

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-019312**Date Inspected:** 11-Jan-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.

Magnetic Particle Testing (MT) – NWIT Document No's: 008127

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 Bike Path. The weld designations reviewed are as follows:

1. BK004A3-006-064, 073, 079, 084
2. GGL-MQ-1840-001, 002, 003, 004
3. TEMP-1 to 4 Lifting Lug

Bay 14

This QA Inspector observed the following work in progress:

Shielded Metal Arc Welding (SMAW) repair welding of weld joint SEG3014J-141 and 142 located on Floor Beam to side plate I-ribs Stiffener at panel point 120.5 of the OBG Segment 13BW. ZPMC Welder is identified as 068917. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. The welding variables recorded by QC appeared to comply with the Applicable WPS-345-SMAW-3G (3F) – FCM – Repair, which is used as per

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Welding Repair Report (WRR) B-WRR-18318.

SMAW repair welding of weld joint SEG3014G -130, 061 and 094 located on Floor Beam to side plate I-ribs Stiffener at panel point 121 of the OBG Segment 13BW. ZPMC Welder is identified as 067993. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. 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-18318.

SMAW repair welding of weld joint SEG3014E -067 and 072 located on Floor Beam to Bottom plate I-ribs Stiffener at panel point 121.5 of the OBG Segment 13BW. ZPMC Welder is identified as 066674. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. 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-18318.

Flux Core Arc Welding (FCAW) repair welding of weld joint SEG3014F -085, 090, 120 and 130 located on Floor Beam to Bottom plate I-ribs Stiffener at panel point 121 of the OBG Segment 13BW. ZPMC Welders are as identified as 201583 and 045143. ZPMC Quality Control (QC) is identified as Mr. Wang Xiang Pin. 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-19634.

FCAW welding of weld joint SEG3020BB-019 located on Vertical Shear Plate to Bottom Plate of the OBG Segment 14W. ZPMC Welder is identified as 067949. 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-T-2232-ESAB.

FCAW welding of weld joint SEG3020BB-028 located on Vertical Shear Plate to Bottom Plate of the OBG Segment 14W. ZPMC Welder is identified as 066695. 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-T-2232-ESAB.

This QA inspector observed ABF personnel performed Magnetic Particle Testing on Floor beam and Longitudinal Diaphragm Stiffeners of the OBG Segment 13BW at panel point 121.5 and 122 north side.

This QA inspector observed ZPMC personnel performed Ultrasonic Testing on Floor beam and Bottom Plate of the OBG Segment 14W at panel point 127.3. The weld number is identified as SEG3020L-086.

This QA inspector observed ZPMC personnel performed Ultrasonic Testing on Floor beam and Longitudinal Diaphragm of the OBG Segment 14W at panel point 125 and 126. The weld numbers are identified as SEG3020R-032, 034 and SEG3020M-018, 019.

ZPMC personnel performing heat straightening on deck plate of OBG Segment 13BW member identified as DP3137A. Distortion appeared to be caused by mishandling of the welding/material. ZPMC Quality Control (QC) inspector identified as Mr. Qui Wen was present to monitor the heat straightening process. The heat straightening appeared to comply with HSR1 (B) number 10040. See the attached picture.

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SMAW repair welding of weld joint SEG3020X -014 located on Longitudinal Diaphragm to Bottom plate of the 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-345-SMAW-2G (2F) – FCM – Repair, which is used as per Critical Welding Repair Report (CWR) B-CWR-2620.

SMAW repair welding of weld joint SEG3020Y -030 located on Longitudinal Diaphragm to Bottom plate of the OBG Segment 14W. ZPMC Welder is identified as 066398. 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 Report (CWR) B-CWR-2662.

SMAW repair welding of weld joint SEG3020Q -058 located on Longitudinal Diaphragm to Floor Beam of the 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-3G (3F) – FCM – Repair, which is used as per Critical Welding Repair Report (CWR) B-CWR-2662.

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.

Inspected By: Kumar,Vibin

Quality Assurance Inspector

Reviewed By: Patel,Hiranch

QA Reviewer