DEPARTMENT OF TRANSPORTATION DIVISION OF ENGINEERING SERVICES OFFICE ENGINEER, MS 43 1727 30<sup>TH</sup> STREET P.O. BOX 168041 SACRAMENTO, CA 95816-8041 FAX (916) 227-6214 TTY (916) 227-8454



Flex your power! Be energy efficient!

ARNOLD SCHWARZENEGGER, Governor

#### \*\* WARNING \*\* WARNING \*\* WARNING \*\* WARNING \*\* This document is intended for informational purposes only.

Users are cautioned that California Department of Transportation (Department) does not assume any liability or responsibility based on these electronic files or for any defective or incomplete copying, exerpting, scanning, faxing or downloading of the contract documents. As always, for the official paper versions of the bidders packages and non-bidder packages, including addenda write to the California Department of Transportation, Plans and Bid Documents, Room 0200, P.O. Box 942874, Sacramento, CA 94272-0001, telephone (916) 654-4490 or fax (916) 654-7028. Office hours are 7:30 a.m. to 4:15 p.m. When ordering bidder or non-bidder packages it is important that you include a telephone number and fax number, P.O. Box and street address so that you can receive addenda. December 29, 2005

04-SF-80-13.2/13.9 04-0120F4

Addendum No. 6

Dear Contractor:

This addendum is being issued to the contract for construction on State highway in SAN FRANCISCO COUNTY IN SAN FRANCISCO FROM 0.6 KM TO 1.3 KM EAST OF THE YERBA BUENA TUNNEL EAST PORTAL.

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 February 1, 2006.

This addendum is being issued to revise the Project Plans, the Notice to Contractors and Special Provisions and provide an Information Handout.

This addendum is the last anticipated revision to the contract.

Project Plan Sheets 13 and 526 are revised. Half-sized copies of the revised sheets are attached for substitution for the like-numbered sheets.

In the Special Provisions, Section 5-1.13, "PROJECT INFORMATION," is revised as attached.

In the Special Provisions, Section 5-1.14, "INTEGRATED SHOP DRAWINGS," the third and fourth paragraphs are replaced by the following paragraphs:

"For Pier W2 cap beam, the Contractor shall assume the use of headed bar reinforcement for all main reinforcement and shear reinforcement instead of the hooks and stirrups shown on plans.

Prior to commencing work on the ISD, the Contractor (including any sub-consultants hired to work on the ISD) shall schedule and attend a meeting with the Engineer to discuss the ISD work. ISD status meetings shall be held regularly, or as required by the Engineer, to discuss the progress of the ISD work.

The Contractor shall utilize commercially available software that checks for interference in three dimensions to identify any conflicts in the planned positions of embedded items in the ISD. Prior to acquiring the software, the Contractor shall submit to the Engineer the product name and application features of the software for review and approval. The software shall be compatible with the computer-aided drafting (CAD) software used to develop the ISD. Bar reinforcement shall be shown with deformed diameters. The Contractor shall develop CAD files using different layers for each type of embedded item such that the sequence of construction of the member or area being detailed can be shown."

Addendum No. 6 Page 2 December 29, 2005

04-SF-80-13.2/13.9 04-0120F4

In the Special Provisions, Section 5-1.14, "INTEGRATED SHOP DRAWINGS," the ninth paragraph through the twelfth paragraph are revised as follows:

"The Contractor's proposed changes in the ISD shall be applied to elements of the Pier W2 cap beam and Pier E2 cross beam in the following sequence of item adjustments as necessary:

## A. Pier W2 Cap Beam:

- 1. Non structural embedded items
- 2. Bar reinforcing steel
- Vertical prestressing ducts
  Transverse prestressing ducts
- 5. Continuity prestressing ducts
- 6. High strength anchor rods
- 7. Cable tie-down cable pipe sleeves
- B. Pier E2 Cross Beam:
  - Nonstructural embedded items 1.
  - 2. Bar reinforcing steel
  - 3. Prestressing ducts
  - Shear key anchor bolts 4.
  - 5. Bearing anchor bolts

For conflicts involving bar reinforcing steel that cannot be resolved by adjusting nonstructural embedded items, the Contractor shall apply the following sequence of adjustments in order as necessary:

- Adjust reinforcement spacing. A.
- B. Bundle bars.
- C. Relocate splices.
- D. Change reinforcement size and number. Reduction of the total reinforcement area will not be permitted, unless otherwise approved by the Engineer.
- E. Change reinforcement shape.
- F. Move embedded inserts.
- G. Cut/trim reinforcement.
- H. Combination of all the above.

Attention is directed to "Working Drawing Campus," of these special provisions. The Working Drawing Campus and ISD status meetings shall be used to facilitate discussion and resolution of conflicts identified in the ISD.

The ISD to be submitted to the Engineer shall include the following:

- Baseline/Conflict Identification ISD: Three sets of the ISD corresponding to the details as shown on the A. plans without any modifications. These ISD shall indicate all conflicts including locations of the conflicts and items involved in the conflicts.
- B. Conflict List: Three complete lists of conflicts with descriptions and the Contractor's proposed modifications for each conflict.
- Proposed Modifications ISD: Three sets of the ISD corresponding to the details as shown on the plans with С. incorporation of the Contractor's proposed modifications. These ISD shall indicate that all previous identified conflicts have been resolved and concrete cover requirements as shown on the plans are met.
- D. ISD shall be 559 mm x 864 mm in size and shall use colored ink to differentiate each type of embedded items. For each portion of the structure, ISD shall include a minimum of six isometric views. Any two isometric views shall be 90 degrees apart.
- E. Three copies of the ISD in CAD file format on compact discs or tape for use by the Engineer."

