

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-012683**Date Inspected:** 14-Mar-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 Inspector: Mr. Liu Hua Jie

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 14

This QA Inspector observed ZPMC welder Ms. Hue Junrong, stencil 201215 is using flux cored welding procedure WPS-B-T-2133 to make OBG weld SEG3005E-021 between longitudinal diaphragm 3002 and segment 12BE deck plate between panel points 114 and 115. This QA Inspector measured a welding current of approximately 285 amps and 25.0 volts. This QA Inspector observed ZPMC QC Inspector Mr. Tao Wei is monitoring this welding and Ms. Hue Junrong 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. Jiang Yong Sheng, stencil 045240 is using flux cored welding procedure WPS-B-T-2133 to make OBG weld SEG3005H-021 between longitudinal diaphragm 3002 and segment 12BE deck plate between panel points 113 and 114. This QA Inspector measured a welding current of approximately 280 amps and 28.0 volts. This QA Inspector observed ZPMC QC Inspector Mr. Tao Wei is monitoring this welding and Mr. Jiang Yong Sheng appears to be certified to make this weld. Items observed on

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this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. He Hanhi, stencil 202122 is using flux cored welding procedure WPS-B-T-2133 to make OBG weld SEG3005E-021 between longitudinal diaphragm 3002 and segment 12BE deck plate between panel points 114 and 115. This QA Inspector measured a welding current of approximately 285 amps and 25.0 volts. This QA Inspector observed ZPMC QC Inspector Mr. Tao Wei is monitoring this welding and Mr. He Hanhi 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 Hua, stencil 045227 is using flux cored welding procedure WPS-B-T-2133 to make OBG segment 12BE weld SEG3005D-021. This QA Inspector observed ZPMC QC Inspector Mr. Tao Wei has recorded a welding current of 211 amps and 24.5 volts. This QA Inspector observed is monitoring this welding and Mr. Ji Hua appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

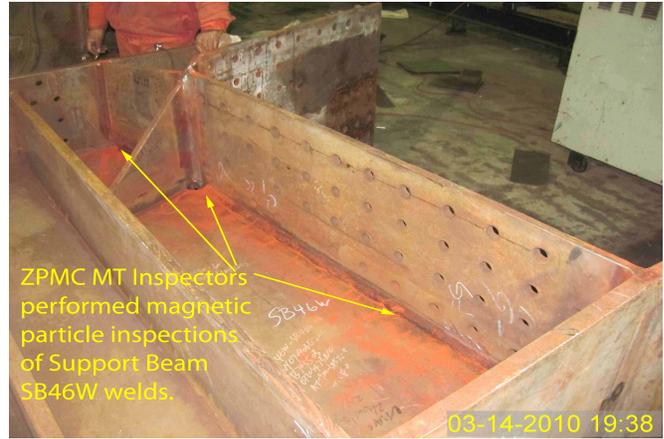
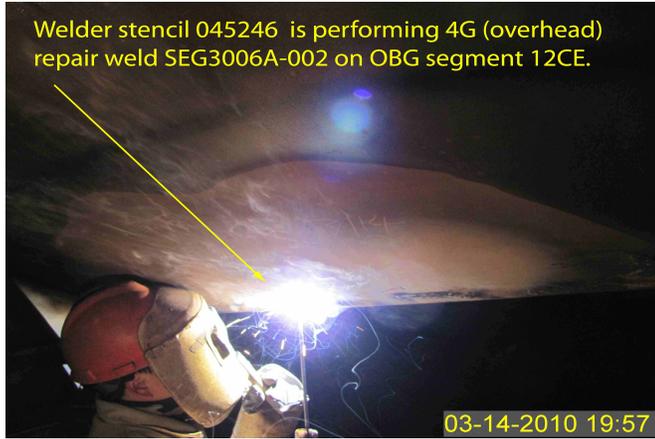
This QA Inspector observed ZPMC welder Mr. Tian Zhaoquan, stencil 045246 is using shielded metal arc welding procedure WPS-345-SMAW-4G(4F)-FCM-Repair-1 to make 4G (overhead) position shielded metal arc weld repair of OBG segment 12CE weld repair SEG3006A-002. This weld repair is the result of ultrasonic rejections. This QA Inspector observed Mr. Tian Zhaoquan has a welding current of approximately 150 amps. This QA Inspector observed Mr. Tian Zhaoquan appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

Segment Trial Assembly

Earlier in the day ZPMC presented QA personnel with "Notification of Witness Inspection" document #005336 item 3 that states ZPMC has completed magnetic particle "Green Tag" inspections of OBG segment 6AW "green tag" deck drainage plate to top deck welds. This inspection could not be completed due to rain falling throughout most of the day. At around 0200 AM on March 15, 2010 this QA Inspector and QA Inspector Mr. Mike Hasler were able to dry the welds and random magnetic particle (MT) inspections were completed on approximately 15 percent length of drainage plate attachment plate welds on the top of OBG segment 6AW. The weld numbers are: OB6F-001 through OB6F-012 and these welds appear to comply with AWS D1.5 MT requirements. For additional information on these inspections see Mr. Hasler's TL6028 Magnetic Particle Test Report dated March 14, 2010.

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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
Reviewed By:	Carreon,Albert	QA Reviewer
