

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 13.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-015077**Date Inspected:** 22-Jun-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1000**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1830**Contractor:** Oregon Iron Works Clackamas, Or.**Location:** Clackamas, OR

CWI Name:	M. Gregson, J. Salazar, G. Mundt	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:	Hinge K Pipe Beams				

Summary of Items Observed:

The Quality Assurance Inspector Sean Vance arrived on site at Oregon Iron Works, Inc (OIW) in Clackamas, OR, to randomly observe the in process welding of the Hinge K Pipe Beam assemblies. The QA Inspector arrived on site to randomly observe the OIW Quality Control (QC) Inspectors in process and completed visual and nondestructive testing. Upon the arrival of the QA Inspector the following observations were made:

Hinge-K Pipe Beam Assembly 101A-3:

The QA Inspector observed WID # J6 (Craig Jacobson), performing Flux Core Arc Welding (FCAW), on the non-critical weld repair (WRR # 2244-10-07). The QA Inspector observed that this weld joint was designated as # W4-01, Fuse 120A-3 to Forging 102A-3 and that WID # J6 was performing the FCAW in the vertical position, from the exterior side of the weld joint.

The QA Inspector observed that the pre-heat was being applied to the joint with a previously set-up stationary rosebud torch and observed that OIW QC Inspector Jose' Salazar was present on this shift. QC Inspector Salazar explained that he was intermittently monitoring the welding parameters and pre-heat during the FCAW, at approximately 30 minute intervals. QC Inspector Salazar explained that prior to the FCAW being started, that pre-heat was verified to be approximately 400 degrees Fahrenheit and travel speed of 7 inches per minute (178 mm/minute). The QA Inspector then observed the welding parameters to be 220 amps and 25 volts, during the in-process FCAW. QC Inspector Salazar explained that Welding Procedure Specification (WPS), 3048 was being utilized for the repair.

The QA Inspector reviewed the applicable Weld Repair and Ultrasonic Testing Report and noted that this repair was designated as Indication # 4, per the reports and that this was a second time repair, due to rejectable indications discovered during preliminary Ultrasonic Testing.

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

The QA Inspector later observed that the repair had been completed by the end of shift and post-heat was being applied to the repair area.

The QA Inspector was present on this swing shift and observed that the post heat continued for 2 hrs., which appeared to be in compliance with the applicable WRR. See attached pictures below.

Material, Equipment, and Labor Tracking (MELT)

QA Inspector Sean Vance performed a verification of material, personnel and equipment involved with the project.

The QA Inspector observed at Oregon Iron Works Clackamas: 3 OIW production personnel and 2 QC Inspectors.



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:	Vance,Sean	Quality Assurance Inspector
----------------------	------------	-----------------------------

Reviewed By:	Adame,Joe	QA Reviewer
---------------------	-----------	-------------