

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 #: 01.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-030036**Date Inspected:** 10-Sep-2013**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site

CWI Name:	Jesus Cayabyab & Bernie 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:	See Below		

Summary of Items Observed:

Quality Assurance Inspector (QAI) Edward Leach was at the American Bridge/Flour (ABF) job site at Yerba Buena Island between the times noted above in order to monitor Smith Emery Quality Control (QC) functions and the in process work being performed by ABF personnel. The following items were observed:

13 Meter Tower Diaphragm: Weld Access Holes

ABF welding personnel Guo Wu Chen was observed utilizing the SMAW process in the vertical (3G) & horizontal (2G) positions with Atom Arc E7018-1 H4R, 1/8" diameter electrode to weld insert plate for weld access hole located at Electroslag Weld (ESW) "S" and "R" on the south side of the tower at 13 meter diaphragm. The welding parameters were verified by QC Inspector Bernie Docena with a Fluke 337 current clamp meter per ABF Welding Procedure Specification (WPS) ABF-WPS-D15-1160. Once welding was complete the weld was ground flush with the base metal. This work is part of Request for Information (RFI) #2838-R01. The weld designations for these two locations are identified as #140-2 & 139-1, access hole to diaphragm plate.

Ring Beam North Side

ABF welding personnel Rick Clayborn was observed removing 3/8" backing bar & performing back gouging on side B for vertical Complete Joint Penetration (CJP) ring beam weld #149 at location ESW "N" & "W". QC Inspector Bernie Docena performed visual inspection and Magnetic Particle Testing (MT) examination for back gouge prior to welding.

Mr. Rick Clayborn was later observed utilizing the Flux Cored Arc Welding (FCAW-S) process in the vertical (3G) position with Lincoln Innershield NR-232, E71T-8, 1.8mm diameter wire electrode to weld side B of vertical CJP weld. The welding parameters were verified by QC Inspector Bernie Docena with a Fluke 337 current clamp

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

meter per ABF Welding Procedure Specification (WPS) ABF-WPS-D15-2030-3. After welding was completed and cooled to ambient temperature, the QAI along with QC Inspector Bernie Docena performed final visual inspection, Magnetic Particle Testing (MT) examination and Ultrasonic Testing (UT) for welds #148 & 149 (web & flange) on the north tower side ring beam. No relevant indications were observed during inspection and welds were accepted by QC.

The welding & workmanship observed on this date appeared to be in general compliance with the contract specifications. The following picture below details completed welds on north ring beam after final inspection.



Summary of Conversations:

General conversations with ABF/JV QC NDT personnel relevant to work and testing performed during this shift.

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 Gary Thomas (916) 764-6027, who represents the Office of Structural Materials for your project.

Inspected By:	Leach,Ed	Quality Assurance Inspector
----------------------	----------	-----------------------------

Reviewed By:	Mertz,Robert	QA Reviewer
---------------------	--------------	-------------