

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:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-015254**Date Inspected:** 30-Jun-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:** Bernard Docena, Mike Johnson**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 4E/5E-E2, 1W/2W-B and the following observations were made:

4E/5E-E2

Upon the arrival of the QA Inspector it was observed ABF welder was setting up the flux cored arc welding (FCAW) machine to begin the FCAW root pass. The QA Inspector performed random visual testing of the fit up and noted it appeared to be in general compliance with the contract requirements. The QA Inspector randomly observed the ABF welder Song Tao Huang had previously started the induction heating blankets 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 randomly observed the SE QC Inspector identified as Bernard Docena set the FCAW machine to the parameters of the approved WPS. The QA Inspector randomly observed the FCAW parameters were 240 Amps 23.8 Volts and a travel speed of 310mm/min. The QA Inspector randomly observed the ABF welder Song Toa Huang begin the FCAW root/fill pass of the top 900mm of the above identified weld joint by hand. The QA Inspector noted the FCAW parameters appeared to be in general compliance 3042-B-1. The QA Inspector noted the ABF welder spent the remainder of the shift performing the FCAW fill/cover pass.

1W/2W-B

Upon the arrival of the QA Inspector in the AM the QA Inspector randomly observed the above identified weld joint back weld appeared to be approximately 40% complete. The QA Inspector randomly observed the ABF

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

welder had previously set up the induction heating blankets on the external surface of the OBG prior to the arrival of the QA Inspector. The QA Inspector noted the material appeared to be maintained at 150°F at the time of the visit. The QA Inspector randomly observed the Smith Emery (SE) Quality Control (QC) Inspector Mike Johnson on site and monitoring the in process FCAW back welding. The QA Inspector noted the QC inspector set the FCAW machine at 240 Amps, 21.5 Volts and travel speed of 230mm per minute. The QA Inspector noted the FCAW parameters appeared to be in general compliance with the contract requirements. The QA Inspector noted the ABF welder began the FCAW manually and continued until the end of the QA Inspectors shift. The QA Inspector noted no additional grinding or Inspection was performed on the QA Inspectors shift.

OBG-5W

The QA Inspector randomly observed the ABF welder Mitch Sittinger laying out and welding the square nuts for the fit up gear. The QA Inspector randomly observed the ABF welder had completed welding the temporary attachments to the "D" plate of the OBG in preparation of the fit up of the OBG 6W. The QA Inspector noted the OBG 6W was approximately 1 meter from the OBG 5W on this date. The QA Inspector noted no erection personnel performed any fitting tasks or moved 6W closer to 5W on this date.

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 Mohammad Fatemi (916)-813-3677, who represents the Office of Structural Materials for your project.

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