

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:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-015645**Date Inspected:** 13-Jul-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:	Tony Sherwood, Mike Johnson, Scott Pursell			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 5W/6W, and the following observations were made:

Bike Path Cantilever Beams

The QA Inspector randomly observed the ABF welder identified as Fred Kaddu and helper Todd Jackson begin the fillet weld threaded stud repairs. The QA Inspector noted it was previously observed and identified that the fillet weld size for the threaded studs did not meet the requirements of the contract documents. The QA Inspector randomly observed the ABF helper perform grinding tasks with a flapper wheel in an attempt to remove the majority of the previous under sized fillet welds, paint and galvanization. The QA Inspector randomly observed the ABF helper working in front of the ABF welder preparing the studs for the fillet welds to be repaired by shielded metal arc welding.

The QA Inspector randomly observed the Smith Emery (SE) Quality Control (QC) Inspector Tony Sherwood on site to monitor the in process repairs. The QA Inspector noted the QC inspector set the SMAW machine and parameters to 133 Amps with 1/8" E7018 low hydrogen electrodes. The QA Inspector noted the preheat and welding parameters appeared to be in general compliance with ABF-WPS-D1.5-F1200-A. The QA Inspector randomly observed the ABF welder complete several of the studs on the QA Inspectors shift. It was observed the Bike Path Cantilever Beams identified as BK001-009 pp19 and BK-001-009 pp22 were completed on the QA Inspectors shift. The QA Inspector noted a total of 4 welds per beam were completed. The QA Inspector randomly observed the SE QC Inspector Tony Sherwood perform visual testing (VT) of the completed welds. The QA

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Inspector noted the welds were accepted by the QC Inspector and indicated directly on the material adjacent to the completed weld. The QA Inspector performed random visual testing (VT) and noted the size and profile of the completed fillet welds appeared to meet the general requirements of the contract documents.

5W/6W-A

Upon the arrival of the QA Inspector in the am it was observed the weld joint had been joined by welding. The QA Inspector noted the full length task weld had been completed in segments the full length of the weld joint. The QA Inspector noted the all of the weld segment A1 and approximately at the 6800mm mark in weld segment A2 was tack welded with flux cored arc welding (FCAW). The QA Inspector noted the all of the weld segment A5 and approximately at the 20000mm mark in weld segment A4 was tack welded with flux cored arc welding (FCAW). The QA Inspector noted the entire remaining weld joint was welded with shielded metal arc welding (SMAW). The QA Inspector randomly observed the ABF welders Mike Maday, Bryce Howell and Kenny Chappell were performing grinding tasks in the am. The QA Inspector randomly observed the ABF welders grinding a channel or groove in the center of the weld joint to ensure the submerged arc welding (SAW) root pass in deposited evenly and with sufficient penetration. The QA Inspector noted no welding was perform on this date.

Summary of Conversations:

The ABF Welding Superintendent Dan Ieraci informed the QA Inspector the ABF welding operators will set up the SAW equipment and tracks today. Mr. Ieraci went on to say the SAW root pass will be performed first thing in the morning.

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
