

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

OFFICE ENGINEER

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www.dot.ca.gov/hq/esc/oe



*Serious Drought.  
Help save water!*

March 6, 2015

04-SCI,SM-101-52.0/52.6,0.0/0.6

04-235624

Project ID 0400000678

NHP-000C(366)E

Addendum No. 3

Dear Contractor:

This addendum is being issued to the contract for CONSTRUCTION ON STATE HIGHWAY IN SANTA CLARA AND SAN MATEO COUNTIES IN PALO ALTO AND EAST PALO ALTO FROM OREGON EXPRESSWAY OVERCROSSING TO 0.3 MILE SOUTH OF UNIVERSITY AVENUE OVERCROSSING.

Submit bids for this work with the understanding and full consideration of this addendum. The revisions declared in this addendum are an essential part of the contract.

Bids for this work will be opened on Wednesday, March 18, 2015.

This addendum is being issued to revise the project plans, the *Notice to Bidders and Special Provisions*, the *Bid book*, *Information Handout* and the Federal Minimum Wages with Modification Number 6 dated February 27, 2015.

Project plan sheets 1, 12, 35, 47, 49, 57, 72, 92, 93, 116, 141 and 159 are replaced and attached for substitution for the like-numbered sheets.

Project plan sheets 115A, 115B, 117A, 117B, 117C, 117D, 117E, 117F, 117G, 117H, 117I, 117J, 117K, 117L, 118A, 119A, 120A, and 121A are added and attached for addition to the project plans.

In the *Notice to Bidders*, the following paragraph is added after the ninth paragraph:

"For the Federal training program, the number of trainees or apprentices is 10."

In the Special Provisions, Section 1-1.01 is replaced as attached.

In the Special Provisions, Section 2-1.06B is replaced as attached.

In the Special Provisions, Section 8-1.04C is replaced as attached.

In the Special Provisions, Section 12-4.04 is replaced as attached.

In the Special Provisions, Section 12-4.05B is replaced as attached.

In the Special Provisions, Section 12-4.05E is replaced as attached.

*"Provide a safe, sustainable, integrated and efficient transportation system  
to enhance California's economy and livability"*

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In the Special Provisions, Section 13-3 is replaced as attached.

In the Special Provisions, Section 13-8 is added as attached.

In the Special Provisions, Section 13-12 is replaced as attached.

In the Special Provisions, Section 14-8.03 is added as attached.

In the Special Provisions, Section 39 is replaced as attached.

The *Information Handout* is replaced as attached.

In the *Bid* book, in the "Bid Item List," Items 77, 100, 105 and 120 are replaced.

In the *Bid* book, in the "Bid Item List," Items 160, 161 and 162 are added.

In the *Bid* book, in the "Bid Item List," Items 25, 137, 159 are deleted.

To *Bid* book holders:

Inquiries or questions in regard to this addendum must be communicated as a bidder inquiry and must be made as noted in the *Notice to Bidders* section of the *Notice to Bidders and Special Provisions*.

Submit the *Bid* book as described in the *Electronic Bidding Guide* at the Bidders' Exchange website.

**[http://www.dot.ca.gov/hq/esc/oe/electronic\\_bidding/electronic\\_bidding.html](http://www.dot.ca.gov/hq/esc/oe/electronic_bidding/electronic_bidding.html)**

Inform subcontractors and suppliers as necessary.

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This addendum, EBS addendum file, attachments and the modified wage rates are available for the Contractors' download on the Web site:

**[http://www.dot.ca.gov/hq/esc/oe/project\\_ads\\_addenda/04/04-235624](http://www.dot.ca.gov/hq/esc/oe/project_ads_addenda/04/04-235624)**

If you are not a *Bid* book holder, but request a book to bid on this project, you must comply with the requirements of this letter before submitting your bid.

Sincerely,



BIJAN SARTIPI  
District Director

Attachments

**Add to section 1-1.01:  
Bid Items and Applicable Sections**

Item code	Item description	Applicable section
026313	TEMPORARY CREEK DIVERSION SYSTEM	13
026315	TEMPORARY TIMBER CONSTRUCTION MAT	10
028762	VIBRATION MONITORING	14
028484	REMOVE ALTERNATIVE SOUND WALL SYSTEM	15
026316	GRATE LOCKING DEVICE	15
026317	TEMPORARY CAP INLET	15
044810	CONTROLLED LOW STRENGTH MATERIAL (BRIDGE)	19
026743	IMPORTED BIOFILTRATION SOIL	21
026744	HOT MIX ASPHALT DIKE TYPE E (MODIFIED)	39
044811	SOLDIER PILE (W14 x 233)	49
044812	FURNISH PILING (CLASS 200) (ALTERNATIVE Y)	49
044813	DRIVE PILE (CLASS 200) (ALTERNATIVE Y)	49
044814	STRUCTURAL CONCRETE, CAP	51
044815	BAR REINFORCING STEEL (CAP)	52
028480	RETRO-REFLECTIVE SHEETING (TYPE XI)	56
028481	ALTERNATIVE SOUND WALL SYSTEM	58
026318	16' TEMPORARY GATE (TYPE CL-6)	80
044816	TEMPORARY DEBRIS RACK	78
026319	CONCRETE BARRIER MARKER	83
044817	CONCRETE BARRIER (TYPE 60A MODIFIED)	83
044818	CONCRETE BARRIER (TYPE 60C MODIFIED) (BRIDGE)	83
044819	CONCRETE BARRIER (TYPE 736S MODIFIED)	83
028482	CONCRETE BARRIER (Type 60C Modified)	83
026320	MODIFY TRAFFIC OPERATIONS SYSTEM	86
026321	MODIFY TRAFFIC OPERATIONS SYSTEM (STAGE CONSTRUCTION)	86
026923	SPECIES PROTECTION	14

**Add to section 2-1.06B:**

The Department makes the following supplemental project information available:

**Supplemental Project Information**

Means	Description
Included in the <i>Information Handout</i>	Final Foundation Report for San Francisquito Creek Bridge Replacement, Bridge No. 35-0348 dated April 2, 2013  Structures Final Hydraulic Report for San Francisquito Creek, Bridge No. 35-0348 dated November 7, 2014  U.S. Army Corp Permit, dated May 31, 2013  California Fish and Wildlife Permit, dated May 20, 2013  California Regional Water Quality Control Board Permit dated June 12, 2013  U.S. National Marine Fisheries Biological Opinion dated March 29, 2011  Water Quality Information Handout  Conceptual Storm Water Pollution Prevention Plan (CSWPPP) Cal-OSHA Tunnel Classification, dated May 9, 2013
Available as specified in the <i>Standard Specifications</i>	Bridge as-built drawings
Included with the project plans	Log of test borings

**Replace "Reserved" in section 8-1.04C with:**

Section 8-1.04B does not apply.

Start job site activities within 15 days after receiving notice that the Contract has been approved by the Attorney General or the attorney appointed and authorized to represent the Department.

Do not start job site activities until the Department authorizes or accepts your submittal for:

1. CPM baseline schedule
2. Signed *Conceptual Storm Water Pollution Plan (CSWPPP)*
3. Notification of DRA or DRB nominee and disclosure statement
4. SSPC QP certifications

Do not start other job site activities until all the submittals from the above list are authorized or accepted and the following information is received by the Engineer:

1. *Notice of Materials To Be Used* form.
2. Written statement from the vendor that the order for the sign panels has been received and accepted by the vendor. The statement must show the dates that the materials will be shipped.
3. Written statement from the vendor that the order for electrical material has been received and accepted by the vendor. The statement must show the dates that the materials will be shipped.
4. Written statement from the vendor that the order for structural steel has been received and accepted by the vendor. The statement must show the dates that the materials will be shipped.

You may start job site activities before the 15th day after Contract approval if you:

1. Obtain specified authorization or acceptance for each submittal before the 55th day
2. Receive authorization to start

Submit a notice 72 hours before starting job site activities. If the project has more than 1 location of work, submit a separate notice for each location.

Replace "Reserved" in section 12-4.04 with:

Lane Closure Restriction for Designated Holidays and Special Days										
Thu	Fri	Sat	Sun	Mon	Tues	Wed	Thu	Fri	Sat	Sun
x	<b>H</b> xx	xx	xx							
	<b>SD</b> xx									
x	xx	<b>H</b> xx	xx							
		<b>SD</b> xx								
	x	xx	<b>H</b> xx	xx						
			<b>SD</b> xx							
	x	xx	xx	<b>H</b> xx	xxx					
	x	xx	xx	<b>SD</b> xx	xxx					
				x	<b>H</b> xx					
				x	<b>SD</b> xx					
					x	<b>H</b> xx				
						<b>SD</b> xx				
						x	<b>H</b> xx	xx	xx	xx
							<b>SD</b> xx			

Legend:

	Refer to lane requirement charts
x	The full width of the traveled way must be open for use by traffic after 5:00 am.
xx	The full width of the traveled way must be open for use by traffic.
xxx	The full width of the traveled way must be open for use by traffic until 11:00 pm.
<b>H</b>	Designated holiday
<b>SD</b>	Special day

Replace "Reserved" in section 12-4.05B with:

Chart no. 1 Freeway Lane Requirements																									
County: SM							Route/Direction: 101 / NB							PM: 0.0											
Closure limits: From Oregon Expwy to University Ave																									
Hour	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon-Thu	1	1	1	1	1																	4	4	3	2
Fri	1	1	1	1	1																	4	4	3	2
Sat	2	1	1	1	1	1	2	3	4	4											4	4	4	4	3
Sun	2	1	1	1	1	1	1	2	2	3	4	4							4	4	4	4	3	3	2

Legend:

1 Provide at least 1 through freeway lane open in direction of travel

2 Provide at least 2 adjacent through freeway lanes open in direction of travel

3 Provide at least 3 adjacent through freeway lanes open in direction of travel

4 Provide at least 4 adjacent through freeway lanes open in direction of travel

Work allowed within the highway where shoulder or lane closure is not required

REMARKS:

CONTRACT NO. 04-235624  
REPLACED PER ADDENDUM NO. 3 DATED MARCH 6, 2015

**Chart no. 2  
Freeway Lane Requirements**

County: SM		Route/Direction: 101 / SB										PM: 0.0													
Closure limits: From University Ave to Oregon Expwy																									
Hour	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon-Thu	2	1	1	1	1																4	3	3	2	
Fri	2	1	1	1	1																4	4	3	3	
Sat	2	2	1	1	1	1	2	3	3	4	4									4	4	4	4	3	
Sun	2	2	1	1	1	1	1	2	3	3	4								4	4	4	4	3	2	

Legend:

1 Provide at least 1 through freeway lane open in direction of travel

2 Provide at least 2 adjacent through freeway lanes open in direction of travel

3 Provide at least 3 adjacent through freeway lanes open in direction of travel

4 Provide at least 4 adjacent through freeway lanes open in direction of travel

Work allowed within the highway where shoulder or lane closure is not required

REMARKS:

Replace "Reserved" in section 12-4.05E with:

Chart no. 3 Complete Ramp Closure Hours Requirements																									
County: SCL						Route/Direction: 101 / NB						PM: 52.344													
Closure limits: : On the on-ramp from Embarcadero Rd and Oregon Expwy																									
Hour	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon-Thu	C	C	C	C	C																				C
Fri	C	C	C	C	C																				C
Sat	C	C	C	C	C	C	C	C																	C
Sun	C	C	C	C	C	C	C	C	C															C	C
Legend:																									
<input type="checkbox"/> C Ramp may be closed completely																									
<input type="checkbox"/> Work allowed within the highway where shoulder or lane closure is not required																									
REMARKS: See Detour Plan No. 1																									

CONTRACT NO. 04-235624  
 REPLACED PER ADDENDUM NO. 3 DATED MARCH 6, 2015

**Chart no. 4  
Complete Ramp Closure Hours Requirements**

County: SM	Route/Direction: 101 /SB	PM: 0.701
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Closure limits: : On the On-ramp from University Ave

Hour	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24		
Mon-Thu		C	C	C	C	C																		C	C	C	
Fri		C	C	C	C	C																			C	C	
Sat		C	C	C	C	C	C	C																	C	C	
Sun		C	C	C	C	C	C	C	C																C	C	C

**Legend:**

C	Ramp may be closed completely
	Work allowed within the highway where shoulder or lane closure is not required

REMARKS: See Detour Plan No. 2

Chart no. 5 Complete Ramp Closure Hours Requirements																									
County: SM										Route/Direction: 101 /NB										PM: 0.774					
Closure limits: : On the Off-ramp to University Ave																									
Hour	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon-Thu	C	C	C	C	C																		C	C	C
Fri	C	C	C	C	C																		C	C	
Sat	C	C	C	C	C	C	C	C	C														C	C	C
Sun	C	C	C	C	C	C	C	C	C	C												C	C	C	C
Legend:																									
<input type="checkbox"/> C Ramp may be closed completely <input type="checkbox"/> Work allowed within the highway where shoulder or lane closure is not required																									
REMARKS: Detour traffic to next off-ramp																									

