

**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-020321**Date Inspected:** 02-Feb-2011**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 as 6E-pp44-E4-1,2,3,4, 9E/10E-C2 and the following observations were made:

**6E-pp44-E4-1,2,3,4**

The QA Inspector randomly observed the ABF welder identified as Salvador Sandoval had completed the shielded metal arc welding (SMAW) from face A or the top side of the above identified weld joints. The QA Inspector randomly observed the ABF welder begin grinding all of the weld reinforcement flush with the top deck plate at all 4 weld joints identified above. The QA Inspector randomly observed the ABF welder completed the grinding. The QA Inspector performed a random visual inspection of the completed grinding and noted it did appear to meet the general requirements of the contract documents. The QA Inspector noted the ABF welder moved to the under side of the top deck plate to begin back gouging and back welding the weld joints identified above. The QA Inspector noted no welding was performed during the QA Inspectors shift.

**9E/10E-C2**

The QA Inspector randomly observed the ABF welder Song Tao Hunag had previously started the induction heating blankets on the inside of OBG to ensure the minimum required preheat of 150°F was achieved prior to welding. The QA Inspector randomly verified utilizing a 150°F temperature indicating marker and noted the minimum required preheat had been achieved. The QA Inspector observed the ABF welder to be utilizing the semi automated flux cored arc welding (FCAW) for the above identified weld joint. The QA Inspector randomly observed the Smith Emery (SE) QC Inspector identified as Fred Vonhoff set the FCAW machine to the parameters

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of the approved WPS identified as ABF-WPS-D1.5-3042-B-1 The QA Inspector randomly observed the FCAW parameters were 265 Amps, 24 Volts and a travel speed of 295mm/min. The QA Inspector noted the ABF welder continued welding the FCAW fill passes for the remainder of the shift. The QA Inspector noted the fit up in the areas being welded were in compliance with the contract requirements. The QA Inspector noted the welding continued through out the duration of the QA Inspectors shift.

The QA Inspector spent the remainder of the shift updating current ABF production welding on Caltrans QA spreadsheets as well as tracking QA and QC NDT status of transverse filed splices, lifting lugs restorations, access holes and longitudinal stiffener butt splices.

### Summary of Conversations:

The QA Task Lead Bill Levell informed the QA Inspector the weld repair requests identified as RWR-201102-001 (7W/8W-A5 Y=230mm), 002 (7W/8W-A2 Y=4880mm), 003(8E/9E-A5 Y=4200mm) and RWR-201101-005 (7W/8W-A-5 Y=30mm) were all approved per the Structures Materials Representative Patrick Lowry.

### 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 Sang Le 916-764-5650, 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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