

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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-019465**Date Inspected:** 21-Jan-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site

CWI Name:	Steven Mc Connell and Gary Ersham			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 8E/9E edge plate 'F' outside, QA randomly observed ABF/JV qualified welder Fred Kaddu ID # 2188 perform CJP groove welding repair. The welder was observed welding in the 3G (vertical) position utilizing Shielded Metal Arc Welding (SMAW) with 5/32" diameter E7018H4R electrode implementing welding procedure ABF-WPS-D15-1000-Repair. The repair excavations were preheated to more than 140 degree Fahrenheit using propane gas torch prior welding. During the shift, ABF QC Steven Mc Connell was noted monitoring the welder. Prior welding, ABF QC Steven Mc Connell was also observed performing Magnetic Particle Testing (MT). There were no defects noted during the test. The locations of the repairs were noted below;

Location	Y-dimension	Length	Width	Depth	Remarks
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1. F 65mm 125mm 25mm 9mm Completed
2. F 355mm 160mm 25mm 10mm Completed
3. F 650mm 105mm 25mm 10mm Completed

At OBG 3W-PP20-W4- #2 & #4 inside- ABF welder Mike Jimenez was observed flush grinding the weld cover of the joints. During the shift, flush grinding was completed and the welder has asked for QC VT/MT of the just ground butt joints. ABF QC Gary Ersham performed the VT/MT which he found them acceptable. QA has performed the verification of the joints and concurred their acceptance.

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

At OBG 1W-PP10.5-W2-N deck access hole to top deck plate outside, QA randomly observed ABF/JV qualified welder Jin Pei Wang perform CJP repair welding. The welder was noted welding in 1G (Flat) position utilizing Shielded Metal Arc Welding (SMAW) with 1/8" diameter E7018H4R electrode implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-1001 Repairs. The welding repairs were excavated to a boat shape profile and were tested with Magnetic Particle Testing (MT) prior welding. During welding, ABF QC Gary Ersham was noted monitoring the welder and his welding parameters. The locations of the repairs were noted below;

Location	Y-dimension	Length	Width	Depth	Remarks
1.	4280mm	180mm	25mm	17mm	Completed
2.	4080mm	180mm	25mm	16mm	Completed

At the request of Quality Control Field Supervisor, Bonifacio Daquinag, QA has randomly verified the QC visual inspection of the Complete Joint Penetration (CJP) welding of the following Lifting Lug Holes (LLH); The QA verification was performed to verify that the welding and the visual weld inspection performed by the QC inspector meet the requirements of the contract documents. At the conclusion of the QA verification it appeared that the welds and the QC inspection complies with the contract documents.

1. 1W-PP8.5-W4 #1 to #4 – QA VT/MT verified
2. 1W-PP8.5-W3 #1 to #4 – QA VT/MT verified
3. 1W-PP9.5-W3 #1 to #4 – QA VT/MT verified
4. 1W-PP11.0-W4 #1 to #4 – QA VT/MT verified

At OBG 6E/7E bottom plate 'D' inside; this QA performed 10% MT verification on the welded splice butt joint. QA found no indications during the verification. Please see TL-6028 report for more information.



Summary of Conversations:

No significant conversation occurred today.

Comments

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

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
