

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-014174**Date Inspected:** 18-May-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1100**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1930**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** See Below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Orthotropic Box Girders**Summary of Items Observed:**

At the start of the shift the Quality Assurance Inspector (QAI) traveled to the project site and observed the following work performed by American Bridge/Fluor Enterprises (AB/F) personnel at the locations noted below:

A). Field Splice E5/E6

A) Field Splice E5/E6

The QAI observed the AB/F personnel attempting to correct the misalignment issue located at the deck plate field splice identified as WN: 5E-6E-A. The Y-dimension was noted as 8,540mm to 11,000mm at the A2 Segment. Prior to performing this task the AB/F personnel changed the hydraulic system from the use of five (5) individual pumps to one (1) pump utilizing a manifold to supply the five individual rams. At the conclusion of revising the set-up, the contractor commence the first phase of correcting the misalignment task by applying hydraulic pressure to 2500 psi, which equates to approximately 60 tons of working pressure at the rams. At this time, the QAI observed the Quality Control Inspector, Bonifacio Daquinag, Jr. verified the dimensions of the misalignment and no changes were noted. At the conclusion of this task the AB/F personnel were instructed by John Callahan to perform the second phase of the operation which was to relieve the tension from the High Strength Bolts (HSB) connecting the U-ribs at the field splice. Upon the completion of this phase additional pressure was applied to 3,000 psi, (approximately 75 tons) utilizing the hydraulic system. At the conclusion of phase two (2) of this operation, the QC inspector verified the dimensions and no significant changes were noted by the QAI, approximately .7mm was recorded and verified at one area and the remaining areas were measured at .5mm. The greatest misalignment was 4.5mm and the least dimension was 2mm. At this time Mr. Callahan instructed the working crew of four (4)

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

AB/F personnel to tension the H.S.B that were previously relieved of their tension values and to also place steel wedges between the deck plate and the U-rib splice plate at the E5 Orthotropic Box Girder (OBG). At this time Mr. Callahan terminated this operation and informed the QAI that AB/F had completed the task as requested and would await instructions from Cal Trans as how to proceed. Prior to the removal of the temporary attachments the QAI verified the multi-pass fillet welds and no linear indications were noted at the weld metal or the base metal. Note: Cal Trans Engineer Paul Jefferson also observed this operation performed by AB/F.

The digital photographs below, illustrate the work observed during this scheduled shift.



Summary of Conversations:

In conversation with Mr. Callahan regarding the replacing of the galvanized H.S.B., that were relieved of their tension values in order to attempt the correcting the misalignment at the deck plate field splice, Mr. Callahan informed the QAI to speak with Mr. Paul Jefferson in regards to this issue.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mohammad Fatemi (916) 813-3677, who represents the Office of Structural Materials for your project.

Inspected By: Reyes, Danny

Quality Assurance Inspector

Reviewed By: Levell, Bill

QA Reviewer
