

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-015589**Date Inspected:** 12-Jul-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island **Location:** Shanghai, China**CWI Name:** Mr. Geng Wei**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 Segment**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance Inspector (QA), Vibin Kumar Selvanayaham, was present during the times noted above for observations relative to the work being performed.

Ultrasonic Testing (UT) – Document No: 006179

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as OBG Segment 11BW. The weld designations reviewed are as follows:

1. SEG 067A-002
2. SEG 067\*-047
3. SEG067\*-008, 012, 024, 035

Ultrasonic Testing (UT) – Document No: 006182

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The members are identified as OBG Segment 13AW bottom plate. The weld designations reviewed are as follows:

1. BP3073-001-002
2. BP3075-001-004

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### OBG Segment 12BW

This QA inspector observed ZPMC qualified welding personnel identified as 204730 perform Shielded Metal Arc Welding (SMAW) Welding on OBG Segment 12BW, weld joint identified as SEG3005C-008. ZPMC QC is identified as Mr. Wang Wei Ming. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2132.

This QA inspector observed ZPMC qualified welding personnel identified as 067610 and 066261 perform SMAW welding on drain plate of OBG Segment 12BW, weld joint identified OBW12C-006 and 007. ZPMC QC is identified as Mr. Wang Wei Ming. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-P-2114-FCM-1.

### OBG Segment 12 CW

This QA inspector observed ZPMC qualified welding personnel identified as 067840 perform SMAW welding on drain plate of OBG Segment 12CW, weld joint identified SEG3006C-120 and 122. ZPMC QC is identified as Mr. Wang Wei Ming. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-P-2214-B-U2-FCM-1.

### Bay 8

This QA inspector observed ZPMC qualified welding personnel identified as 054459 perform Flux Cored Arc Welding (FCAW) welding on Bike Path, weld joint identified as BK004A7-056-225 and 232. ZPMC QC is identified as Mr. Liu Chuan Gang. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2132.

### Bay 14

This QA inspector observed ZPMC qualified welding personnel identified as 250050 perform Submerged Arc Welding (SAW) Welding on Longitudinal Diaphragm of OBG Segment 13BW, weld joint identified as LD3032-001-001. ZPMC QC is identified as Mr. Li Ming Yang. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2221-B-U3c-S-2.

This QA inspector observed ZPMC qualified welding personnel identified as 250050 perform SAW Welding on Longitudinal Diaphragm of OBG Segment 13AW, weld joint identified as LD3031-001-006. ZPMC QC is identified as Mr. Li Ming Yang. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2221-B-U3c-S-2.

This QA inspector observed ZPMC qualified welding personnel identified as 044795 and 044801 perform FCAW welding on Side Plate of OBG Segment 13CE, weld joint identified as SP3076-001-005 to 007. ZPMC QC is identified as Mr. Zhang Guo Hui. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2132.

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This QA inspector observed ZPMC personnel performed Magnetic Particle Testing Inspection on OBG Segment 13BE Side plate stiffener fillet welds. The side plate is identified as SP3062A. See the attached pictures.

Bay 16

This QA inspector observed ZPMC qualified welding personnel identified as 045270 perform SAW Welding on OBG Segment 13AW bottom plate, weld joint identified as BP3074-001-002. ZPMC QC is identified as Mr. Tao Wei. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2221-B-U3c-S-2.

OBG Segment 11DE

This QA inspector observed ZPMC qualified welding personnel identified as 067589 perform SMAW Welding on OBG Segment 11DE, weld joint identified as SEG072-032. ZPMC QC is identified as Mr. Li Ping. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-345-SMAW-4G (4F)-Repair.

This QA inspector observed ZPMC qualified welding personnel identified as 045268 perform SMAW welding on drain plate of OBG Segment 11DE, weld joint identified OBW11A-011 and 015. ZPMC QC is identified as Mr. Li Ping. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-P-2214-Tc-U4b-FCM-1.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.



## Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

## 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 , who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Kumar, Vibin	Quality Assurance Inspector
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<b>Reviewed By:</b>	McClendon, Timothy	QA Reviewer
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