

COUNTY OF SAN MATEO

STATE OF CALIFORNIA

CONTRACT DOCUMENTS
AND
SPECIFICATIONS
FOR

TUNITAS CREEK BEACH IMPROVEMENTS

WITH APPURTENANT WORK THERETO
IN SAN MATEO COUNTY

COUNTY PROJECT NO. P30T1
PROJECT FILE NO. E4995

APPROVED: April 21, 2023, 2023

ANN MADER STILLMAN
(R.C.E. No. 47882)
Director of Public Works



Department of Public Works
San Mateo County
555 County Center, 5th Floor
Redwood City, California 94063-1665

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APPENDIX A

County of San Mateo Waste Management Plan Form
Waste Management Daily Transport Report

APPENDIX B

Sanitary Sewer Monitoring and Reporting Requirements:
State Water Resources Control Board Order No. WQ 2013-0058-EXEC

APPENDIX C

Sample "Payment Bond" Form

Sample "Performance Bond" Form

APPENDIX D

Daily Personnel and Equipment Log

APPENDIX E

Construction Claims:
Public Contract Code Sections 9204 and 20104 et seq.

APPENDIX F

Mitigation Monitoring and Reporting Program

APPENDIX G

San Mateo County Building Permit – Not available at this time.
Caltrans Encroachment Permit – Not available at this time.

APPENDIX H

County of San Mateo Routine Maintenance Program Manual
Table 9-1: Maintenance Program Best Management Practices

APPENDIX I

For Reference Only: Investigation and Geologic Feasibility Study dated March 2017 prepared by Romig Engineers

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PROPOSAL

- Contractor's Check-Off List
- Name and Address of Bidder
- Contractor Declaration Statement
- Bid Schedules
- Bidder's Bond
- Signature of Bidder
- Subcontractors
- San Mateo County Equal Employment Opportunity Program
- Equal Benefits Compliance Ordinance No. 04026
(Title 2, Chapter 2.84, San Mateo County Ordinance Code)
- Equal Benefits Compliance Declaration Form
- Contractor Employee Jury Service Ordinance No. 04269
(Title 2, Chapter 2.85, San Mateo County Ordinance Code)
- Contractor Employee Jury Service Compliance Declaration Form
- Non-Collusion Declaration Form

AGREEMENT

- Signature Sheet

**COUNTY OF SAN MATEO
STATE OF CALIFORNIA
NOTICE TO CONTRACTORS**

NOTICE IS HEREBY GIVEN, that

Sealed bids will be received at the office of the County Executive/Clerk of the Board of Supervisors, Hall of Justice and Records, 400 County Center, Redwood City, California, 94063 until the hour of

2:30 PM, Thursday, May 25, 2023

which all bids will then be transmitted to the County Executive's Office in the Hall of Justice and Records, where the bids will be publicly opened and read aloud for the following project in accordance with the specifications therefore and to which special reference is made as follows:

**TUNITAS CREEK BEACH IMPROVEMENTS
WITH APPURTENANT WORK THERETO
IN SAN MATEO COUNTY**

**COUNTY PROJECT NO. P30T1
PROJECT FILE NO. E4995**

Bids are required for the entire work described herein.

Bidders are further advised of the following:

1. **Contractor should be placed on a Plan Holders List for bidding. To be placed on the Plan Holders List, the Contractor shall either:**
 - a. **Purchase Plans and Specifications, including forms of proposal and contract, from the County of San Mateo Department of Public Works. When purchasing by phone (650-363-4100) or email (mmanalo@smcgov.org), please send check payable to "County of San Mateo" to 555 County Center, 5th Floor, Redwood City, CA 94063; OR**
 - b. **Complete and sign the following Plan Holder's Affidavit by using the link below and you will receive a separate link for downloading an electronic copy of the Plans and Specifications. The contractor is advised that the table should be received by the County no later than three (3) working days prior to the bid opening date.**

<https://www.smcgov.org/publicworks/affidavit-form-tunitas-creek-beach-improvement-project>

- c. If plans and specifications are obtained through a source other than those outlined in 1a and 1 b above, complete and sign the following Plan Holder’s Affidavit and return to the County by PDF either via email to mmanalo@smcgov.org and alum@smcgov.org or by fax at (650-361-8220). The Contractor is advised that the table should be received by the County no later than three (3) working days prior to the bid opening date.

Plan Holder’s Affidavit	
Project Title	<u>Tunitas Creek Beach Improvements</u>
Project No.	<u>P30T1</u>
Project Engineer:	<u>Michelle Manalo Mason</u>
Project Manager:	<u>Anthony Lum</u>
Bid Open Date and Time:	<u>2:30 PM, Thursday, May 25, 2023</u>
Company Name:	_____
Mailing Address:	_____
Phone Number:	Fax Number: _____
E-mail Address:	_____
(Name and Title of Authorized Representative of Bidder)	
(Signature of Authorized Representative of Bidder)	

The Plan Holders List will be posted to the County of San Mateo’s Public Works website two (2) working days prior to the bid open date.

2. Questions regarding the Contract Documents concerning items such as discrepancies, conflicts, omissions, doubts as to meanings, or regarding scope of bid items shall be referred to the Engineer. Inquiries must be received in writing via email, to mmanalo@smcgov.org and alum@smcgov.org, not less than five (5) working days prior to bid opening. Inquiries will be answered in writing via email response if written clarification is warranted, in the opinion of the Engineer, then inquiries and responses will be posted to the Project’s page on the County of San Mateo’s Public Works website. It will be the Contractor’s sole responsibility to ensure that they receive responses, *if any*. The County will not be responsible for oral clarifications.

3. It will be the Contractor’s sole responsibility to ensure that they have

received addendums, *if any*, which will be posted to the County of San Mateo's Public Works website on the same day issued. Said addendums will also be sent to all current plan holders and made available during purchase of Plans and Specifications.

4. Proposals in which the prices obviously are unbalanced may be rejected.

The Department of Public Works website will be updated as needed and can be accessed under the Department's tab found on the County of San Mateo website

[\(<https://publicworks.smcgov.org>\)](https://publicworks.smcgov.org).

ENGINEER'S ESTIMATE
TUNITAS CREEK BEACH IMPROVEMENTS
WITH APPURTENANT WORK THERETO
IN SAN MATEO COUNTY

Item No.	Item Description	Section No.	Unit of Measure	Estimated Quantity
101	Mobilization/ Demobilization	11	LS	1
102	Construction Waste Management	14	LS	1
103	Water Pollution Control	13-1	LS	1
104	Construction Staking	100	LS	1
105	Maintaining Traffic	12-2	LS	1
106	Prepare Health and Safety Plan	10-4	LS	1
107	Project Sign	12-3	EA	1
108	Temporary Fencing	16	LF	2,300
109	Temporary Silt Fence	13-4	LF	1,500
110	Fiber Roll	13-5	LF	4,300
111	Stabilized Construction Entrance	13-6	EA	1
112	Watering	13-7	LS	1
201	Clear and Grub	17-1	SF	220,000
202	Hardscape Removal	17-2	SF	7,000
203	Gate Removal	17-3	EA	1
204	Fence Removal	17-3	LF	215
205	Light Pole Removal	17-3	EA	1

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Item No.	Item Description	Section No.	Unit of Measure	Estimated Quantity
206	Power Pole Removal	17-3	EA	1
207	Gravel Parking Area Protection	17-4	SF	1,500
208	Remove Striping	84-2	LS	1
301	Parking Area Earthwork	19-1	CY	9,100
302	Pathway Earthwork	19-1	CY	5,500
303	Midbluff Area Earthwork	19-1	CY	2,000
304	Roadway Excavation – Highway 1	19-5	CY	200
305	Stockpile	19-2	CY	2,000
306	Slide Repair Earthwork	19-4	CY	8,000
307	Export	19-3	CY	4,000
308	Fine Grading	19-7	SF	100,000
401	Parking Lot Asphalt Paving	36-1	TON	605
402	Highway 1 Asphalt Paving	36-1	TON	250
403	Remove and Replace Asphalt Driveway ®	36-3	TON	90
404	Concrete Walkway (Type A Finish)	73-2	SF	9,160
405	Concrete Walkway (Type B Finish)	73-2	SF	1,670
406	Vehicle Aggregate Surface	26-2	TON	580
407	Pedestrian Aggregate Surface	26-2	TON	46
408	Parking Lot Aggregate Base	26-1	TON	1,150

Table continued on next page

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Item No.	Item Description	Section No.	Unit of Measure	Estimated Quantity
409	Highway 1 Aggregate Base	26-1	TON	280
410	Aggregate Base for Various Concrete Elements	26-3	TON	304
411	Resilient Surfacing	36-2	SF	15,450
412	Resilient Surfacing Permeable Aggregate Base	36-2	TON	383
413	Stabilized Decomposed Granite Paving	36-4	SF	7,300
414	Shredded Hardwood Mulch Surfacing	20-3	SF	1,000
415	Parking Lot Unpaved Trail	19-6	SF	2,500
416	South Loop Unpaved Trail	19-6	SF	13,025
417	Curb Ramp	73-2	SF	750
418	Concrete Curb	73-1	LF	1,250
419	Concrete Curb and Gutter	73-1	LF	755
420	Flush Concrete Curb	73-1	LF	100
421	Extended Concrete Curb and Gutter	73-1	LF	115
422	Retaining Curb and Gutter	73-1	LF	275
423	Curb Cuts with Cobble Rock	72	EA	6
424	Soldier Pile Wall	47	SF	1,960
425	Soldier Pile Wall (Taller than 4 feet)	47	SF	300

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Item No.	Item Description	Section No.	Unit of Measure	Estimated Quantity
426	Wood Step	73-3	CY	40
427	Wood Step	19-8	EA	80
428	Midwest Guardrail	83	LF	660
429	Signs and Posts	82	EA	12
430	Detail 38A	84-1	LF	240
431	Detail 27B	84-1	LF	400
432	4" Stripe	84-1	LF	1,150
433	Markings	84-1	SF	1,000
501	Wood Decking	77-2	SF	855
502	Amphitheatre	77-3	LS	1
503	Guardrail	75-2	LF	415
504	Handrail	75-1	LF	4,620
505	Bollards	75-3	EA	5
506	Gate	75-4	EA	4
507	Top of Bluff Seatwalls Type A	77-5	LS	1
508	Top of Bluff Seatwalls Type B	77-5	LS	1
509	Mid Bluff Timber Bench	77-5	LS	1
510	Strata Beam Bench	77-6	EA	10
511	Precast Concrete Bench	77-6	EA	2

Table continued on next page

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Item No.	Item Description	Section No.	Unit of Measure	Estimated Quantity
512	Rammed Earth Seat Wall	77-4	EA	1
513	Bicycle Parking	77-6	EA	12
514	Bike Repair Station	77-6	EA	1
515	Picnic Tables	77-6	EA	5
516	Feature Log	77-6	EA	1
517	Concrete Wheel Stop	77-6	EA	15
518	Wayfinding Sign	77-7	EA	7
519	Land Recognition Plaque	77-7	EA	1
520	Interpretative Signage	77-7	EA	6
521	Donor Wall	77-8	LS	1
522	Donor Plaques on Seat Backs	77-8	EA	22
523	Bat House	77-9	EA	1
524	Entry Kiosk	77-10	EA	1
525	Habitat Protection Fence	80	LF	7,000
501	Slope Stabilization Seeding	21-1	SF	82,000
502	Social Trail Slope Stabilization Seeding	21-2	SF	10,000
503	Plants/ Shrubs	20-1	SF	32,000
504	Ground Cover	20-1	SF	32,000
505	Tree	20-1	EA	65

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Item No.	Item Description	Section No.	Unit of Measure	Estimated Quantity
506	Landscape Maintenance	20-2	LS	1
601	Restroom Plans and Materials	99-1	LS	1
602	Ranger Shed Plans and Materials	99-1	LS	1
603	Ranger Shed Foundation	99-2	EA	1
604	Ranger Shed	99-3	EA	1
605	Restroom Foundation	99-2	EA	1
606	Restroom	99-3	EA	1
701	12" PVC	64	LF	820
702	8" Perforated Pipe	68	LF	305
703	6" Perforated Pipe	68	LF	925
704	Class II Permeable	61-1	CY	65
705	Bioretention Soil	61-2	CY	97
706	Subdrain Cleanout	68	EA	24
707	Overflow Drain Inlet	70	EA	5
708	Turning Structure	70	EA	3
709	Drop Inlet with Side Opening	70	EA	1
710	Outfall Rock Dissipater	72	TON	35
801	Joint Trench	86-1	LF	1,800
802	Service Trench	86-1	LF	500

Table continued on next page

Table continued from previous page

Item No.	Item Description	Section No.	Unit of Measure	Estimated Quantity
803	PG&E #7 Vault	86-2	EA	3
804	AT&T 30x48 Pull Box	86-2	EA	1
805	AT&T 30x60 Pull Box	86-2	EA	3
806	Comcast Pull Box	86-2	EA	4
901	Transformer	87-2	EA	1
902	Switch Gear	87-2	EA	1
903	Electric Vehicle Charging Station	87-4	EA	4
904	Electrical Conduit and Conductors	87-1	LF	4,000
905	Handrail Lighting	87-3	LF	2,000
906	6" Water Pipeline	79	LF	1,000

Engineer's Estimate of Cost: \$ 11,000,000.00

(Note: Gaps in section numbering, above, indicate the Section is blank or does not apply.)

The foregoing quantities are approximate only, being given as a basis for the comparison of bids, and the County of San Mateo does not, expressly or by implication, agree that the actual amount of work will correspond herewith, but reserves the right to increase or decrease the amount of any class or portion of the work, or to omit any portion of the work, as may be deemed necessary or expedient by the Engineer.

Payment to the Contractor for materials furnished and work completed shall be made by the County in accordance with Section 9 of the "Special Provisions" portion of these Contract Documents. Pursuant to Section 22300 of the Public Contract Code, Contractor may, upon his request and at Contractor's expense, substitute equivalent securities for any moneys retained from such payment for the fulfillment of the Contract.

When applicable, both Contractor and Subcontractor hereby agrees to pay not less than prevailing rates of wages and be responsible for compliance with all the provisions of the California Labor Code, Article 2-Wages, Chapter 1, Part 7, Division 2, Section 1770 et seq and Section 1810 et seq. A copy of the prevailing wage scale established by the Department of Industrial Relations is on file in the office of the Director of Public Works, and available at www.dir.ca.gov/DLSR or by phone at 415-703-4774. California Labor Code Section 1776(a) requires each contractor and subcontractor keep accurate payroll records of trades workers on all public works projects and to submit copies of certified payroll records upon request.

Additionally, pursuant to State Senate Bill SB 854 (Stat. 2014, chapter 28), effective January 1, 2015:

- (1) No contractor or subcontractor may be listed on a bid proposal for a public works project (submitted on or after March 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)].**
- (2) No contractor or subcontractor may be awarded a contract for public work on a public works project (awarded on or after April 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5.**
- (3) This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.**

Wage rates for overtime shall be paid at not less than one and one-half (1-1/2) times the above rates. Wage rates for Sundays and holidays shall be paid at not less than two (2) times the above rates.

The holidays upon which such rates shall be paid shall be all holidays recognized in the collective bargaining agreement applicable to the particular craft, classification, or type of worker employed on the Project.

It is the policy of the County that Contractors on public projects employ their workers and craftsmen from the local labor market whenever possible. "Local Labor Market" is defined as the labor market within the geographical confines of the County of San Mateo, State of California. Consistent with this policy, the Contractor is requested

to employ craftsmen and other workers from the local labor market whenever possible to do so.

Each bidder shall submit with the bid, Certificates of Compliance and Intent on a form provided in the "Proposal" section of these Contract Documents, a certificate that bidder is in compliance with the provisions of the Equal Employment Opportunity Requirement of Executive Order 11246, Title VII of the Civil Rights Act of 1964, the California Fair Employment and Housing Act and any other federal, State and local laws and regulations relating to equal employment opportunity. With the execution of said certificates, bidder also agrees that bidder will maintain or develop and implement, during the course of the work concerned, a program of hiring and employment, conducted without regard to race, religion, color, national origin, ancestry, sexual orientation, or sex of the applicants. With this certification, bidder shall submit any and all information that may be required by the County in connection with the particular project.

Each bidder is hereby notified of Section 9204 and Section 20104 et seq. of the Public Contract Code as those Sections (attached hereto as Appendix E) relate to resolution of construction claims, and to Section 3186 of the Civil Code, as amended January 1, 1999 with regard to stop notices and public entity's rights to retain monies in order to provide for that entity's reasonable cost of litigation. The bidder is further notified that all provisions of Section 9204 and Section 20104 et seq. of the Public Contract Code and Section 3186 of the Civil Code, as outlined above shall be considered as incorporated into and become an integral part of these specifications.

Questions relating to equal employment should be directed to the San Mateo County Department of Public Works, Equal Employment Opportunity Program, 555 County Center, 5th Floor, Redwood City, CA 94063-1665, telephone (650) 363-4100.

Plans and Specifications and forms of Proposal and Contract may be seen and obtained at the office of the Director of Public Works, 555 County Center, Redwood City, California, 94063-1665. Plans and specifications may be obtained for a:

NON-REFUNDABLE FEE OF \$ 100 PER SET

Additional technical questions should be directed to the office of the Director of Public Works, 555 County Center, Redwood City, California, 94063-1665, telephone (650) 363-4100.

The Contractor shall possess either a Class A License or a combination of Class C licenses that are applicable for the majority of the work at the time this contract is awarded. No Contract will be awarded to a Bidder who is not licensed as required by laws of the State of California.

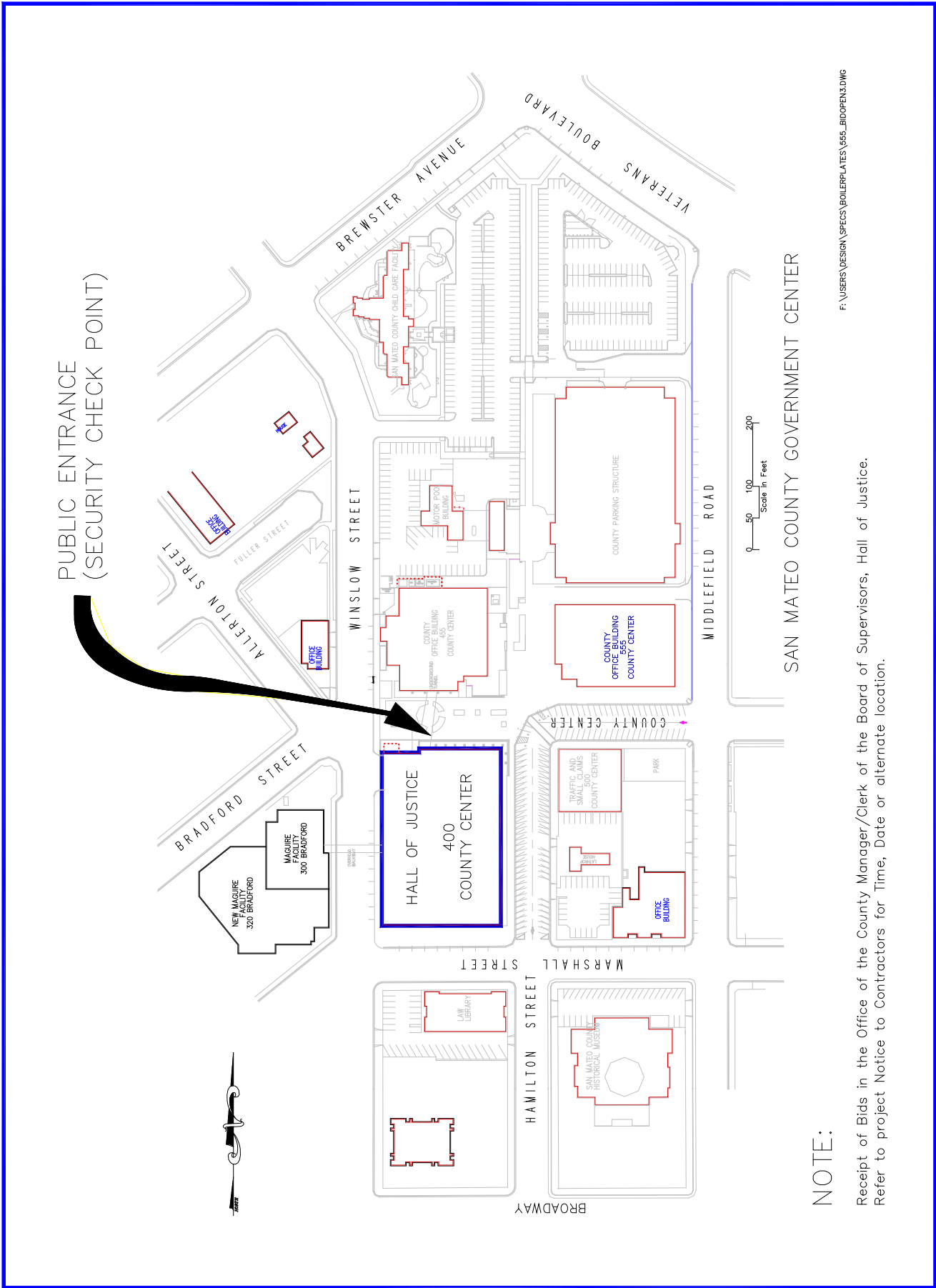
The County of San Mateo reserves the right to reject any or all bids and/or waive any informalities or irregularities in any bid received.

Bidders may not withdraw their bid for a period of **FORTY-FIVE (45) DAYS** after the date set from the opening thereof.

BY ORDER OF THE
BOARD OF SUPERVISORS
COUNTY OF SAN MATEO

DATE: April 21, 2023

**Michael Callagy, County Executive/
Clerk of the Board of Supervisors**



F:\USERS\DESIGN\SPCS\BOILERPLATES\655_BIDOPEN.DWG

NOTE:

Receipt of Bids in the Office of the County Manager/Clerk of the Board of Supervisors, Hall of Justice.
Refer to project Notice to Contractors for Time, Date or alternate location.

COUNTY OF SAN MATEO

STATE OF CALIFORNIA

**SPECIAL PROVISIONS
FOR**

TUNITAS CREEK BEACH IMPROVEMENTS

**WITH APPURTENANT WORK THERETO
IN SAN MATEO COUNTY**

**COUNTY PROJECT NO. P30T1
PROJECT FILE NO. E4995**

DATE: APRIL 21, 2023

SECTION 1. DEFINITIONS OF TERMS TO BE USED IN THE SPECIAL PROVISIONS

Except as specifically stated herein, the definitions contained in the Standard Specifications of the State of California, Department of Transportation, as set forth per Section 2-1, "Plans and Specifications," of these Special Provisions and hereafter referred to as "Standard Specifications," shall be applicable with the understanding that where said definitions specifically refer to the State of California, a department or division of the State or an official, officer or employee of the State, said definition shall be interpreted to refer to the County of San Mateo, the Department of Public Works, or other appropriate department, division, official, officer or employee of the County of San Mateo.

Definition 7-1.02L, "Public Contract Code," of the Standard Specifications shall not be interpreted to include the provisions of Article 7.1 of Division 2, Part 2, Chapter 1 of the Public Contract Code.

The following definitions apply to these Special Provisions:

Beach. This is the area at the base of bluff adjacent to the Pacific Ocean.

Engineer. County representative or their authorized representative.

Landscape Architect. County representative or their authorized representative.

Mid Bluff. This is the area at the base of the driveway.

Owner. County representative or their authorized representative.

Plans. The plans prepared by CSW|ST2 dated April 21, 2023.

Subgrade. The final elevation of the earth's surface as required by the Plans and Special Provisions prior to application of a surfacing material such as asphalt, aggregate base, decomposed granite, or mulch.

Top of Bluff. This is the area adjacent to State Route 1.

END OF SECTION

SECTION 2. BIDDING

The Bidder's attention is directed to all the provisions of Section 2, "Bidding," of the Standard Specifications and these Special Provisions. The County will accept a Bidder's Bond in the form issued by an admitted surety insurer in lieu of the sample forms provided herein in Appendix C of these Special Provisions. The County will not be responsible for any oral interpretations to Bidders with respect to any of the work embraced herein.

Failure of the bidder to fulfill the requirements of the Special Provisions for submittals required to be furnished after bid opening, including but not limited to escrowed bid documents, where applicable, may subject the bidder to a determination of the bidder's responsibility in the event it is the apparent low bidder on a future public works contract.

All proposals must be made upon the blank form contained herein.

2-1. Plans and Specifications

Subject to the exceptions stated herein, the work embraced herein shall be done in accordance with the Standard Plans and Specifications as adopted by the County of San Mateo insofar as the same may apply, and in accordance with the following Special Provisions.

As set forth in **Resolution No. 077227** of the Board of Supervisors of the County of San Mateo, adopted **February 11, 2020**, which approved and adopted the **2018** Standard Plans and Standard Specifications of the State of California, Department of Transportation as the Standard Plans and Standard Specifications of the County of San Mateo, State of California.

In the event that a discrepancy arises between the project Plans, these Special Provisions, the Standard Plans and the Standard Specifications, the provisions of Section 5-1.02, "Contract Components," of the Standard Specifications shall apply.

END OF SECTION

SECTION 3. CONTRACT AWARD AND EXECUTION

The bidder's attention is directed to the provisions in Section 3, "Contract Award and Execution," of the Standard Specifications and these Special Provisions for the requirements and conditions concerning award and execution of contracts.

However, the following supersedes the second paragraph in Section 3-1.04, "Contract Award," of the Standard Specifications:

"The award of contract, if awarded, will be made to the lowest responsible bidder within **SIXTY (60) DAYS** after the opening of the proposals. If the lowest responsible bidder refuses or fails to execute the contract, the County may award the contract to the second lowest responsible bidder. If the second lowest responsible bidder refuses or fails to execute the contract, the County may award the contract to the third responsible bidder. The period of time after that specified above within which the award of the contract may be made shall be subject to extension for such further period as may be agreed upon, in writing, between the County and the bidder concerned."

Bidders who wish to lodge a protest for consideration as to the bidding process or the award of a contract to the lowest responsible bidder must do so as follows:

- (1) Protests based upon alleged improprieties in a solicitation, which are apparent prior to bid opening, shall be filed **two (2) business days** prior to bid opening.
- (2) Protests other than those covered by paragraph 1, above, shall be filed no later than **ten (10) calendar days** after the bid opening.
- (3) All protests shall be delivered to:

Director of Public Works
County of San Mateo
555 County Center, 5th Floor
Redwood City, CA 94063

Untimely protests, which do not meet the deadline requirements specified above, will not be accepted or considered.

Bid protests must be submitted in writing to the addressee and address listed above. Bid protests must at a minimum include the following:

- Project Name

- Project File Number
- A complete statement describing the basis for the bid protest, which includes a detailed statement of all legal and factual grounds for the protest
- Documentation supporting the protestor's grounds for the protest
- The type of relief requested and the legal basis for such relief

If a valid protest is filed timely, the Department will investigate the bid protest. The protested bidder shall have **three (3) business days** to respond to the Department and to provide any information requested by the Department. The Department shall respond to the protesting party, stating its findings. The Department Director shall make a recommendation to the San Mateo County Board of Supervisors regarding the bid protest.

Bid protests are to be delivered to the following address: 555 County Center, 5th Floor Redwood City, CA 94063.

The award of the contract, if it is awarded, will be to the lowest responsible bidder whose proposal complies with all the requirements prescribed.

The contract shall be executed by the successful bidder and shall be returned, together with the contract bonds, to the County so that it is received within ten (10) days, not including Saturdays, Sundays and legal holidays, after the bidder has received the contract for execution. Failure to do so shall be just cause for forfeiture of the proposal guaranty. The executed contract documents shall be delivered to the following address: 555 County Center, 5th Floor Redwood City, CA 94063.

END OF SECTION

SECTION 4. DESCRIPTION OF WORK

The work to be done consists, in general, of amenities to support the opening of Tunitas Creek Beach Park to the public. Various tasks include, but are not limited to: clearing and grubbing; mass and fine grading; construction of a parking lot, trail, and amphitheater; storm drain installation; lighting; construction of retaining wall, decks, and seating; installation of a restroom and ranger shed; and placement of erosion control measures as well as any other items and details not mentioned above, but required by the Project Plans, Standard Specifications and these Special Provisions, and the directions of the Engineer.

END OF SECTION

SECTION 5. CONTROL OF WORK

Attention is directed to the provisions of Section 5, "Control of Work," of the Standard Specifications, except as herein provided, and to Section 2-1, "Plans and Specifications," of these Special Provisions.

5-1. Differing Site Conditions

This section shall be used in lieu of Section 4-1.06, "Differing Site Conditions (23 CFR 635.109)," of the Standard Specifications. Section 4-1.06 of the Standard Specifications shall not apply.

The following shall apply to digging trenches or other excavations that extend deeper than four feet (4') below the surface:

- A. The Contractor shall promptly, and before the following conditions are disturbed, notify the Engineer, in writing, of any:
- (1) Material that the Contractor believes may be material that is hazardous waste, as defined in Section 25117 of the Health and Safety Code, that is required to be removed to a Class I, II, or III disposal site in accordance with provisions of existing law.
 - (2) Subsurface or latent physical conditions at the site differing from those indicated.
 - (3) Unknown physical conditions at the site of any unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the contract.
- B. The Engineer shall promptly investigate the conditions, and if the Engineer finds that the conditions do materially differ, or do involve hazardous waste, and cause a decrease or increase in the Contractor's cost of, or the time required for, performance of any part of the work, shall issue a change order, excluding loss of anticipated profits, under the procedures described in the contract. No contract adjustment that results in a benefit to the Contractor will be allowed unless the Contractor has

provided the required written notice.

- C. In the event that a dispute arises between the Engineer and the Contractor whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the contractor's cost of, or time required for, performance of any part of the work, the Contractor shall not be excused for any scheduled completion date provided for by the contract, but shall proceed with all work to be performance under the contract. The Contractor shall retain any and all rights provided either by contract or by law that pertain to the resolution of disputes and protests between the contracting parties.
- D. In the event conditions materially differ from those indicated, te Contractor shall have no claim for construction delays, unless said conditions are determined by the Engineer to impact the controlling item of work.

5-2. Repair of Equipment

The work of installing, assembling, repairing or reconditioning, or other work of any nature on machinery, equipment or tools used in or upon the work shall be considered a part of the work to be performed under the contract and any laborers, workers or mechanics working on the machinery, equipment or tools, unless employed by bona fide commercial repair shops, garages, blacksmith shops or machine shops, which have been established and operating on a commercial basis for a period of at least 2 months prior to the award of the contract, shall be subject to all the requirements relating to labor set forth in these specifications and in the special provisions.

5-3. Cooperation

Attention is directed to Sections 5-1.20, "Coordination with Other Entities," and 5-1.36, "Property and Facility Preservation," of the Standard Specifications,

and to these Special Provisions. The utility companies may be rearranging their facilities within the project area and it is expected that they will cooperate with the Contractor to the end that the work may be handled in an efficient manner.

The Contractor shall contact USA North811 (USA) service alert a minimum of forty-eight (48) hours in advance of any excavation or trenching work. USA may be contacted either on-line at usanorth811.org or by phone by dialing (800) 642-2444 or 811.

5-4. Permits and Licenses

Attention is directed to Section 5-1.20B, "Permits, Licenses, Agreements, and Certifications," of the Standard Specifications and these Special Provisions.

The Contractor shall have at least two employees trained in confined space entry regulations CAL/OSHA Confined Space Regulations, Title 8 CCR GISO 5156, 5157, and 5158 at the site whenever there are open trenches or underground work going on. It is understood that all fall protection, retrieval and atmospheric monitoring equipment shall be furnished and maintained by the Contractor at the Contractor's expense. This shall include but not be limited to cost associated with compliance with Confined Space Entry Regulations shall be at the expense of the Contractor.

5-5. Project Appearance

The Contractor shall maintain a neat appearance to the work. Full compensation for conforming to the provisions in this section, not otherwise provided for, shall be considered as included in the unit prices paid for the various Contract items of work involved, and no additional compensation will be allowed therefore.

5-6. Preservation of Property

The Contractor's attention is directed to Section 5-1.36, "Property and Facility Preservation," of the Standard Specifications.

5-7. Air Pollution Control

Air pollution control shall conform to the provisions of Section 14-9.02, "Air Pollution Control," of the Standard Specifications.

5-8. Obstructions

Attention is directed to the provisions in Section 5-1.36C, "Nonhighway Facilities," 15, "Existing Facilities," and 51-1.03E(9), "Utility Facilities," of the Standard Specifications.

5-9. Sound Control

Sound control shall conform to the provisions in Section 14-8.02, "Noise Control," of the Standard Specifications.

5-10. Public Convenience

Public Convenience shall conform to the provisions in Section 7-1.03, "Public Convenience," of the Standard Specifications and to these Special Provisions.

5-11. Disposal of Material Outside the Highway Right of Way

Disposal of Material Outside the Highway Right Of Way shall conform to the provisions of Sections 5-1.20B(4), "Contractor-Property Owner Agreement," and 14-10, "Solid Waste Disposal and Recycling," of the Standard Specifications, and Section 14, "Construction Waste Management," of these Special Provisions. The Contractor's attention is further directed to Appendix "A", "Construction Waste Management Plan," of these Special Provisions.

5-12. Sanitary Sewer Monitoring and Reporting Requirements

The Contractor's attention is directed to Appendix B for sanitary sewer

monitoring and reporting requirements.

5-13. Subcontracting

Attention is directed to the provisions in Section 5-1.13, "Subcontracting," of the Standard Specifications.

END OF SECTION

SECTION 6. CONTROL OF MATERIALS

Attention is directed to Section 6, "Control of Materials," of the Standard Specifications and these Special Provisions.

The Contractor shall furnish all materials required to complete the work under this Contract.

6-1. Certificates of Compliance

Certificates of Compliance, conforming to the provisions in Section 6-2.03C, "Certificates of Compliance," of the Standard Specifications shall be furnished for all manufactured products, unless otherwise waived by the Engineer.

6-2. Materials Testing

Whenever the specifications require compliance with specified values for the following applicable properties, tests will be made as indicated:

Material To Be Tested	Property Being Tested	Acceptable Test Method(s)	Description
Aggregate Base	Relative Compaction	CT 216/CT 231	Determines field densities using a nuclear gage.
Asphalt Concrete	Relative Compaction	CT 375 or ASTM D2950	Determines field densities using a nuclear gage.
Concrete	Compressive Strength	ASTM C39	Concrete cylinders
Soil	Relative Compaction	CT 110/ CT 231	Determines field densities using a nuclear gage.

Any costs to the County for testing layers which fail the compaction requirements may be deducted from any progress payment due to the Contractor

when, in the opinion of the Engineer, such failure results from the Contractor's lack of diligence in pursuing compaction effort. If a test fails, any testing after the first shall be at the Contractor's expense.

END OF SECTION

SECTION 7. LEGAL RELATIONS AND RESPONSIBILITY

Attention is directed to the provisions of Section 7, "Legal Relations and Responsibility to the Public," of the Standard Specifications, these Special Provisions, and to the provisions of paragraph VIII, "Insurance," of the Agreement (AG) portion of the Contract Documents for insurance requirements and the provisions related to Novel Coronavirus Disease 2019 (COVID-19) in the Proposal (PR) and Sections XVI, "COVID-19" and XXII, "Electronic Signature," of the Agreement (AG) portions of the Contract Documents.

7-1. Equal Employment Opportunity Program for Minority Employment

It is the intent of the Board of Supervisors of the County of San Mateo to prohibit and eliminate employment discrimination and to further the opportunities for minority persons to be gainfully employed in the performance of County construction contracts. Award of a contract to a low bidder will not be made until such bidder has complied with the provisions of Section 2.50.040 of Title 2, Chapter 2.50, as amended, of the San Mateo County Ordinance Code and with these guidelines.

7-1.1. Definitions

EQUAL EMPLOYMENT OPPORTUNITY PROGRAM: An Equal Employment Opportunity Program (EEO) is a set of specific and result oriented procedures to which a Contractor commits himself in order to achieve equal employment opportunity.

COMPLIANCE OFFICER: The Compliance Officer (CO) means the County official designated by the County Executive to represent him in the administration of these guidelines and in the enforcement of the provisions of Sections 2.50.040 and 2.50.050 of Title 2, Chapter 2.50.

7-1.2. Certifications of Compliance and Intent

Every bidder will submit with his bid, as required by Section 2.50.050 of Title 2, Chapter 2.50, a Certification of Compliance with the laws prohibiting

discrimination and a Certification of Intent to implement an equal employment opportunity program on the form furnished in the Proposal section of these Specifications.

7-1.3. Equal Employment Opportunity Program

In addition to furnishing the Certifications of Compliance and Intent, each bidder will submit his equal employment opportunity program with his bid proposal. The EEOP shall contain the following information:

- A. Analysis of current work force
 - (1) Total number of employees;
 - (2) Numerical racial breakdown of employees by job classification;
 - (3) Information on apprentices.

These figures will provide the base by which the low bidder's EEOP will be evaluated. Factors to be considered both in the original statistics and in any plans for future employment will include the percentage of minority population in San Mateo County, the availability of minority construction workers and the present minority representation in the various construction trades.

- B. The affirmative actions the bidder has taken and will take to ensure equal employment opportunity. These shall include:
 - (1) Recruiting and hiring minority persons. If non-union personnel are employed, this would involve employment advertising through sources serving the minority population. These include local minority newspapers, referral agencies, high schools, vocational schools and community groups. Specific information on these sources may be obtained from the Compliance Officer. Union employees will be recruited in accordance with applicable labor agreements. The bidder will seek to have included or will reaffirm clauses in all labor agreements prohibiting discrimination based on race, religion, color, national origin, age, disability, ancestry, sexual orientation, or sex. It is also suggested that bidders assist in admitting minority workers who are over the traditional

apprenticeship entry age to the various craft training programs.

- (2) Providing adequate opportunity for the upgrading or further training of all employees to insure equal opportunity in advancement and promotion. This might include a counseling service, information and assistance with night classes, or special career-directed program information.
- (3) Appointing an Equal Employment Opportunity Coordinator, full time or as an additional duty. This person will have the responsibility of administering an active program, informing company personnel and union representatives of company policy, and advising all subcontractors of their obligation to this program.
- (4) Establishing or maintaining an apprenticeship/training program designed to ensure hiring of additional minority employees in the journeyman and skilled classes. Each bidder is urged to support or develop and implement an Apprenticeship Program for his trade.
- (5) Selecting minority subcontractors or subcontractors who are known for their ongoing programs of apprenticeship for minorities. This includes advising minority Contractor associations of opportunities for subcontracts. Joint ventures with minority sub-contractors are encouraged.

C. The EEOP should state any previous experience the bidder has had with similar plans and the results of that effort. Current affirmative action plans should be described in detail.

7-1.4. Equal Employment Opportunity Program Evaluation

A. The Compliance Officer (**CO**) will review the EEOP submitted by the low bidder in order to determine whether the program submitted complies with the provisions of Section 2.50.040 of Title 2, Chapter 2.50, as amended, of the San Mateo County Ordinance Code, and these guidelines. If deficiencies are indicated, CO may request additional information from the bidder or suggest appropriate remedies. The CO will be available to answer questions relative to the guidelines and to advise

those seeking assistance of other sources. CO will not be responsible for the service or lack of service rendered by the consultant recommended, nor will the CO develop an EEOP or serve as a recruiter for any bidder.

The lower bidder may withdraw his EEOP for revision after consultation with the CO; however, the revised program must be resubmitted by a date not later than fifteen (15) calendar days after the opening of bids.

- B. All subcontractors listed in the low bidder's proposal shall be required to file completed Certificates of Compliance and Intent and their EEOP with the Bidder for submission to the County. The EEOP of each subcontractor will be evaluated by criteria established for the low bidder's EEOP.
- C. The CO, upon conclusion of the EEOP review, will report his findings and recommendation to the Director of Public Works. The CO will keep acceptable EEOP's on file for six (6) months. During this time period, if the bidder or subcontractors bid for other County contracts, they may refer to the EEOP on file and state any changes, but will not be required, unless specifically requested, to re-file their program.

7-1.5. Inclusion of EEOP and Certificates

Upon award of the Contract by the Board of Supervisors, the EEOP and certifications for the bidder and all subcontractors, which have been approved and accepted by the County, will become an integral part of the Contract and subject to the provisions thereof.

7-1.6. Compliance of Contractor

- A. The Contractor will post, in conspicuous places available to employees and applicants for employment, notices, provided by the County, stating that the Contractor is obliged to comply with the provisions of these guidelines and the provisions of Section 2.050.040 of Title 2, Chapter 2.50, as amended, of the San Mateo County Ordinance Code. These notices will also be sent to all unions, employee organizations and other recruiting sources providing employees to the Contractor.

- B. All announcements of job openings will include the statement, "An Equal Opportunity Employer."
- C. The Contractor will make written progress reports on a form provided by the County to illustrate the effectiveness of his EEOP at intervals established by the County.
- D. The **CO** will monitor the Contractor's EEOP until completion of the Contract and will report non-compliance of the Contractor in adhering to his EEOP to the Director of Public Works.
- E. The Contractor will permit, during Contractor's normal business hours and at Contractor's place of business, access by the County to his records of employment, employment advertisements, application forms and other data and records pertaining to Contractor's employment practices, for the purpose of determining whether Contractor is complying with the non-discrimination and equal employment opportunity rules of the County.

7-1.7. Compliance of Subcontractor

All subcontractors listed by the bidder are subject to all the provisions of these guidelines and the provisions of Section 2.050.040 of Title 2, Chapter 2.50, as amended, of the San Mateo County Ordinance Code.

7-1.8. Penalties for Non-Compliance

The penalties for non-compliance are listed in Title 2, Chapter 2.50, Section 2.50.050, which states:

- a. "Every public works contract shall provide that a contractor who, within the time specified in the contract, does not submit an equal employment plan and make the certifications required in this chapter shall be in breach of the contract."
- b. "If, after an award is made, the contractor is found by the County or by a Federal or State agency empowered to make such findings to be in substantial or material violation of the Fair Employment Practices Act of the State of California, the Equal Employment Opportunity Requirement of Executive Order 11246, title VII of the Civil Rights Act of 1964, or of the provisions of this chapter or of the Board-established guidelines implementing them, he may be found to be in material breach of contract, and the County shall have the power to cancel the contract in whole or in part, or alternatively, to deduct for each working

day during which the contractor is found to have been in such non-compliance, two percent (2%) of the total amount payable to the contractor.”

7-1.9. Waiver of Compliance

In the event that any of the requirements of Sections 2.050.040 and 2.050.050 of Title 2, Chapter 2.50, as amended, of the San Mateo County Ordinance Code, are found to result in an undue hardship upon a low bidder, bidder may submit evidence of hardship and a petition for waiver of such requirements to the Director of Public Works for recommendation to the Board of Supervisors. Such a waiver may only be granted by the Board and, if approved, shall become an integral part of the contract.

7-1.10 Employee Benefits

All Contractors with contracts with the County of \$5,000 or more shall comply with the provisions of Title 2, Chapter 2.84, as amended, of the San Mateo County Ordinance Code with respect to the provisions on employee benefits. As set forth in the ordinance, such contractors are prohibited from discriminating in the provisions of employee benefits between an employee with a domestic partner and an employee with a spouse. A copy of the Ordinance and Compliance form is attached to the Proposal Section of these Specifications.

In the event it is determined, by the County, that any portion of the County Ordinance Code regarding employee benefits conflict with Federal or State regulations, the Federal or State regulations shall take precedence over the County Ordinance Code.

7-1.11 Non-Discrimination

No person shall be excluded from participation in, denied benefits of, or be subject to discrimination under this Agreement on the basis of their race, color, religion, national origin, age, sex, sexual orientation, pregnancy, childbirth or related conditions, medical condition, mental or physical disability or veteran's status. Contractor shall ensure full compliance with Federal, State and local laws, directives and executive orders regarding non-discrimination for all employees and Subcontractors under this Agreement.

Violation of the non-discrimination provisions of this Agreement shall be considered a breach of this Agreement and subject the Contractor to penalties, to

be determined by the County Executive, including but not limited to:

- i) termination of this Agreement;
- ii) disqualification of the Contractor from bidding on or being awarded a County contract for a period of up to 3 years;
- iii) liquidated damages of \$2,500 per violation;
- iv) imposition of other appropriate contractual and civil remedies and sanctions, as determined by the County Executive.

To effectuate the provisions of this paragraph, the County Executive shall have the authority to:

- i) examine Contractor's employment records with respect to compliance with this paragraph;
- ii) set off all or any portion of the amount described in this paragraph against amounts due to Contractor under the Contract or any other Contract between Contractor and County.

Contractor shall report to the County Executive the filing by any person in any court of any complaint of discrimination or the filing by any person of any and all charges with the Equal Employment Opportunity Commission, the Fair Employment and Housing Commission or any other entity charged with the investigation of allegations within thirty (30) days of such filing, provided that within such thirty (30) days such entity has not notified Contractor that such charges are dismissed or otherwise unfounded. Such notification shall include the name of the complainant, a copy of such complaint and a description of the circumstance. Contractor shall provide County with a copy of its response to the Complaint when filed.

In the event it is determined, by the County, that any portion of these requirements regarding non-discrimination conflict with Federal or State regulations, the Federal or State regulations shall take precedence over County requirements.

7-2. Prevailing Wages

Attention is directed to Section 7-1.02K(2), "Wages," of the Standard Specifications.

In accordance with the provisions of Section 1770 of the California Labor Code, the Board of Supervisors of the County of San Mateo has ascertained the prevailing rate of wages applicable to the work to be done, which prevailing wage rates have been established as indicated in the Notice to Bidders and are incorporated herein by reference.

The Contractor's attention is further directed to the following requirements of State Senate Bill SB 854 (Stat. 2014, chapter 28), effective January 1, 2015:

- (1) No contractor or subcontractor may be listed on a bid proposal for a public works project (submitted on or after March 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)].**
- (2) No contractor or subcontractor may be awarded a contract for public work on a public works project (awarded on or after April 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5.**
- (3) This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.**

7-2a. Payroll Records

Reference is made to Section 7-1.02K(3), "Certified Payroll Records (Labor Code § 1776)," of the Standard Specifications. In particular, the Contractor's attention is directed 'to the last paragraph, which is amended to read:

"If by the 7th working day after the 25th of the month, the Contractor has not submitted satisfactory payrolls for all work performed during the monthly period ending on or before the 25th of that month, the Department may withhold an amount equal to ten percent (10%) of the estimated value of the work performed (exclusive of Mobilization) from that month's estimate, except that this withholding shall not exceed \$10,000 nor be less than \$1,000.

Withholdings for failure to submit satisfactory payrolls shall be additional to all other withholdings or retentions provided for in the contract. The withholding for failure to submit payrolls for any monthly period will be released for payment on the monthly estimate for partial payments following the date that all the satisfactory payrolls for which the withholding was made are submitted.”

The Contractor shall be required to submit Certified Payroll Records using an online reporting system such as LCPTracker.

The Contractor is advised that Contractor shall submit either Contractor’s Daily Dispatch Report at the start of each working day OR a Daily Personnel and Equipment Log (included as Appendix D of these Special Provisions) to the Engineer by the start of the first working day subsequent to the performance of the work, or Contractor may incur task-specific liquidated damages in the amount of \$500 per calendar day for every day hence until submittal is made.

The Contractor is further advised that, pursuant to State Senate Bill SB 854 (Stat. 2014, chapter 28), effective January 1, 2015, all contractors and subcontractors working on a contract for public work on a public works project (awarded on or after April 1, 2015) must furnish electronic certified payroll records to the Labor Commissioner.

7-2b. Contractor Employee Jury Service

All Contractors with contracts with the County of \$100,000 or more shall comply with the provisions of Title 2, Chapter 2.85, as amended, of the San Mateo County Ordinance Code, with respect to provision of jury duty pay to employees and have and adhere to a written policy that provides that its employees shall receive from the Contractor, on an annual basis, no less than five (5) days of regular pay for actual jury service in San Mateo County. The policy may provide that employees deposit any fees received for such jury service with the Contractor or that the Contractor deduct from the employees’ regular pay the fees received for jury service. A copy of the Ordinance and a

Compliance Form is attached to the Proposal Section of these Specifications.

Award of a Contract to a low bidder will not be made until such bidder has certified compliance with the provisions of Title 2, Chapter 2.85, as amended, of the San Mateo County Ordinance Code.

7-3. Highway Construction Equipment

Attention is directed to Section 7-1.02O, "Vehicle Code," of the Standard Specifications and these Special Provisions.

Pursuant to the authority contained in Section 591 of the Vehicle Code, the County has determined that, within such areas as are within the limits of the project and are open to public traffic, the Contractor shall comply with all the requirements set forth in Divisions 11, 12, 13, 14 and 15 of the Vehicle Code. Attention is directed to the statement in Section 591 that this section shall not relieve him or any person from the duty of exercising due care. The Contractor shall take all necessary precautions for safe operation of his equipment and the protection of the public from injury and damage from such equipment.

7-4. Public Safety

Public Safety shall conform to the provisions in Section 7-1.04, "Public Safety," of the Standard Specifications and to these Special Provisions.

Full compensation for conforming to the requirements of this section shall be considered as included in the unit prices paid for the various Contract items of work, and no additional compensation will be allowed therefore.

7-5. Trench Safety

Trench Safety shall conform to the provisions in Section 7-1.02K(6)(b), "Excavation Safety," of the Standard Specifications and these Special Provisions.

Full compensation for conforming to the requirements of this section shall be considered as included in the unit prices paid for the various Contract items of work, and no additional compensation will be allowed therefore.

END OF SECTION

SECTION 8. PROGRESS OF WORK AND TIME OF COMPLETION

Attention is directed to the provisions of Section 8, "Prosecution and Progress," of the Standard Specifications, except as herein provided.

8-1. Time of Completion

The Contractor shall begin work within **TEN (10) CALENDAR DAYS** after receiving Notice to Proceed from the Department of Public Works, and shall diligently prosecute the same to completion before the expiration of

ONE HUNDRED AND EIGHTY (180) WORKING DAYS

from the date of said beginning, as described above.

The Engineer will provide the Contractor with a Notice to Proceed which will allow the Contractor to complete the preconstruction tasks as described in Section 10 such as preparing submittals, attending trainings, complying with special status species requirements and coordination with Caltrans. However, the Engineer will not charge working days to the project until after the mutually agreed date that the Contractor can mobilize at the site. See Sections 8-4 and 8-5 of these Special Provisions for incentives and penalties related to completion of grading work.

The Contractor is advised that punch list items are required to be completed before the expiration of the working days stated above.

The Contractor may request, in writing, for an extension of working days, which request shall state the reason for said request and the number of additional working days. The Engineer will consider said request and respond, in writing, stating either the number of additional working days approved or the reason for denying the request.

8-2. Liquidated Damages

Attention is directed to Sections 8-1.04, "Start of Job Site Activities," 8-1.05, "Time," and 8-1.10, "Liquidated Damages," of the Standard Specifications. The Contractor shall pay to the County of San Mateo the sum of Four Thousand Eight Hundred Dollars (\$4,800.00) per calendar day for every calendar day delay over and above the number of working days prescribed above for finishing the work, unless additional days are approved by the Engineer.

The Contractor is advised that task-based liquidated damages may be enforced in conformance with the following bid item-specific Special Provisions:

- (1) **Section 7-2a, "Payroll Records" @ \$500/calendar day**
- (2) **Delay in installing the Joint Trench as described in Section 86 of these Special Provisions that results in additional PG&E, AT&T, and/ or Comcast inspection fees. These fees will be charged to the Contractor at the actual cost.**
- (3) **Delays in winterization as defined in Section 8-5 will be charged at \$2,000 per calendar day.**

8-3. Progress Schedule

The Contractor is advised that an initial/baseline project schedule and subsequent schedule updates is required for the work included under this Contract, and such schedules shall be in accordance with these Special Provisions.

The provisions of Section 8-1.02, "Schedule," of the Standard Specifications are superseded by the following:

"The Contractor shall submit a baseline project schedule, to the Engineer within **five (5) working days** after receipt of the Notice to Proceed from the Department of Public Works. This baseline schedule and any subsequent schedule updates shall show:

- (1) Completion of all work within the specified contract time;
- (2) The proposed order of work; and
- (3) Projected starting and completion times for major phases of

the work, for the total project, including dates for ordering materials and for substantial completion of the project. Reference is made to Section 8-1, "Time of Completion," of these Special Provisions."

The Contractor is advised that:

- (1) Contractor shall notify the Engineer a minimum of twenty-four (24) hours, prior to cancellation of any scheduled work. Should the Contractor fail to provide such notice, the cost for any travel time and mileage incurred by the Engineer will be deducted from the total amount due to the Contractor.**

The schedule shall be developed by a critical path method. The baseline progress schedule shall have as many activities as necessary, and as approved by the Engineer, to be sufficient to assure adequate planning of the project, and to permit monitoring and evaluation of progress and the analysis of time impacts. The Contractor shall provide sufficient material, equipment, and labor to meet the completion times in this schedule.

The baseline project schedule submitted shall meet in all respects the time and order of work requirement of the contract. If the Contractor fails to define any element of work, activity or logic, and the error is discovered by either party, it shall be corrected by the Contractor at the next scheduled monthly update or revision.

The Engineer shall have **five (5) working days** to review and accept, reject or return a submitted schedule for revision. The Contractor shall not commence project work until after receipt of written approval of the preliminary project schedule from the Engineer.

The Contractor shall submit a revised progress schedule within **five (5) working days** when requested by the Engineer, or when there is significant change in the Contractor's operations that will affect the work schedule.

During the period of the Contract, on or before the first calendar day of each month, the Contractor shall submit to the Engineer a complete, updated progress schedule. Said updated schedules shall provide a complete analysis of

work previously completed and work yet to be performed, including a status update of each salient component that is delayed or not on schedule, the impact such delays will have on each of the remaining salient features of the work (with revised completion dates), and a revised completion date for all of the project work. Updated schedules shall incorporate all current schedule information, actual progress, approved adjustments of time and proposed changes in sequence and logic.

The Engineer may require the Contractor to also submit, on a weekly basis, a schedule of work for the following workweek. The Engineer will determine the dates for submittal of weekly schedules.

If the Contractor or the Engineer considers that an approved or anticipated change will impact the contract progress, a schedule analysis and revised schedule supporting the proposed adjustment of time shall be submitted to the Engineer for review and approval.

If the Engineer deems that the baseline progress schedule, any necessary progress schedules and/or required supplemental schedules do not provide the information required in the section and/or is unacceptable in size, appearance, neatness and legibility, progress payments will be withheld by the Engineer until a schedule containing the required information and/or with improved appearance has been submitted by the Contractor and approved in writing by the Engineer.

The Engineer's written approval of any schedule shall not transfer any of the Contractor's responsibilities to the Engineer. The Contractor alone shall remain responsible for adjusting forces, equipment, and work schedules to ensure completion of the work within the time(s) specified in the contract.

Full compensation for conforming to all provisions of this Section, "Progress Schedule," is included in the unit prices paid for the various Contract items of the work, and no additional compensation will be allowed therefor.

8-4 Early Grading Incentive

The Engineer anticipates that the Contractor shall mobilize on the site by August

1, 2023. If the Contractor completes the mass grading of the site as described in Section 19 of these Special Provisions; installs the drainage system outfalls and piping on slopes; and completes the permanent erosion control on disturbed slopes by October 15, 2023 (55 working days) the Engineer shall provide an incentive payment to the Contractor equal to \$70,000. This will be paid in the November progress payment.

If the Contractor completes final surfacing of the parking area and the pathway to the mid bluff by December 15, 2023, the Engineer shall provide an additional incentive payment to the Contractor equal to \$30,000.

8-5 Winterization Deadline

If the Contractor does not complete the grading work as described in Section 8-4 of these Special Provisions by November 15, 2023, the Contractor shall complete winterization of the site, within 10 days or sooner if required by weather, as described in Section 13-10 of these Special Provisions.

END OF SECTION

SECTION 9. MEASUREMENT AND PAYMENT

9-1. Force Account Work

Attention is directed to the provisions of Section 9-1.04, "Force Account," of the Standard Specifications and these Special Provisions.

The first sentence of bullet item 2 under Section 9-1.04B, "Labor," of the Standard Specifications is amended to read:

"Labor surcharge percentage in *Labor Surcharge and Equipment Rental Rates* and *General Prevailing Wage Rates* current during the work paid at force account for:"

With respect to extra work, the Bidder's attention is directed to the provisions of Section 4-1.05, "Changes and Extra Work," of the Standard Specifications. No extra work or change shall be made, unless pursuant to a written contract change order from the Engineer. No claim for an addition to the Contract sum shall be valid unless so ordered.

9-2. Payments to Contractor

Payments shall be made according to the provisions of Section 9, "Payment," of the Standard Specifications and these Special Provisions. Attention is directed to Section 9-1.16, "Progress Payments," regarding progress or partial payments, and to Section 9-1.17, "Payment After Contract Acceptance," regarding final estimates and payments.

Section 9-1.16E(2), "Progress Withholds," of the Standard Specifications is superseded by the following:

The County of San Mateo shall retain five percent (5%) of such estimated value of the work done, and five percent (5%) of the value of materials so estimated to have been furnished and delivered and unused or furnished and stored as aforesaid as part security for the fulfillment of the Contract by the Contractor. In no event shall the County of San Mateo withhold less than five percent (5%) of the total Contract price until final completion and acceptance of the project.

The Contractor may, upon request and at the Contractor's own expense, substitute security for any money withheld to ensure performance of the Contract in accordance with Government Code Section 4590.

The filing of a Notice of Completion for the work herein provided shall not

constitute an acceptance by the County of latent defects in said work.

9-3. Payments Withheld from Contractor

The County may withhold sufficient monies from any sum otherwise due the Contractor, pursuant to this Agreement, to protect the County against loss on account of:

- A. Repair or replacement of street pavement or base, and/or culverts or other structures, on or near the work, damaged by reason of the Contractor's operations due to hauling materials or moving heavy equipment.
- B. Defective work not corrected.
- C. Claims filed or reasonable evidence indicating probable filing of claims.
- D. Failure of the Contractor to make payments properly to the subcontractors for material or labor.
- E. Reasonable doubt that the Contract can be completed for the balance then unpaid.
- F. Damage to another Contractor.
- G. Failure of the Contractor to provide water pollution control.
- H. Failure of the Contractor to submit satisfactory as-built drawings.

Payment of the amounts withheld shall be made upon the determination by the County that the withholding of such amounts is no longer necessary.

9-4. Stop Notices

Section 9-1.16E(4), "Stop Notice Withholds," of the Standard Specifications is superseded by the following:

"The County of San Mateo, by and through the Department of Public Works or other appropriate County office or officers, may at its option and at any time retain any amounts due the Contractor, sums sufficient to cover claims filed pursuant to Section 9000 et seq. of the Civil Code."

