

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-018162**Date Inspected:** 15-Nov-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1500**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** See below**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:** SAS OBG**Summary of Items Observed:**

The Quality Assurance (QA) Inspector, Rick Bettencourt was on site at the job site between the times noted above. The QA Inspector was on site to randomly observe the in process welding and inspection of the weld joints identified as FW Spencer Pipe Support Welding, 2E-pp15-E3-3, 1E-pp15-E3-2, 3E-pp23.5-E5-NE and the following observations were made:

FW Spencer Pipe Support Welding

The QA Inspector arrived at W2 and observed the FWS Spencer welder identified as David Garcia performing the SMAW fillet welds attaching the pipe supports identified as PS-18 to the embed plates in the bridge. The QA Inspector randomly observed the approved welding quality control plan (WQCP) on site and noted the documentation appeared to be in general compliance with the contract requirements. The QA Inspector randomly observed the SE QC Inspector Tom Pagliero was on site and monitoring the in process welding. The QA Inspector randomly observed the SMAW parameters and they were 1/8" E7018 low hydrogen electrodes with 120 Amps the QA Inspector noted the SMAW parameters appeared to be in general compliance with the WPS identified as FWS Fillets Murex SFOBB. The QA Inspector randomly observed the FWS welder identified above had fit up and tack welded several PS-19 pipe supports into place. The QA Inspector randomly observed the fit up and noted the embed plates had been ground so the rust and zinc coating had been removed on the pipe supports as well. The QA Inspector noted the fit up appeared to be in general compliance with the contract documents.

2E-pp15-E3-3

The QA Inspector randomly observed the contractor inadvertently burned through the weld in the top deck in an attempt to weld repairs from the bottom side of the deck plate. The QA Inspector noted the repairs were completed

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

from the bottom side of the deck previously and the weld reinforcement ground near flush. The QA Inspector randomly observed the ABF welder Rick Clayborn utilize an air carbon arc and begin back gouging the areas that were burned through from the bottom. The QA Inspector noted no welding was performed on the back gouged areas on this date.

1E-pp15-E3-2

The QA Inspector randomly observed Eric Sharp performing grinding tasks of ultrasonic testing reject in the above identified lifting lug deck hole restoration. The QA Inspector noted the excavation and repair was being performed from the bottom side of the deck plate. The QA Inspector randomly observed the ABF welder had previously excavated the UT rejection located in the above identified hole. The QA Inspector noted the weld repair was approximately 20% complete upon the arrival of the QA inspector in AM. The QA Inspector randomly observed the SE QC Inspector John Pagliero was on site to monitor and record the in process welding parameters. The QA Inspector noted the ABF welder was utilizing the shielded metal arc welding process with 1/8" E7018 low hydrogen electrodes. The QA Inspector randomly observed the ABF welder was utilizing 120 Amps while performing the SMAW repair. The QA Inspector performed a random visual inspection of the previously excavated areas and noted they had been ground and blended to weldable profile. The QA Inspector randomly observed and noted the ABF welder was preheating the material to approximately 100°F prior to making the SMAW repairs. The QA Inspector noted the SMAW repairs appeared to be in general compliance with ABF-WPS-1001 repair. The QA Inspector noted the repair welding was completed on the QA Inspectors shift. After the ABF welder completed the welding, he performed grinding tasks while removing the weld reinforcement flush with the top deck base material.

3E-pp23.5-E5-NE

The QA Inspector randomly observed the SE QC Inspector Steve McConnell perform ultrasonic testing of the above identified access hole restoration. The QA Inspector randomly observed after the testing was completed the QC Inspector had located 3 UT rejects. The QA inspector randomly observed three rejects were indicated with a distinguishing marking directly on the steel for excavation and repair. The QA Inspector noted no repairs were made on the above identified weld joint on this date.

The QA Inspector spent the remainder of the shift updating the NDT tracking and production welding status logs for all in process and completed ABF production welding and repair welding.

Summary of Conversations:

No pertinent conversation noted.

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:	Bettencourt,Rick	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer
