

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-006079**Date Inspected:** 20-Feb-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See Below**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 Fabrication**Summary of Items Observed:**

CWI Inspectors Mr. Wu Ming Kai, Xu Le Feng, Wan Wen Zhong

On this date CALTRANS OSM Quality Assurance (QA) Inspector Mr. Paul Dawson arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai, China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. The QA Inspector observed the following:

Tower Bay 10

This QA Inspector performed random ultrasonic (UT) inspections of approximately 10 percent length of West Tower Lift 2 Skin plate D stiffener to skin plate welds WSD1-SA354-A/D-5, WSD1-SA354-A/D-6, WSD1-SA384-B/D-2. These welds had previously been ultrasonically inspected and accepted by ZPMC inspection personnel. The QA Inspector observed the welds that was ultrasonically inspected by this QA Inspector appear to comply with AWS D1.5 UT requirements. For additional information on this inspection see the TL6027 Ultrasonic Test Report.

This QA Inspector observed ZPMC welder Mr. Hu Xingping, stencil 049099 is using shielded metal arc welding procedure WPS-345-SMAW-1G(1F)-Repair to make critical weld repair on tower weld WSD1-SA340-D/F-20. Prior to welding the QA Inspector observed the base material was preheated to a minimum of 160 degrees Celsius using a torch. The QA Inspector observed ZPMC CWI Mr. Xu Le Feng had documented Mr. Hu Xingping having a welding current of approximately 223 amps, 28.6 volts and a travel speed of 149 mm per minute. Items

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

observed by the QA Inspector appear to comply with project specifications.

The QA Inspector observed ZPMC welder Mr. Wang Youxiang, stencil 066912 is using flux cored welding procedure WPS B-T-2232-TC-P5-F to make stiffener plate to tower skin plate weld NSD1-SA163A/D-17. The QA Inspector observed that the base material had been preheated using electrical heater elements. The QA Inspector observed ZPMC Quality Control personnel measuring Mr. Wang Youxiang having a welding current of approximately 312 amps and 31.7 volts. Items observed by this QA Inspector appear to be progressing in compliance with project specifications.

The QA Inspector observed ZPMC welder Mr. Meng Tao, stencil 068918 is using flux cored welding procedure WPS B-T-2232-TC-P5-F to make stiffener plate to tower skin plate weld NSD1-SA163A/D-18. The QA Inspector observed that the base material had been preheated using electrical heater elements. The QA Inspector observed ZPMC Quality Control personnel measuring Mr. Meng Tao having a welding current of approximately 307 amps and 31.0 volts. Items observed by this QA Inspector appear to be progressing in compliance with project specifications.



Summary of Conversations:

See 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 Eric Tsang phone: 150-0042-2372 , who represents the Office of Structural Materials for your project.

Inspected By:	Dawson,Paul	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer
