

**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-014866**Date Inspected:** 04-Jun-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 Inspectors: Mr. Li Yang, Mr. Xu Tao

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 Segment Trial Assembly**

This QA Inspector observed ZPMC welder Mr. Yun Chuansheng, stencil 045221 is using shielded metal arc welding procedure WPS-B-P-2212-TC-U4b-FCM-1 to make hold back weld CA056-001. This welding is located between the side and edge plates on the interior of OBG segment 9AW adjacent to where OBG segment 8CW is to be joined to 9AW. This QA Inspector observed Mr. Yun Chuansheng has a welding current of approximately 195 amps and Mr. Yun Chuansheng appears to be certified to make this weld. This QA Inspector observed the welding electrodes are being stored in a heated portable electrode storage oven and the base material appears to have been preheated with a torch. Items observed on this date appeared to generally comply with applicable contract documents. See the photograph below for additional information.

This QA Inspector observed ZPMC welder Ms. Cheng Haixia, stencil 045209 is using flux cored welding procedure WPS-B-P-2231-TC-U4b-F to make weld OBW9K-002. This weld joins a drip plate to the exterior counterweight side of OBG segment 9AW. This QA Inspector observed welding current of approximately 300

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amps, 30.6 volts and the base material appears to have been preheated with an electrical heating element. Ms. Cheng Haixia appears to be certified to make these welds. Items observed on this date appeared to generally comply with applicable contract documents.

OBG Segments in the yard behind bays 14 and 15

This QA Inspector observed ZPMC welder Mr. Ge Hao, stencil 201583 is using flux cored welding procedure WPS-B-T-2233-TC-U4b-F to make welds SSD10A-PP104-257 and -258. These welds attach a lifting attachment assembly to OBG segment 11DW floor beam at panel point 104. This QA Inspector measured a welding current of approximately 220 amps and Mr. Ge Hao 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. Ji Yi, stencil 045268 is using shielded metal arc procedure WPS-B-T-4114 to make weld SEG71E-170 between the side plate and the edge plate on the exterior of OBG segment 11DW. This QA Inspector observed a welding current of approximately 165 amps and the welding electrodes are being stored in a portable electrode storage oven that appears to be connected to an electrical power supply. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. He Hanbi, stencil 202122 is using flux cored welding procedure WPS-B-T-2231-TC-U4b-F to make weld SSD13-PP106-130. This weld attaches a lifting attachment assembly to OBG segment 11DE floor beam at panel point 106. This QA Inspector observed ZPMC QC Inspector Mr. Li Ping has recorded a welding current of 310 amps and 30.1 volts. Items observed on this date appeared to generally comply with applicable contract documents.

OBG Bay 14

This QA Inspector observed ZPMC welder Mr. Xi Xianyou, stencil 047866 has been using flux cored welding procedure WPS-B-T-2132 to make segment welds SSD25-PP92-037 and -038. This QA Inspector observed ZPMC QC has recorded a welding current of 294 amps and 30.7 volts. This QA Inspector observed Mr. Xi Xianyou appears to be certified to make these welds. Items observed on this date appeared to generally comply with applicable contract documents.

OBG Bay 16

This QA Inspector observed ZPMC welder Ms. Wang Lanying, stencil 045265 is using submerged arc welding procedure WPS-B-T-2221-B-U3C-S-2 to make OBG segment 13 weld BP3073-001-005 between plates PL3362B and PL3361B. This QA Inspector measured a welding current of approximately 640 amps and Ms. Wang Lanying appears to be certified to make this weld. Items observed by this QA Inspector appear to be progressing in compliance with project specifications.

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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 Eric Tsang phone: 150-0042-2372 , 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>	Carreon,Albert	QA Reviewer

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