

**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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-023185**Date Inspected:** 30-Apr-2011**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. Sun Tian Liang**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.

Magnetic Particle Testing (MT) – NWIT Document No's: 008992

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as OBG Segment 13CE. The weld designations reviewed are as follows:

1. SEG3011D-139, 141, 148, 149, 151
2. SEG3011B-138, 140, 146, 147, 150, 142, 143
3. SEG3011B-066, 070, 074, 078, 082, 086, 090, 094, 098, 102, 106
4. SEG3011B-110, 114, 118, 122, 126, 130, 134, 154, 064
5. SEG3011D-065, 067, 071, 075, 079, 083, 087, 091, 095, 099, 103, 107, 111
6. SEG3011D-068, 069, 072, 073, 076, 077, 080, 081, 084, 085
7. SEG3011D-088, 089, 092, 093, 096, 097, 100, 101, 104, 105
8. SEG3011D-108, 109, 112, 116, 117

OBG Trail Assembly

This QA Inspector observed the following work in progress:

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This QA inspector observed ZPMC personnel performed Magnetic particle Testing (MT) on bottom plate SA RS stiffeners at Panel point 123 to 123.5 of OBG Segment 13CW. The weld numbers are identified as SA3125-001~003-005 and 007.

This QA inspector observed ABF personnel performed Ultrasonic Testing (UT) on Architecture House of OBG Segment 13B/CW. The weld number is identified as AH3003-001 and AH3003-003.

This QA inspector observed ZPMC personnel performed Ultrasonic Testing (UT) on Architecture House RS Stiffener of OBG Segment 13CW.

Shielded Metal Arc Welding (SMAW) welding of weld joint SEG3020AQ-025 located on side plate to anchor plate at panel point 125 to 127 of OBG Segment 14W. ZPMC Welder is identified as 066361. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-1G-(1F)-FCM-Repair-1, which is used as per Critical Welding Repair Report (CWR) B-CWR-2923R1.

Flux Core Arc Welding (FCAW) welding of weld joint SEG3020AZ-242, 247, 252 and 257 located on Side Plate I-rib to Floor Beam at panel point 128.3 of OBG Segment 14W. ZPMC Welder is identified as 067949. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2233-ESAB.

FCAW welding of weld joint SEG3020AH-004 located on edge plate to side plate at panel point 127 to 128 of OBG Segment 14W. ZPMC Welder is identified as 066421. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2232-ESAB.

SMAW welding of weld joint SEG3020AH-002 located on edge plate to side plate at panel point 125 to 127 of OBG Segment 14W. ZPMC Welder is identified as 037938. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2212-Tc-U4b-FCM-1.

FCAW welding of weld joint SEG3020AB-016 located on longitudinal diaphragm to deck panel of OBG Segment 14W. ZPMC Welder is identified as 066881. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2232-ESAB.

FCAW welding of weld joint SEG3020AK-003 deck panel diaphragm to deck panel diaphragm at panel point 127.3 of OBG Segment 14W. ZPMC Welder is identified as 037748. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2233-ESAB.

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

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## 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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**Inspected By:** Kumar,Vibin

Quality Assurance Inspector

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**Reviewed By:** Patel,Hiranch

QA Reviewer