

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-009997**Date Inspected:** 31-Oct-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 Inspectors: Mr. Xu Xian Ping, Mr. Lv Li Qin

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 Mr. Shen Tianju, stencil 215083, is using shielded metal arc welding procedure WPS-345-SMAW-2G(2F)-Repair to make repairs to flame cut notches on the edges of various traveler rail plates as referenced on ZPMC weld repair report B-WR8254. This QA Inspector observed a welding current of approximately 135 amps. This QA Inspector observed Mr. Shen Tianju is certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

OBG Bay 13

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 CA079-003. This QA Inspector observed ZPMC QC Inspector Mr. Tang Yajun has recorded a welding current of 315 amps and 30.6 volts. This QA Inspector observed that Mr. Yuan Wensong is certified to make this weld. Items observed on this date appeared to

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generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Wu Wanyong, stencil 050242 has been using welding procedure WPS-B-P-2232-TC-U4b-F to make corner assembly flux cored weld CA079-003. This QA Inspector observed ZPMC QC Inspector Mr. Tang Yajun has recorded a welding current of 315 amps and 30.6 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.

OBG Bay 14

This QA Inspector observed ZPMC welder Ms. Gao Min, stencil 050988 has used flux cored welding procedure specification WPS-B-T-2132 to make welds DP509-001-052~060 between an angle brace and various side plate "T" stiffener plates. This QA Inspector observed Ms. Gao Min is certified to make these welds. This QA Inspector observed ZPMC QC Inspector Mr. Tang Yajun has recorded a welding current of 310 amps and 30.2 volts. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Ms. Xie Jinxia, stencil 048038 is using shielded metal arc welding procedure WPS-B-P-2211-B-U2-FCM-1 to make OBG weld SEG088*-003 between deck plates DP455-0001 and DP428-001. This QA Inspector observed that Ms. Xie Jinxia is certified to make this weld and the electrode storage oven feels hot to the touch and appears to be connected to an electrical power cord. This QA Inspector observed a welding current of 155 amps. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Ye Shen Jun, stencil 203871 has recently used flux cored welding procedure WPS-B-T-2133 to make OBG weld SSD22-PP80.5 between between an angle brace and various side plate "T" stiffener plates. The QA Inspector observed ZPMC QC personnel have recorded a welding current of 210 amps and 25.2 volts. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Ms. He Junrong, stencil 201215 has recently used flux corded arc welding procedure specification WPS-B-T-2233-B-U2-F to complete weld SSD12-PP076-009. This QA Inspector observed ZPMC QC has recorded a welding current of 214 amps and 25.6 volts and Ms. He Junrong 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. Yun Chuan Shan, stencil 050316 has recently completed using flux cored welding process WPS-B-T-2233-B-U2-F to make OBG weld SSD10-PP74-008. This QA Inspector observed ZPMC QC has recorded a welding current of 208 amps and 24.7 volts. This QA Inspector verified Mr. Yun Chuan Shan is certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

OBG BAY 9

This QA Inspector performed random magnetic particle inspections of approximately 15 percent of the tack welds that attach closed ribs to deck panels DP3062-001 and DP3041-001. These deck panels are clamped to the convex

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shaped welding platforms that are adjacent to overhead welding gantry #2. Earlier in this shift ZPMC conducted a "Production Monitoring Test" using gantry #2 and if the testing results are satisfactory these deck panels are scheduled to be welded during the dayshift. These deck panel tack welds appear to have been previously MT inspected by ZPMC personnel and several of the welds appear to have been ground to eliminate MT indications which had been marked by ZPMC MT Inspectors. These inspections were performed on an informational basis and no TL-6028 Magnetic Particle Test Report has been issued to document these inspections.

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
Reviewed By:	Carreon,Albert	QA Reviewer
