

**CONTRACT CHANGE ORDER**

Change Requested by: Contractor

CCO: 57	Suppl. No. 0	Contract No. 04 - 0120F4	Road SF-80-13.2/13.9	FED. AID LOC.:
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To: AMERICAN BRIDGE/FLUOR ENTERPRISES INC A JOINT VENT

You are directed to make the following changes from the plans and specifications or do the following described work not included in the plans and specifications for this contract. **NOTE: This change order is not effective until approved by the Engineer.**

Description of work to be done, estimate of quantities and prices to be paid. (Segregate between additional work at contract price, agreed price and force account.) Unless otherwise stated, rates for rental of equipment cover only such time as equipment is actually used and no allowance will be made for idle time. This last percentage shown is the net accumulated increase or decrease from the original quantity in the Engineer's Estimate.

**Adjustment of Compensation at Lump Sum:**

Perform the following work:

1. Revise Special Provisions Section 10-1.59 "STEEL STRUCTURES," subsection "Welding of HPS 485W Steels," as shown on sheet two (2) of this change order.
2. Revise Special Provisions Section 10-1.60 "CABLE SYSTEM," subsection "Cable Band Bolts," to provide a minimum of one bolt per heat treatment lot for cable band bolt testing as shown on sheet three (3) of this change order.

This change order resolves cost and time impacts associated with Contractor Request For Information (RFI) Numbers 902 987 and 1027.

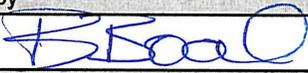
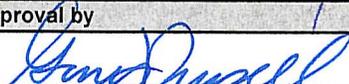
For this work, the Contractor will be paid the sum of \$0.00. This sum constitutes full compensation, including all markups, for this change.

There is no adjustment of contract time for this change.

Adjustment of Compensation at Lump Sum Price .....\$0.00

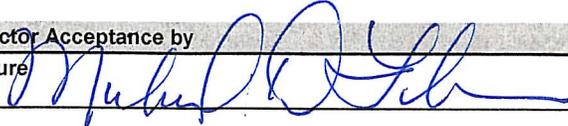
Estimated Cost: Increase  Decrease  \$0.00

By reason of this order the time of completion will be adjusted as follows: 0 days

Submitted by		
Signature 	Resident Engineer Brian Boal for Gary Pursell, P.E., Sup.T.E.	Date 4/16/08
Approval Recommended by		
Signature 	Supervising Bridge Engineer Richard Morrow, P.E., Sup. BE	Date 4/16/08
Engineer Approval by		
Signature 	Supervising Transportation Engineer Gary Pursell, P.E., Sup. TE	Date 4/18/08

We the undersigned contractor, have given careful consideration to the change proposed and agree, if this proposal is approved, that we will provide all equipment, furnish the materials, except as may otherwise be noted above, and perform all services necessary for the work above specified, and will accept as full payment therefor the prices shown above.

**NOTE: If you, the contractor, do not sign acceptance of this order, your attention is directed to the requirements of the specifications as to proceeding with the ordered work and filing a written protest within the time therein specified.**

Contractor Acceptance by		
Signature 	(Print name and title) Michael D. Flowers	Date 9.17.08

CONTRACT CHANGE ORDER NO. 57 SUPPL. NO. ---  
ROAD 04-SF-80-13.2, 13.9 SHEET 2 OF 3 SHEETS  
FEDERAL NO.(S) \_\_\_\_\_ CONTRACT NO.: 04-0120F4

## 10-1.59 STEEL STRUCTURES

### Welding of HPS 485W Steels

4. Qualification Testing: Weld procedure qualification test requirements for HPS 485W groove welds shall be evaluated using Welding Procedure Specification (WPS) Test Plates from the greatest thickness to be welded in production and, for formed members, the as-formed base metal representing the highest forming strain, i.e., lowest ratio of diameter to thickness of a tubular, to be used in fabrication. Testing shall conform to AWS D1.5 qualification requirements, except fillet weld procedures shall be qualified in each position used, macroetch specimens shall be taken and additional sets of Charpy V-Notch specimens shall be taken within one millimeter of both the inside and outside tubular surfaces and centered on the coarse-grained area of the heat affected zone (HAZ). The test results shall meet the following properties:

Transverse tensile ultimate strength:  $\geq 620$  Mpa

Transverse tensile ultimate strength – Deviation Saddles Post Weld Heat Treated:  $\geq 600$  MPa if the failure is initiated in the weld metal and  $\geq 585$  MPa if the failure is initiated in the base metal.

All-Weld-Metal: yield strength:  $\geq 485$  MPa

All-Weld-Metal: ultimate tensile strength:  $\geq 620$  Mpa

All-Weld-Metal – Deviation Saddles: ultimate tensile strength after Post Weld Heat Treatment:  $\geq 600$  MPa

All-Weld-Metal: percent elongation:  $\geq 19\%$  in 50 mm

Charpy V-Notch: as specified under Materials above.

CONTRACT CHANGE ORDER NO. 57 SUPPL. NO. ---  
ROAD 04-SF-80-13.2, 13.9 SHEET 3 OF 3 SHEETS  
FEDERAL NO.(S) \_\_\_\_\_ CONTRACT NO.: 04-0120F4

10-1.60 CABLE SYSTEM

Cable Band Bolts

Cable band bolts shall conform to the requirements of ASTM Designation: A354, Grade BC. Nuts shall conform to the requirements of ASTM Designation: A563. Washers shall conform to ASTM Designation: F436. Cable band bolts, nuts and washers shall be galvanized. The cable band bolts shall have drilled recesses in the center of the bolt head and the center of the bolt shank for extensometer length measurements. All bolts shall receive heat treatment after final machining.

~~Perform T tensile tests to failure on cable band bolts assemblies with nuts and washers shall be performed on a minimum of 30 bolts, but not less than 6 per heat. If one bolt fails to meet the required strength two more bolts from the heat shall be tested. If both bolts meet the specified requirements, the heat will be accepted. If any two bolts from one heat fail to meet the requirements, the heat will be rejected.~~ Test a minimum of one bolt per heat treatment lot but not less than 30 bolts evenly distributed among heat treatment lots and not less than 6 bolts per mill heat evenly distributed among heat treatment lots. If a bolt fails to meet the required strength, test two more bolts from the same lot. If both bolts meet the required strength the lot is accepted. If two bolts from the same heat treatment lot fail to meet the required strength the lot is rejected. Test, for load extension and ultimate tensile strength, one bolt per lot of the bolts supplied for the Friction Test.

Tensile tests, to obtain load-extension curves, shall be carried out on five cable band bolts, but not less than one per heat. Test bolts from different heat treatment lots if possible or evenly among lots to the extent possible. The testing apparatus shall be proposed by the Contractor and approved by the Engineer. The load-extension curve shall be recorded continuously. The extension may be measured from the separation of the jaws of the test apparatus. The yield point of the tested specimen shall be compared to that of the specified yield point. If any of the tests does not meet the minimum requirements, two additional tests shall be conducted for that heat. Both tests shall pass the requirements or the heat will be rejected.

