

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-020734**Date Inspected:** 17-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)**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

Segment 12BE to Segment 12CE (Bottom 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 OBE12C-001. The welder identification was 040320 and observed welding in the 1G (Flat) position using approved Welding Procedure Specification WPS-345-SMAW-1G(1F)-FCM-Repair-1. The piece mark was identified as the Bottom Panel, at transverse splice. ZPMC performed repair welding in accordance with Welding Repair Report B-WR20190.

Segment 12BE to Segment 12CE (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 OBE12E-001. The welder identification was 044515 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 Cross Beam side, at

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transverse splice. ZPMC performed repair welding in accordance with Welding Repair Report B-WR20176.

Please reference the pictures attached for more comprehensive details.

Segment 12BE to Segment 12CE (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 OBE12E-002. The welder identification was 044515 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 Corner Assembly, Cross Beam side, at transverse splice. ZPMC performed repair welding in accordance with Welding Repair Report B-WR20176.

Segment 12AW to Segment 12BW (Side Panel I- Rib Splice weld)

This QA Inspector observed the in-process welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as SP3053-001-032. The welder identification was 040611 and observed welding in the 4G (Overhead) position using approved Welding Procedure Specification WPS-B-P-2214-B-U2-FCM-1. The piece mark was identified as the Side Panel, I-Ribs at transverse splice, Counter Weight side.

Please reference the pictures attached for more comprehensive details.

Segment 12AW to Segment 12BW (Edge Panel, I- Rib Splice weld)

This QA Inspector observed the in-process welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as EP3008-001-014. The welder identification was 044551 and observed welding in the 4G (Overhead) position using approved Welding Procedure Specification WPS-B-P-2214-B-U2-FCM-1. The piece mark was identified as the Edge Panel, I-Ribs at transverse splice.

Segment 12CW (Edge Panel, I- Rib hold back weld)

This QA Inspector observed the in-process welding by Flux Cored Arc Welding (FCAW) process on a Fillet weld. The Weld joint was designated as EP3011-001-010. The welder identification was 041713 and observed welding in the 2F (Horizontal) position using approved Welding Procedure Specification WPS-B-P-2112-FCM-1. The piece mark was identified as the Edge Panel, I-Ribs hold back weld at Counter Weight side.

Segment 12CW (Edge Panel, I- Rib hold back weld)

This QA Inspector observed the in-process welding by Flux Cored Arc Welding (FCAW) process on a Fillet weld. The Weld joint was designated as EP3008-001-010. The welder identification was 057333 and observed welding in the 2F (Horizontal) position using approved Welding Procedure Specification WPS-B-P-2112-FCM-1. The piece mark was identified as the Edge Panel, I-Ribs hold back weld at Cross Beam side.

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Segment 12AW to Cross Beam # 17

This QA Inspector observed ZPMC personnel welding the temporary attachments for the I-Stiffeners on Segment 12AW FL3 Floor Beam to the I-Stiffeners on Cross Beam # 17 at PP 111. The welder was identified as 205616.

Please reference the pictures attached for more comprehensive details.

Segment 12AE to Segment 12BE

This QA Inspector observed ZPMC personnel performing grinding at I-Stiffeners splice weld connecting the Side Panel I-Stiffeners of Segment 12AE to Segment 12BE.

Please reference the pictures attached for more comprehensive details.

Segment 12AW to Segment 12BW

This QA Inspector observed ZPMC personnel performing flush grinding at Bottom Panel Transverse splice of Segment 12AW to Segment 12BW.

Please reference the pictures attached for more comprehensive details.

Segment 12AE to Segment 12BE

This QA Inspector observed ZPMC personnel performing grinding at the repair excavated areas for the weld connecting Deck Panel to Edge Panel repair excavated at work E5 at OBG Trial Assembly.

