

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

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-016652**Date Inspected:** 03-Sep-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 "A" stiffeners, hole restoration, and the following observations were made:

1E-pp9.5-E3-4

The QA Inspector randomly observed the ABF welder identified as Jin Pei Wang performing grinding tasks on the above identified back gouged weld joint. The QA Inspector randomly observed the Smith Emery (SE) Quality Control (QC) Inspector John Pagliero perform visual testing several times in an attempt to clear or accept the back gouged weld joint. The QA Inspector randomly observed the back gouged weld joint and noted visible slag inclusions were present and additional grinding would be required. After the grinding was completed the QA Inspector randomly observed the ABF welder begin performing the SMAW back weld for the above identified weld joint. The QA Inspector noted the base metal and the weld joint were preheated to approximately 150°F and back welding was commenced. The QA Inspector randomly observed the ABF welder to be utilizing 1/8" E7208 low hydrogen electrodes with 125 Amps. The QA Inspector noted the SMAW back weld was not completed on this date.

3E/4E-A-LS-3

Upon the arrival of the QA Inspector at the above identified location, the QA Inspector randomly observed the ABF welder Hua Qiang Hwang had completed the SMAW cover pass from one side of the weld joint. The QA Inspector randomly observed the ABF helper was performing grinding of the weld reinforcement from one side of the weld joint as well as performing grinding of the back gouge. The QA Inspector randomly observed the ABF welder preheat the material to 200°F utilizing a rosebud torch. The QA Inspector noted the SE QC Inspector John

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Pagliari was on site monitoring the in process preheats and welding parameters of approved welding procedure identified as ABF-WPS-D1.5-1012-3. The QA Inspector performed a random visual inspection of the above identified stiffener plate and noted the production welding appeared to be approximately 60% from one side only. The QA Inspector randomly observed the ABF welder remove the E9018 1/8" electrodes from the rod container at 0730. The QA Inspector noted the maximum exposure time for the above identified electrodes is one hour. The QA Inspector randomly observed the ABF welder continue the SMAW fill passes on the above identified weld joint. The QA Inspector noted the SMAW parameters were 125 amps and appeared to be in general compliance with the above identified WPS. The QA Inspector noted the ABF welder completed the above identified weld joint from one side and continued to perform welding from the back side of the weld joint or back weld.

4E/5E-A-LS-4, 5, 6

Upon the arrival of the QA Inspector at the above identified location, the QA Inspector randomly observed the ABF welder Xiao Jin Wan preheat the material to 200°F utilizing a rosebud torch. The QA Inspector noted the SE QC Inspector John Pagliero was on site monitoring the in process preheats and welding parameters of approved welding procedure identified as ABF-WPS-D1.5-1012-3. The QA Inspector performed a random visual inspection of the above identified stiffener plates and noted the production welding appeared to be approximately 20% from one side only. The QA Inspector randomly observed the ABF welder remove the E9018 1/8" electrodes from the rod container at 0730. The QA Inspector noted the maximum exposure time for the above identified electrodes is one hour. The QA Inspector randomly observed the ABF welder continue the SMAW fill passes on the above identified weld joint. The QA Inspector noted the SMAW parameters were 125 amps and appeared to be in general compliance with the above identified WPS. The QA Inspector noted the ABF welder was working on all three stiffeners at one time. The QA Inspector randomly observed and noted the ABF welder was alternating stiffener plates. The SE QC Inspector John Pagliero informed the QA Inspector the welder was alternating the plates to reduce the amount of distortion on the "A" deck plate. The QC Inspector informed the QA Inspector the ABF welder was instructed to do so by the ABF welding Superintendent Dan Ieraci.

6E/7E-A

The QA Inspector randomly observed the above identified OBG lifts had been pushed together and were being bolted on this date. The QA Inspector randomly observed the ABF erection personnel installing permanent bolts to the splice plates under the top deck plate. The QA Inspector randomly observed the ABF personnel did not tension the bolts rather just snugged them tight. The QA Inspector performed a random visual inspection of the longitudinal welds on the top deck plate and noted they had been ground flush at the intersection with the top deck complete joint penetration groove led. The QA Inspector noted the steel backing bar was being fit up and wedged into place on this date.

Summary of Conversations:

The ABF Welding Superintendent Dan Ieraci informed the QA Inspector production welding will be started on Tuesday 9/7/10 for the transverse deck splice 6E/7E-A1-A5.

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.

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