

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:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-012286**Date Inspected:** 25-Feb-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:****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 6AE (Corner Assembly)

This Quality Assurance (QA) Inspector witnessed final tension verification for Corner Assembly 6AE at Panel Point (PP) 37 and PP 37.5 for Segment 6AE. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00259 Dated February 25, 2010.

Bolt sizes used were M22 x 120 RC Set# DHGM220053 and final torque required was 440 N-m.

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

Segment 6AE (Side Panel T-Ribs at FL3 Location)

This Quality Assurance (QA) Inspector witnessed final tension verification for Side Panel T-Ribs Cross Beam side between Panel Point (PP) 38 to PP 38.5, PP 38.5 to PP 39 and PP 39 to PP 40 for Segment 6AE. Inspected 10% on

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a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00260 Dated January 25, 2010.

The following location are been inspected after installing the Extra Reinforcing Splice plate of 12mm thickness due to the vertical offset exceeding the requirement of RFI No. 2004 Rev. 0 Dated Dec 17, 2010.

At PP 38 to PP 38.5

5th T-Rib, 6th T-Rib, 7th T-Rib, 8th T-Rib, 11th T-Rib, 13th T-Rib, 14th T-Rib, 15th T-Rib, 16th T-Rib, 17th T-Rib, 18th T-Rib and 19th T-Rib.

At PP 38.5 to PP 39

2nd T-Rib, 3rd T-Rib, 13th T-Rib and 15th T-Rib

At PP 39.5 to PP 40

7th T-Rib, 11th T-Rib and 10th T-Rib.

Bolt sizes used were M22 x 80 RC Set# DHGM220050 and final torque required was 486 N-m.

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

Segment 6CE (Side Panel T-Ribs at FL3 Location)

This Quality Assurance (QA) Inspector witnessed final tension verification for Side Panel T-Ribs Cross Beam side between Panel Point (PP) 44 to PP 44.5, PP 45 to PP 45.5 and PP 45.5 to PP 46 for Segment 6CE. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00260 Dated January 25, 2010.

The following location are been inspected after installing the Extra Reinforcing Splice plate of 12mm thickness due to the vertical offset exceeding the requirement of RFI No. 2004 Rev. 0 Dated Dec 17, 2010.

At PP 44 to PP 44.5

19th T-Rib.

At PP 45 to 45.5

9th T-Rib

At PP 45.5 to PP 46

18th T-Rib and 19th T-Rib.

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Bolt sizes used were M22 x 80 RC Set# DHGM220050 and final torque required was 486 N-m.

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

Note: At PP 45.5 to PP 46 13th T-Rib and 14th T-Rib not offered for inspection as blasting and painting not performed.

Segment 5BW to 5CW (Longitudinal Diaphragm) Joint Survey

This QA Inspector performed Joint Inspection with ZPMC Survey Team and ABF Survey Team for the Longitudinal Diaphragm between Segment 5BW to 5CW (Shop Segment Splice) between Panel Point (PP) 34 and PP 35 North Cross Beam Side only for Offset and Sweep. The offset was measured at 5 (five) different locations in which 2 (Two) locations were at Flange area and 3 (Three) locations were at Web area and Sweep was measured at 100 mm from both side from the Floor Beam and 800mm from both side of floor Beam and at Centre (Total 5 Locations). The Caltrans Lead Inspector was been notified for further action.

Segment 7BW (T-Ribs deflection at FL3 location) Individual Survey

This QA Inspector performed Inspection for the T-Ribs deflection above the Cope hole at FL3 location at PP 50 to PP 50.5, PP 51 to PP 51.5 and PP 51.5 to PP 52 below the floor beam for Segment 7BW at Cross beam side. The Caltrans Lead Inspector was been notified for further action.

Segment 7AW (T-Ribs deflection at FL3 location) Individual Survey

This QA Inspector performed Inspection for the T-Ribs deflection above the Cope hole at FL3 location at PP 50 to PP 50.5, PP 51 to PP 51.5 and PP 51.5 to PP 52 below the floor beam for Segment 7AW at Cross beam side. The Caltrans Lead Inspector was been notified 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