Addendum No. 6 Page 3 December 29, 2005

04-SF-80-13.2/13.9 04-0120F4

In the Special Provisions, Section 5-1.25, "PAYMENTS," in the second paragraph, Item F is revised as follows:

F. Document Management System \$880,000

In the Special Provisions, Section 5-1.28, "GENERAL MIGRATORY BIRD PROTECTION," the fifth and sixth paragraphs are revised as follows:

"When evidence of migratory bird nesting that may be adversely affected by construction activities is discovered, or when birds are injured or killed as a result of construction activities, the Contractor shall immediately stop work in the general area of the nesting and notify the Engineer. Such work shall not resume until the Engineer provides written notification that work may begin in this location.

The Contractor shall use exclusion devices or remove and dispose of partially constructed and unoccupied nests of migratory birds on a regular basis to prevent their occupation. Nesting prevention measures performed by the Contractor will be paid for as extra work as provided in Section 4-1.03D, "Extra Work," of the Standard Specifications."

In the Special Provisions, Section 5-1.29 "ENVIRONMENTAL WORK RESTRICTIONS," subsection "SPECIES OF CONCERN," subsection "California Sea Lion, Harbor Seal and Gray Whale," the first paragraph is revised as follows:

"Prior to driving piles greater than or equal to 1.5 meters in diameter, a preliminary 500-meter radius safety zone for pinnipeds (harbor seals and California sea lions) will be established around the pile-driving site. The Department of Transportation will establish and conduct monitoring of the safety zone. Once pile-driving begins, the safety zone radius for pinnipeds will then be enlarged or reduced by the Department of Transportation, depending on monitored sound pressure levels. A safety zone for gray whales will also be established by the Department of Transportation during the gray whale migration season from December 1 through May 31."

In the Special Provisions, Section 5-1.39, "INSURANCE," the second paragraph is revised as follows:

"The first paragraph in Section 7-1.12B (4)(b), "Liability Limits/Additional Insureds," of the Standard Specifications is revised as follows:

The limits of liability shall be at least:

- A. \$2,000,000 for each occurrence (combined single limit for bodily injury and property damage).
- B. \$2,000,000 aggregate for products-completed operations.
- C. \$4,000,000 general aggregate. This general aggregate limit shall apply separately to the Contractor's work under this Contract.
- D. \$50,000,000 umbrella or excess liability. The umbrella or excess policy shall contain a clause stating that it takes effect (drops down) in the event the primary limits are impaired or exhausted."

In the Special Provisions, Section 5-1.395, "CONTRACTOR'S RESPONSIBILITY FOR THE WORK AND MATERIALS," is added after Section 5-1.39, "INSURANCE," as attached.

In the Special Provisions, Section 10-1.10, "COOPERATION," is revised as attached.

In the Special Provisions, Section 10-1.16, "WORKING DRAWING CAMPUS," is revised as attached.

Addendum No. 6 Page 4 December 29, 2005

04-SF-80-13.2/13.9 04-0120F4

In the Special Provisions, Section 10-1.20, "DOCUMENT MANAGEMENT SYSTEM," the first paragraph is revised as follows:

"The Contractor shall provide the complete computer system (hardware and software), including one system for the State's exclusive possession and use, specifically capable of a Document Management System that is the latest version of "PMIV" by Integral Vision to facilitate efficient document management and control.

Arrangements have been made to ensure that any successful bidder can obtain the "PMIV" from the vendor:

Integral Vision 3176 Lucas Drive, Suite 200 Lafayette, CA 94549 Telephone: (925) 284-8302 - Fax: (925) 284-1905 info@integralvision.com

The price quoted by the vendor for the "PMIV" is \$800,000 including sales tax. The above price will be firm for orders placed on or before July 31, 2006 provided delivery is accepted within 90 days after the order is placed."

In the Special Provisions, Section 10-1.20, "DOCUMENT MANAGEMENT SYSTEM," subsection "DATA DELIVERY REQUIREMENTS," the table titled, "DOCUMENT MANAGEMENT SYSTEM COST BREAK-DOWN," is revised as follows:

ITEM	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	VALUE	AMOUNT
PC-1	Computer Hardware - Server	EA	2		
NC-1	Network Copier Hardware	EA	2		
NC-2	Network Copier Support (excluding paper and staples)	МО	144		
SW-1	Computer Software - Server Operating System Software	EA	2		
SW-2	Computer Software for Document Management System for server	EA	2		
SW-3	Computer Software for DMS for clients – concurrent users	EA	80		
SW-4	Computer Software for DMS for clients – Annual Maintenance	EA	400		

## DOCUMENT MANAGEMENT SYSTEM COST BREAK-DOWN Contract No. 04-0120F4

Addendum No. 6 Page 5 December 29, 2005

04-SF-80-13.2/13.9 04-0120F4

ITEM	ITEM DESCRIPTION	UNIT	ESTIMATED QUANTITY	VALUE	AMOUNT
SW-5	Software Technical Support for Server/Client for DMS	Hrs	1440		
SW-7	Add-on Software – PDF Split	EA	12		
SW-8	Add-on Software – PDF doc	EA	80		
TR-1	Computer Software Training Sessions – <sup>1</sup> / <sub>2</sub> Day	EA	20		

# TOTAL

In the Special Provisions, Section 10-1.41, "TEMPORARY TOWERS," subsection "TEMPORARY TOWER DESIGN," the first paragraph is revised as follows:

"Temporary tower structural system shall consist of ductile steel braced frames with welded or bolted connections used for field erection splices. Isolation may be used as part of the structural system to reduce the seismic demands. However, stoppers shall be used to limit relative displacement beyond the maximum design relative displacement. The isolation shall be designed to carry all other load cases elastically. Welded connections performed in the field or in the Contractor's fabrication facilities shall be designed in accordance with AISC or API RP2A for hot rolled sections and steel tubular sections, respectively. The Contractor shall provide 2 copies of the stated codes to the Engineer. Timber walkways and decks will be permitted."

