

July 7, 2016

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

WIND RETROFIT

FEDERAL-AID PROJECT: BHLS-6003(052)

Contract No. 2016-B-1

To: Prospective Bidders

RE: Response to Bidders' Question No. 275 through 279

#### Ladies and Gentlemen:

The following are the responses to questions submitted by prospective bidders and designated as Bid Question No. 275 through 279:

# **BID QUESTION No. 275:**

Thermal effects on Bridge Geometry - 8-1.08A

The sixth paragraph reads, "For all permanent and temporary work, prior to submitting your working Drawings to the Engineer, you must take field measurements, verify all controlling field dimensions and resolve any and all field conflicts required:

- (i) for the attachment of all temporary and permanent work to the existing structure; and
- (ii) for the proper and adequate fabrication and installation of all temporary and permanent work

It is documented this structure moves a significant amount. Since a measurement between several structural members could vary depending on the effect of sunlight on different parts of the steel structure, the temperature, fog, precipitation, wind, traffic, and other variables:

- 1. Does the District have historical information on the performance and movement of the bridge based on the many different elements?
- 2. Will the District provide this information prior to beginning any permanent work fabrication (e.g. net design and calculations and fabrication)?

GOLDEN GATE BRIDGE PHYSICAL SUICIDE DETERRENT SYSTEM and WIND RETROFIT Contract No. 2016-B-1 Response to Bidders' Question No. 275 through 279 July 7, 2016 Page 2 of 5

3. The Contractor and District are aware that it will be unreasonably difficult to duplicate field verification measurements taken under different environmental conditions (within same work shift, or even subsequent shifts). Please, confirm the District will accept the Contractor's best efforts to document field measurements and the Contractor will accept the risk of proceeding with the known conditions.

### **RESPONSE:**

It is not clear what specific work, for which field measurements must be taken, this question refers to.

See Addendum 5 for the revised SDNS Contract Drawings.

The largest movements of steel trusses, such as vertical and horizontal deflections due to live load, temperature and wind, occur at the Main Span of the Suspension Bridge. With regard to the SDNS, these movements have been assessed as having insignificant effect on the values shown in Table 1 on Drawing S180. Note that the effects of the Main Span movements are only a fraction of the geometry and tensile force tolerances specified in the Notes on Contract Drawing S180.

The relative movements that occur at the interfaces of bridge structures have been accounted for by un-tensioned net panels and the border cables with extra lengths. Please see Contract Drawing Nos. S115, S121and S230.

# **BID QUESTION No. 276:**

Resolving any and all field conflicts - 8-1.08A

The sixth paragraph reads, "For all permanent and temporary work, prior to submitting your working Drawings to the Engineer, you must take field measurements, verify all controlling field dimensions and resolve any and all field conflicts required:

- (i) for the attachment of all temporary and permanent work to the existing structure; and
- (ii) for the proper and adequate fabrication and installation of all temporary and permanent work

The Contractor assumes it will be compensated for all time and materials required to resolve any and all field conflicts. Please, confirm.

#### **RESPONSE:**

The bidder's assumption that it will be compensated for all time and materials required to resolve any and all field conflicts is not correct.

GOLDEN GATE BRIDGE
PHYSICAL SUICIDE DETERRENT SYSTEM and
WIND RETROFTT
Contract No. 2016-B-1
Response to Bidders' Question No. 275 through 279
July 7, 2016
Page 3 of 5

The costs associated with the time and materials required to resolve some field conflicts may be the responsibility of the Contractor and to resolve others may be the responsibility of the District.

For instance, the Contract Drawings may indicate that the center to center spacing of existing fasteners is 3" but the actual spacing is 4". The costs associated with performing the field verifications and measurements to determine the actual fastener spacing, to develop the working drawings incorporating the actual fastener spacing and fabricating the element, which will be attached to the existing structure using the actual fastener spacing, is the responsibility of the Contractor and is included in the corresponding Contract Bid Price. However, if the Contractor finds during field verifications that an existing member is deteriorated in such a way that it must be repaired in order to allow a new member to be attached, the cost of repairing the existing member will be the responsibility of the District.

As stated in Section 2-1.06B, Supplemental Project Information, the present as-built dimensions of the Bridge structures, including the structural members thereof, are variable and not uniform. The variability is due to many factors (e.g., original construction tolerances, curvature of the bridge structure, superelevations, climatic conditions, deterioration of members, maintenance repairs and modifications to the structure, etc.).

Where construction depends on the dimensions and conditions of the existing bridge, it is necessary for the Contractor to field measure the Bridge structures and verify the existing conditions for the accuracy and completeness of their submittals and the subsequent fabrication and installation work. When the bidder is preparing their Proposal, the bidder must anticipate that the field measurements will reveal variable and not uniform conditions when estimating the anticipated costs in preparing the Working Drawings and in fabricating and installing the work required by the Contract.

The indication of "typical" in the Contract Plans is not intended to represent that the work will be standard and uniform. Rather, the reference to "typical" is intended to indicate that the general nature of the designated work is to be repeated elsewhere, but the bidder should not assume that the conditions will be identical at other locations of work. The Contractor must still field measure all as-built conditions of the Bridge structures, including each and every structural member thereof, for the accuracy and completeness of their Working Drawings.

Notwithstanding the designation of "typical" in the Contract Plans, the bidder should expect that a high degree of coordination will be necessary to perform the work, and anticipate this coordination work while preparing their Proposal. Moreover, the bidder should anticipate that, based on the variability in field conditions, it will be necessary to provide a specifically dimensioned attachment between the new work and the existing bridge structures.

GOLDEN GATE BRIDGE PHYSICAL SUICIDE DETERRENT SYSTEM and WIND RETROFIT Contract No. 2016-B-1 Response to Bidders' Question No. 275 through 279 July 7, 2016 Page 4 of 5

## **BID QUESTION No. 277:**

SDS 60-8, 60-1.02A(2) SDNS Components and Products

No. 3 Specifies a 16mm Wire Strand 1x61 or 1x37.

As both constructions are not common for 16mm Wire Strands, can a construction 1x19 be used assuming that the construction satisfies with the requirements shown on SDS 60-10?

No. 6 Specifies ASTM F1145 for Turnbuckles. Can the Turnbuckles also be in accordance with ASTM A276 assuming that the construction satisfies with the requirements shown on SDS 60-10?

### **RESPONSE:**

See Addenda for revised Section 60-1.

No, the 16mm wire strand shall be in either the 1x61 or 1x37 configuration as called out for in Section 60-1.02A(2), SDNS Components and Products. The 1x19 configuration would produce a cable that does not provide the flexibility needed for the system at the locations where the 16mm eye cable is necessary.

Turnbuckles must meet the requirements of ASTM F1145 and Section 60-1.02A(2), SDNS Components and Products. The substitution of ASTM A276 for ASTM F1145 is not allowed.

# **BID QUESTION No. 278:**

Section 7-1.12 and sheet 7/224 require a manned security gate at Conzelman Road at all times when work at the jobsite is in progress. What Bid Item is this cost to be included within?

## **RESPONSE:**

Section 9-1.03, Payment Scope, states:

- "Full compensation for work specified in divisions I, II, and X is included in the payment for the contract items unless:
- 1. Contract item for the work is shown on the Contract Item List.
- 2. Work is specified as change order work."

So full compensation for conforming to the requirements in Section 7-1.12, Site Security, is included in the payment for the various Contract Items of work involved where site security is required and no additional compensation is allowed therefore.

GOLDEN GATE BRIDGE
PHYSICAL SUICIDE DETERRENT SYSTEM and
WIND RETROFIT
Contract No. 2016-B-1
Response to Bidders' Question No. 275 through 279
July 7, 2016
Page 5 of 5

## **BID QUESTION No. 279:**

We would like further clarification of the expected role of the Net System Quality Control Manager? Given the existence of a project management team, a manufacturing quality control individual, and a manufacturer's rep who will be on site during installation, where does the Net System Quality Control Manager fit in within the SDS net manufacturer's scope of supply and what is the expected location of this individual during the term of the project?

### **RESPONSE:**

Please refer to revised Section 60-1 issued in Addendum 5.

The requirement for assignment of the Net System Quality Control Manager has been removed. Instead, the revised Section 60-1 requires an assignment of the Manufacturers' Representative.

The Quality Control Manager referred to in Section 60-1.01D(1) is the same position that is listed in Section 2-1.36B, Contractor's Project Management Team.

Sincerely,

John Eberle, P.E.

Deputy District Engineer