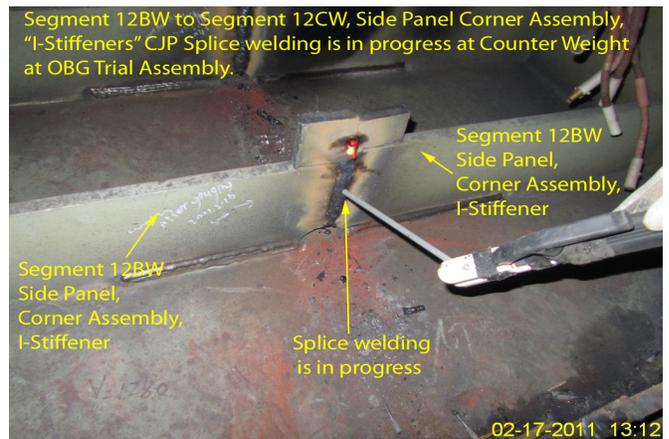
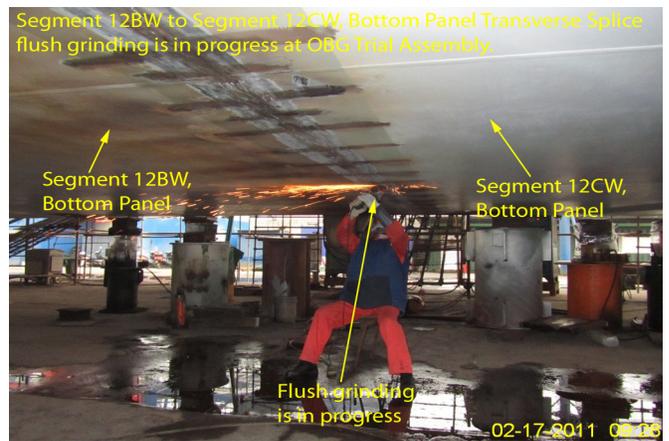
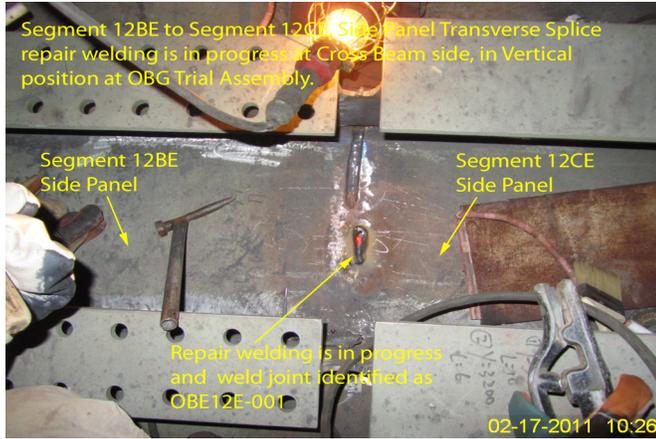
Please reference the pictures attached for more comprehensive details.

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



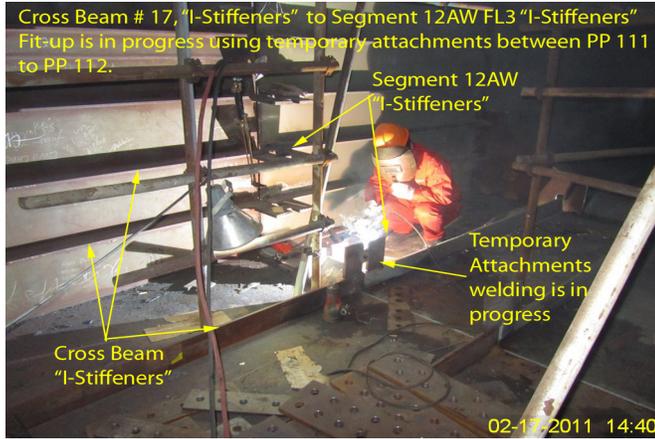
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Summary of Conversations:

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
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Reviewed By:	Miller,Mark	QA Reviewer
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