

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-024752**Date Inspected:** 27-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 the blanket type 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). 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 – North Tower – Splice Plates

This QA Inspector observed ABF welding personnel Salvador Sandoval (#2202) using the Flux Cored Arc Welding (FCAW) process to weld the top half of the fillet weld in the vertical (3F) position on splice plate weld joint #165-Northeast. This QA Inspector randomly observed QC Inspector Steve Jensen verify the following welding parameters; 273 amperes and 22.1 volts at a travel speed of 100 mm per minute to produce a heat input of 3.62 KJ per mm. The welding observed appeared to comply with ABF-WPS-D15-F2200-3. The welding at this location appeared to have been completed at approximately 1030 hours this date.

This QA Inspector observed ABF welding personnel Xiao Jian Wan (#9677) using the FCAW process to weld the

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

top fillet weld in the horizontal (2F) position on splice plate weld joint #165-North. The welding at this location appeared to have been completed at approximately 1000 hours this date.

This QA Inspector randomly observed as QC Inspector Steve Jensen performed a visual inspection on weld joint #165-North and #165-Northeast. This QA Inspector observed several areas were marked for additional welding and grinding on weld joint #165-North and grinding on weld joint # 165-Northeast. Later this date QC Inspector Steve Jensen informed this QA Inspector he had re-inspected and accepted both welds (# 165-North and #165-Northeast). QC Inspector Steve Jensen also informed this QA Inspector he had previously performed and accepted the visual inspection on weld joints #166-North and #166-Northeast.

This QA Inspector performed a visual inspection on the following weld joints: 114-Meter elevation, North Tower, weld joints - #165-North, #166-North, #165-Northeast and #166-Northeast. This QA Inspector observed a short section of weld contour which contained roll over on weld joint #165-North and informed QC Inspector Steve Jensen of the observation. QC Inspector Steve Jensen concurred and informed ABF welding personnel Xiao Jian Wan (#9677) of the finding. This QA Inspector randomly observed ABF welding personnel Xiao Jian Wan (#9677) use a grinder to contour the weld. QC Inspector Steve Jensen re-inspected the area and informed this QA Inspector the weld was acceptable. This QA Inspector performed a re-verification and observed the work at this time appeared to comply with the contract requirements.

The work above completed the visual inspection of the fillet welds for the splice plates in the North Tower. QC Inspector Steve Jensen informed this QA Inspector he had made arrangements for Magnetic Particle Testing to be performed tomorrow to comply with the 24 hour waiting period after the completion of welding.

This QA Inspector observed ABF welding personnel Salvador Sandoval (#2202) and Xiao Jian Wan (#9677) packing up equipment to move to the East Tower at the 114-Meter elevation.

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
