

**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-020582**Date Inspected:** 13-Feb-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. Qui Wen**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: 008330

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 14E. The weld designations reviewed are as follows:

1. SEG3019BB-015

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This QA Inspector observed the following work in progress:

Shielded Metal Arc Welding (SMAW) repair welding of weld joint SEG3020BB-055 located on Bottom Plate to Vertical Shear Plate at panel point 125/126 of OBG Segment 14W. ZPMC Welder is identified as 045246. 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-2G-(2F)-FCM-Repair, which is used as per Critical Welding Repair (CWR) B-CWR-2752.

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SMAW repair welding of weld joint SEG3020BB-073 located on Bottom Plate to Vertical Shear Plate at panel point 125/126 of OBG Segment 14W. ZPMC Welder is identified as 047864. 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-2G-(2F)-FCM-Repair, which is used as per Critical Welding Repair (CWR) B-CWR-2752.

SMAW repair welding of weld joint SEG3020BB-001 located on Bottom Plate to Vertical Shear Plate at panel point 125/126 of OBG Segment 14W. ZPMC Welder is identified as 066038. 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-2G-(2F)-FCM-Repair, which is used as per Critical Welding Repair (CWR) B-CWR-2793.

Flux Core Arc Welding (FCAW) welding of weld joint SEG3020BB-115 located on Anchor Plate to Vertical Shear Plate at panel point 125/126 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-2233-ESAB.

FCAW welding of weld joint SEG3020BB-114 located on Anchor Plate to Vertical Shear Plate at panel point 125/126 of OBG Segment 14W. ZPMC Welder is identified as 066695. 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 SEG3020BB-116 located on Anchor Plate to Vertical Shear Plate at panel point 125/126 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 SEG3020BB-117 located on Anchor Plate to Vertical Shear Plate at panel point 125/126 of OBG Segment 14W. ZPMC Welder is identified as 067888. 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.

SMAW welding of weld joint SEG3020BE-054 and 059 located on Vertical Shear Plate at panel point 126 of OBG Segment 14W. ZPMC Welder is identified as 067764. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2114-FCM-1.

SMAW welding of weld joint DP3174-001-017 located on Deck Panel to Deck Panel Diaphragm of OBG Segment 14W. ZPMC Welder is identified as 037780. ABF Quality Control (QC) is identified as Mr. Shen Jian. 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 DP3174-001-018 located on Deck Panel to Deck Panel Diaphragm of OBG Segment 14W. ZPMC Welder is identified as 067611. ABF Quality Control (QC) is identified as Mr. Shen Jian. 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 DP3174-001-019 located on Deck Panel to Deck Panel Diaphragm of OBG

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Segment 14W. ZPMC Welder is identified as 067520. ABF Quality Control (QC) is identified as Mr. Shen Jian. 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 DP3174-001-023 located on Deck Panel to Deck Panel Diaphragm of OBG Segment 14W. ZPMC Welder is identified as 066155. ABF Quality Control (QC) is identified as Mr. Shen Jian. 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 DP3173-001-023 located on Deck Panel to Deck Panel Diaphragm of OBG Segment 14W. ZPMC Welders are as identified as 037779 and 066443. ABF Quality Control (QC) is identified as Mr. Shen Jian. 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 DP3172-001-017 located on Deck Panel to Deck Panel Diaphragm of OBG Segment 14W. ZPMC Welder is identified as 037840. ABF Quality Control (QC) is identified as Mr. Shen Jian. 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 DP3172-001-018 located on Deck Panel to Deck Panel Diaphragm of OBG Segment 14W. ZPMC Welder is identified as 066898. ABF Quality Control (QC) is identified as Mr. Shen Jian. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2212-Tc-U4b-FCM-1.

FCAW welding of weld joint DP3171-001-246 located on Deck Panel U-Ribs to Deck Panel Diaphragm of OBG Segment 14W. ZPMC Welder is identified as 067949. ABF Quality Control (QC) is identified as Mr. Shen Jian. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2133-ESAB.

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This QA Inspector observed the following work in progress:

Flux Core Arc Welding (FCAW) welding of weld joint W5-SB15-003 located on OBG Component. ZPMC Welder is identified as 068858. ZPMC Quality Control (QC) is identified as Mr. Guo Xing Hui. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2231-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