

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-013011**Date Inspected:** 27-Mar-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: Mr. Liu Hua Jie

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 Mr. Tian Zhaoquan, stencil 045246 is using shielded metal arc welding procedure WPS-B-P-2214-TC-U4b-FCM-1 to make 4G (overhead) position shielded metal arc weld repair SEG071A-010 at OBG segment 11DW panel point 106. This QA Inspector observed Mr. Tian Zhaoquan has a welding current of approximately 165 amps and Mr. Tian Zhaoquan appears to be certified to make this weld. ZPMC CWI Mr. Liu Hua Jie informed this QA Inspector that he does not have any weld repair documentation for the weld repair being made by Mr. Tian Zhaoquan, because dayshift QC Inspectors appears to have taken this documentation. This QA Inspector observed the welding electrodes are being stored in a heated portable electrode storage oven and the base material appears to have been preheated with a torch prior to commencement of the welding. Items observed on this date appeared to generally comply with applicable contract documents. See the photograph below for additional information.

This QA Inspector observed ZPMC welder Mr. Hue Junrong, stencil 201215 is using flux cored welding

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

procedure WPS-B-T-2232-TC-U4B-F to make OBG weld SEG3006S-129 between longitudinal diaphragm LD3023-001 and side plate SP3056A. This weld is located in OBG segment 12CW. This QA Inspector measured a welding current of approximately 285 amps and 33 volts. This QA Inspector observed Mr. Hue Junrong appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Hu Yacheng, stencil 049339 is using shielded metal welding process WPS-B-P-2112-FCM-1 to make OBG side plate SP3004-001 "T" rib hold back weld SP3004-055. This QA Inspector measured a welding current of approximately 180 amps and Mr. Hu Yacheng appears to be certified to make this weld. This QA Inspector observed the shielded metal arc welding electrodes are being stored in an electrically heated electrode storage container that feels hot. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Tu Zhi Wu, stencil 214945 is using flux cored welding procedure WPS-B-T-2133 and WPS-B-T-2132 to make OBG segment 12CW deck plate DP3014-001 closed rib to longitudinal diaphragm weld DP3014-142. This QA Inspector observed a welding current of approximately 230 amps and 26.0 volts. This QA Inspector observed that Mr. Tu Zhi Wu appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Wei Yingchong, stencil 048043 is using shielded metal arc welding specification WPS-B-T-2113-FCM-1 to complete OBG segment 12BE deck plate DP3014-001 to longitudinal diaphragm weld 3014-142. This QA Inspector observed the shielded metal arc welding electrodes are being stored in an electrically heated electrode storage container that feels hot and Mr. Wei Yingchong appears to be certified to make this weld. This QA Inspector measured a welding current of approximately 150 amps. Items observed on this date appeared to generally comply with applicable contract documents.

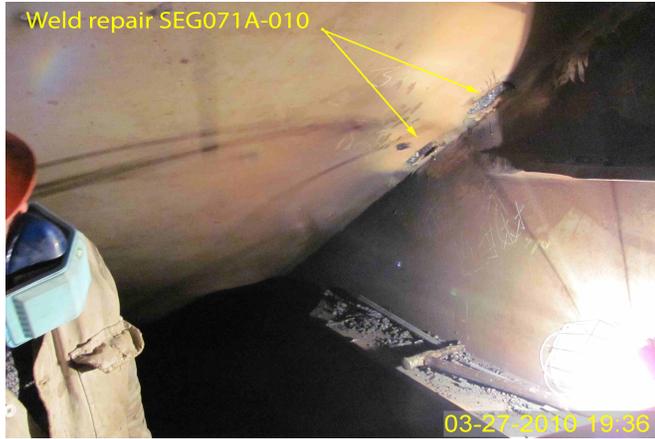
This QA Inspector observed ZPMC welder Mr. Hong Yong Li, stencil 044801 has using flux cored welding procedure WPS-B-T-2133 to make OBG segment 12BE floor beam FB3011-001 to longitudinal diaphragm LD3009 welds SEG3002J-15 and -16. This QA Inspector observed ZPMC QC/CWI Inspector Mr. Zhong Guo Hui has recorded a welding current of 270 amps and 25.5 volts. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Hong Liang, stencil 200113 is using shielded metal welding process WPS-B-P-2214-TC-U4b-FCM-1 to make OBG segment 112BE weld SEG3002J-008 at panel point PP113.

This QA Inspector measured a welding current of approximately 160 amps and Mr. Hong Liang appears to be certified to make this weld 4G position (overhead) weld. Items observed on this date appeared to generally comply with applicable contract documents.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)



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:	Carreon,Albert	QA Reviewer
