

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-022504**Date Inspected:** 12-Apr-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Jobsite**CWI Name:** Gary Ehram**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:**

Quality Assurance inspector (QA) Douglas Frey was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

1. Access Plate Longitudinal Stiffner Field Splice @ 8W PP70.5 W5
2. Lifting Lug Hole #1 @ 7W PP53 W3
3. Lifting Lug Hole #2 @ 7W PP55 W3

1. Longitudinal Stiffner Field Splice 8W PP70.5 W5

The QA Inspector observed that the ABF welder Jin Pei Wang had completed welding the west end face A of the Longitudinal Stiffner (LS) on the access plate located at PP70.5. It was noted that the ABF QC Inspector identified as Gary Ehram had approved the Visual Inspection of the weld and the welder began preparations to back gouge from face B. The QA Inspector periodically observed the ABF welder identified above perform the Carbon Air Arc (CAA) process. The QA Inspector randomly observed the QC Inspector complete Magnetic Particle Testing on the back gouge and was found to be acceptable. The QA observed the welder begin to install the induction heating blankets on face A of the LS to ensure the minimum required preheat for Grade 485W HPS steel was achieved prior to welding. The QA Inspector randomly verified utilizing a 200°F temperature indicating marker and noted the minimum required preheat had been achieved. The QA Inspector observed the ABF welder to be utilizing SMAW manually for the above identified weld joint. The QA Inspector randomly observed the QC Inspector set the SMAW machine to the parameters of the approved WPS identified as ABF-WPS-D1.5-1012-3.

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The QA Inspector randomly observed the ABF welder identified above start the root pass. The QA Inspector noted the ABF welder spent the remainder of the QA Inspectors shift performing the SMAW fill passes. The QA Inspector randomly and periodically observed the welding at the above identified location. It was noted by the QA Inspector the ABF welder did not complete the SMAW on the QA Inspectors shift.

2. Lifting Lug Hole #1 7W PP53 W3

The QA Inspector randomly observed the ABF welder Darcell Jackson repair UT Indications at $y=600\text{mm}$ $x=0$ by excavating the area utilizing a 4" grinding wheel. The QA Inspector randomly observed the ABF QC Inspector identified as Gary Ehrsam inspect the work and record the excavation as 13mm's deep, 110mm's long and 25mm's wide. The QA Inspector noted that the welder began to perform SMAW within the parameters of the approved WPS identified as ABF-WPS-D15-1050A. The QA Inspector randomly observed the welding to completion and measured the ground flush condition to be +.5mm.

3. Lifting Lug Hole #1 7W PP55 W3

The QA Inspector randomly observed the ABF Welder Darcell Jackson repair two (2) UT Indications at $y=600\text{mm}$ $x=+5$ by excavating the area utilizing a 4" grinding wheel. The QA Inspector randomly observed the QC Inspector Gary Ehrsam inspect the work and record the excavation as 11mm's deep, 120mm's long and 20mm's wide. The QA Inspector randomly observed the QC Inspector inspect the repair work of Indication #2 at $y=310\text{mm}$ $x=0$ and record the excavation as 11mm's deep, 110mm's long and 20mm's wide. The QA Inspector randomly observed the welder performing SMAW within the parameters of the approved WPS identified as ABF-WPS-D15-1050A. The QA Inspector randomly and periodically observed the welding at the above identified location. It was noted by the QA Inspector the ABF welder did not complete the SMAW on the QA Inspectors shift.

Summary of Conversations:

As noted above.

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 Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Frey,Doug	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer
