

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 #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-015418**Date Inspected:** 03-Jul-2010**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 Wu Zhi Cheng	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, 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) Trial Assembly Areas

7BW FL3

This Quality Assurance (QA) Inspector witnessed final tension verification for Bolts connecting Cable Tray Segment 7BW at FL3 location. Inspected bolts tension on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00408 Dated July 03, 2010.

Bolt sizes used were M3/4" x 2 1/4" RC Set# DHG60580 and final torque required was 340 N-m.

Manual Torque wrench was been used with Sr. No. X02-763.

Segment 9CE (Side Panel Bike Path Side Connecting Clips)

This Quality Assurance (QA) Inspector witnessed final tension verification for Clips connecting Side Panel Bike Path Side T-ribs to the Floor Beam at Panel Point (PP) 77, PP 78 and PP 79 for Segment 9CE. Inspected 10% on a

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random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00408 Dated July 3, 2010.

Bolt sizes used were M16 x 45 RC Set# DHGM160001 and final torque required was 210 N-m and

Bolt sizes used were M16 x 65 RC Set# DHGM160006 and final torque required was 180 N-m.

Manual Torque wrench was been used with Sr. No. XQ2-118.

Segment 9CE (Bottom Panel Connecting Clips)

This Quality Assurance (QA) Inspector witnessed final tension verification for Clips connecting Bottom Panel T-ribs to the Floor Beam at Panel Point (PP) 77, PP 78 and PP 79 for Segment 9CE. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00408 Dated July 3, 2010.

Bolt sizes used were M16 x 45 RC Set# DHGM160001 and final torque required was 210 N-m and

Bolt sizes used were M16 x 65 RC Set# DHGM160006 and final torque required was 180 N-m.

Manual Torque wrench was been used with Sr. No. XQ2-118.

Segment 9CE (Side Panel Cross Beam Side Connecting Clips)

This Quality Assurance (QA) Inspector witnessed final tension verification for Clips connecting Side Panel Cross Beam Side T-ribs to the Floor Beam at Panel Point (PP) 77, PP 78 and PP 79 for Segment 9CE. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00408 Dated July 3, 2010.

Bolt sizes used were M16 x 45 RC Set# DHGM160001 and final torque required was 210 N-m and

Bolt sizes used were M16 x 65 RC Set# DHGM160006 and final torque required was 180 N-m.

Manual Torque wrench was been used with Sr. No. 0900001.

Please refer the pictures attached for more comprehensive details.

Lift 8 West

This QA Inspector observed welding by Shielded Metal Arc Welding (SMAW) in progress of Fillet Weld. The Weld

joint is designated as OBW8B-008, OBW8B-009, OBW8B-004, OBW8B-005, OBW8B-032 and OBW8B-034. The welder number is identified as 066002 and was observed welding in the 2F (Horizontal) position using approved Welding Procedure Specification WPS-B-P-2112-FCM-1 and WPS-B-P-2213-B-U2-FCM-1.

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Segment 9AW to 9BW

This QA Inspector observed welding by Shielded Metal Arc Welding (SMAW) in progress of Complete Joint Penetration (CJP). The Weld joint is designated as Seg9B-001. The welder number is identified as 067588 and was observed welding in the 3G (Vertical) position using approved Welding Procedure Specification WPS-345-SMAW-3G (3F)-Repair-FCM-1. PMCK identified as Transverse Splice Weld at Edge Panel. The repair weld is been performed against the Welding Repair Report # BWR13908.

Segment 9AW to 9BW

This QA Inspector observed welding by Shielded Metal Arc Welding (SMAW) in progress of Complete Joint Penetration (CJP). The Weld joint is designated as Seg9B-003. The welder number is identified as 067588 and was observed welding in the 4G (Overhead) position using approved Welding Procedure Specification WPS-345-SMAW-4G (4F)-Repair-FCM-1. PMCK identified as Transverse Splice Weld at Bottom Panel. The repair weld is been performed against the Welding Repair Report # BWR13906. Please refer the pictures attached for more comprehensive details.

Segment 9AW to 9BW

This QA Inspector observed welding by Shielded Metal Arc Welding (SMAW) in progress of Complete Joint Penetration (CJP). The Weld joint is designated as Seg9B-004. The welder number is identified as 045246 and was observed welding in the 4G (Overhead) position using approved Welding Procedure Specification WPS-345-SMAW-4G (4F)-Repair-FCM-1. PMCK identified as Transverse Splice Weld at Side Panel Cross Beam Side. The repair weld is been performed against the Welding Repair Report # BWR13906.

Segment 9AW to 9BW

This QA Inspector observed welding by Shielded Metal Arc Welding (SMAW) in progress of Complete Joint Penetration (CJP). The Weld joint is designated as Seg9B-002. The welder number is identified as 068097 and was observed welding in the 4G (Overhead) position using approved Welding Procedure Specification WPS-345-SMAW-4G (4F)-Repair-FCM-1. PMCK identified as Transverse Splice Weld at Side Panel Counter Weight Side. The repair weld is been performed against the Welding Repair Report # BWR13907.