In the Special Provisions, Section 10-1.41, "TEMPORARY TOWERS," subsection "TEMPORARY TOWER DESIGN," subsection "Seismic Design Loads," the fourth paragraph is revised as follows:

"Modal spectral analysis with sufficient number of modes to capture at least 90% of the mass of the structure shall be used to establish the peak seismic displacements. To establish the ultimate limit state, a longitudinal and transverse static push-over analyses shall be used to verify the stability of the temporary tower and its ductility. Tower vertical load carrying members and connections shall remain elastic. Structural steel bracing members and piles may yield. The temporary tower structural system shall have a minimum displacement ductility of 2. Pushover analyses of the temporary towers shall be carried out based upon displaced shapes defined, at a minimum, as the primary transverse and longitudinal mode shapes. The mode shapes shall be determined from modal analyses of the temporary towers and the supported bridge superstructure."

In the Special Provisions, Section 10-1.59, "STEEL STRUCTURES," subsection "FABRICATION," subsection "Fabrication/Erection Procedure and Mock-Ups," the fourth paragraph is revised as follows:

"The Contractor shall prepare full-scale steel mock-ups of the following details to demonstrate the proposed fabrication procedure and verify the inspectability of each weld. The Contractor may propose alternative steel grade for preparation of the mock-ups, as approved by the Engineer.

- A. Tower Diaphragm Type 3B
- B. Tower lift erection splice (For each alternative proposed)
- C. Deck plate section (For welding requirements of closed ribs to deck plate, see "Welding of Closed Ribs to Box Shell Plates" below.)
- D. Tower section"

Addendum No. 6 Page 6 December 29, 2005

04-SF-80-13.2/13.9 04-0120F4

In the Special Provisions, Section 10-1.59, "STEEL STRUCTURES," subsection "FABRICATION," subsection "Fabrication/Erection Procedure and Mock-Ups," the sixth paragraph is revised as follows:

"For each mock-up, the Contractor shall prepare a written fabrication and welding sequence. The fabrication and welding sequence shall be submitted for review by the Engineer, and approval shall be given before the mock-up is fabricated. The Engineer shall witness all fit-up and welding for each mock-up."

In the Special Provisions, Section 10-1.59, "STEEL STRUCTURES," subsection "FABRICATION," subsection "Fabrication/Erection Procedure and Mock-Ups," in the seventh paragraph, Item B-1 is revised as follows:

"1. A crack, as defined by AWS D1.5, is found."

In the Special Provisions, Section 10-1.59, "STEEL STRUCTURES," subsection "FABRICATION," subsection "Flame, Plasma and Arc Cutting," is revised as follows:

### "Flame, Plasma and Arc Cutting

All thermally cut edges in SPCMs and steel grades of grade 345 and greater shall be ground to remove dross and slag and shall conform to the requirements of AWS D1.5, Section 3.2 or 12.10, as appropriate. The hardness of plate cut edges shall not exceed the maximum hardness of adjacent base metal, exclusive of mill scale. Excessively hard plate cut edges shall be conditioned by grinding. The treatment of cut edges for other grades shall conform to the requirements of AWS D1.5."

In the Special Provisions, Section 10-1.59, "STEEL STRUCTURES," subsection "WELDING PROCEDURE QUALIFICATION," the second paragraph is revised as follows:

"The Charpy V-Notch impact toughness requirements for weld metal are stipulated above under "Materials" or in AWS D1.5 if not specified therein. Charpy V-Notch impact tests shall also be taken from the coarse grain heat affected zone (HAZ) for steels with HAZ toughness requirements stipulated above under "Materials.""

In the Special Provisions, Section 10-1.59, "STEEL STRUCTURES," subsection, "INSPECTION AND TESTING," the non-destructive testing table in the fifth paragraph is revised as attached.

In the Special Provisions, Section 10-1.59, "STEEL STRUCTURES," subsection "INSPECTION AND TESTING," in the "Notes" following the non-destructive testing table in the fifth paragraph, item (a) of Note 9 is revised as follows:

"(a) Minimum weld size, excluding reinforcement, is increased by a minimum of 5 mm over that required by the contract plans; and the remaining root face still satisfies minimum requirement of the standard weld joint detail in AWS D1.5;"

Addendum No. 6 Page 7 December 29, 2005

04-SF-80-13.2/13.9 04-0120F4

In the Special Provisions, Section 10-1.59, "STEEL STRUCTURES," subsection "FIELD WELDING," the seventh paragraph is revised as follows:

"The following shall apply to all field welding:

The Contractor shall provide suitable enclosures to permit field welding during inclement weather, which includes local wind speeds in the vicinity of the weld exceeding that specified in AWS D1.5, or 30 kilometer per hour, whichever is less. Field welds for the tower, box girder and crossbeams shall be performed in suitable enclosures that protect the weld area from wind, rain and other deleterious environmental exposure, as approved by the Engineer. Provisions shall be made to control atmospheric conditions inside the enclosures with limits suitable for field welding in accordance with the requirements of AWS D1.5 and "Welding" of these special provisions."

In the Special Provisions, Section 10-1.59, "STEEL STRUCTURES," subsection "FIELD WELDING," in the last paragraph, Items "C" and "E" are revised and Items "H" and "I" are added after Item "G" as follows:

- "C. For welds with required preheat temperatures greater than 65° C, and for all tower erection welds, preheat temperatures shall be achieved and maintained using electric resistance heating bands for the entire length of the weld. The heaters shall be controlled by attached thermocouples at spacing not exceeding 2 m. For these welds, the minimum preheat temperature shall be maintained continuously from beginning to three hours after the completion of the entire weld, even if welding is interrupted.
- E. The final external weld surface shall be ground smooth and flush. The direction of final grinding marks shall be parallel to the axis of the tower or bridge.
- H. For the erection of the tower shafts, spacers or temporary backing within the weld can be used for fitup of backgouged welds where the root opening exceeds 6 mm, provided the spacer conforms to the same specification as the plate being welded, is ground to bright metal before installing, and is completely removed during backgouging.
- I. The minimum preheat and interpass temperature shall conform to AWS D1.5, Section 12.14 for welding consumables that are not certified H2 or H4."

