

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-023585**Date Inspected:** 06-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. Li Yang Hua

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. Du Henghua, stencil 037779 used shielded metal arc welding process to make temporary alignment / jacking plate welds between OBG segment 13AW and 13BW counterweight side plates. This QA Inspector observed a welding current of approximately 180 amperes (amps), the base materials were heated with a torch and Mr. Du Henghua 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-B-T-2231T-ESAB-1 to make weld OBW13B-003. This QA Inspector observed a welding current of approximately 320 amps, 24.5 volts, the base material had been preheated with electric heaters and Mr. Jiang Junlin appeared to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

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This QA Inspector observed ZPMC welder Mr. Wang Rucheng, stencil 066881 used flux cored welding procedure WPS-B-T-2231T-ESAB-1 to make weld OBW13B-003. This QA Inspector observed a welding current of approximately 320 amps, 26.0 volts, the base material had been preheated with electric heaters 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 stencil 204730 used flux corded arc welding process to make temporary alignment / jacking plate welds between OBG segment 13CW and 14W top deck plates. This QA Inspector observed a welding current of approximately 270 amps, 26.0 volts and the base materials were heated with a torch. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Wu Cunnang, stencil 070101 used flux cored welding procedure specification WPS-B-T-2233-ESAB to make OBG segment 13AE weld SEG3013AU-087. This QA Inspector observed a welding current of approximately 260 amps, 25.0 volts and Mr. Wu Cunnang 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 Bin, stencil 069896 used shielded metal arc welding procedure specification WPS-345-SMAW-4F(4G)-FCM-Repair-1 to make repairs of OBG segment 14W weld SEG3013-004. ZPMC QC informed this QA Inspector that weld repair document B-WR-20849 documents this weld had been ultrasonically rejected. This QA Inspector observed a welding current of approximately 170 amps, the base material had been preheated with electric heaters and Mr. Li Bin 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-2213-B-U2-FCM-1 to make OBG segment 12CW welds SEG3006D-147, 148, 152 and 153. This QA Inspector observed a welding current of approximately 170 amps, the base materials were heated with a torch, Mr. Liao Yanfei appeared to be certified to make this weld and items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Huang Hongpei, stencil 037705 used flux cored welding procedure WPS-B-T-2133-ESAB to make OBG segment 14W welds SEG3020D-155, 156, 157 and 158. This QA Inspector observed a welding current of approximately 230 amps, 26.5 volts, the base material had been preheated with electric heaters 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.

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Welder 066398 used a torch to preheat welds SEG3006D-147 and 148.



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
