

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-020334**Date Inspected:** 07-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-E4-1-4, 4W-pp25-W4-4 and the following observations were made:

6E-pp44-E4-1-4

The QA Inspector randomly observed the ABF welder Salvador Sandoval performing carbon arc gouging and back grinding of the above identified weld joints. The QA inspector randomly observed the ABF welder grind the back gouged weld joints to bright metal. The QA Inspector randomly observed the Smith Emery (SE) Quality Control (QC) Inspector Steve McConnell performing magnetic particle testing of the back gouged weld joints. It was noted no relevant indications were located at the time of the testing. The QA Inspector randomly observed the back gouged weld joints and noted they appeared to be in general compliance with the contract requirements. After the weld joints #2 and #4 were completely back gouged and tested with MT, the QA Inspector randomly observed the ABF welder move to the opposite side of the floor beam and perform the same back gouging tasks on the weld joints identified as #1 and #3. The QA Inspector noted the ABF welder utilized carbon arc gouging method and a grinding disc to perform the back gouge. The QA Inspector noted no welding was performed on the QA Inspectors shift.

4W-pp25-W4-4

The QA Inspector randomly observed the ABF welder identified as Mike Jimenez and ABF helper begin fitting up the lifting lug deck insert identified above. The QA Inspector noted the direction of rolling was stamped with a low stress stamp in the center of the insert plate, so no grinding or welding would mask or deface the identifying

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

marking. The QA Inspector randomly observed the bevel angle to be 45°. The QA Inspector noted the surface of the bevel appeared to be a machined surface with bright shiny metal. The QA Inspector noted the ABF welder was utilizing a prefabricated round copper backing plate with a channel machined in root opening where the welding will take place. The QA Inspector noted the fit up was completed on the QA Inspectors shift and appeared to be in general compliance with the contract documents. The QA Inspector randomly observed the ABF welder begin the SMAW root pass. The QA Inspector randomly observed the SMAW parameters were 1/8" E7018 low hydrogen electrodes with 127 Amps. The QA Inspector noted the parameters appeared to be in general compliance with ABF-WPS-1070A R1. After the SMAW root pass was completed the QA Inspector randomly observed the welder switch to 3/16" E7018 low hydrogen electrodes with 225Amps and used through the completion of the weld. The QA Inspector randomly observed the ABF welder did complete the above identified lifting lug hole on the QA Inspectors shift. It was noted the ABF welder did not remove the weld reinforcement of the QA Inspectors shift.

The QA Inspector spent the remainder of the shift updating job site production tracking logs as well as QA NDT tracking. The QA Inspector noted a job walk was performed in the afternoon to observe the charts kept directly on the steel. After the job walk was completed the QA Inspector transposed the updates to excel spreadsheets in the METS QA field office.

Summary of Conversations:

no pertinent conversation noted.

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.

Inspected By:	Bettencourt,Rick	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer
