

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-020426**Date Inspected:** 04-Feb-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1100**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 Section**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 to monitor American Bridge/Fluor (ABF) welding operations.

The following observations were made:

1) At weld joint 9E/10E –C2, inside the OBG section: ABF welding personnel Sang Tao Huang (#3794) was performing production welding using the Flux Cored Arc Welding (FCAW) process. QC Inspector Fred Von Hoff was monitoring the work.

2) At weld joint 9E/10E –B, inside the OBG section: ABF welding personnel Fred Kaddu (#2188) was using the carbon arc process to remove the backing bar from the weld joint.

At weld joint 9E/10E –C2, inside the OBG section this QA Inspector observed ABF welding personnel Sang Tao Huang (#3794) performing production welding using the FCAW process. This QA Inspector randomly observed QC Inspector Fred Von Hoff verify the following welding parameters; 255 amperes and 24.2 volts at a travel speed of 305 mm per minute. The work observed at this location appeared to comply with Welding Procedure Specification (WPS) ABF-WPS-D15-3040A-3 and the contract requirements. This QA Inspector did notice the welding sequence appeared to have changed and asked ABF Lead Welder James Zhen (#6001) and QC Inspector Fred Von Hoff about the change. This QA Inspector was informed of the following:

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- The utilization of the track system with FCAW has been shortened for both welds C1 and C2, therefore placing more weld metal using the FCAW process manually.

- The FCAW manual process will be used to fill in a short area between welds C1 and C2 which was previously done with the track system.

- The purpose of the change is to prevent less distortion to facilitate with the fit and bolting of splice plates on the wide flanges at this location.

- This QA Inspector observed ABF Lead Welder James Zhen (#6001) had a detailed procedure outlining the new welding sequence.

Lead QA Inspector Rick Bettencourt was informed of the conversation noted above.

At weld joint 9E/10E –B, inside the OBG section this QA Inspector observed ABF welding personnel Fred Kaddu (#2188) using the carbon arc process and a grinder to remove the backing bar from the weld joint. The work at this location was in progress at the end of this QA Inspectors' shift.

Summary of Conversations:

As noted 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 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
