

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-026810**Date Inspected:** 02-Dec-2011**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:** Listed 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:** S.A.S. components**Summary of Items Observed:**

The Quality Assurance Inspector (QAI), Scott Croff, was present at the Self Anchored Span (SAS) job site to observe the scheduled fabrication and welding of components for the SFOBB project. The following observations were made:

- 1) OBG field splice welding at 13W/14W - D1
- 2) OBG field splice repair at 13W/14W - A2.2
- 3) OBG A deck, Vent Hole welding at 14W PP126.7 W2.5

1) The QAI observed ABF personnel making complete joint penetration (CJP) welds at OBG field splice 13W/14W location D1. The QAI noted that ABF welder Jeremy Dolman, ID 5042, is using Gas Shielded Flux Cored Arc Welding (FCAW-G) in the overhead (4G) position. The QAI also noted that the Quality Control Inspector (QCI) William Sherwood is monitoring this welding. The QAI spoke with the QCI and confirmed that the weld being made has the contract requirements of a Seismic Performance Critical Member (SPCM). The QAI verified that the preheat and interpass temperatures were conforming to the welding procedure specification (WPS) ABF-WPS-D15-3110-4. The QCI informed the QAI that the welding parameters were conforming to the WPS. The QAI made random observations of the work in progress during this shift. The QAI noted back welding (fill passes) are being made. The QAI noted that due to the length of the weld D1, 1/2 of the length is being welded at a time. The QAI noted that the 1st half was completed during this shift. The work on the 2nd half was in progress until the end of the shift and was not completed. The QAI noted that the work appeared to be generally conforming to the contract requirements.

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# WELDING INSPECTION REPORT

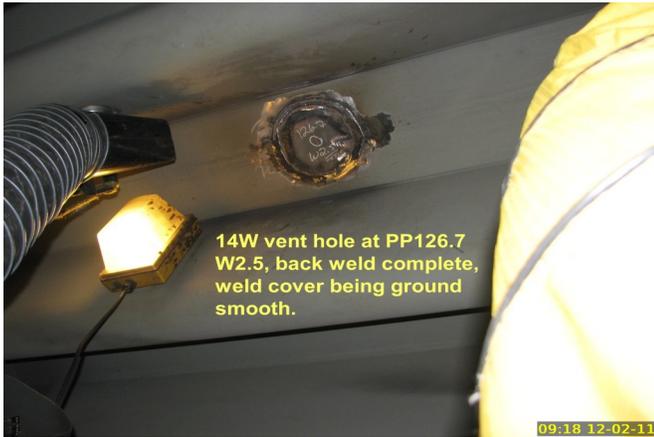
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2) The QAI observed ABF personnel repairing OBG field splice weld 13W/14W location A2.2. The QAI witnessed the QCI William Sherwood performing Magnetic Particle Testing (MT) of the excavation, whose dimensions are 12mm deep, 30mm wide and 80mm long. The QAI was informed that the repair is from a rejectable indication that was located during Ultrasonic Testing (UT). The QCI informed the QAI that the excavation was not ready for repair welding, as the required preheat temperature has not been reached. The QAI noted that ABF welder Richard Garcia, ID 5892, is preparing to make the weld. The QAI observed that an electric induction heater is being used to bring the repair area to the required preheat temperature. The QAI returned later and noted that the repair weld was completed and is being post weld heat treated. The QAI spoke with the QCI William Sherwood and was informed that the welding was performed within the ranges on ABF-WPS-D15-1004-Repair. The QAI was not able to verify the welding parameters.

3) The QAI observed ABF welder Mike Jiminez, ID 4671, inside the OBG 14W at panel point (PP) 126.7 location W2.5. The QAI attempted to monitor the back welding of the vent hole patch that has been installed at this location. The QAI was informed that the welding is completed and the weld is being ground smooth. See the attached photo.



### Summary of Conversations:

The QAI had general conversations with ABF and Caltrans personnel during this shift. The QAI relayed the general observations and status of work to the QAI Lead Bill Levell. Except as described above, there were no other notable conversations or observations.

### 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 Nina Choy (510) 385-5910, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Croff, Scott	Quality Assurance Inspector
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<b>Reviewed By:</b>	Levell, Bill	QA Reviewer
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