

**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-013829**Date Inspected:** 04-May-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**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:** Orthotropic Box Girders (OBG)**Summary of Items Observed:**

Quality Assurance inspector (QA) Michael Foerder was at the American Bridge/Flour (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:

1. OBG Field Splice 1E/2E Face D Repairs (Outside)
2. OBG Field Splice 3E/4E Face C (Outside)
3. OBG Field Splice 3W/4W Face A Repairs

**Field Splice 1E/2E Face D (Outside)**

The QA inspector periodically observed ABF welding personnel Mitch Sittinger grinding operations in order to excavate and remove the rejectable indications previously identified by QC utilizing Ultrasonic Testing (UT). Several areas were noted to be marked for repair on this face and the welder relayed a portion of these repairs will be performed from the outside and a portion will be performed from the inside of the OBG. QC inspector Tony Sherwood was noted to be present in order to monitor the progress and adherence to the welding procedure specification designated as ABF-WPS-D1.5-1001 Repair. The excavation at approximate Y location designated 1400mm was reviewed by the QC inspector and the welder performed the repair utilizing the shielded metal arc welding (SMAW) process and the amps were verified to be 135. The welder completed this area and proceeded to excavate and repair another repair at Y location designated 1900mm which was completed later in the shift. The work appeared to be in general conformance with the contract documents.

**Field Splice 3E/4E Face C (Outside)**

---

---

# WELDING INSPECTION REPORT

( Continued Page 2 of 2 )

---

---

The QA inspector noted and periodically observed ABF welding operators Rory Hogan and Jeremy Dolan performing the grinding operations for face C on the second side (Outside). The welding operators continued setting the equipment up and periodically performing the operation throughout the shift. The work was not completed on this date or turned over to QC for verification to the QA inspector's knowledge but appeared to be progressing in general conformance with the contract documents.

### Field Splice 3W/4W Face A Repairs

The QA inspector periodically observed QC inspectors Steve McConnell and Tom Pascaulone performing ultrasonic testing (UT) on this date for the balance of the welds designated A-5 and A-1. The QC inspectors were noted to be utilizing a zero degree transducer for lamination examination and a 70 degree transducer and wedge combination for shear wave examination. Several areas were marked for repair and later in the shift ABF welding personnel Jordan Hazalaar began the excavation process along with a helper. At this time approximately 20 areas have been marked for repair along the entire weld face designated A. At the end of the QA inspector's shift the ABF personnel had performed 10 of the excavations and shaped them for welding, however no welding was observed on this date by the QA inspector. A review of the excavation by the QA inspector revealed the majority of the rejectable areas depicted linear porosity in the weld and a digital photo is included in the body of this report for general information.



### Summary of Conversations:

As noted above in items observed.

### 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> | Foerder, Mike | Quality Assurance Inspector |
| <b>Reviewed By:</b>  | Levell, Bill  | QA Reviewer                 |

---