

June 16, 2016

GOLDEN GATE BRIDGE PHYSICAL SUICIDE DETERRENT SYSTEM FEDERAL-AID PROJECT: BHLS-6003(051)

and

WIND RETROFIT

FEDERAL-AID PROJECT: BHLS-6003(052)

Contract No. 2016-B-1

To: Prospective Bidders

RE: Response to Bidders' Question No. 208 through 217

# Ladies and Gentlemen:

The following are the responses to questions submitted by prospective bidders and designated as Bid Question No. 208 through 217:

### **BID QUESTION No. 208:**

SDS Net Acceptance Criteria - 60-1.03C(5), 60-1.03C(8)

The second and sixth paragraph state the Contractor shall install the mesh "taut" and "...tension mesh panels in accordance with the manufacturer's instructions."

Since the structure is continually moving and changing shape, please, confirm the Contractor requires the manufacturer's approval on the final configuration and installation. If the net changes appearance (slack at times) and the tension varies as the bridge moves, this will not be cause for rejection or rework, if the installation has been approved and accepted by the manufacturer. Is this assumption correct?

### **RESPONSE:**

See Addendum 5 for revisions to Section 60-1 and the Contract Drawings. Revised Section 60-1.03C(4), Installation, includes provisions for installing the SDNS and revised Contract Drawing S180 shows details and notes for tensioned mesh geometry and tension forces. The Contractor must install the SDNS in accordance with the Manufacturer's Instructions, the approved SDNS Installation Work Plan and under the direction of the Manufacturer's Representative. The SDNS Installation Work Plan must include provisions for installing the SDNS such that the installation complies with the geometry and tension requirements, and tolerances, shown on the Contract Drawings.

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# **BID QUESTION No. 209:**

Based on the available as-built information of the existing connections/fasteners, our takeoff quantities for Bid Items 37-40 are well in excess of the quantities shown in the Bid Form. Based on the high variability of these work items, and the lack of ability to accurately field verify the existing conditions prior to submitting our Bid Proposal, would the District please consider paying for these work items on a unit price basis?

### **RESPONSE:**

See Addenda 6, 8, and 9 for revised and new Contract Drawings, revised Section 55, and revised Engineer's Estimate and Schedule of Prices. The quantities for Contract Item Nos. 39, Remove and Replace Fasteners (Rail Girders), and 40, Field Drilling New Hole in Existing Steel (Rail Girders), have been increased on the revised Engineer's Estimate and Schedule of Prices, primarily due to the new requirement to remove and replace 4 lacing bars top and bottom (8 total) on each rail girder as specified in Note 2 on new Contract Drawing S333D. The quantities for Contract Item Nos. 37, Remove Fasteners (Bridge), and 38, Field Drilling New Hole in Existing Steel (Bridge,) remain unchanged.

Revised Section 55-1.04B, Payment, states:

"Full compensation for the removal and replacement of the existing lacing bars, batten plates, and associated fasteners that are removed and replaced for your convenience during the erection of net supports, vertical barriers, structural steel supporting travelers, traveler charging stations and traveler fixed access platforms and ladders, including furnishing, installing and removing temporary struts as shown on the Plans, are considered included in the prices paid for the various Contract Items associated with the net supports, vertical barrier, structural steel supporting travelers, traveler charging stations and traveler fixed access platforms and ladders and no additional compensation will be allowed therefor."

Contract Item Nos. 37 through 40 will remain designated as final pay items and the payment for these contract items will be made in accordance with Section 9-1.02C, Final Pay Item Quantities.

### **BID QUESTION No. 210:**

Subject: Net Support Connection Details

Drwq/Det. Reference: S206

Floor Beam Strengthening is not mentioned in the Construction Sequence.

Please confirm the Floor Beam Strengthening scope does not have any erection sequence requirements relative to the other scope in the contract.

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#### **RESPONSE:**

See Addendum 11 and revised Section 8-1.08. Revised Section 8-1.08A, General, specifies to complete the North Approach Viaduct floorbeam bracket top flange repairs prior to installing the SDNS at that location.

# **BID QUESTION No. 211:**

Subject: Incentive Payments

8-1.11

Paragraph 3 states "...you complete installation of the Suicide Deterrent System on the east side of the Suspension Bridge." paragraphs 4 states "...you complete installation of the Suicide Deterrent System and the Wind Retrofit on the west side of the Suspension Bridge."

Is the Bridge Main Towers portion of the SDS Net System scope required for this incentive, for each respective east or west side?

Does this include removal of temporary structures such as temporary access or temporary braces for net installation and tensioning?

#### **RESPONSE:**

See Addendum 5 for revised Contract Drawings.

No, the Bridge Main Towers portions of the Suicide Deterrent System between the Type 1 end supports, as shown on revised Contract Drawing S230, are not required to be complete for these incentives. To receive the incentive for completing the Suicide Deterrent System on the east side or the west side of the Suspension Bridge, the contractor must complete the installation of the Suicide Deterrent System as follows within the respective times specified in Section 8-1.11:

- 1. From the Pylon S1 end support between Panel Points 0 and 1 to the South Tower end support near Panel Point 43.
- 2. From the South Tower end support near Panel Point 47 to the North Tower end support near Panel Point 47'.
- 3. From the North Tower end support near Panel Point 43' to the Pylon N1 end support between Panel Points 0' and 1'.

Complete installation includes removal of any temporary structures used exclusively for SDNS installation or tensioning, such as temporary braces used for SDNS installation and tensioning. Temporary structures used as temporary access that will be used for Contract work after the SDNS completion do not have to be completely removed to receive the incentive, provided the temporary access does not affect the function of the Suicide Deterrent System.

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# **BID QUESTION No. 212:**

Please refer to the California DOT Encroachment Permit provided in addendum 3. On page two of the permit, the permit states that the hours of traffic control are authorized from 9:00 PM to 6 AM, Sunday through Thursday. This is in conflict with the lane closure chart provided in 12-4.05B — Freeway and Expressway Lane Requirements. Please clarify which are the correct stipulations for the allowable lane closure periods.

#### **RESPONSE:**

See Addendum No. 11 for revisions to the California Department of Transportation Encroachment Permit. The allowable lane closure periods are as specified in Section 12-4.05B.

# **BID QUESTION No. 213:**

Section 2-1.06B – Supplemental Project Information, states, "The District assumes no responsibility whatsoever in respect to the sufficiency or accuracy of the Record Drawings and other historic project record...The Record Drawings may not accurately represent the actual dimensions of the existing structure."

- a. Please clarify if the contract drawings under Contract No. 2016-B-1, sheets 1 through 224, are considered Record Drawings.
- b. If a steel connection detail within Contract No. 2016-B-1, shows 5 rivets to be removed but in actuality it is 10 rivets, will this be considered a differing site condition or will the District assume no responsibility under Section 2-1.06B of the special provisions.

#### **RESPONSE:**

- a. The contract drawings under this Contract No. 2016-B-1, sheets 1 through 224, are not considered Record Drawings. As stated on all the Drawings and in Note 4 on Contract Drawing Z005, the Contractor shall field verify all controlling field dimensions and resolve all field conflicts before submitting working drawings and ordering and fabricating any material.
- b. In accordance with Section 5-1.26, Field Measurements, the Contractor is required to field measure and verify all existing dimensions and conditions required for construction and attachment of all the permanent and temporary work to the existing structures and for proper and adequate fabrication and installation of the work. If a steel connection detail within this Contract No. 2016-B-1, shows 5 existing rivets to be removed, the Contractor must field verify the existing conditions. If during field verifications the Contractor finds that the existing conditions are different than those shown, the Contractor must submit a request for information notifying the District of the existing condition, and proposing a resolution to the conflict. The condition is not considered a differing site condition since the Contract Documents inform you that the existing conditions may differ from what is shown on the Drawings. If the Contractor determines that there are cost and time implications associated with the resolution of the field conditions, this information must be included in the request for information and the Contractor must file a Notice of Compensable Change in accordance with Section 4-1.05A(3), Notice of Compensable Change. The Engineer will make a determination regarding the Notice of Compensable Change in accordance with Section 4-1.05,

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Changes and Extra Work. If the Engineer determines there has been a compensable change, payment for the change will be made in accordance with Section 4-1.05.

## **BID QUESTION No. 214:**

**Existing Pull Boxes** 

Drawing E500, "Reuse of Existing High Voltage Pull Boxes" reviews the requirement to ensure the existing pull boxes in the existing spare 3" conduit feeder run #48 and C1-C10 on the bridge meet the standards of the NEC Code.

- A. The Contractor assumes the existing spare 3" conduit feeder run # 48 and C1 –C10 have individual dedicated pull boxes for this conduit system. Please confirm.
- B. The Contractor assumes these existing pull boxes do not have any additional conduits and any associated wire/cable in them. Please confirm.

#### **RESPONSE:**

See Addendum 8 for new Section 78 and revised Contract Drawings.

The Contractor's assumption that there are individual dedicated pull boxes for the existing conduit #48 is not correct. The existing spare 3" conduit (designated as conduit #48) to the West Abutment Junction Box and the existing spare 4" conduit (designated as conduit #48 and relabeled as conduits C1 through C10) from the West Abutment Junction Box northward do not have individual dedicated pull boxes but share existing pull boxes with other conduits and wires/cables as indicated on revised Contract Drawings E516 and E517.

# **BID QUESTION No. 215:**

Fastener Painting 59-2.03B(2)(c)

Drawing S334, Detail 1:S350, shows removal and replacement of existing fasteners for the traveler rail bracket. Specification 59-2.03B(2)(c) Cleaning, Preparing and Painting Bolt Holes and Connection Surfaces, states "Clean the inside surfaces of all bolt holes in conformance with the requirements in SSPC Surface Preparation Specification No. 1, "Solvent Cleaning," and Surface Preparation Specification No. 2, "Hand Tool Cleaning." Remove all visible rust. Paint inside surfaces of bolt holes cleaned under SSPC- SP 1with 1 Coat of zinc primer by brush methods. Protect the adjacent undercoated surfaces from the zinc primer. Allow primer to fully dry prior to final fit up and bolt installation."

A. Please confirm the existing fastener holes shall be solvent cleaned under SSPC-SP 1 and painted with 1 coat of zinc primer by brush methods prior to new bolt installation and do not need to be blast cleaned and field painted with zinc-rich primer coat prior to bolting.

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B. Please confirm the existing steel located within 4 inches around the existing fastener hole, on the underside of the top chord plate, does not need to be blast cleaned and field painted with the 3-coat system after bolt installation is completed.

### **RESPONSE:**

- A. For the removal and replacement of existing fasteners for the replacement of the side traveler crane rail and rail chair shown in Detail 1/S350 on Contract Drawing S334, Section 59-2.03B(2)(c), Cleaning, Preparing and Painting Bolt Holes and Connection Surfaces, requires the inside surfaces of the fastener holes to be cleaned in conformance with the requirements in SSPC Surface Preparation Specification No. 1, "Solvent Cleaning," and Surface Preparation Specification No. 2, "Hand Tool Cleaning." All visible rust must be removed. After cleaning, the inside surfaces of the bolt holes must be painted with 1 coat of zinc primer by brush methods. Blast cleaning of bolt holes is not required but blast cleaning and field painting of the existing steel within 4 inches around the existing or new fastener holes, on both the near and far sides of the connections is required.
- B. Section 59-2.03B(2)(c) requires the existing steel located within 4 inches around the existing or new fastener holes, on both near and far sides of the connection, be blast cleaned and field painted with zinc-rich primer coat. After bolting is completed, the areas outside the footprint of the installed fasteners must be painted with the intermediate and finish coats of the approved paint system and the installed fasteners must be painted in accordance with Section 59-3, Painting of Galvanized Surfaces.

### **BID QUESTION No. 216:**

**Faying Surface Painting** 

Drawing S119, Temporary Brace detail, shows the attachment of the temporary net support brace to the existing bridge structure. This is a temporary brace to be utilized during net installation and is to removed after net installation is completed.

- A. Is it the intent of the District to have connections for temporary supports be painted per the same requirements as new steel? For example, does the connection require faying surfaces on the existing steel to be blast cleaned and primed or can the temporary braced be bolted directly to the existing steel?
- B. Is it the intent of the District to have a new 3-coat paint system applied to the existing steel after the temporary brace is removed?

### **RESPONSE:**

A. The connections for temporary supports must be cleaned and painted per the same requirements as new steel. Section 48-3.03A, General, requires the drilling of holes in the existing steel and installing new fasteners to be in conformance with Section 55-4. Section 55-4 requires cleaning the surfaces of existing and new steel exposed in connection with drilling and bolting operations and field drilled holes in accordance with Section 59-2.03B(2). Section 59-2.03B(2) specifies the cleaning, preparing and painting of bolt holes and connection surfaces.

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B. Yes, in accordance with Section 48-3.03B, after removing the temporary bolted connection and filling any holes that remain after the removal of the temporary supports with fully tensioned high strength bolts, the connection surfaces and bolts are to be cleaned and painted in accordance with Section 59.

# **BID QUESTION No. 217:**

Traveler Rail

Drawing Z005, Note 15, states "New <u>travelers</u> shall not be used to support temporary falsework, perform bridge removal, and for the erection on new steel."

The Contractor assumes this requirement only applies to the actual "traveler" and does not apply to the new traveler rails. Please confirm.

#### **RESPONSE:**

See Addendum 8 for revised Contract Drawings. Note 15 on revised Contract Drawing Z005 applies to the new travelers but does not apply to the new traveler rails.

The new traveler rails when used for the Contractor's means are considered as a temporary structure and the Contractor must comply with the provisions of Section 48-3, Temporary Structures, including verifying the structural integrity and capacity of the rails and the structure supporting the rails under all loads imposed by the Contractor's operations in addition to the Bridge service dead and live loads. The Contractor is responsible for repairing any damage to the new traveler rails caused by the Contractor's operations.

Sincerely,

John Eberle, P.E.

Deputy District Engineer