

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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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-024419**Date Inspected:** 15-Jun-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** 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:** Tower**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.

Prior to the start of welding this QA Inspector observed an induction heating system consisting of either the air cooled blanket type or the liquid cooled hose type which appeared to have been positioned over the area to be welded in order to start the preheating process, gas troches are used to bring the preheat temperature to be within the range specified in the Welding Procedure Specification (WPS) as needed. At the completion of welding and/or at the end of the shift it appears the same induction heating system is used to perform the 3 hour post heating.

114 Meter elevation – West Tower – Splice Plates

This QA Inspector observed ABF welding personnel Salvador Sandoval (#2202) using the Flux Cored Arc Welding (FCAW) process on the top half of splice plate weld joint #165-West. This QA Inspector randomly observed QC Inspector Steve Jensen verify the following welding parameters; 265 amperes and 22 volts at a travel speed of 110 mm per minute to produce a heat input of 3.17 Kj per mm. The welding observed appeared to comply with ABF-WPS-D15-F2200-3. The welding at this location is being performed in a small space in which movements are limited.

This QA Inspector was informed by QC Inspector Steve Jensen that he had performed and accepted a visual

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inspection on the top half of weld joint #165-West. This QA Inspector performed a random visual verification and the welding observed appeared to comply with the contract requirements. Upon completion of the inspection ABF welding personnel Salvador Sandoval (#2202) and Paul Frambrini placed the liquid cooled induction heater over the weld to start the 3 hour post heat at approximately 1400 hours this date, see photo below.

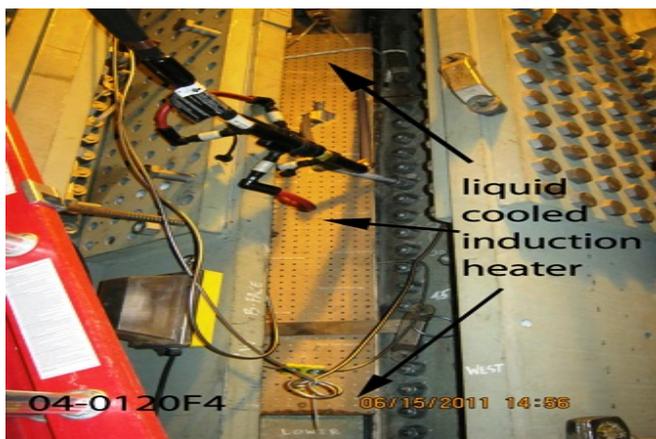
114 Meter elevation – North Tower – Splice Plates

This QA Inspector randomly observed ABF welding personnel Xiao Jian Wan (#9677) and Paul Frambrini had started the fit up process of the splice plates in the North corner of the tower. Please note this is a small space with limited access for movement, the fit up was not completed this date.

During this QA Inspectors' shift welding was periodically observed in the West Towers this date. The progress of work appears to be slower due to the limited access for welding and grinding at all locations. This QA Inspector observed QC Inspector Steve Jensen at this location.

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 below 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.

Inspected By:	Hager,Craig	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer
