City Council
Meeting Agenda

Tuesday, May 13, 2025

City Council Chambers
City Hall, One Twin Pines Lane, Belmont, California

General order of Business

1. ITEMS BEFORE 7:00 PM
2. CALL TO ORDER
3. PLEDGE OF ALLEGIANCE
4. REPORT FROM CLOSED SESSION
5. SPECIAL PRESENTATIONS
6. PUBLIC COMMENTS ON ITEMS NOT ON THE AGENDA
7. COUNCILMEMBER ANNOUNCEMENTS
8. CONSENT BUSINESS
9. PUBLIC HEARINGS (none)
10. GENERAL BUSINESS (none)
11. BRIEF VERBAL REPORTS FROM MEMBERS AND STAFF
12. MATTERS OF INTEREST/CLARIFICATION
13. ADJOURNMENT

City Council
Julia Mates, Mayor
Robin Pang-Maganaris, Vice Mayor
Gina Latimerlo, Councilmember
Tom McCune, Councilmember
Cathy Jordan, Councilmember

Staff
Afshin Oskoui, City Manager
Scott Rennie, City Attorney
Kathy Kleinbaum, Assistant City Manager
Ken Stenquist, Police Chief
Grace Castaneda, Finance Director
Ann Ritzma, Interim Admin Services Director
Carlos deMelo, Community Development Director
Brigitte Shearer, Parks and Recreation Director
Nisha Patel, Public Works Director
Jozi Plut, City Clerk

MEETING ATTENDANCE:
Council meetings, unless otherwise noted, are broadcast live to Belmont residents on

1. Comcast Cable Channel 27
2. Streamed live via the City's website at www.Belmont.gov
3. ZOOM https://belmont- gov.zoom.us/ **Meeting ID: 95745673035**
4. Attend the meeting in the Council Chambers, Belmont City Hall 2nd floor

PUBLIC COMMENT:

- Public in the Council Chamber present the Clerk a request to speak slip found at the table at the rear of the chamber.
- If participating virtually use the Raise Hand feature to request to speak.
  - For dial- in comments, call *67 1-(669) 900-6833 (your phone number will appear on the live broadcast if *67 is not dialed prior to the phone number)
  - enter **Meeting ID: 95745673035**, and press *9 to request to speak

All public comments are subject to a **3-minute time limit** unless otherwise determined by the Chair.

To submit a written public comment:
E-mail cclerk@belmont.gov before the Council discusses the item, noting the agenda topic or number in the subject line. Comments received up to three hours before the meeting will be distributed to the Council and included in the record but not read aloud during the meeting..

The Mayor has the authority to rule any speaker out of order, including speakers during the Public Comment period; If the subject raised is not within the subject matter jurisdiction of the City Council, during a public hearing or a general business item if the speaker is not presenting testimony or evidence relevant to the matter or if the speaker becomes disruptive to the proceedings and conduct of the meeting.

The Mayor also has the authority to order any person who willfully interrupts the meeting to be removed. All persons are expected to always conduct themselves with civility and courtesy. All persons giving comments shall speak directly to the Council and address issues, not individuals. Personal attacks, cursing and outbursts from the audience in support or opposition to a speaker are not tolerated to foster an environment where everyone feels welcome to speak.

LEVINE ACT:

The Levine Act (California Government Code Section 84308) limits campaign contributions that may be made to elected or appointed City officials (including councilmembers and the mayor) and certain candidates for elective city offices. The Act prohibits an agent of a party from contributing any amount to councilmember while a proceeding for a contract valued at $50,000 or more, permit, license, or other entitlement for use is pending that does not solely involve purely ministerial decisions. The Act also prohibits parties and participants in the above entitlement proceedings from contributing more than $500 during the proceeding and for 12 months after the proceeding and requires disclosure of the prohibited contributions. The Act prohibits certain officials, including local elected officials, from taking part in an entitlement proceeding if the official has received a contribution exceeding $500 from a party or participant in the proceeding within the preceding 12 months. An official is also prohibited from accepting, soliciting, or directing a contribution exceeding $500 from a party or participant in the proceeding for 12 months after a final decision is rendered in such a proceeding. The law is complex, and this brief description is not legal advice. If you or an agent have made any campaign contributions to a councilmember in the 12 months before a proceeding in which you have an interest or you are contemplating making a contribution within the 12 months after such a proceeding, you are urged to review the Levine Act and consider consulting an attorney. The California Fair Political Practices Commission (FPPC) is responsible for administering the Levine Act. More information about the Act and its implementing regulations can be found on the FPPC's website here: https://www.fppc.ca.gov/learn/pay-to-play-limits-and-prohibitions.html

ACCESSIBILITY

If you need assistance to participate in this meeting, please contact the City Clerk at (650) 595-7413. Notification 48 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting.

AGENDA POSTING: I declare a copy of this agenda was posted at City Hall, One Twin Pines Lane, and the City's website www.Belmont.gov Date: Time: /s/:

City of Belmont

City Council Regular Meeting Agenda
May 13, 2025
City Council Chambers
City Hall, One Twin Pines Lane, Belmont, California

NOTE-Virtual/ZOOM participation will not be available for this meeting.

NOTICE REGARDING MEETING SCHEDULE
The City Council may meet prior to 7:00 PM for Study Sessions, Closed Sessions, or other Special Topics. All other business will commence at 7:00 PM as a time-certain agenda item.

1. ITEMS BEFORE 7:00 PM

2. CALL TO ORDER
- Roll Call

A. CLOSED SESSION (6:45 PM)

Conference with Legal Counsel - Anticipated Litigation

Significant exposure to litigation under Government Code Section 54956(d)(2): one case. The City and CP VII 815 Belmont, LLC, a subsidiary of Carmel Partners, have a cost sharing agreement for certain costs related to construction of public improvements for Carmel's 815 Old County Road apartment project. Carmel hired McGuire and Hester to construct the improvements. A dispute has arisen between McGuire and Carmel related to the cost of construction (San Mateo County Superior Court 25-CIV-00267)

B. STUDY SESSION (none)
The public will have an opportunity to address the City Council concerning this item.

C. SPECIAL SESSION/OTHER TOPICS (none)

ITEMS STARTING AT 7:00 PM

3. PLEDGE OF ALLEGIANCE

4. REPORT FROM CLOSED SESSION

5. SPECIAL PRESENTATIONS

A. Belmont Community Foundation Presentation

B. Belmont Fire Hazard Severity Zone Maps (LRA) and Ordinance Updates
Attachments:
Presentation

C. Proclamation in Recognition of Jewish American Heritage Month

D. Proclamation in Recognition of Asian American Pacific Islander National Heritage Month

E. Proclamation Recognition of National Public Works Week

F. Proclamation in Recognition of Municipal Clerks Week

6. PUBLIC COMMENTS ON ITEMS NOT ON THE AGENDA

This portion of the meeting is reserved for persons wishing to address the Body on any City matter not on the agenda. The period for public comment at this point in the agenda is limited to 15 minutes, with a maximum of 3 minutes per speaker. Speakers who requested but did not receive an opportunity to speak during this comment period will be given an opportunity to address the Body later in the meeting. State law prohibits the Body from acting on non-agenda items.

7. COUNCILMEMBER ANNOUNCEMENTS

8. CONSENT BUSINESS

Consent business items are considered to be routine in nature and will be enacted by one motion. There will be no separate discussion on these items unless a member or staff request specific items to be removed for separate action. The City Attorney will read the title of ordinances to be adopted.

A. Approval of Minutes

Recommendation: Consider modifications and approve minutes
Attachments:
April 8, 2025 Meeting Minutes
April 22, 2025 Meeting Minutes

B. Second Reading of Indemnity Requirements for Approvals, Encroachments, and Right of Way Maintenance

Recommendation: Motion to approve Ordinance
Attachments:
Indemnity Ordinance

C. Monthly Financials-February 2025

Recommendation: Motion to approve the February Monthly Financials
Attachments:
Monthly Financial Reports

D. Salson Trail Culvert Replacement Project – Plans and Specifications Approval, Bid and Construction Award Authorization, Design Task Order Amendment, and Construction Management Task Order Authorization

Recommendation: **A**dopt a resolution approving plans and specifications, authorizing advertisement for sealed bids, authorizing the City Manager to negotiate and execute a contract with the lowest responsible and responsive bidder for an amount not to exceed $554,321 plus a ten percent construction contingency, approving a design task order amendment with Mott MacDonald Group, Inc. for an amount not to exceed $93,142, approving a task order for construction management services with MNS Engineers, Inc. for an amount not to exceed $90,655 for the Salson Trail Culvert Replacement Project, City Contract Number 2025-639; and appropriate budget funds to the Salson Trail Culvert Replacement Project
Attachments:
Staff Report
Resolution
Plans
Specifications

MNS Construction Management Proposal
Mott MacDonald TO #1 Amendment #1

E. Twin Pines Park Belmont Creek Restoration Project – Tree Removal Notice of Completion

Recommendation: Adopt a resolution accepting the construction work and authorizing the issuance of a Notice of Completion for the Twin Pines Park Belmont Creek Restoration Project – Tree Removal, City Contract Number 2024- 064, recording of Notice of Completion, and release of retention 35 days after recording Notice of Completion

Attachments:
Staff Report
Resolution

F. Senate Bill 1 (SB 1) Local Streets and Roads Project List FY 2025-2026

Recommendation: Adopt a resolution approving a list of proposed projects for fiscal year (FY) 2025-2026 funded by the Road Repair and Accountability Act of 2017

Attachments:
Staff Report
Resolution
Attachment B - Street List

G. CSG Master Service Agreement (MSA) Renewal and Building Plan Review Services Task Order #1

Recommendation: Adopt a motion authorizing the City Manager to negotiate and execute a Master Service Agreement (MSA) with CSG Consultants, Inc., and Task Order #1 in an amount not to exceed $130,000, for Building Plan Review Services

Attachments:
Staff Report

9. PUBLIC HEARINGS (none)

10. GENERAL BUSINESS (none)

General Business items are considered separately, typically in the order listed. The chair will call for public comment on each item when the body considers the item.

11. BRIEF VERBAL REPORTS FROM MEMBERS AND STAFF

A. **Verbal report from Councilmembers on Intergovernmental (IGR) and Subcommittee Assignments**
B. **Verbal report from City Manager**

12. MATTERS OF INTEREST/CLARIFICATION

Items in this category are for discussion and direction to staff only. However, Council/Board may take final action on an item if there is no need for additional staff analysis.

13. ADJOURNMENT

Belmont Fire Hazard Severity Zone Maps (LRA) and Ordinance Updates

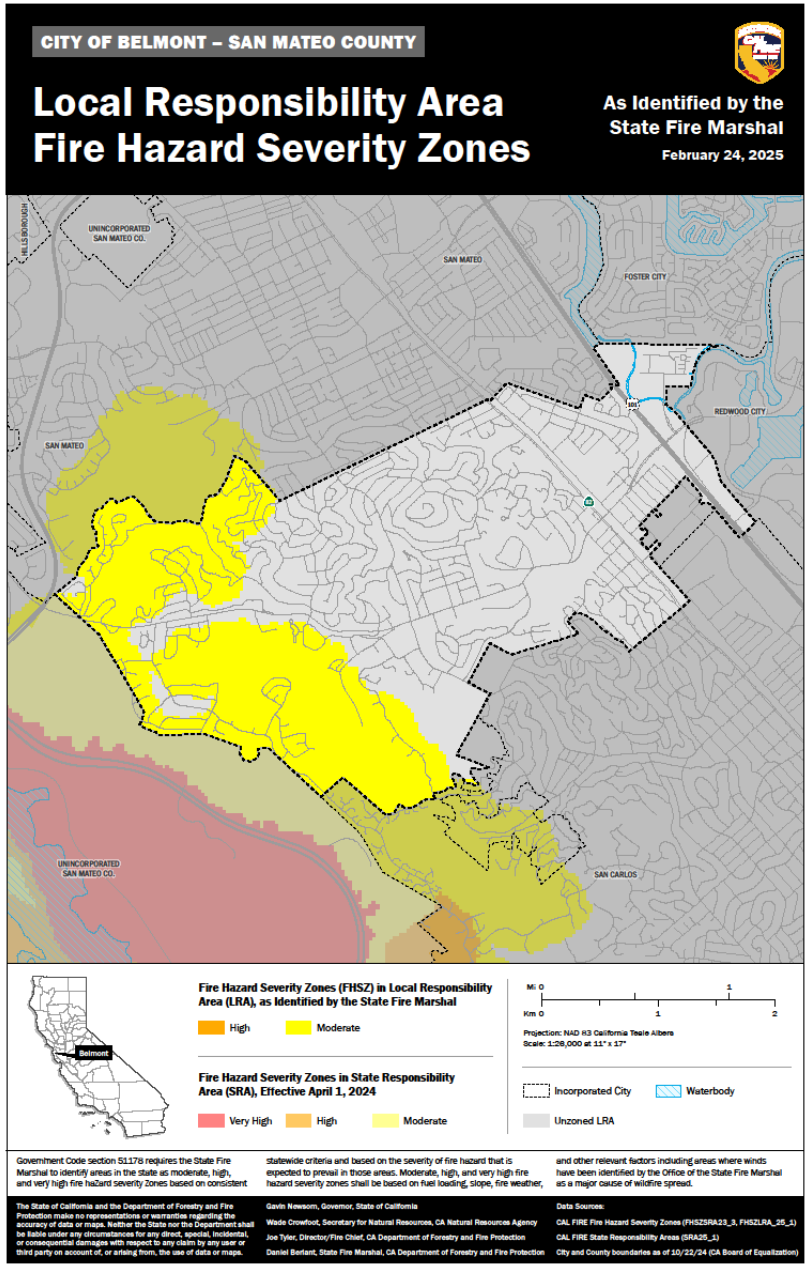
- Carisa Workman – Fire Marshal
- 5/13/25
- San Mateo Consolidated Fire Department

What are Fire Hazard Severity Zones?



- The Fire Hazard Severity Zone (FHSZ) maps are developed using a science-based and field-tested model that assigns a hazard score based on the factors that influence fire likelihood and fire behavior.
- Many factors are considered such as fire history, existing and potential fuel (natural vegetation), predicted flame length, blowing embers, terrain, and typical fire weather for the area.
- There are three levels of hazard in the State Responsibility Areas:
  - Moderate
  - High
  - Very high





- Belmont LRA FHSZ Map

Why we Need to Adopt the Maps

- New legislation, Senate Bill 63 (Stern, 2021), now requires the adoption of all three Fire Hazard Severity Zone classes in the Local Responsibility Area.
- Previously only Very High Fire Hazard Severity Zones were required for adoption in Local Responsibility Areas.
- Government Code Sections 51178 and 51179



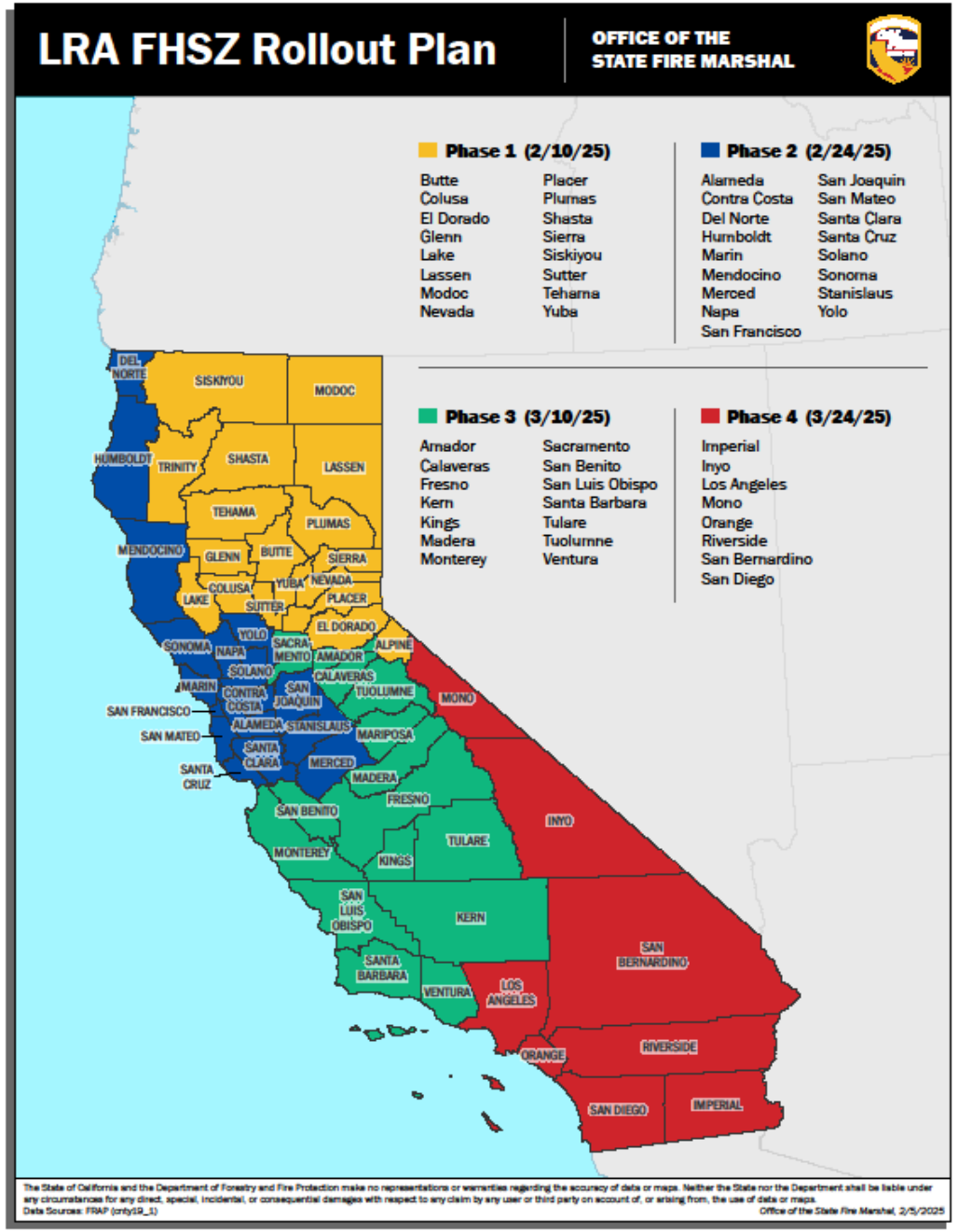


California LRA Map Rollout Plan

TOP TAKEAWAYS

The Office of the State Fire Marshal (OSFM) is releasing local responsibility area (LRA) maps, designated as moderate, high, or very high in a fire hazard severity zone. Cities will need to:

1. Make the map available for public review and comment within **30 days.**
2. Adopt the designation via local ordinance within **120 days.**
3. Submit the ordinance to the state within **30 days** of local adoption.



Why we Needed to Update the Ordinance?

- Previous ordinance language stated High and Very High Fire Zones.
- Previous ordinance language did not allow for Moderate Zones.
- New ordinance language gives us the authority to continue to reduce risk in our Wildland/Urban Interface (WUI) areas by including moderate zones as identified by the new LRA maps.





SMC Fire Code Amendments

- **LOCAL AGENCY FIRE HAZARD SEVERITY ZONE.**
- Property within a Local Responsibility Area (LRA) served by the San Mateo Consolidated Fire Department that has been designated by the Office of the State Fire Marshal and/or the San Mateo Consolidated Fire Department as a Moderate, High, or Very High Fire Hazard Severity Zone.

- **SECTION 4905.3.1 LOCAL AGENCY MODERATE FIRE HAZARD SEVERITY ZONE REQUIREMENTS.**

- 4905.3.1 Local Agency Moderate fire hazard severity zone requirements. Buildings constructed in local Agency Moderate Fire Hazard Severity Zones shall comply with section 4905.2.

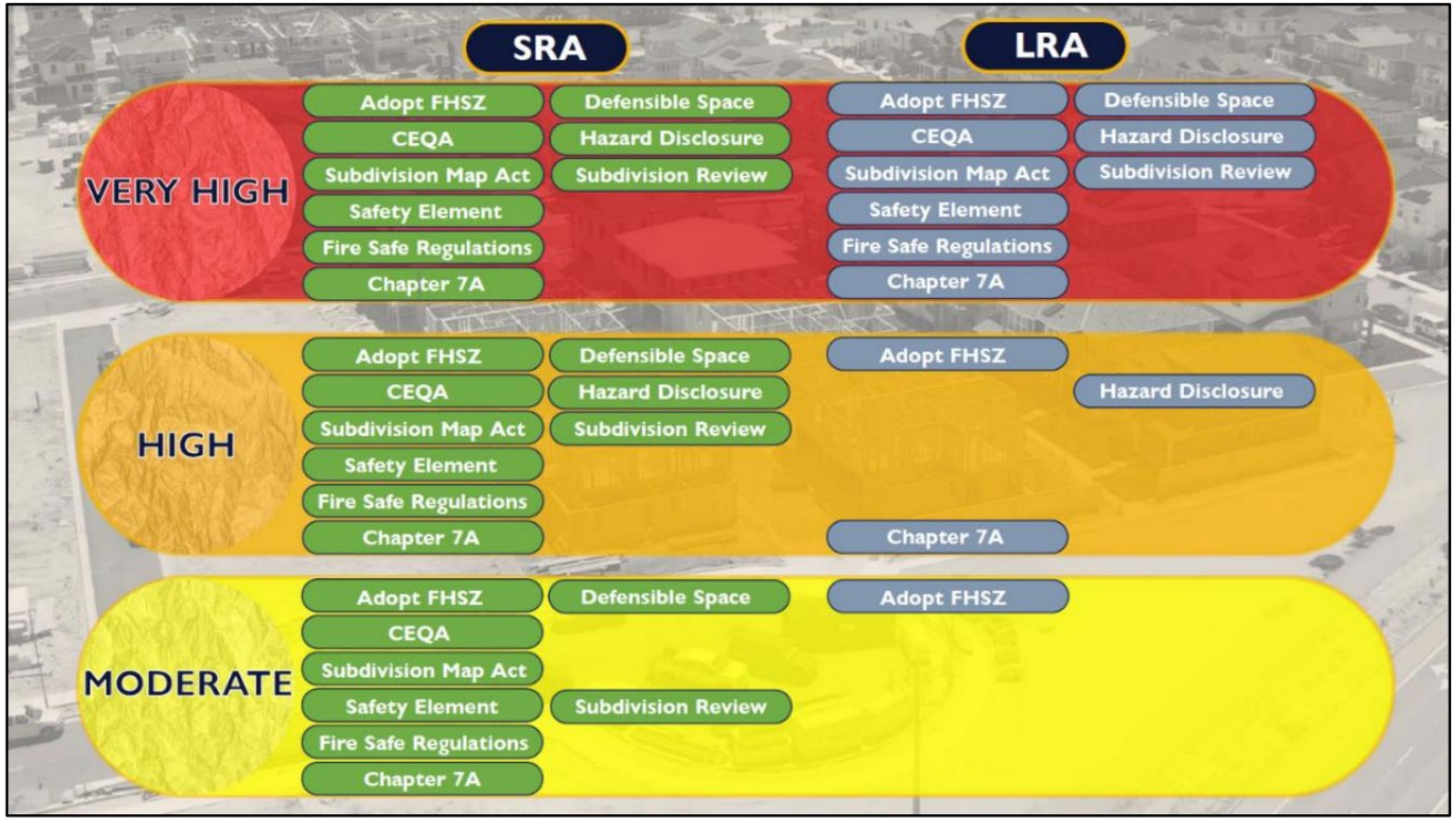
- **SECTION 4907.1 GENERAL. AMENDED**

- 4907.1 General. Defensible space will be maintained around all buildings and structures in State Responsibility Areas (SRA) as required in Public Resources Code 4290 and "SRA Fire Safe Regulations" California Code of Regulations, Title 14, Division 1.5, Chapter 7, Subchapter 2, Section 1270.

- Buildings and structures within the Local Responsibility Area (LRA) shall maintain defensible space as outlined in Government code sections 51175 through 51189 in moderate, high, and very high fire hazard severity zones as designated by the Office of the State Fire Marshal and as confirmed or modified by the San Mateo Consolidated Fire Department.

State Response Area (SRA)
Local Response Area (LRA)

- SRA requirements N/A
- LRA requirements
- SMCFD recommends following more restrictive requirements for all designated fire hazard zones.
  - Chapter 7A
  - Defensible Space



Graphic provided by California's Office of the State Fire Marshal.

Chapter 7A [SFM]
Materials and Construction Methods for Exterior Wildfire Exposure
California Building Code 2022

Ignition Resistant Construction	Roofing	Vents
Exterior Windows, Skylights and Doors	Decking	Accessory Dwellings and Miscellaneous Structures

Hazard Vs. Risk

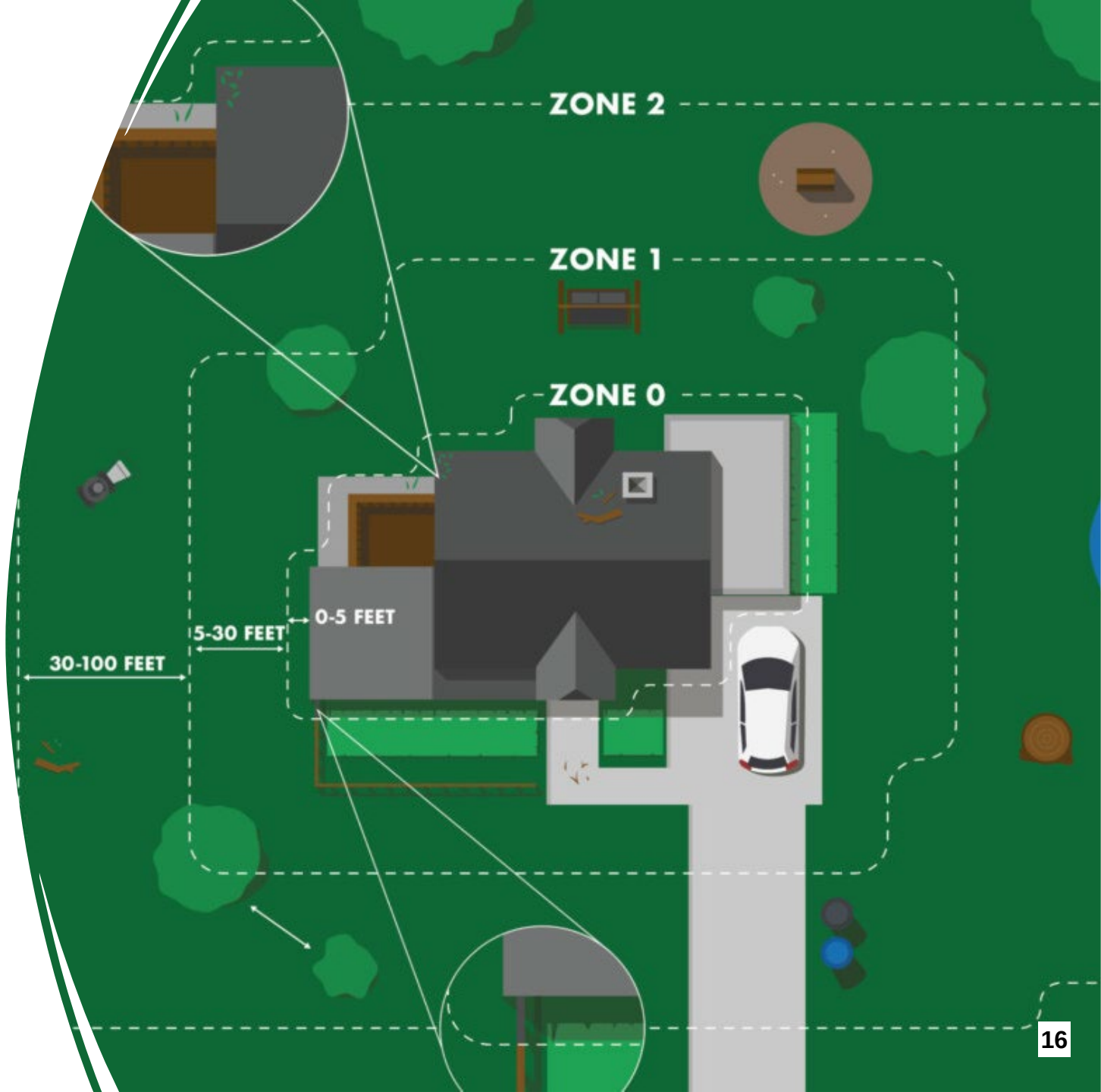
Hazard
Is based on physical conditions that create a likelihood and expected fire behavior over a 30 to 50-year period without considering mitigation measures such as home hardening, recent wildfires, or fuel reduction.

Risk
Is the potential damage a fire can do to the area under existing conditions, accounting for any modifications such as fuel reduction projects, defensible space, and ignition resistant building construction



What is Defensible Space?

- Buffer zone between structures and surrounding wildland areas
- Key to slowing or stopping fire spread and protecting homes from embers, flames, or heat
- Gives firefighters a safe area to defend property
- This is key to keeping your family and home safe from the damaging effects caused by fires



Creating Defensible Space

SMCFD Services:

- Proactive Wildland/Urban Interface (WUI) property inspections
- Work with neighboring cities to ensure open space is managed
- Investigate fire hazards concerns

What residents should do:

- Create and maintain a defensible space
- Remove dead or dying vegetation
- Consider home hardening

Resources

Who do you call if you have a wildland/vegetation concern?

SMCFD Community Risk Reduction - 650-522-7940

FHSZ LRA Maps:

SMC Fire website – www.smcfire.org - local hazard zone maps

Office of State Fire Marshal: You can search by address to find your current designation on the web at: osfm.fire.ca.gov/FHSZ

To find the current FHSZ designation for a property, visit FHSZ Map Viewer (ca.gov).

Helpful links: FHSZ Website: osfm.fire.ca.gov/FHSZ FHSZ Map Viewer:

FHSZ Map Viewer (ca.gov)

Contacts for FHSZ for Public Questions: (916) 633-7655 FHSZinformation@fire.ca.gov

Additional Information can be found online:

Fire Safe San Mateo - https://www.firesafesanmateo.org/ - local information on planting and fire wise vegetation

CalFire - https://www.fire.ca.gov/dspace - defensible space guidelines

Ready for Wildfire- www.readyforwildfire.org

California Department of Insurance Information: Department of Insurance hotline at 1-800-927-4357 or visit their website at http://www.insurance.ca.gov/External Link.

CITY OF BELMONT CITY COUNCIL REGULAR MEETING MINUTES
City Council Chambers City Hall, One Twin Pines Lane, Belmont, California

Tuesday, April 8, 2025

1. **CALL TO ORDER [6:45 PM]**

2. **ROLL CALL**
   COUNCILMEMBERS PRESENT: Jordan, Latimerlo, McCune, Pang-Maganaris, Mates
   COUNCILMEMBERS ABSENT: None

3. **CLOSED SESSION**
   CONFERENCE WITH LEGAL COUNSEL - ANTICIPATED LITIGATION
   Initiation of litigation under Government Code Section 54956.9(d)(4): 1 case

Adjourned at this time being 6:55 p.m.

4. **STUDY SESSION [none]**

5. **PLEDGE OF ALLEGIANCE**
   Led by mayor Mates

6. **REPORT FROM CLOSED SESSION**
   City Attorney Rennie reported that no reportable action was taken.

7. **SPECIAL PRESENTATIONS**
   Proclamation Recognizing April as National Poetry Month
   Mayor Mates read the proclamation and presented it to Monika Korde, Belmont Poet Laurette. Ms. Korde provided an overview of her 2024 year of service as poet laureate and recited an original piece.

8. **PUBLIC COMMENTS ON ITEMS NOT ON THE AGENDA**
   Comments provided by Giuliano Carlini, Max Reinhardt, Arvind Chandra, Tony, Tin

9. **COUNCILMEMBER ANNOUNCEMENTS**
   Councilmembers shared updates on upcoming events and highlighted recent successful events.

10. **CONSENT BUSINESS**
    a. Approval Of **Minutes March 11, 2025**
    b. Adopt an **Ordinance 2025-1184** Rezoning Property Located at 1538 El Camino Real in The City of Belmont into The S-3 Cannabis Retail and Distribution Overlay District
       Adopt an **Ordinance 2025-1185** Approving a Development Agreement For a Retail Cannabis Project (Nug) At 1538 El Camino Real in The City Of Belmont
       Adopt a **Resolution 2025-27** Approving A Conditional Use Permit and Design Review For the Nug Retail Cannabis Dispensary Business at 1538 El Camino Real
    c. Adopt an **Ordinance 2025-1186** Rezoning Property Located at and Around 1397 El Camino Real into The S-3 Cannabis Retail and Distribution Overlay District

DRAFT

Adopt an **Ordinance 2025-1187** Approving a Development Agreement For a Retail Cannabis Project (Canna-Bel) At 1397 El Camino Real in the City of Belmont
Adopt a **Resolution 2025-28** Approving A Conditional Use Permit and Design Review for the Canna-Bel Retail Cannabis Dispensary Business At 1397 El Camino Real & APN 045-243-050

d. Adopt a **Resolution 2025-29** Approving Plans And Specifications, Authorizing Advertisement For Sealed Bids, Authorizing The City Manager To Negotiate And Execute A Contract With The Lowest Responsible Bidder For An Amount Not To Exceed $4,355,806 Plus A Ten Percent Construction Contingency, And (2) Authorizing The City Manager To Negotiate And Execute A Task Order For Construction Management Services With Pavement Engineering Inc. For An Amount Not To Exceed $559,295, For The 2025 Pavement Rehabilitation Project, City Contract Number 2025-637

City Attorney Rennie read the titles of Ordinance 2025-1184, 2025-1185, 2025-11186, 2025-1187

ACTION: On a motion made by Councilmember Latimerlo and noting that she votes no on Ordinance 2025-1184 the motion was seconded by Councilmember McCune and the Consent Business items were unanimously approved by a roll call vote (5-0) Councilmember Latimerlo no on item B.

11. PUBLIC HEARINGS [none]

12. GENERAL BUSINESS

A. **Update on Belmont's Pavement Management Program**
Assistant Public Works Engineer Matthews and City Consultant Joe Ririe, Pavement Engineer Inc. presented the staff report provided an update on Belmont's Pavement Management Plan and the condition of Belmont's roadways, following the completion of the Pavement Distress Survey.

Public comment provided by Giuliano Carlini.

The report was an informational item, and no action was taken.

13. BRIEF VERBAL REPORTS FROM MEMBERS AND STAFF

A. **Verbal report from Councilmembers on Intergovernmental (IGR) and Subcommittee Assignments**
Councilmembers reported on their assignments.

B. **Verbal report from City Manager**
City Manager Oskoui commented on upcoming summer projects and noted that community noticing will be sent prior to construction start.

14. MATTERS OF INTEREST/CLARIFICATION [none]

15. ADJOURNMENT at this time being 8:35 p.m.

Submitted by
Jozi Plut, City Clerk

City Council Regular Meeting Minutes
City Council Chambers, City Hall, One Twin Pines Lane, Belmont, California

Tuesday, April 22, 2025

1. ITEMS BEFORE 7:00 PM

A. CLOSED SESSION (none)

B. STUDY SESSION (6:30 p.m.)

a. **Belmont's Centennial Celebration Discussion**
Parks and Recreation Director Shearer provided a presentation of initial planning efforts for Belmont Centennial Celebration in 2026.
No action required.

C. SPECIAL SESSION/OTHER TOPICS (none)

Recess: **6:44 PM**
Reconvene: 7:00 PM

REGULAR BUSINESS ITEMS

2. CALL TO ORDER 7:00 PM

- Roll Call

Councilmembers Present: Jordan, McCune, Pang-Maganaris, Mates
Councilmembers Absent: Latimerlo

3. PLEDGE OF ALLEGIANCE
Led by Mayor Mates.

4. REPORT FROM CLOSED SESSION
No closed session was held on this meeting date.

5. SPECIAL PRESENTATIONS

a. **Proclamation Recognizing May as Mental Health Awareness Month**
Mayor Mates read the proclamation and presented it to Patricia Player Maxwell Belmont Redwood Shores Rotary.

b. **Proclamation Recognizing April 22, 2025 as Earth Day**
Mayor Mates read the proclamation.

c. **Proclamation Recognizing April 25, 2025 as Arbor Day in Belmont**
Mayor Mates read the proclamation.

d. **Proclamation Recognizing May as National Arab American Heritage Month**
Mayor Mates read the proclamation.

e. **Celebrate the Music Presentation**
Alan Sarver, event coordinator provided a presentation on the music festival.

6. PUBLIC COMMENTS ON ITEMS NOT ON THE AGENDA

Tiffany Obayashi provided comments on Ralston Avenue pedestrian protection.
Eric Dentler provided comments on the benefits of the Belmont History Museum.

7. COUNCILMEMBER ANNOUNCEMENTS

Councilmembers shared updates on upcoming events and highlighted recent successful events held prior to the meeting

8. CONSENT BUSINESS

a. **Approval of Minutes** March 23, 2025 Meeting
b. Motion authorizing the City Manager to negotiate and execute a service agreement with Bay Area Tree Specialists for vegetation management and fuel reduction services for an amount not to exceed $207,000.
c. **Resolution 2025-30** approving winter Holiday Closures for the periods December 25, 2025 through January 1, 2026; December 25, 2026 through January 3, 2027; December 27, 2027 through January 2, 2028.
d. **Resolution 2025-31** authorizing the City to accept a $500,000 grant from the Metropolitan Transportation Commission (MTC) Transit Oriented Communities (TOC) program for the purpose of administering a multi-jurisdictional study to update inclusionary housing and commercial linkage fee policies, enter into a Master Grant Agreement with MTC to be the fiscal agent for the multi-jurisdictional grant, and appropriate the grant funds to the Affordable Housing Fund.
e. Introduced an ordinance regulating indemnity requirements for applicants and holders of permits, licenses and other city entitlements, encroachments, and right of way maintenance
f. Motion authorizing the City Manager to negotiate and execute an agreement with the County of San Mateo for minimum wage enforcement services for a one year term, with the option to renew for two additional two-year periods, at a flat rate of $10,000 annually.
g. Motion approving a Permanent Encroachment Agreement for Retaining Wall within the public right-of- way adjacent to 1041 Hill Street.

Public comment provided by Giuliano Carlini on item D of the consent calendar. E-mail comments also received prior to the meeting.

ACTION: On a motion made by Councilmember Pang-Maganaris and Councilmember Jordan the Consent Calendar was approved by a roll call vote (4-1, Latimerlo absent).

9. PUBLIC HEARINGS (none)

10. GENERAL BUSINESS

a. **Annual Transportation and Mobility Update**

Assistant Public Works Engineer Matthews, Police Lieutenant Hussey and Deputy Fire Marshal Martin provided a report on the three Es of multi-modal transportation (engineering, education and enforcement) this was an informational item, no action taken.

Public Comment provided by Giuliano Carlini

b. **Amendments to Regional Commercial (RC) Zoning District**

Deputy Community Development Director Russell and provided a report on proposed amendments to the Regional Commercial Zoning District Designation and associated Environmental Review.

Council concurred with staff recommendations; no other action was taken.

11. BRIEF VERBAL REPORTS FROM MEMBERS AND STAFF

b. **Verbal report from Councilmembers on Intergovernmental (IGR) and Subcommittee Assignments**

Councilmembers reported on their IGR assignments.

c. **Verbal report from City Manager**

City Manager Oskoui reported on an upcoming community workshop regarding the Harbor Industrial Area. He noted that outreach efforts are in preparation for summer construction projects. He also shared that a survey was distributed to the community to gather input on the City's website modernization and refresh.

12. MATTERS OF INTEREST/CLARIFICATION (none)

13. **ADJOURNMENT** at this being 9 p.m.

Submitted by,
Jozi Plut, City Clerk

DRAFT

ORDINANCE NO. _____

AN ORDINANCE OF THE CITY OF BELMONT REGULATING INDEMNITY FOR APPLICANTS AND HOLDERS OF PERMITS, LICENSES AND OTHER CITY ENTITLEMENTS, ENCROACHMENTS, AND RIGHT OF WAY MAINTENANCE

THE CITY COUNCIL OF THE CITY OF BELMONT DOES ORDAIN AS FOLLOWS:

SECTION 1. LEGISLATIVE FINDINGS

(a) The City Council finds that the issuance of licenses, permits, and other approvals under state and local regulations creates a risk to the city as a result of issuing those licenses, permits and approvals, which are primarily for the benefit of the applicant, licensee or permittee. This is especially true for projects for which discretionary city approvals are necessary and for which, in addition to other legal requirements, environmental review is required under California Environmental Quality Act (CEQA) because, among other things, substantial City time, effort, and resources are expended in complying with CEQA's requirements and other legal requirements necessary before granting such approvals.

(b) Judicial challenges arising from or related to the issuance of licenses, permits and other approvals, especially CEQA determinations for projects requiring discretionary approvals, are costly and time consuming. In addition, project opponents often seek an award of attorneys' fees and costs in such challenges and the city typically may not recover its fees and costs if it is successful defending the challenge. The city's unequal exposure to unrecoverable defense cost and the opposing party's litigation costs invites challenges and disadvantages the city in resolving challenges even when the merits arguably favor the city. As project applicants, licensees, and permittees are the primary beneficiaries of such approvals, it is appropriate that such applicants, licensees and permittees should bear the expense of defending against any such judicial challenge, and bear the responsibility for any costs, attorneys' fees, and damages which may be awarded to a successful challenger.

SECTION 2. BCC SECTION 1-18 ADDED

Belmont City Code Section 1 is added to read:

Sec. 1-18 Indemnification for Approvals

(a) **Applications and approvals generally**.

(1) Except as provided in subsection (b), and to the fullest extent allowed by law, an applicant for city approval must, as a condition of application and approval, defend, indemnify, and hold harmless the city and its officers, officials, employees and volunteers against and from any and all damage, liability, loss, claim, action or proceeding connected with or arising out of any claim, action or proceeding either to attack, set aside, void, annul, or challenge the validity of any approval or otherwise in connection with the approval, and to bear its own costs in any action or proceeding as a real party in interest. The city is not obligated to defend or to contribute to the cost of defense of any action or proceeding to attack, set aside, void, annul, or challenge the validity of any approval, or reimburse the applicant for any liability, cost or loss incurred by the applicant as a result of such action or

proceeding or its disposition including but not limited to any settlement, cost, or attorneys fees paid by applicant or award against the applicant.

(2) Within 14 days of receiving notice of a claim, action or proceeding to attack, set aside, void, annul, or challenge the validity of approval or in connection with the approval, an applicant must notify the city in writing that it will defend the city and its bodies, officers, employees, and agents in the action or proceeding without qualification or reservation.

(3) If the applicant fails to timely provide the notice required by subsection (a)(2) or fails to timely undertake the unqualified and unreserved defense of the city and its bodies, officers, employees, and agents, the city may settle any such claim, action or proceeding on any terms it determines acceptable without incurring any liability to the applicant and without prejudicing any rights of recovery from the applicant under this section or any provision of law.

(4) For purposes of subsection (a), an "approval" means the grant of any license, permit, entitlement or other approval under this Code or any city ordinance, rule or regulation by any person, entity, or body on behalf of the city.

(5) The city will promptly notify the applicant or approval holder of any claim, action, or proceeding in connection with any approval or that is brought to attack, set aside, void or annul an approval.

(6) The city retains the right to participate in the defense of any claim, action or proceeding, including selection of defense counsel.

(b) **Applications and approvals for tentative, parcel, and final maps.**

(1) A subdivider must, as a condition of tentative, parcel, or final map application and approval, defend, indemnify, and hold harmless the city and or its agents, officers, and employees from any claim, action, or proceeding against the city or its agents, officers, or employees to attack, set aside, void, or annul, an approval of the city, a city advisory agency, appeal board, or council concerning a subdivision. The city will promptly notify the subdivider of any claim, action, or proceeding and cooperate fully in the defense.

(2) An applicant for a tentative, parcel, or final map must agree in the application to defend, indemnify, and hold harmless the city and its agents, officers, and employees as provided in subsection (b)(1).

(3) The conditions of approval for a tentative, parcel, or final map subdivision must recite the subdivider's obligation in subsection (b)(1).

(4) The city may participate in the defense of any claim, action, or proceeding, and if it so chooses, will bears its own attorney's fees and costs and defend the action in good faith.

(5) The subdivider is not required to pay or perform any settlement unless the settlement is approved by the subdivider.

(6) Subsection (b) is to be interpreted and enforced in accordance with the limitations and requirements of Government Code Section 66474.9.

(c) **Form of Indemnity**. The city manager, in consultation with the city attorney, may determine the precise form of the indemnification in an application form and included in conditions of approval.

(d) **Enforcement.** To the fullest extent allowed by law, an applicant must indemnify the city for all of the city's costs, losses, and attorney's fees incurred to enforce the indemnification in this section.

(e) **Applicant**. "Applicant" means the party on whose behalf an application is submitted and any subsequent legal or equitable holder of a city approval.

(f) **Notice**. Written notice of a claim, action or proceeding may be provided in accordance with Belmont City Code Section 1-12.

(g) **Conditions of Approval**. The conditions of an approval are to include reference to the applicant's obligations under this section. Failure to include reference does not affect the applicant's obligations under this section.

SECTION 3. BCC SECTION 22-31 AMENDED

Belmont City Code Section 22-31 is added to read:

Sec. 22-31 Indemnity for encroachments

An owner of real property whose property is or was benefited by an encroachment established by themselves or their predecessors in interest must defend and indemnify the city and its officers, officials, employees and volunteers against any claim for injury to persons or damage to property related to or arising from the encroachment.

SECTION 4. BCC SECTION 22-81 AMENDED

Belmont City Code Section 22-81 is amended to read:

Sec. 22-81. Maintenance of sidewalks.

(a) As used in this section, sidewalk area includes the sidewalk, any park or parking strip maintained in the area between the property line and the street line, and the curbing, gutter, driveway, bulkheads, retaining walls or other works for the protection of any sidewalk or of any park or parking strip.

(b) The owner of a lot fronting on or adjacent to a public street must maintain any sidewalk area in good repair and condition. This duty includes but is not limited to maintenance and repair of surfaces including performance of grinding, removal and replacement of sidewalks, and repair and maintenance of curb and gutters, so that the sidewalk area will remain in a condition that is not dangerous to property or to persons using the sidewalk area in a reasonable manner and will be in a condition which will not interfere with the public convenience in the use of the sidewalk area.

(c) An lot owner required by this section to maintain a sidewalk area ~~shall~~ owes a duty to members of the public to keep and maintain the sidewalk area in a safe and non-dangerous

condition.

(d) If, as a result of a~~n~~ lot owner's failure to maintain a sidewalk area in a safe and non-dangerous condition, any person suffers injury or damage to person or property, the owner ~~shall be~~is liable to the person for the resulting damages or injury.

(e) A lot owner required by this section to maintain a sidewalk area must defend and indemnify the city and its officers, officials, employees and volunteers and any public entity that owns or controls public property within the sidewalk area against any claim for injury to persons or damage to property related to or arising from the property owner's failure to maintain the sidewalk area in accordance with this section.

(f) The ~~City of Belmont~~city and any public entity that owns or controls public property within the sidewalk area ~~shall have~~has a cause of action for indemnity against the owner of a lot fronting on or adjacent to a public street ~~a property owner~~ for any damages ~~it~~ either may be required to pay as satisfaction of any judgment or settlement of any claim that results from injury to persons or property as a legal result of the lot owner's failure to maintain a sidewalk area in accordance with this section. The indemnity cause of action includes recovery of attorney fees and costs incurred defending against the claim and any lawsuit to recover on the claim. The right to indemnity and the obligation to indemnify is not dependent on the city or other public entity first tendering the claim to the property owner.

(g~~f~~) Failure of an owner to maintain a sidewalk area as set forth in this section ~~shall~~ constitutes a public nuisance.

SECTION 5. BZO Section 10.4.2 Amended

Belmont Zoning Ordinance Section 10.4.2 is amended to read:

10.4.2 **Contents.** The application must include the following.

(a) Name and address of the applicant, and the applicant's authorized agent, if any.

(b) Applications seeking entitlements affecting particular real property must be accompanied by the following.

(1) A statement certifying under penalty of perjury that the applicant is the owner of the property or the authorized agent of the owner.

(2) The address or description of property.

(3) An accurate scale drawing of the site showing the contours at intervals of not more than 5 feet and the locations of any existing and proposed streets, property lines, uses, structures, driveways, pedestrian walks, off-street parking and off-street loading facilities and landscaped areas. This requirement may be waived or modified by the Zoning Administrator.

(4) A detailed statement indicating the precise manner of compliance with each applicable plan, program, policy, ordinance, standard, requirement or similar provision applicable to the entitlements sought, together with any other data pertinent

to the findings prerequisite to the granting of the permit or approval, as required by the Zoning Administrator

(c) Such other information, plans, maps and data that the Zoning Administrator determines are necessary for evaluating applications for particular entitlements or will assist the reviewing authority in making a determination in harmony with the requirements of this Ordinance.

(d) A signed statement that the applicant agrees to defend, indemnify and hold harmless the city and its officers, officials, employees and volunteers as provided in Belmont City Code Section 1-18(a). ~~o defend, indemnify, and hold harmless the city and its agents, officers, and employees from any action, claim, or proceeding brought against the city or its agents, officers, or employees which challenges the validity of any zoning entitlement approval by the city~~

SECTION 6. SEVERABILITY.

If any section, subsection, sentence, clause or phrase of this Ordinance is for any reason held by a court of competent jurisdiction to be invalid, such a decision shall not affect the validity of the remaining portions of this Ordinance. The City Council of the City of Belmont hereby declares that it would have passed this Ordinance and each section or subsection, sentence, clause and phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses or phrases be declared invalid.

SECTION 7. EFFECTIVE DATE.

This Ordinance takes effect and will be enforced 30 days after its adoption.

* * *

The City Council of the City of Belmont, California introduced the foregoing ordinance, on [insert date], 2012 and adopted the ordinance at a regular meeting held on [insert date], 2012 by the following vote:

Ayes:

Noes:

Absent:

Abstain:

ATTEST:

_____
City Clerk

_____
Mayor

APPROVED AS TO FORM:

_____
City Attorney

CITY OF BELMONT

FISCAL YEAR 2024-25

MONTHLY FINANCIAL REPORT - FEBRUARY 28, 2025



HIGHLIGHTS

PERFORMANCE AT A GLANCE REPORT

• General Fund balance increased compared to prior YTD

FUND RECAP AT A GLANCE REPORT

Notable Fund Balance Increase compared to prior YTD:

•General Fund
•Belmont Fire Protection District
•Street Maintenance
• Sewer Collection System
• Facilities Management

Notable Fund Balance Decrease compared to prior YTD:

• Measure I
• Affordable Housing Successor

BUDGET VARIANCE REPORT

• Management Discussion & Analysis
• Tax Trends

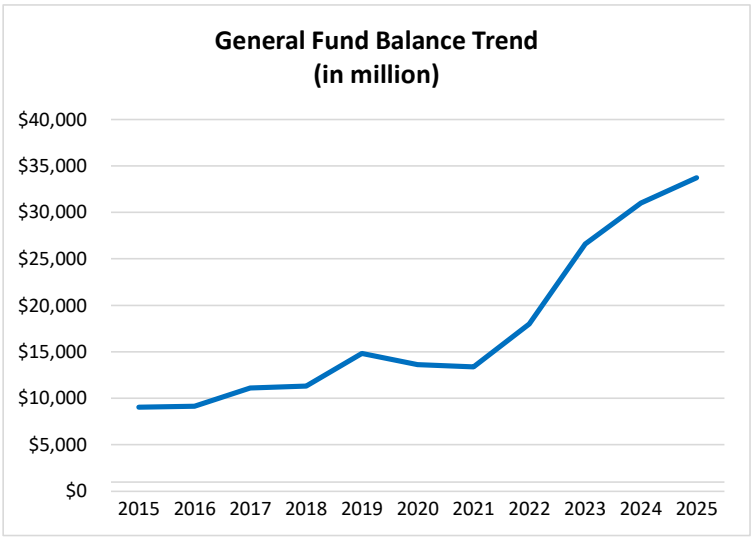
CASH DISBURSEMENTS & PURCHASE ORDER ACTIVITY REPORT

•Amounts equal to and above $50,000

This report contains financial information which has not been reviewed or audited by an independent auditor, does not reflect the application of generally accepted accounting principles in all instances and is subject to future revision. This report has not been prepared with a view to informing an investment decision in any of the City's bonds, notes or other obligations. Any projections, plans or other forward-looking statements included in this report are subject to a variety of uncertainties that could cause any actual plans or results to differ materially from any such statement. The information herein is not intended to be used by investors or potential investors in considering the purchase or sale of the City's bonds, notes or other obligations and investors and potential investors should rely only on information filed by the City on the Municipal Securities Rulemaking Board's Electronic Municipal Market Access System for municipal securities disclosures and website, maintained on the World Wide Web at https://emma.msrb.org/

These financial reports are designed to provide a general overview of the City of Belmont's interim finances. Questions concerning any information provided in

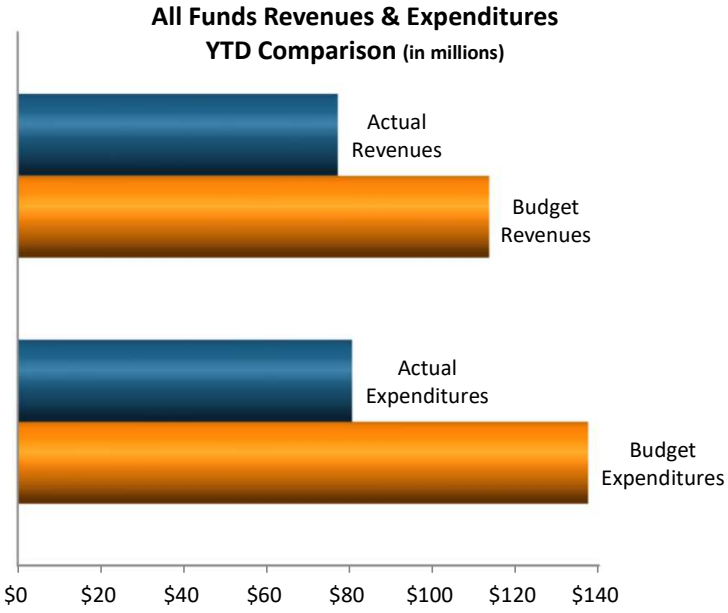
City of Belmont
Performance at a Glance
Results for the Period Ended February 28, 2025
(000's)

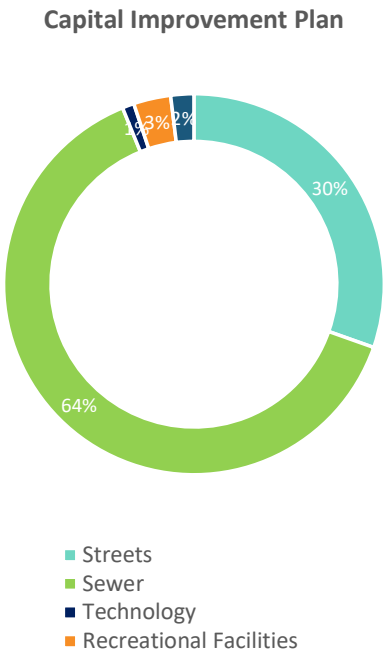


General Fund Balance Trends*

6/30/2015	2015	$9,049	Audited
6/30/2016	2016	$9,177	Audited
6/30/2017	2017	$11,128	Audited
6/30/2018	2018	$11,325	Audited
6/30/2019	2019	$14,846	Audited
6/30/2020	2020	$13,637	Audited
6/30/2021	2021	$13,398	Audited
6/30/2022	2022	$18,013	Audited
6/30/2023	2023	$26,586	Audited
6/30/2024	2024	$31,003	Audited
2/28/2025	2025	$33,718	Unaudited

* excludes Measure I





General Fund

The General Fund balance is $33.7 million, an increase of $2.7 million compared to the amount at the prior fiscal year-end. This is primarily due to the timing of the Prop Tax In-lieu of VLF and ERAF Refund receipts.

Fund Balance - YTD Fund Deficits

As shown on the Fund Recap at a Glance (page 3) Recreation Fund has deficit fund balance and is expected to be eliminated in a future period.

City of Belmont
Fund Recap at a Glance
Results for the Period Ended February 28, 2025
(000's)

Fund	Name	Audited Fund Balance 06/30/24 (1)	Revenues YTD Budget	YTD Actual (2)	Variance (Under) Over	%	PY YTD Actual	Expenditures YTD Budget	YTD Actual (3)	Variance Under (Over)	%	PY YTD Actual	Unaudited Fund Balance 02/28/25 (1)+(2)-(3)	PY YTD Fund Balance 02/28/24
GENERAL FUND														
101	General	*$31,003*	$22,141	$19,593	($2,548)	88%	$19,113	$21,338	$16,878	$4,460	79%	$16,125	***$ 33,718***	*29,574*
102	Measure I	*4,464*	1,609	1,235	(374)	77%	1,335	5,487	3,213	2,275	59%	1,694	***2,487***	*3,578*
SPECIAL REVENUE FUNDS														
205	Recreation	*397*	2,658	1,602	(1,056)	60%	1,544	2,723	2,519	205	92%	2,241	***(519)***	*(114)*
206	Library Maintenance & Operation	*777*	228	194	(34)	85%	195	648	293	356	45%	252	***678***	*758*
207	Athletic Field Maintenance	*391*	110	129	20	118%	126	236	96	140	41%	79	***424***	*413*
208	City Tree	*252*	14	10	(4)	72%	28	91	28	63	31%	60	***234***	*252*
209	Senior Services Donation	*96*	7	10	3	137%	2	6	0	6	0%	0	***106***	*94*
210	Development Services	*2,020*	4,589	4,578	(11)	100%	4,488	4,801	4,328	473	90%	3,613	***2,270***	*2,412*
212	General Plan Maintenance	*1,492*	336	278	(58)	83%	343	947	708	239	75%	523	***1,062***	*1,412*
223	Belmont Fire Protection District	*25,882*	12,681	11,090	(1,591)	87%	11,146	9,321	12,674	(3,353)	136%	9,489	***24,298***	*21,855*
225	Police Grants and Donations	*35*	1	1	0	154%	5	6	0	6	0%	1	***36***	*35*
227	Supplemental Law Enforcement	*71*	117	166	49	142%	172	66	68	(1)	102%	83	***169***	*95*
231	Street Maintenance	*1,365*	1,786	1,040	(746)	58%	808	1,733	1,593	139	92%	1,636	***812***	*(828)*
232	RMRA Street Project	*498*	513	469	(43)	92%	420	1,116	330	786	30%	8	***638***	*1,018*
233	Measure W	*2,295*	327	260	(67)	79%	242	2,012	118	1,894	6%	0	***2,436***	*2,051*
234	Street Improvements	*2,935*	756	658	(98)	87%	753	2,287	428	1,860	19%	117	***3,165***	*2,540*
237	Traffic Impact	*100*	105	160	55	153%	2	0	0	0	N/A	0	***260***	*98*
239	Public Art	*420*	14	9	(6)	60%	7	7	0	7	0%	0	***429***	*411*
275	Affordable Housing Successor	*6,056*	151	129	(22)	85%	238	1,049	261	789	25%	160	***5,924***	*9,526*
277	Inclusionary Housing	*3,254*	129	202	73	157%	604	0	0	0	N/A	0	***3,456***	*3,175*
	Total Special Revenue	*48,336*	24,519	20,985	(3,534)	86%	21,122	27,050	23,443	3,607	87%	18,262	***45,878***	***45,202***
CAPITAL PROJECT FUNDS														
308	General Facilities	*621*	19	12	(7)	65%	13	396	38	357	10%	7	***595***	*740*
310	Infrastructure	*2,290*	58	46	(12)	79%	44	2,175	(172)	2,347	-8%	137	***2,509***	*2,302*
312	Comcast PEG Program	*421*	10	9	(2)	84%	7	80	0	80	0%	0	***430***	*412*
341	Planned Park	*1,084*	61	17	(44)	28%	30	467	337	130	72%	337	***764***	*1,393*
342	Park Impact	*680*	29	38	8	129%	24	442	20	422	4%	0	***698***	*666*
343	Open Space	*104*	2	2	(1)	75%	2	34	53	(18)	154%	0	***53***	*99*
399	Capital Improvement Projects	*3,292*	36,776	7,248	(29,528)	20%	7,427	39,193	7,722	31,470	20%	3,946	***2,818***	*3,481*
704	Special Assessment Districts	*328*	8	7	(1)	84%	6	0	0		N/A	0	***335***	*321*
	Total Capital Projects	*8,820*	36,964	7,379	(29,586)	20%	7,552	42,786	7,998	34,788	19%	4,427	***8,201***	***9,413***
DEBT SERVICE & OTHER FUNDS														
406	Library Bond Debt Service	*320*	465	403	(61)	87%	405	454	659	(204)	145%	648	***65***	*43*
501-505	Sewer Collection System	*40,307*	15,998	16,184	186	101%	9,848	24,897	15,833	9,064	64%	7,996	***40,658***	*33,334*
507	Sewer Treatment	*28,834*	2,206	2,220	15	101%	1,937	3,583	3,764	(181)	105%	2,681	***27,290***	*26,647*
525	Storm Drainage Enterprise	*1,406*	1,397	779	(618)	56%	770	2,083	1,150	933	55%	1,304	***1,034***	*1,639*
530	Solid Waste Management	*2,110*	460	425	(35)	92%	372	406	356	50	88%	350	***2,179***	*1,891*
570	Worker's Compensation	*1,837*	627	660	33	105%	677	568	760	(192)	134%	693	***1,737***	*1,746*
571	Liability Insurance	*3,324*	610	619	9	101%	85	929	906	23	97%	648	***3,037***	*3,123*
572	Self Funded Vision	*0*	0	0	0	N/A	0	0	0	0 N/A		(4)	***0***	*4*
573	Fleet & Equipment Management	*8,241*	3,550	3,520	(29)	99%	3,176	4,703	3,032	1,671	64%	3,141	***8,730***	*8,429*
574	Facilities Management	*366*	2,022	2,083	61	103%	1,922	2,115	1,714	401	81%	1,681	***735***	*(363)*
575	Benefit Prefunding	*1,313*	1,007	970	(37)	96%	954	1,057	807	250	76%	1,037	***1,476***	*1,151*
775	Successor Agency Trust Fund[1]	-	0	0	0	N/A	0	0	0		N/A	0	***0***	*0*
	Total Debt & Other	88,058	28,340	27,864	(476)	98%	20,147	40,795	28,980	10,785	71%	20,176	86,942	77,645
	Total All Funds	**$180,681**	**$113,574**	**$77,057**	**($36,517)**	**68%**	**$69,270**	**$137,457**	**$80,512**	**$55,914**	**59%**	**$60,684**	**$177,225**	**$165,412**

Fund Types:

General Fund - Used to account for and report all financial resources not accounted for and reported in another fund.

Special Revenue Funds - Used to account for and report the proceeds of specific revenue sources that are restricted or committed to expenditure for specific purposes other than debt service or capital projects.

Capital Projects Funds - Used to account for and report financial resources that are restricted, committed, or assigned to expenditure for capital outlays, including the acquisition or construction of capital facilities and other capital assets.

Debt Service & Other Funds - Includes funds used to account for and report financial resources that are restricted, committed, or assigned to expenditure for principal and interest; funds used to finance and account for special activities and services performed by a designated department for other departments in the City on a cost reimbursement basis; and funds to account for operations financed and operated in a manner similar to a private business enterprise with the intent that the cost of providing goods and services is primarily financed through user charges; and funds used to account for assets held by the City as an agent.

City of Belmont
Budget Variance Report
General Fund / All Other Funds
Results for the Period Ended February 28, 2025
(000's)

	General Fund						All Other Funds					
	Year to Date (YTD)				Annual	PY YTD	Year to Date (YTD)				Annual	PY YTD
	Budget	Actual	Variance	%	Budget	Actual	Budget	Actual	Variance	%	Budget	Actual
REVENUES												
Taxes	$15,817	$14,358	($1,459)	91% **a**	$23,725	$13,336	$15,032	$12,736	($2,296)	85% **a**	$22,549	$12,468
Licenses and permits	810	716	(94)	88%	1,215	633	1,590	2,114	524	133%	2,385	1,844
Intergovernmental	244	279	35	114%	366	335	8,822	1,825	(6,997)	21% **d**	13,233	5,331
Charge for services	2,879	2,737	(142)	95% **b**	4,318	2,774	25,801	24,518	(1,283)	95% **e**	38,702	23,358
Fines and forfeits	96	61	(35)	63%	144	88	-	-	-	N/A	-	-
Use of money and property	1,278	1,320	42	103%	1,917	1,921	3,556	3,358	(198)	94% **f**	5,334	3,218
Miscellaneous	214	123	(91)	57%	321	26	18	481	463	2645%	27	389
Other financing sources	-	-	-	N/A	-	-	-	6	6	N/A	-	13
Operating transfers in	803	-	(803)	0% **c**	1,205	-	36,613	12,424	(24,189)	34% **c**	54,919	3,536
Total Revenues	**22,141**	**19,593**	**(2,548)**	**88%**	**33,212**	**19,113**	**91,433**	**57,463**	**(33,969)**	**63%**	**137,149**	**50,157**
EXPENDITURES												
General government	5,374	4,904	(469)	91%	8,060	4,235	6,027	5,425	(602)	90%	9,040	5,533
Public safety	10,724	10,117	(607)	94%	16,086	10,230	9,126	12,795	3,669	140% **g**	13,689	9,547
Streets and utilities	-	-	-	N/A	0	0	48,756	19,193	(29,562)	39%	73,133	12,995
Culture and recreation	1,940	1,857	(83)	96%	2,911	1,537	7,196	4,877	(2,319)	68%	10,794	4,675
Urban redevelopment	-	-	-	N/A	0	0	5,536	4,207	(1,329)	76%	8,304	3,234
Non departmental	-	-	-	N/A	0	0	1,380	152	(1,228)	11%	2,071	-
Debt service	-	-	-	N/A	0	0	3,982	4,561	579	115% **h**	5,973	5,163
Operating transfer out	3,300	-	(3,300)	0%	4,950	122	34,116	12,424	(21,692)	36%	51,174	3,413
Total Expenditures	**21,338**	**16,878**	**(4,460)**	**79%**	**32,007**	**16,125**	**116,118**	**63,634**	**(52,484)**	**55%**	**174,178**	**44,559**
EXCESS OF REVENUES OVER/ (UNDER) EXPENDITURES	**$803**	**$2,715**			**$1,205**	**$2,988**	**($24,686)**	**($6,171)**			**($37,028)**	**$5,598**

Management Discussion and Analysis

(Items with unfavorable budget variance more than $0.1 million)

General Fund

Revenues

a) Taxes - The budget variance is primarily due to the timing of semi-annual property tax receipts received in December and April. In addition, February Sales Taxes and Transient Occupancy Taxes (TOT) remiitances will be received and reported in March.

b) Charge for services - The budget variance is primarily due to the quarterly fire prevention and protection fee, which will be received and reported in March.

c) Operating transfers in - Budgeted operating transfers are recorded at the end of the fiscal year based on actual results.

Other Funds

Revenues

d) Intergovernmental - Grant revenue will be received and reported in a future reporting period.

e) Charge for services - The Sewer User Fee (Collection & Treatment) is included as part of the City's Property Tax bill to be received semi-annually, typically in December and April.The budget variance is primarily due to the timing of the sewer user fee receipts.

f) Use of money and property - The budget variance is primarily due to the fact that quarterly interest allocation was not booked until the end of the quarter.

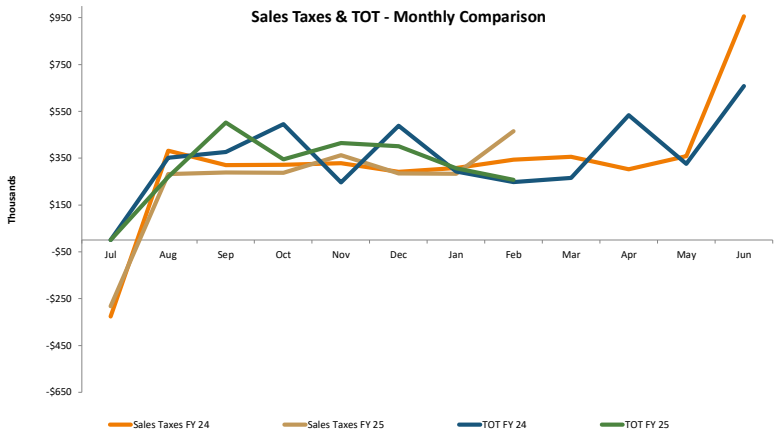
Other Funds

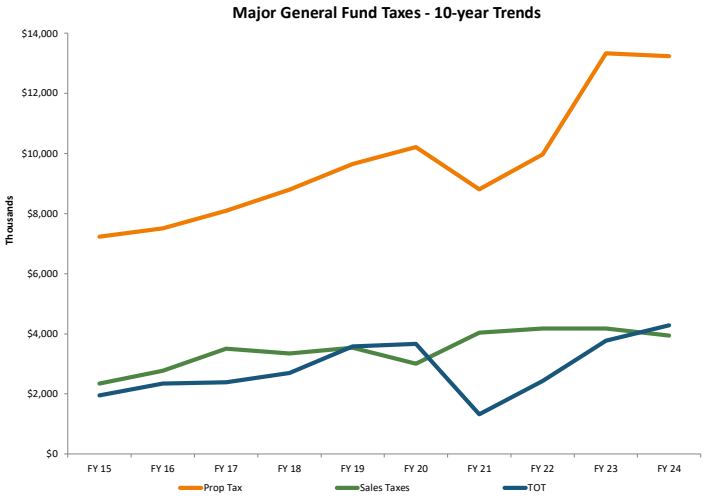
Expenditures

g) Public safety - The budget variance is primarily due to three quarterly payments for San Mateo Fire Fees that were made as of January.

h) Debt service - The budget variance is primarily due to semi-annual principal payments for library and sewer bonds that were made in January.

Trends





City of Belmont
Disbursements & Purchase Order Activity Report
Results for the Period Ended February 28, 2025

Disbursements Amounts Equal to $50,000 and Above

Vendor	Description	Date	No.	Amount
ATLAS TREE SERVICE INC	PROGRESS PAY 1	2/7/25	EFT00037793	120,650.00
ATLAS TREE SERVICE INC	PROGRESS PAY 2	2/21/25	EFT00037891	97,375.00
CALPERS	CALPERS CERBT CONTRIBUTIONS	2/3/25	DAJ000009538	133,391.86
CALPERS	COB HEALTH PREMIUM-FEBRUARY	2/7/25	DAJ000009539	236,478.06
CALPERS	COB CONTRIBUTION PPE 02/07/25	2/12/25	DAJ000009540	139,025.17
CALPERS	COB CONTRIBUTIONS PPE 02/21/25	2/28/25	DAJ000009541	141,608.87
DISBURSEMENTS	Payroll Tax PPE 02/15/25	2/21/25	DAJ000009574	129,182.55
DISBURSEMENTS	Payroll Wage PPE 02/01/25	2/7/25	DAJ000009558	496,986.60
DISBURSEMENTS	Payroll Tax PPE 02/01/25	2/7/25	DAJ000009560	114,230.04
DISBURSEMENTS	Payroll Wage PPE 02/15/25	2/21/25	DAJ000009561	525,595.63
GOOD CITY COMPANY	HIA Subs Dec 2024	2/21/25	EFT00038010	98,493.47
MISSIONSQUARE	DEF COMP ACCT#302442	2/10/25	DAJ000009546	56,678.75
MISSIONSQUARE	DEF COMP ACCT#e302442	2/24/25	DAJ000009549	57,016.08
SILICON VALLEY CLEAN WATER	MARCH CONTRIBUTION	2/7/25	EFT00037775	601,959.82
			Total Disbursements in Excess of $50,000	**$ 2,948,671.90**
			Total Count	**14**

Purchase Order Amounts Equal to $50,000 and Above

Vendor	Description	Date	No.	Amount
ONPOINT CONSTRUCTION	LIBRARY INTERIOR PROJECT	2/7/25	25 00091	450,313.00
HDL COREN & CONE	FY 24/25 - FY 28/29 PROP TAX MNGMNT/AU	2/11/25	25 00096	70,218.75
HDL COMPANIES	FY 24/25 - FY 28/29 TOT ADMIN SERVICES	2/28/25	25 00101	74,000.00
HDL COMPANIES	FY 24/25 - FY 28/29 SALES TAX ADMIN S	2/28/25	25 00102	74,000.00
HDL COMPANIES	FY 24/25 - FY 28/29 BL TAX ADMIN	2/28/25	25 00103	625,000.00
			Total Purchase Orders Issued in Excess of $50,000	**$ 1,293,531.75**
			Total Count	**5**

CITY OF BELMONT
TREASURER'S REPORT
February 28, 2025

Agency Receipts and Disbursements Summary

	Beginning Balance January 31, 2025	Receipts	Disbursements	Ending Balance February 28, 2025
City of Belmont	$ 131,130,083.61	$ 4,820,037.03	$ (1,687,006.91)	$ 134,263,113.73
Belmont Fire Protection District	25,565,027.81	1,145,660.44	(2,431,485.93)	24,279,202.32
Total	**$ 156,695,111.42**	**$ 5,965,697.47**	**$ (4,118,492.84)**	**$ 158,542,316.05**

-

Balance Summary

	Deposit	Investments	Pool Total
City of Belmont & Belmont Fire Protection District	**$ 5,119,584.52**	**$ 153,422,731.53**	**$ 158,542,316.05**

-

I certify that this report accurately reflects all investments of City of Belmont and Belmont Fire Protection District, and is in conformance with the adopted Investment Policy mandated by Government Code 53646. Furthermore, I certify to the best of my knowledge, sufficient investment liquidity and anticipated revenues are available to meet the Agency's budgeted expenditure requirement for the next six months.

Respectfully Submitted,

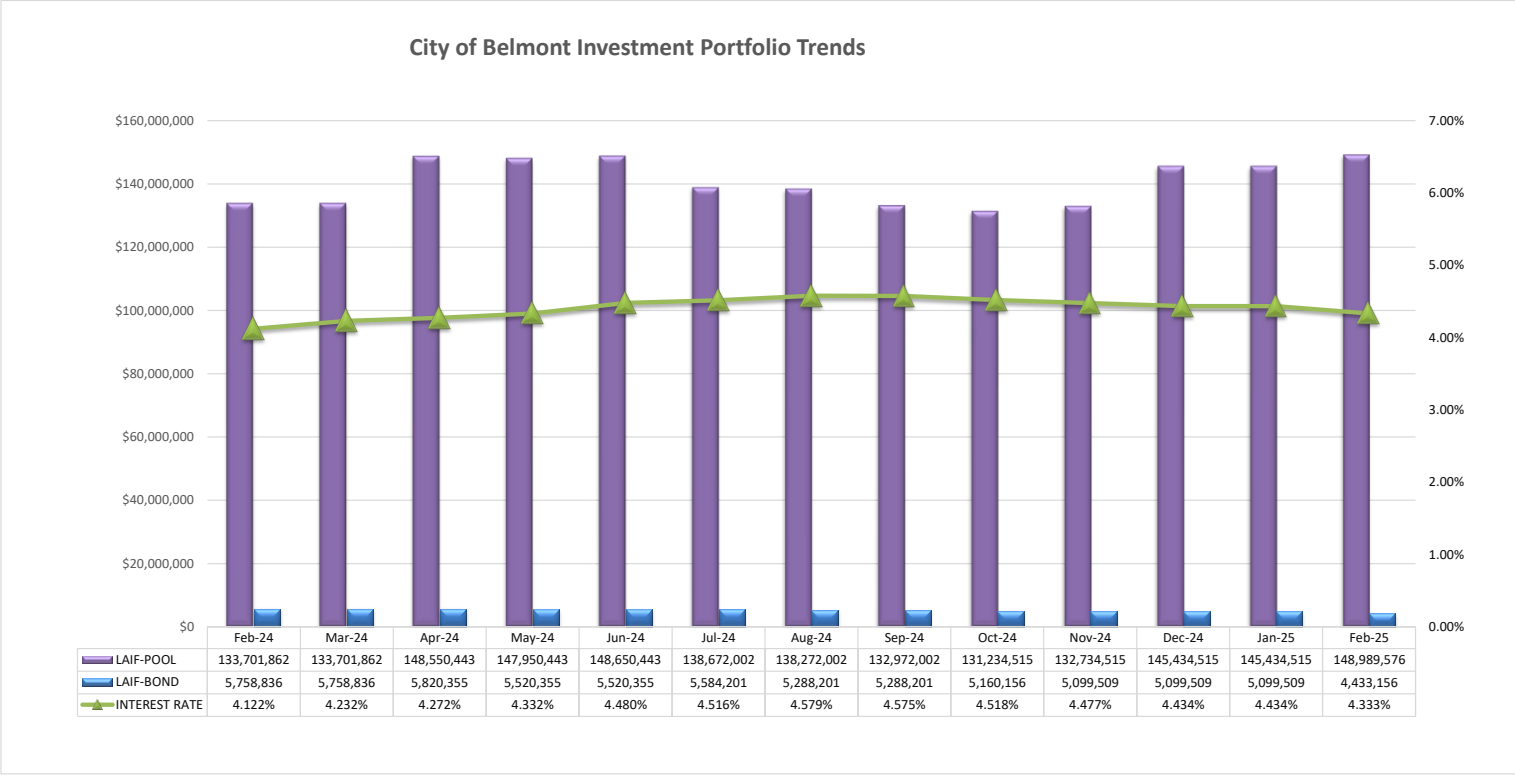
s/b Grace Castaneda

Grace Castaneda
City Treasurer

CITY OF BELMONT
TREASURER'S REPORT
February 28, 2025

Investment Detail

Investment Type	Issuer	Maturity Date	Par Amount	Current Market Value	Interest	Total	Investment Period	Rate	Pricing Source	Manager
Deposit										
General Account	Wells Fargo		$ 5,119,584.52	$ 5,119,584.52					Bank	Bank
Investments:										
L.A.I.F.-POOL	State of California	Daily	148,989,575.74	148,933,255.45	537,976.53		90 days	4.333%	LAIF	LAIF
L.A.I.F.-BONDS	State of California	Daily	4,433,155.79	4,431,479.99	16,007.39		90 days	4.333%	LAIF	LAIF
Total			**$ 158,542,316.05**	**$ 158,484,319.96**	**$ 553,983.91**					



	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25
LAIF-POOL	133,701,862	133,701,862	148,550,443	147,950,443	148,650,443	138,672,002	138,272,002	132,972,002	131,234,515	132,734,515	145,434,515	145,434,515	148,989,576
LAIF-BOND	5,758,836	5,758,836	5,820,355	5,520,355	5,520,355	5,584,201	5,288,201	5,288,201	5,160,156	5,099,509	5,099,509	5,099,509	4,433,156
INTEREST RATE	4.122%	4.232%	4.272%	4.332%	4.480%	4.516%	4.579%	4.575%	4.518%	4.477%	4.434%	4.434%	4.333%

STAFF REPORT

Meeting Date:	May 13, 2025
Agency:	City of Belmont
Staff Contact:	Bozhena Palatnik, Public Works, (650) 595-7463, bpalatnik@belmont.gov
Agenda Title:	Salson Trail Culvert Replacement Project – Plans and Specifications Approval, Bid and Construction Award Authorization, Design Task Order Amendment, and Construction Management Task Order Authorization
Agenda Action:	Resolution

Recommendation

Adopt a resolution approving plans and specifications, authorizing advertisement for sealed bids, authorizing the City Manager to negotiate and execute a contract with the lowest responsible and responsive bidder for an amount not to exceed $554,321 plus a ten percent construction contingency, approving a design task order amendment with Mott MacDonald Group, Inc. for an amount not to exceed $93,142, approving a task order for construction management services with MNS Engineers, Inc. for an amount not to exceed $90,655 for the Salson Trail Culvert Replacement Project, City Contract Number 2025-639; and appropriate budget funds to the Salson Trail Culvert Replacement Project.

