

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-005450**Date Inspected:** 08-Jan-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: Mr. Sun Wei

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:

OBG Bay 9

This QA Inspector observed ZPMC welder Mr. Han Siqi, stencil 202842 is using flux cored welding procedure WPS-345-FCAW-1G(1F)-Repair-1 to make stiffener plate repairs to OBG deck plate DP585-001 weld #13R1. The QA Inspector observed the base material had been preheated using an electrical heater element. The QA Inspector observed ZPMC Quality Control Inspector Mr. Lijie measuring Mr. Siqi having a welding current of approximately 290 amps and 30.0 volts. Items observed by this QA Inspector appear to be progressing in compliance with project specifications. Later in the shift the QA Inspector observed Mr. Siqi was making weld repairs to stiffeners on deck plate DP575-001.

This QA Inspector observed ZPMC welder Mr. Hu Fenjian, stencil 067877 is using flux cored welding procedure WPS-345-FCAW-1G(1F)-Repair-1 to make stiffener plate repairs to OBG deck plate DP585-001 weld #11R1. The QA Inspector observed the base material had been preheated using an electrical heater element. The QA Inspector observed ZPMC Quality Control Inspector Mr. Lijie measuring Mr. Fenjian having a welding current of

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approximately 295 amps and 30.5 volts. Items observed by this QA Inspector appear to be progressing in compliance with project specifications. Later in the shift the QA Inspector observed Mr. Lijie was making weld repairs to stiffeners on DP575-001.

This QA Inspector observed ZPMC ultrasonic personnel have completed ultrasonic inspections of welds on DP550-001 and several of the stiffener plate welds are rejected. These welds have previously been rejected two other times and these ultrasonic rejections will require weld repair #3. See the photograph below for additional information.

OBG Bay 12

This QA Inspector performed random ultrasonic (UT) inspections of OBG deck plate welds DP550-001-013, DP550-001-015, DP550-001-021, DP550-001-097, DP550-001-107, DP550-001-119, DP550-001-130 and DP550-001-141. These welds had previously been ultrasonically inspected and accepted by ZPMC inspection personnel and are listed on ZPMC Notification of Witness Inspection document 001944 which states the area of inspection is limited to the 15000 mm adjacent to the closed rib welds. The QA Inspector observed the welds that were 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.



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
