

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

OFFICE ENGINEER

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*Serious Drought.
Help save water!*

August 19, 2015

04-SM-92-14.4/16.3

04-3G4864

Project ID 0412000086

Addendum No. 2

Dear Contractor:

This addendum is being issued to the contract for CONSTRUCTION ON STATE HIGHWAY IN SAN MATEO COUNTY AT THE SAN MATEO-HAYWARD BRIDGE.

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 Thursday, September 17, 2015.

This addendum is being issued to revise the project plans, the *Notice to Bidders and Special Provisions*, and the *Bid* book.

Project plan sheets 1, 7, 8 and 9 are replaced and attached for substitution for the like-numbered sheets.

Project plan sheets 1A, 1B, 9A, 9B, 9C, 9D, 9E, 9F, and 9G are added and attached for addition to the project plans.

In the *Notice to Bidders*, the twelfth paragraph is replaced as follows:

"The estimated cost of the project is \$46,400,000."

In the *Special Provisions*, Section 1 is added as attached.

In the *Special Provisions*, Section 3, the second paragraph is deleted.

In the *Special Provisions*, Section 9 is added as attached.

In the *Special Provisions*, Section 12-5.02 is deleted.

In the *Special Provisions*, Section 14-11.08 is replaced as attached.

In the *Special Provisions*, Section 15 is added as attached.

Addendum No. 2
Page 2
August 19, 2015

04-SM-92-14.4/16.3
04-3G4864
Project ID 0412000086

In the Special Provisions, Section 55 is added as attached.

In the Special Provisions, Section 59 is replaced as attached.

In the Special Provisions, Section 75 is added as attached.

In the *Bid* book, in the "Bid Item List," Item 12 is replaced.

In the *Bid* book, in the "Bid Item List," Item 13 is deleted.

In the *Bid* book, in the "Bid Item List," Items 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24 and 25 are added.

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

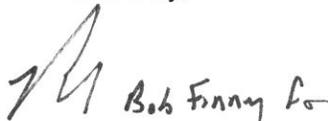
Inform subcontractors and suppliers as necessary.

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

http://www.dot.ca.gov/hq/esc/oe/project_ads_addenda/04/04-3G4864

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

1 GENERAL

Add to section 1-1.01:

Bid Items and Applicable Sections

Item code	Item description	Applicable section
029574	BIRD SPIKE	75

9 PAYMENT

Add to section 9-1.16C:

The following items are eligible for progress payment even if they are not incorporated into the work:

1. Miscellaneous bridge metal
2. Structural steel
3. Bird spikes

Replace "Reserved" in section 14-11.08 with:

14-11.08A General

Section 14-11.08 includes specifications relating to the disturbance of existing paint systems.

The existing paint system on bridge number 35-0054 contains lead and chromium. Any work that disturbs the existing paint system exposes workers to health hazards and produces:

1. Debris containing heavy metal in amounts that exceed the thresholds established in 8 CA Code of Regs and 22 CA Code of Regs. This debris is a Department-generated hazardous waste.
2. Toxic fumes when heated.

Grime and detritus already on the bridge before the start of work may also contain lead. Consider this grime and detritus part of the existing paint system. The Department is the hazardous waste generator if the Engineer accepts waste-characterization test results demonstrating that the debris is a hazardous waste.

Contain all debris produced when the existing paint system is disturbed. If containment measures are inadequate to contain and collect debris produced when the existing paint system is disturbed, stop the work and do not perform additional work until:

1. Revised debris containment and collection plan has been authorized
2. Released material has been collected and contained

Handle, store, transport, and dispose of debris produced when the existing paint system is disturbed under applicable federal, state, and local hazardous waste laws.

14-11.08B Submittals

14-11.08B(1) General

Not Used

14-11.08B(2) Debris Containment and Collection Plan

Submit a debris containment and collection plan. The plan must:

1. Identify materials, equipment, and methods to be used when the existing paint system is disturbed
2. Include shop drawings of:
 - 2.1. Containment systems complying with section 59-2.03B(3)
 - 2.2. Components that provide ventilation, air movement, and visibility for worker safety
3. Include the name and location of the analytical laboratory that will perform the analyses
4. Identify the hazardous waste transporter that will haul the debris and provide documentation of
 - 4.1 Current DTSC registration
 - 4.2 Compliance with the CA Highway Patrol Biennial Inspection of Terminals Program
5. Include the name and location of the disposal facility that will accept the hazardous waste

Allow 20 days for review.

