

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 #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-002116**Date Inspected:** 20-Apr-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1400**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 300**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai China**CWI Name:** See in Observations**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 side panels & tower skin plates**Summary of Items Observed:**

Summary of Items Observed: Caltrans Quality Assurance Inspector Mr. David Kelsey (QA Inspector) arrived at Shanghai Zhenhua Port Machinery Co (ZPMC) to observe Quality Control Inspector Mr. Chen Chie Ming (QC Inspector) of ZPMC perform the duties and responsibilities as outlined in the Welding Quality Control Plan (WQCP), Contract Special Provisions and to randomly inspect the in-process welding fabrication of the Orthotropic Box Girder (OBG) bottom plate segment joining welds. QA Inspector also observed Mr. Anqing Xiang perform the duties of QC Inspector for ZPMC as previously mentioned for in-process welding inspection on tower skin plate welds.

The Caltrans QA Inspector performed in-process visual inspection on the submerged arc welding (SAW) process welding joining the bottom plates BP13A to the BP14A in the new OBG building.

The Caltrans QA Inspector performed in-process visual inspection on the submerged arc welding (SAW) process welding on Tower skin plate weld piece 7SDI SA216 A/K-18B.

The Caltrans Inspector observed cutting plate edge bevel on side plate SP019 and back gouging on side plate SP019 for the OBG.

The Caltrans Inspector observed radiography being performed by ZPMC technicians at 2300 in new tower bldg Bay 3.

The Caltrans QA Inspector performed Magnetic Particle Testing (MT) verification of the QC MT Inspected and

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accepted tower skin plate welds (Tower Bldg Bay 3). QA Inspector's MT verification appears to be acceptable with AWS D1.5-02 section 6, table 6.1. Reference QA Magnetic Particle Test Report TL-6028 dated 4-20-08 for specific test data.

Bay 2 New OBG Building:

The Caltrans QA Inspector observed in-process SAW welding of the previously mentioned bottom plates rootside/backside within the parameters set forth in the WPS-B-T-2221-B-L2c-5-1. QA Inspector observed the ZPMC QC Inspector and two CAWI monitoring welding voltage, pre-heat & interpass temperatures, weld pass width, profile/size and travel speed. The Caltrans QA Inspector checked the CWI qualifications and randomly verified the pre-heat & interpass temperatures, welding position, welding voltage, weld profile, size and interpass cleaning on the previously mentioned plates.

New Tower Building Bay 2.

The Caltrans QA Inspector observed in-process SAW welding of the previously mentioned skin plate (weld SA216 A/K-18B to SA216 A/K -11B, Weld# 216) face side within the parameters set forth in the WPS-B-T-2221-B-U3 C-S-1. QA Inspector observed the ZPMC QC Inspector and one CAWI monitoring welding voltage, pre-heat & interpass temperatures, weld pass width, profile/size, interpass cleaning and travel speed. The Caltrans QA Inspector checked the CWI qualifications and randomly verified the pre-heat & interpass temperatures, welding position, welding voltage, weld profile, size and interpass cleaning on the previously mentioned skin plate weld.

The in-process welding, fit-up & joint preparation, and Magnetic Particle Testing observed appears to comply with WPS-B-T-2221-B-L2c-5-1, WPS-B-T-2221-B-U3 C-S-1, the approved drawings, the WQCP, Contract Special Provisions and AWS welding code D1.5.

Summary of Conversations:

No significant conversations at the time of this report.

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 for your project.

Inspected By:	Kelsey,David	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer
