

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-009892**Date Inspected:** 16-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 & Tower Fabrication**Summary of Items Observed:**

CWI Inspector: 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 14

This QA Inspector observed ZPMC welder Mr. Xue Xiang Liang, stencil 066478 using shielded metal arc welding procedure WPS-B-P-2212-FCM-1 to make weld SSD13-PP73-005. This QA Inspector observed a welding current of approximately 170 amps. This QA Inspector observed that Mr. Xue Xiang Liang 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. Tu Zhi Wu, stencil 214945 has recently used flux cored welding procedure WPS-B-T-2132 to make OBG weld SSD24-PP86.5 to weld angle braces on side plate stiffeners between panel points PP86 and PP87. This QA Inspector observed ZPMC Quality Control Inspector Mr. Wang Xie has recorded a welding current of 327 amps and 29.2 volts. This QA Inspector verified Mr. Tu Zhi Wu is 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. Hi Hanbi, stencil 202122 has recently completed using flux cored welding process WPS-B-T-2232-TC-U4b-F to make OBG weld SEG051B-0649 at OBG segment 9BW. This QA Inspector observed ZPMC QC Inspector Mr. Xu Tao has recorded a welding current of 300 amps and 30.6 volts. This QA Inspector verified Mr. Yun Hi Hanbi is certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

ZPMC issued "Inspection Notification Sheet" number 4413 informing QA that ZPMC has completed ultrasonic inspections of the following OBG welds: SEG063A-005, SEG063A-011, SEG063A-020. This QA Inspector performed ultrasonic inspections of approximately 10 percent length of welds SEG064A-005r2, SEG064A-011r1 and SEG064A-020r1. This QA Inspector observed ZPMC QC personnel had previously marked these welds as being ultrasonically accepted. All three welds have been marked as having a one meter long (approximate length) portion of the weld as not having been ultrasonically inspected due to lack of access to backgouge and weld the back side of the weld. This area is not accessible due to a large steel post that is supporting the weight of the OBG segment. It appears that once the OBG is repositioned, this section of the weld will be welded from the back side, and ultrasonically inspected. Items observed by this QA Inspector appear to comply with AWS D1.5 UT requirements. For additional information on these inspections see the TL6027 Ultrasonic Test Report.

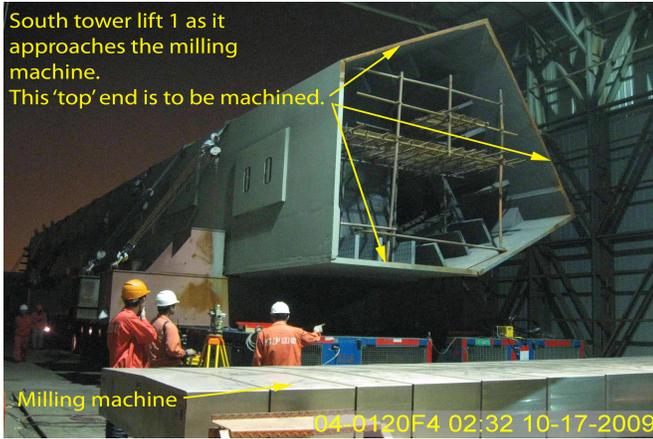
Tower Milling Station

This QA Inspector performed random observations and observed ZPMC personnel moving North Tower Lift 1 into the milling machine shed, with the top end of the tower closest to the milling head. This move consisted of using six separate vehicles with a total of 384 tires and each of the six vehicles are electronically connected together to function as a single unit. This move was complicated by ZPMC having recently removed and reworked portions of the concrete apron in front of the milling machine station. ZPMC positioned steel plates and used wood planks to ramp over some of the uneven soil surfaces where the wheels were later driven. The move appeared to progress smoothly and no problems were observed. See the photographs below for additional information.



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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
