

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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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-026567**Date Inspected:** 25-Oct-2011**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:** Job Site

CWI Name:	Fred Von Hoff and Steve Jensen			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:

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 Cross Beam #7 inside, this QA randomly observed ABF welder Mike Jimenez continuing to perform multiple position fillet welding between 3" x 3" x 3/8" thick angular to same for electrical Cable Tray Support (CTS). The welder was noted using Shielded Metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode. ABF QC Steve Jensen was observed monitoring the welder with 125 Amps measured current during welding.

The fillet welding on Cable Tray Support inside the Cross Beams is being welded per ABF/JV drawing number CTS20-0 pages 1 to 5 with Caltrans reference Standard 75-1.03. At the end of the shift, fillet welding was completed on two cable tray supports for a total of 48 fillet welds and one C8 channel welded to 3" x 3" x 3/8" angular.

At Tower South Shaft elevation 53 meters, QA randomly observed ABF QC Fred Von Hoff perform Magnetic Particle Testing on the two (2) 20mm thick gusset plates that were relocated and welded to the Tower skin plate 'D'. QC has found no significant defects during the test. This QA randomly verified the MT performed by QC and noted same result.

At OBG 11E-PP100-E3-#1 & 2 lifting lug hole infill plate to top deck plate outside, ABF welder Fred Kaddu was observed 1G SMAW welding 1st time repair on the infill plate to top deck plate butt joint. The welder was noted

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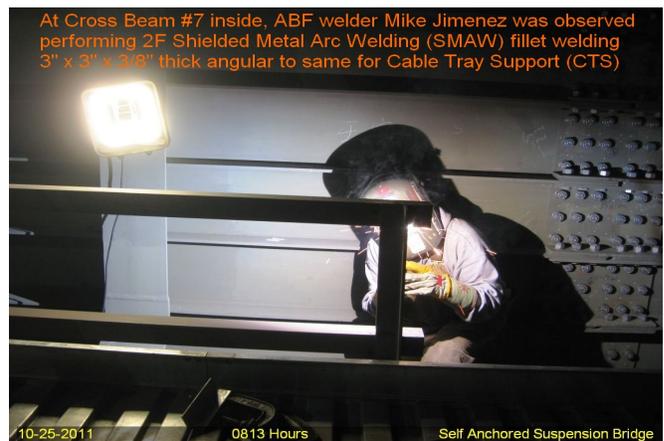
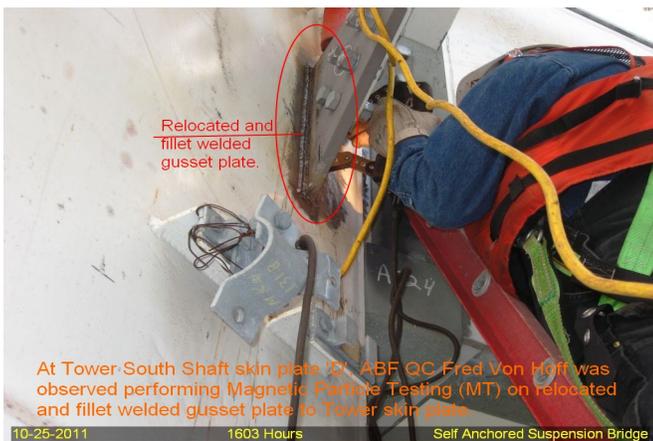
using 1/8" diameter E7018H4R electrode implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1001 Repair. Prior welding, ABF QC Fred Von Hoff was observed inspecting the excavation of the butt joints. During welding, ABF QC Fred Von Hoff was noted monitoring the welder's welding parameters. At the end of the shift, repair welding on hole #2 was completed while the 2 repairs on hole #1 was still in progress.

FW Spencer:

At location Panel Point PP46 to PP58 of grid line E5, this QA randomly observed FW Spencer qualified welder Curtis Jump perform Complete Joint Penetration (CJP) 2G (horizontal position) Shielded Metal Arc Welding (SMAW) welding root pass to cover pass on the 1" weldolet welded to 2.5" diameter domestic water line and 2" weldolet welded to 4" diameter compressed air line. The welder was noted welding the root pass with 3/32" diameter E6010 electrode and followed by fill pass to cover pass using 3/32" diameter E7018H4R electrode implementing Caltrans approved procedure FW Spencer WPS 1-12-1Rev 2. The welder was noted preheating and removing the moisture of the joint using a portable propane gas torch prior welding. During welding, ABF QC Steve Jensen was noted monitoring the parameters of the welder. At the end of the shift, three (3) 1" and three (3) 2" diameter weldolets were being welded and still in progress.

Location Service Remarks

- | | |
|----------------------------------|-------------------------|
| 1. #1/DW1/PP46/NE Domestic Water | CJP welding in progress |
| 2. #1/CA2/PP46/NE Compressed Air | CJP welding in progress |
| 3. #1/DW1/PP52/NE Domestic Water | CJP welding in progress |
| 4. #1/CA2/PP52/NE Compressed Air | CJP welding in progress |
| 5. #1/DW1/PP58/NE Domestic Water | CJP welding in progress |
| 6. #1/CA2/PP58/NE Compressed Air | CJP welding in progress |



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Summary of Conversations:

This QA had a conversation with ABF QC Supervisor Bonifacio Daquinag regarding bolt connections of hand rail being plug welded instead of providing four (4) bolts and nuts to hand rail post base plate to platform frame structure at Cross Beam # 7.

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 Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

Inspected By: Lizardo, Joselito

Quality Assurance Inspector

Reviewed By: Levell, Bill

QA Reviewer