

**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:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-027876**Date Inspected:** 30-Jun-2012**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:** Job Site**CWI Name:** As noted 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:**

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:

**12E Corner Drop-In Panel (Interior)**

This QA Inspector randomly conducted fit up and measurement of the 12E Corner Drop-In Panel on the interior of the OBG. QC Inspector Salvador Merino utilized a Bridge Cam gauge to measure the planar offset of the 12E-E2. 1-C seam located on Bottom Plate "D" where the existing Plate thickness averaged 22mm to the 18mm Drop-In Plate. Work was also performed on Edge Plate "B" on the exterior of the OBG. (see photo below) The work at this location is in progress and appeared to be in general conformance with the contract specifications.

**12E-E2.1 (Exterior)**

This QA Inspector randomly observed Submerged Arc Welding (SAW) of the Corner Drop-In Plate at 12E-E2.1 on the exterior of the OBG. This QA Inspector observed heat induction blankets to provide pre-heat for the single bevel joint and verified the temperature was the required minimum of 150° F. It was also noted that the remote oven for the ESAB EN 760 Flux was in the on position with the dial set at 250° F as ABF welding personnel employed a flux recycling vacuum hose to empty the feeder hopper of the SAW unit. This QA Inspector observed the removal of the electrode spool which was discarded and replaced with a new F7A2-EM12KH8 electrode spool. QC Inspector Fred Michels measured the parameters for amperage, volts, travel speed and the heat input as ABF

---

---

# WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

---

---

welder James Zhen (ID 6001) adjusted the controls on the Lincoln track mounted wire feeder. Upon approval for conformity with WPS-D1.5-4042B-1, Mr. Zhen commenced welding operations on the joint in the 1G flat position. On a subsequent observation, this QA Inspector observed ABF welding personnel recycle the flux utilizing a vacuum hose and cleaning the edge of the work with a chipping hammer between passes. Mr. Zhen was observed adjusting the path of the feeder prior to each consecutive pass during the ongoing process and inspected each completed pass for indications and workmanship. QC was present to monitor the welding and the parameters so they remain within the requirements of the WPS. This QA Inspector made subsequent observations throughout the shift to monitor quality and noted that the work was in process and appeared to be in general conformance with the contract specifications.

## Summary of Conversations:

This QA Inspector discussed the offset of 12E Edge Plate "B" with Quality Control Inspector Salvador Merino.



## 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