

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 #: 1x.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-014329**Date Inspected:** 20-May-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1230**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1600**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** Bernard Docena**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:**

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 W1/W2-F: ABF welding personnel Mitch Sittinger (#0315) was performing production welding using Flux Cored Arc Welding (FCAW) process with QC Inspector Tony Sherwood present.
- 2) At weld joint W1/W2-E1 and E2: QC Inspectors Jesus Cayabyab and Bernard Docena were performing Ultrasonic Testing (UT) from the outside surface.
- 3) At weld joint W2/W3-E1 and E2: ABF personnel were in the process of back gouging the weld joint from the outside.

At weld joint W1/W2-F this QA Inspector randomly observed ABF welding personnel Mitch Sittinger (#0315) was performing production welding using the FCAW process. This QA Inspector performed a verification of the welding parameters and observed the following: 230 amperes and 23.5 volts with a travel speed of 190 mm per minute. This QA Inspector randomly observed QC Inspector Tony Sherwood monitoring the welding parameters and performing visual inspections of the various weld passes. The welding parameters observed appeared to

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comply with the Welding Procedure Specification (WPS) ABF-WPS-D15-3040A-3. The welding and QC functions observed this date appeared to comply with the contract requirements. Please see general photo below of the work area.

At weld joint W1/W2-E1 and E2 this QA Inspector randomly observed QC Inspectors Jesus Cayabyab and Bernard Docena performing UT from the outside surface of the weld joint. It appeared that QC Inspector Bernard Docena was using a 1-inch diameter, straight beam transducer to perform a lamination scan of the base material and to locate and mark the locations of the stiffeners welded on the inside surface. This QA Inspector has observed QC personnel mark the location of stiffeners and/or ribs welded on the opposite side UT scanning is being performed in an effort to minimize false signals. This QA Inspector randomly observed QC Inspector Jesus Cayabyab performing UT using what appeared to be a 70 degree shear wave transducer after the lamination scans had been performed. The Ultrasonic Testing (UT) observed appeared to have been performed in accordance with the contract requirements. The UT was in process at the end of this QA Inspector's shift.

At weld joint W2/W3-E1 and E2 this QA Inspector randomly observed ABF personnel using a plasma arc torch to performing back gouging of the weld joint. The work observed was being performed on the outside surface of the weld joint and appeared to comply with the contract requirements.



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 Mohammad Fatemi (916) 813-3677, who represents the Office of Structural Materials for your project.

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