 | 6,169,430 | | | 3,613,557 |
| 202 | Public Safety Fund | 1,937,168 | 732,500 | 150,000 | - | | | 2,519,668 |
| 203 | Prop A Fund | 7,306,463 | 4,696,690 | 6,033,580 | 5,897,340 | | | 72,233 |
| 204/214 | Prop C Funds | 13,927,732 | 8,124,220 | 579,600 | 5,669,320 | | | 15,803,032 |
| 205 | Air Quality Improvement Fund | 322,967 | 220,000 | - | 23,000 | | | 519,967 |
| 206 | Local Transp Fund Art 3 | 195,857 | 222,760 | - | 409,000 | | | 9,617 |
| 207 | Local Transp Fund Art 8 | 4 | 10,049,030 | 9,750,740 | 298,300 | | | (6) |
| 208/218 | Measure R Funds | 11,171,172 | 97,639,550 | - | 95,982,800 | | | 12,827,922 |
| 209/219 | Measure M Funds | 8,840,236 | 8,834,270 | - | 6,609,100 | | | 11,065,406 |
| 210 | Road Maint & Rehab Acct Fund | 2,371,025 | 4,337,560 | - | 6,541,380 | | | 167,205 |
| 211 | Measure A LA County Parks | - | 1,445,000 | - | 1,445,000 | | | - |
| 220 | Park Development Fund | 9,594 | 1,550,000 | 269,600 | 617,000 | | | 672,994 |
| 221 | Traffic Impact Fund | 737,105 | 310,000 | - | 100,000 | | | 947,105 |
| 222 | Drainage Funds | 13,293,591 | 1,117,300 | 127,900 | 7,702,240 | | | 6,580,751 |
| 227 | Fire Facilities Impact Fund | 9,879,380 | 750,000 | 37,500 | - | | | 10,591,880 |
| 228 | Sewer Upgrade Fund | 382,095 | - | - | 334,110 | | | 47,985 |
| 229 | Public Facilities Fund | 1,684,389 | 495,000 | - | 320,470 | | | 1,858,919 |
| 240 | Federal Funds Fund | 3 | 14,209,690 | - | 14,154,820 | | | 54,873 |
| 241 | State Grants Fund | 702 | 2,508,120 | 1,586,510 | 455,000 | | | 467,312 |
| 242 | Misc Grant/Developer Contrib | 3,094,012 | 4,880,160 | 882,700 | 4,591,850 | | | 2,499,622 |
| 243 | Federal Home Program | 7,914,724 | 2,905,000 | 2,905,370 | - | | | 7,914,354 |
| 244 | Federal Jobs Programs | 8 | 94,120 | 94,000 | - | | | 128 |
| 245 | HOME ARP Fund | 32,835 | 2,033,460 | 2,033,830 | - | | | 32,465 |
| 250 | Park Assessments Fund | 2,694,715 | 3,135,700 | 2,653,480 | 256,540 | | | 2,920,395 |
| 251 | Landscape Maintenance Fund | 13,219,080 | 7,590,380 | 9,071,310 | - | | | 11,738,150 |
| 252 | Street Lighting Assmnt Distr | 20,486,507 | 1,336,950 | 1,191,320 | - | | | 20,632,137 |
| 253 | Drainage Benefit Assessment | 1,481,667 | 156,700 | 49,200 | - | | | 1,589,167 |
| 254 | Sewer Maint Assessment Dist | 31,278,293 | 6,541,000 | 4,320,040 | 10,012,090 | 9,383,488 | | 14,103,675 |
| 255 | Street Light County District | 15,186,494 | 3,680,570 | 4,284,950 | - | | | 14,582,114 |
| 256 | Street Light Dist #2 Anaverde | 851,320 | 191,320 | 213,850 | - | | | 828,790 |
| 257 | Street Light Dist #3 Ritter | 318,300 | 74,480 | 113,640 | - | | | 279,140 |
| 258 | Enhanced Infrastructure Financing Dis | 597,756 | 300,000 | - | - | | | 897,756 |
| 259 | CFD 2022-1 Maintenance Service Dist | - | 22,030 | 22,030 | - | | | - |
| 260 | Solid Waste | 1,123,781 | 1,429,990 | 1,457,800 | - | | | 1,095,971 |
| 280 | CDBG Fund | 2,125,263 | 4,562,480 | 2,466,140 | 946,850 | | | 3,274,753 |
| 281 | SAVES Grant Fund | (2) | 50,000 | 50,000 | - | | | (2) |
| 291 | Housing Authority Fund | 1,464,181 | 94,600 | 105,510 | - | | | 1,453,271 |
| 292 | Housing Facilities Fund | (2,006,045) | 8,485,750 | 7,733,440 | 355,000 | | | (1,608,735) |
| 293 | Housing Asset Fund | 47,317,975 | 1,964,170 | 7,128,320 | 1,050,000 | | | 41,103,825 |
| 300 | Water Park | 4,365,772 | 2,488,000 | 2,166,530 | 1,661,000 | | | 3,026,242 |
| 350 | Palmdale CCA | (1,121,640) | 71,701,340 | 67,799,970 | - | 2,034,000 | | 745,730 |
| 460 | Successor Agency | 7,829,694 | 73,606,310 | 74,019,540 | - | | | 7,416,464 |
| 480 | AD88-1 10Th St West Improv | (65,787) | - | - | - | | | (65,787) |
| 481 | AD90-2 7Th St West Improvement | 125,607 | - | - | - | | | 125,607 |
| 482 | CFD 2003-1 Improvement Fund | 13,093 | - | - | - | | | 13,093 |
| 483 | CFD 91-1 Sierra Gateway Improv | 158,266 | - | - | - | | | 158,266 |
| 484 | CFD 93-1 Ritter Ranch Impr Fund | 2,687,897 | 19,000 | - | - | | | 2,706,897 |
| 487 | CFD 2022-3 Ritter Redemption | - | 52,300 | - | - | | | 52,300 |
| 523 | Debt Svc-Pwr Pl Land $19.9 COP | - | - | - | - | | | - |
| 524 | Debt Svc-Revenue Bonds | 10,000 | 10,000 | - | - | | | 20,000 |
| 525 | Debt Svc-PFA | 354 | 5,168,680 | 5,168,510 | - | | | 524 |
| 580 | OPEB Fiduciary Trust Funds | 4,503,040 | 380,000 | 400,000 | - | | | 4,483,040 |
| 710 | Palmdale Community Foundation | 219,886 | 60,500 | 266,420 | - | | | 13,966 |
| 730 | AD 88-1 10Th St West Redemption | 72,885 | 5,000 | - | - | | | 77,885 |
| 732 | AD 90-2 7Th St West Redemption | (122,572) | 3,000 | - | - | | | (119,572) |
| 733 | AD 87-1 Rancho Vista Rdmpt Fund | 130,037 | 2,000 | - | - | | | 132,037 |
| 734 | CFD 03-1 Anaverde Redemption | 1,954,487 | 1,551,100 | 1,532,500 | - | | | 1,973,087 |
| 735 | CFD 2005-1 Redemption Fund | 1,786,336 | 1,080,400 | 973,500 | - | | | 1,893,236 |
| 736 | CFD 91-1 Sierra Gateway Redempt | (98,741) | 87,660 | 116,720 | - | | | (127,801) |
| 737 | AD 91-2 52Nd St West Redemption | 23,528 | 400 | - | - | | | 23,928 |
| 738 | CFD 93-1 Ritter Ranch Rdmpt Fnd | 189,323 | 1,500 | 52,910 | - | | | 137,913 |
| 739 | AD 2006-01 Godde Hill Rdmp Fd | 270,452 | 139,450 | 137,490 | - | | | 272,412 |
| 740 | CFD 16-1 Joshua Ranch Wtr Rdmp | 2,301,450 | 855,700 | 874,450 | - | | | 2,282,700 |
| 741 | CFD 2022-2 Ritter Ranch Improv | - | 3,040,400 | - | - | | | 3,040,400 |
| | **Total** | **363,910,592** | **528,236,610** | **358,279,790** | **208,339,990** | **59,363,139** | **30,000,000** | **236,164,283** |

CITY OF PALMDALE
FY 2025 PROPOSED BUDGET
REVENUES-ALL FUNDS (Actuals through Q3 FY24)

| | Category | 2022 Actual | 2023 Actual | 2024 Projected | 2025 Proposed | $ Chg | % Chg |
|---|---|---|---|---|---|---|---|
| **60** | PROPERTY TAXES | 90,526,566 | 103,684,186 | 95,217,840 | 105,721,710 | 10,503,870 | 11.0% |
| **61** | SALES & USE TAXES | 62,973,812 | 63,427,168 | 65,008,050 | 65,634,160 | 626,110 | 1.0% |
| **62** | OTHER TAXES | 6,821,624 | 7,931,808 | 7,905,330 | 8,931,600 | 1,026,270 | 13.0% |
| **63** | TRANSIENT OCC TAX | 5,540,832 | 4,608,941 | 4,896,000 | 4,950,000 | 54,000 | 1.1% |
| **64** | FRANCHISE FEES | 6,567,427 | 7,830,872 | 8,456,870 | 17,631,960 | 9,175,090 | 108.5% |
| **65** | GRANTS | 13,106,047 | 29,861,992 | 60,452,390 | 149,232,670 | 88,780,280 | 146.9% |
| **66** | DEVELOPER CONTRIB | 51,380 | 17,690 | 223,100 | 50,000 | (173,100) | -77.6% |
| **67** | COUNTY CONTRIB | 320,843 | 295,903 | 3,627,260 | 2,162,910 | (1,464,350) | -40.4% |
| **68** | STATE CONTRIBUTIONS | - | - | 1,000 | 1,000 | - | 0.0% |
| **69** | OTHER AGENCY CONTRIB | 766,094 | 522,378 | 393,750 | 3,948,250 | 3,554,500 | 902.7% |
| **71** | USE OF PROPERTY | 12,671,239 | 16,279,987 | 13,333,110 | 13,835,430 | 502,320 | 3.8% |
| **72** | FAIR VALUE OF INVEST | (11,066,442) | (1,751,064) | - | - | - | 0.0% |
| **75** | PARK DEVELOPMENT FEE | 2,413,127 | 1,339,284 | 1,000,000 | 1,500,000 | 500,000 | 50.0% |
| **76** | DRAINAGE FEES | 2,192,979 | 1,397,889 | 2,949,720 | 627,000 | (2,322,720) | -78.7% |
| **77** | SEWER UPGRADE FEES | - | 900 | 900 | 900 | - | 0.0% |
| **78** | TRAFFIC IMPACT FEES | 891,289 | 677,674 | 400,000 | 300,000 | (100,000) | -25.0% |
| **79** | FACILITY IMPACT FEE | 1,422,618 | 798,263 | 1,740,000 | 1,190,000 | (550,000) | -31.6% |
| **80** | LICENSES AND PERMITS | 6,417,117 | 5,690,705 | 5,645,300 | 5,123,180 | (522,120) | -9.2% |
| **81** | CHRGS FOR SERVICES | 4,125,941 | 33,308,633 | 72,180,670 | 75,753,360 | 3,572,690 | 4.9% |
| **82** | DEV CHRGS FOR SVCS | 2,716,054 | 3,852,193 | 2,543,250 | 2,664,150 | 120,900 | 4.8% |
| **83** | FINES & FORFEITURES | 1,167,735 | 1,148,943 | 1,079,490 | 1,287,110 | 207,620 | 19.2% |
| **84** | SPECIAL ASSESSMENTS | 22,687,355 | 24,069,984 | 24,457,200 | 27,893,230 | 3,436,030 | 14.0% |
| **90** | OTHER - REVENUE | 4,235,091 | 5,197,303 | 11,825,260 | 10,740,140 | (1,085,120) | -9.2% |
| **95** | GN/LS-SALE OF ASSET | (561,355) | 113,064 | 741,200 | - | (741,200) | -100.0% |
| **98** | TRANSFERS IN | 18,208,135 | 24,009,476 | 40,519,370 | 29,057,850 | (11,461,520) | -28.3% |
| **Grand Total** | | **254,195,509** | **334,314,172** | **424,597,060** | **528,236,610** | **103,639,550** | **24.4%** |

CITY OF PALMDALE
FY 2025 PROPOSED BUDGET
REVENUES-GENERAL FUND (Actuals through Q3 FY24)

| | Category | 2022 Actual | 2023 Actual | 2024 Projected | 2025 Proposed | $ Chg | % Chg |
|---|---|---|---|---|---|---|---|
| **60** | PROPERTY TAXES | 27,498,407 | 29,208,527 | 30,297,750 | 31,738,000 | 1,440,250 | 4.8% |
| **61** | SALES & USE TAXES | 27,799,318 | 27,808,626 | 27,429,330 | 28,092,130 | 662,800 | 2.4% |
| **63** | TRANSIENT OCC TAX | 5,540,832 | 4,608,941 | 4,896,000 | 4,950,000 | 54,000 | 1.1% |
| **64** | FRANCHISE FEES | 6,303,923 | 7,595,391 | 8,191,870 | 17,366,960 | 9,175,090 | 112.0% |
| **65** | GRANTS | 18,753 | 908 | - | - | - | 0.0% |
| **69** | OTHER AGENCY CONTRIB | 43,250 | 500,358 | 50,000 | 50,000 | - | 0.0% |
| **71** | USE OF PROPERTY | 2,763,309 | 3,783,921 | 2,980,680 | 3,441,330 | 460,650 | 15.5% |
| **72** | FAIR VALUE OF INVEST | (3,635,505) | (654,783) | - | - | - | 0.0% |
| **80** | LICENSES AND PERMITS | 6,350,339 | 5,525,829 | 5,531,700 | 5,009,580 | (522,120) | -9.4% |
| **81** | CHRGS FOR SERVICES | 988,381 | 1,524,521 | 1,234,810 | 1,276,100 | 41,290 | 3.3% |
| **82** | DEV CHRGS FOR SVCS | 2,657,376 | 3,190,946 | 2,293,250 | 2,414,150 | 120,900 | 5.3% |
| **83** | FINES & FORFEITURES | 881,764 | 784,947 | 755,290 | 962,910 | 207,620 | 27.5% |
| **90** | OTHER - REVENUE | 3,370,990 | 4,014,234 | 10,505,370 | 9,230,000 | (1,275,370) | -12.1% |
| **95** | GN/LS-SALE OF ASSET | 341,784 | - | - | - | - | 0.0% |
| **98** | TRANSFERS IN | 10,344,639 | 14,281,368 | 24,423,610 | 12,663,810 | (11,759,800) | -48.1% |
| **Grand Total** | | **91,267,560** | **102,173,734** | **118,589,660** | **117,194,970** | **(1,394,690)** | **-1.2%** |

CITY OF PALMDALE
FY 2025 PROPOSED BUDGET
EXPENDITURES-ALL FUNDS (Actuals through Q3 FY24)

| | Category | 2022 Actual | 2023 Actual | 2024 Projected | 2025 Proposed | $ Chg | % Chg |
|---|---|---|---|---|---|---|---|
| **10** | SALARIES | 23,032,221 | 29,319,718 | 31,044,230 | 33,304,080 | 2,259,850 | 7.3% |
| **11** | BENEFITS | 9,996,939 | 11,606,647 | 14,320,140 | 16,095,810 | 1,775,670 | 12.4% |
| **15** | ORG DEVELOPMENT | 521,485 | 547,800 | 940,410 | 1,089,300 | 148,890 | 15.8% |
| **20** | OPERATING EXP | 12,773,055 | 20,659,367 | 36,841,530 | 29,208,620 | (7,632,910) | -20.7% |
| **21** | CONTRACT SERVICES | 20,425,410 | 54,708,730 | 101,127,540 | 106,673,810 | 5,546,270 | 5.5% |
| **22** | SOFTWARE | 1,714,893 | 1,222,547 | 3,148,360 | 2,941,860 | (206,500) | -6.6% |
| **23** | CAPITAL OUTLAY | 265,216 | 614,608 | 616,270 | 607,060 | (9,210) | -1.5% |
| **24** | COUNTY CONTRACTS | 29,610,842 | 30,468,171 | 34,067,570 | 35,730,060 | 1,662,490 | 4.9% |
| **25** | UTILITIES | 6,595,602 | 6,970,353 | 8,634,670 | 8,828,880 | 194,210 | 2.2% |
| **26** | PROGRAM EXP | 390,183 | 2,256,227 | 4,379,850 | 9,858,430 | 5,478,580 | 125.1% |
| **30** | INTER-GOV SHARING | 50,646,105 | 61,704,794 | 52,044,210 | 61,402,480 | 9,358,270 | 18.0% |
| **40** | CAPITAL | 20,379,998 | 27,598,709 | 104,836,010 | 208,339,990 | 103,503,980 | 98.7% |
| **50** | DEBT SERVICE | 20,180,709 | 20,670,899 | 21,891,780 | 22,231,550 | 339,770 | 1.6% |
| **59** | TRANSFERS OUT | 2,125,273 | 2,525,189 | 4,714,790 | 4,810,060 | 95,270 | 2.0% |
| **95** | GN/LS-SALE OF ASSET | - | - | 275,000 | - | (275,000) | -100.0% |
| **Grand Total** | | **198,657,931** | **270,873,760** | **418,882,360** | **541,121,990** | **122,239,630** | **29.2%** |

CITY OF PALMDALE
FY 2025 PROPOSED BUDGET
EXPENDITURES-GENERAL FUND (Actuals through Q3 FY24)

| | Category | 2022 Actual | 2023 Actual | 2024 Projected | 2025 Proposed | $ Chg | % Chg |
|---|---|---|---|---|---|---|---|
| **10** | SALARIES | 16,076,422 | 16,911,481 | 18,790,740 | 20,635,660 | 1,844,920 | 9.8% |
| **11** | BENEFITS | 6,491,687 | 6,224,728 | 8,413,730 | 9,314,190 | 900,460 | 10.7% |
| **15** | ORG DEVELOPMENT | 421,321 | 443,528 | 703,950 | 809,320 | 105,370 | 15.0% |
| **20** | OPERATING EXP | 5,881,613 | 8,841,748 | 21,255,610 | 13,141,700 | (8,113,910) | -38.2% |
| **21** | CONTRACT SERVICES | 10,006,471 | 13,729,796 | 17,590,810 | 21,886,320 | 4,295,510 | 24.4% |
| **22** | SOFTWARE | 1,857 | 1,635 | 2,100 | 3,000 | 900 | 42.9% |
| **23** | CAPITAL OUTLAY | 78,023 | 103,468 | 212,970 | 202,210 | (10,760) | -5.1% |
| **24** | COUNTY CONTRACTS | 22,007,204 | 17,256,289 | 24,420,460 | 27,964,940 | 3,544,480 | 14.5% |
| **25** | UTILITIES | 2,016,585 | 2,316,350 | 2,926,560 | 2,978,870 | 52,310 | 1.8% |
| **40** | CAPITAL | 1,075,359 | 1,721,670 | 1,929,210 | 7,026,950 | 5,097,740 | 264.2% |
| **50** | DEBT SERVICE | 2,289,380 | 2,312,865 | 2,315,830 | 2,291,600 | (24,230) | -1.0% |
| **59** | TRANSFERS OUT | 9,522,750 | 13,472,978 | 27,966,270 | 17,196,200 | (10,770,070) | -38.5% |
| **Grand Total** | | **75,868,671** | **83,336,535** | **126,528,240** | **123,450,960** | **(3,077,280)** | **-2.4%** |

CITY OF PALMDALE
FY 2025 PROPOSED BUDGET
EXPENDITURES-ALL FUNDS-BY DEPARTMENT/DIVISION (Actuals through Q3 FY24)

| Department/Division | Category | 2022 Actual | 2023 Actual | 2024 Projected | 2025 Proposed | $ Chg | % Chg |
|---|---|---|---|---|---|---|---|
| **1. City Council** | | | | | | | |
| **CITY COUNCIL** | SALARIES | 130,890 | 151,617 | 265,730 | 198,380 | (67,350) | -25.3% |
| | BENEFITS | 144,583 | 114,445 | 195,300 | 210,600 | 15,300 | 7.8% |
| | ORG DEVELOPMENT | 30,449 | 29,175 | 42,200 | 53,000 | 10,800 | 25.6% |
| | OPERATING EXP | 1,329 | 3,029 | 77,700 | 77,700 | - | 0.0% |
| | CAPITAL OUTLAY | - | - | 1,000 | 1,000 | - | 0.0% |
| | UTILITIES | 486 | 3,510 | 3,000 | 3,000 | - | 0.0% |
| | TRANSFERS OUT | 44,590 | 54,450 | 83,700 | 81,180 | (2,520) | -3.0% |
| **CITY COUNCIL Total** | | **352,326** | **356,226** | **668,630** | **624,860** | **(43,770)** | **-6.5%** |
| **1. City Council Total** | | **352,326** | **356,226** | **668,630** | **624,860** | **(43,770)** | **-6.5%** |
| **2. City Attorney** | | | | | | | |
| **CITY ATTORNEY** | SALARIES | 1,149,293 | 245,915 | 72,100 | 300 | (71,800) | -99.6% |
| | BENEFITS | 353,974 | 119,182 | 34,000 | 500 | (33,500) | -98.5% |
| | ORG DEVELOPMENT | 27,976 | 22,784 | 18,100 | 8,000 | (10,100) | -55.8% |
| | OPERATING EXP | 2,598 | 2,652 | 4,000 | 4,000 | - | 0.0% |
| | CONTRACT SERVICES | 889,223 | 1,796,160 | 1,976,500 | 1,931,500 | (45,000) | -2.3% |
| | CAPITAL OUTLAY | - | - | 1,000 | 1,000 | - | 0.0% |
| | UTILITIES | 1,364 | 1,027 | 1,000 | - | (1,000) | -100.0% |
| | TRANSFERS OUT | 53,630 | 65,359 | 100,410 | 97,430 | (2,980) | -3.0% |
| **CITY ATTORNEY Total** | | **2,478,058** | **2,253,078** | **2,207,110** | **2,042,730** | **(164,380)** | **-7.4%** |
| **2. City Attorney Total** | | **2,478,058** | **2,253,078** | **2,207,110** | **2,042,730** | **(164,380)** | **-7.4%** |
| **3. City Manager Department** | | | | | | | |
| **CITY CLERK** | SALARIES | 424,403 | 563,624 | 569,250 | 421,750 | (147,500) | -25.9% |
| | BENEFITS | 181,894 | 223,629 | 232,900 | 202,400 | (30,500) | -13.1% |
| | ORG DEVELOPMENT | 15,610 | 17,093 | 14,910 | 19,450 | 4,540 | 30.4% |
| | OPERATING EXP | 7,457 | 13,324 | 16,000 | 13,360 | (2,640) | -16.5% |
| | CONTRACT SERVICES | 284,323 | 271,576 | 71,050 | 240,200 | 169,150 | 238.1% |
| | CAPITAL OUTLAY | 795 | - | 1,500 | 1,500 | - | 0.0% |
| | UTILITIES | - | 491 | 500 | 500 | - | 0.0% |
| | TRANSFERS OUT | 98,230 | 119,830 | 184,090 | 178,620 | (5,470) | -3.0% |
| **CITY CLERK Total** | | **1,012,711** | **1,209,566** | **1,090,200** | **1,077,780** | **(12,420)** | **-1.1%** |
| **CITY MANAGER** | SALARIES | 1,312,532 | 1,090,338 | 1,306,300 | 1,474,500 | 168,200 | 12.9% |
| | BENEFITS | 435,581 | 411,168 | 583,140 | 724,440 | 141,300 | 24.2% |
| | ORG DEVELOPMENT | 71,185 | 34,661 | 60,300 | 134,940 | 74,640 | 123.8% |
| | OPERATING EXP | 336,293 | 1,323,327 | 37,100 | 90,100 | 53,000 | 142.9% |
| | CONTRACT SERVICES | 413 | - | 138,000 | 256,000 | 118,000 | 85.5% |
| | CAPITAL OUTLAY | 1,258 | 3,978 | 5,000 | 5,000 | - | 0.0% |
| | UTILITIES | 2,178 | 1,202 | 2,000 | 2,060 | 60 | 3.0% |
| | TRANSFERS OUT | 74,300 | 68,282 | 107,260 | 104,650 | (2,610) | -2.4% |
| **CITY MANAGER Total** | | **2,233,739** | **2,932,958** | **2,239,100** | **2,791,690** | **552,590** | **24.7%** |
| **COMMUNICATIONS** | SALARIES | 553,056 | 500,989 | 406,100 | 144,100 | (262,000) | -64.5% |
| | BENEFITS | 272,409 | 237,230 | 151,280 | 69,780 | (81,500) | -53.9% |
| | ORG DEVELOPMENT | 4,129 | 13,606 | 11,100 | 5,800 | (5,300) | -47.7% |
| | OPERATING EXP | 1,646 | 4,726 | 5,000 | 3,000 | (2,000) | -40.0% |
| | CONTRACT SERVICES | 353,585 | 312,768 | 1,338,000 | 1,752,000 | 414,000 | 30.9% |
| | CAPITAL OUTLAY | 13,371 | - | 5,000 | 2,000 | (3,000) | -60.0% |
| | UTILITIES | 1,869 | 2,252 | 950 | 600 | (350) | -36.8% |
| | TRANSFERS OUT | 53,630 | 65,359 | 100,410 | 97,430 | (2,980) | -3.0% |
| **COMMUNICATIONS Total** | | **1,253,694** | **1,136,929** | **2,017,840** | **2,074,710** | **56,870** | **2.8%** |
| **LEGISLATIVE AFFAIRS** | SALARIES | 164,880 | 466,601 | 171,500 | 120,000 | (51,500) | -30.0% |
| | BENEFITS | 75,492 | 122,098 | 41,900 | 63,800 | 21,900 | 52.3% |
| | ORG DEVELOPMENT | 100 | 10,375 | 7,790 | 9,600 | 1,810 | 23.2% |
| | OPERATING EXP | - | 752 | - | - | - | 0.0% |
| | CONTRACT SERVICES | 152,325 | 346,300 | 277,200 | 317,000 | 39,800 | 14.4% |
| | CAPITAL OUTLAY | - | - | - | - | - | 0.0% |
| | UTILITIES | - | - | 780 | 780 | - | 0.0% |
| **LEGISLATIVE AFFAIRS Total** | | **392,798** | **946,125** | **499,170** | **511,180** | **12,010** | **2.4%** |

CITY OF PALMDALE
FY 2025 PROPOSED BUDGET
EXPENDITURES-ALL FUNDS-BY DEPARTMENT/DIVISION (Actuals through Q3 FY24)

| Department/Division | Category | 2022 Actual | 2023 Actual | 2024 Projected | 2025 Proposed | $ Chg | % Chg |
|---|---|---|---|---|---|---|---|
| **RECORDS MANAGEMENT** | SALARIES | 1,208 | 70,356 | 72,910 | 73,030 | 120 | 0.2% |
| | BENEFITS | 23 | 18,626 | 6,100 | 47,020 | 40,920 | 670.8% |
| | ORG DEVELOPMENT | 200 | - | - | 1,500 | 1,500 | 0.0% |
| | OPERATING EXP | 2,639 | 2,435 | 6,350 | 8,700 | 2,350 | 37.0% |
| | CONTRACT SERVICES | 8,706 | 15,764 | 12,550 | 8,850 | (3,700) | -29.5% |
| | CAPITAL OUTLAY | - | - | 1,000 | 1,000 | - | 0.0% |
| | UTILITIES | 7,956 | 12,093 | 14,000 | 14,000 | - | 0.0% |
| **RECORDS MANAGEMENT Total** | | **20,732** | **119,274** | **112,910** | **154,100** | **41,190** | **36.5%** |
| **3. City Manager Department Total** | | **4,913,674** | **6,344,853** | **5,959,220** | **6,609,460** | **650,240** | **10.9%** |
| **4. Operations Department** | | | | | | | |
| **ASSESSMENT DIST / CFD** | CONTRACT SERVICES | 696,784 | 747,524 | 1,087,500 | 1,122,040 | 34,540 | 3.2% |
| | DEBT SERVICE | 2,457,545 | 2,354,682 | 2,361,700 | 2,356,950 | (4,750) | -0.2% |
| | TRANSFERS OUT | 120,900 | 122,700 | 214,900 | 230,610 | 15,710 | 7.3% |
| **ASSESSMENT DIST / CFD Total** | | **3,275,229** | **3,224,906** | **3,664,100** | **3,709,600** | **45,500** | **1.2%** |
| **FINANCE** | SALARIES | 1,126,230 | 1,171,532 | 1,354,600 | 1,485,200 | 130,600 | 9.6% |
| | BENEFITS | 518,728 | 565,170 | 707,200 | 695,100 | (12,100) | -1.7% |
| | ORG DEVELOPMENT | 15,177 | 20,206 | 62,820 | 78,500 | 15,680 | 25.0% |
| | OPERATING EXP | 43,472 | 22,421 | 39,500 | 34,500 | (5,000) | -12.7% |
| | CONTRACT SERVICES | 654,191 | 652,462 | 936,460 | 868,100 | (68,360) | -7.3% |
| | CAPITAL OUTLAY | - | 19,184 | 23,820 | 17,000 | (6,820) | -28.6% |
| | UTILITIES | 487 | 1,326 | 2,000 | 2,000 | - | 0.0% |
| | DEBT SERVICE | 278,551 | 197,519 | 199,420 | 189,420 | (10,000) | -5.0% |
| | TRANSFERS OUT | 4,756,896 | 5,953,879 | 5,715,900 | 4,893,590 | (822,310) | -14.4% |
| | GN/LS-SALE OF ASSET | - | - | 275,000 | - | (275,000) | -100.0% |
| **FINANCE Total** | | **7,393,733** | **8,603,698** | **9,316,720** | **8,263,410** | **(1,053,310)** | **-11.3%** |
| **GENERAL CITY** | SALARIES | - | 314,631 | 66,200 | 1,216,700 | 1,150,500 | 1737.9% |
| | BENEFITS | 176,221 | 189,339 | 286,100 | 286,800 | 700 | 0.2% |
| | ORG DEVELOPMENT | 105,467 | 93,801 | 190,500 | 152,000 | (38,500) | -20.2% |
| | OPERATING EXP | 600,565 | 1,067,285 | 996,500 | 3,004,300 | 2,007,800 | 201.5% |
| | CONTRACT SERVICES | 213,500 | 285,537 | 735,800 | 583,000 | (152,800) | -20.8% |
| | CAPITAL OUTLAY | - | 2,178 | | - | - | 0.0% |
| | UTILITIES | 122,690 | 91,366 | 101,500 | 101,500 | - | 0.0% |
| | CAPITAL | - | - | 1,717,860 | 6,100,000 | 4,382,140 | 255.1% |
| | DEBT SERVICE | 5,982,510 | 6,072,168 | 7,211,960 | 7,460,110 | 248,150 | 3.4% |
| | TRANSFERS OUT | 7,220,136 | 10,657,493 | 23,159,230 | 12,410,780 | (10,748,450) | -46.4% |
| **GENERAL CITY Total** | | **14,421,089** | **18,773,798** | **34,465,650** | **31,315,190** | **(3,150,460)** | **-9.1%** |
| **HUMAN RESOURCES** | SALARIES | 453,080 | 571,096 | 668,590 | 595,690 | (72,900) | -10.9% |
| | BENEFITS | 183,567 | 231,409 | 360,500 | 314,300 | (46,200) | -12.8% |
| | ORG DEVELOPMENT | 14,700 | 16,143 | 17,350 | 19,700 | 2,350 | 13.5% |
| | OPERATING EXP | 1,326,089 | 1,906,624 | 1,700,200 | 2,265,850 | 565,650 | 33.3% |
| | CONTRACT SERVICES | 990,961 | 1,188,812 | 1,366,100 | 1,521,400 | 155,300 | 11.4% |
| | CAPITAL OUTLAY | 758 | - | 8,500 | 7,560 | (940) | -11.1% |
| | TRANSFERS OUT | 62,550 | 76,255 | 117,150 | 113,660 | (3,490) | -3.0% |
| **HUMAN RESOURCES Total** | | **3,031,705** | **3,990,338** | **4,238,390** | **4,838,160** | **599,770** | **14.2%** |
| **INFORMATION TECHNOLOGY** | SALARIES | 809,057 | 894,645 | 771,300 | 786,400 | 15,100 | 2.0% |
| | BENEFITS | 425,661 | 436,970 | 384,050 | 394,650 | 10,600 | 2.8% |
| | ORG DEVELOPMENT | 3,429 | 11,684 | 10,000 | 10,000 | - | 0.0% |
| | OPERATING EXP | 226,482 | 989,776 | 15,000 | 15,000 | - | 0.0% |
| | CONTRACT SERVICES | 28,605 | 38,725 | 73,000 | 68,000 | (5,000) | -6.8% |
| | SOFTWARE | 1,713,037 | 1,210,212 | 3,135,260 | 2,927,860 | (207,400) | -6.6% |
| | CAPITAL OUTLAY | 126,235 | 416,537 | 155,000 | 155,000 | - | 0.0% |
| | UTILITIES | 12,285 | 76,628 | 96,900 | 96,900 | - | 0.0% |
| | CAPITAL | - | - | 900,000 | 936,000 | 36,000 | 4.0% |
| **INFORMATION TECHNOLOGY Total** | | **3,344,791** | **4,075,177** | **5,540,510** | **5,389,810** | **(150,700)** | **-2.7%** |
| **RISK MANAGEMENT** | SALARIES | - | - | 57,200 | 212,500 | 155,300 | 271.5% |
| | BENEFITS | - | - | 32,900 | 122,100 | 89,200 | 271.1% |
| | ORG DEVELOPMENT | - | 385 | 6,900 | 28,460 | 21,560 | 312.5% |
| | OPERATING EXP | 3,048,529 | 4,929,155 | 16,516,150 | 5,095,980 | (11,420,170) | -69.1% |
| | CONTRACT SERVICES | 503,383 | 1,011,062 | 1,072,750 | 858,250 | (214,500) | -20.0% |
| | CAPITAL OUTLAY | - | - | 5,000 | 1,500 | (3,500) | -70.0% |
| **RISK MANAGEMENT Total** | | **3,551,912** | **5,940,602** | **17,690,900** | **6,318,790** | **(11,372,110)** | **-64.3%** |
| **SUCCESSOR AGENCY** | SALARIES | 574 | - | - | - | - | 0.0% |
| | BENEFITS | 388 | - | | - | - | 0.0% |

CITY OF PALMDALE
FY 2025 PROPOSED BUDGET
EXPENDITURES-ALL FUNDS-BY DEPARTMENT/DIVISION (Actuals through Q3 FY24)

| Department/Division | Category | 2022 Actual | 2023 Actual | 2024 Projected | 2025 Proposed | $ Chg | % Chg |
|---|---|---|---|---|---|---|---|
| **SUCCESSOR AGENCY** | OPERATING EXP | 2,456,741 | 61 | 1,635,580 | 200 | (1,635,380) | -100.0% |
| | CONTRACT SERVICES | 1,169,175 | 1,188,797 | 1,224,470 | 1,248,430 | 23,960 | 2.0% |
| | UTILITIES | 108,568 | 97,506 | 107,100 | 107,100 | - | 0.0% |
| | PROGRAM EXP | - | - | 365,000 | 365,000 | - | 0.0% |
| | INTER-GOV SHARING | 50,646,105 | 61,704,794 | 52,044,210 | 61,402,480 | 9,358,270 | 18.0% |
| | DEBT SERVICE | 10,220,185 | 10,224,186 | 10,469,200 | 10,549,580 | 80,380 | 0.8% |
| | TRANSFERS OUT | 131,367 | 513,598 | 348,180 | 346,750 | (1,430) | -0.4% |
| **SUCCESSOR AGENCY Total** | | **64,733,103** | **73,728,942** | **66,193,740** | **74,019,540** | **7,825,800** | **11.8%** |
| **PALMDALE COMMUNITY FOUNDATION** | OPERATING EXP | 47,611 | 162,799 | 73,770 | 266,420 | 192,650 | 261.1% |
| | CONTRACT SERVICES | - | - | | - | - | 0.0% |
| **PALMDALE COMMUNITY FOUNDATION Total** | | **47,611** | **162,799** | **73,770** | **266,420** | **192,650** | **261.1%** |
| **AMERICAN RESCUE PLAN ACT** | SALARIES | - | 1,005,500 | - | - | - | 0.0% |
| | OPERATING EXP | 74,837 | 4,082,652 | 5,583,780 | 850,000 | (4,733,780) | -84.8% |
| | CONTRACT SERVICES | 49,533 | 385,367 | 779,980 | 74,470 | (705,510) | -90.5% |
| | CAPITAL OUTLAY | - | 2,862 | 47,000 | - | (47,000) | -100.0% |
| | COUNTY CONTRACTS | - | 4,500,000 | 2,000,000 | - | (2,000,000) | -100.0% |
| | UTILITIES | 451 | 5,255 | 10,800 | 10,800 | - | 0.0% |
| | CAPITAL | 4,850 | - | | - | - | 0.0% |
| **AMERICAN RESCUE PLAN ACT Total** | | **129,670** | **9,981,636** | **8,421,560** | **935,270** | **(7,486,290)** | **-88.9%** |
| **4. Operations Department Total** | | **99,928,843** | **128,481,897** | **149,605,340** | **135,056,190** | **(14,549,150)** | **-9.7%** |
| **5. Economic and Community Development** | | | | | | | |
| **ADMIN - ECONOMIC DEVELOPMENT** | SALARIES | 210,201 | 313,031 | 503,600 | 542,500 | 38,900 | 7.7% |
| | BENEFITS | 76,760 | 111,061 | 220,480 | 252,680 | 32,200 | 14.6% |
| | ORG DEVELOPMENT | 9,829 | 9,614 | 14,500 | 14,500 | - | 0.0% |
| | OPERATING EXP | 6,164 | 7,372 | 7,500 | 7,500 | - | 0.0% |
| | CONTRACT SERVICES | 2,475 | 44,107 | 35,000 | 50,000 | 15,000 | 42.9% |
| | UTILITIES | 42 | - | 1,300 | 1,300 | - | 0.0% |
| | TRANSFERS OUT | 116,060 | 141,614 | 217,560 | 211,090 | (6,470) | -3.0% |
| **ADMIN - ECONOMIC DEVELOPMENT Total** | | **421,531** | **626,798** | **999,940** | **1,079,570** | **79,630** | **8.0%** |
| **BUILDING AND SAFETY** | SALARIES | 1,096,780 | 1,321,488 | 1,467,000 | 1,435,200 | (31,800) | -2.2% |
| | BENEFITS | 608,588 | 652,211 | 770,300 | 793,400 | 23,100 | 3.0% |
| | ORG DEVELOPMENT | 33,217 | 33,684 | 34,700 | 42,700 | 8,000 | 23.1% |
| | OPERATING EXP | 3,357 | 4,123 | 4,500 | 4,500 | - | 0.0% |
| | CONTRACT SERVICES | 373,542 | 702,975 | 750,750 | 750,750 | - | 0.0% |
| | CAPITAL OUTLAY | - | 822 | 6,000 | 4,000 | (2,000) | -33.3% |
| | UTILITIES | 6,537 | 5,923 | 6,000 | 5,800 | (200) | -3.3% |
| | TRANSFERS OUT | 174,600 | 209,309 | 349,930 | 346,460 | (3,470) | -1.0% |
| **BUILDING AND SAFETY Total** | | **2,296,622** | **2,930,535** | **3,389,180** | **3,382,810** | **(6,370)** | **-0.2%** |
| **ECONOMIC DEVELOPMENT** | SALARIES | 257,903 | 268,036 | 298,700 | 368,700 | 70,000 | 23.4% |
| | BENEFITS | 150,366 | 139,568 | 143,050 | 173,300 | 30,250 | 21.1% |
| | ORG DEVELOPMENT | 24,094 | 39,911 | 45,500 | 46,250 | 750 | 1.6% |
| | OPERATING EXP | 401,142 | 585,029 | 520,260 | 3,965,260 | 3,445,000 | 662.2% |
| | CONTRACT SERVICES | 325,574 | 769,674 | 517,360 | 549,000 | 31,640 | 6.1% |
| | CAPITAL OUTLAY | 651 | - | 1,500 | 1,500 | - | 0.0% |
| | UTILITIES | 578 | 632 | 900 | 1,400 | 500 | 55.6% |
| | TRANSFERS OUT | 53,630 | 65,359 | 100,410 | 97,430 | (2,980) | -3.0% |
| **ECONOMIC DEVELOPMENT Total** | | **1,213,938** | **1,868,209** | **1,627,680** | **5,202,840** | **3,575,160** | **219.6%** |
| **PLANNING** | SALARIES | 820,539 | 902,373 | 879,300 | 1,003,000 | 123,700 | 14.1% |
| | BENEFITS | 386,884 | 388,266 | 440,400 | 531,300 | 90,900 | 20.6% |
| | ORG DEVELOPMENT | 6,679 | 19,278 | 23,740 | 20,540 | (3,200) | -13.5% |
| | OPERATING EXP | 2,539 | 8,433 | 12,300 | 12,300 | - | 0.0% |
| | CONTRACT SERVICES | 17,388 | 87,501 | 81,470 | 96,200 | 14,730 | 18.1% |
| | CAPITAL OUTLAY | 2,152 | 2,233 | 3,000 | 3,000 | - | 0.0% |
| | UTILITIES | 42 | - | | - | - | 0.0% |
| | TRANSFERS OUT | 107,150 | 130,718 | 200,830 | 194,850 | (5,980) | -3.0% |
| **PLANNING Total** | | **1,343,373** | **1,538,802** | **1,641,040** | **1,861,190** | **220,150** | **13.4%** |

CITY OF PALMDALE
FY 2025 PROPOSED BUDGET
EXPENDITURES-ALL FUNDS-BY DEPARTMENT/DIVISION (Actuals through Q3 FY24)

| Department/Division | Category | 2022 Actual | 2023 Actual | 2024 Projected | 2025 Proposed | $ Chg | % Chg |
|---|---|---|---|---|---|---|---|
| **PALMDALE FILM STAGES** | OPERATING EXP | - | 4,137 | 80,000 | 125,000 | 45,000 | 56.3% |
| | CONTRACT SERVICES | - | - | - | - | - | 0.0% |
| | UTILITIES | - | - | 27,950 | 27,950 | - | 0.0% |
| **PALMDALE FILM STAGES Total** | | **-** | **4,137** | **107,950** | **152,950** | **45,000** | **41.7%** |
| **5. Economic and Community Development Total** | | **5,275,463** | **6,968,481** | **7,765,790** | **11,679,360** | **3,913,570** | **50.4%** |
| **6. Public Safety** | | | | | | | |
| **COMMUNITY COMPLIANCE** | SALARIES | 1,539,597 | 1,923,915 | 2,755,670 | 2,477,500 | (278,170) | -10.1% |
| | BENEFITS | 520,352 | 689,934 | 1,071,900 | 1,604,080 | 532,180 | 49.6% |
| | ORG DEVELOPMENT | 6,231 | 11,275 | 16,000 | 16,000 | - | 0.0% |
| | OPERATING EXP | 47,028 | 27,892 | 23,300 | 317,500 | 294,200 | 1262.7% |
| | CONTRACT SERVICES | 68,856 | 77,087 | 446,950 | 2,752,670 | 2,305,720 | 515.9% |
| | CAPITAL OUTLAY | 2,000 | - | 5,000 | 2,000 | (3,000) | -60.0% |
| | COUNTY CONTRACTS | 7,938 | 1,488 | 6,000 | 39,820 | 33,820 | 563.7% |
| | UTILITIES | 13,315 | 14,274 | 25,850 | 32,800 | 6,950 | 26.9% |
| | CAPITAL | 70,630 | 57,814 | 164,500 | - | (164,500) | -100.0% |
| | TRANSFERS OUT | 90,866 | 95,418 | 223,870 | 236,110 | 12,240 | 5.5% |
| **COMMUNITY COMPLIANCE Total** | | **2,366,813** | **2,899,096** | **4,739,040** | **7,478,480** | **2,739,440** | **57.8%** |
| **PUBLIC SAFETY** | SALARIES | 321,164 | 362,535 | 406,800 | 547,800 | 141,000 | 34.7% |
| | BENEFITS | 211,786 | 203,342 | 254,900 | 331,600 | 76,700 | 30.1% |
| | ORG DEVELOPMENT | 325 | 100 | 4,000 | 4,500 | 500 | 12.5% |
| | OPERATING EXP | 6,788 | 14,684 | 172,750 | 376,000 | 203,250 | 117.7% |
| | CONTRACT SERVICES | 7,808 | 1,460 | 7,600 | 8,300 | 700 | 9.2% |
| | CAPITAL OUTLAY | - | - | - | 5,000 | 5,000 | 0.0% |
| | COUNTY CONTRACTS | 29,602,904 | 25,966,683 | 32,061,570 | 35,690,240 | 3,628,670 | 11.3% |
| | UTILITIES | 4,699 | 6,694 | 6,100 | 1,300 | (4,800) | -78.7% |
| | CAPITAL | 7,000 | - | | - | - | 0.0% |
| **PUBLIC SAFETY Total** | | **30,162,474** | **26,555,498** | **32,913,720** | **36,964,740** | **4,051,020** | **12.3%** |
| **6. Public Safety Total** | | **32,529,287** | **29,454,594** | **37,652,760** | **44,443,220** | **6,790,460** | **18.0%** |
| **7. Neighborhood Services** | | | | | | | |
| **AFFORDABLE HOUSING** | SALARIES | 371,117 | 381,399 | 545,400 | 727,710 | 182,310 | 33.4% |
| | BENEFITS | 167,712 | 175,112 | 262,300 | 366,480 | 104,180 | 39.7% |
| | ORG DEVELOPMENT | 4,593 | 17,280 | 21,480 | 26,000 | 4,520 | 21.0% |
| | OPERATING EXP | 469,250 | 556,309 | 1,462,720 | 2,845,070 | 1,382,350 | 94.5% |
| | CONTRACT SERVICES | 3,717,342 | 4,294,437 | 4,498,970 | 5,113,760 | 614,790 | 13.7% |
| | CAPITAL OUTLAY | 10,136 | 54,060 | 24,500 | 33,000 | 8,500 | 34.7% |
| | UTILITIES | 1,425,506 | 1,259,358 | 1,325,760 | 1,365,060 | 39,300 | 3.0% |
| | PROGRAM EXP | 390,183 | 2,256,227 | 3,989,850 | 9,106,660 | 5,116,810 | 128.2% |
| | CAPITAL | 331,026 | 364,018 | 945,070 | 1,451,850 | 506,780 | 53.6% |
| | DEBT SERVICE | 277,395 | 278,951 | 363,500 | 364,000 | 500 | 0.1% |
| | TRANSFERS OUT | 401,858 | 357,628 | 1,394,010 | 1,394,310 | 300 | 0.0% |
| **AFFORDABLE HOUSING Total** | | **7,566,119** | **9,994,780** | **14,833,560** | **22,793,900** | **7,960,340** | **53.7%** |
| **CDBG** | SALARIES | - | 170,758 | 196,620 | 46,300 | (150,320) | -76.5% |
| | BENEFITS | - | 20,779 | 19,490 | 21,300 | 1,810 | 9.3% |
| | ORG DEVELOPMENT | - | 4,552 | 5,500 | 5,500 | - | 0.0% |
| | OPERATING EXP | - | 65,143 | 210,250 | 1,128,240 | 917,990 | 436.6% |
| | CONTRACT SERVICES | - | 99,825 | 133,120 | 123,870 | (9,250) | -6.9% |
| | CAPITAL OUTLAY | - | - | 100 | 100 | - | 0.0% |
| | UTILITIES | - | 4,704 | 23,500 | - | (23,500) | -100.0% |
| | PROGRAM EXP | - | - | 25,000 | 386,770 | 361,770 | 1447.1% |
| | CAPITAL | - | 795,275 | | - | - | 0.0% |
| | DEBT SERVICE | - | 579,095 | 321,880 | 347,520 | 25,640 | 8.0% |
| **CDBG Total** | | **-** | **1,740,131** | **935,460** | **2,059,600** | **1,124,140** | **120.2%** |

