

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 #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-020930**Date Inspected:** 23-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), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Yang and Zhu Zhong Hai**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 Trial Assembly**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) at Trial Assembly Areas

Bike Path at Bay # 10

This QA Inspector performed Dimension Control Inspection on the Bike Path bottom plate for flatness check across the longitudinal butt weld. Flatness check was performed on following mentioned Bike Paths and Bike Path are identified as:

BK007A-001.

The QA Inspector measured the flatness using 600mm long straight edge across the Butt (CJP) weld and using 1500mm long straight edge between the stiffeners which are plug weld to bottom plate.

Observed flatness within the allowable tolerance.

The result of the inspection was informed to ZPMC QC Supervisor Mr. Xu Le Feng, ABF Mr. Man Kam Hon and

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Caltrans Lead Inspector Mr. Mark Miller and Mr. Hiranch Patel.

Segment 12AE (Lower Chevron Flatness Survey)

This QA Inspector performed Dimension Control Inspection along with ZPMC QC Mr. Zhang Hai Jung on the Splice plate installed at Lower Chevron from East and West side to ensure flatness is within the allowable tolerance before snug tightening the bolts for Segment 12AE at Panel Points (PP) 109, 110, PP 111 and PP 112 (Cross Beam side at work point E4) and (Bike Path side at work point E3).

The QA Inspector measured the Flatness using 1(One) Meter Straight Edge and the results appeared to be in general compliance with contract requirements.

Segment 12BW to Segment 12CW (Bottom Panel, Transverse Splice weld)

This QA Inspector observed the repair welding by Flux Cored Arc Welding (FCAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as OBW12C-001. The welder identification was 047353 and observed welding in the 1G (Flat) position using approved Welding Procedure Specification WPS-345-FCAW-1G(1F)-ESAB-Repair. The piece mark was identified as the Bottom Panel, at transverse splice. ZPMC performed repair welding in accordance with Welding Repair Report B-WR20263.

Please reference the pictures attached for more comprehensive details.

Segment 12BW to Segment 12CW (Side Panel, Transverse Splice weld)

This QA Inspector observed the repair welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as OBW12E-001. The welder identification was 040611 and observed welding in the 3G (Vertical) position using approved Welding Procedure Specification WPS-345-SMAW-3G(3F)-FCM-Repair-1. The piece mark was identified as the Side Panel, at transverse splice. ZPMC performed repair welding in accordance with Welding Repair Report B-WR20193.

Please reference the pictures attached for more comprehensive details.

Segment 12BE (Deck Panel and Edge Panel connecting weld)

This QA Inspector observed the repair welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as CA3003-005. The welder identification was 044504 and was observed welding in the 4G (Overhead) position using approved Welding Procedure Specification WPS-345-SMAW-3G(3F)-FCM-Repair-1. The piece mark was identified as Deck Panel to Edge Panel hold back weld at work point E2. ZPMC performed repair welding in accordance with Critical Welding Repair Report B-CWR2808.

Please reference the pictures attached for more comprehensive details.

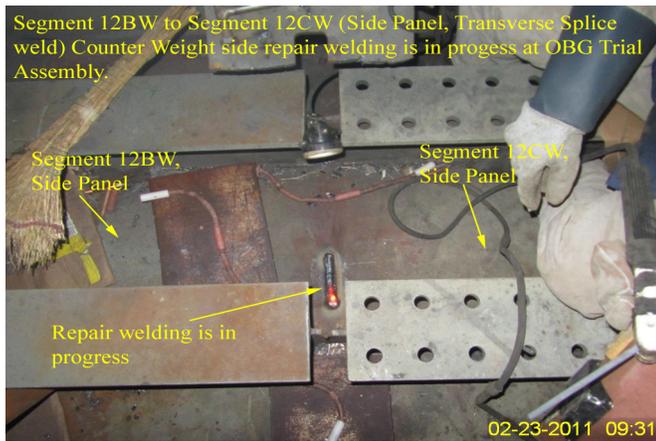
Segment 12BW (Longitudinal Diaphragm to Bottom Panel hold back weld)

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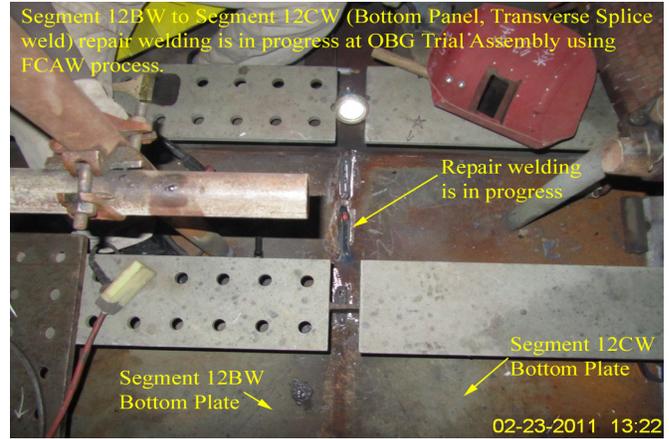
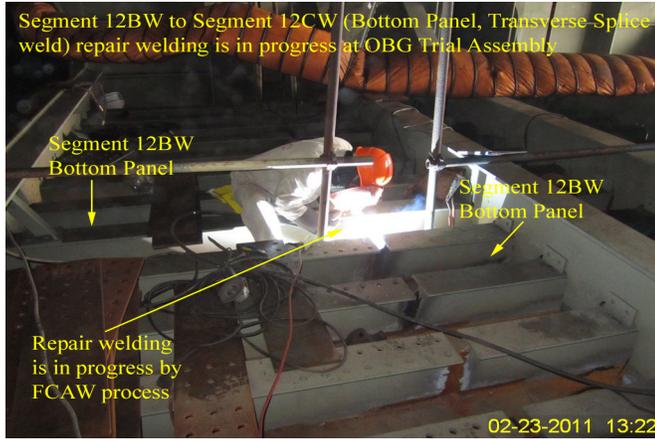
This QA Inspector observed the repair welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as Seg3004V-051. The welder identification was 046709 and observed welding in the 2G (Horizontal) position using approved Welding Procedure Specification WPS-345-SMAW-2G(2F)-FCM-Repair-1. The piece mark was identified as the weld connecting the Longitudinal Diaphragm to Bottom Panel hold back. ZPMC performed repair welding in accordance with Welding Repair Report B-WR20150.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



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Summary of Conversations:

No relevant conversations were reported on this date.

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 Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

Inspected By: Math,Manjunath

Quality Assurance Inspector

Reviewed By: Miller,Mark

QA Reviewer