

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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-016704**Date Inspected:** 09-Sep-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1000**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1830**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site

CWI Name:	Tom Pasqualone and Mike Johnson			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 Girder		

Summary of Items Observed:

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at the Self Anchored Suspension (SAS) job site as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

At OBG 1W/2W top deck plate outside (panel point PP10 – PP11) north, QA randomly observed ABF welder Rick Clayborn perform 1G/4G (flat position/overhead) CJP welding 3/8" thick x 3 5/8" wide counter weight connection plate to the top deck end plate. The welder was using SMAW with 1/8" diameter E7018H4R electrode implementing Caltrans approved welding procedure specification (WPS) ABF-WPS-D1.5-D1000. The connection plate has a 45 degree bevel that was welded from one side and then back gouged and back welded from the other side. During welding, ABF Quality Control (QC) Mike Johnson was noted monitoring the welding parameters of the welder. The welder has completely welded at location mentioned above and has moved to PP12 – PP13. At the end of the shift, welding was still continuing and should remain tomorrow.

At OBG 1W/2W longitudinal stiffener LS1, LS2, LS3, LS4, LS5 and LS6 inside, flush grinding of the weld cover reinforcement on both sides of each stiffer plates were seen completed. During the shift, ABF QC Tom Pasqualone was noted performing visual test (VT) on the completely ground stiffener plates. After QC's VT on the stiffener plates, QC informed this QA that he found numerous undercut on most of the stiffeners that needed to be fixed.

At OBG 2W/3W longitudinal stiffeners (LS) inside, QA randomly observed ABF welder Yao Xin Liang ID #7238 perform 3G (vertical) Shielded Metal Arc Welding (SMAW) complete joint penetration (CJP) welding fill pass on one side of the longitudinal stiffener LS4 splice butt joint. The joint has a double V joint preparation and it was

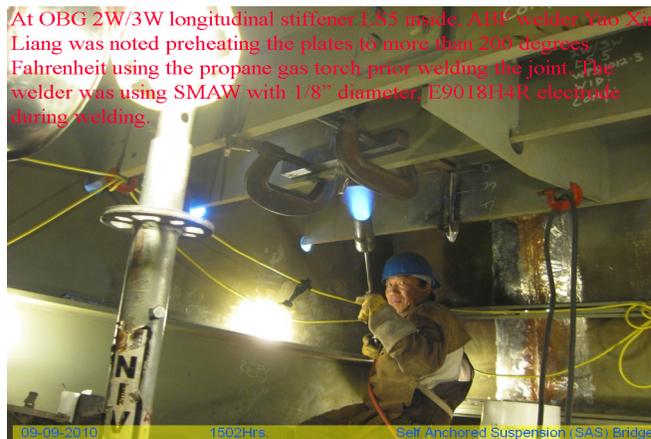
WELDING INSPECTION REPORT

(Continued Page 2 of 3)

welded from one side using E9018H4R with 1/8" diameter electrode implementing Caltrans approved welding procedure specification (WPS) ABF-WPS-D1.5-1012-3. The joint being welded was root welded using a ceramic backing. During the shift, the welder has completed the cover reinforcement welding of the LS4 and has moved to LS5. LS5 was also welded using the same WPS as mentioned above. The QA Inspector noted the ABF QC Inspector Tom Pasqualone was on site monitoring the in process preheats and welding parameters. During the shift, QA noted ABF QC was closely monitoring the issuance of E9018H4R electrodes due to its limited exposure time allowed. At the end of the shift, LS5 welding was still continuing and should remain tomorrow.

At OBG 1W edge plate 'B' (PP19) north side, QA randomly observed ABF welder Darcel Jackson perform 2F fillet welding all around 3/4" diameter x 6" long stud to edge plate of the OBG. The studs being welded were not done by contractor ZPMC prior to shipment from China due to sea fastening location. These studs will also be used for the counter weight of the OBG. The studs were welded using SMAW with 1/8" diameter electrode, E7018H4R electrode. During welding, ABF Quality Control (QC) Mike Johnson was noted monitoring the welding parameters of the welder.

At OBG 4E/5E edge plate 'B' inside, QA performed visual test (VT) and Magnetic Particle Testing (MT) on the welded and wire brushed cover reinforcement of the splice butt joints. The VT revealed no significant surface irregularities and deemed in compliance to the contract requirements. During MT, QA was using Parker Contour Probe electromagnetic yoke with red magnetic powder as detecting media. There were no significant defects noted during the tests.



Summary of Conversations:

No significant conversation occurred today.

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

Inspected By: Lizardo, Joselito

Quality Assurance Inspector

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Reviewed By: Levell,Bill

QA Reviewer