

**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-018404**Date Inspected:** 29-Nov-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1500**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) Backing Bar Survey
- 2) OBG Deck Hole Welding

1) The QAI was tasked with documenting the current condition of backing bars that are in place on the OBG field splices. The QAI assisted in measuring the dimensional locations of melt through / burn through of weld metal visible and accessible on OBG field splices 1E/2E, 2E/3E, 5E/6E and 6E/7E. The QAI generated a list of each location and cross referenced them to their respective Non-Conforming Incident Report and / or ABFJV Non-Conformance Report where applicable. The QAI relayed the list to the QAI Rick Bettencourt and the Assistant Structural Materials Representative (ASMR) Nina Mahjoub. The QAI also relayed that at OBG field splice 1E/2E, there is no safe access to make additional observations and several areas noted on other reports could not be fully examined. During this research, the QAI noted that the QAI Joselito Lizardo is photographing the various conditions of the backing bars for the survey.

2) The QAI made observations of welding of the OBG deck hole patches on the East bound line of the S.A.S. OBG structure. The QAI noted that the patches are being placed in the deck access / ventilation holes and lifting lug holes. The QAI observed Salvador Sandoval, ID 2202, and Mike Jininez, ID 4671, using shielded metal arc welding (SMAW) to make repairs to lifting lug patch welds. See the attached photo. The QAI noted that repairs

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are being made at Panel Point (PP) 20-E4, PP25-E3 and PP25-E4. The QAI also noted that the repairs include in-process work and repairs of deficient welds. The QAI noted that the repair welding is being monitored by the Quality Control (QC) Inspector Pat Swain. The QAI was informed that welding procedure specification (WPS) ABF-WPS-D15-1001-Repair is being used for this welding. The QAI randomly measured the welding parameters and noted that they appeared to be conforming to the WPS requirements. This work was in progress at the end of the shift.

The QAI witnessed the QC Inspector Tom Pasqualone conducting magnetic particle testing (MT) of a back-gouged weld on deck access hole patch at PP37.5-E2SW. See the attached photo. The QAI was informed that the weld was acceptable and fill passes will begin. The QAI made observations of the back gouge and noted that it appeared to be conforming to the contract requirements. The QAI then observed Wen Han Yu, ID 6317, using SMAW to make the fill passes. The QAI noted that the welding is being monitored by the QC Inspector Tom Pasqualone. The QAI was informed that ABF-WPS-D15-1010 rev.1 is being used for this welding. The QAI randomly measured the welding parameters and noted that they appeared to be conforming to the WPS requirements. This work was in progress at the end of the shift.



## Summary of Conversations:

The QAI had general conversations with ABF and Caltrans personnel during this shift. The QAI Lead Bill Levell tasked the QAI to document the current condition of backing bars, as noted above. The QAI relayed the information regarding the backing bar conditions to the QAI Lead Bill Levell, the QAI Rick Bettencourt and the ASMR Nina Mahjoub.

The QAI met with the QC Inspector William Norris and relayed the previously reported status of the informal review of the contractor's welding submittal package #37. 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 Mohammad Fatemi, (916) 813-3677, who represents the Office of Structural Materials for your project.

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**Inspected By:** Croff, Scott

Quality Assurance Inspector

**Reviewed By:** Levell, Bill

QA Reviewer