

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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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-027584**Date Inspected:** 10-May-2012**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Jobsite

CWI Name:	As noted below		
Inspected CWI report:	Yes	No	N/A
Electrode to specification:	Yes	No	N/A
Qualified Welders:	Yes	No	N/A
Approved Drawings:	Yes	No	N/A

CWI Present:	Yes	No	
Rod Oven in Use:	Yes	No	N/A
Weld Procedures Followed:	Yes	No	N/A
Verified Joint Fit-up:	Yes	No	N/A
Approved WPS:	Yes	No	N/A
Delayed / Cancelled:	Yes	No	N/A

Bridge No: 34-0006**Component:** As noted below**Summary of Items Observed:**

The Caltrans Quality Assurance Inspector (QAI) David Gray was at the American Bridge Fluor (ABF) job site between 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:

Skyway:

The QAI witnessed work in progress related to Contract Change Order (CCO) 179, East Bikeway. The QAI observed ABF welder Jason Collins ID# 8128 fillet welding in the 2F and 4F positions with FCAW utilizing E71T-11 wire electrode. Bikepath Divider Rail Conduit Routing 16mm pipe sleeves were "Seal Welded" (reference note 4 of Contract Change Order No. 179 Sheet 5 of 7) to the top and bottom plates at dividers 163, 164, 165, 166, 167, 168, 169, 170 and 171. QCI Steve Jensen was observed measuring welding parameters for compliance to ABF-WPS-D11-F2201. Holes for the 16mm Pipe Sleeve were observed being drilled from panel 165 to approximately 175.

Hinge B East Bikeway Expansion Joint Replacement, (reference ABF Sheet ABN-402 2 of 6)

Expansion Joint Cover Plate B1 was removed to expose 17ea 10 x 10 x 200 Steel Spacers (Spacers and their required weldments not detailed on referenced drawing). Spacers removed by grinding fillet welds at spacers. Remaining welds ground flush at top plate. The QAI observed QCI Tony Sherwood utilizing Magnetic Particle Testing (MT) methods to test 100% (17 of 17) at the ground areas. The QAI Visually (VT) and MT inspected 10% of Y-0 to Y-4570 of cover plate in accordance with ASTM E709 and AWS D1.5 Section 6.26.2 after acceptance by QCI. The QAI utilized a Parker Model DA-400, Serial# 169991 Yoke calibrated on 5-10-12 and submitted a

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

6028 MT report with no indications noted.

The QAI was directed by lead QAI Daniel Reyes to SAS OBG 13W at 1230 hours.

The QAI observed the following ABF welders noted below performing 1G (flat position) Shielded Metal Arc Welding (SMAW) on the Seismic Performance Critical Member (SPCM) Complete Joint Penetration (CJP) splice butt joint using 3.2mm E7018-H4R electrodes with an average of 130amps. This welding was in progress for the duration of the shift.

The welding consists of root and intermediate weld passes. At the 13W-A2.1 location Salvador Sandoval ID# 2202, 13W-W2.1 Steven Davis ID# 7889, 13W-PP120.6 and 13W-W2.3 Jacob Stafford ID# 8020, 13W-W2.5 Mike Jimenez, and 13W-PP122.2 Edward Brown ID# 9331. QCI Inspectors William Sherwood and Salvador Merino were observed monitoring the welding parameters for compliance to ABF-WPS-D1.5-1040C-CU Revision 0 and measuring inter-pass temperatures between passes. During subsequent observations it was noted that the welders were using a power disc grinder at weld starts and stops as needed and were cleaning between weld passes with power wire wheel brushes.

The QA Inspector observed ABF welder Ken Chappell (Welder ID 3833) in the process of performing cover pass welding utilizing the Submerged Arc Welding (SAW) process using F7A6-EM12K-H8 (1/8") diameter electrode Flux 10.62 in the (1G) flat position on the (top side) of the Deck Plate Drop-in Section Longitudinal Field Weld Splice on Segment 13W-W2.8. The QA Inspector observed QC Inspector Tony Sherwood verify that the minimum preheat temperature as per the approved WPS was established; and afterwards verified that the welding parameters (Amps, Volts and Travel Speed) were in accordance with WPS 4042B-1 Revision 1.

The QA Inspector made subsequent observations throughout the shift to monitor quality and noted that the work appears to be in general accordance with the project plans and specifications.

Summary of Conversations:

Except as noted above no significant conversations were held on this date.

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:	Gray, David	Quality Assurance Inspector
Reviewed By:	Levell, Bill	QA Reviewer