Strategic Focus Area

Infrastructure and Mobility

Background

The Salson Trail is an unpaved fire road in the City of Belmont (City) located south of the Sugar Loaf Open Space area near East Laurel Creek Road. The trail provides recreation opportunities and important emergency access for firefighting to approximately 100 acres of open space area along the tributary of Laurel Creek. The open space is tightly surrounded by residential neighborhoods in the Cities of Belmont and San Mateo. During the large winter storm events of 2022/23 part of the trail that crosses the tributary with a 48" storm culvert was damaged by excessive flow and overtopped the crossing. The events caused erosion of the banks, caused much of the emergency access road to collapse, and jeopardized the sanitary sewer main.

The City has applied to the Federal Emergency Management Agency (FEMA) to repair areas impacted from these storm events, using $186,795 in federal grant funding available through the Hazard Mitigation and Public Assistance grant programs. However, FEMA has rejected City's application for requested funding. Staff retained a qualified engineering firm to design improvements to fix the storm culvert, sanitary sewer main, and emergency access road, and provide clearance for all necessary regulatory permits. The design and permitting are now complete.

The Salson Trail Culvert Replacement Project will restore the culvert function, and adjoining infrastructure, and restore emergency access at the urban/wildland interface.

Analysis

The Salson Trail Culvert Replacement Project aims to restore a critical piece of infrastructure at the urban/wildland interface by addressing both stormwater conveyance and emergency access needs. The project scope includes:

- Replacing and upsizing the failing culvert to mitigate the risk of future failures;
- Replacing a damaged and at-risk segment of sewer main; and
- Repairing and reopening the Salson Trail for emergency vehicle access and public recreational use.

Initial project assumptions anticipated exemption from environmental permitting requirements. However, upon early coordination with environmental agencies, only the U.S. Army Corps of Engineers confirmed that no permit would be required. In contrast, the Regional Water Quality Control Board and the California Department of Fish and Wildlife required full permit submittals. This triggered extensive coordination, additional review time, and added scope for the design consultant. As a result, staff is requesting an amendment to Task Order #1 with Mott MacDonald Group, Inc. to include environmental permit compliance, CEQA clearance, and post-construction restoration monitoring. The cost of Amendment #1 is $93,142, bringing the total Task Order #1 to $261,087.

To ensure effective construction oversight and regulatory compliance during the construction phase, staff solicited proposals from on-call construction management firms. MNS Engineers, Inc. was selected due to their proven experience with similar projects. Their construction management and inspection services are estimated at $90,655 and will include full-time inspection, coordination with permitting agencies, and managing field conditions and issues as they arise.

The total construction cost is estimated at $554,321, with a 10% contingency added to account for unexpected field conditions. Including the amended design contract and construction management services, the total estimated project cost is $787,351. To accommodate potential unforeseen costs, staff recommends that the City Council approve a total project budget of $810,000 for the Salson Trail Culvert Replacement Project (CIP #3233, Account #399-3-730-3233-9030), funded equally by Measure I (Fund 102) and the Belmont Fire Protection District (Fund 223), with each contributing $405,000.

Alternatives

1. Take no action.
2. Refer back to staff for additional information

Attachments

A. Resolution
B. Project Plans
C. Project Specifications
D. Amendment #1 to Task Order #1 Proposal from Mott MacDonald Group, Inc.
E. Construction Management and Inspection Proposal from MNS, Inc.

Fiscal Impact

☐ No Fiscal Impact

☒ Funding Source Confirmed: Budget appropriations to the Capital Improvement Program (CIP) Salson Trail Culvert Replacement Project #3233 to reflect a total budget of $810,000 (Account# 399-3-730-3233-9030), to be funded $405,000 by the Measure I Fund 102, and $405,000 to funded by the Belmont Fire Protection District Fund 223.

Source:	**Purpose:**	**Public Outreach:**
Staff	Discretionary Action	Posting of Agenda

RESOLUTION NO. 2025 –

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BELMONT (1) APPROVING PLANS AND SPECIFICATIONS, AUTHORIZING ADVERTISEMENT FOR SEALED BIDS, AUTHORIZING THE CITY MANAGER TO NEGOTIATE AND EXECUTE A CONTRACT WITH THE LOWEST RESPONSIBLE BIDDER FOR AN AMOUNT NOT TO EXCEED $554,321 PLUS A TEN PERCENT CONSTRUCTION CONTINGENCY, (2) AUTHORIZING THE CITY MANAGER TO NEGOTIATE AND EXECUTE AN AMENDMENT #1 TO TASK ORDER #1 FOR ADDITIONAL SERVICES WITH MOTT MACDONALD GROUP, INC. FOR AN AMOUNT NOT TO EXCEED $93,142, (3) AUTHORIZING THE CITY MANAGER TO NEGOTIATE AND EXECUTE A TASK MNS ENGINEERS, INC. FOR AN AMOUNT NOT TO EXCEED $90,655, AND (4) APPROVE BUDGET APPROPRIATIONS TO THE CAPITAL IMPROVEMENT PROGRAM (CIP) SALSON TRAIL CULVERT REPLACEMENT PROJECT #3233 TO REFLECT A TOTAL BUDGET OF $810,000 (ACCOUNT# 399-3-730-3233-9030), TO BE FUNDED $405,000 BY THE MEASURE I FUND, AND $405,000 TO FUNDED BY THE BELMONT FIRE PROTECTION DISTRICT FUND FOR THE SALSON TRAIL CULVERT REPLACEMENT PROJECT, CITY CONTRACT NUMBER 2025-639.

WHEREAS, the Department of Public Works has prepared plans and specifications for the Salson Trail Culvert Replacement Project, CCN 2025-639; and,

WHEREAS, the project is statutory exempt from the California Environmental Quality Act (CEQA) under the CEQA Section 15269 because it is an emergency project; and,

WHEREAS, compliance with environmental permits required additional level of service for the design consultants, resulting in the Amendment of the scope of work; and,

WHEREAS, Staff solicited proposals from qualified civil engineering firms under existing on-call agreements to provide construction management and inspection services; and,

WHEREAS, MNS Engineers, Inc. was selected to provide the City with on-call construction management and inspection services for an amount no tot exceed $90,655.

NOW, THEREFORE, the City Council of the City of Belmont resolves as follows:

SECTION 1. Approves plans and specifications, authorizes the advertisement for sealed bids, and authorizes the City Manager to negotiate and execute a contract with the lowest responsible and responsive bidder for an amount not to exceed $554,321 plus a ten percent construction contingency for the Salson Trail Culvert Replacement Project, City Contract Number 2025-639.

SECTION 2. The City Manager is authorized to negotiate and execute an Amendment #1 to the Task Orde r#1 with Mott MacDonald Group, Inc. for an amount not to exceed $93,142 for the Salson Trail Culvert Replacement Project, City Contract Number 2025-639.

SECTION 3. The City Manager is authorized to negotiate and execute a Task Order with MNS Engineers, Inc. to provide construction management services for an amount not to exceed $90,655 for the Salson Trail Culvert Replacement Project, City Contract Number 2025-639.

SECTION 4. To account for any unanticipated additional costs that may arise, staff is requesting that City Council approve budget appropriations to the Capital Improvement Program (CIP) Salson Trail Culvert Replacement Project #3233 to reflect a total budget of $810,000 (Account# 399-3-730-3233-9030), to be funded $405,000 by the Measure I Fund 102, and $405,000 to funded by the Belmont Fire Protection District Fund 223.

* * *

ADOPTED May 13, 2025 by the City of Belmont City Council by the following vote:

Ayes:

Noes:

Absent:

Abstain:

ATTEST:

_____
City Clerk

_____
Mayor

APPROVED AS TO FORM:

_____
City Attorney

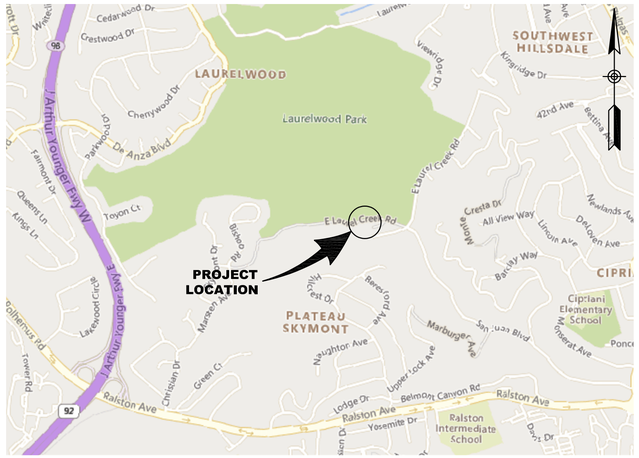
SALSON TRAIL
CULVERT REPAIR PROJECT
EAST LAUREL CREEK
BELMONT, CALIFORNIA

GENERAL NOTES

1. MAINTAIN A COPY OF THE PROJECT PLANS ON THE JOBSITE AT ALL TIMES.
2. STATE LAW REQUIRES THE CONTRACTOR TO CONTACT UNDERGROUND SERVICE ALERT (USA) AT 800–227–2600 AT LEAST 48 HOURS PRIOR TO COMMENCING EXCAVATIONS.
3. CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
4. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL PLAN, IF REQUIRED BY CITY.
5. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE SITE IN A CLEAN AND DUST–FREE STATE THROUGHOUT CONSTRUCTION.
6. CONTRACTOR SHALL COMPLY WITH BEST MANAGEMENT PRACTICES OF CITY'S NPDES PERMIT FOR PROTECTION OF STORM WATER QUALITY.
7. CONTRACTOR IS RESPONSIBLE FOR SITE SAFETY. ALL EXCAVATIONS SHALL BE PLATED WHEN INACTIVE. BARRICADES WITH LIGHTS SHALL DELINEATE CONSTRUCTION ZONE.
8. CONTRACTOR SHALL NOTIFY PUBLIC WORKS: (650)595–7425 AT THE BEGINNING OF ANY WORK.
9. CONTRACTOR SHALL COMPLY WITH ALL CONDITIONS OF RESOURCE AGENCY PERMITS AUTHORIZING THE PROJECT
10. IN OPEN CUT SEWER REPLACEMENT SECTIONS, EXISTING SEWER PIPE AND CONTENTS SHALL BE REMOVED AND DISPOSED OF AT CONTRACTOR'S EXPENSE.
11. NEW SEWER PIPE SHALL BE THE MATERIAL AS NOTED ON THE DRAWINGS.

ENGINEER'S NOTES

1. CONTRACTOR SHALL COMPLY WITH CALTRANS STANDARD PLANS AND SPECIFICATION, 2023 EDITION AND THE STANDARDS AND REQUIREMENTS OF THE CITY OF BELMONT, WHERE APPROPRIATE. ALL WORK SHALL BE PERFORMED TO THE SATISFACTION OF THE CITY ENGINEER.
2. CONTRACTOR SHALL PROVIDE ADEQUATE DUST CONTROL AT ALL TIMES AS REQUIRED BY THE CITY OF BELMONT.
3. ALL KNOWN EXISTING UTILITY LINES ARE SHOWN FOR INFORMATION ONLY. CONTRACTOR SHALL EXERCISE ALL NECESSARY CAUTION TO AVOID DAMAGE TO ANY EXISTING UTILITY LINES OR FACILITIES TO REMAIN IN PLACE, WHETHER OR NOT SUCH FACILITIES APPEAR ON THESE PLANS, AND SHALL BEAR FULL RESPONSIBILITY FOR ANY DAMAGE THERETO.
4. RIGHT OF WAY LINES WHERE SHOWN ARE BASED UPON COUNTY GIS DATA AND ARE SHOWN FOR INFORMATIONAL PURPOSES ONLY.
5. CONTRACTOR SHALL PROTECT EXISTING TREES IN ACCORDANCE WITH SP 1–8–7 OF THE SPECIAL PROVISIONS.
6. THE CONTRACTOR SHALL PROTECT EXISTING FEATURES AND WHERE NECESSARY RESTORE IN KIND ALL DAMAGED OR OTHERWISE DISTURBED FEATURES WHETHER OR NOT SHOWN/SPECIFIED ON PLANS, INCLUDING FENCES, GATES, MONUMENTS, DRAINAGE CHANNELS, LANDSCAPE FEATURES OF WHATEVER NATURE, SUE TO CONTRACTOR WORK, TO THE SATISFACTION OF THE ENGINEER. THESE FEATURES SHALL BE RESTORED WITHIN 15 CALENDAR DAYS OF COMPLETION OF CULVERT AND/OR PIPE INSTALLATION WORK. COST OF RESTORING THESE FEATURES SHALL BE INCLUDED IN THE COST OF THE CULVERT OR PIPE.
7. BYPASS OF SANITARY SEWER FLOWS MAY BE LOCATED AT GROUND SURFACE WITHIN THE TEMPORARY ESA FENCED AREA.
8. CONTRACTOR SHALL CONTACT BOTH UNDERGROUND SERVICE ALERT (800–277–2600) AND THE AFFECTED UTILITY COMPANY PRIOR TO STARTING WORK TO REQUEST AND OBTAIN THE MARKING OF EXISTING UNDERGROUND FACILITIES.
9. ENGINEER SHALL BEAR NO RESPONSIBILITY FOR METHODS AND PROCEDURES OF WORK ESTABLISHED BY CONTRACTOR, JOBSITE CONDITIONS, JOBSITE SAFETY OR CONFORMANCE WITH SAFETY PROCEDURES AND REQUIREMENTS.
10. THE OWNER SHALL CLEAR ACCUMULATED DEBRIS FROM NEW CULVERT PIPE, NEAR BOLLARDS, AND ANY OTHER AREAS ADJACENT TO CULVERT WHENEVER DEBRIS IS PRESENT. OWNER SHOULD INSPECT PIPE AND BOLLARDS BEFORE AND AFTER ALL RAIN EVENTS.



VICINITY MAP
NO SCALE

ABBREVIATIONS

CLR	CLEAR
CLSM	CONTROLLED LOW STRENGTH MATERIAL
CMP	CORRUGATED METAL PIPE
COMP	COMPOSITE
CONST JT	CONSTRUCTION JOINT
ELEV	ELEVATION
EX	EXISTING
EXP	EXPANSION
F	FOUNDATION
FG	FINISH GRADE
FL	FLOWLINE
HDPE	HIGH–DENSITY POLYETHYLENE
HMA	HOT MIX ASPHALT
INV	INVERT
LOL	LAYOUT LINE
MH	MANHOLE
NONRCP	NON–REINFORCED CONCRETE PIPE
OC	ON CENTER
OD	OUTER DIAMETER
OG	ORIGINAL GRADE
PVC	POLYVINYL CHLORIDE
RCP	REINFORCED CONCRETE PIPE
RECP	ROLLED EROSION CONTROL PRODUCT
RSC	RAPID STRENGTH CONCRETE
SD	STORM DRAIN
SPEC	SPECIFICATION
SS	SANITARY SEWER
STD	STANDARD
THVF	TEMPORARY HIGH VISIBILITY FENCE
TYP	TYPICAL
VCP	VITRIFIED CLAY PIPE
W/	WITH

LEGEND

- SANITARY SEWER MANHOLE
- SANITARY SEWER MANHOLE
- CLASS 2 AGGREGATE BASE (AB)
- CONTROLLED LOW STRENGTH MATERIAL CONCRETE
- EARTHWORK
- ROCK SLOPE PROTECTION
- ROLLED EROSION CONTROL PRODUCT
- GRAVEL FILTER
- XX — TEMPORARY HIGH VISIBILITY FENCE

SHEET INDEX

NO.	SHEET
1	COVER SHEET
2	OVERALL PROJECT LAYOUT AND SURVEY CONTROL
3	CULVERT DESIGN
4	GRADING PLAN
5	DRAINAGE DETAILS
6	CONSTRUCTION DETAILS
7	CONSTRUCTION DETAILS
8	CONSTRUCTION BEST MANAGEMENT PRACTICES

CITY COUNCIL

MAYOR	JULIA MATES
VICE MAYOR	GINA LATIMERLO
COUNCIL MEMBER	ROBIN PANG–MANGANARIS
COUNCIL MEMBER	DAVINA HURT
COUNCIL MEMBER	TOM MCCUNE

STAFF

CITY MANAGER	AFSHIN OSKOUI
DIRECTOR OF PUBLIC WORKS	NISHA PATEL, PE
CITY ATTORNEY	SCOTT RENNIE
CITY CLERK	JOZI PLUT

APPROVED BY CITY COUNCIL ON MAY 13, 2025

NISHA PATEL, PE – DIRECTOR OF PUBLIC WORKS

NO	REVISIONS	DATE	APPR
1			
2			
3			
4			
5			
6			
7			

CITY OF BELMONT PUBLIC WORKS

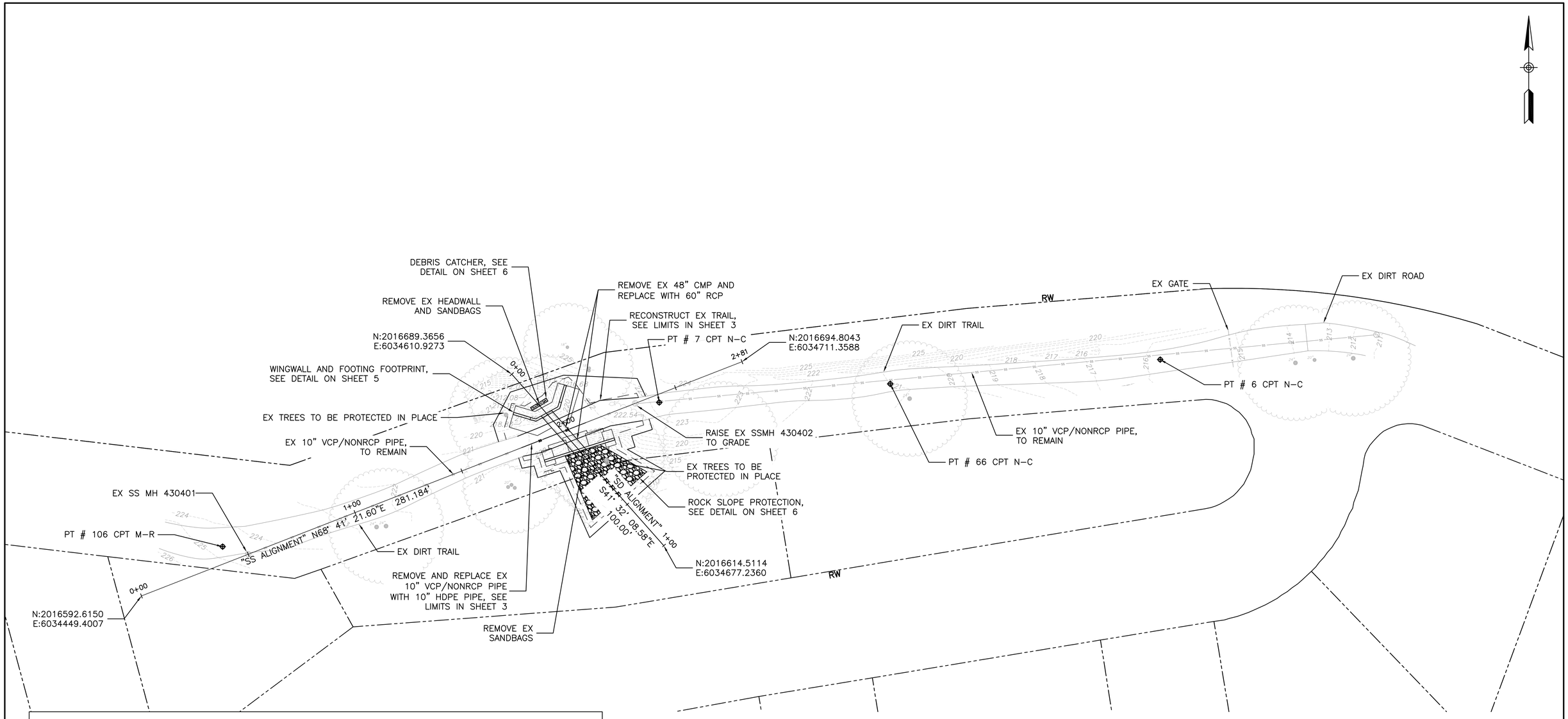
MOTT MACDONALD
1111 Broadway Suite 300
Oakland, CA 94607-4167
Tel: 510 388-8213

REGISTERED PROFESSIONAL ENGINEER HIMABINDU SAMUDRALA 91756 Exp. 12–31–24 CIVIL STATE OF CALIFORNIA

DEPT. OF PUBLIC WORKS CCN 2025-639
SALSON TRAIL CULVERT
COVER SHEET

DATE: 12/31/24
SCALE:
DESIGN: LA
DRAWN: LA
CHECKED: BLS

SHEET: 1 OF 8



SURVEY CONTROL POINT TABLE

POINT #	NORTHING	EASTING	POINT ELEVATION	DESCRIPTION
6	6034893.7673	2016695.7161	215.7646	CPT N-C
7	6034675.2479	2016677.0210	223.2520	CPT N-C
66	6034776.0122	2016685.1297	220.9809	CPT N-C
106	6034484.8083	2016614.1107	224.6243	CPT M-R

SURVEY NOTES:
1) BASIS OF BEARINGS: CALIFORNIA COORDINATE SYSTEM, NAD 83 ZONE 3 IN FEET.
2) N-C = NAIL AND CHASER
3) M-R = MAG NAIL AND SHINER

GRAPHIC SCALE
20 0 10 20 40 80
(IN FEET)
1 inch = 20 ft.

NO	REVISIONS	DATE	APPR
1			
2			
3			
4			
5			
6			
7			

CITY OF BELMONT PUBLIC WORKS

MOTT MACDONALD
1111 Broadway Suite 300
Oakland, CA 94607-4167
Tel: 510 388-8213

DEPT. OF PUBLIC WORKS CCN 2025-639

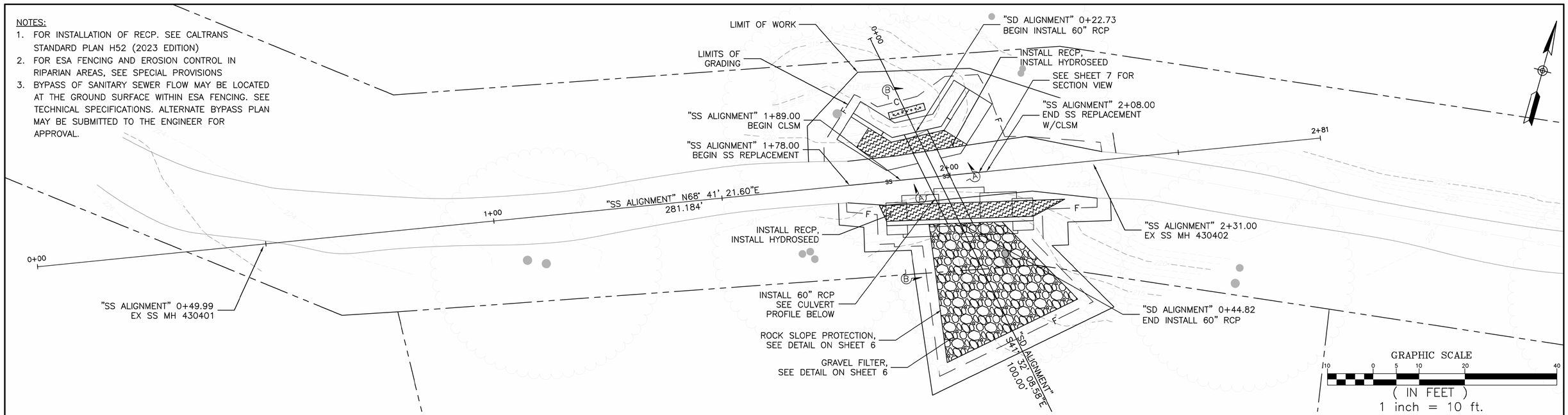
SALSON TRAIL CULVERT
OVERALL PROJECT LAYOUT AND SURVEY CONTROL

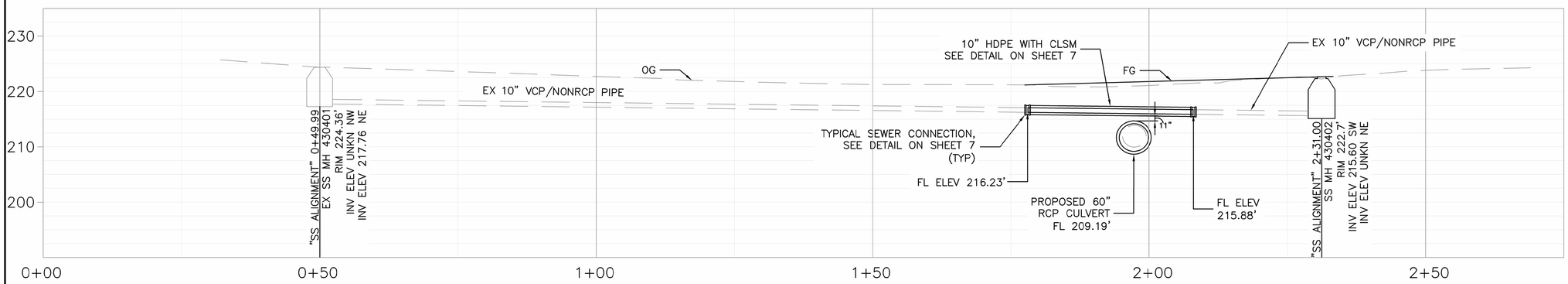
DATE: 12/31/24
SCALE: 1" = 20'
DESIGN: LA
DRAWN: LA
CHECKED: BLS

SHEET: 2 OF 8

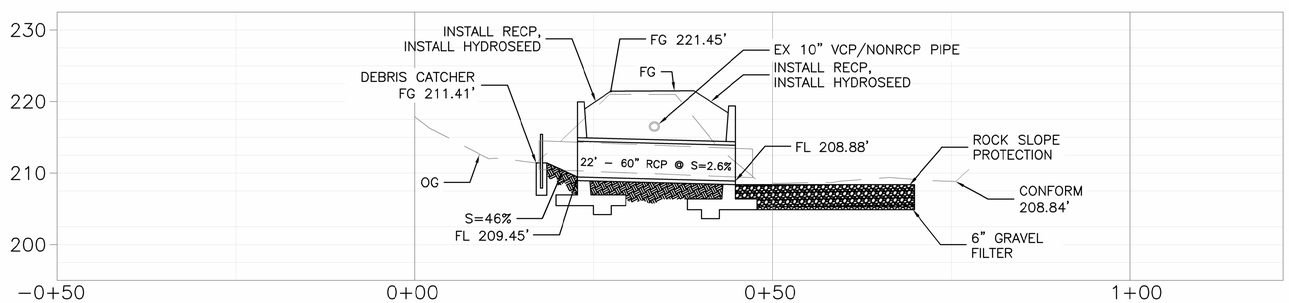
NOTES:

1. FOR INSTALLATION OF RECP. SEE CALTRANS STANDARD PLAN H52 (2023 EDITION)
2. FOR ESA FENCING AND EROSION CONTROL IN RIPARIAN AREAS, SEE SPECIAL PROVISIONS
3. BYPASS OF SANITARY SEWER FLOW MAY BE LOCATED AT THE GROUND SURFACE WITHIN ESA FENCING. SEE TECHNICAL SPECIFICATIONS. ALTERNATE BYPASS PLAN MAY BE SUBMITTED TO THE ENGINEER FOR APPROVAL.





SANITARY SEWER PROFILE
SCALE 1"=10' H ; 1"=20' V



CULVERT PROFILE
SCALE 1"=10' H ; 1"=20' V

NO	REVISIONS	DATE	APPR
1			
2			
3			
4			
5			
6			
7			

CITY OF BELMONT PUBLIC WORKS

MOTT MACDONALD
1111 Broadway Suite 300
Oakland, CA 94607-4167
Tel: 510 388-8213

REGISTERED PROFESSIONAL ENGINEER HIMABINDU SAMUDRALA 91756 Exp. 12-31-24 CIVIL STATE OF CALIFORNIA

DEPT. OF PUBLIC WORKS CCN 2025-639

SALSON TRAIL CULVERT
CULVERT DESIGN

DATE: 12/31/24
SCALE: AS SHOWN
DESIGN: LA
DRAWN: LA
CHECKED: BLS

SHEET: 3 OF 8

LEGEND

LIMIT OF WORK

LIMIT OF GRADING

"SD ALIGNMENT" 0+16.32 RT 3.55'
BEGIN DEBRIS CATCHER
FG 211.41'

"SD ALIGNMENT" 0+13.05 RT 10.43'
BEGIN RETAINING WING WALL
TOP WALL 214.95'
BTM WALL 206.95'

"SD ALIGNMENT" 0+22.73
TOP WALL 219.95'
FL @ INV 209.45'
BTM WALL 206.95'

"SD ALIGNMENT" 0+17.79 LT 4.31'
END DEBRIS CATCHER
FG 211.41'

"SD ALIGNMENT" 0+18.74 LT 14.06'
END RETAINING WING WALL
TOP WALL 214.95'
BTM WALL 206.95'

"SS ALIGNMENT" 2+17.27 LT 6.77'
TRAIL ANGLE POINT
FG 222.29

"SS ALIGNMENT" 1+88.38 LT 5.37'
TRAIL ANGLE POINT
FG 221.20'

"SS ALIGNMENT" 2+31.18
RAISE SSMH TO GRADE
RIM 222.7'±

"SS ALIGNMENT" 1+78.09 LT 5.26'
CONFORM TO EXISTING TRAIL
CONFORM 221.1'±

"SS ALIGNMENT" 2+33.47 LT 1.82'
CONFORM TO EXISTING TRAIL
CONFORM 222.7'±

"SS ALIGNMENT" N68°41'21.60"E
281.184'

"SS ALIGNMENT" 1+58.27 RT 3.36'
CONFORM TO EXISTING TRAIL
CONFORM 221.0'±

"SS ALIGNMENT" 2+31.33 RT 8.15'
CONFORM TO EXISTING TRAIL
CONFORM 222.6'±

"SS ALIGNMENT" 2+17.53 RT 5.23'
TRAIL ANGLE POINT
FG 222.05

"SS ALIGNMENT" 1+85.47 RT 5.13'
TRAIL ANGLE POINT
FG 221.08'

"SS ALIGNMENT" 2+17.10 RT 11.67'
END RETAINING HEADWALL
TOP WALL 219.38'
BTM WALL 206.38'

"SS ALIGNMENT" 1+85.17 RT 9.58'
BEGIN RETAINING HEADWALL
TOP WALL 219.38'
BTM WALL 206.38'

"SD ALIGNMENT" 0+44.82
TOP WALL 219.38'
FL @ INV 208.88'
BTM WALL 206.38'

"SD ALIGNMENT" 0+70.93 LT 15.83
FG RSP 212.00'

"SD ALIGNMENT" 0+70.93 RT 15.83'
FG RSP 213.25'

"SD ALIGNMENT" 0+70.93
FG RSP 208.25'

"SD ALIGNMENT" S41°32'08.58"E
100.00'

EARTHWORK QUANTITIES	
CUT	310 CY
FILL	390 CY
IMPORT BORROW	80 CY

1. EARTHWORK VOLUMES PROVIDED ARE FOR THE CONTRACTOR'S CONVENIENCE ONLY. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL QUANTITIES AND MUST RELY ON THEIR OWN CALCULATIONS FOR BIDDING AND CONSTRUCTION PURPOSES.

2. VOLUMES ARE IN SITU ESTIMATES AND DO NOT ACCOUNT FOR BULKING FACTORS

GRAPHIC SCALE
10 0 5 10 20 40
(IN FEET)
1 inch = 10 ft.

NO	REVISIONS	DATE	APPR
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CITY OF BELMONT PUBLIC WORKS

MOTT MACDONALD
1111 Broadway Suite 300
Oakland, CA 94607-4167
Tel: 510 388-8213

REGISTERED PROFESSIONAL ENGINEER
HIMABINDU SAMUDRALA
91756
Exp. 12-31-24
CIVIL
STATE OF CALIFORNIA

DEPT. OF PUBLIC WORKS CCN 2025-639

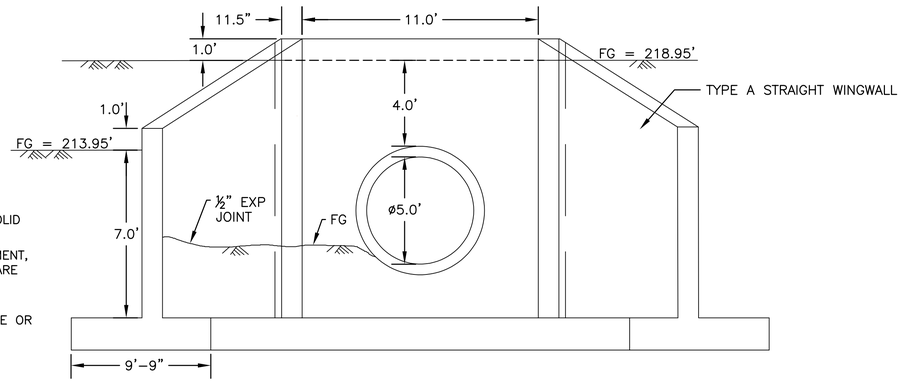
SALSON TRAIL CULVERT
GRADING PLAN

DATE: 12/31/24
SCALE: AS SHOWN
DESIGN: LA
DRAWN: LA
CHECKED: BLS

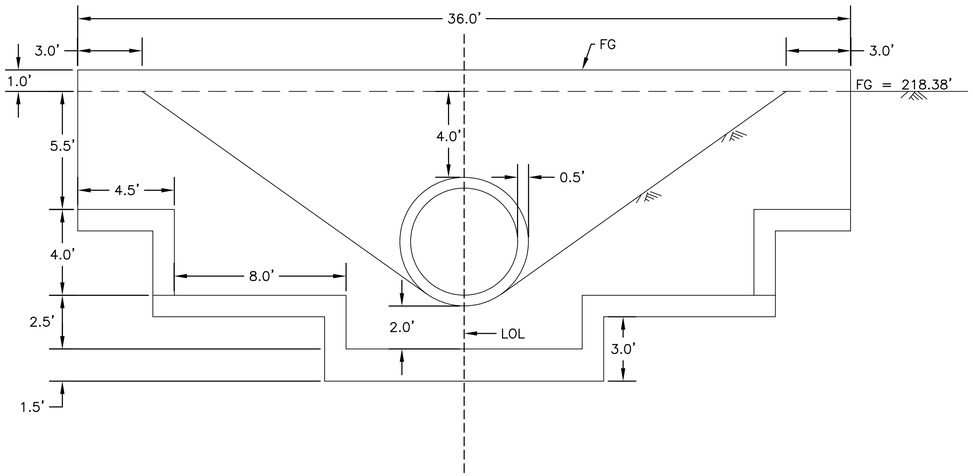
SHEET: 4 OF 8

GENERAL NOTES:
SEE CALTRANS STANDARD PLAN, 2023 EDITION, PLAN D90, B3–1C FOR ALL OTHER INFORMATION.

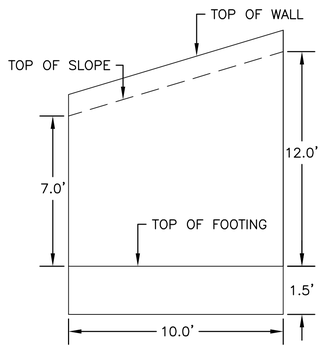
NOTES:
1. A SUITABLY QUALIFIED GEOTECHNICAL ENGINEER SHALL INSPECT THE BASE OF THE EXCAVATION TO CONFIRM SOLID AND STABLE CONDITIONS.
2. WHERE THE FORMATION DOES NOT MEET THIS REQUIREMENT, EXCAVATION SHALL CONTINUE UNTIL SUCH CONDITIONS ARE MET.
3. ANY OVEREXCAVATION TO ACHIEVE REQUIRED BEARING CONDITIONS SHALL BE BACKFILLED WITH MASS CONCRETE OR FLOWABLE FILL. THE USE OF OTHER MATERIALS IS NOT PERMITTED.



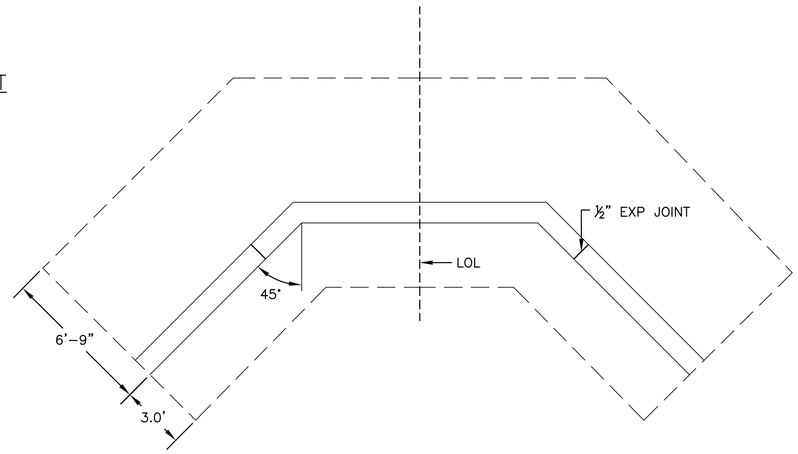
UPSTREAM VIEW OF HEADWALL AND WINGWALL ELEVATION



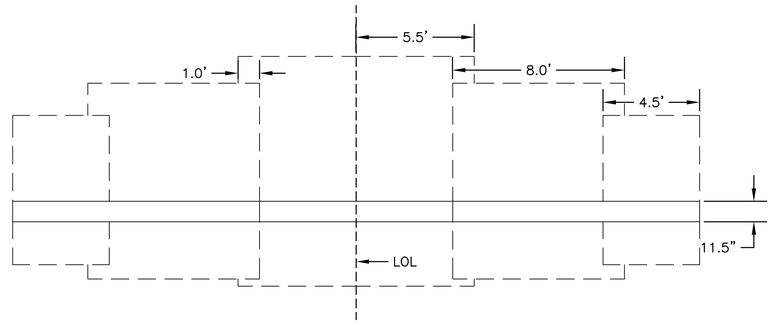
DOWNSTREAM VIEW OF HEADWALL AND WINGWALL ELEVATION



ELEVATION
UPSTREAM WINGWALL LAYOUT



UPSTREAM HEADWALL AND WINGWALL FOOTING PLAN



DOWNSTREAM HEADWALL AND WINGWALL FOOTING

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CITY OF BELMONT PUBLIC WORKS

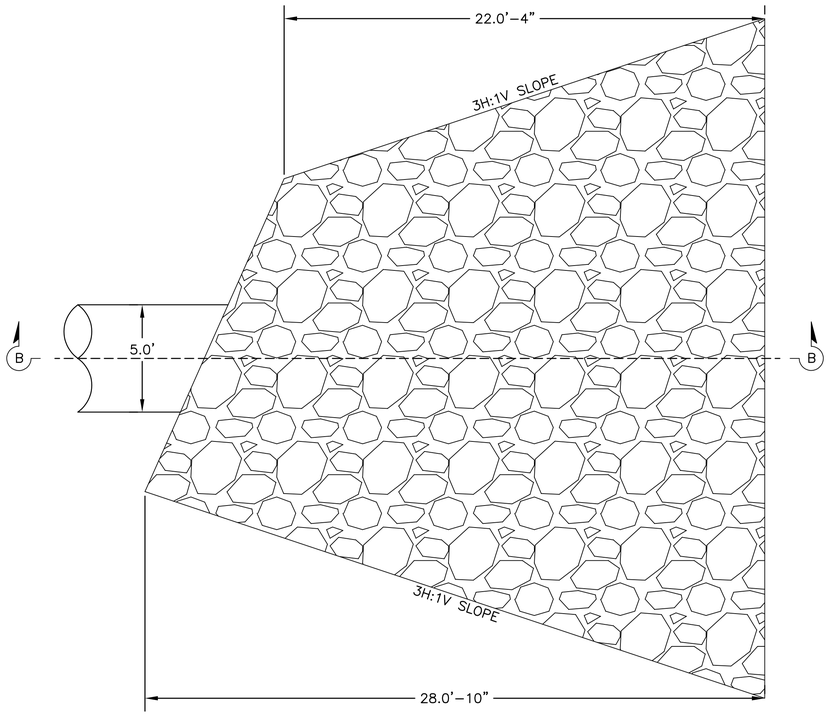
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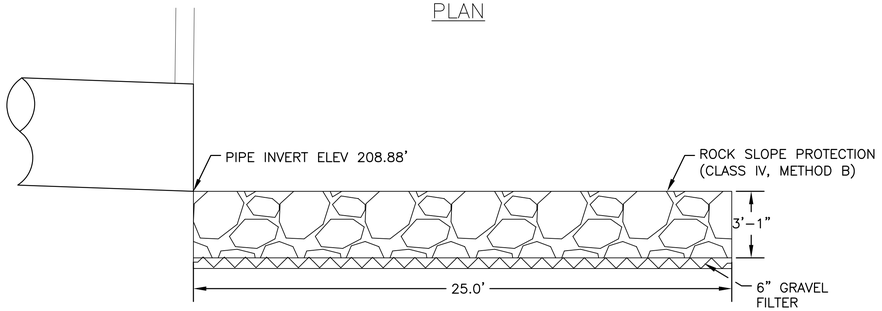
DEPT. OF PUBLIC WORKS CCN 2025-639
SALSON TRAIL CULVERT DRAINAGE DETAILS

DATE: 12/31/24
SCALE: NTS
DESIGN: LA
DRAWN: LA
CHECKED: BLS

SHEET: 5 OF 8

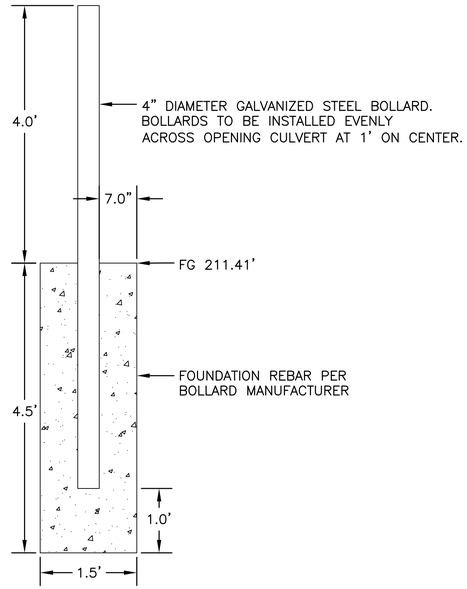


PLAN



SECTION B–B

DOWNSTREAM CLASS IV ROCK SLOPE PROTECTION LAYOUT



NOTES:

– INSTALL (7) – 4" DIAMETER GALVANIZED STEEL BOLLARDS AT 1' CENTER TO CENTER UPSTREAM OF CULVERT TO STOP LARGE DEBRIS FROM ENTERING PIPE. (SEE PLAN VIEW ON LAYOUT SHEET)

– BOLLARDS TO BE INSTALLED EVENLY ACROSS OPENING AS SHOWN.

– BOLLARDS TO EXTEND 4' ABOVE ADJACENT GRADE AND 3.5' BELOW GRADE INTO CONCRETE FOUNDATION.

– CONCRETE FOUNDATION TO BE 4.5' DEEP BY 1.5' THICK.

– TOP OF CONCRETE FOUNDATION TO MATCH CREEK SURFACE ELEVATION.

BOLLARD DEBRIS CATCHER

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CITY OF BELMONT PUBLIC WORKS

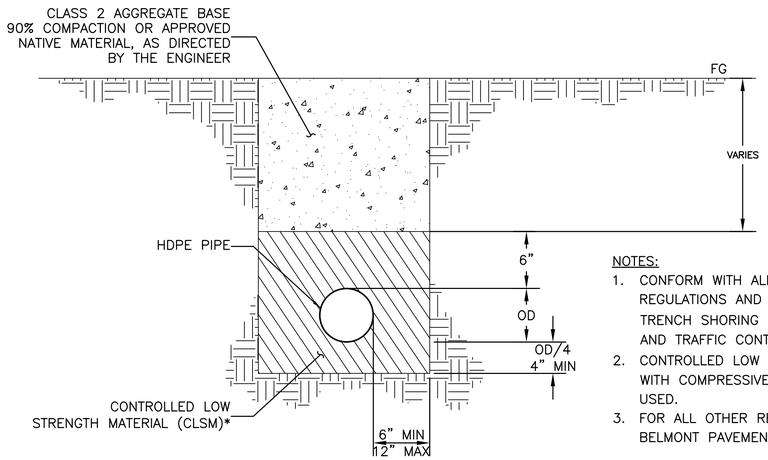
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91756
Exp. 12–31–24
CIVIL
STATE OF CALIFORNIA

DEPT. OF PUBLIC WORKS CCN 2025-639
SALSON TRAIL CULVERT
CONSTRUCTION DETAILS

DATE: 12/31/24
SCALE: NTS
DESIGN: LA
DRAWN: LA
CHECKED: BLS

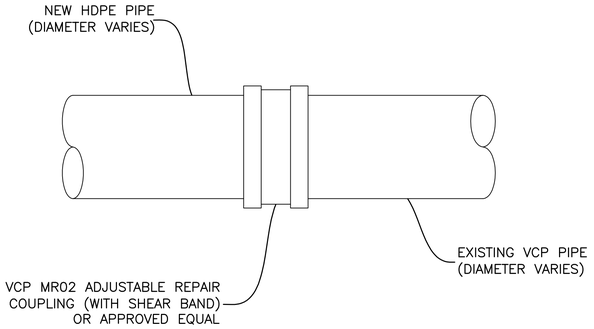
SHEET: 6 OF 8



NOTES:

1. CONFORM WITH ALL FEDERAL AND STATE SAFETY REGULATIONS AND RECOMMENDATIONS INCLUDING TRENCH SHORING (LABOR CODE SECTION 6705) AND TRAFFIC CONTROL.
2. CONTROLLED LOW STRENGTH MATERIAL (CLSM) WITH COMPRESSIVE STRENGTH OF 100 PSI TO BE USED.
3. FOR ALL OTHER REQUIREMENTS, SEE CITY OF BELMONT PAVEMENT RESTORATION STANDARDS.

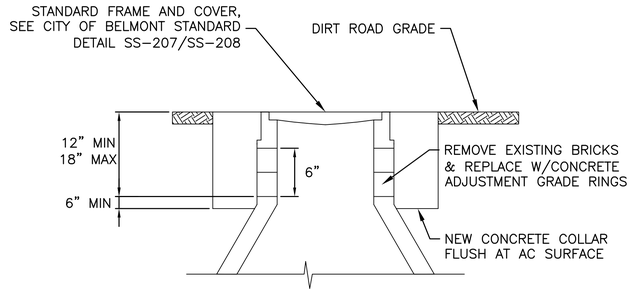
TRENCH DETAIL FOR UNIMPROVED AREAS
*SEE SHEET 3 FOR LIMITS OF SS REPLACEMENT TO USE CLSM



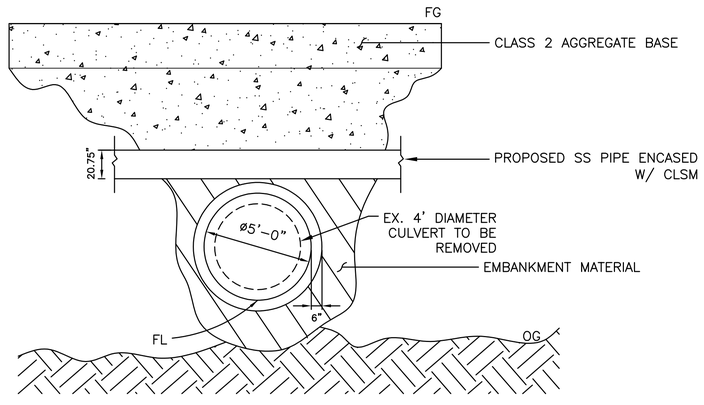
NOTES:

1. THIS DETAIL APPLIES TO ALL EXISTING SANITARY SEWER PIPE CONNECTIONS WHETHER REFERENCED OR NOT.
2. WHERE POSSIBLE, CONTRACTOR SHALL CONNECT TO EXISTING SANITARY SEWER THROUGH BELL AND SPIGOT ON ONE END OF PROPOSED OPEN CUT OR POINT REPAIR AND SHALL USE MISSION RUBBER ARC WITH SHEAR BAND FOR OPPOSITE CONNECTION TO EXISTING SANITARY SEWER IN ACCORDANCE WITH THIS DETAIL.

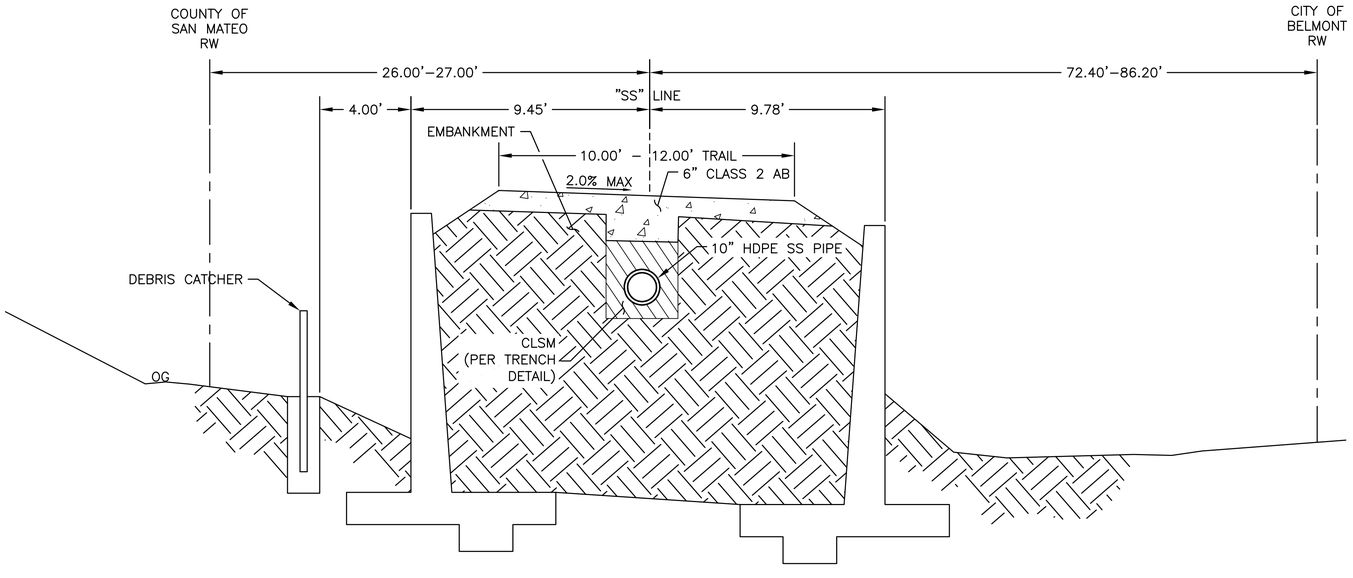
TYPICAL CONNECTION TO EXISTING
VCP SANITARY SEWER DETAIL



MANHOLE ADJUSTMENT



CULVERT DESIGN
SECTION A-A
(SEE SHEET 3)



SECTION B-B
(SEE SHEET 3)

NO	REVISIONS	DATE	APPR
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CITY OF BELMONT PUBLIC WORKS

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STATE OF CALIFORNIA

DEPT. OF PUBLIC WORKS CCN 2025-639

SALSON TRAIL CULVERT CONSTRUCTION DETAILS

DATE:	12/31/24
SCALE:	NTS
DESIGN:	LA
DRAWN:	LA
CHECKED:	BLS

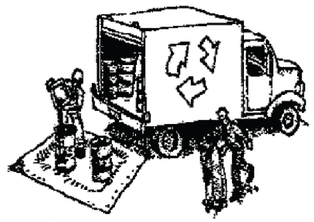
SHEET: 7 OF 8

SAN MATEO COUNTYWIDE
Water Pollution Prevention Program
Clean Water. Healthy Community.

Construction Best Management Practices (BMPs)

Construction projects are required to implement the stormwater best management practices (BMP) on this page, as they apply to your project, all year long.

Materials & Waste Management



Non-Hazardous Materials

- ❑ Berm and cover stockpiles of sand, dirt or other construction material with tarps when rain is forecast or if not actively being used within 14 days.
- ❑ Use (but don't overuse) reclaimed water for dust control.

Hazardous Materials

- ❑ Label all hazardous materials and hazardous wastes (such as pesticides, paints, thinners, solvents, fuel, oil, and antifreeze) in accordance with city, county, state and federal regulations.
- ❑ Store hazardous materials and wastes in water tight containers, store in appropriate secondary containment, and cover them at the end of every work day or during wet weather or when rain is forecast.
- ❑ Follow manufacturer's application instructions for hazardous materials and be careful not to use more than necessary. Do not apply chemicals outdoors when rain is forecast within 24 hours.
- ❑ Arrange for appropriate disposal of all hazardous wastes.

Waste Management

- ❑ Cover waste disposal containers securely with tarps at the end of every work day and during wet weather.
- ❑ Check waste disposal containers frequently for leaks and to make sure they are not overfilled. Never hose down a dumpster on the construction site.
- ❑ Clean or replace portable toilets, and inspect them frequently for leaks and spills.
- ❑ Dispose of all wastes and debris properly. Recycle materials and wastes that can be recycled (such as asphalt, concrete, aggregate base materials, wood, gyp board, pipe, etc.)
- ❑ Dispose of liquid residues from paints, thinners, solvents, glues, and cleaning fluids as hazardous waste.

Construction Entrances and Perimeter

- ❑ Establish and maintain effective perimeter controls and stabilize all construction entrances and exits to sufficiently control erosion and sediment discharges from site and tracking off site.
- ❑ Sweep or vacuum any street tracking immediately and secure sediment source to prevent further tracking. Never hose down streets to clean up tracking.

Equipment Management & Spill Control



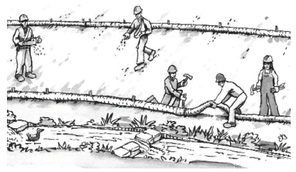
Maintenance and Parking

- ❑ Designate an area, fitted with appropriate BMPs, for vehicle and equipment parking and storage.
- ❑ Perform major maintenance, repair jobs, and vehicle and equipment washing off site.
- ❑ If refueling or vehicle maintenance must be done onsite, work in a bermed area away from storm drains and over a drip pan or drop cloths big enough to collect fluids. Recycle or dispose of fluids as hazardous waste.
- ❑ If vehicle or equipment cleaning must be done onsite, clean with water only in a bermed area that will not allow rinse water to run into gutters, streets, storm drains, or surface waters.
- ❑ Do not clean vehicle or equipment onsite using soaps, solvents, degreasers, or steam cleaning equipment.

Spill Prevention and Control

- ❑ Keep spill cleanup materials (e.g., rags, absorbents and cat litter) available at the construction site at all times.
- ❑ Inspect vehicles and equipment frequently for and repair leaks promptly. Use drip pans to catch leaks until repairs are made.
- ❑ Clean up spills or leaks immediately and dispose of cleanup materials properly.
- ❑ Do not hose down surfaces where fluids have spilled. Use dry cleanup methods (absorbent materials, cat litter, and/or rags).
- ❑ Sweep up spilled dry materials immediately. Do not try to wash them away with water, or bury them.
- ❑ Clean up spills on dirt areas by digging up and properly disposing of contaminated soil.
- ❑ Report significant spills immediately. You are required by law to report all significant releases of hazardous materials, including oil. To report a spill: 1) Dial 911 or your local emergency response number, 2) Call the Governor's Office of Emergency Services Warning Center, (800) 852-7550 (24 hours).

Earthmoving

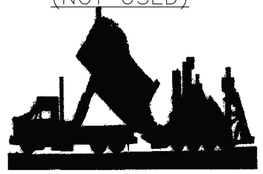


- ❑ Schedule grading and excavation work during dry weather.
- ❑ Stabilize all denuded areas, install and maintain temporary erosion controls (such as erosion control fabric or bonded fiber matrix) until vegetation is established.
- ❑ Remove existing vegetation only when absolutely necessary, and seed or plant vegetation for erosion control on slopes or where construction is not immediately planned.
- ❑ Prevent sediment from migrating offsite and protect storm drain inlets, gutters, ditches, and drainage courses by installing and maintaining appropriate BMPs, such as fiber rolls, silt fences, sediment basins, gravel bags, berms, etc.
- ❑ Keep excavated soil on site and transfer it to dump trucks on site, not in the streets.

Contaminated Soils

- ❑ If any of the following conditions are observed, test for contamination and contact the Regional Water Quality Control Board:
  - Unusual soil conditions, discoloration, or odor.
  - Abandoned underground tanks.
  - Abandoned wells
  - Buried barrels, debris, or trash.

Paving/Asphalt Work (NOT USED)

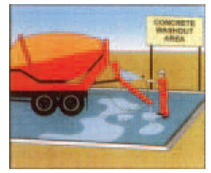


- ❑ Avoid paving and seal coating in wet weather or when rain is forecast, to prevent materials that have not cured from contacting stormwater runoff.
- ❑ Cover storm drain inlets and manholes when applying seal coat, tack coat, slurry seal, fog seal, etc.
- ❑ Collect and recycle or appropriately dispose of excess abrasive gravel or sand. Do NOT sweep or wash it into gutters.
- ❑ Do not use water to wash down fresh asphalt concrete pavement.

Sawcutting & Asphalt/Concrete Removal

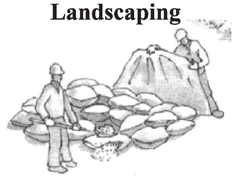
- ❑ Protect nearby storm drain inlets when saw cutting. Use filter fabric, catch basin inlet filters, or gravel bags to keep slurry out of the storm drain system.
- ❑ Shovel, abosorb, or vacuum saw-cut slurry and dispose of all waste as soon as you are finished in one location or at the end of each work day (whichever is sooner!).
- ❑ If sawcut slurry enters a catch basin, clean it up immediately.

Concrete, Grout & Mortar Application



- ❑ Store concrete, grout, and mortar away from storm drains or waterways, and on pallets under cover to protect them from rain, runoff, and wind.
- ❑ Wash out concrete equipment/trucks offsite or in a designated washout area, where the water will flow into a temporary waste pit, and in a manner that will prevent leaching into the underlying soil or onto surrounding areas. Let concrete harden and dispose of as garbage.
- ❑ When washing exposed aggregate, prevent washwater from entering storm drains. Block any inlets and vacuum gutters, hose washwater onto dirt areas, or drain onto a bermed surface to be pumped and disposed of properly.

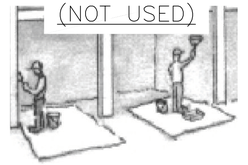
Landscaping



- ❑ Protect stockpiled landscaping materials from wind and rain by storing them under tarps all year-round.
- ❑ Stack bagged material on pallets and under cover.
- ❑ Discontinue application of any erodible landscape material within 2 days before a forecast rain event or during wet weather.

Painting & Paint Removal

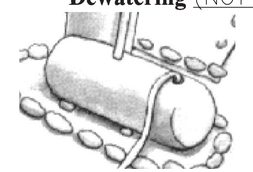
(NOT USED)



Painting Cleanup and Removal

- ❑ Never clean brushes or rinse paint containers into a street, gutter, storm drain, or stream.
- ❑ For water-based paints, paint out brushes to the extent possible, and rinse into a drain that goes to the sanitary sewer. Never pour paint down a storm drain.
- ❑ For oil-based paints, paint out brushes to the extent possible and clean with thinner or solvent in a proper container. Filter and reuse thinners and solvents. Dispose of excess liquids as hazardous waste.
- ❑ Paint chips and dust from non-hazardous dry stripping and sand blasting may be swept up or collected in plastic drop cloths and disposed of as trash.
- ❑ Chemical paint stripping residue and chips and dust from marine paints or paints containing lead, mercury, or tributyltin must be disposed of as hazardous waste. Lead based paint removal requires a state-certified contractor.

Dewatering (NOT USED)



- ❑ Discharges of groundwater or captured runoff from dewatering operations must be properly managed and disposed. When possible send dewatering discharge to landscaped area or sanitary sewer. If discharging to the sanitary sewer call your local wastewater treatment plant.
- ❑ Divert run-on water from offsite away from all disturbed areas.
- ❑ When dewatering, notify and obtain approval from the local municipality before discharging water to a street gutter or storm drain. Filtration or diversion through a basin, tank, or sediment trap may be required.
- ❑ In areas of known or suspected contamination, call your local agency to determine whether the ground water must be tested. Pumped groundwater may need to be collected and hauled off-site for treatment and proper disposal.

Storm drain polluters may be liable for fines of up to $10,000 per day!

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CITY OF BELMONT PUBLIC WORKS

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REGISTERED PROFESSIONAL ENGINEER
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91756
Exp. 12-31-24
CIVIL
STATE OF CALIFORNIA

DEPT. OF PUBLIC WORKS CCN 2025-639
SALSON TRAIL CULVERT
CONSTRUCTION BEST MANAGEMENT PRACTICES

DATE:	12/31/24
SCALE:	NTS
DESIGN:	LA
DRAWN:	LA
CHECKED:	BLS

SHEET: 8 OF 8

CITY OF BELMONT
CONTRACT DOCUMENTS

SALSON TRAIL CULVERT REPLACEMENT PROJECT

City Contract Number 2025-639

Approved by _____
Nisha Patel, PE - Public Works Director

INVITATION FOR SEALED BIDS

The City of Belmont invites sealed bids for public project construction described as: **Salson Trail Culvert Replacement Project, City Contract Number 2025-639**. The public project construction is more specifically defined in the Contract Documents, but generally includes the following items of work: replacing and upsizing the failing culvert to reduce the potential for similar damage in the future, replacing the damaged and at-risk segment of sewer main, and repairing Salson Trail so it can be reopened for firefighting access and recreational use, as identified in the Contract Documents (the "Work").

1. SOURCE OF PROJECT FUNDS: This Project **DOES NOT** involve federal funds.

2. PRE-BID CONFERENCE: None

3. BID SUBMITTAL, WITHDRAWAL, IRREVOCABILITY: Bids must be submitted on the bid forms supplied by the City. SEALED BIDS must be received at the City of Belmont, City Clerk's Office, 1 Twin Pines Lane, Suite 330, Belmont, CA 94002 (hereinafter the City) by June 4, 2025, 1:45 PM local time ("Bid Deadline"). The Contractors may drop off sealed proposals at the Suite 210 (EOC Room) at the Belmont City Hall located at 1 Twin Pines Lane, Belmont, CA 94002 (hereinafter the City) on June 4, 2025, between 1:30 PM – 2:00 PM local time. The Bids will be publicly open at 2:00 PM on June 4, 2025 ("Bid Deadline"), at the Suite 210 (EOC Room). Bids received after the bid deadline will not be accepted. It is the bidder's responsibility to ensure that its bid package is duly delivered. Bidders are solely responsible for the cost of preparing their bids. No bidder may withdraw its bid for a period 60 days after the date set for bid opening, except as provided in Public Contract Code Section 5101 *et seq.*

4. ENGINEER'S ESTIMATE: The Engineer's estimated total construction cost for this Contract is $554,321. This estimate is intended to serve merely as a guideline of the magnitude of work. Neither the bidders nor the contractor shall be entitled to claims because of any inaccuracy in the estimated cost range.

5. CONTRACT TIME; LIQUIDATED DAMAGES: The construction Work is to be completed within a total of 40 working days. The City will assess liquidated damages in the amount of $3,500 for each and every working day of delay in finishing the work in excess of the contract construction time.

6. REQUIRED CONTRACTOR'S LICENSE(S): Under Business & Professions Code Section 7028.15 and Public Contract Code Section 3300, all bidders must possess proper licenses for the performance of the work contemplated by the Project except as provided herein. Failure to possess the specified license(s) at the time of bidding will render the bid non-responsive. Contractors must possess a valid California class A contractor's license for this contract. Firms bidding as a joint venture must secure a joint venture license before award of this contract. Firms bidding on projects involving federal funds must secure a license before award of this contract.

7. DEPARTMENT OF INDUSTRIAL RELATIONS REGISTRATION REQUIRED: As provided in Labor Code Section 1771.1, the Bidder and all subcontractors listed on the bid proposal must be registered with the Department of Industrial Relations under Labor Code section 1725.5 at the time the bid is submitted, except as provided herein. Failure to be timely registered will render the bid non-responsive. If submitting a bid as part of a joint venture authorized by Business and Professions Code Section 7029.1 or for a Project involving federal funds, the Bidder's registration may be secured up to the time of contract awarded. No contractor or subcontractor may be awarded a contract for the project unless registered with the Department of Industrial Relations under Labor Code section 1725.5. This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

8. CONTRACT DOCUMENTS: Bidders may obtain the bidding documents including Plans and Specifications in electronic format at Peninsula Builders Exchange, or local Plan Rooms. Hard copy bid documents are not available at this time.

9. BONDS AND INSURANCE: Bid security in the amount of ten percent (10%) of the Bid Amount must accompany the Bid in accordance with Public Contract Code Section 20170. After award of the contract, the successful bidder must provide securty for faithful performance and labor and materials (payment bond) as well as proof of insurance, in accordance with the requirements set forth in the Contract Documents. Bonds must be executed by a surety possessing a valid certificate of authority issued by the California Department of Insurance.

10. SECURITIES SUBSTITUTION: At the request and expense of the Contractor to whom the Contract is awarded, securities in a form approved by the City will be permitted in substitution for money withheld by the City to ensure performance under the Contract, as provided in Public Contract Code Section 22300.

11. PREVAILING WAGE: This project is a public work under Labor Code Section 1770, *et seq.*, and the successful bidder will be required to comply with certain labor standards and employment requirements including payment of the prevailing wage rates in effect on the date this Invitation for Sealed Bids was first published. Copies of the prevailing wage rates can be viewed at: http://www.dir.ca.gov/DLSR/PWD/ and are on file with the Engineer at the address identified below and shall be made available to any interested party upon request.

12. SHORING AND BRACING: If the construction involves trenches or open excavations, which are five feet or deeper, each bid submitted in response to this Invitation for Sealed Bids must contain, as a bid item adequate sheeting, shoring, and bracing, or equivalent method, for the protection of life and limb in trenches and open excavation which shall conform to applicable safety orders, as required by Labor Code Section 6707.

13. SPECIFIC BRAND NAME MATERIALS: None

14. WAIVER OF IRREGULARITIES. The City reserves the right, in its sole discretion, to reject any or all Bids, to waive minor irregularities or defects in bidding and to reject nonconforming, nonresponsive or conditional bids.

INQUIRIES: If any bidder has questions regarding this Project, contact the Engineer: Bozhena Palatnik, One Twin Pines Lane, Suite 385, Belmont, CA 94002, Phone: (650) 595-7463, bpalatnik@belmont.gov. Any questions addressing the interpretation or clarification of the Contract Documents shall be in writing.

INSTRUCTIONS TO BIDDERS

1. OBTAINING COPIES OF CONTRACT DOCUMENTS

1.1. Bidders may obtain complete electronic set of the Contract Documents at the local Plan rooms, or the purchase sum stated therein.

1.2. Each bidder shall use a complete set of Contract Documents in preparing its bid.

1.3. The Contract Documents are more particularly defined in the Construction Agreement.

1.4. The City makes copies of the Contract Documents available, on the above terms, for the sole purpose of obtaining Bids for the Work and does not confer a license or grant permission for any other use of the Contract Documents.

2. INTERPRETATION OR CORRECTION OF CONTRACT DOCUMENTS

2.1. Bidder must, before submitting its Bid, carefully study and compare the components of the Contract Documents and must examine the Project Site, the conditions under which the Work is to be performed, and the local conditions.

2.2. In the event Bidder has any question as to the meaning of any part of the Contract Documents, or Bidder finds any error, omission, inconsistency, or ambiguity in the Contract Documents, Bidder must make a written Request for Clarification before submitting its Bid. Requests for clarification or interpretation of the Contract Documents must be addressed only to the Engineer. It is the Bidder's responsibility to ensure that any such request is submitted to the City in a timely manner, in order to allow the City to issue a written Addenda.

2.3. If necessary, the City will make clarifications, interpretations, corrections, and changes to the Contract Documents by Addenda issued as provided in Section 4 of these Instructions to Bidders, below.

2.4. Purported clarifications, interpretations, corrections, and changes to the Contract Documents made in any other manner are not binding on the City, and Bidders may not rely upon them.

2.5. The plans and specifications, including drawing, plans, maps, diagrams and other graphic representations of the project, show conditions as they are believed by City to exist on the site, but the conditions shown do not constitute a representation by City that they actually exist. Utilities (underground or above-ground), buildings, structures and other improvements may be within or adjacent to the project site. These may or may not be included in the project's plans and specifications.

2.6. Submission of a bid shall constitute a representation by bidder that they have visited and examined the project site, and examined the plans and specifications. Bidder is relying on their own

examination and knowledge of the site and plans in making their bid and not on any representation by City. No claim for additional compensation shall be allowed that is based upon a failure to examine or lack of knowledge of, the work site or contract documents.

3. **PREFERENCE FOR MATERIALS**

3.1. In accordance with Public Contract Code Section 3400, except as otherwise specified on the Invitation for Sealed Bids, the City will not limit the bidding, directly or indirectly, to any one specific concern. Whenever any particular material (including product, thing, equipment, or service) is indicated in the Contract Documents by patent, proprietary or brand name, or by name of manufacturer, such wording is used for the purpose of facilitating its description and shall be deemed to be followed by the words "or equal." A listing of materials is not intended to be comprehensive, or in order of preference.

3.2. Unless a successful bidder (the Contractor) submits a request for substitution of "equal" materials in accordance with the requirements of the Contract Documents, and unless the City approves the substitution in accordance with the requirements of the Contract Documents, the Contractor shall furnish and install the specified material for the Bid Amount and within the Contract Time.

4. A**DDENDA**

4.1. Addenda will only be issued in writing to the local Planrooms.

4.2. Each Bidder shall be responsible for ascertaining, prior to submitting its Bid, that it has received all issued Addenda. City makes no guarantee that all Bidders will receive all the Addenda. Copies of Addenda will be made available for inspection at the office where Contract Documents are on file for inspection, as indicated on the Invitation for Sealed Bids.

4.3. Addenda withdrawing the Invitation for Sealed Bids or postponing the Bid Deadline may be issued any time before the Bid Deadline. However, if any Addenda results in a material change (addition or deletion) to the Contract Documents, the Bid Deadline will be extended by the City by not less than 72 hours, as provided in Public Contract Code Section 4104.5.

4.4. Each Bidder must acknowledge receipt of all Addenda on the Bid Form. Failure to acknowledge receipt of Addenda may render the bid non-responsive.

5. **FILLING IN BID FORMS BY BIDDERS**

5.1. All bids must be prepared on the forms provided by the City and submitted in accordance with these Instructions to Bidders. The documents required to be submitted in the bid package are as follows:

5.1.1. Bid

5.1.2. Equal Employment Opportunity Certification (Federal funded projects only)

5.1.3. Bidder's Non-collusion Affidavit

5.1.4. Debarment and Suspension Certification

5.1.5. Bidder's Security

5.1.6. Bidder's Statement of Responsibility

5.1.7. Any other information required by the Invitation For Sealed Bids

5.2. All blanks on the Bid Forms shall be filled in by typeface or printed legibly in ink.

5.3. Interlineations, alterations, and erasures must all be individually initialed by the Bidder.

5.4. Bidder shall acknowledge receipt of all Addenda on the Bid.

5.5. Bidder shall not modify or qualify the Bid Forms in any manner.

5.6. The Bid Forms shall be signed by a person or persons legally authorized to bind Bidder to the Contract. The individuals signing each document must warrant that they are authorized to bind the legal entity of the Bidder.

5.7. Qualifying Experience for Horizontal Directional Drilling and Pipe Bursting contractor/subcontractor.

5.8. Qualifying Experience for cured in place pipe contractor/subcontractor.

6. **DESIGNATION OF SUBCONTRACTORS**

6.1. The Bidder must comply with the Subletting and Subcontracting Fair Practices Act as set forth in Public Contract Code Section 4100 *et seq.* (hereinafter referred to as the "Subcontracting Act"). Any reference in these Contract Documents to the requirements of the Subcontracting Act are for the Bidder's reference, and do not limit the Bidder's or Contractor's obligations under law.

6.2. No contractor or subcontractor may be listed on a bid proposal for or work on a public works project unless registered with the Department of Industrial Relations under Labor Code section 1725.5 or submitting a bid as part of a joint venture authorized by Business and Professions Code Section 7029.1 or by Public Contract Code Section 10164 and 20103.5, provided the contractor is registered to perform public work under Section 1725.5 at the time the contract is awarded.

6.3. The Bidder must list, in the Bid:

6.3.1. The name and location of the place of business of each subcontractor who will perform work or labor or render service to the Bidder in or about the construction of the Work for this Project, or a subcontractor licensed by the State of California who, under subcontract to the Bidder, specially fabricates and installs a portion of the Work or improvements according to detailed drawings contained in the plans and specifications, in an amount in excess of the minimum threshold of the Subcontracting Act. Generally, the minimum threshold is one-half of one percent (0.5%) of Bidder's Bid Amount; however, if the contract is for the construction

of streets (including highways or bridges), the minimum threshold is the greater of: (a) onehalf of one percent (0.5%) of Bidder's Bid Amount, or (b) ten thousand dollars ($10,000).

6.3.2. The portion of the Work which will be done by each subcontractor described in Instructions To Bidders subsection 6.3.1.

6.4. The Bidder must list only one subcontractor for each portion of the Work as is defined by the Bidder in the Bid.

6.5. The Bidder must not list any subcontractor who is ineligible under Labor Code Sections 1777.1 and 1777.2, and Public Contract Code Section 6109.

6.6. The Bidder is subject to the penalties set forth in the Subcontracting Act if the Bidder lists in its Bid another contractor who will in turn sublet portions constituting the majority of Work covered by the prime contract.

6.7. If the Bidder fails to specify a subcontractor, or if the Bidder specifies more than one subcontractor for the same portion of the Work, the Bidder agrees that it is fully qualified to perform that portion itself, and that the Bidder must perform that portion itself.

6.8. If, after award of the Contract, the successful Bidder ("Contractor") subcontracts, except as provided in the Subcontracting Act, the Contractor is subject to the penalties set forth in the Subcontracting Act. If the Contractor violates any provisions of the Subcontracting Act, the Contractor violates the Contract and the City may either cancel this Contract or assess a penalty to the Contractor in accordance with the terms of the Subcontracting Act.

7. **BID SECURITY**

7.1. Each Bid shall be accompanied by Bid Security, in the amount of ten percent (10%) of the Bid Amount, as security for Bidder's obligation to enter into a Contract with the City on the terms stated in the Bidding Documents. Bid Security shall be in one of the following forms: cash, a cashier's check made payable to the City of Belmont, a certified check made payable to the City of Belmont, or a Bid Bond executed by an admitted surety insurer in the form contained in the Bidding Documents.

7.2. If a Bid Bond is submitted, and an attorney-in-fact executes the Bid Bond on behalf of the surety, a notarized and current copy of the power of attorney shall be affixed to the Bid Bond. The surety issuing the Bid Bond shall meet the requirements set by California law.

7.3. The City reserves the right to retain the Bid Security of all bidders until the occurrence of one of the following:

7.3.1. The successful Bidder has properly and timely executed and submitted all items required by Instructions To Bidders Section 13, including the Agreement.

7.3.2. The time period for the City's review of Bids as specified in Instructions To Bidders Section 9 has expired.

7.3.3. The Bids have been rejected by the City.

8. SUBMISSION OF BIDS

8.1. All Bid Forms (using the forms supplied by the City, as defined in Instructions to Bidders Section 5), including all documents required to be submitted with the Bid, shall be enclosed in a sealed opaque envelope with the following address and identification on the face. If the Bid is sent by mail, the sealed envelope shall be enclosed in a separate mailing envelope.

(Name of Bidder)
Sealed Bid Proposal for City Contract No. 2025-639
Salson Trail Culvert Replacement Project
City of Belmont

8.2. Bids may be mailed or delivered by messenger. It is the Bidder's responsibility alone to ensure that the Bid is received at the place (and before the Bid Deadline) specified in the Invitation for Sealed Bids. Any Bid received after the exact time of the Bid Deadline will be returned unopened.

8.3. Oral, telephonic, facsimile, telegraphic, or electronically transmitted Bids are invalid and will not be accepted.

9. WITHDRAWAL OF BIDS

9.1. After a Bid is received by the City, the Bid may be withdrawn only by a written request signed by the Bidder. In order to cause a withdrawal of the Bid, the request must be received by the City at the place (and before the Bid Deadline) specified in the Invitation for Sealed Bids.

9.2. No oral request for withdrawal will be considered. No oral or written request for modification will be considered.

9.3. The withdrawal of a Bid shall not prejudice the right of the Bidder to submit a new Bid, provided the new Bid is submitted in accordance with these Bidding Requirements.

9.4. After the Bid Deadline, a bidder may not withdraw its bid for a period of at least sixty (60) calendar days following the Bid Deadline, subject to the exceptions stated in this section 9.

9.4.1. The sixty (60) day review period may be extended upon the written request by the Engineer, and written approval by the affected Bidders.

9.4.2. If a bidder is not the low monetary bidder, a bidder may make a written request (no earlier than five working days after the Bid Opening) for an early release of bid security. The Engineer is authorized to release a bidder's bid security if the Engineer determines, in his/her sole discretion, that the bid is not likely to be recommended to the Awarding Body for award (based on the dollar amount of the bid in excess of the estimated project cost, or based on the number of responsive bidders with a lower monetary bid).

9.5. A Bidder shall be permitted to withdraw a Bid after the Bid Deadline only if the Bidder establishes, to the satisfaction of the Engineer, all of the elements identified in Public Contract Code Section 5103, including the following:

9.5.1. A clerical error was made by the Bidder in filling out the Bid; and the error was not due to error in judgment or to carelessness in inspecting the site of the Work, or in reading the plans or specifications.

9.5.2. The clerical error caused the Bid to be materially different than the Bidder intended the Bid to be.

9.5.3. The Bidder gave the City written notice within five working days, excluding Saturdays, Sundays, and state holidays, after the opening of the Bids of the mistake, specifying in the notice in detail the nature of the mistake and how the mistake occurred.

10. BID OPENING AND REVIEW OF BIDS BY THE CITY

10.1. Bids submitted in accordance with the requirements of the Bidding Documents, and received on or before the Bid Deadline in accordance with the requirements of the Invitation for Sealed Bids, will be opened publicly, and the dollar amounts of each bid will be read aloud.

10.2. The City reserves the right to:

10.2.1. reject all Bids;

10.2.2. reject any Bid not accompanied by the required Bid Security or any other item required by the Bidding Documents, or a Bid which is in any other way incomplete or irregular; and,

10.2.3. waive irregularities in a Bid, and to award the Contract to the Lowest Responsible Bidder (as determined by the City), only if the irregularities are non-material and inconsequential.

11. CITY'S DETERMINATION OF LOWEST RESPONSIBLE BIDDER

11.1. The term "Lowest Responsible Bidder" means the "Lowest Monetary Bidder" whose Bid is "responsive," and who is "responsible" to perform the Work required by the Contract Documents, as those terms are defined by State law, including Public Contract Code Sections 20161, *et seq*, and 22030 *et seq*. This Section 11 summarizes the procedure by which the City will determine the "Lowest Responsible Bidder" in accordance with State law.

11.2. The City shall determine the "Lowest Monetary Bidder" on the basis of the Bid Amount, in accordance with the calculation criteria set forth on the Bid.

11.3. After the "Lowest Monetary Bidder" has been determined, the Lowest Monetary Bidder's Bid will be evaluated by the Engineer in order to determine whether or not that Bid is "responsive." The term "responsive" is defined by State law, but generally means that the Bid has been prepared and submitted in accordance with the requirements of the Bidding Requirements.

11.4. If the Lowest Monetary Bidder's Bid is responsive, that Bidder's qualifications will be evaluated by the Engineer to determine whether or not the Bidder is "responsible" to perform the Work

required by the Contract Documents. The Engineer shall review "responsibility" of Bidders based upon the City's analysis of the information submitted on the Bidder's Statement of Responsibility (as a part of the Bid Forms) in accordance with the criteria set forth in Instructions To Bidders Section 12.

11.5. If the Engineer finds that the Lowest Monetary Bidder submitted a responsive Bid, and that the Bidder is responsible, then that Bidder will be deemed the apparent "Lowest Responsible Bidder".

11.6. If the Engineer finds that the Lowest Monetary Bidder's Bid is not responsive, or that the Lowest Monetary Bidder is not responsible, then the Engineer may review the responsiveness and responsibility of the next Low Monetary Bidder. If the Engineer finds that the next Low Monetary Bidder is responsive and responsible, then that next Low Monetary Bidder shall be deemed the apparent "Lowest Responsible Bidder. This process may continue until the Engineer finds the Lowest Monetary Bidder which is also responsive and responsible. In the event that one or more Low Monetary Bidders are found by the Engineer to be non-responsive or non-responsible, those Bidders will be given notice and a reasonable opportunity to present additional relevant evidence to the Engineer, within five working days after the Bidder receives the notice.

11.7. No Bid shall be binding upon the City until after the Contract is signed by both the Contractor and the City. The City may investigate the responsibility and qualifications of all Bidders to whom the award is contemplated for a period not to exceed sixty (60) days after the Bid opening. The sixty (60) day review period may be extended upon the written request by the Engineer and written approval by the affected Bidders.

11.8. Bid Protest. The City will issue a Notice of Intent to Award before the actual award. Any Bid protest must be submitted in writing to the Engineer before 5:00 p.m. of the fifth (5^{th}) calendar day following posting of a Notice of Intent to Award for Construction in the City Hall Lobby. City will use reasonable efforts to deliver by email a copy of the Notice of Intent to Award to all Bidders who submitted Bids and provided an email address no later than one working day after its issuance, although any delay or failure to do so will not extend the Bid protest deadline described above. The following conditions will apply to all protests.

11.8.1. The initial protest document must be in writing, contain a complete statement of the legal ground for the protest; all the relevant facts to the protest; and the form of relief requested and the legal basis for such relief.

11.8.2. The protest must refer to the specific portion of the document that forms the basis for the protest.

11.8.3. The protest must include the name, address and telephone number of the protesting party or the person representing the protesting party. If an email address is available, it should also be included.

11.8.4. The party filing the protest must concurrently transmit a copy of the initial protest document and any attached documentation to all other parties with a direct financial interest that may be adversely affected by the outcome of the protest.

11.8.5. The procedure and time limits set forth in this paragraph are mandatory and are Bidders sole and exclusive remedy in the event of Bid protest. Bidders failure to comply with these procedures shall constitute a waiver of any right to further pursue the Bid protest, including filing a Government Code Claim or legal proceedings. A Bidder may not rely on a protest submitted by another Bidder, but must timely pursue its own protest. The City will respond to any properly submitted protest within fifteen (15) calendar days and shall provide a hearing to the protesting bidder but only if the hearing is requested by the protesting bidder in the protest. The City's decision on the protest shall be final.

12. **CITY'S DETERMINATION OF RESPONSIBILITY**

12.1. The term "responsible" is defined by California law, but generally means that the Bidder is able to demonstrate that it possesses: (1) the capacity to perform the Work required by the Contract Documents with respect to financial strength, resources available, and experience; and (2) the integrity and trustworthiness to complete performance of the Work in accordance with the Contract Documents. The City may consider the following factors, in relation to the Work to be performed for this Project, in determining whether nor not a Bidder is "responsible":

12.1.1. Demonstrated financial strength including, but not limited to, resources available, bonding capacity, and available insurance.

12.1.2. Demonstrated safety record including, but not limited to, Experience Modification Rate.

12.1.3. Successful completion of projects of similar scope and size. In reviewing this factor, the City may consider elements including, but not limited to, contract amount of completed projects, experience on public works projects, experience implementing prevailing wage certified payroll requirements, timeliness of performance, and, if necessary, evaluation of Bidder's work by previous cities, clients, design professionals, or subcontractors.

12.1.4. Sufficiency of contract administration and construction management systems including, but not limited to, proposed scheduling tools, proposed subcontract forms, proposed progress payment applications, and proposed certification of payroll documents.

12.1.5. History of claims, litigation, and termination or disqualification from projects.

12.2. The City will make its determination of responsibility based upon information submitted by Bidders contained in the "Bidders Statement of Responsibility," included in the Bid Forms, and, if necessary, interviews with previous cities, clients, design professionals, or subcontractors with whom the Bidder has worked. If a non-responsive or non-responsible Bidder submits additional evidence pursuant to Instructions To Bidders Section 11, then that additional evidence shall be considered by the Engineer in making a determination of the Lowest Responsible Bidder.

13. **AWARD OF CONTRACT**

13.1 After the determination as to which Bidder is the Lowest Responsible Bidder, the City will issue a Notice of Award to the Lowest Responsible Bidder. No contractor or subcontractor may be awarded a contract for the project (awarded on or after April 1, 2015) unless registered with the Department of Industrial Relations under Labor Code section 1725.5. Within seven (7) calendar

days after receipt of the Notice of Award, Bidder shall submit to the City all of the following properly signed items:

13.1.1. Two originals of the Agreement signed by Bidder.

13.1.2. Documentation of authority of individual or individuals to sign the Agreement on behalf of Bidder.

13.1.3. The Improvement Security required by Agreement Section 13.

13.1.4. Proof of Insurance required by Agreement Section 14.

13.1.5. Documentation of payment of City of Belmont business tax as provided in Agreement Section 12.

13.1.6. Copy of Contractor's State Contractor's License.

13.1.7. Identification of Contractor's Authorized Representative required by Agreement Section 6.

13.1.8. For joint ventures, proof of Department of Industrial Relations Registration for the Contractor and each subcontractor.

14. FORFEITURE OF BID SECURITY

In the event that Bidder does not properly and timely execute and submit the items set forth in subsection 13.1, above, the Bid Security shall be forfeited to the City and the City may award the Contract to next Lowest Responsible Bidder. The forfeited Bid Security may be utilized by the City in accordance with Public Contract Code Sections 20170 through 20174.

BID

BID TO: Belmont City Clerk
One Twin Pines Lane
Belmont, California 94002

BID FROM: _____
Insert Full Legal Name of Bidder (Firm Submitting Bid)

NOTE: All portions of these Bid Forms (including the Bid, Bidder's Non-Collusion Affidavit, Bidder's Statement of Responsibility, and Bid Bond or alternative bidder's security) must be properly completed, signed, and submitted with the Bid. Failure to do so may result in the Bid being deemed non-responsive by the City.

1. **SCOPE OF BID.** Bidder hereby offers to furnish for the above referenced Project all labor (including supervision), materials and equipment (whether or not permanent or temporary, and whether or not actually incorporated into the Work), utilities (including water, sanitary facilities, electricity, fuel, light, heat, and telephone), tools, transportation, and services necessary to complete the Work on this Project in accordance with the Contract Documents and to complete all requirements of the Contract Documents for the amounts quoted in this Bid (including the costs of any and all applicable taxes, patent rights, royalties, licenses, and permits), as modified pursuant to the terms of the Contract Documents. Bidder will not withdraw its Bid for at least sixty (60) calendar days after the Bid Deadline, unless otherwise extended by the written agreement of the City and Bidder. If Bidder is selected as the Lowest Responsible Bidder, Bidder shall, within seven (7) calendar days after receipt of Notice of Award, sign and deliver to the City all documents identified in Section 13 of the Instructions to Bidders (including the Agreement, performance bond, payment bond, and proof of insurance). Time is of the essence. If awarded the Contract, Bidder agrees to complete the Work within the time specified in the Invitation For Sealed Bids.

2. **ADDENDA.** Bidder shall insert, in the blank lines below (or additional pages, if needed), each Addenda received by the Bidder, and incorporated herein by reference into this Bid. Bidder hereby acknowledges receipt of the following Addenda (Addendum No. and Date Issued):

Addendum No.	Date Issued
_____	_____
_____	_____
_____	_____
_____	_____

3. **BID AMOUNT**.

3.1. **Estimated Quantities.** Since the amounts identified in the Bid Spreadsheet (Section 4, below) are estimates for the purpose of comparing bids, the City reserves the right to increase or decrease the

quantities to reflect the actual amount of work to be performed by the Contractor in accordance with the requirements of the Contract Documents.

3.2. **Unit Price Bids.** For each bid item identified in the Bid Spreadsheet (Section 4, below), the Bidder shall provide a bid item unit price and a bid item extension (bid item unit price multiplied by bid item estimated quantity equals bid item extension). In case of a math error or ambiguity, bid item unit prices shall prevail over the bid item extensions.

3.3. **Total Bid Amount.** The Bidder shall identify the Total Bid Amount, which shall equal the sum of all bid item extensions and bid alternates. The total bid amount shall include the total of all bid schedules. In case of a math error or ambiguity, bid item extensions shall prevail over the Total Bid Amount. The Total Bid Amount shall be the total dollar amount bid by the Bidder, for the Bidder's performance of all Work in accordance with the Contract Documents (and payment of all Bidder's costs required therefor, whether or not specifically identified herein). The Total Bid Amount may also be referred to in the Contract Documents as the Contract Amount.

3.4. **Alternate Bids.** Alternate bids proposed by the Bidder shall not be considered by the City.

4. **BID SPREADSHEET.** Bidder hereby offers to provide to the City the Work required by the Contract Documents (as defined in Agreement Section 2), for the amounts quoted in this Bid, as follows. Bidder shall complete bid schedule, the total bid amount shall constitute the total of all Bid Item Extensions.

#	Item Description	Unit	Quantity	Unit Price	Total
1	Sheeting, Shoring and Bracing	LS	1	$	$
2	Clearing and Grubbing	LS	1	$	$
3	Import borrow	CY	80	$	$
4	Structure Backfill (culvert)	CY	22	$	$
5	Class 2 Aggregate Base	CY	93	$	$
6	Structural Concrete, Headwall (F)*	CY	27	$	$
7	Structural Concrete, Wingwall (F)	CY	35	$	$
8	Bar reinforcing, wingwall (F)	LB	5886	$	$
9	Bar reinforcing, retaining wall (F)	LB	4088	$	$
10	60" reinforced Concrete pipe (CLASS V)	LF	25	$	$
11	Remove and Replace 10-Inch Sanitary Sewer with 10-Inch Sanitary Sewer Main (Open Cut)	LF	40	$	$
12	Raise existing manhole to ground level	EA	1	$	$
13	Remove culvert	LF	35	$	$
14	Remove Headwall	EA	2	$	$
15	Rock stabilization (Rock Slope Protection Class IV, Method B)	CY	66	$	$
16	Gravel Filter	CY	11	$	$
17	4" Galvanized Steel bollards (7.5' long)	EA	7	$	$
18	Rolled erosion control product (netting)	SF	250	$	$
19	Rolled erosion control product (jute mesh)	SF	2000	$	$
20	Hydroseed	SF	250	$	$
21	Structural Concrete	CY	2	$	$
22	Temporary Erosion control	LS	1	$	$
23	Concrete backfill (pipe trench)	CY	2	$	$
24	Preparation and Implementation of Water Pollution Control Plan	LS	1	$	$
25	Temporary High visibility fencing	LF	500	$	$
26	Structure Backfill (slurry cement) (revocable)	CY	60	$	$

27	Temporary Creek Diversion System (revocable)	LS	1	$	$
28	Mobilization (10%)	LS	1	$	$
	TOTAL				**$**

* (F) =Final Payment

TOTAL BID AMOUNT $_____

5. **BID SECURITY.** Bidder must attach Bid Security in the amount of ten percent (10%) of the Bid Amount (see Section 7 of the Instructions to Bidders).

6. **LIST OF SUBCONTRACTORS**.

6.1. Bidder will use Subcontractors for the Work:

YES_____ NO_____

6.2. If yes, the Bidder hereby certifies that the following is a list of all subcontractors which the Bidder is required by law to name in its bids. Generally, bidders are required to identify each subcontractor performing more than one half of one percent of the work. However, more particular requirements are contained in the Subletting and Subcontracting Fair Practices Act, Public Contract Code Sections 4100 *et seq.* (the "Subcontracting Act"), summarized in Section 6 of the Instructions to Bidders.

6.3. Bidders are reminded of the severe penalties imposed by the Subcontracting Act for a failure to list all required subcontractors (Work Activity, Name, and Address) on this sheet. Bids will not be found non-responsive for omission (at time of bid) of additional information regarding estimated dollar amount of subcontracted work or subcontractor license number. However, bidders shall submit all information required by this sheet by no later than 24 hours after written request by the City.

6.4. ALL BIDDERS ARE HEREBY NOTIFIED THAT: the successful bidder will be required to perform not less than ***fifteen*** percent (***15%***) of the Work with the successful bidder's own organization. A failure of the Bid to establish compliance with this requirement may render the bid non-responsive, or it may result in a determination of bidder non-responsibility based on a failure to demonstrate adequate resources available to perform the Work.

Subcontracted work activity	Subcontractor name including address (City and State)	Est. $ amt. of subcontracted work	Subcontractor License no.	DIR #
_____	_____	$_____	_____	_____
_____	_____	$_____	_____	_____

NOTE: Provide additional sheets if required. (copy of this sheet is acceptable)

7. REPRESENTATIONS OF BIDDER.

7.1. By submitting this Bid, Bidder declares under penalty of perjury the following representations are true and correct:

7.1.1. Bidder has read and understands all requirements of the Contract Documents, and this Bid is made in accordance with those requirements. The Contract Documents are more particularly defined in the Agreement, and generally include: all Bidding Documents (including the Invitation For Sealed Bids, these Instructions to Bidders, Supplemental Instructions to Bidders, Addenda [if any], and Bid Forms), the Agreement, the Specifications (including the General Conditions, Special Provisions , the, and the Technical Specifications), the Exhibits (including bonds), and the Drawings (also defined as "Plans").

7.1.2. Any questions by the Bidder regarding the meaning of any part of the Contract Documents have been submitted, in writing, by the Bidder to the City, in accordance with Section 2 of the Instructions to Bidders.

7.1.3. Bidder has visited and examined the Project site of the proposed work, and Bidder is familiar with all the conditions related to the proposed work, including the availability of labor, materials (including transportation, handling, delivery, and storage), equipment, and utilities (including water and electricity), and is familiar with local conditions (including weather, road access and truck routes, and surface and subsurface conditions) as related to requirements of the Contract Documents.

7.1.4. The Bid is based upon the materials, equipment, and systems required by the Bidding Documents without exception.

7.1.5. The Contract Time, as specified in the Invitation For Sealed Bids, is reasonable for performing the Work and that Contractor is able to perform the Work within the Contract Time.

7.1.6. Bidder has the expertise and financial capacity to perform and complete all obligations required by the Contract Documents.

7.1.7. Bidder is aware of and, if awarded the Contract, will comply with applicable legal requirements, including all City Regulations (including payment of City business license tax) in its performance of the Work.

7.1.8. The Bidder shall comply with the requirements of the Labor Code, including Sections 1770 *et seq.*, and the Bidder shall comply with the General Prevailing Wage Determination Made by the Director of Industrial Relations that is in effect on the date of the Invitation for Sealed Bids. The prevailing wage rate schedule is on file with the Engineer and will be made available for review upon request.

7.1.9. Bidder certifies that, for the excavation of any trench of a depth of five feet or more, its bid includes the cost for adequate sheeting, shoring, and bracing or equivalent method (including costs of design), for the protection of life or limb, which shall conform to applicable safety orders, in accordance with Labor Code Sections 6705 and 6707.

7.2. In accordance with Business and Professions Code Section 7028.15, Bidder certifies, under penalty of perjury, that the information contained in this subsection 7.2, below, is true and correct. Any bidder who is not licensed in accordance with the Business and Professions Code, and in

accordance with the Invitation For Sealed Bids, shall be considered non-responsive and shall be rejected by the City.

7.2.1. State Contractor's License No. and Class _____.

7.2.2. Original date license issued, and License expiration date _____.

7.2.3. DIR Number _____.

7.3. As required by Government Code Section 4552, in submitting a Bid to the City, Bidder offers and agrees that, if the Bid is accepted, it will assign to the City all rights, title and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C., Section 15) or under the Cartwright Act (Chapter 2 [commencing with Section 16700] of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, materials, or services by Bidder for the sale to City pursuant to the Bid. Such assignment shall be made and become effective at the time City tenders final payment to Bidder.

7.4. Bidder acknowledges that, unless the bidder submits a request for substitution of "equal" materials in accordance with the requirements of the Agreement, and unless the City approves the substitution in accordance with the requirements of the Contract Documents, the Contractor shall furnish and install the specified material for the Bid Amount.

IN WITNESS WHEREOF, the individuals signing this Bid represent and warrant that they have the right, power, legal capacity, and authority to sign this Bid on behalf of the Bidder, and have caused this Bid to be executed by setting hereto their names, titles, and signatures at _____ County, in the State of _____.

BIDDER: _____
(Signature) (Date)

_____
(Name and Title of Signatories)

_____
(Legal Name of Bidder, including type of organization, e.g., corp. or partnership)

_____
(Bidder's Street and Mailing Address)

_____
(City, State, Zip Code)

_____ _____
(Telephone Number) (Email Address)

EQUAL EMPLOYMENT OPPORTUNITY CERTIFICATION

The bidder _____ and proposed subcontractor hereby certifies that it has _____, has not ____ participated in a previous contract or subcontract subject to the equal opportunity clause, as required by Executive Orders 10925, 11114 or 11246, and that where required, filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.

NOTE: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7(b)(1)) and must be submitted by bidders and proposed subcontractors only in connection with contracts and subcontracts that are subject to the equal opportunity clause. Contract and subcontracts which are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally only contracts or subcontracts of $10,000 or under are exempt).

Currently, Standard Form 100 (EEO-1) is the only report required by the Executive Orders or their implementing regulations.

Proposed prime contractors and the subcontractors who have participated in a previous contract or subcontract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60.1.7(b)(1) prevents the award of contract or subcontracts unless such Contractor submits a reporting covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

The bidder must place a checkmark after "has" or "has not" in one of the blank spaces provided. The above Certification is part of this Proposal. Signing this Proposal on the signature portion thereof shall also constitute an endorsement and execution of the certification. Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

NON-COLLUSION DECLARATION

(Title 23 United States Code Section 112 and
Public Contract Code Section 7106)

The undersigned declares:

I am the _____ of _____, the party making the foregoing bid.

The bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation. The bid is genuine and not collusive or sham. The bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid. The bidder has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or to refrain from bidding. The bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder. All statements contained in the bid are true. The bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof, to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this declaration on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute, this declaration on behalf of the bidder.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct and that this declaration is executed on _____ [date], at _____[city], _____[state].

BIDDER: _____
(Signature) (Date)

_____
(Printed or Typed Name and Title of Signatories)

_____
(Legal Name of Bidder)

DEBARMENT AND SUSPENSION CERTIFICATION

Title 49, Code of Federal Regulations, Part 29

The bidder, under penalty of perjury, certifies that, except as noted below, he/she or any other person associated therewith in the capacity of owner, partner, director, officer, manager:

- Is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any Federal agency;
- Has not been suspended, debarred, voluntarily excluded or determined ineligible by any Federal agency within the past 3 years;
- Does not have a proposed debarment pending; and
- Has not been indicted, convicted, or had a civil judgment rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past 3 years.

If there are any exceptions to this certification, insert the exceptions in the following space.

Exceptions will not necessarily result in denial of award, but will be considered in determining bidder responsibility. For any exception noted above, indicate below to whom it applies, initiating agency, and dates of action.

The above Certification is part of this Proposal. Signing this Proposal on the signature portion thereof shall also constitute an endorsement and execution of the certification. Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

BIDDER'S STATEMENT OF RESPONSIBILITY

(Must be executed by Bidder and submitted with Bid)

1. **SCOPE OF THIS STATEMENT OF RESPONSIBILITY.** In order to allow the City to make a determination of the Bidder's responsibility, the Bidder shall provide the information required herein as a part of its Bid.
   1.1. **City's Right to Use the Bidder's Statement of Responsibility.** The City shall use the information required by this Statement of Responsibility for the sole purpose of determining the Bidder's "responsibility." While the City conducts its deliberative process to determine whether a bidder is "responsible," the City will not disclose "confidential" information (as identified by the Bidder pursuant to paragraph 1(b), below) unless otherwise compelled by a court order. However, if there is a challenge regarding the City's determination of whether a Bidder is "responsible," the City shall have the right to use any and all information contained herein in support of the City's determination, and the Bidder waives any claim against the City for the City's use of information for this intended purpose.
   1.2. **Bidder's Obligation to Identify Confidential Information.** If a Bidder believes that any portion of this Statement of Responsibility is "confidential" and not legally subject to public disclosure in accordance with the requirements of the California Public Records Act (Government Code Sections 6250, *et seq*), the Bidder shall: (1) clearly mark the relevant portions of the Statement of Responsibility as "Confidential"; and (2) upon request from the City, identify the legal basis for exception from disclosure under the Public Records Act; and (3) the Bidder shall defend, indemnify, and hold harmless the City regarding any claim by any third party for the public disclosure of the "Confidential" portion of the Statement of Responsibility; and (4) if the Bidder fails to identify information as "Confidential," or if the Bidder fails to defend and indemnify the City regarding any claim by any third party for the public disclosure of a "Confidential" portion of the Statement of Responsibility, the Bidder shall hold the City harmless and waive any claim against the City for any damages allegedly related to any public disclosure of any portion of the Statement of Responsibility.
   1.3. **Additional Pages.** If additional pages are required to respond to any of the questions set forth in this Statement of Responsibility, the Bidder shall describe and list the additional pages in Section 16, below.

2. **EXPERIENCE**
   2.1. How many years has the Bidder been performing work as a contractor under the present business name?
   2.2. If any of the experience listed in this document refers to work performed under a different name, list the different business names and describe the relationship to the present business name on a separate page (list the additional pages in Section 13 below).

3. **CURRENT WORK IN PROGRESS**
   3.1. For how many construction projects is the Bidder under contract to perform (which are currently under construction)? _____
   3.2. What is the total dollar amount of the construction contracts listed in Subsection 3.1?
   _____
   3.3. What is the total bonding capacity of the Bidder? _____
   3.4. How many construction contracts listed in 3.1 are:
      3.2.1. in an amount of 50% or less of the Total Bid Amount? _____
      3.2.2. in an amount between 50% and 100% of the Total Bid Amount? _____
      3.2.3. in an amount between 100% and 150% of the Total Bid Amount? _____
      3.2.4. in an amount over 150% of the Total Bid Amount? _____

3.5. List the name of the project (with Contract Amount and Anticipated Completion Date), the name of the City/Client entity, and a City/Client contact person (with name and telephone number), for three current active projects referred to in Section 3.4:

3.5.1. Project Name _____

Contract Amount _____
Anticipated Completion Date _____

City/Client Entity _____
City/Client Contact _____
(Name and Phone) _____

3.5.2. Project Name _____

Contract Amount _____
Anticipated Completion Date _____

City/Client Entity _____
City/Client Contact _____
(Name and Phone) _____

3.5.3. Project Name _____

Contract Amount _____
Anticipated Completion Date _____

City/Client Entity _____
City/Client Contact _____ (Name and Phone) _____

4. COMPLETED WORK

Provide the requested information set forth below for the: (1) three most recent projects completed of a similar character to this Project (performed as a general contractor); and (2) three most recent public works projects completed (performed as a general contractor).

4.1. Three most recent projects completed of a similar character to this Project:

4.1.1. Project Name: _____

Project Description:_____
_____
_____

Contract Amount _____

Date Completed:_____

Owner: _____

Contact Person: _____

Contact Person's Phone Number: _____

4.1.2. Project Name _____

Project Description _____
_____

Contract Amount: _____

Date Completed: _____

Owner: _____

Contact Person: _____

Contact Person's Phone Number: _____

4.1.3. Project Name: _____

Project Description: _____
_____
_____

Contract Amount: _____

Date Completed: _____

Owner: _____

Contact Person: _____

Contact Person's Phone Number: _____

4.2. Three most recent public works project (City, State, County) completed:

4.2.1. Project Name: _____

Project Description: _____
_____
_____

Contract Amount: _____

Date Completed: _____

Public Agency: _____

Agency Contact Person: _____

Contact Person's Phone Number: _____

4.2.2. Project Name: _____

Project Description: _____
_____
_____

Contract Amount: _____

Date Completed: _____

Public Agency: _____

Agency Contact Person: _____

Contact Person's Phone Number: _____

4.2.3. Project Name: _____

Project Description: _____
_____
_____

Contract Amount: _____

Date Completed: _____

Public Agency: _____

Agency Contact Person: _____

Contact Person's Phone Number: _____

5. CLAIMS HISTORY

5.1. Has any claim been made against your company in the past five years, which has resulted in arbitration or litigation?_____

5.2. Has your company made any claim against any City or client in the past five years, which has resulted in arbitration or litigation?_____

5.3. If you answered "yes" to subsections 5.1 or 5.2 above, describe the claim(s) using the format below: (use additional sheets if necessary).

5.3.1. Project Name _____

Claim Amount _____

Other Party Entity Name _____
Other Party Contact _____

(Name and Phone) _____

6. Describe the claim(s) on a separate sheet (see Section 14, below).

7. **CONTRACT TERMINATION**

7.1. Has your company ever been terminated by a City or client, or rejected from bidding on a public works project in the last five (5) years? _____. If yes, identify each and provide an explanation below:

7.2. Project Name _____

City/Client Entity Name _____ City/Client Contact
(Name and Phone) _____

Date of Termination/Rejection _____

Explanation _____
_____
_____

8. If more than one (1), describe on additional sheet (see Section 14, below).

9. **COMPLETION BY SURETY**

9.1. Has your company ever failed to satisfactorily complete a construction contract, or has a surety ever completed any portion of a construction contract of your company within the last five (5) years?
_____. If yes, provide an explanation below:

9.2. Project Name _____

Surety Contact
(Name and Phone) _____

Date Surety Took Over _____

Explanation _____
_____
_____

10. If more than one (1), describe on additional sheet (see Section 13, below).

11. **STORM WATER BEST MANAGEMENT PRACTICES**

11.1. Has bidder violated the Storm Water Best Management Practices for illegal or improper discharge(s) into storm drain systems two (2) or more times within the past five (5) years?

☐ Yes
☐ No

Note: This question refers to your firm's violation of sewer overflow to the storm drain system that was required to be reported to the State Water Board.

12. **SEWER AND WATER CROSS-CONTAMINATION**

12.1. Has work performed by the bidder resulted in cross-contamination with water and sewer facilities within the past five (5) years?

☐ Yes
☐ No

13. **OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) COMPLIANCE**

13.1. Has the federal Occupational Safety and Health Administration cited and assessed penalties against your firm for any "serious," "willful" or "repeat" violations of its safety or health regulations in the past five (5) years?

☐ Yes
☐ No

If "Yes," attach a separate signed page describing the citations, including information about the dates of the citations, the nature of the violation, the project on which the citation(s) was or were issued, the amount of penalty paid, if any. If the citation was appealed to the Occupational Safety and Health Appeals Board and a decision has been issued, state the case number and the date of the decision.

14. **PUBLIC WORKS CONTRACTS**

14.1. In the last five (5) years has your firm been denied an award of a public works contract based on a finding by a public agency that your company was not a responsible bidder?

☐ Yes
☐ No

If "Yes," explain on a separate signed page. Identify the year of the event, the owner, the project, and the basis for the finding by the public agency.

15. **ADDITIONAL DOCUMENTS**

In order to allow the City to make a determination of the Bidder's responsibility, the Bidder may be required to submit additional documents.

16. **ADDITIONAL PAGES**

The Bidder declares that the pages listed in this Subsection were added and included with these Bid Documents in order to accurately respond to the Bidding Requirements. The following descriptions include the general nature of the additional information. If no additional pages are submitted, write "None" on the blank line.

_____

_____

_____

17. **PENALTY OF PERJURY**

Bidder hereby declares and certifies under penalty of perjury under the laws of the State of California that the information contained herein is true, correct, and complete.

IN WITNESS WHEREOF, the undersigned represent and warrant that they have the right, power, legal capacity and authority to sign this document on behalf of the Bidder, and have caused this document to be executed by setting hereto their names, titles and signatures.

BIDDER: _____

(Signature) (Date)

_____

(Printed or Typed Name and Title of Signatories)

_____

(Legal Name of Bidder)

BID BOND Bond No. _____

WHEREAS, ("Principal") submitted a Bid to the City of Belmont ("City") for the Project identified on this Bond, and the terms of the Bid require the Principal to submit bidder's security.

NOW, THEREFORE, Principal and _____ ("Surety"), are hereby held and firmly bound unto the City in the amount of ten percent (10%) of the Bid Amount set forth in the Principal's Bid (the terms and conditions of which are incorporated herein by reference) for the above referenced Project, for payment of which Principal and Surety hereby bind themselves, their heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT, if Principal's Bid is rejected by the City, or if Principal's Bid is accepted by the City and the Principal properly executes and submits to the City the Agreement and all required documents (including the Faithful Performance Bond, the Labor and Material Bond, and the proof of insurance), then this obligation shall be null and void; otherwise it shall be and remain in full force and effect.

The Surety hereby agrees, for value received, that its obligations under this bond shall in no way be impaired or modified by an agreement between the City and the Principal to extend the time within which the City may accept the Principal's Bid, and the Surety hereby waives notice of any such extension.

In the event suit is brought upon this bond, the surety shall pay reasonable attorneys' fees and costs incurred by the prevailing parties in such suit, which fees and costs shall be in addition to the face amount of the bond.

IN WITNESS WHEREOF, the undersigned represent and warrant that they have the right, power, legal capacity, and authority to enter into and execute this document on behalf of the Principal and the Surety, and have caused this document to be executed by setting hereto their names, titles, and signatures.

Principal	**Surety**
_____	_____
By: _____	By: _____
Title: _____	Title: _____
Date:	Date: _____
	Address for Notices to Surety: _____
	_____
	_____

NOTE: NOTARY ACKNOWLEDGMENT FOR SURETY AND SURETY'S POWER OF ATTORNEY MUST BE ATTACHED.

CONSTRUCTION AGREEMENT

This Construction Agreement (hereinafter "Agreement") is made and entered into by and between the CITY OF BELMONT, a municipal corporation (hereinafter "City"), and [***INSERT LEGAL NAME OF CONTRACTOR***name of business and description of legal entity, i.e., LLC, Partnership, Corporation, etc.] (hereinafter "Contractor").

RECITALS

A. In accordance with the applicable provisions of State law, including the California Public Contract Code, and local law, including the Belmont City Code, the City issued an invitation for competitive bids for this Project.

B. In response to the invitation for bids, the Contractor submitted the Bid Forms (with a Bid Amount of $_____), which are incorporated herein by reference, which were found by the City to be responsive to the invitation for bids.

C. After reviewing all bids submitted in response to the invitation for bids, the City found the Contractor to be the Lowest Responsible Bidder, and the Awarding Body awarded this Agreement to the Contractor on _____ [***INSERT DATE OF AWARD***].

D. The Project is more specifically described in the Contract Documents, but generally includes the following items of work [*** INSERT IDENTICAL TO "PROJECT DESCRIPTION" IN THE INVITATION TO BIDS***]

NOW THEREFORE, THE PARTIES MUTUALLY AGREE AS FOLLOWS:

1. **SCOPE OF WORK.** The Contractor shall perform, or cause to be performed, the Work described in the Contract Documents (hereinafter "Work"), to the satisfaction of the City Engineer, and subject to the final acceptance by the City.

2. **CONTRACT DOCUMENTS.**

   2.1. **List of Contract Documents.** The Contract Documents consist of this executed Agreement; all Bidding Documents (including the Invitation for Bids, Instructions to Bidders, Supplemental Instructions to Bidders, Bid Forms, and Addenda (if any) as identified below); the Specifications (including General Conditions, Special Provisions, and all documents incorporated by reference therein, including City Standard Specifications, and Caltrans Standard Specifications), and the Technical Specifications; the Drawings (also referred to as "Plans"); and the Exhibits (including bonds).

2.2. **Precedence of Contract Documents.** In the event of a conflict between component parts of the Contract Documents, the document highest in precedence shall control. The precedence shall be as follows: [***SPECIFICALLY IDENTIFY EACH INCORPORATED DOCUMENT, PARTICULARLY THE PLANS, AND ELIMINATE UNUSED PARTS***]

2.2.1. Agreement, as amended by contract change orders.

2.2.2. All Bidding Documents, as amended by Addenda.

2.2.3. Technical Specifications

2.2.4. Special Provisions.

2.2.5. General Conditions

2.2.6. City Standard Specifications.

2.2.7. Caltrans Standard Specifications (Standard Specifications for Construction of Local Streets and Roads, State of California, 2023 Edition).

2.2.8. Drawings (also referred to as Plans), as defined on ********.

2.2.9. Standard Plans and Standard Details.

2.2.10. Exhibits.

2.3. **Addenda.** The following Addenda are hereby incorporated into the Contract Documents:

No.	Date of Issue:
____	_____
____	_____
____	_____

3. **CONTRACT TIME**.

3.1. After Contractor has provided to City all documents identified in the Instructions to Bidders and the Notice of Award (in a form satisfactory to the City, and in accordance with the requirements of the Contract Documents), City shall schedule the mandatory pre-construction conference, and Contractor shall attend and participate in the pre-construction conference.

3.2. After the pre-construction conference, the City shall issue a Notice to Proceed to Contractor. The Notice to Proceed will identify the date on which the "Contract Time" commences, and this date may be referred to as the "Contract Commencement Date." Contractor is authorized to commence Work on the Contract Commencement Date, and Contractor must commence the Work no later than seven days after the Contract Commencement Date. The Work must be diligently prosecuted and all of the Work must be substantially completed within the Contract Time specified in the Invitation For Bids. Time is of the essence in the performance of all obligations under these

Contract Documents, and all timing requirements must be strictly adhered to unless otherwise modified by the City in accordance with the Contract Documents. The Contractor must submit all requests for extensions of time to the City, in writing, no later than ten (10) working days after the start of the condition which purportedly caused the delay, and not later than the date on which performance is due.

3.3. Within the time set forth in the Special Provisions (or, if no time is specified in the Special Provisions, with seven (7) calendar days after written request from the City), Contractor shall submit to the City all required documents, including the following:

3.3.1. Contractor's safety program, and identification of Contractor's safety officer.

3.3.2. Contractor's cost distribution schedule of prices (schedule of values).

3.3.3. Contractor's Construction Schedule.

3.3.4. Contractor's schedule of submittals.

3.3.5. Copies of all required documentation for each subcontractor, including: State Contractor's License, identification of each subcontractors' authorized representative, copy of contract between Contractor and each subcontractor.

4. **CONTRACT AMOUNT.** City shall pay to Contractor, for the performance of the Work, the Contract Amount identified in the Bid Documents, subject to adjustment of estimated quantities (to reflect actual work performed by the Contractor), and as modified according to the terms of the Contract Documents. The Contractor's compensation shall include all costs incurred by the Contractor in the performance of the Work, including: furnishing all labor (including supervision), materials (including the costs of any and all applicable taxes, patent rights, royalties, licenses, and permits), equipment, tools, transportation, and services necessary to complete the Work (including costs to protect the Work, and all damages to the Work prior to acceptance of the Work by the City, unless otherwise specifically provided in the Contract Documents). The Contract Amount identified in the Bid Documents [***, which includes alternate items _____*** insert ***,] is $_____.

5. **LIQUIDATED DAMAGES.** If Contractor fails to complete the Work within the Contract Time, Contractor shall pay to the City, as liquidated damages and not as a penalty, the sum specified in the Invitation for Bids for each calendar day after the expiration of the Contract Time that the Work remains incomplete. The City and Contractor agree that in the event the Work is not completed within the Contract Time, the City's damages would be extremely difficult or impracticable to determine and therefore the City and Contractor agree that the amount stated herein is a reasonable estimate of the amount of such damages. The City may deduct any liquidated damages owed to the City, as determined by the City, from any payments otherwise payable to Contractor under this Contract. Nothing contained herein shall limit the City's rights or remedies against Contractor for any default other than failure to complete the Work within the Contract Time. This provision for liquidated damages shall not be applicable nor act as a limitation upon the City if Contractor abandons the Work. In such event, Contractor shall be liable to the City for all losses incurred.

6. **CONTRACTOR REPRESENTATIVE.** At all times during the progress of the Work, Contractor shall have a competent supervisor, foreman, or superintendent (hereinafter "Contractor

Representative") on site with authority to act on behalf of the Contractor. The Contractor Representative shall be authorized by the Contractor to sign, send, and receive all notices contemplated or required by the Contract Documents, and authorized to direct all Work being performed by (or on behalf of) the Contractor. The Contractor shall, at all times, keep the City Engineer informed in writing of the name and telephone number of the Contractor Representative. Throughout the term of this Contract, Contractor Representative shall meet and confer with the City Engineer in a good faith effort to resolve any outstanding issues related to performance required by the Contract Documents. The Contractor shall, at all times, keep the City Engineer informed in writing of the names and telephone numbers of all subcontractors performing the Work.

7. **ACCESS TO THE SITE.** In order to permit the City to inspect the Work, the Contractor shall, at all times, provide to the City (including agencies and entities designated by the City) proper and safe access to the Project site, and all portions of the Work, and to all shops wherein portions of the Work are in preparation.

8. DOCUMENTATION AND RECORD KEEPING.

8.1. **Contractor's Project Records.** Contractor's Project records shall include all of Contractor's accounting records, employment records, and project work records for all employees, subcontractors, and suppliers, including: the Contract Documents, one record copy of the plans and specifications, change orders, requests for clarifications, instructions from the City, contracts with suppliers and subcontractors, correspondence, submittals, samples, shop drawings, invoices, receipts, vouchers, purchase orders, notes, daily logs, and memoranda relating to the Work.

8.2. **Contractor's Maintenance of Project Records.** Contractor shall keep and preserve Project records in accordance with generally accepted accounting principles and state law requirements. During performance of the Work, Contractor shall keep all of Contractor's Project records in a secure location at the Project Site. After completion of the Work, Contractor shall maintain the Project records for no less than four years after final completion of the Work.

8.3. **Audit by the City.** All of Contractor's Project records, as identified above, shall be made available to the City (including agencies and entities designated by the City), and the Contractor shall provide copies of the Contractor's records upon request by the City.

9. **RESPONSIBILITY OF CONTRACTOR AND SUBCONTRACTORS**.

9.1. Contractor is an independent contractor and is solely responsible for all acts of its employees, agents, or subcontractors, including any negligent acts or omissions. Contractor is not City's employee and Contractor shall have no authority, express or implied, to act on behalf of the City as an agent, or to bind the City to any obligation whatsoever, unless the City provides prior written authorization to Contractor.

9.2. For each subcontractor performing any portion of the Work for this Project, the Contractor shall include a provision in the subcontract documents incorporating by reference the requirements of these Contract Documents, to require the subcontractor to comply with the requirements of these Contract Documents as related to the portion of the Work performed by the subcontractor. This requirement shall specifically include: indemnification of the City (Agreement Section 16),

business tax compliance (Agreement Section 12), insurance (Agreement Section 14), and nondiscrimination and compliance with law (Agreement Section 11.1).

10. **CONFLICTS OF INTEREST.** Contractor (including its employees, agents, and subcontractors) shall not maintain or acquire any direct or indirect interest that conflicts with the performance of this Agreement. In the event that Contractor maintains or acquires such a conflicting interest, any contract (including this Agreement) involving Contractor's conflicting interest may be terminated by the CITY.

11. **COMPLIANCE WITH LAW.** The Contractor shall comply with all applicable legal requirements including all federal, state, and local laws (including ordinances, resolutions, and City Regulations), whether or not said laws are expressly stated in this Agreement.

11.1. **Nondiscrimination.** Contractor shall comply with all applicable federal, state, and local laws regarding nondiscriminatory employment practices, whether or not said laws are expressly stated in this Agreement. Contractor shall not discriminate against any employee or applicant because of race, color, religious creed, national origin, physical disability, mental disability, medical condition, marital status, sexual orientation, or sex.

11.2. **Labor Compliance.** Contractor must comply with all applicable federal, state, and local laws regarding labor compliance, including, but not limited to, all applicable provisions related to working hours, the payment of prevailing wages, travel and subsidence payments, apprentices, payroll records, and labor code penalties (as required by California Labor Code Sections 1720 through 1861, and as outlined in the General Conditions). Copies of the prevailing wage rates are on file with the City Engineer, and shall be made available to any interested party upon request. See General Conditions Section 19 for more detail.

11.3. **Department of Industrial Relations Registration**. No contractor or subcontractor may be listed on a bid proposal for or work on a public works project unless registered with the Department of Industrial Relations under Labor Code section 1725.5 or submitting a bid as part of a joint venture authorized by Business and Professions Code Section 7029.1 or by Public Contract Code Section 10164 and 20103.5, provided the contractor is registered to perform public work under Section 1725.5 at the time the contract is awarded.

11.4. **Subcontractor Eligibility.** Contractor acknowledges that under Public Contract Code Section 6109 no contractor or subcontractor who is ineligible to bid or work on, or be awarded, a public works project under Labor Code Section 1777.1 or 1777.7 may bid on, be awarded, or perform work as a subcontractor on, a public works project. Contractor is prohibited from performing work on a public works project with a subcontractor who is ineligible to perform work on the public works project under Labor Code Section 1777.1 or 1777.7.

12. **PERMITS AND LICENSES.** The Contractor must obtain and maintain all necessary permits and licenses for the performance of the Work.

12.1. **Belmont Business License Tax.** Contractor must apply for and pay the business tax and registration tax for a business license, in accordance with the Belmont City Code.

12.2. **Fees, Royalties, and Patents.** Contractor must pay all license fees and royalties related to or necessary for the Work 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 that is the subject of patent rights or copyrights held by others.

13. **IMPROVEMENT SECURITY.** Concurrently with the execution of this Agreement by the Contractor, and before the commencement of any Work, the Contractor shall furnish improvement security, in a form substantially the same as that set forth in the Exhibits, attached hereto, or in an alternate form authorized by state law and approved by the City, in the following amounts:

13.1. **Faithful Performance** security in the amount of 100 % of the Contract Amount to secure faithful performance of this Agreement (until the date on which the City accepts the Work as complete).

13.2. **Labor and Material** security in the amount of 100% of the Contract Amount to secure payment by the Contractor to laborers and materialmen (until the date on which claims are required to be made by laborers and materialmen pursuant to law).

13.3. **Warranty** security in the amount of 10% of the Contract Amount to secure faithful performance of this Agreement (from the date on which the City accepts the Work as complete until one year thereafter).

14. **INSURANCE**. Contractor must, throughout the duration of this Agreement, maintain insurance to cover Contractor (including its agents, representatives, subcontractors, suppliers, and employees) in connection with the performance of Work under this Agreement, including against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Work. This Agreement identifies the minimum insurance levels with which Contractor must comply; however, the minimum insurance levels do not relieve Contractor of any other performance responsibilities under this Agreement (including the indemnity requirements). City reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other circumstances.

14.1. **Coverage**. Contractor must maintain insurance in the following minimum levels:

14.1.1. **Workers' Compensation**. Workers' compensation coverage as required by the State of California, with statutory limits.

14.1.2. **Commercial General Liability** (CGL). Commercial general liability with coverage at least as broad as ISO form CG 00 01 covering CGL on an "occurrence" basis, including products and completed operations, property damage, bodily injury and personal & advertising injury in an amount not less than $5,000,000 per occurrence. If a general aggregate limit applies, either the general aggregate limit must apply separately to this project/location or the general aggregate limit must be twice the required occurrence limit.

14.1.2.1. **Umbrella Policy.** At the option of the Contractor, primary CGL limits may be less than required, with an umbrella policy providing the additional limits needed. This form of insurance will be acceptable provide that the primary and umbrella policies both provide the insurance coverages herein required, including all additional insured

requirements. The umbrella policy shall be provided on a "following form" basis, with coverage at least as broad as provided on the underlying Commercial General Liability insurance.

14.1.3. **Employer's Liability**. Employer's liability in an amount not less than $1,000,000 per accident for bodily injury or disease.

14.1.4. **Automobile Liability**. Automobile liability with coverage at least as broad as ISO Form Number CA 0001 covering Code 1 (any auto) in an amount not less than $5,000,000 per accident for bodily injury and property damage (coverage required to the extent applicable to Contractor's vehicle usage in performing services hereunder).

14.1.5. **Professional Liability**. For design-build projects, or if the Work requires Contractor to provide professional services related to environmental hazards, professional liability in an amount not less than $1,000,000 per occurrence or claim, and $2,000,000 policy aggregate.

14.1.6. **Contractors' Pollution Legal Liability.** If the Work involves environmental hazards, Contractors' pollution legal liability in an amount not less than $1,000,000 per occurrence or claim, and $2,000,000 policy aggregate.

14.1.7. **Asbestos Legal Liability**. If the Work involves asbestos removal, asbestos legal liability in an amount not less than $1,000,000 per occurrence or claim, and $2,000,000 policy aggregate.

14.1.8. **Builder's Risk (Course of Construction).** Builder's risk insurance utilizing an "All Risk" (Special Perils) coverage form in an amount equal to the completed value of the project and no coinsurance penalty provisions.

14.1.8.1. Builder's Risk insurance must name City as a loss payee as their interest may appear.

14.1.8.2. If the project does not involve new or major reconstruction, at the option of City, an Installation Floater may be acceptable. For such projects, a Property Installation Floater shall be obtained that provides for the improvement, remodel, modification, alteration, conversion or adjustment to existing buildings, structures, processes, machinery and equipment. The Property Installation Floater shall provide property damage coverage for any building, structure, machinery or equipment damaged, impaired, broken, or destroyed during the performance of the Work, including during transit, installation, and testing at the Entity's site.

14.2. **Additional Coverage**. Contractor may carry, at its own expense, any additional insurance it deems necessary or prudent. If Contractor maintains higher levels than the minimums shown above, City requires and shall be entitled to coverage for the higher limits maintained by Contractor. Any available insurance proceeds in excess of the specified minimum levels of insurance and coverage shall be available to the City.

14.3. **Insurer Qualifications**. Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A:VII, unless otherwise acceptable to the Entity. Exception may be made for the State Compensation Insurance Fund when not specifically rated.

14.4. **Deductibles**. Any deductibles or self-insured retentions must be declared to and approved by City. At the option of City, either:

14.4.1. Contractor must reduce or eliminate such deductibles or self-insured retentions as respects the City, its officers, officials, employees and volunteers; or,

14.4.2. Contractor must provide a financial guarantee satisfactory to City guaranteeing payment of losses and related investigations, claim administration and defense expenses.

14.5. **Subrogation Waiver.** Contractor hereby grants to City a waiver of any right to subrogation which any insurer of Contractor may acquire against the City by virtue of the payment of any loss under such insurance. Contractor agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation. The Workers' Compensation policy must be endorsed with a waiver of subrogation in favor of City for all work performed by Contractor, its employees, agents and subcontractors. This provision applies regardless of whether or not the City has requested or received a waiver of subrogation endorsement from the insurer.

14.6. **Evidence of Coverage**. Concurrently with the execution of this Agreement, Contractor must furnish City with original certificates and amendatory endorsements, or copies of information or declaration page listing all policy endorsements of the insurance required hereunder. However, failure to obtain the required documents before the work beginning shall not waive Contractor's obligation to provide them. City reserves the right to require complete, certified copies of all required insurance policies, including endorsements, required by these specifications, at any time.

14.7. **Endorsements**. The insurance policies must be endorsed as follows:

14.7.1. For commercial general liability and automobile liability insurance, the City (including its elected officials, employees, and agents) must be named as an additional "insured". The endorsement must include liability arising out of work or operations performed by or on behalf of Contractor including materials, parts, or equipment furnished in connection with such work or operations and automobiles owned, leased, hired or borrowed by or on behalf of Contractor. For commercial general liability, the policy must be endorsed with a form at least as broad as ISO form CG 20 10, GC 11 85 or both CG 20 10 and CG 20 37 forms if later revisions used.

14.7.2. Contractor's insurance is primary to any other insurance (including self-insurance) available to the City (including its elected officials, employees, and agents) with respect to any claim arising out of this Agreement. Any insurance maintained by the City shall be excess of the Contractor's insurance and shall not contribute with it.

14.7.3. No policy shall be canceled, limited, or allowed to expire without renewal until after 30 days written notice has been given to the City by first class mail.

14.8. **Claims Made Policies**. If any required coverage is made on a claims-made form:

14.8.1. The "Retro Date" must be shown, and must be before the date of the contract or the beginning of contract work.

14.8.2. Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of the contract of work.

14.8.3. If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a "Retro Date" prior to the contract effective date, Contractor must purchase

"extended reporting" coverage for a minimum of five (5) years after completion of contract work.

14.8.4. A copy of the claims reporting requirements must be submitted to City for review.

14.8.5. If the services involve lead-based paint or asbestos identification/remediation, Contractor's Pollution Liability policy shall not contain lead-based paint or asbestos exclusions. If the services involve mold identification/remediation, Contractor's Pollution Liability policy shall not contain a mold exclusion, and the definition of Pollution shall include microbial matter, including mold.

14.9. **Subcontractors**. Contractor must require and verify that all subcontractors maintain insurance meeting all the requirements stated herein, and Contractor must ensure that City is an additional insured on insurance required from subcontractors. For CGL coverage subcontractors must provide coverage with a format least as broad as CG 20 38 04 13.

15. **REPORTING DAMAGES.** If any damage (including death, personal injury or property damage) occurs in connection with the performance of this Agreement, Contractor must immediately notify the City Risk Manager's office by email at finance@belmont.gov, and Consultant shall promptly submit to the City's Risk Manager and the City's Authorized Representative, a written report (in a form acceptable to the City) with the following information: (a) name and address of the injured or deceased person(s), (b) name and address of witnesses, (c) name and address of Consultant's insurance company, and (d) a detailed description of the damage and whether any City property was involved.

16. **RESPONSIBILITY FOR LOSS**.

16.1. The City and its elected officials, officers, employees, agents and volunteers, shall not be answerable or accountable in any manner: for any loss or damage that may happen to the work or any part thereof; for any loss or damage to any of the materials or other things used or employed in performing the work; for injury to or death of any person (including but not limited to workers or the public) from any cause whatsoever; or for damage to property from any cause whatsoever.

16.2. The Contractor shall be responsible for any liability imposed by law and for injuries to or death of any person (including but not limited to workers and the public) or damage to property resulting from defects or obstructions or from any cause whatsoever during the progress of the work or at any time before its completion and final acceptance. The Contractor shall indemnify and save harmless the City of Belmont and its elected officials, officers, employees, agents and volunteers from all claims, suits or actions of every name, kind and description brought for, or on account of, injuries to or death of any person (including but not limited to employees of Contractor, of subcontractor, or of any other person, firm or entity and the public) or damage to property arising from any cause whatsoever during the progress of the work or at any time before its final completion and acceptance. Contractor's indemnification shall specifically include, but not be limited to, all claims arising out of: contract claims, property damage, personal injury, and any infringement of patent rights or copyrights incidental 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 in the Contract Documents. Contractor's indemnification shall include any and all costs, expenses, court costs, attorneys' fees and liability incurred by the City in enforcing the

provisions of this section, and in defending against such claims, whether the same proceed to judgment or not. Contractor shall reimburse City for any expenditures City incurs by reason of such matters. The duty of the Contractor to indemnify and save harmless includes the duties to defend as set forth in Section 2778 of the Civil Code. This indemnification shall survive termination of the Contract.

The Contractor waives any and all rights to any type of express or implied indemnity against the City, and its officers, officials, agents, employees and volunteers. It is the intent of the parties that the Contractor shall indemnify and hold harmless the City, and its elected officials, officers, agents, employees and volunteers from any and all claims, suits, or actions arising from any cause whatsoever as set forth above regardless of the existence or degree of fault or negligence on the part of the City, the Contractor, the subcontractor or employee of any of these, other than the sole negligence, active negligence or willful misconduct of the City, and its elected officials, officers, agents, employees and volunteers.

16.3. In addition to any remedy authorized by law, so much of the money due the Contractor under and by virtue of the Agreement as shall be considered necessary by the City may be retained by the City until disposition has been made of such suits or claims for damages as aforesaid.

16.4. Neither the elected officials, officers, agents, employees not volunteers of City, nor any officer or employee of any county, city or district shall be personally responsible for any liability arising under or by virtue of the Agreement.

16.5. Nothing in the Agreement is intended to make the public or any person a third party beneficiary under this Contract, nor is any term and condition or other provision of the Agreement intended to establish a standard of care owed to the public or any member thereof. Attention is directed to Section ___, "Insurance Provisions," of the General Conditions for the Contractor's responsibility for providing and maintaining insurance.

17. **ACCEPTANCE OF WORK.** Before acceptance of the Work by the City, the Contractor shall be solely responsible for maintaining the quality of the Work, and maintaining safety at the Project site. The Contractor's obligation to perform the Work shall not be satisfied until after the City Engineer has made a written determination that all obligations of the Agreement have been satisfied and all outstanding fees and charges have been paid, and the City has accepted the Work as complete.

18. **WARRANTY.**

18.1. **Quality of Work.** Contractor warrants to the City that all materials and equipment used in or incorporated into the Work will be of good quality, new, and free of liens, claims, and security interests of third parties; and that the Work will be of good quality and free from defects; and that the Work will conform with the requirements of the Contract Documents.

18.2. **Documentation of Warranty.** If required by the City Engineer, Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment. If required by the Contract Documents, the Contractor shall provide a written warranty from the manufacturer or supplier.

18.3. **Warranty Period.** The Contractor shall warrant the quality of the Work, in accordance with the terms of the Contract Documents, for the "Warranty Period." The Warranty Period shall be a one year period (unless a longer period of time is specified in the Contract Documents) commencing as follows: (a) for any Work not identified as incomplete in the Certificate of Substantial Completion, commencing on the date of Substantial Completion; and (b) for any Work that is identified as incomplete in the Certificate of Substantial Completion, commencing on the date of Final Completion.

18.4. **Default During Warranty Period.** In the event that (during the Warranty Period) any portion of the Work is determined by the City Engineer to be defective as a result of an obligation of the Contractor under this Agreement (including any faulty workmanship or material, or any failure of the Work to operate in accordance with the requirements of the Contract Documents), the Contractor shall be in default.

19. **DEFAULT**.

19.1. **Notice of Default**. In the event that the Contractor is in default of this Agreement, as defined in this section, the City Engineer shall provide written notice to the Contractor and the Contractor's surety (if any) in which the default is described.

19.2. **Circumstances Constituting Default**. Contractor shall be in default of this Agreement if the City Engineer determines that any one of the following conditions exists:

19.2.1. Contractor fails to perform any portion of the Work in accordance with the timing requirements of the Construction Schedule.

19.2.2. Contractor abandons the Project site.

19.2.3. Contractor fails to replace or repair any damage caused by Contractor or its agents, representatives, contractors, subcontractors, or employees in connection with performance of the Work.

19.2.4. Contractor fails to supply workers, subcontractors, or other personnel with the skills, certifications, or licenses required by the Contract Documents.

19.2.5. Contractor violates any legal requirement related to the Work.

19.2.6. Contractor is insolvent, files for bankruptcy, makes a general assignment for the benefit of its creditors, or fails to pay its debts as they become due.

19.2.7. Contractor fails to perform any portion of the Work in accordance with the requirements of the Contract Documents.

19.3. **City Remedies**. The City may, in the discretion of the City Engineer, take any or all of the actions identified in this subsection, if the Contractor fails to: (a) promptly commence, and diligently and continuously prosecute the cure of the default, or (b) within ten (10) days, cure the default, or provide adequate written assurance to the satisfaction of the City Engineer that the cure will be promptly commenced and diligently prosecuted to its completion:

19.3.1. Demand the Contractor to complete performance of the Work (including repair, or removal and replacement, of nonconforming Work).

19.3.2. Issue a Notice of Suspension of Work, by which the Contractor shall suspend all Work except for those portions of the Work authorized by the Notice, and for which the Contractor shall not be entitled to any adjustment of the Contract Amount or Contract Time. Notwithstanding the timing requirements of this Section 19.3, if the City Engineer determines that a default may have a potentially adverse impact on the safety of persons or property (including but not limited to a failure by the Contractor to maintain documentation of insurance or improvement security as required by this Agreement), the City Engineer may immediately issue a Notice of Suspension of Work in accordance with this subsection.

19.3.3. Cure the default and charge the Contractor for all costs resulting therefrom, including administrative costs (including City staff costs, City consultant costs, and attorney's fees) and interest in an amount equal to seven percent (7 %) per annum from the date of default, which charge may be deducted by the City from amounts otherwise payable to the Contractor.

19.3.4. Remove the Contractor from the site and demand the Contractor's surety (if any) to complete performance of the Work.

19.3.5. Take possession of the Project site and all materials, supplies, equipment, tools, and construction equipment and machinery thereon owned by Contractor; accept the assignment of any or all of the subcontracts; and then complete the Work by any method the City may deem expedient. If requested by the City, Contractor shall remove any part or all of Contractor's materials, supplies, equipment, tools, and construction equipment and machinery from the Project site within seven (7) days of such request; and if Contractor fails to do so, the City may remove or store, and after ninety (90) days sell, any of the same at Contractor's expense.

19.3.6. Terminate the Contract.

19.4. **Termination for Default**. In the event that the Contract is terminated by the City in accordance with this section:

19.4.1. Contractor shall not be entitled to receive any further payment until the expiration of thirty-five (35) days after Final Completion and acceptance of all Work by the City

19.4.2. If the unpaid balance of the Contract Amount (to which the Contractor is otherwise entitled in accordance with the Contract) exceeds the cost of completing the Work (including all additional costs and expenses made necessary thereby, plus all losses sustained, including any liquidated damages provided under the Contract Documents), such excess shall be paid to Contractor. If the cost of completing the Work exceeds the unpaid balance of the Contract Amount, Contractor shall pay such excess to the City.

19.4.3. No termination or action taken by the City after termination shall prejudice any other rights or remedies of the City provided by law or by the Contract Documents upon such termination; and the City may proceed against Contractor to recover all losses suffered by the City.

20. **NOTICES.** All notices or demands which the Contract Documents contemplates or requires shall be in writing and shall be delivered to the respective party as set forth in this section. Communications shall be deemed to be effective on the first to occur of: (a) actual receipt by a party's

Authorized Representative; (b) actual receipt at the address designated below; or (c) three working days following the deposit in the United States Mail of registered or certified mail, sent to the address designated below. The Authorized Representative of either party may modify their respective contact information identified in this section by providing notice to the other party.

TO: City of Belmont	**To: Contractor**
Attn: Bozhena Palatnik	Attn:
Senior Civil Engineer	
One Twin Pines Lane, Suite	
Belmont, CA 94002	

21. **HEADINGS.** The heading titles for each paragraph of the Contract Documents are included only as a guide to the contents and are not to be considered as controlling, enlarging, or restricting the interpretation of the Contract Documents.

22. **SEVERABILITY.** If any term of the Contract Documents (including any phrase, provision, covenant, or condition) is held by a court of competent jurisdiction to be invalid or unenforceable, the Contract Documents shall be construed as not containing that term, and the remainder of this Agreement shall remain in full force and effect; provided, however, this section shall not apply to the extent that enforcement of the Contract Documents without the term would be grossly inequitable under all the circumstances or would frustrate the purposes of the Contract Documents.

23. **INTERPRETATION OF CONTRACT DOCUMENTS**.

23.1. **Governing Law, Jurisdiction, and Venue.** The interpretation, validity, and enforcement of the Contract Documents shall be governed by and construed under the laws of the State of California. Any suit, claim, or legal proceeding of any kind related to this Agreement shall be filed and heard in a court of competent jurisdiction in the County of San Mateo.

23.2. **Industry Standards.** When Contract terms have a customary technical or trade meaning, the terms shall be interpreted in accordance with that meaning.

23.3. **Standard Specifications and Codes.** References to any regulations (including: standard specifications, manuals or codes of a technical society, organization or association; or laws or regulations of any governmental authority) shall mean the regulations in effect at the time of the Bid Opening, unless otherwise specifically identified in the Contract Documents.

24. **ATTORNEY'S FEES.** In the event any legal action is commenced to enforce the Contract Documents, the prevailing party is entitled to reasonable attorney's fees, costs, and expenses incurred, not to exceed $10,000.

25. **ASSIGNMENT AND DELEGATION**.

25.1. **Assignment of The Contract Documents.** The Contract Documents, and any portion thereof, shall not be assigned or transferred, nor shall any of the Contractor's duties be delegated, without the written consent of the City. Any attempt to assign or delegate the Contract Documents without the written consent of the City shall be void and of no force or effect. A consent by the City to one assignment shall not be deemed to be a consent to any subsequent assignment.

25.2. **Antitrust Claims.** As required by the instructions to bidders and Government Code Section 4552, the Contractor hereby agrees to assign to the City, all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Action (15 U.S.C. Section 15) or under the Cartwright Act (Chapter 2 [commencing with Section 16700] of Part 2 of Division 7 of the California Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the City tenders final payment to the Contractor, without further acknowledgment by the parties. The Contractor further warrants that all goods, services, and materials provided to the City in accordance with this Contract are free and clear of all liens and encumbrances.

26. **MODIFICATIONS.** The Contract Documents may not be modified orally or in any manner other than by an agreement of the parties, in writing, in accordance with requirements of the Contract Documents.

27. **WAIVERS.** Waiver of a breach or default under the Contract Documents shall not constitute a continuing waiver or a waiver of a subsequent breach of the same or any other provision of the Contract Documents.

28. **CONFLICTS.** If any conflicts arise between the terms and conditions of this Agreement and the terms and conditions of the attached exhibits or any documents expressly incorporated, the terms and conditions of this Agreement shall control.

29. **ENTIRE AGREEMENT.** The Contract Documents, including all documents incorporated herein by reference, comprise the entire integrated understanding between the City and Contractor concerning the Work to be performed for this Project. The Contract Documents supersede all prior negotiations, agreements, and understandings regarding this matter, whether written or oral. The Contract Documents are complementary; what is called for in one is binding as if called for by all. To the extent that portions of the Contract Documents are not attached to this Agreement, they shall be deemed incorporated herein by reference.

30. **SIGNATURES.** The individuals executing this Agreement represent and warrant that they have the right, power, legal capacity, and authority to enter into and to execute the Contract Documents on behalf of the respective legal entities of the Contractor and the City. The Contract Documents shall inure to the benefit of and be binding upon the parties hereto and their respective successors and assigns.

IN WITNESS WHEREOF the City and the Contractor do hereby agree to the full performance of the terms set forth herein.

CITY OF BELMONT	**CONTRACTOR**
By: _____ Afshin Oskoui, City Manager	By: _____ _____ (print name) (print title)
Date: _____	Date: _____
APPROVED AS TO FORM	By: _____ _____ (print name) (print title)
_____ Scott M. Rennie, City Attorney	Date: _____
FUNDING VERIFIED	
_____ Grace Castaneda, Finance Director	

INSTRUCTIONS FOR SIGNATURES – DO NOT INCLUDE WITH SIGNED CONTRACT

****

[PLEASE SELECT THE APPROPRIATE SIGNATURE BLOCK FROM THE FOLLOWING SAMPLES]

CORPORATIONS

XYZ Land Development Inc,

a California corporation

By: _____

Its: _____

[needs to be officer from the operations side:

President, CEO, Vice President]

By: _____

Its: _____

[needs to be officer from the finance side: Treasurer, CFO, Secretary]

One corporate signature is acceptable if the person is an officer if the signature is notarized (although we would like you to ask for a corporate resolution showing that person is authorized to sign). A single signature where the person is not a corporate officer – eg general manager, etc – must be supported by a corporate resolution indicating that person has been delegated authority to sign contracts on behalf of the corporation

GENERAL PARTNERSHIPS

XYZ Land Development,

a California general partnership

By: _____

Its: General Partner

LIMITED PARTNERSHIPS

XYZ Land Development, LLP,

A California limited partnership

By: _____

Its: General Partner

[need limited partnership agreement or certificate filed with state showing the person or entity is the general partner]

In many cases the general partner will be a corporation so the signature block would look like this:

XYZ Land Development, LP,

A California limited partnership

By: ABC Developers, Inc,

a California corporation

Its: General Partner

By: _____

Its: President, CEO, VP

By: _____

Its: Secretary, Treasurer, CFO

LIMITED LIABILITY COMPANY

XYZ Land Development, LLC,

a California Limited Liability Company

By: _____

Its: Managing Member

[we need to see the operating agreement or certificate filed with secretary of state showing the person or entity is the managing member]

If the Managing Member is not an individual, but is a business entity then you would indent the signature block for the appropriate persons to sign as in the example for the limited partnership above.

PERFORMANCE BOND **Bond No. _____**

WHEREAS,_____ ("Principal") has entered into an "Agreement" with the City of Belmont ("City") for the Project identified on this Bond, the terms and conditions of which are incorporated herein by reference; and the terms of the Agreement require the Principal to submit performance security.

NOW, THEREFORE, Principal and _____ ("Surety"), are hereby held and firmly bound unto the City in the amount of $_____, for payment of which Principal and Surety hereby bind themselves, their heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT, if Principal (or its heirs, executors, administrators, successors, or assigns approved by the City) performs the covenants, conditions, and obligations of the Agreement, including the obligation to indemnify, defend, and hold harmless the City, then this obligation shall be null and void; otherwise it shall be and remain in full force and effect.

The Surety's obligation under this bond shall arise after the City has provided written notice to the Surety, at the address set forth below, of the Principal's default under the Agreement, and the Principal's failure to cure the default in accordance with the terms of the Agreement.

The Surety hereby agrees, for value received, that its obligations under this bond shall in no way be impaired or modified by any modification to the Agreement by the City and the Principal, and the Surety hereby waives notice of any such modification.

In the event suit is brought upon this bond, the surety shall pay reasonable attorneys' fees and costs incurred by the prevailing parties in such suit, which fees and costs shall be in addition to the face amount of the bond.

IN WITNESS WHEREOF, the undersigned represent and warrant that they have the right, power, legal capacity, and authority to enter into and execute this document on behalf of the Principal and the Surety, and have caused this document to be executed by setting hereto their names, titles, and signatures.

Principal	**Surety**
_____	_____
By: _____	By: _____
Title: _____	Title: _____
Date:	Date: _____
	Address for Notices to Surety: _____
	_____
	_____

NOTE: NOTARY ACKNOWLEDGMENT FOR SURETY AND SURETY'S POWER OF ATTORNEY MUST BE ATTACHED.

PAYMENT BOND **Bond No. _____**

WHEREAS, _____("Principal") has entered into an "Agreement" with the City of Belmont ("City") for the Project identified on this Bond, the terms and conditions of which are incorporated herein by reference; and the terms of the Agreement require the Principal to submit payment (labor & material) security for the benefit of all "Claimants"; and the term "Claimants" is defined as any of the persons named in California Civil Code Section 3181, or their assigns.

NOW, THEREFORE, Principal and _____ ("Surety"), are hereby held and firmly bound unto the City, and all Claimants, in the amount of $_____, for payment of which Principal and Surety hereby bind themselves, their heirs, executors, administrators, successors, and assigns, jointly and severally, by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT, if the Principal (or its heirs, executors, administrators, successors, or assigns approved by the City) and all of its subcontractors pay: (a) all Claimants, and (b) all amounts due under the California Unemployment Insurance Code with respect to work or labor performed under the Agreement, and (c) all amounts required to be deducted, withheld, and paid over to the California Employment Development Department from the wages of employees of the Principal and its subcontractors pursuant to California Unemployment Insurance Code Section 13020 with respect to such work and labor; then this obligation shall become and be null and void; otherwise it shall remain in full force and effect.

The Surety's obligation under this bond shall arise, and the Surety shall make appropriate payments, after the Surety has received written notice, at the address set forth below, of the Principal's failure to make payment in accordance with the obligations of the Agreement or this bond. This bond shall inure to the benefit of the City and Claimants, as to give a right of action to any Claimant or their assigns in any suit brought upon this bond. In the event suit is brought upon this bond, the surety shall pay reasonable attorneys' fees and costs incurred by the prevailing parties in such suit, which fees and costs shall be in addition to the face amount of the bond. The Surety hereby agrees, for value received, that its obligations under this bond shall in no way be impaired or modified by any modification to the Agreement by the City and the Principal, and the Surety hereby waives notice of any such modification.

IN WITNESS WHEREOF, the undersigned represent and warrant that they have the right, power, legal capacity, and authority to enter into and execute this document on behalf of the Principal and the Surety, and have caused this document to be executed by setting hereto their names, titles, and signatures.

Principal	**Surety**
_____	_____
By: _____	By: _____
Title: _____	Title: _____
Date:	Date: _____
	Address for Notices to Surety: _____
	_____
	_____

NOTARY ACKNOWLEDGMENT FOR SURETY AND SURETY'S POWER OF ATTORNEY MUST BE ATTACHED.

MAINTENANCE BOND

(To be executed after acceptance of project by the City Council)

KNOW ALL MEN BY THESE PRESENTS, that we, _____ as Principal, and _____, as Surety, are held and firmly bound unto the City of Belmont (hereinafter called the Obligee), in the penal sum of _____ Dollars ($_____) for the payment of which, well and truly to be made, we do hereby bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, Principal has heretofore entered into a contract with the Obligee for the _____Project, City Contract No._____; and,

WHEREAS, the work called for under the contract has now been completed and accepted by Obligee;

NOW, THEREFORE, THE CONDITIONS OF THIS OBLIGATION IS SUCH, that if the Principal shall for a period of one (1) year from and after the date of the completion and acceptance of the contract indemnify the Obligee against any loss or damage directly arising by reason of any defect in the material or workmanship that may be discovered within the period aforesaid, then this obligation shall be void; otherwise to remain in full force and effect.

All suits at law or proceedings in equity to recover on this bond must be instituted within twelve (12) months after the expiration of the maintenance period provided for herein.

Principal: _____	Surety: _____
Corporate Seal (where appropriate)	Corporate Seal (where appropriate)
_____	_____
Authorized Signature	Authorized Signature
_____	_____
Printed name and title	Printed name and title
_____	_____
Date	Date
_____	_____
Street Address	Street Address
_____	_____
City, State, Zip Code	City, State, Zip Code

ALTERNATIVE CLAUSES

1. **Identification of Plans.** The Contract Documents are more particularly defined in the Agreement, and generally include: all Bidding Documents (including the Invitation For Bids, these Instructions to Bidders, Addenda [if any], and Bid Forms), the Agreement, the Specifications (including the General Conditions, the Special Provisions , and the Technical Specifications), the Exhibits (including bonds), and the Drawings (also referred to as "Plans"). The Plans specifically include the following documents: 11 SHEETS OF DRAWINGS PREPARED BY Schaaf & Wheeler, DATED May 13, 2024.

2. **Truck Routes.** Pursuant to City ordinances, use only authorized truck routes. Additional information is listed below:

The following truck traffic routes shall be limited to a maximum gross weight, including load, of THIRTEEN (13) Tons:

- All of Ralston Avenue

The maximum combined total vehicle weight, plus load, on all remaining streets shall not exceed Eight (8) Tons.

REQUIREMENT FOR PUBLIC NOTIFICATION

If more than fifty (50) yards of material will be hauled, the permit applicant shall be required to notify all property owners within a three hundred (300) foot radius of the date and time that the hauling will take place. (Belmont City Code Section 14-94(f)).

Alternate Improvement Security Clauses for Agreement Section 13:

Warranty security in the amount of 10 % of the Contract Amount (in the form of the Faithful Performance security) to secure faithful performance of this Agreement (from the date on which the City accepts the Work as complete until one year thereafter).

Alternate Insurance Clauses for Agreement Section 14:

Risk Management may require additional insurance coverage (e.g., $3,000,000 for commercial general liability).

Deductibles and Self-Insured Retentions. Any deductibles (including any self-insured retentions) must be declared to and approved by the City.

If the amount of the deductible for commercial general liability is greater than $_____, the Contractor shall either: reduce the deductible to an amount less than or equal to $_____, or the Contractor shall procure a bond in an amount sufficient to guarantee payment of claims within the deductible amount (including losses and related investigations, administration and defense expenses).

If the amount of the deductible for property insurance is greater than $_____, the Contractor shall either: reduce the deductible to an amount less than or equal to $_____, or the Contractor shall

procure a bond in an amount sufficient to guarantee payment of claims within the deductible amount (including losses and related investigations, administration and defense expenses).

Alternative Clauses 1 of 1

GENERAL CONDITIONS

CITY OF BELMONT
CITY CONTRACT NUMBER 2025-639
SALSON CULVERT REPLACEMENT PROJECT

G.C. 1 STANDARD SPECIFICATIONS

The Standard Specifications for Public Works Construction "Greenbook" (2018) in conjunction with The State of California Department of Transportation Standard Specifications "Caltrans Standard Specifications" (2023 Edition) shall be the referenced standard specifications for this contract. All work shall conform to the aforementioned standard specifications, including General Conditions, Special Provisions and Technical Specifications, unless otherwise specified in the Contract Documents.

G.C. 2 DEFINITIONS

"City of Belmont," the "Contractor," and the "Contract Documents" are identified in the Standard Contract Agreement. The "City of Belmont" and the "Contractor" include their authorized representatives and are treated throughout as if each were singular in number and neuter in gender. "Contractor" includes its surety. Whenever in the Standard Specifications and Contract Documents the following terms are used, they shall be understood to mean and refer to the following:

A. Agency/City The City of Belmont, California

B. Engineer The Director of Public Works and his authorized representatives.

G.C. 3 ENGINEER

The Engineer shall act as the City's representative during the construction period. He shall determine the amount, quality, acceptability and fitness of parts of the work and interpret the Contract Documents. The Engineer will make visits to the site and determine if the work is proceeding in accordance with the Contract Documents. No act or omission of the Engineer shall relieve the Contractor of the duty to proceed with the work in strict conformity with the Contract Documents.

At least one week prior to the start of work, the Contractor shall furnish to the Engineer a Schedule of Work showing the Contractor's planned sequence of operations. Such schedule shall be subject to the review and approval of the Engineer. No work shall be done until the Contractor and the Engineer have agreed to the schedule to be followed by the Contractor.

Upon request, the Engineer shall reduce to writing any oral order, objection requirement or determination. All communications to the City by the Contractor shall be via the Engineer. Whenever the Engineer's approval is requested, it shall be in writing only.
In accordance with Belmont's Construction Noise Ordinance, work within the City's right of way shall be done during normal working hours of 8 am to 5 pm, Monday through Friday.

The Contractor shall hand deliver written notification to the Engineer prior to any emergency overtime, weekend or holiday. The sum of the City Inspector's pay for inspection of overtime weekend or holiday work performed will be deducted from any moneys due to the Contractor.

Overtime is defined as work in excess of 8 hours in a day. The Contractor, and not the Engineer, shall be responsible for the construction means, controls, techniques, sequences, procedures and construction safety.

