

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave. St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

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-010521**Date Inspected:** 12-Nov-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 Inspector: Mr. Li Ming, Mr. Wan Wen Zhong, Mr. Zhu Zhong Hai

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 10**

This QA Inspector observed ZPMC welder Mr. Zhu Cheng Dong, stencil 040582 has recently used shielded metal arc process WPS-B-T-4113-1 to make Shear Link weld ND1-A6002-17-28. This QA Inspector observed ZPMC QC Inspectors have recorded a welding current of 180 amps and the electrically heated electrode storage container which is warm to the touch and it appears to be connected to the welding power supply cable. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Shi Xingyu, stencil 052930 has recently used shielded metal arc process WPS-B-T-4113-1 to make Shear Link weld ND1-A6002-17-27. This QA Inspector observed ZPMC QC Inspectors have recorded a welding current of 179 amps and the electrically heated electrode storage container which is warm to the touch and it appears to be connected to the welding power supply cable. 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. Huang Zhao, stencil 056200 has recently used shielded metal arc process procedure WPS-345-SMAW-4G(4F)-Repair to make tower lift 4 weld NSTL4-3B/L-1B. This QA Inspector observed ZPMC QC Inspectors have recorded a welding current of 156 amps. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed Mr. Chang Chuan Gang, stencil 053870 has recently used flux cored weld procedure WPS-345-FCAW-2G(2F)-Repair to make tower lift 4 weld NSTL4-3B/L-2B. This QA Inspector observed ZPMC QC Inspectors have recorded a welding current of 315 amps and 30.0 volts. Items observed on this date appeared to generally comply with applicable contract documents.

### OBG Bay 13

This QA Inspector observed ZPMC welder Mr. Wu Wanyong, stencil 050242 is using welding procedure WPS-B-P-2232-TC-U4b-F to make corner assembly flux cored weld CA087-003. This QA Inspector measured a welding current of 280 amps and 29.5 volts. This QA Inspector observed that Mr. Wu Wanyong 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. Yuan Wensong, stencil 055491 has been using welding procedure WPS-B-P-2232-TC-U4b-F to make corner assembly flux cored weld CA087-003. This QA Inspector observed ZPMC QC Inspector Mr. Tang Yajun has recorded a welding current of 318 amps and 30.9 volts. This QA Inspector observed that Mr. Yuan Wensong is certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

### Outside OBG Bay 13

This QA Inspector observed ZPMC welder Mr. Zhang Quin Quan, stencil 044774 is using flux cored welding procedure WPS-B-T-2233-TC-U5-F(G) to make weld SSD18A-PP88-225. This QA Inspector observed a welding current of approximately 215 amps and 25.0 volts. This QA Inspector observed that Mr. Zhang Quin Quan appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

### OBG BAY 14

This QA Inspector observed ZPMC welder Ms. Wang Min, stencil 044771 is using welding procedure specification WPS-B-T-3321-B-L2c-S-2 to make submerged arc groove weld SEG069\*-006 between side plate SP213-001 and SP240-001. This QA Inspector observed a welding current of approximately 620 amps and 33.0 volts. This QA Inspector confirmed that Ms. Wang Min 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 Ms. Li Jiao, stencil 049861 is using shielded metal arc welding procedure specification WPS-B-P-2211-B-U2-FCM to make tack welds between side plate SP559-001 and SP704-001. This QA Inspector observed a welding current of approximately 170 amps and Ms. Li Jiao appears to be 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 hot to the touch. Items observed on this date

---

---

# WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

---

---

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.

---

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

---