In the Special Provisions, Section 10-1.60, "CABLE SYSTEM," subsection "MATERIALS AND FABRICATION," subsection "Shop Prefabricated Parallel Wire Strand (PWS)," the fourth paragraph is revised as follows:

"Across the saddles, where curvature is significant, the parallel wire strands shall be formed to the appropriate radius, and strand clamps applied as necessary to maintain the wire alignment and prevent subsequent wire longitudinal slippage during erection. Alternatively, additional restraints shall be applied to prevent localized wire bulging after the erection of each strand. The strand clamps or restraints shall be removed at suitable intervals during the strand erection program. The strand clamps or restraints shall not damage the PWS wires."

Addendum No. 6 Page 8 December 29, 2005

04-SF-80-13.2/13.9 04-0120F4

In the Special Provisions, Section 10-1.63, "TRAVELER SCAFFOLDS," subsection "TRAVELER SCAFFOLD MECHANICAL," after subsection "Codes," a new subsection, "Sole Source Supplier" is added as follows:

#### "Sole Source Supplier

The piston motor driven trolleys, the passive trolleys, and the brake trolleys shall be obtained from the following manufacturer:

VENDOR ADDRESS AND PHONE NUMBER
ELECT AIR
4385 EAST LOWELL STREET
ONTARIO, CA 91761-2228
TEL: 909-390-0770
FAX: 800-390-0776

The unit prices quoted by the supplier for the trolley items are as follows:

ATET-MR3/05065B	\$16,101.98 each
BrkTrolley/03003B	\$5,882.87 each
BTP-MR3-6/04028B	\$3,772.93 each

The prices quoted are effective for all orders placed on or before 6/30/2006, provided delivery is accepted within 112 days after the order is placed. The FOB location is Seattle, Washington. The above prices include freight, insurance, technical advice, inspection by a qualified representative of the manufacturer during installation and a final inspection of the installed trolleys, but do not include taxes.

The total price will be increased 5% per year for each year thereafter through 2011, provided delivery is accepted within 112 days after the order is placed."

To Proposal and Contract book holders:

An Information Handout titled, "TEMPORARY TOWER DESIGN EXAMPLE" is provided via the website: www.dot.ca.gov/dist4/sasoutreach/.

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 CONTRACTORS section of the Notice to Contractors and Special Provisions.

Indicate receipt of this addendum by filling in the number of this addendum in the space provided on the signature page of the proposal.

Submit bids in the Proposal and Contract book you now possess. Holders who have already mailed their book will be contacted to arrange for the return of their book.

Inform subcontractors and suppliers as necessary.

Addendum No. 6 Page 9 December 29, 2005

04-SF-80-13.2/13.9 04-0120F4

This office is sending this addendum by UPS overnight mail to Proposal and Contract book holders to ensure that each receives it. A copy of this addendum isavailable for the contractor's use on the Internet Site:

## http://www.dot.ca.gov/hq/esc/oe/weekly\_ads/addendum\_page.html

If you are not a Proposal and Contract 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,

ORIGINAL SIGNED BY

REBECCA D. HARNAGEL, Chief Office of Plans, Specifications & Estimates Office Engineer

Attachments

#### **5-1.13 PROJECT INFORMATION**

The information in this section has been compiled specifically for this project and is made available for bidders and Contractors. Other information referenced in the Standard Specifications and these special provisions do not appear in this section. The information is subject to the conditions and limitations set forth in Section 2-1.03, "Examination of Plans, Specifications, Contract, and Site of Work," and Section 6-2, "Local Materials," of the Standard Specifications. Bidders and Contractors shall be responsible for knowing the procedures for obtaining information.

Information attached to the project plans is as follows:

Log of Test Borings

Information included in the Information Handout provided to bidders and Contractors is as follows:

## STRUCTURE MATERIALS INFORMATION

- A. United States Army Corps of Engineers Method CRD-C39-81, "Test Method for Coefficient of Linear Thermal Expansion of Concrete", June 1, 1981
- B. Notification of Qualification Requirements for Ultrasonic Testing Personnel, Forms
- C. Mass Concrete Report: Skyway Structure, January 25, 2001
- D. Appendix to Mass Concrete Report: Measurement of the Curing Temperature in Mass Concrete Pours: Dublin 580/680 Interchange, January 9, 2001
- E. Self Anchored Suspension Bridge Design Criteria, July 15, 2002
- F. CEB-FIP Model Code1990 for Concrete Structures, recommendation (Comité Eurointernational du Béton Fédération International de la Précontrainte)
- G. Sample Certificate of Compliance Form, April 2001
- H. New Self-Anchored Suspension Span Wind Studies, Final Report, Revision 1, December 2002
- I. SAS Suspension System Geometry Based on Contract Plans, September 30, 2003
- J. Ship Collision Study, February 14, 2000
- K. Hydraulic Modeling and Scour Analysis, October 31, 1999
- L. Illustration of Melt Through identified in Item B.3 of "Steel Structures/Shop Welding/Welding of Closed Ribs to Box Shell Plate" of these special provisions.
- M. Preliminary Working Drawings for Skyway Temporary Towers (Contract 04-012024)
- N. Preliminary Pipe Beam Temporary Support Working Drawings from Contract 04-012024 (Skyway).
- O. Approved shop drawings of temporary towers AE and AW (Contract 04-012024)

## **GEOTECHNICAL MATERIALS INFORMATION**

- A. Pile Installation Demonstration Project (PIDP) Geotechnical Report, March 2001
- B. Ground Motion Report, SFOBB East Span Seismic Safety Project, March 2001
- C. Demonstration of Blasting and Environmental Effects for Caltrans SFOBB Project, August 2002
- D. Final Marine Geophysical Survey Report, Volumes 1 and 2, March 2001
- E. Final Marine Geotechnical Site Characterization Report, Volumes 1, 2A through 2H, and Appendices, March 2001
- F. Final Yerba Buena Island Geotechnical Site Characterization Report, Volumes 1 through 4, December 2001
- G. Geotechnical Foundation Report for the Yerba Buena Island Approach and Self-Anchored Suspension Bridge, June 30, 2002
- H. Geotechnical and Material Report for Yerba Buena Island, January 2002 Phase I-Subcontractor Reports, Preliminary Geotechnical Site Characterization, Volumes 1 through 4, June 1998
- I. Phase II- Subcontractor Reports, Final Geotechnical Site Characterization, Volumes 1 through 3, March 2001

## CONTRACT NO. 04-0120F4 REVISED PER ADDENDUM NO. 6 DATED DECEMBER 29, 2005

## DISTRICT MATERIALS INFORMATION

- A. Water Quality, Permits and Agreements:
- 1. California Regional Water Quality Control Board (RWQCB)
  - a. Order 01-120, October 17, 2001
  - b. Order R2-2002-0011, January 23, 2002
- 2. California Department of Fish and Game (CDFG), Permit No. 2081-2001-021-03, Issued November 19, 2001
- 3. United States Army Corps of Engineers (ACOE)
  - a. Permit No. 023014-0S, December 4, 2001
  - b. Permit No. 023014-0S, Letter of Modification, April 2, 2002
- 4. San Francisco Bay Conservation Development Commission (BCDC), Permit No. 8-01, Issued on November 20, 2001, through current amendment.
- 5. National Marine Fisheries Service (NMFS)
  - a. Biological Opinion and Incidental Take Statement, October 30, 2001
  - b. Incidental Harassment Authorization, November 4, 2003
  - c. Incidental Harassment Authorization Amendment, June 28, 2004
- United States Fish and Wildlife Service (USFWS), Biological Opinion, October 29, 2001
- 7. United States Coast Guard (USCG)
  - a. Record of Decision and Bridge Permit 3-01-11, December 11, 2001
  - b. Memorandum of Agreement, June 21, 2002
  - c. Licenses DTCG-Z71111-03-RP-010L and DTCG-Z71111-03-RP-002L, December 23, 2002
  - d. License DTCG-Z71111-03-RP-002L, Amendment No. 1, May 14, 2003
- 8. Correspondence with Dredged Material Management Office (DMMO) regarding dredging, October 31, 2000, through November 21, 2001.

Updated versions of environmental permits can be found at the following website:

www.biomitigation.org

- B. Correspondence with United States Custom Service regarding Jones Act and use of crane/barge, 2002 and 2005.
- C. Pre-Award Information/Questionnaire (PAIQ) Form
- D. Manufacturing and Fabrication Self Qualification Audit (MFSQA) Form
- E. Construction Vibration Monitoring Field Data Form
- F. Sample of United States Coast Guard, Private Aids to Navigation Form, April 2001
- G. SFOBB East Span Survey Information, Control Diagram, December 30, 2002
- H. Archaeological Survey Reports
- 1. Phase 1- Maritime Archaeology, September 1999
- 2. Addendum- Maritime Archaeology, December 6, 1999
- 3. Addendum- Maritime Archaeology, March 2000
- 4. Addendum- Maritime Archaeology, August 17, 2000
- I. SFOBB East Span Underwater Debris Diagram, May 2001
- J. Plot Map titled, "Pier 7 Area for Contractor's Use", and Port of Oakland Pier 7 Utility Contacts
- K. Settlement Agreement regarding Burma Road Easement and Pier 7 Temporary Construction Easement, between City of Oakland and State of California Department of Transportation, dated April 18, 2002
- L. California Office of the State Fire Marshal, approved plans and specifications for the Dehumidifier System and Elevator, dated September 15, 2003
- M. Sample Advance Payment Bond form for partial payments
- N. Sample First Demand Bank Guarantee form for partial payments
- O. Yerba Buena Historical Torpedo Building As-Built Plans, November 9, 2004
- P. Quitclaim Easement Deed, between the Federal Highway Administration and the State of California, dated February 11, 2002.

#### CONTRACT NO. 04-0120F4

#### REVISED PER ADDENDUM NO. 6 DATED DECEMBER 29, 2005

Information available for inspection, upon written request, at the District Office is as follows:

- A. Final Environmental Impact Statement/California Environmental Quality Act (CEQA) Statutory Exemption and Record of Decision;
- B. BCDC Permit Application;
- C. Application for Water Quality Certification from the RWQCB;
- D. ACOE 404 Permit Application;
- E. USCG Permit Application;F. Temporary Tower Design Example

The District Office in which the work is situated is located at the office of the Duty Senior, 111 Grand Avenue, Oakland, CA 94612, email: duty senior district04@dot.ca.gov, telephone number (510) 286-5209.

Cross sections are not available for this project.

## 5-1.395 CONTRACTOR'S RESPONSIBILITY FOR THE WORK AND MATERIALS

Section 7-1.16, "Contractor's Responsibility for the Work and Materials," of the Standard Specifications, is revised for this contract as follows:

"Until the acceptance of the contract, the Contractor shall have the charge and care of the work and of the materials to be used therein (including materials for which the Contractor has received partial payment as provided in Section 9-1.06, "Partial Payments," or materials which have been furnished by the State) and shall bear the risk of injury, loss or damage to any part thereof by the action of the elements or from any other cause, whether arising from the execution or from the non-execution of the work, except as provided in Sections 7-1.08, "Public Convenience," and 7-1.15, "Relief From Maintenance and Responsibility." The Contractor shall rebuild, repair, restore, and make good all injuries, losses or damages to any portion of the work or the materials occasioned by any cause before its completion and acceptance and shall bear the expense thereof, except as otherwise expressly provided in Section 7-1.165, "Damage by Storm, Flood, Tsunami or Earthquake," and in Section 19-2.04, "Slides and Slipouts," and except for those injuries, losses, or damages that are directly and proximately caused by acts of the Federal Government, acts of the public enemy, or acts of terrorism in the United States that cause damage greater than \$5,000,000. The term 'acts of terrorism,' as used hereunder, shall be construed to be an offense in the United States that appears to be calculated to influence, affect, or retaliate against the conduct or policy of a governmental entity in the United States by intimidation or coercion. Where necessary to protect the work or materials from damage, the Contractor shall, at the Contractor's expense, provide suitable drainage of the roadway and erect those temporary structures that are necessary to protect the work or materials from damage. The suspension of the work from any cause whatever shall not relieve the Contractor of the responsibility for the work and materials as herein specified. If ordered by the Engineer, the Contractor shall, at the Contractor's expense, properly store materials which have been partially paid for by the State or which have been furnished by the State. Storage by the Contractor shall be on behalf of the State and the State shall at all times be entitled to the possession of the materials, and the Contractor shall promptly return the materials to the site of the work when requested. The Contractor shall not dispose of any of the materials so stored except on written authorization from the Engineer."