As stated elsewhere, amounts shown in the Proposal and Contract as to quantities are estimates only. From time to time, the Engineer shall direct the Contractor as to the prosecution of the work in such manner as to increase or decrease such estimates as to the work actually to be done. The Contractor shall comply with such instructions and shall be paid only for work actually done based on the unit prices set out in the Contract.

G.C. 4 AWARD AND EXECUTION OF CONTRACT

The right is reserved to reject any bids if the Engineer is not satisfied that the bidder is fully qualified to carry out the terms of the Contract.

G.C. 5 PROTECTION

At his expense the Contractor shall:

A. Protect all utilities from damage and not disturb such utilities without approval of the governing agency. Contact Underground Service Alert (USA) at 1-800-227-2600 at least 48 hours prior to commencing excavations.

B. Work with the respective utility companies to assure proper reconnection and relocation of such services. The Contractor is expected to include the cost of working with these utility companies in the price bid for the work involved.

C. Take every precaution against injuries to persons or damage to property.

D. Comply with regulations governing the use of the property. The Contractor shall furnish the City with a copy of written permission from the property owner to the Contractor prior to using private property for any storage of materials, equipment or debris.

E. Store and suitably protect its apparatus, equipment, materials, and supplies in an orderly fashion on site.

F. Place on the work only such loads as are consistent with the safety of the work.

G. Effect all cutting, fitting, or patching or its work required to make it conform to the Plans and Specifications and interrelated with other improvements but, except with the consent of the Engineer, shall not cut or otherwise alter existing improvements.

H. Protect and preserve established benchmarks and monuments, make no changes in the location of such without the prior written approval of the City, and replace and relocate any which may be lost or destroyed or which require shifting because of necessary changes in grades or locations. All replacement and relocation work shall be accomplished only after approval of the City and under the direct supervision and instructions of the Engineer.

I. Before final payment, remove all surplus material, false work, temporary structures, debris, and similar matter resulting from its operation from the site and put the site in an orderly condition.

J. Construct, operate and maintain all passageways, guard fences, lights, barricades and other facilities required for protection by state or municipal laws and regulations and local conditions during the course of the work.

K. Guard the City's property from injury or loss.

L. Take all reasonable precautions for dust and noise control and generally conduct operations so as not to constitute a nuisance.

M. Protect existing signs, fences, asphalt pavement, concrete curb, and gutter and other highway facilities which may be encountered in the roadway. The replacement or repair of any facilities which the City deems necessary as a result of the Contractor's operations shall be done by the Contractor at its own expense and to the satisfaction of the City.

G.C. 6 VALUE ENGINEERING

The City is receptive to proposals from the Contractor identifying ways to reduce project costs and will share 50% of the cost savings with the Contractor if the proposal is accepted. The City encourages the Contractor to submit cost saving proposals on construction methods, products or materials that are equal to, or better than, what is specified by the project plans or specifications. The City is not obligated to accept and implement the proposal; however, if the City does accept the proposal for implementation, the City will share 50% of the cost savings with the Contractor. The cost savings shall be limited to the project for which the proposal is made. The City retains the right to implement the Contractor's proposal on future projects without obligation to sharing the future cost savings. The cost saving/value engineering program is administered by the City in accordance with California Public Contract Code Section 7101.

G.C. 7 CHANGES IN THE WORK

The City shall have the right to make any reasonable changes in the project plans or quantities determined to be necessary or expedient. In case such changes increase or diminish the work shown, the Contractor shall be paid for the work actually done at a mutually agree upon adjustment to the Contract price, based upon the accepted Bid Proposal or according to the provisions of Paragraph 7, Changes in Work. The Contractor shall not be entitled to extra payment, nor shall any claim be made on account of anticipated profits on the work that may be omitted.

G.C. 8 CHANGES IN CONTRACT PRICES

Whenever corrections, alterations, or modifications of the work under this Contract are ordered by the Engineer and increase the amount of work to be done, such added work shall be known as extra work; and when such corrections, alterations, or modifications decrease the amount of work to be done, such subtracted work shall be known as work omitted.

The difference in cost of the work affected by such change will be added to or deducted from the amount of said Contract price, as the case may be, by a fair and reasonable valuation, which shall be determined in one or more of the following ways:

a. By agreed lump sum
b. By agreed unit prices
c. By Force Account

If neither a nor b methods can be agreed upon and the Contractor receives written order to make such changes, the Contractor shall be compensated by Force Account for his actual necessary costs, including labor, material, and equipment rental, as determined by the Engineer, plus a negotiated

fixed fee for profit and such overhead items as home and branch office expenses, general expenses, general superintendence, indirect labor, and licenses. The negotiated fixed fee shall not exceed fifteen percent (15%) of actual necessary direct costs.

In addition to the actual cost of labor, the amount due the Contractor shall include the cost of compensation insurance, contributions made to the State as required by the provisions of the Unemployment Reserve Act, Chapter 352, Statutes of 1935, as amended; and for taxes paid the Federal Government, as required by the Social Security Act, approved August 14, 1935, as amended to date, plus other payments the Contractor must make to, or on behalf of, the workers.

For use of equipment owned by the Contractor, the rental rates therefore shall be based upon the current prices prevailing in the locality, not to exceed the rates promulgated by the California (State) Department of Transportation in effect at the time the work was performed.

It is understood that labor, materials, and equipment may be furnished by the Contractor, or by the subcontractor, or by others on behalf of the Contractor. When the work is performed by other than the Contractor's organization, the Contractor shall reach an agreement with such other forces as to the distribution of payments made for such, and no additional payment therefore will be made by the City.

When Force Account work is performed by a bona fide and approved subcontractor, the negotiated fixed fee markup is limited to ten percent (10%) for the subcontractor, and five percent (5%) for the prime Contractor, on the performing subcontractor's actual costs, and no markup will be allowed for any intermediary subcontractor between the performing subcontractor and the prime Contractor.

All labor furnished on Force Account work shall be adjusted daily upon report sheets, furnished by the Contractor and signed by both parties, which daily report sheets hall thereafter by considered the true record of Force Account labor provided.

In order that a proper estimate may be made by the Engineer of the net cost of labor and materials entered into Force Account work, in accordance with the procedure hereinbefore stated, the Contractor shall furnish weekly an itemized statement of materials and labor supplied together with the cost of such material and the wages paid, and shall furnish vouchers for quantities and prices of such labor, material, or work. In case the Contractor fails to comply with the above provisions, he shall have no claim for compensation against the City.

City reserves the right to contract with any person or firm other than the Contractor for any or all extra work. The Contractor's attention is especially called to the fact that he shall be entitled to no claim for damages for anticipated profits on any portions of work that may be awarded to others.

When the Contractor considers that any changes ordered involve extra work that the Engineer has not recognized as such, he shall immediately notify the Engineer in writing as to when and where alleged extra work is to be performed. If the Engineer directs by written order that the alleged extra work be performed, the Contractor shall comply, and shall make claim for compensation therefore each month not later than the 20th day of the month during which the work claimed to be extra work was performed, and he shall submit a weekly complete statement of materials used and expenses incurred on account of extra work performed, showing allocation of all materials and expenses. All such claims shall state the date of the Engineer's written order.

Unless such notification is made in writing and unless complete statements of materials used and expenses incurred on account of such alleged extra work are furnished as above required, the Contractor shall not be entitled to consideration for payment for alleged extra work, and any future claims for compensation for such alleged extra work shall be invalidated.

G.C. 9 BRAND OR TRADE NAME - SUBSTITUTE OF EQUALS

Reference is made in Section 3400 of the California Public Contracts Code, which is by this reference incorporated herein with like effect as if here set forth in full.

If a potential bidder believes he knows of an equal to a specified brand or trade name which is not mentioned in the Contract Documents, then such potential bidder may so advise the Engineer of such fact, giving all relevant information. If appropriate, an Addendum will be issued as to the alleged equal provided that such issuance may be accomplished at least 5 days before the time fixed for opening bids.

Unless the subject article or product is expressly designated for matching others in use in a particular public improvement either completed or in the course of completion, any bidder may, as part of its bid proposal, include a request for substitution of an item equal to any specified brand or trade name. At the preconstruction meeting, the Contractor may submit to the Engineer data substantiating such a request, and the difference, if any, in cost. The Engineer shall promptly investigate the request and make a recommendation to the City as to equality.

The City shall promptly determine where the substitute is equal in every respect to the item specified, and approve or deny the request accordingly, and shall notify the Engineer of the determination made, who shall advise the Contractor in writing of the decision. Unless the request is granted, substitution will not be permitted. In accordance with Section 3400 of the California Public Contracts Code, the Contractor shall be provided a period of not less than 35 days after the award of contract for submission of data substantiating a request for a substitution of “an equal” item.

Nothing herein shall authorize a change in the Contract price or prevent the use of change order in the manner provided elsewhere in the Contract Documents.

G.C. 10 FINAL INSPECTION, ACCEPTANCE AND NOTICE OF COMPLETION

Upon written notice from the Contractor that the entire work required by the Contract Documents is complete and that all submittals required by him are made, and after the Contractor has delivered the bonds, certificates of inspection, proof of insurance, guarantees, warranties, releases, and other documents, all as required by the Contract Documents or by law, a post construction conference will be held to review the work and resolve any unsettled matters. Present at the conference shall be the Engineer, the Inspector, the Contractor, and the Contractor’s Superintendent. Following this conference, Engineer will make a final inspection, the Contractor, and the City will notify the Contractor in writing of any deficiencies in the submittals and other documents required of him. The Contractor promptly shall make such corrections as are necessary to remedy all defects or deficiencies. After the Contract has completed any such corrections to the satisfaction of the City, the City will issue a written final acceptance of the work and file any notice of completion required by law or otherwise.

Final Inspection will be in two phases: a semi-final inspection by the Construction Inspector and the Contractor; and a final inspection, including representatives of the City, the Contractor, and any State or County agency. At the conclusion of the semi-final inspection, the Construction Inspector will provide the Contractor, in writing, a "punch list" of items requiring completion of remedial work. The Contractor shall rectify all matters on the "punch list" before making his formal request, in writing, for Final Inspection. Upon completion of the final inspection, if further completion or remedial work is determined to be necessary, the Engineer shall transmit to the Contractor a final list of items for remedial attention. After final inspection, the City Council will adopt a resolution determining that the contract work, or designated phases thereof, is substantially complete and is accepted.

G.C. 11 GUARANTEE AND WARRANTY OF WORK

The Contractor shall submit all products and materials to be used to the Engineer for approval. The Contractor shall provide a list of submittals at the pre-construction conference.

Notwithstanding inspections and acceptance by the City of work furnished under this contract, the Contractor warrants to the City that all materials and equipment furnished under the contract, including that provided pursuant to change orders, will be of good quality and new, that the work will be free from defects in material or workmanship and that the work will conform to the requirements of the Contract Documents. Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective.

This warranty by the Contractor is in addition to any warranties or guarantees required by the special provisions or technical specifications for specified items of equipment or materials. This warranty shall be in effect notwithstanding any disclaimers, or limiting or conditional terms contained such separate warranties furnished by manufacturers or suppliers.

If, within one year after the date of final acceptance of the work by the City, any of the work is found not to be in accordance with the Contract Documents the Contractor shall correct it promptly after written notice from the City to do so, and pay for any damage to other property resulting from such non-conforming work. If the Contractor fails to make the repairs or replacements promptly, or in any emergency when delay could cause risk or damage or loss, the City may have the non-conforming work removed, replaced or corrected at the expense of the Contractor and his surety. If the amount of the performance bond is insufficient to cover such work, the Contractor shall be liable to pay any such deficiency on demand by the City. Nonconforming work which is remedied under this Section shall be subject to an extended warranty obligation for a period of one year after the non-conforming work has been remedied.

All workmanship performed, and materials/equipment installed, as part of this contract shall be guaranteed for a period of one year, commencing upon issuance of the Notice of Completion for the work under this contract.

G.C. 12 CITY'S RIGHT TO STOP WORK OR TERMINATE THE CONTRACT

The City, without prejudice to such other right, remedy or relief it may be entitled to, may by giving ten (10) days notice to the Contractor, terminate the employment of the Contractor and it his right to proceed, if:

A. The Contractor shall be adjudged bankrupt or make an assignment for the benefit of creditors.

B. A receiver or liquidator is appointed for the Contractor or any of its property.

C. The Contractor shall refuse or fail after Notice of Warning from the City by the Engineer to supply sufficient properly skilled workmen or suitable materials.

D. The Contractor fails to prosecute the work with such diligence as will insure its completion within the stipulated time period.

E. The Contractor shall fail to make payments to persons supplying labor or materials for the work.

F. The Contractor does not comply with applicable law or instructions of the Engineer.

G. The Contractor is otherwise guilty of a substantial violation of any provision of the Contract Documents.

If the City determines that the Contractor has failed to perform any of its obligations under the Standard Contract Agreement or to otherwise comply with the Standard Contract Agreement, then, in addition to all other remedies provided by law, City may terminate the Standard Contract Agreement immediately upon written notice to the Contractor provided, however, that if the City's determination of the Contractor's failure to perform under or comply with the Standard Contract Agreement can be cured by Contractor within thirty (30) days from the date that City discovers Contractor's failure to perform or comply, then the City may provide Contractor with a notice of Contractor's failure to perform or comply and provide Contractor with a definite period of time, to be specified in the notice and not to exceed a maximum period of thirty (30) days from the date of the notice, to cure. Failure to perform or comply to City's satisfaction within the definite time period specified in the notice are grounds for termination by City.

The City Manager is empowered to terminate the Standard Contract Agreement and issue the notices provided for in this Section on behalf of City. In the event of termination, the Contractor shall immediately cease all work being performed under the Standard Contract Agreement. Termination of the Standard Contract Agreement by City shall constitute the withdrawal of any consent or authorization of City for Contractor to perform any construction or other work under the Standard Contract Agreement in the public right-of-way or on public property, excepting only that work necessary to leave all work site areas in a clean and safe condition.

The City's right to terminate may be for the entire work, or at the City's option, as to any portion thereof as to which delay shall have occurred or breach or miscompliance related, and may thereupon take possession of the entire work or portion thereof. In such case, the Contractor shall not be entitled to receive any further payment until the work is finished. If the unpaid balance shall exceed the expense of completion, and other damage, expense or loss of the City occasioned by the Contractor's failure to properly perform, the Contractor shall pay such excess. If such expense and damage exceeds the unpaid balance, the Contractor is liable to the City for the excess. If the City elects to proceed under this Section, it may take possession of and utilize in completing the work such materials, supplies, pain and equipment on site which may be necessary or convenient for the purpose of completing the work. The City is expressly granted the right, acting via an Engineer or otherwise, to operate equipment and machinery on site for the purpose of determining whether it has a basis for proceeding under this Section.

G.C. 13 PAYMENT AND MONTHLY ESTIMATES

1. Schedules, Reports and Records As stated in Section 9-2 of the Standard Specification for Public Works Construction "Greenbook" (latest edition), the Contractor is required to submit to the Engineer for approval, a schedule of values for bid items. Lump Sum bid items are to be broken out into appropriate segments to create the schedule. This is to be integrated with the project work schedule and submittal schedule. These schedules will be used in the evaluation of Contractor Progress Payment Requests to the City.

2. Pay Period On or immediately after the first day of each month, the Contractor is to submit to the Engineer a "Request For Progress Payment." This request is to be for work performed and for materials on the site up to and including the last day of the month. The Request For Progress Payment is to be submitted on a "Payment Application and Certificate" form (CP-14).

3. Retentions Pursuant to Section 9-3.2 of the Specifications, 5 percent of each month's amount earned by the Contractor will be retained by the City until 50 percent of the contract work is completed. At that point, at the Engineer's discretion, if work is proceeding satisfactorily, retention may be discontinued except for the amount previously retained. Pursuant to Section 9-3.2 of the Standard Specification for Public Works Construction "Greenbook" (latest edition), the Contractor may elect to place sufficient acceptable securities with the City or in an escrow account, in lieu of the Engineer's retention of the funds. Earnings from such an escrow account shall accrue to the benefit of the Contractor. All procedures and documentation shall be as provided by State Law.

4. Preparation and Processing of Monthly Progress Payment Requests Each monthly progress payment shall be submitted on a copy of the form "Payment Application and Certificate" (CP-14). It shall be prepared and certified by the Contractor and submitted to the Engineer, on or immediately following the last day of the month. It shall include the Contractor's itemization, prepared in a format approved by the Engineer and including the approved schedule of values. The "Payment Application and Certificate" (Form CP-14) shall be signed by an authorized representative of the Contractor.

Preparation of the request for progress payment should be preceded by consultation between the Contractor and the Engineer to determine acceptable percentages of completion for items in the Schedule of Values for which work has been performed. The extension of the total amount due per Schedule Item should agree with the percentage of completion. This may necessitate expressing the percentage figure to four decimal places.

Pursuant to Section 9-3.3 of the Specifications, requests for payments for materials on the site shall be accompanied by invoices, bills of sale, delivery tickets or other documentation that establishes the City's title and the value of materials for which payment is requested.

Requests for payment of Change Orders authorized by the City shall be accompanied by signed daily work orders for labor, equipment and materials if performed on a time and material basis. These are to be submitted on "Cost of Work Record" forms (CP-18).

The Engineer will review the request, check all mathematical entries, percentages and extension, and when satisfactory, will transmit the Form CP-14 to the Director of Public Works with recommendation for payment. Upon approval, the Engineer will submit, the progress payment

request to the City's Finance Department for payment to the contractor. Payment will then be issued to the Contractor by the City, with retention of a portion of the funds by the City, as indicated above. If a retention securities escrow account has been established, the City will make 100% payment of the approved monthly progress payment.

Upon satisfactory completion of the Contract work, and official acceptance by the City, the retained amount will be paid to the Contractor by City, or the City will authorize the release of impounded securities to the Contractor, all subject to the provisions of Section 9-3.1 of the Specifications.

G.C. 14 FAILURE TO COMPLETE THE WORK IN THE TIME AGREED UPON

It is agreed by the parties to the Contract that time is of the essence; and that in the case all the work is not completed before or upon the expiration of the time limit set forth, damage will be sustained by the City and it is, therefore, agreed that the Contractor will pay to the City as damages the amount of the actual damage as determined, due to the failure to complete the work in the time agreed upon. In addition, the City shall have the right to charge to the Contractor and to deduct from payments for the work the actual cost to the City of engineering, inspection, superintendence, and other overhead expenses, which are directly chargeable to the contract and which accrue during the period of such delay, except that the cost of final surveys and preparation of the final estimate shall not be included in such charges. The expenses and damages described above shall be deducted from any money due the Contractor under this contract; the Contractor and his sureties shall be liable for any such excess cost.

The Contractor shall not be deemed in breach of its contract and no forfeiture due to delay shall be made because of any delays in the completion of the work due to unforeseeable causes beyond the control and without the fault or negligence of the Contract, provided the Contractor requests an extension of time in accordance with the procedures set forth in Section 6-6 of the Standard Specification for Public Works Construction "Greenbook" (latest edition). Unforeseeable causes of delay beyond the control of Contractor shall include acts of God, acts of a public enemy, acts of the government, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and weather, or delays caused by failure of the City or the owner of a utility to provide for removal or relocation of existing utility. Failure of the Contractor, its agent, servants, employees, officers, subcontractors, directors, or of any party contracting to perform part or all of the work or to supply any equipment or materials shall not be excusable delays. Excusable delays (those beyond Contractor's control) shall not entitle the Contractor to any additional compensation. The sole remedy of the Contractor shall be to seek an extension of time.

G.C. 15 FINAL ACCEPTANCE, RECORDING AND PAYMENT

Upon satisfactory completion of the contractor work or designated phase thereof, and receipt, by the City, of required releases and the "Contractor's Certificate of Release and Request for Final Payment" (CP-20), the acceptance process is as follows:

1. The Engineer recommends to the City Manager and the City Council that the contract work, or designated phase thereof, is substantially complete and ready for acceptance by the City.

2. The City Council adopts a resolution determining that the contract work, or designated phases thereof, is substantially complete and is accepted. The resolution directs the City Clerk to do the following:

(a) Issue a "Notice of Substantial Completion" (Form CP-21) to the Contractor.

(b) File with the County Recorder of the County of San Mateo a "Notice of Completion of Contract" (Form CP-22). Filing not to occur until after certification by the Engineer to the City Clerk that all required "punchlist" items have been satisfactorily remedied by the Contractor. On the date established in the "Notice of Completion" the Contractor's required one-year warranty period will commence, and the City will assume operational responsibility for the completed facilities.

3. Upon issuance of the "Notice of Substantial Completion" to the Contractor, the City will make final payment to the Contractor of the amount remaining after deducting all prior payments and deducting all amounts to be kept or retained by City under the provisions of the contract documents.

4. If all "punch list" items have been satisfactorily remedied, then within ten days of the City Council adoption of the resolution determining the contract work, or designated phase thereof, completed and accepted, the City Clerk will file with the County Recorder the "Notice of Completion of Contract." If a "punchlist" of remedial work remains to be performed by Contractor, then provisions of Section 2.b, above, shall govern as to the time of filing the "Notice of Completion of Contract."

5. A period of thirty-five (35) calendar days will elapse from the date of filing of the "Notice of Completion of Contract" with the County Recorder before the final payments of retained amounts will be made to the contractor.

6. If no stop notices are received by the City within the stated 35-day filing period, the City will issue final payment of retained amounts for the contract work, or designated phase thereof, to the contractor. If any stop notice is received by the City within the 35-day waiting period, it will be referred to the City's legal counsel and final payment of retained amounts will be deferred or adjusted in accordance with advice of legal counsel, until such stop notice matter has been satisfactorily resolved.

G.C. 16 RESOLUTION OF DISPUTES

The City of Belmont incorporates the provisions of Chapter 1414 of the State Public Contract Code (A.B. No. 4165) as part of its plan and specifications for the resolution of construction claims through arbitration. A summary of its provisions are included in the modification to the Standard Specifications which the Contractor is directed to read. The Contractor is also directed to review the entire Statute, Chapter 1414, Section 20207.4 and Section 20104 of the Public Contract Code.

The City's records setting forth the fair and reasonable cost of repairing, replacing, rebuilding or reasonable cost of repairing, replacing, rebuilding or restoring any damage or defects when performed by one other than the Contractor shall be binding and conclusive as to the amount thereof upon the Contractor.

G.C. 16.1 CONTRACT INTERPRETATION BY THE ENGINEER

Questions regarding the meaning and intent of the Contract Documents shall be referred in writing by the Contractor to the Engineer. The Engineer will respond to the Contractor in writing with a decision.

G.C. 16.2 CLAIMS

G.C. 16.2.1 NOTICE

If the Contractor disagrees with the Engineer's decision in G.C.16.1, Contract Interpretation by the Engineer, or in any case, where the Contractor deems additional compensation or a time extension to the contract period is due him for work or materials not covered in the contract or which the Engineer has not recognized as extra work, the Contractor shall notify the Engineer, in writing, of his intention to make claim. Claims pertaining to decisions provided in G.C.16.1 shall be filed in writing to the Engineer within five (5) days of receipt of such decision. All other claims notices for extra work shall be filed in writing to the Engineer prior to the commencement of such work. Written notice shall use the words "Notice of Potential Claim." Such Notice of Potential Claim shall state the circumstances and the reasons for the claim, but need not state the amount.

Additionally, no claim for additional compensation or extension of time for a delay will be considered unless provisions of G.C.7, Changes in the Work; G.C.8, Changes in Contract Prices; and G.C.25, Termination of Contract by Contractor of these General Conditions, are complied with. No claim filed after the date of final payment will be considered.

It is agreed that unless notice is properly given, the Contractor shall not recover costs incurred by him as a result of the alleged extra work, changed work or other situation which had proper notice been given would have given rise to a right for additional compensation. The Contractor should understand that timely notice of potential claim is of great importance to the City, and is not merely a formality. Such notice allows the City to consider preventative action, to monitor the Contractor's increased costs resulting from the situation, to marshall facts, and to plan its affairs. Such notice by the Contractor, and the fact that the Engineer has kept account of the cost as aforesaid, shall not in any way be construed as proving the validity of the claim.

G.C. 16.2.2 SUBMISSION OF CLAIM COSTS

Within thirty (30) days after the last cost of work for which the Contractor contends additional compensation is due, but if costs are incurred over a span of more than 30 days, then within fifteen (15) days after the thirtieth day and every month thereafter, the Contractor shall submit to the Engineer the costs incurred for the claimed matter. Claims shall be made in itemized detail satisfactory to the Engineer in content, detail and format of presentation. If the additional costs are in any respect not knowable with certainty, they shall be estimated. If the claim is found to be just, it shall be allowed and paid for as provided in G.C.7, Changes in the Work.

G.C. 16.2.3 CLAIM MEETINGS

From time to time the Engineer may call special meetings to discuss outstanding claims. The Contractor shall cooperate and attend, prepared to discuss outstanding claims, making available the personnel necessary for claim resolution, and providing documents reasonably requested by the Engineer.

G.C. 16.3 RESOLUTION OF CLAIMS

For all contracts awarded during the effective dates of Public Contract Code Section 20104, where claims cannot be resolved between the parties, claims for three hundred and seventy-five thousand ($375,000) or less shall be resolved pursuant to the provisions of that code section, which is summarized in G.C.16.3.1 and 16.3.4 are applicable; however, G.C.16.3.5, Civil Action for claims less than $375,000 is not applicable.

G.C. 16.3.1 CLAIMS LESS THAN $50,000

1. For claims of less than fifty thousand dollars ($50,000), the Engineer shall respond in writing to written claims within 45 days of receipt of the claim in G.C.16.2, Claims, or may request, in writing, within 30 days of receipt of the claim, any additional documentation supporting the claim or relating to defenses or claims the City may have against the Contractor.

2. If additional information is thereafter required, it shall be requested and provided pursuant to this section, upon mutual agreement of the City and the Contractor.

3. The Engineer's written response to the claim, as further documents, shall be submitted to the Contractor within 15 days after receipt of the further documentation or within a period of time no greater than that taken by the Contractor in producing the additional information, whichever is greater.

G.C. 16.3.2 CLAIMS GREATER THAN $50,000

1. For claims of over fifty thousand dollars ($50,000), the Engineer shall respond in writing to all written claims within 60 days of receipt of the claim in G.C.16.2, Claims, or may request, in writing, within 30 days of receipt of claim, any additional documentation supporting the claim or relating to defenses or claims the City may have against the Contractor.

2. If additional information is thereafter required, it shall be requested and provided pursuant to this paragraph, upon mutual agreement of the City and the Contractor.

3. The Engineer's written response to the claim, as further documented, shall be submitted to the Contractor within 30 days after receipt of the further documentation, or within a period of time no greater than that taken by the Contractor in producing the additional information or requested documentation, whichever is greater.

G.C. 16.3.3 CLAIM CONFERENCE

If the Contractor disputes the Engineer's written response, or if the Engineer fails to respond within the time prescribed, the Contractor may so notify the City, in writing, either within 15 days of receipt of the Engineer's response or within 15 days of the Engineer's failure to respond within the time prescribed, respectively, and demand an informal conference to meet and confer for settlement of the issues in dispute. Upon a demand, the City shall schedule a meet and conference within 30 days for settlement of the dispute.

G.C. 16.3.4 CLAIM FILING

If following the meet and conference described in G.C.16.3.3, Claim Conference, the claim or any portion remains in dispute, the Contractor may file a claim pursuant to Chapter 1 (commencing with Section 900) and Chapter 2 (commencing with Section 910) of Part 3 of Division 3.6 of Title

1 of the Government Code. For purposes of those provisions, the running of the period time within which a claim must be filed shall be tolled from the time the Contractor submits his or her written claim pursuant to G.C.16.2, Claims, until the time the claim is denied, including any period of time utilized by the meet and conference.

G.C. 16.3.5 CIVIL ACTIONS FOR CLAIMS LESS THAN $375,000

The following procedures are established for all civil actions filed to resolve claims for less than three hundred seventy five thousand dollars ($375,000).

1. Within 60 days, but not earlier than 30 days, following the filing or responsive pleading, the court shall submit the matter to non-binding mediation unless waived by mutual stipulation of both parties. The mediation process shall provide for the selection within 15 days by both parties of a disinterested third person as mediator, shall be commenced within 30 days of the submittal, and shall be concluded within 15 days from the commencement of the mediation unless a time requirement is extended upon a good cause showing to the court.

2. If the matter remains in dispute, the case shall be submitted to judicial arbitration pursuant to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, notwithstanding Section 1141.11 of that Code. The Civil Discovery Act of 1986 (Article 3 (commencing with Section 2016) of Chapter 3 of Title 3 of Part 4 of the Code of Civil Procedure) shall apply to any proceeding brought under this subdivision consistent with the rules pertaining to judicial arbitration.

3. In addition to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, (A) arbitrators shall, when possible, be experienced in construction law, and (b) any party appealing an arbitration award who does not obtain a more favorable judgment shall, in addition to payment of costs and fees under the chapter, also pay the attorney's fees on appeal of the other party.

G.C. 16.3.6 UNRESOLVED ISSUES

Unless this contract provides otherwise, all claims, counterclaims, disputes, and other matters in question between the City and the Contractor that are not resolved between the City and the Contractor and are not governed by Public Contract Code 20104 shall be decided by a court of competent jurisdiction. Arbitration shall not be used for resolution of these disputes. Should either party to this Agreement bring legal action against the other, the case shall be handled in the California County where the work is being performed.

G.C. 16.4 RECORDS OF DISPUTED WORK

In proceeding with a disputed portion of the work, the Contractor shall keep accurate records of its costs and shall make available, to the Engineer, a daily summary of the hours and classification of equipment and labor utilized on the disputed work, as well as a summary of any materials or any specialized services which are used. Such information shall be submitted to the Engineer on a monthly basis, receipt of which shall not be construed as an authorization for or acceptance of the disputed work.

G.C. 17 DOCUMENTS OF CONTRACTOR

Upon demand, the Contractor shall make available to the City all documents in its possession relevant to the work accomplished or to be accomplished or any demand or claim of the Contractor

as to the City. This includes copies of documents sent by the Contractor to others relevant to the work. The Contractor shall further make available to the City conformed copies of all documents submitted to the sureties who executed indemnification made to such surety by others for such purpose. The Contractor shall maintain in its possession all documents to the work for three years after Notice of Completion.

G.C. 18 PROJECT SAFETY AND RESPONSIBILITY OF CONTRACTOR TO ACT IN AN EMERGENCY

The Contractor shall take all responsible precautions for the safety of, and shall provide all reasonable protection to prevent damage, injury or loss to:

1. All employees on the work and all other persons and organizations who may be affected thereby.

2. All the work and all materials and equipment to be incorporated therein, whether in storage on or off the site, under the care, custody or control of the Contractor of any of its subcontractors or sub-subcontractors.

3. Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structure and utilities not designated for removal, relocation, or replacement in the course of construction.

4. Vehicular and pedestrian traffic on or near the project site. These requirements shall apply continuously and not be limited to normal working hours.

The Contractor shall give all notice and comply with all applicable laws, ordinances, rules, regulations and lawful orders of any public authority bearing on the safety of persons or property or their protection from damage, injury or loss. Except where otherwise expressly required by applicable laws, the City may monitor the Contractor's compliance with any laws or regulations.

The Contractor shall erect and maintain, as required by existing conditions and progress of the work, all reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations and notifying owners and uses of adjacent utilities.

Full compensation for the work involved in carrying out the safety precautions shall be considered as included in the various items of work and no additional payment will be made therefor.

In case of an emergency which threatens loss or injury to property or life, the Contractor shall act without previous instructions as the situation may warrant. The Contractor shall notify the Engineer immediately thereafter. Any compensation for emergency work claimed by the Contractor, together with substantiating documentation, shall be submitted to the City via the Engineer.

G.C. 19 LABOR CODE

A. Public Works. The services to be performed under this contract are for "public works" within the meaning of Labor Code Section 1720. The Contractor must comply with the requirements applicable to public works contractors as contained in Chapter 1, Part 7, Division 2 of the California Labor Code (commencing with Section 1720) and as set forth in this section.

This contract is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

B. Hours of Labor. As required by Labor Code Section 1810 and 1813, the parties stipulate as follows. Eight hours labor constitutes a legal day's work. The Contractor shall forfeit, as penalty to the City, $25 for each workman employed in the performance of the Contract by the Contractor or by any subcontractor under him for each calendar day during which such workman is required or permitted to work more than eight hours in any one day and 40 hours in any one calendar week in violation of Labor Code Sections 1810 to 1815, except that work performed by employees of the Contractor in excess of eight hours per day and 40 hours during any one week shall be permitted upon compensation for all hours worked in excess of eight hours per day at not less than one-and-one-half times the basic rate of pay.

C. Prevailing Wage. Contractor must comply with the prevailing wage requirements of Labor Code Sections 1720 to 1780. D. Wage Rates.

1. In accordance with Labor Code Section 1773.2, the City has obtained from the Director of the California Department of Industrial Relations the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work in the locality in which the work is to be performed for each craft, classification, or type of worker needed to execute the contract, a copy of which is hereby incorporated by reference. Copies of the prevailing rates of per diem wages are on file in City's office and are available to any interested party.

2. The Contractor must post a copy of the prevailing rate of per diem wages at each job site.

3. The term "per diem wages" is defined in Labor Code Section 1773.1. E. Failure to Pay Prevailing Wages.

1. In accordance with Labor Code Section 1775, the Contractor will forfeit as a penalty to the City an amount determined by the Labor Commissioner under Section 1775 for each calendar day or portion thereof for each workman paid less than stipulated prevailing wage rates for such work or craft in which such worker is employed for any work done under the Contract by the Contractor or by any subcontractor under the Contractor in violation of the provisions of the Labor Code.

2. As required by Labor Code Section 1775, the parties stipulate that the contractor and subcontractors must comply with Section 1775, and in the event of non-compliance with payment of prevailing wages to workers, the contractor or subcontractor must pay the difference between the prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the prevailing wage rate to each worker.

3. The City will not recognize any claim for additional compensation because of the payment by the Contractor of any wage rate in excess of the prevailing wage rate set forth in the Contract. The possibility of wage increases is one of the elements to be considered by the

Contractor in determining his bid, and will not under any circumstances be considered as the basis of a claim against the City on the Contract. F. Payroll Records.

1. The Contractor and each subcontractor must comply with Labor Code Section 1776 and all requirements of contractors stated therein for the maintenance, inspection and certification of payroll records.

2. *The Contractor and each subcontractor must furnish electronic certified payroll records directly to the Labor Commissioner.*

3. The Contract and each subcontractor must furnish certified payroll records to the City with each progress payment request.

4. The Contractor and each subcontractor who fails to timely furnish payroll records or make the records available for inspection will forfeit to the City the penalty for noncompliance set forth in Labor Code Section 1776 for their respective failure.

G. Apprentices. This subsection applies to contracts for Public Works involving $30,000 or more.

1. The contractor and each subcontractor must comply with the requirements for employment and compensation of apprentices as set for in Labor Code Section 1777.5. The prime Contractor is responsible for compliance with Labor Code Section 1777.5 for all apprenticeable occupations.

2. As required by Labor Code Section 1773.3, the City will send notice of the award of this Contract to the Division of Apprenticeship Standards within five days after award.

H. Discrimination. The contractor and each subcontractor must comply with the antidiscrimination requirements of Labor Code Section 1777.6. I. Worker's Compensation.

1. In accordance Labor Code Section 1860, the contractor and each subcontractor must secure the payment of workers' compensation for their employees as required by Labor Code Section 3700.

2. Before performing the work, the Contractor must sign and file with the City, the certification required by Labor Code Section 1861.

J. Excavation Plans. As required by Labor Code Section 6705, for all public works projects in excess of $25,000 that involve excavation or trenching to a depth of five feet or more, the Contractor must submit a detailed plan showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground during the excavation or trenching. The plan must comply with the following provisions.

1. If the plan varies from the shoring system standards, the plan must be prepared by a registered civil or structural engineer.

2. A note must be included on the plan by the registered civil or structural engineer certifying that the plan complies with the CAL OSHA Construction Safety Orders or that the plan is not

less effective than the shoring, bracing, sloping, or other provision of the Construction Safety Orders.

3. If the Engineer has investigated subsurface conditions in area where the work is to be performed, these investigations are identified in the Special Provisions and the records of the investigations are available for inspection in the Public Works Department. The plan will not be accepted by the City if the plan is based on subsurface conditions which are more favorable than those revealed by the Engineer's investigations, or if the plan is based on soils related design criteria which is less restrictive than the criteria set forth in the Engineer's report of investigations or subsurface conditions.

4. The detailed plan must include surcharge loads for nearby embankments and structures for spoil banks and for construction equipment and other construction loadings. The plan must indicate for all trench conditions, the minimum horizontal distances from the side of the trench at its top to the near side of the surcharge loads.

5. Nothing contained in this Section shall be construed to impose tort liability on the City or any of its employees or to relieve the Contractor of the full responsibility for providing shoring, bracing, sloping, or other provisions which are adequate for worker protection.

K. Subcontractor Eligibility**.** Contractor acknowledges that under Public Contract Code Section 6109 no contractor or subcontractor who is ineligible to bid or work on, or be awarded, a public works project under Labor Code Section 1777.1 or 1777.7 may bid on, be awarded, or perform work as a subcontractor on, a public works project. Contractor is prohibited from performing work on a public works project with a subcontractor who is ineligible to perform work on the public works project under Labor Code Section 1777.1 or 1777.7.

G.C. 20 SUPERVISION BY CONTRACTOR

The Contractor will supervise and direct the work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the work in accordance with the Contract Documents. The Contractor will be solely responsible for the means, methods, techniques, sequences and procedures of construction. The Contractor shall be responsible to see that the finished work complies accurately with the Contract Documents. The Contractor will employ and maintain on the work site a qualified supervisor or superintendent who shall have been designated in writing by the Contractor as the Contractor's representative at the site. The supervisor shall have full authority to act on behalf of the Contractor and all communications given to the supervisor shall be as binding as if given to the Contractor. The supervisor shall be present on the work site at all times as required to perform adequate supervision and coordination of the work. The Contractor shall not change job supervisor without written approval of the Engineer. Full compensation for conforming to the requirements of this Section shall be considered included in the contract prices paid for the various items of work and no additional compensation shall be allowed therefore.

G.C. 21 ALTERNATIVE METHODS OF CONSTRUCTION

Whenever the Contract Documents provide more than one method of construction or more than one specified type of construction equipment may be used to perform portions of the work and the Contract Documents leave the selection of the method of construction or the type of equipment to be used up to the Contractor, it is understood that the City does not guarantee that every such

method of construction or the type of equipment can be successfully used throughout all or any part of any project. It shall be the Contractor's responsibility to select and use the alternative or alternatives which will satisfactorily perform the work under the conditions encountered. In the event some of the alternatives on any project or equipment specified cannot be utilized, the Contractor shall be responsible for completing the work in a satisfactory and workmanlike manner to provide the intended service and full compensation for any additional cost involved shall be considered as included in the contract price paid for the item of work involved and no additional compensation will be allowed therefore.

G.C. 22 PROJECT APPEARANCE

The Contractor shall maintain a neat appearance of the work. In any area visible to the public, broken concrete and debris developed during clearing and grubbing shall be disposed of concurrently with its removal. If stockpiling is necessary, the material shall be removed or disposed weekly.

Full compensation for conforming to the provisions in this Section not otherwise provided for shall be considered as included in prices paid for the various contract items of work involved and no additional compensation will be allowed therefore.

G.C. 23 INSURANCE HOLD HARMLESS

The Contractor shall, before the commencement of work herein specified, procure and maintain in full force and effect during the life of the contract, at its sole expense, insurance as described in Section 14 of the Construction Agreement.

G.C. 24 EQUAL EMPLOYMENT OPPORTUNITY

General: The Contractor shall not discriminate in its recruiting, hiring, promotion, demotion or termination practices on the basis of race, religious creed, color, national origin, ancestry, sex, age, physical handicap, medical condition, or marital status in the performance of this Contract and shall comply with the provisions of the California Fair Employment and Housing Act (commencing with Section 12900 of the Government Code), Federal Executive Order No. 11246 (30 Federal Register 12319), as amended, and all administrative rules and regulations issued pursuant to said Acts and Order. See particularly 41 Code of Federal Regulation (CFR) Chapter 60.

The Contractor shall require each of its subcontractors to comply with the preceding paragraph and shall include in each subcontract language similar to the preceding paragraph.
Each bidder shall submit with the bid proposal a fully executed Certificate of NonDiscrimination by Contractors. Bids will not be considered unless accompanied by the completed Certificate.

A. Transactions of $10,000 and Less

1. Contracts and subcontracts not exceeding $10,000 are exempt from the requirements of this clause.

2. No Contractor or subcontractor shall procure supplied and/or services in less than usual quantities to avoid applicability of the Equal Opportunity Clause. With respect to contracts and subcontracts for indefinite quantities, the Equal Opportunity Clause shall

apply unless it is determined by the City that the amount to be ordered in any one year under such contract reasonably will be expected not to exceed $10,000.

B. Transactions in Excess of $10,000, but Less Than $50,000

1. Each prime contractor shall certify that it has in effect an affirmative action plan and agrees to comply with all state and federal laws and regulations concerning Fair Employment Practices.

2. The contractor shall maintain a written copy of its affirmative action plan and will furnish a copy to the City upon request by the City. The City reserves the right, during the life of this Contract, to require the contractor to complete an affirmative action compliance report furnished by the City setting definite goals and timetables and indicating progress in meeting the goals.

C. Transactions of $50,000 or More

1. Each prime contractor who has fifty or more employees and a contract of $50,000 or more shall develop and submit to the City within thirty days of award a written affirmative action compliance program including definite goals and timetables with proposed dates of compliance. The prime contractor shall make, as a condition of its subcontract, the same requirement of each subcontractor who has fifty or more employees and a subcontract of $50,000 or more. Each contractor shall include in its affirmative action compliance program a complete table of its employees' job classifications. This table must include, but need to be limited to, job titles, duties and rates of pay.

2. The contractor agrees to permit access to its records or employment advertisement, application forms and other pertinent data and records by the City or its designee and any state or federal agency having jurisdiction for the purposes of investigation to ascertain compliance with the Fair Employment Practices section of this contract.

3. The City shall have the right to assign an affirmative action representative to monitor the conduct of the contractor and subcontractors under this contract. The affirmative action representative shall have the right to enter the construction or manufacturing site to obtain information from persons performing work on the project, providing such inspection shall not in any way interfere with the progress of the work under contract.

G.C. 25 TERMINATION OF CONTRACT BY CONTRACTOR

The Contractor may terminate the contract upon ten (10) days calendar day's written notice to the City whenever (1) the entire work has been suspended in accordance with these provisions for sixty (60) consecutive calendar days through no fault or negligence of the Contractor, and notice to resume work or to terminate the contract has not been received from the City within this time period; or (2) the City should fail to pay the Contractor any substantial sums due it in accordance with the terms of the contract and within the time limits prescribed. In the event of such termination, the Contractor shall have no claims against the City except for those claims specifically enumerated in these provisions and determined in accordance thereof.

SPECIAL PROVISIONS

CITY OF BELMONT
CITY CONTRACT NUMBER 2025-639
SALSON CULVERT REPLACEMENT PROJECT

Unless otherwise noted, Section Numbers used in these Special Provisions refer to corresponding Sections in "The GREENBOOK" Standard Specifications for Public Works Construction, 2024 Edition.

Where noted, certain other Section Numbers used in these Special Provisions refer to corresponding Sections in the State of California Department of Transportation 2023 Standard Specifications ("Caltrans Standard Specifications").

If General Conditions conflict with these Special Provisions, these Special Provisions and Technical Specifications shall prevail.

Full compensation for actions taken by the Contractor in order to comply with public health orders or advisories issued by local, County, State, or Federal government agencies shall be considered as included in the contract prices paid for the various items of work involved and no additional compensation will be allowed therefor The Health Orders can be accessed at the San Mateo County website at https://www.smchealth.org/coronavirus .

S.P. 2-1 WORK TO BE DONE

The Contractor shall furnish all materials, equipment, tools, labor and incidentals necessary to complete the work shown on the plans and described in the specifications in a satisfactory and workmanlike manner, as more particularly described herein. The Contractor shall declare any extra work at the time and may proceed with this work only after engineer's change order has been approved in writing by the Director of Public Works.

S.P. 2-4 COOPERATION AND COLLATERAL WORK

The City reserves the right to perform other and additional work, by contract or otherwise, at or near the site (including materials sites) at any time by the use of other forces. Should work be underway or subsequently undertaken within or adjacent to this project, the Contractor shall cooperate with all other Contractors or other forces and conduct this work so that the operations of both suffer the least interference and delay. If there should be any disagreement between the Contractors or the Contractor and the City as to the manner and order of performing work, such disagreement will be resolved by the Engineer, and his/her determination shall be final.

If the contract gives notice of other work that may affect the work of this contract, the coordination of the work shall be taken into account by the Contractor, and any resulting costs shall be considered as included in the contract items.

WORK NOT PAID FOR SEPARATELY

Full compensation for the following work shall be considered as included in the contact prices paid for the various items of work and no separate payment will be made therefor:

- Jobsite maintenance
- Street sweeping
- Protecting existing facilities
- Project Appearance
- Protection and restoration of existing improvements
- Protection of adjacent residential properties

Jobsite Maintenance

The Contractor shall perform daily clean-up operations to keep the jobsite and adjacent properties free from accumulation of waste materials and debris resulting from the Contractor's operations. The Contractor shall deposit waste material in on-site containers or at a legal disposal area away from the site at the end of each working day.

Nothing herein shall be construed as relieving the Contractor of responsibility for final cleanup of the site as provided in Section 4-1.13, "Cleanup", of the Caltrans Standard Specifications.

Surplus excavated material shall become the property of the Contractor and shall be disposed of outside the street right of way as required in the Caltrans Standard Specifications within 2 days of excavation. The depth of excavation shall be to such lines and grades required to reconstruct the street as shown on the plans or as directed by the Engineer.

The Contractor shall keep existing streets free from dirt and debris at all times. The Contractor shall be prepared to sweep surfaces immediately if deemed necessary by the Engineer for public safety and to avoid damage to properties. If streets are not satisfactorily cleaned within 12 hours from verbal notice by the Engineer, the City will issue s Stop Work Notice.

S.P. 4-2 PROTECTION

The Contractor is responsible for replacing damaged improvements on private property and within the street right-of-way including, but not limited to, shrubs, lawns, irrigation lines, and sidewalks, except that fences within the street right-of-way or easements may be removed only if approved by the Engineer in order to perform the work and allow the property owner to salvage materials in advance. Every effort must be made by the contractor to work around existing improvements.

Full compensation for conforming to the provisions in this section, not otherwise provided for, shall be considered as included in the contract prices paid for the various items of work involved and no additional compensation will be allowed therefor.

S.P. 6-1 CONSTRUCTION SCHEDULE AND COMMENCEMENT OF THE WORK

The Contractor shall provide a schedule of work and temporary traffic control plan (TTC Plan) ten (10) calendar days prior to the pre-construction conference and receive approval

from the Engineer before starting any work. The construction schedule shall detail sufficient information to be used to notify homeowners of expected work in their area and to permit the City to schedule inspection and testing. Work shall begin within (7) seven calendar days after the Notice to Proceed is issued by the City.

A pre-construction conference will be held at the Belmont Public Works Department, 1 Twin Pines Lane, Suite 385, Belmont, California. The contractor is directed to arrange for the following:

A. Attendance

1. Contractor's Superintendent
2. Major Subcontractors
3. Others, as appropriate

B. Submittals:

1. Construction Schedule (Submit 10 calendar days in advance)
2. Temporary Traffic Control Plan (Submit 10 calendar days in advance)
3. General Notice to Residents
    a. Contractor's telephone number (including 24-hour emergency contact)
    b. Nature of work
    c. Expected duration
4. Staging and Storage Plan
5. All material submittals and planned storage of equipment and materials.
6. EEO, IIPP, Health and Safety Plan, and Safety Policy
7. Water Pollution Control Plan
8. Sanitary Sewer Overflow Emergency Response Plan
9. By-Pass Pumping Plan

Prior to commencing work, the Contractor shall submit to the Engineer a copy of his construction schedule. The Contractor shall submit an updated (written) copy of the construction schedule to the Engineer on a weekly basis, during construction, subject to approval. Updates of the Schedule to reflect actual progress shall not be considered revisions to the Schedule. Since scheduling is a dynamic process, revisions to activity durations and sequences are expected on a weekly basis.

The Contractor is required to obtain a Temporary Encroachment Permit from the Department of Public Works for any work or storage of material in the public right-of-way.

S.P. 6-2 PROSECUTION OF THE WORK

Working hours for this project shall be from 8:00 a.m. to 5:00 p.m. Monday through Friday unless otherwise noted and except for designated legal holidays.

The designated legal holidays are:

New Year's Day (January 1)

Martin Luther King's Birthday (third Monday in January)

Presidents' Day (third Monday in February)

Memorial Day (last Monday in May)

Independence Day (July 4)

Labor Day (first Monday in September)

Columbus Day (second Monday in October)

Veterans Day (November 11)

Thanksgiving Break (fourth Thursday and following Friday in November)

Christmas Day (December 25).

When a designated legal holiday falls on a Saturday, the preceding Friday shall be the designated legal holiday. When a designated legal holiday falls on a Sunday, the following Monday shall be the designated legal holiday.

S.P. 6-3 TIME OF COMPLETION

Total contract time (including the ninety working day Limited Notice-To-Proceed) for construction related work is 40 working days. Punchlist items are included in construction Contract time.

S.P. 6-9 LIQUIDATED DAMAGES

In accordance with Public Contracts Code, Section 10226, it is agreed by the parties to the contract that for each day, including weekends and holiday’s that completion of the work, including Punchlist items is delayed beyond the specified time will cause damage to the City of Belmont. The Contractor shall forfeit and pay to the City $3,500.00 per day for each working day in excess of the construction contract time.

Liquidated damages shall not apply for excusable delay, as defined in Section GC-01. However, the Contractor shall not be entitled to additional compensation as a result of the completion date being extended due to excusable delay.

S.P. 302-10.4 PUBLIC CONVENIENCE AND TRAFFIC CONTROL

Safety throughout the site is the Contractor's responsibility. The Contractor shall provide a safe working environment for employees and the public, meeting all standards of the State of California. All differences in grade greater than four (4) inches in any vehicular travel area shall be ramped with temporary asphalt/cutback until such time as final paving takes place.

All differences greater than one (1) inch in grade in pedestrian areas shall be considered a "trip hazard" and shall be ramped with temporary AC or other acceptable means until such time as final restoration takes place. All excavations shall be covered during "non- working hours." All excavations in vehicular areas shall be covered with 3/4" thick steel plates (minimum). Excavations in pedestrian areas shall be covered with plywood and barricades. All steel plates and plywood shall have a non-skid surface. All barricades on the project site shall be equipped with lights (in working condition).

Construction Area Signs

The Contractor shall furnish, install, maintain and remove construction an electronic changeable message sign on San Juan Blvd. The sign shall be placed on site at least 2 weeks prior to construction with an approved message and remain on site until the project is complete.

The cost for construction area signs as provided herein shall be considered as included in the contract lump sum (LS) price paid for “Pedestrian Control, Traffic Control, and Notifications”.

Temporary Traffic Control

The Contractor shall notify the Engineer of his intent to begin work on each street at least five (5) days before work is begun on that street. The Contractor shall cooperate with local authorities relative to handling traffic through the area.

Notifications to the public shall be accomplished in the following manner:

1. General Notice, by mail, shall be sent to all residences along and adjacent to each street to be reconstructed 2 weeks in advance of commencement of work for that street. Such General Notice, by mail, shall be reviewed and approved by the Engineer prior to mailing. Contractor's emergency telephone number and contact individual shall be provided.

Delays to the Contractor caused by the presence of parked vehicles will not be grounds for additional compensation or extension of time.

Salson Trail Culvert Replacement Project

City Contract No. 2025-639

The Technical Specifications contained herein have been prepared by, or under the responsible charge of, the following registered person(s):

Prepared by:



Himabindu Samudrala May 6, 2025

Himabindu Samudrala, P.E. Date

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Environmental Specifications prepared by:



May 6, 2025

Anna Buising, Ph.D., P.G. Date

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TECHNICAL SPECIFICATIONS

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BID ITEM DESCRIPTIONS

Payment for work in the Contract Documents that is not covered in the Bid Item Descriptions below shall be considered as included in the prices paid for the various items of work and no additional compensation will be allowed therefore.

Bid Item 1 – Sheeting, Shoring and Bracing

1. This bid item shall be lump sum.
2. The Contractor shall comply with the requirements described in Specification Sections as well as applicable City, County, State, and Federal regulations regarding sheeting, shoring, and bracing. This bid item includes all excavation support measures required, including but not limited to design, installation, maintenance, and removal of shoring and bracing required to stabilize and prevent movement of existing ground and to protect and provide for the safety of the Contractor's workers due to sudden collapse or movement of the existing ground, during excavation and trenching operations, including furnishing all equipment, materials and personnel associated therewith, and in accordance with the project Technical Specifications and California Labor Code 6700-6708.

Bid Item 2 – Clearing and Grubbing (LS)

1. This bid item shall be lump sum.
2. The contractor shall include in this lump sum bid item full compensation for all labor, supervision, materials, tools, equipment and incidentals, and for all the work including, but not limited to, removal of trees, shrubs, stumps, roots, and other debris to prepare the site for construction. Contractor should create a clean work area while protecting environmentally sensitive zones as directly by the Engineer and complying with disposal regulations.

Bid Item 3 – Import borrow

1. This bid item shall be paid at the unit price bid per cubic yard of material brought into supplement or replace existing soil for embankments, backfill, or other construction needs as indicated on the Drawings.
2. The material must meet specified gradation, compaction, and environmental as indicated on the Drawings. This bid item includes submittals, providing, transporting, and placing the borrow material in accordance with project specifications.

Bid Item 4 – Structure Backfill (culvert)

1. This bid item shall be paid at the unit price bid per cubic yard of material used for backfill at the culvert.
2. This bid item includes submittals, providing, transporting and placing and compacting trench backfill including geotextile fabric; CLSM backfill; place and compact surface restoration and paving, including sidewalks, concrete or brick pavers, concrete paving; restoration of landscaping and other surface features at the culvert.

Bid Item 5 – Class 2 Aggregate Base

1. This bid item shall be paid at the unit price bid per cubic yard placed complete and in place.
2. This bid item includes submittals, sourcing, transporting, and placing Class 2 Aggregate Base; grading and compacting the material to meet specified density and thickness requirements; moisture control to achieve optimal compaction; quality control testing to ensure compliance with Caltrans specifications; protection of adjacent structures and utilities during placement; proper disposal of excess or unsuitable material.

Bid Item 6 - Structural Concrete, Headwall (F)*

1. This bid item shall be paid at the unit price bid per cubic yard placed complete and in place.

2. This bid item includes: Submittals; sourcing, transporting, and placing structural concrete for headwalls; formwork and reinforcement to meet design specifications; surface finishing to ensure durability and aesthetic compliance; curing and protection of concrete to achieve required strength; quality control testing for compliance with Caltrans standards; proper disposal of excess material; and record drawings, including furnishing all equipment, materials, and personnel associated therewith, and in accordance with these Contract Documents
3. Bar reinforcing shall be paid under "Bar reinforcing, retaining wall" bid item.

Bid Item 7 - Structural Concrete, wingwall (F)*

1. This bid item shall be paid at the unit price bid per cubic yard placed complete and in place.
2. This bid item includes: Submittals; sourcing, transporting, and placing structural concrete for windwalls; formwork and reinforcement to meet design specifications; surface finishing to ensure durability and aesthetic compliance; curing and protection of concrete to achieve required strength; proper disposal of excess material; and record drawings, including furnishing all equipment, materials, and personnel associated therewith, and in accordance with these Contract Documents.
3. Bar reinforcing shall be paid under "Bar reinforcing, wingwall" bid item.

Bid Item 8 - Bar reinforcing, wingwall (F)*

1. This bid item shall be paid at the unit price bid per pound (LB) placed.
2. This bid item includes: submittals; sourcing, transporting, and placing reinforcing steel for wingwalls; cutting, bending, and tying bars to meet design specifications; placement and securing of reinforcement within formwork; quality control testing to ensure compliance with Caltrans standards; protection of adjacent structures and utilities during installation; proper disposal of excess material; and record drawings, including furnishing all equipment, materials, and personnel associated therewith, and in accordance with these Contract Documents.

Bid Item 9 - Bar reinforcing, retaining wall (F)*

1. This bid item shall be paid at the unit price bid per pound (LB) placed.
2. This bid item includes: Submittals; sourcing, transporting, and placing reinforcing steel for retaining walls; cutting, bending, and tying bars to meet design specifications; placement and securing of reinforcement within formwork; quality control testing to ensure compliance with Caltrans standards; protection of adjacent structures and utilities during installation; proper disposal of excess material; and record drawings, including furnishing all equipment, materials, and personnel associated therewith, and in accordance with these Contract Documents.

Bid Item 10 - 60" Reinforced Concrete Pipe (Class V)

1. This bid item shall be paid at the unit price bid per linear foot (LF) installed.
2. This bid item includes: submittals; sourcing, transporting, and installing 60-inch Class V reinforced concrete pipe; excavation and trench preparation to meet project specifications; supporting and protecting existing or utilities, bedding and backfill placement to ensure proper support and compaction; joint sealing and connections to maintain structural integrity and prevent leakage; quality control testing for compliance with Caltrans standards; protection of adjacent structures and utilities during installation; proper disposal of excess material; and record drawings, including furnishing all equipment, materials, and personnel associated therewith, and in accordance with these Contract Documents.

Bid Item 11 - Remove and Replace 10-Inch Sanitary Sewer with HDPE 10-Inch Sanitary Sewer Main (Open Cut)

1. This bid items shall be paid at the unit price bid per foot of installed pipe by open cut method, portion of the main as shown on the Engineering plan.
2. Provision and installation of high-density polyethylene (HDPE) gravity sewer pipe using the open cut method shall include: submittals; pipe materials; couplings and shear bands where connecting to existing main that is to remain in place; locating, supporting and protecting existing or new utilities; coordination with utility companies/agencies as needed; surveying; saw cutting, grinding; surface demolition; excavation; dust control; spoil handling and proper disposal; trenching; dewatering the trench as needed; wastewater bypass pumping and rerouting; furnish and install HDPE sewer pipe; prepare and compact pipe sub base; place and compact pipe bedding; connecting pipe ends; place and compact backfill; place and compact surface restoration including the trail path; restoration of landscaping and other surface features disturbed by the work; protection of landscaping; restoration of landscaping and other surface features; including furnishing all equipment, materials and personnel associated therewith, and in accordance with these Specifications.
3. Pipe backfill shall be paid under separate backfill bid item.

Bid Item 12 –Raise existing manhole to ground level

1. This bid item shall be paid at the unit price per each (EA) adjusted.
2. This bid item includes: submittals; locating and adjusting existing manhole frames and covers to match final ground elevation; removal and replacement of adjustment rings as needed; install new sections as needed, installation of new sealing materials to ensure watertight joints; surface restoration including soil, concrete patching around the manhole; quality control testing to verify proper alignment and sealing; protection of adjacent structures and utilities during adjustment; proper disposal of excess material; and record drawings, including furnishing all equipment, materials, and personnel associated therewith, and in accordance with these Contract Documents

Bid Item 13 – Remove Existing Culvert

1. This bid item shall be paid at the unit price bid per linear foot (LF) removed.
2. This bid item includes: submittals; locating and identifying the existing culvert for removal; excavation and extraction of the culvert while minimizing disruption to surrounding structures; proper disposal or recycling of removed materials in accordance with environmental regulations; backfilling and compaction of the excavated area to restore site conditions; protection of adjacent structures during removal; and record drawings, including furnishing all equipment, materials, and personnel associated therewith, and in accordance with these Contract Documents.

Bid Item 14 – Remove Existing Headwalls

1. This bid item shall be paid at the unit price bid per each (EA) removed.

2. This bid item includes: submittals; locating and identifying the existing headwall for removal; saw-cutting, breaking, and extracting the headwall while minimizing disruption to surrounding structures; proper disposal or recycling of removed materials in accordance with environmental regulations; backfilling and compaction of the excavated area to restore site conditions; protection of adjacent structures during removal; and record drawings, including furnishing all equipment, materials, and personnel associated therewith, and in accordance with these Contract Documents.

Bid Item 15 – Rock stabilization (Rock Slope Protection Class IV, Method B)

1. This bid item shall be paid at the unit price bid per cubic yard (CY) placed complete and in place.
2. This bid item includes: submittals; sourcing, transporting, and placing Class IV Rock Slope Protection material; grading and compacting rock to meet specified slope stabilization requirements; installation of geotextile fabric as required for erosion control; protection of adjacent structures and utilities during placement; proper disposal of excess or unsuitable material; and record drawings, including furnishing all equipment, materials, and personnel associated therewith, and in accordance with these Contract Documents.

Bid Item 16 – Gravel Filter

1. This bid item shall be paid at the unit price bid per cubic yard (CY) placed complete and in place.
2. This bid item includes: submittals; sourcing, transporting, and placing gravel filter material; grading and compacting gravel to meet specified filtration and drainage requirements; protection of adjacent structures during placement; proper disposal of excess or unsuitable material; and record drawings, including furnishing all equipment, materials, and personnel associated therewith, and in accordance with these Contract Documents.

Bid Item 17 – 4" Galvanized Steel bollards (7.5' long)

1. This bid item shall be paid at the unit price bid per each (EA) installed as specified on Engineer plan.
2. This bid item includes: submittals; sourcing, transporting, and installing 4-inch galvanized steel bollards; excavation and foundation preparation to meet bollard manufacturer's requirement; placement and securing of bollards in concrete or other approved material; surface finishing to ensure durability and corrosion resistance; protection of adjacent structures during installation; proper disposal of excess material; and record drawings, including furnishing all equipment, materials, and personnel associated therewith, and in accordance with these Contract Documents.

Bid Item 18 – Rolled erosion control product (netting)

1. This bid item shall be paid at the unit price bid per square foot (SQFT) placed complete and in place.
2. This bid item includes: submittals; sourcing, transporting, and installing rolled erosion control netting; surface preparation to ensure proper adhesion and effectiveness; anchoring and securing the netting to prevent displacement; protection of adjacent structures and vegetation during installation; proper disposal of excess material; and record drawings, including furnishing all equipment, materials, and personnel associated therewith, and in accordance with these Contract Documents.

Bid Item 19 – Rolled erosion control product (jute mesh)

1. This bid item shall be paid at the unit price bid per square foot (SQFT) placed complete and in place.
2. This bid item includes: submittals; sourcing, transporting, and installing jute mesh erosion control product; surface preparation to ensure proper adhesion and effectiveness; anchoring and securing the mesh to prevent displacement; protection of adjacent structures and vegetation during installation; proper disposal of excess material; and record drawings, including furnishing all equipment, materials, and personnel associated therewith, and in accordance with these Contract Documents.

Bid Item 20 – Hydroseed

1. This bid item shall be paid at the unit price bid per square foot (SQFT) placed complete and in place.
2. This bid item includes all work necessary to source, transport and spread suitable native species of hydroseed as shown in drawings and instructed by the City's engineer or Designate.

Bid Item 21 – Structural Concrete, bollard

1. This bid item shall be paid at the unit price bid per cubic yard (CY) placed complete and in place.
2. This bid item includes submittals; sourcing, transporting, and placing structural concrete for bollards; formwork and reinforcement to meet design specifications; surface finishing to ensure durability and aesthetic compliance; curing and protection of concrete to achieve required strength; proper disposal of excess material; and record drawings, including furnishing all equipment, materials, and personnel associated therewith, and in accordance with these Contract Documents.

Bid Item 22 – Temporary Erosion control

1. This bid item shall be lump sum.
2. This bid item includes: submittals; sourcing, transporting, and installing temporary erosion control measures; surface preparation to ensure proper application; placement of erosion control blankets, fiber rolls, or silt fences as required; temporary soil stabilization using mulch, hydroseeding, or tackifiers; stormwater pollution prevention to minimize sediment runoff; protection of adjacent structures and vegetation during installation; maintenance and removal of temporary erosion control measures upon project completion; proper disposal of excess material; and record drawings, including furnishing all equipment, materials, and personnel associated therewith, and in accordance with these Contract Documents.

Bid Item 23 – Concrete Backfill (pipe trench)

1. This bid item shall be paid at the unit price bid per cubic yard (CY) placed complete and in place.
2. This bid item includes: Submittals; sourcing, transporting, and placing concrete backfill for pipe trenches; placement and compaction of concrete to ensure proper support and stability; curing and protection of concrete to achieve required strength; proper disposal of excess material; and record drawings, including furnishing all equipment, materials, and personnel associated therewith, and in accordance with these Contract Documents.

Bid Item 24 – Preparation and Implementation of Water Pollution Control Plan

This lump sum bid item includes all work necessary to prepare and implement a Water Pollution Control Plan and erosion controls plan in conformance with the applicable permits, including the City's NPDES permit for WPCP. This bid item will be paid monthly based on the percentage of work that is completed.

Bid Item 25– Temporary High visibility fencing

1. This bid item shall be paid for each Linear Foot of fence placed complete and in place.
2. This bid item includes: Submittals; sourcing, transporting, and installation of the fencing with appropriate posts or stakes to prevent displacement, ensuring it does not obstruct drainage or interfere with site operations. Contractors must provide certificates of compliance for high-visibility fabric and ensure proper maintenance throughout the project duration. Upon completion, the fencing must be removed and disposed of in accordance with environmental regulations.

Bid Item 26 – Structure backfill (slurry cement) (revocable)

1. This bid item shall be paid at the unit price bid per cubic yard (CY) placed complete and in place. This item to be implemented at the request of City Engineer or their designated Manager
2. This bid item includes: submittals; sourcing, transporting, and placing slurry cement backfill below retaining and wingwall foundations, structures; excavation and preparation of the backfill area to meet project specifications; mixing and placement of slurry cement to ensure proper support and compaction; curing and protection of the material to achieve required strength; protection of adjacent structures and utilities during placement; proper disposal of excess material; and record drawings, including furnishing all equipment, materials, and personnel associated therewith, and in accordance with these Contract Documents.
3. This bid item will be utilized if weak and unsuitable material is encountered during the excavation process. The contractor to continue excavation until firm and stable ground is reached. A maximum excavation depth of 3 ' below bottom of footing to be assumed.

Bid Item 27 – Creek Stream Bypass Pumping (revocable)

1. This bid item shall be paid at the unit price bid per lump sum (LS). This item to be implemented at the request of City Engineer or their designated Manager.
2. This bid item includes: submittals; sourcing, transporting, and installing bypass pumping equipment; setup and operation of pumps, hoses, and temporary flow diversion systems to maintain creek stream flow during construction; installation of temporary barriers or cofferdams to isolate the work area; monitoring and adjusting flow rates to prevent erosion or flooding; quality control testing to ensure compliance with environmental and regulatory standards; protection of aquatic habitats and adjacent structures during pumping operations; proper disposal of excess water or sediment; and record drawings, including furnishing all equipment, materials, and personnel associated therewith, and in accordance with these Contract Documents.

Bid Item 28 – Mobilization

1. This bid item shall be lump sum. Payment for this item will be prorated over the course of the project based upon the complete percentage of all items..
2. The contractor shall include in this lump sum bid item full compensation for all labor, supervision, materials, tools, equipment and incidentals, and for all the work involved in mobilization, including, but not limited to, furnishing all specified contract bonds and insurance certificates, required project forms, sewer outage notifications, public and agency notifications, moving onto the site of all equipment, materials and staff including obtaining and setting up of Contractor's staging area/yard; furnishing and erecting all needed construction facilities, fencing, project signage, project security, demobilization, preconstruction photographs, video recording of surface features, progress schedules and reports, contract meetings, and record drawings, and all other work not otherwise attributable to any specific bid item and as directed by the Engineer. No additional compensation will be allowed. therefore. This item shall also include all costs necessary to demobilize at the conclusion of all work. Bid items 26,27 are not included for mobilization . It may be paid in installments as determined by the Engineer.

SECTION 01505

MOBILIZATION

PART 1 – GENERAL

1.01 DESCRIPTION

A. Mobilization shall conform to the applicable provisions in Section 11, Mobilization of the State Standard Specifications.

B. Mobilization shall include, but not be limited to the following items:

1. Locating a Construction Staging area at the Contractor's expense.
2. Moving on to the site all of Contractor's equipment required for first month operations.
3. Having all OSHA required notices and establishment of safety programs.
4. Having the Contractor's superintendent at the job site full time.
5. Completing the Preconstruction Conference.
6. Walking the project sites with the Engineer prior to the start of construction and taking sufficient preconstruction digital photos or DVDs to document existing improvements and provide same to the City. At a minimum, one photograph on each end of the culvert with special attention given to environmentally critical areas. Additional photographs shall be taken as necessary to adequately document the condition of existing improvements to remain. Photographs shall be labeled by station so that upon completion of the construction, or during construction, if necessary, subsequent photographs can be taken from the same control points.
7. Conducting a site inspection and construction survey staking prior to construction to check that the culvert locations, the proposed sewer main replacement location, and elevations conform to the Contract Drawings and to become familiar with all site conditions, and identify potential obstructions caused by other underground utilities. This also includes locating existing utilities by calling Underground Service Alert at 811 or 800-227-2600.
8. Demobilization shall include moving off the site all equipment and temporary facilities; final cleaning of all work sites and the Contractor's staging area; completion of all punch list items; and submittal of construction record drawings, any required permits signed by the issuing agency, certifications, and operation and maintenance manuals.
9. Mobilization shall not exceed five (10%) percent of the contract total compensation amount for all work as defined in the Contract Documents.

PART 2 – PRODUCTS

Not Used.

PART 3 – EXECUTION

Not Used.

****END OF SECTION****

SECTION 01560

TEMPORARY CONTROLS

PART 1 - GENERAL

1.01 DESCRIPTION

This Section describes the requirements for temporary controls, such as flow controls, dust, rubbish, drainage, erosion and sediment, and pollution control in order to execute work expeditiously.

1.02 REFERENCES

A. State of California, Department of Transportation (Caltrans), State Standard Specifications (latest edition)

B. Related Sections: SECTION 02200, Excavation and Backfill

1.03 **DUST CONTROL**

A. Dust control shall conform to the provisions in Section 10, Dust Control, of the State Standard Specifications and these Technical Specifications. No separate payment will be made for any work performed or material used to control dust resulting from public traffic within the right-of-way.

B. The Contractor shall furnish all labor, equipment and means required and shall carry out effective measures wherever and as often as necessary to prevent its operation from producing dust in amounts damaging to property or causing nuisance as defined by the Engineer.

C. The Contractor shall be responsible for any damage resulting from any dust originating from its operations.

D. The dust abatement measures shall be continued until the Contractor is relieved of further responsibility by the Engineer.

E. The use of water shall not be permitted as a substitute for sweeping or other methods of dust control. Only dry sweeping is allowed.

1.04 RUBBISH CONTROL

A. Through all phases of construction, including suspension of work and until final acceptance of the project, the Contractor shall keep the worksite and other areas used by it in a neat and clean condition, and free from any accumulation of rubbish and debris.

B. Contractor shall properly dispose of all excess earth, concrete, asphaltic concrete and debris off job site and clean up the work area at the end of each workday. The work area shall be left in a neat and presentable condition.

C. The Contractor shall keep its haul roads free from dirt, rubbish, and unnecessary obstructions resulting from its operations. Care shall be taken to prevent spillage on haul routes. Contractor shall obtain all required truck route permits. Any such spillage shall be removed immediately, and the area cleaned by the Contractor.

D. Disposal of all rubbish and surplus materials shall be off the site of construction, at the Contractor's expense, all in accordance with local codes and ordinances governing locations and methods of disposal, and in conformance with all applicable safety laws, and the requirements of the OSHA Safety and Health Standards for Construction.

1.05 DRAINAGE CONTROL

A. Provide for the drainage of stormwater and any water applied or discharged on the site in performance of the work.

B. All stormwater discharged to storm drains shall be clean. Washing mud into storm drains will not be allowed.
C. Provide adequate drainage facilities to prevent damage to the work, the site, and adjacent property.
D. Maintain excavations free of water to prevent puddling or running water.
E. Supplement existing drainage channels and conduits as necessary to carry all increased runoff from construction operations.
F. Contractor is responsible for the flooding of property due to his work under this project. Contractor is also responsible to make right any damages to work in progress that is caused by flooding. The means and methods the Contractor employs to meet the above requirements are at his discretion.

1.06 EROSION AND SEDIMENT CONTROL

A. Plan and execute construction by methods to control surface drainage. Minimize the amount of bare soil exposed at one time.
B. Provide temporary measures such as berms, dikes, silt fences, sediment traps, and drains, to prevent water flow.
C. Periodically inspect earthwork to detect evidence of erosion and sedimentation. Promptly apply corrective measures should erosion and sedimentation be detected.
D. Perform control in accordance with State and local rules and regulations.
E. If erosion occurs to trenches or work areas prior to restoration by the Contractor, the Contractor shall be responsible for repair of eroded areas.

1.07 POLLUTION CONTROL

A. Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by the construction operations.
B. Do not permit sanitary wastes to enter any drain or watercourse other than sanitary sewer.
C. Do not permit sediment, debris or other substances to enter sanitary or storm sewer.

1.08 WATER POLLUTION CONTROL PROGRAM (WPCP)

A. The Contractor shall be responsible for all water pollution control program and a plan to implement it. Before starting any work on the project, the Contractor shall submit a WPCP. The plan shall show the schedule for the erosion control work included in the contract and for all water pollution control measures which the Contractor proposes to take in connection with construction of the project to minimize the effects of the operations upon adjacent streams and other bodies of water. The WPCP shall be prepared by a Qualified SWPPP Developer (QSD).

B. The Engineer shall notify the Contractor of any revisions to water pollution control program within 5 days of the revision. The City will not be liable for Contractor failure of implementing any portion of an originally submitted or revised water pollution control program, nor for any delays to the work due to the Contractor's failure to submit an acceptable WPCP.

1.09 BEST MANAGEMENT PRACTICES

A. Contractor shall implement best management practices identified in SWPPP to meet the specifications listed in these Contract Documents.
B. Contractor shall provide, inspect, and maintain acceptable BMPs appropriate for the work, as necessary to control and prevent stormwater pollution for the duration of the project.
C. Contractor shall properly dispose of all wastes and excess materials in a legal manner to the satisfaction of the Engineer.

D. Upon completion of the project, Contractor shall remove all BMPs to the satisfaction of the Engineer.

PART 2 - PRODUCTS
Not used.

PART 3 - EXECUTION
Not used.

****END OF SECTION****

SECTION 01600

ENVIRONMENTAL PROTECTION

PART 1 GENERAL

ENVIRONMENTAL COMMITMENTS AND REGULATORY REQUIREMENTS

These specifications reflect mandatory project environmental commitments and regulatory permit requirements known at the time of bidding.

Contractor shall adhere to all requirements set forth in the following.

1. The project's adopted Avoidance and Minimization Measures (AMMs), detailed in the Project Description submitted to the resource agencies (Appendix 1)

2. The Statewide General Waste Discharge Requirements for Dredged or Fill Discharges to Waters Deemed by the U.S. Army Corps of Engineers to be Outside of Federal Jurisdiction (General WDRs) (State Water Resources Control Board Water Quality Order No. 2004-0004-DWQ) (Appendix 2)

3. The project Streambed Alteration Agreement with the California Department of Fish and Wildlife (SAA) (Appendix 3).

Key contractor responsibilities are detailed below; requirements are provided in their entirety in Appendices 1, 2, and 3. In the event of uncertainty, omissions, conflict, or unclarity the documents in Appendices 1, 2, and 3 prevail.

PART 2 PRODUCTS

[Reserved; see relevant information in Part 3.]

PART 3 EXECUTION

3.01 DOCUMENTATION AT PROJECT SITE

Contractor shall keep copies of the General WDRs and SAA, and any extensions or amendments, all related notification materials, and the project California Environmental Quality Act (CEQA) documents, readily available at the project site at all times and shall present them to resource agency personnel or personnel from another state, federal, or local agency upon request. Copies of the General WDRs and SAA and any extensions or amendments shall be provided to all persons who will be working at the project site.

3.02 AGENCY STAFF ACCESS TO WORK SITE

Contractor shall coordinate with the City to enable resource agency staff to enter and inspect the work site if such access is requested.

3.03 SEASONAL WORK PERIOD

Work shall be limited to the period between June 15 to October 31.

3.04 WORKER TRAINING

Prior to the start of training, the City will retain a qualified biologist to conduct a biological resources awareness training for all construction personnel. Contractor shall coordinate with the biologist to facilitate training and shall ensure that all personnel attend the training prior to beginning work on the site; this includes new staff who may join the project while construction is in progress. Contractor staff shall sign a form stating that they understand the project environmental requirements and will comply and shall provide the signed forms for City files. If training needs to be delivered bilingually in Spanish or another language plus English Contractor shall notify the City no less than 30 days in advance of the anticipated start of work.

3.05 LIMITS OF WORK AND ENVIRONMENTALLY SENSITIVE AREA EXCLUSION

Staging and materials laydown shall be confined to the existing Salson Trail roadway; no staging shall occur within the riparian corridor or in areas outside the roadway. No material or equipment shall be stockpiled or stored where it could be washed into the water or where it would cover aquatic or riparian vegetation.

The work and access footprints shall be kept to the minimum necessary to accomplish the work; no unnecessary entrance into or disturbance of the riparian corridor or the East Laurel Creek channel shall be permitted.

Prior to mobilization onsite, the limits of the work area, access, and staging shall be delineated in the field, using temporary construction fencing or another suitable low-impact/high-visibility medium. Fencing or other delineation shall be installed under the oversight of a qualified biologist retained separately by the City (hereafter, City's biologist). Exclusion areas around occurrences of special-status plants shall be defined in the same way. Fencing/exclusion measures shall be inspected daily and maintained for the duration of construction.

No entry into the Creek channel or riparian corridor outside the work/access area boundary or into other exclusion areas shall be permitted. Vegetation shall not be removed or damaged outside the delineated work area. Disturbance or removal of vegetation within the work area shall not exceed the minimum necessary to complete project activities.

3.06 PROVISION FOR WILDLIFE ESCAPE

Fencing used to define the work area and sensitive habitat exclusion area(s) shall be equipped with escape ramps, funnels, or other features that allow animals to exit the work area but not to enter it.

