

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-016162**Date Inspected:** 12-Aug-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1100**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** Jim Cunningham**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:** OBG Section**Summary of Items Observed:**

This Quality Assurance (QA) Inspector, Craig Hager was on site at the job site between the times noted above. This QA Inspector was on site to randomly observe Quality Control (QC) personnel perform Non-Destructive Testing (NDT) and to monitor American Bridge/Fluor (ABF) welding operations.

The following observations were made:

- 1) At weld joint E5/E6-C1 and C2, outside the OBG section: ABF welding personnel Rory Hogan (#3186) and Jeremy Dolman (#5042) were performing Flux Cored Arc Welding (FCAW). QC Inspector Jim Cunningham was present.
- 2) At weld joints E4/E5- C1, C2, E1 and E2, outside the OBG section: ABF personnel were in the process of grinding the as welded welds flush.
- 3) At weld joint E4/E5-B and F, inside the OBG section: This QA Inspector observed QC personnel had marked adjacent to the weld that Ultrasonic Testing had been performed from the inside face of the weld joint.
- 4) At weld joint E5/E6-B and F, inside the OBG section: This QA Inspector observed QC personnel had marked adjacent to the weld that Ultrasonic Testing had been performed from the inside face of the weld joint.

At weld joint E5/E6-C1 and C2, outside the OBG section this QA Inspector observed ABF welding personnel Rory Hogan (#3186) and Jeremy Dolman (#5042) performing FCAW using the magnetic base Bug-O track system.

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Prior to the start of welding this QA Inspector was present with QC Inspector Jim Cunningham when ABF welding personnel Rory Hogan (#3186) informed us that water was running down the plate above this weld, dripping onto and running down the track and dripping, therefore welding would be postponed until this issue was resolved. This QA Inspector observed the water was not running down the weld but only the track used for welding. Later in the shift this QA Inspector observed welding had started and observed QC Inspector Jim Cunningham was present. This QA Inspector observed as QC Inspector Jim Cunningham verified the following welding parameters: 239 amperes and 24.9 volt at a travel speed of 188 mm per minute. The welding observed appeared to comply with WPS-ABF-D15-3040A-4. This QA Inspector observed the water had been diverted by placing duct tape on the plate above this weld joint. QC Inspector Jim Cunningham stated he monitor the area to confirm water did not run on to the track. This QA Inspector observed the device appeared to solve the problem and that the source of the water which appeared to be the early morning dew was drying.

At weld joints E4/E5- C1, C2, E1 and E2, outside the OBG section this QA Inspector observed ABF personnel were in the process of grinding the as welded welds flush in preparation for QC inspection.

This QA Inspector performed a walk through OBG sections E5 and E6 to monitor the status of work and QC inspections and observed the following: at weld joints E5/E6-B and F and E4/E5-B and F the weld maps inside the OBG sections indicated that QC personnel (initials' SM) had performed Ultrasonic Testing (UT) from this face of the weld, dated yesterday (8/11/10). This QA Inspector checked the surfaces outside the applicable OBG sections and did not observe any markings indicating UT had been performed. This QA Inspector went to the QC office on the West bridge deck to check the status of the inspections. Prior to this date Lead QC Inspector Lenard Cross had informed this QA Inspector a board listing the various welds was posted inside the office, updated daily and was available for QA personnel to check the status of QC Inspections. This QA Inspector observed the welds identified above were marked as "UT in process" indicating the UT inspections had not been completed. Lead QC Inspector Lenard Cross was present in the office, observed this QA Inspector checking the status board and informed me the board was not up to date.

In general the work observed appeared to comply with the contract requirements.

Summary of Conversations:

As noted above.

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:	Hager,Craig	Quality Assurance Inspector
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Reviewed By:	Levell,Bill	QA Reviewer
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