If required, submit a revised debris containment and collection plan.

14-11.08B(3) Lead Compliance Plan

Submit a lead compliance plan under section 7-1.02K(6)(j)(ii).

14-11.08B(4) Air Monitoring Reports

Air monitoring reports, including test results for samples taken after corrective action, must be prepared by the CIH and submitted:

1. Verbally within 48 hours after sampling
2. As an informational submittal within 5 days after sampling

Air monitoring reports must include:

1. Date and location of sample collection, sample number, contract number, bridge number, full name of the structure, and District-County-Route-Post mile
2. Name and address of the certified laboratory that performed the analyses
3. Chain of custody documentation
4. List of emission control measures in place when air samples were taken
5. Air sample results compared to the appropriate permissible exposure limit (PEL)
6. Corrective action recommended by the CIH to ensure exposure to airborne metals outside the containment systems and work areas is within specified limits
7. Signature of the CIH who reviewed the data and made recommendations

14-11.08B(5) Soil Sampling Results for Debris Containment Verification

Not Used

14-11.08B(6) Waste-Characterization Test Results

Submit waste-characterization test results for the debris and chain of custody documentation before:

1. Requesting the Engineer's signature on the disposal facility's waste profile document
2. Requesting a generator's EPA Identification Number
3. Removing the debris from the site

14-11.08B(7) Request for U.S. Environmental Protection Agency Identification Number

Submit a request for the generator's EPA Identification Number when the Engineer accepts waste-characterization test results documenting that the debris is a hazardous waste.

14-11.08B(8) Disposal Documentation

Submit documentation from the receiving landfill or recycling facility confirming proper disposal within 5 business days of transporting debris from the project.

14-11.08C Safety and Health Provisions

14-11.08C(1) General

Comply with 8 CA Code of Regs, including § 1532.1.

14-11.08C(2) Protective Work Clothing and Washing Facilities

Supply clean protective work clothing for 5 Department personnel:

1. Whenever there is possible exposure to heavy metals or silica dust
2. During application of paint undercoats

Replace protective work clothing as needed.

Protective work clothing and washing facilities must be inspected and authorized for use by Department personnel before starting any activity with the potential for lead exposure.

Protective work clothing remains your property upon completion of the Contract.

14-11.08D Work Area Monitoring

14-11.08D(1) General

Monitor the ambient air in and around the work area to verify the effectiveness of the containment system. Work area monitoring includes:

1. Collecting, analyzing, and reporting air test results
2. Recommending corrective action when specified air concentrations are exceeded

Collect air samples at locations designated by the Engineer.

14-11.08D(2) Air Monitoring

Air monitoring must be performed under the direction of a CIH.

Collect and analyze air samples to detect lead under the National Institute of Occupational Safety and Health (NIOSH) Method 7082 using a detection limit equal to $0.05 \mu\text{g}/\text{m}^3$ or less. Collect and analyze air samples to detect other metals under NIOSH Method 7300 using a detection limit equal to 1 percent or less of the appropriate PEL specified by Cal/OSHA. You may use alternative methods of sampling and analysis with equivalent detection limits.

Concentrations of airborne metals outside the containment systems and work areas must not exceed any of the following:

1. An average lead concentration of $1.0 \mu\text{g}/\text{m}^3$ of air over 24 hours, in compliance with section 11-1-302 of the Bay Area Air Quality Management District's Regulation 11, Hazardous Pollutants, Rule 1, Lead
2. 10 percent of the action level specified for lead by 8 CA Code of Regs §1532.1
3. 10 percent of the appropriate PELs specified for other metals by Cal/OSHA

Collect air samples daily during work activities that disturb the existing paint system. Air samples must be analyzed within 48 hours by a facility accredited by the Environmental Lead Laboratory Accreditation Program of the American Industrial Hygiene Association. If concentrations of airborne metals exceed allowable levels, modify the containment system or work activities to prevent further release of metals. If the CIH recommends corrective action, collect and analyze additional samples after implementing the corrective action unless directed otherwise.

14-11.08E Debris Management

14-11.08E(1) Debris Storage

Debris produced when the existing paint system is disturbed must not be temporarily stored on the ground. Before the end of each work shift, remove accumulated debris from the containment system. Store the debris as a hazardous waste.

14-11.08E(2) Debris Waste Characterization

Perform waste characterization testing on the debris as required by the disposal facility including:

1. Total lead and chromium by US EPA Method 6010B
2. Soluble lead and chromium by CA Waste Extraction Test (CA WET)
3. Soluble lead and chromium by Toxicity Characteristic Leaching Procedure (TCLP)

From the first 220 gal of hazardous waste or portion thereof, if less than 220 gal of hazardous waste are produced, a minimum of 4 randomly selected samples must be taken and analyzed individually. Samples must not be composited. From each additional 880 gal of hazardous waste or portion thereof, if less than 880 gal are produced, a minimum of 1 additional random sample must be taken and analyzed.

Use chain of custody procedures consistent with chapter 9 of US EPA Test Methods for Evaluating Solid Waste, Physical/Chemical Methods (SW-846) while transporting samples from the job site to the analytical laboratory. The laboratory must be certified by the State Water Resources Control Board (SWRCB) Environmental Laboratory Accreditation Program (ELAP) for all analyses to be performed.

Before performing the analyses, the laboratory must homogenize each sample. The homogenization process must not include grinding of the samples. A sample aliquot must be:

1. Obtained in an amount large enough for all analyses to be performed
2. Homogenized a 2nd time
3. Used for the total and soluble analyses after the 2nd homogenization

14-11.08E(3) Debris Transport and Disposal

14-11.08E(3)(a) General

For bidding purposes, assume the debris is a hazardous waste.

14-11.08E(3)(b) Hazardous Waste Debris

After the Engineer accepts the waste-characterization test results, dispose of the debris:

1. Within 90 days after accumulating 220 lb of debris
2. At an appropriately permitted Class I facility located in California

Make all arrangements with the operator of the disposal facility.

If less than 220 lb of hazardous waste is generated in total, dispose of it within 90 days after the start of accumulation of the debris.

Use a hazardous waste manifest and a transporter using vehicles with current DTSC registration certificate when transporting hazardous waste. The Engineer provides the generator's EPA Identification Number and signs all manifests as the hazardous waste generator within 2 business days of accepting the waste-characterization test results and receiving your request for the generator's EPA Identification Number.

14-11.08E(3)(c) Nonhazardous Waste Debris

If waste characterization test results demonstrate that the debris is a nonhazardous waste and the Engineer accepts the results, dispose of the debris at an appropriately permitted CA Class II or CA Class III facility or recycle it. Make all arrangements with the operator of the disposal facility and comply with the facility's requirements.

You may dispose of nonhazardous debris at a facility equipped to recycle the debris if you make all arrangements with the recycling facility's operator and perform any facility-required testing of the debris.

The Department does not adjust payment for disposal of nonhazardous debris at a recycling facility.

15 EXISTING FACILITIES

Add to section 15-4.01C(1):

Remove the following portions of bridges:

Bridge no.	Description of work
35-0054	Remove pier ladders, handrails, platform ladders, platform railings, access door hinges, structural steel bolts where shown.

Add to section 15-4.01C(3)(a):

Where structural steel bolts are shown to be removed, not more than a total of 100 structural steel bolts can be removed at one time.

At a splice location, no more than half the bolts or 100 bolts, whichever number is lower, can be removed at any one time.

Clean and paint the bolt holes under section 59 and install new structural steel bolts under section 55 before removing any more structural steel bolts.

DIVISION VI STRUCTURES
55 STEEL STRUCTURES

Add to section 55-1.02B(6)(a):

Zinc coat the HS steel fastener assemblies and other fasteners attached to structural steel. If direct tension indicators are used, all components of these fastener assemblies must be zinc coated by mechanical deposition.

59 PAINTING

Add to section 59-2.01A:

Clean and paint the structures shown in the following table with the coating system specified:

Bridge name and number	Work description	Coating system
San Mateo - Hayward Bridge Bridge No. 35-0054	Clean and paint all steel surfaces of the existing bridge to the limits shown.	State Specification PB copper finish
	Spot blast clean and paint undercoat on portions of the existing bridge, including all steel surfaces of bearing assemblies.	State Specification PB aluminum finish
	Paint pier numbers where shown.	

Clean and paint the following galvanized steel surfaces under section 59-3:

1. Existing conduits where shown
2. New HS steel fastener assemblies

Replace "Reserved" in section 59-2.01C(2) with:

Submit proof of each required SSPC-QP certification as specified in section 8-1.04C. Required certifications are as follows:

1. SSPC-QP 1
2. SSPC-QP 2, Category A

Add to section 59-2.03B(2)(a):

Clean inside surfaces of bolt holes under SSPC-SP 1 and remove visible rust.

Replace the 2nd paragraph of the RSS for section 59-2.03B(3)(a) with:

The containment system must be ventilated containment system.

Replace the 4th and 5th paragraphs of the RSS for section 59-2.03B(3)(b)(ii) with:

The minimum total design load for the ventilated containment system must consist of the sum of the dead and live vertical loads and wind loads.

Dead, live, and wind loads are as follows:

1. Dead load must consist of the actual load of the ventilated containment system
2. Live loads for bridges with only spot blast cleaning work must consist of:
 - 2.1. Uniform load of at least 25 psf applied over the supported area
 - 2.2. Moving concentrated load of 1000 lb to produce maximum stress in the main supporting elements of the ventilated containment system
3. Live loads for bridges with 100 percent blast cleaning to bare metal must consist of:
 - 3.1. Uniform load of at least 45 psf, which includes 20 psf of sand load, applied over the supported area
 - 3.2. Moving concentrated load of 1000 lb to produce maximum stress in the main supporting elements of the ventilated containment system
4. Uniform wind velocity pressure of 10 psf applied across the ventilated containment systems.

Add to section 59-2.03C(2)(a):

Coat inside surfaces of bolt holes cleaned under SSPC-SP 1 with 1 coat of organic zinc primer after applying the undercoat. Protect the adjacent undercoated surfaces from the organic zinc primer.

Add to section 59-2.03C(4)(a) of the RSS for section 59-2.03C:

Where copper finish paint is shown, the State Specification PB copper finish coating system for existing structural steel must comply with the requirements shown in the following table:

State Specification PB Copper Finish Coating System

Surface	Description	State Specification Coating	Dry film thickness (mils)
Surfaces cleaned to bare metal ^a :	1st undercoat	PB 201	2-3
	2nd undercoat	PWB 145	2-3
	3rd undercoat	PWB 146	2-3
	1st finish coat	PWB 168D	1.5-3
	2nd finish coat	PWB 168D	1.5-3
	Total thickness, all coats	--	9-15
Existing painted surfaces to be topcoated:	Undercoat	PWB 146	2-3
	1st finish coat	PWB 168D	1.5-3
	2nd finish coat	PWB 168D	1.5-3
	Total thickness, new coats	--	5-9

^aIncludes locations of spot blast cleaning

Where aluminum finish paint is shown, the State Specification PB aluminum finish coating system for existing structural steel must comply with the requirements shown in the following table:

State Specification PB Aluminum Finish Coating System

Surface	Description	State Specification Coating	Dry film thickness (mils)
Surfaces cleaned to bare metal ^a :	1st undercoat	PB 201	2-3
	2nd undercoat	PWB 145	2-3
	3rd undercoat	PWB 146	2-3
	1st finish coat	PWB 161	1.5-3
	2nd finish coat	PWB 162	1.5-3
	Total thickness, all coats	--	9-15
Existing painted surfaces to be topcoated:	Undercoat	PWB 146	2-3
	1st finish coat	PWB 161	1.5-3
	2nd finish coat	PWB 162	1.5-3
	Total thickness, new coats	--	5-9

^aIncludes locations of spot blast cleaning

Replace "Reserved" in section 59-2.03C(4)(b) of the RSS for section 59-2.03C with:

Apply the 2nd finish coat after the 1st finish coat has dried 12 hours unless authorized.

**Replace section 59-3 with:
59-3 PAINTING GALVANIZED SURFACES**

59-3.01 GENERAL

Section 59-3 includes specifications for painting galvanized metal surfaces.

59-3.02 MATERIALS

The coating system for galvanized steel surfaces must comply with the requirements shown in the following table:

Coating System			
Surface	Description	Coating	Dry film thickness (mils)
Existing galvanized surfaces cleaned under SSPC-SP2:	Undercoat ^a	Organic zinc-rich primer	1-3
	1st finish coat	State Specification PWB 161A	1.5-3
	2nd finish coat	State Specification PWB 162A	1.5-3
	Total thickness, all coats	--	4-9
New and existing galvanized surfaces to be topcoated:	1st finish coat	161A	2-4
	2nd finish coat	162A	2-4
	Total thickness, new coats	--	4-8

59-3.03 CONSTRUCTION

Clean galvanized surfaces by pressure washing or steam cleaning.

Roughen galvanized areas after cleaning by abrasive blasting. Use an abrasive no larger than 30 mesh.

Do not remove galvanizing unless the surface has rust or mill scale. Remove loose rust or mill scale under SSPC-SP2.

Feather edges of remaining paint. Do not use pneumatic chipping hammers unless authorized.

Unless authorized, apply the undercoat or finish coat the same day cleaning is performed. Unless authorized, do not apply the next coat unless the previous coat has dried at least 12 hours.

59-3.04 PAYMENT

Not Used

DIVISION VIII MISCELLANEOUS CONSTRUCTION

75 MISCELLANEOUS METAL

Add to the list in the 2nd paragraph of section 75-1.03A:

6. Pier ladders, platform ladders
7. Handrails, platform railings
8. Access door hinges
9. Hinge box screens

Replace section 75-1.03J with:

75-1.03J BIRD SPIKES

Bird spikes must be commercial quality, stainless steel, all-weather install, and glue-down variety.

Thoroughly clean the surface areas to receive the bird spikes and install the bird pikes per manufacturer instructions.

Replace the 1st paragraph of section 75-1.06 with:

Except for final-pay-item miscellaneous metal materials and bird spikes, miscellaneous metal materials are determined from scale weighings.

BID ITEM LIST
04-3G4864

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
1	070030	LEAD COMPLIANCE PLAN	LS	LUMP SUM	LUMP SUM	
2	080050	PROGRESS SCHEDULE (CRITICAL PATH METHOD)	LS	LUMP SUM	LUMP SUM	
3	090105	TIME-RELATED OVERHEAD (LS)	LS	LUMP SUM	LUMP SUM	
4	120090	CONSTRUCTION AREA SIGNS	LS	LUMP SUM	LUMP SUM	
5	120100	TRAFFIC CONTROL SYSTEM	LS	LUMP SUM	LUMP SUM	
6	128652	PORTABLE CHANGEABLE MESSAGE SIGN (LS)	LS	LUMP SUM	LUMP SUM	
7	130100	JOB SITE MANAGEMENT	LS	LUMP SUM	LUMP SUM	
8	130200	PREPARE WATER POLLUTION CONTROL PROGRAM	LS	LUMP SUM	LUMP SUM	
9	141110	WORK AREA MONITORING (BRIDGE)	LS	LUMP SUM	LUMP SUM	
10	590106	CLEAN STRUCTURAL STEEL (EXISTING BRIDGE)	LS	LUMP SUM	LUMP SUM	
11	590111	PAINT STRUCTURAL STEEL (EXISTING BRIDGE)	LS	LUMP SUM	LUMP SUM	
12	590135	SPOT BLAST CLEAN AND PAINT UNDERCOAT	SQFT	864,990		
13	BLANK					
14	130570	TEMPORARY COVER	SQYD	950		
15	130620	TEMPORARY DRAINAGE INLET PROTECTION	EA	3		
16	130640	TEMPORARY FIBER ROLL	LF	920		
17	130710	TEMPOARY CONSTRUCTION ENTRANCE	EA	2		
18	130730	STREET SWEEPING	LS	LUMP SUM	LUMP SUM	
19	129000	TEMPORARY RAILING (TYPE K)	LF	200		
20	157560	BRIDGE REMOVAL (PORTION)	LS	LUMP SUM	LUMP SUM	

BID ITEM LIST
04-3G4864

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
21 (F)	550102	STRUCTURAL STEEL (BRIDGE)	LB	53,500		
22 (F)	750501	MISCELLANEOUS METAL (BRIDGE)	LB	26,000		
23	029574	BIRD SPIKE	LF	16,500		
24	800103	TEMPORARY FENCE (TYPE CL-6)	LF	300		
25	999990	MOBILIZATION	LS	LUMP SUM	LUMP SUM	

TOTAL BID

FOR BID ITEMS:

\$

TOTAL BID

FOR TIME:

	X	\$10,500.00	=	\$	
WORKING DAYS BID		COST PER DAY			
(Do not bid less than 850 days and not more than 1,250 Days)					