Segment 9BE to 9CE

This QA Inspector observed ZPMC Personnel's removing the Longitudinal Diaphragm (LD) from its location for Segment 9BE to 9CE between Panel Point (PP) 76 to PP 77 at E3 location reason been buttering build-up is required at LD web area due to adjustment of Skin Flatness of the Segment.

Please refer the pictures attached for more comprehensive details.

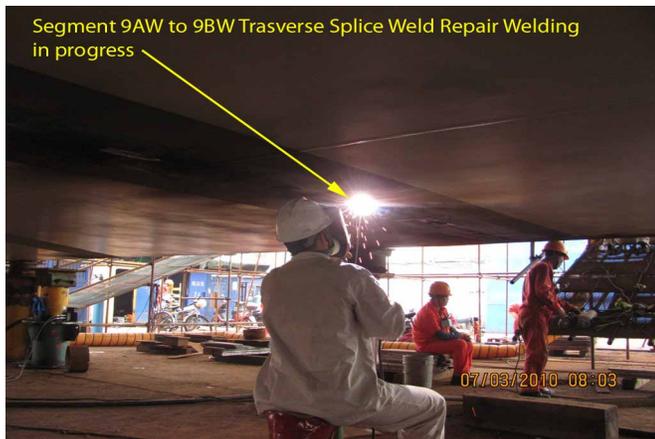
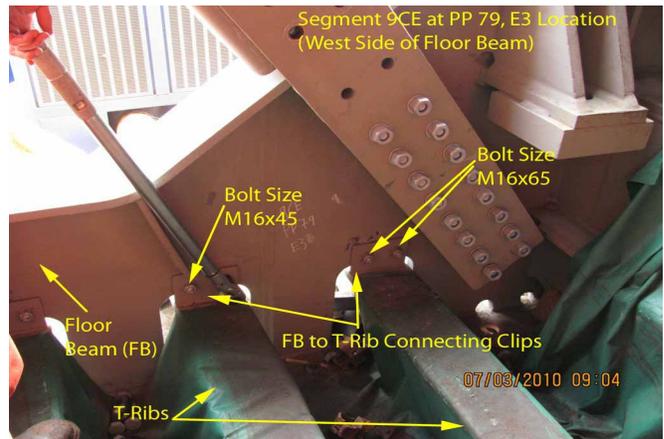
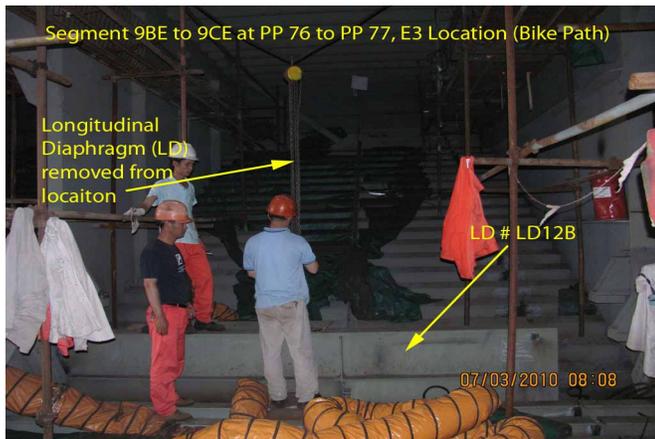
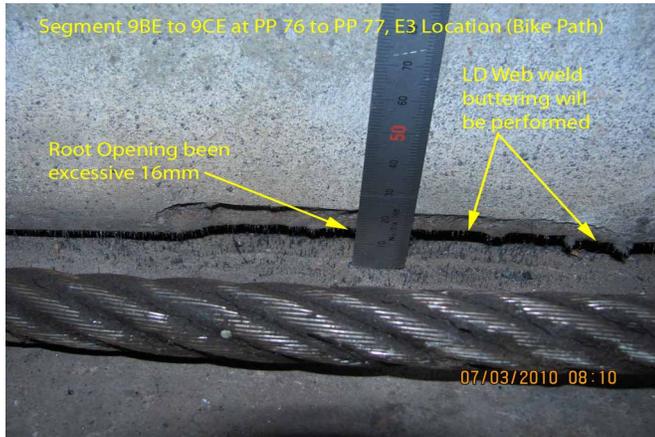
Segment 9AW to 9BW

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This QA Inspector observed ZPMC Personnel's performing Heat Straightening for T-Ribs at Transverse Splice weld for Segment 9AW to 9BW between Panel Point (PP) 73 to PP 74 against the Heat Straightening Report # HSR1(B)-8707 Dated June 29, 2010.

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.

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 T Sang 1500-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Math,Manjunath	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer
