

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-012135**Date Inspected:** 11-Feb-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 & Tower**Summary of Items Observed:**

CWI Inspector: Mr. Liu Zhong An

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 Bays 1 through 9

This QA Inspector observed no ZPMC personnel were working on Caltrans OBG segments or tower assemblies in OBG Bays 1 through 9.

OBG Bays 13 and 14

This QA Inspector observed no ZPMC personnel were working on Caltrans OBG segments or tower assemblies in OBG Bays 13 or 14 and the overhead lights were turned off. Many of the ZPMC workers are not at work due to the Chinese New Year holiday.

OBG Trial Assembly

At around 2030 hours this QA Inspector observed that two ZPMC workers were beginning to use a torch to

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perform heat straightening of the complete joint penetration weld in OBG segment 5CE, between side plate 425A and side plate 306A. This QA Inspector observed the two workers do not appear to have any equipment to measure the base material temperature and that no ZPMC QC Inspection personnel appeared to be in the vicinity where this work is taking place. This QA Inspector asked the ZPMC workers if this work is being monitored by any QC Inspector and one of the workers used his cell phone to call ZPMC QC Inspector Mr. Wang Xu, who is not a Certified Welding Inspector. Mr. Wang Xu, who speaks a limited amount of the English language, informed this QA Inspector that he is located in his office and he is working on his daily report. This QA Inspector asked Mr. Wang Xu to come to where this heat straightening is taking place and approximately 15 minutes later Mr. Wang Xu arrived. Mr. Wang Xu showed this QA Inspector that this work is being performed in accordance with heat straightening document HSR-B-353. This QA Inspector informed Mr. Wang Xu that the workers that were performing the heat straightening do not appear to have any equipment to monitor the temperature of the steel. Mr. Wang Xu informed this QA Inspector that the workers are done working, and no more heat straightening will be taking place this shift.

This QA Inspector observed three ABF personnel appeared to be performing magnetic particle inspections of deck plate butt welds on the inside surface of OBG segment 5CE.

Heavy Dock Tower

This QA Inspector observed no ZPMC personnel were working on Caltrans tower assemblies at the heavy dock.

Tower Bay 10

This QA Inspector observed ZPMC welder Mr. Shi Xingyu, stencil 052930 has recently completed using shielded metal arc process procedure WPS-345-SMAW-2G(2F)-Repair to perform north tower lift 4 weld NSTL4-3B/L-1B Repair #2. The repair weld was required due to ultrasonic rejections at location Y=26520 and the first weld repair apparently had not resolved the original ultrasonic rejection. This QA Inspector observed the area that was recently welded has an electric heating element which is maintaining the base material temperature and ZPMC CWI Mr. Liu Zhong An is monitoring the post welding base material temperature. See the photograph below for additional information. Items observed on this date appeared to generally comply with applicable contract documents.



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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
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Reviewed By:	Carreon,Albert	QA Reviewer
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