

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-017426**Date Inspected:** 17-Oct-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)**Location:** Shanghai, China

CWI Name:	N/A	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

Incident Report generated at Segment 10BW

This Quality Assurance (QA) Inspector wrote an Incident Report for the Road Barrier brackets which is installed at deck panel I-Stiffener at corner assembly at Cross Beam and Counter Weight side for mis-drilling the bolt hole, as the edge distance to bolt hole edge does not comply the requirements. The road barrier in question is installed at Segment 10BW at PP 91.5. Please reference the Incident Report # 04-0120F4_TL-15_B278_10-17-2010_Mis Drilled Holes_Segment 10BW_PP 91.5_Road Barrier_CB_CW_Side dated October 17, 2010 for further detail.

Please reference the pictures attached for more comprehensive details.

Segment 10AE to Segment 10BE (U-Rib to U-Rib)

This QA Inspector witnessed the final bolt tension verification on bolts connecting the U-Rib to U-Rib at the transverse splice between Panel Points (PP) 88 and PP 89 for Segment 10AE to Segment 10BE. The QA Inspector

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verified the bolt tension on a random basis and the results appeared to be in general compliance. The Inspection was performed against Notification No. 00512 dated October 17, 2010.

The bolt sizes used were M22 x 70 RC Lot # DHGM220022 and the final torque value established was 487 N-m.

The Manual Torque wrench used was Serial No. XO2-666. Please reference the pictures attached for more comprehensive details.

Note: ZPMC QC Mr. Zhang Hai Jung did not offer inspection for U-Rib at the following locations as bolts not installed.

4th U-Rib, 5th U-Rib, 24th U-Rib, 25th U-Rib, 26th U-Rib, 27th U-Rib, 29th U-Rib, 30th U-Rib, 31st U-Rib, 32nd U-Rib and 38th U-Rib.

Segment 10BW to 10CW (Transverse Splice T-Ribs)

This QA Inspector witnessed final bolt tension verification on bolts connecting T-Rib to T-Rib for Transverse Splice at Side Panel Cross Beam Side (from work point W6 towards W4), Bottom Panel (from work point W4 towards W3) and Counter Weight side (from work point W3 to W1) between Panel Point (PP) 91 to PP 92 for Segment 10BW to Segment 10CW. Inspected the bolt tensioning on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00511 Dated October 17, 2010.

The bolt sizes used were M22 x 70 RC Lot # DHGM220038 and the final torque value established was 480 N-m.

The Manual Torque wrench used was Serial No. XO2-779.

Segment 10BW to Segment 10CW (Transverse Splice T-Ribs)

This QA Inspector performed Dimension Control Inspection on the Transverse Splice T-Ribs to T-Ribs after bolting for the Segment 10BW to Segment 10CW between Panel Point (PP) 91 to PP 92 at the following locations:

Work Point W6 towards Work Point W4 (Side Panel Cross Beam Side) total 19 T-Ribs.

Work Point W4 towards Work Point W3 (Bottom Panel) total 18 T-Ribs.

Work Point W3 towards Work Point W1 (Side Panel Counter Weight Side) total 19 T-Ribs.

The QA Inspector measured the Vertical Offset using 1(One) Meter Straight Edge and measured the Horizontal Offset on the web using a Bridge Cam gauge.

The measurements were recorded in the Dimension Control Plan (DCP) on a separate form and submitted to the Lead Inspector and Engineer for review and disposition.

Segment 10BW to Segment 10CW (U-Rib to U-Rib)

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This QA Inspector witnessed the final bolt tension verification on bolts connecting the U-Rib to U-Rib at the transverse splice between Panel Points (PP) 91 and PP 92 for Segment 10BW to Segment 10CW. The QA Inspector verified the bolt tension on a random basis and the results appeared to be in general compliance. The Inspection was performed against Notification No. 00511 dated October 17, 2010.

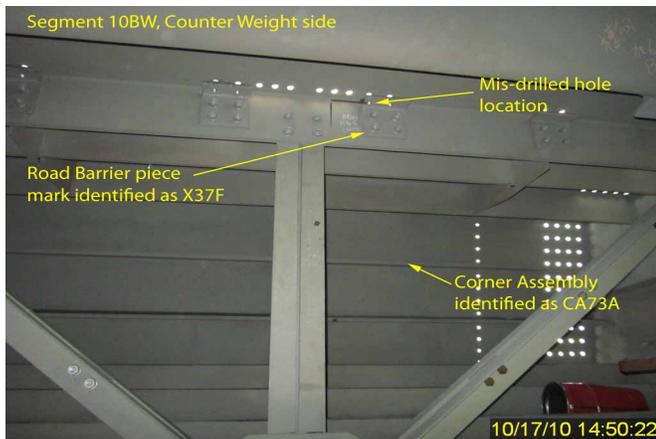
The bolt sizes used were M22 x 70 RC Lot # DHGM220022 and the final torque value established was 487 N-m.

The bolt sizes used were M22 x 80 RC Lot # DHGM220094 and the final torque value established was 470 N-m.

The bolt sizes used were M22 x 85 RC Lot # DHGM220110 and the final torque value established was 356 N-m.

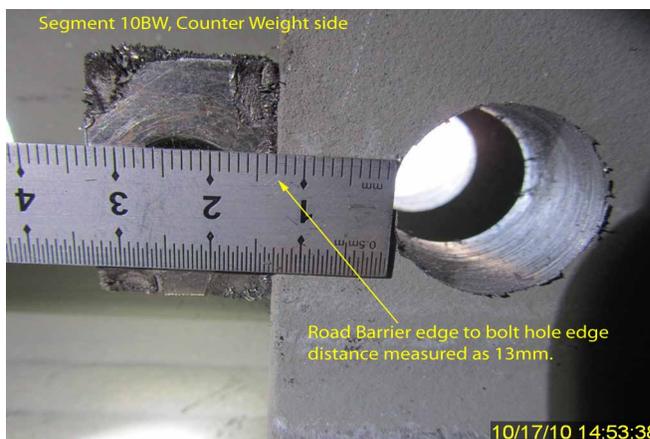
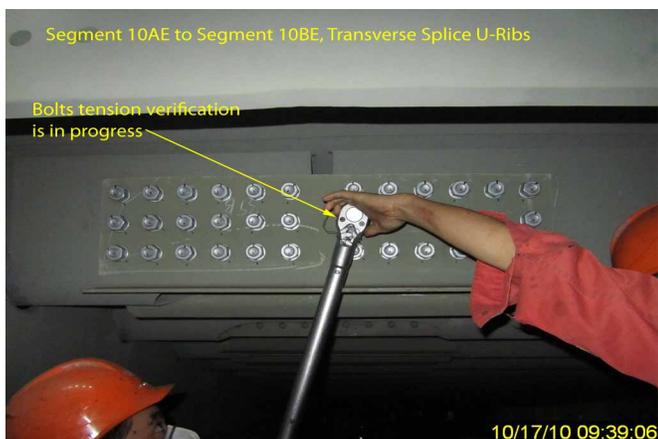
The Manual Torque wrench used was Serial No. XO2-779. Please reference the pictures attached for more comprehensive details.

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 150000422372, who represents the Office of Structural Materials for your project.

Inspected By: Math,Manjunath

Quality Assurance Inspector

Reviewed By: Peterson,Art

QA Reviewer