

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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-017305**Date Inspected:** 08-Oct-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**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**Summary of Items Observed:**

CWI Inspector: ABF: Mr. Shang Qing Quan

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. This QA Inspector observed the following:

OBG Bay 14

This QA Inspector observed ZPMC welder Ms. Wang Min, stencil 044771 was using submerged arc welding procedure WPS-B-T-2221-B-L2C-S-2 to make OBG segment 13CE butt weld SEG3011-003. This QA Inspector observed ZPMC QC personnel monitoring this welding and this QA Inspector measured a welding current of approximately 660 amps and 33.0 volts. Ms. Wang Min appeared to be certified to make this weld and the base material was preheated with electric heating elements. Items observed by this QA Inspector appeared to be progressing in compliance with project specifications.

This QA Inspector observed ZPMC welder Ms. Wang Lanying, stencil 045265 used submerged arc welding procedure WPS-B-T-2221-B-L2C-S-2 to make OBG segment 14W welds SEG3020AX-007 and -012 between plates PL3092A and PL3093A. This QA Inspector observed a welding current of approximately 590 amps, 29.5 volts, Ms. Wang Lanying appeared to be certified to make this weld, and electrical heaters had been used to preheat the base material. Items observed by this QA Inspector appear to be progressing in compliance with

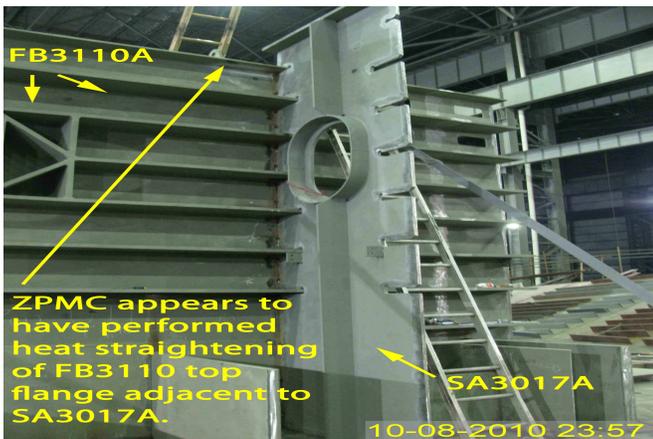
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project specifications.

This QA Inspector observed ZPMC welder Mr. Wang Li, stencil 044772 used shielded metal arc welding procedure specification WPS-B-P-3211-B-U2 to make OBG segment 13AE tack welds between stiffener plate X3427D and floor beam FB3110A. This QA Inspector measured a welding current of approximately 160 amps and Mr. Wang Li appears to be certified to make this weld. ABF CWI Mr. Zheng Qing Quan monitored this welding, the base material was preheated with a torch and the welding electrodes were stored in a portable rod oven which was warm to the touch. ABF CWI Mr. Zheng Qing Quan informed this QA Inspector that was not able to determine any of the weld numbers and tomorrow he will obtain a weld map that shows this information. Items observed on this date appeared to generally comply with applicable contract documents.

At around midnight ZPMC workers used an overhead crane to position OBG segment 13AE plate SA3017B in position adjacent to floor beam FB3110A. This QA Inspector observed the top flange of FB3110A appears to be distorted and the top flange would not fit into the slot cut into SA3017B. ABF CWI Mr. Mr. Zheng Qing Quan informed this QA Inspector that ZPMC needs to obtain a heat straightening approval and since no ZPMC QC is available to submit this document that no additional plates will be installed this shift. See the photographs below for additional information.



Summary of Conversations:

See Above.

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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:	Carreon,Albert	QA Reviewer
