

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-014875**Date Inspected:** 15-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 Jie, 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. Tian Zhaoquan, stencil 045246 is using shielded metal arc welding procedure WPS-345-SMAW-2G(2F)-Repair-1 to make shielded metal arc repair weld SP765-001-025 as directed by weld repair document B-WR13527. This weld is located on the side plate of OBG segment 8BW between panel points PP67 and PP68. OBG segments 8BW and 8CW had been identified as having excessive misalignment. This QA Inspector observed Mr. Tian Zhaoquan has a welding current of approximately 140 amps and Mr. Tian Zhaoquan 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 is being preheated with a torch. 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 has recently used submerged arc

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welding procedure WPS-B-T-2221-B-U3C-S-2 to make OBG segment 13AW weld BP3074-001-005 between plates PL3361C and PL3362C. This QA Inspector observed ZPMC QC Inspector Mr. Li Ming Yang has recorded a welding current of 621 amps and 29.5 volts and Ms. Wang Lanying appears to be certified to make this weld. Mr. Li Ming Yang informed this QA Inspector that in order to prevent the weld from distorting the plates into a “V” shape, ZPMC has stopped additional welding on this side of the complete joint penetration weld and that the plates will be turned over and welded from the other side of the weld joint. Items observed by this QA Inspector appear to be progressing in compliance with project specifications.

At around 1600 hours today ZPMC presented QA personnel with “Notification of Witness Inspection” document number 5989 that states ZPMC is requesting Caltrans to perform visual and magnetic particle (MT) inspections of Tower Access Door welds LK-SAK1-18M-1, -2, -3 and -4 in Bay 16. This QA Inspector performed random visual and magnetic particle (MT) inspections of the welds listed above and items observed appear to comply with AWS D1.5 MT requirements. For additional information on these inspections see this QA Inspector’s TL6028 Magnetic Particle Test Report.

At around 1700 hours today ZPMC presented QA personnel with “Notification of Witness Inspection” document number 5989 that states ZPMC is requesting Caltrans to perform visual and magnetic particle (MT) inspections of Tower Facade Hand Plate welds SD1-A242-5 and, SD1-A242-6 in Bay 16. This QA Inspector performed random visual and magnetic particle (MT) inspections of the welds listed above and items observed appear to comply with AWS D1.5 MT requirements. For additional information on these inspections see this QA Inspector’s TL6028 Magnetic Particle Test Report.

OBG Segment 11DW located in the yard behind bay 14

This QA Inspector observed ZPMC welder Mr. Ge Hao, stencil 201583 is using flux cored welding procedure WPS-B-T-2133 to make OBG segment 11DW weld SSD10-PP104-225. This QA Inspector measured a welding current of approximately 225 amps and 23.0 volts. This QA Inspector observed that Mr. Yu Hui Ye appears to be certified to make this weld and the base material was preheated with a torch prior to welding. Items observed on this date appeared to generally comply with applicable contract documents.



Summary of Conversations:

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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
