

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-011483**Date Inspected:** 09-Jan-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 and Tower**Summary of Items Observed:**

CWI Inspectors: Mr. Ji Jia, Mr. You Qi Guo

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 5

This QA Inspector observed ZPMC welder Ms. Song Aiyong, stencil 215689 is using flux cored welding procedure WPS-B-T-2132 to make traveler rail weld 11TR10-002-009. This QA Inspector observed a welding current of approximately 325 amps and 30.8 volts. ZPMC QC Inspector Mr. Zheng Zhi Wei is monitoring this welding and Ms. Song Aiyong 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. Si Gao Feng, stencil 204342 is using flux cored welding procedure WPS-B-T-2332-TC-U5-F2 to make traveler rail weld 10TR3-006-014. This QA Inspector observed a welding current of approximately 320 amps and 31.2 volts. ZPMC QC Inspector Mr. Zheng Zhi Wei is monitoring this welding and Mr. Si Gao Feng appears 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. Li Yuan Zheng, stencil 217185 is using flux cored welding procedure WPS-B-T-2332-TC-U5-F2 to make traveler rail weld 10TR1-009-014. This QA Inspector observed a welding current of approximately 325 amps and 31.50 volts. ZPMC QC Inspector Mr. Zheng Zhi Wei is monitoring this welding and Mr. Li Yuan Zheng appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

Heavy Dock

This QA Inspector observed ZPMC welder Mr. Yin Guoqiang, stencil 058792 has recently used flux cored welding procedure WPS-B-T-2333-TC-P4-F to make West tower lift 1 weld WSD1-SA653-D/F-2. This weld is located inside the base of West tower on the Heavy Dock. This QA Inspector observed ZPMC CWI Mr. You Qi Guo is has recorded a welding current of 217 amps and 25.9 volts. This QA Inspector observed Mr. Yin Guoqiang appears to be certified to make this weld. Items observed by this QA Inspector generally appear to be progressing in compliance with project specifications.

This QA Inspector observed ZPMC welder Mr. Liu Jin, stencil 202821 had recently completed using flux cored welding procedure WPS-B-T-2333-TC-P4-F to make West tower lift 1 weld WSD1-SA653-D/F-6. This weld is located inside the base of West tower on the Heavy Dock. This QA Inspector observed ZPMC CWI Mr. You Qi Guo has recorded a welding current of 218 amps and 26.3 volts and Mr. Liu Jin appears to be certified to make this weld. Items observed by this QA Inspector appear to be progressing in compliance with project specifications.

This QA Inspector observed ZPMC welder Mr. Wang Daping, stencil 040736 is using flux cored welding procedure WPS-B-T-2333-TC-P4-F to make West tower lift 1 weld WSD1-SA653-B/Z-10. This weld is located inside the base of West tower on the Heavy Dock. This QA Inspector observed ZPMC CWI Mr. You Qi Guo is monitoring this welding, Mr. Wang Daping appears to be certified to make this weld and this QA Inspector measured a welding current of approximately 220 amps and 25.0 volts. Items observed by this QA Inspector appear to be progressing in compliance with project specifications.

This QA Inspector observed ZPMC welder stencil 053468 is using flux cored welding procedure WPS-B-T-2333-TC-P4-F to make West tower lift 1 weld WSD1-SA225-F/H-8. This weld is located inside the base of West tower on the Heavy Dock. This QA Inspector observed ZPMC CWI Mr. You Qi Guo is monitoring this welding and this QA Inspector measured a welding current of approximately 210 amps and 26.0 volts. Items observed by this QA Inspector appear to be progressing in compliance with project specifications.

Segment Assembly

This QA Inspector observed ZPMC welder Mr. Hu Yanming, stencil 62092 is using shielded metal arc procedure WPS-B-P-2214-TC-U4b-FCM-1 to install drip plate weld OBW5G-010 on the counterweight side of OBG segment 5AW. This QA Inspector observed electric heating elements appear to have been used to preheat the base metal and the welding electrodes are being stored in a portable rod oven that is connected to an electric power cable. This QA Inspector measured a welding current of approximately 150 amps and Mr. Hu Yanming appears to be certified to make this 4F (overhead) fillet weld. Items observed on this date appeared to generally comply with applicable contract documents.

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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.

Inspected By:	Dawson,Paul	Quality Assurance Inspector
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Reviewed By:	Carreon,Albert	QA Reviewer
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