

**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-023734**Date Inspected:** 13-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. Sha Zhi

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 Ms. Hue Junrong, stencil 201215 used flux cored welding process to make temporary alignment / jacking plate welds between the cross beam side of OBG segments 13CW and 14W top deck plates. This QA Inspector observed a welding current of approximately 310 amps and 27 volts, the base materials were heated with a torch and Ms. Hue Junrong 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. Pan Wei, stencil 218662 used shielded metal arc process to make temporary alignment / jacking plate welds between the counterweight side of OBG segments 13BW and 13CW top deck plates. This QA Inspector observed and the base materials appear to have been preheated with a torch and Mr. Pan Wei 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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## WELDING INSPECTION REPORT

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This QA Inspector observed ZPMC welder Mr. Li Jian stencil 067829 used shielded metal arc welding procedure specification WPS-B-P-2214-B-U2A-FCM-1 to make weld OBG13-001. This weld joins the deck plates between OBG segments 13AW and 13BW. This QA Inspector observed a welding current of approximately 160 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.

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. Jiang Yang Sheng, stencil 045240 used flux cored welding procedure WPS-B-T-2231-ESAB to make welds SA3060-001-010-001, 002, 003, 005, 007 and 008. This QA Inspector observed a welding current of approximately 320 amps and 25.0 volts the base material had been preheated with electric heaters and Mr. Jiang Yang Sheng 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. Wang Rucheng, stencil 066881 used flux cored welding procedure WPS-B-T-2232-ESAB to make stiffener plate hold back welds BP3058-001-013 and 015. This QA Inspector observed a welding current of approximately 320 amps, 26.5 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. Huang Hongpei, stencil 037705 used flux cored welding procedure WPS-B-T-2233-ESAB to make OBG segment 13AW welds SEG3013T-114 and 109. This QA Inspector observed a welding current of approximately 240 amps, 25.5 volts, the base material had been preheated with a torch 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.

This QA Inspector observed ZPMC welder Mr. Li Shoufu, stencil 066674 used shielded metal arc welding procedure WPS-B-P-2213-ESAB to make OBG segment 13AW weld SEG3013J-147. This QA Inspector observed a welding current of approximately 170 amps and Mr. Li Shoufu 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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# WELDING INSPECTION REPORT

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## 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.

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<b>Inspected By:</b>	Dawson,Paul	Quality Assurance Inspector
<b>Reviewed By:</b>	Riley,Ken	QA Reviewer

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