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 #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 1x.28

WELDING INSPECTION REPORT

Resident Engineer: Casey, William
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-027528
Date Inspected: 01-May-2012

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: American Bridge/Fluor Enterprises, a JV

OSM Arrival Time: 700
OSM Departure Time: 1730
Location: On Site

CWI Name: Sal Marino

Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**CWI Present:**	☑ Yes	☐ No	
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☑ Yes	☐ No	☐ N/A
				Approved WPS:	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: SAS OBG Components

Summary of Items Observed:

This Quality Assurance (QA) Inspector, Art Peterson arrived on site between the times noted above. This QA Inspector was on site to randomly observe Quality Control (QC) personnel perform Non-Destructive Testing (NDT) and monitor the welding operations performed by American Bridge Fluor (ABF) welding personnel. The following observations were:

Segment 13E Grid Line E2.8 Deck Plate Drop-in Section Longitudinal Field Weld Splice

This QA Inspector observed ABF welder Mike Jimenez (Welder ID 4671) performing the root pass weld operation per the Shielded Metal Arc Welding (SMAW) process in the (1G) flat position on the (top side) of the Deck Plate Drop-in Section Longitudinal Field Weld Splice on Segment 13E along Grid Line E2.8.

This QA Inspector observed QC Inspector Sal Marino verify prior to the start of the root pass weld operation, that the minimum preheat temperature as per the approved WPS was established; and afterwords verified that the welding parameters (Amps and Travel Speed) were in accordance with WPS D1.5-1040C-CU Revision 0 using E7018 (1/8") and (5/32") diameter electrode.

This QA Inspector observed that ABF welder Mike Jimenez was in-process on the root pass weld operation on the Deck Plate Drop-in section Longitudinal Field Weld Splice along Grid E2.8 at the end of this QA Inspectors' shift.

Segment 13E Deck Plate Drop-in Section @ PP122.2 Transverse Field Weld Splice

This QA Inspector observed ABF welder Salvador Sandoval (Welder ID 2202) performing the root pass weld operation per the Shielded Metal Arc Welding (SMAW) process in the (1G) flat position on the (top side) of the Deck Plate Drop-in Section Transverse Field Weld Splice on Segment 13E/14E.

This QA Inspector observed QC Inspector Sal Marino verify prior to the start of the root pass weld operation, that the minimum preheat temperature as per the approved WPS was established; and afterwords verified that the welding parameters (Amps and Travel Speed) were in accordance with WPS D1.5-1040C-CU Revision 0 using E7018 (1/8") diameter electrode.

This QA Inspector observed that ABF welder Salvador Sandoval was in-process on the root pass weld operation on the Deck Plate Drop-in section Transverse Field Weld Splice along 13E/14E at the end of this QA Inspectors' shift.

Segment 13E Grid Line E2.1 - Deck Plate Drop-in Section Longitudinal Field Weld Splice

This QA Inspector observed ABF welder Steve Davis (Welder ID 7889) performing the root pass weld operation per the Shielded Metal Arc Welding (SMAW) process in the (1G) flat position on the (top side) of the Deck Plate Drop-in Section Longitudinal Field Weld Splice on Segment 13E along Grid Line E2.1.

This QA Inspector observed QC Inspector Sal Marino verify prior to the start of the root pass weld operation, that the minimum preheat temperature as per the approved WPS was established; and afterwords verified that the welding parameters (Amps and Travel Speed) were in accordance with WPS D1.5-1040C-CU Revision 0 using E7018 (1/8") diameter electrode.

This QA Inspector observed that ABF welder Steve Davis was in-process on the root pass weld operation on the Deck Plate Drop-in section Longitudinal Field Weld Splice along Grid Line E2.1 at the end of this QA Inspectors' shift.

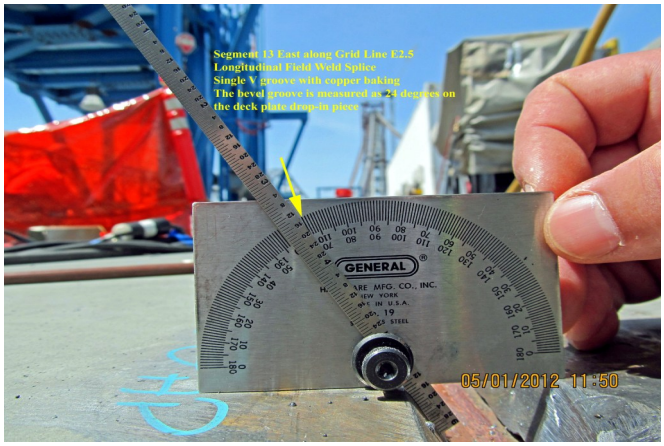
Segment 13E PP122.2 - Deck Plate Drop-in Section @ Transverse Field Weld Splice

This QA Inspector performed planar misalignment measurements using a bridge-cam gage along the length of the deck plate drop-in section transverse field splice on Segment 13 East of PP122.2. The length of the weld is 8600 mm and the thickness of the deck plate is 20 mm. The planar misalignment measurements were recorded after the root pass was welded in place and the key plates were removed. The planar misalignment measurements recorded were as follows: 2580 mm ~ 2765 mm - (3 to 5) mm; 6530 mm - (3 mm); 6550 mm - (4 mm); 6575 mm - (5 mm); 6630 mm - (6 mm); 6700 mm - (5 mm); 6880 mm - (4 mm); and 6970 mm - (3 mm). This QA Inspector informed QA Lead Inspector Danny Reyes of the measurements recorded and Danny Reyes would inform QA Task Leader Bill Levell of the planar misalignment measurements for review and disposition.

Segment 13E Grid Line E2.5 - Deck Plate Drop-in Section Longitudinal Field Weld Splice

This QA Inspector performed the bevel angle measurements after ABF welder Jacob Stafford (Welder ID 2202) performed the buttering operation per the SMAW process in the (1G) flat position on one side of the bevel on the deck plate drop-in section along Grid Line E2.5 on Segment 13E. The bevel angle measurements were used to

determine the groove angle which was measured at 45 degrees and the groove angle measured will be for ultrasonic testing purposes only. See photos below of the bevel angle measurements.



Summary of Conversations:

Only general conversations between this QAI and and the QC Inspector on this date.

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:	Peterson,Art	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer