

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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-017099**Date Inspected:** 29-Sep-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:** John Pagliero**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 joints E6/E7 – C2, inside the OBG section: ABF welding personnel Song Tao Huang (#3794) was performing Flux Cored Arc Welding (FCAW). QC Inspector John Pagliero was present and monitoring the work.
- 2) Access Holes – The overall status of welding performed and Non-Destructive Testing (NDT) performed was gathered and reported, see below for details.
- 3) At weld joint E6/E7 – E1 and E2, outside the OBG section: ABF welding personnel Rory Hogan (#3186) and Jeremy Dolman (#5042) are in the process removing the backing bar.

At weld joints E6/E7 – C2, inside the OBG section, this QA Inspector observed ABF welding personnel Song Tao Huang (#3794) performing FCAW using a track system. This QA Inspector randomly observed QC Inspector John Pagliero verify the base material was preheated to a temperature greater than 150° F prior to the start of welding. This QA Inspector also observed QC Inspector John Pagliero verify the following welding parameters; 260 amperes and 24 volts at a travel speed of 300 mm per minute. QC Inspector John Pagliero informed this QA Inspector this provided a 1.248 KJ per mm heat input value which was within the range of the Welding Procedure

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

Specification (WPS). At various times during the shift this QA Inspector monitored the welding being performed at this location. The welding randomly observed by this QA Inspector appeared to comply with ABF-WPS-D15-3040A3.

At various locations on the top deck of each OBG section ABF has cut access holes, removed the plate section, and used the openings for ventilation piping, personnel access and various other uses. As of this date 3 of the access plate sections have been welded back into place. The 3 sections welded are identified as: L1E-S, L1E-N and L3E-NW. It appears the welding has been completed on all 3. The QC inspection status is as follows:

- 1) L1E-N; approximately 75% of the complete joint penetration weld has been inspected by Ultrasonic Testing (UT) and 10 areas have been marked indicating defects.
- 2) L1E-S; no markings indicating inspections have been performed by QC personnel.
- 3) L3E-NW; no markings indicating inspections have been performed by QC personnel.

At weld joints E6/E7 – E1 and E2, outside the OBG section this QA Inspector observed ABF welding personnel Rory Hogan (#3186) and Jeremy Dolman (#5042) were in the process of removing the backing bar and back gouging the weld. The work was being done using a plasma arc torch and power grinder. The work observed by this QA Inspector 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
Reviewed By:	Levell,Bill	QA Reviewer
