

**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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-025407**Date Inspected:** 02-Aug-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:** Fred Von Hoff**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 Sections**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 monitor American Bridge/Fluor (ABF) welding operations. This Quality Assurance (QA) Inspector, Craig Hager observed the following.

**Orthotropic Bridge Girder (OBG) Sections:**

10E-PP88-E4 LLH-#3 : This QA Inspector randomly observed ABF welding personnel Salvador Sandoval (#2202) using the Shielded Metal Arc Welding (SMAW) process in the flat (1G) position outside this OBG section.

This QA Inspector observed the plate for the lifting lug hole had been tack welded into position. This QA Inspector observed the plate appeared to be centered and the root opening appeared to be approximately 4-5 mm wide. This QA Inspector used an electronic temperature gauge and verified the preheat temperature was greater than 150°F. QC Inspector Fred Von Hoff arrived at this location and verified the following welding parameters; 130 amperes using a 3.2 mm diameter E7018H4R electrode. The welding observed appeared to comply with Welding Procedure Specification (WPS) ABF-WPS-D15-1050A-CU. This QA Inspector periodically observed QC Inspector Fred Von Hoff monitoring the welding at this location.

10E-PP92-E3 LLH-#4 : This QA Inspector randomly observed ABF welding personnel Mike Jiminez (#4671) using the SMAW process in the flat (1G) position outside this OBG section. This QA Inspector observed the fill passes were being welded. QC Inspector Fred Von Hoff arrived at this location and verified the following welding parameters; 280 amperes using a 4.8 mm diameter E7018H4R electrode. The welding observed appeared to

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comply with Welding Procedure Specification (WPS) ABF-WPS-D15-1050A-CU. This QA Inspector periodically observed QC Inspector Fred Von Hoff monitoring the welding at this location.

QC Inspector Bonifacio Daquinag Jr. informed this QA Inspector that all QC inspections (visual, Magnetic Particle Testing (MT) and Ultrasonic Testing (UT)) had been completed at 11W/12W-A1 thru A5 and that all welds had been accepted except for a UT defect at A1. QC Inspector Bonifacio Daquinag Jr. also informed this QA Inspector that a weld repair had been completed at 11E/12E-A2 and that all QC inspections were completed and accepted. This QA Inspector performed verification inspections as follows:

11W/12W-A1 : VT and MT performed on approximately 11% of the weld length – UT was not performed due to a pending repair

11W/12W-A2 : VT, MT and UT performed on approximately 11% of the weld length

11W/12W-A3 : VT, MT and UT performed on approximately 11% of the weld length

11W/12W-A4 : VT, MT and UT performed on approximately 11% of the weld length

11W/12W-A5 : VT, MT and UT performed on approximately 11% of the weld length

11E/12E-A2 : UT performed on approximately 11% of the weld length.

This QA Inspector did not observe any MT indications and/or UT signals that indicated a defect. The work observed appeared to comply with the contract requirements. See MT report (TL-6028) and UT report (TL-6027) this date for further details.

### Summary of Conversations:

This QA Inspector had general conversations with American Bridge/Fluor (ABF) and Caltrans personnel during this shift. Except as described above and noted below there were no notable conversations.

### 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>	Hager,Craig	Quality Assurance Inspector
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<b>Reviewed By:</b>	Levell,Bill	QA Reviewer
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