9-5. Construction Claims

Each Bidder is hereby notified of Section 9204 and Section 20104 et seq. of the Public Contract Code as those Sections (attached hereto as Appendix E) relate to the resolution of construction claims and to Section 3186 of the Civil Code, as amended January 1, 1999 with regard to stop notices and public entity's rights to retain monies in order to provide for that entity's reasonable cost

of litigation. The Bidder is further notified that all provisions of Sections 9204 and 21014 et seq. of the Public Contract Code and Section 3186 of the Civil Code, as outlined above, shall be considered as incorporated into and become an integral part of these Specifications.

END OF SECTION

SECTION 10. GENERAL

10-1. Permits and Environmental Conditions

This project is subject to the California Environmental Quality Act (CEQA) which includes several mitigations. The Mitigation Monitoring and Reporting Program's conditions are included in Appendix F.

The project received a building permit from the County of San Mateo as well as an encroachment permit from the California Department of Transportation (Caltrans). Copies of these permits, when available, will be included in Appendix G. The Contractor shall assume standard permit conditions typically associated with these agencies.

A summary of some, but not all of the conditions the Contractor shall comply with include the following:

1. Manage dust at the site consistent with Best Management Practices.
2. The County will complete special status species (plants and animals) surveys prior to the Contractor commencing work. The Contractor shall not commence work until authorized by the Engineer.
3. All contractor personnel shall participate in a Special Status Species and Best Management Practice implementation training prior to commencing work.
4. Contractor to prepare a Health and Safety Plan (HSP) for earthwork at the site.
5. The County shall retain an archaeologist to be present to observe excavation activities. Should the Contractor or archaeologist discover human remains, prehistoric, or historical archeologic materials, all excavation work shall stop.

Payment.

Full compensation for conforming to the requirements of this section, "Permits and Environmental Conditions", with the exception of the HSP, which is paid per section 10-4, shall be considered as included in the unit prices paid for the various Contract items of

work, and no additional compensation will be allowed therefor.

10-2. Work Sequence

The Contractor shall complete the work in a logical manner that minimize disruption to the public and the environment. The Engineer offers the following work sequence as well as site specific conditions that may assist the Contractor in developing a plan.

1. For the work within the State of California Department of Transportation's (Caltrans) right of way, secure a Double Permit.
2. Prepare the Health and Safety Plan.
3. Submit drawings and calculations to support building permits for the bathroom and ranger shed.
4. Provide submittals, including but not limited to, the following for review and approval:
 - a. Project schedule
 - b. Traffic Control Plan
 - c. Water Pollution Control Program
 - d. Specific submittals for the elements contained within these Special Provisions
5. Attend Special Status Species and BMP Installation Training.
6. Complete site preparation work including:
 - a. Install perimeter security fencing.
 - b. Install tree protection fencing.
 - c. Implement the Pollution Prevention BMP's.
7. Complete clearing and grubbing in phases as necessary.
8. Commence site earthwork.
 - a. Complete grading of the parking lot, trail, and mid bluff areas.
 - b. Stockpile borrow for landslide repair.
 - c. Complete landslide repair including hydroseed.

- d. Finish grade the mid bluff, trail, and parking lot areas.
- 9. Complete modifications to Highway 1 including joint trench construction.
- 10. Install electrical, storm drainage, and related utility or underground infrastructure.
- 11. Complete mockups of finishes at least two weeks in advance of installing the final products.
- 12. Install parking area hardscape.
- 13. Install walls, handrails, and surfacing for trail.
- 14. Construct mid bluff features including restroom and ranger residence.
- 15. Complete final planting.
- 16. Removing erosion control features.

The Contractor can propose an alternate sequence for County review and approval. County makes no guarantee that an alternate sequence will be approved. This shall be submitted with the initial schedule of work.

Payment. Full compensation for conforming to the requirements of this section, "Work Sequence" shall be considered as included in the unit prices paid for the various Contract items of work, and no additional compensation will be allowed therefor.

10-3. Air Quality

The following Basic Construction Mitigation Measures by the Bay Area Air Quality Management District shall be implemented to minimize emissions associated with construction activities:

- 1) Any exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- 2) All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- 3) All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.

- 4) All vehicle speeds on unpaved roads shall be limited to 15 mph.
- 5) All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- 6) Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- 7) All construction equipment shall be maintained and properly tuned in accordance with the manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.
- 8) Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Payment. Full compensation for conforming to the requirements of this section, "Air Quality" shall be considered as included in the unit prices paid for the various Contract items of work, and no additional compensation will be allowed therefor.

10-4. Health and Safety Plan

In accordance with Section 5-11 of these Specifications, the Contractor shall be responsible for soil disposal at the site. The Contractor shall assume that all soil has levels of contamination that exceeds environmental screening levels listed by the California Regional Water Quality Control Board for residential land use or commercial/industrial land use, but the soil is non-regulated and non-hazardous. Thus, all material shall be disposed of in an appropriate landfill.

The Contractor shall retain a qualified vendor to prepare a site-specific Health and Safety Plan (HSP). The vendor shall complete analytical testing of soil conditions found at the site for: lead, hydrocarbons, metals, pesticides, polychlorinated biphenyls, and any other contaminate deemed necessary by the document's author.

The HSP shall establish soil management and control specifications for excavation, grading, soil disposal, and health and safety provisions for monitoring the exposure of construction workers to contaminants. The HSP shall be submitted to the Engineer for review and approval.

Payment. The contract lump sum price paid for "Prepare Health and Safety Plan" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in testing soils as well as preparing and implementing the plan, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

10-5. Environmental Training

The County will provide introductory training to the Contractor, his or her employees and subcontractors at the job site before work commences for any project with resource agency permits. The training will provide background information on sensitive species, permit requirements and site-specific water quality issues.

Payment. Full compensation for conforming to the requirements of this section, "Environmental Training" shall be considered as included in the unit prices paid for the various Contract items of work, and no additional compensation will be allowed therefor.

END OF SECTION

SECTION 11. MOBILIZATION

Mobilization shall conform to the provisions in Section 9-1.16D, "Mobilization," of the Standard Specifications and to these Special Provisions.

Payment. The contract lump sum price paid for "Mobilization/Demobilization" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in bringing equipment, materials, and tools to the site, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

END OF SECTION

SECTION 12. MAINTAINING TRAFFIC

Attention is directed to Section 12-1, "Temporary Traffic Control, General," of the Standard Specifications, Sections 5-10, "Public Convenience," and 7-4, "Public Safety," of these Special Provisions, the Standard Plans, the Project Plans and the directions of the Engineer. Section 12-1.04, "Payment," of the Standard Specifications shall not apply. In connection with said sections, it is understood that all lights, signs, barricades, flaggers or other necessary devices shall be furnished and maintained by the Contractor at the Contractor's expense.

12-1 Traffic Control Plan

The Contractor shall furnish an overall Traffic Control Plan for all phases of work. A draft of the traffic handling required along State Route 1 is as shown in the Plans. The Contractor shall submit the Traffic Control Plan within **FIVE (5) WORKING DAYS** after the pre-construction conference. The Engineer shall establish the time and place for said pre-construction conference. Delays upon the part of the Contractor in submitting a Plan, in the format as outlined in these Special Provisions and as directed by the Engineer, shall not constitute a valid reason for time extensions should the Contract time elapse before completion of said project. The Contractor is further advised that consideration for adequate review time, as determined by the Engineer, shall be included in the work schedule.

12-2 Traffic Control Implementation

No construction site work shall commence prior to the Engineer's written approval of the Traffic Control Plan.

All traffic control shall be consistent with the requirements of Caltrans. This shall include advance signage on State Route 1 advising the public of construction along the highway. The traffic handling plan will require temporary railing (Type K) as shown in Caltrans Standard Plan T3A. The Contractor shall furnish energy dissipater devices

consistent with Caltrans standards.

If any component in the traffic control system is damaged, displaced or ceases to operate or function as specified, from any cause, during the progress of the work, the Contractor shall immediately repair or replace said component to its original condition and reinstall the component to its original location.

The provisions in this Special Provision will not relieve the Contractor from responsibility to provide additional devices or take such measures as may be necessary to comply with the provisions in Section 7-1.04, "Public Safety," of the Standard Specifications.

At locations where traffic is being routed through construction under one-way controls, the movement of the Contractor's equipment from one portion of work to another shall be governed in accordance with such one-way controls.

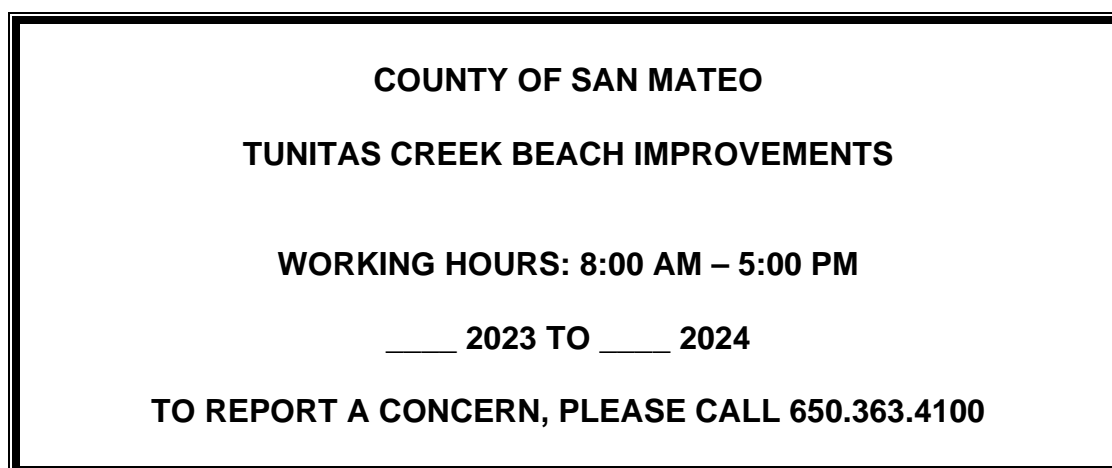
During paving and striping operations, the Contractor shall furnish and place sufficient barricades and detour signs to protect new pavement surfaces and markings. The duration of placement of said barricades shall be as approved by the Engineer.

Whenever the Contractor's operations create a condition hazardous to traffic or to the public, the Contractor shall take the necessary precautions and provide additional traffic control measures to protect those who must pass through the work. If the Contractor shall appear to be neglectful or negligent in providing warning or protective measures, the Engineer may direct attention to the existence of a hazard, and require that additional barricades, flashers, warning and detour signs or lights be installed by the Contractor, or additional flaggers provided. Any action or lack of action by the Engineer as provided herein shall not relieve the Contractor from responsibility for public safety.

Payment. The contract lump sum price paid for “Maintaining Traffic” includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in traffic handling, complete in place, including providing traffic control plans, providing traffic control devices, and maintaining the devices, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

12-3 Project Sign

The Contractor shall provide and place a project sign fabricated from aluminum, or plywood, or as approved by the Engineer. The sign shall be at least 3 feet tall by 6 feet wide and shall be mounted on a frame that is at least 10 feet high. The sign shall be white with text in black and include the following:



The sign shall include the full color logos of the following: San Mateo County, San Mateo County Parks, Peninsula Open Space Trust, and the California Coastal Conservancy. The Engineer will provide the Contractor with an electronic file with these logos.

The Contractor shall provide a draft of the sign for the Engineer’s approval prior to fabrication.

The project sign shall be at the entrance to the Tunitas Creek Beach site and as directed by the Engineer in the field. Signs shall be set in place a minimum

of **SEVEN (7) CALENDAR DAYS** prior to commencement of construction site work, unless otherwise directed by the Engineer.

Payment. The contract unit price paid for each "Project Sign" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved providing and placing the sign, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

END OF SECTION

SECTION 13. WATER POLLUTION CONTROL

The provisions of Section 13, “Water Pollution Control,” of the Standard Specifications are superseded by these Special Provisions the San Mateo Countywide Water Pollution Prevention Program (SMCWPPP) State Water Resources Control Board NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities Order No. 2010-0014-DWQ (Construction General Permit). Information regarding SMCWPPP is available at www.flowstobay.org. Information regarding the Construction General Permit is available at <https://www.waterboards.ca.gov>

The Contractor is advised that failure to fully comply with the provisions of this Section, and all requirements listed in the California Regional Water Quality Control Board San Francisco Bay Region Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit Order No. R2-2015-0049 (MRP), and where applicable, the Construction General Permit, and any resource agency permits obtained for the project, where applicable, except where amended in writing and signed by the Director of Public Works or his or her duly authorized representative, shall constitute substantial non-compliance with the requirements of the Clean Water Act, the NPDES permit program, and the Contract.

The County shall provide periodic site monitoring to ensure that the work complies with the requirements specified herein and in any resource agency permits. The County will provide the Contractor with copies of the completed monitoring reports. Should any work be found to be non-compliant, a follow up site monitoring visit will be conducted to ensure the items have been corrected. If deficiencies noted during a monitoring visit are not corrected before the follow up monitoring visit, the costs associated with additional follow up visits to correct the noted deficiencies shall be deducted from the final payment for all of the Contract work.

Attention is directed to Section 21, "Erosion and Sediment Control," of these Special Provisions and the plans for erosion control requirements.

Construction sites are common sources of water pollution. Materials and wastes that blow or wash into a storm drain, gutter, or street have a direct impact on local creeks and wetlands, San Francisco Bay and the Pacific Ocean. The Contractor shall be responsible for any environmental damage caused by his or her operations and those of his or her subcontractors or employees.

Water pollution shall be defined as including the introduction of any material, including sediment, trash, or other debris, equipment or vehicles into any watercourse, including creeks, ponds, ditches, storm drain facilities, and any surfaces immediately tributary to those areas, except as specifically authorized by any resource agency permits. Water pollution controls are materials and measures that prevent the introduction of any material to any watercourse. Water pollution control materials and measures may consist of temporary silt fencing; straw mulch/straw logs; spill cleanup materials; pavement sweepers; sand bags or continuous berms; etc.

Water pollution controls shall be applied, maintained and removed by the Contractor as specified herein and as directed by the Engineer. For construction activities occurring between June 15 and September 15, sufficient quantities of applicable water pollution control materials shall be available at the work site prior to commencing any work. For construction activities occurring between September 15 and June 15, all applicable water pollution control measures shall be installed, and all applicable water pollution control materials shall be available at the work site, prior to commencing any work.

13-1. SWPPP

The Contractor shall prepare a Storm Water Pollution and Prevention Plan (SWPPP) consistent with the requirements of Section 13-3 of the Standard Specification for review and approval of the Engineer. The SWPPP shall be for a Risk Level 2 site. The Contractor shall coordinate with the County to secure a Notice of Intent from the Water Board prior to commencing grading.

The Contractor is advised that he or she may be required to respond to the work site after hours and/or on weekends or holidays to mitigate potential water pollution, soil erosion or sedimentation and/or to repair damaged water pollution controls. Failure to respond within four (4) hours of notification by the Department of Public Works shall constitute substantial non-compliance with these Special Provisions.

Should the County Road Maintenance Division be required to provide any after-hours, weekend or holiday repairs to the Contractor's water pollution controls due to the Contractor's failure to respond, all costs associated with providing that response, including overtime wages, equipment and material costs, shall be deducted from the Contractor's final payment. The Contractor shall also be fully responsible for any fines, penalties or mitigations imposed by any regulatory agency caused by his or her failure to respond, regardless of if the County Road Maintenance Division attempts any repairs or pollution prevention work in his or her absence.

Payment. Full compensation for all work involved for "SWPPP" is included in the contract lump sum price paid for "Water Pollution Control," and no separate payment will be made.

13-2. Job Site Management

The Contractor shall implement the SWPPP and complete job site management consistent with Section 13-4 of the Standard Specifications specifically including the

management of spills and stockpiles as well as sanitary and concrete waste.

Payment. Full compensation for all work involved in "Job Site Management" is included in the contract lump sum price paid for "Water Pollution Control," and no separate payment will be made.

13-3. Temporary Erosion Control

Temporary erosion controls shall be applied, maintained and removed by the Contractor as specified herein and as directed by the Engineer. The Contractor shall not commence any excavation, backfilling, grading or stockpiling operations until sufficient quantities and types of temporary erosion control materials have been delivered to the work site as determined by the Engineer. The Contractor may not remove temporary erosion controls such as fiber rolls until the Engineer or County Inspector indicates stabilization of disturbed areas has been achieved.

Additional temporary erosion controls, if necessary and as directed by the Engineer, shall be installed at the conclusion of the workweek to the satisfaction of the Engineer. The Engineer may also require the installation of temporary erosion controls at the conclusion of any workday when rain and/or wind is occurring or forecast.

The Contractor is advised that he or she may be required to respond to the work site after hours and/or on weekends or holidays to mitigate potential erosion or sedimentation and/or to repair damaged silt fencing and other erosion controls. .

Payment. The contract lump sum price paid for "Water Pollution Control" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved preparing the SWPPP and in site pollution control and protecting water resources, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

13-4. Temporary Silt Fence

The Contractor shall install and maintain silt fences as required by the SWPPP, Engineer, and as required in Section 13-10 of the Standard Specifications.

Temporary silt fence shall be installed on contour a minimum of two (2) feet to the downslope side of the area of demolition, clear and grub and rough grading. Silt fence lines shall be unbroken, with silt fencing pieces wound together to form a contiguous structure. Attention is directed to Section 21-2, "Temporary Erosion Control," of these Special Provisions for additional requirements.

The Engineer may deem it necessary and require parallel silt fencing to contain the full limits of excavation and backfill. Parallel silt fence shall be placed on contour and shall overlap the horizontal projection of the primary silt fence by not less than eight (8) linear feet.

No silt fencing shall be placed in or across any flowing stream or swale.

Inspection and Maintenance

Silt fencing shall be inspected and any necessary repairs made by the Contractor at his or her expense daily prior to any excavation or backfill. The Contractor shall remove any soil, rock and/or debris contained by the silt fence once they have reached a depth of half ($\frac{1}{2}$) the above-ground height of the silt fence.

Removal and Disposal

Temporary silt fence and any soil, rock or debris shall be completely removed by the Contractor at the conclusion of the work. Temporary silt fence and any soils, rock or debris shall be disposed of outside the project site and highway right of way in accordance with the provisions of Section 5-11, "Disposal of Material Outside the Highway Right-of-Way," of these Special Provisions, by the Contractor at his or her expense. Soil, rock or debris shall not be scattered or "flaked" on any slope. The Contractor shall specify in writing the method of removal and disposal for the Engineer's

approval not less than two (2) working days prior to removing silt fence.

Payment -The contract price paid per linear foot for "Temporary Silt Fence" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in placing the BMPS, complete in place, including, maintenance and removal, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

13-5. Fiber Roll

The Contractor shall install and maintain silt fences as required by the SWPPP, Engineer, and as required in Section 13-10 of the Standard Specifications.

Payment -The contract price paid per linear foot for "Fiber Roll" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in placing the BMPS, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

13-6. Stabilized Construction Entrance

The Contractor shall place a stabilized construction entrance as defined in Section 13-7.03 "Temporary construction Roadways and Entrances" near the entrance to State Route 1 using rock designed to prevent sediment from being tracking onto public roadways.

The Engineer will pay for only one stabilized construction entrance. Additional entrances or the replacement of the original installed entrance will not be paid by the Engineer.

Payment -The contract unit price paid for each "Stabilized Construction Entrance" includes full compensation for furnishing all labor, materials, tools, equipment, and

incidentals, and for doing all the work involved in placing the BMPS, complete in place, including maintenance and removal, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

13-7. Watering

The Contractor shall actively water graded areas to prevent dust. All water shall be brought to the site from a non-potable source. There is no water available on the property.

Payment -The contract lump sum price paid for "Watering" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved maintaining dust control, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

13-8. Street sweeping

The Contractor shall have street sweeping clean State Route 1 at least **ten times per day** during import or export of materials from the site and when grading adjacent to State Route 1. The Contractor shall increase this value as directed by the Engineer should sediment be present on public roadways.

Payment. Full compensation for all work involved for this item, "Street Sweeping" is included in the contract lump sum price paid for "Water Pollution Control," and no separate payment will be made.

13-9 Staging Areas

The Contractor shall contain runoff that may potentially leave any staging area to within the staging area by any suitable means approved by the Engineer.

Staging area BMPs shall be maintained throughout the duration of the work. Staging

area BMPs shall be completely removed and disposed of outside the project site and highway right of way in accordance with the provisions of Section 5-11, "Disposal of Material Outside the Highway Right-of-Way" of these Special Provisions, by the Contractor at his or her expense at the conclusion of the work. Attention is directed to Section 13, "Water Pollution Control," of these Special Provisions for provisions relating to tracking of mud from staging areas.

The Contractor shall finish all staging areas as specified herein and as directed by the Engineer.

All stockpiles, debris and exclusion fencing shall be completely removed and disposed of outside the project site and the highway right of way in accordance with the provisions of Section 5-11, "Disposal of Material Outside the Highway Right-of-Way," of these Special Provisions, by the Contractor at his or her expense at the conclusion of construction operations. Staging area surfaces shall be smoothed and contoured to drain in the same manner as prior to their use. Any adjacent areas disturbed by the Contractor's operations shall be smoothed and mulched as specified below.

Loose soil and/or rock resulting from any grading work required to restore the pre-construction condition shall not be scattered or "flaked" on any slope.

13-10 Winterization

Should the Contractor fail to complete the work as Specified in Section 8-5 of these Special Provisions, the Contractor shall winterize the project and any staging areas at his or her expense as specified herein and as directed by the Engineer.

Winterization shall include, at a minimum, removal or securing, at the Engineer's option, of any stockpiled materials; removing equipment from the vicinity; restoring staging areas as specified under "Staging Area Finish" above; applying hydroseed, fiber rolls, and silt fences; and ensuring positive drainage through the project areas.

The Engineer will make no payment to the Contractor should winterization be required.

END OF SECTION

SECTION 14. CONSTRUCTION WASTE MANAGEMENT

The County has established that this Project shall minimize the creation of construction and demolition waste on the job site. Factors that contribute to waste such as over packaging, improper storage, ordering error, poor planning, breakage, mishandling, and contamination, shall be minimized. For any waste that is generated, as many of the waste materials as economically feasible shall be reused, salvaged, or recycled. Waste disposal in landfills shall be minimized.

14-1 Diversion Goals

One hundred percent (100%) of inert wastes, and at least fifty percent (50%) of the remaining construction and demolition debris shall be diverted from landfills.

Inert wastes, such as concrete, brick, rock, asphalt, and soil not intended for on-site use, shall be taken to a facility that will reuse or recycle them.

Other mixed construction & demolition (C&D) wastes shall be taken to a facility with a C&D sorting program, as listed in the Construction and Demolition Debris Recycling Guide referenced below, if additional recycling is needed in order to meet the requirements set forth in this Section. If debris box service is used, the debris boxes must be taken to a C&D sorting facility if materials are not separated on-site for recycling.

The Contractor has the option of separating on-site for recycling non-inert materials, such as cardboard, paper, wood, metals, green waste, new gypsum wallboard, tile, porcelain fixtures, and other easily recycled materials, and directing them to recycling facilities and taking the remaining mixed waste (but no more than 50% by weight or yardage) to a facility for disposal. If waste is taken for disposal, documentation must be provided to show that 50% of C&D wastes (in addition to 100% of inert wastes) have been diverted.

14-2 References and Resources

A Construction and Demolition Guide (C&D Guide) is available online at <https://www.smcsustainability.org/waste-reduction/construction->

[demolition/](#). For more information or resources, contact the County of San Mateo's Office of Sustainability by phone at (888) 442-2666 or by email at sustainability@smcgov.org. The Contractor's attention is directed to **Appendix A** for the County of San Mateo Waste Management Plan Form and the Waste Management Daily Transport Report.

14-3. Waste Management Plan and Daily Transport Report

The Contractor is required to complete a Waste Management Daily Transport Report, listing details of the material transported on that particular day, which is to be signed by both the Contractor's representative and the County inspector on the job site.

The Waste Management Plan shall be submitted to the Engineer, Department of Public Works, 555 County Center – 5th Floor, for approval within SEVEN (7) WORKING DAYS after the pre-construction conference.

The Waste Management Plan shall include a description of how the contractor will meet the requirements of this contract and shall include a list of disposal and recycling facilities where waste materials will be taken, a description of what will be taken to each facility (inert wastes, metals, wood, glass, plastics, mixed waste, etc.), a description of the means of transportation of recyclable materials (whether materials will be site-separated and self-hauled to designated centers, or whether mixed materials will be collected by a waste hauler and designated center, or whether mixed materials will be collected by a waste hauler and removed from the site), and an estimated amount (weight, yardage, etc.).

Approval will be granted if the plan shows:

- One hundred percent (100%) of inert wastes being reused or recycled AND at least fifty percent (50%) of C&D wastes being reused or recycled; OR
- All waste that is not separated on-site for recycling is sent to a mixed C& D sorting facility for recycling.

14-4. Waste Management Plan Implementation

A. Plan Distribution:

The contractor shall provide copies of the approved Waste Management Plan to the project superintendent and each subcontractor.

B. Instruction:

The contractor shall provide on-site instruction of appropriate separation, handling, and recycling, salvage, reuse, and return methods to be used by all parties at the appropriate stages of the Project.

C. Meetings:

The contractor shall conduct monthly Construction Waste Management meetings or at least one meeting for projects with length of less than twenty (20) working days. Meetings shall include subcontractors affected by the Waste Management Plan. At a minimum, waste management goals and issues shall be discussed at regularly scheduled project meetings.

D. Separation Facilities:

The contractor shall designate a specific area or areas to facilitate separation of materials for potential reuse, salvage, recycling, and return. Recycling and waste bin areas are to be kept neat and clean and clearly marked in order to avoid co-mingling of materials. Bins set within the County Right of Way shall be subject to approval by the County. Bins set within the Caltrans Right of Way shall be subject to approval by Caltrans. All bins used shall be protected during non-working hours from offsite contamination.

E. Materials Handling Procedures:

Materials to be recycled shall be protected from contamination, and shall be handled, stored and transported in a manner that meets the requirements set by the designated facilities for acceptance.

F. Hazardous Wastes:

Hazardous wastes shall be separated, stored, and disposed of according to State and local regulations.

G. Reporting:

As a condition of final approval and retention release, submit

documentation to the Engineer. Projects that establish monthly progress payments shall also require monthly reporting on the Waste Management Plan. Such reports shall be submitted prior to the monthly cutoff for progress payments and shall include, at a minimum, a summary of waste materials recycled, salvaged and disposed of for the Project. Submitted with this summary will be documentation (receipts/scale tickets, waybills) showing the quantities and types of materials diverted and disposed. The documentation shall coincide with the Waste Management Daily Transport Reports (in Appendix A) that were signed by both the Contractor and the County inspector. A Notice of Completion will not be filed for the project and retention released until all reports as required for the project are submitted and approved.

The above-mentioned summary and documentation shall contain the following information:

- (1) For each material recycled and salvaged from the Project, include the amount (in cubic yards or tons, or in the case of salvaged items, state quantities by number, type and size of items) and the destination (i.e., recycling facility, used building materials yard or other local users).
- (2) For each material landfilled or incinerated from the Project, include the amount (in cubic yards or tons) of material and the identity of the landfill, incinerator and/or transfer station. All projects are subject to inspection.
- (3) Documentation shall consist of photocopies of receipts and weight tags or other records of measurement or equivalent documentation from recycling companies, deconstruction contractors, and landfill and disposal companies. The contractor shall sign the completed Waste Management Plan to certify its accuracy as part of the documentation of compliance.

It is unlawful for any person to submit documentation to the County for an approved Waste Management Plan that that said person knows to contain any

false statements, including but not limited to false statements regarding weight and/or yardage of materials recycled or diverted, or to submit any false or fraudulent receipt or weight tag or other record of measurement.

Payment. The contract lump sum price paid for "Construction Waste Management" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in managing and disposing of waste, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

No partial payment will be made for this Contract item of work until all work required, as specified in this Section, is completed to the satisfaction of the Engineer, and all necessary documentation provided. This item will be paid with the final progress payment on the Project.

END OF SECTION

SECTION 16. TEMPORARY FACILITIES

The Contractor shall install 48-inch-tall orange plastic fencing sometimes referred to as “snow fencing” to protect the work area from trespass. This fencing shall also be used to advise workers of areas with sensitive habitats. The Contractor shall install posts at intervals of no less than 48 inches and shall maintain the fencing for the duration of the work. The fencing shall be in accordance with Section 16-2.03 “Temporary High-Visibility Fences” of the Standard Specifications.

Payment. The contract unit price paid per linear foot for “Temporary Fencing” includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in installing temporary fencing, complete in place, including confirming layout and access locations with the Engineer prior to securing in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

END OF SECTION

SECTION 17. CLEARING AND GRUBBING

Attention is directed to Section 17-2 "Clearing and Grubbing" of the Standard Specifications, these Special Provisions, the Standard Plans, the Project Plans and the direction of the Engineer.

All material removed as required by Section 17 and as directed by the Engineer shall be removed and disposed of outside the highway right of way in accordance with the provisions of Section 5-11, "Disposal of Material Outside the Highway Right-of-Way," of these Special Provisions, by the Contractor at his or her expense.

17-1. General Clearing

Clearing and grubbing shall consist of removing all natural and artificial objectionable materials within the limits shown on the Plans and as described in these Special Provisions. This work shall be performed in advance of grading operations and in accordance with the requirements herein specified, subject to erosion control requirements.

The natural ground surface shall be cleared of all vegetable growth, such as trees, logs, upturned stumps, roots of downed trees, brush, grass, weeds, and all other objectionable materials, within the limits of construction.

Grubbing shall extend to the outside excavation and fill slope lines, except where slopes are to be rounded, the areas shall extend to the outside limits of slope rounding. Within the limits of clearing, all stumps, roots 1-1/2 inches in diameter or larger, buried logs, and all other objectionable material shall be removed 3 feet below the existing ground surface or subgrade, whichever is deeper. **The Contractor shall complete grubbing activities to no less than 6 inches below the surface and as directed by the Engineer.** The grubbed material can be re-used as fill provided it complies with Section 19-1 of these Specifications.

No payment will be made to the Contractor for clearing and grubbing outside the stated limits unless such work is authorized by the Engineer.

Trees and plants that are not to be removed shall be fully protected from injury by the Contractor at its expense. Trees shall be removed in such a manner as not to injure standing trees, plants, and improvements which are to be preserved.

Payment. The contract price paid per square foot for "Clear and Grub" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in removing vegetation and debris to prepare for construction, complete in place, including, debris disposal, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

17-2. Hardscape Removal

This work shall include the removal of asphalt and concrete as shown in the Plans. When only a portion of asphalt is to be removed, the Contractor shall neatly sawcut the asphalt along the line of removal.

Payment. The contract price paid per square foot for "Hardscape Removal" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in removing asphalt and concrete, complete in place, including, but not limited to, saw cutting and debris disposal, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

17-3. Other Demolition

The Plans show removal of specific elements, which the Contractor shall remove and dispose that include gates, fences, lights, and poles. The Contractor shall remove any

foundations associated with these elements and backfill the hole to the lines and grades as required on the Plans and to the criteria described in these Special Provisions.

Payment. The contract unit price paid for each "Gate Removal" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in removing the gate, complete in place, including, but not limited to, footings, appurtenances and debris disposal, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Payment. The contract price paid per linear foot for "Fence Removal" includes full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in removing the fence, complete in place, including, but not limited to, footings, appurtenances and debris disposal, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Payment. The contract unit price paid for each "Light Pole Removal" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in removing a light pole post, complete in place, including, but not limited to, removing the post, footing, appurtenances, debris disposal and providing engineered material to fill the footing hole to grade, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Payment. The contract unit price paid for each "Power Pole Removal" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in removing a power pole post, complete in place, including, but not limited to, removing the post, footing, appurtenances, debris disposal and providing engineered material to fill the footing hole to grade, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as

directed by the Engineer.

17-4. Gravel Parking Area

As shown on the Plans, there is an existing gravel parking area. The Contractor shall harvest this material and stockpile it for replacement upon the project's completion. The Contractor shall ensure the material is not contaminated with debris or soil. The Contractor shall place the material, grade to match the exiting condition, and compact to 90%.

Should the Contractor damage or contaminate the gravel, they shall replace it with Class II aggregate base at no additional cost to the Engineer.

Payment. The contract price paid per square foot for "Gravel Parking Area Protection" includes full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in harvesting and placing gravel, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

END OF SECTION

SECTION 19 EARTHWORK

The Contractor shall complete earthwork as necessary to achieve the lines and grades as shown on the Plans. All earthwork shall be completed in accordance with Section 19 of the Standard Specifications and as detailed in this Section. For reference, the Engineer provides a geotechnical report for the site as shown in Appendix I.

The earthwork will be measured and paid based upon the areas designated on the Plans and described as follows:

- Mass grading for the site work including the parking lot, pathway, and mid bluff areas.
- Mass grading for landslide repair and pathway from the mid bluff to the beach.
- Roadway excavation for widening of State Route 1.
- A small foot trail that links the parking lot to the beach on the south side of the site.

Upon completion of the mass grading, the Contractor shall complete fine grading to establish the subgrade for the parking lot, trail, and walkways.

Any unsuitable material removed shall be removed and disposed of outside the highway right of way in accordance with Section 19-3 of these Special Provisions.

19-1. Mass Grading

The Contractor shall complete Clearing and Grubbing as described in Section 17 of these Special Provisions to expose the terrain. The Engineer will complete a field survey of the work area to confirm the topography. Should the existing topography vary from the Plans, the Engineer and Contractor shall coordinate to modify the lines and grades to achieve the improvements detailed in the Plans.

Prior to placing fill or base materials for surface improvements, all soil surfaces shall be

scarified to a depth of 6 inches, moisture conditioned, and compacted to 90% at least 2 percent above optimum in accordance with ASTM Test D1557.

On-site soils containing less than 3% organic material by volume in accordance with ASTM D2974 can be used for fill. The material shall not contain rocks larger than 6 inches in greatest dimension and no more than 15% larger than 2.5 inches. If fill is imported, it shall not have a Plasticity Index greater than 15 and be predominantly granular material. All fill materials shall be approved by the Engineer prior to use.

Fill material shall be placed in horizontal layers of depths compatible to the material being placed and the type of equipment being used. Each layer shall be evenly spread and moistened or aerated, as necessary. Unless otherwise approved by the Engineer, each layer spread for compaction shall not exceed 8 inches of compacted thickness.

Unless otherwise permitted by the Engineer, each layer of fill material shall cover the length and width of the area to be filled before the next higher layer of material is placed. The top surface of each layer shall be approximately level, but with a crown or crossfall of at least 1 vertical in 50 horizontal, but no more than 1 vertical in 20 horizontal, to provide adequate drainage at all times during the construction period.

The contractor shall bench and key excavation for all fill slopes that exceed 6 horizontal to 1 vertical. The width of the bench shall be as required to meet minimum compaction requirements.

At the time of compaction, the moisture content of fill material shall be such that the specified relative compaction will be obtained, and the fill will be firm, hard, and unyielding. Fill material which contains excessive moisture shall not be compacted until the material is dry enough to obtain the required relative compaction.

Each layer of earth fill shall be compacted by approved tamping or sheepfoot rollers, pneumatic-tired rollers, or other mechanical means acceptable to the Engineer, to such

extent as will produce the specified relative compaction. At locations where it would be impractical because of inaccessibility to use such compacting equipment, fill layers shall be compacted to the specified requirements by hand-directed compaction equipment.

Soils shall be compacted as shown in the following table in accordance with ASTM Test D1557

Item	Relative Compaction	Moisture Content
Scarified subgrade in areas to receive fill	90%	At least 2% above optimum
Areas of fill	92%	At least 2% above optimum
Pavement areas within the upper 6 inches of soil	90%	At least 2% above optimum
Utility Trench Soil Backfil	90%	At least 2% above optimum
Utility Trench Imported Sand Backfil	95%	Near optimum

When soil types, or a combination of soil types, are encountered which tend to develop densely packed surfaces as a result of spreading or compacting operations, the surface of each layer of fill shall be sufficiently roughened after compaction to ensure bond to the succeeding layer.

The Contractor shall keep the soil sub-grade moist up until the base materials are placed.

Payment - The contract price paid per cubic yard for "Parkway Area Earthwork", "Pathway Earthwork", and "Midbluff Area Earthwork" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the

work involved in completing earthwork, complete in place, including, cutting, transporting of soil, placing fill, grading, shaping, and compacting, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Payment for Earthwork will be the sum of cut and fills of in-place material. The Engineer will make no allowance for shrink or swell of the material. The Engineer will measure this value by completing a survey of the area after clearing and grubbing but prior to grading. Once the Contractor achieves subgrade, the Engineer will complete a second survey of the area. The difference in the two surveys as calculated by AutoCAD or similar electronic tool will establish the value of earthwork paid to the Contractor.

19-2. Borrow

The mass grading for the site work will generate surplus material. A portion of this material will be used as embankment for the slide repair as shown in the Plans and as described in Section 19-4.

During the grading operations, the Contractor shall haul and stockpile this material for future use. The Engineer shall direct the Contractor as to the soil that is suitable for use. The total volume of soil shall not exceed the requirements to meet the lines and grades as shown on the Plans.

Payment - The contract price paid per cubic yard for "Stockpile" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in stockpile soil, complete in place, including, transporting of soil, placing, and temporary stabilizing the material, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

19-3. Export

The Contractor shall export all surplus soil. There is no analytical testing data available for soil within the project limits. The Contractor shall assume that all soil has levels of contamination that exceeds environmental screening levels listed by the California Regional Water Quality Control Board for residential land use or commercial/industrial land use but is non-regulated and non-hazardous. All material shall be disposed of in an appropriate landfill with all-weather access. The Contractor shall be responsible for testing soil as required by the disposal site.

The Contractor shall provide waste manifests produced by the receiver of the soil documenting the total volume of soil received.

Payment - The contract price paid per cubic yard for "Export" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved exporting soil, complete in place, testing, transporting of soil, and paying disposal fees, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

19-4. Slide Repair Earthwork

The Contractor shall remove slide debris, cut benches, stockpile material, place and compact fill as defined in Section 19-1 of this Section, as well as fine grade the slope as shown on the Plans. This work shall include installation of a sub drainage system as described in Section 68 of these Special Provisions.

The slide repair earthwork also includes the grading of the pathway from the mid bluff to the beach. The Contractor shall install wood steps as detailed in Section 19-8 of these Special Provisions.

Payment - The contract price paid per cubic yard for "Slide Repair Earthwork" includes

full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved repairing an unstable slope, complete in place, including installing the subdrain, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Payment for Slide Repair Earthwork will be the sum of cut and fills of in-place material. The Engineer will make no allowance for shrink or swell of the material. The Engineer will measure this value by completing a survey of the area after clearing and grubbing but prior to grading. Once the Contractor achieves subgrade, the Engineer will complete a second survey of the area. The difference in the two surveys as calculated by AutoCAD or similar electronic tool will establish the value of earthwork paid to the Contractor.

19-5. State Route 1 Widening

As shown on the Plans, the Contractor shall complete roadway excavation to widen State Route 1. This work shall be completed in accordance with Section 19 of the Standard Specifications and to the satisfaction of the Caltrans inspector.

Payment - The contract price paid per cubic yard for "Roadway Excavation – Highway 1" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved repairing excavation for the structural section, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

The Engineer will measure the volume of earthwork by average end area method using field measurements.

19-6. Trail Construction

As shown on the Plans, the Contractor shall construct an unpaved foot path trail on the

south side of the site that links the parking lot to the beach as well as near the parking lot. The Contractor shall establish the lines and grades with the Engineer in the field. To achieve this, the Contractor shall remove vegetation in accordance with the Clearing and Grubbing Section as described in Section 17. Once the route is established, the Contractor shall grade the route to balance cut and fill in coordination with the Engineer's direction.

The Contractor shall install wood steps as detailed in Section 19-8 of these Special Provisions.

Payment - The contract price paid per square foot for "Parking Lot Unpaved Trail" and "South Loop Unpaved Trail" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing the trail, complete in place, including clearing and grubbing, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

19-7. Fine Grading

Fill and cut slopes shall be finished in conformance with the lines and grades shown on the Plans. When completed, the average plane of the slopes shall conform to the slopes indicated on the Plans and no point on the completed slopes shall vary from the designated plane by more than 6 inches measured at right angles to the slope.

The Contractor shall cut and fill all ditches to the lines and grades shown on the Plans.

Payment - The contract price paid per square foot "Fine Grading" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in fine grading, complete in place as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

This item will be measured by field survey conducted by the Engineer of the actual work completed in the field.

19-8. Wood Steps

For the pathways/trails described in Sections 19-4 and 19-6 of these Special Provisions, the Contractor shall install redwood timbers of the size shown on the Plans. The Engineer will coordinate with the Contractor to locate these timbers during grading operations.

Payment - The contract unit price paid for each "Wood Step" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in providing steps, complete in place as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

END OF SECTION

SECTION 20. LANDSCAPE

The Contractor shall complete planting as shown on the Plans and as detailed in Section 20-3 "Planting" of the Standard Specifications, these Special Provisions, and as directed by the Engineer.

20-1. Container-grown tree, shrub, and groundcover planting

The Contractor shall provide trees, shrubs, and groundcover planting as shown in the Plans.

SUBMITTALS

Product Data: For each type of product indicated.

Photographs of trees to be shipped to site. Include a measuring staff in the photographs to show scale. Include close-up of trunk with ruler to show trunk caliper.

Samples for Verification: 0.5 lb or organic mulch in labeled plastic bag.

Product Certificates: For each type of manufactured product, signed by product manufacturer, and complying with the Manufacturer's certified analysis for standard products or analysis of other materials by a recognized laboratory made according to methods established by the Association of Official Analytical Chemists, where applicable.

Qualification Data: For landscape Installer.

Material Test Reports: For existing site soil to be used for planting, imported topsoil and amended planting soil.

Planting Schedule: Indicating anticipated planting dates for exterior plants.

QUALITY ASSURANCE

Installer Qualifications: A qualified landscape installer whose work has resulted in successful establishment of exterior plants.

Installer's Field Supervision: Require Installer to maintain an experienced full-time supervisor on Project site when exterior planting is in progress.

Soil-Testing Laboratory Qualifications: An independent laboratory, recognized by the State Department of Agriculture, with the experience and capability to conduct the testing indicated and that specializes in types of tests to be performed.

Tree and Shrub Measurements: Measure according to ANSI Z60.1 with branches and trunks or canes in their normal position. Do not prune to obtain required sizes. Take caliper measurements 6 inches above ground for trees up to 4-inch caliper size, and 12 inches above ground for larger sizes. Measure main body of tree or shrub for height and spread; do not measure branches or roots tip-to-tip.

Observation: Engineer will observe trees at place of growth and shrubs at site before planting for compliance with requirements for genus, species, variety, size, and quality. Engineer retains right to observe trees and shrubs further for size and condition of balls and root systems, insects, injuries, and latent defects and to reject unsatisfactory or defective material at any time during progress of work. Remove rejected trees or shrubs immediately from Project site.

WARRANTY

Warranty the plants for one year from date of Substantial Completion against defects including death and unsatisfactory growth, except for defects resulting from lack of adequate maintenance, neglect, or abuse by Owner, or incidents that are beyond Contractor's control.

Remove dead plants immediately. Replace immediately unless required to plant in the succeeding planting season.

Replace plants that are more than 25 percent dead or in an unhealthy condition at end

of warranty period.

A limit of one replacement of each exterior plant will be required, except for losses or replacements due to failure to comply with requirements.

SOILS ANALYSIS AND SOIL AMENDMENT

Furnish soil analysis of existing site soils by a qualified soil-testing laboratory stating percentages of organic matter; gradation of sand, silt, and clay content; cation exchange capacity; sodium absorption ratio; deleterious material (including gravel content); pH; and mineral and plant-nutrient content of topsoil.

Report suitability of soil for plant growth based on the proposed plant palette. State recommended quantities of nitrogen, phosphorus, and potash nutrients and soil amendments to be added to produce a satisfactory planting soil as specified herein.

Provide soils analyses of amended planting soils and import topsoil to verify compliance with specifications and soils report recommendations.

Soils analyses should provide organic amendment recommendations, avoiding synthetic fertilizers when possible. Soils amendment recommendations should be specific to the proposed plant palette.

Amend existing site soils as recommended for container-grown planting areas and tree-pit backfill.

Fertilize existing site soils as recommended for hydroseeded areas.

PRODUCTS

TREE, SHRUB, AND PLANT MATERIAL

General: Furnish nursery-grown trees, shrubs and plants complying with ANSI Z60.1,

with healthy root systems developed by transplanting or root pruning. Provide well-shaped, fully branched, healthy, vigorous stock free of disease, insects, eggs, larvae, and defects such as knots, sun scald, injuries, abrasions, and disfigurement.

Grade: Provide trees and shrubs of sizes and grades complying with ANSI Z60.1 for type of trees and shrubs required. Trees and shrubs of a larger size may be used if acceptable to Engineer, with a proportionate increase in size of roots or balls.

MULCHES

Organic Mulch: Free from deleterious materials and suitable as a top dressing of trees and shrubs, consisting of shredded hardwood bark, wood and bark chips.

STAKES AND GUYS

Stakes: 3" x 10' lodgepole pine stakes.

Tree Tie: Nylon web straps.

Guy Cable: 5-strand, 3/16-inch-diameter, galvanized-steel cable, with zinc-coated turnbuckles, a minimum of 3 inches long, with two 3/8-inch galvanized eyebolts.

Hose Chafing Guard: Reinforced rubber or plastic hose at least 1/2 inch in diameter, black, cut to lengths required to protect tree trunks from damage.

Flags: Standard surveyor's plastic flagging tape, white, 6 inches long.

WIRE MESH FOR TREE AND PLANT PROTECTION

Material: Galvanized before weld

Size: 1" x 2", 14 gauge

EROSION-CONTROL JUTE NETTING

Jute netting shall be 100% biodegradable natural fiber jute netting for erosion control.

Type: Woven

Mesh size: Approximately 1/2" x 3/4"

Life expectancy: 6 months to 2 years.

EXECUTION

EXAMINATION

Examine areas to receive exterior plants for compliance with requirements and conditions affecting installation and performance. Proceed with installation only after unsatisfactory conditions have been corrected.

PREPARATION

Protect structures, utilities, sidewalks, pavements, and other facilities, and lawns and existing exterior plants from damage caused by planting operations.

Provide erosion-control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.

Install jute netting on slopes greater than or equal to 1:4. Install rolls by unrolling in direction of slope. Overlap jute netting sheets by 6 inches and staple in place with flat-headed galvanized wire staples on a 4-foot-on-center grid. Place mulch over jute netting to full depth of mulch indicated for all planting areas.

Lay out individual tree and shrub locations and areas for multiple exterior plantings. Stake locations, outline areas, adjust locations when requested, and obtain Engineer's acceptance of layout before planting. Make minor adjustments as required.

PLANTING BED ESTABLISHMENT

Finish Grading: Grade planting beds to a smooth, uniform surface plane with loose, uniformly fine texture. Roll and rake, remove ridges, and fill depressions to meet finish grades.

Restore planting beds if eroded or otherwise disturbed after finish grading and before planting.

TREE AND SHRUB EXCAVATION

Excavate circular pits with sides sloped inward. Excavate approximately three times as wide as ball diameter for container-grown stock. Trim base leaving center area raised slightly to support root ball and assist in drainage. Do not further disturb base. Scarify sides of plant pit smeared or smoothed during excavation.

Use subsoil removed from excavations as backfill. Amend soil as recommended in soils analysis.

Obstructions: Notify Engineer if unexpected rock or obstructions detrimental to trees or shrubs are encountered in excavations.

Drainage: Notify Engineer if subsoil conditions evidence unexpected water seepage or retention in tree or shrub pits.

TREE AND SHRUB PLANTING

Before planting, verify that root flare is visible at top of root ball according to ANSI Z60.1. If root flare is not visible, remove soil in a level manner from the root ball to where the top-most root emerges from the trunk. After soil removal to expose the root flare, verify that root ball still meets size requirements. Retain applicable paragraphs and subparagraphs below.

Remove stem girdling roots and kinked roots. Remove injured roots by cutting cleanly; do not break.

Scarify plant root ball sides and bottom, tree root balls a minimum of 1-inch deep and shrub root balls a minimum of 1/2-inch deep. Loosen circling or matted roots.

Set container-grown stock plumb and in center of pit or trench with top of root ball flush with adjacent finish grades.

Carefully remove root ball from container without damaging root ball or plant.

Place backfill around root ball in layers, tamping to settle fill and eliminate voids and air pockets. When pit is approximately one-half backfilled, water thoroughly before placing remainder of backfill. Repeat watering until no more water is absorbed. Place and tamp final layer of planting soil mix and water thoroughly.

Remove nursery stakes after staking trees as specified and indicated.

GROUND COVER AND PLANT PLANTING

Set out and space ground cover and plants as indicated.

Dig holes large enough to allow spreading of roots and backfill with planting soil.

Work soil around roots to eliminate air pockets and leave a slight saucer indentation around plants to hold water.

Water thoroughly after planting, taking care not to cover plant crowns with wet soil.

Protect plants from hot sun and wind; remove protection if plants show evidence of recovery from transplanting shock.

PLANTING BED MULCHING

Mulch backfilled surfaces of all planting beds and other areas indicated.

Apply organic mulch to thickness indicated, and finish level with adjacent finish grades.

Do not place mulch within 6 inches of trunks or stems.

CLEANUP AND PROTECTION

During exterior planting, keep adjacent pavings and construction clean and work area in an orderly condition.

Protect exterior plants from damage due to landscape operations, operations by other

contractors and trades, and others. Maintain protection during installation and maintenance periods. Treat, repair, or replace damaged exterior planting.

DISPOSAL

Disposal: Remove surplus soil and waste material, including excess subsoil, unsuitable soil, trash, and debris, and legally dispose of them off Owner's property.

Payment - The contract price paid per square foot for "Plants/ Shrubs" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in planting, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Payment - The contract price paid per square foot for "Ground Cover" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in planting, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Payment - The contract unit price paid for each "Tree" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in planting, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

20-2. Landscape maintenance

Maintain all planted and hydroseeded areas for the following maintenance period by pruning, cultivating, watering, weeding, fertilizing, restoring planting saucers, tightening and repairing stakes and guy supports, and resetting to proper grades or vertical position, as required to establish healthy, viable plantings. Spray as required to keep trees and shrubs free of insects and disease. Restore or replace damaged tree wrappings.

Maintenance Period: 2 years from date of Substantial Completion.

Hand-water all container-grown tree, shrub and groundcover planting areas as necessary to ensure plant health and vigor. Water shall be provided via truck. Provide slow-release watering bags for all trees.

Prune, thin, and shape trees and shrubs only as directed by Engineer.

Hydroseeded areas and slopes shall be inspected periodically for damage due to wind, water, or human disturbance. Damaged areas shall be repaired immediately using hydro mulching per the original specifications; small areas may be repaired using organic mulch.

The Contractor shall submit a maintenance bond to the County equal to the value of the work and for a two-year term. The Contractor shall submit this maintenance bond for the County's review at least one month before notice of completion.

Payment - The contract lump sum price paid for "Landscape Maintenance" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in maintaining planting, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and

as directed by the Engineer.

20-3. Mulch Surfacing

The Contractor shall provide a high-quality shredded hardwood mulch free of contamination and install in the locations and to the depth shown on the Plans. The Contractor shall provide a sample of the mulch for review by the Engineer prior to ordering the material.

Payment - The contract price paid per square foot for "Shredded Hardwood Mulch Surfacing" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in mulching, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

END OF SECTION

SECTION 21. EROSION AND SEDIMENT CONTROL

The provisions of Section 21, “Erosion Control,” of the Standard Specifications are superseded by these Special Provisions.

The Contractor is advised that failure to fully comply with the provisions of this Section and/or Section 13, “Water Pollution Control,” of these Special Provisions, and all requirements listed in the National Pollutant Discharge Elimination System (NPDES) General Permit, San Francisco Bay Region Municipal Regional Stormwater NPDES Permit, and any resource agency permits obtained for the project, where applicable, except where amended in writing and signed by the Director of Public Works or his or her duly authorized representative, shall constitute substantial non-compliance with the requirements of the Clean Water Act, the NPDES permit program, and the Contract.

The County shall provide periodic site monitoring to ensure that the work complies with the requirements specified herein and in any resource agency permits. The County will provide the Contractor with copies of the monitoring reports. Should the work be found to be non-compliant, a follow up site monitoring visit will be conducted to ensure the items have been corrected. The costs associated with any compliance monitoring required beyond a single follow up site monitoring visit shall be deducted from the final payment for all of the Contract work.

21-1. Hydroseeding

The Contractor shall procure a native seed mix to the San Mateo Coast species, as indicated on the drawings, and implement hydroseeding consistent with Section 21-2 of the Standard Specifications.

Payment - The contract price paid per square foot for “Slope Stabilization Seeding” includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in hydroseeding, complete in place, as shown on the plans, as specified in the Standard Specifications and these special

provisions, and as directed by the Engineer.

21-2. Social Trail Slope Stabilization

In the locations shown on the Plans, the Contractor shall restore slopes with hydroseed and mulch. The hydroseed shall be consistent with Section 21-1 of these Special Provisions. After placement of hydroseed, the Contractor shall mulch the area.

Mulch shall consist of a uniform application of rice straw to a depth of not less than two (2) inches. Straw bales and flakes shall be broken apart and loosely spread prior to crimping. Mulch shall be manually crimped into the soil surface using rakes, pitch forks or other appropriate means. Mulch shall not be track-walked using heavy equipment.

Payment - The contract price paid per square foot for "Social Trail Slope Stabilization Seeding" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in hydroseeding, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

END OF SECTION

SECTION 26 AGGREGATE BASES

Upon establishing subgrade as required in Section 19 of these Special Provisions, the Contractor shall place Class II aggregate base in conformance to Section 26 of the Standard Specifications. This installation includes the following components:

- Aggregate base used for State Route 1 asphalt paving.
- Aggregate base used for the parking lot's asphalt paving.
- Exposed aggregate base used as a final surfacing for pedestrian and vehicle areas in the locations shown on the Plans.
- Aggregate base used for curbs, gutters, and other concrete elements described in Section 73 of these Special Provisions.

The gradation shall be $\frac{3}{4}$ inch maximum.

26-1. Aggregate Based Used in Paving

In the locations shown on the Plans, the Contractor shall place Class II aggregate base to prepare for asphalt pavement. The Class II aggregate base shall be compacted to 95% in accordance with ASTM D1557 at a near optimum moisture content.

Payment - The contract unit price paid per ton for "Parking Lot Aggregate Base" and "Highway 1 Aggregate Base" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in placing the aggregate, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

26-2. Aggregate Base Surfacing Treatment

In the locations shown on the Plans, the Contractor shall place Class II aggregate base as the final surface for the vehicle and pedestrian areas. The difference between the two items is the thickness as shown on the Plans. The work shall include the following

elements:

1. Complete earthwork as necessary to achieve the required subgrade elevation.
2. Scarify and re-compact the subgrade to 90% relative compaction.
3. Place Class II aggregate base and compact to 95% relative compaction.

Payment - The contract unit price paid per ton for "Vehicle Aggregate Surface" and "Pedestrian Aggregate Surface" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing parking area, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

26-3. Concrete Curbs, Gutters, and Flatwork

In the locations shown on the Plans, the Contractor shall place Class II aggregate base under concrete curbs, gutters, and flatwork as described in Section 73 of these Special Provisions. The Class II aggregate base shall be compacted to 95% in accordance with ASTM D1557 at a near optimum moisture content.

The contract price paid per ton for "Aggregate Base for Various Concrete Elements" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in placing aggregate for walkways and ramps complete in place, including, placement of aggregate base material, and disposal of unsuitable materials, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

26-4. Other Aggregate Base

Aggregate based as required by the Plans or these Special Provision shall be compacted to 95% in accordance with ASTM D1557 at a near optimum moisture content. The Engineer shall not measure and pay for this separately; it will be paid under the respective item of work.

END OF SECTION

SECTION 36 SURFACING AND PAVEMENTS

In the locations shown on the plans, the Contractor shall surface treatments for vehicles and pedestrians. These special provisions describe the requirements for asphalt paving, resilient surfacing, and aggregate surfacing.

36-1. Asphalt Paving

In the locations shown on the Plans, the Contractor shall install new asphalt paving for the parking lot and the widening of State Route 1.

The work shall include the following elements:

1. When widening pavement, sawcut along the existing asphalt to create a clean edge.
2. Remove the existing asphalt, concrete, vegetation, and other materials within the limits shown in the plans. Export all surplus materials and dispose in a legal manner and consistent with Section 14, "Construction Waste Management," and Section 5-11, "Disposal of Material Outside the Highway Right-of-Way," of these Special Provisions, by the Contractor at his or her expense.
3. Complete earthwork as necessary to achieve the required subgrade elevation.
4. Scarify and re-compact the subgrade to 95% relative compaction.
5. Place Class II aggregate base conforming to Section 26 of the Standard Specifications.
6. Place asphalt to the thicknesses as shown in the Plan and as described in this Section of the Standard Specifications.

The Contractor shall comply with Section 39, "Hot Mix Asphalt," of the 2010 Standard Specifications (unrevised) except as modified in these Special Provisions.

The Contractor shall make the following submittals:

- Submit JMF information on Form CEM-3511 and Form CEM-3512. Submit Form CEM-3513 or CEM-3514 for mixes that have been verified within last 12 months.

Provide most recent CEM-3513 if mix has not been verified within the last 12 months. For unverified mixes or out of date mix tests, final acceptance will be based on production startup tests and Contractor will be paving at their own risk.

- Submit Quality Control Plan that conforms to the current Caltrans Quality Control Plan Review Checklist for Hot Mix Asphalt. Allow 20 calendar days for review.
- Material Delivery Tickets shall be submitted daily.
- Contractor shall submit all quality control field test results daily and laboratory test results within 5 calendar days of sampling. The County will complete their own tests of the materials.

The materials used shall conform to the following:

Aggregate

The hot mix asphalt to be used will be as follows unless modified by the Engineer:

Base Courses:	3/4-inch, Type A
Intermediate Courses:	1/2-inch, Type A
	3/4-inch, Type A may be used for lifts of 2-1/2 inches or greater
Surface Courses:	1/2-inch, Type A
Leveling Courses:	3/8-inch, Type A

Asphalt Binder

The grade of asphalt binder mixed with aggregate for HMA (Type A) shall be as follows:

Base Course:	PG 64-10
Intermediate Course:	PG 64-10
Surface Course:	PG 64-10

Mix Properties

Mix voids shall be targeted at 3.5%.

The allowable production range for mix voids shall be 2.0% to 5.0%.

The mix shall include 0.5% of liquid anti-strip. No Warm Mix Additive shall be allowed.

Delivery Tickets

Material delivery tickets shall be submitted daily. Each delivery ticket shall include information on the material type, binder type, oil content, and the mix design number. Material delivered to the project without such annotations shall be subject to rejection.

The Contractor shall complete construction in accordance with the following requirements.

General

The paving shall be performed so no longitudinal paving joints remain at the end of each day's paving operation.

Surface Preparation

The work shall consist of preparing the existing street surfaces prior to the commencement of paving. Such work shall include removing raised pavement markers, removing thermoplastic traffic markings and legends, controlling nuisance water, sweeping, watering, and removing loose and broken pavement and foreign material as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer.

All vertical edges to be paved shall be tack coated. These include, but are not limited to, curb faces, gutter lips, swale edges, cross gutter edges, and pavement edges.

Tack coat shall be utilized and shall be either emulsified asphalt Grade RS-1, RS-1h, SS-

1, or SS-1h conforming to Section 94, "Asphaltic Emulsions," or paving grade asphalt conforming to Section 92, "Asphalts Binder."

The asphalt tack coat shall be placed with a calibrated distributor truck per Subsection 93-1.03C of the Standard Specifications, unless otherwise specified by the Engineer. The application temperature of the asphalt emulsion shall be 300 degrees Fahrenheit minimum and 375 degrees Fahrenheit maximum.

All cold joints, both longitudinal and transverse, shall be heated with a torch immediately prior to paving. Cold joints include previous passes placed more than three hours prior. All cold joints shall be tack coated.

Layout

The Contractor shall layout and mark the location of the edges of the paving passes of the surface course to match the new layout of the lane lines. The layout shall be made at least 24 hours prior to paving. The layout shall be approved by the Engineer prior to paving.

If the striping is to remain unchanged, the edges of the paving passes shall conform to existing lane edges.

In all cases where practical, each lane shall be paved in a single pass. In tapered transition areas, the shoulder areas shall be paved first, then the through lane shall be paved immediately after the shoulder paving.

For paving which incorporates new quarterpoints or gradebreaks due to keycuts or other conditions, the Contractor shall provide equipment capable of adjusting to the new surface profile at the appropriate locations. The profile adjustments shall be within twelve inches of the actual gradebreak or quarterpoint.

The Contractor shall take sufficient measurements during laydown to ensure that the full

design hot mix asphalt layer depth is provided at each quarterpoint, gradebreak, or transition. Failure to provide the design depth at these areas will result in rejection of the work. Correction of this rejected work will include milling out the new hot mix asphalt from the road edge to the centerline or nearest inside lane line and repaving. The minimum length of the milled and corrected area shall be fifty feet.

Tolerances

The finished hot mix asphalt surface shall be flush with, to 1/4 inch above, the gutter lips. The finished pavement surface shall not be lower than the gutter lips.

The average pavement thickness shall be equal to the specified thickness for the project.

For total pavement thicknesses of less than four inches, the minimum allowable thickness will be 1/4 inch less than that specified.

For total pavement thicknesses of four inches or more, the minimum allowable thickness will be 1/2 inch less than that specified.

Automatic Screed Controls

For all main line street or roadway paving with single lane length exceeding 300 feet, automatic screed controls shall be required. Automatic screed controls shall not be required for the paving of parking lots, intersections, cul-de-sacs, alleyways or other irregular areas.

In addition to the requirements in Section 39-1.10 and 39-1.11 of the Standard Specifications, hot mix asphalt shall be placed with spreading equipment equipped with fully automatic screed and grade sensing controls which shall control the longitudinal grade of the screed. Automatic controls shall conform to and be operated in accordance with the provisions herein.

Unless approved otherwise, ski-type devices with a minimum length of 30 feet shall be

used to provide a reference for the grade sensor. Skis shall be constructed and installed in such a manner that a reference to the average elevation of the existing pavement, along the length of the ski, is maintained at the sensor point. When placing surfacing adjacent to surfacing previously placed in conformance with these provisions, a joint matching shoe of adequate size and type to properly sense the grade of the previously placed mat may be used in lieu of the 30-foot ski.

The ski shall be mounted at a location which will provide an accurate reference for the surfacing being placed. This may require the ski to be mounted ahead of and inside the outer limits of the screed. Automatic cross slope control may be accomplished by use of a ski and grade sensor on each side of the paving machine.

Automatic screed controls shall be installed in such a manner that the occasional manual adjustments necessary to maintain the attitude of the screed parallel to the underlying pavement are readily accomplished. Automatic screed controls shall be installed so that with little or no delay, use of the automatic controls can be discontinued and the screed controlled by manual methods.

If it is determined by the Engineer that the existing grade and cross slope are too irregular for the automatic controls to provide the quality of work required, the use of the automatic controls shall be discontinued and the spreading equipment adjusted by manual methods. Use of automatic controls shall resume when the Engineer has determined that it is again practical and so orders.

Compacting

Rolling shall be performed as indicated in the referenced Caltrans specifications.

The roller water shall contain a soap type compound to prevent sticking of the HMA material to the rollers. The soap type compound shall not damage the HMA or impede the bonding of layers.

The number of rollers required for each paving operation shall be such that all rolling for density can be completed before the temperature of the hot mix asphalt mixture drops below 240 degrees Fahrenheit.

Breakdown rolling shall commence when the hot mix asphalt is placed. Rolling shall be accomplished with the drive wheel forward and with the advance and return passes in the same line.

For leveling courses, breakdown rolling shall consist of three coverages with an 8 to 12-ton pneumatic roller followed by a finishing coverage with a steel wheel roller. The rolling may begin with a single pass of a steel wheel roller until the pneumatic has sufficient opportunity to warm up to avoid tracking and picking up material from the mat. The pneumatic roller tires shall be treated with a non-petroleum based product to prevent pickup. Failure to successfully provide for breakdown rolling with the pneumatic roller after a reasonable warm up time will be cause for termination of paving activities until the Contractor can provide equipment which will perform without pickup.

The Contractor shall have hand-compaction equipment immediately available for compacting all areas inaccessible to rollers. Hand-compaction shall be performed concurrently with breakdown rolling. If for any reason hand-compaction falls behind breakdown rolling, further placement of hot mix asphalt shall be suspended until hand-compaction is caught up. Hand-compaction includes vibraplates and hand tampers. Hand torches shall be available for rework of areas which have cooled.

After compaction, the surface texture of all hand work areas shall match the surface texture of the machine placed mat. Any coarse or segregated areas shall be corrected immediately upon discovery. Failure to immediately address these areas shall cause suspension of hot mix asphalt placement until the areas are satisfactorily addressed, unless otherwise allowed by the Engineer.

Contractor Quality Control

The HMA shall be verified by the engineer prior to placement on the jobsite. If agreed to by the Contractor and the Engineer, the production start-up may be used for verification. If the production start-up is used for verification the Engineer may require removal and replacement of the HMA, at his discretion, in the event of verification failure.

Contractor quality control testing is optional. However, if the contractor fails to submit quality control results to the engineer within 72 hours of HMA placement, the contractor waives all rights to dispute the Engineer's results. In the event of asphalt binder or Hamburg wheel track testing by the Engineer, the contractor has 5 days to submit their test results from the time the Engineer informs the contractor that he is performing testing or the contractor waives the right to dispute the Engineer's results.

The Engineer shall test for conformance with aggregate quality characteristics at the beginning of the project.

The Engineer shall test air void content, Hveem stability, and voids in mineral aggregate (VMA) a minimum of once per day.

The Engineer may sample the hot mix asphalt from truck beds at the plant, from the hopper of the paving machine, or from the mat behind the paver at the discretion of the Engineer. The Contractor shall facilitate the sampling process.

Engineer's Acceptance

The County shall be notified 48-hours prior to scheduling pavement placement so that Quality Assurance personnel can be scheduled.

1. Materials Acceptance

Modify 39-3.02A Testing as follows:

Add the following footnote:

- h. Contractor can perform independent quality control testing continuously during paving using nuclear or non-nuclear methods.
- i. For minor HMA placement, the Engineer will monitor the contractor's work for conformance to the Method Process. In addition, the Engineer will collect HMA samples and verify the mix.

The Engineer may withhold acceptance in the event of any failing test result until the Contractor has addressed the failing material to the Engineer's satisfaction.

2. Compaction Acceptance

Each 750 tons, or part thereof, placed on an individual street in a paving day. If over 750 tons are placed in a single paving day on an individual street, up to 150 tons over 750 tons can be moved in to the previous 750 ton subplot.

The in-place density shall be between 92.0 percent and 97.0 percent of maximum theoretical unit weight using a nuclear gauge. Gauge compaction testing shall be performed in accordance with CTM 375. Final compaction is based on the average nuclear gauge results for the subplot. The nuclear gauge will be core correlated the first day of paving.

If nuclear gauge compaction testing results are failing, the contractor can request coring to verify the results. Three cores will be sampled for each subplot and the average of the three cores for each subplot will determine the in-place density. The core locations will be determined using random sampling charts in CTM 375. The engineer will mark the core locations.

Cores may be taken up to 5 calendar days after placement and may be 4 or 6 inches in diameter. The engineer will provide results within 3 working days of receiving the cores.

Passing cores shall be paid for by the owner. Failing cores will be paid for by the contractor. If the core testing produces both passing and failing cores, the cost will be prorated between the contractor and the owner.

Contractor shall core the full depth of the new overlay and existing asphalt layers and backfill the cores holes with rapid set concrete. The cores shall be sawcut at the new overlay line prior to testing. **Failure to backfill the core holes on the same day as the coring is performed will subject the Contractor to liquidated damages in the amount of \$250 per day per location.**

For the percent of maximum theoretical density, the following table shall apply to deductions for average compaction of a subplot:

**Reduced Payment Factors for % of Max. Theoretical
Density**

HMA (Type A) Percent of Maximum Theoretical Density	Reduced Payment Factor	HMA (Type A) Percent of Maximum Theoretical Density	Reduced Payment Factor
92.0	0.0000	97.0	0.0000
91.9	0.0125	97.1	0.0125
91.8	0.0250	97.2	0.0250
91.7	0.0375	97.3	0.0375
91.6	0.0500	97.4	0.0500
91.5	0.0625	97.5	0.0625
91.4	0.0750	97.6	0.0750
91.3	0.0875	97.7	0.0875
91.2	0.1000	97.8	0.1000
91.1	0.1125	97.9	0.1125
91.0	0.1250	98.0	0.1250
90.9	0.1375	98.1	0.1375
90.8	0.1500	98.2	0.1500
90.7	0.1625	98.3	0.1625
90.6	0.1750	98.4	0.1750
90.5	0.1875	98.5	0.1875
90.4	0.2000	98.6	0.2000
90.3	0.2125	98.7	0.2125
90.2	0.2250	98.8	0.2250
90.1	0.2375	98.9	0.2375
90.0	0.2500	99.0	0.2500
< 90.0	Remove and	> 99.0	Remove and

Payment -The contract unit price paid per ton for “Parking Lot Asphalt Paving” and “Highway 1 Asphalt Paving” includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in

constructing asphalt pavement, complete in place, including, saw cutting, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

The Contractor shall submit certified weight tags of all asphalt delivered to the project.

36-2. Resilient Surfacing

As shown on the Plans, the Contractor shall provide and place a resilient surfacing on the pathway from the parking area to the mid bluff. The Resilient surfacing is also known as an Admixture-bound Decomposed Granite Paving. This surfacing material shall consist of the following components:

1. Resilient Surfacing shall be a crushed decomposed aggregate blended with an admixture produced by GraniteCrete or approved equal. The decomposed aggregate shall have a 3/8" maximum gradation produced from naturally friable rock/granite with enough fines to produce a smooth walking surface. Materials should be free from clay lumps, organic matter, and deleterious material. Blends of coarse sand and rock dust are not acceptable. Gradation shall comply with ASTM C136. The admixture shall be Carmel Coast.
2. Permeable base material shall be washed and 100% fracture by mechanical means. There shall be no rounded sands or aggregates. The material shall conform to the following gradation:

Sieve	Allowable Range	Target Value
1"	100	100
3/4"	90-100	100
3/8"	40-100	78
No. 4	25-40	36
No. 8	18-33	26

No. 30	5-15	11
No. 50	2-10	6
No. 200	0-5	2

Test results by AASHTO Test Method T-27

Durability Index (CTM #229) 40 minutes

Sand Equivalent (CTM #217) 70

LA Rattler (CTM #211) 50 revs, less than or equal to 40%

3. Steel edging shall be ¼"-thick weathering steel.

Contractor shall install Admixture-bound Decomposed Granite Paving according to the manufacturer's recommendation for a commercial application, 3 bag mixture. The ratio for commercial applications is 12.5:1 (12.5 units of decomposed granite to 1 unit of GraniteCrete, or approved equal, measured in volume). The profile shall be 3" of Admixture-bound Decomposed Granite Paving on 4" base.

The Contractor installing the resilient surfacing shall have experience with the product and approved by the surfacing vendor. If not, the Contractor shall attend a pre-construction meeting with a representative from the vendor. All installation methods shall comply with the manufacturer's recommendations.

SUBMITTALS

The contractor shall submit the following:

Product data for each type of manufactured material and product indicated.

Samples of Admixture-bound Decomposed Granite Paving showing a range of standard colors using the indicated Decomposed Granite material or approved equal.

Sieve analysis of the Decomposed Granite material.

Sieve analysis and color of decomposed granite shall be approved, in writing, by the Engineer before any material is delivered to the Project.

MOCKUP

The contractor shall Construct one (1) 4'-0" x 4'-0" x thickness (thickness as shown in the Contract Drawings) for each type of decomposed granite pavement color as specified herein.

Build mock-Ups in the location and of the size indicated or, if not indicated, as directed by the Owner's Authorized Representative.

Notify Owner's Authorized Representative seven (7) days in advance of dates and times when mockups will be constructed.

Obtain Owner's Authorized Representative's written approval of mock-ups before starting construction.

Maintain approved mockups during construction in an undisturbed condition as a standard for judging the completed pavement.

Demolish and remove approved mockups from the site when directed by the Owner's Authorized Representative.

EXECUTION

The Contractor shall excavate the subgrade to the lines and grades as shown on the plans and in accordance with Section 19 of the Standard Specifications. This shall include the scarification and re-compaction of the top 4 inches of subgrade to 90% relative compaction.

The Contractor shall install the edging and place the permeable base material to 90% relative compaction.

The Contractor shall have the decomposed granite and admixture delivered to the site in a truck capable of self-mixing the product. Prior to placing the product, the Contractor

shall add water to moisten the mixture until it marbles or clumps together. The Contractor shall demonstrate to the Engineer that when taking a handful of the mixed material and gently squeezing, the material stays together in a clump and the color transfer to the hand.

The Contractor shall place the surfacing material atop the permeable base and spread using a landscape or asphalt rake until it is one inch above finish grade. The Contractor shall compact the surfacing using a lawn roller filled with water or a small, powered roller using static compaction. Do not allow the material to dry, mist with water as necessary. Compact the material until it complies with the grades shown on the Plans.

Once compaction is complete, lightly sweep the finished surface in a perpendicular pattern with a medium-bristled push broom. Then make several more passes with the roller.

To complete the installation, the Contractor shall dampen with water all newly-installed and compacted materials. Do not create puddles. Moisten the area a second time within 1 to 5 days.

Payment - The contract price paid per square foot for “Resilient Surfacing” includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing the pathway, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Payment - The contract price paid per ton for “Resilient Surfacing Permeable Aggregate Base” includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in providing the base, complete in place, including grading, subgrade preparation, placement of permeable base, and disposal of unsuitable materials, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

36-3. Driveway Repair

Should the construction activity destroy the asphalt driveway, the Engineer will direct the Contractor to repair it. This work shall include removal of the asphalt, scarification and re-compaction of the base materials, and application of a new lift of 4 inches of asphalt. The work associated with these items shall be in accordance with the requirements in other sections of these Special Provisions.

Payment - The contract unit price paid per ton for "Remove and Replace Asphalt Driveway" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in replacing the driveway, complete in place, including, removing the asphalt and disposal of unsuitable materials, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

The County reserves the right to eliminate this item, "Remove and Replace Asphalt Driveway," from the project completely. The Contractor shall request and receive written confirmation from the County as to the status of this item of work prior to incurring any costs. The Contractor shall not be entitled to any compensation under this item of work for any cost incurred should the Contractor proceed in advance of receiving written authorization from the County.

36-4. Decomposed Granite

Install Stabilized Decomposed Granite as indicated on the Plans. Stabilized Decomposed Granite shall be produced and installed according to the stabilizer manufacturer's recommendations.

SUBMITTALS

General: Submit the following:

Product Data: For each type of manufactured material and product indicated:

Decomposed Granite.

Organic Binder.

Herbicide.

Weed Control Fabric.

Samples: Submit one (1) sample for all surfacing materials and systems in this Specification Section to the Engineer.

Submit sample(s) of decomposed granite material for approval to ensure color will be compatible with the Project. Sample shall be sufficiently large (1/2 pound minimum) to illustrate clearly the functional characteristics and full range of color and texture of the material.

Sieve analysis: Submit sieve analysis of each type of proposed decomposed granite material to ensure it meets grading requirements.

Sieve analysis and color of decomposed granite shall be approved, in writing, by the Owner's Authorized Representative before any material is delivered to the Project.

Material Test Reports:

Certified copies of field test of compressive strengths of decomposed granite paving.

Qualification Data: Submit names for firms and persons specified in the "Quality Assurance" Article to demonstrate their capabilities and experience on similar decomposed granite paving projects within the past three (3) years. Include lists of completed projects with project names and addresses, names and addresses and other information specified to the Owner's Authorized Representative.

Written recommendation from the manufacturer/supplier of the soil stabilizer, indicating the quantity (pounds) of soil stabilizer required per ton of decomposed granite (lbs./ton). Recommendation shall be specific to the approved decomposed granite material.

QUALITY ASSURANCE

Installer Qualifications: An experienced installer who has completed pavement work similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.

Mock-Ups: Construct one (1) 4'-0" x 4'-0" x thickness (thickness as shown in the Contract Drawings) for each type of decomposed granite pavement color as specified herein.

Build mock-Ups in the location and of the size indicated or, if not indicated, as directed by the Owner's Authorized Representative.

Notify Owner's Authorized Representative seven (7) days in advance of dates and times when mockups will be constructed.

Obtain Owner's Authorized Representative's written approval of mock-ups before starting construction.

Maintain approved mockups during construction in an undisturbed condition as a standard for judging the completed pavement.

Demolish and remove approved mockups from the site when directed by the Owner's Authorized Representative.

Approved mockups may become part of the completed Work if directed by the Owner's Authorized Representative.

ORGANIC BINDER

Stabilizer product shall be a non-toxic, colorless, odorless, non-staining, concentrated organic powder that binds soil and crushed aggregate screenings together, creating a

natural-appearing, firm surface.

Product shall be “Stabilizer”, Stabilizer, Inc., 4832 East Indian School Rd., Phoenix, AZ 85018, (800) 336-2468, or approved equal.

Application Rate: Shall be as per written manufacturer’s recommendations. Minimum application rate of 12 lbs./ton.

DECOMPOSED GRANITE

Decomposed Granite material shall be as indicated on the Plans and shall comply with the following grading requirements:

Percentage of Weight Passing a Square Mesh Sieve AASHTO T11-82 and T27-82			
<u>Sieve Size</u>	<u>Percent Passing</u>	<u>Sieve Size</u>	<u>Percent Passing</u>
3/8"	100%	No. 30	40 – 50%
No. 4	95 – 100%	No. 50	25 – 35%
No. 8	75 – 80%	No. 100	20 – 25%
No.16	55 – 65%	No. 200	5 – 15%

Gradation analysis of the Decomposed Granite material shall be reviewed and approved by the Engineer and by the Stabilizer product representative.

Decomposed Granite shall be clean, hard, durable particles or fragments of ¼” minus select crushed granite, river rock, or basalt. Fines shall be evenly mixed throughout the aggregate. When produced from gravel, fifty percent (50%) by weight of the material retained on a No. 4 sieve shall have one (1) fractured face.

The portion retained on the No. 4 sieve shall have a maximum percentage of wear of 50 at 500 revolutions as determined by AASHTO T96-77.

The portion passing a No. 4 sieve shall have a maximum liquid limit of 25 and a maximum plasticity index of 7, as determined by AASHTO T89-81 and AASHTO 90-81 respectively.

The decomposed granite material shall be free from clay lumps, vegetable matter, and deleterious material.

Payment - The contract price paid per square foot for "Stabilized Decomposed Granite Paving" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing the pathway, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

END OF SECTION

SECTION 47 EARTH RETAINING SYSTEMS

The Contractor shall install retaining walls to the lines and grades as shown on the Plans. These walls shall be steel soldier piles with wood lagging. Wood lagging shall redwood 4x12 construction heart grade, rough sawn.

This work consists of furnishing and placing steel soldier piles into drilled holes. The Contractor shall furnish soldier piles consisting of structural steel members that meet the plan requirements and conform to ASTM A572, Grade 60. All soldier piles shall be galvanized. Do not field weld or splice steel soldier piles.

Excavate the hole for the drilled shaft within 3 inches of the plan location. Place the soldier pile within the hole so it is vertical and not inclined more than 1 inch between top to bottom. Place the soldier pile so that the flanges are parallel to the centerline of the row of drilled shafts. Do not allow the orientation of the flanges to vary by more than 10 degrees. Support the soldier pile so that it does not move during concrete placement.

Concrete shall have a compressive strength of 3,000 PSI. Place concrete to the elevation for the top of the drilled shaft. The Contractor may place concrete using the free fall method provided the depth of water is less than 6 inches and the concrete falls without striking the sides of the hole. Pouring concrete along the web of the soldier pile is acceptable.

Remove concrete as necessary from around the soldier pile to place the lagging. Place lagging so that the soldier pile flange overlaps the end of the lagging by at least 2 inches at both ends of the lagging. Wait at least 12 hours after placing concrete before placing lagging.

Sequence of Installation: The installation sequence shall be such that no drilled shaft is installed adjacent to either an open drilled shaft excavation or a drilled shaft in which the

concrete has less than a 48-hour cure. Installing the shafts in an alternating sequence or any other sequence that meets this criterion is permissible.

Protection of Unattended Open Shafts: Care shall be exercised to cover unattended open shafts. Temporary covers shall be of adequate strength to prevent a person or animal from falling in. No drilled shaft excavation shall be left un-poured overnight.

The Contractor shall furnish timber lagging. To permit drainage, provide 1/4 to 1/2-inch spaces between lagging boards using 3/8-inch thick spacer blocks or other means acceptable to the Engineer. Place the lagging boards between the flanges of the soldier piles and bearing against the flanges on the exposed side of the wall so that the soldier pile flange overlaps the end of the lagging by at least 2 inches at both ends of the lagging boards.

The void area behind the lagging shall be backfilled with clean 1 inch diameter drain rock.

Payment. The contract price paid per square foot for "Soldier Pile Wall" and "Soldier Pile Wall (Taller than 4 feet)" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing walls, complete in place, including, preparatory grading, shaft drilling, concrete, beams, lagging, drain rock backfill, and disposal of unsuitable materials, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

END OF SECTION

SECTION 61 STORM WATER QUALITY

The Contractor shall construct storm water quality facilities in the location as shown in the Plans. The Contractor shall complete earthwork as detailed in Section 19 of these Special Provisions.

Any unsuitable material removed shall be removed and disposed of outside the highway right of way in accordance with the provisions of Section 5-11, "Disposal of Material Outside the Highway Right-of-Way," of these Special Provisions, by the Contractor at his or her expense.

61-1 Class II Permeable Backfill

Upon achieving the grade as defined in the Plans, the Contractor shall install Class II permeable material in accordance with Section 68 of the Standard Specifications compacted to 95% relative compaction in accordance with ASTM D-1557.

When placing the permeable material, the Contractor shall install a subdrain as described in Section 68 of these Special Provisions.

Payment - The contract price paid per cubic yard for "Class II Permeable" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in providing the permeable material, complete in place, including, excavation, subgrade preparation, and disposal, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

61-2 Bioretention Area Soil

The bio retention area shall be installed as detailed in the Bay Area Stormwater Management Agencies Association (BASMAA) "Specification of Soils for Biotreatment or Bioretention Facilities" dated April 18, 2016.

The soil shall be placed in 8-to-12-inch lifts. All backfill materials shall not be

compacted but placed to minimize the possibility of excessive settlement. The Contractor may water soils to encourage compaction. Do not plant the bioretention area until the process of natural compaction is complete, as determined by the Engineer.

Planting of the bioretention area shall be as shown on the Plans and as detailed in Section 20 of these Special Provisions.

Payment - The contract price paid per cubic yard for "Bioretention Soil" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in installing bioretention soil, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

END OF SECTION

SECTION 64 PLASTIC PIPE

The Contractor shall construct storm water quality facilities in the location as shown in the Plans. All storm drain pipe shall be SDR 35 polyvinyl chloride conforming to ASTM D3034. The Contractor shall complete installation as detailed in Section 64-2 of the Standard Specifications.

Any unsuitable material removed shall be removed and disposed of outside the highway right of way in accordance with the provisions of Section 5-11, "Disposal of Material Outside the Highway Right-of-Way," of these Special Provisions, by the Contractor at his or her expense.

Complete field leakage testing consistent with the requirements of Section 61-2.01D(3) of the Standard Specifications.

Payment. The contract price paid per linear foot for "12" PVC Pipe" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in installing storm drainage pipe, complete in place, including, trenching, backfill, compaction, and surface restoration, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

END OF SECTION

SECTION 68 SUBSURFACE DRAINS

The Contractor shall install subsurface drainage for the landslide repair as described in Section 19-3 as well as for the bioretention area described in Section 61-1 of the Special Provisions and as shown on the Plans.

All subsurface drainage pipe shall be smooth-wall PVC corresponding to Section 68-2.02D of the Standard Specifications.

Payment. The contract price paid per linear feet for “8” Perforated Pipe and “6” Perforated Pipe” includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in placing pipe, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Payment. The contract unit price paid for each “Subdrain Cleanout” includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in placing the cleanout, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

END OF SECTION

SECTION 70 MISCELLANEOUS DRAINAGE FACILITIES

The Contractor shall install the stormwater inlets and related infrastructure as shown on the Plans. All drain inlets shall be precast concrete shall be precast concrete conforming to Section 70-4 of the Standard Specifications. Grates and similar components shall be consistent with Section 70-5 of the Standard Specifications.

Payment. The contract unit price paid for each "Overflow Drain Inlet", "Turning Structure", and "Drop Inlet with Side Opening" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in installing drainage structures, complete in place, including, excavation, backfill, and compaction, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

END OF SECTION

SECTION 72. ROCK SLOPE PROTECTION

Attention is directed to Section 72-2 “Rock Slope Protection” of Standard Specifications, these Special Provisions, the Standard Plans, the Project Plans, and the directions of the Engineer. This work shall include the furnishing and placement of rock slope protection (RSP) for the following elements:

- Rock slope protection for storm drain outfalls, which shall be Class 1 placed by Method A.
- Cobble used to dissipate the energy in bioretention areas from cuts in the curbs, which shall be rock that is shown on the Plans.

Payment. The contract price paid per ton for “Outfall Rock Dissipater” includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved placing RSP, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Payment. The contract unit price paid for each “Curb Cuts with Cobble Rock” includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved placing rock, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

END OF SECTION

SECTION 73 CONCRETE CURBS AND SIDEWALKS

The Contractor shall install concrete elements as shown on the Plans, as detailed in Section 73 of the Standard Specifications, and as included in this Special Provisions.

For all work related to this Section, the Contractor shall export all surplus materials including soil and dispose in a legal manner and consistent with Section 14, "Construction Waste Management," and Section 5-11, "Disposal of Material Outside the Highway Right-of-Way," of these Special Provisions.

73-1. Concrete Curb and Gutter

In the locations shown on the Plans, the Contractor shall install concrete curb and gutters. The work shall include the following elements:

1. Complete earthwork as necessary to achieve the required subgrade elevation.
2. Scarify and re-compact the subgrade as required in Section 19-1 of these Special Provisions.
3. Place Class II aggregate base conforming to Section 26 of these Special Provisions.
4. Form and pour concrete curbs and gutters, curbs, and similar elements using minor concrete as described in Section 73 of the Standard Specifications.
5. Cure all concrete consistent with Section 73-1.03E of the Standard Specifications.

Concrete curbs and gutters with breaks for bioretention will be measured and paid as standard concrete curbs and gutters.

Payment - The contract prices paid per linear foot for "Concrete Curb"; "Concrete Curb and Gutter"; "Flush Concrete Curb"; "Extended Concrete Curb and Gutter"; and "Retaining Curb and Gutter" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing concrete elements, complete in place, including, construction of formwork,

placement of concrete, and disposal of unsuitable materials, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

73-2. Concrete Flatwork

In the locations shown on the Plans, the Contractor shall install concrete walkways and curb ramps. The work shall include the following elements:

1. Complete earthwork as necessary to achieve the required subgrade elevation.
2. Scarify and re-compact the subgrade as required in Section 19-1 of these Special Provisions.
3. Place Class II aggregate base conforming to Section 26 of these Special Provisions.
4. Form and pour concrete curbs and gutters, curbs, and similar elements using minor concrete as described in Section 73 of the Standard Specifications. Note that the finish of the concrete shall be as shown on the Plans.
 - a. Provide 4' x 4' (min.) mockups for each type of finish, for approval by Engineer prior to full pour. For exposed aggregate finish, provide 3 mockups with different levels of chemical-retarder exposed aggregate corresponding to Top-Cast numbers 25, 50 and 75 for Engineer's selection.
5. Cure all concrete consistent with Section 73-1.03E of the Standard Specifications.
6. As shown on the Plans, install detectable warning device consistent with yellow color number 33538.

The contract price paid per square foot for "Curb Ramp"; "Concrete Walkway (Type A Finish)"; and "Concrete Walkway (Type B Finish)" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing flatwork complete in place, including, applying surface treatments and tactile domes, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

73-3. Concrete Stairs

In the locations shown on the Plans, the Contractor shall construct concrete stairs. The 28-day compressive strength shall be 3,600 psi or greater. The combined aggregate grading shall be either the 1-inch maximum grading, the 1/2-inch maximum grading, or the 3/8-inch maximum grading and shall conform to the requirements in Section 90 of the Standard Specifications.

Reinforcement shall conform to the provisions in Section 52, "Reinforcement," of the Standard Specifications and these Specifications. Bar reinforcement to be epoxy coated shall conform to the ASTM designation and grade required as indicated in the Plans.

Concrete finish shall be as shown in the Plans. Cure concrete consistent with Section 73-1.03E of the Standard Specifications.

The Contractor shall install handrails along the stairs per the plans. See section 75-1 of these Special Provisions for handrails.

Each stair shall be topped with wood as shown on the Plans.

The contract price paid per cubic yard for "Wood Topped Stairs" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing flatwork complete in place, including constructing handrails, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

END OF SECTION

SECTION 75 MISCELLANEOUS METALS

The Contractor shall furnish and install gates, guardrails, barriers, and bollards as shown on the Plans and as detailed in this Special Provision.

75-1. Handrails

The Contractor shall furnish a shop drawing of the handrail for review and approval by the Engineer. The handrail shall include the following elements:

1. Galvanized Steel Handrails: Standard Steel Pipe, Architectural Handrail Grade, of diameter and sizes indicated. Exterior metal handrails shall be hot-dip galvanized. Provide terminal safety returns for all stair handrails. Include all fittings and components, sleeves, hardware, backing plates, and accessories as required for complete and finished handrail installations.
2. Steel Pipe: Pipe for railings, pipe supports, and pipe sleeves shall be seamless steel pipe, conforming to ASTM A53/A53M, Type S, Grade A, of diameters and sizes indicated. Special instructions shall be given the pipe manufacturer to provide Architectural Handrail Grade pipe.
3. Plate: Steel plate for anchor plates shall be standard steel plate, conforming to ASTM A36/A36M, weldable quality.
4. Stainless Steel Handrails:
 - Tubing: ASTM A 554, Grade MT 316L.
 - Pipe: ASTM A 312/A 312M, Grade TP 316L.
 - Plate and Sheet: ASTM A 666, Type 316L.
 - Bars and Shapes: ASTM A 276, Type 316L.
 - Finish: Directional Satin Finish No. 4.

PERFORMANCE REQUIREMENTS

Structural Performance for handrails: Provide railings capable of withstanding the effects of gravity loads and the following loads and stresses within limits and under

conditions indicated:

Uniform load of 50 lbf/ ft. (0.73 kN/m) applied in any direction.

Concentrated load of 200 lbf (0.89 kN) applied in any direction.

Uniform and concentrated loads need not be assumed to act concurrently.

Control of Corrosion: Prevent galvanic action and other forms of corrosion by insulating metals and other materials from direct contact with incompatible materials.

SUBMITTALS

Product Data: For grout, anchoring cement, and paint products.

Shop Drawings: Include plans, elevations, sections, details, and attachments to other Work.

For railings indicated to comply with design loads, include structural analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

Samples: For each exposed finish and metal stock shape required. Provide sample of finishing of weld at connection of handrail to post.

All mild steel railings and related items shall be galvanized, after fabrication, by the hot-dip process in accordance with ASTM A123/A123M and ASTM A385/A385M. Weight of zinc coating shall conform with requirements specified under "Weight of Coating" in ASTM A123/A123M.

The Contractor shall cast concrete as shown in the Plans and as required in Section 73 of the Standard Specifications.

Install metal handrails and railings as indicated and in accordance with the approved Shop Drawings, using workers skilled and experienced in the installation of the type of work involved. Conform with the installation requirements of National Association of

Architectural Metal Manufacturer's Pipe Railing Systems Manual, as applicable.

Install metal handrails and railings with accessories furnished by the railing fabricator as required for complete and finished railing installations. Installation of handrails and railings shall be in accordance with approved Shop Drawings, true and horizontal, perpendicular, or at the required angle, as the case may be, level and square, with angles and edges parallel with related lines of the building or structure.

Field welding, where required, shall conform with requirements of Section 11 of the Standard Specifications.

Galvanized surfaces which have become damaged from welding, handling, or installation shall be repaired immediately after installation with galvanizing repair material in accordance with ASTM A780/A780M.

The railing shall be affixed to the foundation using a non-shrink grout complying with ASTM C1107.

Create a mockup for a standard section of handrail for approval by Engineer. Approved mockups may remain in place.

Payment. The contract price paid per linear foot for "Handrail" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in installing handrails, complete in place, including, providing shop drawings, excavating for footings, placement of concrete, and fabricating handrails, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Handrails for staircases are not paid under this item of work. See Section 73-3 of these Special Provisions for more information.

75-2. Guardrails

The Contractor shall furnish and install guardrail of the sizes and types shown on the Plans. All metal and fasteners used in the fabrication shall be grade 316 stainless steel:

Tubing: ASTM A 554, Grade MT 316L.

Pipe: ASTM A 312/A 312M, Grade TP 316L.

Plate and Sheet: ASTM A 666, Type 316L.

Bars and Shapes: ASTM A 276, Type 316L.

Finish: Directional Satin Finish No. 4.

The top rail shall be redwood grade B Heart and shall be smooth on all sides.

Wire net infill material shall be Carl Stahl X-TEND, or equal, manufactured from robust, high-grade DIN 1.4401/AISI 316 stainless steel cables. The cables are swaged with tinned copper (type CX) or stainless steel (types CXE and CXS) clamps in a special process to form a mesh structure that is both stressable and flexible and suited for either two- or three-dimensional applications.

PERFORMANCE REQUIREMENTS

Structural Performance for guardrails: Provide railings capable of withstanding the effects of gravity loads and the following loads and stresses within limits and under conditions indicated:

Uniform load of 50 lbf/ ft. (0.73 kN/m) applied in any direction.

Concentrated load of 200 lbf (0.89 kN) applied in any direction.

Uniform and concentrated loads need not be assumed to act concurrently.

Control of Corrosion: Prevent galvanic action and other forms of corrosion by insulating metals and other materials from direct contact with incompatible materials.

SUBMITTALS

Product Data: For grout, anchoring cement, and paint products.

Shop Drawings: Include plans, elevations, sections, details, and attachments to other Work.

For railings indicated to comply with design loads, include structural analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

Samples: For each exposed finish and metal stock shape required. Provide sample of finishing of weld at connections.

Provide a mockup of a full section of guardrail with two posts for approval by Engineer prior to installation of guardrails. Approved mockups may remain in place.

The guardrail can either be affixed to the deck or embedded into the ground. The unit price paid is the same regardless of the type installed.

Payment. The contract price paid per linear foot for "Guardrail" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in installing guardrails, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

75-3. Bollards

The Contractor shall furnish and install removable bollards of the type shown in the Plans. This work shall include providing concrete footings using minor concrete as defined in Section 90 of the Special Provisions.

Payment. The contract unit price paid for each "Bollards" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the

work involved in installing bollards, complete in place, including, placement of a concrete foundation, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

75-4. Vehicle Gate

The Contractor shall furnish and install metal swing gates as shown in the Plans. The height of the gate from bottom to top rail shall be no less than 48 inches. The metal swing gate shall be a cantilever type fabricated from galvanized steel conforming to ASTM A123. The galvanizing shall be hot-dipped, zinc-coated accessories of ferrous material with weight of zinc coating not less than 1.2 ounces per square foot. Any steel hardware that is not galvanized shall be grade 316 stainless steel.

Each gate assembly shall be installed to completely close the driveway; the gates shall be double swing and fabricated to the ASTM F2656 standard. The gate shall have hinges that allow one person to easily swing the gate open and close.

The Contractor shall complete the installation as follows:

1. Install gates true to opening and plumb in closed position within a vertical tolerance of one half inch.
2. Hang gates so that bottom of gate is as close to ground as practical (8 inches max.) while allowing sufficient clearance for free operation through at least 120 degrees in one direction from the closed position.
3. When the gates are installed, there shall be no visible deflection from the horizontal.
4. Gate hardware shall be installed in a manner to mitigate tampering and/or removal, e.g., by brazing, peening or welding to prevent removal with hand tools. Hinges shall be tamper proof and installed to prevent the gate from being lifted off.

5. The gate shall be able to be locked in place either open or closed. This shall allow up to three locks to be installed on the gate.
6. The gate, posts, and related appurtenances shall be painted yellow (RAL 1003) using a gloss finish of exterior grade paint.
7. Each gate shall have one OM4-1 object marker installed.

The Contractor shall provide a foundation for the gate using concrete with a compressive strength of 3,000 PSI in accordance with Section 90 of the Standard Specifications. The gate's foundation shall be mechanically fastened to the vertical post using grade 316 stainless steel bolts, nuts, and washers.

Prior to procuring materials for the gate, the Contractor shall provide a submittal and/ or shop drawings illustrating the unit for the Engineer's review and approval.

The contract unit price paid for each "Gate" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in installing a gate, complete in place, including, placement of a concrete foundation and sign, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

A gate is measured as one post, one gate arm, and one foundation. Thus, a double swing gate is measured as two (2) gates.

75-5. Weathering Steel

This Section includes the following:

1. Weathering Steel Fascia.
2. Weathering Steel Edging.

SUBMITTALS

Shop Drawings: Include plans, elevations, sections, and details of metal fabrications and their connections. Show anchorage and accessory items.

Samples: For each Weathering Steel Fascia and Edging

PRODUCTS

METALS

Provide materials with smooth, flat surfaces without blemishes.

Steel Fascia and Steel Edging: ASTM A606-4 Weathering Steel Plates & Sheets

FABRICATION

Preassemble items in the shop to greatest extent possible.

1. Use connections that maintain structural value of joined pieces. Cut, drill, and punch metals cleanly and accurately. Remove burrs and ease edges. Remove sharp or rough areas on exposed surfaces.
2. Weld corners and seams continuously. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals. Obtain fusion without undercut or overlap. Remove welding flux immediately. Finish exposed welds smooth and blended.
3. Form exposed connections with hairline joints, flush and smooth, using concealed fasteners where possible. Locate joints where least conspicuous.
4. Fabricate seams and other connections that will be exposed to weather in a manner to exclude water. Provide weep holes where water may accumulate.
5. Where units are indicated to be cast into concrete or built into masonry, equip with integrally welded steel strap anchors, not less than 24 inches (600 mm) o.c.

FINISHES

Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes. Finish metal fabrications after assembly.

Weathering Steel Finishes: Fascia – Medium Sand Blast Finish to remove mill scale.

EXECUTION

Perform cutting, drilling, and fitting required for installing metal fabrications. Set metal fabrications accurately in location, with edges and surfaces level, plumb, and true.

1. Fit exposed connections accurately together. Weld connections that are not to be left as exposed joints but cannot be shop welded. Do not weld, cut, or abrade surfaces of exterior units that have been hot-dip galvanized after fabrication.
2. Provide anchorage devices and fasteners where metal fabrications are required to be fastened to in-place construction.
3. Provide temporary bracing or anchors in formwork for items that are to be built into concrete, masonry, or similar construction.
4. Set bearing and leveling plates on cleaned surfaces using wedges, shims, or leveling nuts. After bearing members have been positioned and plumbed, tighten anchor bolts and pack solidly with non-shrink, nonmetallic grout.

PAYMENT. Full compensation for conforming to the requirements of this section shall be considered as included in the unit prices paid for the various Contract items of work, and no additional compensation will be allowed therefor.

END OF SECTION

SECTION 77 AMENITIES

As shown in the Plans and as described in these Special Provisions the Contractor shall furnish and install various amenities at the site.

77-1. Wood

The Engineer will supply salvaged wood for use in constructing benches and related amenities as described in these Special Provisions. The wood is various conifers, principal redwood, and will be supplied rough sawn in 16 foot lengths as follows:

- 32 - 8x6
- 15 - 4.5x8
- 2 - 15x5x10
- 2 - 15x5x17
- 4 - 10x5x6
- Logs as required

The Contractor may pickup the wood at Memorial Park located at 9500 Pescadero Creek Rd, Loma Mar, CA 94021 after October 15, 2023.

Payment. Full compensation for conforming to the requirements of this section shall be considered as included in the unit prices paid for the various Contract items of work, and no additional compensation will be allowed therefor.

77-2. Wood Decks

As shown on the project plans and as described in these special provisions, the Contractor shall provide and place wood decking generally as follows:

- An overlook at the parking lot at the top of bluff – two decks.
- At one location along the ramp from the top of the bluff to the mid bluff.

- An overlook at the mid bluff near the bottom of the tail.

Prior to procuring materials, the Contractor shall provide shop drawings illustrating the materials and layout for each deck for the Engineer's review and approval.

The materials used shall comply with the following:

1. All decking shall be redwood.
 - a. Wood products must be certified by the Forest Stewardship Council (FSC) or USGBC-approved equivalent.
 - b. Posts and timbers shall be grade construction heart and shall be surfaced four sides.
 - c. Decking shall be grade B Heart.
2. Structural members not exposed to view shall be pressure treated lumber, type as recommended for the use category by the Western Wood Preservatives Institute. Hand-apply chemical treatment to all cut surfaces of lumber.
3. Fasteners used shall be type 316 stainless steel.
4. Connectors shall be stainless steel.
5. Concrete shall comply with Section 73 of the Standard Specifications.

All concrete foundations shall be concrete cast into a drilled hole. All connections between wood and concrete as well as wood and wood shall be by metal connector with fasteners.

The guardrails are paid under Section 75-2 of these Special Provisions.

The construction of the decks shall include weathered steel plates as shown on the Plans and as required in Section 75-5 of these Special Provisions.

Payment. The contract price paid per square foot for "Wood Decking," includes full

compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing raised wooden decks, complete in place, including, grading, subgrade preparation, installation of footings and grade beams, deck construction, and disposal of unsuitable materials, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

77-3. Amphitheater

As shown in the Plans, the Contractor shall install an amphitheater, which shall include the following elements:

1. Concrete stairs
2. Handrails which shall comply with Section 75-1 of these Special Provisions.
3. Concrete seat walls with timber seating
4. Concrete end wings
5. A short concrete stem wall as shown on Sheet L-301 in Section 1.
6. All other elements required to construct the amphitheater unless specifically excluded from this section.

Other elements of the amphitheater that are paid under separate items includes:

1. Clearing and grubbing in accordance with Section 17 of these Special Provisions.
2. Grading in accordance with Section 19 of these Special Provisions.
3. Resilient surfacing paving in accordance with Section 36-2 of these Special Provisions.
4. Donor plaques for the seat backs described in Section 77-8 of these Special Provisions.

Stairs and Other Concrete Elements

In the locations shown on the Plans, the Contractor shall construct concrete stairs. The 28-day compressive strength shall be 3,600 psi or greater. The combined aggregate grading shall be either the 1-inch maximum grading, the 1/2-inch maximum grading, or the 3/8-inch maximum grading and shall conform to the requirements in Section 90 of the Standard Specifications.

Reinforcement shall conform to the provisions in Section 52, "Reinforcement," of the Standard Specifications and these Specifications. Bar reinforcement to be epoxy coated shall conform to the ASTM designation and grade required as indicated in the Plans.

Concrete finish shall be as shown in the Plans. Cure concrete consistent with Section 73-1.03E of the Standard Specifications.

The Contractor shall install handrails along the stairs per the plans. See section 75-1 of these Special Provisions for handrails.

Seating

1. Concrete shall be minor as defined in Section 73 of the Standard Specifications.
2. Obtain wood as detailed in Section 77-1.
3. Obtain wood as detailed in Section 77-1.
4. Any additional wood required for construction shall be redwood.
 - a. Other wood products must be certified by the Forest Stewardship Council (FSC) or USGBC-approved equivalent.
 - b. Wood shall be grade B Heart.
5. Fasteners used shall be type 316 stainless steel.
6. Connectors shall be stainless steel.

Payment. The contract lump sum price paid for "Amphitheater" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing the amphitheater, complete in place, including, stairs, handrails, end wings, and seating, as shown on the plans, as specified

in the Standard Specifications and these special provisions, and as directed by the Engineer.

77-4. Rammed Earth Seat Wall

Description: stabilized rammed earth walls including reinforcing, control joints, admixtures, and sealant used as seating and as a donor wall shown on sheets L-509 and L-512 of the Plans. See Section 77-8 for payment of the Rammed Earth Donor Wall.

SUBMITTALS

Samples: Submit 5 earth mix samples indicating color range possible and size of particles for soil, sand, and aggregates. Engineer to approve final mix.

Shop Drawings: Indicate expected minimum performance, list of materials, reinforcing, formwork materials and placement, mix ratios, admixture ratios, waterproofing details, joint location and details.

Material Safety Data Sheets on cement type, admixtures, and sealant.

QUALITY ASSURANCE

Acquire cement and soil from the same source for all work. Soil color range to match coastal bluff. Soil from site grading may be evaluated per submittal instructions for color approval.

Compressive Strength to be determined through approved geotechnical testing.

Installer Qualifications: Specialists performing the work of this section must be supported by one professional with minimum 10 years insulated rammed earth experience.

Completed rammed earth is non-uniform in color and texture. Non-structural shrinkage

cracks, non-structural “character flaws”, and efflorescence may occur.

PRODUCTS

All earth materials to be extracted from within a 50 mile radius of the site.

RAMMED EARTH MATERIALS

1. Portland Cement: CAN/CSAA3001, Grey color, 8-10%.
2. Proprietary mix of amended soil and admixtures.
3. Water: clean and not detrimental to rammed earth.
4. Color mix as per Engineer’s selection.

ADMIXTURES

Chemical Admixtures: as recommended by rammed earth installer, and including:

1. Plasticure, or approved equal, for waterproofing.

ACCESSORIES

Provide concrete bonding slurry for concrete slab for increased adhesion and damp proofing:

1. Bondall, Laticrete, or approved equal.
2. Or provide crystalline waterproofing slurry if recommended by rammed earth subcontractor.

Provide sealant for finishing treatment for walls as directed by rammed earth subcontractor:

1. Clear solvent based acrylic polymer sealer

FORMWORK

No tie holes to be permitted. Provide formwork surface sufficient to provide a visually smooth finish.

Vertical formwork joints should not be visible. Horizontal formwork joints should not be

visible except at day-lines on finished surface.

Vertical control/articulation joints to be placed 10 feet on center, 1 inch vee joint.

Corners and edges to be chamfered at 45 degrees, 1 inch.

RAMMED EARTH MIX

Mix and deliver rammed earth to meet the following criteria:

1. Mix capable of producing a durable and solid rammed earth wall, less than 20% clay.
2. Cement Type: Portland Cement
3. Compressive Strength (100 day): minimum 1500 psi
4. Nominal size of soil/sand/aggregate: as approved by Engineer.
5. Provide waterproofing admixture as recommended by rammed earth subcontractor.

EXECUTION

EXAMINATION

Verify existing conditions before starting work.

Verify all dimensions and locations required on drawings.

Verify requirements for rammed earth cover over reinforcement.

Verify that anchors, seats, plates, reinforcement and other items to be cast into rammed earth are accurately placed, positioned securely, and will not impede rammed earth placement.

PREPARATION

Prepare previously placed concrete slab according to rammed earth installer's instructions. Provide adhesion / waterproofing slurry at top of slab prior to first rammed earth placement. Coordinate the placement of joint devices with erection of rammed earth formwork and placement of form accessories.

PLACING RAMMED EARTH

Place rammed earth in accordance with rammed earth contractor's recommendations. Install reinforcing according to shop drawings. Install individual lift for full length of wall in forms indicated on drawings in approximately 4 inch lifts. Compress with pneumatic tampers along full length of wall. Notify Engineer minimum 24 hours prior to commencement of operations. Ensure formwork, reinforcement, and contraction joints are not disturbed during rammed earth placement.

CURING AND PROTECTION

Immediately after placement, protect rammed earth from rain and flowing water, premature drying, excessively hot or cold temperatures, and mechanical damage. Maintain rammed earth with minimal moisture loss at relatively constant temperature for period necessary for hydration of cement and hardening of rammed earth.

FIELD QUALITY CONTROL

Field inspection and testing as per Engineer's direction. Allow Engineer to inspect rammed earth surfaces immediately upon removal of forms. Patch imperfections as directed.

DEFECTIVE RAMMED EARTH

Defective Rammed earth: Rammed earth not conforming to required lines, details, dimensions, tolerances or specified requirements. Repair or replacement of defective rammed earth will be determined by Engineer. Do not patch, fill, touchup, repair, or replace exposed rammed earth except upon express direction of Engineer for each individual area.

Payment. The contract unit price paid for each “Rammed Earth Seat Wall” includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing benches, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

77-5. Benches and Seat Walls

In the locations shown on the Plans, the Contractor shall construct benches of the following types.

1. Top of Bluff Seatwalls Type A – Multiple locations and sizes.
2. Top of Bluff Seatwalls Type B – Multiple locations and sizes.
3. Mid Bluff Timbers Bench – Multiple locations and sizes.

The materials used shall comply with the following:

1. Obtain wood as detailed in Section 77-1.
2. All other wood shall be redwood and shall comply with the following:
 - a. Certified by the Forest Stewardship Council (FSC) or USGBC-approved equivalent.
 - b. Wood shall be grade B Heart.
3. Fasteners used shall be type 316 stainless steel.
4. Connectors shall be stainless steel.
5. Concrete shall comply with Section 73 of the Standard Specifications.

All exposed concrete shall be finished smooth. The timber bench will require shaping, which shall be done under the direction of the Engineer. All wood shall be finished smooth.

Payment. The contract lump sum price paid for “Top of Bluff Seatwalls Type A”, “Top of

Bluff Seatwalls Type B” and “Mid Bluff Timber Bench” includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing benches, complete in place, including, but not limited to, grading, subgrade preparation, placement of aggregate base material, construction of formwork, placement of rebar, placement of concrete and disposal of unsuitable materials, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

77-6. General Site Features

As shown on the Plans, there are a series of amenities including off the shelf furnishings and fabricated items. These items include:

1. Picnic table of the type shown on the Plans or approved equal. All tables are paid the same regardless of type.
2. A bike rack of the type shown on the Plans or approved equal.
3. Logs embedded in concrete footings under mulch. Obtain wood as detailed in Section 77. The Contractor shall cut and smooth the log as directed by the Engineer.
4. Bike Repair station Fixit Plus by Dero or approved equal. This shall include a minor concrete foundation as shown in the plans.
5. A precast concrete bench by QCP products or approved equal. This shall include placement of aggregate base as shown in the Plans. The bench shall have the option for a manufacturer installed memorial plaque.
6. A prefabricated bench – Strata by Landscape Forms or approved equal. This shall include a minor concrete foundation and anchors as shown in the plans. The bench shall have the option for a manufacturer installed memorial plaque.
7. Concrete wheel stop. Shall be 48 inches long.

Payment - The contract price paid for each “Feature Log” includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the

work involved in fabricating and installing a feature log, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Payment - The contract unit price paid for each "Picnic Tables", "Precast Concrete Bench", and "Strata Beam Bench" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in installing amenities, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Payment - The contract unit price paid for each "Bicycle Parking" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in installing accommodations for bicycle parking, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Payment - The contract unit price paid for each "Bike Repair Station" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in installing accommodations for bicycle repair, complete in place, including the concrete foundation as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Payment - The contract unit price paid for each "Concrete Wheel Stops" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in installing timber and concrete curb stops, complete in place, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

77-7. Wayfinding, Land Recognition, and Interpretive Signs

The Contractor shall fabricate and install wayfinding, land recognition, and interpretive signs as shown on the Plans. The Engineer will provide the Contractor with an electronic file that illustrates the graphics for the panel. The Contractor shall fabricate the sign panels and install.

The contract unit price paid for each “Wayfinding Sign”, “Land Recognition Plaque” and “Interpretive Signage” includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in installing specialty signs, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

77-8. Donor Acknowledgement

The Contractor shall furnish and install donor acknowledgement elements that include:

- Donor wall with engraved panels as shown on Sheet L-512
- Plaques installed on seat backs within the amphitheater.

The donor wall features rammed earth walls of sizes and shapes as shown on the Plans. See Section 77-4 of these Special Provisions for requirements to construct the Stabilized Rammed Earth. The Contractor shall furnish and install anodized aluminum plaques to the rammed earth using stainless steel fasteners as shown on the plans. The Engineer will provide the Contractor with an electronic file that includes the layout of these plaques.

Within the wooden seatbacks of the amphitheater, the Contractor shall furnish and install plaques as shown on the Plans. This shall include an aluminum backing that is anodized brass with an aluminum plaque anodized dark bronze. Anodizing shall be consistent with ASTM B580-79. Names and images shall be laser cut into the plaque. The cut shall be smooth and without burrs. The plaque and backing shall be recessed into the wooden bench as shown on the Plans.

All hardware used to affix the plaques and signs to the benches and the donor wall shall be tamper proof.

Examples of the plaques installed on the seat backs includes.



The contract lump sum price paid for “Donor Wall” includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in installing wall and sign, complete in place, including installing the concrete foundation, rammed earth, and fabricating the sign, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

The contract unit price paid for each “Donor Plaques on Seat Backs” includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in installing plaques, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

77-9. Bat House

The Contractor shall furnish a bat house as shown in the Plans. It shall have a final

configuration similar to the following:



The Engineer will not provide wood for the Bat House.

The contract unit price paid for each “Bat House” includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in siting and installing the Bat Roost, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

77-10. Entry Kiosk

The materials used shall comply with the following:

1. All wood shall be redwood.
 - a. Wood products must be certified by the Forest Stewardship Council (FSC) or USGBC-approved equivalent.

- b. Wood shall be clear heart redwood.
2. Fasteners used shall be type 316 stainless steel.
3. Connectors shall be stainless steel.
4. Concrete shall comply with Section 73 of the Standard Specifications.

Layout of the materials shall be completed with the Engineer prior to fabrication of the entry kiosk as shown on the Plans.

The Contractor shall fabricate and install a sign within the kiosk that notes the follows:

(a) "This park has been developed for your convenience by County of San Mateo under a Lease with the California Department of Transportation. The Lease is subject to termination if the property is needed for State highway purposes.

(b) Warning: Users of the park and/or recreational area are at increased risk of exposure to Aerially Deposited Lead, vehicle emissions, and other hazardous or harmful materials and substances. Use of this park and/or recreational area is at each inhabitant's own risk, and neither the State of California nor the California Department of Transportation is liable for any injury or property damage suffered while using the Premises.

(c) Firearms and illegal weapons may not be possessed on the Premises.

(d) Open fires are prohibited.

(e) Use or possession of prescription drugs, or other substances which are designated controlled substances under Federal Law, without a valid medical prescription in the holder's name, is prohibited on the Premises. Use or possession of medical marijuana, or recreational marijuana, is prohibited on the Premises even with a valid medical prescription in the holder's name.

(f) All inquiries should be directed to San Mateo County Parks (650)363-4020.

The contract unit price paid for each "Entry Kiosk" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in siting and installing the kiosk, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

END OF SECTION

SECTION 79 WATER PIPELINE

The Contractor shall install potable water pipeline along the alignment shown on the Plans. The installation shall be by trenchless methods, such as horizontal directional boring. The pipe shall be a 4 inch in diameter C900 fusible polyvinyl chloride pipe conforming to ASTM D2241.

The Contractor shall trench bore and receiving pits as required to support the installation. Upon completion of installation, the Contractor shall restore all excavations to existing or better condition.

Upon completion of installation, the Contractor shall apply 100 PSI of air pressure to the line and hold for a period of 2 hours. At the end of the test, there shall be no reduction in pressure.

The Contractor shall record the two end points of the water line providing coordinates in northings and eastings to the hundreds place.

Payment. The contract price paid per linear foot for "6" Water Pipeline" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in placing the pipeline, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

END OF SECTION

SECTION 80 FENCES

The Contractor shall install a habitat protection fence stakes shall be as noted on plans. Acceptable products include 31” Heavy Duty Tent Ground Stake with Eye Hook, by Canopies and Tarps (canopiesandtarps.com) or equal. Rope shall be as indicated.

Payment. The contract price paid per linear foot for “Habitat Protection Fence” includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in placing a fence, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

END OF SECTION

SECTION 82 SIGNS AND MARKERS

The Contractor shall install signs consistent with the requirements of Section 82-3 of the Standard Specifications. All posts shall be wood in accordance with Section 52-3.02C of the Standard Specifications.

The contract unit price paid for each "Signs and Posts" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in installing traffic and accessible parking signs, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

The Engineer measures each location with a sign and post as one regardless of the number and configuration of the signs on the posts.

END OF SECTION

SECTION 83 RAILINGS AND BARRIER

The Contractor shall install a Midwest guardrail system as shown on the Plans and in accordance with Section 83-2.02 "Midwest Guardrail Systems" of the Standard Specifications.

