

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-013012**Date Inspected:** 28-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. Geng 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. This QA Inspector observed the following:

OBG Bay 14

This QA Inspector observed ZPMC welder Mr. Tu Zhi Wu, stencil 214945 is using flux cored welding procedure WPS-B-T-2233-TC-U4b-F to make OBG segment 12BW, deck plate DP3016-001 weld DP3016-3068B. This deck plate weld is being made near the center of OBG Bay 14 and after the deck plate welds are completed, this plate will be turned over then it will be installed at panel point 113. This QA Inspector observed a welding current of approximately 240 amps and 26.0 volts and the base material is being preheated with a torch. 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. Liu Ming, stencil 044790 is using flux cored welding procedure WPS-B-T-2233-TC-U4b-F to make OBG segment 12BW, deck plate DP3016-001 weld DP3016-3069A. This deck plate weld is being made near the center of OBG Bay 14 and after the deck plate welds are completed, this

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

plate will be turned over then it will be installed at panel point 114.5. This QA Inspector observed a welding current of approximately 280 amps and 33.0 volts and the base material is being preheated with a torch. This QA Inspector observed that Mr. Liu Ming 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 Ms. Li Jiao, stencil 049861 is using shielded metal arc welding procedure specification WPS-B-P-2114-FCM-1 to make tack welds between deck plates DP3005A-001 and DP3006A-001. These deck plates will be installed in OBG segment 12AE. This QA Inspector observed a welding current of approximately 165 amps and Ms. Li Jiao 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 which is hot to the touch and the base material was preheated with a torch prior to tack welding. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Yuan Wensong, stencil 055491 is using welding procedure WPS-B-P-2231-TC-U4b-F to make corner assembly flux cored weld CA3002A-004. This QA Inspector observed a welding current of approximately 280 amps and 30.0 volts. This QA Inspector observed that Mr. Yuan Wensong 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 stencil 052696 is using flux cored welding procedure WPS-B-P-2231-TC-U4b-F to make corner assembly flux cored weld CA3002A-004. This QA Inspector observed a welding current of approximately 295 amps and 30.0 volts. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Jin Chen Mao, stencil 058551 is using flux cored welding procedure WPS-B-T-2133 to make OBG weld SEG3002G-039 through weld SEG3002G-058. These welds join longitudinal diaphragm with the bottom plate at OBG segment 12AE near panel point 113. This QA Inspector observed that Mr. Jin Chen Mao is certified to make this weld and the base material was preheated with a torch prior to welding. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Chen Chuanzong, stencil 044824 has recently used flux cored welding procedure WPS-B-T-2133 to make OBG weld SEG3002E-040 through 057. These welds join longitudinal diaphragm with the bottom plate at OBG segment 12AE near panel point 113.5. This QA Inspector observed QC has recorded a welding current of 312 amps and 30.5 volts. This QA Inspector observed Mr. Chen Chuanzong 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 stencil 044295 has recently used flux cored welding procedure WPS-B-T-2133 to make OBG weld SEG3002C-039 through 058. These welds join longitudinal diaphragm with the bottom plate at OBG segment 12AE near panel point 114. This QA Inspector observed QC has recorded a welding current of 303 amps and 29.1 volts. 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
