

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-020229**Date Inspected:** 27-Jan-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:** Tony Sherwood**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 8E/9E –F, inside the OBG section: ABF welding personnel Fred Kaddu (#2188) was performing production welding using the Shielded Metal Arc Welding (SMAW) process. QC Inspector Fred Von Hoff was monitoring the work.
- 2) At weld joint 9E/10E –A3 and A4, outside the OBG: ABF welding personnel Wai Kitlai (#2953) was performing repair welding using the SMAW process. QC Inspector Tony Sherwood was monitoring the work.
- 3) At weld joint 8E/9E –E1 and E2, outside the OBG: ABF welding personnel Rory Hogan (#3186) was setting up to begin production welding using the Flux Cored Arc Welding (FCAW) process.
- 4) At weld joint 6EPP44E3 hole #4, outside the OBG section: ABF welding personnel Salvador Sandoval (#2202) was performing production welding using the SMAW process. QC Inspector Steve McConnell was monitoring the work.
- 5) At weld joint 9E/10E –F, inside the OBG section: ABF welding personnel Wen Han Yu (#6317) was

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performing production welding using the SMAW process. QC Inspector Tony Sherwood was monitoring the work

At weld joint 8E/9E –F, inside the OBG section this QA Inspector observed ABF welding personnel Fred Kaddu (#2188) performing grinding and production welding using the SMAW process. This QA Inspector observed QC Inspector Fred Von Hoff had marked multiple areas of undercut and under fill for additional welding and multiple areas of excessive weld reinforcement for grinding. Prior to the start of welding this QA Inspector randomly observed QC Inspector Fred Von Hoff verify the preheat temperature was greater than 150°F with an electronic temperature gauge and the following welding parameters; 130 amperes using a 3.2 mm diameter E7018H43R electrode. The work observed at this location appeared to comply with Welding Procedure Specification (WPS) ABF-WPS-D15-1040B-Rev-1 and the contract requirements.

At weld joint 9E/10E –A3 and A4, outside the OBG this QA Inspector observed ABF welding personnel Wai Kitlai (#2953) performing repair welding using the SMAW process. This QA Inspector observed repair welding the excavations at the following locations; A-3, Y-1760 (excavation being 110 mm long and 14 mm deep) and A-4, Y-1990 (excavation being 120 mm long and 12 mm deep). This QA Inspector randomly observed QC Inspector Tony Sherwood perform and accept Magnetic Particle Testing (MT) of the excavations prior to welding and verify the preheated temperature of the base metal using an electronic temperature gauge. This QA Inspector randomly observed as QC Inspector Tony Sherwood verified the following welding parameters; 145 amperes using a 3.2 mm diameter E7018H4R electrode. The work observed at this location appeared to comply with ABF-WPS-D15-1001-Repair and the contract requirements.

At weld joint 8E/9E –E1 and E2, outside the OBG this QA Inspector observed ABF welding personnel Rory Hogan (#3186) was setting up to begin production welding using the FCAW process. The FCAW track system and preheating equipment was being re-located to begin production welding.

At weld joint 6EPP44E3 hole #4 lifting hole, outside the OBG section this QA Inspector observed ABF welding personnel Salvador Sandoval (#2202) performing production welding using the SMAW process. This QA Inspector performed a verification of the welding parameters observing the following; 227 amperes using a 4.75 mm diameter E7018H4R electrode. This QA Inspector periodically observed QC Inspector Steve McConnell monitoring the work. The work observed by this QA Inspector appeared to comply with ABF-WPS-D15-1050A-CU and the contract requirements.

At weld joint 9E/10E –F, inside the OBG section this QA Inspector observed ABF welding personnel Wen Han Yu (#6317) performing production welding using the SMAW process. This QA Inspector randomly observed QC Inspector Tony Sherwood verify the following welding parameters; 125 amperes using a 3.2 mm diameter E7018H4R electrode. The work observed appeared to comply with ABF-WPS-D15-1040B-Rev-1 and 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

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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
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Reviewed By:	Levell,Bill	QA Reviewer
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