

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

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-026617**Date Inspected:** 01-Nov-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**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:** OBG Sections**Summary of Items Observed:**

This Quality Assurance (QA) Inspector, Craig Hager was on site at the job site between the times noted above. This QA Inspector was on site to randomly observe Quality Control (QC) personnel perform Non-Destructive Testing (NDT) and monitor American Bridge/Fluor (ABF) welding operations. This Quality Assurance (QA) Inspector, Craig Hager observed the following.

Orthotropic Bridge Girder (OBG) Sections:

13E/14E – weld joint D-3: This weld joint requires the minimum preheat temperature (200°F) to be continuous during welding and post heating for 3 hours after the completion of welding. This QA Inspector observed QC Inspector Fred Von Hoff verify the minimum preheat and the following Flux Cored Arc Welding (FCAW) parameters for ABF welding personnel Jin Pei Wang; 250 amperes and 24.8 volts at a travel speed of 203 mm per minute to produce a heat input of 1.83 Kj per mm. The heat input and welding observed appeared to comply with Welding Procedure Specification (WPS) ABF-WPS-D15-3110-4 being used by the QC Inspector. This QA Inspector periodically observed QC Inspector Fred Von Hoff monitoring the welding at this location which included the welding parameters, preheat and interpass temperatures and in process visual inspections. This QA Inspector observed that welding was not completed at this location this date. This QA Inspector observed the induction heating blankets were positioned over the weld joint after welding the last pass for this date.

12W/13W Longitudinal Stiffeners (LS) LS-6: This QA Inspector observed the weld joint had been back gouged and informed by QC Inspector John Pagliero that he performed and accepted the visual and Magnetic Particle Testing (MT) of the back gouged area. This QA Inspector performed a random visual verification of the back

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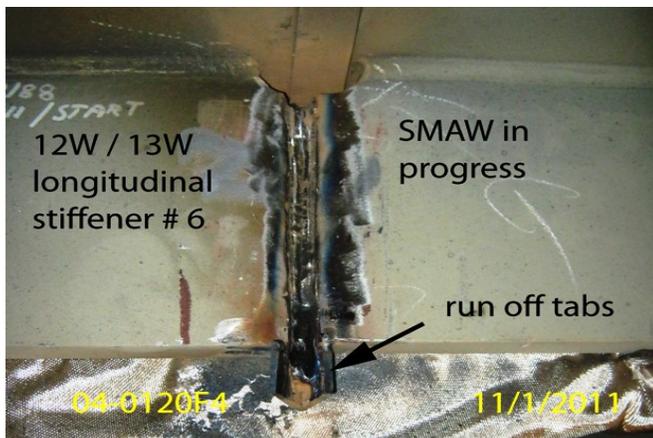
gouged weld and observed the work appeared to comply with the contract requirements. This QA Inspector observed QC Inspector John Pagliero verify the following Shielded Manual Arc Welding (SMAW) parameters for ABF welding personnel Fred Kaddu (#2188); 130 amperes. The welding observed at this time appeared to comply with ABF-WPS-D15-1012-3 being used by the QC Inspector. This QA Inspector performed a random verification of the preheat temperature and observed the induction heating blankets appeared to be positioned correctly and set at an adequate heating temperature; the preheat temperature was greater than 200°F when verified with an electronic temperature gauge. This QA Inspector and QC Inspector John Pagliero were informed by ABF welding personnel Fred Kaddu (#2188) that he wanted to increase the welding amperage. This QA Inspector observed QC Inspector John Pagliero verify the following welding parameters; 145. The welding observed at this time appeared to comply with ABF-WPS-D15-1012-3 being used by the QC Inspector. This QA Inspector observed welding appeared to have been completed at approximately 1600 hours this date and that the induction heating blankets remained over the weld and were above the minimum preheat temperature towards the end of the shift.

This QA Inspector confirmed with ABF Welding Superintendent Danny Ieraci (#3232) that welding had not been completed at the above locations (13E/14E – weld joint D-3 and 12W/13W Longitudinal Stiffeners (LS) LS-6) and that the induction heat blankets would be keep on the welds and electrical power for heating would be provided through the night.

This QA Inspector verbally informed QA SPCM Lead Inspector, Daniel Reyes, of the issues noted in this report for compliance therefore for further details of issues of significance see QA SPCM Lead Inspector, Daniel Reyes, Daily Inspection Report (6031) for this date.

Summary of Conversations:

This QA Inspector had general conversations with American Bridge/Fluor (ABF) and Caltrans personnel during this shift. Except as described above and noted above there were no notable conversations.



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

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Inspected By: Hager,Craig

Quality Assurance Inspector

Reviewed By: Levell,Bill

QA Reviewer