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 #: 99.28

WELDING INSPECTION REPORT

Resident Engineer: Casey, William
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-030002
Date Inspected: 13-Sep-2013

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

OSM Arrival Time: 630
OSM Departure Time: 1530
Location: Oakland, CA

CWI Name: Tony Sherwood

Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**CWI Present:**	☑ Yes	☐ No	
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☑ Yes	☐ No	☐ N/A
				Approved WPS:	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: Tower Skirt Ring Beam

Summary of Items Observed:

Quality Assurance Inspector (QA) James Doe was at the American Bridge/Flour (ABF) job site at Yerba Buena Island between the times noted above in order to monitor Smith Emery Quality Control (QC) functions and the in process work being performed by ABF personnel. The following items were observed: Nine (9) meter level Tower Skirt Ring Beam, East Side. ABF welding personnel Rick Clayborn was observed performing in process fit up for Complete Joint Penetration (CJP) welds at one location for web & flange of the ring beam on the East side of the tower. The two locations are at Electroslag weld (ESW) "R". The weld numbers per ABF drawing are identified as #146 (web) & #147 (flange). Welder was observed using 3/8" backing for back side (side B) of the root opening which will later be removed for back gouging. Weld joint configuration is identified as a skewed double bevel CJP weld. Fit up at both locations was inspected by both QC Inspector Tony Sherwood and QAI. Fit up was accepted by the QC Inspector and QA inspector agreed. The welder, Rick Clayborn was later observed at ESW "R" utilizing the Flux Cored Arc Welding (FCAW-S) process in the vertical (3G) & flat (1G) position with Lincoln Innershield NR-232, E71T-8, 1.8mm diameter wire electrode to weld ring beam 1" flange and web plates. The welding parameters were verified by QC Inspector Tony Sherwood with a Fluke 337 current clamp meter per ABF Welding Procedure Specification (WPS) ABF-WPS-D15-2030-3,revision 1 & ABF-WPS-D15-2030-1, revision 1 throughout the shift. QC inspector relayed to this QA inspector that the welding parameters for the verticle CJP welds taken at 11;30 was 260 amps and 20.4 volts and was in compliance with the WPS noted above. The welder was using a hand held propylene torch to maintain preheat/interpass temperature at or above 150° Fahrenheit. Welder was observed using proper interpass cleaning methods with a slag hammer, wire wheel and light grinding. At the end of this QA inspectors shift the welding was still in process for ring beam CJP # 146 & 147. The welding & workmanship observed on this date appeared to be in general compliance with the contract specifications. The following pictures below detail some of the observations made on this date.

WELDING INSPECTION REPORT

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Summary of Conversations:

General conversations with ABF/JV QC NDT personnel relevant to work and testing performed during this shift.

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 Gary Thomas (916) 764-6027, who represents the Office of Structural Materials for your project.

Inspected By:	Doe,James	Quality Assurance Inspector
Reviewed By:	Riley,Ken	QA Reviewer