CONTRACT NO. 04-235624  
 REPLACED PER ADDENDUM NO. 3 DATED MARCH 6, 2015

**Chart no. 6  
Complete Ramp Closure Hours Requirements**

County: SCL	Route/Direction: 101 /SB	PM: 52.401
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Closure limits: : On the off-ramp to Embarcadero Rd and Oregon Expwy

Hour	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
Mon-Thu	C	C	C	C	C	C																		C	C	C
Fri	C	C	C	C	C	C																		C	C	C
Sat	C	C	C	C	C	C	C	C																C	C	C
Sun	C	C	C	C	C	C	C	C	C															C	C	C

**Legend:**  
 C Ramp may be closed completely  
 Work allowed within the highway where shoulder or lane closure is not required

REMARKS: Detour traffic to next off-ramp

**Chart no. 7  
Complete Ramp Closure Hours Requirements**

County: SCL					Route/Direction: 101 /NB					PM: 51.964															
Closure limits: : On the on-ramp from Oregon Expwy																									
Hour	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mon-Thu	C	C	C	C	C																			C	C
Fri	C	C	C	C	C																			C	C
Sat	C	C	C	C	C	C	C	C	C													C	C	C	C
Sun	C	C	C	C	C	C	C	C	C	C											C	C	C	C	C
Legend:																									
<input type="checkbox"/> C Ramp may be closed completely <input type="checkbox"/> Work allowed within the highway where shoulder or lane closure is not required																									
REMARKS: See Detour Plan No. 3																									

CONTRACT NO. 04-235624  
REPLACED PER ADDENDUM NO. 3 DATED MARCH 6, 2015

**Add to section 13-3.01A:**

The project is risk level 2.

A *Conceptual Storm Water Pollution Prevention Plan* (CSWPPP) has been prepared for the work and is available in the *Information Handout*. The CSWPPP covers only the following activities:

1. Shift NB freeway traffic to the east and SB freeway traffic to the west away from the center median. Remove the median barrier and level the freeway.
2. Perform structure excavation and structure backfill for the new abutment and pier walls from outside creek. Perform dewatering, pile driving, and some portions of the abutment and pier wall construction which can be accomplished from outside creek.
3. Remove and abandon the 96 inch culvert as shown on plan DD-2 from outside creek.

Activities other than activities listed above will require an approved SWPPP.

Comply with the CSWPPP for all construction activities listed above until your SWPPP is approved by the Engineer.

Approved SWPPP supersedes the *Conceptual* SWPPP.

**Replace section 13-3.01B(1) with:**

**13-3.01B(1) General**

Provide the "Certification" included in the CSWPPP with all the required signatures and submit to the Engineer within 10 days of Contract approval. If amendment to the CSWPPP is necessary, submit amendment to the Engineer within 5 days of Contract approval. Do not start construction until your amendment is authorized.

**Replace section 13-3.01B(2)(a) with:**

**13-3.01B(2)(a) General**

Within 15 days of Contract approval:

1. Submit 3 copies of your SWPPP for review. Allow 7 days for the Department's review. The Engineer provides comments and specifies the date when the review stopped if revisions are required.
2. Change and resubmit a revised SWPPP within 7 days of receiving the Engineer's comments. The Department's review resumes when a complete SWPPP has been resubmitted. Allow 7 days for the Department's second review. Change and resubmit a revised SWPPP within 3 days of receiving the Engineer's comments.
3. When the Engineer authorizes the SWPPP, submit an electronic copy and 4 printed copies of the authorized SWPPP.
4. If the RWQCB requires review of the authorized SWPPP, the Engineer submits the authorized SWPPP to the RWQCB for its review and comment.
5. If the Engineer requests changes to the SWPPP based on the RWQCB's comments, amend the SWPPP within 7 days.

**Replace the first paragraph of section 13-8.01B(2) with:**

Start the following process for the ATS plan within 15 days of Contract approval:

1. Submit 3 copies of the ATS plan. Allow 7 days for the Department's review. The Engineer provides comments and specify the date when the review stopped if revisions are required.
2. Change and resubmit a revised ATS plan within 7 days of receiving the Engineer's comments. The Engineer's review resumes when a complete ATS plan has been resubmitted. Allow 7 days for the Department's second review. Change and resubmit a revised SWPPP within 3 days of receiving the Engineer's comments.
3. When the Engineer authorizes the ATS plan, submit an electronic copy and 4 printed copies of the authorized ATS plan.
4. Allow 30 days for the Engineer to submit the authorized ATS plan to the State Water Resources Control Board and RWQCB.
5. If the Engineer requests changes to the ATS plan based on the State Water Resources Control Board's or RWQCB's comments, amend the ATS plan within 3 business days.

**Replace section 13-12 with:  
13-12 TEMPORARY CREEK DIVERSION SYSTEM**

**13-12.01 GENERAL**

**13-12.01A Summary**

Section 13-12 includes specifications for constructing, maintaining, reconstructing, and later removing temporary creek diversion system (TCDS).

Do not conduct these activities between October 16 and May 31.

A TCDS includes:

1. Water-filled primary and secondary cofferdams
2. Alternative pipe culvert (APC) pipe
3. Impermeable plastic membrane and gravel bags to seal cofferdam opening at plastic pipe.
4. Dewatering pit and piping

**13-12.01B Submittals**

**13-11.01B(1) Certificate of Compliance**

Submit a certificate of compliance for:

1. Gravel
2. Impermeable plastic membrane
3. Alternative pipe culvert (APC) pipe

**13-12.01B(1) Temporary Creek Diversion System Plan**

Within 15 days of Contract approval:

1. Submit 3 copies of temporary creek diversion system plan (TCDSP) for review. Allow 7 days for the Engineer's review. The Engineer provides comments and specifies the date when the review stopped if revisions are required.
2. Change and resubmit a revised TCDSP within 7 days of receiving the Engineer's comments. The Engineer's review resumes when a complete TCDSP is resubmitted. Allow 7 days for the Department's second review. Change and resubmit a revised SWPPP within 3 days of receiving the Engineer's comments.
3. When the Engineer authorizes the TCDSP, submit an electronic copy and 4 printed copies of the authorized TCDSP.
4. Allow 30 days for the Engineer to submit the authorized TCDSP to the RWQCB and California Department of Fish and Wildlife (CDFW) for their review and comments.
5. If the Engineer requests changes to the TCDSP based on the RWQCB and CDFW's comments, amend the TCDSP within 3 business days. Do not start construction in the creek until the TCDSP is approved by the RWQCB and CDFW.
6. Submit the approved TCDSP as Attachment "F", under "Other Plans, Permits, and Agreements" in SWPPP Amendment.

TCDSP must include:

1. Title sheet.
2. Table of contents.
3. CEM-2008 SWPPP/WPCP Amendment Certification and Acceptance Form.
4. CEM-2009 SWPPP/WPCP Amendments Log Form.
5. Description and schedule of the diversion activities, including:
  - 5.1. Construction anticipated in the creek
  - 5.2. Creek channel condition
  - 5.3. Diversion system components including discussion of primary and secondary cofferdams
  - 5.4. Schedule of the diversion activities
  - 5.5. Relevant permits and agreements
6. Plans showing location(s) of diversion, including layouts, cross sections, and elevations.
7. Calculations supporting the sizing of any piping or other conveyance materials. Calculations must be sealed and signed by an engineer registered as a civil engineer in the State. Conveyance pipe through the jobsite must be:
  - 7.1. No less than 30 inches in diameter.
  - 7.2. Upstream cofferdam must be sized for the creek base flow.
  - 7.3. The top of the downstream cofferdam must be at least 2 feet above the highest observed tide in the past 5 years.
8. Description of pre-field activities, including:
  - 8.1. Reviewing the exact location for upstream and downstream cofferdam
  - 8.2. Identifying equipment access, material logistical needs, and staging areas
  - 8.3. Identifying the water quality sample locations
  - 8.4. Coordinating with Caltrans Biologist for fish trapping and diversion screening
11. Contingency measures whenever the National Weather Service is predicting a storm event with at least 30 percent probability of precipitation within 72 hours.
12. Creek diversion installation and removal processes, including equipment, platforms for equipment, cofferdams, and creek access locations.
13. Description of in-creek construction activities, including
  - 13.1. Vegetation removal
  - 13.2. Relocation of wildlife within the work area
  - 13.3. Removal and disposal of creek water within work area
  - 13.4. Installation of temporary ramp for construction equipment access
  - 13.5. Temporary construction site best management practices (BMPs) to be implemented
14. Materials proposed for use, including *MSDS* and pumping system, if used.
15. Water quality monitoring and reporting during creek diversion under section 13-11, including a sample of visual inspection log form and water quality sampling log form.
16. Restoration plans showing before and after conditions, including photos of existing conditions for areas disturbed during installation, operation, and removal of the temporary creek diversion system.
17. Protective measures to prevent puncture of the water-filled cofferdam by sharp or abrasive objects. Contingency plan if water bladder is punctured and deflated.

Use of an alternative TCDS is acceptable if approved by the Engineer. The alternative TCDS must be within the temporary impact area allowed in the PLACs in the Water Quality Information Handout. The alternative TCDS is subject to the same submittal, review, and approval process as required for the TCDS under section 13-12.01B(1). The Department does not pay any increase in cost for the alternative TCDS. The alternative TCDS must be installed and maintained as required for the TCDS specified.

**13-12.02 MATERIALS**

**13-12.02A Water-filled Cofferdam**

The water-filled cofferdam must:

1. Be able to stand alone without additional external stabilization devices.
2. Not degrade the aquatic environment by siltation or other means or harm native wildlife.
3. Be as watertight as practicable to provide a reasonably dry working area suitable for construction activities.
4. Consist of a system of at least 1 pair of water-filled inner tubes in a side-by-side position contained by 1 outer tube that forms a stable, non-rolling wall of water. The inner tube fabric must be impervious. The outer tube fabric must be UV and puncture resistant.
5. Have threaded fill ports and drain ports for each cofferdam unit for rapid inflation and draining.
6. Have end-lifting loops used for equipment to control the dam during its installation and removal.

**13-12.02B Alternative Pipe Culvert (APC) Pipe**

APC pipe must comply with section 64-1.02C and:

1. Be clean, uncoated, in good condition, free of paint, oil, dirt or other residues that could potentially contribute to water pollution
2. Be adequately supported for planned loads
3. Use watertight joints
4. Be made of a material or combination of materials that are suitable for clean water and which do not contain banned, hazardous or unlawful substances
5. Be smooth walled

**13-12.02C Gravel**

Gravel must:

1. Be river run gravel obtained from a river or creek bed with grading compliant with the following requirements:

Sieve size (inch)	Percentage passing	Percentage retained
1-1/2	100	0
3/4	0	100

2. Be clean, hard, sound, durable, uniform in quality, and free of any detrimental quantity of soft, thin, elongated or laminated pieces, disintegrated material, organic matter, or other deleterious substances
3. Be composed entirely of particles that have no more than one fractured face
4. Have a cleanliness value of at least 85, as determined by the Cleanliness Value Test Method for California Test No. 227.

**13-12.02D Gravel-filled Bags**

Gravel-filled bags must comply with section 13-5.02G.

The 2nd paragraph of section 13-5.02G does not apply.

### **13-12.02E Impermeable Plastic Membrane**

Impermeable plastic membrane must be:

1. Single ply, commercial quality, non-photodegradable polyethylene with a minimum thickness of 10 mils under ASTM D5199
2. Free of holes, punctures, tears or other defects that compromise the impermeability of the material
3. Suitable for use as a impermeable membrane

### **13-12.02F Pumps**

Pumps must comply with section 74-2 and:

1. Be equipped with second containment.
2. Be free of fuel and oil leaks
3. Include intake screens that meet regulatory requirements

Pumps used to dewater worksite must be equipped with double screens that meet the following National Marine Fisheries fish screening criteria:

1. Perforated plate or woven wire: screen openings must not exceed 0.1 inch, measured in diameter for square or round openings. Slotted openings must not exceed 0.07 inch.
2. Screen material must provide a minimum of 27-percent open area.
3. Approach velocity must not exceed 0.33 feet per second.

### **13-12.02G Filter Fabric**

Filter fabric must be Class A under section 88-1.02B.

## **13-12.03 CONSTRUCTION**

### **13-12.03A General**

Do not start construction in the creek until your TCDS is authorized by RWQCB and CDFW.

Construct TCDS within the temporary impact footprint allowed in the PLAC in the Water Quality Information Handout.

Do not construct or reconstruct diversion system if the 72-hour forecasts predict a 50-percent or greater chance of rain in the project area.

Stop all work, stabilize the work areas, and remove all sources of pollution that would lead to violation of applicable permits from the creek between upstream and downstream cofferdams if the 72-hour forecasts predict a 30-percent or greater chance of rain in the project area and the predicted rainfall is estimated to produce a flow volume exceeding the design capacity of the TCDS.

Do not use motorized vehicles and equipment in areas of flowing and standing water. Comply with section 13-4.03.

Remove vegetation to ground level and clear away debris.

Place temporary or permanent fill as allowed by PLACs.

Remove TCDS and restore the creek to original flow condition before October 15. Reconstruct the temporary creek diversion system, if needed, after June 1 of the following year.

Lap and join all joints between the edges of impermeable plastic membrane with commercial quality waterproof tape with minimum 4-inch lapping at the edges.

### **13-12.03B Maintenance**

After TCDS is installed, perform initial dewatering to remove the water within the upstream and downstream cofferdams as authorized by the Engineer. After in-creek construction starts, use the dewatering pit as shown to bypass the groundwater within the upstream and downstream cofferdams that is not in contact with construction activities to the downstream of the cofferdam as authorized by the Engineer.

Prevent leaks in the TCDS. Water leaking through TCDS to the work area that is in contact with construction activities must be pumped to temporary active treatment system under section 13-8. Repair leaks immediately.

Maintain the TCDS to provide adequate holding capacity with a minimum freeboard of 12 inches between water surface and the top of the cofferdam.

Install a level staff as authorized by the Engineer at the upstream boundary of the diversion system for observing the water surface elevation. Clearly mark the level staff with the elevation of:

1. The top of the upstream cofferdam
2. One foot below the top of upstream cofferdam
3. Two feet below the top of upstream cofferdam

In the event that the water surface reaches the warning level of 2 feet below the top of the upstream cofferdam, stop work, stabilize the work areas, and remove all sources of pollution that would lead to violation of applicable permits from the creek between upstream and downstream cofferdams until water surface drops under the warning level of 2 feet below the top of upstream cofferdam.

Take every precaution to prevent water-filled cofferdam from being punctured by sharp objects or edges. Remove all sharp or abrasive objects that may potentially puncture the water-filled cofferdam.

Repair holes, rips and voids in the impermeable plastic membrane by taping. Replace impermeable plastic membrane when patches or repairs compromise the impermeability of the material.

Repair TCDS within 24 hours after the damage occurs.

Prevent debris from entering the creek.

Remove and replace immediately gravel, gravel-filled bags, impermeable plastic membrane, or plastic pipes contaminated by construction activities.

Remove sediment deposits and debris from TCDS as needed. If removed sediment is deposited within project limits, it must be stabilized and not subjected to erosion by wind or water.

### **13-12.03C Removal**

When no longer required, remove and dispose of all components of TCDS. Return the creek bed to the pre-construction conditions.

Backfill ground disturbance, including holes and depressions caused by the installation and removal of TCDS with permeable material. Maintain the original line of the creek bed.

### **13-12.04 PAYMENT**

Water quality monitoring and reporting plan is not included in the payment for TCDS.

**Replace section 14-8.03 with:**

**14-8.03 VIBRATION MONITORING**

**14-8.03A General**

**14-8.03A(1) Summary**

Section 14-8.03 includes specifications for furnishing, installing, and maintaining vibration-monitoring instrumentation; collecting vibration data; interpreting and reporting the results of vibration monitoring; implementing required remedial and precautionary measures; and inspecting and documenting the property adjacent to the job site to protect from excessive vibrations during the impact of pile driving operations.

You must:

1. Furnish and install vibration-monitoring instruments (portable seismographs).
2. Protect from damage, and repair or replace damaged or inoperable instruments immediately to ensure continuous monitoring.
3. Collect, interpret, and report vibration data.
4. Implement response actions.
5. Review the contract components and reports, and field verify the location and extent of the vibration monitoring-related work in the San Francisquito Bridge replacement.

**14-8.03A(2) Submittals**

**14-8.03A(2)(a) General**

Submit:

1. Product data
2. Baseline vibration levels
3. Vibration monitoring plan
4. Vibration mitigation plan
5. Vibration data report

**14-8.03A(2)(b) Product Data**

Submit a copy of the instructions and maintenance manual, product data, other pertinent information; and laboratory calibration record and certification within 5 days of receipt of each portable seismograph at the site.

The certificate of calibration must show that the seismographs are calibrated and maintained in accordance with the equipment manufacturer's calibration requirements and that calibrations are traceable to the U.S. National Institute of Standards and Technology (NIST).

**14-8.03A(2)(c) Baseline Vibration Levels**

Submit baseline vibration levels for vibration monitoring areas identified.

**14-8.03A(2)(d) Vibration Monitoring Plan**

Submit 4 copies of the vibration monitoring plan (VMOP) at least 30 days before any work requiring vibration monitoring.

Allow 14 days for review and authorization. Revise and resubmit the plan within 7 days of receipt of comments, if revisions are required.

Allow 7 days for review of the revisions. Submit 4 copies of the VMOP incorporating the required changes after authorization.

Minor changes or clarifications to the initial submittal may be made and attached as amendments to the plan.

VMOP must include:

1. The name of the qualified vibration monitoring specialist providing the vibration monitoring services.
2. Description of the instruments and equipment to be used.
3. Measurement locations and methods for mounting the seismographs.
4. Procedures for data collection and analysis.
5. Means and methods of providing warning when the particle velocity equals or exceeds specified threshold.
6. Name of the designated responsible person. The responsible person must have the authority to stop the work causing the vibration.
7. The resumes of the vibration instrument engineer and technical support personnel.

#### **14-8.03A(2)(e) Vibration Mitigation Plan**

Submit 4 copies of the vibration mitigation plan (VMP) at least 30 days before the start of any work requiring vibration monitoring.

VMP must include generalized plans of action to be implemented in the event the particle velocity equals or exceeds specified threshold. The generalized plans of action must include positive measures to control vibrations (e.g., using alternative construction methods) and measures to protect the area adjacent to the job site.

Allow 14 days for review and authorization. Revise and resubmit the plan within 7 days of receipt of comments, if revisions are required.

Allow 7 days for review of the revisions. Submit 4 copies of the VMP incorporating the required changes after authorization.

Minor changes or clarifications to the initial submittal may be made and attached as amendments to the plan. VMP may be conditionally accepted while minor revisions or amendments are being completed.

#### **14-8.03A(2)(f) Vibration Data Report**

Submit a hard copy and an electronic report documenting the results at the seismograph locations within 14 days after the completion of the vibration monitoring.

Submit daily hardcopy and electronic report summarizing data collected at the seismograph locations before the end of the following day.

Vibration instrumentation engineer must sign all vibration data reports and include:

1. Project identification, including, county, route, post mile and project name as shown
2. Location of the seismographs (clearly label image and identify latitude and longitude location)
3. Location of vibration sources (i.e., piling driving)
4. Summary tables indicating the date, time, and magnitude and frequency of maximum single-component peak particle velocity measured during each 1-hour interval of the monitoring period for each seismograph
5. Field data forms (construction vibration monitoring only)
6. Appendix graphs of the strip charts printed during the monitoring periods

#### **14-8.03A(3) Quality Control and Assurance**

##### **14-8.03A(3)(a) General**

Vibration monitoring engineer must prepare reports indicating that vibration performance in the area adjacent to the job site during the impact of pile driving operation is acceptable and is below the threshold limits.

#### **14-8.03A(3)(b) Quality Assurance**

##### **14-8.03A(3)(b)(i) Qualifications**

Vibration monitoring personnel must include a vibration instrumentation engineer who meets 1 of the following minimum qualifications:

1. Geophysicist or engineer registered in the State with at least 5 years of experience in the installation and use of vibration-monitoring instruments and data interpretation
2. Professional with graduate level degree from an accredited university in physics or acoustics with at least 5 years of experience in the installation and use of vibration-monitoring instruments and data interpretation

Vibration instrumentation engineer must:

1. Be onsite and supervise the initial installation of vibration-monitoring instruments
2. Supervise interpretations of vibration-monitoring data

Submit training and qualification records to the Engineer.

Keep copies of training records on the job site.

##### **14-8.03A(3)(b)(ii) Preconstruction Meeting**

Attendees of the preconstruction meeting must include:

1. Engineer
2. Department's vibration competent person
3. Your vibration monitoring personnel
4. Your vibration instrument engineer
5. Your project Superintendent, and others as necessary

The meeting agenda must include a review of the job site personnel vibration monitoring requirements, VMOP, VMP, emergency contacts and notification plan, submittals, and any other issues pertinent to the execution of the vibration monitoring-related work.

#### **14-8.03B Materials**

Not Used

#### **14-8.03C Construction**

##### **14-8.03C(1) Equipment**

##### **14-8.03C(1)(a) Vibration Monitoring Equipment**

Portable seismographs must have the following minimum features:

1. Seismic range: 0.01 to 4 inches per second with an accuracy of  $\pm 5$  percent of the measured peak particle velocity or better at frequencies between 10 Hertz and 100 Hertz; and with a resolution of 0.01 inch per second or less.
2. Frequency response ( $\pm 3$  dB points): 2 to 200 Hertz.
3. 3 channels for simultaneous time-domain monitoring of vibration velocities in digital format on 3 perpendicular axes.
4. 2 power sources: internal rechargeable battery and charger and 115 volts (AC). Battery must be capable of supplying power to monitor vibrations continuously for up to 24 hours.
5. Capable of internal, dynamic calibration.
6. Capability to transfer data from memory to external device. Instruments must be capable of producing recordings of readings on site within 1 hour of obtaining the readings. Provide computer software to perform analysis and produce reports of continuous monitoring.

7. Continuous monitoring mode must be capable of automatic recording of single-component peak particle velocities and frequencies of peaks with an interval of 1 minute or less.
8. Able to give warning immediately when threshold particle velocity is exceeded.
9. 1 seismograph must be waterproof and capable of downhole stationing.

Mount the seismographs firmly on the surface slab of concrete or asphalt, or set in undisturbed soil. Align the seismographs' longitudinal direction of measurement parallel to the facility's alignment. Align the seismographs' transverse direction of measurement perpendicular to the facility's alignment.

Place seismographs within 3 feet of the exterior of designated facility on the side facing construction activities at 1 location, Yeaman Auto Body at 2025 East Bayshore Road, Palo Alto, California 94303, that is within the vibration monitoring distance of 35 feet as specified in the Final Foundation Report for San Francisquito Creek Bridge Replacement, Bridge No. 35-0348, dated April 2, 2013.

#### **14-8.03C(1)(b) Calibration**

Calibrate and maintain all equipment in working order under the equipment use specifications at the manufacturer's product maintenance schedule or certified calibration laboratory within 1 year of use on site.

#### **14-8.03C(2) Vibration Monitoring**

You must establish baseline vibration levels before start of work requiring vibration monitoring.

Monitor and record vibration data during the course of pile driving operations.

Seismographs must be set up to give immediate warning when particle velocity equal to or exceeding the threshold value of 0.2 inches per second. The warning emitted must be instantaneously transmitted to the designated responsible person and the Engineer by warning lights, audible sounds, or electronic transmission.

Stop work immediately and notify the Engineer when vibration readings equal or exceed the specified threshold value.

Immediately implement vibration mitigation plan to reduce the vibrations within 24 hours. Do not resume work unless authorized.

#### **14-8.03C(3) Maintenance**

##### **14-8.03C(3)(a) Notifications, Communications, and Postings**

Do not disclose any instrumentation data to 3rd parties nor publish data without the Department's written consent.

Submit matters of interpretation of standards to the appropriate administrative agency for resolution before start of work.

Where requirements of this special provisions and reference documents vary, the most stringent requirements will prevail.

#### **14-8.03D Payment**

Not Used

**Replace the 2nd paragraph in section 39-2.01A of the RSS for section 39 with:**

Produce Type A HMA using an authorized warm mix asphalt technology, except the water injection technology is not allowed.

**Replace "Reserved" in section 39-2.02C of the RSS for section 39 with:**

The grade of asphalt binder for Type A HMA must be PG 64-10.

**Replace the paragraphs of section 39-2.03 of the RSS for section 39 with:**

If the atmospheric temperature is below 60 degrees F, cover loads in trucks with tarps. If the time for HMA discharge to truck at the HMA plant until transfer to paver's hopper is 90 minutes or greater and if the atmospheric temperature is below 70 degrees F, cover loads in trucks with tarps. The tarps must completely cover the exposed load until you transfer the mixture to the paver's hopper or to the pavement surface. Tarps are not required if the time from discharging to the truck until transfer to the paver's hopper or the pavement surface is less than 30 minutes.

Spread Type A HMA at the atmospheric and surface temperatures shown in the following table:

**Minimum Atmospheric and Surface Temperatures**

Compacted layer thickness	Atmosphere, °F		Surface, °F	
	Unmodified asphalt binder	Modified asphalt binder	Unmodified asphalt binder	Modified asphalt binder <sup>a</sup>
< 0.15	45	45	50	45
≥ 0.15	40	40	40	40

<sup>a</sup> Except asphalt rubber binder.

For method compaction, the maximum compacted layer thickness must be 0.25 foot.

For Type A HMA placed under method compaction, if the asphalt binder is:

1. Unmodified, complete:
  - 1.1 First coverage of breakdown compaction before the surface temperature drops below 240 degrees F
  - 1.2 Breakdown and intermediate compaction before the surface temperature drops below 190 degrees F
  - 1.3 Finish compaction before the surface temperature drops below 140 degrees F
2. Modified, complete:
  - 2.1 First coverage of breakdown compaction before the surface temperature drops below 230 degrees F
  - 2.2 Breakdown and intermediate compaction before the surface temperature drops below 170 degrees F
  - 2.3 Finish compaction before the surface temperature drops below 130 degrees F

If you request and the request is authorized, you may cool Type A HMA with water when rolling activities are complete. Apply water under section 17.

**BID ITEM LIST****04-235624**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
21	130620	TEMPORARY DRAINAGE INLET PROTECTION	EA	60		
22	130640	TEMPORARY FIBER ROLL	LF	500		
23	130680	TEMPORARY SILT FENCE	LF	500		
24	130710	TEMPORARY CONSTRUCTION ENTRANCE	EA	15		
25	BLANK					
26	130730	STREET SWEEPING	LS	LUMP SUM	LUMP SUM	
27	130800	TEMPORARY ACTIVE TREATMENT SYSTEM	LS	LUMP SUM	LUMP SUM	
28	130900	TEMPORARY CONCRETE WASHOUT	LS	LUMP SUM	LUMP SUM	
29	131103	WATER QUALITY SAMPLING AND ANALYSIS DAY	EA	321		
30	131104	WATER QUALITY MONITORING REPORT	EA	30		
31	141000	TEMPORARY FENCE (TYPE ESA)	LF	500		
32	141103	REMOVE YELLOW THERMOPLASTIC TRAFFIC STRIPE (HAZARDOUS WASTE)	LF	10,900		
33	141120	TREATED WOOD WASTE	LB	1,360		
34	026315	TEMPORARY TIMBER CONSTRUCTION MAT	LS	LUMP SUM	LUMP SUM	
35	150204	ABANDON CULVERT (LF)	LF	43		
36	150608	REMOVE CHAIN LINK FENCE	LF	80		
37	150661	REMOVE GUARDRAIL	LF	100		
38	028484	REMOVE ALTERNATIVE SOUND WALL SYSTEM	LF	40		
39	150711	REMOVE PAINTED TRAFFIC STRIPE	LF	37,600		
40	150712	REMOVE PAINTED PAVEMENT MARKING	SQFT	880		

**BID ITEM LIST**

**04-235624**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
61	157560	BRIDGE REMOVAL (PORTION)	LS	LUMP SUM	LUMP SUM	
62	160102	CLEARING AND GRUBBING (LS)	LS	LUMP SUM	LUMP SUM	
63	190101	ROADWAY EXCAVATION	CY	5,420		
64 (F)	192003	STRUCTURE EXCAVATION (BRIDGE)	CY	6,881		
65 (F)	044810	CONTROLLED LOW STRENGTH MATERIAL (BRIDGE)	CY	5,076		
66 (F)	192020	STRUCTURE EXCAVATION (TYPE D)	CY	1,542		
67 (F)	192049	STRUCTURE EXCAVATION (SOLDIER PILE WALL)	CY	7		
68 (F)	193029	STRUCTURE BACKFILL (SOLDIER PILE WALL)	CY	1		
69 (F)	193030	PERVIOUS BACKFILL MATERIAL	CY	291		
70 (F)	193116	CONCRETE BACKFILL (SOLDIER PILE WALL)	CY	87		
71 (F)	193119	LEAN CONCRETE BACKFILL	CY	38		
72	194001	DITCH EXCAVATION	CY	120		
73	026743	IMPORTED BIOFILTRATION SOIL	CY	59		
74	210300	HYDROMULCH	SQFT	4,100		
75	210430	HYDROSEED	SQFT	4,100		
76	390132	HOT MIX ASPHALT (TYPE A)	TON	8,560		
77	390137	RUBBERIZED HOT MIX ASPHALT (GAP GRADED)	TON	5,480		
78	026744	HOT MIX ASPHALT DIKE TYPE E (MODIFIED)	LF	10		
79	397005	TACK COAT	TON	21		
80	044811	SOLDIER PILE (W14 X 233)	LF	696		

**BID ITEM LIST**

**04-235624**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
81	490403	30" DRILLED HOLE	LF	689		
82	490782	FURNISH PILING (CLASS 200) (ALTERNATIVE W)	LF	17,699		
83	490783	DRIVE PILE (CLASS 200) (ALTERNATIVE W)	EA	231		
84	044812	FURNISH PILING (CLASS 200) (ALTERNATIVE Y)	LF	472		
85	044813	DRIVE PILE (CLASS 200) (ALTERNATIVE Y)	EA	14		
86 (F)	510051	STRUCTURAL CONCRETE, BRIDGE FOOTING	CY	549		
87 (F)	510053	STRUCTURAL CONCRETE, BRIDGE	CY	3,054		
88 (F)	044814	STRUCTURAL CONCRETE, CAP	CY	16		
89 (F)	510088	STRUCTURAL CONCRETE, APPROACH SLAB (TYPE N MODIFIED)	CY	174		
90 (F)	510502	MINOR CONCRETE (MINOR STRUCTURE)	CY	15.2		
91	511106	DRILL AND BOND DOWEL	LF	206		
92	519081	JOINT SEAL (MR 1/2")	LF	478		
93	519102	JOINT SEAL (TYPE AL)	LF	250		
94 (F)	520102	BAR REINFORCING STEEL (BRIDGE)	LB	389,869		
95 (F)	044815	BAR REINFORCING STEEL (CAP)	LB	3,080		
96 (F)	520110	BAR REINFORCING STEEL (EPOXY COATED) (BRIDGE)	LB	391,466		
97 (F)	520120	HEADED BAR REINFORCEMENT	EA	1,554		
98 (F)	560223	FURNISH SIGN STRUCTURE (BRIDGE MOUNTED WITHOUT WALKWAY)	LB	1,707		
99 (F)	560224	INSTALL SIGN STRUCTURE (BRIDGE MOUNTED WITHOUT WALKWAY)	LB	1,707		
100	560244	FURNISH LAMINATED PANEL SIGN (1"- TYPE A)	SQFT	270		

**BID ITEM LIST****04-235624**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
101	560251	FURNISH SINGLE SHEET ALUMINUM SIGN (0.063"-FRAMED)	SQFT	17		
102	560252	FURNISH SINGLE SHEET ALUMINUM SIGN (0.080"-FRAMED)	SQFT	30		
103	028480	RETRO-REFLECTIVE SHEETING (TYPE XI)	SQFT	266		
104	562002	METAL (BARRIER MOUNTED SIGN)	LB	1,550		
105	566011	ROADSIDE SIGN - ONE POST	EA	3		
106 (F)	575004	TIMBER LAGGING	MFBM	6		
107 (F)	582001	SOUND WALL (MASONRY BLOCK)	SQFT	2,579		
108	028481	ALTERNATIVE SOUND WALL SYSTEM	LF	40		
109	590120	CLEAN AND PAINT STEEL SOLDIER PILING	LS	LUMP SUM	LUMP SUM	
110	620100	18" ALTERNATIVE PIPE CULVERT	LF	140		
111	623001	12" TEMPORARY CULVERT	LF	160		
112	642115	18" SLOTTED PLASTIC PIPE	LF	120		
113	650026	36" REINFORCED CONCRETE PIPE	LF	26		
114	650065	96" REINFORCED CONCRETE PIPE	LF	75		
115	680902	6" PERFORATED PLASTIC PIPE UNDERDRAIN	LF	83		
116	705527	36" AUTOMATIC DRAINAGE GATE	EA	1		
117	720110	SMALL-ROCK SLOPE PROTECTION	CY	2		
118	721026	ROCK SLOPE PROTECTION (NO. 1, METHOD B) (CY)	CY	15		
119	721420	CONCRETE (DITCH LINING)	CY	6		
120	729011	ROCK SLOPE PROTECTION FABRIC (CLASS 8)	SQFT	400		

**BID ITEM LIST**

**04-235624**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
121	731502	MINOR CONCRETE (MISCELLANEOUS CONSTRUCTION)	CY	2		
122	731627	MINOR CONCRETE (CURB, SIDEWALK AND CURB RAMP)	CY	64		
123 (F)	750001	MISCELLANEOUS IRON AND STEEL	LB	4,564		
124 (F)	750501	MISCELLANEOUS METAL (BRIDGE)	LB	262		
125 (F)	750505	BRIDGE DECK DRAINAGE SYSTEM	LB	3,670		
126	044816	TEMPORARY DEBRIS RACK	LS	LUMP SUM	LUMP SUM	
127	800103	TEMPORARY FENCE (TYPE CL-6)	LF	1,110		
128	800302	CHAIN LINK FENCE (TYPE CL-3, VINYL-CLAD)	LF	790		
129	800400	CHAIN LINK FENCE (TYPE CL-8)	LF	91		
130	026318	16' TEMPORARY GATE (TYPE CL-6)	EA	11		
131 (F)	833032	CHAIN LINK RAILING (TYPE 7)	LF	170		
132 (F)	833088	TUBULAR HANDRAILING	LF	145		
133 (F)	833140	CONCRETE BARRIER (TYPE 26)	LF	145		
134 (F)	833142	CONCRETE BARRIER (TYPE 26 MODIFIED)	LF	145		
135	026319	CONCRETE BARRIER MARKER	EA	97		
136	044817	CONCRETE BARRIER (TYPE 60A MODIFIED)	LF	145		
137	BLANK					
138 (F)	044819	CONCRETE BARRIER (TYPE 736S MODIFIED)	LF	83		
139	044819	CONCRETE BARRIER (TYPE 60C MODIFIED)	LF	810		
140	839699	CONCRETE BARRIER (TYPE 60P)	LF	12		

**BID ITEM LIST**

**04-235624**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
141	839701	CONCRETE BARRIER (TYPE 60)	LF	360		
142	839703	CONCRETE BARRIER (TYPE 60C)	LF	2,610		
143 (F)	839727	CONCRETE BARRIER (TYPE 736 MODIFIED)	LF	20		
144 (F)	839738	CALIFORNIA ST-30 BRIDGE RAIL	LF	125		
145	840504	4" THERMOPLASTIC TRAFFIC STRIPE	LF	50,700		
146	840506	8" THERMOPLASTIC TRAFFIC STRIPE	LF	1,880		
147	840508	8" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 12-3)	LF	5,370		
148	840515	THERMOPLASTIC PAVEMENT MARKING	SQFT	200		
149	840526	4" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 17-7)	LF	780		
150	840655	PAINT TRAFFIC STRIPE (1-COAT)	LF	57,300		
151	840665	PAINT PAVEMENT MARKING (1-COAT)	SQFT	880		
152	850101	PAVEMENT MARKER (NON-REFLECTIVE)	EA	9,320		
153	850111	PAVEMENT MARKER (RETROREFLECTIVE)	EA	3,890		
154	860090	MAINTAINING EXISTING TRAFFIC MANAGEMENT SYSTEM ELEMENTS DURING CONSTRUCTION	LS	LUMP SUM	LUMP SUM	
155	860501	SIGN ILLUMINATION	LS	LUMP SUM	LUMP SUM	
156	026320	MODIFY TRAFFIC OPERATIONS SYSTEM	LS	LUMP SUM	LUMP SUM	
157	026321	MODIFY TRAFFIC OPERATIONS SYSTEM (STAGE CONSTRUCTION)	LS	LUMP SUM	LUMP SUM	
158	026923	SPECIES PROTECTION	LS	LUMP SUM	LUMP SUM	
159	BLANK					
160	028762	VIBRATION MONITORING	LS	LUMP SUM	LUMP SUM	

**BID ITEM LIST**

**04-235624**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
161	044818	CONCRETE BARRIER (TYPE 60C MODIFIED) (BRIDGE)	LF	125		
162	999990	MOBILIZATION	LS	LUMP SUM	LUMP SUM	

**TOTAL BID:**

**\$**

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