

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-012990**Date Inspected:** 14-Apr-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 Inside Splice 2E/3E C-1 and C-2 (Second Side)
2. OBG Inside Field Splice 3E/4E E-2 FCAW

Field Splice 2E/3E Face C (Second side-Outside)

The QA inspector periodically observed ABF welding operator Rory Hogan moving additional induction heating blankets into position for the balance of weld designated C-2 on the outside of the OBG from the bottom plate progressing toward the Edge plate. It was noted upon the review by the QA inspector weld C1 has been completed and the heating blankets were being kept in place for the additional post weld heat time. QC inspector Jim Cunningham was noted to be present and marked several areas for minor grinding/blending for weld C2. The welder and helper continued the process of moving welding equipment into place with no welding being observed at this location by QA on this date for the QA inspector's shift.

Field Splice 3E/4E Face E-2 (First side-Inside)

The QA inspector periodically observed the in process Flux Cored Arc Welding (FCAW-G) being performed by ABF welding personnel Song Tao Huang between Y locations designated 9875mm – 10,000. QC inspector Tom Pascaulone was noted to be present in order to monitor the progress and ensure the welding was within the established Welding Procedure Specification (WPS) noted as ABF-WPS-D1.5-3042B-1. The preheat and interpass

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

temperature was verified by the QC and QA inspector to be greater than 65° Celsius (C) and the parameters were verified to be 220 amps, 23.5 volts and a measured travel speed of 220mm/min. The welder is in the process of placing the cover passes at this time. The work progressed throughout the morning shift, was completed and appeared to be in general conformance with the contract documents. The QC inspector performed a visual examination of the completed weld in this area and had the welder perform minor grinding and blending and accepted the weld visually. The QA inspector performed a visual review of welds E-1 and E-2 for the inside and concurred with QC's assessment with the following exception, there is an area approximately 300mm in length which exhibits a significant planar misalignment measured to be 2.5mm and increasing over the distance to 8mm as the joint progresses toward plate F. It was noted an incident report has been generated for this issue previously on 4/2/10 by QA inspector Dan Reyes. The welder and QC inspector relayed they would be moving the welding equipment and QC's operation to 3E/4E plate C after the break.

Summary of Conversations:

No significant conversations held on this date for this contract.

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.

Inspected By:	Foerder, Mike	Quality Assurance Inspector
Reviewed By:	Levell, Bill	QA Reviewer
