

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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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-014987**Date Inspected:** 15-Jun-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**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 (OBG)**Summary of Items Observed:**

Quality Assurance inspector (QA) Michael Foerder was at the American Bridge/Flour (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

1. OBG Field Splice 3E/4E Face D (Outside) Backgouge
2. OBG Field Splice 4E/5E Face F (Outside) FCAW
3. OBG Field Splice 3W/4W Face E Backgouge
4. OBG Field Splice 4W/5W Face A UT Review

Field Splice 3E/4E Face D (Outside) Backgouge

The QA inspector noted and periodically observed ABF welding operators Mitch Sittinger and Fred Kaddu performing the backgouging and grinding operations for face D on the second side (Outside). The welding operators continued setting the equipment up and periodically performing the operation throughout the shift. QC inspector Jim Cunningham was noted to be present in order to monitor the progression of work, perform in process visual inspection and ensure the work was being performed in general conformance with the contract documents. The work was not completed on this date and appeared to be progressing in general conformance with the contract documents.

Field Splice 4E/5E Face F (Outside)

The QA inspector periodically observed ABF welding personnel Xiao Jin Wan performing flux cored arc welding (FCAW) at this location. The welder is in the process of placing the last cover pass and areas of insufficient

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fill identified by the QC inspector. QC inspector Tony Sherwood was noted to be present in order to monitor the progress and ensure the welding was within the established Welding Procedure Specification (WPS) noted as ABF-WPS-D1.5-3040B-3. The preheat and interpass temperature was verified by the QC and QA inspector to be greater than 65° Celsius (C) and the parameters were verified to be 220 amps, 23.1 volts and a measured travel speed of 150mm/min. The welder completed the welding of this area and proceeded to perform grinding and blending operations for a portion of the shift. Later in the shift the QC inspector performed a visual review of the completed weld and noted it as acceptable with the exception of the last 60mm, approximately. This last area will be welded at a later date when the side plate is backgouged and welded. The QA inspector performed a general visual review and the item appeared to be in general conformance with the contract documents. This information was relayed to Dan Reyes and Rick Bettencourt for tracking purposes.

Field Splice 3W/4W Face E (Outside) Backgouge

The QA inspector noted and periodically observed ABF welding operators Rory Hogan and Jeremy Dolan performing the backgouging and grinding operations for face E on the second side (Outside). The welding operators continued setting the equipment up and periodically performing the operation throughout the shift. The work was not completed on this date or turned over to QC for verification at this time but appeared to be progressing in general conformance with the contract documents.

Field Splice 4W/5W Face A (Outside) UT Review

The QA inspector periodically observed QC inspector Steve McConnell performing ultrasonic testing (UT) on this date for weld designated A5 as a preliminary scan of the ends of the deck plate. The QC inspector was noted to be utilizing a zero degree transducer for lamination examination and a 70 degree transducer and wedge combination for shear wave examination. The QC inspector marked an area approximately 80mm in length due to discovering a class "A" rejectable indication. This information was relayed to QA inspectors Dan Reyes and Rick Bettencourt for general tracking purposes and the QC inspector was noted to re locate to a different area with the balance of the UT review still pending.



Summary of Conversations:

No significant conversations held on this date for this contract.

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

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Materials for your project.

Inspected By: Foerder, Mike

Quality Assurance Inspector

Reviewed By: Levell, Bill

QA Reviewer