

**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-018722**Date Inspected:** 14-Dec-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1000**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1830**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site

<b>CWI Name:</b>	William Sherwood and Mike Johnson			<b>CWI Present:</b>	<b>Yes</b>	<b>No</b>	
<b>Inspected CWI report:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Rod Oven in Use:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Electrode to specification:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Weld Procedures Followed:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Qualified Welders:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Verified Joint Fit-up:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Approved Drawings:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Approved WPS:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
				<b>Delayed / Cancelled:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Bridge No:</b>	34-0006			<b>Component:</b>	Orthotropic Box Girder		

**Summary of Items Observed:**

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at the Self Anchored Suspension (SAS) job site as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

The following deck access hole infill plate to top deck plate welding was observed;

- At OBG 1W-PP10.5-W2-N outside – ABF welder Jin Pei Wang was observed 1G Shielded Metal Arc Welding (SMAW) welding fill pass on the infill plate to top deck plate butt joint. The welder was noted using 1/8” diameter E7018H4R electrode. At the end of the shift, fill pass welding was still in progress and should continue tomorrow.
- At OBG 1W-PP10.5-N5-S outside - ABF welder Han Wen Yu was observed 1G SMAW welding fill pass on the infill plate to top deck plate butt joint. The welder was noted using 3/16” diameter E7018H4R electrode. At the end of the shift, fill pass welding was still in progress.
- At OBG 3W-PP19.5-W2-NW outside - ABF welder Kenneth Chappell was observed 1G SMAW welding fill pass on the infill plate to top deck plate butt joint. The welder was noted using 1/8” diameter E7018H4R electrode. During the shift, fill pass welding on this location was still continuing which should remain tomorrow.
- At OBG 2W-PP13.5-W5-S inside – ABF welder Mick Chan was observed 4G Shielded Metal Arc Welding (SMAW) welding fill pass on the infill plate to top deck plate butt joint. The welder was noted using 1/8” diameter E7018H4R electrode. At the end of the shift, fill pass welding was still in progress and should continue tomorrow.

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

---

5. At OBG 8W-PP70.5-W5-S outside - ABF welder Jorge Lopez was observed tack welding/fitting up the infill plate to top deck plate. After the completion of the fit up, ABF QC Steven Mc Connell performed the fit up alignment check which he accepted but marked some areas for buttering due to excessive root gap. QA verified and confirmed the alignment. The welder was noted welding the root pass where gap was acceptable and according to QC Steven Mc Connell, the welder will batter the plate where the gaps were excessive. The welder was noted using 1/8" diameter E7018H4R electrode. At the end of the shift, root pass welding on this location was still continuing which should remain tomorrow.

All the welders working on the deck access hole mentioned above were noted welding/implementing Caltrans approved welding procedure specification ABF-WPS-D15-1010 Revision 1. All the welders and their welding parameters were also monitored by ABF QC William Sherwood.

At OBG 1W-PP9.5-W4-# 4 lifting lug access infill plate to top deck plate outside, ABF welder Mike Jimenez was observed continuing to perform 1G SMAW welding fill pass on the infill plate to top deck plate butt joint. The joint being welded has a 45 degrees single bevel groove joint with copper backing plate. The welder was noted using 1/8" diameter E7018H4R electrode implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1070. ABF QC Mike Johnson was noted monitoring the welder's welding parameters. At the end of the shift, fill pass welding on this location was still continuing which should remain tomorrow.

At OBG 1W-PP9.5-W3-#1 & 2 lifting lug access infill plate to top deck plate outside, ABF welder Darcel Jackson was observed continuing to perform 1G SMAW welding fill pass on the infill plate to top deck plate butt joint. The joint being welded has a 45 degrees single bevel groove joint with copper backing plate. The welder was noted alternately welding the two access holes using 1/8" diameter E7018H4R electrode implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1070. ABF QC Mike Johnson was noted monitoring the welder's welding parameters. At the end of the shift, fill pass welding on this location was still continuing which should remain tomorrow.

Flush grinding/grinding cut orientation and smooth finish verification on the bottom of welded lifting lug restoration at the following locations were verified by this QA;

1. 1E-PP11-E3-#2
2. 2E-PP15-E3-#1, #2, #3 & #4
3. 2E-PP15-E4-#1, #2, #3 & #4

---

# WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

---



## Summary of Conversations:

No significant conversation occurred today.

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

---

**Inspected By:** Lizardo, Joselito

Quality Assurance Inspector

---

**Reviewed By:** Levell, Bill

QA Reviewer