

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-018138**Date Inspected:** 11-Nov-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 as 8E/9E-A1-A5, 1E-pp9.5-E4-1, 2, 3, 4 and the following observations were made:

8E/9E-A1-A5

Upon the arrival of the QA Inspector at the above identified location it was observed the above identified weld joint appeared to be approximately 90% completed. The QA Inspector randomly observed both of the ABF welding Superintendent Dan Ieraci was the ABF welding operator performing the work. The QA Inspector randomly observed Mr. Ieraci utilizing both submerged arc welding (SAW) machines. The QA Inspector noted Mr. Ieraci would utilize one machine to perform welding from A3-A1 and another machine to perform welding from A3-A5. The QA Inspector noted it appeared Mr. Ieraci was instructing two apprentice iron workers on how to perform the SAW. The QA Inspector randomly observed Mr. Ieraci continued performing the SAW cover pass in the center of A3 and weld to the end of section A1. The QA Inspector randomly observed the SAW parameters and they were 550 Amps, 32.5Volts and a travel speed of 400mm/min. The QA Inspector noted the SAW parameters appeared to be in general compliance with ABF-WPS-D1.5-4042B-1. The QA Inspector noted Mr. Ieraci was performing the SAW cover passes in the areas which appeared to be under filled. The QA Inspector noted the weld joint was completed on the QA Inspectors shift.

1E-pp9.5-E4-3

The QA Inspector was informed by the SE QC Inspector Bonifacio Daquinag the 4 lifting lug hole at the above identified panel point were completed and accepted by SE QC. The QA Inspector performed visual testing of the

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

completed welds identified as 1E-pp9.5-E4-1, 2, 3, 4 and noted they appeared to be in general compliance with the contract requirements. The QA Inspector noted the 4 welds had been accepted and signed off by SE QC with VT, MT and UT. The QA Inspector proceeded to perform 10% ultrasonic testing (UT) verification of the above identified weld joints. After the evaluation it was noted by the QA Inspector weld joints 1E-pp9.5-E4-1, 2, 4 appeared to be in general compliance with the contract requirements. The QA Inspector noted the weld joint identified as 1E-pp9.5-E4-3 had a class "A" rejectable weld defect. The QA Inspector noted the weld defect was located during the QA 10% verification testing. The QA Inspector indicated the weld defect and informed the QC Inspector Pat Swain of the findings (see summary of conversation). For additional specific information regarding weld defect see TL-6027 for 11-11-10).

Summary of Conversations:

The SE QC Inspector Pat Swain performed the UT of the rejected area located by the QA Inspector and agreed the indication was present and rejectable. Mr. Swain informed the QA Inspector the weld defect was indeed present and that his indication rating, depth and length were spot on with the QA Inspectors findings. Mr. Swain informed the QA Inspector the indication would be excavated and repaired as an R2.

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
