

**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:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-015032**Date Inspected:** 18-Jun-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

<b>CWI Name:</b>	Bernard Docena, Jesse Cayabyab			<b>CWI Present:</b>	Yes	No	
<b>Inspected CWI report:</b>	Yes	No	N/A	<b>Rod Oven in Use:</b>	Yes	No	N/A
<b>Electrode to specification:</b>	Yes	No	N/A	<b>Weld Procedures Followed:</b>	Yes	No	N/A
<b>Qualified Welders:</b>	Yes	No	N/A	<b>Verified Joint Fit-up:</b>	Yes	No	N/A
<b>Approved Drawings:</b>	Yes	No	N/A	<b>Approved WPS:</b>	Yes	No	N/A
				<b>Delayed / Cancelled:</b>	Yes	No	N/A
<b>Bridge No:</b>	34-0006			<b>Component:</b>	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 4W/5W-D, 3W/4W-C, 1W/2W-D/S and the following observations were made:

1W/2W-D/S

D/S#2

Upon the arrival of the QA Inspector at the above identified location it was observed the ABF welder James Zhen was performing flux cored arc welding (FCAW) repairs. The QA Inspector randomly observed the ABF welder was continuing the FCAW repairs started previously. The QA Inspector noted the repair appeared to be a full length excavation which was approximately 80% complete upon the arrival of QA Inspector in the AM. The QA Inspector noted an incident report was written and submitted for the contractor proceeding with the excavation and repair of third time rejections and repairs. The QA Inspector randomly observed the SE QC Inspector Tom Pasqualone was on site monitoring and observing the in process repairs. The QA Inspector randomly observed the FCAW parameters and they were 250 Amps, 23 Volts and a travel speed of 245mm/min. The QA Inspector noted the FCAW parameters appeared to be consistent with the ABF approved WPS identified as ABF-WPS-D1. 5-3000-3 repair. The QA Inspector randomly observed the ABF welder complete the FCAW repair on this date. The QA Inspector noted no grinding was performed on this date.

D/S#5

The QA Inspector randomly observed the ABF welder grind and excavate the previously indicted UT rejection. In addition it was noted the excavation is a third time repair. The QA Inspector performed dimensional measurements

---

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

---

---

of the excavation and noted it was 140mm x 38mm x 22mm. The QA Inspector noted no welding was performed on this date.

D/S#6

The QA Inspector randomly observed the ABF welder grind and excavate the previously indicted UT rejection. In addition it was noted the excavation is a third time repair. The QA Inspector performed dimensional measurements of the excavation and noted it was 140mm x 33mm x 20mm. The QA Inspector noted the above identified weld joint had two rejectable weld defects previously indicated and one of the excavated. The QA Inspector noted one of the indications was excavated and the dimensions of the excavation are identified above. The QA Inspector was informed by the QC Inspector the bigger of the two excavations would be welded first and the second indicated area will be excavated after the bigger one is completed.

3W/4W-E

The QA Inspector randomly observed the ABF welders Jeremy Doleman and Rory Hogan performing plasma arc gouging while back gouging the above identified weld joint. The QA Inspector noted the back gouge was nearly complete, additional grinding would be required prior to the FCAW back welding. No welding was performed on the QA Inspectors shift.

4W/5W-A

The QA Inspector randomly observed the ABF welder identified as Fred Kaddu performing grinding tasks while excavating a UT rejection previously indicated by the SE Quality Control Inspector Steve McConnell. The QA Inspector randomly observed and noted the excavation was 250mm x 25mm x 20mm. The QA Inspector was informed by the QA Lead Inspector Bill Levell the verbal approval to perform the weld repair was granted. The QA Inspector randomly observed the SE QC Inspector Steve McConnell perform magnetic particle testing of the excavated area and noted the relevant indications were located at the time of the testing. The QA Inspector randomly observed the ABF welder begin the shielded metal arc welding (SMAW) repair. The QA Inspector randomly observed the ABF welder was utilizing 1/8" E7018 low hydrogen electrodes with 126 Amps. The QA Inspector noted the SMAW parameters appeared to be in general compliance with the contract requirements.

### **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 Mohammad Fatemi (916)-813-3677, who represents the Office of Structural Materials for your project.

---

<b>Inspected By:</b>	Bettencourt,Rick	Quality Assurance Inspector
----------------------	------------------	-----------------------------

---

<b>Reviewed By:</b>	Levell,Bill	QA Reviewer
---------------------	-------------	-------------