CITY OF PALMDALE
FY 2025 PROPOSED BUDGET
EXPENDITURES-ALL FUNDS-BY DEPARTMENT/DIVISION (Actuals through Q3 FY24)

| Department/Division | Category | 2022 Actual | 2023 Actual | 2024 Projected | 2025 Proposed | $ Chg | % Chg |
|---|---|---|---|---|---|---|---|
| **NEIGHBORHOOD SVCS** | SALARIES | 144,297 | 32,694 | 50,910 | 47,100 | (3,810) | -7.5% |
| | BENEFITS | 69,847 | 13,999 | 26,920 | 27,980 | 1,060 | 3.9% |
| | ORG DEVELOPMENT | 670 | 512 | 1,000 | 1,000 | - | 0.0% |
| | OPERATING EXP | 19,528 | 51,507 | 16,150 | 9,550 | (6,600) | -40.9% |
| | CONTRACT SERVICES | 111,576 | 114,067 | 620,400 | 553,310 | (67,090) | -10.8% |
| | CAPITAL OUTLAY | - | - | 1,500 | 1,500 | - | 0.0% |
| | UTILITIES | 15,816 | 12,828 | 13,700 | 13,700 | - | 0.0% |
| | TRANSFERS OUT | 348,190 | 424,842 | 652,690 | 633,280 | (19,410) | -3.0% |
| **NEIGHBORHOOD SVCS Total** | | **709,924** | **650,448** | **1,383,270** | **1,287,420** | **(95,850)** | **-6.9%** |
| **7. Neighborhood Services Total** | | **8,276,044** | **12,385,359** | **17,152,290** | **26,140,920** | **8,988,630** | **52.4%** |
| **8. Parks & Recreation** | | | | | | | |
| **COMMUNITY PROGRAMS** | SALARIES | 369,445 | 323,016 | 510,170 | 547,300 | 37,130 | 7.3% |
| | BENEFITS | 149,448 | 84,876 | 172,580 | 192,250 | 19,670 | 11.4% |
| | ORG DEVELOPMENT | 4,324 | 2,190 | 6,350 | 6,350 | - | 0.0% |
| | OPERATING EXP | 116,160 | 136,928 | 339,090 | 291,500 | (47,590) | -14.0% |
| | CONTRACT SERVICES | 4,434 | 5,921 | 4,500 | 4,500 | - | 0.0% |
| | UTILITIES | 28,118 | 10,960 | | 5,300 | 5,300 | 0.0% |
| **COMMUNITY PROGRAMS Total** | | **671,929** | **563,892** | **1,032,690** | **1,047,200** | **14,510** | **1.4%** |
| **EVENTS & CULTURE** | SALARIES | 772,946 | 1,032,378 | 1,449,470 | 1,492,380 | 42,910 | 3.0% |
| | BENEFITS | 229,926 | 314,465 | 402,260 | 395,700 | (6,560) | -1.6% |
| | ORG DEVELOPMENT | 6,558 | 4,470 | 12,400 | 12,100 | (300) | -2.4% |
| | OPERATING EXP | 117,785 | 343,607 | 954,260 | 1,049,950 | 95,690 | 10.0% |
| | CONTRACT SERVICES | 393,846 | 810,448 | 1,027,450 | 2,005,500 | 978,050 | 95.2% |
| | SOFTWARE | 1,857 | 1,635 | 2,100 | 3,000 | 900 | 42.9% |
| | CAPITAL OUTLAY | 6,693 | 27,550 | 45,800 | 47,500 | 1,700 | 3.7% |
| | UTILITIES | 41,034 | 80,240 | 87,500 | 87,500 | - | 0.0% |
| | CAPITAL | 13,459 | - | 36,400 | 38,000 | 1,600 | 4.4% |
| | TRANSFERS OUT | - | - | 41,900 | - | (41,900) | -100.0% |
| **EVENTS & CULTURE Total** | | **1,584,104** | **2,614,791** | **4,059,540** | **5,131,630** | **1,072,090** | **26.4%** |
| **LIBRARY** | SALARIES | 25,747 | 41,478 | 48,940 | 5,000 | (43,940) | -89.8% |
| | BENEFITS | 1,736 | 2,510 | 1,800 | 2,000 | 200 | 11.1% |
| | ORG DEVELOPMENT | - | - | - | - | - | 0.0% |
| | OPERATING EXP | 249,705 | 243,850 | 360,520 | 376,000 | 15,480 | 4.3% |
| | CONTRACT SERVICES | 1,023,507 | 1,061,350 | 1,108,950 | 1,218,730 | 109,780 | 9.9% |
| | CAPITAL OUTLAY | 36,358 | 789 | 10,000 | 10,000 | - | 0.0% |
| | UTILITIES | 63,889 | 55,964 | 56,900 | 68,700 | 11,800 | 20.7% |
| | TRANSFERS OUT | 107,150 | 130,718 | 200,830 | 194,850 | (5,980) | -3.0% |
| **LIBRARY Total** | | **1,508,093** | **1,536,659** | **1,787,940** | **1,875,280** | **87,340** | **4.9%** |
| **PARKS & FACILITIES** | SALARIES | 1,600,081 | 2,035,422 | 2,204,030 | 2,248,260 | 44,230 | 2.0% |
| | BENEFITS | 445,411 | 497,978 | 623,000 | 651,920 | 28,920 | 4.6% |
| | ORG DEVELOPMENT | 22,751 | 13,794 | 26,360 | 32,860 | 6,500 | 24.7% |
| | OPERATING EXP | 201,785 | 260,602 | 337,100 | 318,500 | (18,600) | -5.5% |
| | CONTRACT SERVICES | 177,051 | 147,051 | 252,720 | 350,280 | 97,560 | 38.6% |
| | SOFTWARE | - | 10,701 | 11,000 | 11,000 | - | 0.0% |
| | CAPITAL OUTLAY | 25,045 | 28,558 | 115,000 | 153,000 | 38,000 | 33.0% |
| | UTILITIES | 297,652 | 389,606 | 493,850 | 559,050 | 65,200 | 13.2% |
| | CAPITAL | 20,846 | 75,603 | 257,250 | 276,540 | 19,290 | 7.5% |
| | TRANSFERS OUT | 574,600 | 737,152 | 1,232,410 | 1,213,630 | (18,780) | -1.5% |
| **PARKS & FACILITIES Total** | | **3,365,221** | **4,196,467** | **5,552,720** | **5,815,040** | **262,320** | **4.7%** |
| **RECREATION SERVICES** | SALARIES | 1,824,958 | 2,106,479 | 2,403,340 | 2,615,430 | 212,090 | 8.8% |
| | BENEFITS | 315,649 | 317,981 | 397,870 | 369,370 | (28,500) | -7.2% |
| | ORG DEVELOPMENT | 10,735 | 8,638 | 11,680 | 17,430 | 5,750 | 49.2% |
| | OPERATING EXP | 165,385 | 180,944 | 204,590 | 210,450 | 5,860 | 2.9% |
| | CONTRACT SERVICES | 130,689 | 169,852 | 225,370 | 245,700 | 20,330 | 9.0% |
| | CAPITAL OUTLAY | 6,824 | 16,477 | 26,850 | 19,850 | (7,000) | -26.1% |
| | UTILITIES | 61,891 | 73,938 | 78,180 | 79,680 | 1,500 | 1.9% |
| | CAPITAL | 53,852 | 26,859 | | - | - | 0.0% |
| **RECREATION SERVICES Total** | | **2,569,984** | **2,901,168** | **3,347,880** | **3,557,910** | **210,030** | **6.3%** |

CITY OF PALMDALE
FY 2025 PROPOSED BUDGET
EXPENDITURES-ALL FUNDS-BY DEPARTMENT/DIVISION (Actuals through Q3 FY24)

| Department/Division | Category | 2022 Actual | 2023 Actual | 2024 Projected | 2025 Proposed | $ Chg | % Chg |
|---|---|---|---|---|---|---|---|
| **EMERGENCY MANAGEMENT** | SALARIES | 84,596 | 132,460 | 134,100 | 151,000 | 16,900 | 12.6% |
| | BENEFITS | 44,825 | 70,553 | 75,120 | 80,100 | 4,980 | 6.6% |
| | ORG DEVELOPMENT | 747 | 7,639 | 10,500 | 10,500 | - | 0.0% |
| | OPERATING EXP | 8,314 | 19,233 | 36,240 | 34,900 | (1,340) | -3.7% |
| | CONTRACT SERVICES | - | 2,500 | 10,800 | 6,500 | (4,300) | -39.8% |
| | CAPITAL OUTLAY | 287 | 2,495 | 4,000 | 4,000 | - | 0.0% |
| | UTILITIES | 360 | 478 | 2,000 | 2,000 | - | 0.0% |
| | CAPITAL | 1,229 | (142,237) | | - | - | 0.0% |
| | TRANSFERS OUT | 17,840 | - | - | - | - | 0.0% |
| **EMERGENCY MANAGEMENT Total** | | **158,196** | **93,121** | **272,760** | **289,000** | **16,240** | **6.0%** |
| **8. Parks & Recreation Total** | | **9,857,526** | **11,906,097** | **16,053,530** | **17,716,060** | **1,662,530** | **10.4%** |
| **9. Public Works** | | | | | | | |
| CAPITAL IMPROVEMENT PROJECTS | SALARIES | 368,698 | 370,189 | | - | - | 0.0% |
| | BENEFITS | 423,380 | 379,451 | | - | - | 0.0% |
| | CAPITAL | 19,877,107 | 26,279,139 | 98,980,790 | 197,895,100 | 98,914,310 | 99.9% |
| **CAPITAL IMPROVEMENT PROJECTS Total** | | **20,669,186** | **27,028,778** | **98,980,790** | **197,895,100** | **98,914,310** | **99.9%** |
| ENGINEERING | SALARIES | 1,747,843 | 1,993,373 | 2,324,100 | 2,787,000 | 462,900 | 19.9% |
| | BENEFITS | 871,305 | 906,947 | 1,228,870 | 1,519,780 | 290,910 | 23.7% |
| | ORG DEVELOPMENT | 30,005 | 29,103 | 58,720 | 59,620 | 900 | 1.5% |
| | OPERATING EXP | 446,722 | 530,995 | 915,250 | 1,082,540 | 167,290 | 18.3% |
| | CONTRACT SERVICES | 328,233 | 196,654 | 981,400 | 1,038,130 | 56,730 | 5.8% |
| | CAPITAL OUTLAY | 9,488 | 5,784 | 31,200 | 31,200 | - | 0.0% |
| | UTILITIES | 1,802,455 | 1,941,358 | 2,243,150 | 2,287,150 | 44,000 | 2.0% |
| | CAPITAL | - | - | | - | - | 0.0% |
| | DEBT SERVICE | 964,522 | 964,298 | 964,120 | 963,970 | (150) | 0.0% |
| | TRANSFERS OUT | 621,085 | 1,616,039 | 2,500,520 | 2,525,190 | 24,670 | 1.0% |
| **ENGINEERING Total** | | **6,821,659** | **8,184,552** | **11,247,330** | **12,294,580** | **1,047,250** | **9.3%** |
| ENVIRONMENTAL | SALARIES | 217,969 | 326,812 | 354,800 | 349,100 | (5,700) | -1.6% |
| | BENEFITS | 102,276 | 147,956 | 195,150 | 197,250 | 2,100 | 1.1% |
| | ORG DEVELOPMENT | - | - | 24,980 | 15,100 | (9,880) | -39.6% |
| | OPERATING EXP | (8,058) | 4,788 | 8,500 | 8,500 | - | 0.0% |
| | CONTRACT SERVICES | 60,802 | 246,983 | 472,850 | 1,302,300 | 829,450 | 175.4% |
| | UTILITIES | - | 53 | 600 | 600 | - | 0.0% |
| **ENVIRONMENTAL Total** | | **372,988** | **726,592** | **1,056,880** | **1,872,850** | **815,970** | **77.2%** |
| MAINTENANCE | SALARIES | 4,272,924 | 6,976,902 | 7,679,100 | 7,877,250 | 198,150 | 2.6% |
| | BENEFITS | 2,559,504 | 4,001,177 | 4,492,820 | 4,814,530 | 321,710 | 7.2% |
| | ORG DEVELOPMENT | 60,761 | 61,235 | 157,700 | 182,500 | 24,800 | 15.7% |
| | OPERATING EXP | 2,334,946 | 3,095,672 | 3,771,460 | 4,579,900 | 808,440 | 21.4% |
| | CONTRACT SERVICES | 7,592,336 | 8,244,631 | 11,296,000 | 12,566,100 | 1,270,100 | 11.2% |
| | CAPITAL OUTLAY | 23,141 | 31,102 | 81,400 | 89,600 | 8,200 | 10.1% |
| | UTILITIES | 2,573,886 | 2,819,555 | 3,897,900 | 3,946,550 | 48,650 | 1.2% |
| | CAPITAL | - | 142,237 | 1,834,140 | 1,642,500 | (191,640) | -10.4% |
| | TRANSFERS OUT | 2,216,912 | 2,412,254 | 4,499,190 | 4,681,310 | 182,120 | 4.0% |
| **MAINTENANCE Total** | | **21,634,410** | **27,784,764** | **37,709,710** | **40,380,240** | **2,670,530** | **7.1%** |
| PUBLIC WORKS - ADMINISTRATION | SALARIES | 860,212 | 1,133,393 | 923,800 | 1,171,700 | 247,900 | 26.8% |
| | BENEFITS | (107,339) | (235,092) | 448,080 | 569,700 | 121,620 | 27.1% |
| | ORG DEVELOPMENT | 11,543 | 11,431 | 15,670 | 17,900 | 2,230 | 14.2% |
| | OPERATING EXP | 8,231 | 6,794 | 5,500 | 8,100 | 2,600 | 47.3% |
| | CONTRACT SERVICES | 95,245 | 123,742 | 157,500 | 310,000 | 152,500 | 96.8% |
| | CAPITAL OUTLAY | 25 | - | 2,500 | 4,000 | 1,500 | 60.0% |
| | UTILITIES | 1,449 | 1,132 | 3,000 | 3,800 | 800 | 26.7% |
| | CAPITAL | - | - | - | - | - | 0.0% |
| | TRANSFERS OUT | 15,420 | 15,984 | 23,990 | 24,640 | 650 | 2.7% |
| **PUBLIC WORKS - ADMINISTRATION Total** | | **884,785** | **1,057,384** | **1,580,040** | **2,109,840** | **529,800** | **33.5%** |

CITY OF PALMDALE
FY 2025 PROPOSED BUDGET
EXPENDITURES-ALL FUNDS-BY DEPARTMENT/DIVISION (Actuals through Q3 FY24)

| Department/Division | Category | 2022 Actual | 2023 Actual | 2024 Projected | 2025 Proposed | $ Chg | % Chg |
|---|---|---|---|---|---|---|---|
| PALMDALE CCA | SALARIES | - | 124,743 | 126,600 | 135,300 | 8,700 | 6.9% |
| | BENEFITS | - | 54,309 | 57,480 | 69,600 | 12,120 | 21.1% |
| | ORG DEVELOPMENT | - | 3,181 | 7,660 | 37,000 | 29,340 | 383.0% |
| | OPERATING EXP | - | 307 | 692,660 | 728,250 | 35,590 | 5.1% |
| | CONTRACT SERVICES | - | 29,267,614 | 67,409,020 | 66,778,970 | (630,050) | -0.9% |
| | CAPITAL OUTLAY | - | - | 4,100 | 5,250 | 1,150 | 28.0% |
| | TRANSFERS OUT | - | 10,893 | - | - | - | 0.0% |
| **PALMDALE CCA Total** | | **-** | **29,461,048** | **68,297,520** | **67,754,370** | **(543,150)** | **-0.8%** |
| **9. Public Works Total** | | **50,383,027** | **94,243,118** | **218,872,270** | **322,306,980** | **103,434,710** | **47.3%** |
| **Grand Total** | | **213,994,249** | **292,393,704** | **455,936,940** | **566,619,780** | **110,682,840** | **24.3%** |

CITY OF PALMDALE
FY 2025 PROPOSED BUDGET
EXPENDITURES-GENERAL FUND-BY DEPARTMENT/DIVISION (Actuals through Q3 FY24)

| Department/Division | Category | 2022 Actual | 2023 Actual | 2024 Projected | 2025 Proposed | $ Chg | % Chg |
|---|---|---|---|---|---|---|---|
| **1. City Council** | | | | | | | |
| **CITY COUNCIL** | SALARIES | 130,890 | 151,617 | 265,730 | 198,380 | (67,350) | -25.3% |
| | BENEFITS | 144,583 | 114,445 | 195,300 | 210,600 | 15,300 | 7.8% |
| | ORG DEVELOPMENT | 30,449 | 29,175 | 42,200 | 53,000 | 10,800 | 25.6% |
| | OPERATING EXP | 1,329 | 3,029 | 77,700 | 77,700 | - | 0.0% |
| | CAPITAL OUTLAY | - | - | 1,000 | 1,000 | - | 0.0% |
| | UTILITIES | 486 | 3,510 | 3,000 | 3,000 | - | 0.0% |
| | TRANSFERS OUT | 44,590 | 54,450 | 83,700 | 81,180 | (2,520) | -3.0% |
| **CITY COUNCIL Total** | | **352,326** | **356,226** | **668,630** | **624,860** | **(43,770)** | **-6.5%** |
| **1. City Council Total** | | **352,326** | **356,226** | **668,630** | **624,860** | **(43,770)** | **-6.5%** |
| **2. City Attorney** | | | | | | | |
| **CITY ATTORNEY** | SALARIES | 1,149,293 | 245,915 | 72,100 | 300 | (71,800) | -99.6% |
| | BENEFITS | 353,974 | 119,182 | 34,000 | 500 | (33,500) | -98.5% |
| | ORG DEVELOPMENT | 27,976 | 22,784 | 18,100 | 8,000 | (10,100) | -55.8% |
| | OPERATING EXP | 2,598 | 2,652 | 4,000 | 4,000 | - | 0.0% |
| | CONTRACT SERVICES | 889,223 | 1,796,160 | 1,976,500 | 1,931,500 | (45,000) | -2.3% |
| | CAPITAL OUTLAY | - | - | 1,000 | 1,000 | - | 0.0% |
| | UTILITIES | 1,364 | 1,027 | 1,000 | - | (1,000) | -100.0% |
| | TRANSFERS OUT | 53,630 | 65,359 | 100,410 | 97,430 | (2,980) | -3.0% |
| **CITY ATTORNEY Total** | | **2,478,058** | **2,253,078** | **2,207,110** | **2,042,730** | **(164,380)** | **-7.4%** |
| **2. City Attorney Total** | | **2,478,058** | **2,253,078** | **2,207,110** | **2,042,730** | **(164,380)** | **-7.4%** |
| **3. City Manager Department** | | | | | | | |
| **CITY CLERK** | SALARIES | 424,403 | 563,624 | 569,250 | 421,750 | (147,500) | -25.9% |
| | BENEFITS | 181,894 | 223,629 | 232,900 | 202,400 | (30,500) | -13.1% |
| | ORG DEVELOPMENT | 15,610 | 17,093 | 14,910 | 19,450 | 4,540 | 30.4% |
| | OPERATING EXP | 7,457 | 13,324 | 16,000 | 13,360 | (2,640) | -16.5% |
| | CONTRACT SERVICES | 284,323 | 271,576 | 71,050 | 240,200 | 169,150 | 238.1% |
| | CAPITAL OUTLAY | 795 | - | 1,500 | 1,500 | - | 0.0% |
| | UTILITIES | - | 491 | 500 | 500 | - | 0.0% |
| | TRANSFERS OUT | 98,230 | 119,830 | 184,090 | 178,620 | (5,470) | -3.0% |
| **CITY CLERK Total** | | **1,012,711** | **1,209,566** | **1,090,200** | **1,077,780** | **(12,420)** | **-1.1%** |
| **CITY MANAGER** | SALARIES | 1,253,382 | 1,060,313 | 1,259,700 | 1,389,900 | 130,200 | 10.3% |
| | BENEFITS | 409,948 | 396,143 | 559,640 | 683,440 | 123,800 | 22.1% |
| | ORG DEVELOPMENT | 71,185 | 34,661 | 60,300 | 134,940 | 74,640 | 123.8% |
| | OPERATING EXP | 4,968 | 6,316 | 22,100 | 65,100 | 43,000 | 194.6% |
| | CONTRACT SERVICES | 413 | - | 88,000 | 206,000 | 118,000 | 134.1% |
| | CAPITAL OUTLAY | 1,258 | 3,978 | 5,000 | 5,000 | - | 0.0% |
| | UTILITIES | 2,178 | 1,202 | 2,000 | 2,060 | 60 | 3.0% |
| | TRANSFERS OUT | 74,300 | 68,282 | 107,260 | 104,650 | (2,610) | -2.4% |
| **CITY MANAGER Total** | | **1,817,631** | **1,570,897** | **2,104,000** | **2,591,090** | **487,090** | **23.2%** |
| **COMMUNICATIONS** | SALARIES | 553,056 | 500,989 | 406,100 | 144,100 | (262,000) | -64.5% |
| | BENEFITS | 272,409 | 237,230 | 151,280 | 69,780 | (81,500) | -53.9% |
| | ORG DEVELOPMENT | 4,129 | 13,606 | 11,100 | 5,800 | (5,300) | -47.7% |
| | OPERATING EXP | 1,646 | 4,726 | 5,000 | 3,000 | (2,000) | -40.0% |
| | CONTRACT SERVICES | 353,585 | 312,768 | 1,338,000 | 1,752,000 | 414,000 | 30.9% |
| | CAPITAL OUTLAY | - | - | 5,000 | 2,000 | (3,000) | -60.0% |
| | UTILITIES | 1,869 | 2,252 | 950 | 600 | (350) | -36.8% |
| | TRANSFERS OUT | 53,630 | 65,359 | 100,410 | 97,430 | (2,980) | -3.0% |
| **COMMUNICATIONS Total** | | **1,240,324** | **1,136,929** | **2,017,840** | **2,074,710** | **56,870** | **2.8%** |
| **LEGISLATIVE AFFAIRS** | SALARIES | 164,880 | 130,794 | 79,300 | 60,000 | (19,300) | -24.3% |
| | BENEFITS | 75,492 | 43,008 | 32,000 | 31,900 | (100) | -0.3% |
| | ORG DEVELOPMENT | 100 | 10,375 | 7,790 | 9,600 | 1,810 | 23.2% |
| | OPERATING EXP | - | 752 | - | - | - | 0.0% |
| | CONTRACT SERVICES | 152,325 | 346,300 | 277,200 | 317,000 | 39,800 | 14.4% |
| | CAPITAL OUTLAY | - | - | - | - | - | 0.0% |
| | UTILITIES | - | - | 780 | 780 | - | 0.0% |
| **LEGISLATIVE AFFAIRS Total** | | **392,798** | **531,228** | **397,070** | **419,280** | **22,210** | **5.6%** |

CITY OF PALMDALE
FY 2025 PROPOSED BUDGET
EXPENDITURES-GENERAL FUND-BY DEPARTMENT/DIVISION (Actuals through Q3 FY24)

| Department/Division | Category | 2022 Actual | 2023 Actual | 2024 Projected | 2025 Proposed | $ Chg | % Chg |
|---|---|---|---|---|---|---|---|
| **RECORDS MANAGEMENT** | SALARIES | 1,208 | 70,356 | 72,910 | 73,030 | 120 | 0.2% |
| | BENEFITS | 23 | 18,626 | 6,100 | 47,020 | 40,920 | 670.8% |
| | ORG DEVELOPMENT | 200 | - | - | 1,500 | 1,500 | 0.0% |
| | OPERATING EXP | 2,639 | 2,435 | 6,350 | 8,700 | 2,350 | 37.0% |
| | CONTRACT SERVICES | 8,706 | 15,764 | 12,550 | 8,850 | (3,700) | -29.5% |
| | CAPITAL OUTLAY | - | - | 1,000 | 1,000 | - | 0.0% |
| | UTILITIES | 7,956 | 12,093 | 14,000 | 14,000 | - | 0.0% |
| **RECORDS MANAGEMENT Total** | | **20,732** | **119,274** | **112,910** | **154,100** | **41,190** | **36.5%** |
| **3. City Manager Department Total** | | **4,484,196** | **4,567,894** | **5,722,020** | **6,316,960** | **594,940** | **10.4%** |
| **4. Operations Department** | | | | | | | |
| **FINANCE** | SALARIES | 1,126,230 | 1,171,532 | 1,341,500 | 1,464,700 | 123,200 | 9.2% |
| | BENEFITS | 518,728 | 565,170 | 700,700 | 683,100 | (17,600) | -2.5% |
| | ORG DEVELOPMENT | 15,177 | 20,206 | 62,820 | 78,500 | 15,680 | 25.0% |
| | OPERATING EXP | 20,388 | 22,421 | 39,500 | 34,500 | (5,000) | -12.7% |
| | CONTRACT SERVICES | 654,191 | 642,462 | 926,460 | 858,100 | (68,360) | -7.4% |
| | CAPITAL OUTLAY | - | 19,184 | 23,820 | 17,000 | (6,820) | -28.6% |
| | UTILITIES | 487 | 1,326 | 2,000 | 2,000 | - | 0.0% |
| | TRANSFERS OUT | 123,916 | 174,293 | 395,750 | 387,790 | (7,960) | -2.0% |
| | GN/LS-SALE OF ASSET | - | - | 275,000 | - | (275,000) | -100.0% |
| **FINANCE Total** | | **2,459,116** | **2,616,594** | **3,767,550** | **3,525,690** | **(241,860)** | **-6.4%** |
| **GENERAL CITY** | SALARIES | - | 229,700 | 10,000 | 1,165,000 | 1,155,000 | 11550.0% |
| | BENEFITS | 176,221 | 153,594 | 260,000 | 260,000 | - | 0.0% |
| | ORG DEVELOPMENT | 105,467 | 93,801 | 190,500 | 152,000 | (38,500) | -20.2% |
| | OPERATING EXP | 150,130 | 340,045 | 561,000 | 2,428,300 | 1,867,300 | 332.9% |
| | CONTRACT SERVICES | 175,992 | 247,272 | 688,800 | 536,000 | (152,800) | -22.2% |
| | CAPITAL OUTLAY | - | 2,178 | | - | - | 0.0% |
| | UTILITIES | 122,690 | 91,366 | 101,500 | 101,500 | - | 0.0% |
| | CAPITAL | - | - | 1,717,860 | 6,100,000 | 4,382,140 | 255.1% |
| | DEBT SERVICE | 2,289,380 | 2,312,865 | 2,315,830 | 2,291,600 | (24,230) | -1.0% |
| | TRANSFERS OUT | 7,163,600 | 10,618,049 | 23,078,530 | 12,357,180 | (10,721,350) | -46.5% |
| **GENERAL CITY Total** | | **10,183,480** | **14,088,871** | **28,924,020** | **25,391,580** | **(3,532,440)** | **-12.2%** |
| **HUMAN RESOURCES** | SALARIES | 453,080 | 571,096 | 668,590 | 595,690 | (72,900) | -10.9% |
| | BENEFITS | 183,567 | 231,409 | 360,500 | 314,300 | (46,200) | -12.8% |
| | ORG DEVELOPMENT | 14,700 | 16,143 | 17,350 | 19,700 | 2,350 | 13.5% |
| | OPERATING EXP | 1,326,089 | 1,906,624 | 1,700,200 | 2,265,850 | 565,650 | 33.3% |
| | CONTRACT SERVICES | 990,961 | 1,188,812 | 1,366,100 | 1,521,400 | 155,300 | 11.4% |
| | CAPITAL OUTLAY | 758 | - | 8,500 | 7,560 | (940) | -11.1% |
| | TRANSFERS OUT | 62,550 | 76,255 | 117,150 | 113,660 | (3,490) | -3.0% |
| **HUMAN RESOURCES Total** | | **3,031,705** | **3,990,338** | **4,238,390** | **4,838,160** | **599,770** | **14.2%** |
| **RISK MANAGEMENT** | SALARIES | - | - | 57,200 | 212,500 | 155,300 | 271.5% |
| | BENEFITS | - | - | 32,900 | 122,100 | 89,200 | 271.1% |
| | ORG DEVELOPMENT | - | 385 | 6,900 | 28,460 | 21,560 | 312.5% |
| | OPERATING EXP | 3,048,529 | 4,929,155 | 16,516,150 | 5,095,980 | (11,420,170) | -69.1% |
| | CONTRACT SERVICES | 503,383 | 1,011,062 | 1,072,750 | 858,250 | (214,500) | -20.0% |
| | CAPITAL OUTLAY | - | - | 5,000 | 1,500 | (3,500) | -70.0% |
| **RISK MANAGEMENT Total** | | **3,551,912** | **5,940,602** | **17,690,900** | **6,318,790** | **(11,372,110)** | **-64.3%** |
| **4. Operations Department Total** | | **19,226,213** | **26,636,406** | **54,620,860** | **40,074,220** | **(14,546,640)** | **-26.6%** |
| **5. Economic and Community Development** | | | | | | | |
| **ADMIN - ECONOMIC DEVELOPMENT** | SALARIES | 210,201 | 313,031 | 503,600 | 542,500 | 38,900 | 7.7% |
| | BENEFITS | 76,760 | 111,061 | 220,480 | 252,680 | 32,200 | 14.6% |
| | ORG DEVELOPMENT | 9,829 | 9,614 | 14,500 | 14,500 | - | 0.0% |
| | OPERATING EXP | 6,164 | 7,372 | 7,500 | 7,500 | - | 0.0% |
| | CONTRACT SERVICES | 2,475 | 44,107 | 35,000 | 50,000 | 15,000 | 42.9% |
| | UTILITIES | 42 | - | 1,300 | 1,300 | - | 0.0% |
| | TRANSFERS OUT | 116,060 | 141,614 | 217,560 | 211,090 | (6,470) | -3.0% |
| **ADMIN - ECONOMIC DEVELOPMENT Total** | | **421,531** | **626,798** | **999,940** | **1,079,570** | **79,630** | **8.0%** |

CITY OF PALMDALE
FY 2025 PROPOSED BUDGET
EXPENDITURES-GENERAL FUND-BY DEPARTMENT/DIVISION (Actuals through Q3 FY24)

| Department/Division | Category | 2022 Actual | 2023 Actual | 2024 Projected | 2025 Proposed | $ Chg | % Chg |
|---|---|---|---|---|---|---|---|
| **BUILDING AND SAFETY** | SALARIES | 1,096,780 | 1,321,488 | 1,467,000 | 1,435,200 | (31,800) | -2.2% |
| | BENEFITS | 608,588 | 652,211 | 770,300 | 793,400 | 23,100 | 3.0% |
| | ORG DEVELOPMENT | 33,217 | 33,684 | 34,700 | 42,700 | 8,000 | 23.1% |
| | OPERATING EXP | 3,357 | 4,123 | 4,500 | 4,500 | - | 0.0% |
| | CONTRACT SERVICES | 373,542 | 702,975 | 750,750 | 750,750 | - | 0.0% |
| | CAPITAL OUTLAY | - | 822 | 6,000 | 4,000 | (2,000) | -33.3% |
| | UTILITIES | 6,537 | 5,923 | 6,000 | 5,800 | (200) | -3.3% |
| | TRANSFERS OUT | 174,600 | 209,309 | 349,930 | 346,460 | (3,470) | -1.0% |
| **BUILDING AND SAFETY Total** | | **2,296,622** | **2,930,535** | **3,389,180** | **3,382,810** | **(6,370)** | **-0.2%** |
| **ECONOMIC DEVELOPMENT** | SALARIES | 257,903 | 268,036 | 298,700 | 368,700 | 70,000 | 23.4% |
| | BENEFITS | 150,366 | 139,568 | 143,050 | 173,300 | 30,250 | 21.1% |
| | ORG DEVELOPMENT | 24,094 | 39,911 | 45,500 | 46,250 | 750 | 1.6% |
| | OPERATING EXP | 325 | 75 | 260 | 260 | - | 0.0% |
| | CONTRACT SERVICES | 113,432 | 769,674 | 517,360 | 549,000 | 31,640 | 6.1% |
| | CAPITAL OUTLAY | 651 | - | 1,500 | 1,500 | - | 0.0% |
| | UTILITIES | 578 | 632 | 900 | 1,400 | 500 | 55.6% |
| | TRANSFERS OUT | 53,630 | 65,359 | 100,410 | 97,430 | (2,980) | -3.0% |
| **ECONOMIC DEVELOPMENT Total** | | **600,979** | **1,283,255** | **1,107,680** | **1,237,840** | **130,160** | **11.8%** |
| **PLANNING** | SALARIES | 820,539 | 902,373 | 879,300 | 1,003,000 | 123,700 | 14.1% |
| | BENEFITS | 386,884 | 388,266 | 440,400 | 531,300 | 90,900 | 20.6% |
| | ORG DEVELOPMENT | 6,679 | 19,278 | 23,740 | 20,540 | (3,200) | -13.5% |
| | OPERATING EXP | 2,539 | 8,433 | 12,300 | 12,300 | - | 0.0% |
| | CONTRACT SERVICES | 17,388 | 87,501 | 81,470 | 96,200 | 14,730 | 18.1% |
| | CAPITAL OUTLAY | 2,152 | 2,233 | 3,000 | 3,000 | - | 0.0% |
| | UTILITIES | 42 | - | - | - | - | 0.0% |
| | TRANSFERS OUT | 107,150 | 130,718 | 200,830 | 194,850 | (5,980) | -3.0% |
| **PLANNING Total** | | **1,343,373** | **1,538,802** | **1,641,040** | **1,861,190** | **220,150** | **13.4%** |
| **PALMDALE FILM STAGES** | OPERATING EXP | - | 4,137 | 80,000 | 125,000 | 45,000 | 56.3% |
| | CONTRACT SERVICES | - | - | - | - | - | 0.0% |
| | UTILITIES | - | - | 27,950 | 27,950 | - | 0.0% |
| **PALMDALE FILM STAGES Total** | | **-** | **4,137** | **107,950** | **152,950** | **45,000** | **41.7%** |
| **5. Economic and Community Development Total** | | **4,662,504** | **6,383,527** | **7,245,790** | **7,714,360** | **468,570** | **6.5%** |
| **6. Public Safety** | | | | | | | |
| **COMMUNITY COMPLIANCE** | SALARIES | 941,052 | 960,753 | 1,372,900 | 1,165,700 | (207,200) | -15.1% |
| | BENEFITS | 347,032 | 356,372 | 514,900 | 681,460 | 166,560 | 32.3% |
| | ORG DEVELOPMENT | 6,231 | 11,275 | 16,000 | 16,000 | - | 0.0% |
| | OPERATING EXP | 44,562 | 26,973 | 18,500 | 27,000 | 8,500 | 45.9% |
| | CONTRACT SERVICES | 62,940 | 72,528 | 326,360 | 1,865,040 | 1,538,680 | 471.5% |
| | CAPITAL OUTLAY | 2,000 | - | 5,000 | 2,000 | (3,000) | -60.0% |
| | UTILITIES | 13,315 | 14,274 | 25,850 | 32,800 | 6,950 | 26.9% |
| | CAPITAL | 4,130 | 15,761 | - | - | - | 0.0% |
| | TRANSFERS OUT | 90,866 | 95,418 | 223,870 | 236,110 | 12,240 | 5.5% |
| **COMMUNITY COMPLIANCE Total** | | **1,512,127** | **1,553,354** | **2,503,380** | **4,026,110** | **1,522,730** | **60.8%** |
| **PUBLIC SAFETY** | SALARIES | 321,164 | 362,535 | 352,100 | 344,500 | (7,600) | -2.2% |
| | BENEFITS | 211,786 | 203,342 | 222,800 | 212,300 | (10,500) | -4.7% |
| | ORG DEVELOPMENT | 325 | 100 | 4,000 | 4,500 | 500 | 12.5% |
| | OPERATING EXP | 6,788 | 14,684 | 172,750 | 376,000 | 203,250 | 117.7% |
| | CONTRACT SERVICES | 7,808 | 1,460 | 7,600 | 8,300 | 700 | 9.2% |
| | CAPITAL OUTLAY | - | - | - | 5,000 | 5,000 | 0.0% |
| | COUNTY CONTRACTS | 22,007,204 | 17,256,289 | 24,420,460 | 27,964,940 | 3,544,480 | 14.5% |
| | UTILITIES | 4,699 | 6,694 | 6,100 | 1,300 | (4,800) | -78.7% |
| | CAPITAL | 7,000 | - | | - | - | 0.0% |
| **PUBLIC SAFETY Total** | | **22,566,774** | **17,845,104** | **25,185,810** | **28,916,840** | **3,731,030** | **14.8%** |
| **6. Public Safety Total** | | **24,078,901** | **19,398,458** | **27,689,190** | **32,942,950** | **5,253,760** | **19.0%** |

CITY OF PALMDALE
FY 2025 PROPOSED BUDGET
EXPENDITURES-GENERAL FUND-BY DEPARTMENT/DIVISION (Actuals through Q3 FY24)

| Department/Division | Category | 2022 Actual | 2023 Actual | 2024 Projected | 2025 Proposed | $ Chg | % Chg |
|---|---|---|---|---|---|---|---|
| **7. Neighborhood Services** | | | | | | | |
| **AFFORDABLE HOUSING** | SALARIES | 4,974 | 4,627 | 9,900 | 25,300 | 15,400 | 155.6% |
| | BENEFITS | 1,932 | 1,884 | 4,600 | 13,400 | 8,800 | 191.3% |
| | ORG DEVELOPMENT | 196 | 965 | 1,000 | 2,000 | 1,000 | 100.0% |
| | OPERATING EXP | 1 | 48 | 1,100 | 1,100 | - | 0.0% |
| | CONTRACT SERVICES | 8,010 | 55,405 | 32,000 | 20,000 | (12,000) | -37.5% |
| **AFFORDABLE HOUSING Total** | | **15,113** | **62,928** | **48,600** | **61,800** | **13,200** | **27.2%** |
| **NEIGHBORHOOD SVCS** | SALARIES | 142,718 | 25,926 | 42,600 | 34,800 | (7,800) | -18.3% |
| | BENEFITS | 69,096 | 11,461 | 22,980 | 21,780 | (1,200) | -5.2% |
| | ORG DEVELOPMENT | 670 | 512 | 1,000 | 1,000 | - | 0.0% |
| | OPERATING EXP | 10,928 | 46,007 | 10,650 | 9,550 | (1,100) | -10.3% |
| | CONTRACT SERVICES | 916 | 300 | 28,100 | 3,900 | (24,200) | -86.1% |
| | CAPITAL OUTLAY | - | - | 1,500 | 1,500 | - | 0.0% |
| | UTILITIES | 15,816 | 12,828 | 13,700 | 13,700 | - | 0.0% |
| | TRANSFERS OUT | 348,190 | 424,842 | 652,690 | 633,280 | (19,410) | -3.0% |
| **NEIGHBORHOOD SVCS Total** | | **588,334** | **521,876** | **773,220** | **719,510** | **(53,710)** | **-6.9%** |
| **7. Neighborhood Services Total** | | **603,447** | **584,804** | **821,820** | **781,310** | **(40,510)** | **-4.9%** |
| **8. Parks & Recreation** | | | | | | | |
| **COMMUNITY PROGRAMS** | SALARIES | 208,316 | 102,236 | 115,900 | 104,700 | (11,200) | -9.7% |
| | BENEFITS | 94,170 | 54,912 | 67,280 | 66,380 | (900) | -1.3% |
| | ORG DEVELOPMENT | 4,324 | 2,190 | 6,350 | 6,350 | - | 0.0% |
| | OPERATING EXP | 15,086 | 15,023 | 22,500 | 22,500 | - | 0.0% |
| | CONTRACT SERVICES | 4,434 | 5,921 | 4,500 | 4,500 | - | 0.0% |
| | UTILITIES | - | 165 | | - | - | 0.0% |
| **COMMUNITY PROGRAMS Total** | | **326,330** | **180,448** | **216,530** | **204,430** | **(12,100)** | **-5.6%** |
| **EVENTS & CULTURE** | SALARIES | 772,946 | 934,481 | 1,276,470 | 1,288,170 | 11,700 | 0.9% |
| | BENEFITS | 229,926 | 285,795 | 306,400 | 301,360 | (5,040) | -1.6% |
| | ORG DEVELOPMENT | 6,558 | 4,470 | 12,400 | 12,100 | (300) | -2.4% |
| | OPERATING EXP | 117,785 | 127,933 | 256,450 | 356,500 | 100,050 | 39.0% |
| | CONTRACT SERVICES | 389,417 | 801,189 | 1,018,450 | 1,990,500 | 972,050 | 95.4% |
| | SOFTWARE | 1,857 | 1,635 | 2,100 | 3,000 | 900 | 42.9% |
| | CAPITAL OUTLAY | 6,693 | 27,550 | 45,800 | 47,500 | 1,700 | 3.7% |
| | UTILITIES | 41,034 | 80,240 | 87,500 | 87,500 | - | 0.0% |
| | CAPITAL | 13,459 | - | 36,400 | 38,000 | 1,600 | 4.4% |
| **EVENTS & CULTURE Total** | | **1,579,675** | **2,263,292** | **3,041,970** | **4,124,630** | **1,082,660** | **35.6%** |
| **LIBRARY** | SALARIES | 25,603 | 33,384 | 43,940 | - | (43,940) | -100.0% |
| | BENEFITS | 1,736 | 2,264 | 1,800 | 2,000 | 200 | 11.1% |
| | ORG DEVELOPMENT | - | - | - | - | - | 0.0% |
| | OPERATING EXP | 232,705 | 228,967 | 261,500 | 261,500 | - | 0.0% |
| | CONTRACT SERVICES | 1,023,507 | 1,061,350 | 1,108,950 | 1,218,730 | 109,780 | 9.9% |
| | CAPITAL OUTLAY | 36,358 | 789 | 10,000 | 10,000 | - | 0.0% |
| | UTILITIES | 63,889 | 55,964 | 56,900 | 68,700 | 11,800 | 20.7% |
| | TRANSFERS OUT | 107,150 | 130,718 | 200,830 | 194,850 | (5,980) | -3.0% |
| **LIBRARY Total** | | **1,490,949** | **1,513,435** | **1,683,920** | **1,755,780** | **71,860** | **4.3%** |
| **PARKS & FACILITIES** | SALARIES | 809,617 | 886,968 | 1,014,810 | 1,032,150 | 17,340 | 1.7% |
| | BENEFITS | 318,528 | 318,349 | 432,200 | 469,850 | 37,650 | 8.7% |
| | ORG DEVELOPMENT | 4,862 | 2,028 | 8,200 | 8,200 | - | 0.0% |
| | OPERATING EXP | 37,254 | 36,177 | 53,100 | 73,500 | 20,400 | 38.4% |
| | CONTRACT SERVICES | 42,580 | 3,940 | 9,600 | 43,600 | 34,000 | 354.2% |
| | CAPITAL OUTLAY | 1,623 | 7,317 | 15,000 | 13,000 | (2,000) | -13.3% |
| | UTILITIES | 58,987 | 65,217 | 46,950 | 48,250 | 1,300 | 2.8% |
| | CAPITAL | - | 26,865 | - | 5,000 | 5,000 | 0.0% |
| | TRANSFERS OUT | 574,600 | 737,152 | 1,232,410 | 1,213,630 | (18,780) | -1.5% |
| **PARKS & FACILITIES Total** | | **1,848,051** | **2,084,013** | **2,812,270** | **2,907,180** | **94,910** | **3.4%** |

CITY OF PALMDALE
FY 2025 PROPOSED BUDGET
EXPENDITURES-GENERAL FUND-BY DEPARTMENT/DIVISION (Actuals through Q3 FY24)

| Department/Division | Category | 2022 Actual | 2023 Actual | 2024 Projected | 2025 Proposed | $ Chg | % Chg |
|---|---|---|---|---|---|---|---|
| **RECREATION SERVICES** | SALARIES | 1,824,958 | 2,094,772 | 2,390,840 | 2,602,390 | 211,550 | 8.8% |
| | BENEFITS | 315,649 | 317,436 | 397,870 | 369,370 | (28,500) | -7.2% |
| | ORG DEVELOPMENT | 10,735 | 8,638 | 11,680 | 17,430 | 5,750 | 49.2% |
| | OPERATING EXP | 165,385 | 179,593 | 198,340 | 204,200 | 5,860 | 3.0% |
| | CONTRACT SERVICES | 130,689 | 169,852 | 225,370 | 245,700 | 20,330 | 9.0% |
| | CAPITAL OUTLAY | 6,824 | 16,477 | 26,850 | 19,850 | (7,000) | -26.1% |
| | UTILITIES | 61,891 | 73,938 | 78,180 | 79,680 | 1,500 | 1.9% |
| | CAPITAL | 53,852 | 26,859 | | - | - | 0.0% |
| **RECREATION SERVICES Total** | | **2,569,984** | **2,887,564** | **3,329,130** | **3,538,620** | **209,490** | **6.3%** |
| **EMERGENCY MANAGEMENT** | BENEFITS | - | - | - | - | - | 0.0% |
| | ORG DEVELOPMENT | 747 | 7,639 | 10,500 | 10,500 | - | 0.0% |
| | OPERATING EXP | 8,314 | 19,233 | 36,240 | 34,900 | (1,340) | -3.7% |
| | CONTRACT SERVICES | - | 2,500 | 10,800 | 6,500 | (4,300) | -39.8% |
| | CAPITAL OUTLAY | 287 | 2,495 | 4,000 | 4,000 | - | 0.0% |
| | UTILITIES | - | 478 | 1,200 | 1,200 | - | 0.0% |
| | TRANSFERS OUT | 17,840 | - | - | - | - | 0.0% |
| **EMERGENCY MANAGEMENT Total** | | **27,187** | **32,346** | **62,740** | **57,100** | **(5,640)** | **-9.0%** |
| **8. Parks & Recreation Total** | | **7,842,176** | **8,961,098** | **11,146,560** | **12,587,740** | **1,441,180** | **12.9%** |
| **9. Public Works** | | | | | | | |
| CAPITAL IMPROVEMENT PROJECTS | SALARIES | 31,677 | 36,285 | | - | - | 0.0% |
| | BENEFITS | 15,718 | 59,490 | | - | - | 0.0% |
| | CAPITAL | 996,918 | 1,652,184 | 174,950 | 883,950 | 709,000 | 405.3% |
| **CAPITAL IMPROVEMENT PROJECTS Total** | | **1,044,313** | **1,747,960** | **174,950** | **883,950** | **709,000** | **405.3%** |
| ENGINEERING | SALARIES | 605,568 | 726,030 | 969,200 | 1,389,300 | 420,100 | 43.3% |
| | BENEFITS | 316,080 | 321,729 | 510,500 | 752,000 | 241,500 | 47.3% |
| | ORG DEVELOPMENT | 1,102 | 10,410 | 17,200 | 17,200 | - | 0.0% |
| | OPERATING EXP | 5,386 | 5,292 | 8,500 | 10,000 | 1,500 | 17.6% |
| | CONTRACT SERVICES | 156,694 | 78,920 | 261,200 | 261,200 | - | 0.0% |
| | CAPITAL OUTLAY | 2,399 | - | 3,400 | 3,400 | - | 0.0% |
| | UTILITIES | 255 | 1,020 | 3,900 | 3,900 | - | 0.0% |
| | TRANSFERS OUT | 31,258 | 49,925 | 91,390 | 95,110 | 3,720 | 4.1% |
| **ENGINEERING Total** | | **1,118,741** | **1,193,326** | **1,865,290** | **2,532,110** | **666,820** | **35.7%** |
| ENVIRONMENTAL | SALARIES | 83,651 | 94,242 | 94,300 | 83,400 | (10,900) | -11.6% |
| | BENEFITS | 52,844 | 44,523 | 50,550 | 46,550 | (4,000) | -7.9% |
| | ORG DEVELOPMENT | - | - | 1,000 | 1,000 | - | 0.0% |
| | OPERATING EXP | - | - | 3,500 | 3,500 | - | 0.0% |
| | CONTRACT SERVICES | 30,581 | 2,624 | 100,000 | 280,000 | 180,000 | 180.0% |
| | UTILITIES | - | 53 | 600 | 600 | - | 0.0% |
| **ENVIRONMENTAL Total** | | **167,075** | **141,442** | **249,950** | **415,050** | **165,100** | **66.1%** |
| MAINTENANCE | SALARIES | 1,802,121 | 2,014,984 | 2,233,000 | 2,318,800 | 85,800 | 3.8% |
| | BENEFITS | 1,085,092 | 1,088,724 | 1,294,220 | 1,432,220 | 138,000 | 10.7% |
| | ORG DEVELOPMENT | 15,215 | 23,154 | 48,540 | 60,200 | 11,660 | 24.0% |
| | OPERATING EXP | 651,033 | 879,405 | 1,154,420 | 1,607,300 | 452,880 | 39.2% |
| | CONTRACT SERVICES | 3,533,713 | 3,913,633 | 5,098,390 | 5,953,100 | 854,710 | 16.8% |
| | CAPITAL OUTLAY | 16,199 | 20,446 | 36,600 | 45,900 | 9,300 | 25.4% |
| | UTILITIES | 1,611,023 | 1,884,525 | 2,440,800 | 2,476,550 | 35,750 | 1.5% |
| | TRANSFERS OUT | 211,540 | 230,061 | 505,060 | 530,810 | 25,750 | 5.1% |
| **MAINTENANCE Total** | | **8,925,936** | **10,054,932** | **12,811,030** | **14,424,880** | **1,613,850** | **12.6%** |

CITY OF PALMDALE
FY 2025 PROPOSED BUDGET
EXPENDITURES-GENERAL FUND-BY DEPARTMENT/DIVISION (Actuals through Q3 FY24)

| Department/Division | Category | 2022 Actual | 2023 Actual | 2024 Projected | 2025 Proposed | $ Chg | % Chg |
|---|---|---|---|---|---|---|---|
| PUBLIC WORKS - ADMINISTRATION | SALARIES | 860,212 | 1,133,393 | 923,800 | 1,171,700 | 247,900 | 26.8% |
| | BENEFITS | (107,339) | (235,092) | 448,080 | 569,700 | 121,620 | 27.1% |
| | ORG DEVELOPMENT | 11,543 | 11,431 | 15,670 | 17,900 | 2,230 | 14.2% |
| | OPERATING EXP | 8,231 | 6,794 | 5,500 | 8,100 | 2,600 | 47.3% |
| | CONTRACT SERVICES | 95,245 | 123,742 | 157,500 | 310,000 | 152,500 | 96.8% |
| | CAPITAL OUTLAY | 25 | - | 2,500 | 4,000 | 1,500 | 60.0% |
| | UTILITIES | 1,449 | 1,132 | 3,000 | 3,800 | 800 | 26.7% |
| | TRANSFERS OUT | 15,420 | 15,984 | 23,990 | 24,640 | 650 | 2.7% |
| **PUBLIC WORKS - ADMINISTRATION Total** | | **884,785** | **1,057,384** | **1,580,040** | **2,109,840** | **529,800** | **33.5%** |
| **9. Public Works Total** | | **12,140,850** | **14,195,043** | **16,681,260** | **20,365,830** | **3,684,570** | **22.1%** |
| **Grand Total** | | **75,868,671** | **83,336,535** | **126,803,240** | **123,450,960** | **(3,352,280)** | **-2.6%** |

MEASURE AV
FY 2025 PROPOSED OPERATING & CIP BUDGET
REVENUES & EXPENDITURES BY PROGRAM

| Measure AV Category | Project Description | FY 2021 Actual | FY 2022 Actual | FY 2023 Actual | FY 2024 Actual YTD | FY 2024 Adopted | FY 2024 Revised | FY 2024 Projected | FY 2025 Proposed | $ Chg |
|---|---|---|---|---|---|---|---|---|---|---|
| ***REVENUES*** | | | | | | | | | | |
| Revenue | General Sales Tax | 5,188,745 | 22,685,307 | 22,675,911 | 13,383,148 | 22,923,000 | 22,307,000 | 22,307,000 | 22,811,000 | 504,000 |
| **Revenue Total** | | **5,188,745** | **22,685,307** | **22,675,911** | **13,383,148** | **22,923,000** | **22,307,000** | **22,307,000** | **22,811,000** | **504,000** |
| ***EXPENDITURES*** | | | | | | | | | | |
| A. Public Safety | **Animal Services** | | | | | | | | | |
| | Independent Operation Feasibility | - | - | 30,921 | 67,280 | 69,080 | 69,080 | 69,080 | - | (69,080) |
| | Animal Health Services | - | - | 183,073 | 102,680 | 362,930 | 362,930 | 362,930 | 300,000 | (62,930) |
| | Emergency Management | - | 131,009 | 60,776 | 146,065 | 239,320 | 239,320 | 210,020 | 231,900 | 21,880 |
| | Community Compliance | - | 380,784 | 859,321 | 1,046,715 | 2,358,400 | 2,358,400 | 1,608,200 | 2,080,600 | 472,400 |
| | Public Safety Equipment | - | 66,500 | 60,000 | - | - | - | | | - |
| | **Sheriff Contract** | | | | | | | | | |
| | General Contract | - | 7,595,700 | 2,819,060 | 1,072,441 | 1,838,470 | 1,838,470 | 1,838,470 | 1,893,600 | 55,130 |
| | Infrastructure/Commercial | - | - | 227,120 | 132,638 | 227,380 | 227,380 | 227,380 | 234,200 | 6,820 |
| | Community Programs | - | - | 4,461,080 | 2,387,379 | 4,092,650 | 4,092,650 | 4,092,650 | 4,215,400 | 122,750 |
| | Economic Development | - | - | 989,140 | 612,850 | 1,050,600 | 1,050,600 | 1,050,600 | 1,082,100 | 31,500 |
| **A. Public Safety Total** | | **-** | **8,173,993** | **9,690,491** | **5,568,048** | **10,238,830** | **10,238,830** | **9,459,330** | **10,037,800** | **578,470** |
| B. Infrastructure / CIP | | | | | | | | | | |
| | **Safe and Clean Parks** | | | | | | | | | |
| | Sam Yellen Park | - | - | 613 | 2,231,255 | 9,998,780 | 9,998,780 | 10,798,780 | - | (10,798,780) |
| | Ecological Preservation Study | - | - | - | - | 250,000 | - | - | - | - |
| | McAdam Park Improvements - Schoolhouse | - | 1,770 | 197 | - | - | - | - | - | - |
| | McAdam Park Cultural Art | - | - | - | - | - | - | - | 150,000 | 150,000 |
| | McAdam Park Battery Storage | - | - | 670,213 | 5,106 | 1,106,150 | 805,150 | 805,150 | - | (805,150) |
| | McAdam Park Renovation | - | - | 53,361 | 48,616 | 508,100 | 508,100 | 508,100 | 6,300,000 | 5,791,900 |
| | MK Park Pool Enclosure | - | - | - | - | 550,000 | 550,000 | - | 550,000 | 550,000 |
| | MK Park Swim Deck | - | 350 | 57,670 | 45,084 | 905,890 | 200,000 | 46,000 | 165,000 | 119,000 |
| | Parks Master Plan | - | 70 | 161,708 | 77,626 | 126,530 | 126,530 | 90,000 | - | (90,000) |
| | Courtney's Playground | - | 61,613 | 5,852 | - | - | - | - | - | - |
| | Roller Hockey Rink Renovation | - | 512 | - | - | - | - | - | - | - |
| | Rugby Goal Purch & Install | - | 12,925 | - | - | - | - | - | - | - |
| | General Park Improvements | - | 53,600 | 455,737 | 987,780 | 3,454,270 | 3,192,270 | 2,483,810 | 1,512,440 | (971,370) |
| | Sports Field Lighting | - | 5,968 | 788,134 | 4,328 | 6,667,500 | 6,667,500 | 1,061,320 | 3,200,000 | 2,138,680 |
| | **Graffiti Abatement** | | | | | | | | | - |
| | Graffiti Abatement Vehicles | - | - | 142,237 | 145,077 | 158,780 | 158,780 | 377,030 | - | (377,030) |
| | Abatement/Prevention/Maintenance Prgrms | - | - | 310,980 | 188,345 | 639,650 | 639,650 | 461,720 | 1,090,800 | 629,080 |
| | Street Sweeping Signage | - | - | - | 16,303 | 750,000 | 450,000 | 450,000 | - | (450,000) |
| | **CIP Multi-Year Projects** | | | | | | | | | - |
| | Citywide Security | - | 150,176 | 680,183 | 199,666 | 2,187,490 | 2,187,490 | 450,000 | 1,250,000 | 800,000 |
| | Facility Improvements - Aero | - | - | 213,392 | 112,020 | 200,000 | 450,000 | 205,000 | 245,000 | 40,000 |
| | Chimbole | - | - | 84,323 | - | 107,680 | 307,680 | - | 1,900,000 | 1,900,000 |
| | Public Facility Energy Efficiency Projects | - | - | - | - | - | - | 155,610 | 5,893,290 | 5,737,680 |
| | Memorial Honor Wall | - | - | 13,627 | 2,275 | 11,370 | - | 2,280 | - | (2,280) |
| | Regional Recreation Complex | - | 343,097 | 87,791 | - | 15,970 | - | - | - | - |
| | Veteran Resource Center | 3,636 | - | - | - | - | - | - | - | - |
| | Avenue M Grade Separation | - | - | - | - | 1,000,000 | 1,000,000 | - | - | - |
| **B. Infrastructure / CIP Total** | | **3,636** | **630,081** | **3,726,018** | **4,063,481** | **28,638,160** | **27,241,930** | **17,894,800** | **22,256,530** | **4,361,730** |

MEASURE AV
FY 2025 PROPOSED OPERATING & CIP BUDGET
REVENUES & EXPENDITURES BY PROGRAM

| Measure AV Category | Project Description | FY 2021 Actual | FY 2022 Actual | FY 2023 Actual | FY 2024 Actual YTD | FY 2024 Adopted | FY 2024 Revised | FY 2024 Projected | FY 2025 Proposed | $ Chg |
|---|---|---|---|---|---|---|---|---|---|---|
| C. Community Programs | | | | | | | | | | |
| | SAVES | - | 80,498 | 71,976 | 61,074 | 319,870 | 319,870 | 363,070 | 444,090 | 81,020 |
| | Unhoused Programs | - | - | 199,729 | 133,680 | 200,000 | 200,000 | 200,000 | 150,000 | (50,000) |
| | Mental Health Programs | 148,807 | 149,593 | - | - | - | - | - | - | - |
| | Community Partnership Programs | - | - | 29,975 | - | 50,000 | 25,000 | 50,000 | 50,000 | - |
| | Senior Programs/Legacy Commons | - | - | 300,994 | 229,277 | 405,440 | 412,440 | 399,580 | 416,710 | 17,130 |
| | Community Grant Programs | - | 179,000 | 1,087,458 | - | - | - | - | - | - |
| | Veteran Support | - | - | - | 1,900 | 25,000 | 25,000 | 15,000 | 25,000 | 10,000 |
| | Recreation Scholarships | - | - | - | 3,258 | 20,000 | 20,000 | 20,000 | 20,000 | - |
| | **Community Events** | | | | | | | | | - |
| | Community Events | - | - | 309,787 | 721,419 | 986,450 | 986,450 | 954,160 | 900,000 | (54,160) |
| **C. Community Programs Total** | | **148,807** | **409,091** | **1,999,919** | **1,150,608** | **2,006,760** | **1,988,760** | **2,001,810** | **2,005,800** | **3,990** |
| D. Economic Development | | | | | | | | | | |
| | **Economic Development** | | | | | | | | | |
| | Business Retention | - | 250,817 | 105,928 | 14,866 | 140,000 | 140,000 | 140,000 | 140,000 | - |
| | Auto Mall Partnership | - | - | 450,000 | - | 500,000 | 500,000 | 170,000 | 500,000 | 330,000 |
| | Aerospace Incentive Program | - | - | - | - | 250,000 | 250,000 | - | 500,000 | 500,000 |
| | Property Acquisition & Entitlement | - | - | 6,309 | 18,030 | 1,500,000 | 1,500,000 | 170,000 | 500,000 | 330,000 |
| | Film & Tourism | - | - | 22,718 | 34,686 | 150,000 | 150,000 | 40,000 | 75,000 | 35,000 |
| | Holidays on Parade | - | 150,000 | - | - | - | - | - | - | - |
| **D. Economic Development Total** | | **-** | **400,817** | **584,955** | **67,582** | **2,540,000** | **2,540,000** | **520,000** | **1,715,000** | **1,195,000** |
| Administrative Costs | Program Administration - 5% cap | - | 84,783 | 121,694 | 61,170 | 83,270 | 83,270 | 82,300 | 78,500 | (3,800) |
| | Independent Audit | - | - | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | 10,000 | - |
| **Administrative Costs Total** | | **-** | **84,783** | **131,694** | **71,170** | **93,270** | **93,270** | **92,300** | **88,500** | **(3,800)** |
| **Expenditure Total** | | **152,443** | **9,698,765** | **16,133,077** | **10,920,889** | **43,517,020** | **42,102,790** | **29,968,240** | **36,103,630** | **6,135,390** |
| **Surplus/(Deficit)** | | **5,036,302** | **12,986,543** | **6,542,834** | **2,462,259** | **(20,594,020)** | **(19,795,790)** | **(7,661,240)** | **(13,292,630)** | |
| **Beginning Fund Balance** | | **-** | **5,036,302** | **18,022,844** | **24,565,678** | **24,565,678** | **24,565,678** | **24,565,678** | **16,904,438** | |
| **Change in Fund Balance** | | **5,036,302** | **12,986,543** | **6,542,834** | **2,462,259** | **(20,594,020)** | **(19,795,790)** | **(7,661,240)** | **(13,292,630)** | |
| **Ending Fund Balance - Before Reserves** | | **5,036,302** | **18,022,844** | **24,565,678** | **27,027,937** | **3,971,658** | **4,769,888** | **16,904,438** | **3,611,808** | |
| **Reserve Requirement - 10%** | | | | | **1,092,089** | **4,351,702** | **4,210,279** | **2,996,824** | **3,610,363** | |
| **Ending Fund Balance - After Reserves** | | **5,036,302** | **18,022,844** | **24,565,678** | **25,935,848** | **(380,044)** | **559,609** | **13,907,614** | **1,445** | |

AMERICAN RESCUE PLAN ACT
FY 2025 OPERATING & CIP BUDGET
REVENUES & EXPENDITURES BY PROGRAM

| ARPA Reporting Category | Project Description | FY 2022 Actual | FY 2023 Actual | FY 2024 Actual YTD | FY 2024 Adopted | FY 2024 Revised | FY 2024 Projected | FY 2025 Proposed | $ Chg |
|---|---|---|---|---|---|---|---|---|---|
| **U.S. Treasury Allocation:** | **$ 35,455,019** | | | | | | | | |
| ***REVENUES*** | | | | | | | | | |
| Revenue | American Rescue Plan Act Allocation | $ 342,808 | 12,580,662 | - | 12,721,540 | 22,319,750 | 15,779,110 | 6,752,440 | 9,598,210 |
| | Program Income - Interest | 24,499 | 703,801 | 230,607 | 300,000 | 300,000 | 300,000 | 300,000 | - |
| **Revenue Total** | | **367,307** | **13,284,463** | **230,607** | **13,021,540** | **22,619,750** | **16,079,110** | **7,052,440** | **9,598,210** |
| ***EXPENDITURES*** | | | | | | | | | |
| 1. Public Health and Safety | SAVES HVAC Replacement | - | - | - | 80,000 | - | - | - | (80,000) |
| | Public Facility Health & Safety, Energy Efficiency | - | - | 3,607,512 | 4,966,600 | 4,966,600 | 4,966,600 | | - |
| | Mental Health Partnerships | - | - | - | 2,175,000 | 2,175,000 | 2,175,000 | - | - |
| | SAVES Facility Improvements | - | - | - | - | 705,000 | - | 705,000 | 705,000 |
| | Dump Stations / Illegal Dumping | - | - | - | 300,000 | - | - | - | (300,000) |
| | Mutual Aid Regional Response | 40,333 | - | - | - | - | - | - | - |
| | Oasis vaccine clinic vinyl floor covering | - | 14,983 | - | 5,020 | 5,020 | - | - | - |
| | Sheriff Contract | - | 4,500,000 | 1,000,000 | 2,000,000 | 2,000,000 | 2,000,000 | - | - |
| | Emergency Operations Center Relocation | - | - | - | 2,000,000 | 2,000,000 | 100,000 | 1,900,000 | - |
| | Well-Being Lab - Mental Health Services | - | 146,300 | 95,700 | 453,700 | 453,700 | 453,700 | 700,000 | - |
| **1. Public Health Total** | | **40,333** | **4,661,283** | **4,703,212** | **11,980,320** | **12,305,320** | **9,695,300** | **3,305,000** | **325,000** |
| 2. Negative Economic Impacts | | | | | | | | | |
| | Business Retention | 212,142 | 195,000 | 50,000 | 600,000 | 600,000 | 600,000 | - | - |
| | Film Incentive Programs | 30,000 | 49,256 | - | 60,470 | 60,470 | 60,470 | - | - |
| | Business Grants | - | 54,966 | 21,000 | 45,040 | 45,040 | 45,040 | - | - |
| | Tourism | - | 68,993 | 53,829 | 100,270 | 100,270 | 56,000 | - | - |
| **2. Negative Economic Impacts Total** | | **242,142** | **368,215** | **124,829** | **805,780** | **805,780** | **761,510** | **-** | **-** |
| 3.Services to Disproportionately Impacted Communities | | | | | | | | | |
| | Library Services | 17,306 | 86,617 | 28,871 | 131,300 | 131,300 | 82,270 | 35,270 | - |
| | SAVES Operations | - | - | - | 150,000 | 150,000 | 150,000 | 150,000 | - |
| | Public Parks/Facilities Improvements | - | | - | 250,000 | 250,000 | 250,000 | 2,877,170 | - |
| | Battery Storage Project | - | - | - | 1,550,000 | 1,550,000 | - | - | - |
| | Park Facility Energy Improvements | - | - | 22,728 | 355,000 | 355,000 | 155,000 | - | - |
| | Affordable Housing Programs | | 2,000,000 | - | - | - | - | - | - |
| | Community Choice Aggregate Programs | | 1,754,220 | 745,780 | 745,780 | 745,780 | 745,780 | - | - |
| | Recreation Sponsorship Program | - | - | - | 75,000 | 75,000 | - | - | - |
| **3. Services to Disproportionately Impacted Communities Total** | | **17,306** | **3,840,837** | **797,379** | **3,257,080** | **3,257,080** | **1,383,050** | **3,062,440** | **-** |
| 4. Premium Pay | | | | | | | | | |
| | Premium Pay | - | 1,005,500 | - | 75,000 | 75,000 | - | - | - |
| **4. Premium Pay Total** | | **-** | **1,005,500** | **-** | **75,000** | **75,000** | **-** | **-** | **-** |
| 5. Water, Sewer & Broadband Infrastructure | | | | | | | | | |
| | Storm Water Basin & Recycled Water Projects | - | - | - | 400,000 | 400,000 | - | - | - |
| **5. Water, Sewer & Broadband Infrastructure Total** | | **-** | **-** | **-** | **400,000** | **400,000** | **-** | **-** | **-** |

AMERICAN RESCUE PLAN ACT
FY 2025 OPERATING & CIP BUDGET
REVENUES & EXPENDITURES BY PROGRAM

| ARPA Reporting Category | Project Description | FY 2022 Actual | FY 2023 Actual | FY 2024 Actual YTD | FY 2024 Adopted | FY 2024 Revised | FY 2024 Projected | FY 2025 Proposed | $ Chg |
|---|---|---|---|---|---|---|---|---|---|
| 6. Revenue Replacement | | | | | | | | | |
| | Multiagency Regional Resiliency Center (MARRC) | - | 2,500,000 | - | - | - | - | - | - |
| | Technology Infrastructure | 35,500 | 122,832 | - | - | - | - | - | - |
| | Unhoused Programs | - | - | 718,314 | 2,000,000 | 2,000,000 | 2,000,000 | - | - |
| | Hammack Center Demolition | - | 15,050 | 81,441 | 734,950 | 409,950 | 409,950 | | (325,000) |
| | Park Improvements | - | - | - | 500,000 | 500,000 | 250,000 | 250,000 | - |
| | Records Digitization | - | - | 165 | 2,200,000 | 2,200,000 | 1,255,000 | - | - |
| | Film Consultants | - | 59,300 | 47,975 | 59,300 | 59,300 | 59,300 | - | - |
| **6. Revenue Replacement Total** | | **35,500** | **2,697,182** | **847,895** | **5,494,250** | **5,169,250** | **3,974,250** | **250,000** | **(325,000)** |
| 7. Administrative & Other | | | | | | | | | |
| | AdministrativeCosts | 7,527 | 7,645 | 13,288 | 307,320 | 307,320 | 50,000 | 50,000 | - |
| **7. Administrative & Other Total** | | **7,527** | **7,645** | **13,288** | **307,320** | **307,320** | **50,000** | **50,000** | **-** |
| **Expenditure Total** | | **342,808** | **12,580,662** | **6,486,603** | **22,319,750** | **22,319,750** | **15,864,110** | **6,667,440** | **-** |
| **Remaining Allocation** | | **35,455,019** | **35,112,211** | **22,531,549** | **22,531,549** | **22,531,549** | **22,531,549** | **6,667,439** | |
| **Expenditures** | | **342,808** | **12,580,662** | **6,486,603** | **22,319,750** | **22,319,750** | **15,864,110** | **6,667,440** | |
| **Ending Available Fund Balance** | | **35,112,211** | **22,531,549** | **16,044,946** | **211,799** | **211,799** | **6,667,439** | **(1)** | |

CITY OF PALMDALE
FY 2025 PROPOSED BUDGET
CAPITAL IMPROVEMENT PROGRAM - BY PROJECT AND FUNDING SOURCE

| CIP | Org Description | Fund | Fund Description | 2024 Adopted | 2024 Projected | 2025 Proposed |
|---|---|---|---|---|---|---|
| **B0004** | **ADA COMPLIANCE** | 203 | PROP A FUND | 396,240 | 1,000 | 394,910 |
| **B0004** | **ADA COMPLIANCE** | 206 | LOCAL TRANSP FUND ART 3 | 220,000 | 16,000 | 409,000 |
| **B0004** | **ADA COMPLIANCE** | 280 | CDBG FUND | - | - | 800,000 |
| **B0004 Total** | | | | **616,240** | **17,000** | **1,603,910** |
| **B0013** | **ADA COMP-AVE Q 12/10TH-12TH E** | 280 | CDBG FUND | 175,730 | 130,000 | - |
| **B0013** | **ADA COMP-AVE Q 12/10TH-12TH E** | 214 | PROP C LOCAL RETURN | 6,180 | 5,990 | - |
| **B0013 Total** | | | | **181,910** | **135,990** | **-** |
| **D0001** | **AMARGOSA DRAINAGE** | 222 | AMARGOSA DRAINAGE FUND | 20,000 | - | 20,000 |
| **D0001 Total** | | | | **20,000** | **-** | **20,000** |
| **D0002** | **ANAVERDE DRAINAGE** | 223 | ANAVERDE DRAINAGE FUND | 20,000 | - | 20,000 |
| **D0002 Total** | | | | **20,000** | **-** | **20,000** |
| **D0003** | **PORTAL RIDGE DRAINAGE** | 224 | PORTAL RIDGE DRAINAGE FUND | 20,000 | - | 20,000 |
| **D0003 Total** | | | | **20,000** | **-** | **20,000** |
| **D0004** | **PEARLAND DRAINAGE** | 225 | PEARLAND DRAINAGE FUND | 20,000 | - | 20,000 |
| **D0004 Total** | | | | **20,000** | **-** | **20,000** |
| **D0008** | **AMARGOSA CRK UPPER RECHG PROJ** | 211 | MEASURE A LA COUNTY PARKS | 1,000,000 | 55,000 | 945,000 |
| **D0008** | **AMARGOSA CRK UPPER RECHG PROJ** | 222 | AMARGOSA DRAINAGE FUND | 339,020 | 120,000 | 219,020 |
| **D0008** | **AMARGOSA CRK UPPER RECHG PROJ** | 223 | ANAVERDE DRAINAGE FUND | 386,920 | - | 386,920 |
| **D0008** | **AMARGOSA CRK UPPER RECHG PROJ** | 224 | PORTAL RIDGE DRAINAGE FUND | 448,700 | - | 448,700 |
| **D0008** | **AMARGOSA CRK UPPER RECHG PROJ** | 225 | PEARLAND DRAINAGE FUND | 944,200 | - | 944,200 |
| **D0008** | **AMARGOSA CRK UPPER RECHG PROJ** | 226 | LITTLEROCK DRAINAGE FUND | 50,000 | - | 50,000 |
| **D0008** | **AMARGOSA CRK UPPER RECHG PROJ** | 230 | BIG ROCK DRAINAGE FUND | 73,400 | - | 73,400 |
| **D0008 Total** | | | | **3,242,240** | **175,000** | **3,067,240** |
| **D0101** | **DETENTION BASIN MAINT & REPAIR** | 101 | GENERAL FUND | 160,000 | - | 160,000 |
| **D0101 Total** | | | | **160,000** | **-** | **160,000** |
| **D0118** | **PEARLAND DRAINAGE PLAN STUDY** | 225 | PEARLAND DRAINAGE FUND | 530,000 | 50,000 | 480,000 |
| **D0118 Total** | | | | **530,000** | **50,000** | **480,000** |
| **D0119** | **OASIS PARK BASIN UPGRADE** | 225 | PEARLAND DRAINAGE FUND | 1,160,000 | 10,000 | 1,150,000 |

CITY OF PALMDALE
FY 2025 PROPOSED BUDGET
CAPITAL IMPROVEMENT PROGRAM - BY PROJECT AND FUNDING SOURCE

| CIP | Org Description | Fund | Fund Description | 2024 Adopted | 2024 Projected | 2025 Proposed |
|---|---|---|---|---|---|---|
| **D0119 Total** | | | | **1,160,000** | **10,000** | **1,150,000** |
| **D0120** | **40TH E/AVE R DRAINAGE IMPRV** | 225 | PEARLAND DRAINAGE FUND | 300,000 | 10,000 | 2,290,000 |
| **D0120 Total** | | | | **300,000** | **10,000** | **2,290,000** |
| **D0171** | **DRNG IMPR 25 W OLIVE DR/AVE S** | 225 | PEARLAND DRAINAGE FUND | 500,000 | - | 500,000 |
| **D0171 Total** | | | | **500,000** | **-** | **500,000** |
| **D0173** | **TS HILARY-BERNARDIN WALL RPR** | 225 | PEARLAND DRAINAGE FUND | 200,000 | 120,000 | 80,000 |
| **D0173 Total** | | | | **200,000** | **120,000** | **80,000** |
| **D0174** | **TS HILARY STORM DR RPR** | 225 | PEARLAND DRAINAGE FUND | 20,000 | - | - |
| **D0174 Total** | | | | **20,000** | **-** | **-** |
| **F0010** | **CITY FACILITIES** | 101 | GENERAL FUND | 171,180 | - | - |
| **F0010** | **CITY FACILITIES** | 229 | PUBLIC FACILITIES FUND | 120,470 | 171,180 | 120,470 |
| **F0010** | **CITY FACILITIES** | 240 | FEDERAL FUNDS FUND | - | - | 1,300,000 |
| **F0010** | **MAV CITY FACILITIES** | 157 | MEASURE AV | 450,000 | 205,000 | 245,000 |
| **F0010** | **CITY FACILITIES ARPA** | 158 | AMERICAN RESCUE PLAN FUND | 2,000,000 | 100,000 | 1,900,000 |
| **F0010 Total** | | | | **2,741,650** | **476,180** | **3,565,470** |
| **F0028** | **PTC WAYFINDING SIGNAGE** | 203 | PROP A FUND | 58,200 | 16,800 | 20,000 |
| **F0028 Total** | | | | **58,200** | **16,800** | **20,000** |
| **F0047** | **LIBRARY IMPROVEMENTS** | 241 | STATE GRANTS FUND | 698,000 | 425,000 | 273,000 |
| **F0047 Total** | | | | **698,000** | **425,000** | **273,000** |
| **F0052** | **PLAYHOUSE HVAC UPGRADE** | 220 | PARK DEVELOPMENT FUND | 200,000 | 200,000 | - |
| **F0052** | **PLAYHOUSE HVAC UPGRADE** | 229 | PUBLIC FACILITIES FUND | 200,100 | 200,100 | - |
| **F0052 Total** | | | | **400,100** | **400,100** | **-** |
| **F0056** | **CIVIC CENTER WAYFINDING** | 218 | MEASURE R LOCAL RETURN | 50,000 | - | - |
| **F0056 Total** | | | | **50,000** | **-** | **-** |
| **F0059** | **SAVES RELOCATION** | 280 | CDBG FUND | 5,000,000 | - | - |
| **F0059 Total** | | | | **5,000,000** | **-** | **-** |

CITY OF PALMDALE
FY 2025 PROPOSED BUDGET
CAPITAL IMPROVEMENT PROGRAM - BY PROJECT AND FUNDING SOURCE

| CIP | Org Description | Fund | Fund Description | 2024 Adopted | 2024 Projected | 2025 Proposed |
|---|---|---|---|---|---|---|
| **F0060** | **PTC TRANSIT INFRSTR IMPR** | 209 | MEASURE M FUND | 1,662,790 | 30,000 | 1,632,790 |
| **F0060 Total** | | | | **1,662,790** | **30,000** | **1,632,790** |
| **F0061** | **PTC SECURITY UPGRADE** | 203 | PROP A FUND | 60,000 | | - |
| **F0061 Total** | | | | **60,000** | | **-** |
| **F0062** | **SAVES/OASIS GENERATORS** | 241 | STATE GRANTS FUND | 28,980 | 57,820 | - |
| **F0062 Total** | | | | **28,980** | **57,820** | **-** |
| **F0082** | **PALMDALE FILM STAGE** | 101 | GENERAL FUND | 100,000 | - | 100,000 |
| **F0082** | **PALMDALE FILM STAGE** | 229 | PUBLIC FACILITIES FUND | - | - | 200,000 |
| **F0082 Total** | | | | **100,000** | **-** | **300,000** |
| **F0083** | **CITY WIDE SECURITY** | 157 | MEASURE AV | 2,187,490 | 450,000 | 1,250,000 |
| **F0083** | **CITY WIDE SECURITY** | 203 | PROP A FUND | 454,200 | 454,200 | - |
| **F0083 Total** | | | | **2,641,690** | **904,200** | **1,250,000** |
| **F0121** | **CITY DEV SVCS ELEVATOR REPAIR** | 229 | PUBLIC FACILITIES FUND | 120,000 | 120,000 | - |
| **F0121 Total** | | | | **120,000** | **120,000** | **-** |
| **F0122** | **FIRE SUPRESSION RETROFITTING** | 229 | PUBLIC FACILITIES FUND | 10,000 | 10,000 | - |
| **F0122 Total** | | | | **10,000** | **10,000** | **-** |
| **F0137** | **OASIS GENERATOR** | 158 | AMERICAN RESCUE PLAN FUND | 155,000 | 155,000 | - |
| **F0137 Total** | | | | **155,000** | **155,000** | **-** |
| **F0148** | **OASIS REC CNTR ROOF** | 101 | GENERAL FUND | 200,000 | - | 200,000 |
| **F0148 Total** | | | | **200,000** | **-** | **200,000** |
| **F0149** | **MK PARK REC CNTR CANOPY** | 101 | GENERAL FUND | 132,288 | - | 132,290 |
| **F0149 Total** | | | | **132,288** | **-** | **132,290** |
| **F0150** | **DEV SVCS BLDG PAINT** | 101 | GENERAL FUND | 100,000 | - | - |
| **F0150 Total** | | | | **100,000** | **-** | **-** |
| **F0156** | **HAMMACK CNT DEMO** | 158 | AMERICAN RESCUE PLAN FUND | 409,950 | 409,950 | - |
| **F0156 Total** | | | | **409,950** | **409,950** | **-** |

CITY OF PALMDALE
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CAPITAL IMPROVEMENT PROGRAM - BY PROJECT AND FUNDING SOURCE

| CIP | Org Description | Fund | Fund Description | 2024 Adopted | 2024 Projected | 2025 Proposed |
|---|---|---|---|---|---|---|
| **F0158** | **OASIS VINYL FLOORS** | 158 | AMERICAN RESCUE PLAN FUND | 5,020 | - | - |
| **F0158 Total** | | | | **5,020** | **-** | **-** |
| **F0161** | **CHIMBOLE/LIBRARY/CITY HALL IMP** | 101 | GENERAL FUND | 10,090 | 10,090 | - |
| **F0161** | **CHIMBOLE/LIBRARY/CITY HALL IMP** | 157 | MEASURE AV | 307,680 | - | 1,900,000 |
| **F0161 Total** | | | | **317,770** | **10,090** | **1,900,000** |
| **F0164** | **FACILITY REPAIR** | 229 | PUBLIC FACILITIES FUND | 75,000 | | - |
| **F0164 Total** | | | | **75,000** | | **-** |
| **F0178** | **SAVES TENANT IMPR** | 158 | AMERICAN RESCUE PLAN FUND | 705,000 | - | 705,000 |
| **F0178** | **SAVES TENANT IMPR** | 280 | CDBG FUND | - | - | 100,000 |
| **F0178 Total** | | | | **705,000** | **-** | **805,000** |
| **G0007** | **PAVEMENT MANAGEMENT PROGRAM** | 207 | LOCAL TRANSP FUND ART 8 | - | 205,650 | 130,000 |
| **G0007** | **PAVEMENT MANAGEMENT PROGRAM** | 214 | PROP C LOCAL RETURN | 300,620 | - | - |
| **G0007 Total** | | | | **300,620** | **205,650** | **130,000** |
| **G0026** | **PUBLIC WORKS SOFTWARE UPGRADE** | 201 | GAS TAX FUND | 175,320 | 17,000 | 158,320 |
| **G0026** | **PUBLIC WORKS SOFTWARE UPGRADE** | 254 | SEWER MAINT ASSESSMENT DIST | 92,810 | - | - |
| **G0026** | **PUBLIC WORKS SOFTWARE UPGRADE** | 255 | STREET LIGHT COUNTY DISTRICT | 98,850 | - | - |
| **G0026 Total** | | | | **366,980** | **17,000** | **158,320** |
| **G0028** | **HIGH SPEED RAIL ADM REIMB AGMT** | 241 | STATE GRANTS FUND | 570 | 570 | - |
| **G0028 Total** | | | | **570** | **570** | **-** |

CITY OF PALMDALE
FY 2025 PROPOSED BUDGET
CAPITAL IMPROVEMENT PROGRAM - BY PROJECT AND FUNDING SOURCE

| CIP | Org Description | Fund | Fund Description | 2024 Adopted | 2024 Projected | 2025 Proposed |
|---|---|---|---|---|---|---|
| G0030 | GENERAL PLAN UPDATE | 101 | GENERAL FUND | 638,200 | 148,510 | - |
| G0030 | GENERAL PLAN UPDATE | 241 | STATE GRANTS FUND | 68,760 | 51,760 | 17,000 |
| **G0030 Total** | | | | **706,960** | **200,270** | **17,000** |
| G0095 | PUB FAC ENERGY EFFICIENCY | 101 | GENERAL FUND | - | 8,350 | 141,660 |
| G0095 | PUB FAC ENERGY EFFICIENCY | 157 | MEASURE AV | - | 155,610 | 5,893,290 |
| G0095 | PUB FAC ENERGY EFFICIENCY | 158 | AMERICAN RESCUE PLAN FUND | 4,966,600 | 4,966,600 | - |
| **G0095 Total** | | | | **4,966,600** | **5,130,560** | **6,034,950** |
| G0096 | BATTERY STORAGE MCADAM | 157 | MEASURE AV | 805,150 | 805,150 | - |
| G0096 | BATTERY STORAGE MCADAM | 158 | AMERICAN RESCUE PLAN FUND | 1,550,000 | - | - |
| G0096 | BATTERY STORAGE PROJECT | 205 | AIR QUALITY IMPROVEMENT FUND | 23,000 | - | 23,000 |
| **G0096 Total** | | | | **2,378,150** | **805,150** | **23,000** |
| G0157 | DIGITAL EQUITY STUDY | 241 | STATE GRANTS FUND | 325,000 | 160,000 | 165,000 |
| G0157 | BROADBAND INFRASTRUCTURE | 158 | AMERICAN RESCUE PLAN FUND | 100,000 | - | - |
| **G0157 Total** | | | | **425,000** | **160,000** | **165,000** |
| G0162 | LOCAL ROADWAY SAFETY PLAN | 101 | GENERAL FUND | 8,000 | 8,000 | - |
| G0162 | LOCAL ROADWAY SAFETY PLAN | 241 | STATE GRANTS FUND | 72,000 | 72,000 | - |
| **G0162 Total** | | | | **80,000** | **80,000** | **-** |
| G0165 | EECBG GRANT | 241 | STATE GRANTS FUND | 197,390 | - | - |
| **G0165 Total** | | | | **197,390** | **-** | **-** |
| G0166 | SPORTSFIELD LIGHTING | 157 | MEASURE AV | 5,606,180 | - | - |
| **G0166 Total** | | | | **5,606,180** | **-** | **-** |
| G0167 | FACILITY ENERGY EFFICIENCY | 101 | GENERAL FUND | 592,712 | - | - |
| **G0167 Total** | | | | **592,712** | **-** | **-** |
| G0168 | RECORD DIGITIZATION | 158 | AMERICAN RESCUE PLAN FUND | 2,200,000 | 1,255,000 | - |
| **G0168 Total** | | | | **2,200,000** | **1,255,000** | **-** |
| G0172 | DOT CHARGING FAC INFRASTRUCTURE | 240 | FEDERAL FUNDS FUND | - | - | 1,844,000 |

CITY OF PALMDALE
FY 2025 PROPOSED BUDGET
CAPITAL IMPROVEMENT PROGRAM - BY PROJECT AND FUNDING SOURCE

| CIP | Org Description | Fund | Fund Description | 2024 Adopted | 2024 Projected | 2025 Proposed |
|---|---|---|---|---|---|---|
| **G0172 Total** | | | | **-** | **-** | **1,844,000** |
| **L0011** | **AUTO MALL LANDSCAPE PROJECT** | 481 | AD90-2 7TH ST WEST IMPROVEMENT | 20,640 | 20,640 | - |
| **L0011 Total** | | | | **20,640** | **20,640** | **-** |
| **L0013** | **LMD DESIGN AND RENOVATION** | 251 | LANDSCAPE MAINTENANCE FUND | 817,240 | 250,000 | - |
| **L0013 Total** | | | | **817,240** | **250,000** | **-** |
| **L0088** | **PALM BLVD/47TH LNDSCP** | 214 | PROP C LOCAL RETURN | 236,790 | 265,000 | - |
| **L0088 Total** | | | | **236,790** | **265,000** | **-** |
| **P0009** | **SAM YELLEN PARK** | 157 | MEASURE AV | 9,998,780 | 10,798,780 | - |
| **P0009** | **SAM YELLEN PARK** | 211 | MEASURE A LA COUNTY PARKS | 1,549,300 | 1,549,300 | - |
| **P0009** | **SAM YELLEN PARK** | 220 | PARK DEVELOPMENT FUND | 8,393,100 | 7,593,100 | - |
| **P0009 Total** | | | | **19,941,180** | **19,941,180** | **-** |
| **P0027** | **DRY TOWN WP-REFURBISHMENT** | 250 | PARK ASSESSMENTS FUND | 385,000 | 385,000 | - |
| **P0027 Total** | | | | **385,000** | **385,000** | **-** |
| **P0042** | **COMMUNITY PUBLIC ART PROJECTS** | 156 | PUBLIC ART FUND | 60,000 | - | 60,000 |
| **P0042** | **COMMUNITY PUBLIC ART PROJECTS** | 242 | MISC GRANT/DEVELOPER CONTRIB | 44,760 | 19,150 | 25,610 |
| **P0042 Total** | | | | **104,760** | **19,150** | **85,610** |
| **P0052** | **MARIE KERR PARK N RIDE** | 158 | AMERICAN RESCUE PLAN FUND | - | - | - |
| **P0052** | **MARIE KERR PARK N RIDE** | 203 | PROP A FUND | 2,023,000 | 200,000 | 4,823,000 |
| **P0052** | **MARIE KERR PARK N RIDE** | 211 | MEASURE A LA COUNTY PARKS | 487,060 | 487,060 | - |
| **P0052** | **MARIE KERR PARK N RIDE** | 254 | SEWER MAINT ASSESSMENT DIST | - | - | 1,000,000 |
| **P0052 Total** | | | | **2,510,060** | **687,060** | **5,823,000** |
| **P0054** | **RANCHO VISTA PARK** | 156 | PUBLIC ART FUND | 2,840 | - | - |
| **P0054** | **RANCHO VISTA PARK** | 220 | PARK DEVELOPMENT FUND | 322,780 | 322,780 | - |
| **P0054 Total** | | | | **325,620** | **322,780** | **-** |
| **P0105** | **MK PARK SWIM DECK & COVER** | 211 | MEASURE A LA COUNTY PARKS | 1,000,000 | 500,000 | 500,000 |
| **P0105** | **MK PARK SWIM DECK** | 157 | MEASURE AV | 200,000 | 46,000 | 165,000 |
| **P0105 Total** | | | | **1,200,000** | **546,000** | **665,000** |

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FY 2025 PROPOSED BUDGET
CAPITAL IMPROVEMENT PROGRAM - BY PROJECT AND FUNDING SOURCE

| CIP | Org Description | Fund | Fund Description | 2024 Adopted | 2024 Projected | 2025 Proposed |
|---|---|---|---|---|---|---|
| **P0107** | **MEMORIAL & HONOR WALL** | 157 | MEASURE AV | - | 2,280 | - |
| **P0107 Total** | | | | **-** | **2,280** | **-** |
| **P0109** | **SPORTS FIELD MAINTENANCE** | 157 | MEASURE AV | 3,192,270 | 2,483,810 | 1,512,440 |
| **P0109** | **SPORTS FIELD MAINTENANCE** | 242 | MISC GRANT/DEVELOPER CONTRIB | 115,000 | - | 115,000 |
| **P0109 Total** | | | | **3,307,270** | **2,483,810** | **1,627,440** |
| **P0110** | **PARK MASTER PLAN** | 157 | MEASURE AV | 126,530 | 90,000 | - |
| **P0110 Total** | | | | **126,530** | **90,000** | **-** |
| **P0111** | **SPORTS FIELD LED LIGHT RETROFI** | 157 | MEASURE AV | 1,061,320 | 1,061,320 | 3,200,000 |
| **P0111 Total** | | | | **1,061,320** | **1,061,320** | **3,200,000** |
| **P0115** | **DESERT SANDS PARK IMPROVEMENTS** | 229 | PUBLIC FACILITIES FUND | - | 1,500 | - |
| **P0115 Total** | | | | **-** | **1,500** | **-** |
| **P0116** | **MK PARK IMPROVEMENTS** | 158 | AMERICAN RESCUE PLAN FUND | 100,000 | - | - |
| **P0116 Total** | | | | **100,000** | **-** | **-** |
| **P0117** | **BOTW SNACK BAR** | 158 | AMERICAN RESCUE PLAN FUND | 500,000 | 250,000 | 250,000 |
| **P0117 Total** | | | | **500,000** | **250,000** | **250,000** |
| **P0130** | **MCADAM PARK RENO** | 242 | MISC GRANT/DEVELOPER CONTRIB | 275,000 | 275,000 | - |
| **P0130** | **MCADAM PARK RENOV** | 157 | MEASURE AV | 508,100 | 508,100 | 6,300,000 |
| **P0130** | **MCADAM PARK RENOV** | 254 | SEWER MAINT ASSESSMENT DIST | - | - | 200,000 |
| **P0130 Total** | | | | **783,100** | **783,100** | **6,500,000** |

