

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-001305**Date Inspected:** 26-Dec-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name:	Wu Ming Kai	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	

Summary of Items Observed:

Caltrans Quality Assurance Inspector Gabriel Quintana (QA Inspector) arrived at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China to observe fabrication and Quality Control Inspectors (QC Inspectors) perform their duties and responsibilities as specified in the contract documents, approved plans, fabrications documents and Special Provisions for this project. While on site the QA Inspector observed the following:

Bay 3- QA Inspector randomly observed ZPMC qualified welder Wei Dashuai, Identification (ID) #051246 performing tack welding on Side Plate SP29 weld joints SP029-01-028 and SP029-01-029 to PL83A and PL83B plates, section #3A-C5. QA Inspector observed that preheating and welding current was monitored by QC Inspector Wu Ming Kai. Flux Core Arc Welding (FCAW) process is being used per the Welding Procedure Specification (WPS) WPS-B-T-2132-2. QA Inspector observed welding parameters of 270 amps and 29.2 volts were used by welder Wei Dashuai #051246. Welding and welding parameters observed by QA Inspector appear to be in general compliance with the approved WPS.

Bay 3- QA Inspector randomly observed ZPMC qualified welder He Yumei, ID# 048625, utilizing the FCAW process using the approved WPS-B-T-2132-2 while performing tack welding on Side Plate SP13 weld joints SP013-01-30/31 and SP013-01-32/33 to PL73A and PL73B plates. QA Inspector observed ZPMC Certified Weld Inspector (CWI) Wu Ming Kai monitoring welding and preheating parameters. The QA Inspector also randomly monitored weld parameters and recorded them as follows: welding amperage 280 amps, welding voltage 28.2 volts. The weld parameters appeared to comply with contract requirements.

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Bay 3 - QA Inspector observed weld joints SP034-01-11 thru 20 have been previously tack welded on Side Plate SP34 to plate PL86E. QA Inspector observed the welds during the preparation and cleaning process with electric wire wheel prior to performing preheat and final welding. No discrepancies are noted.

QA Inspector observed ZPMC employee Ly Yangqi transfer all TL-508 welding electrodes from oven #2 and placed them in oven #1. Ly Yangqi then refilled oven #2 with 240 kilograms (kg) of TL-508 welding electrodes. Ly Yangqi then he set the oven temperature to 350 Degrees Celsius for 130 minutes. QA inspector observed that Ly Yangqi recorded this information in a log book and then placed a sign on the oven door that restriction the door to be opened.

At this stage of fabrication, all items observed by QA Inspector appear to comply with the requirements of the Standard Specifications, contract Special Provisions, approved drawings, Welding Code AWS D1.5 (2002) and approved Welding Procedure Specification.



Summary of Conversations:

General communications took place between the QA and QC Inspector.

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 Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials

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for your project.

Inspected By:	Quintana, Gabriel	Quality Assurance Inspector
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Reviewed By:	Cochran, Jim	QA Reviewer
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