Payment. The contract price paid per linear foot for "Midwest Guardrail" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in installing guardrails, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

END OF SECTION

SECTION 84 MARKINGS

84-1 Marking Installation

The Contractor shall install traffic stripes and pavement markings consistent with Section 84-2 of the Standard Specifications. The Contractor shall temporarily mark the stripes (cat-track) for the Engineer's review (provide no less than 5-days of advance notification for the County and as required by Caltrans in the encroachment permit) and approval prior to placing the final striping. All markings used in the parking lot shall be paint. All marking used on State Route 1 shall be thermoplastic. There shall be no change in the price paid for the color of the stripe.

Payment. The contract price paid per linear foot for "Detail 38A", "Detail 27B", and "4" Stripe" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in striping, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Payment. The contract price paid per square foot for "Markings" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in striping, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

84-2 Remove Traffic Stripes and Pavement Markings

As shown on the Plans as described in Section 89-9.03B, the Contractor shall remove traffic stripes and pavement markings.

Payment. The contract lump sum price paid for "Remove Striping" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and

for doing all the work involved in removing lane lines, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

END OF SECTION

SECTION 86 JOINT TRENCH

This work includes the placement of above ground conductors into an underground system. The Contractor shall be responsible for installing the conduits and boxes. The utilities shall be responsible for placing the conductors and removing the overhead lines. The Contractor shall be responsible for coordinating scheduling of the activities with the utilities with the support of the Engineer.

86-1. Excavation, Conduit Placement, and Backfill

The Contractor shall complete the installation of a joint trench as shown on the Plans.

The Contractor shall clear and grub, saw cut, remove asphalt, remove concrete, excavate a trench, backfill the trench, dispose of spoils and deleterious materials, and perform surface restoration for the joint utility infrastructure of Pacific Gas and Electric (PG&E), Comcast, and AT&T.

The Contractor shall be responsible for horizontal and vertical layout of the Joint and Service Trenches. Trenching and backfilling shall be completed in accordance with the requirements of the utility companies who occupy the trench including the "Joint Trench Configurations and Occupancy Guide" included in the PG&E Greenbook.

The Contractor shall install the trench to a depth that meets the minimum cover requirements of the conduits, is not in conflict with existing or proposed utilities, and provides smooth transitions. The trench depth may vary depending on the elevations of existing facilities encountered, and no extra payment will be made for increased trench depths or widths to accommodate these obstructions. The Contractor shall use care in protecting the installed conduits during rough grading operations.

The Contractor shall furnish and install conduit of the various sizes as shown in the Plans for PG&E, AT&T, and Comcast. All conduit supplied shall be Polyvinyl Chloride

(PVC) schedule 40.

Prior to backfill of the conduits, the Contractor shall coordinate and obtain approval from the various utility company inspectors. The backfill material shall be provided and placed in accordance with the PG&E Greenbook's, "Joint Trench Configurations and Occupancy Guide."

The Contractor shall maintain daily records drawings of the joint and service trench installation. The information should include depth of conduits from finished ground, horizontal distance from trench to future curb line, and conduit configuration.

The Contractor shall export all surplus materials including soil and dispose in a legal manner and consistent with Section 14, "Construction Waste Management," and Section 5-11, "Disposal of Material Outside the Highway Right-of-Way," of these Special Provisions.

Payment - The contract price paid per linear foot for "Install Joint Trench" and "Install Service Trench" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in placing the conduit system, complete in place, including, clearing and grubbing, trenching, providing and placing conduits, backfilling, compacting, and surface restoration, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

The joint and service trenches are paid the same regardless of the number and sizes shown on the Plans.

86-2 Joint Trench - Utility Vaults

The Contractor shall furnish and install utility vaults as shown in the Plans for, PG&E, AT&T, and Comcast. The Contractor shall be responsible for horizontal and vertical layout of all Utility Vaults shown in the Plans. All Utility Vaults furnished shall be in

accordance with the utility company's standard specifications.

The Contractor shall clear and grub, saw cut, remove asphalt, remove concrete, excavate, dispose of spoils and deleterious materials, and backfill as required to install the utility vault. It shall be the Contractor's responsibility to set the vault at the appropriate elevation to conform to the final condition.

Prior to installation, the Contractor should obtain approval from each utility company's inspector that the utility vault is acceptable. No backfill should be completed without obtaining the utility company inspector's approval.

All conduits entering vaults and boxes shall have bell ends secured to the vault or box by concrete (outside wall) and grouting (inside wall). Concrete shall be 5-sack mix and grout shall be standard bag mix. Ground rods are to be installed by the Contractor in all primary vaults and pads as directed by the inspector and conform to PG&E Standard Drawing No. 013109.

Payment - The contract unit price paid for each "PG&E #7 Vault", "AT&T 30x48 Pull Box", "AT&T 30x60 Pull" and "Comcast Pull Box" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in placing the boxes, complete in place, including, clearing and grubbing, trenching, providing and placing boxes, backfilling, compacting, and surface restoration, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

END OF SECTION

SECTION 87 ELECTRICAL SYSTEMS

The Contractor shall furnish and install electrical system components as shown in the Plans. This shall be to provide service to the electrical vehicle chargers, handrail lighting, and electrical service to the restroom and ranger shed.

The Contractor shall provide submittals for all electrical equipment and appurtenances proposed for use in the project.

87-1. Electrical Conduits and Conductors

The installation of electrical components as shown on the Plans and as specified in these Special Provisions shall be completed in accordance with the 2022 California Electrical Code.

The Contractor shall provide, and place conduits of the types and sizes as shown on the Plans. Pull boxes shall have a solid copper ground rod as shown on the Plans. All conduits and fittings shall be rigid polyvinyl chloride (PVC) conduit complying with UL 651. All pull boxes shall be of the size and type shown on the Plans.

The Contractor shall pull conductors of the sizes and numbers shown on the Plans. All conductors shall be copper complying with ASTM B3 and B8. Insulation shall be either Type TW PVC under ASTM D2219 or Type THW PVC.

All conduit and pull boxes shall be completed as shown on the Plans and in conformance with Sections 87-1.03B(3) 87-1.03C, and 87-1.03E of the Standard Specifications. No backfill shall be allowed until the contractor receives acceptance of the installation by the Engineer. The Contractor shall pull conductors in the conduit system in accordance with the Plans and as required by Section 87-1.03F of the Standard Specifications.

The Contractor shall restore the surface to match the existing conditions. This includes trenching through asphalt areas.

The Contractor shall export all surplus materials including soil and dispose in a legal manner and consistent with Section 14, "Construction Waste Management," and Section 5-11, "Disposal of Material Outside the Highway Right-of-Way," of these Special Provisions.

Payment - The contract price paid per foot for "Electrical Conduit and Conductors" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in providing site electrical distribution, complete in place, including, but not limited to, trenching, placing conduits and pull boxes, backfilling, surface restoration, disposal of unsuitable materials, and placement of conductors, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

87-2. Electrical Equipment

As shown on the Plans, the Contractor shall furnish and install electrical equipment that shall include the following components:

- Main Switchboard with pull section, meter/ main section, breakers, and related appurtenances. The switchboard shall be housed in an all-weather stainless steel grade 316 enclosure complying with the NEMA 4X standard.
- Breaker panel for site lighting and electrical service to ranger shed, and restroom housed in an all-weather stainless steel grade 316 enclosure complying with the NEMA 4X standard.
- Lighting controls including a photocell, contactor, and time clock housed in an all-weather stainless steel grade 316 enclosure complying with the NEMA 4X standard. The cabinet shall be lockable. This shall include a manual switch to override the lighting controls.

- Dry Type Transformer complying with Section 86-1.02Y Transformer of the Standard Specifications.
- Concrete pads as shown on the Plans with a compressive strength of 3,000 PSI unless noted otherwise.
- Related appurtenances including mounting hardware fabricated from galvanized steel.

The Contractor shall complete fine grading as necessary to install the electrical equipment as well as stub conduits into pads.

Payment - The contract unit price paid for each "Transformer" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in installing the transformer, complete in place, including, placing the pad, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Payment - The contract unit price paid for each "Switch Gear" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in installing the switchgear, complete in place, including, placing the pads and lighting controls, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

87-3. Handrail Lighting

The Contractor shall provide a light within the handrails as shown on the Plans. This light shall be a light emitting diode that operates at a color temperature of 2,700 kelvin. The fixture shall be aluminum with a clear anodized body and be rated for outdoor use in a marine environment. The lights shall operate at an input voltage of 24 volts of direct current DC. The fixture shall be a 2-watt LEDpod-40 by Klik USA or approved equal. Each fixture shall have a minimum of 50,000 hours of life.

These fixtures shall be activated by a photocell installed within the switch gear that turns them on at low light levels, generally at sunset. This lighting control shall include a time clock that can automatically turn off the system. In addition, the Contractor shall install a manual switch as described in Section 87-2 of these Specifications to manually turn off the system.

The Contractor shall cut a hole in the handrail as detailed in Section 75-1 of these Special Provisions to accommodate the light fixture. The resulting hole shall be smoothed so as there are no sharp corners. The Contractor shall install the mounts, conductors, AC to DC transformer, and fixtures consistent with the manufacturer's instructions.

Payment. The contract price paid per foot for "Handrail Lighting" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in installing lighting, complete in place, including, but not limited to, providing and installing the fixtures and conductors, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

87-4. Electric Vehicle Charging Station

The Contractor shall furnish and install a vehicle charging station that includes the following features:

- A single pedestal with a standard SAE J1772™ Level 2 charging port with locking holsters, supplying up to 7.2kW.
- The charger shall operate on a 40 ampere 240-volt circuit.
- The charger shall be ENERGY STAR® certified.
- The chargers should be mounted on a freestanding bollard.
- All software to operate the charging station shall provide for upgrades over a wireless connection.

- Each charger shall provide a cord that is at least 23 feet long.

Approved vendors include the following: Flow, Enel X, Blink, EV Connect, and ChargePoint.

The Contractor shall procure all hardware required to install the electric vehicle charging station as well as a service plan that includes software upgrades and payment methods for a term of no less than 3 years.

The Contractor installing the charging station must be certified by the vendor of the charging station to install the unit. The Contractor shall provide documentation of said certification. All installation shall comply with the manufacturer's requirements. When complete, the Contractor shall certify that the standard 1-year warranty including parts and labor for any defect in manufacturing or workmanship is in effect.

The Contractor shall provide all operating documents to the County. In addition, the Contractor shall provide a one-hour training session on the use, operation, and maintenance of the charging station.

Payment - The contract unit price paid for each "Electric Vehicle Charging Station" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in installing electric vehicle charging stations, complete in place, including, installing the foundation and providing training, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

END OF SECTION

SECTION 99 BUILDING CONSTRUCTION

The Contractor shall provide and place one Ranger Station Shed (Ranger Shed) and one Restroom as shown in the Plans. These buildings shall be pre-engineered buildings by Romtec or approved equal.

The following summarizes the building design that shall be consistent with the California Building Code 2022.

Ranger Station Shed

Occupancy Classification: Utility and Miscellaneous Group U

Uses are un-separated.

One story building

Type III construction

No fire sprinklers

Restroom

Occupancy Classification: Utility and Miscellaneous Group U

One story building

Type III construction

No fire sprinklers

99-1 Building Design and Materials

The Contractor shall coordinate with the pre-engineered building vendor to provide final plans, calculations, and related documents to support permitting with San Mateo County. The Engineer will facilitate permitting and pay permit fees.

Upon approval of the Plans, the Contractor shall procure the materials including the payment of freight from the building supplier.

Payment. The contract lump sum price paid for "Restroom Plans and Materials" and

“Ranger Shed Plans and Materials” includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in providing final documents for obtaining a building permit, complete in place, including acquiring materials, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

The Engineer will pay 25% of this item upon receiving final design document; the Engineer will make the final payment upon delivery of materials to the project site.

99-2 Foundation Construction

With approval of the building permit, the Contractor shall complete excavation, prepare subgrade as defined in Section 19-1 of these Special Provisions and as required by the pre-engineered building vendor.

Upon completion of subgrade preparation, the Contractor shall provide at least 12 inches of Class II aggregate base conforming to the requirements of Section 26 of these Special Provisions and compacted to 95% relative compaction in accordance with ASTM D1557. Atop the compacted aggregate base, the Contractor shall provide at least 4 inches of $\frac{3}{4}$ crushed rock with no more than 5% passing the ASTM No. 200 sieve. This rock shall be covered with an ultraviolet resistant vapor barrier conforming to the requirements of ASTM E 1745 Class A with a water vapor transmission rate less than or equal to 0.1 perms.

The Contractor shall place a concrete slab in accordance with pre-engineered building vendor’s requirements. The slab shall be at least 5 inches thick reinforced with steel rebar. The concrete shall have a minimum compressive strength of 3,000 PSI. The water-to-cement ration shall be 0.45 or less; mid-range plasticizers can be added to the mix to improve workability.

This work shall include the installation of conduits beneath the concrete and stubbing through the slab to provide electrical service.

Payment. The contract unit price paid for each “Ranger Shed Foundation” and “Restroom Foundation” includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing foundations complete in place, including, excavation, backfill, compaction, placement of aggregate base, drain rock, vapor barrier, conduits, and concrete, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

99-3 Building Construction

The Contractor shall procure all materials and construct the building as detailed in the plans and as approved by the Building Department. For the Ranger Shed, this shall include the installation of an electrical panel, lights, and outlets as shown on the Plans. The Contractor shall provide rigid metal conduits for all electrical conductors.

Payment. The contract unit price paid for each “Ranger Shed” and “Restroom” includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing the buildings, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

END OF SECTION

SECTION 100 CONSTRUCTION LAYOUT

Section 5-1.26, "Construction Surveys," of the Standard Specifications shall not apply to this section.

The Contractor shall be responsible for all land surveying and shall provide construction stakes or marks necessary to establish the limits, lines, alignments, and grades required for proper construction staking layout and completion of the work as shown on the drawings, as specified in these Special Provisions, and as directed by the Engineer. All construction staking shall be provided under the direction of either a professional land surveyor licensed by the State of California, or an Engineer qualified to perform land surveying.

The survey datum used for the project shall be in accordance or tied-in with the County datum, as referenced on the Plans.

The Contractor shall provide and establish the construction staking of principal structures, and set grades and benchmarks as required. It will be the Contractor's responsibility to layout the work from the lines and grades, and to transfer elevations from the benchmarks set. All staking, locating, and layout work required for construction purposes shall be performed by the Contractor. Where new construction connects to existing facilities, the Contractor shall check and establish the exact location of existing facilities prior to construction of new facilities.

When using construction stakes to establish alignment, the Contractor shall use a minimum of three (3) stakes to check horizontal alignments, and a minimum of two (2) stakes to check vertical alignments.

Should an occasion arise where the validity of a stake is questionable, either as to its location, or the elevation marked thereon, the Contractor shall check the stake or stakes in question. The Contractor shall be responsible for correcting any alignment or

elevation errors that resulted from incorrect staking.

The Contractor shall maintain a complete and accurate log of all control and survey work as it progresses. On completion of site improvements, the contractor's surveyor shall prepare a certified survey drawing showing all dimensions, locations, angles, and elevations of construction.

The Contractor shall set or establish the necessary construction layout stakes and markings a minimum of **two (2) working days** in advance of the work and shall notify the Engineer when such markings have been set.

The Contractor shall protect all monumentation and survey points in their undisturbed location and condition. Damage, as a result of the Contractor's operations, to the existing monuments, survey markers, or reference points that are not part of this Contract, shall be repaired and replaced at the Contractor's expense.

The Contractor's attention is directed to Section 100-1, "As-Built Drawings," of these Special Provisions for additional requirement for submittal of As-Built Drawings upon completion of this project.

Payment. The contract lump sum price paid for "Construction Staking" includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in project layout, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

The County reserves the right to eliminate this item, "Construction Layout," from the project completely. The Contractor shall request and receive written confirmation from the County as to the status of this item of work prior to incurring any costs. The Contractor shall not be entitled to any compensation under this item of work for any cost incurred should he proceed in advance of receiving written authorization from the County.

100-1. As-Built Drawings

For the County to produce As-Built Drawings for this project, the Contractor shall submit a PDF copy of the Plans with appropriate as-built information mark-ups, which Plans shall be signed by the Contractor certifying the accuracy of the as-built drawings, including that elevations and locations of improvements are in accordance with the contract Documents. Should the Engineer determine that additional information is required to produce accurate As-Built Drawings, the Contractor shall provide such information within **ten (10) calendar days** after receiving the written request for said additional information. The cost for providing this additional information shall be at the Contractor's expense, and no additional compensation will be allowed therefor.

The Contractor is advised that Final Progress Payment may be withheld until satisfactory as-builts plans, as determined by the Engineer, are submitted to the County. Payment may be withheld upon the determination by the County that the withholding of such amount is no longer necessary.

END OF SECTION

Appendix A

**County of San Mateo Waste Management Plan Form
Waste Management Daily Transport Report**



County of San Mateo WASTE MANAGEMENT PLAN

Case/group number(s):
BLD _____ - _____

Project address:
Street: _____

City: _____

Zip Code: _____

Green Halo number(s):

WMP required because project is a:

- Residential Demolition
- Nonresidential New Construction
- Addition

Submit to:

County of San Mateo
Department of Public Works
555 County Center, 5th Floor
Redwood City, CA 94063

Information and support: 888-442-2666
www.smcsustainability.org/waste-reduction/construction-demolition

Section One: Permit Application

This Waste Management Plan (WMP) must be completed, submitted for review, and approved to obtain a permit. Separate WMPs are required for demolition and construction at the same site unless the Building Department requires only one permit. Need for a WMP is at the discretion of the Building Official or designee.

Applicant's Name: _____ Owner's Name: _____

Phone Number: _____ Email: _____

Applicant is (please check one): Owner Architect Builder Owner/Builder Other _____

Contractor (if applicable): _____ Contact Phone Number: _____

Project Description: _____

Project Square Footage: _____ Estimated Completion Date: _____

Waste Management Requirements:

You are required to recycle or re-use all inert solids (asphalt, brick, concrete, dirt, fines, rock, sand, and stone) and 65% of all construction and demolition debris.

I understand that I am required by San Mateo County Building Regulations Section 9210 - Adoption Of 2016 California Green Building Standards Code (Building Regulations) to salvage, reuse, or recycle **all inert solids** (asphalt, brick, concrete, dirt, fines, rock, sand, and stone) and **a minimum of 65%** of all construction and demolition debris (C&D). _____ (Initial)

I understand that failure to meet the requirements of the Building Regulations shall constitute a misdemeanor, and shall be punishable by imprisonment in the county jail for up to 6 months and/or a fine of up to \$1,000, calculated as a percentage of the required 65% diversion of C&D debris, and that the fine must be paid as a condition of final approval. _____ (Initial)

At the completion of this project, or more frequently if required, all weight tags or other equivalent documentation from salvage, recycling and waste facilities will be provided and I understand that I may not be issued my final inspection unless all original receipts and documentation are submitted to the County of San Mateo Department of Public Works. _____ (Initial)

Recycling and waste facilities ask for the correct origin of the materials generated as they come through the scale house. These tons are reported to the State of California. I understand that I need to advise my debris box company, waste haulers, and my drivers that the materials generated on this project originated in Unincorporated County of San Mateo. _____ (Initial)

1) Deconstruction/salvage/reuse:

What materials will be salvaged/reused? _____

Deconstruction or salvage company (if applicable): _____

What materials will be reused on site? _____

How will this be documented? _____

2) Material transportation:

Will you be using a hauling company, debris box company or hauling the material yourself?

Hauler Debris Box Self-haul

If using a hauling or debris box company, which company? _____

Have they been notified that the diversion of 65% mixed debris and all inert solids is required? Yes No

3) Waste management plan:

Check the materials you anticipate generating and fill in the facilities that you plan to use.

Category	Material	√	Reuse, Recycling or Disposal Facility
Mixed C&D	Mixed Debris		
Inerts	Asphalt		
	Bricks		
	Concrete		
	Dirt		
	Other inert solids		
Source Separated	Cardboard		
	Metals		
	Wood		
	Roofing		
	Carpet		
	Drywall		
	Yard trimmings		
	Other		
Disposal	Waste		

The undersigned hereby agrees to comply with the Waste Management Plan as submitted and is the owner or authorized agent to sign for the owner of this project.

Applicant Signature _____ **Date** _____

County Approval: Approved Approved with comments Denied

All receipts, weight tags and documentation for salvage, recycling, and disposal must be submitted:

On completion of project Other _____

Office of Sustainability Approval: _____ Date: _____



County of San Mateo

WASTE MANAGEMENT PLAN

Case/Group Number(s):
 BLD _____ - _____
 Project Address:
 Street: _____
 City: _____

Section Two: Final Report Approval

Please complete, submit, and get this section approved by the Department of Public Works, prior to obtaining final approval by the Department of Public Works no later than 30 days after completion of the demolition or construction project. Please provide weight of materials in **tons**. If needed, please use the conversion table on the next page to convert cubic yards to tons.

This section must be completed and signed, and all receipts or other supporting documentation must be attached in order to receive final project approval.

Category	Date	Material/items	Name of facility debris was hauled to	Weight (Tons)	Volume (CU. YD.)
Mixed C&D					
Salvage/Reuse					
Inerts Asphalt, bricks, concrete, dirt, rock, sand, soil, stone					
Source Separated Cardboard, wood, metal, sheetrock, wire, carpet, yard trimmings					
Disposal (Waste)					

- All receipts or equivalent documentation for salvage, recycling, and disposal are hereby attached.
- This project has recycled all of the inert solids and at least 65% of all debris generated.

Applicant Signature _____ **Date** _____

County Approval: Approved Approved with Comments Fine Payment Required

Comments:

Fine Calculation: $1 - (\text{C\&D Diversion \% Achieved} \text{ ____} / 65\%) \times \$1000 = \$$ _____

Office of Sustainability Approval: _____ Date: _____



County of San Mateo

WASTE MANAGEMENT PLAN

Cubic Yards to Tons Conversion Table

Category	Material	Cubic Yards	Pounds	Tons
Mixed C&D	Mixed load C&D	1	500	0.25
Inerts	Asphalt	1	1380	0.69
	Bricks	1	3000	1.5
	Concrete	1	1860	0.93
	Dirt	1	2000	1
	Other inert solids	1	1240	0.62
Source Separated	Cardboard	1	100	0.05
	Metals	1	900	0.45
	Wood	1	300	0.15
	Asphalt roofing	1	1188	0.59
	Carpet	1	600	0.3
	Drywall	1	400	0.2
	Green waste	1	300	0.15
	Gravel	1	2600	1.3
Disposal	Waste	1	300	0.15

WASTE MANAGEMENT DAILY TRANSPORT REPORT				
Date :		Day :		Multiple Pages : Yes ___ No ___
Project :			Contractor Representative :	
			County Inspector :	
	Transport Vehicle Type	Vehicle License/I.D.	Load Destination	
			Inert Material	Non-Inert Material
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

Note : Inert material shall be as defined in the Construction Waste Management Section of these specifications.

Comments :

Appendix B

Sanitary Sewer Monitoring and Reporting Requirements:

**State Water Resources Control Board
Order No. WQ 2013-0058-EXEC**

STATE OF CALIFORNIA
WATER RESOURCES CONTROL BOARD
ORDER NO. WQ 2013-0058-EXEC

AMENDING MONITORING AND REPORTING PROGRAM
FOR
STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR
SANITARY SEWER SYSTEMS

The State of California, Water Resources Control Board (hereafter State Water Board) finds:

1. The State Water Board is authorized to prescribe statewide general Waste Discharge Requirements (WDRs) for categories of discharges that involve the same or similar operations and the same or similar types of waste pursuant to Water Code section 13263(i).
2. Water Code section 13193 *et seq.* requires the Regional Water Quality Control Boards (Regional Water Boards) and the State Water Board (collectively, the Water Boards) to gather Sanitary Sewer Overflow (SSO) information and make this information available to the public, including but not limited to, SSO cause, estimated volume, location, date, time, duration, whether or not the SSO reached or may have reached waters of the state, response and corrective action taken, and an enrollee's contact information for each SSO event. An enrollee is defined as the public entity having legal authority over the operation and maintenance of, or capital improvements to, a sanitary sewer system greater than one mile in length.
3. Water Code section 13271, *et seq.* requires notification to the California Office of Emergency Services (Cal OES), formerly the California Emergency Management Agency, for certain unauthorized discharges, including SSOs.
4. On May 2, 2006, the State Water Board adopted Order 2006-0003-DWQ, "Statewide Waste Discharge Requirements for Sanitary Sewer Systems"¹ (hereafter SSS WDRs) to comply with Water Code section 13193 and to establish the framework for the statewide SSO Reduction Program.
5. Subsection G.2 of the SSS WDRs and the Monitoring and Reporting Program (MRP) provide that the Executive Director may modify the terms of the MRP at any time.
6. On February 20, 2008, the State Water Board Executive Director adopted a revised MRP for the SSS WDRs to rectify early notification deficiencies and ensure that first responders are notified in a timely manner of SSOs discharged into waters of the state.
7. When notified of an SSO that reaches a drainage channel or surface water of the state, Cal OES, pursuant to Water Code section 13271(a)(3), forwards the SSO notification information² to local government agencies and first responders including local public health officials and the applicable Regional Water Board. Receipt of notifications for a single SSO event from both the SSO reporter

¹ Available for download at:

http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2006/wqo/wqo2006_0003.pdf

² Cal OES Hazardous Materials Spill Reports available Online at:

[http://w3.calema.ca.gov/operational/mal haz.nsf/\\$defaultview](http://w3.calema.ca.gov/operational/mal haz.nsf/$defaultview) and <http://w3.calema.ca.gov/operational/mal haz.nsf>

and Cal OES is duplicative. To address this, the SSO notification requirements added by the February 20, 2008 MRP revision are being removed in this MRP revision.

8. In the February 28, 2008 Memorandum of Agreement between the State Water Board and the California Water and Environment Association (CWEA), the State Water Board committed to re-designing the CIWQS³ Online SSO Database to allow "event" based SSO reporting versus the original "location" based reporting. Revisions to this MRP and accompanying changes to the CIWQS Online SSO Database will implement this change by allowing for multiple SSO appearance points to be associated with each SSO event caused by a single asset failure.
9. Based on stakeholder input and Water Board staff experience implementing the SSO Reduction Program, SSO categories have been revised in this MRP. In the prior version of the MRP, SSOs have been categorized as Category 1 or Category 2. This MRP implements changes to SSO categories by adding a Category 3 SSO type. This change will improve data management to further assist Water Board staff with evaluation of high threat and low threat SSOs by placing them in unique categories (i.e., Category 1 and Category 3, respectively). This change will also assist enrollees in identifying SSOs that require Cal OES notification.
10. Based on over six years of implementation of the SSS WDRs, the State Water Board concludes that the February 20, 2008 MRP must be updated to better advance the SSO Reduction Program⁴ objectives, assess compliance, and enforce the requirements of the SSS WDRs.

IT IS HEREBY ORDERED THAT:

Pursuant to the authority delegated by Water Code section 13267(f), Resolution 2002-0104, and Order 2006-0003-DWQ, the MRP for the SSS WDRs (Order 2006-0003-DWQ) is hereby amended as shown in Attachment A and shall be effective on 07/26/2013.

Date

7/30/13

Thomas Howard
Executive Director

Thomas Howard

³ California Integrated Water Quality System (CIWQS) publicly available at <http://www.waterboards.ca.gov/ciwqs/publicreports.shtml>

⁴ Statewide Sanitary Sewer Overflow Reduction Program information is available at: http://www.waterboards.ca.gov/water_issues/programs/ssso/

ATTACHMENT A

STATE WATER RESOURCES CONTROL BOARD ORDER NO. WQ 2013-0058-EXEC

AMENDING MONITORING AND REPORTING PROGRAM FOR STATEWIDE GENERAL WASTE DISCHARGE REQUIREMENTS FOR SANITARY SEWER SYSTEMS

This Monitoring and Reporting Program (MRP) establishes monitoring, record keeping, reporting and public notification requirements for Order 2006-0003-DWQ, "Statewide General Waste Discharge Requirements for Sanitary Sewer Systems" (SSS WDRs). This MRP shall be effective from September 9, 2013 until it is rescinded. The Executive Director may make revisions to this MRP at any time. These revisions may include a reduction or increase in the monitoring and reporting requirements. All site specific records and data developed pursuant to the SSS WDRs and this MRP shall be complete, accurate, and justified by evidence maintained by the enrollee. Failure to comply with this MRP may subject an enrollee to civil liabilities of up to \$5,000 a day per violation pursuant to Water Code section 13350; up to \$1,000 a day per violation pursuant to Water Code section 13268; or referral to the Attorney General for judicial civil enforcement. The State Water Resources Control Board (State Water Board) reserves the right to take any further enforcement action authorized by law.

A. SUMMARY OF MRP REQUIREMENTS

Table 1 – Spill Categories and Definitions

CATEGORIES	DEFINITIONS [see Section A on page 5 of Order 2006-0003-DWQ, for Sanitary Sewer Overflow (SSO) definition]
CATEGORY 1	Discharges of untreated or partially treated wastewater of any volume resulting from an enrollee's sanitary sewer system failure or flow condition that: <ul style="list-style-type: none">• Reach surface water and/or reach a drainage channel tributary to a surface water; or• Reach a Municipal Separate Storm Sewer System (MS4) and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the MS4 is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or groundwater infiltration basin (e.g., infiltration pit, percolation pond).
CATEGORY 2	Discharges of untreated or partially treated wastewater of 1,000 gallons or greater resulting from an enrollee's sanitary sewer system failure or flow condition that do not reach surface water, a drainage channel, or a MS4 unless the entire SSO discharged to the storm drain system is fully recovered and disposed of properly.
CATEGORY 3	All other discharges of untreated or partially treated wastewater resulting from an enrollee's sanitary sewer system failure or flow condition.
PRIVATE LATERAL SEWAGE DISCHARGE (PLSD)	Discharges of untreated or partially treated wastewater resulting from blockages or other problems within a privately owned sewer lateral connected to the enrollee's sanitary sewer system or from other private sewer assets. PLSDs that the enrollee becomes aware of may be voluntarily reported to the California Integrated Water Quality System (CIWQS) Online SSO Database.

Table 2 – Notification, Reporting, Monitoring, and Record Keeping Requirements

ELEMENT	REQUIREMENT	METHOD
NOTIFICATION (see section B of MRP)	<ul style="list-style-type: none"> • Within two hours of becoming aware of any Category 1 SSO greater than or equal to 1,000 gallons discharged to surface water or spilled in a location where it probably will be discharged to surface water, notify the California Office of Emergency Services (Cal OES) and obtain a notification control number. 	Call Cal OES at: (800) 852-7550
REPORTING (see section C of MRP)	<ul style="list-style-type: none"> • Category 1 SSO: Submit draft report within three business days of becoming aware of the SSO and certify within 15 calendar days of SSO end date. • Category 2 SSO: Submit draft report within 3 business days of becoming aware of the SSO and certify within 15 calendar days of the SSO end date. • Category 3 SSO: Submit certified report within 30 calendar days of the end of month in which SSO the occurred. • SSO Technical Report: Submit within 45 calendar days after the end date of any Category 1 SSO in which 50,000 gallons or greater are spilled to surface waters. • "No Spill" Certification: Certify that no SSOs occurred within 30 calendar days of the end of the month or, if reporting quarterly, the quarter in which no SSOs occurred. • Collection System Questionnaire: Update and certify every 12 months. 	Enter data into the CIWQS Online SSO Database (http://ciwqs.waterboards.ca.gov/), certified by enrollee's Legally Responsible Official(s).
WATER QUALITY MONITORING (see section D of MRP)	<ul style="list-style-type: none"> • Conduct water quality sampling within 48 hours after initial SSO notification for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters. 	Water quality results are required to be uploaded into CIWQS for Category 1 SSOs in which 50,000 gallons or greater are spilled to surface waters.
RECORD KEEPING (see section E of MRP)	<ul style="list-style-type: none"> • SSO event records. • Records documenting Sanitary Sewer Management Plan (SSMP) implementation and changes/updates to the SSMP. • Records to document Water Quality Monitoring for SSOs of 50,000 gallons or greater spilled to surface waters. • Collection system telemetry records if relied upon to document and/or estimate SSO Volume. 	Self-maintained records shall be available during inspections or upon request.

B. NOTIFICATION REQUIREMENTS

Although Regional Water Quality Control Boards (Regional Water Boards) and the State Water Board (collectively, the Water Boards) staff do not have duties as first responders, this MRP is an appropriate mechanism to ensure that the agencies that have first responder duties are notified in a timely manner in order to protect public health and beneficial uses.

1. For any Category 1 SSO greater than or equal to 1,000 gallons that results in a discharge to a surface water or spilled in a location where it probably will be discharged to surface water, either directly or by way of a drainage channel or MS4, the enrollee shall, as soon as possible, but not later than two (2) hours after (A) the enrollee has knowledge of the discharge, (B) notification is possible, and (C) notification can be provided without substantially impeding cleanup or other emergency measures, notify the Cal OES and obtain a notification control number.
2. To satisfy notification requirements for each applicable SSO, the enrollee shall provide the information requested by Cal OES before receiving a control number. Spill information requested by Cal OES may include:
 - i. Name of person notifying Cal OES and direct return phone number.
 - ii. Estimated SSO volume discharged (gallons).
 - iii. If ongoing, estimated SSO discharge rate (gallons per minute).
 - iv. SSO Incident Description:
 - a. Brief narrative.
 - b. On-scene point of contact for additional information (name and cell phone number).
 - c. Date and time enrollee became aware of the SSO.
 - d. Name of sanitary sewer system agency causing the SSO.
 - e. SSO cause (if known).
 - v. Indication of whether the SSO has been contained.
 - vi. Indication of whether surface water is impacted.
 - vii. Name of surface water impacted by the SSO, if applicable.
 - viii. Indication of whether a drinking water supply is or may be impacted by the SSO.
 - ix. Any other known SSO impacts.
 - x. SSO incident location (address, city, state, and zip code).
3. Following the initial notification to Cal OES and until such time that an enrollee certifies the SSO report in the CIWQS Online SSO Database, the enrollee shall provide updates to Cal OES regarding substantial changes to the estimated volume of untreated or partially treated sewage discharged and any substantial change(s) to known impact(s).
4. PLSDs: The enrollee is strongly encouraged to notify Cal OES of discharges greater than or equal to 1,000 gallons of untreated or partially treated wastewater that result or may result in a discharge to surface water resulting from failures or flow conditions within a privately owned sewer lateral or from other private sewer asset(s) if the enrollee becomes aware of the PLSD.

C. REPORTING REQUIREMENTS

1. **CIWQS Online SSO Database Account:** All enrollees shall obtain a CIWQS Online SSO Database account and receive a "Username" and "Password" by registering through CIWQS. These accounts allow controlled and secure entry into the CIWQS Online SSO Database.
2. **SSO Mandatory Reporting Information:** For reporting purposes, if one SSO event results in multiple appearance points in a sewer system asset, the enrollee shall complete one SSO report in the CIWQS Online SSO Database which includes the GPS coordinates for the location of the SSO appearance point closest to the failure point, blockage or location of the flow condition that caused the SSO, and provide descriptions of the locations of all other discharge points associated with the SSO event.
3. **SSO Categories**
 - i. **Category 1** – Discharges of untreated or partially treated wastewater of any volume resulting from an enrollee's sanitary sewer system failure or flow condition that:
 - a. Reach surface water and/or reach a drainage channel tributary to a surface water; or
 - b. Reach a MS4 and are not fully captured and returned to the sanitary sewer system or not otherwise captured and disposed of properly. Any volume of wastewater not recovered from the MS4 is considered to have reached surface water unless the storm drain system discharges to a dedicated storm water or groundwater infiltration basin (e.g., infiltration pit, percolation pond).
 - ii. **Category 2** – Discharges of untreated or partially treated wastewater greater than or equal to 1,000 gallons resulting from an enrollee's sanitary sewer system failure or flow condition that does not reach a surface water, a drainage channel, or the MS4 unless the entire SSO volume discharged to the storm drain system is fully recovered and disposed of properly.
 - iii. **Category 3** – All other discharges of untreated or partially treated wastewater resulting from an enrollee's sanitary sewer system failure or flow condition.
4. **Sanitary Sewer Overflow Reporting to CIWQS - Timeframes**
 - i. **Category 1 and Category 2 SSOs** – All SSOs that meet the above criteria for Category 1 or Category 2 SSOs shall be reported to the CIWQS Online SSO Database:
 - a. Draft reports for Category 1 and Category 2 SSOs shall be submitted to the CIWQS Online SSO Database within three (3) business days of the enrollee becoming aware of the SSO. Minimum information that shall be reported in a draft Category 1 SSO report shall include all information identified in section 8.i.a. below. Minimum information that shall be reported in a Category 2 SSO draft report shall include all information identified in section 8.i.c below.
 - b. A final Category 1 or Category 2 SSO report shall be certified through the CIWQS Online SSO Database within 15 calendar days of the end date of the SSO. Minimum information that shall be certified in the final Category 1 SSO report shall include all information identified in section 8.i.b below. Minimum information that shall be certified in a final Category 2 SSO report shall include all information identified in section 8.i.d below.

- ii. **Category 3 SSOs** – All SSOs that meet the above criteria for Category 3 SSOs shall be reported to the CIWQS Online SSO Database and certified within 30 calendar days after the end of the calendar month in which the SSO occurs (e.g., all Category 3 SSOs occurring in the month of February shall be entered into the database and certified by March 30). Minimum information that shall be certified in a final Category 3 SSO report shall include all information identified in section 8.i.e below.
- iii. **“No Spill” Certification** – If there are no SSOs during the calendar month, the enrollee shall either 1) certify, within 30 calendar days after the end of each calendar month, a “No Spill” certification statement in the CIWQS Online SSO Database certifying that there were no SSOs for the designated month, or 2) certify, quarterly within 30 calendar days after the end of each quarter, “No Spill” certification statements in the CIWQS Online SSO Database certifying that there were no SSOs for each month in the quarter being reported on. For quarterly reporting, the quarters are Q1 - January/ February/ March, Q2 - April/May/June, Q3 - July/August/September, and Q4 - October/November/December.

If there are no SSOs during a calendar month but the enrollee reported a PLSD, the enrollee shall still certify a “No Spill” certification statement for that month.
- iv. **Amended SSO Reports** – The enrollee may update or add additional information to a certified SSO report within 120 calendar days after the SSO end date by amending the report or by adding an attachment to the SSO report in the CIWQS Online SSO Database. SSO reports certified in the CIWQS Online SSO Database prior to the adoption date of this MRP may only be amended up to 120 days after the effective date of this MRP. After 120 days, the enrollee may contact the SSO Program Manager to request to amend an SSO report if the enrollee also submits justification for why the additional information was not available prior to the end of the 120 days.

5. **SSO Technical Report**

The enrollee shall submit an SSO Technical Report in the CIWQS Online SSO Database within 45 calendar days of the SSO end date for any SSO in which 50,000 gallons or greater are spilled to surface waters. This report, which does not preclude the Water Boards from requiring more detailed analyses if requested, shall include at a minimum, the following:

- i. **Causes and Circumstances of the SSO:**
 - a. Complete and detailed explanation of how and when the SSO was discovered.
 - b. Diagram showing the SSO failure point, appearance point(s), and final destination(s).
 - c. Detailed description of the methodology employed and available data used to calculate the volume of the SSO and, if applicable, the SSO volume recovered.
 - d. Detailed description of the cause(s) of the SSO.
 - e. Copies of original field crew records used to document the SSO.
 - f. Historical maintenance records for the failure location.
- ii. **Enrollee’s Response to SSO:**
 - a. Chronological narrative description of all actions taken by enrollee to terminate the spill.
 - b. Explanation of how the SSMP Overflow Emergency Response plan was implemented to respond to and mitigate the SSO.

- c. Final corrective action(s) completed and/or planned to be completed, including a schedule for actions not yet completed.

iii. **Water Quality Monitoring:**

- a. Description of all water quality sampling activities conducted including analytical results and evaluation of the results.
- b. Detailed location map illustrating all water quality sampling points.

6. **PLSDs**

Discharges of untreated or partially treated wastewater resulting from blockages or other problems within a privately owned sewer lateral connected to the enrollee's sanitary sewer system or from other private sanitary sewer system assets may be voluntarily reported to the CIWQS Online SSO Database.

- i. The enrollee is also encouraged to provide notification to Cal OES per section B above when a PLSD greater than or equal to 1,000 gallons has or may result in a discharge to surface water. For any PLSD greater than or equal to 1,000 gallons regardless of the spill destination, the enrollee is also encouraged to file a spill report as required by Health and Safety Code section 5410 et. seq. and Water Code section 13271, or notify the responsible party that notification and reporting should be completed as specified above and required by State law.
- ii. If a PLSD is recorded in the CIWQS Online SSO Database, the enrollee must identify the sewage discharge as occurring and caused by a private sanitary sewer system asset and should identify a responsible party (other than the enrollee), if known. Certification of PLSD reports by enrollees is not required.

7. **CIWQS Online SSO Database Unavailability**

In the event that the CIWQS Online SSO Database is not available, the enrollee must fax or e-mail all required information to the appropriate Regional Water Board office in accordance with the time schedules identified herein. In such event, the enrollee must also enter all required information into the CIWQS Online SSO Database when the database becomes available.

8. **Mandatory Information to be Included in CIWQS Online SSO Reporting**

All enrollees shall obtain a CIWQS Online SSO Database account and receive a "Username" and "Password" by registering through CIWQS which can be reached at CIWQS@waterboards.ca.gov or by calling (866) 792-4977, M-F, 8 A.M. to 5 P.M. These accounts will allow controlled and secure entry into the CIWQS Online SSO Database. Additionally, within thirty (30) days of initial enrollment and prior to recording SSOs into the CIWQS Online SSO Database, all enrollees must complete a Collection System Questionnaire (Questionnaire). The Questionnaire shall be updated at least once every 12 months.

i. **SSO Reports**

At a minimum, the following mandatory information shall be reported prior to finalizing and certifying an SSO report for each category of SSO:

- a. **Draft Category 1 SSOs:** At a minimum, the following mandatory information shall be reported for a draft Category 1 SSO report:
1. SSO Contact Information: Name and telephone number of enrollee contact person who can answer specific questions about the SSO being reported.
 2. SSO Location Name.
 3. Location of the overflow event (SSO) by entering GPS coordinates. If a single overflow event results in multiple appearance points, provide GPS coordinates for the appearance point closest to the failure point and describe each additional appearance point in the SSO appearance point explanation field.
 4. Whether or not the SSO reached surface water, a drainage channel, or entered and was discharged from a drainage structure.
 5. Whether or not the SSO reached a municipal separate storm drain system.
 6. Whether or not the total SSO volume that reached a municipal separate storm drain system was fully recovered.
 7. Estimate of the SSO volume, inclusive of all discharge point(s).
 8. Estimate of the SSO volume that reached surface water, a drainage channel, or was not recovered from a storm drain.
 9. Estimate of the SSO volume recovered (if applicable).
 10. Number of SSO appearance point(s).
 11. Description and location of SSO appearance point(s). If a single sanitary sewer system failure results in multiple SSO appearance points, each appearance point must be described.
 12. SSO start date and time.
 13. Date and time the enrollee was notified of, or self-discovered, the SSO.
 14. Estimated operator arrival time.
 15. For spills greater than or equal to 1,000 gallons, the date and time Cal OES was called.
 16. For spills greater than or equal to 1,000 gallons, the Cal OES control number.
- b. **Certified Category 1 SSOs:** At a minimum, the following mandatory information shall be reported for a certified Category 1 SSO report, in addition to all fields in section 8.i.a :
1. Description of SSO destination(s).
 2. SSO end date and time.
 3. SSO causes (mainline blockage, roots, etc.).
 4. SSO failure point (main, lateral, etc.).
 5. Whether or not the spill was associated with a storm event.
 6. Description of spill corrective action, including steps planned or taken to reduce, eliminate, and prevent reoccurrence of the overflow; and a schedule of major milestones for those steps.
 7. Description of spill response activities.
 8. Spill response completion date.
 9. Whether or not there is an ongoing investigation, the reasons for the investigation and the expected date of completion.

10. Whether or not a beach closure occurred or may have occurred as a result of the SSO.
 11. Whether or not health warnings were posted as a result of the SSO.
 12. Name of beach(es) closed and/or impacted. If no beach was impacted, NA shall be selected.
 13. Name of surface water(s) impacted.
 14. If water quality samples were collected, identify parameters the water quality samples were analyzed for. If no samples were taken, NA shall be selected.
 15. If water quality samples were taken, identify which regulatory agencies received sample results (if applicable). If no samples were taken, NA shall be selected.
 16. Description of methodology(ies) and type of data relied upon for estimations of the SSO volume discharged and recovered.
 17. SSO Certification: Upon SSO Certification, the CIWQS Online SSO Database will issue a final SSO identification (ID) number.
- c. **Draft Category 2 SSOs:** At a minimum, the following mandatory information shall be reported for a draft Category 2 SSO report:
1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO.
- d. **Certified Category 2 SSOs:** At a minimum, the following mandatory information shall be reported for a certified Category 2 SSO report:
1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO and Items 1-9, and 17 in section 8.i.b above for Certified Category 1 SSO.
- e. **Certified Category 3 SSOs:** At a minimum, the following mandatory information shall be reported for a certified Category 3 SSO report:
1. Items 1-14 in section 8.i.a above for Draft Category 1 SSO and Items 1-6, and 17 in section 8.i.b above for Certified Category 1 SSO.
- ii. **Reporting SSOs to Other Regulatory Agencies**
- These reporting requirements do not preclude an enrollee from reporting SSOs to other regulatory agencies pursuant to state law. In addition, these reporting requirements do not replace other Regional Water Board notification and reporting requirements for SSOs.
- iii. **Collection System Questionnaire**
- The required Questionnaire (see subsection G of the SSS WDRs) provides the Water Boards with site-specific information related to the enrollee's sanitary sewer system. The enrollee shall complete and certify the Questionnaire at least every 12 months to facilitate program implementation, compliance assessment, and enforcement response.
- iv. **SSMP Availability**
- The enrollee shall provide the publicly available internet web site address to the CIWQS Online SSO Database where a downloadable copy of the enrollee's approved SSMP, critical supporting documents referenced in the SSMP, and proof of local governing board approval of the SSMP is posted. If all of the SSMP documentation listed in this subsection is not publicly available on the Internet, the enrollee shall comply with the following procedure:

- a. Submit an **electronic** copy of the enrollee's approved SSMP, critical supporting documents referenced in the SSMP, and proof of local governing board approval of the SSMP to the State Water Board, within 30 days of that approval and within 30 days of any subsequent SSMP re-certifications, to the following mailing address:

State Water Resources Control Board
Division of Water Quality
Attn: SSO Program Manager
1001 I Street, 15th Floor, Sacramento, CA 95814

D. WATER QUALITY MONITORING REQUIREMENTS:

To comply with subsection D.7(v) of the SSS WDRs, the enrollee shall develop and implement an SSO Water Quality Monitoring Program to assess impacts from SSOs to surface waters in which 50,000 gallons or greater are spilled to surface waters. The SSO Water Quality Monitoring Program, shall, at a minimum:

1. Contain protocols for water quality monitoring.
2. Account for spill travel time in the surface water and scenarios where monitoring may not be possible (e.g. safety, access restrictions, etc.).
3. Require water quality analyses for ammonia and bacterial indicators to be performed by an accredited or certified laboratory.
4. Require monitoring instruments and devices used to implement the SSO Water Quality Monitoring Program to be properly maintained and calibrated, including any records to document maintenance and calibration, as necessary, to ensure their continued accuracy.
5. Within 48 hours of the enrollee becoming aware of the SSO, require water quality sampling for, at a minimum, the following constituents:
 - i. Ammonia
 - ii. Appropriate Bacterial indicator(s) per the applicable Basin Plan water quality objective or Regional Board direction which may include total and fecal coliform, enterococcus, and e-coli.

E. RECORD KEEPING REQUIREMENTS:

The following records shall be maintained by the enrollee for a minimum of five (5) years and shall be made available for review by the Water Boards during an onsite inspection or through an information request:

1. General Records: The enrollee shall maintain records to document compliance with all provisions of the SSS WDRs and this MRP for each sanitary sewer system owned including any required records generated by an enrollee's sanitary sewer system contractor(s).
2. SSO Records: The enrollee shall maintain records for each SSO event, including but not limited to:
 - i. Complaint records documenting how the enrollee responded to all notifications of possible or actual SSOs, both during and after business hours, including complaints that do not

result in SSOs. Each complaint record shall, at a minimum, include the following information:

- a. Date, time, and method of notification.
 - b. Date and time the complainant or informant first noticed the SSO.
 - c. Narrative description of the complaint, including any information the caller can provide regarding whether or not the complainant or informant reporting the potential SSO knows if the SSO has reached surface waters, drainage channels or storm drains.
 - d. Follow-up return contact information for complainant or informant for each complaint received, if not reported anonymously.
 - e. Final resolution of the complaint.
- ii. Records documenting steps and/or remedial actions undertaken by enrollee, using all available information, to comply with section D.7 of the SSS WDRs.
 - iii. Records documenting how all estimate(s) of volume(s) discharged and, if applicable, volume(s) recovered were calculated.
3. Records documenting all changes made to the SSMP since its last certification indicating when a subsection(s) of the SSMP was changed and/or updated and who authorized the change or update. These records shall be attached to the SSMP.
 4. Electronic monitoring records relied upon for documenting SSO events and/or estimating the SSO volume discharged, including, but not limited to records from:
 - i. Supervisory Control and Data Acquisition (SCADA) systems
 - ii. Alarm system(s)
 - iii. Flow monitoring device(s) or other instrument(s) used to estimate wastewater levels, flow rates and/or volumes.

F. CERTIFICATION

1. All information required to be reported into the CIWQS Online SSO Database shall be certified by a person designated as described in subsection J of the SSS WDRs. This designated person is also known as a Legally Responsible Official (LRO). An enrollee may have more than one LRO.
2. Any designated person (i.e. an LRO) shall be registered with the State Water Board to certify reports in accordance with the CIWQS protocols for reporting.
3. Data Submitter (DS): Any enrollee employee or contractor may enter draft data into the CIWQS Online SSO Database on behalf of the enrollee if authorized by the LRO and registered with the State Water Board. However, only LROs may certify reports in CIWQS.
4. The enrollee shall maintain continuous coverage by an LRO. Any change of a registered LRO or DS (e.g., retired staff), including deactivation or a change to the LRO's or DS's contact information, shall be submitted by the enrollee to the State Water Board within 30 days of the change by calling (866) 792-4977 or e-mailing help@ciwqs.waterboards.ca.gov.

5. A registered designated person (i.e., an LRO) shall certify all required reports under penalty of perjury laws of the state as stated in the CIWQS Online SSO Database at the time of certification.

CERTIFICATION

The undersigned Clerk to the Board does hereby certify that the foregoing is a full, true, and correct copy of an order amended by the Executive Director of the State Water Resources Control Board.

7/30/13

Date



Jeanine Townsend
Clerk to the Board

Appendix C

Sample “Payment Bond” Form

Sample “Performance Bond” Form

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS:

That **WHEREAS**, the County of San Mateo hereinafter designated as the "County," has awarded to _____, hereinafter designated
(Contractor's Name)
as the "Principal," a contract dated _____, hereinafter designated
(Contract Award Date)
as the "Contract," which Contract is by this reference made a part hereof, for the work described as _____.
(Project Name, Location & Number)

And WHEREAS, pursuant to law, the Principal is required, before entering upon the performance of the work, to file a good and sufficient bond with the body by whom the Contract is awarded to secure the claims to which reference is made in Sections 9550 to 9566 and 9100 to 9364 both inclusive, of the Civil Code of California.

NOW THEREFORE, THESE PRESENTS WITNESSETH:

That the said Principal and the undersigned, _____
(Surety's Name)
as corporate Surety, are held and firmly bound unto all laborers, material men and other persons referred to in said statutes in the sum of _____ Dollars (\$ _____)
lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, or assigns, jointly and severally, by these presents.

The condition of this obligation is that if the above bonded Principal, contractor, person, company or corporation, or his or its sub-contractor, fails to pay any claimant name in Section 9100 of the Civil Code of the State of California, or amounts due under the Unemployment Insurance Code, with respect to work or labor performed by any such claimant, that the Surety on this bond will pay the same, in an amount not exceeding the aggregate sum specified in this bond, and also, in case suit is brought upon this bond, a reasonable attorney's fee, which shall be awarded by the court to the prevailing party in said suit, and attorney's fees to be taxed as costs in said suit.

It is hereby expressly stipulated and agreed that this bond shall inure to the benefit of any and all persons, companies and corporations entitled to file claims under Section 9100 to 9364 of the Civil Code, so as to give a right of action to them or

their assigns in any suit brought upon this bond.

This bond is executed and filed to comply with the provisions of the act of Legislature of the State of California as designated in the Civil Code, Sections 9550-9566 inclusive, and all amendments thereto.

Should the condition of this bond be fully performed, then this obligation shall become null and void, otherwise it shall be and remain in full force and effect.

And the said Surety, for value received, hereby stipulates and agrees that no change will be made which increases the total Contract price more than twenty percent (20%) in excess of the original Contract price without notice to the Surety, then, this obligation to be void, otherwise to remain in full force and virtue.

Correspondence relating to this bond shall be sent to the Surety at the address set forth below.

IN WITNESS WHEREOF, this instrument has been duly executed by the Principal and Surety this _____ day of _____, 20____.

Principal

Surety

Signature

Signature

Printed Name

Printed Name

Address for Notices:

NOTE: Notary acknowledgement for Surety and Surety's Power of Attorney must be attached.

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS:

That **WHEREAS**, the County of San Mateo hereinafter designated as the "County," has awarded to _____, hereinafter designated
(Contractor's Name)
as the "Principal," a contract dated _____, hereinafter designated
(Contract Award Date)
as the "Contract," which Contract is by this reference made a part hereof, for the work described as _____.
(Project Name, Location & Number)

And WHEREAS, Principal is required to furnish a bond in connection with the Contract, guaranteeing the faithful performance thereof.

NOW THEREFORE, THESE PRESENTS WITNESSETH:

That the said Principal and the undersigned, _____,
(Surety's Name)
as corporate Surety, are held and firmly bound unto the County in the sum of _____ Dollars (\$ _____)

lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, or assigns, jointly and severally, firmly by these presents.

The condition of this obligation is such that if the above bonded Principal shall well and truly perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of said Contract during the original term of said Contract and any extensions thereof that may be granted by the County, with or without notice to the Surety, and during the life of any guarantee required under the Contract, and shall also well and truly perform and fulfill all the undertakings, covenants, terms, conditions and agreements of any and all duly authorized modifications of said Contract that may hereafter be made, except that no change will be made which increases the total

Contract price more than twenty percent (20%) in excess of the original Contract price without notice to the Surety, then, this obligation to be void, otherwise to remain in full force and virtue.

Correspondence relating to this bond shall be sent to the Surety at the address set forth below.

IN WITNESS WHEREOF, this instrument has been duly executed by the Principal and Surety this _____ day of _____, 20____.

Principal

Surety

Signature

Signature

Printed Name

Printed Name

Address for Notices:

NOTE: Notary acknowledgement for Surety and Surety's Power of Attorney must be attached.

Appendix D

Daily Personnel and Equipment Log

DAILY PERSONNEL AND EQUIPMENT LOG

Using as many copies of this form necessary, the Contractor shall provide the Engineer with a list of all personnel and their title and, if applicable, equipment said employee is operating. This information is required of the Prime and their Subcontractors.

This form, if used in lieu of Contractor’s Daily Dispatch Report, shall be submitted to the Engineer by the start of the first working day subsequent to the performance of the work, or Contractor may incur task-specific liquidated damages in the amount of \$500 per day for every day hence until submittal is made. Reference is made to Section 7-4a, “Payroll Records,” of the Project Special Provisions.

Date: _____ Project No.: P30T1

Project: Tunitas Creek Beach Improvements Project

Contractor: _____

Is this log for Subcontractor? Yes No

If yes, Name of Subcontractor: _____

Personnel		Equipment			
Name	Title/ Trade	No.	Type	Make	Model

Notes:

Appendix E

**Public Contract Code
Sections 9204 and 20104 et seq.**

Public Contract Code Section 9204 et seq.

9204.

(a) The Legislature finds and declares that it is in the best interests of the state and its citizens to ensure that all construction business performed on a public works project in the state that is complete and not in dispute is paid in full and in a timely manner.

(b) Notwithstanding any other law, including, but not limited to, Article 7.1 (commencing with Section 10240) of Chapter 1 of Part 2, Chapter 10 (commencing with Section 19100) of Part 2, and Article 1.5 (commencing with Section 20104) of Chapter 1 of Part 3, this section shall apply to any claim by a contractor in connection with a public works project.

(c) For purposes of this section:

(1) "Claim" means a separate demand by a contractor sent by registered mail or certified mail with return receipt requested, for one or more of the following:

(A) A time extension, including, without limitation, for relief from damages or penalties for delay assessed by a public entity under a contract for a public works project.

(B) Payment by the public entity of money or damages arising from work done by, or on behalf of, the contractor pursuant to the contract for a public works project and payment for which is not otherwise expressly provided or to which the claimant is not otherwise entitled.

(C) Payment of an amount that is disputed by the public entity.

(2) "Contractor" means any type of contractor within the meaning of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code who has entered into a direct contract with a public entity for a public works project.

(3) (A) "Public entity" means, without limitation, except as provided in subparagraph (B), a state agency, department, office, division, bureau, board, or commission, the California State University, the University of California, a city, including a charter city, county, including a charter county, city and county, including a charter city and county, district, special district, public authority, political subdivision, public corporation, or nonprofit transit corporation wholly owned by a public agency and formed to carry out the purposes of the public agency.

(B) "Public entity" shall not include the following:

(i) The Department of Water Resources as to any project under the jurisdiction of that department.

(ii) The Department of Transportation as to any project under the jurisdiction of that department.

(iii) The Department of Parks and Recreation as to any project under the jurisdiction of that department.

(iv) The Department of Corrections and Rehabilitation with respect to any project under its jurisdiction pursuant to Chapter 11 (commencing with Section 7000) of Title 7 of Part 3 of the Penal Code.

(v) The Military Department as to any project under the jurisdiction of that department.

(vi) The Department of General Services as to all other projects.

(vii) The High-Speed Rail Authority.

(4) "Public works project" means the erection, construction, alteration, repair, or improvement of any public structure, building, road, or other public improvement of any kind.

(5) "Subcontractor" means any type of contractor within the meaning of Chapter 9 (commencing with Section 7000) of Division 3 of the Business and Professions Code who either is in direct contract with a contractor or is a lower tier subcontractor.

(d) (1) (A) Upon receipt of a claim pursuant to this section, the public entity to which the claim applies shall conduct a reasonable review of the claim and, within a period not to exceed 45 days, shall provide the claimant a written statement identifying what portion of the claim is disputed and what portion is undisputed. Upon receipt of a claim, a public entity and a contractor may, by mutual agreement, extend the time period provided in this subdivision.

(B) The claimant shall furnish reasonable documentation to support the claim.

(C) If the public entity needs approval from its governing body to provide the claimant a written statement identifying the disputed portion and the undisputed portion of the claim, and the governing body does not meet within the 45 days or within the mutually agreed to extension of time following receipt of a claim sent by registered mail or certified mail, return receipt requested, the public entity shall have up to three days following the next duly publicly noticed meeting of the governing body after the 45-day period, or extension, expires to provide the claimant a written statement identifying the disputed portion and the undisputed portion.

(D) Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after the public entity issues its written statement. If the public entity fails to issue a written statement, paragraph (3) shall apply.

(2) (A) If the claimant disputes the public entity's written response, or if the public entity fails to respond to a claim issued pursuant to this section within the time prescribed, the claimant may demand in writing an informal conference to meet and confer for settlement of the issues in dispute. Upon receipt of a demand in writing sent by registered mail or certified mail, return receipt requested, the public entity shall schedule a meet and confer conference within 30 days for settlement of the dispute.

(B) Within 10 business days following the conclusion of the meet and confer conference, if the claim or any portion of the claim remains in dispute, the public entity shall provide the claimant a written statement identifying the portion of the claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the claim shall be processed and made within 60 days after the public entity issues its written statement. Any disputed portion of the claim, as identified by the contractor in writing, shall be submitted to nonbinding mediation, with the public entity and the claimant sharing the associated costs equally. The public entity and claimant shall mutually agree to a mediator within 10 business days after the disputed portion of the claim has been identified in writing. If the parties cannot agree upon a mediator, each party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the claim. Each party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator. If mediation is unsuccessful, the parts of the claim remaining in dispute shall be subject to applicable procedures outside this section.

(C) For purposes of this section, mediation includes any nonbinding process, including, but not limited to, neutral evaluation or a dispute review board, in which an independent third party or board assists the parties in dispute resolution through negotiation or by issuance of an evaluation. Any mediation utilized shall conform to the timeframes in this section.

(D) Unless otherwise agreed to by the public entity and the contractor in writing, the mediation conducted pursuant to this section shall excuse any further obligation under Section 20104.4 to mediate after litigation has been commenced.

(E) This section does not preclude a public entity from requiring arbitration of disputes under private arbitration or the Public Works Contract Arbitration Program, if mediation under this section does not resolve the parties' dispute.

(3) Failure by the public entity to respond to a claim from a contractor within the time periods described in this subdivision or to otherwise meet the time requirements of this section shall result in the claim being deemed rejected in its entirety. A claim that is denied by reason of the public entity's failure to have responded to a claim, or its failure to otherwise meet the time requirements of this section, shall not constitute an adverse finding with regard to the merits of the claim or the responsibility or qualifications of the claimant.

(4) Amounts not paid in a timely manner as required by this section shall bear interest at 7 percent per annum.

(5) If a subcontractor or a lower tier subcontractor lacks legal standing to assert a claim against a public entity because privity of contract does not exist, the contractor may present to the public entity a claim on behalf of a subcontractor or lower tier subcontractor. A subcontractor may request in writing, either on his or her own behalf or on behalf of a lower tier subcontractor, that the contractor present a claim for work which was performed by the subcontractor or by a lower tier subcontractor on behalf of the subcontractor. The subcontractor requesting that the claim be presented to the public entity shall furnish reasonable documentation to support the claim. Within 45 days of receipt of this written request, the contractor shall notify the subcontractor in writing as to whether the contractor presented the claim to the public entity and, if the original contractor did not present the claim, provide the subcontractor with a statement of the reasons for not having done so.

(e) The text of this section or a summary of it shall be set forth in the plans or specifications for any public works project that may give rise to a claim under this section.

(f) A waiver of the rights granted by this section is void and contrary to public policy, provided, however, that (1) upon receipt of a claim, the parties may mutually agree to waive, in writing, mediation and proceed directly to the commencement of a civil action or binding arbitration, as applicable; and (2) a public entity may prescribe reasonable change order, claim, and dispute resolution procedures and requirements in addition to the provisions of this section, so long as the contractual provisions do not conflict with or otherwise impair the timeframes and procedures set forth in this section.

(g) This section applies to contracts entered into on or after January 1, 2017.

(h) Nothing in this section shall impose liability upon a public entity that makes loans or grants available through a competitive application process, for the failure of an awardee to meet its contractual obligations.

(i) This section shall remain in effect only until January 1, 2027, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 2027, deletes or extends that date.

SEC. 2.

The Legislature finds and declares that it is of statewide concern to require a charter city, charter county, or charter city and county to follow a prescribed claims resolution process to ensure there are uniform and equitable procurement practices.

SEC. 3.

If the Commission on State Mandates determines that this act contains costs mandated by the state, reimbursement to local agencies and school districts for those costs shall be made pursuant to Part 7 (commencing with Section 17500) of Division 4 of Title 2 of the Government Code.

Public Contract Code Section 20104 et seq.

20104.

(a) (1) This article applies to all public works claims of three hundred seventy-five thousand dollars (\$375,000) or less which arise between a contractor and a local agency.

(2) This article shall not apply to any claims resulting from a contract between a contractor and a public agency when the public agency has elected to resolve any disputes pursuant to Article 7.1 (commencing with Section 10240) of Chapter 1 of Part 2.

(b) (1) "Public work" means "public works contract" as defined in Section 1101 but does not include any work or improvement contracted for by the state or the Regents of the University of California.

(2) "Claim" means a separate demand by the contractor for (A) a time extension, (B) payment of money or damages arising from work done by, or on behalf of, the contractor pursuant to the contract for a public work and payment of which is not otherwise expressly provided for or the claimant is not otherwise entitled to, or (C) an amount the payment of which is disputed by the local agency.

(c) The provisions of this article or a summary thereof shall be set forth in the plans or specifications for any work which may give rise to a claim under this article.

(d) This article applies only to contracts entered into on or after January 1, 1991.

(Amended by Stats. 2010, Ch. 697, Sec. 47. Effective January 1, 2011. Operative July 1, 2012, by Sec. 105 of Ch. 697.)

20104.2.

For any claim subject to this article, the following requirements apply:

(a) The claim shall be in writing and include the documents necessary to substantiate the claim. Claims must be filed on or before the date of final payment. Nothing in this subdivision is intended to extend the time limit or supersede notice requirements otherwise provided by contract for the filing of claims.

(b) (1) For claims of less than fifty thousand dollars (\$50,000), the local agency shall respond in writing to any written claim within 45 days of receipt of the claim, or may request, in writing, within 30 days of receipt of the claim, any additional documentation supporting the claim or relating to defenses to the claim the local agency may have against the claimant.

(2) If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of the local agency and the claimant.

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

(c) (1) For claims of over fifty thousand dollars (\$50,000) and less than or equal to three hundred seventy-five thousand dollars (\$375,000), the local agency shall respond in writing to all written claims within 60 days of receipt of the claim, or may request, in writing, within 30 days of receipt of the claim, any additional documentation supporting the claim or relating to defenses to the claim the local agency may have against the claimant.

(2) If additional information is thereafter required, it shall be requested and provided pursuant to this subdivision, upon mutual agreement of the local agency and the claimant.

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

(d) If the claimant disputes the local agency's written response, or the local agency fails to respond within the time prescribed, the claimant may so notify the local agency, in writing, either within 15 days of receipt of the local agency's response or within 15 days of the local agency'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 local agency shall schedule a meet and confer conference within 30 days for settlement of the dispute.

(e) Following the meet and confer conference, if the claim or any portion remains in dispute, the claimant may file a claim as provided in 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 of time within which a claim must be filed shall be tolled from the time the claimant submits his or her written claim pursuant to subdivision (a) until the time that claim is denied as a result of the meet and confer process, including any period of time utilized by the meet and confer process.

(f) This article does not apply to tort claims and nothing in this article is intended nor shall be construed to change the time periods for filing tort claims or actions specified by 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.

(Added by Stats. 1994, Ch. 726, Sec. 22. Effective September 22, 1994.)

20104.4.

The following procedures are established for all civil actions filed to resolve claims subject to this article:

(a) Within 60 days, but no earlier than 30 days, following the filing or responsive pleadings, the court shall submit the matter to nonbinding 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 or by stipulation of both parties. If the parties fail to select a mediator within the 15-day period, any party may petition the court to appoint the mediator.

(b) (1) 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 (Title 4 (commencing with Section 2016.010) 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.

(2) Notwithstanding any other provision of law, upon stipulation of the parties, arbitrators appointed for purposes of this article shall be experienced in construction law, and, upon stipulation of the parties, mediators and arbitrators shall be paid necessary and

reasonable hourly rates of pay not to exceed their customary rate, and such fees and expenses shall be paid equally by the parties, except in the case of arbitration where the arbitrator, for good cause, determines a different division. In no event shall these fees or expenses be paid by state or county funds.

(3) In addition to Chapter 2.5 (commencing with Section 1141.10) of Title 3 of Part 3 of the Code of Civil Procedure, any party who after receiving an arbitration award requests a trial de novo but does not obtain a more favorable judgment shall, in addition to payment of costs and fees under that chapter, pay the attorney's fees of the other party arising out of the trial de novo.

(c) The court may, upon request by any party, order any witnesses to participate in the mediation or arbitration process.

(Amended by Stats. 2004, Ch. 182, Sec. 54. Effective January 1, 2005. Operative July 1, 2005, by Sec. 64 of Ch. 182.)

20104.6.

(a) No local agency shall fail to pay money as to any portion of a claim which is undisputed except as otherwise provided in the contract.

(b) In any suit filed under Section 20104.4, the local agency shall pay interest at the legal rate on any arbitration award or judgment. The interest shall begin to accrue on the date the suit is filed in a court of law.

(Added by Stats. 1994, Ch. 726, Sec. 22. Effective September 22, 1994.)

Appendix F

Mitigation Monitoring and Reporting Plan

APPENDIX B

Tunitas Creek Beach Improvement Project County of San Mateo, Parks Department Mitigation Monitoring & Reporting Program				
Impact	Mitigation Measure	Mitigation Action(s)	Mitigation Timing	Action/ Oversight Responsibility
Air Quality				
Impact AIR-1: Construction of the proposed project could result in fugitive dust impacts. The BAAQMD requires the implementation of BAAQMD Basic Construction Mitigation Measures (Best Management Practices) to reduce construction fugitive dust impacts to a less-than-significant level.	AIR-1: In order to meet the BAAQMD fugitive dust threshold, the following BAAQMD Basic Construction Mitigation Measures shall be implemented: <ul style="list-style-type: none"> • Any exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. • All haul trucks transporting soil, sand, or other loose material off-site shall be covered. • All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. • All vehicle speeds on unpaved roads shall be limited to 15 mph. • All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. • Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points. • All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. 	Implement Basic Construction Mitigation Measures to control fugitive dust	During construction	The Contractor is responsible for implementing this measure; oversight by County of San Mateo Parks Department (County)

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Tunitas Creek Beach Improvement Project County of San Mateo, Parks Department Mitigation Monitoring & Reporting Program				
Impact	Mitigation Measure	Mitigation Action(s)	Mitigation Timing	Action/ Oversight Responsibility
	<ul style="list-style-type: none"> Post a publicly visible sign with the telephone number and person to contact at the County of San Mateo Parks Department regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations. 			
Biological Resources				
<p>Impact BIO-1: If present, coastal marsh milk-vetch could be impacted by ground disturbance, vegetation removal, water system development, and other project construction activities. Potential impacts to these species can be reduced to a less-than-significant level with implementation of Mitigation Measure BIO-1.</p>	<p>BIO-1: To the extent feasible, the previously mapped CNDDDB occurrences of the coastal marsh milk-vetch should be avoided and set back from the proposed project development by at least 50 feet.</p> <p>Prior to the initiation of construction activities, a qualified botanist shall conduct protocol-level surveys to verify the absence of the special-status plant species listed on Table A: Special-Status Species Evaluated for the Project of the Initial Study. The surveys shall be conducted in accordance with the California Department of Fish and Wildlife's (CDFW) Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities. A series of pre-construction special-status plant surveys shall be conducted multiple times during the growing season to account for both early and late-blooming plant species. The surveys shall be conducted by a qualified biologist within the proposed project footprint and within a 50-foot buffer to allow for assessment of required avoidance setbacks from any special-status plants identified. The proposed project shall be at least 50 feet away from any special-status plant detected during pre-construction surveys. The previously mapped occurrences of coastal marsh milk-vetch shall be avoided and set back from the proposed project development by at least 50 feet.</p>	<p>County to avoid and set back project elements at least 50 feet from known occurrences of special-status plants.</p> <p>Qualified botanist to conduct surveys for sensitive plant species during the appropriate blooming season.</p> <p>If any special-status plant species are identified within the area of potential impact, protection fencing to be established to avoid impacts, when possible. Qualified botanist to conduct transplanting and monitor success.</p>	<p>Prior to the start of construction.</p>	<p>Qualified biologist to conduct surveys and any plantings; oversight by County.</p>

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	<p>If special-status plants are found in the project site, the population size and occupied area of special-status plant populations identified during the field survey, and with potential to be impacted, will be estimated. A “population” will be defined as the group of individuals of a species present within a 0.10-mile radius. In addition, the population shall be photographed and flagged to maximize avoidance, as well as to estimate the percentage of the population affected. If feasible, the project shall be redesigned or modified to avoid direct and indirect impacts on special-status plant species.</p> <p>Special-status plants to be avoided shall be protected from disturbance by installing environmentally sensitive area fencing (orange construction barrier fencing or a suitable alternative). Protective fencing shall be installed under the direction of a qualified biologist as necessary to protect the plant and its habitat; where feasible, the environmentally sensitive area fencing shall be installed at least 50 feet from the edge of the population. The location of the fencing shall be shown on the site plans and marked in the field with stakes and/or flagging. The specifications shall contain clear language that prohibits construction activities, vehicle operation, material and equipment storage, and other surface disturbing activities within the fenced environmentally sensitive area.</p> <p>If impacts to special-status plants are unavoidable and less than 5 percent of a population would be impacted, prior to any ground-disturbing activities, the County shall preserve the seedbank within the impact area by removing and retaining the topsoil prior to the implementation of</p>			

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Tunitas Creek Beach Improvement Project County of San Mateo, Parks Department Mitigation Monitoring & Reporting Program				
Impact	Mitigation Measure	Mitigation Action(s)	Mitigation Timing	Action/ Oversight Responsibility
	<p>construction activities. Following completion of construction, the County shall monitor the impact area for two years. Any non-native invasive plant species occurring within this area during the monitoring period shall be removed under the supervision of a qualified biologist.</p> <p>If appropriately timed focused botanical surveys cannot be conducted prior to construction activities in areas identified by a qualified biologist as potentially supporting listed plants, then the County will assume presence of the plant species in question.</p>			
<p>Impact BIO-2: Suitable habitat may be present for monarch butterfly within the Monterey pine forest, which would be impacted by development of proposed park improvements, and possibly by on-going park operations and management. Implementation of Mitigation Measure BIO-2 would reduce potential impacts to monarch butterfly to less than significant.</p>	<p>BIO-2: If trees within the Monterey pine forest are impacted (trimmed or removed), a focused monarch butterfly survey shall be conducted to determine if monarchs roost in the on-site trees. If found, potential impacts to the trees should be avoided, especially during the winter when monarchs are more likely to be present. The following measures, as adapted from the County of San Mateo Routine Maintenance Program Environmental Impact Report, shall be considered in order to avoid potential impacts to existing or suitable roost sites:</p> <ul style="list-style-type: none"> • If, based on a review of current CNDDDB records or the latest information available from the Xerces Society (https://xerces.org/state-of-the-monarch-butterfly-overwintering-sites-in-california/) historically or currently occupied overwintering habitat for the monarch butterfly is determined to exist in or adjacent to the work area where ground disturbing activities are planned to occur, the County shall implement applicable protection measures as follows: 	<p>Qualified biologist to conduct surveys for monarch butterfly roosts, establish buffer zones if roosts are identified, and implement an impact minimization plan in consultation with USWFS, if trees cannot be avoided.</p> <p>If any monarch butterfly roosts are found, Contractor shall avoid tree removal/impacts during winter.</p>	<p>Prior to the start of construction and throughout the construction/operation period</p>	<p>Qualified biologist to conduct surveys, establish buffers and implement minimization plan (if needed); Contractor to avoid trees; oversight by County.</p>

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	<ul style="list-style-type: none"> ○ Areas supporting overwintering habitat for the monarch butterfly shall be identified by a qualified biologist and maintenance activities during fall and winter months when monarch butterflies are present shall be avoided to the extent practicable. ○ Historically or currently occupied trees/groves shall be protected from disturbance by the establishment of a 100-foot buffer zone around the tree/grove. The buffer shall be measured from the outside edge of the dripline of the monarch grove. If maintenance activities within 100 feet of a historically or currently occupied tree/grove are unavoidable, the County shall prepare and implement an impact minimization plan in consultation with the United States Fish and Wildlife Service (USFWS). ○ No herbicides or pesticides shall be applied to the buffer area, and to the extent feasible, maintenance personnel and equipment shall not operate within such areas 			
Impact BIO-3: Clearing of vegetation and ground-disturbing activities in riparian areas and other habitat areas have the potential to impact these species, if present during project construction. Implementation of Mitigation Measure BIO-3 would reduce potential impacts to these species to	BIO-3: For ground-disturbing activities within and in proximity to creeks or within riparian woodlands or riparian scrub habitats, the following measures shall be implemented to reduce potential impacts to special-status amphibian and reptile species, including California red-legged frog, San Francisco garter snake, California giant salamander, Santa Cruz black salamander, and western pond turtle. Where applicable, these measures were adapted from the County of San Mateo Routine Maintenance Program Environmental Impact Report.	Qualified biologist to conduct employee education training, preconstruction surveys, establish exclusion areas, conduct monitoring, and relocate individuals, if needed. Contractor to implement measures as outlined in contract specifications to	Prior to, during, and following project construction	Qualified biologist to conduct training, surveys, and monitoring; Contractor to implement measures; oversight by County.

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a less than significant level.	<ul style="list-style-type: none"> • The qualified biologist shall conduct employee education training for personnel working on construction or demolition activities. Personnel shall be required to attend the presentation, which shall describe the life cycles and ecology of the California red-legged-frog, San Francisco garter snake, California giant salamander, Santa Cruz black salamander, western pond turtle, and all other special-status species that could occur on the project site. The training shall also include materials concerning the following topics: sensitive resources, resource avoidance, permit conditions, and possible consequences for violations of State or Federal environmental laws. The training shall cover the mitigation measures, environmental permits, and regulatory compliance requirements, as well as the roles and authority of the monitors and biologists. Printed training material and an attendance sheet shall be provided at the session. • Prior to implementation of construction work, the County or County’s biologist shall submit to the USFWS and CDFW for its review and approval the qualifications of proposed wildlife biologists who will perform pre-activity surveys and on-site monitoring. • No more than 24 hours prior to the date of initial ground disturbance, a pre-activity survey for the California red-legged frog, San Francisco garter snake, California giant salamander, Santa Cruz black salamander, and western pond turtle shall be conducted by a qualified biologist in the construction area. The survey shall consist of walking the work area limits to ascertain the possible presence of the 	avoid impacts to these species during construction activities.		

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	<p>species. The qualified biologist shall investigate all potential areas that could be used by these species, including examination of mammal burrows. If any adults, subadults, juveniles, tadpoles, or eggs are found, the qualified biologist shall contact the USFWS and/or CDFW to determine if moving any of the individuals is appropriate. If the USFWS/CDFW approves moving animals, the biologist and USFWS/CDFW shall identify a suitable relocation site, and the County shall ensure the qualified biologist is given sufficient time to move the animals from the work site before ground disturbance is initiated. Only qualified biologists shall capture, handle, and monitor the California red-legged frog, San Francisco garter snake, California giant salamander, Santa Cruz black salamander, and western pond turtle.</p> <ul style="list-style-type: none"> • To minimize harassment, injury, death, and harm to these species, one of the following two measures shall be implemented. <ul style="list-style-type: none"> ○ An approved, qualified biologist(s) shall be on-site during all initial construction activities, such as clearing and grubbing of vegetation that may result in take of or impacts to the California red-legged frog, San Francisco garter snake, California giant salamander, Santa Cruz black salamander, and western pond turtle as determined by the biologist. or ○ Prior to pre-activity surveys, personnel shall enclose the work area with an exclusion fence with a minimum height above grade of 42 inches. Where installation of exclusion fencing 			

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	<p>completely around the work area is not feasible, exclusion fencing shall be installed between the work area and any adjacent vegetation or sensitive habitat where special-status wildlife species could occur. The bottom of the fence shall either be buried a minimum of 6 inches below ground or otherwise secured in a manner approved by the USFWS/CDFW and shall remain in place during all construction activities in order to prevent special-status amphibians and reptiles from entering the work area. 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 exclusion fencing. A qualified biologist shall conduct a pre-activity survey of the fence installation area immediately prior to (i.e., the day of) the commencement of installation and shall be present to monitor fence installation. The exclusion fencing shall be inspected daily by construction personnel and maintained for the duration of the project.</p> <ul style="list-style-type: none"> The qualified biologist(s) shall be given the authority to freely communicate verbally, by telephone, electronic mail, or in writing at any time with construction personnel, any other person(s) at the work area, otherwise associated with the construction work, the USFWS, the CDFW, or their designated agents. The qualified biologist shall have oversight over implementation of all mitigation measures, and shall have the authority and responsibility to stop work activities if they determine any of the associated requirements are not being fulfilled. If the qualified 			

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	<p>biologist(s) exercises this authority, the USFWS/CDFW shall be notified by telephone and electronic mail within 24 hours.</p> <ul style="list-style-type: none"> • The project shall minimize adverse impacts to the California red-legged frog, San Francisco garter snake, California giant salamander, Santa Cruz black salamander, and western pond turtle by limiting, to the maximum extent possible, the number of access routes, ground disturbance area, equipment staging, storage, parking, and stockpile areas. Prior to initiating construction work that involves ground-disturbing activities, equipment staging areas, site access routes, sediment removal, and transportation equipment and personnel parking areas, debris storage areas, and any other areas that may be disturbed shall be identified, surveyed by the qualified biologist, and clearly identified with fencing. The fencing shall be inspected by construction personnel and maintained daily until construction is complete. • To the extent feasible, construction activities shall be conducted from April through October during the dry season when these semi-aquatic species are less likely to be found in a work area. To the extent practicable, ground-disturbing activities shall be avoided from October through April because that is the time period when California red-legged frogs other semi-aquatic species are most likely to be moving through upland areas. When ground-disturbing activities occur between November 1 and March 31, the County shall ensure that daily monitoring by the qualified biologist is completed for California red-legged frogs and other special-status amphibians and reptiles. 			

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Impact	Mitigation Measure	Mitigation Action(s)	Mitigation Timing	Action/ Oversight Responsibility
	<ul style="list-style-type: none"> • To avoid harassment, injury, death, and harm to individual San Francisco garter snakes, immediately prior to (i.e., the day of) the initiation of construction activities that have potential for take of the San Francisco garter snake, a USFWS and CDFW-approved biologist shall conduct daytime surveys throughout the project site. The approved biologist shall be present during initial ground-disturbing activities (i.e., clearing and grubbing) within 250 feet of the work area to monitor for individual garter snakes. If a San Francisco garter snake is observed within the work area, either during the pre-activity survey or at any time, activities that could potentially harm the individual shall cease and the USFWS and CDFW shall be contacted immediately. Work shall not re-commence without written approval from CDFW. The on-site biologist shall be the contact for any employee or contractor who might inadvertently kill or injure a garter snake or anyone who finds a dead, injured, or entrapped San Francisco garter snake. • For vegetation removal in suitable San Francisco garter snake habitat, vegetation shall be cut down to 3 inches by hand-tools (weedwhacker, etc.). Once the ground is visible, a visual survey for San Francisco garter snakes shall be conducted. If no special-status amphibians or reptiles are found in the area, removal of vegetation may continue very slowly with a biological monitor walking in front of the equipment to observe. • When a California red-legged frog, San Francisco garter snake, California giant salamander, Santa Cruz black salamander, or western pond turtle is 			

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	<p>encountered in the work area, all activities that have the potential to result in the harassment, injury, or death of the individual shall be immediately halted. The qualified biologist shall then assess the situation in order to select a course of action that shall avoid or minimize adverse impacts to the animal. To the maximum extent possible, contact with the animal shall be avoided and the individual shall be allowed to move out of the work area to a secure location on its own volition.</p> <ul style="list-style-type: none"> California red-legged frogs, San Francisco garter snakes, California giant salamanders, Santa Cruz black salamanders, and western pond turtles that are in danger shall be relocated and released by the qualified biologist outside the work area within the same riparian area or watershed. If relocation of the individual outside the work area is not feasible (i.e., too many individuals are observed per day), the biologist shall relocate the animals to a USFWS/CDFW pre-approved location. Prior to the initial ground disturbance, the County shall obtain approval of the relocation protocol from the USFWS/CDFW in the event that a California red-legged frog, San Francisco garter snake, California giant salamander, Santa Cruz black salamander, or western pond turtle is encountered and needs to be moved away from the work site. Under no circumstances shall the animal be released on a site unless the written permission of the landowner has been obtained by the County. The qualified biologist shall limit the duration of the handling and captivity of the animals to the minimum amount of time necessary to complete the task. If the animal must be 			

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	<p>held in captivity, it shall be kept in a cool, dark, moist, aerated environment, such as a clean and disinfected bucket or plastic container with a damp sponge. The County shall immediately notify the USFWS and CDFW once the animal and the site is secure.</p> <ul style="list-style-type: none"> • If California red-legged frog egg masses are present and work cannot be postponed until after hatching, a buffer of vegetation at least 10 feet in diameter shall be left around any egg masses found. The County shall keep a record of any sites where egg masses are found and will conduct vegetation removal between June 15 and October 15. Work within the channel shall avoided in order to avoid dislodging egg masses. Construction activities shall be performed from the banks. • If California giant salamander eggs or larvae are found, the qualified biologist shall establish a buffer around the location of the eggs/larvae and work may proceed outside of the buffer zone. No work shall occur within the buffer zone. Work within the buffer zone shall not occur until the time that eggs have hatched and/or larvae have metamorphosed, or the County shall contact CDFW to develop site appropriate avoidance and minimization measures. • If an active western pond turtle nest is detected within the activity area, a 10-foot buffer zone around the nest shall be established and maintained during the breeding and nesting season (April 1 – August 31). The buffer zone shall remain in place until the young have left the nest, as determined by a qualified biologist. 			

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Impact	Mitigation Measure	Mitigation Action(s)	Mitigation Timing	Action/ Oversight Responsibility
	<ul style="list-style-type: none"> • To minimize harassment, injury, death, and harm in the form of temporary habitat disturbances, all vehicle traffic shall be restricted to established roads, sediment removal and access areas, equipment staging, storage, parking, and stockpile areas. These areas shall be included in pre-activity surveys and, to the maximum extent possible, established in locations disturbed by previous activities to prevent further adverse impacts. Vehicles shall observe a 20-mile per hour speed limit within work areas, except on Highway 1. Off-road traffic outside of designated and fenced work areas shall be prohibited. • A litter control program shall be instituted at the project site. All workers shall ensure their food scraps, paper wrappers, food containers, cans, bottles, and other trash are deposited in covered or closed trash containers. The trash containers shall be removed from the site at the end of each working day. • For on-site storage of pipes, conduits and other materials that could provide shelter for special-status amphibians and reptiles, materials shall be securely capped prior to storage or an open-top trailer will be used to elevate the materials above ground. This method is intended to reduce the potential for animals to climb into the conduits and other materials. • To the maximum extent practicable, no construction activities shall occur during rain events or within 24-hours following a rain event. Prior to maintenance activities resuming, a qualified biologist shall inspect the work area and all equipment/materials for the presence of special-status amphibians and reptiles. The animals shall be allowed to move away from the 			

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	<p>work site of their own volition or moved by the qualified biologist.</p> <ul style="list-style-type: none"> • To the maximum extent practicable, night-time construction activities shall be minimized or avoided by the County. Because dusk and dawn are often the times when the California red-legged frog most actively moving and foraging, to the maximum extent practicable, earth-moving and other project activities shall cease no less than 30 minutes before sunset and shall not begin again prior to 30 minutes after sunrise. Artificial lighting in the work area shall be prohibited during the hours of darkness. • Plastic monofilament netting (erosion control matting), loosely woven netting, or similar material in any form shall not be used at the project site because amphibians and reptiles can become entangled and trapped in them. Any such material found on site shall be immediately removed by the qualified biologist, maintenance personnel, or County contractors. Materials utilizing fixed weaves (strands cannot move), polypropylene, polymer or other synthetic materials shall not be used. • Trenches or pits 1-foot or deeper that are going to be left unfilled for more than 48 hours shall be securely covered with boards or other material to prevent special-status amphibians and reptiles from falling into them. If this is not possible, the County shall ensure wooden ramps or other structures of suitable surface that provide adequate footing for the animal are placed in the trench or pit to allow for their unaided escape. Auger holes or fence post holes that are greater than 0.1-inch in diameter shall be immediately filled or securely covered so they do not 			

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	<p>become pitfall traps for the animal. The qualified biologist or trained construction personnel shall inspect the trenches, pits, or holes prior to their being filled to ensure no animals are in them. The trench, pit, or hole also shall be examined by the qualified biologist each workday morning at least one hour prior to initiation of work and in the late afternoon no more than one hour after work has ceased to ascertain whether any individuals have become trapped. If the escape ramps fail to allow the animal to escape, the qualified biologist shall remove and transport it to a safe location, or contact the USFWS/CDFW for guidance.</p> <ul style="list-style-type: none"> As part of the U.S. Army Corps of Engineers (Corps) permit application, a USFWS take permit (Biological Opinion) may be needed for the California red-legged frog and San Francisco garter snake, since they are federally listed species. CDFW may recommend a Section 2081 Incidental Take Permit if the proposed project has the potential to impact the San Francisco garter snake, since this species is listed by the State of California. The Parks Department shall comply with all conditions of incidental take permits issued for the project. Conditions may include, but are not limited to, development of revegetation and restoration plans and procedures, environmental awareness training, pre-construction wildlife surveys, and/or biological monitoring, some or all of which are already included as part of the mitigation measures described herein. (None of the other remaining special-status species are State-listed). 			

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<p>Impact BIO-4: If conducted during the nesting season (typically defined by as February 1 to August 31), project activities could impact nesting birds by removing vegetation or structures containing active nests and/or causing nest abandonment and subsequent reproductive failure due to prolonged loud construction noise. This impact can be reduced to a less-than-significant level with implementation of Mitigation Measure BIO-4.</p>	<p>BIO-4A: If construction activities occur between February 1 and August 31, pre-activity survey for nesting birds (special-status and common bird species) shall be conducted by a qualified biologist to ensure that no nests would be disturbed during project implementation. These surveys shall be conducted no more than seven days prior to the initiation of construction activities. During this survey, the biologist shall inspect all trees and other potential nesting habitats (e.g., trees, shrubs, coastal strand, coastal dunes, structures) in and immediately adjacent to the impact areas for nests. If an active nest is found sufficiently close to work areas to be disturbed by these activities, the biologist shall determine the extent of a construction-free buffer zone to be established around the nest (typically 300 feet for raptors and 100 feet for other species), to ensure that no nests of species protected by the Migratory Bird Treaty Act and/or California Fish and Game Code would be disturbed during project implementation. The boundary of each buffer zone shall be marked with fencing, flagging, or other easily identifiable marking if construction work occurs immediately outside the buffer zone. No trees or shrubs shall be disturbed that contain active bird nests until all eggs have hatched, and young have fully fledged (are no longer being fed by the adults and have completely left the nest site), or if the nest is determined by the biologist to no longer be active.</p> <p>If possible, all potential nesting substrates (e.g., bushes, trees, grasses, and other vegetation) that are planned for removal as part of the project shall be removed prior to the start of the nesting season (e.g., prior to February 1).</p>	<p>Contractor to schedule construction activities outside of nesting season (between September 1 and January 31). If construction cannot be rescheduled, qualified biologist to conduct preconstruction surveys and establish construction-free buffer zones as needed.</p>	<p>No more than 7 days prior to the initiation of ground disturbing activities.</p>	<p>Qualified biologist to conduct surveys and establish buffer zones; oversight by County.</p>
	<p>BIO-4B: To the extent feasible, construction activities within 600 feet of suitable snowy plover breeding habitat</p>	<p>Contractor to schedule construction activities</p>		

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	<p>shall occur outside the plover breeding season of March 1 through September 14. If construction activities occur within 600 feet of suitable snowy plover breeding habitat during the nesting season (March 1 through September 14), a pre-activity survey shall be conducted by a qualified biologist within 7 days prior to the start of the activity to determine whether active nests are present. If an active snowy plover nest is detected within 600 feet of the construction area, the qualified biologist, in coordination with USFWS personnel, shall determine an appropriate buffer that should remain free from construction activities. The buffer shall be determined based on the sensitivity of the nest, the presence of visual barriers (such as dunes) between the construction activities and the nest, and the level and proximity of existing human activity around the nest when it was established. The buffer shall remain in place until the nest is no longer active. If broods of unfledged snowy plover young are present, no construction activities shall occur within 300 feet (or as otherwise determined by a qualified biologist in coordination with the USFWS) of a brood.</p> <p>As part of the Corps permit application, a USFWS take permit (Biological Opinion) may be needed for the western snowy plover, since this species is federally listed. The Parks Department shall comply with all conditions of incidental take permits issued for the project.</p>	<p>outside of plover breeding season (between September 15 and February 28). If construction cannot be rescheduled, qualified biologist to conduct preconstruction surveys and establish construction-free buffer zones as needed.</p>	<p>initiation of ground disturbing activities.</p>	<p>conduct surveys and establish buffer zones; oversight by County.</p>
<p>Impact BIO-5: Construction of the proposed project and ongoing maintenance activities could adversely impact San Francisco</p>	<p>BIO-5: No more than two weeks prior to the beginning of ground disturbance that could disturb SFDFW houses, a qualified biologist shall survey the work areas. If SFDFW houses are found, the houses shall be flagged and construction fencing or flagging that will not impede the movement of the SFDFW shall be placed around the nest to</p>	<p>Qualified biologist to conduct preconstruction surveys, establish construction-free buffer zones, as needed, and implement measures if</p>	<p>Within 14 days prior to the initiation of ground disturbing activities.</p>	<p>Qualified biologist to conduct surveys and establish buffer zones;</p>

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<p>dusky-footed wood rat (SFDFW) if they are present during project construction or if construction impacts their houses. Implementation of Mitigation Measure BIO-5 would reduce potential impacts to SFDFW to a less-than-significant level.</p>	<p>create a 10-foot buffer (where feasible). If a SFDFW house is identified in a work area, the following shall be implemented:</p> <ul style="list-style-type: none"> • Physical disturbance of the house shall be avoided if feasible. If possible, a minimum 10-foot buffer shall be maintained between maintenance construction activities and each nest to avoid disturbance. In some situations, a smaller buffer shall be allowed if in the opinion of a qualified biologist removing the nest would be a greater impact than that anticipated as a result of the project. • If a dusky-footed woodrat nest cannot be avoided, prior to the beginning of construction activities, a qualified biologist shall disturb the SFDFW house to the degree that all SFDFW leave the house and seek refuge outside of the maintenance activity area. Relocations efforts shall avoid the nesting season (February - July) to the maximum extent feasible. Disturbance of the SFDFW house shall be initiated no earlier than one hour before dusk to minimize the exposure of woodrats to diurnal predators. Subsequently, the biologist shall dismantle and relocate the house material by hand. All material from dismantled houses shall be placed in a pile, preferably against a log or tree trunk, in suitable habitat located at least 20 feet from, but otherwise as close as possible to, the original house locations, to provide material for SFDFW to construct new houses. During the deconstruction process, the biologist shall attempt to assess if juveniles SFDFW are present in the house. If immobile juveniles are observed, the deconstruction process shall be discontinued until a time when the biologist believes the juveniles will be 	<p>SFDFW houses are found, including dismantling houses and/or relocation of individuals, as needed.</p>		<p>oversight by County.</p>

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	<p>fully mobile. A 10-foot wide no-disturbance buffer shall be established around the nest until the juveniles are mobile. The house may be dismantled once the biologist has determined that adverse impacts on the juveniles would not occur. All disturbances to SFDFW houses shall be documented in a construction monitoring report and submitted to CDFW.</p> <ul style="list-style-type: none"> • A qualified biologist shall set two traps around each of the SFDFW houses to be relocated. Traps shall be set within one hour prior to sunset, and baited with a mixture of peanut butter, oats, and apples, or other suitable bait. Traps shall also be equipped with cotton bedding and covered with cardboard. The traps shall be checked the following morning, within one-and-a-half hours of sunrise. If a SFDFW is captured, it shall be placed in a quiet area while its house material is relocated; the SFDFW will then be released at the relocated structure. If no SFDFW are captured after the first night, the biologist shall set the traps for one additional evening to increase the probability of capturing the SFDFW and ensuring a safe relocation. If no SFDFW are captured at a given house after two nights, it shall be assumed that the house is not currently occupied. Trapping shall only be conducted outside the breeding season, which for SFDFW is from February through the end of July. If a litter of young is found or suspected while dismantling a house for relocation, the house material shall be replaced, any trapped SFDFW shall be returned to the house, and the house shall be left alone for 2 to 3 weeks, after which time the house shall be rechecked to verify that the young are capable of independent 			

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	survival, as determined by the qualified biologist, before proceeding with dismantling of the house.			
<p>Impact BIO-6: The proposed project would impact a known bat roost within the unoccupied house. In addition, construction and maintenance activities could directly impact roosting bats if these activities result in the removal of trees or structures with bat roosts or result in the disruption or abandonment of nearby active bat roosts. Implementation of Mitigation Measures BIO-6A and BIO-6B would reduce potential impacts to roosting bats to less than significant.</p>	<p>BIO-6A: Prior to demolition, a qualified biologist should conduct an additional survey during the summer maternity season (ideally June) to determine whether the unoccupied house supports a Townsend’s big-eared bat maternity colony or whether the site is only used by wintering bats or by males. If the roost is occupied, and can be avoided, a qualified biologist should develop a plan to preserve and secure the roost for future use by bats.</p> <p>Prior to building demolition or modification, a qualified biologist should conduct a focused survey for bats within any structures to be demolished. If any bats are found, but they do not represent an active maternity roost, they shall be excluded from the building through installation of one-way doors, closure of potential entry points, or use of acoustic deterrents. Alternatively, opening up the structure (i.e., removal of boards from windows and doors, removal of roof sections) should increase wind flow through the structure and may also deter bats from roosting. A qualified biologist should consult on the methods used to exclude bats.</p> <p>If a maternity colony is present, then no demolition or modification of the roost site, nor of any areas within 100 feet of the roost site and any points of ingress or egress, should occur during the period April 1 to August 31 (or until young are demonstrated to be flying well). After August 31 (or after the young are flying), then bat exclusion can proceed. No exclusion should occur during rainy or cold conditions.</p>	<p>Qualified biologist to conduct surveys, and develop and implement an exclusion plan, if needed.</p> <p>If a maternity colony is present, Contractor to schedule construction activities outside of the period between April 1 to August 31.</p>	<p>Prior to demolition of the unoccupied house and any structures to be demolished.</p>	<p>Qualified biologist to conduct surveys and implement exclusion plan; oversight by County.</p>

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	<p>If a Townsend’s big-eared bat maternity colony is confirmed in the unoccupied house, and demolition or modification (to the point that bats no longer use the building) of this structure cannot be avoided, replacement maternity roost habitat should be provided on the site. Note that bat boxes and bat condominiums do not provide suitable replacement habitat for Townsend’s big-eared bats. Rather, larger, more cavernous bat structures are required to replace maternity roost habitat for this species. The replacement roost structure should be designed and sited in consultation with a qualified biologist. The structure should be monitored for a period of 5 years to determine whether it is occupied. Success of the habitat replacement should be achieved if the roost structure is determined by a qualified biologist to provide similar thermal and light conditions to those that exist in the unoccupied house that is currently being used as a roost site.</p>			
	<p>BIO-6B: A qualified biologist shall conduct a survey to look for evidence of bat use within two weeks prior to the onset of work activities. If evidence of bat occupancy is observed, or if high-quality roost sites are present in areas where evidence of bat use might not be detectable (such as a tree cavity), an evening survey and/or nocturnal acoustic survey may be necessary to determine if roosting bats are present and to identify the specific location of the bats. If no active maternity colony or non-breeding bat roost is located, project work can continue as planned. If an active maternity colony or non-breeding bat roost is located, the construction work shall be redesigned to avoid disturbance of the roosts, if feasible. If an active maternity colony is located, and the project cannot be redesigned to avoid removal or disturbance of the occupied tree or structure, disturbance shall not take place during the maternity season (March 15 –</p>	<p>Qualified biologist to conduct surveys, conducting worker training, establishing buffers, and developing and implementing an exclusion/eviction plan.</p> <p>If maternity colony is present, Contractor to schedule construction activities outside of the maternity season (March 15 – July 31).</p>	<p>Within 14 days of start of construction/tree removal.</p>	<p>Qualified biologist to conduct surveys and implement exclusion/eviction plan; oversight by County.</p>

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	<p>July 31), and a disturbance-free buffer zone (determined by a qualified bat biologist) shall be established during this period. If an active non-breeding bat roost is located, and the project cannot be redesigned to avoid removal or disturbance of the occupied tree or structure, the individual bats shall be safely evicted between August 1 and October 15 or between February 15 and March 15 (as determined in consultation with CDFW). Bats may be evicted through exclusion only after notifying and obtaining approval from CDFW. Trees with roosts that need to be removed shall first be disturbed at dusk, just prior to removal that same evening, to allow bats to escape during the darker hours. Roosts may only be removed once the bats are no longer occupying the roost, at which time, a plan approved by CDFW may be implemented for removal of the roost. The plan shall describe appropriate methods for the removal of the roost. As part of CDFW’s approval, a new roost site may be required to be created on the project site. Active day roosts of tree-foliage bats may be removed upon permission of CDFW.</p> <p>If feasible, trees planned for pruning or removal as a part of the project, shall be pruned or removed during the fall to avoid the maternity roosting period of resident bats (mid-April to August season). Western red bats are less likely to be present and roosting in the trees on and adjacent to the project site during the spring and summer, but other bats may be roosting during this period. Because bats may be present at any time, a pre-construction survey by a qualified biologist shall be required as outlined above regardless of timing of tree or structure removal and a suitable buffer zone established around detected roosts.</p>	<p>Contractor to schedule tree removal/trimming during the fall and for leaving cut limbs in place for 24 hours after cutting.</p>		

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	Pruned limbs or cut trees shall be left on the ground in place for at least 24 hours after cutting to allow any bats that may be roosting in the trees to leave the roosts prior to chipping the branches or removing the cut material from the site. Before any construction activities begin in the vicinity of the identified bat roosts on the project site, an approved biologist shall conduct a training session for all construction personnel. At a minimum, the training shall include a description of the bats and their habitat, the specific measures that are being implemented to conserve the bat roosts for the project, and the boundaries within which the project may be accomplished. Brochures, books, and briefings may be used in the training session. A qualified biologist shall conduct the training session.			
Impact BIO-7: If riparian vegetation is impacted during project construction or ongoing maintenance activities, implementation of Mitigation Measures BIO-7A through BIO-7F would reduce potential impacts to riparian habitat to a less-than-significant level.	BIO-7A: If native riparian trees or shrubs are impacted during project construction, the impacted trees shall be replaced at a minimum 1.5:1 ratio (meaning 1.5 acres of riparian habitat shall be restored/created for every 1 acre of riparian habitat impacted by the project. The native riparian species shall be replaced in-kind preferably from phytophthera-free container stock as appropriate, propagated from local genetic stock (i.e., San Francisco Bay region). Any temporarily disturbed areas within the riparian woodland shall be seeded with an appropriate native seed mix. Appropriate permits from CDFW and possibly Regional Water Quality Control Board (RWQCB) would need to be obtained and any monitoring and reporting requirements stated within the permits, including preparation and implementation of a mitigation and monitoring plan would have to be completed.	County to consult with CDFW and RWQCB, acquire any necessary permits for project activities, and mitigate impacts at a 1.5:1 ratio.	Prior to project activities that impact the riparian corridor.	County to obtain permit from CDFW and RWQCB if needed; oversight by CDFW and RWQCB.
	BIO-7B: If needed, the project shall design and construct low impact stream crossings that would include a wooden walkway/boardwalk, or similar structure to avoid potential		County to include low-impact stream crossings	Prior to project construction.

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	impacts to the streams. The crossings shall be designed to accommodate high flows and be regularly maintained. Footings for the crossings shall be sited fully outside of the banks and channel of the streams.	in the final project design.		
	BIO-7C: The project contractor shall implement applicable BMPs and conservation measures detailed in the County of San Mateo Watershed Protection Program’s Maintenance Standards and the San Mateo Countywide Pollution Prevention Program Construction BMPs during construction.	Project contractor to implement applicable BMPs and conservation measures.	Prior to and during construction activities.	Contractor to implement BMPs; oversight by County.
	<p>BIO-7D: To protect water quality during construction and maintenance, the following measures shall be included on the construction specifications, with construction oversight by a qualified biologist or biological monitor:</p> <ul style="list-style-type: none"> • Stationary equipment such as motors, generators, and welders located within 100 feet of the stream shall be stored overnight at staging areas and shall be positioned over drip pans. • Any hazardous or toxic materials deleterious to aquatic life that could be washed into a basin shall be contained in watertight containers or removed from the project site. • All construction debris and associated materials stored in staging areas shall be removed from the work site upon completion of the project. • Whenever possible, refueling of equipment shall take place within turnouts or staging areas at least 50 feet from the top of bank or other wetland. • All refueling shall be conducted over plastic bags filled with sawdust or other highly absorbent material. Clean-up materials for spills shall be kept on hand at all times. Any accidental spills of fuel or 	Implement identified measures on all construction specifications.	During construction.	Contractor to implement water quality measures; oversight by qualified biological monitor.

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	<p>other contaminants shall be cleaned up immediately. The project contractor shall install protective fencing prior to and during construction to keep construction equipment and personnel from impacting riparian vegetation outside of work limits. A qualified biologist or biological monitor with the education and experience necessary to delineate riparian vegetation shall supervise the installation of protective fencing.</p>			
	<p>BIO-7E: The Parks Department shall obtain a Coastal Development Permit as required for project activities. The Parks Department shall comply with all conditions of permit issued for the project. Conditions may include, but are not limited to, development of revegetation and restoration plans and procedures, environmental awareness training, pre-construction wildlife surveys, and/or biological monitoring, some or all of which are already included as part of the mitigation measures described above.</p>	<p>County to obtain a Coastal Development Permit.</p>	<p>Prior to construction.</p>	<p>County to obtain permit from California Coastal Commission (CCC) if needed; oversight by CCC.</p>
	<p>BIO-7F: A Revegetation Plan shall be prepared by a qualified biologist to revegetate and restore impacted habitat. This plan shall include a list of appropriate species, planting specifications, monitoring procedures, success criteria, and a contingency plan if success criteria are not met.</p>	<p>Qualified biologist to prepare a Revegetation Plan.</p>	<p>Following construction.</p>	<p>Contractor to revegetate; oversight by County.</p>
<p>Impact BIO-8: Proposed improvements would require construction work and placement of structures within Tunitas Creek and atop the creek bank and the proposed trail crossing may require placement of fill within the intermittent stream on</p>	<p>BIO-8A: Impacts to areas of wetland and other water shall be avoided to the greatest extent possible. If impacts to areas of wetlands and other water is unavoidable, the area impacted shall be confined to the smallest area possible.</p>	<p>Contractor to avoid wetland areas and other water to the extent possible.</p>	<p>Prior to and during construction.</p>	<p>Contractor to avoid wetlands; oversight by County.</p>
	<p>BIO-8B: For project activities that impact wetlands or other waters requiring permits from the Corps, RWQCB, and/or CDFW, the County shall obtain permits and comply with all permit requirements. For on-site, in-kind mitigation, the County shall mitigate impacts to wetlands by restoring, preserving, and managing wetlands and aquatic habitats, or</p>	<p>County to obtain permits from Corps and RWQCB, and comply with permit requirements.</p>	<p>Prior to project activities that impact wetlands or other waters.</p>	<p>County to obtain permits from Corps and RWQCB; oversight by</p>

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<p>the project site. This impact can be reduced to a less-than-significant level through implementation of mitigation measures BIO-7C through BIO-7F, and Mitigation Measures BIO-8A and BIO-8B. With implementation of these mitigation measures, impacts to wetlands and other waters would be less than significant.</p>	<p>substantially improve the quality of highly degraded wetlands and aquatic habitats at a ratio of 1.5:1 (meaning 1.5 acres of wetlands or other waters shall be restored/created for every 1 acre of wetlands and other waters permanently impacted by the project). For off-site, in-kind mitigation, the County shall acquire, preserve, enhance, and manage lands that provide similar ecological functions and values to the wetlands and other waters impacted by project. The acquisition and preservation/enhancement of these higher quality lands shall occur at a ratio of 3:1 (meaning 3 acres of wetlands or other waters shall be acquired, preserved, and enhanced for every 1 acre of wetlands and other waters impacted by the project). Enhancement may include modification of existing management, limited planting, or invasive plant removal, or other activities to enhance wetland/aquatic habitat functions and values.</p>			<p>Corps and RWQCB.</p>

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Cultural Resources				
<p>Impact CULT-1: The proposed project has the potential to unearth previously unidentified archaeological historical resources. Disturbance of such remains could result in a substantial adverse change in the significance of a historical resource. Implementation of Mitigation Measures CULT-1A and CULT-1B would reduce potential impacts to unrecorded archaeological historical resources that may be unearthed during construction to a less-than-significant level.</p>	<p>CULT-1A: Archaeological Monitoring. During project construction, archaeological monitoring shall be conducted for any ground-disturbing activities in the project site, including grubbing or removal of vegetation. A qualified archaeologist shall (1) identify any archaeological resources that may be present; and (2) ensure that if human remains are identified they are treated in an appropriate and respectful manner and provisions outlined in Section 7050.5 of the California Health and Safety Code are followed. If previously unidentified cultural materials are unearthed during construction, work shall be halted in that area until a qualified archaeologist can assess the significance of the find. If major adjustments are made to the horizontal or vertical extent of the project site, then an archaeologist shall be consulted to determine if further identification efforts are recommended.</p>	<p>County to retain qualified archaeologist to monitor excavation activities, identify any resources encountered, and develop and implement recommendations.</p>	<p>During excavation activities.</p>	<p>Archaeologist to monitor excavation activities.</p>
	<p>CULT-1B: Unidentified Archaeological Resources. The potential for encountering previously unidentified buried archaeological cultural resources in the project site is moderate based on the geological landforms and on the presence of previously recorded archaeological sites identified within and adjacent to the project site. If deposits of prehistoric or historical archaeological materials are encountered during project activities that are not monitored, all work within 50 feet of the discovery shall be redirected and a qualified archaeologist contacted to assess the situation, and make recommendations regarding the treatment of the discovery. Project personnel shall not collect or move any archaeological materials or human remains and associated materials. Archaeological cultural resources shall be avoided by project activities. If such resources cannot be avoided, they shall be evaluated for</p>	<p>Contractor to cease all excavation or disturbance of the site and notify qualified archaeologist to evaluate any resources encountered, and develop and implement recommendations.</p>	<p>During excavation activities.</p>	<p>Archaeologist to determine the appropriate treatment of the discovery; oversight by County.</p>

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	<p>their CRHR eligibility, under the direction of a qualified professional archaeologist, to determine if they qualify as a historical resource under CEQA. If the deposit is not eligible, a determination shall then be made as to whether it qualifies as a unique archaeological resource under CEQA.</p> <p>If the deposit is not a historical, unique archaeological or tribal cultural resource, avoidance is not necessary. If the deposit is eligible for the CRHR or is a unique archaeological resource and cannot be avoided by project actions that may result in impacts, such impacts must be mitigated. Mitigation may consist of, but is not limited to, recording the resource; recovery and analysis of archaeological deposits; preparation of a report of findings; and accessioning recovered archaeological materials at an appropriate curation facility. Public educational outreach may also be appropriate. Upon completion of the study, the archaeologist shall prepare a report documenting the methods and results of the investigation and provide recommendations for the treatment of the archaeological materials discovered. The report shall be submitted to the County and to the Northwest Information Center.</p> <p>Likewise, during operation and maintenance activities at the proposed park, impacts to cultural resources may occur as a result of ground disturbing activities. Implementation of BMPs CUL-4, CUL-5, and CUL-6 in the Maintenance Program Manual (see Appendix A) would reduce potential impacts to a less than significant level.</p>			
Geology and Soils				
Impact GEO-1: Ground disturbance has the potential to impact	GEO-1: If paleontological resources are encountered during the course of ground disturbance, work in the immediate area of the find shall be redirected and a paleontologist shall	Contractor to cease all excavation or disturbance of the site and notify	During excavation activities.	Paleontologist to determine the appropriate

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scientifically important paleontological resources. With implementation of Mitigation Measure GEO-1, impacts to paleontological resources would be less than significant.	be contacted to assess the find for scientific significance. If determined to be significant, the fossil shall be collected from the field. The paleontologist may also make recommendations regarding additional mitigation measures, such as paleontological monitoring. Scientifically significant resources shall be prepared to the point of identification, identified to the lowest taxonomic level possible, cataloged, and curated into the permanent collections of a museum repository. If scientifically significant paleontological resources are collected, a report of findings shall be prepared to document the collection.	qualified paleontologist to evaluate any resources encountered, and develop and implement recommendations.		treatment of the discovery; oversight by County.
Hazards and Hazardous Materials				
Impact HAZ-1: Disturbance and improper management of contaminated soil during construction could cause the release of contaminants into the environment, and could result in exposure of the public and construction workers to hazardous materials. Implementation of Mitigation Measure HAZ-1 would ensure impacts to construction and maintenance workers during any disturbance of contaminated on-site soils would be less than significant	HAZ-1: The Parks Department shall hire a qualified contractor to prepare a site-specific Health and Safety Plan (HSP). The HSP shall establish soil management and control specifications for excavation, grading, and construction activities, including procedures for evaluation of soil disposal options, and health and safety provisions for monitoring the exposure of construction workers to contaminants. The HSP shall be submitted to the County for review and approval. The County shall review and approve the HSP and the project contractor shall implement the recommended soil management and control specifications.	Contractor to prepare and implement a site-specific HSP.	Prior to and during construction activities.	Contractor to prepare and implement HSP; oversight by County.

APPENDIX B

Tunitas Creek Beach Improvement Project County of San Mateo, Parks Department Mitigation Monitoring & Reporting Program				
Impact	Mitigation Measure	Mitigation Action(s)	Mitigation Timing	Action/ Oversight Responsibility
Utilities and Service Systems				
Impact UTIL-1:	<p>UTIL-1: Prior to issuance of the Coastal Development Permit, the Parks Department shall prepare a study examining the hydrologic conditions of the site to determine if there is adequate water to supply the residence and if the water extracted will not adversely affect a water-dependent sensitive habitat or result in depletion of the aquifer. The study shall also determine whether the water quality meets potable water standards. If the study determines that insufficient water supply is available, then the proposed ranger residence shall be removed from the project design.</p> <p>In addition, the Parks Department shall coordinate with the State of California Water Resources Control Board to secure an approval of the right to extract water from Tunitas Creek. If approval is denied and another water source cannot be secured, the ranger residence shall be removed from the project design.</p> <p>If the ranger residence is constructed, for the first three years, the County shall monitor the impact of the water extraction on groundwater and surface levels, water quality, and plant and animal species of water-dependent sensitive habitats to determine if the preliminary pumping restrictions adequately protect the sensitive habitats and what measures should be taken if and when adverse effects occur. If monitoring shows impacts to water-dependent sensitive habitats, the pumping rate shall be reduced until it is clear that such impacts will not occur.</p>	County to prepare study evaluating hydrological conditions, coordinate with the State Water Resources Control Board to secure approval for water extraction, and conduct monitoring.	Prior to issuance of the Coastal Development Permit and for the first three years of ranger residence occupation.	County to conduct study, obtain approval from the State Water Resources Control Board, and conduct monitoring for the first three years of ranger residence occupation.

Appendix G

BUILDING PERMIT

NOT AVAILABLE AT THIS TIME

Appendix H

**County of San Mateo Routine Maintenance Program Manual
Table 9-1: Maintenance Program Best Management Practices**

Table 9-1. Maintenance Program Best Management Practices

BMP Number	BMP Title	BMP Description
General Avoidance and Minimization Measures		
GEN-1	Staging and Access	<ul style="list-style-type: none"> ▪ Staging, access, and parking areas will be located outside of sensitive habitats to the extent feasible. ▪ Staging areas will be located 30 feet from the top of bank (or as far as feasibly possible) or on the outboard side of levees. ▪ Vegetation removal shall be limited to the minimum amount necessary to provide access.
GEN-2	Minimize Area of Disturbance and Site Maintenance	<ul style="list-style-type: none"> ▪ Areas of disturbance will be limited to the smallest footprint necessary and a single access pathway, where feasible. For maintenance activities near waterways or other sensitive habitat, the designated work area shall be clearly identified in the field using highly visible material, and work will not be conducted outside this area. ▪ Keep excavated soil and materials on the site where they will not collect into the street or get transported to storm drains or nearby water bodies by rainfall or runoff in order to avoid deleterious effects to fish, wildlife, and beneficial uses. ▪ Transfer excavated materials to dump trucks on the site, not in the street.
GEN-3	Construction Entrances and Perimeter	<ul style="list-style-type: none"> ▪ 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. ▪ When in-channel work is required, where available use existing ingress or egress points or perform work from the top of the stream banks.
GEN-4	Salvage/Reuse of Plant and Woody Material	<ul style="list-style-type: none"> ▪ Large wood or weed-free topsoil displaced by project activities may be stockpiled for use during site restoration. Native vegetation displaced by project activities will be stockpiled if it would be useful during site restoration. ▪ Stockpiled material shall not be placed over riparian or wetland vegetation. Stockpiled material shall not be placed in areas where it could enter the stream, riparian or wetland areas. ▪ To the extent feasible, all other woody material that is not re-usable should be disposed at a composting facility.
GEN-5	Non-Hazardous Materials	<ul style="list-style-type: none"> ▪ 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.
GEN-6	Hazardous Materials Storage/Disposal	<ul style="list-style-type: none"> ▪ 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 watertight containers, store in appropriate secondary containment, and cover them at the end of every workday 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.

BMP Number	BMP Title	BMP Description
GEN-7	Spill Prevention and Control	<ul style="list-style-type: none"> • Keep spill cleanup materials (rags, absorbents, etc.) available at the construction site at all times. • Inspect vehicles and equipment frequently for and repair leaks promptly. On-site monitor should inspect beneath all vehicles that have been parked more than 15 minutes before they leave the work area. 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. If water must be used, the Contractor shall collect the water and spilled fluids and dispose of it as hazardous waste. • Clean up spills on dirt areas by digging up and properly disposing of contaminated soil. • Small spills (less than 18 inches in diameter) including small quantities of oil, gasoline, paint or other materials should be controlled by the first responder (maintenance staff) and do not necessarily require an emergency response team. • Medium spills (greater than 18 inches but less than 6 feet in diameter) are typically controlled by the first responder (maintenance staff) but police or fire department HAZMAT teams may be called based on conditions. Report significant spills (larger than 6 feet in diameter and any “running” spill) immediately. You are required by law to report all significant releases of hazardous materials, including oil. To report a spill, contact the San Mateo County Environmental Health Services Division, or other emergency office (e.g., local fire or police department) as warranted, immediately and document the spill using the spill documentation form . Alternatively, 1) dial 911, the local emergency response number, 2) the National Response Center at (800) 424-8802; or 2) call the Governor’s Office of Emergency Services Warning Center, (800) 852-7550 (24 hours). As appropriate, contact other agencies including California Occupational Safety and Health Administration or the Regional Water Quality Control Board. All chemical spills shall be reported as soon as possible to the emergency site contact.
GEN-8	Waste Management	<p>Cover waste disposal containers securely at the end of every workday and during wet weather.</p> <ul style="list-style-type: none"> ▪ Check waste disposal containers frequently for leaks and to make sure they are not overfilled. Never hose down a dumpster on the construction site. ▪ Ensure that portable toilets have a secondary containment plan (e.g., a containment pan). ▪ 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.
GEN-9	Vehicle Maintenance and Parking	<ul style="list-style-type: none"> ▪ 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. ▪ Conduct vehicle and equipment cleaning at County corporation yards and ensure that rinse water does not run into gutters, streets, storm drains, or surface waters.

BMP Number	BMP Title	BMP Description
GEN -10	Equipment Maintenance & Fueling	<ul style="list-style-type: none"> ▪ If refueling or vehicle maintenance must be done on-site, work in a bermed area (e.g., sandbags, gravel bags, compost socks, or other barrier material) at least 150 feet away from creek channels, away from storm drains and over a drip pan big enough to collect fluids. ▪ Refuel vehicles at least 150 feet away from the active stream channel. ▪ Keep an ample supply of spill clean-up materials near fueling, vehicle maintenance and hazardous materials/hazardous waste storage areas. Inventory clean-up materials monthly and restock as needed. ▪ Post proper fueling and spill clean-up instructions at fueling areas. Never leave the area while equipment is being filled. ▪ Recycle or dispose of fluids as hazardous waste. ▪ Do not clean vehicle or equipment on-site using soaps, solvents, degreasers, steam cleaning equipment, etc. ▪ Perform vehicle and mobile equipment steam cleaning, pressure washing or degreasing only over a containment designed to collect any generated wash water. Collect wash water and discharge to sewer via an oil water separator. Do not pour wash water down storm drains or sewers connected to septic systems. ▪ A separate area should be designated for equipment maintenance and fueling, away from any slopes, watercourses, or drainage facilities. ▪ Equipment should not be stored in areas that will potentially drain to watercourses or drainage facilities. If equipment must be stored in areas with the potential to generate runoff, drip pans, berms, gravel bags, or absorbent booms should be employed to contain any leaks or spills. ▪ Equipment should be inspected daily for leaks or damage and promptly repaired. ▪ Fueling and maintenance of vehicles should take place at least 65 feet away from waterways. ▪ In the event of a spill, follow procedures outlined in BMP GEN-7.
GEN-11	Paving and Asphalt Work	<ul style="list-style-type: none"> ▪ Avoid paving and seal coating in wet weather or when rain is in the 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 or fog seal; and when saw cutting asphalt or concrete. ▪ Collect and recycle or appropriate dispose of excess abrasive gravel or sand. Do not sweep this material into gutters. ▪ Do not use water to wash down fresh asphalt concrete pavement. ▪ Use filter fabric, catch basin inlet filters, or gravel bags to keep slurry out of the storm drain system. ▪ Shovel, absorb or vacuum saw-cut slurry and dispose of all waste as soon as work is complete in one location or at the end of the workday. ▪ If sawcut slurry enters a catch basin, clean it up immediately.
GEN-12	Concrete, Grout and Mortar Application	<ul style="list-style-type: none"> ▪ 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.

BMP Number	BMP Title	BMP Description
GEN-13	Exclude Concrete from Channel	<ul style="list-style-type: none"> ▪ When washing exposed aggregate, prevent wash water from entering storm drains. Block any inlets and vacuum gutters, hose wash water onto dirt areas, or drain onto a bermed surface to be pumped and disposed of properly. ▪ For maintenance activities that involve concrete pouring, the County shall ensure that poured concrete be excluded from the wetted channel for a period of 30 days after it is poured. During that time, the poured concrete shall be kept moist, and runoff from the concrete shall not be allowed to enter a stream. Containment structures should be installed to control the placement of wet concrete and to prevent it from entering the channel outside of those structures. ▪ Commercial sealants may be applied to the poured concrete surface where difficulty in excluding water flow for a long period may occur. If sealant is used, water shall be excluded from the site until the sealant is dry. ▪ No dry concrete shall be placed on the banks or in a location where it could be carried into the channel by wind or runoff.
GEN-14	Concrete Washout Facilities	<ul style="list-style-type: none"> ▪ Concrete washout facilities should be established for maintenance activities that require on-site preparation and use of Portland cement concrete, asphalt concrete or cement mortar, establish concrete washout facilities. These facilities capture wash water, concrete and aggregate flushed from concrete mixers, chutes, etc. Concrete washouts may be contained settling basins dug into the ground, raised and contained structures, trailers, etc. They are also applicable for projects that require equipment washouts. ▪ An appropriate area for the washout must be identified at least 50 feet away from watercourses and storm drains in case of accidental breaching. The storage capacity of the basin must be sized correctly for the job. <p><u>Construction Guidelines:</u></p> <ul style="list-style-type: none"> ▪ The location of the concrete washout should be clearly labeled and all employees should be educated about proper concrete disposal. ▪ Avoid mixing excess amounts of fresh concrete or cement mortar on-site. ▪ Wash out concrete mixers only in designated washout areas where the water will flow into temporary sealed basins or onto stockpiles of aggregate base or sand. Use as little water as possible to reduce hardening and evaporation time of waste products. ▪ Construct a basin large enough to contain all liquid and waste concrete materials generated during washout procedures. A minimum basin size is 9 feet x 9 feet and 2 feet deep. Plastic liner materials shall be a minimum of 60-mil polyethylene sheeting free of holes and defects. ▪ Recycle washout by pumping back into mixers for reuse when possible. <p><u>BMP Maintenance:</u></p> <ul style="list-style-type: none"> ▪ The concrete washout should be checked frequently to ensure proper use and effectiveness. ▪ At 75 percent capacity, the washout must be cleaned or new facilities must be constructed and ready for use. <p><u>BMP Removal:</u></p> <ul style="list-style-type: none"> ▪ The hardened concrete and materials related to the washout must be broken up, removed, and disposed of in accordance to local regulations. ▪ Area disturbed by the concrete washout must be repaired.

BMP Number	BMP Title	BMP Description
GEN-15	Painting and Paint Removal	<ul style="list-style-type: none"> ▪ Never clean brushes or rise 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.
GEN-16	Timing of Work	<ul style="list-style-type: none"> ▪ In general, routine maintenance and construction activities that take place in sensitive habitat and/or in channels below ordinary high water will be conducted during the dry season (June 15 through October 15). Maintenance activities that are in upland areas and that would not affect streams may occur during low rainfall years at times when there is no predicted rainfall (chance of precipitation is less than 30 percent chance of rain). Activities that are subject to permit requirements will be conducted during the period authorized by the permits.
GEN-17	Maintain Traffic Flow	<ul style="list-style-type: none"> ▪ To the extent feasible, work shall be staged and conducted in a manner that maintains two-way traffic flow on roadways in the vicinity of the work site. ▪ Heavy equipment and haul traffic shall be prohibited in residential areas to the greatest extent feasible. When no other route to and from the site is available, heavy equipment and haul traffic through residential areas shall be restricted to the hours of 8 a.m. to 5:30 p.m., Monday through Friday. ▪ If heavy equipment or hauling is required beyond the hours above, the County or their contractor would provide notice to adjacent property owners 48 hours in advance of such activities.
GEN-18	Traffic Control and Public Safety	<ul style="list-style-type: none"> ▪ In the event that work activities require the temporary closure of any traffic lanes, the County shall implement measures to guide traffic (such as signage and flaggers), safeguard construction workers, provide safe passage of vehicles, and minimize traffic impacts through the duration of work activities. The County also shall notify local emergency service providers regarding any planned lane closures. ▪ For any other work within or near the roadway that could pose a hazard to the public, the County shall install/implement appropriate measures, such as fences, barriers, flagging, guards, and/or signs, to give adequate warning and provide protection from the potentially dangerous condition. ▪ For work activities along or near roadways with sidewalks and bike lanes, the County shall implement measures to ensure the safe passage of pedestrians and bicyclists around the work site. ▪ Where work is proposed at a recreational park or trail, warning signs will be posted several feet beyond the limits of work. Signs will also be posted if trails will be temporarily closed. ▪ Public transit access and routes will be maintained in the vicinity of the work site. If public transit will be affected by temporary road closures and require detours, affected transit authorities will be consulted and kept informed of project activities.

BMP Number	BMP Title	BMP Description
GEN-19	Dust Management Controls	<p>The County will implement the Bay Area Air Quality Management District (BAAQMD) Basic Dust Control Measures. Current measures stipulated by the BAAQMD Guidelines include the following:</p> <ol style="list-style-type: none"> 1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day. 2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered. 3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. 4. All vehicle speeds on unpaved roads shall be limited to 15 mph. 5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used. 6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points. 7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified visible emissions evaluator.
GEN-20	Firearms	No firearms (except for federal, State, or local law enforcement officers and security personnel) will be permitted at the project site to avoid harassment, killing or injuring of wildlife.
GEN-21	Domestic Animals	No animals (e.g., dogs or cats) can be brought to the project site to avoid harassment, killing or injuring of wildlife.
GEN-22	Site Stabilization	<p>Earthwork will be completed as quickly as possible, and where practical, site restoration will occur immediately following maintenance. If site restoration involves planting, such activities may commence in late fall or early winter during the onset of rainy season.</p> <p>Bare soil surfaces resulting from maintenance and/or construction activities shall be covered with suitable erosion controls (seed or plant vegetation, fabrics, hydroseeding, mulch, etc.):</p> <ul style="list-style-type: none"> ▪ Within 12 hours of any break in work unless project activities will resume within 7 days. ▪ No later than 3 days following the disturbance during the rainy season (approximately October through April). ▪ No later than 7 days following the disturbance during the dry season (approximately May through September). Every effort shall be made to immediately cover bare soil surfaces resulting from maintenance and/or construction activities prior to storms. <p>Revegetation activities will include only local plant materials native to the San Francisco Peninsula region.</p>
GEN-23	Fire Prevention	<ol style="list-style-type: none"> 1. All earthmoving and portable equipment with internal combustion engines will be equipped with spark arrestors. 2. During the high fire danger period (April 1–December 1), work crews will: <ul style="list-style-type: none"> ▪ Have appropriate fire suppression equipment available at the work site. ▪ Keep flammable materials, including flammable vegetation slash, at least 10 feet away from any equipment that could produce a spark, fire, or flame.

BMP Number	BMP Title	BMP Description
GEN-24	Investigation of Utility Line Locations	<ul style="list-style-type: none"> ▪ Not use portable tools powered by gasoline-fueled internal combustion engines within 25 feet of any flammable materials unless a round-point shovel or fire extinguisher is within immediate reach of the work crew (no more 25 feet away from the work area). <p>An evaluation of the locations of utility lines that could be affected by maintenance activities will be conducted annually as part of the preparation of the Annual Notification. Utilities will be avoided as much as possible. For maintenance areas with the potential for effects on utility services, the following measures will be implemented:</p> <ol style="list-style-type: none"> 1. Utility excavation or encroachment permits will be required from the appropriate agencies. These permits include measures to minimize utility disruption. The County and its contractors will comply with permit conditions. Such conditions will be included in construction contract specifications. 2. Utility locations will be verified through a field survey (potholing) and use of the Underground Service Alert services. 3. Detailed specifications will be prepared as part of the design plans to include procedures for the excavation, support, and/or fill of areas around utility cables and pipelines. All affected utility services will be notified of the County's maintenance plans and schedule. Arrangements will be made with these entities regarding protection, relocation, or temporary disconnection of services. 4. Residents and businesses in the project area will be notified of planned utility service disruption 2 to 4 days in advance, in conformance with state standards. 5. Disconnected cables and lines will be reconnected promptly.
GEN-25	Retention of Tree Stumps / Rootwads	<ul style="list-style-type: none"> ▪ Objects embedded/anchored in the bank, such as tree stumps, shall not be removed if removal could result in release of sediment into the channel. Stumps and rootwads that potentially serve as basking sites or that encourage pool formation should be left in place whenever possible. Protruding objects that could capture additional debris and result in obstruction of the channel (e.g. the branches and trunk of a downed tree) may be trimmed. If an embedded object must be removed to prevent a debris jam, turbidity control practices shall be used, and the bank shall be reseeded, re-vegetated and/or mulched following removal.
GEN-26	Decontamination of Project Equipment and Vehicles	<ul style="list-style-type: none"> ▪ Equipment, boots and waders used for in-water maintenance activities will be decontaminated prior to entering and exiting the maintenance site and/or between each use in different water bodies to avoid the introduction and transfer of organisms between water bodies. Methods to be employed may include: drying, using a hot water soak, or freezing, as appropriate to the type of gear or equipment. The County shall begin the decontamination process by thoroughly scrubbing equipment, paying close attention to small crevices such as boot laces, seams, net corners, etc., with a stiff-bristled brush to remove all organisms. To decontaminate by drying, the County shall allow equipment to dry thoroughly (i.e., until there is a complete absence of water), preferably in the sun, for a minimum of 48 hours. To decontaminate using a hot water soak, the County shall immerse equipment in 140°F or hotter water and soak for a minimum of 5 minutes. To decontaminate by freezing, the County shall place equipment in a freezer 32°F or colder for a minimum of 8 hours. Repeat decontamination is required only if the equipment/clothing is removed from the site, used within a different waterbody, and returned to the project site.

BMP Number	BMP Title	BMP Description
		<ul style="list-style-type: none"> ▪ Vehicles, watercraft, and other maintenance equipment used for in-water maintenance activities that are too large to immerse in a hot water bath shall be decontaminated by pressure washing with hot water (minimum of 140°F at the point of contact or 155°F at the nozzle or by using other effective techniques). Watercraft engines and all areas that could contain standing water (e.g., live wells, bilges, etc.) shall be flushed for a minimum of 10 minutes. Following the hot water wash, vehicles, watercraft and equipment shall be dried as thoroughly as possible. ▪ A bleach solution shall be used to decontaminate vehicles, watercraft and other maintenance gear and equipment at a designated location where runoff can be contained and not allowed to enter streams or other sensitive habitat areas.
GEN-27	Vegetation and Tree Removal	<ul style="list-style-type: none"> ▪ The disturbance or removal of vegetation shall not exceed the minimum necessary to complete maintenance activities. The use of bulldozers, backhoes, or other heavy equipment to remove vegetation along stream banks shall be avoided wherever feasible. ▪ The County may remove up to two non-hazardous trees greater than 12 inches in diameter per year from natural channels below ordinary high water if the trees are restricting the capacity of the channel, causing erosion or flooding, or limiting access to perform maintenance work. Trees will be cut at ground level and the root mass left in place to maintain bank stability. No non-hazardous trees greater than 36 inches in diameter will be removed under this program. This measure does not apply to trees considered a hazard as defined by the International Society of Arboriculture, which may include dead or dying trees, dead parts of live trees, or unstable live trees (due to structural defects or other factors) that are within striking distance of people or property (a target) that have the potential to cause death, injury, or substantial property damage. ▪ Removed vegetation shall be placed directly into a disposal vehicle and removed from the site, and shall not be permitted to remain onsite overnight. However, if removed vegetation will be used onsite for erosion control or slash and will not be moved or disturbed, it may be stockpiled onsite for longer than an overnight. Stockpiled vegetation shall not be piled on the ground unless it is later transferred, piece by piece, under the direct supervision of the biological monitor or qualified biologist. ▪ Herbicide application shall only be conducted when the climate is dry and when wind speeds do not exceed 7 miles per hour. Herbicides shall not be used in or adjacent to any fish-bearing stream, lake, pond or other water bodies supporting suitable habitat for California red-legged frog or other listed species.
Erosion Control Measures		
EC-1	Brush Layering	Brush layering is a technique used to stabilize shallow slope failures or rebuild fill slopes with live brush cuttings (usually willows or other types of branches) with soil backfill or soil lifts. Live brush layers act as horizontal drains and improve slope stability by providing tensile strength and natural revegetation. Brush layering may include the use of synthetic geogrids or fabric soil wraps, large vegetated boulder revetments, or other structural toe support. For a more detailed description of this BMP, refer to Appendix A.
EC-2	Brush Packing	Brush packing is a biotechnical gully and slump repair technique. Brush packing utilizes alternating layers of live branch cuttings (from rootable plant species) and soil to repair large rills, gullies, and slumps. The brush packing technique is more

BMP Number	BMP Title	BMP Description
EC-3	Live Staking	<p>appropriate for the repair of gullies on slopes, and it can be implemented with hand labor. For a more detailed description of this BMP, refer to Appendix A.</p> <p>Live staking involves the insertion of live, vegetative cuttings into the ground in a manner that allows the cutting (stake) to take root and grow. This BMP is used to reduce the potential for soil to become water borne, to reduce water velocity and erosive forces, and to aid in habitat protection. Poles used in willow walls and through rip rap may be a structural application. Sprigs may be used in individual planting spots along a streambank. For a more detailed description of this BMP, refer to Appendix A.</p>
EC-4	Live Pole Drain	<p>Live pole drains are a biotechnical technique intended to drain excess moisture away from an unstable site. Plants (typically willows) are used to construct bundles which will sprout and grow, with the moisture continuing to drain from the lower end. The bundles are placed in shallow trenches in a manner that they intersect and collect excessive slope moisture. See Appendix A for additional description about this BMP.</p>
EC-5	Wattles/ Fascines	<p>Wattles and fascines are live branch cuttings, usually willows, bound together into long, tubular bundles used to stabilize slopes and stream banks. Both wattles and live fascines are true biotechnical practices. The live branches and live stakes provide the biological element while the stems, rope ties and wedge-shaped wooden stakes all combine to provide the structural elements. Fascines differ from wattles in that the branch cuttings all point in the same direction in fascines, where they may point in either direction in wattles. Wattles are typically aligned on contour, where fascines are angled slightly upslope and thus tend to produce more vigorous growth. For a more detailed description of this BMP, refer to Appendix A.</p>
EC-6	Hand Seeding	<p>Hand seeding is broadcasting grass seed on disturbed or bare soil areas by hand or a hand seeding device. This BMP is used to reduce the potential for soil to become water or air borne, reduce erosion after vegetation establishment, provide for vegetative buffers and aid in habitat protection. Seeding with appropriate seed mixes also helps discourage colonization by non-native and invasive plant species. For a more detailed description of this BMP, refer to Appendix A.</p>
EC-7	Hydroseeding	<p>Hydroseeding is broadcasting grass seed, tackifier, wood fiber mulch and water on disturbed areas using a hydroseeding machine. This BMP is used to reduce the potential for soil becoming water or air borne, to reduce erosion after vegetation is established, provide vegetative buffers and to aid in habitat protection. Seeding with appropriate seed mixes will also help discourage colonization by non-native and invasive plant species. Hydroseeding may be used after soil disturbance is completed at construction/maintenance sites and/or on bare slopes. For a more detailed description of this BMP, refer to Appendix A.</p>
EC-8	Mulching	<p>Mulching is the application of rice or sterile straw, wood chips, leaf litter, redwood duff, or other suitable materials on the soil surface applied manually or by machine. This BMP is used to reduce the potential for soil becoming water or air borne, and to encourage vegetation establishment. This BMP is used to protect the soil surface and to protect newly seeded areas. For a more detailed description of this BMP, refer to Appendix A.</p>
EC-9	Vegetative Buffer	<p>A vegetative buffer is a strip of vegetation adjacent to sensitive areas, ditches, pavement and water bodies. This BMP prevents soil from becoming water borne and may help restore shallow slope failures by trapping soil and debris. For a more detailed description of this BMP, refer to Appendix A.</p>
EC-10	Erosion Control Blankets & Mats	<p>Erosion control blankets and mats are installed to protect the prepared soil surface of a steep slope. This BMP may be used at maintenance sites to provide stabilization/protection on steep slopes or stream banks. Erosion control blankets and mats</p>

BMP Number	BMP Title	BMP Description
EC-11	Surface Roughening	are available in a variety of materials including jute, excelsior, blanket material, straw, wood fiber blanket, coconut fiber blanket, coconut fiber mesh, and straw coconut fiber blanket. Material selection should be based on the size of area, slope, surface conditions, revegetation plans, and channel velocity. Coir fabric/netting is a geo-textile product made from coconut fibers loosely woven into a fabric usually packaged in roll form. This fabric can be used to provide a reduction in water velocity/erosive forces and/or habitat protection and topsoil stabilization. Erosion control blankets and mats may be used in combination with seeding and/or vegetation. For a more detailed description of this BMP, refer to Appendix A.
EC-12	Rolling Dip	Surface roughening is a technique for roughening a bare soil surface with furrows running across the slope, stair stepping, or tracking with construction equipment. Surface roughening is intended to aid the establishment of vegetative cover from seed, to reduce runoff velocity and increase infiltration, and to reduce erosion and provide for sediment trapping. This BMP is typically applied on slopes steeper than 3:1. For a more detailed description of this BMP, refer to Appendix A.
EC-13	Slope or Bank Stabilization	Rolling dips are ridges or ridge-and-channels constructed diagonally across a sloping road or utility right-of-way that is subject to erosion to limit the accumulation of erosive volumes of water on roads by diverting surface runoff at designated intervals. Rolling dips are appropriate to use on low and moderate grades and on both high or low traffic roads. For a more detailed description of this BMP, refer to Appendix A.
EC-14	Energy Dissipator	Where biotechnical methods are unsuitable for stabilizing streambanks due to site specific conditions such as steep slopes or limited right-of-way width, hardened engineered solutions such as rock slope protection, soldier pile walls, retaining walls, or slope soil nailing may be utilized along a failed portion of slope to provide a buttress against additional failure. To the extent feasible, this BMP should be combined with biotechnical solutions through installation of vegetated rock slope protection. Refer to Appendix A for a more detailed description of this BMP.
EC-14	Energy Dissipator	An energy dissipator is a structure designed to control erosion at the outlet of a channel or conduit by reducing the velocity of flow and dissipating the energy. This BMP is recommended at the outlet of any new or replacement drainage culvert, which are points of high erosion potential. Energy dissipators are effective in absorbing the impact of flow and reducing the velocity to non-erosive levels. For a more detailed description of this BMP, refer to Appendix A.
Sediment/Water Quality Control Measures		
SC-1	Gravel Bags	Gravel bags can be used to keep water away from work areas and unstable slopes or for constructing cofferdams and clean water bypasses. This BMP is also typically used at construction or maintenance sites to protect storm drain outlets, gutters, ditches, and drainage courses. For a more detailed description of this BMP, refer to Appendix A.
SC-2	Silt Fence	A silt fence is a temporary sediment barrier consisting of fabric stretched across and attached to supporting posts and entrenched into soil. This BMP is generally used for perimeter protection (around construction/maintenance sites, stockpile areas). It may also be installed perpendicular to the flow direction to slow or stop water and to allow perimeter filtration, settling of soil particles, and to reduce water velocity. For a more detailed description of this BMP, refer to Appendix A.
SC-3	Straw Log, Straw Roll, Coir Log	Straw rolls/logs or coir logs may be used for temporary soil stockpile protection; protection of storm drains, gutters, and drainage courses; temporary check dams; bank or slope stabilization; and streambank toe protection. Alternatives to straw rolls/logs and coir logs include compostable filter socks/berms comprised of natural fibers and other bio-based materials. For a more detailed description of this BMP, refer to Appendix A.

BMP Number	BMP Title	BMP Description
SC-4	Inlet Protection	Storm drain inlets can be protected through installation of temporary barriers such as silt fences, gravel bags, and other proprietary barriers like geotextile inserts, biofilter bags, or compost socks. These barriers are intended to prevent and reduce the sediment discharged into storm drains by ponding runoff and allowing sediment to settle out. For a more detailed description of this BMP, refer to Appendix A.
SC-5	Stormwater Separation Systems	Stormwater separation systems are engineered devices installed in storm drain facilities to remove solids, grease and other pollutants. These may be installed where deep structures allow for their placement and maintenance, or where sufficient quantities of pollutant materials require regular removal in order for the storm drains to operate correctly. For a more detailed description of this BMP, refer to Appendix A.
SC-6	Diversion Berm	A diversion berm is a temporary ridge of compacted soil or aggregate base material, or contiguous bag berm constructed at the top or base of a disturbed slope. It may also consist of asphalt concrete or "cutback" at the top of a disturbed slope. This BMP is intended to direct stormwater runoff away from an unstable slope. For a more detailed description of this BMP, refer to Appendix A.
SC-7	Silt Curtain	The County shall install silt curtains or other appropriate silt filtering devices around excavation sites to prevent heavily silted water from impacting areas around the work site. The silt curtain or silt filtering device shall be maintained throughout all phases of excavation.
SC-8	Turbidity Monitoring	During in-water maintenance activities, the County will monitor turbidity levels up and downstream of the maintenance work area prior to conducting maintenance. The County will maintain a log of turbidity data and ensure that activities do not result in increases in turbidity of the stream of more than 20 percent of upstream sampling locations, as measured visually or by nephelometric turbidity units (NTU). Work will be halted if turbidity/siltation levels exceed 20 percent of upstream sampling levels and CDFW will be contacted for further guidance to ensure activities do not harm aquatic life.
Dewatering Measure		
DW-1	Channel Dewatering	<ul style="list-style-type: none"> When in-water construction is unavoidable, streamflow shall be diverted around work areas by either installing cofferdams and/or clean water bypass systems. A cofferdam is a temporary structure built into a waterway to enclose a construction area and reduce sediment pollution from construction work in or adjacent to water. A clean water bypass is typically used for short-term diversion of small amounts of water over short distances to enable dewatering of a maintenance site. Depending on site conditions, these systems may be either gravity driven or require use of a pump to divert water around a construction area. For a more detailed description of this BMP, refer to Appendix A. No dewatering will be conducted at sites with recent document occurrences of coho salmon within the past 5 years.
Sediment Testing and Disposal Measure		
ST-1	Testing and Disposal of Sediment	Depending on the location of the sediment removal site and upstream and adjacent land uses, the County will test the sediment prior to removal to determine suitability for disposal or reuse based on its chemical qualities. The test results and proposed disposal or reuse locations will be submitted to the RWQCB for review and approval. Samples will be analyzed according to the Beneficial Reuse of Dredged Materials: Sediment Screening and Testing Guidelines (RWQCB 2000), as appropriate for the proposed disposal or reuse site. The results will be compared against federal and state environmental screening levels (ESLs) for protection of human health, groundwater quality, and terrestrial receptors. If hazardous levels of

BMP Number	BMP Title	BMP Description
		contaminants (as defined by federal and state regulations) are present, the material will be taken to a permitted hazardous waste facility.

Sources: *San Mateo Countywide Water Pollution Prevention Program, 2014; County of San Mateo, 2004 and 2013.*

Appendix I

**For Reference Only: Investigation and Geologic Feasibility
Study dated March 2017 prepared by Romig Engineers**



GEOTECHNICAL INVESTIGATION AND GEOLOGIC FEASIBILITY STUDY

POST TRAIL AND RANGER STATION
CABRILLO HIGHWAY (APNS: 081-060-020, 030 & 130)
HALF MOON BAY, CALIFORNIA 94019

Prepared for
PENINSULA OPEN SPACE TRUST
222 High Street
Palo Alto, California 94301

March 2017

Project No. 3957-1



March 17, 2017
3957-1

Peninsula Open Space Trust
222 High Street
Palo Alto, California 94301

**RE: GEOTECHNICAL INVESTIGATION AND
GEOLOGIC FEASIBILITY STUDY
POST TRAIL & RANGER STATION
(APNs: 081-060-020, 030 & 130)
CABRILLO HIGHWAY
HALF MOON BAY, CALIFORNIA**

Attention: Mr. Taylor Jang

Gentlemen:

In accordance with your request, we have performed a geotechnical investigation and geologic feasibility study for the proposed ranger station and trail improvements to be constructed on your unincorporated San Mateo County property (APNs: 081-060-020, 081-060-030, and 081-060-130) located along the west side of Cabrillo Highway and south of Tunitas Creek Road and Half Moon Bay, California. The accompanying report summarizes the results of our geologic reconnaissance, field exploration, laboratory testing, and engineering analysis, and presents our geotechnical recommendations for the proposed improvements.

We refer you to the text of our report for specific recommendations.

Thank you for the opportunity to work with you on this project. If you have any questions or comments about the findings or recommendations from our investigation, please call.

Very truly yours,

ROMIG ENGINEERS, INC.

Coleman K. Ng, P.E.



David F. Hoexter, C.E.G.



Copies: Addressee (4)

CN:DFH:LF:dr

**GEOTECHNICAL INVESTIGATION AND
GEOLOGIC FEASIBILITY STUDY
POST TRAIL & RANGER STATION
(APNs: 081-060-020, 030 & 130)
CABRILLO HIGHWAY
HALF MOON BAY, CALIFORNIA 94019**

**PREPARED FOR:
PENINSULA OPEN SPACE TRUST
222 HIGH STREET
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**PREPARED BY:
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1390 EL CAMINO REAL, SECOND FLOOR
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MARCH 2017



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**GEOTECHNICAL INVESTIGATION
AND
GEOLOGIC FEASIBILITY STUDY
POST TRAIL & RANGER STATION IMPROVEMENTS
(APNs: 081-060-020, 030 and 130)
CABRILLO HIGHWAY
HALF MOON BAY, CALIFORNIA**

INTRODUCTION

This report presents the results of our geotechnical and geologic feasibility investigation for the proposed ranger station and trail improvements to be constructed on your property (APNs: 081-060-020, 081-060-030 and 081-060-130) located along the west side of Cabrillo Highway, south of Tunitas Creek Road and Half Moon Bay, in an unincorporated area of San Mateo County, California. The approximate location of the site is shown on the Vicinity Map, Figure 1. The purpose of this investigation was to evaluate the subsurface conditions at the site, address potential geologic hazards, and to provide geotechnical recommendations for the proposed site improvements.

Our feasibility study focused on the following elements:

- Geologic hazards which could impact the existing vacant ranger station (a primary consideration).
- Identifying a geologically suitable location for the proposed road/path down to the beach (a primary consideration).
- Occurrence of an active landslide located immediately south of Tunitas Creek (northeast of the existing ranger station) (a secondary consideration).
- General condition of the slopes south of the existing vacant residence (a secondary consideration).

Project Description

We understand that the project consists of renovating the existing fire-damaged building (appeared to be a former residence) at the northern portion of the site (within APN 081-060-030) into a ranger station, and constructing a trail and/or stairway to access the beach west of the property.



Based on our discussion with you, our study was limited to the northern one-quarter of the property (from south of Tunitas Creek to about 400 feet south of the existing vacant structure). As part of our study, we have evaluated a location for a geologically feasible trail.

Scope of Work

Our scope of work for this investigation was presented in our agreement with Peninsula Open Space Trust (POST), dated October 12, 2016. In order to complete our investigation, we performed the following work.

- Review of readily available geologic and geotechnical literature pertinent to the general area of the site.
- Subsurface exploration consisting of drilling, sampling, and logging of two exploratory borings near the ranger station.
- Geologic reconnaissance and field mapping by our certified engineering geologist and geotechnical engineering/geology staff.
- Review and interpretation of stereo-pair aerial photographs and of LIDAR imagery associated with Google Earth.
- Laboratory testing of selected samples to aid in soil classification and to help evaluate the engineering properties of the soil and rock encountered at the site.
- Engineering analysis and evaluation of the exploration and laboratory data to develop geotechnical design criteria for the project.
- Preparation of this report presenting our findings and geotechnical and geologic recommendations for the proposed site improvements.

Limitations

This report has been prepared for the exclusive use of Peninsula Open Space Trust for specific application to developing geotechnical design criteria for the proposed improvements on your property (APNs: 081-060-020, 081-060-030 and 081-060-130) located along the west side of Cabrillo Highway (California Highway 1) and south of Tunitas Creek Road in the Half Moon Bay vicinity, an unincorporated area of San Mateo County, California. We make no warranty, expressed or implied, for the services we performed for this project. Our services are performed in accordance with geotechnical engineering principles generally accepted at this time and location.

This report was prepared to provide engineering opinions and recommendations only. In the event there are any changes in the nature, design, or location of the project, or if any future improvements are planned, the conclusions and recommendations presented in this report should not be considered valid unless 1) the project changes are reviewed by us, and 2) the conclusions and recommendations presented in this report are modified or verified in writing.

The analysis, conclusions, and recommendations presented in this report are based on site conditions as they existed at the time of our investigation; the currently planned construction; review of previous reports and literature relevant to the site conditions; and laboratory test results. In addition, it should be recognized that certain limitations are inherent in the evaluation of subsurface conditions, and that certain conditions may not be detected during an investigation of this type. Changes in the information or data gained from any of these sources could result in changes in our conclusions or recommendations. If such changes occur, we should be advised so that we can review our report in light of those changes.

PREVIOUS INVESTIGATIONS

Bay Area Geotechnical Group (BAGG) conducted a geotechnical consultation in 1997 and geologic reconnaissance in 1998. Subsurface investigation (e.g. borings or test pits) was not conducted. BAGG noted that the existing building was constructed in 1959 and that the house had not subsequently experienced any damage due to settlement or landsliding (our current investigation has resulted in similar observations of the residence). However, BAGG noted that the area around the residence had experienced substantial landsliding, slumping, and soil creep.

BAGG revisited the site on February 13 and 18, 1998 following an occurrence of landsliding northeast of the primary residence in an area occupied by several cottages. BAGG interpreted aerial photographs from 1963 and 1974, which indicated that the landslide had previously been active in the hillside area of the property between the cottages and Tunitas Creek. The 1998 BAGG site visit indicated that the landslide had extended laterally up to Highway 1 on the east and further south to incorporate the cottages, with a 10 to 15 foot high scarp laterally extending several hundred feet. The condition of the existing vacant residence was essentially unchanged from BAGG's previous site visit. BAGG observed that the coastal bluff south of the residence was underlain by landslides.

The BAGG reports provide additional background information which essentially conforms with our current observations.

SITE RECONNAISSANCE AND EXPLORATION

The subsurface exploration was performed under the supervision of staff geologist, Lauren Froberg, on January 31, 2017, using portable Minuteman drilling and sampling equipment. Two exploratory borings were advanced to depths of 11.9 and 18 feet below the ground surface at the locations shown on the Engineering Geologic Reconnaissance Map, Figure 2. The boring logs and the results of our laboratory tests are attached in Appendices A and B, respectively.

Site reconnaissance to evaluate the existing site surface features and general geologic conditions, including slope stability, were also performed on January 31, 2017. The reconnaissance was performed by Ms. Froberg and Consulting Engineering Geologist David F. Hoexter, CEG, accompanied by Thomas Harris, POST Land Transaction Coordinator. The results of the site reconnaissance are indicated on Figure 2.

General Site Surface Conditions

The site is located in a rural area along the coast south of the community of Half Moon Bay, and located along Cabrillo Highway (California Highway 1), immediately south of Tunitas Creek. The site is approximately bound by the Pacific Ocean on the west, Tunitas Creek on the north, Cabrillo Highway on the east; and a continuation of the bluffs to the south.

The overall nearby site vicinity consists of a locally relatively flat to sloping surface which descends from a ridge on the east down to the Pacific Ocean beach on the west. Slope inclinations within the property are highly variable, generally descending down to the west at inclinations of 1.5:1 to 4:1 (horizontal:vertical), with local flat-lying to near-vertical intervals. The average slope down to the beach from the existing residence is approximately 2.3:1 (horizontal:vertical), and the average slope through the residence from Highway 1 down to the beach is approximately 4.6:1 (horizontal:vertical). The existing vacant residence is located at elevations of ranging from about 80 to 95 feet above sea level, with maximum site elevation approximately 160 feet (refer to Figures 1 and 2).

The site is located along the narrow coastal plain adjacent to the Pacific Ocean on the west, and the ascending Santa Cruz Mountains, to the east. It is within the coastal bluff, which descends down towards the Pacific Ocean. The bluff crest is irregular, and its inclined face is incised with erosion channels and irregular escarpments. The bluff face is both eroding and impacted by landsliding (see subsequent discussion). Tunitas Creek has cut through the bluff at the north end of the property. The site is vegetated with native grass, small to large shrubs, and small to large trees.

An asphalt concrete driveway provides access to the fire damaged residence from Cabrillo Highway. The structure is currently vacant and is of split-level design with wood siding exterior. Concrete walkways, patios, and landscaping surround much of the residence. A raised wood deck was located on the west (downslope) side of the residence overlooking the ocean.

An overgrown path originates from the 180-degree access driveway turn/apex north of the existing residence, extends northward and then turns west and southward, descending to the beach. The path is present in 1943 air photos. We were not able to access the path except at the toe of the bluff. This is the location of potential beach access, and is discussed subsequently in this report.

The Ocean Shore Railroad, constructed in the first decade of the 20th century, extended south from San Francisco and was originally intended to terminate in Santa Cruz, but was heavily damaged during the 1906 Earthquake and apparently never operated south of Tunitas Creek. However, the right of way appears to have been constructed across the site between the adjacent highway and beach, at the approximate location of the existing vacant residence and continuing southward. A proposed route transecting the site is shown on the 1894 Official Map of San Mateo County, and the mapped route is shown on the 1940 USGS Half Moon Bay 15' Quadrangle. There are currently no definitive visible indications of the railroad grade, although it reportedly passed immediately upslope of the residence, and the San Mateo County assessor's map indicates a railroad parcel immediately south of the residence.

Existing Vacant Structure Condition

The existing vacant residence was reportedly constructed in approximately 1959 (based on our air photo interpretation, between 1956 and 1960). It has been damaged by a fire and is currently unoccupied. Vertical and horizontal cracks up to 1/8-inch wide were observed in the exterior stem wall along the southwest side of the residence near the concrete patio. The raised wood deck appeared to be supported on shallow spread footings. Based on the appearance of the isolated footings inside the crawl space, the residence also appeared to be supported on conventional shallow foundation system. We also noted that a portion of the perimeter foundations along the downslope side of the residence was undermined due to near-surface soil creeping and/or erosion. Roof drain downspouts generally discharged adjacent to the perimeter foundations. A detailed evaluation of the structure was not within our scope of investigation. However, we walked within both levels of the structure, and did not notice any obvious indications of significant distress, differential settlement or lateral movement. A liquid manometer or other method of measuring the floor levels would be required to confirm this observation.

In addition, although the interior walls were in poor condition, we did not observe indications of stress (such as cracking over door and window openings) which typically would indicate differential movement of the structure.

Subsurface Conditions

At the location of our Boring EB-1, located west (downslope) of the residence, we generally encountered approximately 6 feet of stiff sandy elastic silt of moderate to high plasticity underlain by severely weathered claystone and siltstone bedrock of the Purisima Formation Lobitos Mudstone Member extending to the maximum depth explored of approximately 11.9 feet.

In Boring EB-2, located east (on the upslope side of the residence), we encountered about 2 feet of stiff sandy elastic silt of moderate to high plasticity underlain by severely weathered claystone and siltstone bedrock of the Purisima Formation Lobitos Mudstone Member extending to the maximum depth explored of approximately 18 feet.

A Liquid Limit of 52 and a Plasticity Index of 22 were measured on a near surface sample of soil obtained from Boring EB-1. These test results indicate that the native near-surface soil at the site has moderate to high plasticity and a moderate to high potential for expansion.

Ground Water

Ground water was not encountered in our borings during or immediately following drilling. The borings were backfilled with grout immediately after drilling and sampling were completed; therefore, a stabilized ground water level was not obtained. Please be cautioned that fluctuations in the level of ground water can occur due to variations in rainfall, landscaping, underground drainage patterns, and other factors. It is also possible that perched ground water conditions could develop in the soils and near the surface of the bedrock during and after significant rainfall or due to landscape watering at the property.

GEOLOGIC SETTING

Regional Geology

The site is located near the San Francisco Bay Region, within the California Coast Range geomorphic province. The site is located west of the Santa Cruz Mountains on a narrow coastal plain along the Pacific Coast.

The site and vicinity are shown on several published geologic maps, including Brabb and Pampeyan (1972a and 1972b); Leighton & Associates (1976); Brabb (1980); Brabb, Graymer, and Jones (1998); and Brabb, Graymer, and Jones (2000). The maps indicate that the site is underlain by the Purisima Formation Pliocene age Lobitos Mudstone Member (Tpl), which is comprised primarily of “unbedded”, silty mudstone and exhibits a maximum thickness of 140 meters. The maps indicate that the axis of a northwest-southeast trending syncline underlies the site, and thus that bedding, if present, is essentially flat-lying at the location of the existing residence. The geologic map by Brabb and Pampeyan (1972b) indicates that the site is located within a probable landslide which extends from Tunitas Creek south along the bluffs, and upslope to the east of Highway 1 to the crest of the adjacent ridge.

The site is located within the San Gregorio 7.5-Minute Quadrangle, but is not located within an Alquist-Priolo California Earthquake Fault Zone (formally Special Studies Zone) (there is no map for the San Gregorio Quadrangle). However, the San Gregorio Fault Zone, commonly considered to be Holocene-active, lies approximately 0.5 to 1 mile southwest of the site. There is also no California Seismic Hazards Zones Map for the San Gregorio Quadrangle.

Engineering Geologic Reconnaissance and Site Geology

The engineering geologic reconnaissance was conducted on January 31, 2017. Significant features on the subject site and in the immediate vicinity are shown on Figure 2 and on Figure 5, Cross Section A-A'. Our reconnaissance consisted of traversing the site vertically and laterally where accessible by foot, including the subject property, adjacent properties, and walking along Tunitas Beach, Tunitas Creek, and Cabrillo Highway.

In general, the site is located in an area underlain by Purisima Formation Lobitos Mudstone member, as previously noted. We observed bedrock outcrops along the ocean bluff at various elevations above the beach along the entire distance from Tunitas Creek south for the 0.3-mile distance we traversed (with similar conditions appearing to continue at least an additional 0.2-miles south to Mussel Rock), and our Borings EB-1 and EB-2 confirm the presence of relatively shallow Lobitos Mudstone bedrock beneath the site. Where exposed, the mudstone is intensely fractured, with no apparent preferred fracture orientations.

The ground surface is commonly underlain by residual soil (weathered bedrock) and colluvium. These soils range from 2 feet (upslope) to 6 feet (downslope) thick in the residence vicinity, although they may be thicker at other locations. Artificial fill and localized cuts were noted around the existing vacant residence (not mapped in detail on Figure 2). Fill also underlies the downslope (western) side of Highway 1 adjacent to the site. There are no indications of large-scale grading within the existing residence immediate vicinity, although some grading for the former railroad grade likely occurred immediately upslope and to the south of the residence.

Landslides of varying age, extent and nature, identified by scarps and hummocky topography, underlie much of the site. The landslides are discussed in a following subsection of this report.

There were no surface indications of springs or creeks, with the exception of the through-flowing Tunitas Creek along the northern property line. However, we observed the growth of pampas grass along the sloping bluff, on indication of the presence of at least locally-occurring relatively shallow ground water. In addition, the site's previous potable water source is reportedly a spring located near the Highway 1 overcrossing of Tunitas Creek. We were not able to access this location at the time of our reconnaissance.

There are no surface indications of faulting within or projecting towards the property.

Landslides

As noted, the site is underlain by siltstone and claystone bedrock of the Purisima Formation Lobitos Mudstone Member, which underlies much of the site vicinity. Published geologic maps, particularly Brabb and Pampeyan (1972b) indicate the presence of a landslide headscarp upslope east of Highway 1 and probable and questionable landslides respectively underlying the site and coastal bluffs to the south. Our air photo interpretation and reconnaissance confirm the Brabb and Pampeyan interpretation of the presence of likely landslides underlying the existing vacant residence and balance of the site. However, there are no indications of active landslide movement below or along the bluff face or in the immediate residence vicinity and thus landsliding at this location currently appears to be dormant.

The area northeast of the residence is an active landslide dating prior to at least 1943 (Location B on Figure 2). This slide reportedly impacted the adjacent Highway 1 in the 1950s, resulting in relocation of the highway to the east and construction of the current Tunitas Creek bridge. The slide reactivated during the winter of 1997-98, expanding laterally to the east and south. The slide is a complex rotational block glide feature, on the order of 500 feet wide along the toe on the north along Tunitas Creek and 400 to 600 feet long perpendicular to the creek. The head scarp on the south and east appears to be currently stable (no indications of further upslope migration), but is near-vertical on the order of 20 feet high and has the potential to recede further to the south. Several cottages located within the slide have been damaged or destroyed, as well (reportedly) as a water tank and associated piping. Detailed mapping or evaluation of this landslide was not within our scope of services, and there are no indications that it will directly impact the propose improvements.

There are no indications of landsliding at or immediately surrounding the existing vacant residence. One feature of note is a “peninsula” or short ridge located east (upslope) of the residence near a vacant cottage, marked by an approximately 6 foot deep topographic swale on the east (Location C on Figure 2). This feature does not appear to be cultural (e.g. a former road or excavation, although a rough-graded road appears to pass through this location on some of the early air photos) and drains toward the north to the active adjacent landslide. It is conceivable that this swale is an old landslide head scarp graben, although it is not laterally extensive to the south and is not evident on earlier air photos.

The slope east of Highway 1 (Location D on Figure 2) appears to be underlain by the remnants of older landsliding, with a prominent scarp near the ridge crest. Movement appears to be dormant at this location, as evidenced by the lack of lateral movement along the Highway 1 crossing of the toe of this feature, and lateral continuity of concrete drainage ditches constructed along the slope face. Movement appears to have been relatively shallow, without definitive indication that it extends under the highway or laterally to the beach on the west. However, detailed evaluation was beyond the scope of this investigation.

A relatively shallow bowl-shaped dormant landslide is located along the bluff northwest of the existing residence. There is a potential for renewed movement within this feature, which is crossed by the existing path down to the beach. Based on our air photo interpretation, there has been no movement within the slide since the existing path was constructed, prior to 1943. This slide is indicative of possible future shallow landsliding which could occur along the face of the bluff. This slide itself, however, is laterally removed from the existing vacant residence and thus renewed movement will not likely impact the residence.

The bluffs to the south of the residence are underlain by multiple landslides likely caused by ocean wave erosion of the toe of the slopes removing support from the intensely fractured and thus weak mudstone bedrock. There no longer is a visible indication of the railroad bed constructed in the early 1900s. The appearance of the bluff has changed markedly over the period of our air photo interpretation (since the early 1940s), indicating that the slides are active. This slope will likely continue to move down towards the beach.

Aerial Photographs

Six sets of stereo pair aerial photographs flown from 1943 to 2005 were interpreted to supplement our on-site engineering geologic observations. Imagery scales ranged from 1:12,000 to 1:24,000. The photographs are referenced at the conclusion of this report. Based on our air photo interpretation and images available on the website HistoricAerials/NETROnline, the existing residence was constructed between 1956 and 1960, conforming with the 1959 date indicated by BAGG.

The 1943 imagery indicates Highway 1 in an alignment immediately west of the current location. The Ocean Shore Railroad alignment is evident north of Tunitas Creek, terminating near a rectangular building (likely a station building) on the bluff immediately north of Tunitas Creek, but is not evident south of the creek. A large arcuate feature indicative of a complex landslide is present upslope (east) of Highway 1. Several rough graded roads cross the site, including the currently inaccessible path from north of the residence site down to the beach. The 1997-98 landslide area northeast of the residence is an older landslide composed of multiple smaller slides, with overall direction of movement northward down to Tunitas Creek. Less extensive landslides are also evident descending from the bluff north of the creek, down southward to the creek. A relatively small shallow concave dormant landslide with weathered scarps and lacking a toe, located north of the residence on the downsloping bluff face, appears essentially as it does today (2017). A rough graded path or road extends down from north of the residence location to the beach below; this feature crosses the slope near the toe of the shallow dormant landslide. There is no apparent active landsliding at the current residence location, but there is active landsliding along the bluff face south of the residence location; a prominent headscarp appears to extend northward as an eroded (dormant) feature immediately upslope (east) of the resident location. The swale area (Figure 2, Location C) is present; a rough graded road extends northward from this location but the swale does not appear to have been formed by grading.

The existing vacant residence is present by 1963, as well as several cabins northeast of the residence. A new highway bridge is present immediately east of the previous bridge. The highway east of the site has been regraded and is supported by fill on the western (downslope) side. The upslope area east of the highway has been regraded with the construction of benches and drainage ditches. The 1973 image is similar, with indications of landsliding northeast of the residence in the cabin area, particularly adjacent to the highway and downslope (north) of the cabins. Continued landsliding along the bluff is evident south of the existing vacant residence.

Continued sliding in both the northern and southern bluff areas is evident in the 1991 and 1997 imagery, including extending up to the Tunitas Creek bridge southern abutment. The 2005 imagery dates approximately seven years after the northern cabin area landslide reactivated and destroyed the cabins. The northern beach trail alignment is evident, with no indications of slumps or slides, and no significant changes except for vegetation covering the trail.

Faulting and Seismicity

The San Francisco Bay Area is located in an active seismic region. Earthquakes in the region result from strain energy constantly accumulating because of the northwestward movement of the Pacific Plate relative to the North American Plate. On average about 1.6-inches of movement occurs per year. Historically, the Bay Area has experienced large, destructive earthquakes in 1838, 1868, 1906 and 1989. The faults considered most likely to produce large earthquakes in the area include the San Gregorio, San Andreas, Hayward, and Calaveras.

As depicted on various published and unpublished geologic maps, the San Gregorio Fault Zone is located under the Pacific Ocean approximately 0.5 to 1 mile southwest of the site. Based on this distance from the site and absence of fault-related features within the site, ground surface fault rupture hazard within the site is judged to be low. The San Andreas Fault is located approximately 8 miles northeast of the site. The Hayward and Calaveras faults are located approximately 26 and 33 miles northeast of the site, respectively. These faults and significant earthquakes that have been documented in the Bay Area are listed in Table 1 below and are shown on the Regional Fault and Seismicity Map, Figure 4.

**Table 1. Earthquake Magnitudes and Historical Earthquakes
POST Trail & Ranger Station
Half Moon Bay, California**

<u>Fault</u>	<u>Maximum Magnitude (Mw)</u>	<u>Historical Earthquakes</u>	<u>Estimated Magnitude</u>
San Andreas	7.9	1989 Loma Prieta	6.9
		1906 San Francisco	7.9
		1865 N. of 1989 Loma Prieta Earthquake	6.5
		1838 San Francisco-Peninsula Segment	6.8
		1836 East of Monterey	6.5
Hayward	7.1	1868 Hayward	6.8
		1858 Hayward	6.8
Calaveras	6.8	1984 Morgan Hill	6.2
		1911 Morgan Hill	6.2
		1897 Gilroy	6.3
San Gregorio	7.3	1926 Monterey Bay	6.1

In the future, the subject property will undoubtedly experience severe ground shaking during moderate and large magnitude earthquakes produced along the San Andreas fault or other active Bay Area fault zones. The Working Group On California Earthquake Probabilities, a panel of experts that are periodically convened to estimate the likelihood of future earthquakes based on the latest science and ground motion prediction modeling, concluded there is a 72 percent chance for at least one earthquake of Magnitude 6.7 or larger in the Bay Area before 2045. The Hayward fault has the highest likelihood of an earthquake greater than or equal to magnitude 6.7 in the Bay Area, estimated at 14 percent, while the likelihood on the San Andreas and Calaveras faults is estimated at approximately 6 and 7 percent, respectively (Working Group, 2015).

Earthquake Design Parameters

The State of California currently requires that buildings and structures be designed in accordance with the seismic design provisions presented in the 2016 California Building Code and in ASCE 7-10, "Minimum Design Loads for Buildings and Other Structures." Based on site geologic conditions and on information from our subsurface exploration at the site, the site may be classified as Site Class C, very dense soil and soft rock, in accordance with Chapter 20 of ASCE 7-10. Spectral acceleration response parameters S_s and S_1 , and site coefficients F_a and F_v , may be taken directly from the figures and tables in the California Building Code and in the lookup tables at the U.S.G.S. website based on the latitude and longitude of the site. For the site latitude (37.3555) and longitude (-122.3997) and Site Class C, $SD_s = 1.510$ and $SD_1 = 0.816$.

Tsunami Hazards

Tsunami risk is common along the California coast and within adjacent bays and estuaries. The California Geological Survey Information Warehouse website indicates anticipated tsunami runup along the California coast. The map indicates a potential runup to an approximate elevation of 80 feet along the coast and inland along the Tunitas Creek to a short distance east of Highway 1. The existing residence is located at elevation of ranging from approximately 80 to 95 feet. In addition, the Association of Bay Area Governments (ABAG) online Resilience Program map indicates potential tsunami inundation of the coastal beach and into the Tunitas Creek drainage a short distance east of Highway 1. The 80 foot runup elevation is likely conservative, and as the existing structure is located primarily above the runup elevation, the risk of tsunami runup is judged to be relatively low.

Coastal Bluff Retreat

A detailed coastal bluff retreat analysis is beyond the scope of this investigation. However, two references provide information on bluff retreat. Griggs and Savoy (1985) indicate an average bluff erosion rate of 0 inches per year at the site, although nearby sites, such as the near-vertical bluff immediately north of Tunitas Creek, exhibit average rates of as much as 10 inches/year. Griggs and Savoy describe the site and bluff to the south as *“Unstable, high coastal bluffs. Landslides gradually destroying abandoned railroad grade. Wave erosion destabilizes slopes below railroad grade. Large landslides cause some highway damage”*. Griggs, Patsch and Savoy (2005) indicate that the rocks forming the bluffs in the site vicinity are sheared and fractured by the (nearby) San Gregorio Fault, resulting in the bluffs being *“unstable and scarred by deep gullies and large landslides”*. The authors indicate that overall bluff retreat has been minimal, but that a landslide *“just south of Tunitas Creek damaged the coastal highway in the 1950s”*. Finally, *“just south of Tunitas Creek, the old rock-cut for the Ocean Shore Railroad grade (built in 1905-08 but never used) that traverses these bluffs about 100 feet above the beach is gradually being destroyed by gullying and small landslides caused by wave erosion at the base of the slope. Grade destruction was greatly accelerated by severe cliff erosion during the storms of January 1983”*.

CONCLUSIONS AND RECOMMENDATIONS

From a geotechnical and engineering geologic viewpoint, the site is suitable for the proposed improvements provided the recommendations presented in this report are followed during design and construction. Detailed recommendations are provided in the following sections of our report.

Existing Vacant Residence (Ranger Station)

The existing vacant residence is located near the current bluff face. There are no indications of slope movement/landsliding at this location during the lifetime of the structure (constructed in approximately 1959), either as sliding along the adjacent bluff face or as deep-seated movement under the structure. However, our air photo interpretation suggests that the currently active landslides along the bluff south of the structure previously (prior to 1943) extended northward and possibly included the structure location. In addition, the shallow swale east (upslope) of the residence adjacent to Highway 1 may have formed as a landslide headscarp graben. The bluff at the residence location is lower than to the south, which would reduce the potential for future landsliding, and there are no indications of deep seated landslide movement underlying the residence structure since at least 1943. However, there remains a risk of possible future landsliding at this location. In our opinion, conversion of the vacant residence as a ranger station is a reasonable use of the structure, however, it should be understood that there is a risk of future slope movements at this location. Extensive subsurface investigation and possibly remediation would be required in order to decrease the hazard of future landsliding at this location. Strengthening and underpinning of the structure with relatively deep drilled piers to increase resistance to slope movement would be prudent, but will not eliminate the risk of structural damage due to deep-seated landslide below the structure or due to the existing active landslides progression to the building area, should these scenarios occur in the future.

Road/Path Down to Beach

We have been tasked with recommending one or more geologically feasible access paths or roads to the beach. A previously constructed path originates from north of the existing residence and descends down to the beach. The path is evident on aerial photos, and dates from prior to 1943. We were not able to access the path as it was inaccessible due to vegetation growth. However, as viewed on aerial photographs and from the beach below, the pathway appears essentially unchanged from its initial excavation, including its crossing of the shallow dormant landslide northwest of the existing residence. The slope at this location currently appears to be relatively stable and inclines less steeply than the slope to the south, impacted primarily by deposition of soil onto the path by erosion and gradual gravity movement of soil from the upslope cut. Elsewhere to the south, a potential graded path would require extensive excavation into higher and relatively steeper potentially unstable slopes and/or placement of fill on the downslope side. Thus, in our opinion, the optimum location for the proposed path would be reusing the existing path north of the residence, which would reduce both construction impact as well as future maintenance (although periodic maintenance would be required over time). An alternative would be a constructed walkway with stairs, which would be feasible but would require numerous drilled piers to support the stairway and ongoing maintenance.

However, widening the existing pathway (if necessary) for vehicular access may not be practical due to the steeply sloping nature of the area; we note that retaining walls may be necessary to support an overly-steepened cut along the upslope side or to retain fill soils along the downslope side of the widened pathway. After the vegetation at the existing pathway is removed, and a more detail topographic survey and grading plans are available for the pathway improvements, we can provide additional guidelines regarding foundation support for site retaining walls, if necessary.

Landslide Adjacent to Tunitas Creek

The complex landslide northeast of the residence will continue to be unstable and subject to periodic movement. Future movement may consist of both remobilization of the current landslide mass and further movement down towards Tunitas Creek, as well as gradual headward migration of scarps along the margins of the landslide. Extensive subsurface investigation and remediation would be required in order to stabilize this landslide.

General Slope Stability

Continued landsliding and overall ocean bluff slope retreat south of the residence (and within APN 081-060-130) are likely to occur. In our opinion, development/use of this area does not appear to be economically feasible. Use of this location should generally be limited to day-time recreational use of the beach.

Plan Review and Construction Observation

Because subsurface conditions may vary from those encountered at the locations of our borings, and to observe that our recommendations are properly implemented, we recommend that we be retained to 1) review the project plans for conformance with our report recommendations and 2) observe and test during earthwork and foundation construction.

FOUNDATIONS

Pier and Grade Beam Foundation System

To reduce the potential for foundation distress due to shallow slope movement, in our opinion, the ranger station building should be underpinned with relatively deep drilled piers bearing in weathered bedrock. We note that it may not be practical to underpin the interior of the residence with drilled piers; as a minimum, the entire perimeter continuous footings and the downslope portion of the residence extending over the slope should be underpinned with drilled piers.

In our opinion, the piers should be at least 24-inches in diameter. From a geotechnical viewpoint, piers should extend at least 20 feet below the bottom of the grade beams and at least 12 feet into weathered bedrock below the native and fill soils, whichever is deeper; the structural design may require a deeper embedment. The piers may be designed for an allowable skin friction in bedrock of 450 pounds per square foot for dead plus live loads, with a one-third increase allowed when considering additional short-term wind or seismic loading. The uplift capacity of the piers may be based on a skin friction value of 360 pounds per square foot. Vertical support provided by soil against the upper 4 feet of the piers should be neglected in design.

Piers should have minimum reinforcement in the vertical direction equivalent to at least four No. 6 bars from a geotechnical viewpoint and/or as determined by the structural engineer to resist bending from lateral loads. Piers should have a center-to-center spacing of at least three pier diameters.

We recommend that grade beams be constructed between the piers as required by the structural engineer. From a geotechnical viewpoint, the grade beams should be reinforced with the equivalent of at least two No. 5 bars, top and bottom. The perimeter grade beams should be embedded at least 6 inches below the surface of the crawl-space, or slab subgrade, to help limit infiltration of surface water into the crawl-space under the residence.

Pier drilling should be observed by our representative to confirm that the pier holes extend the required minimum depth, expose the anticipated competent material, and are properly cleaned or all loose or soft soil and debris. The minimum pier depths recommended above may require adjustment if differing conditions are encountered during drilling.

Concrete should be placed in the pier excavations as soon as practical after drilling. Limited ground water seepage may be encountered during pier drilling. This can be further evaluated during drilling of the initial piers. If ground water cannot be effectively pumped from the pier holes, concrete will need to be placed in the pier holes by the tremie method.

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Settlement

On a preliminary basis, 30-year post-construction differential settlement due to static loads is not expected to exceed about 1/2-inch across the underpinned portions of the residence supported on drilled piers, provided foundations for the structure are designed and constructed as recommended. However, differential movement due to significant slope movement/failure is difficult to estimate. As discussed above, underpinning the existing foundations with drilled piers will not eliminate the risk of structural damage due to the deep-seated landslide below the structure or due to the existing active landslides progression to the building area, should these scenarios occur in the future.

Lateral Loads

Due to the potential for lateral creep of the near-surface soils, we recommend that the upper 5 feet of the piers be designed to resist an active soil pressure equal to 125 pounds per cubic foot, acting against 2 times the projected area of the piers acting in the downhill direction. The active load and other lateral loads may be resisted by passive earth pressure based upon an equivalent fluid pressure of 350 pounds per cubic foot, acting on 2 times the projected area of the pier below a depth of 5 feet below the bottom of the grade beam. The passive resistance of the upper 5 feet of the piers should be neglected.

RETAINING WALLS

Retaining walls should be designed to resist lateral pressures from the adjacent colluvial and fill soils and backfill. We recommend retaining walls with level backfill that are not free to deflect or rotate, such as retaining walls as part of the residence, may be designed to resist an equivalent fluid pressure of 50 pounds per cubic foot, plus an additional uniform lateral pressure of $8H$ pounds per square foot, where H is the height of the wall in feet. Retaining walls with level backfill that are free to rotate may be designed to resist an equivalent fluid pressure of 50 pounds per cubic foot.

Walls with sloping backfill should be designed for an additional equivalent fluid pressure of 1 pound per cubic foot for every 1 degree of slope inclination. Where retaining walls will be subjected to surcharge loads, such as from adjacent foundations, vehicle loads, or construction, the walls should be designed for an additional uniform lateral pressure equal to one-half of the surcharge pressure.

Based on the site peak ground acceleration (PGA), on Seed and Whitman (1970); Al Atik and Sitar (2010); and Lew et al. (2010); seismic loads on retaining walls that can yield may be simulated by a line load of $5H^2$ (in pounds per foot, where H is the wall height in feet). Seismic loads on walls that cannot yield, such as the building retaining walls, may be subjected to a seismic load as high as about $11H^2$. This seismic surcharge line load should be assumed to act at $1/3H$ above the base of the wall (in addition to the active wall design pressure of 50 pounds per cubic foot for level wall backfill, with additional 1 pound per cubic foot for every 1 degree of slope inclination for sloping backfill). The additional uniform lateral pressure of $8H$ pounds per square foot need not be applied for seismic condition.

To prevent buildup of water pressure from surface water infiltration, a subsurface drainage system should be installed behind the walls. The drainage system should consist of a 4-inch diameter perforated pipe (perforations placed down) embedded in a section of 1/2- to 3/4-inch, clean, crushed rock at least 12 inches wide. Backfill above the perforated drain line should also consist of 1/2- to 3/4-inch, clean, crushed rock to within about 1½ to 2 feet below exterior finished grade. A filter fabric should be wrapped around the crushed rock to protect it from infiltration of native soil. The upper 1½ to 2 feet of backfill should consist of compacted native clayey soil. The perforated pipe should discharge to a suitable location. Damp-proofing of the walls should be included in areas where wall dampness and efflorescence would be undesirable.

Miradrain, Enkadrain or other drainage fabrics approved by our office may be used for wall drainage as an alternative to the gravel drainage system described above. If used, the drainage fabric should extend from a depth of about 1 foot below the top of the wall backfill down to the drain pipe at the base of the wall. A minimum 12-inch wide section of ½-inch to ¾-inch clean crushed rock and filter fabric should be placed around the drainpipe, as recommended previously.

Backfill placed behind the walls should be compacted to at least 90 percent relative compaction using light compaction equipment. If heavy equipment is used for compaction of wall backfill, the walls should be temporarily braced.

Retaining walls to be built on sloping ground should generally be supported on drilled piers designed in accordance with the recommendations presented in the above section titled "Drilled Piers." During design, we can provide additional guidelines regarding foundation support for site retaining walls.

SLABS-ON-GRADE

General Slab Considerations

The near-surface soils at the site have a moderate to high expansion potential. Expansive soils have a tendency to expand due to increases in moisture content and shrink as they dry. This can result in some slab cracking and heave regardless of the geotechnical measures implemented. Our recommendations below will help mitigate the impacts of the expansive soils beneath slabs-on-grade, but will not eliminate the risk entirely.

To reduce the potential for movement of the slab sub-grade, at least the upper 6 inches of the slab sub-grade should be scarified and compacted at a moisture content at least 2 percent above the laboratory optimum. The native soil sub-grade should be kept moist up until the time the non-expansive fill, crushed rock and vapor barrier, and/or aggregate base is placed. Slab sub-grades and non expansive fill should be prepared and compacted as recommended in the section of this report titled "Earthwork." Exterior flatwork and interior slabs-on-grade should be underlain by a layer of non expansive fill as discussed below. The non expansive fill should consist of aggregate base rock or a clayey soil with a plasticity index of 15 or less.

We expect that a reinforced slab will perform better than an unreinforced slab. Consideration should also be given to using a control joint spacing on the order of 2 feet in each direction for each inch of slab thickness.

Exterior Flatwork

Concrete walkways and exterior flatwork should be at least 4 inches thick and should be constructed on at least 10 inches of Class 2 aggregate base. To improve performance, exterior slabs-on-grade, such as for patios, should be constructed with a thickened edge to improve edge stiffness and to reduce the potential for water seepage under the edge of the slabs and into the underlying base and subgrade. In our opinion, thickened slab edges should be at least 8 inches wide and should extend at least 4 inches below the bottom of the underlying aggregate base layer.

Interior Slabs

Concrete slab-on-grade floors should be constructed on a layer of non-expansive fill at least 12 inches thick where underlain by expansive soils. Due to the potential for expansive soil movement, we recommend that slab-on-grade floors be at least 5 inches thick, and be reinforced with sufficient steel reinforcement to span across local irregularities. It would also be preferable for the slabs in non-living areas to float relative to the perimeter foundation.

In areas where dampness of concrete floor slabs would be undesirable, such as within the building interior, concrete slabs should be underlain by at least 4 inches of free-draining gravel, such as ½- to ¾-inch clean crushed rock with no more than 5 percent passing the ASTM No. 200 sieve. Pea gravel should not be used for this capillary break material. The crushed rock layer should be densified and leveled with vibratory equipment, and may be considered as the upper portion of the non-expansive fill recommended above.

To reduce vapor transmission up through concrete floor slabs, the crushed rock section should be covered with a high quality, UV-resistant vapor barrier conforming to the requirements of ASTM E 1745 Class A, with a water vapor transmission rate less than or equal to 0.01 perms (such as 15-mil thick “Stego Wrap Class A”). The vapor barrier should be placed directly below the concrete slab. Sand above the vapor barrier is not recommended. The vapor barrier should be installed in accordance with ASTM E 1643. All seams and penetrations of the vapor barrier should be sealed in accordance with manufacturer’s recommendations.

The permeability of concrete is affected significantly by the water cement ratio of the mix, with lower ratios producing more damp-resistant slabs (or mats) and being stronger structurally. Where moisture protection is important and/or where the concrete will be placed directly on the vapor barrier, the water-to-cement ratio should be 0.45 or less. To increase the workability of the concrete, mid-range plasticizers can be added to the mix. Water should not be added to the mix unless the slump is less than specified and the ratio will not exceed 0.45. Other steps that may be taken to reduce moisture transmission through the slab (or mat) include moist curing for 5 to 7 days and allowing the slab to dry for a period of two months or longer prior to placing floor coverings. Also, prior to installation of the floor covering, it may be appropriate to test the slab moisture content for adherence to the manufacturer’s requirements to determine whether a longer drying time is necessary.

EARTHWORK

Clearing and Subgrade Preparation

All deleterious materials, such as existing slabs, pavements, utilities and foundations to be abandoned, fill, vegetation, topsoil, and root systems, should be cleared from areas to be built on or paved. The actual stripping depth should be established by us at the time of construction. Excavations that extend below finish grade should be backfilled with structural fill that is water-conditioned, placed, and compacted as recommended in the section titled "Compaction."

After the site has been properly cleared, stripped, and excavated to the required grades, exposed soil surfaces in areas to receive structural fill or slabs-on-grade should be scarified to a depth of 6 inches, moisture conditioned, and compacted as recommended for structural fill in the section titled "Compaction."

To help mitigate the potential effects of the expansive on-site soils, exterior flatwork, slab and pavement subgrades, grade beam and foundation excavations, and utility trench excavations should be kept in a moist condition throughout the construction period.

Large fills are generally not desirable on a hillside site like this. However, if fills are to be constructed on natural slopes (not retained by retaining walls) having an inclination steeper than 6 horizontal to 1 vertical, the fill should be benched, and a key excavated into the competent native soils, and subdrains installed if required by our field representative. If significant fills are required, we should be contacted to evaluation their feasibility and to provide benching criteria as necessary.

Material For Fill

On-site soil containing less than 3 percent organic material by volume (ASTM D2974) should be suitable for use as structural fill (but not as non-expansive fill below concrete slabs-on-grade). Structural fill should not contain rocks or pieces larger than 6 inches in greatest dimension and no more than 15 percent larger than 2.5 inches. Imported non-expansive fill should have a Plasticity Index no greater than 15, should be predominately granular, and should have sufficient binder so as not to slough or cave into foundation excavations or utility trenches. Our representative should approve proposed import materials prior to their delivery to the site.

Compaction

Scarified soil surfaces and all structural fill should be compacted in uniform lifts no thicker than 8 inches in pre-compacted thickness, conditioned to the appropriate moisture content, and compacted as recommended for structural fill in Table 2 below. The relative compaction and moisture content recommended in Table 2 is relative to ASTM Test D1557, latest edition.

**Table 2. Compaction Recommendations
POST Trail & Ranger Station
Half Moon Bay, California**

	<u>Relative Compaction*</u>	<u>Moisture Content*</u>
<u>General</u>		
• Scarified subgrade in areas to receive structural fill.	90 percent	At least 2 percent above optimum
• Structural fill composed of native soil.	90 percent	At least 2 percent above optimum
• Structural fill composed of non-expansive fill.	90 percent	Above optimum
• Fills below a depth of 4 feet.	92 percent	Above optimum
<u>Pavement Areas</u>		
• Upper 6-inches of soil below baserock.	90 percent	About 2 percent above optimum
• Aggregate baserock.	95 percent	Near optimum
<u>Utility Trench Backfill</u>		
• On-site soil.	90 percent	At least 2 percent above optimum
• Imported sand	95 percent	Near optimum

* Relative to ASTM Test D1557, latest edition.

Temporary Slopes and Excavations

The contractor should be responsible for the design and construction of all temporary slopes and any required shoring. Shoring and bracing should be provided in accordance with all applicable local, state, and federal safety regulations, including current OSHA excavation and trench safety standards.



Because of the potential for variation of the on-site soils, field modification of temporary cut slopes may be required. Unstable materials encountered on slopes during and after excavation should be trimmed off even if this requires cutting the slopes back to a flatter inclination.

Protection of structures near excavations will also be the responsibility of the contractor. In our experience, a preconstruction survey is generally performed to document existing conditions prior to construction, with intermittent monitoring of the structures during construction.

Finished Slopes

We recommend that new finished slopes be cut or filled to an inclination no steeper than 2:1 (horizontal:vertical). Exposed slopes may be subject to minor sloughing and erosion, which could require periodic maintenance. We recommend that all slopes and soil surfaces disturbed during construction be planted with erosion-resistant vegetation.

Surface Drainage

Finished grades should be designed to prevent ponding of water and to direct surface water runoff away from foundations, and edges of slabs and pavements, and toward suitable collection and discharge facilities. Slopes of at least 2 percent are recommended for flatwork and pavement areas with 5 percent preferred in landscape areas within 8 feet of the structures, where possible. At a minimum, splash blocks should be provided at the discharge ends of roof downspouts to carry water away from perimeter foundations. Preferably, roof downspout water should be collected in a closed pipe system that is routed to a storm drain system or other suitable discharge outlet.

In order to reduce the potential for adverse impact to the stability of the existing steep slope onsite, it would be preferable not to discharge large quantities of surface water runoff and roof downspout onto the existing slope. Ideally, surface runoff, downspout drainage and retaining wall back-drain water collected should be discharged in a closed-pipe system and routed to a gently sloping or flat area below the existing steep slope, if feasible.

Drainage facilities should be observed to verify that they are adequate and that no adjustments need to be made, especially during first two years following construction. We recommend an as-built plan showing the locations of surface and subsurface drain lines and clean-outs be developed.

Drainage facilities should be periodically checked to verify that they are continuing to function properly. Drainage lines and facilities will probably need to be periodically cleaned of silt and debris that may build up in the lines.

FUTURE SERVICES

Plan Review

Romig Engineers should review the completed structural and civil plans for conformance with the recommendations contained in this report. We should be provided with these plans as soon as possible upon completion in order to limit the potential for delays in the permitting process that might otherwise be attributed to our review process. In addition, it should be noted that many of the local building and planning departments now require “clean” geotechnical plan review letters prior to acceptance of plans for their final review. Since our plan reviews often do result in recommendations for additional changes to the plans, our generation of a “clean” review letter often requires two iterations. At a minimum, we recommend that the following note be added to the general note sections of the architectural, structural and civil plans:

“Earthwork and site drainage, foundation excavation, pier drilling, utility trench backfill, retaining wall drainage and backfilling, pavement construction, and slab-on-grade subgrade preparation should be performed in accordance with the geotechnical report prepared by Romig Engineers, Inc., dated March 17, 2017. Romig Engineers should be notified at least 48 hours in advance of any earthwork or foundation installation operations and should observe and test the earthwork and foundation installation phases of the project as recommended in the geotechnical report.”

Construction Observation and Testing

The earthwork and foundation phases of construction should be observed and tested by us to 1) Establish that subsurface conditions are compatible with those used in the analysis and design; 2) Observe compliance with the design concepts, specifications and recommendations; and 3) Allow design changes in the event that subsurface conditions differ from those anticipated. The recommendations in this report are based on a limited number of borings. The nature and extent of variation across the site may not become evident until construction. If variations are then exposed, it will be necessary to reevaluate our recommendations.



REFERENCES

Aerial Photographs

United States Geologic Survey Library, Menlo Park, California (USGS), and Pacific Aerial Surveys, Oakland, California (PAS): black and white vertical stereo pairs (color imagery noted)

Source	Imagery	Date	Scale
USGS	DDB-2B-151/152	10/11/43	1:20,000
USGS	DDB-1DD-16/17	7/8/63	1:20,000
USGS	3567-3-051/051	5/8/73	1:12,000
PAS	AV-4075-0207-5/6	10/28/91	1:12,000
PAS	SMT-AV-5431-7-43/44	8/5/97	1:12,000
PAS	KAV-9200-7-21/22 (color)	10/13/05	1:15,000

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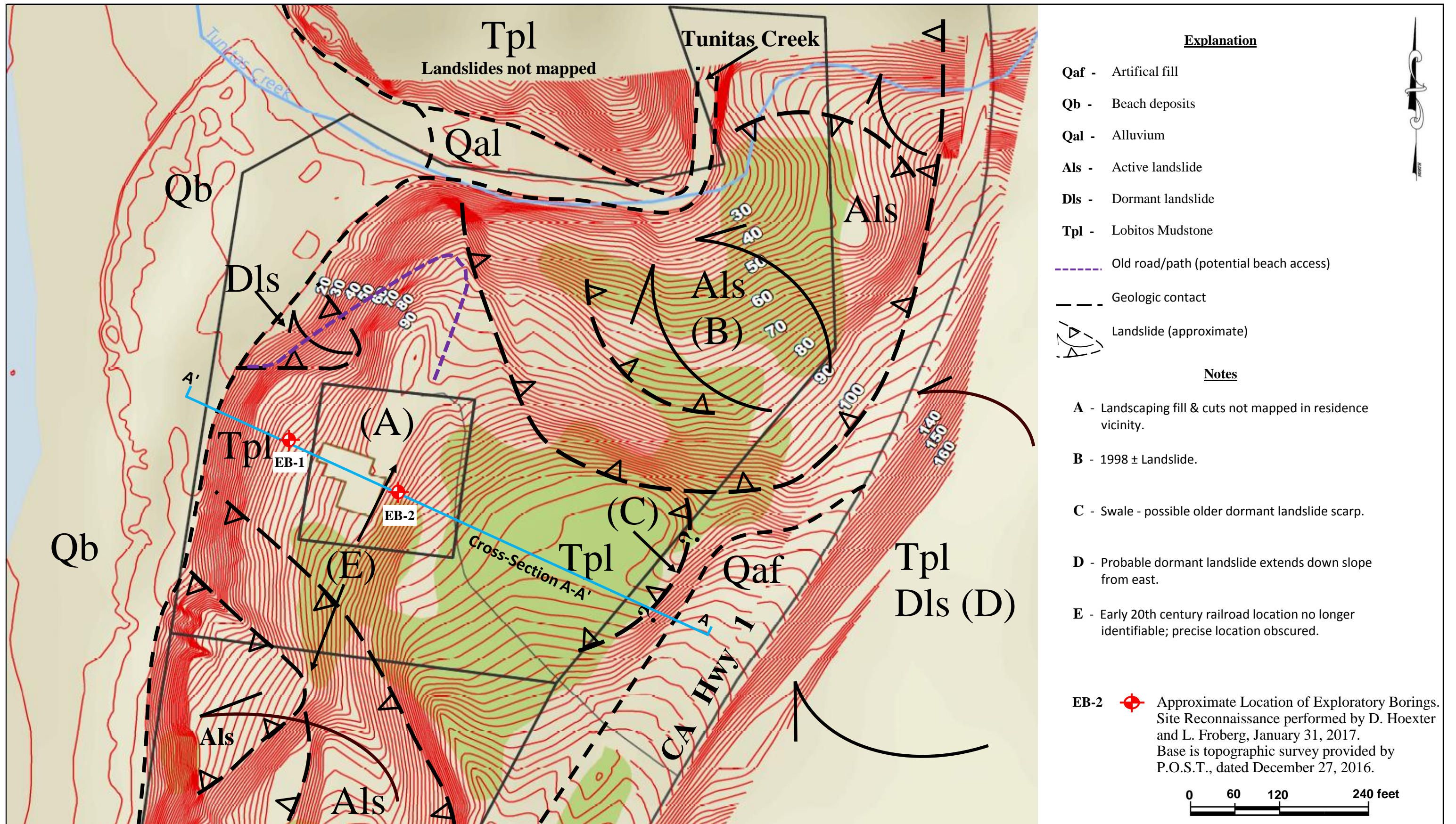


Scale: 1 inch = 2000 feet

Base is United States Geological Survey San Gregorio 7.5 Minute Quadrangle, dated 1997.

VICINITY MAP
 POST TRAIL AND RANGER STATION IMPROVEMENTS
 HALF MOON BAY, CALIFORNIA

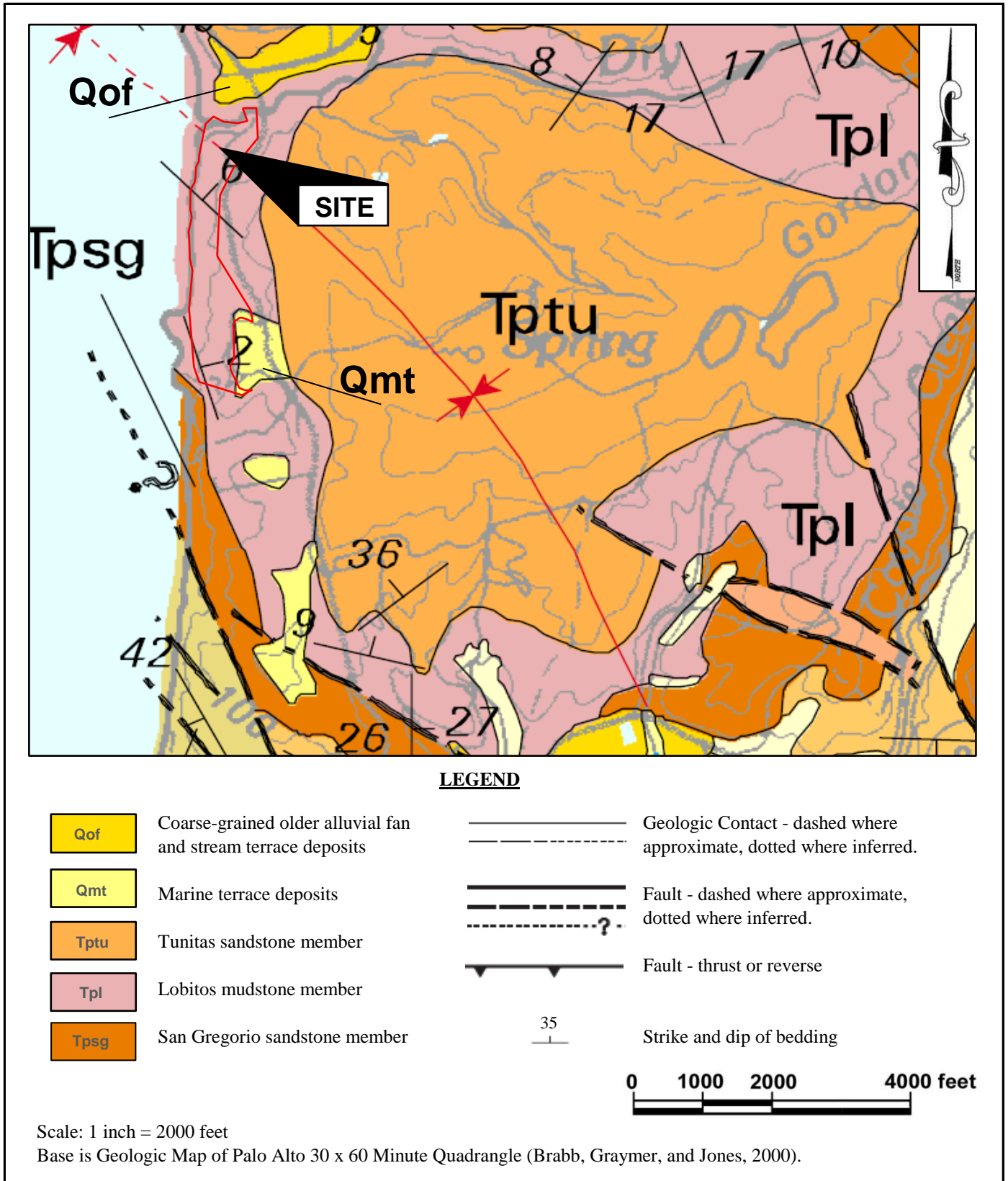
FIGURE 1
 MARCH 2017
 PROJECT NO. 3957-1



ENGINEERING GEOLOGIC RECONNAISSANCE MAP
 POST TRAIL AND RANGER STATION IMPROVEMENTS
 HALF MOON BAY, CALIFORNIA

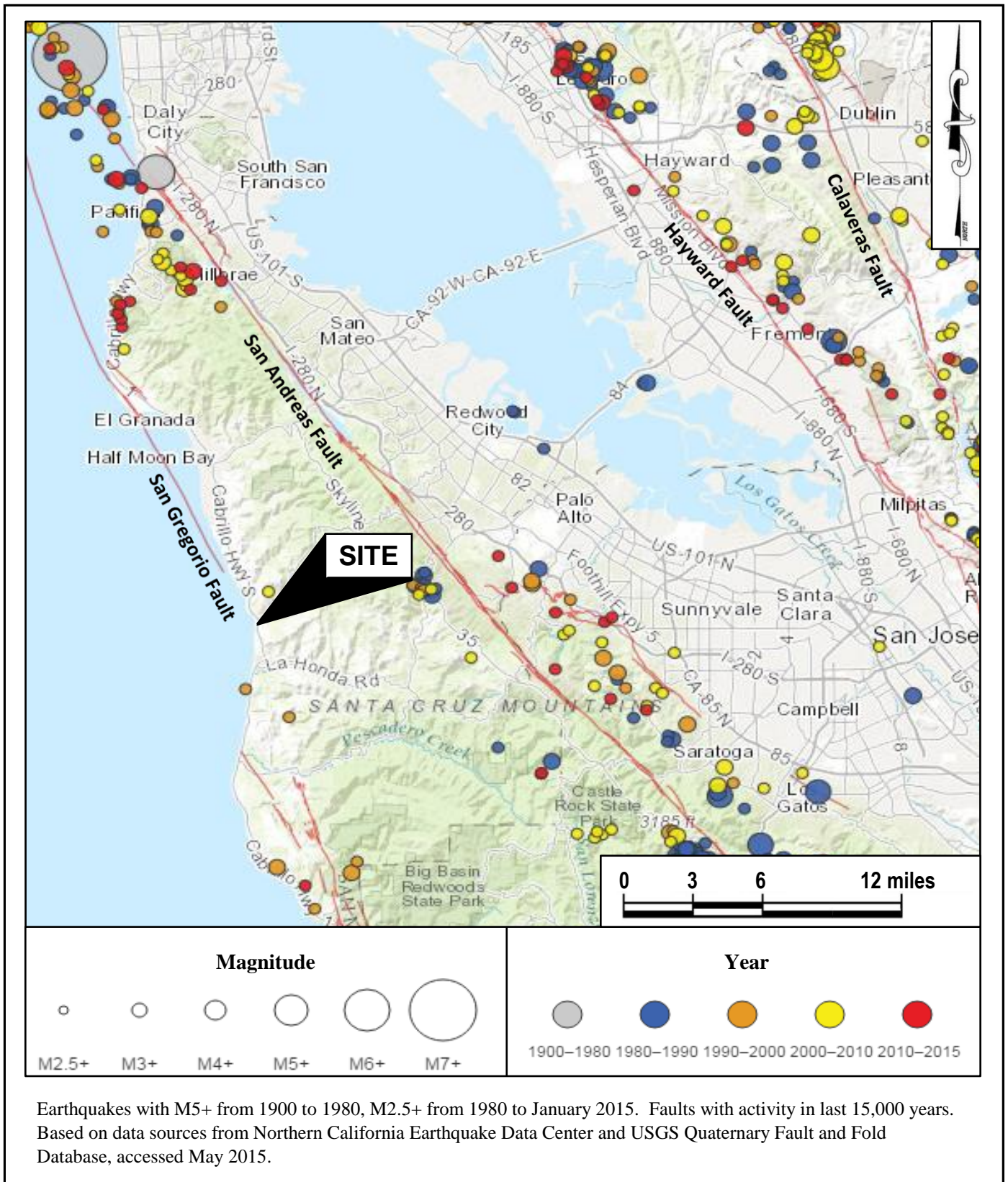


FIGURE 2
 MARCH 2017
 PROJECT NO. 3957-1



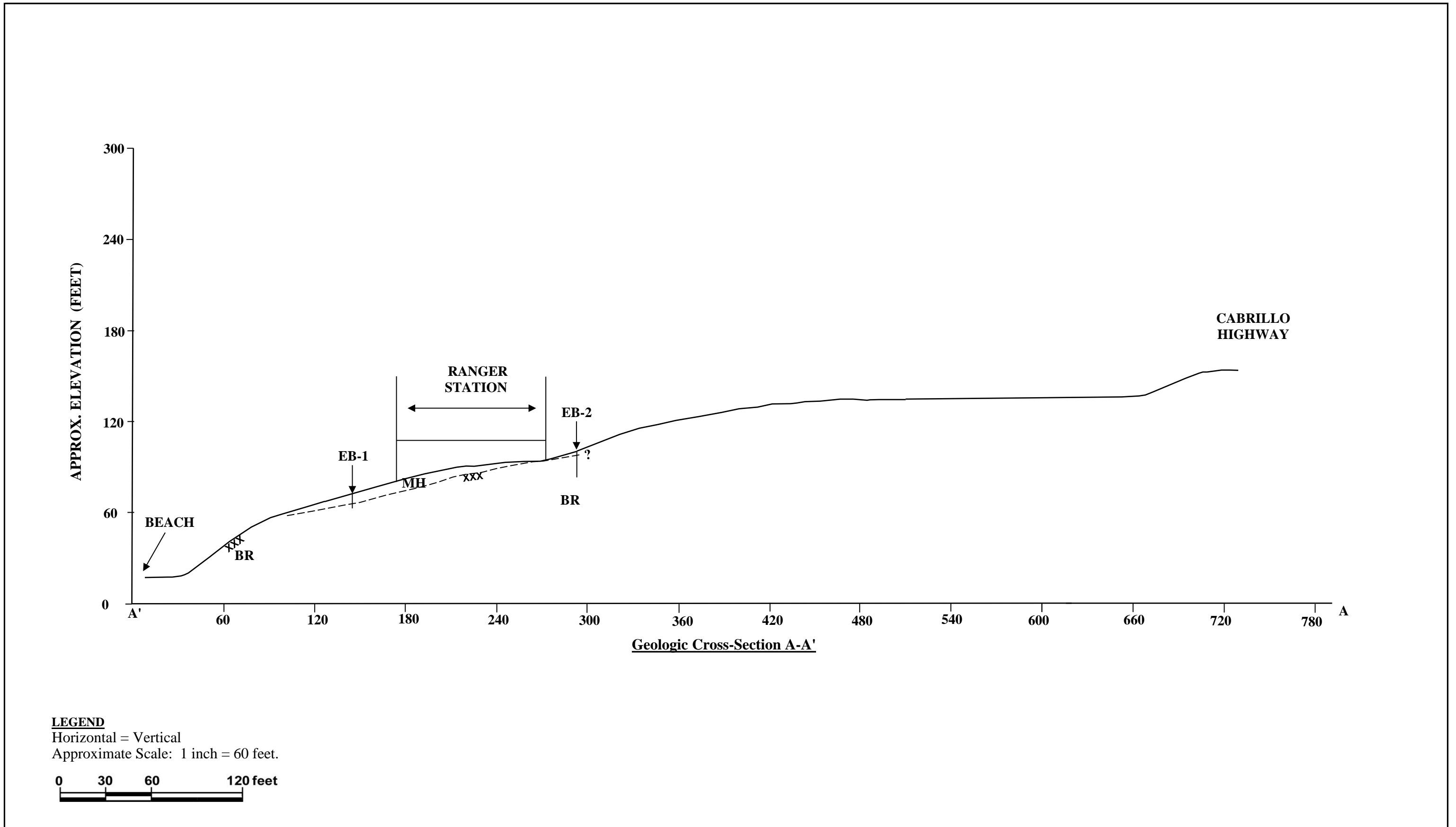
VICINITY GEOLOGIC MAP
 POST TRAIL AND RANGER STATION IMPROVEMENTS
 HALF MOON BAY, CALIFORNIA

FIGURE 3
 MARCH 2017
 PROJECT NO. 3957-1



REGIONAL FAULT AND SEISMICITY MAP
 POST TRAIL AND RANGER STATION IMPROVEMENTS
 HALF MOON BAY, CALIFORNIA

FIGURE 4
 MARCH 2017
 PROJECT NO. 3957-1



GEOLOGIC CROSS-SECTION A-A'
 POST TRAIL AND RANGER STATION IMPROVEMENTS
 HALF MOON BAY, CALIFORNIA



FIGURE 5
 MARCH 2017
 PROJECT NO. 3957-1

APPENDIX A

FIELD INVESTIGATION

The soils encountered during drilling were logged by our representative and samples were obtained at depths appropriate to the investigation. The samples were taken to our laboratory where they were evaluated and classified in accordance with the Unified Soil Classification System. The logs of our borings, as well as a summary of the soil classification system (Figure A-1) and bedrock descriptions (Figure A-2) that have been used, are attached.

Several tests were performed in the field during drilling. The standard penetration resistance was determined by dropping a 140-pound hammer through a 30-inch free fall and recording the blows required to drive the 2-inch (outside diameter) sampler 18 inches. The standard penetration test (SPT) resistance is the number of blows required to drive the sampler the last 12 inches and is recorded on the boring logs at the appropriate depths. Soil samples were also collected using 2.5-inch and 3.0-inch O.D. drive samplers. The blow counts shown on the logs for these larger samplers do not represent SPT values and have not been corrected in any way.

The locations of the borings were established by pacing using the site plan provided by Peninsula Open Space Trust, dated January 5, 2017. The locations of the borings should be considered accurate only to the degree implied by the method used.

The boring logs and related information depict our interpretation of subsurface conditions only at the specific location and time indicated. Subsurface conditions and ground water levels at other locations may differ from conditions at the locations where sampling was conducted. The passage of time may also result in changes in the subsurface conditions.



USCS SOIL CLASSIFICATION

PRIMARY DIVISIONS			SOIL TYPE	SECONDARY DIVISIONS	
COARSE GRAINED SOILS (< 50 % Fines)	GRAVEL	CLEAN GRAVEL (< 5% Fines)	GW	Well graded gravel, gravel-sand mixtures, little or no fines.	
		GRAVEL with FINES	GP	Poorly graded gravel or gravel-sand mixtures, little or no fines.	
		SAND	CLEAN SAND (< 5% Fines)	GM	Silty gravels, gravel-sand-silt mixtures, non-plastic fines.
			SAND WITH FINES	GC	Clayey gravels, gravel-sand-clay mixtures, plastic fines.
	FINE GRAINED SOILS (> 50 % Fines)	SILT AND CLAY Liquid limit < 50%		SW	Well graded sands, gravelly sands, little or no fines.
				SP	Poorly graded sands or gravelly sands, little or no fines.
				SM	Silty sands, sand-silt mixtures, non-plastic fines.
				SC	Clayey sands, sand-clay mixtures, plastic fines.
ML				Inorganic silts and very fine sands, with slight plasticity.	
CL				Inorganic clays of low to medium plasticity, lean clays.	
SILT AND CLAY Liquid limit > 50%		OL	Organic silts and organic clays of low plasticity.		
		MH	Inorganic silt, micaceous or diatomaceous fine sandy or silty soil.		
		CH	Inorganic clays of high plasticity, fat clays.		
		OH	Organic clays of medium to high plasticity, organic silts.		
HIGHLY ORGANIC SOILS			Pt	Peat and other highly organic soils.	
BEDROCK			BR	Weathered bedrock.	

RELATIVE DENSITY

SAND & GRAVEL	BLOWS/FOOT*
VERY LOOSE	0 to 4
LOOSE	4 to 10
MEDIUM DENSE	10 to 30
DENSE	30 to 50
VERY DENSE	OVER 50

CONSISTENCY

SILT & CLAY	STRENGTH [^]	BLOWS/FOOT*
VERY SOFT	0 to 0.25	0 to 2
SOFT	0.25 to 0.5	2 to 4
FIRM	0.5 to 1	4 to 8
STIFF	1 to 2	8 to 16
VERY STIFF	2 to 4	16 to 32
HARD	OVER 4	OVER 32

GRAIN SIZES

BOULDERS	COBBLES	GRAVEL		SAND			SILT & CLAY
		COARSE	FINE	COARSE	MEDIUM	FINE	
12 "	3"	0.75"		4	10	40	200
SIEVE OPENINGS				U.S. STANDARD SERIES SIEVE			

Classification is based on the Unified Soil Classification System; fines refer to soil passing a No. 200 sieve.

* Standard Penetration Test (SPT) resistance, using a 140 pound hammer falling 30 inches on a 2 inch O.D. split spoon sampler; blow counts not corrected for larger diameter samplers.

[^] Unconfined Compressive strength in tons/sq. ft. as estimated by SPT resistance, field and laboratory tests, and/or visual observation.

KEY TO SAMPLERS

	Modified California Sampler (3-inch O.D.)
	Mid-size Sampler (2.5-inch O.D.)
	Standard Penetration Test Sampler (2-inch O.D.)

KEY TO EXPLORATORY BORING LOGS
 POST TRAIL AND RANGER STATION IMPROVEMENTS
 HALF MOON BAY, CALIFORNIA

FIGURE A-1
 MARCH 2017
 PROJECT NO. 3957-1



WEATHERING

<p style="text-align: center;">Fresh</p> <p>Rock fresh, crystals bright, few joints may show slight staining. Rock rings under hammer if crystalline.</p> <p style="text-align: center;">Very Slight</p> <p>Rock generally fresh, joints stained, some joints may show thin clay coatings, crystals in broken face show bright. Rock rings under hammer if crystalline.</p> <p style="text-align: center;">Slight</p> <p>Rock generally fresh, joints stained, and discoloration extends into rock up to 1 inch. Joints may contain clay. In granitoid rocks some occasional feldspar crystals are dull and discolored. Crystalline rocks ring under hammer.</p> <p style="text-align: center;">Moderate</p> <p>Significant portions of rock show discoloration and weathering effects. In granitoid rocks, most feldspars are dull and discolored; some are clayey. Rock has dull sound under hammer and shows significant loss of strength as compared with fresh rock.</p>	<p style="text-align: center;">Moderately Severe</p> <p>All rock except quartz discolored or stained. In granitoid rocks, all feldspars dull and discolored and majority show kaolinization. Rock shows severe loss of strength and can be excavated with geologist's pick. Rock goes "clunk" when struck.</p> <p style="text-align: center;">Severe</p> <p>All rock except quartz discolored or stained. Rock "fabric" clear and evident, but reduced in strength to strong soil. In granitoid rocks, all feldspars kaolinized to some extent. Some fragments of strong rock usually left.</p> <p style="text-align: center;">Very Severe</p> <p>All rock except quartz discolored and stained. Rock "fabric" discernible, but mass effectively reduced to "soil" with only fragments of strong rock remaining.</p> <p style="text-align: center;">Complete</p> <p>Rock reduced to "soil". Rock fabric not discernible or discernible only in small scattered locations. Quartz may be present as dikes or stringers.</p>
---	--

HARDNESS

<p style="text-align: center;">Very hard</p> <p>Cannot be scratched with knife or sharp pick. Hand specimens requires several hard blows of geologist's.</p> <p style="text-align: center;">Hard</p> <p>Can be scratched with knife or pick only with difficulty. Hard blow of hammer required to detach hand specimen.</p> <p style="text-align: center;">Moderately Hard</p> <p>Can be scratched with knife or pick. Gouges or grooves to 1/4 inch deep can be excavated by hard blow of point of a geologist's pick. Hard specimen can be detached by moderate blow.</p>	<p style="text-align: center;">Medium</p> <p>Can be grooved or gouged 1/16 inch deep by firm pressure on knife or pick point. Can be excavated in small chips to pieces about 1 inch maximum size by hard blows of the point of a geologist's pick.</p> <p style="text-align: center;">Soft</p> <p>Can be gouged or grooved readily with knife or pick point. Can be excavated in chips to pieces several inches in size by moderate blows of a pick point. Small thin pieces can be broken by finger pressure.</p> <p style="text-align: center;">Very Soft</p> <p>Can be carved with knife. Can be excavated readily with point of pick. Pieces 1 inch or more in thickness can be broken with finger pressure. Can be scratched readily by fingernail.</p>
--	--

JOINT BEDDING AND FOLIATION SPACING

Spacing	Joints	Bedding and Foliation
Less than 2 in.	Very Close	Very Thin
2 in. to 1 ft.	Close	Thin
1 ft. to 3 ft.	Moderately Close	Medium
3 ft. to 10 ft.	Wide	Thick
More than 10 ft.	Very Wide	Very Thick

ROCK QUALITY DESIGNATOR (RQD)

RQD, as a percentage	Descriptor
Exceeding 90	Excellent
90 to 75	Good
75 to 50	Fair
50 to 25	Poor
Less than 25	Very Poor

KEY TO BEDROCK DESCRIPTIONS
 POST TRAIL AND RANGER STATION IMPROVEMENTS
 HALF MOON BAY, CALIFORNIA

FIGURE A-2
 MARCH 2017
 PROJECT NO. 3957-1



DRILL TYPE: Minuteman with 3-1/4" Continuous Flight Auger

LOGGED BY: LF

DEPTH TO GROUND WATER: Not Encountered SURFACE ELEVATION: NA

DATE DRILLED: 1/31/17

CLASSIFICATION AND DESCRIPTION	SOIL CONSISTENCY/ DENSITY or ROCK HARDNESS* (Figure A-2)	SOIL TYPE	SOIL SYMBOL	DEPTH (FEET)	SAMPLE INTERVAL	PEN. RESISTANCE (Blows/ft)	WATER CONTENT (%)	SHEAR STRENGTH (TSF)*	UNCONFIN. COMP. (TSF)*
Brown, Sandy Elastic Silt, moist, fine to medium grained sand, moderate to high plasticity, orange mottling, some roots.	Stiff	MH		0					
Residual Soil: Brown, Sandy Elastic Silt, moist, moderate to high plasticity, fine to medium grained sand, orange mottling.	Stiff	MH				32			
Lobitos Mustone Member: Gray-brown, Claystone and Siltstone, moist, fine grained, manganese oxide staining, somewhat friable, very severely weathered.	Soft	BR				16	38		
						25	34		
				5					
						23	31		
Wet in veins.									
						27	33		
Becomes wet.									
				10					
						16	37		
						41	35		
						45	36		
Becomes bluish-gray.									
				15					
Note: The stratification lines represent the approximate boundary between soil and rock types, the actual transition may be gradual.						33	33		
*Measured using Torvane and Pocket Penetrometer devices.									
						20	36		
Bottom of Boring at 18 feet.									
				20					

EXPLORATORY BORING LOG EB-2
 POST TRAIL AND RANGER STATION IMPROVEMENTS
 HALF MOON BAY, CALIFORNIA

BORING EB-2
 MARCH 2017
 PROJECT NO. 3957-1



APPENDIX B

LABORATORY TESTS

Samples from subsurface exploration were selected for tests to help evaluate the physical and engineering properties of the soils that were encountered. The tests that were performed are briefly described below.

The natural moisture content was determined in accordance with ASTM D2216 on most of the soil samples recovered from the borings. This test determines the moisture content, representative of field conditions, at the time the samples were collected. The results are presented on the boring logs at the appropriate sample depths.

The Atterberg Limits were determined on one sample of soil in accordance with ASTM D4318. The Atterberg Limits are the moisture content within which the soil is workable or plastic. The results of this test are presented in Figure B-1 and on the log of Boring EB-1 at the appropriate sample depth.



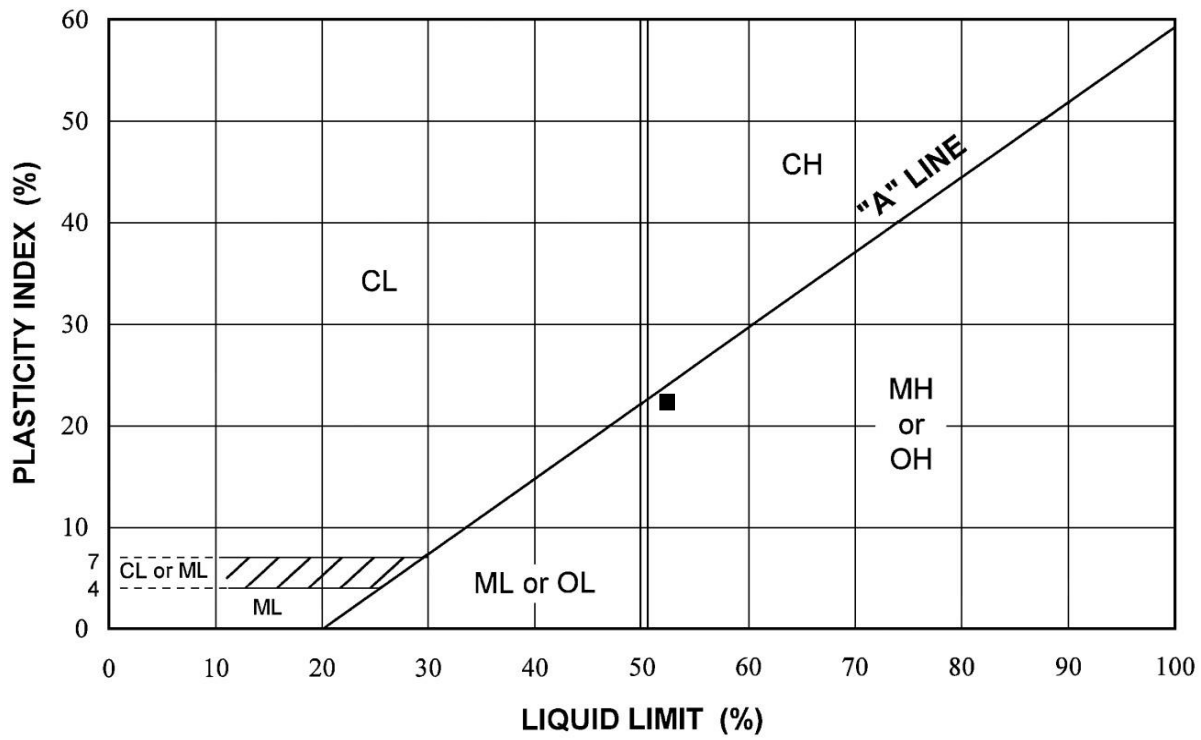


Chart Symbol	Boring Number	Sample Depth (feet)	Water Content (percent)	Liquid Limit (percent)	Plasticity Index (percent)	Liquidity Index (percent)	Passing No. 200 Sieve (percent)	USCS Soil Classification
■	EB-1	2-4	30	52	22	0		MH

PLASTICITY CHART
 POST TRAIL AND RANGER STATION IMPROVEMENTS
 HALF MOON BAY, CALIFORNIA

FIGURE B-1
 MARCH 2017
 PROJECT NO. 3957-1





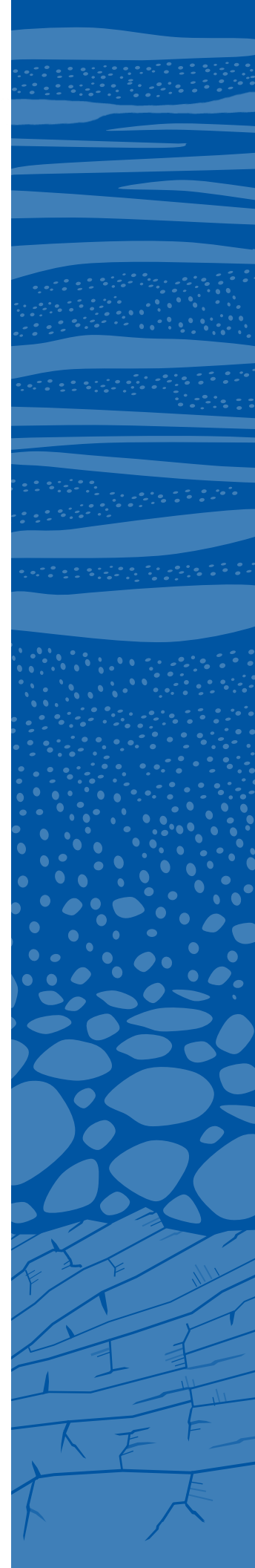
ROMIG ENGINEERS, INC.

1390 El Camino Read, 2nd Floor

San Carlos, California 94070

Phone: (650) 591-5224

www.romigengineers.com



PROPOSAL SECTION

Contractor's Check-Off List:

1. Complete **Bidder's Information Sheet**..... 2
2. Complete **Bid Proposal Sheet** 5-11
3. Complete **Acknowledgement of Site Visit Form**..... 12
4. Check off for **Bidder's Security** (cash, cashier's check, certified check, or bidder's bond) 13-14
5. Complete **Principal(s) and Title(s) Sheet** 16
6. Complete **State Contractor's License No. and Department of Industrial Relations Registration No. Sheet** 17
7. Complete **Subcontractor List Sheets** 18-19
8. Complete **Certification of Intent Sheet** 23
9. **Equal Employment Opportunity Sheets:**
 - i. Complete **Questionnaire for Bidder Sheet** 24-26
 - ii. Complete **Contractor Report Form** 27
10. Complete **Equal Benefits Compliance Declaration Form** 33
11. Complete **Employee Jury Service Compliance Declaration Form** 37
12. Complete **Non-Collusion Declaration Form** 38

**PROPOSAL TO THE COUNTY OF SAN MATEO
STATE OF CALIFORNIA**

TUNITAS CREEK BEACH IMPROVEMENTS

**TOTAL PROJECT APPROXIMATELY 0.28 MILE IN LENGTH
WITH APPURTENANT WORK THERETO
IN SAN MATEO COUNTY**

**COUNTY PROJECT NO. P30T1
PROJECT FILE NO. E4995**

NAME OF BIDDER: _____
STREET ADDRESS: _____
MAILING ADDRESS: _____
TELEPHONE NUMBER: (_____) _____
FAX NUMBER: (_____) _____
EMAIL FOR OFFICIAL NOTIFICATIONS: _____

The work for which this proposal is submitted is for construction in accordance with the Special Provisions and Agreement annexed hereto, the project plans described below, and the Department of Transportation Standard Plans, Revised Standard Plans, Standard Specifications, Revised Standard Specifications, 2018 edition, the Labor Surcharge and Equipment Rental Rates and the General Prevailing Wage Rates in effect on the date the work is accomplished.

It is the Contractor's obligation and responsibility to ensure that all work associated with this Project complies with all current Orders of the Health Officer of the County of San Mateo related to the Novel Coronavirus Disease 2019 (COVID-19). The County of San Mateo assumes no responsibility for work performed by Contractor that is not in compliance with all current Orders. The Contractor is advised to review the Orders of the Health Officer of the County of San Mateo, which can be found at the following link:

<https://www.smchealth.org/post/health-officer-statements-and-orders>

LOCATION OF WORK

The work will be done in accordance with the Special Provisions and Agreement annexed hereto, and in accordance with the Standard Specifications of the County of

San Mateo.

The location and details of said work are further shown on the Plans titled
“Tunitas Creek Beach Improvements,”
File E4995 in the Department of Public Works.

**TO THE BOARD OF SUPERVISORS
COUNTY OF SAN MATEO
STATE OF CALIFORNIA**

The undersigned, as Bidder, declares that the only persons or parties interested in this Proposal as principals are those named herein; that this Proposal is made without collusion with any other person, firm or corporation; that he has carefully examined the location of the proposed work, the annexed proposed form of Agreement, and the Plans and Specifications therein referred to; that he proposes, and agrees if this Proposal is accepted, that he will contract with the County of San Mateo, in the form of the copy of the Agreement annexed hereto, to provide all necessary machinery, tools, apparatus and other means of construction and to do all the work and furnish all the materials specified in the Contract, in the manner and time therein prescribed and according to the requirements of the Engineer as therein set forth, and that he will accept in full payment therefor the following unit prices, to wit:

PROPOSAL TO THE COUNTY OF SAN MATEO

TUNITAS CREEK BEACH IMPROVEMENTS

WITH APPURTENANT WORK THERETO IN SAN MATEO COUNTY

Item No.	Item Description	Section No.	Unit of Measure	Estimated Quantity	Item Price (In Figures)	Total (In Figures)
101	Mobilization/ Demobilization	11	LS	1	\$	\$
102	Construction Waste Management	14	LS	1	\$	\$
103	Water Pollution Control	13-1	LS	1	\$	\$
104	Construction Staking	100	LS	1	\$	\$
105	Maintaining Traffic	12-2	LS	1	\$	\$
106	Prepare Health and Safety Plan	10-4	LS	1	\$	\$
107	Project Sign	12-3	EA	1	\$	\$
108	Temporary Fencing	16	LF	2,300	\$	\$
109	Temporary Silt Fence	13-4	LF	1,500	\$	\$
110	Fiber Roll	13-5	LF	4,300	\$	\$
111	Stabilized Construction Entrance	13-6	EA	1	\$	\$
112	Watering	13-7	LS	1	\$	\$
201	Clear and Grub	17-1	SF	220,000	\$	\$
202	Hardscape Removal	17-2	SF	7,000	\$	\$
203	Gate Removal	17-3	EA	1	\$	\$
204	Fence Removal	17-3	LF	215	\$	\$
205	Light Pole Removal	17-3	EA	1	\$	\$
206	Power Pole Removal	17-3	EA	1	\$	\$

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Item No.	Item Description	Section No.	Unit of Measure	Estimated Quantity	Item Price (In Figures)	Total (In Figures)
207	Gravel Parking Area Protection	17-4	SF	1,500	\$	\$
208	Remove Striping	84-2	LS	1	\$	\$
301	Parking Area Earthwork	19-1	CY	9,100	\$	\$
302	Pathway Earthwork	19-1	CY	5,500	\$	\$
303	Midbluff Area Earthwork	19-1	CY	2,000	\$	\$
304	Roadway Excavation - Highway 1	19-5	CY	200	\$	\$
305	Stockpile	19-2	CY	2,000	\$	\$
306	Slide Repair Earthwork	19-4	CY	8,000	\$	\$
307	Export	19-3	CY	4,000	\$	\$
308	Fine Grading	19-7	SF	100,000	\$	\$
401	Parking Lot Asphalt Paving	36-1	TON	605	\$	\$
402	Highway 1 Asphalt Paving	36-1	TON	250	\$	\$
403	Remove and Replace Asphalt Driveway (R)	36-3	TON	90	\$	\$
404	Concrete Walkway (Type A Finish)	73-2	SF	9,160	\$	\$
405	Concrete Walkway (Type B Finish)	73-2	SF	1,670	\$	\$
406	Vehicle Aggregate Surface	26-2	TON	580	\$	\$
407	Pedestrian Aggregate Surface	26-2	TON	46	\$	\$
408	Parking Lot Aggregate Base	26-1	TONS	1,150	\$	\$

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Item No.	Item Description	Section No.	Unit of Measure	Estimated Quantity	Item Price (In Figures)	Total (In Figures)
409	Highway 1 Aggregate Base	26-1	TON	280	\$	\$
410	Aggregate base for various concrete elements	26-3	TON	304	\$	\$
411	Resilient Surfacing	36-2	SF	15,450	\$	\$
412	Resilient Surfacing Permeable Aggregate Base	36-2	TON	383	\$	\$
413	Stabilized Decomposed Granite Paving	36-4	SF	7,300	\$	\$
414	Shredded Hardwood Mulch Surfacing	20-3	SF	1,000	\$	\$
415	Parking Lot Unpaved Trail	19-6	SF	2,500	\$	\$
416	South Loop Unpaved Trail	19-6	SF	13,025	\$	\$
417	Curb Ramp	73-2	SF	750	\$	\$
418	Concrete Curb	73-1	LF	1,250	\$	\$
419	Concrete Curb and Gutter	73-1	LF	755	\$	\$
420	Flush Concrete Curb	73-1	LF	100	\$	\$
421	Extended Concrete Curb and Gutter	73-1	LF	115	\$	\$
422	Retaining Curb and Gutter	73-1	LF	275	\$	\$
423	Curb Cuts with Cobble Rock	72	EA	6	\$	\$
424	Soldier Pile Wall	47	SF	1,960	\$	\$
425	Soldier Pile Wall (Taller than 4 feet)	47	SF	300	\$	\$

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Item No.	Item Description	Section No.	Unit of Measure	Estimated Quantity	Item Price (In Figures)	Total (In Figures)
426	Wood Step	73-3	CY	40	\$	\$
427	Wood Step	19-8	EA	80	\$	\$
428	Midwest Guardrail	83	LF	660	\$	\$
429	Signs and Posts	82	EA	12	\$	\$
430	Detail 38A	84-1	LF	240	\$	\$
431	Detail 27B	84-1	LF	400	\$	\$
432	4" Stripe	84-1	LF	1,150	\$	\$
433	Markings	84-1	SF	1,000	\$	\$
501	Wood Decking	77-2	SF	855	\$	\$
502	Amphitheatre	77-3	LS	1	\$	\$
503	Guardrail	75-2	LF	415	\$	\$
504	Handrail	75-1	LF	4,620	\$	\$
505	Bollards	75-3	EA	5	\$	\$
506	Gate	75-4	EA	4	\$	\$
507	Top of Bluff Seatwalls Type A	77-5	LS	1	\$	\$
508	Top of Bluff Seatwalls Type B	77-5	LS	1	\$	\$
509	Mid Bluff Timber Bench	77-5	LS	1	\$	\$
510	Strata Beam Bench	77-6	EA	10	\$	\$
511	Precast Concrete Bench	77-6	EA	2	\$	\$
512	Rammed Earth Seat Wall	77-4	EA	1	\$	\$
513	Bicycle Parking	77-6	EA	12	\$	\$
514	Bike Repair Station	77-6	EA	1	\$	\$
515	Picnic Tables	77-6	EA	5	\$	\$

Continued on next page

Continued from previous page

Item No.	Item Description	Section No.	Unit of Measure	Estimated Quantity	Item Price (In Figures)	Total (In Figures)
516	Feature Log	77-6	EA	1	\$	\$
517	Concrete Wheel Stop	77-6	EA	15	\$	\$
518	Wayfinding Sign	77-7	EA	7	\$	\$
519	Land Recognition Plaque	77-7	EA	1	\$	\$
520	Interpretative Signage	77-7	EA	6	\$	\$
521	Donor Wall	77-8	LS	1	\$	\$
522	Donor Plaques on Seat Backs	77-8	EA	22	\$	\$
523	Bat House	77-9	EA	1	\$	\$
524	Entry Kiosk	77-10	EA	1	\$	\$
525	Habitat Protection Fence	80	LF	7,000	\$	\$
501	Slope Stabilization Seeding	21-1	SF	82,000	\$	\$
502	Social Trail Slope Stabilization Seeding	21-2	SF	10,000	\$	\$
503	Plants/ Shrubs	20-1	SF	32,000	\$	\$
504	Ground Cover	20-1	SF	32,000	\$	\$
505	Tree	20-1	EA	65	\$	\$
506	Landscape Maintenance	20-2	LS	1	\$	\$
601	Restroom Plans and Materials	99-1	LS	1	\$	\$
602	Ranger Shed Plans and Materials	99-1	LS	1	\$	\$
603	Ranger Shed Foundation	99-2	EA	1	\$	\$

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Item No.	Item Description	Section No.	Unit of Measure	Estimated Quantity	Item Price (In Figures)	Total (In Figures)
604	Ranger Shed	99-3	EA	1	\$	\$
605	Restroom Foundation	99-2	EA	1	\$	\$
606	Restroom	99-3	EA	1	\$	\$
701	12" PVC	64	LF	820	\$	\$
702	8" Perforated Pipe	68	LF	305	\$	\$
703	6" Perforated Pipe	68	LF	925	\$	\$
704	Class II Permeable	61-1	CY	65	\$	\$
705	Bioretention Soil	61-2	CY	97	\$	\$
706	Subdrain Cleanout	68	EA	24	\$	\$
707	Overflow Drain Inlet	70	EA	5	\$	\$
708	Turning Structure	70	EA	3	\$	\$
709	Drop Inlet with Side Opening	70	EA	1	\$	\$
710	Outfall Rock Dissipater	72	TON	35	\$	\$
801	Joint Trench	86-1	LF	1,800	\$	\$
802	Service Trench	86-1	LF	500	\$	\$
803	PG&E #7 Vault	86-2	EA	3	\$	\$
804	AT&T 30x48 Pull Box	86-2	EA	1	\$	\$
805	AT&T 30x60 Pull Box	86-2	EA	3	\$	\$
806	Comcast Pull Box	86-2	EA	4	\$	\$
901	Transformer	87-2	EA	1	\$	\$
902	Switch Gear	87-2	EA	1	\$	\$
903	Electric Vehicle Charging Station	87-4	EA	4	\$	\$

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Item No.	Item Description	Section No.	Unit of Measure	Estimated Quantity	Item Price (In Figures)	Total (In Figures)
904	Electrical Conduit and Conductors	87-1	LF	4,000	\$	\$
905	Handrail Lighting	87-3	LF	2,000	\$	\$
906	6" Water Pipeline	79	LF	1,000	\$	\$
TOTAL:						\$

Notes: (F) Final Pay Quantities - See Section 9-1.015, "Final Pay Items," of the Standard Specifications.

(S) Specialty Items - As defined in Section 8-1.01, "Subcontracting," of the Standard Specifications

ACKNOWLEDGEMENT OF SITE VISIT

I hereby acknowledge that a representative or representatives from our firm has/have visited the site as required for acceptance of bid for the project “**TUNITAS CREEK BEACH IMPROVEMENTS**”. Proposal packages from contractors who do not return this form, fully executed, will not be accepted.

 Name of Firm

 Name(s) of Visiting Representative(s)
 (Please Print)

 Job Title

 Date of Visit

Acknowledged by,

 Name (Please Print)

 Job Title

 Signature

 Date Signed

The access gate for the project site will be unlocked to allow access to potential bidders at the following times:

1. Friday, May 5th from 9:00 am – 2:00 pm
2. Friday, May 12th from 9:00 am – 2:00 pm
3. Friday, May 19th from 9:00 am – 2:00 pm

Potential bidders are required to visit the site at any of these times, complete this form, and include it with their bid.

Bids are required for the entire work. The amount of the bid for comparison purposes will be the total of all items. The total of unit basis items will be determined by extension of the item price bid on the basis of the estimated quantity set forth for the item.

The Bidder shall set forth for each item of work, in clearly legible figures, an item price and a total for the item in the respective spaces provided for this purpose. In the case of unit basis items, the amount set forth under the "Total" column shall be the extension of the item price bid on the basis of the estimated quantity for the item.

In case of discrepancy between the item price and the total set forth for the item, the item price shall prevail, provided however, if the amount set forth as an item price is ambiguous, unintelligible or uncertain for any cause, or is omitted, or in the case of unit basis items, is the same amount as the entry in the "Total" column, then the amount set forth in the "Total" column for the item shall prevail in accordance with the following:

1. As to lump sum items, the amount set forth in the "Total" column shall be the item price.
2. As to unit basis items, the amount set forth in the "Total" column shall be divided by the estimated quantity for the item and the price thus obtained shall be the item price.

After acceptance of this Proposal and award of the Contract, if the undersigned should fail to contract as aforesaid or should fail to give the "Performance" Surety Bond in the sum of one hundred percent (100%) of the Contract bid, the "Payment" Surety Bond in the sum of one hundred percent (100%) of the Contract bid, the Certificate of Insurance covering public liability and property damage in the amounts specified in the Agreement portion of these Contract documents, and the Certificate of Insurance covering Workmen's Compensation Insurance, within **TEN (10) WORKING DAYS** after award of the Contract, the County may, at its option, determine that the bidder has abandoned the Contract, thereupon this Proposal and the acceptance thereof shall be null and void, and the forfeiture of such **security** accompanying this Proposal shall operate and the same shall become the property of the County of San Mateo, State of California.

Accompanying this Proposal is:

- Cash
- A Cashier's Check (made payable to the "County of San Mateo")
- A Certified Check (made payable to the "County of San Mateo")

- A Bidder's Bond executed by an admitted surety insurer (made payable to the "County of San Mateo") in the amount equal to at least ten percent (10%) of the total bid.

Bidders must, upon request, furnish evidence of their financial responsibility and ability to perform the work herein described.

PROVISIONS OF LABOR CODE

The Contractor shall be required to comply with all the payroll and apprenticeship provisions of Chapter 1, Division 2, Section 1776 and 1777.5 of the California Labor Code.

**BIDDER'S FINANCIAL RESPONSIBILITY
TECHNICAL ABILITY & EXPERIENCE**

THE LOW BIDDER MUST, UPON REQUEST, FURNISH EVIDENCE OF FINANCIAL RESPONSIBILITY AND ABILITY TO PERFORM THE WORK INCLUDED IN THIS PROPOSED CONTRACT. SUCH EVIDENCE MAY INCLUDE, BUT NOT BE LIMITED TO, A FINANCIAL STATEMENT AS OF THE DATE OF BID; A STATEMENT, WITH REFERENCES, OF COMPLETED WORK OF A SIMILAR CHARACTER TO THAT INCLUDED HEREIN; A STATEMENT OF THE LAST TWO PROJECTS PERFORMED REGARDLESS OF THEIR CHARACTER; AND SUCH OTHER INFORMATION WHICH WILL ENABLE THE DIRECTOR OF PUBLIC WORKS TO JUDGE THE BIDDER'S RESPONSIBILITY, EXPERIENCE, SKILL AND BUSINESS STANDING.

The names of all persons interested in the foregoing Proposal as **principals** are as follows:

(Name of Corporation, Co-partnership, Individual)	
(Name and Title)	(Name and Title)
(Name and Title)	(Name and Title)
(Authorized Signature of Bidder)	(Authorized Signature of Bidder)

***(NOTICE:** If the Bidder is a corporation, the legal name of the corporation and the names of the president, secretary, treasurer, and manager thereof shall be set forth together with the signature of the officer or officers authorized to sign Contracts in behalf of the corporation; if the Bidder is a co-partnership, the true name of the firm and the names of the principal partners shall be set forth together with the signature of the partner or partners authorized to sign Contracts in behalf of the co-partnership; and, if the Bidder is an individual, his full name shall be set forth and his signature shall be as the authorized officer. If the signature is by an agent, other than by an officer of a corporation or a member of a partnership, a Power of Attorney must be on file with the County prior to opening of bids or submitted with the bid; otherwise, the bid will be disregarded as irregular and unauthorized.)

Corporations must, upon request, furnish certification attesting to corporate existence and authority of officers to sign contracts and other documents.

The undersigned is licensed by the Contractor's State License Board of the State of California to perform the work hereinafter described, which State Contractor's License No. is:

State Contractor's License No.: _____

(Expires: _____)

Pursuant to State Senate Bill SB 854 (Stat. 2014, chapter 28), effective January 1, 2015, No contractor or subcontractor may be awarded a contract for public work on a public works project (awarded on or after April 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5.

Department of Industrial Relations Registration No.: _____

(Expires: _____)

LICENSEE: _____
(Please print)

ADDRESS: _____

CITY AND STATE: _____

Date of Proposal

Signature

SUBCONTRACTORS

DESIGNATION OF SUBCONTRACTORS: Each Bidder shall set forth below the name, business address and telephone number of each subcontractor who will perform work or labor or render service to the Contractor in or about the construction of the work or improvement to be performed under these Contract Documents. The Bidder shall also list the proposal item number(s) to be done, in whole or in part, by each subcontractor and the total amount of each subcontractor's work in dollars and as a percentage of the total bid amount. The Bidder's attention is directed to Section 5-1.13, "Subcontracting", of the Standard Specifications.

SUBCONTRACTORS

1. Name: _____ Item No(s). _____
 Address: _____ Dollar Amount: \$ _____
 Tel: (____) _____ Percent of Total Bid: _____%
 License No.: _____
 Department of Industrial Relations Registration No.: _____

2. Name: _____ Item No(s). _____
 Address: _____ Dollar Amount: \$ _____
 Tel: (____) _____ Percent of Total Bid: _____%
 License No.: _____
 Department of Industrial Relations Registration No.: _____

3. Name: _____ Item No(s). _____
 Address: _____ Dollar Amount: \$ _____
 Tel: (____) _____ Percent of Total Bid: _____%
 License No.: _____
 Department of Industrial Relations Registration No.: _____

4. Name: _____ Item No(s). _____
 Address: _____ Dollar Amount: \$ _____
 Tel: (____) _____ Percent of Total Bid: _____%
 License No.: _____
 Department of Industrial Relations Registration No.: _____

SUBCONTRACTORS

(Continued)

5. Name: _____ Item No(s). _____
 Address: _____ Dollar Amount: \$ _____
 Tel: (____) _____ Percent of Total Bid: _____%
 License No.: _____
 Department of Industrial Relations Registration No.: _____
6. Name: _____ Item No(s). _____
 Address: _____ Dollar Amount: \$ _____
 Tel: (____) _____ Percent of Total Bid: _____%
 License No.: _____
 Department of Industrial Relations Registration No.: _____
7. Name: _____ Item No(s). _____
 Address: _____ Dollar Amount: \$ _____
 Tel: (____) _____ Percent of Total Bid: _____%
 License No.: _____
 Department of Industrial Relations Registration No.: _____
8. Name: _____ Item No(s). _____
 Address: _____ Dollar Amount: \$ _____
 Tel: (____) _____ Percent of Total Bid: _____%
 License No.: _____
 Department of Industrial Relations Registration No.: _____
9. Name: _____ Item No(s). _____
 Address: _____ Dollar Amount: \$ _____
 Tel: (____) _____ Percent of Total Bid: _____%
 License No.: _____
 Department of Industrial Relations Registration No.: _____
10. Name: _____ Item No(s). _____
 Address: _____ Dollar Amount: \$ _____
 Tel: (____) _____ Percent of Total Bid: _____%
 License No.: _____
 Department of Industrial Relations Registration No.: _____

**SAN MATEO COUNTY
EQUAL EMPLOYMENT OPPORTUNITY PROGRAM**

CONTRACT COMPLIANCE PROGRAM

The purpose of the **Contract Compliance Program** is two-fold:

- 1. To prohibit and eliminate employment discrimination; and**
- 2. To further the opportunities for minority persons to be gainfully employed in County construction contracts.**

The program requires equal employment opportunity efforts by Contractors to employ minority workers on the County's construction projects. The Contractor will not discriminate against any employee or applicant for employment because of race, religion, color, national origin, age, disability, ancestry, sexual orientation, or sex. The Contractor will take equal employment opportunity actions to ensure that applicants are employed, and that employees are treated, during employment, without regard to their race, religion, color, national origin, age, disability, ancestry, sexual orientation, or sex; with the goal that the ethnic composition of the Contractor's work force will approximate the ethnic composition of the population of San Mateo County. Such action shall include, but not be limited to, employment, upgrading, demotion or transfer; recruitment; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship training and on-the-job training.

The **San Mateo County Equal Employment Opportunity Program** requires the Contractor to make two certifications. The first assures compliance with laws prohibiting discrimination. The second concerns the intent to develop and implement an equal employment opportunity program.

The Contractor is further required to:

1. Post "**EQUAL EMPLOYMENT OPPORTUNITY NOTICE(S)**", including the statement: "**AN EQUAL OPPORTUNITY EMPLOYER**", in all announcements of job openings;
2. Permit access by County and State compliance officials to his employment records; and
3. File monthly reports on prescribed forms:
 - A. **Monthly Manpower-Utilization Report**

- B. **Weekly payroll Form WH-347** (which form can be found on the U.S. Department of Labor, Wage & Hour Division website, which website is addressed as <http://www.dir.ca.gov/dlsr/PWD/Northern.html>)
- C. **Statement of Compliance** (which form is on the back of payroll form WH-347 or separate form WH-348, as requested by the County's contract compliance representative)
- D. Assign an equal opportunity officer full time or as additional duty.

Union employees are to be recruited according to applicable labor agreements. If non-union employees are recruited for the project, the Contractor shall make use of minority-oriented news media and referral sources. The Contractor shall inform all subcontractors hired by him on the project(s) of their obligations under this program; and Contractor **will be responsible for the compliance with these regulations by his subcontractors.**

For failure to comply with the non-discrimination section, the Contractor is subject to a penalty of **two percent (2%) of the total amount payable for each working day during which he was found to be in non-compliance, or the cancellation of the contract in part or whole.**

The County's Contract Compliance Program is monitored by the San Mateo County Department of Public Works, 555 County Center, 5th Floor, Redwood City, California, 94063-1665, telephone (650) 363-4100.

Information and necessary forms are available at the **Department of Public Works**. In addition to evaluating Contractors' and subcontractors' equal opportunity efforts, the **Department of Public Works** will assist Contractors and subcontractors toward meeting these obligations.

**CERTIFICATION OF COMPLIANCE
WITH LAWS PROHIBITING DISCRIMINATION**

We are in compliance with the **EQUAL EMPLOYMENT OPPORTUNITY REQUIREMENT OF THE EXECUTIVE ORDER 11246, TITLE VII OF THE CIVIL RIGHTS ACT OF 1964, THE CALIFORNIA FAIR EMPLOYMENT AND HOUSING ACT**, any other Federal or State laws relating to equal employment opportunity and the provisions of **Title 2, Chapter 2.50 of the San Mateo County Ordinance Code** and the Board established guidelines implementing them.

We will not discriminate against any employee or applicant for employment based on **race, religion, color, national origin, age, disability, ancestry, sexual orientation, or sex**. This pertains to the areas of **recruitment, hiring, training, upgrading, transfer, compensation and termination**.

CERTIFICATION OF INTENT

We will maintain or develop and implement, during the course of the work concerned, an **Equal Employment Opportunity Program** of hiring and employment conducted without regard to **race, religion, color, national origin, age, disability, ancestry, sexual orientation, or sex** of the applicants. With this Certification we shall submit any and all information that may be required by the County in connection with this program.

We certify that we have read and understood the County of San Mateo's **GENERAL EQUAL EMPLOYMENT OPPORTUNITY STATEMENT SECTION III-A**, which is included in the proposal section of the Specifications.

As a private Contractor, working under contracts with the County of San Mateo, we understand that these policies are the requirements of said County employment and we will, in our recruitment, training and staffing, work to implement this Section as applicable.

Signature and Title of Authorized Representative or Bidder

Date

**SAN MATEO COUNTY
EQUAL EMPLOYMENT OPPORTUNITY PROGRAM**

QUESTIONNAIRE FOR BIDDER

THIS REPORT MUST BE COMPLETED IN FULL BY AN OFFICIAL OF THE COMPANY AND SUBMITTED WITH THE BID.

PROJECT: TUNITAS CREEK BEACH IMPROVEMENTS PROJECT

NAME OF FIRM: _____

ADDRESS: _____

CITY/ZIP: _____

TELEPHONE: (____)_____ DATE OF SUBMITTAL: _____

OFFICIAL FOR COMPANY: _____

1. _____ Yes _____ No Have you read and are you acquainted with the **Equal Employment Opportunity Requirement** of the Executive Order 11246, Title VII of the **Civil Rights Act of 1964**, the California Fair Employment Practices Act and **Title 2, Chapter 2.50** of the San Mateo County Ordinance Code?

2. _____ Yes _____ No Does your employment advertising state that you are an Equal Opportunity Employer?

3. _____ Yes _____ No Have all recruitment sources been advised that all qualified applicants will be considered for employment without regard to race, religion, color, national origin, age, disability, ancestry, sexual orientation, or sex?

4. _____ Yes _____ No Were any employees hired by means other than the union hiring hall in the past year?

How many? _____

What positions? _____

5. If non-union personnel are employed by the company, or if a position cannot be filled by the union hall, specify the advertisement and recruitment sources that are used. (For example, State HRD, newspapers, high schools, vocational schools, referral agencies/organizations, community groups.)

6. How many apprentices do you employ? _____
How many of these are minorities? _____

7. _____ Yes _____ No Do you have a program for upgrading and counseling present employees?
Describe: _____

8. _____ Yes _____ No Do you have a collective bargaining agreement with a labor union or other organization?
Please list these groups _____

9. What percentage of your work force is covered by union agreement? _____

10. _____ Yes _____ No Have you advised the labor union and/or worker organizations of your company's responsibility under the Equal Employment Opportunity Program?

11. _____ Yes _____ No Does your company's collective bargaining agreement include a provision for non-discrimination in employment?

12. Describe any previous experience with Equal Employment Opportunity Programs:

If your company has a written Equal Employment Opportunity Program now in effect, please attach a copy.

**COUNTY OF SAN MATEO
EQUAL EMPLOYMENT OPPORTUNITY PROGRAM**

**CONTRACTOR REPORT FORM
(To Be Submitted with Original Bid)**

PROJECT: _____ DATE: _____

NAME OF BIDDER: _____

NAME OF PERSON SUBMITTING REPORT: _____

RACIAL/ETHNIC MAKEUP OF THE COMPANY

Be sure to include the total of all employees in each classification in the first column. Report the number of employees enrolled in formal on-the-job (apprenticeship) training programs in parenthesis () for each classification.

Minority Employees										
Job Classification	Total (All Employees)	Ethnicity								
		American-Indian or Native Alaskan	Asian	Native Hawaiian or Pacific Islander	Black American or African American	Caucasian	Filipino	Hispanic or Latino (1)	Other (2)	Unidentified (3)
Total (s)										

- Notes: (1) "Hispanic" includes all persons of Mexican, South and Central American, Puerto Rican, Cuban or Spanish ancestry.
 (2) "Other" includes all others whose origin consists of two or more races other than Hispanic or Latino.
 (3) Use this category for employees who have chosen not to identify any race or ethnicity, including "Other".

**SECTION III-A. GENERAL EQUAL EMPLOYMENT
OPPORTUNITY POLICY STATEMENT**

The Board of Supervisors of the County of San Mateo takes this opportunity to express its commitment to one of its highest priorities in the area of employment. This priority is assuring that all employees and applicants for employment are provided equal access to, and enjoyment of employment opportunities, and that they are not subjected to discrimination because of age (over 40), ancestry, creed, color, disability, marital status, medical condition, national origin, political or religious affiliation, race, sex, or sexual orientation.

The Board of Supervisors is committed to ensuring compliance with all applicable non-discrimination laws and regulations in order to attain a work environment that is free of discrimination so all County employees can provide quality public service.

The County will take positive measures toward eliminating artificial barriers to employment and achieving equal opportunity through its continued implementation and coordination of the County's Equal Employment Opportunity Program and through its review and evaluation of hiring and promotional policies and procedures.

It is the belief of the Board of Supervisors that equal employment opportunity is consistent with the basic merit system principle that all persons be afforded equal access to positions in public service based on their ability to do the job. Employment decisions shall be made on the basis of merit and in conformity with the principles of equal opportunity action.

Through adoption of the Equal Employment Opportunity Program, the Board of Supervisors commits the County, the operating departments, the Equal Employment Opportunity Coordinator, and all employees to a results-oriented Equal Employment Opportunity Program aimed at attaining a balanced workforce at all levels of County employment and achieving equal opportunity in County service.

EQUAL BENEFITS COMPLIANCE ORDINANCE NO. 04026**CHAPTER 2.84**ORDINANCE NO 04026

AN ORDINANCE OF THE SAN MATEO COUNTY ORDINANCE CODE (TITLE 2, ADMINISTRATION), REQUIRING SPECIFIED COUNTY CONTRACTORS TO PROVIDE FOR NON-DISCRIMINATION BY COUNTY CONTRACTORS IN THE PROVISION OF EMPLOYEE BENEFITS

WHEREAS, employee benefits routinely comprise a significant proportion of total employee compensation; and

WHEREAS, discrimination in the provision of employee benefits between employees with domestic partners and employees with spouses results in unequal pay for equal work; and

WHEREAS, County of San Mateo law prohibits discrimination based on marital status and/or sexual orientation; and

WHEREAS, it is the County's intent, through the contracting practices outlined herein, to equalize the total compensation between similarly situated employees with spouses and employees with domestic partners;

Section 1. The Board of Supervisors of the County of San Mateo, State of California, **ORDAINS** as follows:

Chapter 2.84 CONTRACTS – EQUAL BENEFITS**2.84.010 Definitions.**

For the purposes of this chapter,

- A. “Contract” means a legal agreement between the County and a contractor for public works, consulting, or other services, or for purchase of supplies, material or equipment for which the consideration is in excess of \$5,000.
- B. “Contractor” means a party who enters into a contract with the County.
- C. “Contract Awarding Authority” means the Board of Supervisors or the individual authorized by the Board of Supervisors to enter into contracts on behalf of the County.
- D. “Domestic Partner” means any person who is registered as a domestic partner with the Secretary of State, State of California registry or the registry of the state in which the employee is a resident.

- E. “Employee Benefits” means the provision of any benefit other than pension and retirement benefits provided to spouses of employees or provided to an employee on account of the employee's having a spouse, including but not limited to bereavement leave; disability, life, and other types of insurance; family medical leave; health benefits; membership or membership discounts; moving expenses; vacation; travel benefits; and any other benefits given to employees, provided that it does not include benefits to the extent that the application of the requirements of this chapter to such benefits may be preempted by federal or state law. (Ord. 4324, 08/15/06)

2.84.020 Discrimination in the provision of benefits prohibited.

(a) No contractor on a County contract shall discriminate in the provision of employee benefits between an employee with a domestic partner and an employee with a spouse, subject to the following conditions:

1. In the event that the contractor's actual cost of providing a particular benefit for the domestic partner of an employee exceeds that of providing it for the spouse of an employee, or the contractor's actual cost of providing a particular benefit to the spouse of an employee exceeds that of providing it for the domestic partner of an employee, the contractor shall not be deemed to discriminate in the provision of employee benefits if the contractor conditions providing such benefit upon the employee's agreement to pay the excess costs.
2. The contractor shall not be deemed to discriminate in the provision of employee benefits if, despite taking reasonable measures to do so, the contractor is unable to extend a particular employee benefit to domestic partners, so long as the contractor provides the employee with a cash payment equal to the contractor's cost of providing the benefit to an employee's spouse.

(b) The Board of Supervisors may waive the requirements of this chapter when it determines that it is in the best interests of the County. The County Executive may waive the requirements of this chapter for contracts not needing the approval of the Board of Supervisors where waiver would be in the best interests of the County for such reasons as follows:

1. Award of a contract or amendment is necessary to respond to an emergency;
2. The contractor is a sole source;
3. No compliant contractors are capable of providing goods or services that respond to the County's requirements;
4. The requirements are inconsistent with a grant, subvention or agreement with a public agency;

5. The County is purchasing through a cooperative or joint purchasing agreement;

(c) Contractors should submit requests for waivers of the terms of this chapter to the Contract Awarding Authority for that contract, or in the case of Contracts approved by the Board, the County Executive.

(d) The Contract Awarding Authority, or in the case of contracts approved by the Board, the County Executive, may reject an entity's bid or proposals, or terminate a contract, if the Contract Awarding Authority determines that the entity was set up, or is being used, for the purpose of evading the intent of this chapter.

(e) No Contract Awarding Authority shall execute a contract with a contractor unless such contractor has agreed that the contractor will not discriminate in the provision of employee benefits as provided for in this chapter. (Ord. 4324, 08/15/06)

2.84.030 Application of Chapter.

The requirements of this chapter shall only apply to those portions of a contractor's operations that occur (i) within the County; (ii) on real property outside of the County if the property is owned by the County or if the County has a right to occupy the property, and if the contractor's presence at that location is connected to a Contract with the County; and (iii) elsewhere in the United States where work related to a County Contract is being performed. The requirements of this Chapter shall not apply to subcontracts or subcontractors of any contract or contractor. (Ord. 4324, 08/15/06)

2.84.040 Powers and duties of the County Executive.

The County Executive's office shall have the authority to:

(a) Adopt rules and regulations, in accordance with this chapter and the Ordinance Code of the County of San Mateo, establishing standards and procedures for effectively carrying out this chapter.

(b) Receive notification from employees of contractors regarding violations of this chapter.

(c) Determine and recommend to the Board of Supervisors for final decision the imposition of appropriate sanctions for violation of this chapter by contractors including, but not limited to:

1. Disqualification of the contractor from bidding on or being awarded a County contract for a period of up to 5 years; and
2. Contractual remedies, including, but not limited to termination of contract.
3. Liquidated damages in the amount of \$2,500.

- (d) Examine contractors' benefit programs covered by this chapter;
- (e) Impose other appropriate contractual and civil remedies and sanctions for violations of this chapter;
- (f) Allow for remedial action after a finding of non-compliance, as specified by rule;
- (g) Perform such other duties as may be required or which are necessary to implement the purposes of this chapter. (Ord. 4324, 08/15/06)

2.84.050 Date of Application.

The provisions of this chapter shall apply to any contract awarded or amended on or after July 01, 2001, provided that if the contractor is then signatory to a collective bargaining agreement, this chapter shall only apply to any contract with that contractor which is awarded or amended after the effective date of the next collective bargaining agreement. (Ord. 4324, 08/15/06)

Section 2. Severability – The provisions of this ordinance are declared to be separate and severable. If a court of competent jurisdiction, all appeals having been exhausted or all appeal periods having run, finds any provision of this ordinance to be invalid or unenforceable as to any person or circumstance, such offending provision shall, if feasible, be deemed to be modified to be within the limits of enforceability or validity. However, if the offending provision cannot be so modified, it shall be null and void with respect to the particular person or circumstance, and all other provisions of this ordinance in all other respects, and the offending provision with respect to all other persons and all other circumstances, shall remain valid and enforceable.

COUNTY OF SAN MATEO
Equal Benefits Compliance Declaration Form
 (To Be Submitted with Proposal)

I Vendor Identification

Name of Contractor: _____
 Contact Person: _____
 Address: _____
 Phone Number: _____ Fax Number: _____

II Employees

Does the Contractor have any employees? _____ Yes _____ No
 Does the Contractor provide benefits to spouses of employees? _____ Yes _____
 _____ No

*If the answer to one or both of the above is no, please skip to Section IV. *

III Equal Benefits Compliance (Check One)

- Yes, the Contractor complies by offering equal benefits, as defined by Chapter 2.84, to its employees with spouses and its employees with domestic partners.
- Yes, the Contractor complies by offering a cash equivalent payment to eligible employees in lieu of equal benefits.
- No, the Contractor does not comply.
- (NOTE: **DO NOT CHECK THIS BOX** unless the said agreement was executed/renewed on or before July 1, 2001. If checked, a copy of the collective bargaining agreement shall be submitted with Proposal.)*
 The Contractor is under a collective bargaining agreement which began **on or before July 1, 2001** and expires on _____ (date). (Section 2.84.050)

IV Declaration

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct, and that I am authorized to bind this entity contractually.

Executed this _____ day of _____, 20____ at _____, _____.
(City) (State)

 Signature

 Name (Please Print)

 Title

 Contractor Tax Identification Number

CONTRACTOR EMPLOYEE JURY SERVICE ORDINANCE NO. 04269**CHAPTER 2.85**ORDINANCE NO 04269

AN ORDINANCE OF THE SAN MATEO COUNTY ORDINANCE CODE (TITLE 2,
ADMINISTRATION), REQUIRING SPECIFIED COUNTY CONTRACTORS
TO PROVIDE PAID JURY SERVICE TO FULL-TIME EMPLOYEES

The Board of Supervisors of the County of San Mateo, State of California,
ORDAINS as follows:

Chapter 2.85 CONTRACTOR EMPLOYEE JURY SERVICE**2.85.010 Definitions**

For the purposes of this chapter,

- (a) "Contract" means a legal agreement between the County and a contractor for public works, consulting, or other services, or for purchase of supplies, material or equipment.
- (b) "Contractor" means a party who enters into a contract with the County for which the contractor receives consideration of \$100,000 or more.
- (c) "Contract Authority" means the Board of Supervisors or the head of the department or agency presenting the proposed contract to the Board of Supervisors.
- (d) "Employee " means any California resident who is a full-time employee of a contractor under the laws of California.
- (e) "Full time " means 40 hours or more worked per week, or a lesser number of hours if (1) the lesser number is a recognized industry standard as determined by the County Executive, or (2) the contractor has a long standing practice that defines the lesser number of hours as full time. (Ord. 4324, 08/15/06)

2.85.020 Contractor jury service policy

- (a) A contractor shall have and adhere to a written policy that provides that its employees shall receive from the contractor, on an annual basis, no less than five days of regular pay for actual jury service in San Mateo County. The policy may provide that employees deposit any fees received for such jury service with the contractor or that the contractor deduct from the employees' regular pay the fees received for jury service.
- (b) At the time of seeking a contract, a contractor shall certify to the County that it has and adheres to a policy consistent with this chapter or will have and adhere to such a policy prior to award of the contract.

- (c) The Board of Supervisors may waive the requirements of this chapter when it determines that it is in the best interests of the County for such reasons as follows:
 - (1) Award of a contract or amendment is necessary to respond to an emergency;
 - (2) The contractor is a sole source;
 - (3) No compliant contractors are capable of providing goods or services that respond to the County's requirements;
 - (4) The requirements are inconsistent with a grant, subvention or agreement with a public agency;
 - (5) The County is purchasing through a cooperative or joint purchasing agreement.
- (d) Contractors should submit requests for waivers of the terms of this chapter to the Contract Authority or the County Executive.
- (e) The County Executive may reject a contractor's bid or proposal, or terminate a contract, if he determines that the contractor is in violation of the requirements of this chapter or was established, or is being used, for the purpose of evading the intent of this chapter.
- (f) No contract shall be executed with a contractor unless such contractor is in compliance with this chapter. (Ord. 4324, 08/15/06)

2.85.030 Powers and duties of the County Executive

The County Executive's office shall have the authority to:

- (a) Adopt rules and regulations, in accordance with this chapter and the Ordinance Code of the County of San Mateo, establishing standards and procedures for effectively carrying out this chapter.
- (b) Receive notification from employees of contractors regarding violations of this chapter.
- (c) Determine and recommend to the Board of Supervisors for final decision the imposition of appropriate sanctions for violation of this chapter by contractors including, but not limited to:
 - (1) Disqualification of the contractor from bidding on or being awarded a County contract for a period of up to 5 years; and
 - (2) Contractual remedies, including, but not limited to termination of contract.
- (d) Impose other appropriate contractual sanctions for violations of this chapter;

- (e) Allow for remedial action after a finding of non-compliance;
- (f) Perform such other duties as may be required or which are necessary to implement the purposes of this chapter. (Ord. 4324, 08/15/06)

2.85.040 Date of Application

The provisions of this chapter shall apply to any contract awarded or amended on or after September 01, 2005, provided that if the contractor is then signatory to a collective bargaining agreement, this chapter shall only apply to any contract with that contractor which is awarded or amended after the effective date of the next collective bargaining agreement. (Ord. 4324, 08/15/06)

NON-COLLUSION DECLARATION FORM**THIS FORM SHALL BE EXECUTED BY BIDDER AND SUBMITTED WITH BID.**

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].

“Contractor”

(Print)

(Signature)

AGREEMENT

THIS AGREEMENT, made and entered into this _____ day of _____, 2023, by and between the COUNTY OF SAN MATEO, State of California, hereinafter called the "County" and _____, hereinafter called the "Contractor,"

W I T N E S S E T H:

THAT, for and in consideration of the mutual covenants and agreements hereinafter contained, the parties hereto agree as follows:

I. Services to be performed by Contractor: The Contractor will at his own proper cost and expense, do all the work and furnish all the labor, materials, equipment and utilities necessary to perform and complete in good workmanlike and substantial manner, and to the satisfaction of the Director of Public Works of the County of San Mateo, hereinafter called "Engineer," for the project

TUNITAS CREEK BEACH IMPROVEMENTS

WITH APPURTENANT WORK THERETO IN SAN MATEO COUNTY

COUNTY PROJECT NO. P30T1 PROJECT FILE NO. E4995

and all in strict accordance with the Plans, Specifications, Notice to Contractors, Special Provisions and Proposal on file in the office of the Director of Public Works, which said Plans, Specifications, Notice to Contractors, Special Provisions and Proposal are hereby specifically referred to and by such reference made a part thereto.

II. Payments: The Contractor will receive and accept and the County will pay the prices specified in the Contractor's Proposal, dated _____, 2023, on file in the office of the Director of Public Works of the County of San Mateo and by reference made a part of this Agreement, as full compensation for furnishing all labor, materials and equipment for doing all the work contemplated and embraced in this Agreement; the Contractor assumes any and all loss or damage arising out of the

nature of the work aforesaid, or from the action of the elements, or from any unforeseen difficulties or obstructions which may arise or be encountered in the prosecution of the work until its acceptance by the County, and for all risks of every description connected with the work, and also assumes any and all expenses incurred by or in consequence of the suspension or discontinuance of work and for well and faithfully completing the work, and the whole thereof, in the manner and to the Plans, Specifications and Special Provisions and requirements of the Engineer hereunder. The Contractor shall guarantee all materials and workmanship for a period of one (1) year from date of acceptance of the project by the Director of Public Works. Any defects due to faulty materials, method of installation or workmanship within that period shall be repaired by the Contractor promptly upon notice by the Engineer, at the expense of the Contractor.

It is distinctly understood that the estimate set forth in the Notice to Contractors is only an approximation of the amount of work to be done and the County does not expressly or by implication agree that the actual amount of work will correspond with the amount set forth therein, and payment shall be made to the Contractor as above set forth.

Payment to the Contractor shall be made progressively by the County for the work and materials furnished under this Agreement in accordance with the provisions of Section 9 of the Special Provisions portion of these Contract documents.

III. Term: Time is of the essence in the Agreement, and the work to be performed hereunder shall be completed within

ONE HUNDRED AND EIGHTY (180) WORKING DAYS

from the date of commencement of the work, which commencement shall be within **TEN (10) CALENDAR DAYS** after receiving Notice to Proceed from the Engineer.

IV. Termination: This Contract is subject to termination as provided by Section 4410 and Section 4411 of the Government Code of the State of California, being portions of the Emergency Termination of Public Contracts Act of 1949. In the event that the Contract is terminated pursuant to said sections, compensation to the Contractor shall be determined on the basis of the reasonable value of the work done, including preparatory work. As an exception to the foregoing, in the case of any fully completed separate item or portion of the work for which there is a separate Contract

price, the Contract price shall control.

V. Relationship of Parties: Contractor agrees and understands that the work/services performed under this Agreement are performed as independent contractor and not as an employee of the County and that Contractor acquires none of the rights, privileges, powers, or advantages of County employees.

VI. Merger Clause: This Agreement, together with the Notice to Contractors, the Contractor's Proposal, the Plans, Specifications and Special Provisions and the Payment and Performance Bonds form the Contract, and said documents incorporated herein by reference become as fully a part of the Contract as if hereto attached or herein set forth in full. The Standard Specifications of the County of San Mateo, State of California, which, except as specifically noted in the County Contract documents and specifications, are identical with the Standard Specifications of the State of California, Department of Transportation, 2018 edition, and are on file with the County Executive/Clerk of the Board of Supervisors, County of San Mateo, are incorporated herein by reference as a part of the Contract documents and shall apply to this project except where the terms of this Agreement or other Contract documents are inconsistent therewith, in which case the provisions of this Contract shall prevail.

This Agreement constitutes the sole Agreement of the parties hereto and correctly states the rights, duties, and obligations of each party as of this document's date. Any prior agreement, promises, negotiations, or representations between the parties not expressly stated in this document are not binding. All subsequent modifications shall be in writing and signed by the parties.

VII. Surety Bonds: The performance of this Contract is secured by a "Payment" Surety Bond in the sum of one hundred percent (100%) of the Contract bid, and a "Performance" Surety Bond in the sum of one hundred percent (100%) of the Contract bid. "Payment" and "Performance" Surety Bonds have been approved as to form by County Attorney, of which samples of same are attached as Appendix C in the Special Provisions.

VIII. Insurance: The Contractor shall not commence work under this Contract until he has obtained all insurance required under this paragraph and such insurance

has been approved by the County, nor shall the Contractor allow any subcontractor to commence work on his subcontract until all similar insurance required of the subcontractor has been so obtained. The Contractor shall furnish County with certificates of insurance evidencing the required coverage, and there shall be a specific contractual liability endorsement extending the Contractor's coverage to include the contractual liability assumed by the Contractor pursuant to this Contract. Certificates of Insurance shall be filed with the County within **TEN (10) WORKING DAYS** after award of the contract. These certificates shall specify or be endorsed to provide that **THIRTY (30) CALENDAR DAYS'** notice must be given, in writing, to County of any pending change in the limits of liability or of any cancellation or modifications of the policy.

A. Worker's Compensation and Employer's Liability Insurance

The Contractor shall have in effect during the entire life of this Contract, Worker's Compensation and Employer's Liability Insurance providing full statutory coverage; and in case any work is sublet, the Contractor shall require all subcontractors similarly to provide Worker's Compensation and Employer's Liability Insurance to full statutory limits. In signing this Contract, the Contractor makes the following certifications, required by Section 1861 of the Labor Code:

“I am aware of the provisions of Section 3700 of the Labor Code which requires every employer to be insured against liability for Worker's Compensation or to undertake self-insurance in accordance with the provisions of the code, and I will comply with such provisions before commencing the performance of the work of this Contract.”

B. Liability Insurance

The Contractor shall take out and maintain during the life of this Contract such Bodily Injury Liability and Property Damage Liability Insurance as shall comply with Section 7-1.05, “Indemnification,” and Section 7-1.06, “Insurance,” of the Standard Specifications and protect him/her and any subcontractor performing work covered by this Contract, from claims for damages for bodily injury, including accidental death, as well as from claims for property damage including third party property damage, to include coverage on property in the care, custody and control of the Contractor, and also including coverage for what are commonly known as the “X, C and U” exclusions (having to do with blasting, collapse and underground property damage), which may arise from the

Contractor's operations under this Contract, whether such operations be by himself/herself or by any subcontractor or by anyone directly or indirectly employed by either of them and the amounts of such insurance shall be **ONE MILLION DOLLARS (\$1,000,000)** combined single bodily injury and property damage for each occurrence. The County of San Mateo, Peninsula Open Space Trust (POST), Caltrans, and their officers, agents, servants and employees, shall be named as additional insureds on any such policies of insurance, which shall also contain a provision stating that the insurance afforded thereby to the County of San Mateo, Peninsula Open Space Trust (POST), Caltrans, and their officers, agents, servants and employees, shall be primary insurance to the full limits of liability of the policy, and that if the County of San Mateo, Peninsula Open Space Trust (POST), Caltrans, or their officers and employees, have other insurance against a loss covered by such policy, such other insurance shall be excess insurance only.

Such statements, mentioned above, shall be included on a separate endorsement to be submitted to the County with the Certificate of Insurance.

Such insurance shall include:

- 1) Comprehensive General Liability \$1,000,000**
- 2) Motor Vehicle Liability Insurance \$1,000,000**

C. In case of the breach of any provision of this Article, the County, at its option, may take out and maintain at the expense of the Contractor, or subcontractor, such insurance as the County may deem proper and may deduct the cost of taking out and maintaining such insurance from any sums which may be due, or become due, to the Contractor, under this Contract.

D. Hold Harmless

The Contractor's attention is directed to Section 7-1.05, "Indemnification," and Section 7-1.06, "Insurance," of the Standard Specifications.

The provisions contained in Section 7-1.05, "Indemnification," and Section 7-1.06, "Insurance," of the Standard Specifications of the State of California, Department of Transportation, shall be applicable with the understanding that where said provisions specifically refer to the State of California, a department or

division of the State or an official, officer or employee of the State, said provision shall be interpreted to refer to the County of San Mateo, Peninsula Open Space Trust (POST), Caltrans, and all officers, agents, servants and employees thereof connected with the work, including but not limited to the Director of Public Works, their duly authorized representatives, other appropriate department, division, official, officer or employee of the County of San Mateo, Peninsula Open Space Trust (POST), and Caltrans.

The provisions of Section 7-1.05, "Indemnification," and Section 7-1.06, "Insurance," of the Standard Specifications are superseded by the following:

"To the full extent permitted by law, Contractor shall indemnify and save harmless the County, its officers, employees, and servants from all claims, suits, or actions of every name, kind, and description, brought for, or on account of:

1. Injuries to or death of any person, including Contractor, its officers, employees and servants, or
2. Damage to any property of any kind whatsoever and to whomsoever belonging, or
3. Any sanctions, penalties or claims of damages resulting from Contractor's failure to comply with applicable laws, or
4. Any other loss or cost resulting from the contractor's negligent or reckless acts or omissions or willful misconduct in connection with the performance of any work required of Contractor or payments made pursuant to this Agreement, provided that this shall not apply to injuries or damages for which the County has been found in a court of competent jurisdiction to be liable by reason of its own negligence or willful misconduct.

The duty of Contractor to indemnify and save harmless, as set forth herein, shall include the duty to defend, as set forth in Section 2778 of the California Civil Code.

The obligations set forth in this Section shall continue beyond the term of this Agreement as to any act or omission which occurred during or under this Agreement."

E. Compensation

All insurance required by the paragraphs of this section shall be obtained and maintained by the Contractor at Contractor's own expense and County shall

not compensate Contractor for said insurance expenses other than as they are included in the Contract prices the County pays for the various items of work.

F. Nothing herein contained shall be construed as limiting in anyway the extent to which the Contractor may be held responsible for payments of damages resulting from his operation.

IX. Prevailing Wages: Contractor hereby agrees to pay not less than prevailing rates of wages, which are effective on the date the Notice to Contractors is issued for each craft or type of workman or mechanic needed to execute the Contract as provided for by the County for the performance of public work., and be responsible for compliance with all the provisions of the California Labor Code, Article 2-Wages, Chapter 1, Part 7, Division 2, Section 1770 et seq. and Section 1810 et seq., and particularly Section 1775 and 1776(a) thereof. A copy of the prevailing wage scale established by the Department of Industrial Relations is on file in the office of the Director of Public Works, and available at www.dir.ca.gov/DLSR or by phone at 415-703-4774. California Labor Code Section 1776(a) requires each contractor and subcontractor to keep accurate payroll records of trades workers on all public works projects and to submit copies of certified payroll records upon request.

Additionally, pursuant to State Senate Bill SB 854 (Stat. 2014, chapter 28), effective January 1, 2015:

- No contractor or subcontractor may be listed on a bid proposal for a public works project (submitted on or after March 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)].
- No contractor or subcontractor may be awarded a contract for public work on a public works project (awarded on or after April 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5.
- This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

X. California Labor Code: The Contractor expressly covenants and agrees to comply with all the provisions of the Labor Code of the State of California limiting the hours of labor on public works to eight (8) hours during any one calendar day, and forty (40) hours in any one calendar week, requiring the payment of not less than the

prevailing wage rates, and further agrees to the forfeitures provided for in said Labor Code and as set forth in Section 7, "Legal Relations and Responsibility to the Public," of the Standard Specifications and all amendments thereto, in the event of a violation of any of the provisions thereof during the course of execution of this Contract.

The Contractor expressly agrees to be responsible for compliance with all the provisions of Sections 1776 and 1777.5 of the California Labor Code.

XI. Non-Discrimination and Other Requirements:

a. General Non-discrimination:

No person shall be excluded from participation in, denied benefits of, or be subject to discrimination under this Agreement on the basis of their race, color, religion, national origin, ancestry, age, disability (physical or mental), sex, sexual orientation, gender identity, marital or domestic partner status, religion, political beliefs or affiliation, familial or parental status (including pregnancy, childbirth or related conditions), medical condition (including cancer-related), military service, or genetic information. Contractor shall ensure full compliance with Federal, state and local laws, directives and executive orders regarding non-discrimination for all employees and Subcontractors under this Agreement.

b. Equal Employment Opportunity:

Contractor shall ensure equal employment opportunity based on objective standards of recruitment, classification, selection, promotion, compensation, performance evaluation, and management relations for all employees under this Agreement. Contractor's equal employment policies shall be made available to County upon request.

c. Section 504 of the Rehabilitation Act of 1973:

Contractor shall comply with Section 504 of the Rehabilitation Act of 1973, as amended, which provides that no otherwise qualified individual with a disability shall, solely by reason of a disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination in the performance of any services this Agreement. This Section applies only to contractors who are providing services to members of the public under this Agreement.

d. Compliance with County's Equal Benefits Ordinance:

Contractor shall comply with all laws relating to the provision of benefits to

its employees and their spouses or domestic partners, including, but not limited to, such laws prohibiting discrimination in the provision of such benefits on the basis that the spouse or domestic partner of the Contractor's employee is of the same or opposite sex as the employee.

e. Discrimination Against Individuals with Disabilities:

The nondiscrimination requirements of 41 C.F.R. 60-741.5(a) are incorporated into this Agreement as if fully set forth here, and Contractor and any subcontractor shall abide by the requirements of 41 C.F.R. 60-741.5(a). This regulation prohibits discrimination against qualified individuals on the basis of disability and requires affirmative action by covered prime contractors and subcontractors to employ and advance in employment qualified individuals with disabilities.

f. History of Discrimination:

Contractor certifies that no finding of discrimination has been issued in the past 365 days against Contractor by the Equal Employment Opportunity Commission, the California Department of Fair Employment and Housing, or any other investigative entity. If any finding(s) of discrimination have been issued against Contractor within the past 365 days by the Equal Employment Opportunity Commission, the California Department of Fair Employment and Housing, or other investigative entity, Contractor shall provide County with a written explanation of the outcome(s) or remedy for the discrimination prior to execution of this Agreement. Failure to comply with this Section shall constitute a material breach of this Agreement and subjects the Agreement to immediate termination at the sole option of the County.

g. Reporting; Violation of Non-discrimination Provisions:

Contractor shall report to the County Executive the filing in any court or with any administrative agency of any complaint or allegation of discrimination on any of the bases prohibited by this Section of the Agreement or the Section titled "Compliance with Laws". Such duty shall include reporting of the filing of any and all charges with the Equal Employment Opportunity Commission, the California Department of Fair Employment and Housing, or any other entity charged with the investigation or adjudication of allegations covered by this subsection within 30 days of such filing, provided that within such 30 days such entity has not

notified Contractor that such charges are dismissed or otherwise unfounded. Such notification shall include a general description of the circumstances involved and a general description of the kind of discrimination alleged (for example, gender-, sexual orientation-, religion-, or race-based discrimination).

Violation of the non-discrimination provisions of this Agreement shall be considered a breach of this Agreement and subject the Contractor to penalties, to be determined by the County Executive, including but not limited to:

- i) Termination of this Agreement;
- ii) Disqualification of the Contractor from bidding on or being awarded a County contract for a period of up to 3 years;
- iii) Liquidated damages of \$2,500 per violation; and/or
- iv) Imposition of other appropriate contractual and civil remedies and sanctions, as determined by the County Executive.

To effectuate the provisions of this paragraph, the County Executive shall have the authority to:

- i) Examine Contractor's employment records with respect to compliance with this paragraph;
- ii) Offset all or any portion of the amount described in this paragraph against amounts due to Contractor under the Contract or any other Contract between Contractor and County.

Contractor shall report to the County Executive the filing by any person in any court of any complaint of discrimination or the filing by any person of any and all charges with the Equal Employment Opportunity Commission, the Fair Employment and Housing Commission or any other entity charged with the investigation of allegations within 30 days of such filing, provided that within such 30 days such entity has not notified Contractor that such charges are dismissed or otherwise unfounded. Such notification shall include the name of the complainant, a copy of such complaint and a description of the circumstance. Contractor shall provide County with a copy of its response to the Complaint when filed.

Compliance with Equal Benefits Ordinance. With respect to the provisions of employee benefits, Contractor shall comply with the County Ordinance which prohibits contractors from discriminating in the provision of employee benefits between an

employee with a domestic partner and an employee with a spouse.

XII. Compliance with County Employee Jury Service Ordinance:

Contractor shall comply with Chapter 2.85 of the County's Ordinance Code, which states that Contractor shall have and adhere to a written policy providing that its employees, to the extent they are full-time employees and live in San Mateo County, shall receive from the Contractor, on an annual basis, no fewer than five days of regular pay for jury service in San Mateo County, with jury pay being provided only for each day of actual jury service. The policy may provide that such employees deposit any fees received for such jury service with Contractor or that the Contractor may deduct from an employee's regular pay the fees received for jury service in San Mateo County. By signing this Agreement, Contractor certifies that it has and adheres to a policy consistent with Chapter 2.85. For purposes of this Section, if Contractor has no employees in San Mateo County, it is sufficient for Contractor to provide the following written statement to County: "For purposes of San Mateo County's jury service ordinance, Contractor certifies that it has no full-time employees who live in San Mateo County. To the extent that it hires any such employees during the term of its Agreement with San Mateo County, Contractor shall adopt a policy that complies with Chapter 2.85 of the County's Ordinance Code." The requirements of Chapter 2.85 do not apply if this Agreement's total value listed in the Section 16 is less than one-hundred thousand dollars (\$100,000), but Contractor acknowledges that Chapter 2.85's requirements will apply if this Agreement is amended such that its total value meets or exceeds that threshold amount.

XIII. Termination of Agreement: The Contract may be terminated by the County in the event the Contractor should be adjudged bankrupt, or if he should make a general assignment for the benefit of his creditors, or if a receiver should be appointed on account of his insolvency, or if he or any of his subcontractors should violate any of the provisions of the Contract, or if he should persistently or repeatedly refuse, or should fail, except in cases where extension of time is provided, to furnish enough properly skilled workmen or proper materials, or if he should fail to make prompt payment to subcontractors, or for materials or labor, or persistently disregard laws, ordinances, or the instructions of the Engineer. In the event of any of the foregoing

conditions, the Engineer is authorized and directed to serve written notice upon the Contractor and his Surety of its intention to terminate the Contract, such notice to contain the reasons for action and unless within **TWO (2) CALENDAR DAYS** after serving of such notice such conditions shall be remedied and satisfactory arrangements for continuation be made, the Contract shall, upon expiration of **TWO (2) CALENDAR DAYS**, cease and terminate. In the event of any such termination, the Engineer may take over the work and prosecute the same to completion by Contract or by any other method he may deem advisable, and at the expense of the Contractor, and the Contractor and his Surety shall be liable to the County for any excess cost occasioned thereby, and in such event, the County may without liability to so doing take possession of and utilize such materials, appliances, plant and other property belonging to the Contractor as may be on the site of the work, and necessary therefore. In such cases, the Contractor shall not be entitled to receive any further payment until the work is completed.

XIV. Compliance with Laws: The Contractor shall comply with all existing and future State and Federal and regulating laws and all ordinances and regulations of the County of San Mateo which in any manner affect those engaged or employed in the work, or the materials used in the work, or which in any way affect the conduct of the work, and of all such orders and decrees of bodies or tribunals having any jurisdiction or authority over the same.

Controlling Law: The validity of this Agreement and of its terms or provisions, as well as the rights and duties of the parties hereunder, the interpretation, and performance of this Agreement shall be governed by the laws of the State of California.

XV. Contract Assignability: Neither party to the Contract shall assign the Contract or sublet it as a whole without written consent of the other, nor shall the Contractor assign any monies due or to become due to him hereunder without the previous written consent of the County. The Contractor shall neither mortgage nor convey title to equipment or material to be used in this work, without the written permission of the County.

XVI. COVID-19: This Provision relates to issues associated with the Novel Coronavirus Disease 2019 (COVID-19) and shall supersede any other conflicting

sections or provisions of this Contract and its attachments. The ongoing COVID-19 pandemic may impact the County's ability to proceed with this Project.

Although this Project is proceeding as an Essential Infrastructure Project as determined by the County Board of Supervisors/County Executive, this determination could change in the future based on Health Orders issued by the San Mateo County Health Officer or State of California, or future determinations of the County Board of Supervisors/County Executive. Should future Health Orders or the County Board of Supervisors/County Executive directives preclude the Project from proceeding as scheduled, the County reserves the right to:

- Cancel the Project, terminate the Contractor's work once the Contractor has safely secured the work area, and compensate the Contractor for work completed and materials purchased prior to cancellation of the Project and labor and materials, as approved by the Engineer, required to safely secure the work area such that work can be discontinued on the Project; **or**
- The County and Contractor may reach a mutually agreeable extension for completion of the Project such that the work can resume after being halted provided it complies with all Health Orders issued by the Health Officer of the County of San Mateo or the State of California and as approved by the County Board of Supervisors/County Executive.

It is the Contractor's obligation and responsibility to ensure that all work associated with this Project complies with all current Orders of the Health Officer of the County of San Mateo related to the Novel Coronavirus Disease 2019 (COVID-19). The County of San Mateo assumes no responsibility for work performed by Contractor that is not in compliance with all current Orders. The Contractor is advised to review the Orders of the Health Officer of the County of San Mateo, which can be found at the following link:

<https://www.smchealth.org/post/health-officer-statements-and-orders>

XVII. Contract Materials: The County hereby promises and agrees with the said Contractor to employ and does hereby employ the said Contractor to provide the materials, unless otherwise specified, and to do the work according to the terms and conditions herein contained and referred to, for the prices aforesaid and hereby

contracts to pay the same at the time, in the manner and upon the conditions above set forth, and the said parties for themselves, their heirs, executors, administrators, successors, and assigns, do hereby agree to the full performance of the covenants herein contained.

XVIII. Retention of Records, Right to Monitor and Audit:

- A.** CONTRACTOR shall maintain all required records for three (3) years after the COUNTY makes final payment and all other pending matters are closed, and shall be subject to the examination and/or audit of the County, a Federal grantor agency, and the State of California.
- B.** Reporting and Record Keeping: CONTRACTOR shall comply with all program and fiscal reporting requirements set forth by appropriate Federal, State and local agencies and as required by the COUNTY.
- C.** CONTRACTOR agrees upon reasonable notice to provide to COUNTY, to any Federal or State department having monitoring or review authority, to COUNTY's authorized representatives, and/or their appropriate audit agencies upon reasonable notice, access to and the right to examine all records and documents necessary to determine compliance with relevant Federal, State, and local statutes, rules and regulations, and this Agreement, and to evaluate the quality, appropriateness and timeliness of services performed.

XIX. Notices: Any notice, request, demand or other communication required or permitted hereunder shall be deemed to be properly given when both: (1) transmitted via email to the email address listed below or transmitted via facsimile, if available, to the number listed below; and (2) sent to the physical address listed below by either being deposited in the United States mail, postage prepaid, or deposited for overnight delivery, charges prepaid, with an established overnight courier that provides a tracking number showing confirmation of receipt.

In the case of County, to:

Ann M. Stillman, Director of Public Works
 County of San Mateo
 555 County Center, 5th Floor
 Redwood City, CA 94063-1665
 Facsimile: 650-361-8220

Email: astillman@smcgov.org

In the case of Contractor, to:

(Contractor Name)
 (Contractor Address)
 (City, State Zip)
 Facsimile:
 Email:

XX. Contract Amount and Change Orders:

A. Contract Amount

The amount payable to Contractor under the terms of this agreement is _____ DOLLARS (\$_____).

B. Change Orders

The Board of Supervisors has authorized the Director of Public Works to execute change orders to modify the scope of work provided under this agreement, and to increase the County's maximum fiscal obligation to correspond to those changes. The Board of Supervisors has directed that in the event of change orders, the County's maximum fiscal obligation shall not exceed _____ DOLLARS (\$_____). Any payments in excess of the amount authorized by the Board of Supervisors will require additional approval of the Board of Supervisors.

XXI. Proprietary Rights and Confidentiality: The requirements of this Agreement pertaining to the protection of proprietary rights and confidentiality shall survive termination of this Agreement.

XXII. Electronic Signature: Both County and Contractor wish to permit this Agreement and future documents relating to this Agreement to be digitally signed in accordance with California law and County's Electronic and Facsimile Signatures Administrative Memo (B-29). Any party to this Agreement may revoke such agreement to permit electronic signatures at any time in relation to all future documents by providing notice pursuant to this Agreement.

IN WITNESS WHEREOF, the parties to these presents have hereunto set their hands the year and date first above written.

“County”

COUNTY OF SAN MATEO
State of California

BY: _____
**President, Board of Supervisors
County of San Mateo**

ATTEST:

Michael Callagy, County Executive/
Clerk of the Board of Supervisors

“Contractor”

Name of Contractor

BY: _____
(Authorized Signature and Seal of Bidder)