

**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-019082**Date Inspected:** 23-Dec-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) – NWIT Document No: 007897

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. The weld designations reviewed are as follows:

1. AP3031-001-505, 511, 525, 531, 539, 545, 549, 553, 557, 561, 585, 573, 577, 587, 591
2. AP3031-001-409, 413, 429, 433, 437, 443, 447, 451, 457, 461, 477, 481, 487, 493
3. AP3031-001-597, 603, 607, 623, 627, 633, 639, 643, 649, 655, 671
4. AP3031-001-671, 677, 683, 687, 693, 699, 701, 717, 721, 725
5. AP3031-001-869, 873, 879, 885, 903, 909, 913, 917, 921, 925, 933, 949

Bay 14

This QA Inspector observed the following work in progress:

Shielded Metal Arc Welding (SMAW) welding of weld joint SEG3019BB-035 located on Floor Beam to Sub Assembly of the OBG Segment 14E. ZPMC Welder is identified as 070432. ZPMC Quality Control (QC) is

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identified as Mr. Zhong Guo Hui. The welding variables recorded by QC appeared to comply with the Applicable WPS- B-P-2213-Tc-U4b-FCM-1.

Flux Core Arc Welding (FCAW) welding of weld joint SEG3019H-003 and 004 located on Floor Beam to Longitudinal Diaphragm of the OBG Segment 14E. ZPMC Welder is identified as 033705. ZPMC Quality Control (QC) is identified as Mr. Zhong Guo Hui. The welding variables recorded by QC appeared to comply with the Applicable WPS- B-T-2133-ESAB.

FCAW welding of weld joint SEG3020E-056 and 057 located on Floor Beam to bottom plate of the OBG Segment 14W. ZPMC Welders are identified as 047866 and 202122. 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 SEG3019K-001-010, 012 located on Longitudinal Diaphragm to Floor Beam at panel point 127 of the OBG Segment 14E. ZPMC Welders are identified as 066501 and 066763. ZPMC Quality Control (QC) is identified as Mr. Zhong Guo Hui. The welding variables recorded by QC appeared to comply with the Applicable WPS- B-T-2233-ESAB.

FCAW welding of weld joint SA3011-001-004 located on Sub Assembly Component of the OBG Segment 13AE. ZPMC Welder is identified as 070140. ZPMC Quality Control (QC) is identified as Mr. Zhen Hai Feng. The welding variables recorded by QC appeared to comply with the Applicable WPS- B-T-2232-ESAB.

FCAW welding of weld joint SA3011-002-004 located on Sub Assembly Component of the OBG Segment 13AE. ZPMC Welder is identified as 067079. ZPMC Quality Control (QC) is identified as Mr. Zhan Hai Feng. The welding variables recorded by QC appeared to comply with the Applicable WPS- B-T-2232-ESAB.

FCAW welding of weld joint SEG3020R-001-031, 033 located on Longitudinal Diaphragm to Floor Beam of the OBG Segment 14W. ZPMC Welders are identified as 067520 and 058245. 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 SEG3020D-001-035 located on Longitudinal Diaphragm to Floor Beam Hinge Plate at panel point 128.3 of the OBG Segment 14W. ZPMC Welder is identified as 045175. 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.

## **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>	Patel, Hiranch	QA Reviewer
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