

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-020328**Date Inspected:** 03-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 9E/10E-C2 and the following observations were made:

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 Scott Allder set the FCAW machine to the parameters of the approved WPS identified as ABF-WPS-D1.5-3042-B-1 The QA Inspector randomly observed the FCAW parameters were 255 Amps, 24.7 Volts and a travel speed of 295mm/min. The QA Inspector noted the ABF welder continued welding the FCAW fill/cover 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. In addition the Lead QA Inspector and METS QA Inspectors performed a survey of areas that were previously known to have burn thru from the SAW of the top deck plates.

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The QA Inspectors observed all known locations and determined only one area of previously known burn thru remained and would require additional grinding to correct it. The QA Inspector noted 6E/7E-A1 Y=2000mm-3020mm appeared to have dross or burn thru that remained in place and would require removal by grinding. The QA Inspector informed the QA Task Lead Inspector Bill Levell of the area described above.

9E/10E-A

Upon the arrival of the QA Inspector it was observed the above identified transverse field splice was painted approximately all the way across the deck plate. The QA Inspector noted the only areas that were not painted was weld segment A5 where active repairs were being performed. The QA Inspector noted the weld splice had not yet been turned over to Caltrans QA for verification of NDT. The QA Inspector spoke with the ABF project Engineer John Callaghan (see summary of conversation)

Summary of Conversations:

The QA Inspector asked Mr. Callaghan why the weld splice 9E/10E was painted. Mr. Callaghan informed the QA Inspector he was not sure he would look into it. A few minutes later the ABF welding Superintendent Dan Ieraci approached the QA Inspector about the painting issue. Mr Ieraci informed the QA Inspector, he (Ieraci) was not aware the weld joint had not been turned over to Caltrans. He elaborated by saying he was not aware ABF had to wait for Caltrans to do the NDT verification. The QA Inspector informed Mr. Ieraci, ABF does not need to wait for Caltrans. The QA Inspector informed Mr. Ieraci if any waiting is to be done it is waiting for Smith Emery QC to complete the weld joint and turn it over to Caltrans QA. The QA Inspector informed Mr. Ieraci as soon as the weld joints are turned over to Caltrans QA for verification, Caltrans QA Inspectors performed the NDT verification immediately to ensure no hold up occurs. Mr. Ieraci apologized for painting the weld joint and informed the QA Inspector, ABF would remove any paint necessary for Caltrans QA to perform NDT verification of the weld joint.

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