#### **10-1.10 COOPERATION**

Attention is directed to Section 5-1.20 "Areas for Contractor's Use" of these special Provisions, "Construction Details-Areas for Contractor Use" of the project plans, Section 7-1.14, "Cooperation," and Section 8-1.10, "Utility and Non-Highway Facilities," of the Standard Specifications.

It is anticipated that work by other contractors may be in progress adjacent to or within the limits of this project during progress of the work on this contract. The Contractor shall be responsible for coordinating with other contractors performing work adjacent to or within these contract limits. Contracts which may be in progress during the working period of this contract, include, but are not necessarily limited to the following:

- 1. Contract No. 04-012024 constructing San Francisco-Oakland Bay Bridge structures, Route 80, in the City and County of San Francisco and Alameda County, between KP 1.6 (PM 1.0) and KP 1.6 (PM 1.0), adjacent to the eastern limit of the project site.
- Contract No. 04-0120E4 constructing Piers E2 and T1 foundations of Main Span Bridge structures, in the City and County of San Francisco, on Route 80, at Yerba Buena Island at KP 13.4 (PM 8.3) and at KP 13.8 (PM 8.6)
- 3. Contract No. 04-0120R4 constructing the YBI South-South Detour in the City and County of San Francisco, on Route 80, at Yerba Buena Island, between KP 12.6 (PM 7.8) and KP 13.2 (PM 8.2).
- 4. Contract No. 04-0120P4 reconstructing YBI Structures in the City and County of San Francisco, on Route 80, at Yerba Buena Island, between KP 12.6 (PM 7.8) and KP 13.2 (PM 8.2).
- 5. Contract No. 04-0120K4 relocating the submarine cable from the Oakland Mole to Treasure Island.
- Contract No. 04-0120L4 constructing San Francisco-Oakland Bay Bridge Westbound approach structure and roadway and Eastbound marine foundations on Route 80, between the east end of Contract 04-012024 at KP 1.6 (PM 1.0) and San Francisco-Oakland Toll Plaza at KP 3.2 (PM 2.0).
- 7. Contract No. 04-0120M4 constructing San Francisco-Oakland Bay Bridge Eastbound approach structure and roadway on Route 80, between the east end of Contract 04-012024 at KP 1.6 (PM 1.0) and San Francisco-Oakland Toll Plaza at KP 3.2 (PM 2.0).
- 8. Contract No. 04-0120N4 construction of the Oakland Touchdown electrical systems.
- 9. Contract No. 04-002974 constructing Toll Operation Building, and ramps, at the south side of the San Francisco-Oakland Toll Plaza, on Route 80, between KP 1.6 (PM 1.0) and KP 3.7 (PM 2.3), in Alameda County.
- Contract No. 04-0435V4 providing Seismic Retrofit by Replacement, on Route 80 from West Anchorage San Francisco-Oakland Bay Bridge at KP 7.9 (PM 4.9) to 5th Street On/Off-Ramps at KP 9.5 (PM 5.9), in the City and County of San Francisco.
- 11. Contract No. 04-014004 constructing Maintenance Buildings and Maintenance roadway access and reconstructing ramps, on Route 80, between KP 1.6 (PM 1.0) and San Francisco-Oakland Toll Plaza at KP 3.7 (PM 2.3), in Alameda County.
- 12. Contract 04-0105U4 providing Bridge Deck Rehabilitation, on the West span of San Francisco-Oakland Bay Bridge, on Route 80 from San Francisco Anchorage to Yerba Buena Anchorage, from KP 9.01 (PM5.6) to KP 12.22 (PM7.6), in the City and County of San Francisco.

Progress schedules for the above contracts, when available, may be inspected by the Contractor. Such progress schedules are tentative and no guarantee can be made by the State that such work will actually be performed as indicated by the schedules.

The Contractor shall attend joint weekly meetings, to be organized by the Engineer with other contractors on the adjacent projects in order to minimize potential conflicts. Furthermore, the Contractor shall be responsible for coordinating with other contractors, agencies or their authorized personnel or representative performing work within these contract limits. This includes:

- 1. Work by State forces will be in progress within the contract limits during the working period of this contract.
- 2. Work by Biological Monitoring Contractor and its authorized representatives and personnel will be engaged in monitoring biological activities resulting from the State's entering into agreements with and securing permits from various Local, State and Federal agencies as specified elsewhere in these special provisions.

## CONTRACT NO. 04-0120F4 REVISED PER ADDENDUM NO. 6 DATED DECEMBER 29, 2005

#### **10-1.16 WORKING DRAWING CAMPUS**

Attention is directed to requirements of "Areas for Contractor's Use," subsection "Port of Oakland Pier 7", of these special provisions.

The objective of the working drawing campus is to prepare, submit, review and process working drawings, including but not limited to integrated shop drawings (ISD), in the shortest and most efficient manner possible. After approval of the contract, the Department will make its Design engineers available for consultation on site with the Contractor's engineers and detailers who are preparing working drawings. The effort will focus on the most critical and time dependent working drawings first to prevent delay to the project schedule. It is the Contractor's responsibility to submit working drawings sufficiently in advance of the start of the affected work, in accordance with "Working Drawings" of these special provisions. The working drawing campus shall be available for the duration of the contract, or until no longer required as approved by the Engineer.

The Contractor shall provide the following within 60 days of contract award to facilitate early resolution of construction working drawings:

- 1. Suitable office facility located within area described on plot map titled "Pier 7 Area for Contractor's Use. The facilities shall include workspace for the Contractor's staff as determined by the Contractor plus a minimum of 8 vacant, separate office cubicles or rooms intended for the use as workspaces by the Department or its representatives, and a common meeting room with meeting table to seat a minimum of 10 people. The facilities shall also include access to a copier, and a fax machine. Each workspace shall include a minimum of a desk, office chair, bookshelf, phone, and T1 computer cabling. The Contractor is responsible for providing local phone service, internet access and building utility services.
- 2. On-site Coordination Engineer. The Coordination Engineer shall be a registered Civil Engineer in the State of California, and shall be available full time on site to coordinate, manage, and process shop/working drawings and ISD for the project.
- 3. Full time, on-site staff authorized by the Contractor to be capable of producing and revising working drawings and ISD, and in conjunction with such work generating and assisting in resolution of requests for information and potentially resultant change orders. It is not required that all the Contractor's design staff be located on-site.
- 4. Regularly scheduled submittal status meetings (daily if required) to discuss the status and resolve shop/working drawing issues, attended by representatives of the Engineer and the Contractor's coordinator and staff as appropriate.
- 5. Regular updates of the working drawing submittal schedule specified in "Working Drawing Submittal Schedule," of these special provisions.

If the Contractor elects to centralize their field office to the designated area on Pier 7, the Working Drawing Campus facility may be co-located within the same facility provided that the Department or its representatives have access to the Working Drawing Campus portion of the office at all times.

The Contractor shall provide a submittal for the Working Drawing Campus within the first 30 days after award of contract. The submittal shall show the location of the office, layout of the office space and meeting room, and list of the furnishings, including office computers, telephones, desks and chairs to be supplied. The Department will review the submittal within 7 days.

Conformance with these special provisions does not relieve the Contractor of the responsibility for furnishing complete shop/working drawings or producing finished work of the quality specified in the Standard Specifications, these special provisions and as shown on the plans.

The Contractor shall submit, for approval by the Engineer, a schedule of costs detailing the breakdown of the contract lump sum item. The schedule of costs shall be proportionate to the work involved and shall detail the costs and payment schedule for each cost item associated with the process entailed in obtaining approval on all approved working drawing as specified hereunder. When requested by the Engineer, the Contractor shall furnish any cost data or supporting documentation, which might assist the Engineer in verifying one-time partial payments and establishing a suitable schedule of costs. The schedule of costs will be used to determine progress payments for "Working Drawing Campus" during the progress of the work. The schedule of costs shall be submitted to the Engineer for approval within 10 days of contract award. The Engineer shall be allowed 10 days for approval or return for correction of the submittal.

#### EQUIPMENT AND SOFTWARE

Attention is directed to "Integrated Shop Drawings" elsewhere in these special provisions.

The Contractor shall provide for the State's exclusive possession and use, one complete computer system specifically capable of creating, storing, and updating Integrated Shop Drawings utilizing the latest hardware technology. The software shall be identical to that used by the Contractor in generating the ISD. The software and plug-ins used to navigate, collaborate, and coordinate the checking and identification of the interferences shall also be provided. Before delivery and setup of the computer system, the Contractor shall submit to the Engineer for approval a detailed list of all computer hardware and software the Contractor to develop ISD and shall include the following:

- A. Complete computer system, including keyboard, mouse with scroll wheel, video card with one hundred twenty eight (128) megabyte on board memory and dual ports, two 530-mm color SVGA monitors (1,024 x 78 pixels, current Pentium IV microprocessor chip, or equivalent or later;
- B. Computer operating system software, compatible with the selected processing unit and CAD software, Windows 2000 or better, or equivalent;
- C. Minimum four (4) gigabytes of random access memory (RAM);
- D. A 100 gigabyte minimum hard disk drive, a 1.44 megabyte 90-mm floppy disk drive, 32x speed minimum CD-RW drive, 10/100 Ethernet card, two UBCUSB ports;
- E. CAD and other software identical to those used by the Contractor to generate ISD and to check for conflicts and generate ISD's
- F. Microsoft Office software, the latest version for Windows NT/Windows 2000, or later, and McAfee Anti-Virus software or equivalent;
- G. A color laser –jet printer with a minimum of eight (8) megabytes of RAM, capable of 600 dots per inch in color, 600 dots per inch in monochrome or equivalent. Capable of printing fully legible plots in color with a minimum size of 279-mm by 432-mm. LaserJet toner and paper to be provided throughout the contract. HP LaserJet 5500 or later.

The furnished computer hardware shall be compatible with that used by the Contractor for the production of the ISD. The furnished software shall be identical with that used by the Contractor for the production of the ISD and for the identification of the interferences of the ISD, and shall include original instruction manuals and other documentation normally provided with the software.

The Contractor shall furnish, install, set up, maintain and repair the computer hardware and software ready for use at the Working Drawing Campus. The hardware and software shall be installed and ready for use at least 30 days prior to submittal of the first ISD. The Contractor shall provide 16 hours of formal training for the Engineer, and three other agents of the Department designated by the Engineer, in the use of the hardware and software including generating 3-D drawings, merging files, checking for conflicts in three dimensions and manipulating drawing elements. An authorized vendor of the software products shall perform the training.

All computer hardware and software furnished shall remain the property of the Contractor and shall be removed by the Contractor upon acceptance of the contract.

## PAYMENT

Attention is directed to "Payments," of these special provisions.

The contract lump sum price paid for working drawing campus shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in facilitating early resolution of construction working drawings and ISD, including but not limited to utility connection costs, maintenance costs, purchasing of office equipment and furniture, and set up and removal of the office facility."

(Non-destructive testing table for Section 10-1.59, "STEEL STRUCTURES," subsection, "INSPECTION AND TESTING," in the fifth paragraph)

COMPONENT	/	Weld T	ype	Ex	Extent & Type of Testing		Notos
COMPONENT	CJP	PJP	Fillet	RT	UT	MT	notes
1.BOX GIRDER 1.1 Box Shell	<u> </u>	1	•	•	•		
Transverse splice weld shop	X			5%	100%		
(Deck plate: A) field	X			0,0	100%	100%	
Transverse splice weld shop	Х			5%	100%		
(Side plate: B,F) field	Х				100%	100%	
Transverse splice weld shop	Х			5%	100%		
(Bottom plate: D) field	Х				100%	100%	
Transverse splice weld shop (Side plate: C,E,G,H, I,L,M,N,"K"	Х				**		
&"Vertical") field	Х				**		
Longitudinal weld: Deck plate:	Х				100%		
Longitudinal splice weld (Bottom plate: D)	Х				100%		
Longitudinal splice weld (Side plate: C,E,G,H,I, L,M,N,"K" &"Vertical")	Х				100%		(B & F are n/a)
Box corner welds	Х				100%		
		Х	Х			100%	
Closed rib splice	Х				100%		
Closed rib to shell plate:		Х			15%	10%	UT Shall include at least 15% of the tack welds
Stiffener (open rib) to box plate			Х			10%	
Floorbeam to Deck plate	Х		X		100%	50%	
Floorbeam to other box shell plates	v				1000/		
At Crossbeam penetrations	Λ	х	Х		100%	25%	
Elsewhere			Х			10%	
Longitudinal Shear Plate to Deck Plate			Х			25%	
Longitudinal Shear Plate to other Box shell plates			Х			10%	
Deck plate to drain plates	Х				15%		
Deck plate transverse splice at Seismic Joint	Х	X		5%	100% 100%	100%	

Continuation...

Continuation							
1 ) Day Internal Stiffaring							
1.2. DOX Internal Sumening	r –			<u> </u>			
Floorbeam splice:	v				1000/		
Bottom I m	X				100%		
Remainder of lower half	X				50%		
Upper half	Х				15%		
Floorbeam web / Diaphragm to skin plate stiffener	X	Х	Х		100%	25%	
Floorbeam web to floorbeam	Х				100%		
web stiffener		Х	Х			25%	
Diaphragm plate to closed rib	X				100%	100%	
Biupinugin plate to elosed no		x			100/0	100%	
Ground end of diaphragm to closed rib weld for full length	Х	X	X			100%	Additional to NDT specified
of grinding plus 50 mm each end							for weld
Longitudinal Shear Plate to	Х	X			100%		
Floorbeam			Х			15%	
Longitudinal Shear Plate Vertical splice	X				**		
Longitudinal Shear Plate to top	x		X			15%	
and bottom plate			~			1070	
1.3. Girder at PiersAll SPCM welds	X				100%	100%	
		Х	Х			100%	
Non-SPCM Welds		Per Sect	tions 1.1,	1.2 & 1.5	of this T	able	
Saddle Grillage welds	Х				25%		
		X	Х			25%	
Saddle welds	x				25%	_0/0	
Suddie weids		x	x		2370	25%	
		Λ	Λ			2370	
1.4 Other box welds							
SPCM Cable Bracket welds	Х				100%	100%	
		X	Х			100%	
Deviation & Jacking Frame	X			1	100%	100%	
Saddles: Plates to Castings	1	x	x		100/0	25%	
Deviation & Looking Eramo	v	Λ	Δ	+ +	1000/	2570	
Saddlag: Dista wolds	Λ	v			10070	1000/	
Saudies. Flate welds		А	v			100%	
			X		1000/	25%	
Other Welds in SPCMs	X				100%	100%	
		Х	Х			100%	
Other welds	Х				25%		
		Х	Х			10%	

Continuation					-	
Ends of welds at locations of required grinding for full length of grinding plus 50 mm each end	Х	X	X		100%	Additional to NDT specified for weld
2 CROSSREAM	I					
2. CROSSDEAM						
All SPCM Welds	v			100%	100%	
All SI CIVI Welds	л	v	v	10070	100%	
Other welds	v	Λ	Λ	250/	10070	
Other weids	Λ	v	v	2370	1.00/	
Ends of welds at locations of	v				1070	Additional to
required grinding for full length of grinding plus 50 mm each end	Λ	Λ	Λ		100%	NDT specified for weld
3. TOWER						
Skin plate butt welde:	X			100%	25%	
Horizontal	Λ			10070	2370	
Skin plate butt welds: Vertical	x			100%	25%	
Skin place ball weids. Vertical	21	x		25%	25%	
Longitudinal Stiffener butt	x			100%	2070	
welds	21			10070		
Longitudinal stiffener to skin	X			100%		
plate		X		25%	25%	
Press			Х	2070	25%	
Diaphragm butt welds	Х			100%		
Diaphragm to Skin Plate	X			100%		
		x		25%	25%	
			Х	2070	25%	
Diaphragm to Longitudinal	Х			100%		
Stiffener (incl. Fit Lugs)		Х			100%	
			Х		25%	
Tower Strut Welds & Cross	Х	Х		100%	100%	
Bracing Welds			Х		100%	
Grillage welds	Х	Х		***	***	
			Х		25%	
Tower Saddle welds	Х			100%	100%	
		Х			100%	
			Х		25%	
Skin Plate to Tower Base Plate	Х			25%		
		Х			50%	
Bearing Stiffener Welds at	Х			25%		
Tower Base Anchor Bolt		Х	Х		25%	
Assemblies						
Other Tower welds	Х			25%		
		Х	Х		10%	

## CONTRACT NO. 04-0120F4 REVISED PER ADDENDUM NO. 6 DATED DECEMBER 29, 2005

Continuation						
Tower Base Shear Plates to the	Х	Х		****	****	
Skin Plate						
4. OTHER WELDS NOT SPECIE	FIED AI	BOVE				
Welds in SPCMs	Х			100%	100%	
		Х	Х		100%	
Other welds	Х			25%		
		Х	Х		10%	
Ends of welds at locations of	Х	Х	Х		100%	Additional to
required grinding for full						NDT specified
length of grinding plus 50mm						for weld
each end						