

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-010000**Date Inspected:** 04-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 Inspectors: Mr. Lu Li Qin, Mr. Shen Fu You

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 9

This QA Inspector performed random magnetic particle inspections of approximately 15 percent of the tack welds that attach closed ribs to deck panels DP3070-001 and DP3008-001. These deck panels are clamped to the convex 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.

OBG BAY 10

This QA Inspector observed ZPMC welder Mr. Bi Chun stencil 040343 is using flux cored welding procedure

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WPS B-T-2232-TC-U4-F to make north tower lift 4 weld NSTL4-3B/L-3A at approximately 120 meters elevation. This QA Inspector observed a welding current of approximately 325 amps and 31.6 volts. Items observed by this QA Inspector appear to be progressing in compliance with project specifications.

OBG Bay 13

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 CA082-004. This QA Inspector observed ZPMC QC Inspector Mr. Tang Yajun has recorded a welding current of 312 amps and 30.8 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 Ms. Chen Fenglian, stencil 206623 has been using welding procedure WPS-B-P-2232-TC-U4b-F to make corner assembly flux cored weld CA082-004. This QA Inspector observed ZPMC QC Inspector Mr. Tang Yajun has recorded a welding current of 312 amps and 30.8 volts. This QA Inspector observed that Ms. Chen Fenglian 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 CA081-003. This QA Inspector observed ZPMC QC Inspector Mr. Tang Yajun has recorded a welding current of 312 amps and 30.8 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.

OBG Bay 14

This QA Inspector observed ZPMC welder Mr. Lv Feng Yin, stencil 215676 has used flux cored welding procedure WPS-B-T-2132 to make OBG weld SSD21-PP85-005. This QA Inspector observed ZPMC QC has recorded a welding current of 285 amps and 30.2 volts. This QA Inspector observed that Mr. Lv Feng Yin is certified to make this weld. Items observed by this QA Inspector appear to be progressing in compliance with project specifications.

Blast Shop #2

This QA Inspector performed random visual inspections of OBG segment 6CW 47 interior surfaces between panel point 45 and panel point 47. The interior surfaces had recently been sandblasted and the surfaces are now mostly free of rust oxide and other contaminants that had previously obscured portions of the welds. The QA Inspector visually observed three welds require grinding or welding to resolve the visual rejections. This QA Inspector marked these areas using colored chalk and obtained digital photographs of some of the rejected locations. This QA Inspector also made a sketch of some of the locations and a copy of the sketch has been submitted for inclusion into the OBG tracking database which has other QA Inspectors' sketches and notes of visual rejection locations.

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
