

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 #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-022601**Date Inspected:** 08-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. An Qing Xing**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: 008769

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 13CW. The weld designations reviewed are as follows:

1. SEG3015V-009, 010, 011, 012, 029, 030

Bay 14

This QA Inspector observed the following work in progress:

Shielded Metal Arc Welding (SMAW) welding of weld joint SEG3020BB-002 located on Vertical Shear Plate to Anchor Plate of OBG Segment 14W. ZPMC Welders are identified as 037932 and 067765. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2214-Tc-U4b-FCM-1.

SMAW welding of weld joint SEG3020BB-038 located on Vertical Shear Plate to Anchor Plate of OBG Segment

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14W. ZPMC Welders are identified as 069841 and 066261. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2214-Tc-U4b-FCM-1.

SMAW welding of weld joint SEG3020BB-065 located on Vertical Shear Plate to Anchor Plate of OBG Segment 14W. ZPMC Welders are identified as 045246 and 069896. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2214-Tc-U4b-FCM-1.

SMAW welding of weld joint SEG3020BB-029 located on Vertical Shear Plate to Anchor Plate 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-P-2214-Tc-U4b-FCM-1.

Flux Core Arc Welding (FCAW) welding of weld joint SEG3020T-281 located on Deck panel to Anchor Plate at panel point 125.5 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 SEG3020W-013 located on Deck panel to Floor Beam at panel point 125 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-2232-ESAB.

FCAW welding of weld joint SEG3020AA-014 located on Deck panel to Longitudinal Diaphragm of OBG Segment 14W. ZPMC Welder is identified as 066461. 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 SEG3020K-002 located on Deck Panel to Floor Beam at panel point 127.3 of OBG Segment 14W. ZPMC Welder is identified as 067520. ZPMC Quality Control (QC) is identified as Mr. Zhu Lin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2212-Tc-U4b-FCM-1.

SMAW welding of weld joint DP3148-001-246, 249 and 247 located on Deck Panel Diaphragm to Longitudinal of OBG Segment 13BW. ZPMC Welder is identified as 067588. ZPMC Quality Control (QC) is identified as Mr. An Qing Xing. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-3G-(3F)-FCM-Repair, which is used as per Welding Repair Report (WRR) B-WRR-20531.

SMAW repair welding of weld joint DP3133-00-022 located on Deck Panel Longitudinal Diaphragm to Deck Panel Diaphragm of OBG Segment 13BW. ZPMC Welder is identified as 045196. ZPMC Quality Control (QC) is identified as Mr. Liu Fang. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-3G-(3F)-FCM-Repair, which is used as per Welding Repair Report (WRR) B-WRR-20666.

SMAW welding of weld joint DP3133-001-030 located on Deck Panel to Longitudinal Diaphragm of OBG Segment 13BW. ZPMC Welder is identified as 045196. ZPMC Quality Control (QC) is identified as Mr. Liu Fang. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2214-Tc-U4b-FCM-1.

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SMAW welding of weld joint DP3146-001-241 located on Deck Panel to Longitudinal Diaphragm of OBG Segment 13CW. ZPMC Welder is identified as 045196. ZPMC Quality Control (QC) is identified as Mr. Liu Fang. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2214-Tc-U4b-FCM-1.

SMAW welding of weld joint DP3135-001-030 located on Deck Panel to Longitudinal Diaphragm of OBG Segment 13BW. ZPMC Welder is identified as 066179. ZPMC Quality Control (QC) is identified as Mr. Liu Fang. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2214-Tc-U4b-FCM-1.

SMAW welding of weld joint DP3148-001-241 located on Deck Panel to Longitudinal Diaphragm of OBG Segment 13CW. ZPMC Welder is identified as 066176. ZPMC Quality Control (QC) is identified as Mr. Liu Fang. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2214-Tc-U4b-FCM-1.

This QA inspector observed ABF personnel performed Ultrasonic Testing on Deck Panel to Deck Panel Splice weld OBG Segment 13B/CW. The weld numbers are identifies as SEG3014-003 and SEG3015-001.

This QA inspector observed ZPMC personnel performed Magnetic particle Testing (MT) on Bottom Plate and Side Plate RS stiffener to Floor Beam at panel point 120.5 bike path side of OBG Segment 13BW.

This QA inspector observed ABF personnel performed Ultrasonic Testing-D-Scan on Deck Panel to Deck Panel Splice weld of OBG Segment 13BW to 13CW. The weld number is identifies as OBW13A-016. Total 17 linear longitudinal indications are found by ABF UT personnel. See the attached pictures.

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.

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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.

Inspected By:	Kumar,Vibin	Quality Assurance Inspector
Reviewed By:	Patel,Hiranch	QA Reviewer