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CAPITAL IMPROVEMENT PROGRAM - BY PROJECT AND FUNDING SOURCE

| CIP | Org Description | Fund | Fund Description | 2024 Adopted | 2024 Projected | 2025 Proposed |
|---|---|---|---|---|---|---|
| **P0131** | **COURSON REVITALIZATION GRNT** | 242 | MISC GRANT/DEVELOPER CONTRIB | 3,959,140 | 250,000 | 3,709,140 |
| **P0131** | **COURSON REVITALIZATION** | 101 | GENERAL FUND | 150,000 | - | 150,000 |
| **P0131** | **COURSON REVITALIZATION** | 156 | PUBLIC ART FUND | - | - | 50,000 |
| **P0131** | **COURSON REVITALIZATION** | 158 | AMERICAN RESCUE PLAN FUND | 250,000 | 250,000 | 2,877,170 |
| **P0131 Total** | | | | **4,359,140** | **500,000** | **6,786,310** |
| **P0140** | **MK PARK POOL ENCLOSURE** | 157 | MEASURE AV | 550,000 | - | 550,000 |
| **P0140 Total** | | | | **550,000** | **-** | **550,000** |
| **P0144** | **BARREL SPRINGS TRL IMPR** | 220 | PARK DEVELOPMENT FUND | 42,000 | - | 42,000 |
| **P0144** | **BARREL SPRINGS TRL IMPR** | 242 | MISC GRANT/DEVELOPER CONTRIB | 308,000 | - | - |
| **P0144 Total** | | | | **350,000** | **-** | **42,000** |
| **P0151** | **MCADAM CULTURAL ART** | 156 | PUBLIC ART FUND | 75,000 | - | 75,000 |
| **P0151** | **MCADAM CULTURAL ART** | 157 | MEASURE AV | - | - | 150,000 |
| **P0151** | **MCADAM CULTURAL ART** | 220 | PARK DEVELOPMENT FUND | 75,000 | - | 75,000 |
| **P0151** | **MCADAM CULTURAL ART** | 242 | MISC GRANT/DEVELOPER CONTRIB | 150,000 | - | - |
| **P0151 Total** | | | | **300,000** | **-** | **300,000** |
| **P0172** | **PELONA VISTA P&R LIGHTING** | 203 | PROP A FUND | 285,000 | 285,000 | - |
| **P0172 Total** | | | | **285,000** | **285,000** | **-** |
| **P0176** | **YELLEN SOCCER** | 241 | STATE GRANTS FUND | 260,000 | 260,000 | - |
| **P0176 Total** | | | | **260,000** | **260,000** | **-** |
| **P01X1** | **PALMDALE AMP WIFI** | 220 | PARK DEVELOPMENT FUND | - | - | 225,000 |
| **P01X1 Total** | | | | **-** | **-** | **225,000** |
| **P01X2** | **DT LITTLE MINER REFURBISHMENT** | 300 | WATER PARK | - | - | 180,000 |
| **P01X2 Total** | | | | **-** | **-** | **180,000** |
| **P01X3** | **DT PATHWAY LIGHTING RETROFIT** | 300 | WATER PARK | - | - | 350,000 |
| **P01X3 Total** | | | | **-** | **-** | **350,000** |

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FY 2025 PROPOSED BUDGET
CAPITAL IMPROVEMENT PROGRAM - BY PROJECT AND FUNDING SOURCE

| CIP | Org Description | Fund | Fund Description | 2024 Adopted | 2024 Projected | 2025 Proposed |
|---|---|---|---|---|---|---|
| **P01X4** | **DT SPLASH POOL PLASTER REPAIR** | 300 | WATER PARK | - | - | 150,000 |
| **P01X4 Total** | | | | **-** | **-** | **150,000** |
| **P01X5** | **DT TOWER B MECHANICAL REFURB** | 300 | WATER PARK | - | - | 216,000 |
| **P01X5 Total** | | | | **-** | **-** | **216,000** |
| **P01X6** | **DT TOWER B REPAIRS** | 300 | WATER PARK | - | - | 750,000 |
| **P01X6 Total** | | | | **-** | **-** | **750,000** |
| **P01X7** | **PLAYHOUSE INFRSTR. MAINTENANCE** | 220 | PARK DEVELOPMENT FUND | - | - | 275,000 |
| **P01X7 Total** | | | | **-** | **-** | **275,000** |
| **S0025** | **STREET RESURFACING PROGRAM** | 201 | GAS TAX FUND | 9,329,950 | 6,209,730 | 2,150,000 |
| **S0025** | **STREET RESURFACING PROGRAM** | 207 | LOCAL TRANSP FUND ART 8 | 2,481,150 | 3,451,370 | - |
| **S0025** | **STREET RESURFACING PROGRAM** | 210 | ROAD MAINT & REHAB ACCT FUND | 6,505,670 | 6,505,670 | 1,800,000 |
| **S0025** | **STREET RESURFACING PROGRAM** | 214 | PROP C LOCAL RETURN | 5,246,610 | 4,030,620 | 1,216,000 |
| **S0025 Total** | | | | **23,563,380** | **20,197,390** | **5,166,000** |
| **S0040** | **RANCHO VISTA GRADE SEP PH II** | 201 | GAS TAX FUND | - | - | 400,000 |
| **S0040 Total** | | | | **-** | **-** | **400,000** |
| **S0044** | **NO CO FORUM ITS EXPANSION** | 203 | PROP A FUND | 385,650 | 3,057,980 | - |
| **S0044** | **NO CO FORUMITS EXPANSION** | 204 | PROP C FUND | 4,106,110 | 4,063,630 | - |
| **S0044 Total** | | | | **4,491,760** | **7,121,610** | **-** |
| **S0049** | **SR 138 PALMDALE BLVD 5TH/10TH** | 208 | MEASURE R FUND | 19,856,960 | 980,960 | 18,876,000 |
| **S0049 Total** | | | | **19,856,960** | **980,960** | **18,876,000** |
| **S0050** | **SR 138/10TH ST W INTERCHANGE** | 208 | MEASURE R FUND | 24,151,430 | 800,000 | 23,351,430 |
| **S0050 Total** | | | | **24,151,430** | **800,000** | **23,351,430** |
| **S0051** | **SR 138/PLMDL BLVD SB 14 RAMP** | 208 | MEASURE R FUND | 31,253,250 | 2,700,000 | 39,615,370 |
| **S0051** | **SR 138/PLMDL BLVD SB 14 RAMP** | 209 | MEASURE M FUND | 3,351,220 | - | 3,351,220 |
| **S0051 Total** | | | | **34,604,470** | **2,700,000** | **42,966,590** |
| **S0055** | **SR 138 AVE N OVERCROSSING** | 208 | MEASURE R FUND | 6,303,190 | 50,000 | 6,253,190 |

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CAPITAL IMPROVEMENT PROGRAM - BY PROJECT AND FUNDING SOURCE

| CIP | Org Description | Fund | Fund Description | 2024 Adopted | 2024 Projected | 2025 Proposed |
|---|---|---|---|---|---|---|
| **S0055 Total** | | | | **6,303,190** | **50,000** | **6,253,190** |
| **S0058** | **AVE R COMPLETE STRT & SAFE RTS** | 201 | GAS TAX FUND | 500,000 | 55,450 | 1,521,090 |
| **S0058** | **AVE R COMPLETE STRT & SAFE RTS** | 207 | LOCAL TRANSP FUND ART 8 | 1,716,720 | 640,190 | - |
| **S0058** | **AVE R COMPLETE STRT & SAFE RTS** | 209 | MEASURE M FUND | 1,636,720 | 1,636,720 | - |
| **S0058** | **AVE R COMPLETE STRT & SAFE RTS** | 240 | FEDERAL FUNDS FUND | 9,786,900 | 9,737,720 | 49,180 |
| **S0058 Total** | | | | **13,640,340** | **12,070,080** | **1,570,270** |
| **S0061** | **AVENUE R ITS SIGNAL SYNC** | 203 | PROP A FUND | 589,430 | 30,000 | 559,430 |
| **S0061** | **AVENUE R ITS SIGNAL SYNC** | 204 | PROP C FUND | 2,880,170 | - | 2,880,170 |
| **S0061 Total** | | | | **3,469,600** | **30,000** | **3,439,600** |
| **S0062** | **COUNTY PAVEMENT PROJECT** | 218 | MEASURE R LOCAL RETURN | 365,550 | - | 365,550 |
| **S0062** | **COUNTY PAVEMENT PROJECT** | 219 | MEASURE M LOCAL RETURN | 575,090 | - | 575,090 |
| **S0062** | **COUNTY PAVEMENT PROJ CONTRIB** | 201 | GAS TAX FUND | 491,310 | 100,000 | 1,242,510 |
| **S0062** | **COUNTY PAVEMENT PROJ CONTRIB** | 254 | SEWER MAINT ASSESSMENT DIST | - | - | 364,800 |
| **S0062** | **COUNTY PAVEMENT PROJ** | 207 | LOCAL TRANSP FUND ART 8 | 268,300 | 100,000 | 168,300 |
| **S0062** | **COUNTY PAVEMENT PROJ** | 210 | ROAD MAINT & REHAB ACCT FUND | 1,191,380 | 800,000 | 391,380 |
| **S0062 Total** | | | | **2,891,630** | **1,000,000** | **3,107,630** |
| **S0066** | **HSIP ROUNDABOUT @ S-8 & 40TH E** | 208 | MEASURE R FUND | 60,360 | 60,360 | - |
| **S0066** | **HSIP ROUNDABOUT @ S-8 & 40TH E** | 240 | FEDERAL FUNDS FUND | 2,585,180 | 2,585,180 | - |
| **S0066** | **S8 & 40TH EST** | 156 | PUBLIC ART FUND | 50,000 | - | 50,000 |
| **S0066** | **S8 & 40TH EAST** | 218 | MEASURE R LOCAL RETURN | 1,636,570 | 1,636,570 | - |
| **S0066 Total** | | | | **4,332,110** | **4,282,110** | **50,000** |
| **S0067** | **CIVIC CENTER COMPLETE STREETS** | 201 | GAS TAX FUND | 604,080 | 406,570 | 197,510 |
| **S0067** | **CIVIC CENTER COMPLETE STREETS** | 241 | STATE GRANTS FUND | 763,470 | 770,000 | - |
| **S0067** | **CIVIC CENTER COMPLETE STREETS** | 218 | MEASURE R LOCAL RETURN | 119,000 | 150,000 | - |
| **S0067** | **CIVIC CENTER COMPLETE STREETS** | 219 | MEASURE M LOCAL RETURN | 2,602,350 | 2,602,350 | - |
| **S0067 Total** | | | | **4,088,900** | **3,928,920** | **197,510** |

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CAPITAL IMPROVEMENT PROGRAM - BY PROJECT AND FUNDING SOURCE

| CIP | Org Description | Fund | Fund Description | 2024 Adopted | 2024 Projected | 2025 Proposed |
|---|---|---|---|---|---|---|
| **S0072** | **RV AND SIERRA AT GRADE SEP** | 204 | PROP C FUND | 1,273,150 | - | 1,273,150 |
| **S0072 Total** | | | | **1,273,150** | **-** | **1,273,150** |
| **S0075** | **RV BLVD SH RR SAFETY CROSSING** | 240 | FEDERAL FUNDS FUND | 3,862,380 | 458,660 | 3,403,720 |
| **S0075 Total** | | | | **3,862,380** | **458,660** | **3,403,720** |
| **S0077** | **20TH STREET WEST BRIDGE** | 242 | MISC GRANT/DEVELOPER CONTRIB | 742,100 | - | 742,100 |
| **S0077 Total** | | | | **742,100** | **-** | **742,100** |
| **S0094** | **DOMENIC MASSARI BIKE LANE** | 206 | LOCAL TRANSP FUND ART 3 | - | 8,150 | - |
| **S0094** | **DOMENIC MASSARI BIKE LANE** | 241 | STATE GRANTS FUND | 64,720 | 64,720 | - |
| **S0094 Total** | | | | **64,720** | **72,870** | **-** |
| **S00X1** | **PALMDALE BLVD ACQUISITION** | 201 | GAS TAX FUND | - | - | 500,000 |
| **S00X1 Total** | | | | **-** | **-** | **500,000** |
| **S00X2** | **AVE T DESIGN & ENVIRONMENTAL** | 210 | ROAD MAINT & REHAB ACCT FUND | - | - | 2,500,000 |
| **S00X2 Total** | | | | **-** | **-** | **2,500,000** |
| **S0124** | **AVE M RESURFACING** | 214 | PROP C LOCAL RETURN | 300,000 | - | 300,000 |
| **S0124 Total** | | | | **300,000** | **-** | **300,000** |
| **S0125** | **AVE M SR14 TO 10TH PUB ART** | 218 | MEASURE R LOCAL RETURN | 255,000 | - | 255,000 |
| **S0125 Total** | | | | **255,000** | **-** | **255,000** |
| **S0126** | **AVE M INTERCHG IMPRV** | 208 | MEASURE R FUND | 6,615,380 | - | 6,615,380 |
| **S0126 Total** | | | | **6,615,380** | **-** | **6,615,380** |
| **S0142** | **AVE M GRADE SEPARATION EARMARK** | 157 | MEASURE AV | 1,000,000 | - | - |
| **S0142** | **AVE M GRADE SEPARATION EARMARK** | 240 | FEDERAL FUNDS FUND | - | - | 1,500,000 |
| **S0142** | **AVE M GRADE SEPARATION EARMARK** | 219 | MEASURE M LOCAL RETURN | - | - | 500,000 |
| **S0142 Total** | | | | **1,000,000** | **-** | **2,000,000** |

CITY OF PALMDALE
FY 2025 PROPOSED BUDGET
CAPITAL IMPROVEMENT PROGRAM - BY PROJECT AND FUNDING SOURCE

| CIP | Org Description | Fund | Fund Description | 2024 Adopted | 2024 Projected | 2025 Proposed |
|---|---|---|---|---|---|---|
| **S0143** | **GUARDRAIL MAINTENANCE** | 201 | GAS TAX FUND | 479,000 | 479,000 | - |
| **S0143 Total** | | | | **479,000** | **479,000** | **-** |
| **S0145** | **AVE R SH RR SAFETY CRS** | 240 | FEDERAL FUNDS FUND | 1,000,000 | 800,000 | 200,000 |
| **S0145 Total** | | | | **1,000,000** | **800,000** | **200,000** |
| **S0146** | **SR138 PLMD BLVD SIDEWALK GAP C** | 209 | MEASURE M FUND | 550,000 | - | 550,000 |
| **S0146 Total** | | | | **550,000** | **-** | **550,000** |
| **S0147** | **NEC AVE R & SH RT TURN LANE** | 219 | MEASURE M LOCAL RETURN | 750,000 | | - |
| **S0147 Total** | | | | **750,000** | | **-** |
| **S0155** | **MUSICAL ROAD** | 158 | AMERICAN RESCUE PLAN FUND | 100,000 | 56,000 | - |
| **S0155 Total** | | | | **100,000** | **56,000** | **-** |
| **S0169** | **PARKING ENF/SIGNAGE/SWEEPING** | 157 | MEASURE AV | 450,000 | 450,000 | - |
| **S0169 Total** | | | | **450,000** | **450,000** | **-** |
| **S0177** | **AVTA BUS STOPS** | 203 | PROP A FUND | 100,000 | 50,000 | 100,000 |
| **S0177 Total** | | | | **100,000** | **50,000** | **100,000** |
| **T0006** | **TRAFFIC SIGNAL LEFT PHASING** | 221 | TRAFFIC IMPACT FUND | 100,000 | - | 100,000 |
| **T0006 Total** | | | | **100,000** | **-** | **100,000** |
| **T0027** | **15 E/SR 138 INTRSCTN IMPRVMT** | 204 | PROP C FUND | 247,220 | 247,230 | - |
| **T0027** | **15 E/DR 138 INTERSCTN IMPR** | 214 | PROP C LOCAL RETURN | - | | - |
| **T0027 Total** | | | | **247,220** | **247,230** | **-** |
| **T0031** | **AVE R 45TH ST E TRAFFIC SIGNAL** | 221 | TRAFFIC IMPACT FUND | 606,760 | 300,000 | - |
| **T0031 Total** | | | | **606,760** | **300,000** | **-** |
| **T0032** | **RVB & DIVISION ST TRAFFIC** | 210 | ROAD MAINT & REHAB ACCT FUND | 802,970 | 80,970 | 700,000 |
| **T0032 Total** | | | | **802,970** | **80,970** | **700,000** |

CITY OF PALMDALE
FY 2025 PROPOSED BUDGET
CAPITAL IMPROVEMENT PROGRAM - BY PROJECT AND FUNDING SOURCE

| CIP | Org Description | Fund | Fund Description | 2024 Adopted | 2024 Projected | 2025 Proposed |
|---|---|---|---|---|---|---|
| **T0033** | **Traffic Signal - Auto Ctr & 5t** | 201 | GAS TAX FUND | 93,350 | 93,350 | - |
| **T0033 Total** | | | | **93,350** | **93,350** | **-** |
| **T0127** | **TRAFFIC SIGNAL M & 20TH E** | 219 | MEASURE M LOCAL RETURN | 1,588,830 | 1,523,810 | - |
| **T0127 Total** | | | | **1,588,830** | **1,523,810** | **-** |
| **T0129** | **RVB & ARMFIELD SIGNAL** | 210 | ROAD MAINT & REHAB ACCT FUND | 860,960 | 860,960 | - |
| **T0129 Total** | | | | **860,960** | **860,960** | **-** |
| **T0163** | **CITYWIDE SIGNAL MOD** | 240 | FEDERAL FUNDS FUND | 5,857,920 | - | 5,857,920 |
| **T0163** | **CITYWIDE SIGNAL MOD** | 218 | MEASURE R LOCAL RETURN | 650,880 | - | 650,880 |
| **T0163 Total** | | | | **6,508,800** | **-** | **6,508,800** |
| **T0170** | **TECHNOLOGY DR & 3 ST E** | 210 | ROAD MAINT & REHAB ACCT FUND | 1,150,000 | - | 1,150,000 |
| **T0170 Total** | | | | **1,150,000** | **-** | **1,150,000** |
| **U0001** | **STORM GRADE UPGRADE** | 225 | PEARLAND DRAINAGE FUND | 1,000,000 | - | 1,000,000 |
| **U0001** | **STORM GRADE UPGRADE** | 228 | SEWER UPGRADE FUND | 434,110 | 100,000 | 334,110 |
| **U0001** | **STORM GRADE UPGRADE** | 254 | SEWER MAINT ASSESSMENT DIST | 2,700,000 | - | 2,700,000 |
| **U0001 Total** | | | | **4,134,110** | **100,000** | **4,034,110** |
| **U0002** | **LIFT STATION ELIM SEWER REPAIR** | 254 | SEWER MAINT ASSESSMENT DIST | 1,955,810 | 200,000 | 1,747,290 |
| **U0002 Total** | | | | **1,955,810** | **200,000** | **1,747,290** |
| **U0003** | **CITY WIDE SEWER REPAIRS** | 254 | SEWER MAINT ASSESSMENT DIST | - | 5,600 | 250,000 |
| **U0003 Total** | | | | **-** | **5,600** | **250,000** |
| **U0004** | **SEWER MANHOLE REPAIR AND RAISE** | 254 | SEWER MAINT ASSESSMENT DIST | 1,087,670 | 250,120 | - |
| **U0004 Total** | | | | **1,087,670** | **250,120** | **-** |
| **U0134** | **FLEET MAINTENANCE BLDG** | 254 | SEWER MAINT ASSESSMENT DIST | 4,000,000 | 250,000 | 3,750,000 |
| **U0134 Total** | | | | **4,000,000** | **250,000** | **3,750,000** |

CITY OF PALMDALE
FY 2025 PROPOSED BUDGET
CAPITAL IMPROVEMENT PROGRAM - BY PROJECT AND FUNDING SOURCE

| CIP | Org Description | Fund | Fund Description | 2024 Adopted | 2024 Projected | 2025 Proposed |
|---|---|---|---|---|---|---|
| **U0135** | **PRWA ADV RCYCL WATER PRJ** | 158 | AMERICAN RESCUE PLAN FUND | 400,000 | - | - |
| **U0135 Total** | | | | **400,000** | **-** | **-** |
| **Grand Total** | | | | **260,478,620** | **98,980,790** | **197,895,100** |

CITY OF PALMDALE
FY 2025 PROPOSED BUDGET
PERSONNEL REQUESTS

| | | | | | | | FUNDING SOURCE | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ref | Status | Division | Section | Position Title Requested | Union (Y/N) | Range | Landscape Maintenance Fund | MAV | Housing Asset Fun | 2025 Total | On-Boarding Expenses |
| | NEW POSITION REQUESTS | | | | | | | | | | |
| 1 | FT | Neighborhood Services | Housing | Office Assistant I/II | No | 20/22 | | | 72,560 | 72,560 | 3,500 |
| 10 | FT | Public Works - Maintenance | Landscape | Lead Worker Graffiti Abatement | Yes | 29 | | 93,500 | | 93,500 | 3,500 |
| 11 | FT | Public Works - Parks Maintenance | Parks | Maintenance Specialist | Yes | 31 | 96,000 | | | 96,000 | 3,500 |
| | | | | **New Position Total** | | | **$ 96,000** | **$ 93,500** | **$ 72,560** | **$ 262,060** | **$ 10,500** |

CITY OF PALMDALE
FY 2025 PROPOSED BUDGET
CAPITAL OUTLAY REQUESTS

| Ref | | Department | Division | Fleet | Information Technology | FY 2024-25 Proposed |
|---|---|---|---|---|---|---|
| | **Information Technology** | | | | | |
| 1 | OpenGov Procurement and Contracts Software | Operations | Purchasing & Contracts | | 166,000 | 166,000 |
| 2 | Azure Site Recovery | Operations | Information Technology | | 25,000 | 25,000 |
| 3 | Conference Room Update | Operations | Information Technology | | 25,000 | 25,000 |
| 4 | Backup System Replacement | Operations | Information Technology | | 250,000 | 250,000 |
| 5 | 3 Year IT Strategic Plan | Operations | Information Technology | | 75,000 | 75,000 |
| 6 | Security Operations Center (service) | Operations | Information Technology | | 95,000 | 95,000 |
| | | | **Subtotal** | **-** | **636,000** | **636,000** |
| | **Capital Outlay** | | | | | |
| 7 | Laser Level Package - Toro Field Pro | Public Works | Maintenance - Parks | 9,000 | | 9,000 |
| 8 | Brush Cutter Attachment for Dingo | Public Works | Maintenance - Landscape | 11,000 | | 11,000 |
| 9 | Stump Grinder Attachment for Dingo | Public Works | Maintenance - Landscape | 6,500 | | 6,500 |
| 10 | Turf Top Dresser | Public Works | Maintenance - Parks | 50,000 | | 50,000 |
| 11 | 898314 Small Tractor w/Hydraulic Package - Sports Turf | Public Works | Maintenance - Parks | 65,000 | | 65,000 |
| 12 | Klopping-Hardie Turf Renovation Implement | Public Works | Maintenance - Parks | 23,000 | | 23,000 |
| 13 | Boom Sprayer for Utility Vehicle | Public Works | Maintenance - Parks | 8,000 | | 8,000 |
| 14 | HD Dual Axle Dump Trailer | Public Works | Maintenance - Landscape | 20,000 | | 20,000 |
| | | | **Subtotal** | **192,500** | **-** | **192,500** |
| | **Replacement Vehicles** | | | | | |
| 15 | 500113 Water Truck (4K Copasity) | Public Works | Maintenance - Fleet | 250,000 | | 250,000 |
| 16 | Ford F250 or Electric Transit Van (ACF Compliant) | Public Works | Maintenance - Fleet | 85,000 | | 85,000 |
| 17 | 808198 Loader Equivalent | Public Works | Maintenance - Streets | 260,000 | | 260,000 |
| 18 | 512011 Concrete Truck | Public Works | Maintenance - Fleet | 100,000 | | 100,000 |
| 19 | 700195 Paver | Public Works | Maintenance - Streets | 375,000 | | 375,000 |
| 20 | 310063 E-Transit Van | Public Works | Maintenance - Fleet | 85,000 | | 85,000 |
| 21 | 310141 F150 4x4 | Public Works | Maintenance - Fleet | 65,000 | | 65,000 |
| | | | **Subtotal** | **1,220,000** | **-** | **1,220,000** |

