

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-004009**Date Inspected:** 18-Sep-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**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:**

The Caltrans Quality Assurance (QA) Inspector Charlie Franco was present at the time requested to randomly observe welding and associated operations being performed for the Tower and Orthotropic Box Girders (OBG).

OBG Bay 1:

The QA Inspector randomly observed ZPMC welders Zhang Shaohui ID Number 059403, Juang Shuangohen ID Number 201788, Wang Xiao Yong ID Number 059445 and Song Yin Shu ID Number 059421, utilizing the Gas Metal Arc Welding (GMAW) Process in the 2G (Horizontal Groove) Positions with ZPMC WPS WPS-B-T-2342-U1(U-Rib)-4, to weld the root pass attaching U-Ribs to 4-rib Deck Plate DP119-002 Weld Joint (WJ) Numbers 003/004 and 007/008. The QA Inspector randomly observed ZPMC QC under the supervision of ZPMC CWI Sun Wei, monitoring weld parameters. The QA Inspector also randomly monitored weld parameters and recorded them as follows: 370/368 amps, 31.1/30.5 volts for Mr. Zhang/Mr. Jiang (WJ's 003/004) and 375/370 amps, 31.2/31.0 volts for Mr. Wang/ Mr. Song (WJ's 007/008) with a travel speed of 535 millimeters (mm) per minute. The weld parameters appeared to comply with contract requirements. The attached photograph provides additional detail.

OBG Bay 3:

The QA Inspector randomly observed ZPMC Non-Destructive Testing (NDT) Technician Wang Wei, utilizing the Magnetic Particle Testing (MT) Method to examine excavations per ZPMC Critical Weld Repairs (CWR) on the following: Side Plates SP397 and SP403A WJ's 033, 036, 035, 038 and 032 CWR B-CWR154 and B-CWR148

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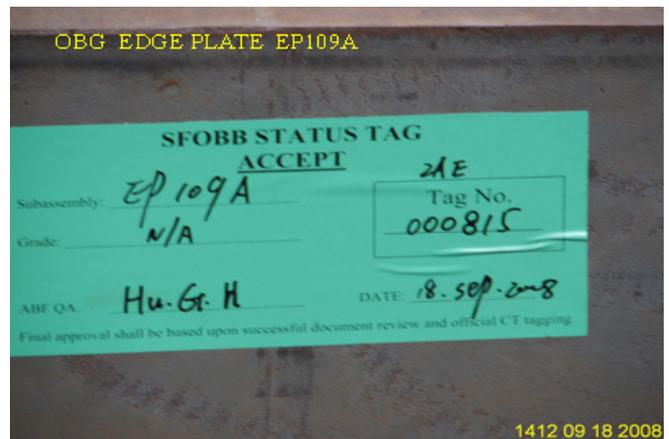
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(QC accepted all excavations); SP407A WJ's 026, 027, 029, 030, 032 and 033 CWR B-CWR158 (QC accepted WJ's 026, 027, 029, 032 and 035-indications still observed in WJ's 030, 033 and 036); SP788A WJ 032 CWR B-CWR157 (QC accepted WJ 032) and SP789 WJ 032 CWR B-CWR156 (QC reject-5 of 7 indications still observed).

OBG Bay 4:

The QA Inspector randomly observed ZPMC NDT Technician Wang Wei, utilizing the MT Method to perform a final MT Inspection on the cover pass of WJ's 004 through 007 and 016 through 019 on Edge Plates EP098-001, EP109-001 and Side Plate SP338-001 WJ's 013 through 019. There appeared to be no indications and ZPMC QC accepted all welds.

The QA Inspector utilized the MT Method to perform a final MT verification on the cover pass of WJ's 004 through 007 and 016 through 019 on Edge Plates EP098-001, EP109-001 and Side Plate SP338-001 WJ's 013 through 019. There appeared to be no indications. The QA Inspector signed off on the Green Tag Documentation after ZPMC QC Representative Chen Chih and ABF QC Representative Hu Gui Hua. The QA Inspector observed ZPMC QC attach Green Tags 000815 (EP109), 000816 (EP098) and 000783 (SP338). The attached photographs provide additional detail.



Summary of Conversations:

There were no relevant conversations.

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 Ady Velasco 13816942685, who represents the Office of Structural Materials for your project.

Inspected By: Franco,Charlie Quality Assurance Inspector

Reviewed By: Carreon,Albert QA Reviewer
