

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-023588**Date Inspected:** 11-May-2011**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 Trial Assembly

This QA Inspector observed ZPMC welder Mr. Liu Ya, stencil 067520 used shielded metal arc welding procedure specification WPS-B-P-2214-B-U2-FCM-1 to make weld OBG13B-001. This weld joins the bottom plates between OBG segments 13AW and 13BW. This QA Inspector observed a welding current of approximately 175 amps, the base material had been preheated with electric heaters and Mr. Liu Ya appeared 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. Li Jian stencil 067829 used shielded metal arc welding procedure specification WPS-B-P-2214-B-U2-FCM-1 to make weld OBG13B-003. This weld joins the bottom plates between OBG segments 13AW and 13BW. This QA Inspector observed a welding current of approximately 165 amps, the base material had been preheated with electric heaters and Mr. Li Jian appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

This QA Inspector observed ZPMC welder Mr. Zhao Aifei stencil 067942 used shielded metal arc welding procedure specification WPS-B-P-2214-B-U2-FCM-1 to make weld OBG13B-005. This weld joins the bottom plates between OBG segments 13AW and 13BW. This QA Inspector observed a welding current of approximately 165 amps, the base material had been preheated with electric heaters and Mr. Zhao Aifei appeared 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. Liao Yanfei, stencil 066398 used shielded metal arc welding procedure WPS-B-P-2212-TC-U4B-FCM-1 to make OBG segment 13BW welds SEG3014L-137 and 113. This QA Inspector observed a welding current of approximately 210 amps, the base materials were heated with an electric heater, Mr. Liao Yanfei appeared 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. Yu Hui Ye, stencil 045143 used flux cored welding procedure specification WPS-B-T-2231-ESAB to perform OBG segment 13BW weld SEG3015K-210. This QA Inspector observed a welding current of approximately 310 amps, 26.0 volts, the base material had been preheated with a torch and Mr. Yu Hui Ye appeared 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. Pan Ming, stencil 066673 used flux cored welding procedure WPS-345-FCAW-3G(3F)-ESAB-Repair-FCM-1 to make repairs to weld SEG3014H-203. ZPMC QC informed this QA Inspector that weld repair document B-WR-20824 documents repairs of this weld. This QA Inspector observed a welding current of approximately 260 amps, 26.5 volts, the base material had been preheated with a torch and Mr. Pan Ming appeared 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. Wang Rucheng, stencil 066881 used flux cored welding procedure WPS-345-FCAW-3G(3F)-ESAB-Repair-FCM-1 to make repairs to OBG segment 13BW weld SEG3014J-111. ZPMC QC informed this QA Inspector that weld repair document B-WR-20824 documents repairs of this weld. This QA Inspector observed a welding current of approximately 240 amps, 26.0 volts, the base material had been preheated with a torch and Mr. Wang Rucheng appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

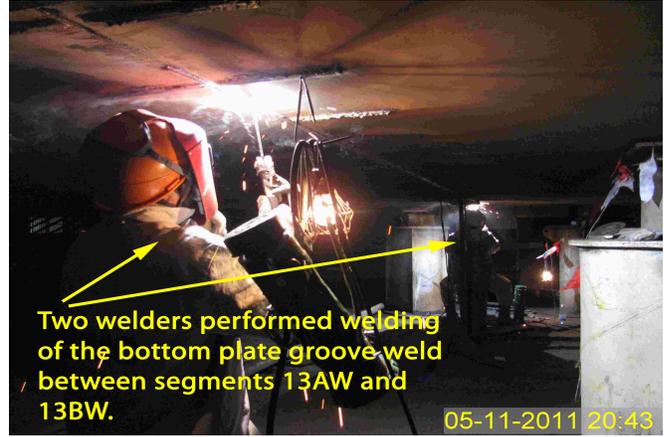
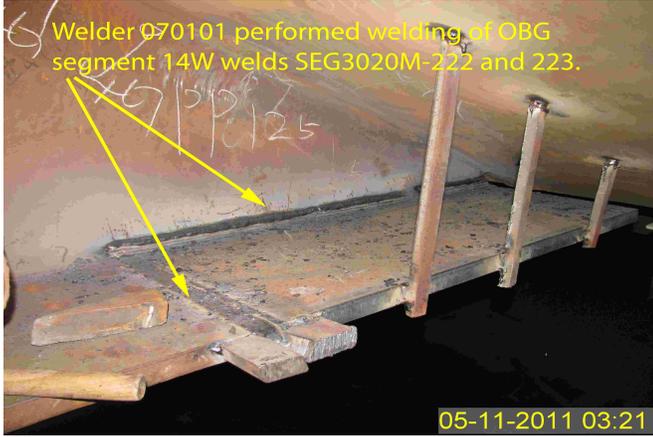
This QA Inspector observed ZPMC welder Mr. Jiang Junlin, stencil 067876 used flux cored welding procedure WPS-345-FCAW-3G(3F)-ESAB-Repair-FCM-1 to make repairs to segment 13AW welds SEG3014B-101 and 107. ZPMC QC informed this QA Inspector that weld repair document B-WR-20824 documents repairs of these welds. This QA Inspector observed a welding current of approximately 250 amps, 26.0 volts, the base material had been preheated with a torch and Mr. Jiang Junlin appeared to be certified to make these welds. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Huang Hongpei, stencil 067275 used flux cored welding procedure WPS-345-FCAW-3G(3F)-ESAB-Repair-FCM-1 to make repairs to segment 13AW welds SEG3013B-005, 011, 017 and 023. ZPMC QC informed this QA Inspector that weld repair document B-WR-20824 documents repairs

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

of these welds. This QA Inspector observed a welding current of approximately 260 amps, 26.0 volts and Mr. Huang Hongpei appeared to be certified to make this weld. 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 James Devey +8615000026784, who represents the Office of Structural Materials for your project.

Inspected By: Dawson,Paul

Quality Assurance Inspector

Reviewed By: Riley,Ken

QA Reviewer
