

**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-017232**Date Inspected:** 04-Oct-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:** See 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:** SAS OBG**Summary of Items Observed:**

The Quality Assurance (QA) Inspector, Rick Bettencourt was on site at the job site between the times noted above. The QA Inspector was on site to randomly observe the in process welding and inspection of the weld joints identified 6E/7E-A and the following observations were made:

**1E-PP-9.5-E4-2**

The QA Inspector randomly observed Darcel Jackson performing grinding tasks of ultrasonic testing rejects in the above identified lifting lug deck hole restoration. The QA Inspector randomly observed the ABF welder had previously excavated all four of the UT rejections located in the above identified hole. The QA Inspector randomly observed the ABF welder had not completed any of the SMAW repairs upon the arrival of the QA inspector in the am. The QA Inspector randomly observed the Smith Emery (SE) Quality Control (QC) Inspector Steve McConnell was on site to monitor and record the in process welding parameters. The QA Inspector noted the ABF welder was utilizing the shielded metal arc welding process with 1/8" E7018 low hydrogen electrodes. The QA Inspector randomly observed the ABF welder was utilizing 135 Amps while performing the SMAW repair. The QA Inspector performed a random visual inspection of the previously excavated areas and noted they had been ground and blended to a boat shaped weldable profile. The QA Inspector randomly observed and noted the ABF welder was preheating the material to approximately 150°F prior to making the SMAW repairs. The QA Inspector noted the SMAW repairs appeared to be in general compliance with ABF-WPS-1001 repair. The QA Inspector noted the repair welding was not completed on the QA Inspectors shift.

**6E/7E-A1**

The QA Inspector was informed by the SE QC Inspectors Steve McConnell and the Lead Inspector Leonard Cross

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## WELDING INSPECTION REPORT

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of a transverse UT indication in the weld segment identified A1 of the above identified weld joint. The QA Inspector noted the QC Inspector indicated the UT reject was approximately 50mm in length and extended into the base material of the top deck plate. Mr. Cross informed the QA Inspector, he would have the ABF WQCM Jim Bowers write a repair procedure and submit it for Caltrans METS approval. The QA Inspector noted no additional work or excavations were started on rejected areas.

### 5W/6W-D

The QA Inspector randomly observed the SE QC Inspector Jesse Cayabyab performing UT of the above identified weld joint. The QA Inspector noted the SE QC Inspector was performing the UT from the outside surface of the "D" plate. The QA Inspector noted the QC Inspector had just completed the lamination scan upon the arrival of the QA Inspector, no weld rejections had been located at the time of the QA Inspectors arrival.

### 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.

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

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