CITY OF PALMDALE
FY 2025 PROPOSED BUDGET
CAPITAL OUTLAY REQUESTS

| Ref | | Department | Division | Fleet | Information Technology | FY 2024-25 Proposed |
|---|---|---|---|---|---|---|
| | | | | | | |
| | **New Vehicles** | | | | | |
| 22 | Ford 150 Police Interceptor or similar (2) | Public Works | Code Enforcement | 120,000 | | 120,000 |
| 23 | GEM eL XD Utility Vehicle | Parks & Recreation | Parks & Recreation | 20,000 | | 20,000 |
| | | | **Subtotal** | **140,000** | **-** | **140,000** |
| | | | | | | |
| | **New Vehicles With Position** | | | | | |
| 24 | E-Transit E350 Express Van - Maint Specialist Parks | Public Works | Maintenance - Parks | 90,000 | | 90,000 |
| | | | **Subtotal** | **90,000** | **-** | **90,000** |
| | | | | | | |
| | | | **Total** | **$ 1,642,500** | **$ 636,000** | **$ 2,278,500** |

# GLOSSARY

## Acronyms

| | |
|---|---|
| AB | Assembly Bill |
| ACA | Affordable Care Act |
| ACFR | Annual Comprehensive Financial Report |
| AD | Assessment District |
| ADA | Americans with Disabilities Act |
| AJCC | America's Job Center of California |
| AUMA | Adult Use of Marijuana Act |
| AVEK | Antelope Valley-Eastern Kern Water Agency |
| AVTA | Antelope Valley Transit Authority |
| CC | City Council |
| CCA | Community Choice Aggregation |
| CDBG | Community Development Block Grant |
| CFD | Community Facilities District |
| CIP | Capital Improvement Program |
| COP | Certificates of Participation |
| CRA | Community Redevelopment Agency |
| CSMFO | California Society of Municipal Finance Officers |
| DAB | Development Advisory Board |
| DDA | Disposition & Development Agreement |
| EOC | Emergency Operations Center |
| EPIC | Energy for Palmdale's Independent Choice |
| ERAF | Educational Revenue Augmentation Fund |
| FEMA | Federal Emergency Management Agency |
| FTE | Full-Time Equivalent |
| FY | Fiscal Year |
| GAAP | Generally Accepted Accounting Principles |
| GASB | Governmental Accounting Standards Board |
| GAVEA | Greater Antelope Valley Economic Alliance |
| GFOA | Government Finance Officers Association |
| GIS | Geographical Information System |
| HSIP | Highway Safety Improvement Program |
| HUD | U.S. Department of Housing and Urban Development |
| HVAC | Heating, Ventilation and Air Conditioning |
| IDA | Industrial Development Authority |
| JAG | Justice Assistance Grant |
| LAD | Landscape Assessment District |
| LAIF | Local Agency Investment Fund |

| | |
|---|---|
| LED | Light Emitting Diode |
| LMD | Landscape Maintenance District |
| MHP | Mobile Home Park |
| MMRSA | Medical Marijuana Regulation and Safety Act |
| MTA | Metropolitan Transportation Authority |
| NPDES | National Pollution Discharge Elimination System |
| NSP | Neighborhood Stabilization Program |
| O&M | Operations and Maintenance |
| OPA | Owner Participation Agreement |
| OPEB | Other Post-Employment Benefits |
| PAA | Palmdale Airport Authority |
| PCA | Palmdale Civic Authority |
| PCF | Palmdale Community Foundation |
| PERS | Public Employees' Retirement System |
| PFA | Palmdale Financing Authority |
| PROP | Proposition |
| PSO | Public Security Officer |
| RDA | Redevelopment Agency |
| RFP | Request for Proposals |
| RORF | Redevelopment Obligation Retirement Fund |
| RPTTF | Redevelopment Property Tax Trust Fund |
| SA | Successor Agency |
| SARC | School Accountability Report Card |
| SAVES | South Antelope Valley Emergency Services |
| SB | Senate Bill |
| SCAG | Southern California Association of Governments |
| SERAF | Supplemental Educational Revenue Augmentation Fund |
| STPL | Surface Transportation Program – Local |
| TOT | Transient Occupancy Tax |
| VLF | Vehicle License Fee |
| WIA | Workforce Investment Act |
| WIOA | Workforce Innovation and Opportunity Act |

## Terms

Accrual Basis – The method of accounting under which revenues and expenses are recorded when they occur, regardless of the timing of related cash flows. Expenses are recorded at the time liabilities are incurred and revenues are recorded when earned.

ACFR – The Annual Comprehensive Financial Report of the City which shows the financial status of the City.

Adoption – Formal action by the City Council that sets the spending limits for the fiscal year.

Appropriation – City Council authorization permitting the City to incur obligations and expend resources during the fiscal year.

Assessed Valuation – An official governmental value placed upon real estate or other property as a basis for levying taxes.

Assessments – Levies that pay for improvements directly benefiting the property owners.

Audit – A review of the City's accounts by an independent auditing firm to substantiate year-end fund balances, reserves, and cash on hand.

Balanced Budget – The City's operating revenues equal or exceed its operating expenditures.

Base Budget – Ongoing expense for personnel, contractual services, and the replacement of supplies and equipment to maintain service levels previously authorized by the City Council.

Beginning / Ending Fund Balance – Unencumbered resources available in a fund from the prior/current year after payment of the prior/current year's expenses. This is not necessarily cash on hand.

Bond – A funding tool representing a written promise to pay a specific sum (face value or principal amount) in the future (maturity date), plus interest. In local California government, bonds are only used to finance capital improvements. There are two types of bonds:

General Obligation Bond – A bond requiring a 2/3 vote of the registered voters and backed by the full faith, credit, and taxing power of the municipality.

Revenue Bond – A bond backed by either the revenue produced by the capital improvement or by commitment of a specific revenue source.

Bond Proceeds – Debt issuances derived from the sale of bonds for the purpose of constructing major capital facilities.

Budget – A financial plan listing proposed operational expenditures and revenue estimates for a particular time period. The budget is proposed until it has been approved and adopted by the City Council. Palmdale's budget encompasses one fiscal year (July 1 to June 30).

Budget Message – A general discussion of the proposed budget as presented in writing by the City Manager to the City Council. The message contains an explanation of principal budget items relative to the current year adopted budget.

Capital Budget – The appropriation of bonds, operating revenue, or fees for improvements to City facilities including buildings, streets, sewer lines, parks, traffic signals, drainage, etc.

Capital Improvement Program – A financial plan of proposed capital improvement projects with single and multiple-year capital expenditures. The City of Palmdale's Capital Improvement Program is a ten-year plan, which is updated annually.

Capital Improvement Projects (CIP) – A permanent addition to the City's assets, including the design, major renovation, construction, or purchase of land, buildings, or facilities. This includes physical structural improvements with a cost of $10,000 or more and a useful life of one year or more. Examples include a new park, building modifications, traffic signals, resurfacing of streets and drainage improvements.

Capital Outlay – A budget category that budgets all equipment having a unit cost of more than $5,000. Capital Outlay is budgeted in the operating budget as opposed to the capital improvement budget.

Contingency Fund – A budgetary reserve set aside for emergency or unanticipated expenditures.

Continuing Appropriation – Resources appropriated for a specific expenditure that is carried over from the prior fiscal year.

Debt Ratio – Total debt divided by total assets. Used by Finance to assess fiscal health, internal controls, etc.

Debt Service – Payments of principal and interest on an obligation resulting from the issuance of bonds, notes, or loans.

Debt Service Requirements – The amount of money required to pay principal and interest on outstanding debt or to accumulate monies for future retirement of term bonds.

Deficit – An excess of expenditures or expenses over resources.

Department – An organizational unit comprised of divisions or programs. This basic organizational unit of government is functionally unique in its delivery of services.

Division – An organizational component of a department.

Encumbrances – Resources committed for future expenditures as a result of signing executory contracts such as purchase orders and specific contracts for goods and services.

Enterprise Fund – An accounting entity that is financed and operated in a manner similar to private business enterprises where the intent of the governing body is that the costs of providing goods and services to the general public on a continuing basis is financed or recovered primarily through user charges.

Expenditure – The actual spending of funds set aside by an appropriation.

Fiscal Year – A 12-month accounting period used by the City. The City of Palmdale's fiscal year begins July 1 and ends June 30.

Full Time Equivalent Position (FTE) – A part-time position converted to the decimal equivalent of a full-time position based on 2,080 hours per year. For example, a part time typist working 20 hours per week would be equivalent to 0.5 of a full-time position.

Fund – An independent fiscal and accounting entity with a self-balancing set of accounts to record revenue and expenditures.

Fund Balance – The amount of financial resources available for use.

GAAP – Generally Accepted Accounting Principles. Uniform standards for financial accounting and recording, encompassing the conventions, rules and procedures that define accepted accounting principles.

GASB – Governmental Accounting Standards Board is the current standards setting board for governmental GAAP.

General Fund – The primary fund of the City used to account for all revenues and expenditures related to municipal services and maintenance. Examples of departments financed by the General Fund include the City Council, Finance, Planning and Law Enforcement.

General Obligation Bond – A bond requiring a 2/3 vote of the registered voters and backed by the full faith, credit and taxing power of the municipality. This type of bond is used to finance capital improvements in local California governments.

Goal – A statement of broad direction, purpose or intent based on the needs of the community. A goal is general and timeless; that is, it is not concerned with a specific achievement in a given time period.

Grant – A contribution by a government or other organization to support a specific purpose, activity, or facility.

Infrastructure – Facilities upon which the continuance and growth of a community depend such as roads, sewers, public buildings, parks, etc.

Interfund Transfers – The reallocation of money from one fund to another. The receiving fund must spend the transferred money in a way that complies with any restrictions placed on the money when it was originally received by the donor fund.

Investment Policy – A written, Council adopted policy delineating permitted investments of the City's idle cash. The City of Palmdale Investment Policy is typically updated and reaffirmed annually.

Major Fund – Any fund whose revenues or expenditures, excluding other financing sources and uses, constitute more than 10% of the revenues or expenditures of the appropriated budget.

Modified Accrual Basis – The accrual basis of accounting adapted to the governmental fund type spending measurement focus. Under it, revenues are recognized when they become both measurable and available to finance expenditures of the current period. Expenditures are recognized when the related fund liability is incurred.

Municipal Code – A book that contains City Council approved ordinances currently in effect. The Code defines City policy with respect to areas such as planning, business licensing, etc.

Objective – Desired output-oriented accomplishments that can be measured and achieved within a given time frame. Achievement of the objective advances the activity and organization toward a corresponding goal.

Operating Budget – Annual appropriation of funds for ongoing program costs including salaries and benefits, services and supplies, debt service, capital outlay, and capital improvements.

Operating Expenditures – Expenditures for materials, supplies, and services which are ordinarily consumed within a fiscal year and which are not included in departmental inventories.

Ordinance – A formal legislative enactment by the City Council that has the full force and effect of law within City boundaries unless preempted by a higher form of law. An ordinance has a higher legal standing than a resolution.

Palmdale Community Choice Aggregation (CCA) – The Palmdale CCA was formed in April 2019 through California Choice Energy Authority (CalChoice) via City Council resolution to purchase power on behalf of the City's residents.

Palmdale Community Foundation – A 501(c)(3) nonprofit organization organized under the California Nonprofit Public Benefit Corporation Law for public purposes.

PERS – Public Employees Retirement System.

Personnel – A budget category used to account for employee compensation including wages, salaries and fringe benefits such as health, life, and disability insurance, retirement, and car allowance/mileage.

Program – A group of related activities performed by one or more organizational units for the purpose of accomplishing a function.

Property Tax – An *ad valorem* tax on real property based upon the value of the property.

Property Transfer Tax – A tax imposed whenever the ownership of real property changes.

Reimbursement – Payment of amount remitted on behalf of another party, department, or fund.

Reserve – An account used to indicate that a portion of a fund's balance is legally restricted for a specific purpose and is, therefore, not available for general appropriation.

Resolution – A special order of the City Council having a lower legal standing than an ordinance.

Resources – Total amounts available for appropriation including estimated revenues, fund transfers, and beginning fund balances.

Revenue Bonds – A bond usually issued to construct facilities that is backed by either the revenue produced by the capital improvement or by commitment of a specific revenue source.

Revenues – Money received by the City from taxes, fees, permits, licenses, interest, etc. or from other governments during the fiscal year.

Special Revenue Funds – A fund used to account for revenues that are restricted in use by the City, State, or Federal Government.

Subventions – Intergovernmental revenues paid to the City by another government, such as the State.

Transfer – A transfer is a transaction whereby the fund receiving the revenue transfers money to the fund expending the revenue. An example would be an operating transfer from a Special Revenue Fund to the Capital Projects Fund for construction expenditures.

User Fees/Charges – Charges of a voluntary nature paid by the person receiving the service in exchange for the fee.

OFFICE OF THE CITY MANAGER

# FY 2024-25 Draft Budget

City Council Meeting

Tuesday, May 15, 2024

# Strategic Goals

| Building Culture & Community | Economic Vitality & Innovation | Social Unity | Transportation & Infrastructure |
|---|---|---|---|
| • Beautification<br>• Public Safety<br>• Museum<br>• Recreation<br>• Library Expansion<br>• One Valley/One Vision Regional Thinking & Cooperation<br>• Farmers Market | • Environmental Sustainability<br>  ○ Hydrogen<br>  ○ Broadband<br>• Job Creation<br>  ○ Workforce Development<br>  ○ Film<br>• Sponsorships & Partnerships | • Health & Wellness<br>  ○ Pediatric<br>  ○ Mental Health<br>  ○ Domestic Violence<br>• Housing<br>  ○ Affordable<br>  ○ Safe<br>  ○ Accessible<br>• Youth Engagement | • Palmdale Boulevard<br>• High-Speed Rail<br>• Grade Seps<br>• Airport<br>• Avenue M<br>• Rancho Vista Blvd.<br>• Brightline |

# City-wide Budget Summary

| | FY 2024 Projected | FY 2025 Proposed |
|---|---|---|
| Beginning Balance | $ 394,975,472 | $ 363,910,592 |
| Revenues/Transfers In | 424,597,060 | 528,236,610 |
| Expenditures/Transfers Out | 455,661,940 | 566,619,780 |
| Surplus/(Deficit) | (31,064,880) | (38,383,170) |
| Estimated Ending Fund Balance – Before Reserves | 363,910,592 | 325,527,422 |
| Reserve Requirement | (59,437,711) | (59,363,139) |
| Estimated Ending Balance | $ 304,472,881 | $ 266,164,283 |

# General Fund Budget Summary

| General Fund | FY 2024 Projected | FY 2025 Proposed | Amount Change | % Ch |
|---|---|---|---|---|
| Beginning Balance* | $92,576,350 | $84,637,770 | | |
| Revenues/Transfers In | 118,589,660 | 117,194,970 | (1,394,690) | -1% |
| Expenditures/Transfers Out | 126,528,240 | 123,450,960 | (3,077,280) | -2% |
| Surplus/(Deficit) | (7,938,580) | (6,255,990) | | |
| **Estimated Ending Balance (Before Reserves/Restrictions)** | **$84,637,770** | **$78,381,780** | | |
| Reserve Requirement | 38,040,972 | 37,035,288 | | |
| Restricted/Assigned Funds | 30,000,000 | 30,000,000 | | |
| **Estimated Ending Fund Balance – After Reserves** | **$16,596,798** | **$11,346,492** | | |

*Based on Annual Comprehensive Financial Report as of June 30, 2023

# General Fund Revenues

| Description | FY 2024 Projected | FY 2025 Proposed | Amount Change | % Ch |
|---|---|---|---|---|
| Property Tax | $ 30,297,750 | $ 31,738,000 | $ 1,440,250 | 5% |
| Sales & Use Tax | 27,429,330 | 28,092,130 | 662,800 | 2% |
| Transient Occupancy Tax | 4,896,000 | 4,950,000 | 54,000 | 1% |
| Franchise Fees | 8,191,870 | 17,366,960 | 9,175,090 | 112% |
| Use Of Property | 2,980,680 | 3,441,330 | 460,650 | 16% |
| License & Permits | 5,531,700 | 5,009,580 | (522,120) | -9% |
| Charges For Services | 1,234,810 | 1,276,100 | 41,290 | 3% |
| Development Charges | 2,293,250 | 2,414,150 | 120,900 | 5% |
| Fines & Forfeitures | 755,290 | 962,910 | 207,620 | 28% |
| Other Revenue | 10,555,370 | 9,280,000 | (1,275,370) | -12% |
| Transfer In | 24,423,610 | 12,663,810 | (11,759,800) | -48% |
| **Total Revenues** | **$ 118,589,660** | **$ 117,194,970** | **($ 1,394,690)** | **-1%** |

# General Fund Expenditures

| Description | FY 2024 Projected | FY 2025 Proposed | Amount Change | % Ch |
|---|---|---|---|---|
| Salaries & Benefits | $ 27,204,470 | $ 29,949,850 | $ 2,745,380 | 10% |
| Organizational Development | 703,950 | 809,320 | 105,370 | 15% |
| Operating | 21,257,710 | 13,144,700 | (8,113,010) | -38% |
| Contract Services | 17,590,810 | 21,886,320 | 4,295,510 | 24% |
| County Contracts | 24,420,460 | 27,964,940 | 3,544,480 | 15% |
| Utilities | 2,926,560 | 2,978,870 | 52,310 | 2% |
| Capital | 2,142,180 | 7,229,160 | 5,086,980 | 237% |
| Debt Service | 2,315,830 | 2,291,600 | (24,230) | -1% |
| Transfers Out | 25,424,770 | 14,926,200 | (10,498,570) | -41% |
| Transfers Out – Reserves | 2,541,500 | 2,270,000 | (271,500) | -11% |
| **Total Expenditures** | **$ 126,528,240** | **$ 123,450,960** | **($3,077,280)** | **-2%** |

# Measure AV

| Measure AV Fund | FY 2024 Projected | FY 2025 Proposed | Amount Change | % Ch |
|---|---|---|---|---|
| Beginning Available Balance | $ 24,565,678 | $ 16,904,438 | | |
| **General Sales Tax Revenue** | **22,307,000** | **22,811,000** | **504,000** | **2%** |
| **Expenditures** | | | | |
| Public Safety | 9,459,330 | 10,037,800 | 578,470 | 6% |
| Beautification / Infrastructure / CIP | 17,894,800 | 22,256,530 | 4,361,730 | 24% |
| Community Programs | 2,001,810 | 2,005,800 | 3,990 | 0% |
| Economic Development | 520,000 | 1,715,000 | 1,195,000 | 230% |
| Administrative | 92,300 | 88,500 | (3,800) | -4% |
| **Total Expenditures** | **29,968,240** | **36,103,630** | **6,135,390** | **20%** |
| Surplus/(Deficit) | (7,661,240) | (13,292,630) | | |
| Estimated Fund Balance – Before Reserves | 16,904,438 | 3,611,808 | | |
| Reserve Requirement | 2,996,824 | 3,610,363 | | |
| **Estimated Ending Fund Balance- After Reserves** | **$ 13,907,614** | **$ 1,445** | | |

# American Rescue Plan Act (ARPA)

| American Rescue Plan Act Fund | FY 2022 Actual | FY 2023 Actual | FY 2024 Projected | FY 2025 Proposed |
|---|---|---|---|---|
| American Rescue Plan Act Allocation | $ 35,455,000 | $ - | $ - | $ - |
| **Expenditures** | | | | |
| Public Health & Safety | 40,333 | 4,661,283 | 9,695,300 | 3,305,000 |
| Negative Economic Impacts | 242,142 | 368,215 | 761,510 | - |
| Services to Disproportionately Impacted Communities | 17,306 | 3,840,837 | 1,383,050 | 3,062,440 |
| Premium Pay | - | 1,005,500 | - | - |
| Water, Sewer & Broadband Infrastructure | - | - | - | - |
| Revenue Replacement | 35,500 | 2,697,182 | 3,974,250 | 250,000 |
| Administrative & Other | 7,527 | 7,645 | 50,000 | 50,000 |
| **Total Expenditures** | **342,808** | **12,580,662** | **15,864,110** | **6,667,440** |
| Estimated Fund Balance | $ 35,112,211 | $ 22,531,549 | $ 6,667,439 | $ - |

# Other Funds

Transportation funds are used exclusively for the repair, maintenance, or improvement of roadways and transportation.

The below table shows the FY 2025 Proposed Transportation fund expenditures:

| Transportation Funds | FY 2024 Projected | FY 2025 Proposed |
|---|---|---|
| Gas Tax Fund | $ 7,901,900 | $ 7,197,030 |
| Prop A Fund | 7,525,540 | 11,930,920 |
| Prop C Fund | 9,912,370 | 6,248,920 |
| Local Transp Art 3 Fund | 24,150 | 409,000 |
| Local Transp Art 8 Fund | 14,266,970 | 10,049,040 |
| Measure R Fund | 6,377,890 | 95,982,800 |
| Measure M Fund | 5,792,880 | 6,609,100 |
| **Total Expenditures** | **$ 51,081,700** | **$ 138,426,810** |

# Capital Improvement Program

| Project Type | FY 2024 Projection | FY 2025 Proposed |
|---|---|---|
| Bicycle & Pedestrian | $ 152,990 | $ 1,603,910 |
| Drainage | 365,000 | 7,807,240 |
| Facilities | 3,015,140 | 10,078,550 |
| General Improvements | 7,854,200 | 8,372,270 |
| Parks & Recreation | 28,153,820 | 27,975,360 |
| Sewer and Watershed | 805,720 | 9,781,400 |
| Streets | 55,527,600 | 123,817,570 |
| Traffic | 3,106,320 | 8,458,800 |
| **Total Capital Improvement Projects** | **$ 98,980,790** | **$ 197,895,100** |

# Personnel

| Department | Division | Funding Source | # FTE | $ Impact |
|---|---|---|---|---|
| **Neighborhood Services** | | | | |
| | Office Assistant | Housing Asset Funds | 1.0 | $72,560 |
| **Public Works** | | | | |
| | Maintenance Leadworker | Landscape Maintenance Funds | 1.0 | 93,500 |
| | Maintenance Specialist | Measure AV | 1.0 | 96,000 |
| | **Total Requested** | | **3.0** | **$ 262,060** |

# Discussion