DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-012707
Date Inspected: 10-Mar-2010

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

OSM Arrival Time: 700
OSM Departure Time: 1900
Location: Shanghai, China

CWI Name:				**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

Segment 5BW to 5CW (T-Ribs)

This Quality Assurance (QA) Inspector witnessed final tension verification for Bolts Installed at T-Ribs to T-Ribs at Segment Transverse Splice Side Panel (Cross Beam Side), Bottom Panel and Side Panel (Counter Weight side) at Panel Point (PP) 34 and PP 35 for Segment 5BW to 5CW. Inspected 10% on a random basis and found the Rotation of Nut to be in general compliance. Inspection was performed against the Notification No. 00276 Dated March 10, 2010.

Bolt sizes used were M22 x 65 RC Set# DHGM220021 and final torque required was 543 N-m (Side Panel Cross Beam Side)

Bolt sizes used were M22 x 70 RC Set# DHGM220020 and final torque required was 520 N-m (Bottom Panel)

Bolt sizes used were M22 x 70 RC Set# DHGM220020 and final torque required was 520 N-m (Side Panel

Counter Weight Side)

Manual Torque wrench was been used with Sr. No. XQ2-759. The Vertical Offset measured at all the T-Ribs locations for Side Panel and Bottom Panel and observed no single reading exceeding 4.5mm.

Segment 5BW to 5CW (Longitudinal Diaphragm)

This Quality Assurance (QA) Inspector witnessed final tension verification for Bolts Installed at Longitudinal Diaphragm to Longitudinal Diaphragm at W3 and W4 (North and South side) at Panel Point (PP) 34 and PP 35 for Segment 5BW to 5CW. Inspected 10% on a random basis and found the Rotation of Nut to be in general compliance. Inspection was performed against the Notification No. 00276 Dated March 10, 2010.

Bolt sizes used were M24 x 70 RC Set# DHGM240010 and final torque required was 560 N-m and

Bolt sizes used were M24 x 95 RC Set# DHGM240021 and final torque required was 540 N-m.

Manual Torque wrench was been used with Sr. No. XQ2-759.

Note: Please refer the pictures attached for more comprehensive detail.

Segment 5AE (Cable Tray)

This Quality Assurance (QA) Inspector witnessed final tension verification for Cable Tray Installed at Bottom Panel (North and South side) at Panel Point (PP) 29, PP 30 and PP 31 for Segment 5AE. Inspected 10% on a random basis and found the Rotation of Nut to be in general compliance. Inspection was performed against the Notification No. 00275 Dated March 10, 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. XQ2-118.

Segment 5BE (Cable Tray)

This Quality Assurance (QA) Inspector witnessed final tension verification for Cable Tray Installed at Bottom Panel (North and South side) at Panel Point (PP) 32, PP 33 and PP 34 for Segment 5BE. Inspected 10% on a random basis and found the Rotation of Nut to be in general compliance. Inspection was performed against the Notification No. 00275 Dated March 10, 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. XQ2-118.

Segment 5CE (Cable Tray)

This Quality Assurance (QA) Inspector witnessed final tension verification for Cable Tray Installed at Bottom Panel (North and South side) at Panel Point (PP) 35, PP 36 and PP 36.75 for Segment 5CE. Inspected 10% on a random basis and found the Rotation of Nut to be in general compliance. Inspection was performed against the Notification No. 00275 Dated March 10, 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. XQ2-118.

Segment 7AE

This QA Inspector performed Offset measurement for Deck Panel to Deck Panel Diaphragm from East facing between the all U-Ribs to U-Ribs (Total 39 nos.) for Segment 7AE at Panel Point (PP) 49. Report forwarded to team leader for further action.

Segment 7BE

This QA Inspector performed Offset measurement for Deck Panel to Deck Panel Diaphragm from East facing between the all U-Ribs to U-Ribs (Total 39 nos.) for Segment 7BE at Panel Point (PP) 52. Report forwarded to team leader for further action.

Segment 7AW

This QA Inspector performed Offset measurement for Deck Panel to Deck Panel Diaphragm from East facing between the all U-Ribs to U-Ribs (Total 39 nos.) for Segment 7AW at Panel Point (PP) 49. Report forwarded to team leader for further action.

Signed Off Green Tag’s

This Quality Assurance (QA) Inspector witnessed final tension verification for following depicted locations. Inspected 10% on a random basis and found the tension to be in general compliance and thus signed off the Green Tags.

At Segment 5AW and 5BW for Longitudinal Diaphragm Splice (North and South) Green Tag No. 642.

At Segment 5AW and 5BW for Longitudinal Diaphragm Splice (North and South) Green Tag No. 641.

At Segment 5AW and 5BW for Segment Splice to T-stiffener (BP Location) Green Tag No. 640.

At Segment 5AW and 5BW for Segment Splice to T-stiffener (North/Counter Weight) Green Tag No. 639.

At Segment 5AW and 5BW for Segment Splice to T-stiffener (South/Cross Beam) Green Tag No. 638.

At Segment 5AW, 5BW and 5CW for Cable Tray Green Tag No. 637.

Segment 5AW

The QA inspector performed inspection for the punch list item 269 for Cable Tray Support did the inspection and Report forwarded to team leader for further action.

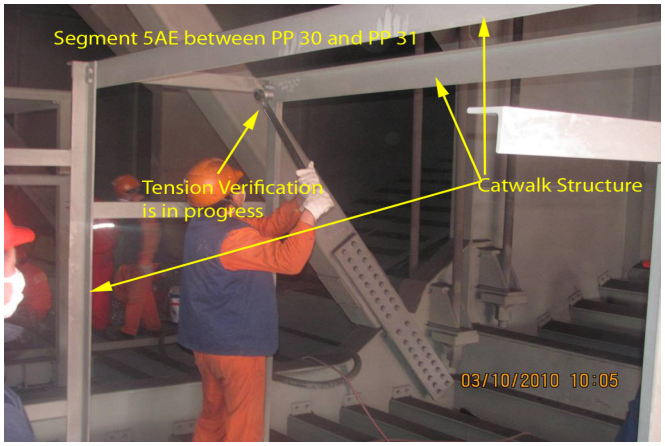
Segment 5BW

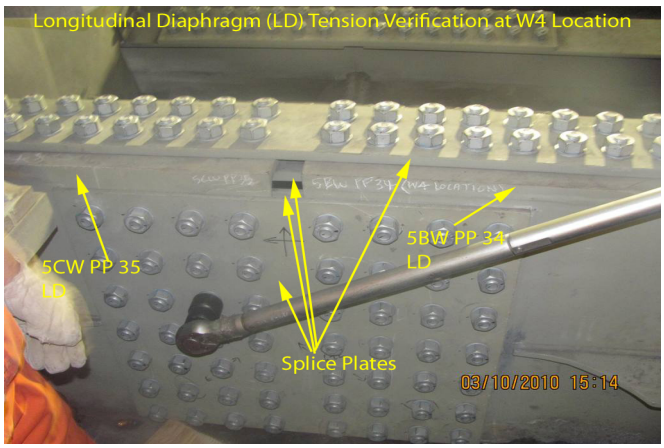
The QA inspector performed inspection for the punch list item 273 for Cable Tray Support did the inspection and Report forwarded to team leader for further action.

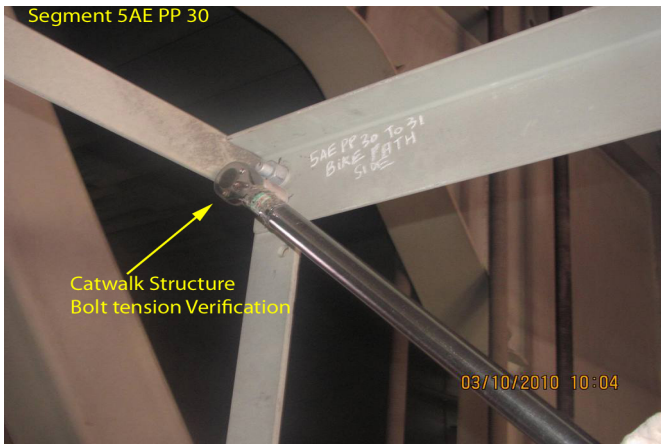
Segment 5CW

The QA inspector performed inspection for the punch list item 277 for Cable Tray Support did the inspection and Report forwarded to team leader for further action.

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







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:	Miller,Mark	QA Reviewer