

**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-018480**Date Inspected:** 06-Dec-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Jobsite**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:**

On this date CALTRANS OSM Quality Assurance Inspector (QAI) Bert Madison was present at Yerba Buena Island in California between the times noted above for observations relative to the work being performed by American Bridge/Fluor Enterprises (AB/F) personnel at the locations noted below.

- 1). OBG Field Splice 7E/8E Weld ID: D, Face B – (Plasma Cutting)
- 2). OBG Field Splice 4E/5E A Longitudinal Stiffener (LS) 4 (SMAW R-1 Repairs)
- 3). OBG East Line Access Penetration Insert Weld at 7E PP61.5 E2 SW (Interior)
- 4). OBG East Line Access Penetration Insert Transverse Stiff. (TS) Splice at 6E PP46.5 E2 S
- 5). OBG East Line Access Penetration Insert Welds (SMAW)
- 6). East Line Lifting Rod Access Penetration Insert Welds (QA verification)

- 1). OBG Field Splice 7E/8E Weld ID: D, Face B – (Plasma Cutting )

The QAI periodically observed AB/F approved welder Rory Hogan (ID 3186) assisted by AB/F approved welder Jeremy Dolman (ID 5042) performing Plasma cutting to remove the backing bar and prepare a groove for back welding.

- 2). OBG Field Splice 4E/5E A Longitudinal Stiffener (LS) 4 (SMAW R-1 Repair)

The QAI periodically observed AB/F approved welder Xiao Jian Wan (ID 9677) performing R-1 repair welding of fill and cover passes per the Shielded Metal Arc Welding (SMAW) process in the 3G (vertical) position of OBG Field Splice 4E/5E ALS-4. See photo below. QC Inspector John Pagliero was present periodically to monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-1002 Repair. The repair welding was completed on the North face of ALS-4. The QAI observed that the excavated area had the following dimensions with the

---

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

---

---

following Y location:

ALS-4 – Excavation: Y = 10mm, Length = 125mm, Depth = 20mm and Width = 25mm.

The QAI observed that the work at this location appeared to be in general compliance with contract documents.

3). OBG East Line Access Penetration Insert Weld at 7E PP61.5 E2 SW (Interior)

The QAI periodically observed AB/F approved welder Wai Kitlai (ID 2953) performing back grinding to prepare for back welding and later periodically observed back welding per the Shielded Metal Arc Welding (SMAW) process in the 4G (overhead) position on the interior of OBG East Line Access Penetration Insert Weld 8E PP61.5 E2 SW. QC Inspector John Pagliero was present to monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-1010 rev 1. The QAI observed the work at this location appeared to be in general compliance with contract documents.

4). OBG East Line Access Penetration Insert Transverse Stiff. (TS) Splice at 6E PP46.5 E2 S

The QAI periodically observed AB/F approved welder Wen Han Yu (ID 6317) performing back welding per the Shielded Metal Arc Welding (SMAW) process in the 3G (vertical) position on the OBG East Line Access Penetration Insert TS. See photo below. QC Inspector John Pagliero was present to monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-1010 rev 1. The QAI observed that back welding was completed and work at this location appeared to be in general compliance with contract documents.

5). OBG Field Welding of East Line Lifting Rod Access Penetration Inserts (SMAW)

Exterior: OBG 5E PP27 E3 welds 1, 2 & 4 (R-1 repairs)

The QAI periodically observed AB/F approved welder Earl Espinoza (ID 5824) performing air carbon arc gouging and grinding of R-1 repair excavated areas at OBG 5E PP27 E3 welds 1, 2 & 4. The QAI subsequently periodically observed welding of fill and cover passes per the Shielded Metal Arc Welding (SMAW) process in the 1G (flat) position. QC Inspector Mike Johnson was periodically present to monitor the progress and verify that the welding parameters were within the limits established by the approved welding Procedure Specification (WPS) identified as ABF-WPS-D1.5-1000 Repair. Welding and flush grinding was completed and the QAI observed that the work at this location appeared to be in general compliance with contract documents. The QAI observed that there was the following number of excavations at the following weld locations: E3 Weld #1 – 7 excavations, E3 Weld #2 – 2 excavations and E3 Weld #4 – 1 excavation.

6). East Line Lifting Rod Access Penetration Insert Welds (QA verification)

The QAI performed verification Ultrasonic Testing (UT) of 25% of the lengths of OBG Field Welds of Lifting Rod Access Penetration Insert Welds at the following locations:

1E PP11-E4-Welds 1 through 4

2E PP15-E3-Welds 1 through 4

2E PP15-E4-Welds 1 through 4

2E PP17-E3-Welds 1 through 4

2E PP17-E4-Welds 1 through 4

3E PP20-E3-Welds 1, 2 and 4

3E PP20-E4-Welds 1 through 4

The OBG Field Welds verified by the QAI at this location appeared to be in general compliance with contract documents. See Ultrasonic Testing Report Form TL-6027 generated by the QAI on this date.

---

# WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

---



## Summary of Conversations:

Conversations on this date with Quality Control Inspectors were general in nature and pertained to locations of welding and QC activities and locations of welds released to the QAI for verification testing.

## 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.

---

<b>Inspected By:</b>	Madison,Bert	Quality Assurance Inspector
<b>Reviewed By:</b>	Levell,Bill	QA Reviewer

---