

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-009873**Date Inspected:** 08-Oct-2009**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 Fabrication**Summary of Items Observed:**

CWI Inspectors: Mr. Li Yang, Mr. Guy Yan Fei, Mr. Zhu Fen Shu

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 2

This QA Inspector observed ZPMC welder Mr. Rao Wei, stencil 049972 is using shielded metal arc welding procedure specification WPS-B-T-2112 to make OBG floor beam stiffener plate fillet tack weld FB3085-001-009. This QA Inspector observed a welding current of approximately 165 amps, the base material appears to be clean where the tack welds were being made, and Mr. Rao Wei is 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 warm to the touch. Items observed on this date appeared to generally comply with applicable contract documents.

OBG BAY 5

This QA Inspector observed ZPMC welder Ms. Song Aiyang, stencil 215689 is using flux cored welding process WPS-B-T-2131-B-U2-F to make traveler rail groove welds TR15-008-001 and TR15-008-002. The QA Inspector

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

observed a welding current of approximately 290 amps and 32.5 volts. This QA Inspector observed Ms. Song Aiying is certified to make this weld and that ZPMC QC Inspector Mr. Zhong Chong Taio is monitoring this welding. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Li Yuanzheng, stencil 217185, is using flux cored welding procedure WPS-B-T-2231-TC-U4b-F to make bikepath cantilever beam weld BK001-037-003. This QA Inspector observed a welding current of approximately 310 amps and 30.0 volts. This QA Inspector observed Mr. Li Yuanzheng is certified to make this weld and that ZPMC QC Inspector Mr. Zhong Chong Taio has recorded a welding current of 311 amps and 30.2 volts. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Chen Naijun, stencil 205390, has recently completed using flux cored welding procedure WPS-B-T-2231-TC-U4b-F to make bikepath cantilever beam weld BK001-040-001. This QA Inspector observed Mr. Chen Naijun is certified to make this weld and that ZPMC QC Inspector Mr. Zhong Chong Taio had been monitoring this welding. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Wang Guangdong, stencil 215009 is using flux cored welding procedure WPS-B-T-2231-TC-U4b-F to make bikepath cantilever beam weld BK001-041-001. This QA Inspector observed a welding current of approximately 310 amps and 30.0 volts. This QA Inspector observed Mr. Wang Guangdong is certified to make this weld and that ZPMC QC Inspector Mr. Zhong Chong Taio has recorded a welding current of 290 amps and 30.0 volts. Items observed on this date appeared to generally comply with applicable contract documents.

OBG BAY 9

This QA Inspector observed ZPMC welder Mr. Xu Guo Xin, stencil 059443 is using flux cored welding procedure WPS-B-T-2133 to make deck plate weld DP3063-001-257. This weld attaches a stiffener plate to the inside of closed rib for OBG deck panel DP3063-001. This QA Inspector observed the base material had been cleaned of oxides where the stiffener welds are to be installed and that ZPMC QC Inspector Mr. Chen Shigang is monitoring this welding. This QA Inspector observed a welding current of approximately 200 amps 26.0 volts and Mr. Xu Guo Xin is 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. Tang Ke, stencil 062305 is using Gas Metal Arc Welding (GMAW) procedure WPS-B-T-2342-U5(U-rib) to tack closed ribs to deck plate DP3063-001. This QA Inspector measured a welding current of approximately 330 amps and 25.0 volts. This QA Inspector observed Mr. Tang Ke is certified to make this weld and that ZPMC QC Inspector Mr. Chen Shigang is monitoring this welding. Items observed on this date appeared to generally comply with applicable contract documents.

OBG BAY 14

This QA Inspector observed ZPMC welder Mr. Yun Chuan Shan, stencil 050316 has recently completed using flux cored welding process WPS-B-T-2233-TC-U4b-F to make OBG weld SEG063A-015 at OBG segment 10CW.

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

This QA Inspector observed ZPMC QC Inspector Mr. Xu Tao has recorded a welding current of 217 amps and 25.1 volts. This QA Inspector verified Mr. Yun Chuan Shan is 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. He Jun Rong, stencil 201215 has recently completed using flux cored welding process WPS-B-T-2233-TC-U4b-F to make OBG weld SEG063A-016 at OBG segment 10CW. This QA Inspector observed ZPMC QC Inspector Mr. Xu Tao has recorded a welding current of 220 amps and 25.7 volts. This QA Inspector verified Mr. He Jun Rong is 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. Hi Hanbi, stencil 202122 has recently completed using flux cored welding process WPS-B-T-2233-TC-U4b-F to make OBG weld SEG063A-009 at OBG segment 10CW. This QA Inspector observed ZPMC QC Inspector Mr. Xu Tao has recorded a welding current of 220 amps and 25.0 volts. This QA Inspector verified Mr. Yun Hi Hanbi is 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 Daiquan, stencil 066401 has recently completed using flux cored welding process WPS-B-T-2233-TC-U4b-F to make OBG weld SEG063A-010 at OBG segment 10CW. This QA Inspector observed ZPMC QC Inspector Mr. Xu Tao has recorded a welding current of 217 amps and 26.4 volts. This QA Inspector verified Mr. Yun Hi Hanbi is 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. Tu Zhi Wu, stencil 214945 is using flux cored welding procedure WPS-B-T-2233-B-U2-F to make OBG weld SEG062*-021. This QA Inspector observed ZPMC Quality Control Inspector Mr. Wang Xie has recorded a welding current of 210 amps and 25.1 volts. This QA Inspector verified Mr. Tu Zhi Wu is 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. Xie Jinxia, stencil 048038 is using flux cored welding procedure WPS-B-T-2233-B-U2-F to make OBG weld SEG062*-022. This QA Inspector observed ZPMC Quality Control Inspector Mr. Wang Xie has recorded a welding current of 212 amps and 25.2 volts. Items observed on this date appeared to generally comply with applicable contract documents.

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
