

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-026584
Date Inspected: 26-Oct-2011

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: American Bridge/Fluor Enterprises, a JV

OSM Arrival Time: 700
OSM Departure Time: 1730
Location: Job Site

CWI Name:	Pat Swain 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 Panel Point (PP) 50 grid line location E4 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. After completely welding 48 fillets at this location, the welder has moved to Cross Beam #17 and started grinding off the paint coating and tack welding the joints.

At Panel Point (PP) 80 grid line location W4 inside, this QA randomly observed ABF welder Erick Sparks 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 Salvador Merino was observed monitoring the welder with 128 Amps measured current during welding.

The fillet welding on Cable Tray Support inside the OBG 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 one cable tray support for a total of 48 fillet welds at each location mentioned above.

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At OBG 11E-PP104-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 using 1/8" diameter E7018H4R electrode implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1001 Repair. Prior welding, ABF QC Pat Swain was observed performing Magnetic Particle Testing (MT) on the excavation of the repair butt joints. During welding, ABF QC Pat Swain was noted monitoring the welder's welding parameters. At the end of the shift, repair welding on holes #1 and #2 were completed. The locations of the repairs were noted below;

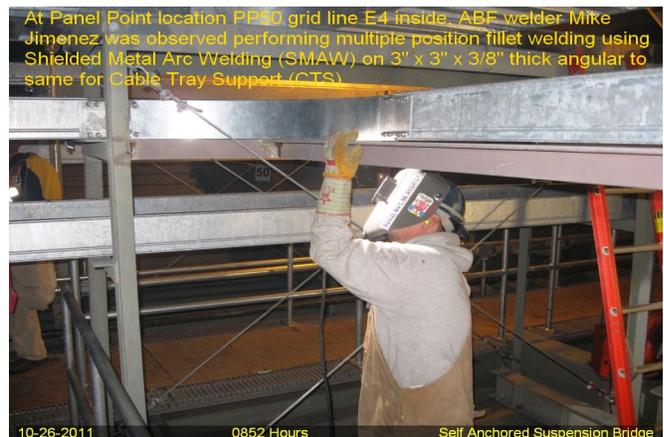
Location	Y-dimension	Length	Width	Depth	Remarks
1. Hole #1	10mm	70mm	16mm	11mm	Completed
2. Hole #1	80mm	70mm	18mm	12mm	Completed
3. Hole #2	105mm	120mm	20mm	13mm	Completed
4. Hole #2	440mm	90mm	18mm	12mm	Completed

FW Spencer:

At location Panel Point PP46 to PP58 of grid line E5, this QA randomly observed FW Spencer qualified welder Curtis Jump continuing to perform Complete Joint Penetration (CJP) 2G (horizontal position) Shielded Metal Arc Welding (SMAW) welding fill 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 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 with 95 Amps measured current during welding. During the shift, the welder has moved to other location (PP109- W5) and started fillet welding the WT pipe support (PS-5) to 3" x 3" angular that was previously welded to the deck plate A.

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



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At OBG 11E-PP104-E3-#2 lifting lug hole infill plate to top deck plate outside, ABF welder Fred Kaddu was noted excavating the 1st time repair on welded butt joint.



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At Panel Point location PP80 grid line W4 inside, ABF welder Eric Sparks was observed performing multiple position fillet welding between the 3" x 3" x 3/8" angular to same for Cable Tray Support (CTS).



10-26-2011 0808 Hours Self Anchored Suspension Bridge

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. Mr. Daquinag informed this QA that a Request for Information (RFI) is being initiated by ABF to resolve this issue.

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