Trenches or pits 1 foot deep or deeper that are left unfilled overnight shall be securely covered with boards or other material to prevent wildlife entrapment. Prior to filling trenches, pits, holes, or pipes, they shall be inspected by the City's biologist to ensure that no wildlife is entrapped.

3.07 NO WORK IN FLOWING CHANNEL

Construction shall be limited to times when East Laurel Creek is not flowing.

3.08 WORK IN DRY WEATHER ONLY

Work within the stream channel shall be restricted to periods of dry weather. Precipitation forecasts and potential increases in stream flow shall be considered when planning construction activities. Construction activities shall cease and all necessary erosion control measures shall be implemented

prior to the onset of precipitation. Construction activities halted due to precipitation may resume when precipitation ceases and the National Weather Service 72 hour weather forecast indicates a 20% or less chance of precipitation, provided no work occurs in the stream bed if water is flowing. No work shall occur during a dry-out period of 72 hours after the above-mentioned wet weather. Weather forecasts shall be documented upon request by the California Department of Fish and Wildlife.

3.09 WASHING OF EQUIPMENT

To prevent the movement of invasive plant and animal species, fungi, and other biotic agents from external ecological regions, all equipment used shall be washed prior to entry and staging onto the construction site.

3.10 PROTECTION OF SPECIAL-STATUS SPECIES

The City's biologist will conduct pre-construction surveys for pallid bat (*Antrozous pallidus*), San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*), California red-legged frog (*Rana draytonii*), and special-status bats prior to the start of any vegetation- or ground-disturbing activity in the project area. Contractor shall coordinate with the City's biologist to enable the surveys and shall comply with any directions from the City's biologist for the protection of special-status species.

3.11 PROTECTION OF NESTING BIRDS

For any work conducted during the nesting season (February 1 – August 31), the City's biologist will conduct a pre-construction nesting bird survey prior to the first project-related activity onsite. Active nests shall be protected with no-activity buffers delineated with temporary construction fencing installed under the supervision of the City's biologist. If state- and/or federally listed species are involved, the City's biologist will coordinate with the California Department of Fish and Wildlife and/or the U.S. Fish and Wildlife Service to obtain agency guidance.

Contractor shall coordinate with the City's biologist as needed to enable the survey(s) and shall install any needed nest buffers under biologist oversight. All Contractor staff shall comply with the no-disturbance requirement. No entry of personnel, equipment, or materials shall be permitted into no-disturbance zones around occupied nests. Additional restrictions may be required if state- and/or federally listed species are involved; Contractor shall also comply with these requirements as directed by the City's biologist.

3.12 TREES PROTECTED BY CITY ORDINANCE #2017-1120

No removal or significant disturbance to any trees protected by City Ordinance #2017-1120 shall occur unless authorized in writing by the City. Protected trees include the following.

1. Principal native trees: coast live oak (*Quercus agrifolia*), valley oak (*Q. lobata*), redwood (*Sequoia sp.*), madrone (*Arbutus menziesii*), bay laurel (*Umbellularia californica*), and buckeye (*Aesculus californica*) that have a single main stem or trunk of 10 inches or more diameter at breast height (DBH, equal to 4.5 feet above grade), or up to three of the largest secondary stems totaling 10 inches or more DBH.

2. Large-diameter trees: Any woody perennial plant characterized by a single main stem or trunk of 14 inches or more DBH, or up to three of the largest secondary stems totaling 18 inches or more DBH.

3.13 PREVENTION OF SUDDEN OAK DEATH SYNDROME

Contractor shall implement standard measures to prevent the spread of sudden oak death (SOD) syndrome and other *Phytophthora* spp. avoidance and minimization measures, including disinfecting boots and equipment. If hydroseeding is used, hydroseed materials shall be *Phytophthora*-free.

3.14 CHECKS FOR ENTRAPPED WILDLIFE

Prior to using construction materials that have been stockpiled onsite, Contractor shall visually check for the presence of wildlife sheltering within them.

3.15 RESPONSE TO SPECIAL-STATUS SPECIES OBSERVATION

If any known or suspected individual of a special-status species is observed within the work area, construction activity shall be suspended, the individual shall be avoided, and Contractor shall immediately notify the City's biologist, who will notify and consult with the appropriate resource agency(ies). Contractor shall comply with direction from the City's biologists regarding next steps.

3.16 REPORTING OF INJURY OR MORTALITY TO SPECIAL-STATUS SPECIES

If any individual of a special-status species is injured or killed, or if any such animal is found injured or dead, all activity in the work area shall immediately cease, and Contractor shall notify the City's biologist immediately. The City's biologist is required to notify the resource agencies by email and telephone within 30 minutes of the discovery and must submit a written report detailing the time, location, and general circumstances under which the dead or injured individual animal was found within 5 business days following the incident.

3.17 EROSION AND SEDIMENT CONTROL

At no time shall silt-laden runoff be allowed to enter the stream or directed to where it may enter the stream. Erosion control best management practices (BMPs), such as silt fences, straw hay bales, water check bars, and broadcasted straw shall be used.

Erosion control fabrics shall consist of biodegradable materials, such as coir or jute. No geotextile or filter fabrics shall be used.

Erosion control BMPs shall be monitored during and after storm events for effectiveness.

Modifications, repairs, and improvements to erosion control BMPs shall be made as needed to protect water quality.

Contractor shall monitor silt control structures daily for effectiveness and shall repair or replace them as needed. Passage of sediment beyond the sediment barrier is prohibited. If the sediment barrier fails to retain sediment, construction activities shall cease, and corrective measures shall be employed.

3.18 REMOVAL OF NATIVE MATERIAL

Other than that required to accomplish project construction, there shall be no removal of native soils, rock, gravel, vegetation, or vegetative debris from the stream bed or banks.

3.19 EQUIPMENT AND VEHICLES

Staging and storage areas for equipment, fuels, lubricants and solvents shall be located away from the wetted areas.

Stationary equipment—such as motors, pumps, generators, compressors, and/or welders—located within or adjacent to the creek shall be positioned over drip-pans.

Any equipment or vehicles driven and/or operated adjacent to the creek shall be checked and maintained daily to prevent leaks of substances that if introduced to water could be deleterious to aquatic life, wildlife or riparian habitat.

Vehicles must be moved away 150 feet from the stream prior to refueling and lubrication.

Vehicles shall observe a 5-mile per hour speed limit within the work area.

3.20 DESIGNATED CONCRETE MONITOR

Contractor shall designate a Concrete Monitor to inspect concrete runoff containment structures immediately before and during concrete pouring and ensure that no concrete or other debris enters the creek outside of those structures. No runoff from concrete shall be allowed to enter the creek at any time.

3.21 DELETERIOUS MATERIALS

Any substances or materials that are deleterious to aquatic life and could be washed into Waters of the State shall be contained in water-tight containers or removed from the project site.

3.22 DEBRIS AND WASTE DISPOSAL

No litter or construction debris shall be dumped within the project area. All debris and waste shall be picked up daily and properly disposed of at an appropriate site. Contractor shall remove all debris from the immediate project area, including litter and exposed, deteriorating plastic bank-stabilization material.

3.23 SPILL CONTAINMENT

Contractor shall have spill containment and clean-up materials onsite for use in an accidental spill. In the event of a spill, Contractor shall immediately notify the City's biologist and the California Emergency Management Agency (1-800-852-7550) and shall immediately initiate the clean-up activities. The City's biologist will notify the California Department of Fish and Wildlife and the Regional Water Quality Control Board and consult regarding clean-up procedures. Following that consultation, Contractor shall comply with any additional direction from the City's biologist regarding clean-up.

END OF SECTION

SECTION 01720

SEWER OUTAGE NOTIFICATIONS

PART 1 - GENERAL

1.01 DESCRIPTION

This Section describes the requirements for providing advanced notification of construction activities to the City Departments, Residents, and Businesses regarding planned sewer outages.

1.02 GENERAL

The requirements of this section shall be used in coordination with all related technical specification sections, the Contract Documents, and City of Belmont requirements.

1.03 RELATED SECTIONS

A. SECTION 01560, TEMPORARY CONTROLS

B. SECTION 01730, PUBLIC AND AGENCY NOTIFICATIONS

C. SECTION 02145, SEWAGE FLOW CONTROL

1.04 PROJECT REQUIREMENTS

A. Provide labor, materials, and supervision as required to prepare and deliver sewer outage and construction notifications and to respond to affected residents and businesses.

B. Contractor shall maintain a local telephone number of contact person for inquiries or complaints.

1.05 SUBMITTALS

The Contractor shall submit a detailed Public and Agency Notification Plan to the Engineer consisting of schedules, sample notices, contact personnel, contact phone numbers, and a detailed timeframe of when notices will be delivered.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

3.01 PUBLIC NOTIFICATION

A. Maintain service usage with the exception of planned outages throughout duration of project.

Maximum amount of no service: 8 hours for any property served by the sewer. Any service out longer than 8 hours shall be bypassed to a sanitary sewer.

B. Public Notification Program

1. Prepare and submit to the City, a notification letter, prior to time of construction, stating the nature of work and expected duration of construction activity and outage affecting all residents and businesses. The City will have one week from the submittal date, to review and make suggested changes.

2. Deliver the city approved written notices on the Contractor's letterhead to each home or business via U.S. mail to provide a two week and seventy-two (72) hours advance notification to all residents and businesses impacted by the construction prior to commencement of work being conducted on section of sewer, including telephone number of Contractor contact for inquires or complaints, description of work, dates and times of construction and information regarding street closures and/or detouring.

3. Notifications shall provide instructions to homes and businesses to minimize discharge to the sewer during scheduled work to avoid back-ups.

4. Notices shall include a summary of the work to be completed, purpose and location of the outage, and the time and duration of service interruption to building.

5. The Contractor shall communicate verbally with the homeowner/ business owner the day prior to the beginning of work conducted on the section relative to the homeowners/business owners.

6. The Contractor shall contact any home or business that cannot be reconnected within the time stated in written notice.

C. Service interruptions shall be strictly limited to the hours of 8:00 AM to 5:00 PM, Monday through Friday.

****END OF SECTION****

SECTION 01730

PUBLIC AND AGENCY NOTIFICATIONS

PART 1 - GENERAL

1.01 DESCRIPTION

This Section describes the requirements for providing advanced notification of construction activities to City Departments, Local Agencies, Residents, and Businesses.

1.02 GENERAL

The requirements of this section shall be used in coordination with all related Technical Specification sections, the Contract Documents, and City of Belmont requirements.

1.03 RELATED SECTIONS

A. SECTION 01560, TEMPORARY CONTROLS

B. SECTION 01720, SEWER OUTAGE NOTIFICATIONS

1.04 PROJECT REQUIREMENTS

A. Provide labor, materials, and supervision as required to prepare and deliver professionally prepared construction notices to affected residents and businesses.

B. Contractor shall maintain a local telephone number of contact person for inquiries or complaints.

1.05 SUBMITTALS

The Contractor shall submit a detailed Public and Agency Notification Plan to the Engineer consisting of schedules, sample notices, contact personnel, contact phone numbers, and a detailed timeframe of when notices will be delivered.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

3.01 PUBLIC NOTIFICATION

A. In addition to specific project notifications as required in other sections of the project Technical Specifications and Contract Documents, the Contractor shall give fourteen (14) days and 48-hour Advanced Project Construction Notification to entities and individuals that will be affected by project construction. The following entities and individuals shall be notified in writing of the general construction activities:

1. All Residents on City Blocks where work will be occurring.
2. All Businesses on City Blocks where work will be occurring.
3. City of Belmont Public Works Department (Project Manager and Inspector).
4. City of Belmont Police Department (650) 595-7400.
5. City of Belmont Fire Department (650) 637-2934.
6. City of Belmont Garbage, Recycling and Tree Trimming Haulers:

   Recology San Mateo County (650) 595-3900
7. San Mateo County Transit District (650) 508 6200.

If an emergency or urgent street closure is required, the Contractor shall immediately notify:

1. City of Belmont Public Works Department (Project Manager and Inspector).
2. City of Belmont Police Department (650) 780-7400.
3. City of Belmont Fire Department (650) 637-2934.

B. Public Notification Program:

1. Deliver written notices on the Contractor's letterhead to each home, business, agency, or department Two Week before commencement of construction activities vis U.S. mail.
2. Notices shall include a project name, a summary of the work to be completed, the location of the work, the expected duration of the work, the hours of work, and a telephone number of Contractor contact for inquires or complaints.
3. A second notice shall be delivered to each home, business, agency, or department 72 hours before commencement of construction activities providing the same information detailed in the above item.

D. Address City correspondence to: 1 Twin Pines Lane, Belmont, CA 94002.

****END OF SECTION****

SECTION 02100

CLEARING AND DEMOLITION

PART 1 - GENERAL

1.01 SUMMARY

A. This specification addresses demolition, removal, and abandonment of trees, facilities, and associated debris generated in the execution of the contract work, including clearing, grubbing and stripping.

1. Do not begin demolition, removal and/or clearing and grubbing until authorization is received from the Engineer.

2. Remove rubbish and debris from the job site daily.

3. Store materials that cannot be removed daily in the Contractor's approved laydown and storage areas, following all requirements established by the property owner and associated permitting jurisdiction.

4. Properly dispose of materials and debris removed from the Project. Disposal shall comply with all federal, state, and local regulations.

B. Related Sections:

1. Section 01560, TEMPORARY CONTROLS

1.02 REFERENCES

American National Standards Institute (ANSI):

ANSI A10.6 – Safety and Health Program Requirements for Demolition Operations

1.03 SUBMITTALS

Submit to the Engineer the following in accordance with the Contract Documents.

A. Demolition Plan, including proposed demolition, tree removal, clearing and grubbing, striping removal, temporary striping, and removal procedures. Demolition Plan shall include a detailed description of methods and equipment to be used for each operation and of the sequence of operations.

B. A plan and coordinated construction schedule for the removal of any existing active facilities and the reconnection of existing system elements to the permanent facilities.

1.04 WORK AND SAFETY REQUIREMENTS

Comply with federal, state, and local hauling and disposal regulations. Work safety requirements shall conform to ANSI A10.6, Demolition Operations – Safety Requirements.

1.05 DUST AND DEBRIS CONTROL

A. Prevent the spread of dust and debris and avoid the creation of a nuisance or hazard in the surrounding area.

B. Do not use water if it results in hazardous or objectionable conditions such as, but not limited to, flooding or pollution.

C. Dry-sweep pavements as often as necessary to control the spread of debris that may result in foreign object damage potential to vehicles.

1.06 PROTECTION

A. Traffic Control Signs - Where pedestrian and driver safety is endangered in the area of removal work, use traffic barricades with flashing lights. Refer to the Contract Documents for additional requirements.

B. Existing Work - Protect existing work which is to remain in place. Repair items which are to remain, and which are damaged during performance of the work to their pre-construction condition or replace with new. Do not overload or damage pavements to remain; only rubber-tired excavation equipment will be allowed. Provide new supports and reinforcement for existing construction weakened by demolition or removal work. Repairs, reinforcement, or structural replacement must have Engineer approval. Refer to the Contract Documents for additional requirements.

C. Facilities - Protect electrical and mechanical services and utilities. Where removal of existing utilities and pavement is specified or indicated, provide approved barricades, temporary covering of exposed areas, and temporary services or connections for electrical and mechanical utilities. Refer to the Contract Documents for additional requirements.

1.07 BURNING AND EXPLOSIVES

Burning and the use of explosives will not be permitted.

1.08 RELOCATIONS

Perform removals and reinstallations of relocated items with workmen skilled in the trades involved. Repair items to be relocated which are damaged or replace damaged items with new undamaged items as approved by the Engineer and governing jurisdiction.

PART 2 - PRODUCTS

Not used

PART 3 - EXECUTION

3.01 PREPARATION

A. Protection

1. Provide barricades, coverings, and other protection necessary to prevent damage to existing improvements.

2. Protect existing trees and other vegetation to remain against damage.

    a. Do not smother trees by stockpiling construction materials or excavated materials within drip line.

    b. Avoid foot or vehicular traffic or parking of vehicles within drip line.

    c. Provide temporary protection as required to prevent damage to trees and vegetation to be left in place.

    d. Provide protection for roots over 1-1/2 IN diameter that are cut during construction operations.

1) Temporarily cover all exposed roots with wet burlap to prevent roots from drying out.

2) Provide earth cover as soon as possible.

3) Repair or replace trees and vegetation damaged by construction operations.

4) Repair to be performed by a qualified tree surgeon.

5) Remove trees which cannot be repaired.

6) Replace with new trees of minimum 4 IN caliper.

7) Repairs or replacements are to be completed in a manner acceptable to Engineer at no additional expense to Engineer.

B. Clearing and Grubbing

1 Clear from surface of existing ground all trees and shrubs marked for removal, brush, downed timber, rotten wood, heavy growth of grass and weeds, vines, rubbish and debris.

2 Grub (remove) all stumps, roots, root mats, logs and debris encountered within limits of construction.

    a. In cut areas, totally grub.

    b. In fill areas, where fill is less than 3 FT totally grub ground.

    c. Fill depressions caused by clearing and grubbing operations with satisfactory soil material, unless further excavation or earthwork is indicated. Place fill material in horizontal layers not exceeding 6 IN loose depth, and thoroughly compact to a density equal to adjacent original ground.

    d. Where fill is 3 FT or more in depth, stumps may be left no higher than 6 IN above existing ground surface.

C. Topsoil

1. Strip topsoil to whatever depths encountered, in manner to prevent intermingling with underlying subsoil or objectionable material.

a. Remove heavy growths of grass before stripping.

b. Where trees are indicated to be left standing, stop topsoil stripping sufficient distance from such trees to prevent damage to main root system.

c. Topsoil is defined as organic surface soil reasonably free of subsoil, clay lumps, stones and other objects over 2 IN diameter, and without weeds, roots and other objectionable material.

2. Stockpile topsoil where directed by Engineer.

a. Construct storage piles to freely drain surface water.

b. Seed or cover storage piles to prevent erosion.

3.02 EXISTING FACILITIES TO BE REMOVED

A. Removal of Existing culvert pipe, headwalls, sanitary sewer pipes and other related material:

Remove existing sanitary sewer pipes, culverts, walls, to the horizontal limits shown on the Contract Documents or as directed by the Engineer. Existing alignments are shown based on topographical survey information. The actual locations of existing utilities may be different from that shown.

3.03 DISPOSITION OF MATERIAL

Title to Materials:

A. Except where specified in other sections, or on the Contract Documents, all materials and equipment removed shall become the property of the Contractor and shall be removed.

B. Title to materials resulting from demolition, and materials and equipment to be removed, is vested in the Contractor upon approval by the Engineer of the contractor's demolition and removal procedures, and authorization by the Engineer to begin demolition.

C. The City will not be responsible for the condition or loss of, or damage to, such property after notice to proceed.

3.04 CLEANUP

Debris (including plant material) and Rubbish:

A. Remove and transport debris, plant material and rubbish in a manner that will prevent spillage on pavements, streets or adjacent areas.

B. Clean up spillage from pavements, streets and adjacent areas.

****END OF SECTION**

Section 02145

SEWAGE FLOW CONTROL

PART 1 - GENERAL

1.01 SUMMARY

1. This Project consists of construction of culvert, removal and replacement of an existing main sewer from existing main sewer to existing main sewer. It shall be the Contractor's responsibility to maintain at all times the sewer flows, regardless of volume, through the Project site and from the adjacent properties.

2. Provide bypass pumping during removal and installation of the main sewer. Accommodate flows at all times from collector and trunk sewer connections at manholes, where they occur. NO SEWAGE FLOW into the trench shall be allowed.

3. Coordinate directly with residents and businesses to minimize wastewater flows during the scheduled work.

4. Provide seer outage notifications per the project Technical Specifications.

5. This Sectio specifies the requirements for temporary bypassing, dewatering, and disposal of water and wastewater from the sewer facilities as required to perform the work. Extract, pump, and/or dispose of wastewater from bypassing and dewatering gravity sanitary sewer pipelines, building sewers (laterals), and cleanouts as required.

6. Sewer flowdischarges shall be to the sanitary sewer system.

1.02 PROJECT REQUIREMENTS

1. Provide labor, materials, and full-time supervision, as required, to set up necessary equipment, and contain, bypass, dewater, and dispose of raw wastewater, treated wastewater, and storm drain flows, as necessary, for abandonment, television inspections, point repairs, replacements, connections, rehabilitation, and other modifications made to complete the work.

2. The Work shall not result in spills into the work area. Spill **of sanitary** wastewater **can result in costs and/or fines levied against** the City. In the event that there is a spill, the Contractor shall be responsible for fines, penalties and charges due to sanitary sewer spills resulting from the Contractor’s operations and/or failure of bypass pumping.

3. The work shall not result in water or wastewater flows to surcharge, shall not result in damage to sewers, and shall protect public and private property from damage and flooding. Surcharge shall be defined as the condition where the depth of flow exceeds the crown elevation in any pipe in any existing gravity pipe systems. Water or wastewater discharges or disposals identified in the Bypass Pumping Plan shall be disposed of to the sanitary sewer system.

1.03 SUBMITTALS

A. Prior to any construction the Contractor shall submit a complete Health and Safety Plan as described in the Contract Documents. No entry to any of the existing facilities will be permitted until appropriate work crews are certified for confined space entry and the Health and Safety Plan is reviewed. The Health and Safety Plan shall be developed specifically for the project.

B. Within five (5) days of Notice to Proceed and at least fourteen (14) days prior to initiating bypass activities, submit a detailed Bypass Pumping Plan consistingof drawings and complete design data in accordance with the Contract Documents. Submittal shall show all proposed methods, layout, equipment, and discharge locations for bypassing and dewatering.

C. The Submittal shall include the following information:

1. A site plan showing the size and layout of pumps, valves, and temporary pipelines. Layout shall show how temporary facilities will be protected during use.
2. Narrative description of system staffing and monitoring.
3. Catalog data on pump controls and audible alarms.
4. Catalog data for portable generators when electric pumps are used.
5. Drawings indicating the locations of temporary plugs, taps, pumping systems, suction and discharge piping, and locations of sanitary sewers and manholes to receive discharges of raw or treated wastewater.
6. Data that includes the locations and elevations of existing sanitary sewer systems, and the capacities of duty and standby pumps, prime movers, power and standby power, and other equipment.
7. Design calculations that prove the adequacy of the bypassing, dewatering, and disposal system(s) and selected equipment. Design calculations shall confirm that the bypassing and pumping operations shall not cause surcharge in any portion of the existing sanitary sewer system. Design calculations shall be signed and sealed by a civil engineer registered in the State of California qualified to perform said analysis.
8. An emergency response plan that provides, in detail, the procedure to be followed in the event of a failure of the bypass pumping systems. The plan shall include the name and telephone number of the person who will be in charge of the response in an accidental spill and is required to:

    a Make the maximum effort to stop the spill immediately.

    b Verbally notify the City of Belmont within 15 minutes of knowledge of the accidental spill.

    c Submit a written report within 15 working days of knowledge of the accidental spill explaining the cause, nature, volume and duration of the accidental spill, and the procedures taken to clean up the spill.

    d If the accidental spill enters the storm drain system or a stream, immediately conduct a sampling and analysis program of the contaminated water body demonstrating up to 21 consecutive days that the stream has recovered to its natural state. The first sample result shall be submitted within 30 days of the accidental spill.

9. Odor and noise mitigation plan

1 Odor and noise mitigation plan shall be in in accordance with the Contractor's Health and Safety Plan and the requirements of the Contract Documents

1.05 JOB CONDITIONS

A. Available Data:

The Contractor shall be responsible for flow verification, design, construction, and operation of an adequate and properly functioning bypass and dewatering system.

Any testing or gathering of flow data is the responsibility of the Contractor.

Coordinate all sewer bypassing and dewatering operations with the Engineer.

B. Protection:

Where bypassing is required, ensure that service for connecting laterals is not disrupted. All bypassed flow shall be discharged into the nearest (downstream) sanitary sewer manhole. Take appropriate steps to ensure odor control at the discharge manholes.

Bypassing and dewatering operations resulting in discharges to the ground surface, streams, creeks, culverts, ditches, storm drains, or groundwater shall not be permitted. Perform work so as to protect the public from potential health hazards, and to protect the environment from contamination.

Obtain approval from the Engineer and City Biologist to ensure that the temporary bypass system lies within the approved disturbed area confines of the creek.

C. Scheduling:

The bypassing and dewatering systems shall not be shut down between shifts, during work stoppages, or during any periods when flows through the main sewer have not been properly restored.

Provide fourteen (14) days written notice to the Engineer prior to performing all bypassing, dewatering, and disposal work.

D. Permits and Approvals:

Obtain approval from the Engineer and City Biologist for the proposed Bypass Pumping Plan.

If the Engineer determines that the Contractor's diversion plan is inadequate, the Contractor shall provide equipment, materials, and labor to develop a viable diversion and pumping plan.

Prior to plugging any lines, the contractor shall notify the project manager and project inspector, at least 24 hours in advance. Included in this item of workis pumping of local depressions in the pipe that may or may not be shown on the plans.

PART 2 - PRODUCTS

2.01 PUMPS AND GENERATORS

A. The Contractor shall provide suitable "trash-type" primary Sewage pump capable of bypassing all flows around the worksite.

B. A minimum of two primary pumps are required for each flow control system.

C. Keep all generators fueled at all times.

D. Generators shall be placed on spill guard mats or other approved double containment devices to eliminate the possibility of fuel spills to ground surface.

2.02 PIPING

A. The sewage flow control piping shall be completely leak free. Any drips or leaks shall be repaired by the Contractor immediately.

B. A minimum of two pipes is required for all sewer bypasses. Each pump may be piped separately to the discharge point, or the pump discharge lines can be manifolded together.

2.03 TEMPORARY BULKHEADS AND PLUGS

A. Design and provide bulkheads and plugs to withstand anticipated upstream differential head without leakage or displacement.

B. A watertight seal is required to prevent Sewage from entering the work area.

C. The Contractor shall provide double bulkheads and plugs, both able to withstand upstream head, upstream of locations where persons will be entering the sewer and at all flow diversions. Coordinate installation and removal of bulkheads and plugs with the Engineer.

2.04 STANDBY EQUIPMENT

A. The Contractor shall have available on site sufficient equipment and materials to ensure continuous and successful leak-free operation of the sewage flow control system.

B. The Contractor shall have available on site sufficient number of valves, tees, elbows, connections, tools, sewer bulkheads for different pipe sizes as needed, piping and other parts of system hardware to ensure immediate repair or modifications of any part of the system as necessary.

C. The Contractor shall have on site one standby pump with capacity equal to or greater than the largest primary pump. If the standby pump is electric, a standby generator shall be provided on site. The standby pump shall be operational and shall be connected to the bypass piping to allow immediate standby service at all times.

D. Generator shall be fueled at all times. Generators shall be placed on spill guard mats or other approved double containment devices to eliminate the possibility of fuel spills to ground surface.

E. Bypassing and dewatering systems shall have one hundred percent (100%) redundancy.

PART 3 - EXECUTION

3.01 PLUGGING, BLOCKING, AND PUMPING

A. Flow control will be required for this Project. Bypass pumping will be allowed only during Contractor’s working hours. At the end of every working day, flows must be

B. properly restored to the sanitary sewer. Any emergency pumping operations that are required outside of the Contractor’s working hours must be approved in advance by the Engineer.

C. Furnish, install and operate pumps, plugs, conduits, and other equipment to dewater

existing sewer pipelines or to divert the flow of wastewater around the pipeline reach in which work is to be performed, and to maintain service to all properties connected to the sewer being replaced. Plugs shall be so designed that all or any portion of the wastewater can be released. Plugs shall be provided with a tag line.

D. The pumping system shall be of sufficient capacity to manage existing flows plus additional flow that may occur during a rainstorm. If pumping is required outside normal working hours, engines shall be equipped and/or shielded in a manner to keep noise to a minimum. Noise level shall conform to the noise ordinance requirements of the governing jurisdiction.

E. Engines shall be equipped with mufflers and/or shall be enclosed to comply with all local noise ordinances. Pumps and bypass lines shall be of adequate capacity and size to handle the flows. All bypassed flow shall be discharged to the nearest downstream manhole.

F. Bypass pumping shall be completed in such a manner as will not damage private or public property or create a nuisance or public health menace. The pumped wastewater shall be in an enclosed hose or pipe that is adequately protected from traffic and shall be redirected into the sanitary sewer system. Dumping or free flow of wastewater on private property, gutters, trenches, streets, sidewalks, or into storm sewers is prohibited. The Contractor shall be liable for all damages associated with this work. After the work is completed, flow shall be restored to original conditions and temporary facilities removed.

3.02 SEWER DEWATERING

A. Extract, pump, and/or dispose of wastewater from dewatering the existing sewers.

B. Dewater all sagged or submerged portions of the existing sewer as required for abandonment, or as otherwise required to complete the work.

C. Dewatering of excavations shall be conducted in accordance with the Contract Documents.

D. Coordinate all work with the Engineer. Comply with the Contract Documents for work outage requests related to City's existing facilities.

3.03 SEWER BYPASSING

A. Where Contractor's work on constructing the project pipeline requires sanitary sewers to be removed temporarily from operation, sewer bypassing shall be accomplished by pumping or diverting the upstream flow around the Contractor's work in accordance with this Section.

B. Unless otherwise specified, sewer flow shall be bypassed around the work whenever the Contractor's equipment is operating in the sewer, or when work related to the sewer provides an obstruction or otherwise restricts flow and causes the depth of flow as measured at the inlet pipe to the upstream manhole adjacent to the Contractor's work to exceed half of the diameter of the pipe.

C. The use of storm sewers for purposes of diverting or pumping sanitary sewer flows shall not be permitted.

3.04 DAMAGES

The Contractor shall pay for all fines and repair without cost to the City any damage that may result from the Contractor's negligence, inadequate or improper installation, maintenance and operation of

bypassing and a dewatering system including mechanical or electrical failures and sewage flow into the trench. Contractor shall also be responsible for all costs associated with reporting the spill, performing the cleanup after a spill, fines, criminal prosecution, and work stoppage.

3.05 MONITORING

A. Provide monitoring of flow levels and pump operation to assure continued operation of bypass pumping.

B. Monitoring by Contractor's personnel shall take place at all times that bypass pumps are in operation (including 24-hour, around-the-clock operation if required during an emergency). An audible alarm system shall be installed to notify workers when the pumps fail to operate.

C. In the event the pumps fail, workers shall immediately evacuate trenches until the bypass pumping system is operational.

3.06 ODOR MITIGATION

A. In accordance with the Contract Documents, submit an odor mitigation plan.

B. When working inside manholes and sewer lines, exercise caution and comply with CAL/OSHA requirements when working in the presence of hydrogen sulfide. Contractor is warned that the existing sewers and the structures associated with the project may contain high levels of hydrogen sulfide gas, a natural gaseous by-product of sanitary sewage. Take all the necessary precautions, such as portable hydrogen sulfide detectors per CAL/OSHA requirements, to ensure that the environment is safe for those at the work site.

C. No entry to any of the existing facilities will be permitted until appropriate work crews are certified for confined space entry and the Odor/Noise Mitigation Plan and Health and Safety Plan for this project is reviewed.

D. The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the work.

E. To minimize the dispersal of sewer odors above ground the Contractor shall:

F. Seal all open sanitary manholes or access openings in the sewers when his operations have been suspended for a period of two hours or more.

G. During construction operations when open manholes or access openings cannot be sealed, vent and filter hydrogen sulfide gases upstream of the openings in the sewer.

H. Odor related to construction around the work shall be controlled through the use of filters, chemical addition to the wastewater, and masking agents as needed to limit the levels of hydrogen sulfide gas to 5 ppm (by volume) 25 feet from the source or at the outside wall of any habitable structure.

I. Payment for compliance with this Section shall be deemed included in the various other items of work, and no additional compensation will be allowed, therefore.

END OF SECTION

SECTION 02200
EXCAVATION AND BACKFILL

PART 1 GENERAL

1.01 SUMMARY

A. Furnish all labor, materials, equipment, facilities, transportation, and services to complete all excavation, backfill, fill, grading and related work as shown on the plans and/or specified herein.

B. Section Includes:
1. Removal of excess and unsuitable material from the site.
2. Excavation of material to allow for the placement of underground structures, including any necessary shoring and bracing.
3. Backfilling of culverts, sewer pipes, and structures.
4. Preparation of subgrade for concrete work.
5. Furnish and compact artificial fill.
6. Finish grading.
7. Shoring of excavations

C. Related Sections:
1. Caltrans Standard Specifications (2023 edition)
2. Section 02100 - Clearing and Demolition
3. Section 02722 - Aggregate Base

1.02 REFERENCES

A. Caltrans Standard specification (2023 edition)

B. Associated General Contractors (AGC):
1. Manual of Accident Prevention in Construction (Section 9).

C. American Society for Testing and Materials (ASTM):
1. C 131 - Test Method for Resistance to Degradation of Small-Size Course Aggregate by Abrasion and Impact in the Los Angeles Machine.
2. C 136 - Test Method for Sieve Analysis of Fine and Course Aggregates.
3. D 422 - Standard Test Method for Particle - Size Analysis of Soils.
4. D 1556 - Test Method for Density and Unit Weight of Soil in Place by the Sand Cone Method.
5. D 1557 - Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft^3 (2,700 kN-m/m).
6. D 2419 - Test Method for Sand Equivalent Value of Soils and Fine Aggregate.
7. D 2922 - Test Methods for Density of Soil and Soil-Aggregate in Place by Nuclear Methods (Shallow Depth).

8. D 6938 - Test Method for Water Content of Soil and Rock in Place by Nuclear Methods (Shallow Depth).
9. D 4253 - Standard Test Methods for Maximum Index Density and Unit Weight of Soils Using a Vibratory Table
10. D 4318 - Test Method for Liquid Limit, Plastic Limit, and Plasticity Index of Soils.
11. D 6938 Standard Test Methods for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)

D. Division of Industrial Safety (DIS).

E. Occupational Safety and Health Act (OSHA).

1.03 DEFINITIONS

A. Excavation: Work shall consist of excavation, storage, and any necessary removal of native soil material for structures, foundations, and pavement. Excavation may include the removal and disposal of existing on-site soil and bedrock (including cobbles and boulders), pavement, or concrete slab materials.

B. Fill: Material placed to backfill excavations.

C. On-Site Material: Material obtained from the project site.

D. In-Place Density of Compacted Backfill: Is the in-place density determined in accordance with ASTM D 1556, or with ASTM D 2922 and ASTM D 6938.

E. Maximum Dry Density: Is maximum dry density obtained in the laboratory when tested in accordance with ASTM D 1557 and ASTM D4253.

F. Optimum Moisture Content: Is the water content at the maximum dry density when tested in accordance with ASTM D 1557.

1.04 SUBMITTALS

A. Product Data: Submit material source, gradation, Plasticity Index, and other test data as required for all materials, including imported and on-site materials to be used as backfill.

B. Dewatering Plan: Submit dewatering plan including arrangement, location and depths of system components, size, type, and required permits.

C. Submit mix designs for controlled low- strength materials. Include test data before excavation where low-strength material is to be used

PART 2 PRODUCTS

2.01 MATERIALS

A. General:
1. All fill material shall be free from sod, large lumps, boulders, rocks, roots, brush, or other objectionable material (as determined by the Engineer), and free of hazardous materials as defined by Section 25117 of the State Health and Safety Code.

B. Class 2 Aggregate Base (AB) shall conform to Section 02722 of these specifications.

C. CDF shall conform to specification Section 03300.

D. Bedding Material:
1. Where shown on the plans bedding material shall be Class 1, Type a Permeable Material meeting the requirements identified herein.
2. The percentage composition by weight of Class 1, Type A permeable material in place must comply with the gradation requirements shown in the following table:

Sieve Size	% Passing Sieve
¾"	100
½"	95-100
3/8"	70-100
No. 4	0-55
No. 8	0-10
No. 200	0-3

E. Native Backfill Material:
1. Approved native backfill material shall only be used in unimproved areas in locations shown on the trench details on the Plans.
2. Native backfill material shall not be placed prior to receiving approval from the City.
3. Native material used for backfill should consist of soil and bedrock materials derived from on-site excavations meeting the project specifications and shall be used for backfill wherever the Plans do not specifically indicate a defined fill material.
4. Native backfill material shall consist of clean soils with an organic content of 3 percent or less.
5. Native backfill material shall have a Plasticity Index of 30 or less.
6. Native backfill material shall not contain rocks or lumps larger than 6 inches in greatest dimension, with no more than 15 percent larger than 2½ inches
7. All placed approved native backfill material shall have a soil moisture content of at least 2 percent over optimum moisture content as determined by ASTM Test Method D1557.
8. All placed fill shall meet the minimum compaction requirement shown on the project Plans and in these specifications.
9. All placed fill shall be firm and unyielding under the weight of the compaction equipment or other construction equipment regardless of moisture content and degree of compaction. Any fill that is pumping and/or rutting should be removed as directed by the engineer.
10. Contractor shall proof roll the fill as directed by the City at no additional cost to the City.

F. Drain Rock:
1. Drain rock shall match the requirements of the Crushed Rock Material as specified herein.

G. Crushed Rock:
1. Crushed rock shall be clean and durable meeting the requirements of ASTM No. 57 stone with the following gradation:

Sieve Size	% Passing Sieve

1-1/2”	100
1”	95-100
½”	25-60
No. 4	0-10
No. 8	0-5

H. Geotextiles, Filter Fabrics, and Geogrid:

1. Stabilization Fabric:
   a. Mirafi 140N
   b. Approved Equal

I. Structure Backfill:

1. Structure backfill must be free of organic or other unsatisfactory material. The impervious backfill material must be an authorized earthy material. The sand equivalent requirement does not apply.
2. Structure backfill compacted to a relative compaction of at least 95 percent and material placed behind retaining walls must have a sand equivalent value of at least 20 and comply with the gradation requirements shown in the following table:

Sieve size	**Percentage passing**
3”	100
No.4	35 – 100
No.30	20-100

3. Except for material placed behind retaining walls, structure backfill compacted to a relative compaction of at least 90 percent must comply with the gradation requirements shown in the following table:

Sieve size	**Percentage passing**
3”	100

4. Material from structure excavation not suitable for use as structure backfill may be used to replace imported borrow or other excavated material.

J. Slurry Cement Backfill

Slurry cement backfill must be a fluid workable mixture of aggregate, cement, and water. The aggregate must be one of the following:

a. Commercial-quality concrete sandIf authorized, controlled low-strength material may be used as structure backfill for pipe culverts unless the culvert has a diameter or span of more than 20 feet.

b. Excavated or imported material in any combination, free of organic material and other deleterious substances and complying with the gradation requirements shown in the following table:

Sieve size	**Percentage passing**
1-1/2”	100
1”	80 – 100
3/4”	60 -100

3/8”	50 - 100
No. 4	40 - 80
No. 100	10 - 40

The cement must comply with section Caltrans Standard Specification section 90-1.02 except testing is not required.

The water must be free from oils, salts, and other impurities that adversely affect the backfill. Proportion slurry cement backfill by weight or volume. The backfill must contain at least 188 pounds of cement per cubic yard and enough water to produce a fluid workable mix that flows and can be pumped without segregation during placement.

Mix materials thoroughly by machine. Use a pugmill, rotary drum, or other authorized mixer. Mix until cement and water are thoroughly dispersed.

You may use slurry cement backfill as structure backfill only for pipe culverts.to traffic.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verification of Conditions:
   1. The Contractor shall, prior to submitting his bid, visit all sites and become familiar with actual site and soil conditions. No allowance will be made by the City for any unfavorable conditions or events which should have been foreseen from a thorough examination of the contract documents, the site, and working conditions.

B. Verification of Prepared Subgrade prior to Constructing Improvements:
   1. The Contractor shall request the City to visually inspect and provide written confirmation of the suitability of prepared subgrade soils prior to the continuation of work.
      a. Work completed without such confirmation is at the Contractor’s risk and subject to removal at the direction of the City.
   2. Contractor shall protect excavation prior to and during the inspection.

C. Retaining walls and structures shall not be backfilled for at least 10 days after the last concrete and until concrete has attained 3000 psi minimum per Section 03100 - Concrete Forming and Accessories section 3.08E.

3.02 OFF-HAUL TESTING

A. The Contractor shall remove and dispose of all excess excavated material to a suitable site. The proper and legal disposal shall be the responsibility of the Contractor.

B. Contractor shall include export and disposal of material in the cost of work to be performed. The Contractor shall include environmental analytical testing in the cost of the work to be performed.

C. Contractor shall maintain proper documentation, in accordance with applicable laws, to provide evidence of proper disposal of off-hauled materials.

3.03 PROTECTION

A. If existing live utilities are encountered, they are to be protected from damage and the

proper authorities and affected utility companies notified.

B. Service shall not be interrupted except as directed or accepted; allow sufficient time for utility companies to arrange for continuation of services.

C. Record unmarked utility locations on record drawings and notify the Engineer.

D. Open excavations, trenches, and the like are to be protected with fences, barricades, covers, and railings as required.

E. Every precaution shall be taken to prevent spillage when hauling on or adjacent to any public street or highway. Any spillage shall be promptly removed.

F. Except where trees are shown to be removed, trees shall be protected from injury during construction operations. No tree roots over 2 inches in diameter shall be cut without written permission of the Engineer. Trees shall be supported during excavation by means previously reviewed by the Engineer and no construction work shall occur within the tree dripline unless authorized by the Engineer. See the tree preservation notes on the Plans.

3.04 SAFETY

A. The Contractor is solely responsible for excavation safety, including support to all adjacent improvements at all times.

B. Excavation shall be in accordance with the State of California Construction Safety Orders. The Contractor shall, in accordance with Section 6705 of the California Labor Code, submit a detailed drawing to the Engineer before excavation begins, showing the design of shoring, bracing, sloping or other provisions to be made for worker protection from the hazard of caving ground during any excavation of five or more feet in depth

C. If the Contractor presents a drawing which varies from shoring system standards established by the Construction Safety Orders, the drawing shall be prepared and signed by a registered civil or structural engineer licensed by the State of California. Any Engineer's review of said drawings will in no way relieve the Contractor from responsibility and liability for the adequacy of shoring systems and excavations.

3.05 EXCAVATION SUPPORT AND PORTECTION

A. Shoring and support of the excavation shall be in conformance with specification section 02350.

3.06 CONTROL OF WATER

A. Water may be encountered within the Work at any time, and the presence of such water is likely to be continuous. Contractor shall control site water so that work may be done in the dry in a safe working environment according to relevant provisions of the Safety Orders.

B. Prior to the preparation of bedding or subgrade, the excavation shall be thoroughly dewatered by the use of sump pumps and dewatering equipment as necessary to safely convey water away from structural excavations to positive draining outlets.

C. All site water discharge shall be into a City’s sewer system or at an approved facility.

D. The Contractor shall apply for and obtain a **discharge permit from the Silicon Valley Clean Water Treatment Plant** prior to discharging any water into the sanitary sewer system. Contractor shall adhere to all permit conditions including testing, filtering, discharge rates, fees, etc.

E. The Contractor shall notify the City two working days prior to discharging into the sewer system. The notice shall include the proposed discharge location, flow rate, and duration.

F. Contractor shall make adequate provisions for the removal of sediment from groundwater prior to discharge.

G. The Contractor shall prevent surface water (e.g. rainwater) and subsurface or groundwater from flowing into excavations and from flooding the project site and surrounding areas.

H. The Contractor shall remove all water which accumulates in all excavations during the progress of work so that all work can be done in the dry. Excavated areas shall be kept free from water while structures are constructed, while concrete is setting and until backfill has been placed to a sufficient height to anchor the work against possible floatation.

I. Contractor shall implement sufficient measures to limit the inflow of groundwater so that the maximum allowed dewatering pumping rate of 50 gpm is sufficient to keep excavated areas free from water.

J. Provide sufficient pumping capacity to maintain the groundwater level at least two feet below the lowest level of excavation or backfill at all times.

K. Provide sufficient pumping capacity to maintain the groundwater at or below the level assumed in the shoring design.

L. Sufficient pumping equipment for immediate use shall be on the project site at all times, including standby pumps for use in case other pumps become inoperable. Water shall be disposed of so as to cause no injury to public or private property, or to be a menace to the public health.

M. Dewatering devices shall be adequately filtered to prevent the removal of fines from the soil.

N. The Contractor shall be responsible for any damage to foundations or other parts of existing structures or of the new work, caused by the failure of any part of the Contractor's protective works.

O. Depending upon groundwater conditions and the degree of project completion, underground structures are susceptible to floatation prior to backfill and anchorage. Contractor shall prevent the floatation or movement of structures during construction.

P. As recommended by the Engineer or City, the Contractor shall be prepared to backfill the trench with drain rock (3/4" crushed rock) encapsulated with filter fabric to control groundwater. All drain rock shall be compacted as specified herein.

Q. After dewatering is no longer necessary, all dewatering pumps and appurtenances shall

be removed by the Contractor.

R. All costs associated with dewatering shall be included within the bid items for work that require dewatering. No additional compensation will be allowed.

3.07 PREPARATION OF SUBGRADE

A. Strip surface vegetation, weeds, and at least the top six inches from areas underlying surface structures and areas to be paved. Excavate soft, wet, or otherwise unsuitable base grade to firm, unyielding soil.

B. Where mud or other soft or unstable material is encountered as determined by the Engineer in the field, remove such material to a minimum of 12 inches. The bottom of the over-excavation should then be completely covered with geotextile and backfilled with drain rock. The stabilization fabric should be wrapped around the backfill to completely encapsulate the drain rock.

3.08 EXCAVATION

A. Contractor shall notify the Engineer of any site condition not reflected on the plans or in these specifications, such as conflict in grade, bad soil, or unexpected utility lines. The Engineer will observe the excavation bottom prior to placing permeable material and may recommend further excavation if soils are not suitable.

B. Strip surface vegetation, weeds, and at least the top six inches from areas underlying surface structures and areas to be paved. Excavate soft, wet, or otherwise unsuitable base grade to firm, unyielding soil.

C. Where mud or other soft or unstable material is encountered as determined by the Engineer in the field, remove such material a minimum of 12 inches. The bottom of the over-excavation should then be completely covered with geotextile and backfilled with drain rock/bedding material. The geotextile fabric should be wrapped around the backfill to completely encapsulate the drain rock as shown on the plans.

D. Excavation to the lines, grades, and dimensions shown on the plans. Excavations shall be made to such width outside the lines of the structure to be constructed as may be required for proper working methods, the erection of forms, and the protection of work. Any resulting over-excavation extending beyond the lines, grades, and dimensions shown on the plans shall be backfilled with material complying with these specifications at no additional cost to the District.

E. Care shall be taken to preserve foundation surfaces in an undisturbed condition, and excavation at or near property lines shall be performed in a manner that minimizes disturbances to adjacent property. Any foundation surfaces disturbed without the Engineer's authorization shall be replaced at the Contractor's expense with material approved by the Engineer so that by test, the bearing capacity of the replacement material is equal to or better than the undisturbed foundation material.

F. Existing structures and completed work shall be adequately braced and cared for so that no damage will result.

G. Excavated material unsuitable for backfill or in excess of the amount required for

backfill shall be disposed of by the Contractor off the site at his expense, and in accordance with "Greenbook", Subsection 300- 2.6.

3.10 BACKFILLING

A. All debris, form work, etc. shall be removed from the excavation prior to backfilling.

B. Pipe and conduits shall be supported during the placement and compaction of bedding and backfill.

C. Backfill with crushed rock encapsulated in geotextile fabric in areas where groundwater is encountered as recommended by the Engineer or City.

D. Contractor shall construct backwater cutoff plugs as indicated on the plans and as directed by the Engineer or City.

E. Fill materials shall be spread in level layers of appropriate thickness for the compaction equipment to be used and moisture content of the material and compacted as specified. Layers shall not exceed 8 inches in thickness after compaction.

F. Granular backfill shall be tamped mechanically or manually along the sides of pipes and structures to minimize voids in the material between the pipe or structure and excavation walls. No flooding or jetting shall be used to compact bedding or backfill materials.

G. Where the backfill material moisture content is too low to permit the specified degree of compaction, water shall be added before or during spreading until the proper moisture content is achieved. Jetting will not be permitted for compaction.

H. Where the backfill material moisture content is too high to permit the specified degree of compaction, the material shall be dried until the moisture content is satisfactory.

I. No fill shall be placed during conditions that will alter the moisture content of the fill material sufficiently to make adequate compaction impossible. After placing operations have been stopped due to adverse conditions, no additional fill material shall be placed until the last layer compacted has been checked and found to be compacted to the specified densities.

J. All ground surfaces shall be finished to uniform grades and slopes as indicated on the plans so that the ground drains properly and is free from depressions which may cause areas of standing water. Drainage shall be away from foundations and slabs. Clods are to be broken up and the surface of the ground shall be uniformly pulverized and graded

K. Crushed rock should be consolidated in place with light vibratory equipment. Rubber-tire equipment should not be allowed to operate on the exposed subgrade; the crushed rock should be stockpiled and pushed out over the stabilization fabric.

L. Excavations should be backfilled simultaneously with shoring removal to ensure that all voids are filled.

M. Placement of CDF as Structural Backfill: Where indicated on the Drawings, CDF shall be placed around structures as backfill evenly so that uneven loading of the structure does not occur as a result of the CDF placement. A minimum of two lifts shall be used in placing the CDF around structures. Where structures have pipes entering/exiting the structure, CDF shall be placed in accordance with placement of CDF for pipe installation locations.

N. Placement of CDF as Pipe Backfill: Where CDF is used as trench backfill within the pipe zone, it shall be placed into the trench around the pipe so that the CDF is placed evenly on both sides of the pipe to prevent uneven loading of the pipe. CDF shall not be placed directly onto the pipe. The maximum depth of the first lift of CDF shall not allow the pipe to move or float. Subsequent lifts of CDF shall be placed so that the pipe does not shift or float. CDF placed in trenches with steep slopes shall be placed in lifts to prevent flotation of the pipe, and the Contractor shall install approved anchor blocks as needed to secure the pipe in place during placement of the CDF. Use of anchor blocks or deadman concrete collars may be used by Contractor with written approval by the City.

O. Tests: Tests are to be made on each layer of fill to assure adequate compaction throughout the entire area. If the field densities are not satisfactory, the Contractor will be required to recompact each layer and/or work area as necessary to achieve the specified densities. Compaction testing will be performed in accordance with ASTM D1556, D1557, D2922, and D6938. Compaction testing will be performed and paid for by the City. See Section 02318-3.03 for additional compaction testing requirements.

3.11 STRUCTURE BACKFILL

Place structure backfill in uniform layers. Bring backfill up uniformly on all sides of structures or drainage facilities. Backfill layer thickness must not exceed 0.67 foot before compacting. If you perform compaction by ponding and jetting, the thickness of the backfill layer must not exceed 4 feet.

Do not use compaction equipment or methods that may cause excessive displacement or damage structures.

Do not place structure backfill until footings or other parts of structures or drainage facilities are authorized. Do not place backfill against the back of abutments, retaining walls, or outside walls of CIP concrete structures until the concrete has attained a compressive strength of at least 2,500 psi or the concrete has been in place for 28 days.

Place backfill inside bridge wingwalls and abutments before railings on wingwalls are constructed.

Compaction by ponding and jetting may be authorized under the following conditions:

1. Backfill material is self-draining when compacted
2. Foundation materials will not soften or be damaged by water
3. Structures will not be damaged by hydrostatic pressure

Ponding and jetting of the upper 4 feet below finished grade is not allowed. Perform work without damaging the structure or embankment and such that water is not collected and confined. Supplement ponding and jetting with vibratory or other compaction equipment.

Compact structure backfill to a relative compaction of at least 95 percent except you may compact structure backfill to a relative compaction of at least 90 percent at the following locations:

1. Overside drains
2. Footings for slope protection, slope paving, and aprons
3. Headwalls, endwalls, and culvert wingwalls
4. Retaining walls, except for portions under any surfacing
5. Inlets in median areas or in traffic interchange loops
6. Footings and pumping plants not beneath surfacing

At locations where ordered, place a compacted impervious backfill material for:

1. Outer 2-foot portion of structure backfill adjacent to inlets and outlets for pipes and culverts
2. Structure backfill placed within 2 feet of finished grade at abutments, abutment wingwalls, retaining walls, and other portions of structures

If imported borrow is shown on the Bid Form, you may use imported borrow as structure backfill if it complies with the specifications for structure backfill.

3.12 SLURRY CEMENT BACKFILL

Place slurry cement backfill within 1 hour of mixing. Place it in a uniform manner that prevents (1) voids or segregation of the backfill and (2) floating or shifting of the culverts. Remove foreign material that falls into trenches.

Do not backfill over or place material over slurry cement backfill until at least 4 hours after placement. When concrete sand is used as aggregate and the in-place material is free draining, you may start backfilling as soon as the surface water is gone.

If slurry cement backfill is used for structure backfill, you may reduce the excavation width such that the clear distance between the outside of the pipe and the side of the excavation on each side of the pipe is at least (1) 6 inches for pipes 42 inches or less in diameter or span and (2) 1 foot for pipes over 42 inches in diameter or span.

Place slurry cement backfill only for that portion of structure backfill (1) below the original ground or grading plane or (2) below the top of the embankment placed before excavating for the culvert pipe. Compact earth plugs at each end of the pipe before placing the backfill to completely contain slurry in the pipe trench.

3.13 COMPACTION

A. Unless otherwise indicated on the drawings, fill materials shall be compacted to relative compactions based on the ASTM D1557 maximum dry density as follows:

Pipe or Conduit Bedding	90%
Trench Backfill under Paved Areas	95%
Backfill under structures	95%
Trench Backfill under Non-Paved Areas	90%
All Other Backfill	90%

B. Relative Compaction (95%) - Compact earthwork to a relative compaction of at least 95 percent for at least a depth of:

1. 0.5 foot below the grading plane for the width between the outer edges of shoulders
2. 2.5 feet below the finished grade for the width of the traveled way plus 3 feet on each side

Except for the outer 5 feet measured horizontally from the embankment side slope, compact the full width and depth of the embankment within 150 feet of each bridge abutment to at least 95 percent relative compaction. The 150-foot limit is measured horizontally from the bridge abutment and either parallel or concentric with the roadway centerline.

Compact earthwork to a relative compaction of at least 95 percent for embankments under retaining wall footings without pile foundations:

- For the full depth of the embankment
- Within the limits established by inclined planes sloping 1.5:1 (horizontal: vertical) out and down from lines 1 foot outside the bottom edges of the footing

C. Relative Compaction (90%) - Compact earthwork to a relative compaction of at least 90 percent in embankment areas not required to be compacted to 95 percent.

3.14 GRADING

A. Contractor shall grade the site as required to match improvements to existing contours.

B. All ground surfaces shall be finished to uniform grades and slopes as indicated on the plans so that the ground drains properly and is free from depressions which may cause areas of standing water. Drainage shall be away from foundations and slabs. Clods are to be broken up and the surface of the ground shall be uniformly pulverized and graded.

C. At the completion of grading work, the site shall be left in a clean and finished condition.

*****END OF SECTION*****

SECTION 02271

RIPRAP (Rock Slope Protection)

PART 1 - GENERAL

1.01 SECTION INCLUDES

A. The work of this section consists of furnishing and placing stone riprap for embankment protection.

1.02 RELATED SECTIONS

A. Section 02200 – Excavation and Backfill

B. Caltrans Standard Specification (2023 edition)

PART 2 - PRODUCTS

2.01 ROCK

A. For method A and B placement and the class of RSP described in Drawings, comply with the rock gradation shown in the table for Caltrans Standard Specification (2023) Section 72-2.

C. Rock material requirements must comply with the requirements as shown in Caltrans Standard Specification 72-2.

D. Select rock such that the shapes provide a stable structure for the required section. If the slope is steeper than 2:1, do not use rounded boulders and cobbles. Angular shaped rock may be used on any planned slope. Flat or needle-shaped rock must not be used unless the individual rock thickness is greater than 0.33 times the length.

2.02 MATERIALS

A. Handlaid Riprap
   1. Approved angular quarry stones, sound and hard, of durability to withstand exposure to water and weathering.
   2. Stones shall be as sized on drawings.

PART 3 - EXECUTION

3.01 General

Local surface irregularities of the RSP must not vary from the planned slope by more than 1 foot as measured at right angles to the slope.

At the completion of slope protection work, fill voids in the footing trench with excavated material. Compaction is not required.

3.02 Placement Method A

Do not place rocks by dumping.

Place larger rocks in the footing trench.

Place rocks on the slope such that their longitudinal axis is normal to the face of the embankment.

Place foundation course rocks such that they are in contact with the ground surface.

For rocks above the foundation course, place them such that each rock has a 3-point bearing on underlying rocks; do not bear them on smaller rocks which may be used for chinking voids

3.03 Placement Method B

Rocks may be placed by dumping and may be spread in layers by bulldozers or other suitable equipment. Place rocks such that:

1. There is a minimum of voids
2. Larger rocks are in the toe course and on the outside surface of the slope protection

END OF SECTION

SECTION 02350

EXCAVATION SUPPORT SHORING AND BRACING

PART 1 - GENERAL

1.01 SUMMARY

A. This Section includes design and construction parameters for the Contractor-designed temporary shoring as necessary for trenches or manhole structures.

B. Shoring refers to providing all components of the excavation support system, including, but not limited to, bracing, steel soldier piles or sheet piles, struts, wales, or any other support including internal bracing, where applicable. Use other methods of support only when approved by the Engineer. Shoring shall be designed, provided, maintained, and where applicable, removed by the Contractor, in accordance with this Section and the Contract Documents.

C. As required by Section 6705 of the California Labor Code and in addition thereto, whenever work under the contract involves the excavation of any trench or trenches five (5) feet or more in depth, including temporary construction pits and manhole excavations, the Contractor shall submit to the Engineer a detailed plan showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground during the excavation of such trench or trenches. If such plans vary from the shoring system standards established by the Construction Safety Orders of the Division of Industrial Safety, in Title 8, Subchapter 4, Article 6, California Code of Regulations, the plans shall be prepared and signed by a registered civil or structural engineer employed by the Contractor.

D. Shoring system plans for trenches or manhole structures in excess of five (5) feet or more in depth shall be prepared and signed by a civil or structural engineer, registered in California and employed by the Contractor. All costs therefore shall be included in the bid price named in the contract for completion of the work as set forth in the Contract Documents.

E. Nothing in this Section shall be deemed to allow the use of a shoring, sloping or other protective system less effective than that required by the Construction Safety Orders. Nothing in this Section shall be construed to impose tort liability on the City, Design Consultant, or any of their officers, agents, representatives, or employees.

F. Horizontal strutting below the barrel of a pipe and the use of pipe as support are not acceptable.

G. The sheeting, shoring, and bracing system shall be designed and constructed to meet all of the following minimum performance requirements:

1. Protect personnel that enter excavations.
2. Assure worker safety and optimal conditions for pipe installation.
3. Protect adjacent existing utilities, pipelines, pavements, and structures.
4. Installation of support system shall not cause settlement or heave of the ground surface nor produce construction vibrations that could damage adjacent utilities or structures.
5. Prevent lateral movement of excavation walls and associated loss of adjacent ground support and adjacent ground lateral shifting/settlement.
6. Prevent heaving of the excavation bottom.
7. When removal is permitted, allow for the removal of support system in a manner that does not damage the pipeline, cause settlement or heave of the

ground surface, nor produce construction vibrations that cause damage to adjacent utilities or structures.

H. Related Sections:
   1. SECTION 02200, EXCAVATION AND BACKFILL
   2. SECTION 02701, PRECAST CONCRETE STRUCTURES
   3. SECTION 15050, GENERAL PIPING

1.02 REFERENCE

A. City of Belmont: Standard Specifications and Details (latest edition).
B. CAL/OSHA and OSHA
C. Title 8, Construction Safety Orders, Section 15041.1, Requirements for Protective Systems, Appendix A

1.03 SYSTEM DESCRIPTION

A. Design Requirements:
   1. Design and construct the shoring system in accordance with all applicable codes, and in accordance with the specific requirements described herein.
   2. At all times furnish, install, and maintain sufficient shoring and bracing in trenches and pits to insure safety of the workmen and to protect and facilitate the work. System shall be designed and constructed in accordance with the Contract Documents. The Contractor shall:
      a. Design each member or support element to support the maximum lateral earth pressures, hydrostatic pressures, lateral loads from traffic, construction equipment, and spoils loads that can occur during construction with appropriate safety factors.
      b. Design the support system to prevent raveling, running, and flowing of excavation walls and associated loss of adjacent ground and adjacent ground surface settlement or existing trench material at utility crossings. Design the support system to retain non-cohesive granular soils subject to raveling, flowing, and/or running upon vibration from construction equipment including compaction of backfill.
      c. Prevent heave and/or piping (boiling) of the excavation bottom.
      d. Design excavation support systems in accordance with all CAL/OSHA, and OSHA, requirements.
      e. Take into account all surcharge loadings. Surcharge loadings can be due to such items as material or soil stockpiles, sloping ground adjacent to shoring, and adjacent building foundations. Contractor shall assure that his assumed conditions and loadings are not exceeded in the field during construction.
      f. Design shoring to withstand any construction loading.
      g. The design of shoring shall conform to accepted engineering practice in this field. The Engineer's approval of the Contractor's plans and methods of construction does not relieve the Contractor of his responsibility for the adequacy of this support.

B. Performance Criteria:

1. The Contractor shall be solely responsible for, and bear the sole burden of cost for, any and all damages resulting from improper shoring or failure to shore.

2. The safety of workmen, the protection of adjacent structures, property and utilities, and the installation of adequate supports for all excavations shall be the sole responsibility of the Contractor.

3. The design, planning, installation, (and removal, if required) of all shoring shall be accomplished in such a manner as to maintain stability of the required excavation and to prevent movement of soil and rock that may cause damage to adjacent shoring systems, structures and utilities, damage or delay the work, or endanger life and health.

1.04 SUBMITTALS

A. Shop Drawings:

1. Submit plans for shoring to the Engineer for review at least ten (10) working days prior to commencement of work. No excavations shall be started until the Engineer has reviewed the Contractor's shoring design. The shoring and bracing system plans shall be in accordance with the Contract Documents and to permit the Engineer to review the overall completeness and effectiveness of the proposed system. Review of the shoring and bracing plans by the Engineer in no way relieves the Contractor of complete responsibility for providing effective and safe shoring and bracing of the construction area and/or pipeline under construction. Shoring and bracing submittals shall demonstrate coordination with the dewatering method and submittal.
2. Include:
   a. Design assumptions, analyses, calculations, and information on Contractor's proposed method of installation (and removal, if required) of all shoring. The design and calculations shall be performed by, sealed by and signed by a professional engineer registered in the State of California and experienced in the design of earth retaining structures.
   b. The maximum design load to be carried by the various members of the support system.
   c. Detailed excavation support drawings, showing all pertinent dimensions, spacings, and relationships among the components of the shoring, as well as construction sequence and scheduling.
   d. The method of bracing.
   e. The full excavation depth and depth(s) below the main excavation to which the support system will be installed.
   f. Detailed sequence of construction and bracing removal and backfilling.
   g. Detailed drawings and descriptions of the method to be used by the Contractor to monitor shoring and adjacent ground/structure movements.

h. Demonstrate coordination with interior (sump pumps) and exterior (dewatering wells) dewatering methods and dewatering submittal.

i. Calculations demonstrating that shoring has been designed for hydrostatic pressures if external dewatering wells are not planned to fully draw down the groundwater level behind the shoring to a minimum of 3 feet below the excavation bottom.

B. Quality Control Submittals:
Submit proof of experience and qualifications required in this Section.

C. Permits:
Contractor shall have up to date CAL/OSHA annual/construction activity permit for Trench and Excavation construction.

1.05 QUALITY ASSURANCE

A. Work of this Section shall be performed by an individual or firm of established reputation (or, if newly organized, whose personnel have previously established a reputation in the same field) for at least five (5) years, which is regularly engaged in, and which maintains a regular force of workmen skilled in design, installation and maintenance of shoring.

B. All welding shall be done by skilled welders, welding operators, and tackers who have had adequate experience in the type of materials to be used. Welders shall be qualified under the provisions of ANSI/AWS D1.1 by an independent local approved testing agency not more than six (6) months prior to commencing work; unless having been continuously employed in similar welding jobs since last certification. Machines and electrodes similar to those used in the work shall be used in qualification tests. The Contractor shall furnish all material and bear the expense of qualifying welders.

1.06 PROJECT CONDITIONS

A. Existing Ground and Groundwater Conditions:
Contractor shall refer to reference information included in the Geotechnical Investigation Report regarding the geotechnical conditions at the sites, see Section 02200-1.4.

B. Existing Utilities:
Contract Drawings do not show all utilities. Contractor shall notify the Underground Service Alert (USA) and field-check locations of utilities prior to commencing work. The Contractor shall protect any overhead wires and any sewer, water, gas, electric or other pipelines or conduits uncovered during work from damage caused by the work of this contract.

1. Where utilities are anticipated or encountered unexpectedly, excavate by hand or other excavation methods acceptable to the utility owner.
2. If existing utilities identified interfere with Contractor's proposed method of support, any required modification or relocation shall be performed at no additional cost to the City.

PART 2 - PRODUCTS

To be selected by the Contractor within the guidelines described in this Section.

PART 3 - EXECUTION

3.01 EXAMINATION

In accordance with Title 8, Construction Safety Orders, Section 15041.1, "Requirements for Protective Systems, Appendix A", "Each soil and rock deposit shall be classified by a competent person as Stable Rock, Type A, Type B, or Type C." A 'Competent Person' is one who is capable of identifying existing and predictable hazards in the surroundings, or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them."

A. Verify Surface Conditions and utility locations. Protect utilities and improvements, as called for in the Contract Documents, or required by the Utility Company(s).

B. Verify field measurements indicated on Contract Documents.

C. Verify layout of work before beginning installation.

3.02 EXCAVATION

A. Protect or repair utilities damaged by operations of this Section. Protect adjacent structures and property from damage and disfiguration.

B. Provide necessary groundwater control and drainage for trenches and manhole structures in accordance with the Contract Documents. Contractor should expect that dewatering will be required to allow placement of shoring in soil under "dry" conditions and to prevent flowing, raveling, or running of soil, prior to shoring placement.

C. The methods of constructing the temporary shoring are at the option of the Contractor and subject to review by the Engineer. Excavations shall be made to the lines, grade, and dimensions shown on the Contractor's Shop Drawings. If the excavation is found to be deviating from the true lines and grade, the Contractor shall immediately make the necessary changes in operation to bring the operation back to the correct position. Any excess deviation beyond that specified herein shall be remedied by the Contractor at their own expense.

D. All materials encountered shall be regarded as unclassified and shall be excavated, regardless of the nature thereof, and all excavated material must be removed and disposed of as described in the Contract Documents.

E. Complete excavation in such manner as to provide adequate support at all times to adjacent conduits, structures, or roads and so as to offer no hazard to train, truck or automobile operations. Bracing and shoring shall be substantial and safe, and all work shall be done in full conformity and subject to the inspection of all affected parties. If and when required and to the degree necessary, the Contractor shall provide additional support as may be necessary at no additional cost.

F. Take every precaution to prevent the entry of water, mud and foreign matter into the excavation at all times. It is the intention of these Specifications that all construction work described herein shall be carried out under dry conditions. The Contractor shall promptly and continuously control water inflow and dispose of all water from any source that may accumulate in the excavation. This shall include all necessary pumping, bailing, draining and sedimentation prior to discharge.

G. Any and all excess excavation or over-excavation performed by the Contractor for any purpose or reason, except as may be ordered in writing by the City, shall be at the expense of the Contractor. Any damage done to the work by the Contractor's operations shall be repaired by and at the expense of the Contractor and in a manner approved by the Engineer.

H. Excavate only as much as can safely stand unsupported prior to installing shoring, but in no case more than 4 feet shall be left unsupported at any time. Install lagging immediately after excavation.

END OF SECTION

SECTION 02722
AGGREGATE BASE

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes: Aggregate base.

B. Related Sections:
   1. Section 02200 - Excavation and Backfill.
   2. Section 03300 - Cast in Place Concrete.

1.02 REFERENCES

A. American Concrete Institute (ACI):
   1. C 117 - Test Method for Material Finer than 75-µm (No. 200) Sieve in Mineral Aggregate by Washing.
   2. C 136 - Method for Sieve Analysis of Fine and Coarse Aggregates.
   3. D 4318 - Test Method for Liquid Limit, Plastic Limit, and Plasticity Index of Soils.

B. State of California Department of Transportation.
   1. CALTRANS Standard Specifications(2023 Edition)

1.03 SUBMITTALS

A. Product Data:
   1. Source, gradation, and testing data for aggregate base course.

B. Quality Control:
   1. Test Reports: Reports for tests required by Sections of CALTRANS Standard Specifications.

C. Certificates of Compliance: Certificates as required by Sections of CALTRANS Standard Specifications.

1.04 DELIVERY, STORAGE, AND HANDLING

A. Storage and Protection: Protect from segregation and excessive moisture during delivery, storage, and handling.

PART 2 PRODUCTS

2.01 MATERIALS

A. Aggregate Base Course:
   1. Class 2, 3/4-inch maximum aggregate size free from vegetable matter and other deleterious substances, and of such nature that aggregate can be compacted readily under watering and rolling to form a firm, stable base.
   2. Materials derived from processing demolished or removed asphalt concrete are not acceptable.
   3. Coarse aggregate material retained in Number 4 sieve shall consist of material of which at least 25 percent by weight shall be crushed particles when tested in accordance with California Test 205.
   4. Aggregate shall not be treated with lime, cement, or other chemical material before the Durability Index test is performed.
   5. Aggregate grading and sand equivalent tests shall be performed to represent not more than 500 cubic yards or one day's production of material, whichever is smaller.
   6. Grade within the limits and conform to quality requirements as follows when tested in accordance with California Test 202:

Sieve Sizes (Square Openings)	Percent by Weight Passing Sieve
1 inch	100
3/4 inch	90-100
Number 4	35-55
Number 30	10-30
Number 200	2-9

Quality Requirements		
Description	California Test	Minimum Test Result
Resistance (R Value)	301	78
Sand Equivalent	217	22
Durability Index	229	35

PART 3 EXECUTION

3.01 EXAMINATION

A. Verification of Conditions: Examine conditions upon which the work specified in this Section depends for defects that may influence installation and performance.

B. Do not proceed with installation until unsatisfactory conditions have been corrected.

3.02 PREPARATION

A. Subgrade Preparation: Prepare as specified in Section 02200, "Excavation and Backfill"

3.03 INSTALLATION

A. Furnish, spread, and compact aggregate base course material to the lines, grades, and dimensions indicated on the Drawings.
   1. Spreading: Spread in accordance with sections of CALTRANS Standard Specifications.
   2. Compacting: per Sections 02200.

3.04 FIELD QUALITY CONTROL

A. Tests: Perform field tests per Sections 02200.

*****END OF SECTION*****

SECTION 02735

SANITARY SEWER SYSTEM TESTING AND CLEANING

PART 1 - GENERAL

1.01 SUMMARY

A. Contractor shall perform all pipeline flushing and testing, complete, for sanitary sewerage system in accordance with the Contract Documents.

B. Contractor shall be responsible for obtaining, conveying, and properly disposing of water used in the testing operations.

C. Related Sections - SECTION 15050, GENERAL PIPING

1.02 REFERENCES

A. City of Belmont Standard Specifications and Details (latest edition)

B. American Society for Testing and Materials (ASTM):
ASTM C1244 – Standard Test Method for Concrete Sewer Manholes by the Negative Air Pressure (Vacuum) Test Prior to Backfill.

C. Uni-Bell PVC Pipe Association:
Recommended Practice for Low-Pressure Air Testing of Installed Sewer Pipe, current Uni-B-6 pamphlet.

1.03 CONTRACTOR SUBMITTALS

A. In accordance with the Contract Documents, a testing plan and schedule shall be submitted in writing to the Engineer for approval a minimum of seventy-two (72) hours before testing is to start.

B. Calibration certifications for test gauges used on this project shall be submitted.

PART 2 - PRODUCTS

2.01 MATERIALS REQUIREMENTS

A. Furnish compressors, piping, hosing, valves, test gages, test plugs, joint test apparatus, power, stopwatch, and personnel required for conducting the test.

B. Test gauge shall be 0 to 15 psi with max 0.5 psi increments.

C. Furnish a valved connection for the City to attach a gauge. The Engineer will witness the test.

D. Provide temporary valves, bulkheads, plugs, and other pressure-testing equipment materials subject to the Engineer's review.

E. No materials shall be used which would be injurious to the public, personnel, adjacent improvements, nor the pipeline structure and future function. Air test gauges shall be laboratory-calibrated test gauges and shall have been recalibrated by a certified laboratory, within three (3) months, prior to the leakage test for this project. Any

necessary recalibration for gauges that do not have calibration certificates within three (3) months of leakage testing shall be done at the Contractor's expense.

PART 3 - EXECUTION

3.01 GENERAL

A. All pipelines shall be cleaned by balling, flushing, and/or other approved methods prior to testing. Debris shall be removed from the downstream manhole until all pipelines are clean.

B. All testing operations shall be performed in the presence of the Engineer.

3.02 TESTING OF PIPING

A. General: All gravity sewer pipes and service laterals shall be tested for exfiltration and or infiltration and deflection, as specified. All manholes shall be tested for leakage, as specified. Manholes shall be tested prior to backfill placement, whereas all pipe shall be backfilled prior to testing. All leakage tests shall be completed and approved prior to placing of permanent resurfacing. When leakage or infiltration exceeds the amount allowed by the Contract Documents, the Contractor at its expense, shall locate the leaks, submit a repair procedure(s) for the Engineer's review, and make the necessary repairs or replacements in accordance with the Contract Documents to reduce the leakage or infiltration to the specified limits. Any individually detectable leaks shall be repaired, regardless of the results of the tests. Pipe joint leakage repair solely with cement grout will not be permitted.

B. Leakage Tests

1. The Contractor shall, in the presence of the Engineer, test the water tightness of all main sewer lines in accordance Contract Documents. The test will be made between each adjacent structure.
2. The Contractor shall use the Air Test as described below.
    a. When Tested:
        1) The pressure test shall be made after the backfill is satisfactorily compacted.
3. The test, as noted in item 1 or 2, above, is considered the "official test." However, preliminary testing is strongly recommended and may be conducted by the Contractor at any time prior to the "official test."
    a. AIR TEST REQUIREMENTS: A sudden expulsion of a poorly installed plug during air testing can be dangerous. The Contractor shall meet the following requirements:
        1) The Contractor shall be fully responsible and take all precautions necessary to ensure the safety of their workers.
        2) All plugs shall be adequately braced to support the full load developed.
        3) No workers shall be allowed in the excavation or manhole while the line is under pressure. The Contractor shall make provisions for reading the pressure at the ground surface and for safely releasing the air pressure without entering the manhole or excavation.
        4) Each section of sewer main shall be tested between successive manholes by plugging and bracing all openings in the sewer

lines. If any leaks are found, the air pressure shall be released, the leaks eliminated, and the test procedure started over again.

5) The final leakage test of the sewer main line shall be conducted in the presence of the Engineer.

4. Leakage Test Acceptance

a. Where the actual leakage exceeds the allowable, the Contractor shall determine the cause and remedy it before the pipeline is accepted. For the purpose of this subarticle, a section of pipeline is defined as the length of pipe between successive manholes or special structures.

b. The Contractor shall correct any visible leaks in the pipeline or manholes.

c. The Contractor shall dispose of all water so as not to cause a public nuisance and as acceptable to the Engineer.

d. If any cleanup activities or fines ensue from a failed leakage test, any associates costs incurred by the City will be deducted from payment to the Contractor.

e. In no case shall the Contractor place the newly constructed sewer in operation without the approval of the Engineer.

3.03 TESTING OF MANHOLES

Vacuum Testing: All new manholes shall be vacuum tested prior to backfill in accordance with ASTM C1244 and these Contract Documents. Vacuum test procedures and requirements shall be as follows:

A. After completion of the manhole barrels but prior to backfilling and grade ring installation, all openings in the manholes shall be sealed with plugs and a rubber ring "donut" type plug inserted inside the opening of the cone.

B. A small vacuum pump shall be attached to a hose connected to the plug and 10 inches Hg of vacuum applied.

C. The vacuum is permitted to stabilize for 1 minute; then the test shall begin.

D. The time shall be measured for the vacuum to drop to 9 inches Hg. The manhole must maintain vacuum such that no greater than 1-inch Hg of vacuum is lost during the specified test period.

E. The specified test period is as follows:

Manhole Depth (Feet)	Test Period Based On Manhole Size (seconds)		
	48-inch Diameter	60-inch Diameter	72-inch diameter
Up to 8	20	26	33
10	25	33	41
12	30	39	49

F. The manhole is acceptable if the time for the vacuum reading to drop from 10 inches Hg to 9 inches Hg is greater than the test period. Manholes that fail the test shall be patched as required and retested.

G. A vacuum regulator shall be provided on the vacuum pump such that no greater than 10.5 inches Hg vacuum can be applied to the manhole during the test.

H. All manholes that do not meet the leakage test, or are unsatisfactory from visual inspection, shall be repaired to the satisfaction of the Engineer and retested at no additional cost to the Owner.

3.04 NOT USED

3.05 CLEANING

A. After the sewers have satisfactorily passed the tests required in this Section, and before CCTV inspection required in the Contract Documents, the Contractor, in the presence of the Engineer, shall clean each section of the sewer in the following manner after placing a wire screen with a one-quarter of an inch (1/4") mesh or smaller in the downstream manhole to catch debris and to prevent any debris from being washed into the existing sewer system.

B. Hydraulic Cleaning

1. All hydraulic cleaning equipment shall be truck mounted. Water jet cleaning equipment shall include a water tank, auxiliary engine, pumps, and hydraulically driven hose reel.
2. Cleaning shall remove all grit, sludge, rocks, debris, roots, grease accumulations, and obstructions from the sewer. Sewer cleaning method shall be water jetting.

C. Debris Removal

1. During cleaning operations, the Contractor shall provide a means of catching and removing the dislodged debris conveyed downstream with the sewer flow. The method chosen shall not allow the transport of debris to downstream sewer reaches.
2. All debris removed from the sewer may be stored until the day's end, whereupon the Contractor shall be responsible for its proper disposal off site.

D. Recleaning

If television inspection indicates that the sewer is not adequately cleaned, the Contractor shall remove all equipment or materials from the sewer and reclean the sewer at no additional expense to the City.

3.06 DISCHARGE OF CLEANING WATER

Water used for cleaning the lines may be discharged to the existing sewer system after screening and removal of solids, and as approved by the Engineer.

END OF SECTION

SECTION 02990

ADJUST INCIDENTAL STRUCTURES TO GRADE

PART 1 - GENERAL

1.01 DESCRIPTION

A. This Section includes raising or lowering the grade or changing the slope of the top of existing structures such as but not limited to manholes, culverts and similar structures shown or implied on the Drawings.

B. This section is not applicable to raising or lowering covers on pressurized systems.

PART 2 - PRODUCTS

Not Used.

PART 3 - EXECUTION

3.01 GENERAL

A. Determine condition of existing incidental structure. Pre-existing damage must be brought to the City's attention prior to commencement of any work.

B. Existing structures to be adjusted to grade shall be reconstructed to the required grade. The existing frames, grates, and covers shall be reused unless otherwise indicated.

C. The existing structure shall be dismantled to a sufficient depth to allow reconstruction.

D. Adjustment will take place just prior to placing of surface pavement for adjustments of the frame and cover. Adjustments which require dismantling and reconstruction of the structure shall be accomplished at the time of subgrade preparation. Pavement which is removed for this adjustment shall match existing conditions.

E. Each structure that is adjusted shall be cleaned of accumulated silt, debris, or foreign matter prior to final acceptance of the work.

F. Any items damaged shall be replaced at the Contractor's expense.

3.02 ADJUST INCIDENTAL STRUCTURES TO GRADE

A. Contractor is responsible for notifying the Engineer of any monuments not shown on the plans that will be disturbed during construction.

B. Frames, covers, and grates of existing manholes structures, water valves, monuments, or other facilities shall be adjusted to grade at locations where they are disturbed in accordance with the provisions in Section 15-2.05, "Reconstruction," of the Caltrans Standard Specifications except that no metal riser adjustment rings will be permitted.

E. The covers shall be raised by excavating the frame and cover in a neat line with a dimension not greater than necessary to loosen and adjust the frame with the cover and the concrete collar.

F. Adjustments shall be accomplished by removing the existing concrete collar around the frame, installing concrete adjustment rings (or other as needed), raising the frame and cover, and construction of a new concrete collar. The concrete collar shall be constructed so that the top of the collar is no greater than two inches and no less than one inch below the existing pavement grade. The void between the top of the concrete collar and the finish grade of the pavement around the collar shall be paved to match existing conditions.

****END OF SECTION****

SECTION 03123

CONTROLLED LOW STRENGTH MATERIAL

PART 1 - GENERAL

1.01 SUMMARY

A. The Contractor shall provide Controlled Low Strength Material (CLSM), complete and in place, in accordance with the Contract Documents.

B. CLSM shall consist of a mixture of aggregate, portland cement, mineral admixtures, water, and at the option of the Engineer, chemical accelerating admixtures.

C. CLSM shall be placed where indicated and may be used, if the Engineer approves, for the following purposes:

Normal CLSM with high slump, non-segregating consistency that readily flows and fills voids and difficult to reach places: pipe zone fill, trench zone fill, existing utility support, pipe abandonment, structure backfill, and structure cavity fill.

1.02 REFERENCES

A. American Society for Testing and Materials (ASTM):

1. ASTM C 33 – Concrete Aggregate
2. ASTM C 39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens
3. ASTM C 94 - Standard Specification for Ready Mixed Concrete
4. ASTM C 138 - Standard Test Method for Density (Unit Weight), Yield and Air Content (Gravimetric) of Concrete
5. ASTM C 150 - Standard Specification for Portland Cement
6. ASTM C 260 - Standard Specification for Air-Entraining Admixtures for Concrete.
7. ASTM C 403 - Standard Test Method for Time of Setting of Concrete Mixtures by Penetration Resistance
8. ASTM C 494 - Standard Specification for Chemical Admixtures for Concrete.
9. ASTM C 803 - Standard Test Method for Penetration Resistance of Hardened Concrete, exceeds 650 psi
10. ASTM D 4832 - Standard Test Method for Preparation and Testing of Controlled Low Strength Material (CLSM) Test Cylinders.

B. Caltrans Standard Specifications (2023 edition)

1.03 RELATED SECTIONS

A. SECTION 02500, ASPHALT CONCRETE PAVEMENT

1.04 CONTRACTOR SUBMITTALS

Shop Drawings:

A. CLSM mix designs which show the proportions and gradations of all materials proposed for each type of CLSM indicated. Each mix design shall be accompanied by independent laboratory test results of the indicated properties.

B. If the Contractor proposes to provide lower strength CLSM with aggregates that do not conform to ASTM C 33 - Concrete Aggregate, Shop Drawings shall include a testing program that will be used to control the variability of the aggregates. The testing program shall be acceptable to the Engineer.

1.05 QUALITY ASSURANCE

A. All testing will be done by a testing laboratory selected by the City at the City's expense, except as otherwise indicated.

B. If tests of the CLSM show non-compliance with the specifications, the Contractor shall make changes as may be required to achieve compliance. Performing and paying for subsequent testing to show compliance shall be the Contractor's responsibility.

C. Correlation Tests:

1. The Contractor shall perform a field correlation test for each mix of CLSM used in pipe zone, trench zone, existing utility support or backfill used in amounts greater than 100 cubic yards or when CLSM is required to support traffic or other live loads on the fill less than 7 days after placing CLSM.
2. Field correlation tests shall be performed in a test pit similar in cross section to the Work and at least 10-feet long at a location near the Work. The proposed location shall be acceptable to the Engineer.
3. Laboratory and field tests shall be performed on samples taken from the same CLSM batch mix. All tests shall be performed by a laboratory at the Contractor’s expense.
4. Testing shall be performed once each 2 hours during the first 8 hours, once each 8 hours during the first week, and once each 24 hours until the CLSM mix reaches the maximum design strength.

    a. Compression testing shall be in accordance with ASTM D 4832 - Preparation and Testing of CLSM Test Cylinders.

    b. Setting test shall be in accordance with ASTM C 403 - Time of Setting of Concrete Mixtures by Penetration Resistance.

c. Density tests shall be in accordance with ASTM C 138 - Unit Weight, Yield and Air Content (Gravimetric) of Concrete.

PART 2 - PRODUCTS

2.01 CONTROLLED LOW STRENGTH MATERIAL

A. CLSM shall be a mixture of cement, pozzolan, coarse and fine aggregate, admixtures, and water, mixed in accordance with ASTM C 94 - Ready Mixed Concrete.

B. Composition: The following parameters shall be within the indicated limits and as necessary to produce the indicated compressive strengths.

1. Mix proportions as necessary.

2. Entrained air content shall be between 5 to 10 percent.

3. Water reducing agent content as necessary.

C. Properties:

1. Density shall be between 120 PCF minimum and 145 PCF maximum.

2. Slump shall be 5 to 8 inches.

3. CLSM shall have a compressive strength not less than 100 or greater than 200 psi at 28 days.

2.02 CEMENT

Cement shall be Type II Modified in accordance with ASTM C 150 - Portland Cement. Mineral admixtures shall not be substituted for Portland cement.

2.03 AGGREGATE

Aggregate shall conform to the quality requirements of Caltrans Section 90-1.02C, "Aggregates" and of these Specifications. Aggregate shall be well graded from coarse to fine. Aggregate shall have a Sand Equivalent, as tested by California Test 217, of not less than 40. Aggregate shall be of such size and gradation that, when mixed with Type II modified Portland cement and mineral admixtures, and tested in accordance with ASTM C 39, the compressive strength of a sample will not be less than 100 or greater than 200 pounds per square inch at 28 days. The Contractor shall notify the Engineer, in writing, of the source and grading of the aggregate to be used in the CLSM. If material supplier is not approved by the City for CLSM, Contractor shall make such material available to the Engineer for sampling and testing at least 45 days prior to scheduled placing of the fill. Should the Contractor change his source of supply, he shall notify the Engineer in writing of the new source and grading and make that material available for sampling and testing at least 45 days prior to intended use.

2.04 ADMIXTURES

A. Air entraining admixtures shall be in accordance with ASTM C 260 - Air-Entraining Admixtures for Concrete.

B. Water reducing admixtures (Type E) shall be in accordance with ASTM C 494 - Chemical Admixtures for Concrete.

C. Accelerating admixtures (Type C) shall be in accordance with ASTM C 494.

2.05 WATER

Water shall be potable, clean, free from objectionable quantities of silt, organic matter, alkali, salt, and other impurities.

PART 3 - EXECUTION

3.01 PREPARATION

Subgrade and compacted fill to receive CLSM shall be prepared according to Section 02200 - Earthwork.

3.02 BATCHING, MIXING AND DELIVERY

A. Batching, mixing, and delivery of CLSM shall conform to ASTM C 94. CLSM shall be mixed at a batch plant acceptable to the Engineer and shall be delivered in standard transit mix trucks.

B. The Portland cement content of the CLSM shall be not less than 47 pounds per cubic yard except that, after testing samples of the Contractor's proposed supply, the Engineer may order an increase in cement content, if necessary to meet the compressive strength requirement specified above. Proportioning for CLSM shall conform to the requirements for proportioning concrete mixes except that dividing of aggregate into sizes will not be required.

C. CLSM shall contain a non-calcium chemical accelerating admixture of at least 2% to decrease curing time. The actual mix proportions shall be submitted by the supplier of the CLSM, indicating the minimum and maximum compressive strengths and is subject to review and approval by the Engineer. The Contractor shall submit the CLSM mix to the Engineer.

3.03 PLACEMENT

A. CLSM shall be placed by tailgate discharge, conveyor belts, pumped, or other means acceptable to the Engineer. CLSM shall be directed in place by vibrator, shovel, or rod to fill all crevices and pockets. Avoid over-consolidation which causes separation of aggregate sizes.

B. CLSM shall be continuously placed against fresh material unless otherwise approved by the Engineer. When new material is placed against existing CLSM, the placement area shall be free from all loose and foreign material. The surface of the existing material shall be soaked a minimum of one hour before placement of fresh material, but no standing water shall be allowed when placement begins.

C. Temperature of the CLSM shall be between 50 and 90 degrees F, when placed. CLSM shall not be placed when the air temperature is below 40 degrees F. No CLSM shall be placed against frozen subgrade or other materials having temperature less than 32 degrees F.

3.04 FINISHING

The finish surface shall be smooth and to the grade indicated or directed by the Engineer. Surfaces shall be free from fins, bulges, ridges, offsets, and honeycombing. Finishing by wood float, steel trowel, or similar methods is not required.

3.05 CURING

CLSM shall be allowed to cure for at least 72 hours prior to placing asphalt concrete pavement of other surface material over it.

3.06 PROTECTION

A. CLSM shall be protected from freezing for 72 hours after placement.

B. If the placement of the CLSM is not completed early enough to allow for placement of temporary paving, the Contractor shall provide no-skid steel plates to the span of the trench to accommodate traffic until the temporary pavement can be placed.

C. No fill or loading shall be placed on CLSM until probe penetration resistance, as measured in accordance with ASTM C 803 - Standard Test Method for Penetration Resistance of Hardened Concrete, exceeds 650 psi.

D. CLSM shall be protected from running water, rain, and other damage until the material has been accepted and final fill completed.

****END OF SECTION****

SECTION 03200

CONCRETE REINFORCEMENT

PART 1 - GENERAL

1.01 SUMMARY

A. This Section specifies reinforcing steel for use in reinforced concrete.

B. Related Sections:

Section 03300, CAST-IN-PLACE CONCRETE

1.02 REFERENCES

A. Caltrans Standard Specifications and Details (2023 edition).

B. City of Belmont: Standard Specifications and Details (latest edition).

C. American Society for Testing and Materials (ASTM):

1. ASTM A82 – Standard Specification for Steel Wire, Plain, for Concrete Reinforcement.
2. ASTM A185 –Standard Specification for Steel Welded Wire Reinforcement, Plain, for Concrete.
3. ASTM A615 - Standard Specification for Deformed and Plain Carbon-Steel Bars for Concrete Reinforcement.
4. ASTM A706 - Standard Specification for Deformed and Plain Low-Alloy Steel Deformed and Plain Bars for Concrete Reinforcement.
5. ASTM A775 - Standard Specification for Epoxy-Coated Steel Reinforcing Bars.
6. ASTM A996 - Standard Specification for Rail-Steel and Axle-Steel Deformed Bars for Concrete Reinforcement.
7. ASTM E329 - Standard Specification for Agencies Engaged in Construction Inspection and/or Testing.

D. American Concrete Institute:

ACI 315R-18 – Guide to Presenting Reinforcing Steel Design Details.

E. American Welding Society:

AWS D1.4 – Structural Welding Code – Reinforcing Steel.

F. Concrete Reinforcing Steel Institute:

1. CRSI Manual – Manual of Standard Practice.

2. CRSI PRB – Placing Reinforcing Bars.

1.03 QUALITY ASSURANCE

Quality Control by Contractor:

A. To verify conformance with the specified requirements for concrete reinforcement, the Contractor shall engage the services of an independent testing laboratory which complies with the requirements of ASTM E329, to the satisfaction of the City.

B. The testing laboratory shall provide inspection services as specified herein, when testing is required. Costs of testing laboratory services shall be the Contractors responsibility.

1.04 SUBMITTALS

A. Provide material shop drawings, certified mills tests and welder qualification certificates in accordance to Part 2 of this Section.

B. Provide reinforcement placing drawings conforming to the requirements of ACI 315. Placing drawings shall include bar lists, schedules, bending details, placing details, and placing plans and elevations as required to fully delineate this portion of the work.

PART 2 - PRODUCTS

2.01 BAR REINFORCEMENT

Reinforcing bars shall be deformed billet steel in conformance with ASTM A615 or ASTM A706. ASTM A996 steel shall not be used. Bars provided as dowels for future construction and bars where specified shall be epoxy-coated in conformance with ASTM A775.

2.02 WIRE FABRIC

Wire fabric shall be welded steel mesh conforming to ASTM A185.

2.03 WIRE AND PLAIN BARS

Wire used as reinforcement and bars used as spiral reinforcement in structures shall be cold drawn steel conforming to ASTM A82.

2.04 TIE WIRE

The wire shall be minimum 16 gage annealed steel conforming to FEDSPEC QQ-W-461H.

2.05 BAR SUPPORTS

Bar supports coming into contact with forms shall be CRSI Class 1 plastic protected or Class 2 stainless steel protected and shall be located in accordance with CRSI MSP-1 and placed in accordance with CRSI PRB. Concrete block supports shall be provided for footing and slabs on grade. Stainless steel or plastic protected plain steel supports shall be provided for other work.

2.06 THREADED MECHANICAL COUPLERS

Threaded mechanical couplers shall be "Lenton" as manufactured by Erico Products, Inc., or "Grip-Twist" as manufactured by Dayton Barsplice Inc. or equal designed to develop one hundred twenty-five percent (125%) of the yield strength of the reinforcing steel.

2.07 PRODUCT DATA

Contractor shall submit the following in accordance with the Contract Documents.

A. Certified mill test reports.

B. Welder qualification certificate, if applicable, in accordance with AWS D1.4.

PART 3 - EXECUTION

3.01 FABRICATION

Reinforcing steel shall not be bent or straightened in a manner which will injure the material. Bars with kinks or with bends not shown shall not be used. Heating or welding bars shall be performed in accordance with AWS D1.4 and shall only be permitted where specified or approved by the Engineer. Bars shall not be welded at the bend.

3.02 PLACEMENT

A. Place reinforcing steel in accordance with CRSI PRB and CRSI MSP-1.

B. Position reinforcing steel accurately and secure against displacement by using annealed iron wire at intersections and shall be supported by concrete or metal chairs, spacers or metal hangers. Tack welding of cross bars is not acceptable. Bars shown on the drawings shall not be repositioned (buried) to act as support bars. Additional bars shall be provided as required for supports. Steel rods and pegs may be used to support reinforcing steel on rock foundations. Reinforcing steel shall be placed in such a manner as to not damage waterproofing membrane or plastic lining which has been previously applied or constructed. Reinforcing steel shall be shop-bent or slightly relocated where necessary to clear waterstop. Reinforcing steel shall not be placed on fresh concrete or forced into fresh concrete.

C. Supports for embedded items shall not be welded to the reinforcement. Additional reinforcement may be provided for this purpose.

3.03 SPLICING

A. Splice reinforcing steel as indicated. Additional splices may be provided where approved by the Engineer. Splices shall conform to ACI standards.

B. In slabs, beams, girders and walls, reinforcing steel shall not be spliced in areas of maximum stress. Splices of adjacent bars shall be staggered at least one splice length, unless otherwise specified. Splices in welded wire fabric shall be at least 1-1/2 meshes wide.

3.04 CLEANING

Clean reinforcing steel of mill rust scale, dried concrete, or other coatings that may reduce bond. Reinforcement reduced in section is not acceptable. When concrete placement is delayed, reinforcement shall be cleaned by sandblasting if directed by the Engineer.

3.05 REPAIR OF EPOXY COATING

Epoxy coating damage need not be repaired in cases where the damaged area is 0.1 square inch or smaller. All damaged areas larger than 0.1 square inch shall be repaired in conformance with ASTM A775.

****END OF SECTION****

SECTION 03300

CAST-IN-PLACE CONCRETE

PART 1 - GENERAL

1.01 SUMMARY

A. This Section specifies cast-in-place concrete for pavements, sidewalks, curbs, encasements, and miscellaneous structures.

B. Related Sections:

1. SECTION 03200, CONCRETE REINFORCEMENT
2. SECTION 03600, GROUT

1.02 REFERENCES

A. Caltrans Standard Specifications and Details (2023 edition).

B. City of Belmont: Standard Specifications and Details (latest edition).

C. American Concrete Institute (ACI):

1. ACI MCP – Manual of Concrete Practice.
2. ACI 211.1 – Standard Practice for Selecting Proportions for Normal, Heavyweight, and Mass Concrete.
3. ACI 301 - Specifications for Structural Concrete.
4. ACI 304 – Guide for Measuring, Mixing, Transporting, and placing Concrete.
5. ACI 305R – Guide to Hot Weather Concreting.
6. ACI 306R – Guide to Cold Weather Concreting.
7. ACI 318 – Building Code Requirements for Structural Concrete (ACI 318-11) and Commentary.
8. ACI 347 – Guide to Formwork for Concrete.

D. American Society for Testing and Materials (ASTM):

1. ASTM C31 - Standard Practice for Making and Curing Concrete Test Specimens in the Field.
2. ASTM C33 - Standard Specification for Concrete Aggregates.
3. ASTM C39 - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens.
4. ASTM C42 - Standard Test Method for Obtaining and Testing Drilled Cores and Sawed Beams of Concrete.

5. ASTM C67 - Standard Test Methods for Sampling and Testing Brick and Structural Clay Tile.
6. ASTM C94 - Standard Specification for Ready-Mixed Concrete.
7. ASTM C136 - Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.
8. ASTM C143 - Standard Test Method for Slump of Hydraulic-Cement Concrete.
9. ASTM C150 - Standard Specification for Portland Cement.
10. ASTM C172 - Standard Practice for Sampling Freshly Mixed Concrete.
11. ASTM C260 - Standard Specification for Air-Entraining Admixtures for Concrete.
12. ASTM C309 - Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete.
13. ASTM C467 - Standard Classification of Mullite Refractories
14. ASTM C494 - Standard Specification for Chemical Admixtures for Concrete.
15. ASTM D1751 – Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Nonextruding and Resilient Bituminous Types).
16. ASTM E329 - Standard Specification for Agencies Engaged in Construction Inspection and/or Testing.

1.03 QUALITY ASSURANCE

A. Quality Control by Contractor:

1. To verify conformance with the specified requirements for cast-in-place concrete, the Contractor shall engage the services of an independent testing laboratory which complies with the requirements of ASTM E329.
2. Costs of testing laboratory services shall be the responsibility of the Contractor in accordance with the Contract Documents.

B. Basis for Quality:

1. Cast-in-place concrete shall conform to the requirements of ACI 301, except as modified.
2. Unless specified otherwise, all formwork shall conform to ACI 347.

1.04 SUBMITTALS

A. Submit concrete, mix designs, recent test data for the submitted mixes, and test data for mix components confirming that the mixes meet the requirements of this Section.

B. Submit data on concrete accessories specified herein that the Contractor intends to install in the work.

C. Submit the following to the project inspector in accordance with the Contract Documents:

1. TEST REPORTS: Three copies of reports from the concrete supplier shall be provided certifying that all concrete materials comply with the specifications and all test requirements.

2. READY-MIXED CONCRETE TRUCK DELIVERY TICKETS: Each load of ready-mixed concrete delivered to the job site shall be accompanied by a delivery ticket showing the information listed in ASTM C94, Section 14.

PART 2 - PRODUCTS

2.01 MATERIALS

A. Cement: Portland cement shall be ASTM C150, Type II or Type V, low alkali, containing less than 0.60 percent alkalis.

B. Aggregates:

1. GENERAL: Fine and coarse aggregates shall conform to ASTM C33. Fine and nonreactive and shall be washed before use.

   When sources of aggregates are changed, test reports shall be provided for the new material. The tests specified shall be performed prior to commencing concrete work.

2. FINE AGGREGATE: Fine aggregate shall be hard, dense, durable particles of either sand or crushed stone regularly graded from coarse to fine. Gradation shall conform to ASTM C33.

3. COARSE AGGREGATE: Coarse aggregate shall be hard, dense and durable gravel or crushed rock free from injurious amounts of soft and friable particles, alkali, organic matter and other deleterious substances. Gradation of each coarse aggregate size specified in this Section and shall conform to ASTM C33-Table 3.

C. Admixtures:

1. GENERAL: All admixtures shall be compatible with the concrete. Calcium chloride or admixtures containing calcium chloride are not acceptable. Admixtures shall be used in accordance with the manufacturer's recommendations and shall be added separately to the concrete mix.

2. WATER REDUCING RETARDER: Water reducing retarder shall be ASTM C494, Type D, and shall be BASF MasterSet R 300; Sika Chemical Corp., Plastiment; or equal.

3. AIR ENTRAINING AGENT: Air entraining agent shall be BASF, MasterAir AE 90; W. R. Grace and Co., DaraVair; or equal. The air entraining agent added shall produce, in accordance with ASTM C260, an entrained air content specified in this Section for each class of concrete.

D. Water: Water for washing aggregate, for mixing and for curing shall be free from oil and deleterious amounts of acids, alkalis, and organic materials.

2.02 CONCRETE CHARACTERISTICS

A. Mix Proportioning:

1. Concrete shall be normal weight concrete composed of specified cement, admixtures, aggregates and water proportioned and mixed to produce a workable, strong, dense, and impermeable concrete.

2. Concrete shall be provided in accordance with the following:

Concrete Class	ASTM Coarse Aggregate Size	Min. Cement Content, sacks/cu yd concrete	Maximum water/cement ratio by weight	Flyash percent by weight of cementious material	Air Entrainment Admixture	Maximum slump in inches	Minimum 28-day compressive strength, psi
B	#57	5.25	0.45	18-20	Yes	3-1/2	4000
C	#67	5.25	0.45	18-20	Yes	4	4000
E	#57	5.25	0.55	0	No	6	2000

Concrete Class	ASTM Coarse Aggregate Size	Min. Cement Content, sacks/cu yd concrete	Maximum water/cement ratio by weight	Pozzolan percent by weight of Portland cement	Air/ Entraining	Maximum slump in inches	Minimum 28-day compressive strength, psi
B	467	5.25	0.45	18-20	Yes	3-1/2	4000
C	376	5.25	0.45	18-20	Yes	4	4000

Notes for table:

a. Compressive strength shall be determined at the end of 28 days based on test cylinders made and tested in accordance with ASTM C39.
b. When slag is used as pozzolan material, slag shall comply with ASTM C989 / AASHTO M 302, Grade 100 or 120.

3. Concrete mix for sidewalk, curb, and gutter shall include 1 pound of Lamp Black color admixture per one cubic yard of concrete.

B. Concrete shall be provided by class for the corresponding use listed as follows:

Types of Use	Class of Concrete
Concrete 12 inches thick and greater	B
Concrete less than 12 inches thick	C
Conduit Encasement (duct banks) and concrete fill	E

B. Control: Before beginning concrete work, the Contractor shall determine the proper proportions of materials for class of concrete B and C. Methods for selecting and adjusting proportions of the ingredients shall be in accordance with ACI 211.1. Reports

C. from the concrete supplier of each mix design shall state whether the items reported comply with the specifications and shall show (1) the expected strength, (2) corresponding slump, (3) expected drying shrinkage, (4) weights and test results of the ingredients on the basis of field experience and/or trial mixtures in accordance with ACI 318, Chapter 5 with at least 30 tests, and (5) other physical properties necessary to check each mix design. Copies of the reports shall be submitted in accordance with the Contract Documents.

2.03 WATERSTOPS

Where specified, waterstops in construction or expansion joints shall be Greenstreak PVC waterstop by Sika Corporation; or approved equal. Waterstops used for connection of pipes to manhole walls are specified elsewhere.

2.04 EXPANSION JOINT MATERIALS

Expansion joint material shall be ¼-inch or ½-inch thick, per applicable City Standard Detail, pre-molded expansion joint filler in conformance with ASTM D1751. Expansion joint material shall be shaped to fit the cross section of concrete being placed.

2.05 BONDING COMPOUNDS

A. Epoxy resin bonding compounds shall be used for wet areas and shall Master Builders Technologies, Concresive series as applicable; Sika Chemical Corporation, Sikadur 35, Hi-Mod LV, Sikadur 32, Hi-Mod, or Sikadur 31, Hi-Mod Gel as applicable; or equal.

B. Nonepoxy bonding compounds shall be used for dry areas and shall be Acrylic Bondcrete; Imperial Chemical Industrial, Inc., Thoro System Products, Acryl 60; Thorobond; or equal. Bonding compounds shall be applied in accordance with the manufacturer's instructions.

2.06 RETARDANT

Retardant for exposing aggregates for nonformed surfaces in construction joints shall be Sika Rugasol-S, Horn Aggretex-H, or equal. Retardant shall be applied in accordance with manufacturer's instructions sufficient to assure a minimum penetration of 1/8 inch.

2.07 CURING AND SEALING COMPOUNDS

Curing and sealing compound shall be BASF, Masterseal; A. C. Horn Inc., Horn Clearseal EM180; Burke Company Spartan-Cote WB Cure Seal Hardener; or equal; conforming to

ASTM C309. Curing compounds shall be clear and shall be applied in accordance with the manufacturer's instructions, except as otherwise specified.

2.08 CONCRETE PAVING WITHIN STATE RIGHT-OF-WAY

Concrete paving within State right-of-way shall be in accordance with Section 40 and 90 of the State Standard Specifications.

PART 3 - EXECUTION

3.01 GENERAL

Construction of cast-in-place concrete shall be in accordance with the pertinent recommendations contained in ACI Manual of Concrete Practice of 300 Group.

3.02 CONCRETE

A. Concrete shall be truck-mixed, ready-mixed concrete conforming to the applicable portions of ASTM C94. Materials shall be proportioned by weighing. The Contractor shall be responsible for producing concrete of the specified characteristics.

B. Concrete shall be delivered to the site of work, and discharge shall be completed within 1-1/2 hours after introduction of the water to the mixture.

3.03 CONVEYING AND PLACING CONCRETE

A. Conveying Concrete: Concrete shall be conveyed from the mixer to the forms in accordance with ACI 301, Chapter 8. Concrete which has segregated in conveying shall be removed from the site of the work.

B. Placing Concrete:

1. GENERAL: Concrete shall be placed in accordance with ACI 301, Chapter 8, and ACI 304, Chapter 6. Pumped concrete shall be the class and consistency specified in the Contract Documents.

2. PLACING CONCRETE IN HOT WEATHER: In hot weather (above 85 degrees F), concrete shall be placed in accordance with ACI 305R.

3. PLACING CONCRETE IN COLD WEATHER: In cold weather (below 45 degrees F), concrete shall be placed in accordance with ACI 306R.

3.04 CONCRETE FORMWORK

Formwork shall be installed in accordance with ACI 347.

3.05 CURING AND SEALING

A. General

1. Concrete curing shall be completed by water curing or by using a clear membrane curing compound or by a combination of both methods. Repairs or

treatment of concrete surfaces shall be coordinated so that interruption of the curing will not be necessary.

2. Concrete surface temperature shall be maintained between 50 degrees F and 80 degrees F for at least 5 days. Curing concrete in hot weather (above 85 degrees F) shall be in accordance with ACI 305R. Curing concrete in cold weather (below 45 degrees F) shall be in accordance with ACI 306R.

B. Water Curing: When water curing is used, concrete shall be kept wet continuously for a minimum of ten (10) days after placement. Burlap mats or fabric may be used to retain moisture during the curing period.

C. Curing Compound:

1. When curing compound is used, it shall be applied as soon as the concrete has set sufficiently so as not to be marred by the application or immediately following form removal for vertical and other formed surfaces. Preparation of surfaces, quantities used, application procedures, and installation precautions shall be followed in strict compliance with the manufacturer's instructions.

2. Curing compound shall not be used on concrete surfaces to be coated, waterproofed, or moisture-proofed.

3.06 PROTECTION

Concrete shall be protected from injurious action by sun, rain, flowing water, frost and mechanical injury.

3.07 CONSTRUCTION JOINTS

A. Construction joints shall be located and formed as specified. A rough surface of exposed concrete aggregates shall be produced using a surface retardant at construction joints. The limit of the treated surfaces shall be 1 inch away from the joint edges. Within 24 hours after placing, retarded surface mortar shall be removed either by high pressure water jetting or stiff brushing or combination of both so as to expose coarse aggregates. A rough surface of exposed aggregate may also be produced by sandblasting followed by high pressure water jetting. Sandblasting, if used, shall remove 1/8 inch of laitance film and shall expose coarse aggregate to insure adequate bond.

B. Reinforcing steel and welded wire fabric shall be continued across construction joints. Waterstops shall be provided in construction joints at locations as specified.

3.08 INSERTS AND EMBEDMENTS

A. Inserts:

1. Where pipes, castings or conduits are to pass through structures, the Contractor shall place such pipes or castings in the forms before placing the concrete, or he may provide openings in the concrete for subsequent insertion of such pipes, castings or conduits. Such openings shall be provided with waterstops and V-

shaped construction joint as shown and shall have a slight flare to facilitate grouting and permit the escape of entrained air during grouting

2. Additional reinforcement shall be provided around large openings as shown on the Drawings. The grout shall be non-shrink grout as specified in the Contract Documents.

B. Embedments: Gate frames, gate thimbles, special castings, channels or other miscellaneous metal parts that are to be embedded in the concrete shall be set and secured in the forms prior to concrete placement. Unless otherwise specified, anchor bolts and inserts shall be embedded in concrete as shown. The Contractor shall provide inserts, anchors or other bolts necessary for the attachment of piping, valves, metal parts and equipment. Operators or sleeves for gate or valve stems shall be positioned to clear reinforcing steel, conduit and other embedments, and to align accurately with equipment.

3.09 EXPANSION JOINTS

Expansion joints shall be as specified. Reinforcement or other embedded metal items bonded to the concrete shall not extend through expansion joints. Waterstops shall be provided in expansion joints as specified in this Section.

3.10 WATERSTOPS

Waterstops shall be provided at the specified locations. Waterstops shall be securely held in position during placing of concrete. If, after placing concrete, waterstops are materially out of position or shape, the surrounding concrete shall be removed, the waterstop reset, and concrete replaced in accordance with this Section.

3.11 MODIFICATION OF EXISTING CONCRETE

Existing concrete shall be removed, and the remaining surfaces resurfaced as specified. The remaining concrete shall be protected from damage. Clean lines shall be made by sawing through the existing concrete. The concrete may be broken out after initial saw cuts in the event thickness prevents cutting through. Where it is not possible to use a saw, the initial cuts shall be made with chipping hammers. These cuts shall be sufficient to prevent damage to the remaining concrete. In general, an opening in existing concrete shall be oversized 1 inch on all sides and built back to the correct dimension with an epoxy grout. Where oversized openings cannot be made, the concrete shall be cut to the correct dimension, with the exposed reinforcing cut back an additional 1 inch and the resulting hole filled with epoxy grout. Cut or broken concrete surfaces shall be resurfaced with an epoxy grout. Concrete surfaces to be coated shall be dry. Where new concrete adjoins existing concrete surfaces or surfaces which have been cut, such surfaces shall be cleaned by sandblasting to remove laitance, loose coatings and foreign materials, and coated with the bonding compound just prior to the placement of the new concrete. Bonding compounds shall be as specified in this Section. Unless otherwise specified, continuity of reinforcing steel shall be obtained across the joint either by exposing existing bars to provide sufficient laps with new bars or by welding existing bars with new bars. Dowels shall be drilled and set with epoxy grout into existing concrete.

3.12 FORMED SURFACE FINISHES

A. Repair of Surface Defects: Surface defects, including tie holes, minor honeycombing or otherwise defective concrete shall be repaired in accordance with ACI 301, Chapter 9. Areas to be patched shall be cleaned. Patches on exposed surfaces shall be finished to match the adjoining surfaces after they have set. Patches shall be cured as specified for the concrete.

B. Finishing:

1. FINISH A: Finish A shall be a grout clean finish in accordance with ACI 301, Section 10.3.2. Surfaces shall be lightly sandblasted prior to sacking. For interior areas not exposed to moisture or weather, water used in the mortar shall be mixed with a PVA bonding compound as recommended by the manufacturer. Unless otherwise specified, Finish A shall be provided for all surfaces exposed to view, both painted and unpainted.

2. FINISH B: Finish B shall be the same as Finish A, except that the final burlap rubbing may be omitted, providing the steel trowel scraping removes the loose buildup from the surface. Finish B shall be provided for waterproof and moisture-proof coated surfaces.

3. FINISH C: Finish C shall be a finish which has surface imperfections less than 3/8 inch in any dimension. Surface imperfections greater than 3/8 inch shall be repaired or removed and the affected areas neatly patched. Finish C or smoother shall be provided for interior surfaces of tanks and channels from 1 foot below minimum water surfaces and down and otherwise unfinished interior surfaces.

4. FINISH D: Unless otherwise specified, Finish D shall be the finish for surfaces not exposed to view in the finish work or by other construction, which may be left as they come from the forms, except that tie holes shall be plugged and defects greater than 1/2 inch in any dimension shall be repaired.

3.13 SLAB FINISHES

A. General: Where finish is not specified, floor slabs shall receive steel troweling. Dry cement shall not be used on new concrete surfaces to absorb excess moisture. Edges shall be rounded to a radius of 1/2 inch. Joints shall be grooved to a radius and depth of 1/4 inch each.

B. Float Finish: Float finish shall conform to ACI 301, Section 11.7.2. Floating shall be performed with a hand or power-driven float. Floating of any one area shall be the minimum necessary to produce the finish specified. Floating shall compact and smooth the surface and close any cracks and checking of surfaces. Float finish shall be applied to surfaces of channel and tank bottom slabs and to footings.

C. Steel Trowel Finish: Steel trowel finish shall conform to ACI 301, Section 11.7.3. Immediately after final troweling, the surface shall be cured and protected as specified. in this Section. Steel trowel finish shall be provided on floors unless specified otherwise.

D. Broomed Finish: Broomed finish shall conform to ACI 301, Section 11.7.4. Broomed finish shall be provided for walks, tops of walls, slabs on grade exposed to atmosphere, and where otherwise specified.

3.14 FIELD SAMPLING AND TESTING OF CONCRETE

A. General: Field sampling and testing shall be performed by the independent testing laboratory specified in this Section. Samples of concrete shall be taken at random locations and at such times to represent the quality of the materials and work throughout the project. The laboratory shall provide the necessary labor, materials and facilities for sampling, casting, handling and storing the concrete samples at the site of work. The minimum number of samples and tests are specified in this Section.

B. Sampling: Concrete shall be sampled as follows and tested in accordance with this Section. Samples of plastic concrete shall be obtained in accordance with ASTM C172. Samples for pumped concrete shall be taken at the hose discharge point. Samples for other concrete shall be taken at the hopper of transit mix truck.

C. Testing: Services of a certified concrete testing laboratory shall be provided at the City's expense to confirm compliance of cast-in-place concrete and CLSM with these Specifications. Failure of the concrete to meet the specified requirements shall be grounds for removal and replacement of the failing concrete, and re-testing at the Contractor's expense.

1. STRENGTH TESTS: The strengths specified for the design mix shall be verified by the testing laboratory during placement of the concrete. Verification shall be accomplished by testing standard cylinders of concrete samples taken at the job site.

   Standard cylinders shall represent the concrete placed in the forms. One set of three standard cylinders shall be cast for each 50 cubic yards, or fraction thereof, for concrete placed in structures, building slabs and footings, but at least three cylinders shall be taken from any one batch. Casting, handling and curing of cylinders shall be in accordance with ASTM C31. Additional cylinders shall be provided when an error in batching is suspected. For the first 24 hours after casting, the cylinders shall be kept moist in a storage box constructed and located so that its interior air temperature will be between 60 and 80 degrees F. At the end of 24 hours, the cylinders shall be transported to the testing laboratory.

   Testing of specimens for compressive strength shall be in accordance with ASTM C39. Tests shall be made at 7 and 28 days from time of casting. One test cylinder from each group of three shall be tested at the end of 7 days, and two shall be tested at the end of 28 days. Each strength test result shall be the average of the strengths of two test cylinders at 28 days, except that if one cylinder in a set of two shows evidence of low strength due to improper sampling, casting, handling or curing, the result of the remaining one cylinder shall be used.

The average of any three consecutive 28-day strength test results of the cylinders representing each class of concrete shall be equal to or greater than the specified strength and not more than 10 percent of the strength test results shall have values less than the specified 28-day strength for the total job concrete. No individual strength test results shall be less than the specified strength by more than 500 pounds per square inch.

Certified reports of the test results shall be provided directly to the Engineer. Test reports shall include sufficient information to identify the mix used, the stationing or location of the concrete placement, and the quantity placed. Slump and ambient temperature shall be noted.

If the 28-day test results fall below the specified compressive strength for the class of concrete required for any portion of the work, adjustment in the proportions, water content, or both, shall be made as necessary at the Contractor's expense. Changes and adjustments shall be reported in writing to the Engineer.

If compressive test results indicate concrete in place may not meet structural requirements, tests shall be made to determine if the structure or portion thereof is structurally sound. Tests may include, but not be limited to, cores in accordance with ASTM C42 and any other analyses or load tests acceptable to the Engineer. Costs of such tests shall be borne by the Contractor.

2. TESTS FOR CONSISTENCY OF CONCRETE: The slump shall be as specified when measured in accordance with ASTM C143. Samples for slump determination shall be taken from the concrete during placing. Slump tests shall be performed whenever standard cylinders are cast.

D. Final Laboratory Report: A final report, prepared by the testing laboratory, shall be provided at the completion of all concreting. This report shall summarize the findings concerning concrete used in the project and provide totals of concrete used by class and structure.

3.15 CLEANUP

Upon completion of the work and prior to final inspection, clean all concrete surfaces, except outside sidewalks or paved areas and those having curing and sealing compound.

****END OF SECTION****

SECTION 03600

GROUT

PART 1 – GENERAL

1.01 DESCRIPTION

A. This Section specifies grout for structural and miscellaneous uses.

B. Related Sections:

SECTION 03300, CAST-IN-PLACE CONCRETE

1.02 QUALITY ASSURANCE

Quality control by contractor:

A. To verify conformance with the specified requirements for grout, the Contractor shall engage the services of an independent testing laboratory which complies with the requirements of ASTM E329. The testing laboratory shall sample and test grout materials as required in this Section.

1.03 REFERENCES

A. American Society of Testing and Materials (ASTM):

1. ASTM C33 - Concrete Aggregates.
2. ASTM C40 – Standard Test Method for Organic Impurities in Fine Aggregates for Concrete.
3. ASTM C87 – Standard Test Method for Effect of Organic Impurities in Fine Aggregate on Strength of Mortar.
4. ASTM C117 - Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate Material Finer Than 75 μm (No. 200) Sieve in Mineral Aggregates by Washing.
5. ASTM C136 - Sieve Analysis of Fine and Coarse Aggregates.
6. ASTM C150 – Portland Cement.
7. ASTM C289 - Potential Reactivity of Aggregates (Chemical Method).
8. ASTM C494 - Chemical Admixtures for Concrete.
9. ASTM D2419 - Standard Test Method for Sand Equivalent Value of Soils and Fine Aggregate.

10. ASTM E329 REV C - Inspection and Testing Agencies for Concrete, Steel, and Bituminous Materials as Used in Construction.

1.04 SUBMITTAL

Contractor shall submit grout, mix designs, recent test data for the submitted mixes, and test data for mix components confirming that the mixes meet the requirements of this Section.

PART 2 – PRODUCTS

2.01 MATERIALS

A. Cement:

Portland cement shall be ASTM C150, Type II or Type V, low alkali, containing less than 0.60 percent alkalis.

B. Aggregate:

1. GENERAL: Aggregate shall be nonreactive and shall be washed before use. When sources of aggregate are changed, test reports shall be provided for the new material. The tests specified shall be performed prior to commencing grout work.

2. FINE AGGREGATE: Fine aggregate shall be hard, dense, durable particles of either sand or crushed stone regularly graded from coarse to fine and shall conform to ASTM C33 as modified herein. When tested in accordance with ASTM C136, gradation shall be such that 100 percent by weight will pass a standard No. 8 mesh sleeve and no less than 45 percent by weight will pass a standard No. 40 mesh sieve.

3. Variation from the specified gradations in individual tests will be acceptable if the average of three consecutive tests is within the specified limits and the variation is within the permissible variation listed below:

U.S. standard sieve size	Permissible variation in individual tests, percent
30 or coarser	2
50 or finer	0.5

4. Other tests shall be in accordance with the following specifications:

Test	Test method	Requirements
Organic Impurities	ASTM C40	Color lighter than standard
Amount of Material Passing No. 200 Sieve	ASTM C117	3% maximum by weight
Soundness	ASTM C88	10% maximum loss with sodium sulfate
Reactivity	ASTM C289	Innocuous aggregate

Sand Equivalent	ASTM D2419	Minimum 80

C. Admixtures:

Admixtures shall be compatible with the grout. Calcium chloride or admixtures containing calcium chloride are not acceptable. Admixtures shall be used in accordance with the manufacturer's recommendations and shall be added separately to the grout mix.

D. Water:

Water for washing aggregate, for mixing and for curing shall be free from oil and deleterious amounts of acids, alkalis, and organic materials; shall not contain more than 1000 mg/1 of chlorides as Cl, nor more than 1300 mg/1 of sulfates as SO_4; and shall not contain an amount of impurities that may cause a change of more than 25 percent in the setting time of the cement nor a reduction of more than 5 percent in the compressive strength of the grout at 14 days when compared with the result obtained with distilled water. Additionally, water used for curing shall not contain an amount of impurities sufficient to discolor the grout.

E. Grout:

1. NONSHRINK GROUT: Shall be nonmetallic aggregate grout: Five Star Products, Inc. Five Star Grout, Master Builders Masterflow 713, or equal.

2. EPOXY GROUT: Epoxy grout shall be a high modulus, two-component, moisture insensitive, 100 percent solids, thermosetting modified polyamid epoxy compound. The consistency shall be a paste form capable of not sagging in horizontal or overhead anchoring configurations. Material shall conform to ASTM C881, Type 1, Grade 3, such as Master Builders Technologies Concresive series, Sika Corporation Sikadur Hi-Mod Series, Adhesive Technology Corporation Solidbond 200, or equal, and shall have a heat deflection temperature in excess of 130 degrees F.

3. EPOXY PRESSURE GROUT FOR CRACK REPAIR: Epoxy for pressure grouting/crack injection shall be a two-component, moisture insensitive, high modulus, injection grade, 100 percent solids, blend of epoxy-resin compounds. The consistency shall be as required to achieve complete penetration in hairline cracks and larger. Material shall conform to ASTM C881, Type 1, Grade 1, such as Sika Corporation Sikadur 52, Adhesive Technology Corporation SLV 300 series, or equal.

PART 3 – EXECUTION

3.01 NONSHRINK GROUT

A. Nonshrink, nonmetallic aggregate grout shall be used to fill the annular space between a cored opening and a pipe’s outside diameter at pipe-to-manhole connections.

Contractor shall core drill, carefully chip out concrete, or remove bricks to create openings to existing manholes where new pipes are to connect. The new pipe shall be inserted into the opening with an approved pipe-to-manhole connector. The annular space between the pipe/adapter's outside diameter and the cored opening shall be packed with nonshrink grout. After connection the Contractor shall rechannel the inside of the existing manhole base to provide a smooth flow channel transition to the newly installed pipe.

B. The Contractor shall plug any holes remaining from abandoned lines with concrete or nonshrink grout.

C. Nonshrink, nonmetallic aggregate grout shall also be used for the bearing surfaces of machinery and equipment bases, column base plates and bearing plates, where applicable.

3.02 EPOXY GROUT

Epoxy grout shall be used for repairing cracks by pressure grouting or gravity flow and repairing structural concrete. Concrete shall be primed in accordance with the grout manufacturer's instructions.

****END OF SECTION****

Section 15050

GENERAL PIPING

PART 1 - GENERAL

1.01 SUMMARY

A. The Contractor shall furnish, install, test, and complete the piping in accordance with the Contract Documents.

B. Related Sections:

1. HIGH-DENSITY POLYETHYLENE (HDPE) PIPE

1.02 QUALITY ASSURANCE

A. Like items of materials provided hereunder shall be the end products of one manufacturer in order to achieve standardization for appearance and manufacturer's service.

B. To assure uniformity and compatibility of piping components in grooved-end piping systems, fittings and couplings shall be furnished by the same manufacturer.

1.03 REFERENCES

A. City of Belmont: Standard Specifications and Details (latest edition).

B. American Society of Testing and Materials (ASTM):

Refer to individual piping sections for relevant ASTM standards.

C. Uni-Bell PVC Pipe Association :

Recommended Practice for Low-Pressure Air Testing of Installed Sewer Pipe, current Uni-B-6 pamphlet.

1.04 GENERAL

A. All sewer construction materials proposed to be used shall be new materials.

B. Where material specification numbers are used herein, they shall refer to the latest revision thereof.

1.05 SUBMITTALS

A. Submit, in accordance with the Contract Documents, installation instructions and details of all pipe, joints, fittings, metallic pipeline marking tape, and appurtenances to be used in the work including the following.

1. Catalog cuts showing all piping, manholes, couplings, and fittings.
    a. Shop drawings shall indicate the details of all thickness, joints, materials, require fabrication tolerances, and procedures, as applicable.
2. Dimensioned layout drawings, including piping, building sewers, and manholes.
3. Installation procedures and sequencing.
4. Staging and lay-down areas.
5. Security plans and fencing, if applicable.
6. Sewer Bypassing Plan in accordance with the Contract Documents.
7. Traffic Control Plan in accordance with the Contract Documents.
8. Connection details for all building sewers and existing systems.

B. The review of procedures and equipment by the Engineer shall not relieve the Contractor of his responsibility nor modify any of the provisions of the contract.

PART 2 - PRODUCTS

2.01 PIPE AND FITTINGS

Refer to applicable pipe specification in Contract Documents.

2.02 FLEXIBLE COUPLINGS

A. Flexible couplings shall be Mission Rubber Flex-Seal ARC Shielded adjustable repair couplings with stainless steel shear band (i.e. MR02 ARC series) or approved equal. Couplings shall have T-Bolt clamps to secure the coupling tightly to entering and exiting pipes. All screw-clamp hardware shall be Type 316 stainless steel with stainless steel support sleeve. Rubber material shall be suitable for sewage service.

B. Existing vitrified clay pipe (VCP) in some areas of the City of Belmont have been found to have a smaller outer diameter than typical VCP. Connections to existing VCP may require a coupling with a smaller diameter gasket (such as MR03 ARC or MR53 ARC intended for connection to asbestos cement pipe). Contractor shall confirm the outer diameter of existing VCP prior to connections and utilize the appropriate couplings to achieve a watertight seal, at no additional cost to the City.

2.03 BURIED DETACTABLE WARNING AND IDENTIFICATION TAPE

1. Warning tape shall be installed with all sewer mains constructed by open cut method.

2. Warning tape shall be polyethylene plastic and metallic core or metallic-faced, acid- and alkali-resistant, polyethylene plastic warning tape manufactured specifically for warning and identification of buried utility lines.

3. Provide tape on rolls, 6-inch-minimum width, color coded green for sewer mains with the words "Caution: Sewer Line Buried Below" printed continuously along its length. Wording shall be approximately ¾ inch high at maximum intervals of two (2) feet. Color and printing shall be permanent, unaffected by moisture or soil.

4. Minimum thickness of the tape shall be 0.004 inch.

5. Tape shall have a minimum strength of 1500 psi lengthwise.

6. Tape shall be manufactured with integral wires, foil backing, or other means of enabling detection by a metal detector when tape is buried up to 3 feet deep.

7. Encase metallic element of the tape in a protective jacket or provide with other means of corrosion protection.

8. If directed by the Engineer, samples of the marking tape shall be submitted in accordance with the Contract Documents.

2.04 TRACER WIRE FOR NON-LINEAR INSTALLATIONS

- Tracer wire shall be used for all non-linear sewer main installations.

- All trace wire shall have HDPE insulation intended for direct burial use at 30 volts, color coated per APWA standard for the specific utility being marked.

- Tracer wire shall meet the requirements of one of the following based on construction method:
  1 Open Trench – Copperhead #12 AWG Copper Clad Steel High Strength with minimum 30 mil HDPE insulation thickness, Part #1230*-HS or approved equal.

  2 Pipe Bursting or Reaming – Copperhead SoloShot Extreme Strength 7 x 7 Stranded, with minimum 50 mil HDPE insulation thickness, Part # PBX-50 or approved equal

- Tracer wire shall be laid along the top of all plastic pipe and held in place with appropriate tape, ties or hitches spaced not more than 13 feet apart.

- Tracer wire shall be terminated at structure connections or pipe locator boxes as indicated on the Drawings.

- Splices along the continuous run of tracer wire for repair of a wire break or replacement of failed segment of wire shall use 3M Brand DBR Direct Bury Splice Kit or approved equal.

PART 3 - EXECUTION

3.01 PREPARATION

A. Trenching and trench dewatering requirements shall comply with the requirements of the Contract Documents.

B. Sewer bypassing and dewatering requirements shall comply with the requirements of the Contract Documents.

C. Layout of Controls:

1. Establish line and grade control and staking in accordance with the Contract Documents.

2. The grades and alignment of the sewer so staked must be approved by the Engineer prior to start of sewer construction.

3. Construction staking:

a. A registered land surveyor engaged by the Contractor shall be responsible for setting stakes and preparing cut sheets. Submit the name, license number and expiration date of the surveyor in charge of the survey work prior to construction.

b. At least five (5) working days before the start of any sewer construction requiring staking, submit three copies of cut sheets to the Engineer. Cut Sheets will be reviewed and one approved copy will be furnished to the Contractor for use in construction. Stakes must not be marked with cuts prior to Engineer's approval of cut sheets.

c. The Contractor shall be responsible for preserving all required benchmarks, reference points and construction stakes in the area and will be responsible for any cost incurred in replacing any such benchmarks, reference points or construction stakes which are destroyed as a result of his activities.

d. The Contractor shall be responsible for maintaining the legibility and refreshing of paint marks as long as needed, including maintenance during idle time and/or inclement weather.

e. Offset stakes from the centerline of the sewer at a safe distance from the excavation but in no case greater than 10 feet unless authorized by the Engineer. The stakes will be marked with offset distance and station only.

D. Surveying Instruments or Lasers: When laying main sewers 6 inches and larger in diameter, unless otherwise approved by the Engineer, a commercial Laser grade setting system shall be used. The following requirements and conditions must be met:

1. The Contractor shall have the responsibility of providing an instrument operator who is qualified and trained in the operation of the Laser, and said operator must adhere to the provisions of the State of California Construction Safety Orders issued by the Division of Industrial Safety. Attention is particularly directed to Section 1514, and Sections 1800 through 1801 of said orders for applicable requirements.

2. When using a Laser, the Laser shall be an in-line Laser or be connected firmly to a tripod, set firmly on compacted soil. The Laser height of instrument shall be taken from one offset hub and checked with at least two more hubs. This shall be done every time the Laser is set up or disturbed.

3. The Laser shall be properly calibrated at all times. If any Laser is found to be out of calibration, the Laser shall be removed from the job site until it has been properly calibrated.

E. Line and Grade:

1. The horizontal controls for this project are the control points and base lines as shown on the plan. The vertical controls for this project are the benchmarks as shown on the plan.

2. It is the responsibility of the Contractor to check these benchmarks at the beginning of the contract period and report any errors or discrepancies to the Engineer.

3. When satisfied that all benchmarks are correct, the Contractor shall use these benchmarks to furnish and maintain all reference lines and grades for sewer construction. Contractor shall not disturb benchmarks with construction equipment, materials or by dewatering operations.

4. Submit to the Engineer copies of field notes used to establish all lines and grades. The Contractor remains fully responsible for the accuracy of his work and the correction of it, if required.

F. Verification of Existing Sewer Connection at New Manhole:

1. Where connection is to be made to an existing sewer with a new manhole, said existing sewer shall be uncovered and checked for location and elevation prior to submitting cut sheets. Any discrepancy between the Plans and field information shall be reported immediately to the Engineer.

2. Where construction requires removal of any existing sewer or structure from service, the work shall be conducted in accordance with the Contract Documents.

G. Sewer Pipe Plugs: Sewer pipe stubs, or other open ends, which are not to be connected for service under this contract, shall be plugged or capped with standard watertight plugs or caps, as submitted by the Contractor and approved by the Engineer for use in the particular installation.

H. Handling of Pipe:

1. All pipe and accessories shall be carefully lowered into the trench in such a manner as to prevent damage to pipe and fittings. Under no circumstances shall pipe or accessories be dropped or dumped into the excavation.

2. Pipe shall be protected against impact shocks during handling. Prior to making pipe joints, all surfaces of the portion of the pipe to be joined shall be cleaned, dried and otherwise repaired in accordance with the manufacturer's installation instructions. The interior of all pipe shall be kept free from all dirt and foreign matter as the work progresses.

3. At the close of each day's work, and at such other times when pipe is not being installed or utilized for service, the ends of all open pipes shall be closed with a watertight plug or cap.

I. Field Cutting Pipe:

1. Use whole lengths of pipe wherever possible. Short lengths or cut pieces shall be allowed only to complete connections to manholes and structures, wye branches, and other required fittings.

2. Unless otherwise permitted by the Engineer, pipes that must be cut in the field shall be cut as recommended by the pipe manufacturer.

3.02 EXCAVATION AND TRENCHING

Perform all excavations for pipelines and appurtenances, of whatever substances encountered, to the depths indicated in the Contract Documents and in accordance with the Contract Documents.

3.03 INSTALLATION

A. General:

1. Each pipe and fitting shall be carefully inspected before the pipe or fitting is installed. Clean ends of pipe thoroughly. Remove foreign matter and dirt from inside of pipe and keep clean during and after laying.

2. Clean out fittings and pipe sections before installing. Clean joint contact surfaces immediately prior to joining. Use joint lubricants and joining methods as recommended by the pipe manufacturer.

3. Furnish and assemble pipe and fittings to provide accurate alignment for joints.

4. Make all joints watertight.

B. Every precaution shall be taken to prevent foreign material from entering the pipe during installation. No debris, tools, clothing, or other materials shall be placed in the pipe.

Whenever pipe laying is stopped, the open end of the pipe shall be closed with an end board closely fitting the end of the pipe to keep sand and earth out of the pipe. The end board shall have several small holes near the bottom to permit water to enter the pipe and prevent flotation in the event of flooding of the trench.

C. Use proper implements, tools, and facilities for the safe and proper protection of the pipe. Carefully handle pipe in such a manner as to avoid any physical damage to the pipe. Do not drop or dump pipe into trenches under any circumstances.

D. Buried Pipe:

1. Commencement of New Sewer Pipeline:

   Unless otherwise specified or authorized by the Engineer, the laying of the pipe by open-cut methods in finished trenches shall be commenced at the lowest point of the project and continued in an upstream manner until completion. Spigot ends shall point in the direction of the flow except as noted or otherwise specified. The joints shall be carefully centered so that when laid to proper grade and alignment as designated on the Contract Documents, they will form a sewer with a uniform invert.

2. Pipe Installation:

   a. The sewer trench shall be dewatered to enable pipe installation under dry conditions per the Contract Documents.

   b. Backfill material shall not be dropped directly on the pipe, and chutes or deflectors shall be utilized to protect the pipe

   c. Adequate backfill shall be deposited on pipe to prevent floating of pipe. Any pipe which has floated shall be removed from the trench, cleaned, and reinstalled in an acceptable manner. No pipe shall be installed when, in the opinion of the Engineer, the trench conditions or weather are unsuitable for such work.

3. Control of Line and Grade:

   a. Total horizontal deviation of the sewer from the line shown on the Contract Documents shall be not more than 1 inch. The sewer grade shall not deviate from the profile shown on the Plans by more than 1/4 inch, measured at the pipe invert, and the grade shall be maintained during and after backfilling operations. Sewer grades exceeding this amount shall be removed and replaced at Contractor's expense.

   b. If deviations less than 1/4 inch from the design grade occurs, pipe joints shall be deflected to bring the invert back to grade. Grade corrections shall be made gradually to prevent ponding in the pipe invert at low spots. Pipe shall be installed to be free draining (no sags) between any two points. No reverse (adverse) grade will be allowed.

4. Joint Deflections: The deflection in the joint between any two successive pipe sections shall not exceed 50 percent of the maximum deflection as recommended by the pipe manufacturer. The minimum allowable radius shall be 300 feet unless otherwise shown. Minimum 2-foot pipe lengths may be supplied, or pipe may be

cut, if approved joint material is available, to install short radius curves and conform with the joint deflection limitations. When short lengths are to be used, it shall be as shown on the Plans.

5. General:

   a. When the pipe laying is not in progress, including break hours, the open ends of pipe shall be closed by approved means, and no trench water, animals, or foreign material shall be permitted to enter the pipe.

   b. All buried pipe shall be prepared as herein before specified and shall be laid on the prepared pipe embedment material in accordance with the Contract Documents to ensure uniform bearing. No pipe shall be laid in water or when, in the opinion of the Engineer, trench conditions are unsuitable.

   c. All sewer mains and building sewers installed by open cut methods shall be installed with green metallic marking tape indicating the presence of the buried sewer. The tape shall be located at the lower of the two following depths:

      1. 18 inches above the sewer pipe.
      2. 6 inches below the finished subgrade.

3.04 FITTINGS

Fittings shall be sized to receive the type of pipe specified. Installation of fittings will be in accordance with manufacturer's recommendations. Fittings and wyes shall be of the same material as that of the pipe it is connecting to.

3.05 DELIVERY, STORAGE, AND HANDLING

A. Materials delivered to site shall be inspected for damage and accepted by the Contractor.

B. Pipe materials shall be stored in strict accordance with the manufacturer's requirements. Typical requirements for pipe storage include:

   1. Pipe shall be stored, if possible, at the job site. Caution shall be exercised to avoid compression, damage, or deformation to the pipe joints and barrel. Pipe supports and straps installed by the manufacturer shall be maintained in place during storage.

   2. When pipelines are stacked, insure that weight or upper units do not cause damage to pipe in lower units.

   3. Pipes shall be supported by struts, racks or dunnage to prevent damage to the bottom during storage.

   4. When long-term storage with exposure to direct sunlight is unavoidable, pipe shall be covered with an opaque material while permitting adequate air circulation above and around the pipe as required to prevent excessive heat accumulation.

5. Pipe shall not be stored close to heat sources or hot objects such as heaters, boilers, steam lines, engine exhaust, etc.

6. Pipe shall not be stored directly on the ground and shall be kept free of dirt and debris.

7. Protect gaskets from excessive exposure to heat and sunlight.

3.06 PIPE COUPLINGS

Installation of pipe couplings shall be in accordance with the manufacturer's recommendations.

3.07 TESTING

Testing shall be completed in accordance with the Contract Documents.

3.08 CLEANING

Care shall be exercised during fabrication to prevent the accumulation of pipe cuttings, and filings, gravel, cleaning rags, etc., within piping sections. All piping shall be examined to assure removal of these and other foreign objects prior to assembly. Shop cleaning may employ any conventional commercial cleaning method if it does not damage, deform, swell, or otherwise alter the physical properties of the material being cleaned.

3.09 FIELD QUALITY CONTROL

A. Field tests and inspections including air pressure tests and cleaning shall be in

B. The following construction deficiencies shall be considered as in need of correction prior to acceptance of the work:

1. Damaged pipes including cracks, gouges and chipped ends of pipe sections.

2. Slope less than the specified.

3. Changes in slope greater than ±0.05 percent of the design slope.

4. Low spots, sags or bellies that hold water

5. Dropped, offset or separated joints.

6. Excessive gap between pipe ends within a coupling or fitting (greater than 0.5 inch unless approved by the Engineer).

7. Infiltration/leaking joints.

8. Other noted deficiencies.

Payment for this Section shall be deemed included with the pay item for High Density Polyethylene pipe, and no additional compensation will be allowed, therefore

****END OF SECTION***

Section 15066

HIGH-DENSITY POLYETHYLENE (HDPE) PIPE

PART 1 - GENERAL

1.01 SUMMARY

A. The Contractor shall furnish, install, and test, complete and in place, high-density polyethylene (HDPE) pipe and fittings, in accordance with the Contract Documents. The HDPE pipe and fittings specified herein shall be used only in association with trenchless construction methods, unless otherwise approved by the Engineer.

B. Related Sections

1. GENERAL PIPING

1.02 REFERENCES

A. Commercial Standards:

1. ASTM D 638 - Test Method for Tensile Properties of Plastics.
2. ASTM D 696 - Test Method for Coefficient of Linear Thermal Expansion of Plastics.
3. ASTM D 746 - Test Method for Brittleness Temperature of Plastics and Elastomers by Impact.
4. ASTM D 1238 - Test Method for Flow Rates of Thermoplastics by Extrusion Plastometer.
5. ASTM D 1505 - Test Method for Density of Plastics by the Density-Gradient Technique.
6. ASTM D 1525 - Test Method for Vicat Softening Temperature of Plastics.
7. ASTM D 1603 - Test Method for Carbon Black in Olefin Plastics.
8. ASTM D 1693 - Test Method for Environmental Stress-Cracking of Ethylene Plastics.
9. ASTM D 1928 - Test Method for Preparation of Compression-Molded Polyethylene Test Sheets and Test Specimens.
10. ASTM D 2240 - Test Method for Rubber Property, Durometer Hardness.
11. ASTM D2321 - Practice for Underground Installation of thermoplastic pipe for sewers and other gravity-flow applications.
12. ASTM D 2657 – Practice for Heat Joining of Polyolefin Pipe and Fittings.
13. ASTM D 2837 – Method for Obtaining Hydrostatic Design Basis for Thermoplastic Pipe Materials.
14. ASTM D3035 - Polyethylene Plastic Pipe (SDR-PR) Based on Controlled Outside Diameter.
15. ASTM D 3261 - Specification for Butt Heat Fusion Polyethylene (PE) Plastic Fittings for Polyethylene (PE) Plastic Pipe and Tubing.

16. ASTM D 3350 - Specification for Polyethylene Plastic Pipes and Fittings Materials.

17. ASTM F 585 - Practice for Insertion of Flexible Polyethylene Pipe into Existing Sewers.

18. ASTM F 714 - Specification for Polyethylene (PE) Plastic Pipe (SDR-PR) Based on Outside Diameter.

19. Plastics Pipe - Renewing Sewers with Polyolefin Pipe.

1.03 CONTRACTOR SUBMITTALS

A. Submit, in accordance with the Contract Documents, installation instructions and details of all pipe, joints, fittings, metallic pipeline marking tape, and appurtenances to be used in the work including the following.

B. The Contractor shall furnish documents to the Engineer certifying that the pipe furnished hereunder is in compliance with the requirements of the Project Documents.

C. The Contractor shall submit a 1-foot segment of each pipe diameter from the pipe supply delivered to the project. The pipe segment shall include a weld joint performed by the operator using the fusing equipment on the project. The sample shall be submitted and reviewed by Engineer prior to installation of any HDPE pipe.

D. Submit a list of pipe and fittings to be used, which includes the following information where applicable:

1. Pipe and fittings to be used

2. Manufacturer

3. Model number, if applicable

4. Size and Sizing System

5. Materials

6. Pressure rating

7. Catalog data

8. Pipe joining methods and equipment, including specific procedures for fusion welding (pipe end cleaning, facing, joining, control of heating plate operation, documentation of jointing, debeading, etc.).

E. The Contractor shall furnish to the Engineer quality control records.

F. Quality assurance procedures shall be performed by the pipe manufacturer fully in accordance with the requirements of this specification. The certification shall include certified laboratory data confirming that said tests have been performed on a sample of the pipe to be provided under this contract, or pipe from that production run, and that satisfactory results were obtained.

PART 2 - PRODUCTS

2.01 MATERIAL REQUIREMENTS

A. Referenced pipe sizes on drawings are nominal inside pipe diameters.

B. All materials delivered to the job site shall be new, free from defects, and marked to identify manufacturer, material, class, and other appropriate information.

C. The Contractor shall provide polyethylene pipe as specified. The pipe shall be made to diameter and tolerances in accordance with ASTM D3035. All pipe shall be made from virgin grade material. The pipe shall be of the diameter and class shown or specified and shall be furnished complete with all fittings, flanged joints and other appurtenances as necessary for a complete and functional system.

D. Acceptance of materials will be subject to strength and quality testing, in addition to inspection of the completed product. Acceptance of installed piping system will be based on inspection and leakage tests.

2.02 PIPE AND FITTING MATERIALS

A. Pipe and fittings shall be high density, high molecular weight polyethylene, as defined in ASTM D 3350. In addition, the material shall be listed by the Plastic Pipe Institute with a designation of PE 4710.

B. Fittings shall be of the same material and class as the pipe. Identification of pipe and fittings shall be in accordance with ASTM D 3350. Pipe and fittings shall be made from virgin material. No rework compound, except that obtained from the manufacturer's own production of the same formulation, shall be used. Pipe and fittings shall be homogeneous throughout and shall be free of visible cracks, holes, foreign material, blisters, or other deleterious faults.

C. Dimensions of pipe and fittings shall be in accordance with ASTM F 714. The pipe and fittings shall be DR 17 or as approved by the Engineer, with a minimum pressure of 125 psi at 73.4°F, and shall be Iron Pipe Size (IPS) rating. Where indicated on plans, DR 11 pipe and fittings shall have with a minimum pressure of 200 psi at 73.4°F, and shall be Iron Pipe Size (IPS) rating.

D. The inside diameter of the new pipe shall meet the following minimum requirements:

Nominal Size Shown on Drawings (inches)	DR 17 Actual Minimum Inside Diameter (inches)
4	3.94
6	5.80
8	7.55

E. The pipe and fittings shall have a **WHITE OR LIGHT GRAY COLORING ON THE INTERIOR**.

F. The high-density polyethylene pipe and fittings shall be provided by the following manufacturer, or approved equal:

DriscoPlex, Division of Chevron Phillips Chemical Co., Plano, TX, 4600 Series pipe for Industrial and Municipal Sewer Trenchless application.

G. Wye fittings for lateral connection to an HDPE main shall be 30 deg. or 45 deg. HDPE stubs or saddles fused to the HDPE main.

2.03 JOINTS

A. Joints in HDPE pipe shall be made using thermal butt-fusion welding equipment designed for the specific purpose of permanently connecting HDPE pipes. This equipment shall be capable of squarely facing the pipe ends to be joined, properly heating each pipe end to the temperature range specified by the pipe manufacturer, and applying and sustaining the appropriate pressure, as recommended by the pipe manufacturer.

B. The butt-fusion welding machine shall be outfitted with a measuring and recording unit that documents the conditions existing during the fusion of each individual weld. A printout that includes the date and time each joint was made, the joint number, the initials of the machine operator, the platen temperature at the time of mating, the pressure during the heating cycle, the time period for the heating cycle, the pressure during the soak cycle, and the time period of the soak cycle shall be machine-generated and delivered to the Engineer at the end of each work shift. The recording unit shall be a DataLogger, as manufactured by McElroy Manufacturing, Inc., or approved equal.

C. Fusion equipment shall be operated by technicians who have been certified by a major gas public utility such as Pacific Gas and Electric, Southern California-Edison or pipe manufacturer or supplier for operation of such equipment. Furthermore, all technicians performing butt-fusion welding on this project shall have a minimum of two (2) years experience operating the same equipment used hereon.

D. Butt-fusion welding equipment shall be as follows, or approved equal:

1. McElroy No. 412 Hydraulic Fusion Machine, McElroy Manufacturing, Tulsa, Oklahoma

2. Proweld Field 12 (315)-R, Asahi/America, Malden, Massachusetts

2.04 FABRICATED FITTINGS

The Contractor shall provide fabricated fittings where required. Fabricated fittings in-line with the pipeline (i.e., a flange adapter), shall have an I.D. that matches I.D. of the pipeline. If the fitting is off-line (i.e., a tee), then the fabricated fitting shall have an I.D. in accordance with the Contract Documents. Unless otherwise required, all fabricated fittings shall be butt-fusion welded.

2.05 ELECTROFUSION COUPLINGS

Fittings/Joints that are to be assembled after pipe bursting/reaming has been completed, shall be butt fused where accessible. An electrofusion coupling shall be used on inaccessible locations. Electrofusion couplings shall be Frialen Electrofusion couplings, as manufactured by Friatec, Inc; Integrifuse Electrofusion couplings, as manufactured by Integrity Fusion Products; Elofit Electrofusion couplings, as manufactured by Nupi Americas or approved equal. Coupling shall be IPS and meet requirements of ASTM F714, F1055, D3035 and DD3350.

2.06 FLEXIBLE COUPLINGS

Flexible couplings, where applicable, shall conform to the requirements of Section 15050, General Piping. Flexible couplings shall only be used when connecting to existing pipe or dissimilar materials.

2.07 PIPE-TO-MANHOLE CONNECTORS

A. Existing Manholes: Provide sanded exterior PVC manhole adapter at the entry of all HDPE pipe into existing manholes. Sanded exterior PVC manhole adapter shall be GPK Part No. G316, or approved equal, suitable for connection to IPS HDPE main. Existing manholes openings modified for pipe replacement or upsizing shall be grouted in place with non-shrink grout.

B. Cast-in Place Base Manholes:

1. Provide rubber waterstop gaskets on the pipe exterior perimeter at the entry of all HDPE pipe into new manholes. Rubber waterstop gaskets shall be Fernco Concrete Manhole Adapters or approved equal.

2. Where a cast-in-place base will be poured around an existing HDPE pipe (portion of pipe to remain as manhole channel), provide A-Lok Waterstop Wedge Kit or approved equal waterstop that is compatible with installation around the existing pipe.

C. Precast Base Manholes: Provide watertight pipe connections per manufacturer's recommendation. When additional field connections or corrections are required, connection shall be made using applicable sanded manhole adapters and non-shrink grout as shown on the Contract Documents.

PART 3 - EXECUTION

3.01 HANDLING AND STORAGE

A. All pipe, fittings, etc., shall be carefully handled and protected against damage, impact shock, free fall, and scoring. All pipe handling equipment shall be acceptable to the Engineer. Pipe shall be stored in a manner that protects the pipe against injury or damage. Stacking of polyethylene pipe will not be allowed.

B. The Contractor shall inspect each pipe and fitting prior to butt-fusion welding and again prior to installation. Any damaged pipe or fittings shall be repaired or replaced by the Contractor, at no additional expense to the District and to the satisfaction of the Engineer. Damage shall include, but not be limited to, gouges, cuts, or scratches of a depth greater than five percent (5%) of the pipe wall.

C. Prior to butt-fusion welding or installation, each pipe or fitting shall be thoroughly cleaned of any foreign substance that may have collected thereon and shall be kept clean at all times thereafter. The material used to clean the pipe and fittings shall be as recommended by the pipe manufacturer.

3.02 BUTT-FUSION WELDING

A. Only technicians who have been certified in accordance with the requirements of paragraph 2.03.C shall be allowed to operate the butt-fusion welding equipment.

B. Butt-fusion welds shall be performed in accordance with manufacturer's instructions. The butt-fusion welding procedures are summarized below:

1. Clean each pipe end with a clean cotton cloth to remove dirt, oil, grease, and other foreign materials.

2. Square (face) the mating surfaces of each of the pipes to be fused.

3. Bring the two (2) pipe ends together and adjust the pipe locations to ensure proper alignment.

4. Verify that the surface temperature of the heater plate is within manufacturer's recommended temperature range and then clean the heater surface with a clean cotton cloth.

5. Insert the heater plate between the pipe ends, bring the ends into firm contact with the heater plate without applying pressure, and achieve a proper melt pattern.

6. After achieving the proper melt bead, remove the heater plate and quickly examine the pipe ends for complete melt.

7. Once complete melt has been accomplished, rapidly bring the pipe ends together and apply pressure as recommended by the pipe manufacturer.

8. Hold the pressure constant and at the proper level throughout the cooling period, for the minimum time period recommended by the pipe manufacturer or as necessary to achieve proper cooling.

C. The Contractor shall mark each joint with the individual joint number, corresponding to the joint identification number appearing on the printout of the data logger attached to the butt-fusion welding machine. The printout shall be attached to the pipe near the joint for collection by the Engineer.

D. The Contractor shall remove both the internal and external melt bead from the welded joint. Bead removal shall be accomplished in a manner that does not score or gouge the pipe.

3.03 INSTALLATION

A. HDPE pipe shall be used for pipe bursting/reaming applications only, unless indicated otherwise in the Project Documents or approved by the Engineer. The Contractor shall insert the pipe through properly prepared insertion and receiving pits, in accordance with the requirements of ASTM F 585.

B. The maximum pulling force that may be applied to any pipe shall be calculated as follows:

$$F = SA$$

where:

F = maximum pulling force on pipe (lb.)

S = maximum allowable stress (1,000 psi)

A = cross-sectional area of pipe wall (square inches)

The cross-sectional area of the pipe wall shall be calculated as follows:

$$A = \pi(D-t)t$$

where:

D = outside diameter (in)

t = minimum wall thickness (in)

C. The Contractor shall take care not to drag the pipe over rocks or rough surfaces that may damage the pipe. An appropriate pulling head shall be attached to the end of the pipe and shall be used for pulling the pipe at all times. Pulling the pipe by the flanged end will not be allowed.

D. Manhole connections shall be made by attaching a collar to the end of the pipe and encasing the collar in the manhole wall using grout, in accordance with the Project Documents. The collar shall not be used for pulling the pipe into the horizontal boring.

E. Following installation, the insertion and receiving pits, and any other excavations used, shall be backfilled in accordance with the requirements of Section 02200, Earthwork.

3.04 FIELD COUPLINGS

Installation of pipe couplings shall be in accordance with the manufacturer's recommendations.

3.05 TESTING

Field testing of sanitary sewer system shall conform to the requirements of Section 02735, "Sanitary Sewer System Testing."

This bid item shall be paid at the unit price bid per foot of installed pipe measured from center of manhole to center of manhole.

END OF SECTION

SECTION 15069

REINFORCED CONCRETE PIPE

PART 1 - GENERAL

1.01 SECTION INCLUDES

A. All reinforced concrete piping, fittings, and appurtenances

1.02 RELATED SECTIONS

A. Section 15060: Piping: General Statement

1.03 REFERENCES

A. Caltrans Standard Specification – Section 65 (2023 Edition)

B. American Society for Testing and Materials (ASTM)
   1. C76, Standard Specification for Reinforced Concrete Culvert, Storm Drain, and Sewer
   2. C150, Standard Specification for Portland Cement
   3. C361, Standard Specification for Reinforced Concrete Low Head Pressure Pipe
   4. C497, Standard Method of Testing Concrete Pipe, Sections, or Tile

C. American Water Works Association
   1. M9, Concrete Pressure Pipe

1.04 SUBMITTALS

A. Certifications and Testing to include:
   1. See Section 15060
   2. Factory test reports
   3. Portland cement mill certificates
   4. Test analysis of design mix utilized for pipe

B. Shop Drawings consistent with Section 01300 and including:

   1. Copy of the concrete mix design before using the concrete or revising the mix proportions.

   2. Certificate of compliance for each pipe shipment. The certificate must:
      1. Be signed by the manufacturer's quality control representative
      2. State that all materials and workmanship comply with the specifications and authorized shop drawings.

3. Shop drawings must include:
   1. Wall thickness
   2. Type, size, location, and configuration of the reinforcement
   3. List of station locations for the pipes, including the size, wall type, and maximum cover height
   4. Method of excavation, bedding, and backfill for each location

4. Detail special fittings and appurtenances showing reinforcement, concrete, and special requirements

PART 2 - PRODUCTS

2.01 MATERIALS

A. Cement: ASTM designation C150 Type I or II modified to require that tricalcium aluminate content shall not exceed 8 percent

B. Aggregate: Assure a minimum 50 percent of the aggregate for all pipe is crushed limestone

The cementitious material and aggregate for concrete pipe must comply with Caltrans Standard Specification section 90-1.02, except (1) gradation requirements do not apply to the aggregate and (2) the use of SCM must comply with AASHTO M 170.

The concrete for reinforced concrete pipe must contain at least 470 pounds of cementitious material per cubic yard and have a water to cementitious material ratio that does not exceed 0.40 by weight. You may use SCM. Circumferential reinforcement must have a minimum cover of 1 inch, except pipes with a nominal diameter of 18 inches or less must have a minimum cover of 3/4 inch.

Special reinforced concrete pipe having concrete cover over the steel reinforcement greater than the cover under AASHTO M 170 must comply with section 65-2.02, except the crack width produced by the D-load test under AASHTO M 170 must be determined by the formula per Caltrans Standard Section 65-2.02

2.02 CIRCULAR REINFORCED CONCRETE PIPE

Circular reinforced concrete pipe described by class must comply with section Caltrans Standard Specification 65 for the class of pipe described.

If the class of pipe is not described and the nominal diameter is less than 24 inches, choose the class of pipe. The pipe chosen must comply with section below.

Pipes must be marked as specified in AASHTO M 170, except circular pipe sections with elliptical reinforcing must have the location of the minor axis of the reinforcing indicated by 3-inch-wide, waterproof, painted stripes on the inside and outside of each pipe at the top

and bottom, at least 12 inches long at each pipe section end, or you may provide a lift hole or lift holes at the top of each pipe along the minor axis of the reinforcement.

If the class of pipe is not described and the nominal diameter is 24 inches or greater, choose either:

1. Class of pipe. The pipe chosen must comply with Caltrans Standard Specification section 65 and this section 2.03.
2. Wall thickness and reinforcement details under section Caltrans Standard Specification 65 and this section 2.04.

If 1 lift hole is provided, the lift hole must be located at the balance point; if 2 lift holes are provided, the lift holes must be spaced equidistant on each side of the balance point. The lift holes must not interfere with the reinforcement. After placing the pipe, fill the open lift holes with cement mortar or concrete plugs before backfilling.

2.03 CIRCULAR REINFORCED CONCRETE PIPE, DESCRIBED OR CHOSEN BY CLASS

Circular reinforced concrete pipe described or chosen by class must comply with AASHTO M 170.
If the class of circular reinforced concrete pipe is not described, choose the class of pipe and corresponding method of backfill for the type of installation shown.

If the class of circular reinforced concrete pipe is described, choose the method of backfill for the type of installation shown.

The D-load to produce a 0.01-inch-wide crack must be not less than the specified D-load.
For pipe classes not specified under AASHTO M 170, but within the minimum and maximum size limits under AASHTO M 170, determine the wall thickness and steel area by interpolation from data given in the tables for pipes of the next smaller size and pipes of the next larger size.

For pipe classes, except Class I, that are less than the minimum size for a particular class under AASHTO M 170, the minimum wall thickness must be not less than 1-3/4 inches and the steel area must be not less than 0.06 sq in/lf of pipe barrel.

For reinforced concrete pipe sizes 36 inches in nominal diameter and smaller, you may substitute nonreinforced concrete pipe if the nonreinforced concrete pipe complies with the following requirements:

1. Minimum 3-edge bearing strength must be the D-load to produce the ultimate load for the class of equivalent reinforced concrete pipe under AASHTO M 170.

2. Pipes must comply with AASHTO M 86M/M 86, Class 1, 2 or 3 as required to comply with the specified D-load requirements. You may request authorization for modified or special designs under AASHTO M 86M/M 86.

3. Cementitious material and aggregate for nonreinforced concrete pipe must comply with specifications for cementitious material and aggregate under section 65-2.02.

2.04 CIRCULAR REINFORCED CONCRETE PIPE, IRECT DESIGN METHOD

Circular reinforced concrete pipe, direct design method must comply with AASHTO M 170.

The wall thickness and reinforcement you choose must comply with the details shown. Use the backfill method shown for the particular pipe design chosen.

The wall thickness of Wall X circular reinforced concrete pipe must not vary by more than 1/4 inch from the wall thickness shown.
Determine the mix proportions for the concrete to be used in direct design method pipes.

Concrete must comply with the specifications for concrete designated by compressive strength.

The circumferential reinforcement for circular reinforced concrete pipe must be smooth or deformed with a minimum yield strength of 65,000 psi. Longitudinal reinforcement must be welded to circumferential reinforcement at not more than 8-inch spacing if the reinforcement is smooth or at not more than 16-inch spacing if the reinforcement is deformed.

Splices of circumferential reinforcement must develop a strength at least equal to Awr x Fy.

where:
Awr = required area of reinforcement shown, sq in
Fy = specified yield strength of reinforcement, psi

Spacers or stirrups may be welded to the longitudinal reinforcement. The welding of spacers or stirrups will be allowed on not more than 10 percent of the circumferential reinforcement at not less than 24-inch spacing along the pipe length. The strength of the circumferential reinforcement across the completed welds must be at least equal to 1.1 x Awr x Fy where spacers or stirrups are welded to the circumferential reinforcement in excess of the above requirements or where longitudinals are welded to the circumferential reinforcement.

If you determine that handling and installation stresses require additional reinforcement, furnish and place additional reinforcement. The Department does not pay for additional reinforcement required for handling and installation stresses.

Markings for circular reinforced concrete pipe, direct design method must comply with AASHTO M 170, except the pipe class marking is not required. The markings under

AASHTO M 170 must be supplemented with the Contract number, maximum cover height, and method of backfill.

2.05 JOINTS

Joints for culvert and drainage pipes must be standard joints unless the classification is described.

At your choosing, concrete pipe joints must comply with the details shown or section 61-2.01D

Unless described otherwise, sealing materials must be one or more of the following:

1. Cement mortar composed of 1-part portland cement or portland limestone cement and 2 parts sand by volume and the following:
    1.1. Well graded sand passing a no. 8 sieve.
    1.2. Mix materials to a consistency suitable for the purpose intended. Use the mortar within 30 minutes after you add the mixing water.
    1.3. You may use admixtures of hydrated lime, fire clay, diatomaceous earth, or other authorized inert material in the mortar to facilitate workability. Obtain authorization for the quantity of admixture.
2. Rubber gasketed joints complying with ASTM C443. Rubber gasketed joints must be:
    2.1. Flexible and able to withstand expansion, contraction, and settlement.
    2.2. Type of rubber gaskets requiring lubrication. Lubricate the rubber gaskets with lubricant recommended and supplied by the pipe manufacturer.
3. Resilient joint materials consisting of polyvinyl chloride, fiberglass impregnated with epoxy resin, or other suitable resilient materials.

You may use other joint sealant materials that prevent leakage and infiltration if authorized.

Joints for siphons and pressure pipes and joints for pipes shown as watertight must be watertight under pressure and all conditions of expansion, contraction, and settlement, and must comply with section 612.01D(2)(b) for watertightness.

2.06 FABRICATION

A. Identification
    1. Provide each pipe, fitting, special appurtenance with a plainly and permanently waterproofed, marked identification. Include but not necessarily limit markings to the following:
        a. Size and class of pipe, pressure rating in compliance with referenced standards
        b. Date of manufacture
        c. Manufacturer's trademark
        d. Manufacturer's name
        e. Full details on fittings and pipe schedule regarding angles of change, reduction
        f. Special notations and tagging of special items

2.07 SOURCE QUALITY CONTROL

A. Testing
   1. Conduct testing methods to evaluate physical properties of pipe in full compliance with ASTM C497
   2. Determine acceptability of RCP in all diameters and classes by appropriate ASTM plant tests, including such tests to indicate specified design strengths have been met prior to shipment

PART 3 - EXECUTION

3.01 EXAMINATION

A. Prior to installation, inspect and verify condition of piping and appurtenances. Installation constitutes installer's acceptance of product condition for satisfactory installation

3.02 PREPARATION

Lay the pipe in a trench excavated to the lines and grades established by the Engineer. Grade and prepare the bottom of the trench to provide a firm and uniform bearing throughout the entire pipe length.

You may partially or completely backfill culvert pipe trenches while the joint mortar is still plastic. If the joint mortar sets before you place the backfill, do not backfill the pipe trench within 16 hours after jointing the pipe sections.

3.03 ERECTION/INSTALLATION/APPLICATION

A. Observe all recommendations in accord with AWWA M9 for installation

B. Do not install concrete pipe manufactured with lifting holes below the groundwater table

C. Observe Drawings for details regarding changes in direction
   1. Where changes of direction by curvature is acceptable, construct curve by deflecting pipe at each joint within the permissible joint deflection allowance recommended by the manufacturer

D. Employ the use of special radius (bevelled or mitered) pipe where deflected straight pipe will not provide a short enough change in radius or where shown on drawings

E. Prepare bedding and backfill as specified and shown on Drawings. Lay pipe with uniform bearing under the full length of the barrel of the pipe

F. Install pipe such that rubber gasket joint performs as the sole element to make the joint watertight

G. Coat exposed metal surfaces, steel joint rings, and other metal surfaces with self-curing inorganic zinc coating to a finished dry thickness of 10 mils

END OF SECTION

Section 32311

DEBRIS CATCHER (BOLLARDS)

PART 1 - GENERAL

1.01 SUMMARY

H. This work consists of construction of debris catchers (bollards), including excavation, furnishing, and installing bollards, embankment, and concrete backfill. Construction and maintenance of bollards may be covered by one or more of the following subsections:

1.02 PROJECT REQUIREMENTS

A. Provide labor, materials, and full-time supervision, as required, to set up necessary equipment, to complete the work.

PART 2 - PRODUCTS

2.01 MATERIALS

A. BOLLARD - Conform to ANSI Schedule 40 Steel.

Steel plate shall be per ASTM A36. All hardware steel conforming to the size and thickness per Manufacturer's requirement.

All steel parts shall be hot-dip galvanized after fabrication in accordance with AASHTO M111.

Concrete Footings shall be constructed using concrete Class 3000

PART 3 - CONSTRUCTION

3.01 GENERAL

A. Construct bollards of the type and at locations as SHOWN ON THE PLANS.

B. Drill holes for bollards. Set posts plumb, backfill with approved material, and compact or as SHOWN ON THE PLANS.

C. Bollards shall not vary more than ½ inch in 30 inches from a vertical plane.

3.02 MEASUREMENT

A. Measure the items listed in the bid schedule according to this section.

3.03 PAYMENT

I. The accepted quantities will be paid at the contract price per unit of measurement for this pay items listed in the bid schedule. Payment will be full compensation for the work prescribed in this Section.

SECTION

ROLLED EROSION CONTROL PRODUCT (NETTING)

PART 1 - GENERAL

1.01 SECTION INCLUDES

The work of this section consists of furnishing, placing and installing rolled erosion control product (RECP).

1.02 RELATED SECTIONS

A. Caltrans Standard Specification (2023 edition)

1.03 SUBMITTALS

Submit a certificate of compliance for straw, fiber, RECP, and fasteners before application.

If weed-free straw is used, the certificate of compliance must include the certificate of quarantine compliance.

Submit records for hydraulically applied erosion control materials that indicate (1) compliance with the specified application rates, (2) areas treated and quantity of materials applied, and (3) application date and time.

PART 2 - PRODUCTS

2.01 GENERAL

RECP must be a long-term, degradable, open-weave textile manufactured or fabricated into rolls designed to reduce soil erosion and assist in the growth, establishment, and protection of vegetation. RECP must conform to the classification system established by the EROSION CONROL TECHNOLOGY CENTER.

Deliver RECP in suitable wrapping to protect against moisture and extended ultraviolet exposure occurring before placement.

2.02 NETTING

Netting must be ECTC Type 4 and made of 100 percent coconut fiber woven into a matrix. Netting must comply with the requirements shown in the following table:

Quality characteristic		Requirement		
		Type A	Type B	Type C
Thickness (min, inch)	ASTM D2625	0.30		
Roll Width (min., inches)	-	72-158		
USLE C-Factor for a 1:1 (H:V) unvegetated slope	-	<=0.25		
Shear stress (max., psf)	ASTM D6460	2.25	4.4	4.6
Tensile Strength (min., psf)	ASTM D5035	125		
Functional Longevity (months)	-	36		
Average open area (%)	-	63 +/- 5	48 +/- 5	38 +/- 5
Weight of fabric (min., oz/sq yd)	ASTM D3776	11.8	20	26

2.03 FASTNERS

Wood stakes must be untreated fir, redwood, cedar, or pine and cut from sound timber. The ends must be pointed for driving into the ground. Notched stakes must be at least 1 by 2 by 24 inches in size. Stakes without notches must be at least 1 by 1 by 24 inches.

Metal stakes must be at least 1/2 inch in diameter and have tops bent at 90-degree angles or capped with an orange or red plastic safety cap that fits snugly onto the metal stake.

Steel staples must be a minimum of 11-gauge, 6-inch, U-shaped staples with a 1-inch crown. Provide heavier gauge and greater length if required by the job site conditions. You may use an alternative attachment device such as a 100 percent biodegradable fastener to install RECP instead of staples.

Rope to fasten fiber rolls must be 1/4 inch in diameter and biodegradable, such as sisal or manila.

PART 3 – EXECUTION

Before placing RECP, ensure the subgrade has been graded smooth and has no depressed voids. The subgrade must be free from obstructions, such as tree roots, projecting stones, or foreign matter greater than 1 inch in diameter.

Fasten RECP to the surface with staples and anchor as shown.

END OF SECTION

SECTION

GRAVEL FILTER

PART 1 - GENERAL

1.01 SECTION INCLUDES

A. The work of this section consists of furnishing, placing and construction if gravel filter.

1.02 RELATED SECTIONS

A. Section 02271 – Rip Rap (Rock Slope Protection)

B. Caltrans Standard Specification (2023 edition)

PART 2 - PRODUCTS

2.01 MATERIALS

Gravel for gravel filter must consist of hard, durable, clean, washed gravel, cobble, crushed stone, crushed rock, or any combination of these. Gravel must be free from organic material, clay balls, and other deleterious substances.

Gravel must have a durability index not less than 40 and must contain at least 90 percent crushed particles when tested under California Test 205.

The percentage composition by weight of gravel filter in place must comply with the gradation requirements shown in the following table:

Gradation Requirements

Sieve size	Percentage passing
2 1/2 inch	85-100
2 inch	65-85
1/2 inch	40-65
No. 4	15-40
No. 8	0-15

PART 3 - EXECUTION

3.01 General

Deliver uniform mixture of gravel filter to the site. Place gravel filter on streambed subgrade. Spread uniform mixture in layers and shape to thickness and limits shown using suitable equipment.

Local surface irregularities of the gravel filter aggregate must not vary from the planned slope by more than 2 inches as measured at right angles to the slope.

END OF SECTION

SECTION

HYDROSEED

PART 1 - GENERAL

1.01 SECTION INCLUDES

The work of this section consists of furnishing, placing and spreading of hydroseed.

1.02 RELATED SECTIONS

A. Section on Rolled Erosion Control product (netting)

B. Caltrans Standard Specification (2023 edition)

PART 2 - PRODUCTS

2.01 MATERIALS

Hydroseed must be of suitable native species. Hydroseed mix to be submitted by Contractor for review and approval by City's Engineer or designate

PART 3 - EXECUTION

3.01 General

Apply hydromulch and hydroseed with hydraulic spray equipment that mixes fiber, tackifier, fertilizer, and other erosion control materials specified. If applying hydroseed, add seed to hydromulch. Seed may be dry applied to small areas not accessible by hydroseeding equipment if authorized.

Equipment must have a built-in continuous agitation and discharge system capable of producing a homogeneous mixture and a uniform application rate. The tank must have a minimum capacity of 1,000 gallons. You may use a smaller tank if authorized.

Apply materials in locations, rates, and number of applications shown and as follows:

1. Start application within 60 minutes after adding seed to the tank.
2. Apply in successive passes as necessary to achieve the specified application rate.
3. Apply all hydromulch or hydroseed materials shown for a single area within 72 hours.

If hydromulch or hydroseed materials are applied to areas covered by RECP, apply hydromulch and hydroseed materials to the rolled product as follows:

1. Verify the RECP is in uniform contact with the slope surface.
2. Spray materials into the RECP perpendicular to the slope and integrate well.
3. Do not displace or damage the RECP.

END OF SECTION

SECTION

TEMPORARY CREEK DIVERSION SYSTEM (REVOCABLE)

PART 1 - GENERAL

1.01 SECTION INCLUDES

A. The work of this section consists of specifications for constructing, maintaining, reconstructing, and removing temporary creek diversion system (TCDS), and restoring creek bed to original condition. The temporary diversion system is used to divert upstream water flows to allow construction in a dry or dewatered location.

1.02 RELATED SECTIONS

A. Caltrans Standard Specification (2023 edition)

1.03 SUBMITTALS

Within 20 days of Contract approval, submit 2 copies of the Temporary Creek Diversion System Plan (TCDSP). The TCDSP must include:

1. Installation and removal process, including equipment, platforms for equipment, and access locations.
2. Anticipated flow rates.
3. Calculations supporting the sizing of piping, channels, pumps, or other conveyance by using FHWA HY-8 or other equivalent method. Calculate the discharge water flow rate and velocity anticipated where it discharges on any erodible surface, so its conveyance does not cause erosion within the project or at the discharge to the water body. Temporary culverts attached to banks, walls, or other locations must be designed to hold the full weight of the culvert at capacity and restrain the culvert for any expected hydraulic forces.
4. Plans showing locations of diversion, including layouts, cross sections, and elevations.
5. Materials proposed for use, including SDS if applicable.
6. Operation and maintenance procedures for the TCDS.
7. Restoration plans showing before and after conditions, including photos of existing conditions for areas disturbed during the installation, operation, and removal of the TCDS.
8. Monitoring and reporting plan to ensure applicable water quality objectives are met. This includes schedule of work including Temporary BMP implementation as part of the Construction Site BMP strategy, and SWPPP or WPCP as applicable.
9. Details of the pumping system, if used, including power source, debris handling, fish screens, and monitoring requirements.

   If revisions are required, the City Engineer or Designate notifies you of the date when the review stopped and provides comments. Submit a revised TCDSP within 15 days of receiving the comments. The City Biologist's review resumes when a complete TCDSP has been resubmitted.

Submit an electronic copy on a read-only CD, DVD, or other Engineer-authorized data storage device and 4 printed copies of the authorized TCDSP.

If the RWQCB or other regulatory agency requires review of the authorized TCDSP, the Engineer submits it to the RWQCB for review and comment. If the Engineer orders changes to the TCDSP based on the RWQCB's comments, submit a revised TCDSP within 10 days.

All submittals which include plans, specifications, and calculations must be sealed and signed by a civil engineer registered in the State.

PART 2 - PRODUCTS

2.01 GRAVEL

Gravel must:

1) Be river run gravel obtained from a river or creek bed with gradation of 100 percent passing a 3/4 inch sieve and 0 percent passing a 3/8 inch sieve
2) Be clean, hard, sound, durable, uniform in quality, and free of any detrimental quantity of soft, thin, elongated or laminated pieces, disintegrated material, organic matter, or other deleterious substances
3) Be composed entirely of particles that have no more than 1 fractured face
4) Have a cleanliness value of at least 85, as determined by California Test 227

2.02 IMPERMEABLE PLASTIC MEMBRANE

1) Impermeable plastic membrane must be:
2) Single ply, commercial quality, polyethylene with a minimum thickness of 10 mil complying with ASTM D2103. You must use stronger plastic membrane if required as part of design to resist hydraulic forces.
3) Free of holes, punctures, tears or other defects that compromise the impermeability of the material.
4) Suitable for use as an impermeable membrane.
5) Resistant to UV light, retaining a minimum grab breaking load of 70 percent after 500 hours under ASTM D4355.

2.03 GRAVEL-FILLED BAGS

Gravel-filled bags must comply with Caltrans Standard Specification section 13-5.02G.

2.04 PLASTIC PIPES

Plastic pipe must comply with Caltrans Standard Specification section 61-3.01 and must:

1) Be clean, uncoated, in good condition free of rust, paint oil dirt or other residues that could potentially contribute to water pollution
2) Be adequately supported for planned loads
3) Use watertight joints under section 61-2.01.
4) Be made of a material or combination of materials that are suitable for clean water and which do not contain banned, hazardous or unlawful substances
5) For temporary pipes not reused on the project you may use the following materials:
   5.1) PVC closed-profile wall pipe must comply with ASTM F1803
   5.2) PVC solid wall pipe must comply with ASTM D3034, ASTM F679, AWWA C900, AWWA C905, or ASTM D2241 and cell class 12454 defined by ASTM D1784
   5.3) HDPE solid wall pipe must comply with AASHTO M 326 and ASTM F714

5.4) Polyethylene large-diameter-profile wall sewer and drain pipe must comply with ASTM F894

2.05 ROCK

Rock layer must comply with the table titled *Rock Gradation for 7-inch-thick Layer* in Caltrans Standard Specification section 72-4.02

2.06 PUMPING SYSTEM

Pumping system must:

1. Comply with Caltrans Standard Specification section 74-2.02B
2. Be equipped with secondary containment
3. Be free of fuel and oil leaks
4. Meet intake screen regulatory requirements

2.07 SEEPAGE PUMPING SYSTEM

If seepage occurs in the dewatered work area, the water must be removed by sump pumps as part of the TCDS.

Seepage pumping system must:

1. Comply with section 74-2.02B
2. Ensure discharge water conform with PLACs or is treated on site
3. Be free of fuel and oil leaks

2.8 DISCHARGE WATER ENERGY DISSIPATION AND EROSION CONTROL

Discharge water from pumps, pipes, ditches, or other conveyances must have BMPs to dissipate the flows and velocity of water discharged from the temporary diversion system if erosion would otherwise occur.

Energy dissipation measures:

1. May be plastic sheeting, flared end sections, rubber matting, or other materials appropriate for the design hydraulics
2. Must be anchored to prevent movement by expected flows
3. Must be removed when the TCDS is removed

PART 3 - EXECUTION

3.01 General

Construction, use and removal of the TCDS is restricted to the time period from June 15, 2025to _October 31, 2025. If the work cannot be completed during the initial restricted time period, remove TCDS, restore the creek to original flow condition, and reconstruct the TCDS after of the following year. No work is allowed within the stream except during the restricted time period.

Do not use motorized equipment or vehicles in areas of flowing or standing water for the construction or removal of the TCDS in compliance with section 13-4.03.

Remove vegetation to ground level and clear away debris.

Place temporary or permanent fill as allowed by PLACs.

Place rock at outlet of diversion pipe under section 72-4.03, except motorized vehicles and equipment must not be used in areas of flowing or standing water.

Do not construct or reconstruct TCDS if the 72-hour forecasts predict a 50 percent or greater chance of rain in the project area.

Stop allwork and remove all material and equipment from the creek between upstream and downstream cofferdams if the 72-hour forecasts predict a 50 percent or greater chance of rain in the project area and the predicted rainfall is estimated to produce a flow rate exceeding the design capacity of the TCDS.

If the required freeboard cannot be maintained and overtopping may occur, implement contingency plan to remove all workers, equipment, and potential sources of pollution from the dry working area of the creek bed.

The TCDS must be constructed within the temporary impact footprint as described in the environmental commitments.

Lap and join joints between the edges of impermeable plastic membrane with commercial-quality waterproof tape with minimum 4-inch lapping at the edges.

Seal openings or penetrations through the impermeable plastic membrane with commercial quality waterproof tape.

The TCDS must be water tight to keep the work area dry for construction and prevent the creation of pollutants. Maintain all portions of the TCDS and fix leaks as soon as they are discovered.

Contact water agencies that discharge to the construction area to ensure that unexpected water is not discharged during construction which could compromise the TCDS.

3.02 Maintenance

Maintain the TCDS to provide a minimum freeboard of 12 inches between the water surface and the impermeable top of the cofferdams.

Do not discharge runoff from existing or proposed drainage systems into the dry work area between the cofferdams. Runoff from these systems may be connected to the diversion pipe or conveyed by pipes downstream of the cofferdam.

Prevent leaks in the TCDS. Provide seepage pumps as necessary and keep the work area dry to prevent the creation of sediment-laden water.

Repair holes, rips and voids in the impermeable plastic membrane with commercial-quality waterproof tape. Replace impermeable plastic membrane when patches or repairs compromise the impermeability of the material.

Repair TCDS within 24 hours after the damage occurs.

Prevent debris from entering the TCDS and receiving water.

Remove and immediately replace gravel, gravel-filled bags, impermeable plastic membrane, or plastic pipes contaminated by construction activities.

Remove sediment deposits and debris from the TCDS as needed. If removed sediment is deposited within project limits, it must be stabilized and not subject to erosion by wind or water, under sections 19-1.01 and 19-2.03 B.

3.03 Removal

When no longer required, remove all components of TCDS. Return the creek bed and banks to the original condition.

Do not excavate the native creek material. Backfill ground disturbance, including holes and depressions caused by the installation and removal of the TCDS with gravel. Maintain the original line and grade of the creek bed.

END OF SECTION

City of Belmont – Salson Trail & Culvert

Project Description

Introduction

This document describes the City of Belmont's (City's) proposed Salson Trail and Culvert Project (project, proposed project), located at the northwest edge of the City adjacent to Sugarloaf Open Space (Figure 1). It contains the following information.

- Background on the project including the project's context, the need for the project, and the project goal and objectives
- Information on previous studies that provided the basis for project design
- A description of the project elements
- An overview of the anticipated construction process
- The environmental commitments that will be put in place to avoid and reduce impacts on sensitive habitats and special-status species
- Information on project environmental review and clearance needs

A list of *References Cited* follows the text.

Project Context

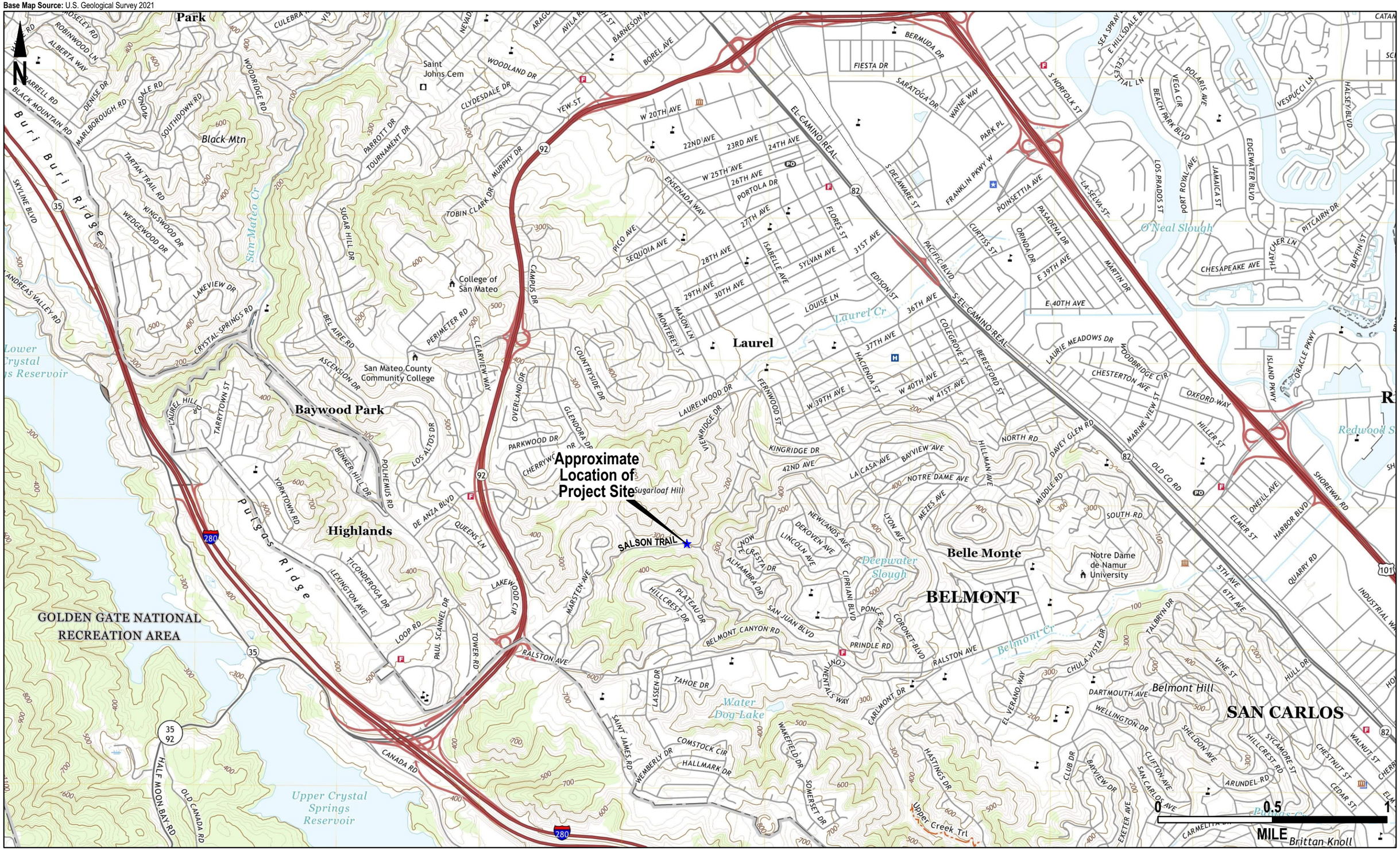
The project is located at the interface between hillside residential development and open space (Figure 2). Salson Trail is an unpaved fire road that provides important emergency firefighting access to the open space as well as supporting recreational use by hikers and bicyclists. It also provides maintenance access to a 10-inch-diameter vitrified clay pipe (VCP) City sewer main that serves approximately 400 houses in the adjacent residential area to the south.

As a hillside road notched into the slope, Salson Trail crosses multiple drainages, including a headwaters tributary to East Laurel Creek, which is culverted beneath the trail about 140 feet east of the terminus of paved East Laurel Creek Road. East Laurel Creek, which flows northeast, is the largest tributary of Laurel Creek; Laurel Creek in turn flows generally southeast, ultimately discharging to San Francisco Bay via Seal Slough.[1]

During the large storm events of December 2022 – January 2023, the Creek overtopped Salson Trail, eroding out a portion of the road and severely damaging the existing 48-inch-diameter corrugated metal pipe (CMP)

[1] Seal Slough is also referred to as O'Neal Slough (see Figure 1).

Base Map Source: U.S. Geological Survey 2021



Redtail Consulting
Environment & Community

Figure 1. Project Location
Salson Trail & Culvert – Project Description
City of Belmor

Aerial Photograph Source: GoogleEarth (imagery date: 04/05/02022; downloaded: 09/11/2024)



Redtail Consulting
Environment & Community

Figure 2. Aerial View of Project Vicinity
Salson Trail & Culvert – Project Description

culvert conveying East Laurel Creek flows (Figure 3). The north end of Salson Trail has been closed since that time to reduce risks to public safety (see https://www.belmont.gov/Home/Components/FacilityDirectory/FacilityDirectory/96/35). The segment of the existing sewer main that crosses the culvert in the subsurface (about 50 linear feet in total) is also damaged and requires replacement to prevent leaks and spills.

Project Objectives

The Salson Trail & Culvert Project is proposed to restore culvert function, prevent sanitary sewer spills, and restore firefighting access at the urban/wildland interface.

Specific project objectives include

- replacing the failing culvert at an appropriate diameter
- replacing the damaged and at-risk segment of sewer main
- repairing Salson Trail so it can be reopened for firefighting access and recreational use

Basis of Design

Project design was largely guided by a hydrologic and hydraulic (H&H) analysis conducted by Wood Rodgers for the City (Wood Rodgers 2024; separately attached). This entailed developing an H&H model for the channel and culvert, assessing the capacity and function of the existing culvert crossing under 10-, 25-, and 100-year storm conditions, and recommending improvements based on modeling results. Modeling used a refined version of the H&H model previously developed for the City's Drainage Master Plan (Wood Rodgers 2024).

Wood Rodgers' (2024) modeling indicates that the existing 48-inch-diameter culvert is undersized for flows generated by the 25-year storm and larger events. They accordingly recommended upsizing the culvert to 60-inch diameter, to safely convey the 25-year flow without overtopping and roadway erosion. They also identified that the existing 48-inch-diameter CMP culvert is corroded, presumably due to soil conditions, and recommended that the replacement culvert be constructed of reinforced concrete pipe (RCP) to extend its service life. Other recommendations included placement of riprap at the new culvert inlet and outlet to stabilize the channel and minimize erosion at higher flows (Wood Rodgers 2024).

Additional evaluation during the early phases of the design process determined that a headwall with wingwalls would be a better solution for retainment of the embankment and road section of the unpaved trail and this was substituted for the upstream riprap apron (Samudrala pers. comm., Mott MacDonald 2024a). The 12-foot height of the wingwalls (see Mott MacDonald 2024a) was based on the existing Salson Trail roadway grade (Abad pers. comm.), and the wingwalls are being designed consistent with California Department of Transportation (Caltrans) Standard Plan, 2023 Edition, Standard Details B3-1C and D90 (again, see Mott MacDonald 2024a).

Further modeling using an add-on to the same model construct was conducted to determine the appropriate size for riprap at the downstream end of the culvert and the extent of the riprap apron (Wood Rodgers 2024). Inputs included the 25-year design flow, culvert diameter (60 inches), normal depth, flow type, and culvert tailwater depth, which was obtained from the downstream channel cross section. Once D_{50} (the average riprap diameter) was determined, the length and depth of the downstream riprap apron were calculated using the approach laid out in FHWA Engineering Circular 14 (Federal Highway Administration 2006). Apron width was determined using a 1:3 flare slope conforming to the dimensions of the downstream channel. A headwall without

Source: photographs courtesy of Vollmar Natural Lands Consulting, Berkeley, CA



View east along closed section of Salson Trail



View upstream through damaged culvert; note deteriorated condition



View upstream along riparian corridor, closed segment of Salson Trail in foreground



View downstream through damaged culvert; again, note overall deteriorated condition

Figure 3. Project Site Views Showing Culvert Damage

wingwalls would also be included on the downstream end of the culvert, to provide a stable section for the Salson Trail roadway and ensure that it can adequately support emergency vehicles for firefighting access.

A trash rack was also recommended for the inlet to reduce the potential for culvert clogging and damage due to floodborne debris (Wood Rodgers 2024).[2] Preliminary design evaluation found that a row of "debris catcher" poles similar to those used on the City's 2011 Bartlett Way culvert replacement (Place ID No. 772163) would be more appropriate than a trash rack per se and these will be substituted for the trash rack.

Finally, Wood Rodgers (2024) recommended placement of an aggregate base for restoration of the roadway, to improve wet weather access.

Project Overview

Project Elements

As currently proposed, the project would include the following elements (Figure 4) (Mott MacDonald 2024a, 2024b).

- A new 60-inch-diameter RCP culvert
- Headwall, wingwalls, and "debris catcher" poles at the upstream end of the culvert
- Headwall and riprap apron at the downstream end of the culvert
- Replacement of the damaged section of 10-inch-diameter sewer line with high-density polyethylene (HDPE) pipe at the same diameter
- Restoration of the Salson Trail where it was damaged by floodflows

The current (October 2024) progress planset is included as a separate attachment with this permit application.

Project Construction

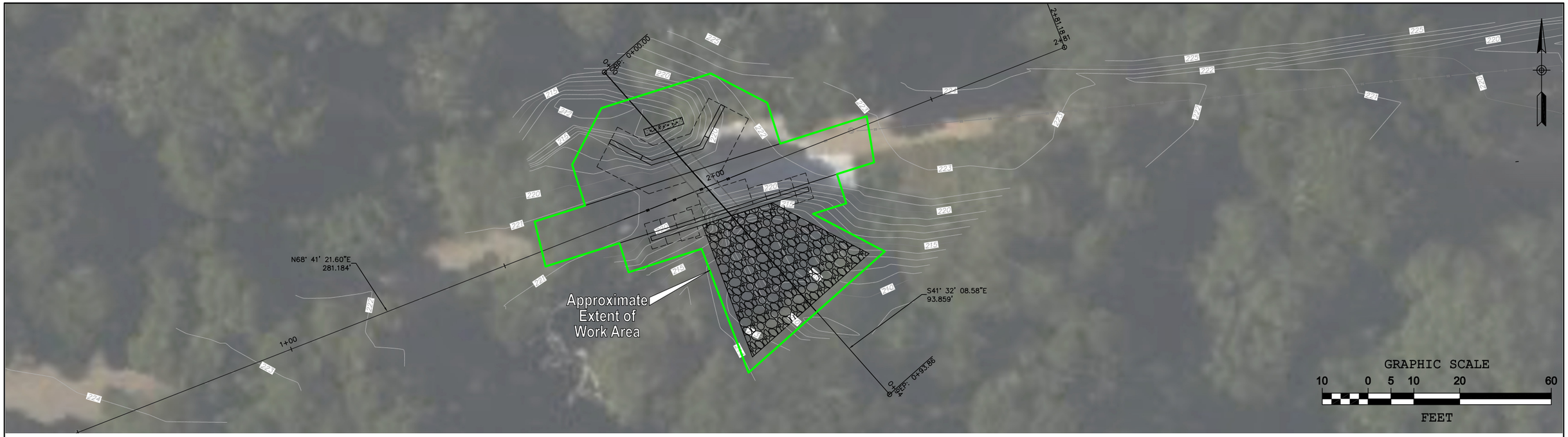
Figure 4 shows the anticipated work area. Construction would rely on means and methods typical in the San Francisco Bay Region. Equipment expected to be in use on the site includes an excavator, concrete mixer, dump truck(s), bulldozer, and compactor as well as hand tools and crew vehicles. Staging would be accommodated entirely within the closed section of Salson Trail. Access to the site would be via Salson Trail, entering either from Bishop Road on the west or East Laurel Creek Road on the east.

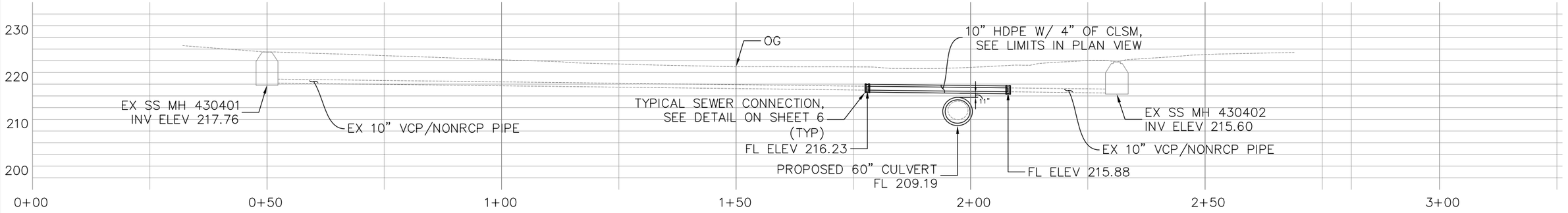
Construction would entail the following steps.

- Site preparation; clearing and grubbing of vegetation in the immediate work area
- Using sump pumps and a temporary pipeline extending from manhole to manhole to bypass sanitary sewer flow during work
- Excavating and removing the existing sewer line and culvert

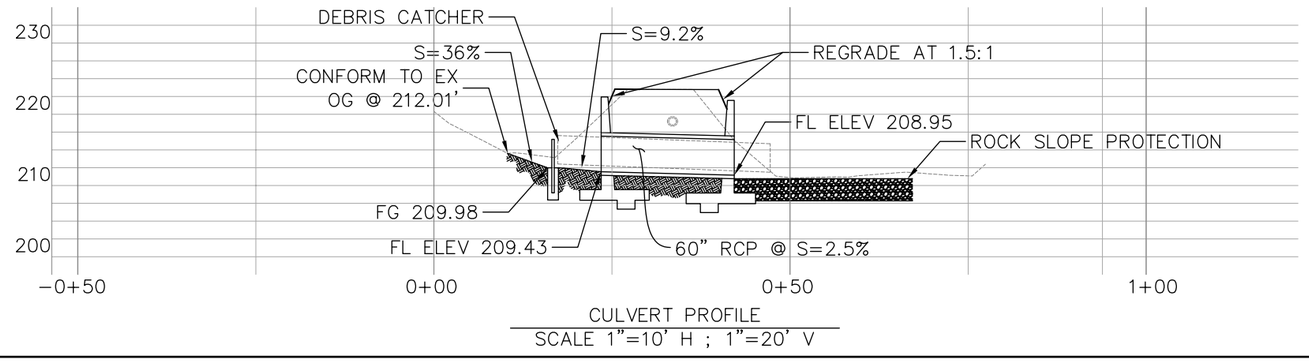
[2] Additionally, although climate change *per se* was not a specific driver on project design, the larger culvert size is expected to improve conveyance and the addition of stabilizing wingwalls and riprap will reduce the potential for erosion in more intense winter storm events anticipated under future climate scenarios (e.g., Ackerley et al. 2023).

Source: *modified from* Mott MacDonald 2024b





SANITARY SEWER PROFILE
SCALE 1"=10' H ; 1"=20' V



CULVERT PROFILE
SCALE 1"=10' H ; 1"=20' V

Figure 4. Overview of Project Elements and Work Area

- Installing the replacement culvert
- Constructing the headwall and wingwalls at the upstream end of the new culvert
- Constructing the headwall at the downstream end of the new culvert
- Backfilling around the new culvert and behind the headwall/wingwalls to restore the contours of the channel and roadway embankment; installing the replacement HDPE sanitary sewer line within a concrete encasement above the replaced culvert; placing erosion control as needed on fill slopes
- Placing and compacting a 6-inch lift of Class 2 aggregate base on top of the restored embankment fill and conforming the surface to the existing Salson Trail roadway
- Constructing the riprap apron at the downstream end of the new culvert
- Installing "debris catcher" poles at the upstream end of the culvert

Environmental Commitments

Based the results of the *Biological Resources Evaluation* conducted for the project (Vollmar Natural Lands Consulting 2024), the following Avoidance and Minimization Measures (AMMs) will be incorporated into the project to protect special-status species and sensitive habitats.

- Prior to the start of training, the City will retain a qualified biologist to conduct a mandatory biological resources awareness training for all construction personnel. The training will cover
    - sensitive habitats on the site
    - listed and other special-status species that may occur on the site, including their habitats, how to recognize them in the field, the conservation measures that will be required for the project (including the measures below and any additional permit conditions) and the penalities for non-compliance with these measures, and proper procedures in the event a special-status species is observed during construction

  Proof of personnel attendance will be kept on file by the City. Translation/interpretation will be provided for non-English-speaking workers. When new construction personnel are added to the project, the City will ensure that the new personnel receive the training before starting work; subsequent training of personnel can include videotape of the initial training and/ or the use of written materials rather than in-person training by a biologist.
- Staging and materials laydown will be confined to the existing Salson Trail roadway; no staging will occur within the riparian corridor
- The work and access footprints will be kept to the minimum necessary to accomplish the work; no unnecessary entrance into or disturbance of the riparian corridor or Creek channel will be permitted. The limits of the work area and access will be delineated in the field prior to contractor mobilization, using temporary construction fencing or another suitable low-impact/high-visibility medium. Fencing or other delineation will be installed under qualified biologist oversight. No entry into the riparian corridor outside the work/access area boundary will be permitted
- Construction will be limited to times when East Laurel Creek is not flowing

- If feasible, work will be conducted outside the nesting season (February 1 – August 31). If work cannot be conducted between September 1 and January 31, the City will retain a qualified biologist to conduct a pre-construction nesting bird survey no more than 1 week prior to the first project-related activity onsite. Any active nests will be protected with no-activity buffers; no entry into the buffer areas will be permitted until the biologist determines that the young have successfully fledged or that the nest has been abandoned. Buffers will be delineated with temporary construction fencing installed under biologist supervision, and buffer widths will be consistent with current California Department of Fish and Wildlife (CDFW) recommendations based on the species of the nesting pair. If state- and/or federally listed species are involved, the City (via the biologist) will coordinate with CDFW and/or the U.S. Fish and Wildlife Service (USFWS) and will proceed in accordance with agency guidance
- Pre-construction surveys for pallid bat (*Antrozous pallidus*) and San Francisco dusky-footed woodrat (*Neotoma fuscipes annectens*) will be conducted by a qualified biologist within 2 weeks prior to the start of any vegetation- or ground-disturbing activity in the project area. Surveys will be consistent with current CDFW guidance; if either species is observed within the project area, follow-up actions will also be consistent with current CDFW guidance
- If requested by CDFW, pre-construction surveys for western leatherwood (*Dirca occidentalis*) and California red-legged frog (*Rana draytonii*) will also be conducted, with appropriate follow-up if either of these species is found to be present. If western leatherwood is observed, the biologist will promptly notify the City and contact CDFW for guidance. If California red-legged frogs at any life stage (eggs, tadpoles, juveniles, or adults) are found, the biologist shall promptly notify the City, and shall contact USFWS and CDFW for guidance.
- No removal or significant disturbance to any trees protected by City Ordinance #2017-1120 will occur unless appropriately authorized by the City. All tree removals will be compensated at a minimum 3:1 ratio under the project *Habitat Mitigation & Monitoring Plan* (Redtail Consulting 2024) (separately attached)
- Prior to the start of work, water quality best management practices (BMPs) will be put in place to minimize erosion, sediment mobility, and potential impacts to water quality. These may include silt fencing, wattles, fiber mats, and other suitable measures. If wattles are used, they will consist of certified sterile weed-free straw. No monofilament materials will be permitted
- Project proponent will implement standard Sudden Oak Death (SOD) and other *Phytophthora* spp. avoidance and minimization measures, including disinfecting boots and equipment, and only planting *Phytophthora*-free plants.

Environmental Review & Clearances

As the lead agency for California Environmental Quality Act (CEQA) compliance, the City has determined that the project qualifies for statutory exemption from CEQA review per Section 15269 of the *CEQA Guidelines* (Emergency Projects). More specifically, the project qualifies as "[e]mergency repairs to publicly…owned service facilities necessary to maintain service essential to the public health, safety or welfare" (*Guidelines* 15269[b]). A Notice of Exemption will be filed with the State Clearinghouse on project approval, per *CEQA Guidelines* Section 15062.

As the lead agency for National Environmental Policy Act (NEPA) compliance, the Federal Emergency Management Agency (FEMA)—which is providing grant funding for the project—has determined that the project

qualifies for categorical exclusion from NEPA review in accordance with FEMA Instruction 108-1-1 and FEMA Directive 108-1-1 as authorized by DHS Instruction Manual 023-01-001-01, Revision 1., Categorical Exclusion N9 (Federal Assistance for Flood Hazard Reduction Actions) (Federal Emergency Management Agency 2024a). FEMA has also concluded that no consultation is warranted under the federal Endangered Species Act or the Magnuson-Stevens Fishery Conservation and Management Act, and that no further action is required for compliance with Section 106 of the National Historic Preservation Act (Federal Emergency Management Agency 2024a, 2024b).

The U.S. Army of Engineers has further indicated that this reach of the Creek is considered an ephemeral stream and thus is not considered a Water of the United States (Galacatos pers. comm.). As result, the project will not require authorization from the U.S. Army Corps of Engineers under Clean Water Act Section 404. However, the Creek is a Water of the State and displays bed and bank geomorphology, and thus will need to obtain Waste Discharge Requirements per California's Porter-Cologne Water Quality Control Act as well as a Streambed Alteration Agreement with the California Department of Fish and Wildlife, per Fish and Game Code Section 1602.

References Cited

Abad, L. (Mott MacDonald). Pers. comm. Written communication to Anna Buising (Redtail Consulting), September 12, 2024. On file with Redtail Consulting, Fremont, CA.

Ackerley, D., Jones, A., Stacey, M., Riordan, B., Barnard, P., Beissinger, S., Biging, G., Brooks, A., Elias, E., Grenier, L., Herbold, B., Micheli, L., Moritz, M., Moura, S., Nelson, K., Piette, M.A., Radke, J., Rhoades, A., Silver, W., Steenwerth, K., Stokes-Draut, J., Torregrosa, A., Waddell, P., and Wehner, M. 2023. California's Fourth Climate Change Assessment: San Francisco Bay Region Report. Available: https://www.climateassessment.ca.gov/regions/. Downloaded: September 2024.

Federal Emergency Management Agency. 2024a. Record of Environmental Consideration (REC), Project PA-09-CA-4683-PW-01382, Title: 728158 – Salson Service Road and Culvert. On file with Redtail Consulting, Fremont, CA.

Federal Emergency Management Agency. 2024b. No Effect Determination Form for FEMA-Funded Projects in California, Nevada, Arizona, Hawaii, and the Pacific Islands – Review for Compliance with Endangered Species Act (ESA) and Magnuson-Stevens Fishery Conservation and Management Act (MSA), Reference Number 728158. On file with Redtail Consulting, Fremont, CA.

Federal Highway Administration. 2006. Hydraulic Design of Energy Dissipators for Culverts and Channels. Engineering Circular No. 14, Third Edition. Available: https://rosap.ntl.bts.gov/view/dot/44356.

Galacatos, K. (U.S. Army Corps of Engineers, San Francisco District, South Branch, Regulatory Division). Email to Anna Buising (Redtail Consulting), August 19, 2024. On file with Redtail Consulting, Fremont, CA.

Mott MacDonald. 2024a. Salson Trail Culvert Repair Project, East Laurel Creek, Belmont, California: 65% Planset. (September.) San Jose, CA. Prepared for City of Belmont. On file with Redtail Consulting, Fremont, CA. (Updated October 2024 progress planset is included with this permit application.)

Mott MacDonald. 2024b. Department of Public Works CCN 2024-631, Salson Trail Culvert, Culvert Design. Prepared for City of Belmont. On file with Redtail Consulting, Fremont, CA.

Mott MacDonald. 2024b. Work Area Map for Cultural and Biological Resources Studies, Salson Trail Culvert. San Jose, CA. (September.) Prepared for Redtail Consulting, Fremont, CA. On file with Redtail Consulting, Fremont, CA.

Redtail Consulting. 2024. City of Belmont Salson Trail & Culvert Project Habitat Mitigation & Monitoring Plan. Prepared for City of Belmont. Separately attached to this permit application.

Samudrala, H. (Mott MacDonald). Pers. comm. Written communication to Anna Buising (Redtail Consulting), September 12, 2024. On file with Redtail Consulting, Fremont, CA.

U.S. Geological Survey. 2021. Topographic Map of San Mateo 7.5' Quadrangle, California (scale 1:24,000). Available: https://ngmdb.usgs.gov/topoview/viewer/#4/39.98/-99.93. Downloaded: October 2023.

Vollmar Natural Lands Consulting. 2024. Biological Resources Evaluation, Salson Service Road and Culvert Repair Project, Belmont, California. Prepared for Redtail Consulting, Fremont, CA. On file with Redtail Consulting, Fremont, CA and City of Belmont. (Included with this permit application.)

Wood Rodgers. 2024. Technical Memo: Salson Trail Hydrologic and Hydraulic Analysis. Oakland, CA. Prepared for City of Belmont. On file with Redtail Consulting, Fremont, CA. (Included with this permit application.)

STATE WATER RESOURCES CONTROL BOARD
WATER QUALITY ORDER NO. 2004-0004-DWQ

STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR DREDGED OR FILL DISCHARGES TO WATERS DEEMED BY THE U.S. ARMY CORPS OF ENGINEERS TO BE OUTSIDE OF FEDERAL JURISDICTION (GENERAL WDRs)

I. FINDINGS

The State Water Resources Control Board (SWRCB) finds that:

Reasons for issuing these General WDRs

1. Section 13260(a) of the California Water Code (Water Code) requires that any person discharging waste or proposing to discharge waste within any region, other than to a community sewer system, which could affect the quality of the waters of the State[1], file a report of waste discharge (ROWD). The discharge of dredged or fill material may constitute a discharge of waste that could affect the quality of waters of the State.

2. California has largely relied upon its authority under section 401 of the federal Clean Water Act (CWA) (33 U.S.C. § 1341) to regulate discharges of dredged or fill material to California waters. That section requires an applicant to obtain "water quality certification" from California that the project will comply with State water quality standards before certain federal licenses or permits may be issued. The permits subject to section 401 include permits for the discharge of dredged or fill materials (CWA section 404 permits) issued by the U.S. Army Corps of Engineers (ACOE).

3. Given the regulatory process employed under section 401, waste discharge requirements under the Porter-Cologne Water Quality Control Act were typically waived for projects that required certification. Regional Water Quality Control Board (RWQCB) waivers also applied to discharges outside of ACOE jurisdiction. However, these waivers expired as of January 1, 2003 pursuant to the requirements of SB 390. These General WDRs regulate some of the activities for which WDRs were previously waived.

4. The certification process under section 401 only applies to those waters that are subject to the reach of the CWA. The CWA applies to "navigable waters," which are defined in the CWA as "waters of the United States." The term "waters of the United States" is defined expansively in 33 Code of Federal Regulations (CFR), part 328. In 2001, the U.S. Supreme Court issued a decision in *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*, 531 U.S. 159 (2001) ("*SWANCC*"), which held that certain "isolated" waters are not subject to CWA jurisdiction merely because they are frequented by migratory birds that cross state lines. The full implications of SWANCC are yet to be determined in the federal courts, but as a result

[1] "Waters of the State" as defined in Water Code section 13050(e).

of the decision, many projects that previously would have required a section 404 permit now no longer need one. From January 1, 2001 to December 31, 2003, the ACOE disclaimed jurisdiction over 160 water bodies comprising 449 acres of waters of the state, including 251 acres of wetlands, 121 acres of riparian area, and 77 acres of other waters (these figures are under-reported because 24 percent of the jurisdictional disclaimers did not specify the sizes of the disclaimed waterbodies). The prospect of issuing waste discharge requirements for each of the now non-federal waters, especially in a time of budgetary contraction, is daunting. Many of the projects that were traditionally subject to certification requirements involved small discharges with few or no permanent impacts. It is the intent of these General WDRs to regulate a subset of the discharges that have been determined not to fall within federal jurisdiction, particularly those projects involving impacts to small acreage or linear feet and those involving a small volume of dredged material.

5. Wetlands, riparian areas, and headwaters are shallow waters of the state, which are by their nature affected most often and severely by filling and excavation. Regulatory attention to these water bodies is necessitated by the State "No Net Loss" Policy for wetlands (Executive Order W-59-93); the high habitat value of these waters; the basin-wide value of these waters for pollutant removal, floodwater retention, channel stability, and habitat connectivity; the high number of special-status species associated with these waters and their associated habitats; the high percentage of historic losses of these waters in California; the vulnerability of these waters to future impacts from projected population growth and land development; and the high level of public interest in these waters.

6. Water Code section 13263(a) requires that waste discharge requirements (WDRs) be prescribed as to the nature of any proposed discharge, existing discharge, or material change in an existing discharge. Such WDRs must implement any relevant water quality control plans, taking into consideration beneficial uses to be protected, the water quality objectives reasonably required for those purposes, other waste discharges, the need to prevent nuisance, and the provisions of section 13241 of the Water Code.

7. Water Code section 13263(i) authorizes the SWRCB to prescribe general WDRs for a category of discharges if the discharges are produced by the same or similar operations; the discharges involve the same or similar types of waste; the discharges require the same or similar treatment standards; and the discharges are more appropriately regulated under general discharge requirements than individual discharge requirements.

8. The discharges authorized by these General WDRs meet the criteria for general WDRs set forth in Water Code section 13263(i) because they are all produced by dredging or filling operations; they all involve the discharge of earth, rock, or similar solid materials; they are all limited in size per the terms of the WDRs; they all require similar mitigation techniques to avoid, minimize, and/or compensate for their adverse impacts; and they are all relatively small surface water bodies or water body segments that have been deemed by ACOE to be “isolated,” do not meet the federal wetland criteria, or are above the “line of ordinary high water” limit of federal jurisdiction. They are appropriately regulated under General WDRs because of their similar nature, large numbers, and amenability to being regulated through the use of similar discharge restrictions, as specified in these General WDRs. Regulation of

such discharges by these General WDRs will allow the SWRCB and RWQCBs to direct limited staff time to larger, more complex, and potentially more damaging discharges to waters deemed to be outside of federal jurisdiction.

Eligibility Criteria

9. These General WDRs are restricted to dredged or fill discharges of not more than two-tenths (0.2) of an acre and 400 linear feet for fill and excavation discharges, and of not more than 50 cubic yards for dredging discharges. Projects that may be covered under these General WDRs include land development, detention basins, disposal of dredged material, bank stabilization, revetment, channelization, and other similar projects. These size maximums help limit the potential environmental impact of the discharges and make them amenable to similar discharge restrictions, while permitting about half of the projects discharging to non-federal waters, as projected from historical data on discharge sizes. The size and volume restrictions are appropriate because larger projects involve a significantly greater risk to the environment and are more appropriately regulated by individual WDRs.

   Absent a potential effect on the quality of waters of the state, no notification is required under these General WDRs.[2] The "quality of waters" refers to chemical, physical, biological, bacteriological, radiological, and other properties and characteristics of water which affects its use.[3] Because of the variability, complexity, and interactions of the factors affecting the quality of waters, it is not possible to provide advice on the kind, size, location, or duration of discharges that can affect water quality under all circumstances. Generally, discharges of dredged, fill, or excavated material to a wetland, or to the active channel or bed of a waterbody will require regulation. Discharges to a riparian area or to an area in proximity to a waterbody can affect the quality of the water if they directly or indirectly result in a discharge to the water (e.g., via stormwater flows, during flood events, or by generating pollutants or increased runoff); are associated with a change in the nature of vegetation that could affect water quality (e.g., by affecting pollutant removal, stream shading, or bank stability); or change the hydrologic or geomorphologic characteristics of the waterbody during some flow condition.

   These General WDRs do not set a lower size limit below which a Notice of Intent is not required. Neither the Porter-Cologne Water Quality Control Act nor the federal CWA establish a lower size threshold for permitting. If a lower threshold were established in these General WDRs, discharges below that threshold would be subject to regulation under individual WDRs or an individual waiver of WDRs, thus defeating the purpose of these General WDRs. Moreover, size is not the sole factor dictating the value of a wetland or other water. Small, strategically placed waters, or segments of waters, can play important roles in supporting local habitat, habitat connectivity, pollutant removal, floodwater attenuation, and other beneficial uses. In addition, without a reporting requirement, there would be no way for the State to ensure that multiple small discharges will not have significant cumulative effects.

10. Discharges of fill can directly or indirectly destabilize the channel or bed of a receiving water by changing geomorphic parameters, including hydrologic characteristics, sediment characteristics, or stream grade. Such destabilization diminishes the ability of the water body

[2] Water Code section 13260
[3] Water Code section 13050(g)

to support designated beneficial uses. Quantification and mitigation of such impacts may require detailed project-specific analyses. Therefore, these General WDRs do not authorize discharges that could destabilize the channel or bed of a receiving water.

11. In urbanizing basins or other situations, a large number of relatively small projects potentially eligible for these General WDRs, in their aggregate, may adversely impair the ability of the water body to support beneficial uses. Quantification and mitigation of such impacts may require basin-wide analyses. Therefore, these General WDRs do not authorize discharges that, when considered in conjunction with other potential discharges, could cause a significant cumulative effect on water quality or beneficial uses.

12. To the extent they are determined to fall within federal jurisdiction, it is likely that the SWRCB and RWQCBs will continue to regulate dredged or fill discharges primarily through their authority under section 401 of the CWA. Therefore, these General WDRs do not apply to discharges to federal waters that are subject to sections 401 and 404 of the CWA. These General WDRs likewise do not apply to discharges regulated under a section 402 storm water permit.

13. Discharges which could have a significant impact on rare, candidate, threatened, or endangered species require detailed project-specific analysis and individual regulation. Such discharges are therefore not authorized by these General WDRs.

14. Although a discharge may be eligible for coverage under these General WDRs, the RWQCB may elect to regulate the discharge under other WDRs or waivers thereof.

15. Discharges that would be exempt pursuant to section 404(f) of the CWA are waived from these WDRs. This waiver shall not affect a RWQCB's authority to issue individual WDRs or waivers for such discharges if it deems it appropriate.

Mitigation Plan

16. SWRCB Resolution No. 68-16, "Statement Of Policy With Respect To Maintaining High Quality Of Waters In California" ("Antidegradation Policy"), states that discharges to existing high quality waters will be required to meet WDRs which will result in the best practicable treatment or control of the discharge necessary to assure that (a) a pollution or nuisance will not occur, and (b) the highest water quality consistent with maximum benefit to the people of the State will be maintained.

17. Executive Order W-59-93, dated August 23, 1993, establishes a California Wetlands Conservation Policy including an objective to ensure no overall net loss of and a long term net gain in the quantity, quality, and permanence of wetland acreage and value in California ("No Net Loss Policy").

18. Filling wetlands, riparian areas, headwaters, and other waters causes partial or complete loss of the beneficial uses provided by those waters. To reconcile such losses with the "No Net

Loss" requirements of Executive Order W-59-93 and the "Antidegradation" requirements of SWRCB Resolution No. 68-16, these General WDRs require mitigation plans to ensure that impacts are mitigated through avoidance and minimization and that unavoidable loss of beneficial uses is offset with appropriate compensatory mitigation, including creation, restoration, or (in exceptional cases) preservation of other waters of the state. These mitigation requirements are consistent with those adopted by the U.S. Environmental Protection Agency and the ACOE for regulation of dredged or fill discharges to federal waters under CWA section 404.

19. To comply with the objective of the State "No Net Loss Policy" to ensure the quantity, quality, and permanence of wetland acreage and values in California, and with the "Antidegradation" requirements of SWRCB Resolution No. 68-16, these General WDRs require that compensatory mitigation areas for permanent impacts be subject to a deed restriction or other legal instrument that ensures preservation of the mitigation in perpetuity. These General WDRs do not generally require compensatory mitigation for temporary impacts, because the SWRCB does not anticipate that projects eligible under this order would ordinarily create temporary impacts of a size, severity, and/or duration that would have a significant adverse impact on beneficial uses. The decision in this order to generally require compensatory mitigation only for permanent impacts is not meant to be a precedent for any other SWRCB or RWQCB order.

20. Consistent and equitable application of these General WDRs is in the interest of environmental protection and the applicants. These General WDRs therefore provide guidance to SWRCB and RWQCB staffs regarding factors to evaluate in considering the eligibility of these General WDRs and in evaluating mitigation plans.

Basin Plans

21. All WDRs must implement the RWQCB Water Quality Control Plan (Basin Plan) for the region affected by the discharge. These General WDRs require dischargers to comply with all applicable Basin Plan provisions, including maintaining the protection of beneficial uses and complying with any prohibitions and water quality objectives governing the discharge.

Beneficial Uses

22. Beneficial uses are the most fundamental of the State's water quality standards. RWQCBs designate appropriate beneficial uses for waters in their regions' Basin Plans. The beneficial uses for the waters of the State include, but are not limited to, domestic supply, municipal supply, agricultural and industrial supply, power generation, recreation, aesthetic enjoyment, navigation, and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves.

Fees

23. Water Code section 13260(d)(1) requires that each person for whom WDRs have been prescribed pursuant to section 13263 shall submit an annual fee according to a reasonable fee

schedule established by the SWRCB. The schedule of fees for discharges of dredged or fill material is published at California Code of Regulations (CCR) 23 section 2200(a)(2). For activities covered by these General WDRs, the SWRCB anticipates that most of the discharges will be one-time and of short duration. Therefore, only a one-time fee usually will be charged.

California Environmental Quality Act (CEQA)

24. CEQA requires a government agency to comply with certain procedures when it approves or proposes to carry out an activity. (Cal. Code Regs., tit. 14, § 15002(e))

25. Private actions are subject to CEQA if they involve governmental participation, financing, or approval. (Cal. Code Regs., tit. 14, § 15002(c))

26. A Mitigated Negative Declaration in compliance with CEQA has been adopted for these General WDRs.

27. Potential dischargers and all other known interested parties have been notified of the intent to adopt these General WDRs.

28. All comments pertaining to the proposed discharges have been heard and considered in a public meeting.

II. ORDER

A. ELIGIBILITY

IT IS HEREBY ORDERED that only discharges that meet the following criteria shall be enrolled under these General WDRs:

1. The discharge shall not be subject to section 404 of the CWA or section 10 of the federal Rivers and Harbors Act. These General WDRs likewise do not apply to discharges regulated under a section 402 storm water permit.

2. The discharge shall be dredged or fill materials.

3. The discharge shall meet the following size criteria:

    a. Excavation[4] and fill activities must not excavate or fill an area greater than two-tenths (0.2) of an acre of waters of the state, and

[4] "Excavation refers to moving sediment or soil in shallow waters or under no-flow conditions where impacts to beneficial uses are best described by the area of discharge. It typically is done for purposes other than navigation. Examples include trenching for utility lines, other earthwork preliminary to construction, removing sediment to increase channel capacity, and aggregate mining in fresh water." (Cal. Code Regs., tit. 23, § 2200(a)(2).)

b. Linear excavation and fill activities affecting drainage features and shorelines (e.g., bank stabilization, revetment, and channelization projects), must not excavate or fill more than 400 linear feet of waters of the state, measured parallel to the streambank or shoreline, and

c. Dredging[5] activities must dredge not more than 50 cubic yards within waters of the state.

d. These size criteria apply to discharges, which could either permanently or temporarily affect the quality of waters of the state[6].

e. These size criteria apply to complete projects and shall not be used to authorize "piecemealing" of larger discharges. In regulating recurring discharges, e.g., routine maintenance of sedimentation basins, forebays, or similar waters, these criteria shall be applied for each discharge episode.

4. For purposes of defining the size criteria specified in this section, determining fees as required by section II.B.3, and evaluating mitigation proposals as required by section II.B.4 of these General WDRs, the lateral extent of waters of the state shall be determined by the most expansive of the following:

   a. The federal criteria current on the date of adoption of these General WDRs[7],

   b. Headwaters, defined as intermittent and ephemeral drainages.

5. The discharge shall not directly or indirectly destabilize a channel or bed of a receiving water. In determining whether a discharge meets this criterion, the RWQCB Executive Officer[8] will consider potential project-induced changes to:

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[5] "Dredging" refers to removing sediment in deeper water to increase the depth. Impacts to beneficial uses are best described by the volume of the discharge. It typically occurs to facilitate navigation and for aggregate extraction in marine waters.

[6] Fill or dredged discharges can *permanently* affect the quality of waters of the state when the discharged material will be in place indefinitely and/or by its nature precludes a reasonable assurance that beneficial uses will be fully reestablished. Examples include filling of wetlands or other waters, streambank hardening, channelization, construction of bridge piers and abutments, and ongoing vegetation removal and channel maintenance. Fill or dredged discharges can *temporarily* affect the quality of waters of the state when the discharged material will be in place for a limited time and/or there is a reasonable assurance that beneficial uses will be fully reestablished once the discharge ceases. Examples include temporary fills, excavation for temporary access roads, and one-time vegetation removal or excavation of sediment. Mitigation measures or management practices may be needed to assure that impacts are "temporary" (e.g., reestablishment of natural grade, revegetation, reestablishment of soil permeability to allow vegetative growth, compaction of backfill to assure that utility trenches do not dewater wetlands).

[7] 33 CFR 328.3(b)-(e), 33 CFR 328.4, 40 CFR 230.41.

[8] For multi-region projects, the SWRCB Executive Director. The terms Executive Officer or Executive Director as used herein include any designees.

a. Quantity, velocity, timing, and direction of flow;
b. Sediment characteristics;
c. Stream grade; and
d. Other relevant project-induced changes.

6. The discharge shall not cause in combination with other discharges a significant cumulative effect on water quality or beneficial uses of the waters of the State including, but not limited to, wetlands and headwaters.

7. The discharge shall not adversely impact, either directly or through habitat modification, any plants or animals identified as candidate, sensitive, or special status species in local or regional plans, policies or regulations; or by the California Department of Fish and Game (DFG), the U.S. Fish and Wildlife Service (USFWS), or the National Marine Fisheries Service (NMFS). The project shall not , substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number of or restrict the range of an endangered, rare or threatened species.

8. The discharge shall not significantly conflict with any adopted and approved USFWS Habitat Conservation Plan (HCP) or DFG Natural Community Conservation Plan (NCCP).

9. The discharge shall not adversely impact a significant historical or archeological resource, shall not directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, shall not disturb any human remains, and shall not eliminate important examples of the major periods of California history or prehistory.

10. The discharge shall not cause conflict with existing zoning for agricultural use or a Williamson Act contract.

11. The discharge, as mitigated, shall not cause significant adverse environmental impacts.

12. Discharges that would be exempt pursuant to section 404(f) of the CWA are waived from these WDRs. This waiver shall not affect a RWQCB's authority to issue individual WDRs or waivers for such discharges if it deems it appropriate.

B. APPLICATION REQUIREMENTS

IT IS FURTHER ORDERED that dischargers seeking enrollment under these General WDRs shall submit the following to the appropriate RWQCB Executive Officer or, in the case of multi-Region projects, to the SWRCB Water Quality Certification Program Manager at least 45 days prior to any discharge:

1. A Notice of Intent (NOI) to be enrolled under and to comply with these General WDRs.

2. Any CEQA documents that have been prepared for the project.

3. A fee pursuant to Title 23, section 2200 of the CCR.

4. A Mitigation Plan:

   The Mitigation Plan shall demonstrate that the discharger will sequentially avoid, minimize, and compensate for the adverse impacts to the affected water bodies' beneficial uses (as defined in the applicable Basin Plan). The Mitigation Plan shall address the following:

   a. Avoidance: No discharge shall be permitted if there is a practicable alternative[9] to the proposed discharge, which would have less adverse impact to the aquatic ecosystem, as long as the alternative does not have other significant adverse environmental consequences.

   b. Minimization: Unavoidable temporary impacts shall be mitigated by restoring water bodies and vegetation to pre-discharge conditions as quickly as practicable and by taking other practicable measures to reduce the severity and duration of such impacts.

   c. Compensatory mitigation: Discharges resulting in unavoidable permanent impacts to wetlands or headwaters shall ensure "no net loss" of area (acreage), functions, and beneficial use values by providing appropriate compensatory mitigation including creation, restoration, or (in exceptional cases) preservation. The RWQCB Executive Officer/SWRCB Executive Director will consider, at a minimum, the following when reviewing the adequacy of compensatory mitigation:

      (1) Onsite habitat value
      (2) Habitat connectivity value
      (3) Floodwater retention value
      (4) Pollutant removal value
      (5) Ratio of area of proposed compensation to proposed loss
      (6) Proposed revegetation and irrigation plans and success criteria
      (7) Availability of suitable soils, hydrology, and natural vegetation at the compensation site
      (8) Monitoring and reporting provisions
      (9) Contingency plan for failure to achieve success criteria
      (10) Any other information requested by the RWQCB or SWRCB.

   The Mitigation Plan shall demonstrate that all potentially adverse environmental impacts have been mitigated to a less than significant level. The thoroughness of the alternatives analysis and the extent of the proposed mitigation shall be commensurate with the purpose of the discharge, the value and sensitivity of the receiving water(s), and the extent, severity, and duration of the effect on the quality of waters.

[9] An alternative is practicable if it is available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes. If it is otherwise a practicable alternative, an area not presently owned by the applicant which could reasonably be obtained, utilized, expanded, or managed in order to fulfil the basic purpose of the proposed activity may be considered (this definition is the same as presented in federal regulations at section 230.10(a)(2) of Title 33 of the CFR).

5. Any other additional information requested by the SWRCB or RWQCB to evaluate the proposed dredged or fill discharge.

A discharge shall not be enrolled under these General WDRs unless the RWQCB Executive Officer or SWRCB Executive Director finds that the Mitigation Plan meets the requirements of this section and the discharge meets all other eligibility criteria. The RWQCB Executive Officer or SWRCB Executive Director shall independently determine eligibility, including the adequacy of the Mitigation Plan, but may consider findings and requirements included in other agencies' permits.

C. DISCHARGE REQUIREMENTS

IT IS FURTHER ORDERED that the discharger shall comply with the following:

Prohibitions:

1. The discharge of material is prohibited until the discharger has received a Notice of Applicability (NOA) from the RWQCB Executive Officer or the SWRCB Executive Director or until 45 days after submission of a complete and accurate NOI.[10] If the RWQCB Executive Officer or the SWRCB Executive Director has not issued a Notice of Exclusion (NOE) within 45 days of receiving a complete and accurate NOI, the discharge may proceed.

2. No discharges are authorized under these General WDRs if the discharger has received a NOE from the RWQCB Executive Officer or the SWRCB Executive Director.

3. The discharge shall not cause pollution, contamination, or nuisance as defined in Water Code section 13050.

4. The discharge of material in a manner other than as described in the NOI, the Findings or conditions of these General WDRs, or in the RWQCB Executive Officer or SWRCB Executive Director-approved Mitigation Plan is prohibited.

5. The discharge of substances in concentrations toxic to human, plant, animal, or aquatic life or that produce detrimental physiological responses therein, is prohibited.

6. The discharge of waste classified as "hazardous" or "designated" as defined in Title 22, section 66261 of the CCR, or Water Code section 13173 is prohibited.

Special Provisions:

7. The discharger shall discharge in a manner that is consistent with the information provided in the NOI.

[10] The RWQCB Executive Officer or the SWRCB Executive Director, within 30 days from submittal of the NOI, may find a submittal to be incomplete or inaccurate.

8. The discharger shall comply with the eligibility criteria for these General WDRs.

9. The discharger shall implement the approved Mitigation Plan.

10. Requested amendments to the approved Mitigation Plan must be submitted in writing to the RWQCB Executive Officer and, for multi-region projects, to the SWRCB Water Quality Certification Program Manager. The discharger may not modify operations until the discharger has received written notification that the RWQCB Executive Officer or SWRCB Executive Director has approved the amendment. If the RWQCB Executive Officer or the SWRCB Executive Director does not disapprove the requested amendment within 45 days of receiving the written notification, the changes to the approved Mitigation Plan may be implemented as described in the requested amendment.

11. If mitigation measures do not meet their interim or ultimate success criteria, the discharger shall implement remedial measures that are acceptable to the RWQCB Executive Officer or SWRCB Executive Director.

12. All compensatory mitigation areas shall be subject to a conservation easement, deed restriction, or other legal instrument, which shall ensure preservation of the mitigation in perpetuity. Documentation of the easement, restriction, or other legal instrument shall be submitted to the RWQCB, or to the SWRCB for multi-region projects, before any discharge authorized by these General WDRs occurs.

13. The discharger, if requested by the RWQCB or SWRCB, shall provide certification that supervisory and other responsible operations personnel have received training regarding these General WDRs.

14. Fueling, lubrication, maintenance, operation, and storage of vehicles and equipment shall not result in a discharge or a threatened discharge to water bodies. At no time shall the discharger use vehicles or equipment that leak any substance that might impact water quality. Staging and storage areas for vehicles and equipment shall be located outside of water bodies.

15. Except in compliance with the terms of an NOA for this order, no construction material, spoils, debris, or other substances associated with this project, that may adversely impact water quality, shall be located in a manner which may result in a discharge or threatened discharge to water bodies.

16. Upon completion of the project, the discharger shall complete a Notice of Termination (NOT) requesting to be un-enrolled from these General WDRs.

Standard Provisions:

17. A copy of these General WDRs shall be kept at the project site for reference by project personnel. Personnel shall be familiar with its contents.

18. The discharger shall take all reasonable steps to prevent any discharge in violation of these General WDRs.

19. The discharger shall report promptly to the RWQCB or SWRCB any proposed material change in the character, location, area, and/or volume of the discharge. The discharger shall obtain confirmation from the RWQCB or SWRCB that such proposed modifications do not disqualify the discharger from coverage under these General WDRs. Confirmation or new WDRs shall be obtained before any modifications are implemented. If the RWQCB Executive Officer or the SWRCB Executive Director does not disapprove the proposed change within 45 days of receiving a written report describing the proposed change, the discharge may proceed in accordance with the proposed modifications.

20. These General WDRs do not convey any property rights or exclusive privileges. The requirements prescribed herein do not authorize the commission of any act causing injury to persons or property, do not protect the discharger from liability under federal, State, or local laws, and do not create a vested right to continue to discharge waste.

21. These General WDRs do not relieve the discharger from the responsibility to obtain other necessary local, State, and federal permits, nor do these General WDRs prevent imposition of additional standards, requirements, or conditions by any other regulatory agency.

22. The discharger shall allow the RWQCB or SWRCB, or an authorized representative, upon the presentation of credentials and other documents, as may be required by law, to do the following:

    a. Enter upon the premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of these General WDRs,

    b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of these General WDRs,

    c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under these General WDRs, and

    d. Sample, photograph, and monitor at reasonable times, for the purpose of assuring compliance with these General WDRs.

23. After notice and opportunity for a hearing, coverage of an individual discharge under these General WDRs may be terminated or modified for cause, including, but not limited to, the following:

    a. Violation of any term or condition of these General WDRs.

    b. Obtaining these General WDRs by misrepresentation or failure to disclose all relevant facts.

c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

24. The filing of a request by the discharger for an order modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of these General WDRs.

25. Where the discharger becomes aware that it failed to submit any relevant facts in an NOI or submitted incorrect information in an NOI to the RWQCB or SWRCB, it shall promptly submit such facts or information.

26. The discharger shall furnish, within a reasonable time, any information the RWQCB or SWRCB may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the discharger coverage under these General WDRs. The discharger shall also furnish to the RWQCB or SWRCB, upon request, copies of records required to be kept by these General WDRs.

27. The Water Code provides that any person failing or refusing to furnish technical or monitoring program reports, as required under these General WDRs, or falsifying any information provided in the monitoring reports, is subject to civil liability for each day in which the violation occurs.

28. The discharger shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with these General WDRs, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the noncompliance.

29. All reports, notices, or other documents required by these General WDRs or requested by the RWQCB or SWRCB shall be signed by a person described below or by a duly authorized representative of that person.

    a. For a corporation: by a responsible corporate officer such as (1) a president, secretary, treasurer, or vice president of the corporation in charge of a principal business function; (2) any other person who performs similar policy or decision-making functions for the corporation; or (3) the manager of one or more manufacturing, production, or operating facilities if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

    b. For a partnership or sole proprietorship: by a general partner or the proprietor.

    c. For a municipality, State, federal, or other public agency: by either a principal executive officer or ranking elected official.

30. Any person signing a document under Provision II.C.29 shall make the following certification, whether written or implied:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

31. The discharger shall report any discharge of waste that may endanger public health or the environment. Any information shall be provided orally to the RWQCB within 24 hours from the time the discharger becomes aware of the occurrence. A written report shall also be submitted to the RWQCB Executive Officer within five (5) consecutive days of the time the discharger becomes aware of the occurrence. The written report shall contain (a) a description of the noncompliance and its cause; (b) the period of the noncompliance event, including dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and (c) steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

32. The discharger shall report all instances of noncompliance not reported under Provision II.C.31 within seven (7) consecutive days of the time the discharger becomes aware of the occurrence. The report shall contain any applicable information listed in Provision II.C.31.

33. The discharger shall comply with all of the conditions of these General WDRs. Any noncompliance with these General WDRs constitutes a violation of the Water Code and is grounds for an enforcement action.

34. The discharger must comply with all applicable Basin Plan provisions, including maintaining the protection of beneficial uses and complying with any prohibitions and water quality objectives governing the discharge. In the event of a conflict between the provisions of these General WDRs and the applicable Basin Plan, the more stringent provisions prevails.

CERTIFICATION

The undersigned, Clerk to the Board, does hereby certify that the foregoing is a full, true, and correct copy of an order duly and regularly adopted at a meeting of the SWRCB held on May 4, 2004.

AYE:

NO:

ABSENT:

ABSTAIN:

_____

Debbie Irvin
Clerk to the Board

STATE WATER RESOURCES CONTROL BOARD

NOTICE OF INTENT (NOI)

TO ENROLL UNDER AND COMPLY WITH THE TERMS OF WATER QUALITY ORDER NO. 2004-004 DWQ (GENERAL WDRs), STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR DREDGED OR FILL DISCHARGES TO WATERS DEEMED BY THE U.S. ARMY CORPS OF ENGINEERS TO BE OUTSIDE OF FEDERAL JURISDICTION

Mark Only One Item	1. New Discharge 2. Change of Information-WDID # _____

I. **Owner of the Land**

Name				
Mailing Address				
City	County	State	Zip	Phone
Contact Person				

II. **Billing Address**

Name				
Mailing Address				
City	County	State	Zip	Phone
Contact Person				

III. **Discharger (if different from owner of the land)**

Name				
Mailing Address				
City	County	State	Zip	Phone
Contact Person				

STATE USE ONLY

WDID:	Regional Board Office:	Date NOI Received:	
			Check #: _____

IV. **Site Location**

Street (including address, if any)	
Nearest Cross Street(s)	
County:	Total Size of Site (acres):

Latitude/Longitude (Center of Discharge Area) in degrees/minutes/seconds (DMS) to the nearest ½ second or decimal degrees (DD) to four decimals (0.0001 degree)

DMS: N. Latitude Deg. _____ Min. _____ Sec. _____

W. Longitude Deg. _____ Min. _____ Sec. _____

DD: N. Latitude _____

W. Longitude _____

Attach a map of at least 1:24000 (1" = 2000') detail of the proposed discharge site (e.g., USGS 7.5 minute topographic map).

V. **Discharge Information**

Subject		Notes
Name(s) and type(s) of receiving waters:		Receiving water types are: river/streambed, lake/reservoir, ocean/estuary/bay, riparian area, wetland
Eligibility of receiving water. Provide evidence that the water affected by this discharge is deemed to be out side of federal jurisdiction:		U.S. Army Corps of Engineers jurisdictional disclaimer letter, or explanation why such a disclaimer is not needed
Identify all regulatory agencies having jurisdiction over this project. Attach copies of all federal and State license/permit applications or issued copies of licenses/permits from government agencies:		For example: Dept. of Fish and Game Streambed Alteration Agreement, Coastal Commission permit
Proposed project start date:	Expected date of completion:	

Project description:	For example: Discharge of riprap; discharge of fill; excavation for a utility line
Purpose of the entire activity:	For example: Stream-bank erosion control; flood management; residential development
Characterization of discharges:	What types of constituents will be discharged? Is the sediment contaminated?

Fill and Excavation Discharges: For each water body type listed below indicate in ACRES the area of the proposed discharge to waters of the state, and identify the impacts(s) as permanent and/or temporary. For linear discharges to drainage features and shorelines, e.g., bank stabilization, revetment, and channelization projects, ALSO specify the length of the proposed discharge to waters of the state IN FEET.[1]

Water Body Type	Permanent Impact		Temporary Impact	
	Acres	Linear Feet	Acres	Linear Feet
Wetland				
Streambed				
Lake/Reservoir				
Ocean/Estuary/Bay				
Riparian				

Dredging Discharges: Volume (cubic yards) of dredged material to be discharged into waters of the United States.

[1] For guidance in determining the extent of impacted waters, see General WDRs, section II.A.4

VI. **California Environmental Quality Act**

Will an environmental impact report or a negative declaration be adopted for this project or has one been adopted?

❑ YES ❑ NO

If yes, what is the current status of the environmental impact report or negative declaration?

❑ Not yet issued for public review.
❑ In public review.
❑ Adopted.

Name of lead agency _____

If an environmental impact report or a negative declaration is in public review or has been adopted, enclose the document with this NOI.

Will the discharge occur in, or in immediate proximity to, an area covered by a U.S. Fish and Wildlife Service (USFWS) Habitat Conservation Plan (HCP) or a Department of Fish and Game Natural Community Conservation Plan (NCCP)?

❑YES ❑ NO

Will the discharge occur in, or in immediate proximity to, any habitat of a plant or animal species that has been classified by the Department of Fish and Game, the U.S. Fish and Wildlife Service, or the National Marine Fisheries Service as candidate, sensitive, endangered, rare, or threatened?

❑YES ❑ NO

Will the discharge occur in, or in immediate proximity to, a significant historical or archeological resource, a unique paleontological resource or site, a unique geologic feature, or any human remains?

❑YES ❑ NO

Will the discharge occur in, or in immediate proximity to, land under existing zoning for agricultural use or under a Williamson Act contract?

❑YES ❑ NO

Will the discharge, as mitigated, cause any other significant adverse environmental impact?

❑YES ❑ NO

If you answered "yes" to any of the previous five questions, provide a detailed explanation demonstrating why the discharge is eligible to be enrolled under the General WDRs.

VII. **Additional Submittals.** In accordance with provisions of State Water Resources Control Board (SWRCB) Water Quality Order No. 2004-0004 DWQ, please submit the following with this NOI to the appropriate Regional Water Quality Control Board or, for multi-Region projects, to the SWRCB.

a. A fee pursuant to California Code of Regulations, Title 23 Section 2200.

b. A Mitigation Plan, as described in the General WDRs.

VIII. CERTIFICATION

"I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. In addition, I certify that the provisions of these General WDRs will be complied with."	
Signature of Discharger	Title
Printed or Typed Name	Date

STATE WATER RESOURCES CONTROL BOARD

NOTICE OF TERMINATION

OF DREDGED OR FILL DISCHARGES
TO WATERS DEEMED BY THE U.S. ARMY CORPS OF ENGINEERS
TO BE OUTSIDE OF FEDERAL JURISDICTION
(WATER QUALITY ORDER NO. 2004-0004 DWQ)

WDID # _____

III. **Owner of the Land**

Name				
Mailing Address				
City	County	State	Zip	Phone
Contact Person				

III. **Discharger (if different from owner of the land)**

Name				
Mailing Address				
City	County	State	Zip	Phone
Contact Person				

III. **Site Location**

Street (including address, if any)
Nearest Cross Street(s)
County:

IV**. Reason For Notice of Termination**

Indicate why the discharge should no longer be regulated under WQ Order No. 2004-0004-DWQ.

STATE USE ONLY

WDID:	Regional Board Office:	Date NOT Received: _____	Date NOT Processed: _____

V. **CERTIFICATION**

"I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."	
Signature of Discharger	Title
Printed or Typed Name	Date

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE
BAY DELTA REGION
2825 CORDELIA ROAD, SUITE 100
FAIRFIELD, CA 94534

STREAMBED ALTERATION AGREEMENT
EPIMS-SMO-56247-R3
East Laurel Creek

BOZHENA PALATNIK
SALSON TRAIL AND CULVERT PROJECT

This Streambed Alteration Agreement (Agreement) is entered into between the California Department of Fish and Wildlife (CDFW) and the City of Belmont Public Works as represented by Bozhena Palatnik (Permittee).

RECITALS

WHEREAS, pursuant to Fish and Game Code section 1602, Permittee notified CDFW on December 31, 2024 that Permittee intends to complete the project described herein.

WHEREAS, pursuant to Fish and Game Code section 1603, CDFW has determined that the project could substantially adversely affect existing fish or wildlife resources and has included measures in the Agreement necessary to protect those resources.

WHEREAS, Permittee has reviewed the Agreement and accepts its terms and conditions, including the measures to protect fish and wildlife resources.

NOW THEREFORE, Permittee agrees to complete the project in accordance with the Agreement.

PROJECT LOCATION

The project is located at an unnamed tributary to East Laurel Creek, in the County of San Mateo, State of California; Latitude 37.51928, Longitude -122.31737; Assessor's Parcel Number [APN] 043-041-110.

PROJECT DESCRIPTION

The project is limited to replacing a failing culvert that conveys flows from a headwaters tributary to East Laurel Creek, replacing a damaged and at-risk segment of sewer main, and repairing Salson Trail so it can be reopened for firefighting access and recreational use.

Construction will entail the following steps, in sequence:

- Clearing and grubbing vegetation in the immediate work area;
- Using sump pumps and a temporary pipeline extending from manhole to manhole to bypass sanitary sewer flow during construction;
- Excavating and removing the damaged segment of the existing 10-inch-diameter sewer line and the existing corrugated metal pipe culvert;
- Installing 25 linear feet of 60-inch diameter reinforced concrete pipe culvert;
- Constructing concrete headwall and wingwalls with footing, totaling 205 square feet, at the upstream end of the new culvert;
- Constructing a 220 square-foot concrete headwall with footing at the downstream end of the culvert;
- Backfilling with 82 cubic yards of soil around the new culvert and behind the headwall/wingwalls to restore the contours of the channel and roadway embankment;
- Installing the replacement high-density polyethylene sanitary sewer line within a concrete encasement above the replaced culvert;
- Placing 250 square feet of rolled erosion control product on fill slopes;
- Placing and compacting a 6-inch lift of Class 2 aggregate base on top of the restored embankment fill and conforming the surface to the existing Salson Trail roadway;
- Constructing a 583 square-foot riprap apron at the downstream end of the new culvert; and
- Installing seven 7.5-foot-long 4-inch diameter galvanized steel debris catcher bollards at the upstream end of the culvert.

PROJECT IMPACTS

Existing fish or wildlife resources the project could substantially adversely affect include:

Common Name	Scientific Name	Status
San Francisco Dusky-Footed Woodrat	*Neotoma fuscipes annectens*	SSC
Pallid bat	*Antrozous pallidus*	SSC
California red-legged frog	*Rana draytonii*	FT
Western leatherwood	*Dirca occidentalis*	1B.2
Nesting birds		
Riparian and aquatic habitat		
Aquatic and riparian species		

Notes:
FT = listed as threatened under the federal Endangered Species Act (ESA), SSC = state species of special concern, PT = proposed as threatened under the federal ESA, 1B.2 = California Rare Plant Rank.

Project construction would result in temporary impacts to approximately 927 square feet of the East Laurel Creek channel and approximately 809 square feet of the associated riparian corridor. All temporary impacts would be restored following construction, as described in Exhibit B.

There would be an additional, approximately 644.5 square feet of permanent impact to the stream channel due to installation of new and larger headwalls, upstream debris catcher poles, and a riprap apron at the replaced culvert outfall.

The adverse effects the project could have on the fish or wildlife resources identified above include:

- Temporary impacts on approximately 809 square feet of riparian habitat and 927 square feet within the channel;
- Change in contour of bed, bank, and channel;
- Change in flow depth, width, and/or velocity;
- Change in composition of channel materials;
- Change in gradient of bed, channel and bank;
- Change in channel cross section;
- Degradation or aggradation of channel;
- Colonization by exotic plant species;
- Short-term release of contaminants (e.g. incidental from construction);
- Change in soil or water pH;
- Increased turbidity;
- Restriction or increase in sediment transport;
- Loss of bank stability during construction;
- Soil compaction or other disturbance to soil layer;
- Increased bank erosion during project construction;
- Loss of aquatic and terrestrial wildlife species;
- Temporary impediment to migration of aquatic and terrestrial species;
- Disruption of nesting and foraging birds, bats and other sensitive wildlife species.

MEASURES TO PROTECT FISH AND WILDLIFE RESOURCES

1. Administrative Measures

Permittee shall meet each administrative requirement described below.

1.1 Documentation at Project Site. Permittee shall make the Agreement, any extensions and amendments to the Agreement, and all related notification materials and California Environmental Quality Act (CEQA) documents, readily available at the project site at all times and shall be presented to CDFW personnel, or personnel from another state, federal, or local agency upon request.

1.2 Providing Agreement to Persons at Project Site. Permittee shall provide copies of the Agreement and any extensions and amendments to the Agreement to all persons who will be working on the project at the project site on behalf of Permittee, including but not limited to contractors, subcontractors, inspectors, and monitors.

1.3 Notification of Conflicting Provisions. Permittee shall notify CDFW if Permittee determines or learns that a provision in the Agreement might conflict with a provision imposed on the project by another local, state, or federal agency. In that event, CDFW shall contact Permittee to resolve any conflict.

1.4 Project Site Entry. Permittee agrees that CDFW personnel may enter the project site at any time to verify compliance with the Agreement.

1.5 CDFW-Approved Qualified Biologist(s) and Biological Monitor(s). Within a minimum of 30 days prior to initiating species surveys within the project area, the Permittee shall submit to CDFW for written approval the names and resumes of all qualified biologists and biological monitors involved in conducting surveys and/or monitoring work.

Qualified Biologist. A Qualified Biologist shall hold a bachelor's degree from an accredited university in a biological or natural resources related field and shall: 1) be knowledgeable and experienced in the biology and natural history of local fish and wildlife resources present at the project site; 2) have experience identifying, capturing, handling, and relocating the fish and/or wildlife species; 3) be familiar with relevant survey protocols and recent scientific literature; and 4) be knowledgeable of state and federal laws regarding the protection of sensitive species. A Qualified Biologist shall have a minimum of five years of academic training and professional experience in biological sciences and related resource management activities.

Biological Monitor. A Biological Monitor is an individual who shall have academic and professional experience in biological sciences and related resource management activities as it pertains to this project, experience with construction-level biological monitoring, be able to recognize species that may be present within the project area and be familiar with the habitats and behavior of those species.

Resumes shall include educational background, experience with focal species and description of experience with each focal species (e.g., tagging, handling, observational surveys, electrofishing, relocation, auditory surveys, etc.), including number of hours/years of experience per species, trainings/workshops, and certificates or related credentials. Please include experience with different life stages of a species when applicable.

1.6 Unauthorized Take. This Agreement does not authorize the take, including incidental take, of any state or federally listed threatened or endangered listed species, or of species that are otherwise protected under Fish and Game Code (FGC). Permittee may be required, as prescribed in the ESA and CESA, to obtain take coverage for federal and state listed species prior to commencement of the project. Any unauthorized take of listed species may result in prosecution and nullification of this Agreement.

1.7 Fish Barriers. The project shall be in compliance with Fish and Game Code Section 5901 and shall not install or maintain any device or contrivance that prevents, impedes or tends to prevent or impede the passing of fish up and down stream.

2. Avoidance and Minimization Measures

To avoid or minimize adverse impacts to fish and wildlife resources identified above, Permittee shall implement each measure listed below.

2.1 Work According to Design Plans. All work shall be completed according to the project plans (Exhibit A, Exhibit C). If the Permittee finds it necessary to update project plans prior to construction that would modify the scope or nature of any project covered under this Agreement, the updated plans shall be submitted to CDFW at least 30 days prior to beginning project activities to determine if an Amendment to this Agreement is required. Project activities shall not proceed until CDFW has accepted the updated plans in writing. At the discretion of CDFW, plan modifications may require an amendment to this Agreement. At the discretion of the CDFW, if substantial changes are made to the original plans this Agreement becomes void and the Permittee shall submit a new notification.

2.2 Seasonal Work Period. To avoid or minimize adverse impacts to sensitive species, work shall be limited to June 15 to October 31.

Construction Measures

2.3 Work Period in Dry Weather Only. Work within the stream channel shall be restricted to periods of dry weather. Precipitation forecasts and potential increases in stream flow shall be considered when planning construction activities. Construction activities shall cease and all necessary erosion control measures shall be implemented prior to the onset of precipitation. Construction activities halted due to precipitation may resume when precipitation ceases and the National Weather Service 72 hour weather forecast indicates a 20% or less chance of precipitation, provided no work occurs in the stream bed if water is flowing. No work shall occur during a dry-out period of 72 hours after the above-mentioned wet weather. Weather forecasts shall be documented upon request by CDFW.

2.4 Washing of Equipment. To prevent the movement of invasive plant and animal species, fungi, and other biotic agents from external ecological regions, all equipment used shall be washed prior to entry and staging onto the construction site.

Vegetation Protection Measures

2.5 Limit Disturbance to Vegetation. A Biological Monitor or Qualified Biologist shall oversee protection of desirable native vegetation that should remain in place, using high-visibility, low-impact measures suitable to the size and distribution of the

plants to be protected. Vegetation shall not be removed or damaged outside the flagged work area. The disturbance or removal of vegetation within the work area as described in the project description shall not exceed the minimum necessary to complete project activities.

2.6 Special-Status Plant Survey(s). Prior to construction, a Qualified Biologist shall conduct botanical surveys during the appropriate blooming period and conditions for all special-status plants that have the potential to occur at or adjacent to each site where plants could be indirectly impacted. Surveys shall be conducted following CDFW's *Protocol for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* (https://wildlife.ca.gov/Conservation/SurveyProtocols#377281280-plants). If any special-status plant species are observed, the Project shall fully avoid direct and indirect impacts to all individuals and provide an avoidance plan to CDFW and obtain CDFW written approval of the plan. If full avoidance is not possible, Project activities may not commence until the Project has consulted with CDFW and obtained CDFW's written approval prior to the start of construction, which may include salvaging topsoil, transplanting and monitoring individuals, compensatory habitat mitigation, or other measures, based on the life history of the species and other relevant factors.

Wildlife Protection Measures

2.7 Education Session before Commencement of Work. Prior to any project or construction activities, the Qualified Biologist shall conduct an education session on species that may be present at the project work site and all Avoidance and Minimization Measures in this Agreement. The training shall consist of identification of the species, their habits, how they may be encountered in the work area, and procedures to follow if/when they are encountered. Any personnel joining the work crew later shall receive the same training before beginning work. The penalties for non-compliance of conditions in this Agreement shall be relayed to all project personnel.

2.8 Designation of Work Area. Prior to project activities, a Biological Monitor or Qualified Biologist shall clearly mark/flag or erect temporary construction fencing to minimize impacts on vegetation, the creek channel, and any wildlife present on site.

2.9 Wildlife Exclusion. Escape ramps, funnels, or other features that allow animals to exit the work area, but which will prohibit the entry of such animals, shall be provided in the wildlife exclusion fencing. A Qualified Biologist or Biological Monitor shall inspect the fence installation area immediately prior to the commencement of installation and will be on-hand to monitor fence installation. The exclusion fencing shall be inspected daily and maintained for the duration of construction. Trenches or pits one foot or deeper that are left unfilled overnight shall be securely covered with boards or other material to prevent wildlife entrapment. A Qualified Biologist or

Biological Monitor shall inspect any trenches, pits, holes or pipes for wildlife, prior to their being filled or capped.

2.10 California Red-Legged Frog (CRLF) Survey(s). Preconstruction survey(s) for CRLF shall occur no more than seven days prior to initial ground disturbance and shall be conducted by a Qualified Biologist. The Qualified Biologist shall investigate all potential areas that could be used by CRLF for feeding, breeding, sheltering, movement, and other essential behaviors, including an adequate examination of mammal burrows. If any adults, subadults, juveniles, tadpoles, or eggs are found, the Permittee shall consult with USFWS and CDFW. If a CRLF is encountered in the work area during project construction, all activities that have the potential to result in harassment, injury, or death shall be immediately halted. Contact with any CRLF will be avoided and individuals will be allowed to move out of the area of their own volition.

2.11 San Francisco Dusky-footed Woodrat (SFDFW) Survey(s). A Qualified Biologist shall conduct surveys for SFDFW individuals and nests five days before debris and vegetation removal or construction activities begin. If any SFDFW nests are in the way of construction and must be disassembled, CDFW shall be contacted immediately. CDFW reserves the right to include additional measures regarding SFDFW. If an active SFDFW is found during SFDFW surveys, the active midden site(s) shall be designated as “Ecologically Sensitive Areas” (ESA) and protected during project construction with establishment of flagging or a fence barrier to provide a 25-foot buffer, at a minimum, around the nest site. The Permittee shall avoid all active SFDFW midden(s). If SFDW midden(s) cannot be avoided, the Permittee shall submit to CDFW a SFDFW Midden Relocation Plan for CDFW review, comment, and written approval. Project activities shall not commence until Permittee receives CDFW’s written approval of the SFDFW Midden Relocation Plan.

2.12 Bat Survey(s). Pre-construction surveys for special-status and non-listed bat species and their habitat shall be performed by a Qualified Biologist seven days before construction commencement. The habitat assessment shall include a visual inspection of potential roosting features (e.g., cavities, crevices in wood and bark, exfoliating bark for colonial species, suitable canopy for foliage roosting species). If suitable habitat is found, it shall be flagged or otherwise clearly marked for avoidance. If suitable bat habitat features identified in the habitat assessment will be altered or disturbed by project activities, the Permittee shall consult with CDFW for further guidance. If any active maternity or hibernation roosts are identified within 100 feet of areas proposed for development, CDFW shall be notified immediately. Work may commence after CDFW provides written guidance on how to avoid and protect bats. CDFW reserves the ability to provide additional provisions to this agreement if roosting bats are found.

2.13 Nesting Bird Survey(s). If project activities are scheduled during the nesting season of raptors and migratory birds, a focused survey for active nests of such

birds shall be conducted by the CDFW-approved qualified biologist within 7 days prior to the beginning of project-related activities. Nesting seasons are typically defined as followed: i) February 15 to August 30 for smaller bird species such as passerines; ii) February 15 to September 15 for raptors, and iii) January 15-September 15 for owls. Surveys shall be conducted in all suitable habitat located at project work sites and in staging and storage areas. The minimum survey radii surrounding the work area shall be the following: i) 250 feet for passerines; ii) 500 feet for small raptors such as accipiters; iii) 1,000 feet for larger raptors such as buteos, and owls. If the survey radii are not feasible due to barriers or lack of access onto private property, the survey radii shall include the end of the project property and area and any trees that can be visually checked and are within line of site of the project activities. The bird survey methodology and the results of the survey shall be submitted to CDFW prior to commencement of project activities.

2.14 Active Nests. If active nests are found, Permittee shall consult with CDFW and the U.S. Fish and Wildlife Service (USFWS) regarding appropriate action to comply with the Migratory Bird Treaty Act of 1918 and the FGC. If a lapse in project-related work of 7 days or longer occurs, another focused survey shall be conducted before project work is reinitiated. If active nests are found, Permittee shall consult with CDFW and the USFWS prior to resumption of project activities.

2.15 Active Nest Buffers. Active nest sites shall be designated as “Ecologically Sensitive Areas” and protected (while occupied) during construction activities with the establishment of a flag at the base of the nest site. The typical minimum distances of the protective buffers surrounding each identified nest site are usually the following: i) 250 feet for passerines; ii) 250 feet for small raptors such as accipiters; iii) 1,000 feet for large raptors such as buteos and owls. A Qualified Biologist or Biological Monitor shall monitor the behavior of the birds (adults and young, when present) at the nest site to ensure that they are not disturbed by project-related activities. Nest monitoring shall continue during project-related construction work until the young have fully fledged, are no longer being fed by the parents, and have left the nest site, as determined by the Qualified Biologist or Biological Monitor.

2.16 Check for Wildlife in Construction Materials. Permittee shall visually check stockpiled construction materials for presence of wildlife sheltering within them prior to use.

2.17 Special-Status Species Encountered During Work. If CDFW determines, or if Permittee or the Qualified Biologist/Biological Monitor finds, that any special status wildlife species, including SSC or CESA or ESA-listed species, are present within the project area, construction work shall stop, and Permittee or Qualified Biologist/Biological Monitor shall notify CDFW and any other appropriate agency. Only a Qualified Biologist with the necessary permits issued by CDFW and/or the USFWS can handle and relocate any CESA and/or ESA listed species. The Qualified Biologist shall contact CDFW within 24 hours of relocation activities.

Through consultation with CDFW, additional measures may be developed to protect special-status species.

2.18 Injury or Mortality of Special-Status Species. If Permittee or its employees, contractors, or agents injures or kills a special-status species, or finds any such animal injured or dead, all activities in the work area shall immediately cease, and CDFW and USFWS shall be notified by email and telephone within 30 minutes of the discovery. A written report detailing the time, location, and general circumstances under which the dead or injured individual animal was found shall be submitted to CDFW and the USFWS no later than five (5) business days following the incident.

Erosion and Sediment Control

2.19 Erosion Control Best Management Practices (BMPs). At no time shall silt laden runoff be allowed to enter the stream or directed to where it may enter the stream. Erosion control BMPs, such as silt fences, straw hay bales, water check bars, and broadcasted straw shall be used. Erosion control fabrics shall be constructed of biodegradable materials, such as coir or jute, unless otherwise authorized by CDFW. The use of geotextile or filter fabrics are not permitted. Erosion control BMPs shall be monitored during and after storm events for effectiveness. Modifications, repairs and improvements to erosion control BMPs shall be made as needed to protect water quality. Silt control structures shall be monitored daily for effectiveness and shall be repaired or replaced as needed. Passage of sediment beyond the sediment barrier is prohibited. If the sediment barrier fails to retain sediment, construction activities shall cease, and corrective measures shall be employed.

2.20 Removal of Native Material. The removal of native soils, rock, gravel, vegetation, and vegetative debris from the stream bed or stream banks is prohibited under this Agreement.

Equipment and Vehicles

2.21 Staging and Storage Areas. Building materials and/or construction equipment shall not be stockpiled or stored where they could be washed into the water or where they will cover aquatic or riparian vegetation.

2.22 Equipment over Drip-pans. Staging and storage areas for equipment, materials, fuels, lubricants and solvents shall be located away from the wetted areas. Stationary equipment such as motors, pumps, generators, compressors and/or welders, located within or adjacent to the creek shall be positioned over drip-pans.

2.23 Maintenance of Vehicles. Any equipment or vehicles driven and/or operated adjacent to the creek shall be checked and maintained daily to prevent leaks of materials that if introduced to water could be deleterious to aquatic life, wildlife or

riparian habitat. Vehicles must be moved away 150 feet from the stream prior to refueling and lubrication.

2.24 Speed Limit Within the Work Site. Vehicles shall observe a 5-mile per hour speed limit within the work area.

Concrete Measures

2.25 Concrete Designated Monitor. Immediately before and during concrete pouring, there shall be a designated monitor to inspect concrete runoff containment structures and ensure that no concrete or other debris enters the creek outside of those structures. Runoff from concrete is not allowed to enter the creek at any time.

Toxic or Hazardous Materials

2.26 Deleterious Materials. Any substances or materials that are deleterious to aquatic life and could be washed into state waters or its tributaries shall be contained in water-tight containers or removed from the project site. Materials deleterious or toxic to fish and wildlife include, but are not limited to, asphalt, tires, concrete, construction materials, trash, treated wood, and creosote-containing materials. Refueling and maintenance activities shall occur only on paved roadways.

2.27 Debris and Waste Disposal. The Permittee/contractor shall not dump any litter or construction debris within the project area. All such debris and waste shall be picked up daily and properly disposed of at an appropriate site. Permittee shall remove all debris from the immediate project area, including litter and exposed, deteriorating plastic bank-stabilization material from the creek bed, bank and channel.

Spills and Emergencies

2.28 Spill Containment. All activities performed in or near a stream shall have absorbent materials designated for spill containment and clean- up activities on-site for use in an accidental spill. The Permittee shall immediately notify the California Emergency Management Agency at 1-800-852-7550 and immediately initiate the clean-up activities. CDFW shall be notified by the Permittee and consulted regarding clean-up procedures.

3. Reporting Measures

The Permittee shall meet each reporting requirement described below. All reports shall be submitted to CDFW in EPIMS Status Reports and via email, with reference to Notification EPIMS-SMO-56247-R3.

3.1 Notification Prior to Work. **At least five days prior** to the start of project activities, the Permittee shall notify CDFW of the intent to commence work.

3.2 Qualified Biologist Approval. Per Measure 1.5, the Permittee shall submit the resumes of Qualified Biologist(s) and/or Biological Monitor(s) to CDFW via email and EPIMS **no later than 30 days prior** to commencement of project activities for review and approval.

3.3 Biological Survey Results. The Permittee shall submit the results of pre-construction biological survey(s) **prior to commencement of project activities** per Measures 2.6 and 2.10 through 2.15.

3.4 Final Construction Report. The Permittee shall provide a final construction report to CDFW no later than two weeks after project construction is completed. The construction report at minimum shall include:

- Pre- and post-construction photos taken from designated vantage points in the project area, which shall offer representative views of the site and describe the direction of the view;
- A summary of construction and vegetation enhancement activities, including as-built designs.

3.5 Riparian Restoration and Monitoring. Permittee shall submit a revised Habitat Mitigation and Monitoring Plan to CDFW **prior to this draft being finalized,** for CDFW to review and accept, and shall be added to this agreement as Exhibit B. The Revised Plan shall be updated to add the following:

1) A map detailing the number, location, and species to be planted within the restoration area; and

2) Updated success criteria culminating in >75% cover of appropriate native species by Year 5 of monitoring.

3.6 Revegetation Monitoring Reports. Annual revegetation/ restored riparian area monitoring shall be conducted for a minimum of five years (per Exhibit B), or until final performance criteria standards are achieved. Annual reports shall be submitted to CDFW via email and EPIMS by December 31 each year, with year 0 corresponding to the calendar year when construction is deemed complete. Monitoring requirements will not be deemed complete until CDFW emails the Permittee stating so. If success criteria are not met at any of the annual monitoring inspections, the Permittee shall perform the necessary remedial work to demonstrate progress toward the below-stated performance criteria.

3.7 Annual Hydrogeomorphic Monitoring Reports. The Permittee shall submit Hydrogeomorphic Monitoring Reports to CDFW via email and EPIMS **by December 31** each year for a five-year monitoring period at a minimum after construction completion. Year 0 corresponds to the calendar year when construction is deemed complete. Monitoring requirements will not be deemed complete until CDFW emails the Permittee stating so. The annual monitoring

inspection and hydrogeomorphic assessment proposed for the project shall include the following:

1) Inspection of the stability of the installed features to gauge performance and note any evidence of failure, such as erosion, boulder collapse, soil loss, etc.;

2) Assessment of the general geomorphic stability of the creekbank along the project channel reach, including any evidence of low bank erosion/retreat or unexpected in-channel sediment bar formation;

3) Photo documentation at fixed monitoring locations, including upland, upstream, downstream, and within-reach segments of the project site;

4) If deemed necessary, any recommended remedial work required to repair any damage to or degradation of the installed features.

3.8 Notification to the California Natural Diversity Database (CNDDB). If any listed, rare, or special status species are detected during project surveys or on or around the project site during project activities, the Permittee shall submit CNDDB Field Survey Forms to CDFW in the manner described at the CNDDB website (http://www.dfg.ca.gov/biogeodata/cnddb/submitting_data_to_cnddb.asp) within 14 working days of the sightings. Copies of such submittals shall also be submitted to the CDFW regional office as specified below.

CONTACT INFORMATION

Any communication that the Permittee or CDFW submits to the other shall be submitted through Environmental Permit Information Management System (EPIMS) as instructed by CDFW.

To Permittee:

Bozhena Palatnik
EPIMS-SMO-56247-R3
Salson Trail and Culvert Project
1 Twin Pines Lane
Belmont, CA 94002
bpalatnik@belmont.gov

To CDFW:

Department of Fish and Wildlife
Bay Delta Region
EPIMS-SMO-56247-R3
Salson Trail and Culvert Project
R3lsa@wildlife.ca.gov

LIABILITY

Permittee shall be solely liable for any violations of the Agreement, whether committed by Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents or contractors and subcontractors, to complete the project or any activity related to it that the Agreement authorizes.

This Agreement does not constitute CDFW's endorsement of, or require Permittee to proceed with the project. The decision to proceed with the project is Permittee's alone.

SUSPENSION AND REVOCATION

CDFW may suspend or revoke in its entirety the Agreement if it determines that Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, is not in compliance with the Agreement.

Before CDFW suspends or revokes the Agreement, it shall provide Permittee written notice by certified or registered mail that it intends to suspend or revoke. The notice shall state the reason(s) for the proposed suspension or revocation, provide Permittee an opportunity to correct any deficiency before CDFW suspends or revokes the Agreement, and include instructions to Permittee, if necessary, including but not limited to a directive to immediately cease the specific activity or activities that caused CDFW to issue the notice.

ENFORCEMENT

Nothing in the Agreement precludes CDFW from pursuing an enforcement action against Permittee instead of, or in addition to, suspending or revoking the Agreement.

Nothing in the Agreement limits or otherwise affects CDFW's enforcement authority or that of its enforcement personnel.

OTHER LEGAL OBLIGATIONS

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from complying with, or obtaining any other permits or authorizations that might be required under, other federal, state, or local laws or regulations before beginning the project or an activity related to it. For example, if the project causes take of a species listed as threatened or endangered under the Endangered Species Act (ESA), such take will be unlawful under the ESA absent a permit or other form of authorization from the U.S. Fish and Wildlife Service or National Marine Fisheries Service.

This Agreement does not relieve Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, from complying with other applicable statutes in the Fish and Game Code including, but not limited to, Fish and Game Code sections 2050 *et seq*.

(threatened and endangered species), section 3503 (bird nests and eggs), section 3503.5 (birds of prey), section 5650 (water pollution), section 5652 (refuse disposal into water), section 5901 (fish passage), section 5937 (sufficient water for fish), and section 5948 (obstruction of stream).

Nothing in the Agreement authorizes Permittee or any person acting on behalf of Permittee, including its officers, employees, representatives, agents, or contractors and subcontractors, to trespass.

AMENDMENT

CDFW may amend the Agreement at any time during its term if CDFW determines the amendment is necessary to protect an existing fish or wildlife resource.

Permittee may amend the Agreement at any time during its term, provided the amendment is mutually agreed to in writing by CDFW and Permittee. To request an amendment, Permittee shall use the “Amendments & Extension” form in EPIMS to submit the request. Permittee shall include with the completed form, payment of the corresponding amendment fee identified in CDFW’s current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

TRANSFER AND ASSIGNMENT

This Agreement may not be transferred or assigned to another entity, and any purported transfer or assignment of the Agreement to another entity shall not be valid or effective, unless the transfer or assignment is requested by Permittee in writing, as specified below, and thereafter CDFW approves the transfer or assignment in writing.

The transfer or assignment of the Agreement to another entity shall constitute a minor amendment, and therefore to request a transfer or assignment, Permittee shall use the “Amendments & Extension” form in EPIMS to submit the request. Permittee shall include with the completed form, payment of the minor amendment fee identified in CDFW’s current fee schedule (see Cal. Code Regs., tit. 14, § 699.5).

EXTENSIONS

In accordance with Fish and Game Code section 1605, subdivision (b), Permittee may request one extension of the Agreement, provided the request is made prior to the expiration of the Agreement’s term. To request an extension, Permittee shall use the “Amendments & Extension” form in EPIMS to submit the request. Permittee shall include with the completed form, payment of the extension fee identified in CDFW’s current fee schedule (see Cal. Code Regs., tit. 14, § 699.5). CDFW shall process the extension request in accordance with Fish and Game Code section 1605, subdivisions (b) through (e).

If Permittee fails to submit a request to extend the Agreement prior to its expiration, Permittee must submit a new notification and notification fee before beginning or continuing the project the Agreement covers (Fish & G. Code § 1605, subd. (f)).

EFFECTIVE DATE

The Agreement becomes effective on the date of CDFW's signature, which shall be: 1) after Permittee's signature; 2) after CDFW complies with all applicable requirements under the California Environmental Quality Act (CEQA); and 3) after payment of the applicable Fish and Game Code section 711.4 filing fee listed at https://wildlife.ca.gov/Conservation/Environmental-Review/CEQA/Fees.

TERM

This Agreement shall expire on December 31, 2029, unless it is terminated or extended before then. All provisions in the Agreement shall remain in force throughout its term. Permittee shall remain responsible for implementing any provisions specified herein to protect fish and wildlife resources after the Agreement expires or is terminated, as Fish and Game Code section 1605, subdivision (a)(2) requires.

EXHIBITS

The documents listed below are included as exhibits to the Agreement and incorporated herein by reference.

A. Exhibit A. "SMO-56247_Salson-Trail&Culvert_Inc-Response_2-10-25"

B. Exhibit B. Revised Riparian Restoration and Monitoring Plan, to be submitted by Permittee

C. Exhibit C. "Salson-TrailCulvert_Progress-Set_11-01-24"

AUTHORITY

If the person signing the Agreement (signatory) is doing so as a representative of Permittee, the signatory hereby acknowledges that he or she is doing so on Permittee's behalf and represents and warrants that he or she has the authority to legally bind Permittee to the provisions herein.

AUTHORIZATION

This Agreement authorizes only the project described herein. If Permittee begins or completes a project different from the project the Agreement authorizes, Permittee may be subject to civil or criminal prosecution for failing to notify CDFW in accordance with Fish and Game Code section 1602.

CONCURRENCE

Through the electronic signature by the permittee or permittee's representative as evidenced by the attached concurrence from CDFW's EPIMS, the permittee accepts and agrees to comply with all provisions contained herein.

The EPIMS concurrence page containing electronic signatures must be attached to this agreement to be valid.

401 Grand Avenue, Suite 200 | Oakland, CA 94610
510.272.2970 OFFICE
mnsengineers.com

April 16, 2025

City of Belmont
Attention: Ms Bozhena Palatnik, Senior Civil Engineer
One Twin Pines Lane, Suite 385
Belmont, CA 94002

SUBJECT: Request for Proposal for Construction Management Services for the Salson Creek Culvert Replacement Project

Dear Ms. Palatnik,

We are pleased to submit a cost proposal and scope of work to provide construction management and inspection services on the upcoming Salson Creek Culvert Replacement Project.

Should you have any questions, please contact me at (510) 774-6119, mchan@mnsengineers.com if you have any questions.

Sincerely,
MNS Engineers, Inc.

Michael K. Chan, PE
Principal Construction Manager

cc: Scope of Work and Cost Proposal

Scope of Work

Belmont Salson Creek Culvert Replacement Project

Perform the following services in in accordance with Chapter 16 "Administer Construction Contracts" of the Caltrans Local Assistance Procedures Manual

I. Construction Services

- Preconstruction Meeting
- Submittal and RFI Coordination
- Project Inspection and documentation
- Review of Progress Payment Requests
- Prepare Weekly Statement of Working Days
- Progress Schedule review
- Contract Change Order Analysis and Negotiation
- Potential Claims analysis and resolution
- Resolution of resident & business concerns
- Utility Coordination assistance (if required)
- Coordination of materials testing
- Office Engineering and Document Control utilizing CMIS
- Conduct weekly meetings as needed to coordinate work with City and Contractor
- Address unforeseen field conditions and provide direction to contractor based on input from Project Manager and Project Engineer
- Check contractor's certified payroll and its compliance with prevailing wage rates
- Estimate and track extra work

III. Contract Close out

- Preparation of punch list items
- Preparation of red lined record drawings

Salson Culvert Replacement Project

Phase	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
Advertise											
Bid Opening and Award											
Submittals and Procurement of 60" RCP											
Begin Construction with NTP (submittals - order 60" RCP, assume work in creek can't begin until June 15th and must be completed by 10/15)											
Closeout											

Staff	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Hours	Hourly Rate	Cost
Michael Chan - Construction Manager					1	1	1	1				4	$355.00	$1,420.00
James Wilcenski - Resident Engineer					30	30	30	30	20	20		160	$295.00	$47,200.00
Office Engineer					26	8	8	9	20	25		97	$155.00	$15,035.00
Assistant Resident Engineer							80	40	0			120	$225.00	$27,000.00
														$90,655.00

1. cost proposal based 4 months for construction with 45 days for submittal and procurment of 60" of RCP
2. Monthly hours for construction inspectors are based upon eight-hour working days times the number of working days that month
3. Prevailing Wage rates subject to PW adjustments.
4. The above estimate doesn't include any OT hours. However, should OT hours be required due to contractor's schedule, non-exempt employees are subject to OT regulations (Time and half &
5. No support for delays due to weather, CCO, R/W, and claims filed by contractor in response to the Proposed Final Estimate.
6. This cost proposal is also based on the plans provided by the city.

Docusign Envelope ID: DDC3398A-F8B7-49D4-8A88-379FAEFDEB4C

City of Belmont
Attn: Bozhena Palatnik
1 Twin Pines Ln,
Belmont, CA 94002

City of Belmont – Amendment to TO#1– Culvert Replacement- Salson Trail

Mott MacDonald Group, Inc

2700 Gateway Place

Ste 550

San Jose, CA 95110

Mohamed Basma, PE

Mohamed.Basma@mottmac.com

Apr 25, 2025

Dear Bozhena:

Mott MacDonald Group Inc. (Mott MacDonald) is pleased to submit this amendment to Task Order #1 proposal in accordance with our Master Architectural and Engineering Agreement to continue providing bid and construction phase services for the City of Belmont (City's) Culvert Replacement – Salson Trail Project (Project). This amendment proposal is prepared as a result of the conversation with you regarding the extended design schedule of TO 1 and the rate changes that will occur due to the extension of the Construction schedule into summer of 2025.

Project Understanding

Through Task Order 1, Mott Macdonald and their sub consultants were tasked to produce a biddable PS&E package for the Salson trail culvert project and provide Design Service During Construction (DSDC) services. The schedule for design and construction as outlined in the TO#1 was to have a biddable package made available to the City by August 2024 for construction to happen before November 2024. This schedule was based in part on the assumption that the project would not require resource agency permitting, since no permits were discussed during the Federal Emergency Management Agency's (FEMA's) staff visit to the site.

However, as you know, the project will involve a jurisdictional stream, since the culvert planned for replacement conveys flows in East Laurel Creek. Shortly after our contract was executed and preliminary work commenced, MM's environmental sub-consultant, Redtail Consulting (RCEC) provided an *Environmental Status and Next Steps* memo (deliverable to TO#1) that included baseline information on the environmental clearances likely to be necessary for the project to proceed. RCEC continued to liaise with the resource agencies and in August 2024 received confirmation that the U.S. Army Corps of Engineers does not consider East Laurel Creek a Water of the United States and therefore would not require the City to obtain a Clean Water Act Section 404 permit; permit requirements were thus understood to be limited to Waste Discharge Requirements (WDRs) issued by the Regional Water Quality Control Board (RWQCB) and a Streambed Alteration Agreement (SAA) with the California Department of Fish and Wildlife (CDFW).

The application for WDRs and the SAA Notification, both of which included a 95% PSE set, were sent to the agencies in mid-November of 2024. The RWQCB has authorized the project to proceed per the SWRCB's Statewide General Waste

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Discharge Requirements for Dredged or Fill Discharges to Waters Deemed by the U.S. Army Corps of Engineers to be outside of Federal Jurisdiction (General WDRs). The project SAA is in preparation and anticipated soon.

We anticipate preparing a California Environmental Quality Act (CEQA) Notice of Exemption (NOE) for the City's use in spring 2025; per *CEQA Guidelines* 15062[a], the NOE is prepared "when the public agency approves or determines to carry out the project", which would either be on City Council approval of the bid process, or on Council's decision to let the contract, depending on the City's standard process. NEPA review will not be required, since FEMA funding has been withdrawn and there is no federal permit requirement.

With the project schedule extended to allow for acquisition of the required resource agency permits, we understand that the City now intends to complete the bid process by July 2025 and begin construction in August 2025. These deadlines will of course be contingent on receipt of the Streambed Alteration Agreement.

Due to the extension of the project schedule and the City's request to include construction-phase tasks, an amendment to Task Order #1 is being proposed. The scope of the remainder tasks have been described and quantified as follows.

Scope of Work

Task 1 Project Management (Additional)

Overall management of Mott MacDonald in-house staff including contract administration, budget and schedule control, monthly project reports, invoicing, coordination meetings with the City, and performing quality control. Mott MacDonald assumes a combined design and DSDC services project duration of eight (8) months.

Deliverables:

- Monthly invoices and progress reports
- Coordination Meeting Agendas and Minutes one (1) project

Task 2 – Bid Package requirements

This task will involve preparing a Bidding documents along with CEQA Notice of Exemption for the City's use and producing a Bid Package that incorporates City's comments.

Deliverables:

- Bid Package documents
- CEQA Notice of Exemption

Task 3 – Design Services during Construction (Additional)

MM team's DSDC have been covered in Task Order #1. The additional requirements for this team are to provide on site geotechnical support and the replenish the DSDC amounts that were utilised in finalising the 100% Design package. The scope for the Geotech work is described here. Our geotech team will provide construction support by witnessing excavation to formation level and identifying a 'firm and unyielding standard' of soil conditions prior to placing the footings for the retaining headwalls. The scope includes site visits and inspection of works, and the production of a field report that confirms that the Contractor achieved firm and unyielding ground conditions at formation level to provide the necessary bearing pressure requirements per Caltrans standards.

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Deliverables:

- Review and respond to contractor submitted RFI's (five (5) numbers).
- Review and respond to shop drawing submittals (four (4) numbers)
- Field visits and preparing of a field report (one (1) number)

Task 4 – Environmental Resource Agency Permits (Optional; prior scope authorized summer 2025)

We propose to augment the base scope and budget for this task as follows.

- Provide construction phase services to assist the City in complying with anticipated permit requirements, including
  - Pre-construction surveys for special-status species and nesting birds
  - Biologist oversight of sensitive habitat exclusion fencing installation
  - Worker environmental awareness training
  - Agency notifications and reporting during the construction period
  - Post-construction restoration of disturbed riparian habitat; follow-up monitoring of restoration establishment

If CDFW requires additional or modified environmental tasks during construction, we will alert you immediately and submit a separate scope of services and budget for that work.

Deliverables:

- Environmental Special Provisions
- Reviews of contractor submittals, if/as requested
- Items such as monitoring "daily" forms and agency notifications/reports required for permit compliance

Assumptions

The following assumptions were made for this proposal:

- Schedule assumes a two-week City review period.
- City will identify and coordinate key stakeholders and operation staff for attending construction meetings with Contractor.
- Mott MacDonald fee proposal is based on the hourly rates which are effective until June 30, 2025.
- Scope of work does not include National Environmental Policy Act (NEPA) compliance activities.

Exclusions

The proposal excludes the following services which can be provided at the request of the City at an additional cost:

- Relocation of other utilities
- Potholing activities/utility location
- Support for FEMA funding.
- Modeling to confirm pipe size and hydraulic sizing.

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Schedule

Below is a tentative schedule for this amendment.

Submit Final Plans (100% PSE) (ACTUAL)	**January 22, 2025**
Bid Documents and CEQA NOE	April 30, 2025
Bidding and Contractor Approval	June 30, 2025
Design Support during Construction	July – November 30, 2025

Fee Proposal

Mott MacDonald will provide the above scope of services on a time-and-materials not-to-exceed fee basis in accordance with our Master Services Agreement. The estimated not to exceed fee for this amendment to Task Order#1 is $93,142.33 as shown in the attached fee estimate.

Thank you for the opportunity to submit this proposal to complete the important work. Please feel free to contact me or Bindu Samudrala, the Project Manager, if you have any questions. Bindu can be reached by phone at (518) 986-1309 or via e-mail at himabindu.samudrala@mottmac.com.

Sincerely,

Mott MacDonald Group, Inc

DocuSigned by:
Mohamed Basma
43F4205A006D4C2...

Mohamed Basma

Senior Vice President

Northern California Portfolio Manager

+1 408 807 0481

Mohamed.basma@mottmac.com

Cc: Stephanie Douglass

Docusign Envelope ID: DDC3398A-F8B7-49D4-8A88-379FAEFDEB4C

dated - 04/25/25

City of Belmont - Salson trail Culvert - Budget and Actuals				
	MM	**Redtail**	**Total**	
DESIGN PHASE				
Design - 100% PSE (as of Invoice 7)	$98,805.00	$0.00	$98,805.00	Actual
Agency coordination, OES/FEMA coordination, permit applications (as of invoice 7)	$1,630.00	$31,765.00	$33,395.00	Actual
Agency coordination, OES/FEMA coordination, permit applications (WIP)	$0.00	$2,500.00	$2,500.00	Actual
CEQA notice of exemption	$0.00	$3,496.00	$3,496.00	Estimate
CONSTRUCTION PHASE				
Bid documents	$7,491.33	$6,000.00	$13,491.33	Estimate
Bid Support and Addenda	$3,970.00	$2,000.00	$5,970.00	Estimate
Western Leatherwood survey	$0.00	$5,545.00	$5,545.00	Estimate
Pre Construct Meetings, RFI'S (5) Submittals (4), Env Support (e.g., pre-con bio surveys worker awareness training, exclusion fencing install oversight)	$14,133.00	$22,833.00	$36,966.00	Estimate
Geo tech Field visits and report (1	$5,555.00	$0.00	$5,555.00	Estimate
Notification and reporting per LSAA (CDFW)	$0.00	$15,000.00	$15,000.00	Estimate
Riparian restoration, post-construction restoration monitoring (5 yrs assumed)		$33,842.00	$33,842.00	Estimate
Punch list and Asbuilts	$6,522.00	$0.00	$6,522.00	Estimate
TOTAL	**$138,106.33**	**$122,981.00**	**$261,087.33**	
TO1 Allocation			***$167,945.00***	
TO1 Cost to date			***$132,151.73***	
TO1 Remaining balance			***$35,793.27***	
TO2 or Amendment to TO1			*$93,142.33*	

STAFF REPORT

Meeting Date:	May 13, 2025
Agency:	City of Belmont
Staff Contact:	Daniel Matthews, Public Works, (650) 637-2985, dmatthews@belmont.gov
Agenda Title:	Twin Pines Park Belmont Creek Restoration Project – Tree Removal Notice of Completion
Agenda Action:	Resolution

Recommendation

Adopt a resolution accepting the construction work and authorizing the issuance of a Notice of Completion for the Twin Pines Park Belmont Creek Restoration Project – Tree Removal, City Contract Number 2024-064, recording of Notice of Completion, and release of retention 35 days after recording Notice of Completion

Strategic Focus Area

Infrastructure and Mobility

Background

Belmont Creek originates in Belmont and flows through the Harbor Industrial Area (HIA) of San Mateo County along the border of San Carlos before reaching Belmont Slough and San Francisco Bay. Belmont Creek within Twin Pines Park (Park) has degraded over time due to increased urban runoff, channelization, invasive species, and other factors, causing bank erosion, tree fall, and loss of riparian vegetation and habitat, impairing water quality and exacerbating downstream flooding.



Figure 1 - Belmont Creek's eroded creek banks present dangerous conditions and are subject to additional erosion

Supported by a grant from the California Department of Water Resources Urban Streams Restoration Program, the Twin Pines Park Belmont Creek Restoration Project will improve approximately 500 feet of Belmont Creek within the park. In order to prepare for restoration construction, Public Works split the work into two separate contracts – tree removal work and the primary creek restoration work. By performing tree removal work first, the City was able to prepare the jobsite and produce construction materials for the next phase of the project. This includes producing over 100 cubic yards of mulch that will be used on the regraded creek bank, and over 30 sections of logs salvaged from removed trees that will be used to stabilize the creek bank.

Analysis

The tree removal work was performed by Atlas Tree Service on schedule and well below the engineer's estimate of $700,000. The work started in January and was completed by the beginning of April, with three change orders issued. The final construction cost, including the change orders, is $312,500.



Figure 3 - Conditions before the tree removal project included a canopy of dangerous, invasive Blue Gum Eucalyptus trees.



Figure 4 - Conditions following the tree removal work, including stockpiled material and tree snags that will be used for restoration construction.

The first change order in the amount of $24,500 was to perform additional needed work as identified by the Parks Department. This included the removal of trees that had previously fallen, and the removal of three additional dangerous trees. The second change order in the amount of $3,000 was to remove tree limbs at risk of falling onto the pedestrian path through the Twin Pines Park. A final third change order of $500 was to account for a tabulation discrepancy in the contract.

The Contractor has completed the project construction in accordance with the plans and specifications and as modified by approved change orders. A final project inspection has been conducted by Parks and Public Works staff, and the work has been deemed complete in accordance with the contract requirements, and the project is recommended for acceptance by Council and a "Notice of Completion" recorded.

Alternatives

1. Take no action
2. Refer back to staff

Attachments

A. Resolution

Fiscal Impact

☐ No Fiscal Impact

☒ Funding Source Confirmed: Funding in the amount of $312,500 came from the Twin Pines

Park Belmont Creek Restoration Project Capital Improvement Program (CIP) Project No. 3218, and was supported by multiple sources including the Belmont Fire Protection District Fund and the City Tree Fund.

Source:	**Purpose:**	**Public Outreach:**
Staff	Statutory/Contractual Requirement	Posting of Agenda

RESOLUTION NO. 2025 –

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BELMONT ACCEPTING THE CONSTRUCTION WORK AND AUTHORIZING THE ISSUANCE OF A NOTICE OF COMPLETION, AND RELEASE OF RETENTION 35 DAYS AFTER RECORDATION OF THE NOTICE OF COMPLETION FOR THE TWIN PINES PARK BELMONT CREEK RESTORATION PROJECT – TREE REMOVAL, CITY CONTRACT 2024-064

WHEREAS, on November 26, 2024, City Council authorized the City Manager to execute a tree removal contract for the Twin Pines Park Belmont Creek Restoration Project – Tree Removal, City Contract 2024-064, with the lowest responsible bidder for an amount not to exceed $570,000; and,

WHEREAS, on November 19, 2024, the City conducted a bid opening, and the low bid came in at $271,000 from Atlas Tree Service, Inc.; and,

WHEREAS, the final cost of construction including change orders is $312,500.00.

NOW, THEREFORE, the City Council of the City of Belmont resolves as follows:

SECTION 1. Accepts the construction work for the Twin Pines Park Belmont Creek Restoration Project – Tree Removal as complete.

SECTION 2. Authorizes the City Clerk to issue a Notice of Completion to Atlas Tree Service, Inc.

SECTION 3. Authorizes the City Clerk to file the Notice of Completion with the San Mateo County Clerk-Recorder's office for the Twin Pines Park Belmont Creek Restoration Project – Tree Removal, City Contract 2024-064.

* * *

ADOPTED May 13, 2025 by the City of Belmont City Council by the following vote:

Ayes:
Noes:
Absent:
Abstain:

ATTEST:

City Clerk

Mayor

APPROVED AS TO FORM:

City Attorney

STAFF REPORT

Meeting Date:	May 13, 2025
Agency:	City of Belmont
Staff Contact:	Daniel Matthews, Assistant Civil Engineer, (650) 637-2985, dmatthews@belmont.gov
Agenda Title:	Senate Bill 1 (SB 1) Local Streets and Roads Project List FY 2025-2026
Agenda Action:	Resolution

Recommendation

Adopt a resolution approving a list of proposed projects for fiscal year (FY) 2025-2026 funded by the Road Repair and Accountability Act of 2017.

Strategic Focus Area

Infrastructure and Mobility

Background

On April 28, 2017, after years of advocating for a solution to the state's transportation crisis, the Legislature passed and the Governor signed Senate Bill 1 (SB 1) also known as the Road Repair and Accountability Act of 2017, increasing transportation funding and instituting much-needed reforms. SB 1 provides the first significant, stable, and on-going increase in state transportation funding in more than two decades to address basic road maintenance, rehabilitation, and critical safety needs on state highways, local streets and road systems. With SB 1, the Road Maintenance and Rehabilitation Account (RMRA) was established to fund road repair and rehabilitation projects.

SB 1 emphasizes the importance of accountability and transparency in the delivery of California's transportation programs. To be eligible, the City must adopt by resolution a list of all projects proposed to receive funding from RMRA, created by SB 1. The proposed project list must include a description, location of each proposed project, a schedule for the project's completion, and the estimated useful life of the improvement.

Analysis

Staff has prepared a resolution that satisfies the requirements set forth in the Road Repair and Accountability Act of 2017. For FY 2025-2026, funding from SB1 funds will provide for preparation of contract documents and construction support for the 2026 Pavement Rehabilitation Project and the planned Belmont Hotspot Pavement Project, as well as construction support for the 2025 Pavement Rehabilitation Project. The street segments for the 2025 and 2026 Pavement Rehabilitation Projects were identified as a part of the Five-Year Pavement Plan, and are attached as Attachment B. The Belmont Hotspot Pavement Project will perform spot repairs including localized digouts and pothole repair, and is currently in the planning phase.

Alternatives

1. Take no action
2. Refer back to staff for additional information.

Attachments

A. Resolution
B. List of Streets

Fiscal Impact

☐ No Fiscal Impact

☒ Funding Source Confirmed: SB 1 funding through RMRA is allocated as part of the annual budget development process and five-year capital improvement program.

Source:	**Purpose:**	**Public Outreach:**
Staff	Statutory/Contractual Requirement	Posting of Agenda

RESOLUTION NO. 2025 –

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF BELMONT ADOPTING A LIST OF PROJECTS FOR FISCAL YEAR 2025-2026 FUNDED BY SENATE BILL 1: THE ROAD REPAIR AND ACCOUNTABILITY ACT OF 2017

WHEREAS, Senate Bill 1 (SB 1), the Road Repair and Accountability Act of 2017 (Chapter 5, Statutes of 2017) was passed by the Legislature and signed into law by the Governor in April 2017 to address the significant multi-modal transportation funding shortfalls statewide; and,

WHEREAS, SB 1 includes accountability and transparency provisions that will ensure the residents of Belmont are aware of the projects proposed for funding in our community and which projects have been completed each fiscal year; and,

WHEREAS, the City must adopt by resolution a list of projects proposed to receive fiscal year funding from the Road Maintenance and Rehabilitation Account (RMRA), created by SB 1, which must include a description and the location of each proposed project, a proposed schedule for the project's completion, and the estimated useful life of the improvement; and,

WHEREAS, the City, will receive an estimated $737,936 in RMRA funding in Fiscal Year 2025-2026 from SB 1; and,

WHEREAS, this is the ninth year in which the City is receiving SB 1 funding and will enable the City to continue essential road maintenance and rehabilitation projects, safety improvements, repairing and replacing aging bridges, and increasing access and mobility options for the traveling public that would not have otherwise been possible without SB 1; and,

WHEREAS, the City has undergone a robust public process to ensure public input into our community's transportation project priorities list including providing information on City's website, conducting presentations at the Council meeting discussing existing and proposed street capital improvement projects; and,

WHEREAS, the City used a pavement management system to develop the SB 1 project list to ensure revenues are being used on the most high-priority and cost-effective projects that also meet the communities priorities for transportation investment, said list was developed using StreetSaver program as well as 5-year Pavement Program; and,

WHEREAS, the funding from SB 1 will help the City maintain and rehabilitate 8 street segments throughout the City this year and a number of similar projects into the future, currently estimated at one or two capital improvement project per fiscal year; and,

WHEREAS, the 2023 California Statewide Local Streets and Roads Needs Assessment found that the City's streets and roads are in a fair condition and this revenue will help us increase the overall quality of our road system and over the next decade will bring our streets and roads into a good condition; and,

WHEREAS, the SB 1 project list and overall investment in our local streets and roads

infrastructure with a focus on basic maintenance and safety, investing in complete streets infrastructure, and using cutting-edge technology, materials and practices, will have significant positive co-benefits statewide.

NOW, THEREFORE, IT IS HEREBY RESOLVED, ORDERED, AND FOUND BY the City Council of the City of Belmont, State of California, as follows:

SECTION 1. The foregoing recitals are true and correct.

SECTION 2. The following list of newly proposed projects will be funded in-part or solely with Fiscal Year 2025-2026 Road Maintenance and Rehabilitation Account revenues:

Project Title: 2026 Pavement Rehabilitation Project
Project Description: Heavy and light rehabilitation of 9 street segments with associated curb ramps and drainage improvements
Project Location: City of Belmont (El Verano Way, Fernwood Way, College View Way, Phyllis Court, Paloma Avenue, King Street, Lane Street, Broadway, and Palm Avenue)
Estimated Project Schedule: Start (06/25)– Completion (12/26) based on the component being funded with RMRA funds
Estimated Project Useful Life: fifteen years.

Project Title: Pavement Hotspot Repair Project
Project Description: Address deficient pavement sections across the City through digouts and localized repairs
Project Location: City of Belmont (Belmont Heights, Plateau-Skymont, Cipriani, Western Hills, McDougal, Central, Downtown, Homeview, Sterling Downs, and East of 101 Neighborhoods)
Estimated Project Schedule: Start (07/25)-Completion (6/26) based on the component being funded with RMRA funds.
Estimated Project Useful Life: ten years.

SECTION 3. The following previously proposed and adopted project may also utilize Fiscal Year 2025-2026 Road Maintenance and Rehabilitation Account revenues in its delivery. With the relisting of these projects in the adopted fiscal year resolution, the City of Belmont is reaffirming to the public and the State our intent to fund these projects with Road Maintenance and Rehabilitation Account revenues:

Project Title: 2025 Pavement Rehabilitation Project
Project Description: heavy and light rehabilitation of 8 street segments with associated curb ramps and drainage improvements
Project Location: City of Belmont (Forest Avenue, Coronet Blvd. (2 segments), Monte Cresta Drive (3 segments), Pullman Avenue, Lower Lock Avenue)
Estimated Project Schedule: Start (06/24)– Completion (12/25) based on the component being funded with RMRA funds
Estimated Project Useful Life: fifteen years.

* * *

ADOPTED May 13, 2025 by the City of Belmont City Council by the following vote:

Ayes:
Noes:
Absent:
Abstain:

ATTEST:

City Clerk

Mayor

APPROVED AS TO FORM:

City Attorney

ATTACHMENT B
STREET LIST
2025 PAVEMENT REHABILITATION PROJECT

Street Name	Beginning Location	End Location	Length (LF)	Width (LF)	Section Area (SF)	Base Bid or Bid-Alt	Selected Treatment	Current PCI
FOREST AVENUE	ALAMEDA DE LAS PULGAS	CIPRIANI BOULEVARD	950	18	17,100	Base Bid	Full Depth Reclamation	29
CORONET BOULEVARD	ARTHUR AVENUE	PRINDLE ROAD	1,550	22	34,100	Base Bid	Mill-and-Fill	40
CORONET BOULEVARD	LYON AVENUE	ARTHUR AVENUE	1,750	22	38,500	Base Bid	Mill-and-Fill	66
MONTE CRESTA DRIVE	SAN JUAN BOULEVARD	BARCLAY WAY	1,600	22	35,200	Base Bid	Overlay	42
MONTE CRESTA DRIVE	BARCLAY WAY	MONTE CRESTA COURT	225	22	4,950	Base Bid	Mill-and-Fill	81
MONTE CRESTA DRIVE	MONTE CRESTA COURT	DEAD END	600	22	13,200	Base Bid	Overlay	36
PULLMAN AVENUE	COVINGTON ROAD	CORONET BOULEVARD	2,150	20	43,000	Base Bid	Mill-and-Fill	54
PULLMAN AVENUE	CORONET BOULEVARD	RALSTON AVENUE	200	24	4,800	Base Bid	Mill-and-Fill	0
RALSTON FRONTAGE RD	HILLER	KEDITH ST	675	38	25,650	Base Bid	Overlay	0
RALSTON FRONTAGE RD	GRANADA ST	HILLER	200	21	4,200	Base Bid	Overlay	78
COMSTOCK CIRCLE	REFUGE BOUNDARY	WALTHAM CROSS	400	40	16,000	Base Bid	Overlay	13
COMSTOCK CIRCLE	HALLMARK DRIVE (S)	HALLMARK DRIVE (W)	2,300	31	71,300	Base Bid	Overlay	17
LOWER LOCK AVENUE	END OF PAVED ROAD	HILLCREST DRIVE	950	26	24,700	Base Bid	Overlay	51
E STREET	FIFTH AVENUE	SIXTH AVENUE	300	32	9,600	Base Bid	Overlay	3
SHOREWAY RD	1111 SHOREWAY RD	CITY LIMIT	1,000	35	35,000	Base Bid	Mill-and-Fill	0
FIFTH AVE	ONEIL AVE	CHANGE OF PAVEMENT ~100' N OF ONEIL AVE	100	14	1,400	Bid Alternate 1	Mill-and-Fill	15
KING ST	SIXTH AVE	SOUTH RD	425	23	9,775	Bid Alternate 1	Overlay	9
LANE ST	PROSPECT ST	MOLITOR RD	350	23	8,050	Bid Alternate 1	Mill-and-Fill	7

Key Terms:

Full Depth Reclamation - a recycling method where all of the asphalt pavement section and a predetermined amount of underlying materials are treated to produce a stabilized base course, which is then overlayed with a surface course of asphalt.

Mill and fill - a pavement rehabilitation process that involves milling (removing) the surface layer of pavement to a predetermined depth and filling it with new or recycled HMA.

Overlay - a pavement rehabilitation process for severely deteriorated pavement that overlays bituminous asphalt concrete on top of existing pavement to strengthen its overall structure, improve ride and extend service life.

PCI - a measure of the pavement health of a road on a scale of 0 to 100 (where 100 means a newly paved road).

Base Bid & Bid Alternate – a base bid item is one that is included in the construction by default. Bid alternates are designed segments that the City may choose to construct based on project progress and funding status.

ATTACHMENT B
STREET LIST
2026 PAVEMENT REHABILITATION PROJECT

Street Name	Beginning Location	End Location	Length (LF)	Width (LF)	Section Area (SF)	Base Bid or Bid-Alt	Anticipated Treatment	Current PCI
BROADWAY	SIXTH AVENUE	SUNNYSLOPE AVENUE	300	30	9,000	Base Bid	Heavy Rehabilitation	5
BROADWAY	SUNNYSLOPE AVENUE	PALOMA AVENUE	300	23	6.900	Base Bid	Heavy Rehabilitation	6
COLLEGE VIEW WAY	SOUTH ROAD	END OF TURN-A-ROUND	1050	24	25,200	Base Bid	Heavy Rehabilitation	19
EL VERANO WAY	CHULA VISTA DRIVE	MAYWOOD DRIVE	1,650	27	44,550	Base Bid	Heavy Rehabilitation	24
FERNWOOD WAY	CHULA VISTA DRIVE	EL VERANO WAY	780	27	21,060	Base Bid	Heavy Rehabilitation	25
KING STREET	SIXTH AVENUE	SAN CARLOS CITY LIMIT/SOUTH END	425	23	9,775	Base Bid	Heavy Rehabilitation	9
KORBEL WAY	SOUTH ROAD	END OF CUL DE SAC	220	22	4,840	Base Bid	Heavy Rehabilitation	18
LANE STREET	MOLITOR ROAD	PROSPECT STREET	650	23	8,050	Base Bid	Heavy Rehabilitation	7

Key Terms:
PCI - a measure of the pavement health of a road on a scale of 0 to 100 (where 100 means a newly paved road).

Base Bid & Bid Alternate – a base bid item is one that is included in the construction by default. Bid alternates are designed segments that the City may choose to construct based on project progress and funding status.

Heavy Rehabilitation: a category of intensive pavement repair techniques for roads that exhibit structural deficiencies, including methods such as mill and fill and full depth reclamation.

Meeting Date:	May 13, 2025
Agency:	City of Belmont
Staff Contact:	Carlos de Melo, Community Development Director, (650) 595-7440 cdemelo@belmont.gov
Agenda Title:	CSG Master Service Agreement (MSA) Renewal and Building Plan Review Services Task Order #1
Agenda Action:	Motion

Recommendation

Adopt a motion authorizing the City Manager to negotiate and execute a Master Service Agreement (MSA) with CSG Consultants, Inc., and Task Order #1 in an amount not to exceed $130,000, for Building Plan Review Services.

Strategic Focus Area

Economic Development and Housing

Summary

To meet the increasing complexity and cyclical volume of development review applications, staff recommends authorizing the City Manager to negotiate and execute a Master Service Agreement (MSA) for on-call Building Plan Review services (and other services as described below). The Building Plan Review services are necessary to supplement internal staff capacity and provide specialized technical expertise not currently available within the Department. The City is currently processing several significant development projects, many of which are undergoing parallel review processes in an effort to expedite approvals and advance construction timelines. Partnering with a consultant will help maintain high standards of review while ensuring timely and efficient processing of permit applications.

Staff recommends renewing the MSA with CSG Consultants, Inc. based on their demonstrated track record of delivering high-quality services, their familiarity with the City's development regulations and processes, and their ability to respond promptly to fluctuating workloads. Their continued support is essential to maintain timely and thorough review of increasingly complex development projects. The cost of these consultant services will be fully funded by building permit fees collected from the respective projects, ensuring that there is no additional financial impact to the City.

The CSG Consultants, Inc. comprehensive scope of the renewed MSA includes the aforementioned Building Plan Review Services, as well as Inspection Services (as needed in the Public Works Department), and Permit Technician Services, providing the flexibility and expertise needed to support the City's development operations. As such, staff is requesting authorization for the City Manager to negotiate and execute a contract that shall not exceed the total amount identified in the subject Task Orders issued by the City against this Agreement. This first Task Order (#1 and specifically for Building Plan Review) shall not

exceed $130,000. The review services are funded through Building Permit fees, and there is currently sufficient budget available in Fund 210-5-904-8351 to support this task order.

Alternatives

1. Refer back to staff for additional information.
2. Continue the item for further discussion.

Attachments

No attachments for this item.

Fiscal Impact

☒ No Fiscal Impact

☒ Funding Source Confirmed

This contract will be funded via Building Permit fees and is not expected to have a direct financial impact to the City. There are adequate funds available in account 210-5-904-8351 for Task Order #1 services.

Source:	**Purpose:**	**Public Outreach:**
Staff	Discretionary Action	Posting of Agenda

*E-Notification of agendas, public notification as required for the May 13, 2025 City Council meeting

Docusign Envelope ID: DDC3398A-F8B7-49D4-8A88-379FAEFDEB4C

City of Belmont
Attn: Bozhena Palatnik
1 Twin Pines Ln,
Belmont, CA 94002

City of Belmont – Amendment to TO#1– Culvert Replacement- Salson Trail

Mott MacDonald Group, Inc

2700 Gateway Place

Ste 550

San Jose, CA 95110

Mohamed Basma, PE

Mohamed.Basma@mottmac.com

Apr 25, 2025

Dear Bozhena:

Mott MacDonald Group Inc. (Mott MacDonald) is pleased to submit this amendment to Task Order #1 proposal in accordance with our Master Architectural and Engineering Agreement to continue providing bid and construction phase services for the City of Belmont (City's) Culvert Replacement – Salson Trail Project (Project). This amendment proposal is prepared as a result of the conversation with you regarding the extended design schedule of TO 1 and the rate changes that will occur due to the extension of the Construction schedule into summer of 2025.

Project Understanding

Through Task Order 1, Mott Macdonald and their sub consultants were tasked to produce a biddable PS&E package for the Salson trail culvert project and provide Design Service During Construction (DSDC) services. The schedule for design and construction as outlined in the TO#1 was to have a biddable package made available to the City by August 2024 for construction to happen before November 2024. This schedule was based in part on the assumption that the project would not require resource agency permitting, since no permits were discussed during the Federal Emergency Management Agency's (FEMA's) staff visit to the site.

However, as you know, the project will involve a jurisdictional stream, since the culvert planned for replacement conveys flows in East Laurel Creek. Shortly after our contract was executed and preliminary work commenced, MM's environmental sub-consultant, Redtail Consulting (RCEC) provided an *Environmental Status and Next Steps* memo (deliverable to TO#1) that included baseline information on the environmental clearances likely to be necessary for the project to proceed. RCEC continued to liaise with the resource agencies and in August 2024 received confirmation that the U.S. Army Corps of Engineers does not consider East Laurel Creek a Water of the United States and therefore would not require the City to obtain a Clean Water Act Section 404 permit; permit requirements were thus understood to be limited to Waste Discharge Requirements (WDRs) issued by the Regional Water Quality Control Board (RWQCB) and a Streambed Alteration Agreement (SAA) with the California Department of Fish and Wildlife (CDFW).

The application for WDRs and the SAA Notification, both of which included a 95% PSE set, were sent to the agencies in mid-November of 2024. The RWQCB has authorized the project to proceed per the SWRCB's Statewide General Waste

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Discharge Requirements for Dredged or Fill Discharges to Waters Deemed by the U.S. Army Corps of Engineers to be outside of Federal Jurisdiction (General WDRs). The project SAA is in preparation and anticipated soon.

We anticipate preparing a California Environmental Quality Act (CEQA) Notice of Exemption (NOE) for the City's use in spring 2025; per *CEQA Guidelines* 15062[a], the NOE is prepared "when the public agency approves or determines to carry out the project", which would either be on City Council approval of the bid process, or on Council's decision to let the contract, depending on the City's standard process. NEPA review will not be required, since FEMA funding has been withdrawn and there is no federal permit requirement.

With the project schedule extended to allow for acquisition of the required resource agency permits, we understand that the City now intends to complete the bid process by July 2025 and begin construction in August 2025. These deadlines will of course be contingent on receipt of the Streambed Alteration Agreement.

Due to the extension of the project schedule and the City's request to include construction-phase tasks, an amendment to Task Order #1 is being proposed. The scope of the remainder tasks have been described and quantified as follows.

Scope of Work

Task 1 Project Management (Additional)

Overall management of Mott MacDonald in-house staff including contract administration, budget and schedule control, monthly project reports, invoicing, coordination meetings with the City, and performing quality control. Mott MacDonald assumes a combined design and DSDC services project duration of eight (8) months.

Deliverables:

- Monthly invoices and progress reports
- Coordination Meeting Agendas and Minutes one (1) project

Task 2 – Bid Package requirements

This task will involve preparing a Bidding documents along with CEQA Notice of Exemption for the City's use and producing a Bid Package that incorporates City's comments.

Deliverables:

- Bid Package documents
- CEQA Notice of Exemption

Task 3 – Design Services during Construction (Additional)

MM team's DSDC have been covered in Task Order #1. The additional requirements for this team are to provide on site geotechnical support and the replenish the DSDC amounts that were utilised in finalising the 100% Design package. The scope for the Geotech work is described here. Our geotech team will provide construction support by witnessing excavation to formation level and identifying a 'firm and unyielding standard' of soil conditions prior to placing the footings for the retaining headwalls. The scope includes site visits and inspection of works, and the production of a field report that confirms that the Contractor achieved firm and unyielding ground conditions at formation level to provide the necessary bearing pressure requirements per Caltrans standards.

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Deliverables:

- Review and respond to contractor submitted RFI's (five (5) numbers).
- Review and respond to shop drawing submittals (four (4) numbers)
- Field visits and preparing of a field report (one (1) number)

Task 4 – Environmental Resource Agency Permits (Optional; prior scope authorized summer 2025)

We propose to augment the base scope and budget for this task as follows.

- Provide construction phase services to assist the City in complying with anticipated permit requirements, including
  - Pre-construction surveys for special-status species and nesting birds
  - Biologist oversight of sensitive habitat exclusion fencing installation
  - Worker environmental awareness training
  - Agency notifications and reporting during the construction period
  - Post-construction restoration of disturbed riparian habitat; follow-up monitoring of restoration establishment

If CDFW requires additional or modified environmental tasks during construction, we will alert you immediately and submit a separate scope of services and budget for that work.

Deliverables:

- Environmental Special Provisions
- Reviews of contractor submittals, if/as requested
- Items such as monitoring "daily" forms and agency notifications/reports required for permit compliance

Assumptions

The following assumptions were made for this proposal:

- Schedule assumes a two-week City review period.
- City will identify and coordinate key stakeholders and operation staff for attending construction meetings with Contractor.
- Mott MacDonald fee proposal is based on the hourly rates which are effective until June 30, 2025.
- Scope of work does not include National Environmental Policy Act (NEPA) compliance activities.

Exclusions

The proposal excludes the following services which can be provided at the request of the City at an additional cost:

- Relocation of other utilities
- Potholing activities/utility location
- Support for FEMA funding.
- Modeling to confirm pipe size and hydraulic sizing.

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Schedule

Below is a tentative schedule for this amendment.

Submit Final Plans (100% PSE) (ACTUAL)	**January 22, 2025**
Bid Documents and CEQA NOE	April 30, 2025
Bidding and Contractor Approval	June 30, 2025
Design Support during Construction	July – November 30, 2025

Fee Proposal

Mott MacDonald will provide the above scope of services on a time-and-materials not-to-exceed fee basis in accordance with our Master Services Agreement. The estimated not to exceed fee for this amendment to Task Order#1 is $93,142.33 as shown in the attached fee estimate.

Thank you for the opportunity to submit this proposal to complete the important work. Please feel free to contact me or Bindu Samudrala, the Project Manager, if you have any questions. Bindu can be reached by phone at (518) 986-1309 or via e-mail at himabindu.samudrala@mottmac.com.

Sincerely,

Mott MacDonald Group, Inc

DocuSigned by:
Mohamed Basma
43F4205A006D4C2...

Mohamed Basma

Senior Vice President

Northern California Portfolio Manager

+1 408 807 0481

Mohamed.basma@mottmac.com

Cc: Stephanie Douglass

Docusign Envelope ID: DDC3398A-F8B7-49D4-8A88-379FAEFDEB4C

dated - 04/25/25

City of Belmont - Salson trail Culvert - Budget and Actuals				
	MM	**Redtail**	**Total**	
DESIGN PHASE				
Design - 100% PSE (as of Invoice 7)	$98,805.00	$0.00	$98,805.00	Actual
Agency coordination, OES/FEMA coordination, permit applications (as of invoice 7)	$1,630.00	$31,765.00	$33,395.00	Actual
Agency coordination, OES/FEMA coordination, permit applications (WIP)	$0.00	$2,500.00	$2,500.00	Actual
CEQA notice of exemption	$0.00	$3,496.00	$3,496.00	Estimate
CONSTRUCTION PHASE				
Bid documents	$7,491.33	$6,000.00	$13,491.33	Estimate
Bid Support and Addenda	$3,970.00	$2,000.00	$5,970.00	Estimate
Western Leatherwood survey	$0.00	$5,545.00	$5,545.00	Estimate
Pre Construct Meetings, RFI'S (5) Submittals (4), Env Support (e.g., pre-con bio surveys worker awareness training, exclusion fencing install oversight)	$14,133.00	$22,833.00	$36,966.00	Estimate
Geo tech Field visits and report (1	$5,555.00	$0.00	$5,555.00	Estimate
Notification and reporting per LSAA (CDFW)	$0.00	$15,000.00	$15,000.00	Estimate
Riparian restoration, post-construction restoration monitoring (5 yrs assumed)		$33,842.00	$33,842.00	Estimate
Punch list and Asbuilts	$6,522.00	$0.00	$6,522.00	Estimate
TOTAL	**$138,106.33**	**$122,981.00**	**$261,087.33**	
TO1 Allocation			***$167,945.00***	
TO1 Cost to date			***$132,151.73***	
TO1 Remaining balance			***$35,793.27***	
TO2 or Amendment to TO1			*$93,142.33*	