DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 1x.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-012860
Date Inspected: 02-Apr-2010

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

OSM Arrival Time: 1100
OSM Departure Time: 1930
Location: Job Site

CWI Name: Mike Johnson and Jim Cunningham

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.

QA randomly observed ABF/JV qualified welders Rory Hogan (ID #3186) and Jeremy Dolman (ID #5042) perform Complete Joint Penetration (CJP) groove (splice) back welding fill to cover pass on Orthotropic Box Girder (OBG) L1E/L2E plate ‘E1’(0 to 4250mm). The welders were observed welding in the 4G (overhead) position utilizing a dual shield Flux Cored Arc Welding (FCAW-G) with E71T-1M, 1/16” diameter wire electrode and implementing Caltrans approved Welding Procedure Specification (WPS) ABF-WPS-D15-3040A-4. The welder was using a track mounted welder holder assembly that is remotely controlled. The joint being welded has the backing bar gouged using the Esab Plasma Arc machine and was ground smooth. The gouged and ground splice butt joint was also Non Destructive Testing (NDT) tested using the Magnetic Particle Testing (MT). The splice joint was preheated to greater than 150 degree Fahrenheit prior welding and the vicinity was properly protected from wind. During welding, ABF Quality Control (QC) Mike Johnson was noted monitoring the welding parameters of the welder. At the end of the ABF shift, the cover pass of the splice butt joint back weld was completed and was ready to move to the other half of the splice butt joint.

At OBG L2E/L3E plate ‘C’(0 to 10555mm) inside, QA noted that the vertical (3G) welding of the splice butt joint has been completed. The welders were also noted moving their welding equipment to another plate inside the OBG L2E/L3E plate ‘E’. Inside the splice butt joint plate ‘E’, one welder was noted wire wheeling/cleaning the plates bevel surfaces. During the observation, ABF QC Bernie Docena informed this QA that the welders will not

be welding today due to installed electric resistance heating bands outside the plate has not yet energized.

At OBG L3E/L4E plate ‘C’ (0 to 10555mm) outside, tack welding using E7018 electrode and fit up of fitting gear/temporary attachment has been completed. The backing bar along the groove joint was also installed and supported by the fitting gear.

Other ABF activity observed by this QA includes Ultrasonic Testing (UT) performed by two ABF QC Jim Cunningham and Jesse Cayabyab. The UT was performed at OBG L1E/L2E plate ‘D’ inside. The UT was still ongoing.

At OBG L1W/L2W deck plate ‘A’ outside, QA observed welding of tack/fillet on one side of backing bar to deck plate has been completed. At the moment, there were no ABF personnel working on the splice butt joint.

Summary of Conversations:

As stated above.

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) 227-5298, who represents the Office of Structural Materials for your project.

WELDING INSPECTION REPORT

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Inspected By:	Lizardo,Joselito	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer