

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-010750**Date Inspected:** 15-Dec-2009**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**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 Trail 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 2AE

This Quality Assurance (QA) Inspector witnessed final tension verification for Cable Tray Structure between Panel Point (PP) 13 and PP 13.5 at Bottom Panel (North and South) side for Segment 2AE. Inspected 10% on a random basis and found the tension to be in general compliance.

Bolt sizes used were M3/4 x 21/4 RC Set# DHG60580 and final torque required is 340 N-m.

Bolt sizes used were M3/4 x 31/4 RC Set# DHG60573 and final torque required is 193 N-m.

Manual Torque wrench is been used with Sr. No. XO2 - 118.

1AAE to 1AE

This Quality Assurance (QA) Inspector witnessed final tension verification for Longitudinal Diaphragm to

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Longitudinal Diaphragm Splice at Elevation 4750mm between Panel Point (PP) 8.0 and PP 8.5 for Segment 1AAE to 1AE. Inspected 10% on a random basis and found the tension to be in general compliance.

Bolt sizes used were M27 x 130 RC Set# DHGM270026 and final torque required is 827 N-m.

Bolt sizes used were M27 x 150 RC Set# DHGM270027 and final torque required is 860 N-m.

Manual Torque wrench is been used with Sr. No. XO2 - 625.

Segment 6AW to 6BW

This QA Inspector along with Caltrans (Ct) QA Mr. Manikandhan were been asked to attend the Joint Survey with ABF QC's. Measured and recorded the Offset for the U-Ribs to U-Ribs (Total 39 Nos.) between PP 40 to PP 41 for Segment 6AW to 6BW and the reports will be generated by ABF QC and will be submitted for Caltrans QA review.

Lift 4 East, Lift 4 West and Lift 3 West

This QA Inspector measured Skin Flatness at Location E3 for Lift 4 East, at Location W3 for Lift 4 West and at Location W3 for Lift 3 West and found the Flatness is within the tolerance.

Segment 6CE

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) for Side Panel T-Ribs at 6CE at Two Locations. The welding was been performed against the B-WR8988 Rev. No.0 and Weld Nos. are Identified as SP529-001-029, 030, 025, 026, 027 and 028. The welder was identified as 054013. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-345-SMAW-2G (2F)-FCM-Repair. The welding parameters

Segment 6AW to 6BW

This QA Inspector observed ZPMC personnel performing Heat Straightening for Longitudinal Diaphragm to Longitudinal Diaphragm between Panel Point (PP) 40 and PP 41 Counter Weight side and Heat Straightening been performed against HSR1 (B)-7992 Rev.0 Dated 12.11.2009.

Segment 5AW

This QA Inspector observed ZPMC personnel performing Drilling at Bottom Panel in Diagonal way for installing the wind diverter.

Segment 6AW to 6BW

This QA Inspector observed ZPMC personnel at Segment 6AW to 6BW between PP 40 and PP 41 Transverse Splice Side Panel T-Rib hold back area grinding is in progress for Counter Weight side as well flush grinding for

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Edge Panel.

Lift 3 East

This QA Inspector observed ZPMC personnel have Shifted Lift 3 East from Heavy work dock on the ship.

Lift 1 West

This QA Inspector observed ZPMC personnel performing Painting activities at Lift 1 West.

Lift 2 West

This QA Inspector observed ZPMC personnel performing Painting activities at Lift 2 West.

Lift 2 East

This QA Inspector observed Lift 2 East been shifted for OBG Trial Assembly to Jetty side for loading on the Ship.

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 , 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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