

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-012013**Date Inspected:** 16-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:** 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 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 6AW (Corner Assembly)

This Quality Assurance (QA) Inspector witnessed final tension verification for Corner Assembly 6AW at Panel Point (PP) 37 and PP 37.5 Counter Weight Side and PP 37.5 to PP 38 Cross Beam side for Segment 6AW.

Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed against the Notification No. 00257 Dated February 16, 2010.

Bolt sizes used were M22 x 85 RC Set# DHGM220013 and final torque required was 433 N-m and

Bolt sizes used were M22 x 120 RC Set# DHGM220051 and final torque required was 433 N-m.

Manual Torque wrench was been used with Sr. No. XQ2-584.

Segment 6AE to 6BE (U-Ribs) Joint Survey

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This QA Inspector performed Joint Inspection with ZPMC Survey Team for the U-Ribs to U-Ribs (Total 39 nos.) for Segment 6AE to 6BE (Shop Segment Splice) between Panel Point (PP) 40 and PP 41 from North towards South side. The measured readings were recorded generated the report and submitted to the Task Leader and Engineer for review.

6AW

This QA Inspector observed ZPMC welding personnel performing repair welding by Flux Cored Arc Welding (FCAW) for Edge Plate T-Ribs as 12mm gap was evident. The welding was in progress against B-CWR 1205 Rev. 0. Dated Jan 02, 02 Cross Beam side. The welder is identified as 066673. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-345-FCAW-3G (3F)-FCM-Repair-1. It was observed that the parameters noted down by ZPMC QC are in compliance with WPS.

6CW

This QA Inspector observed ZPMC welding personnel performing repair welding by Shielded Metal Arc Welding (SMAW) for Longitudinal Diaphragm Flange for Segment 6CW at PP 44 Cross Beam side. The weld joint was identified as Seg 031F-008. The welder is identified as 066261. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-345-SMAW-1G (1F)-Repair-1. It was observed that the parameters noted down by ZPMC QC are in compliance with WPS, for more comprehensive information refer the attached pictures.

6BW to 6CW

This QA Inspector observed ZPMC welding personnel performing repair welding by Shielded Metal Arc Welding (SMAW) for Bottom Panel Transverse Splice Weld against the Corner Assembly. The weld joint was identified as OBW6C-003. The welding was in progress against the B-CWR 1209. The welder is identified as 037743. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-345-SMAW-1G (1F)-Repair-1. It was observed that the parameters noted down by ZPMC QC are in compliance with WPS.

6CW

This QA Inspector observed ZPMC personnel's performing at Segment 6CW and PP 47 Longitudinal Diaphragm cope hole at Bottom Panel location smooth grinding is in progress.

6AE

This QA Inspector observed ZPMC personnel's performing carbon arc gouging for the weld connecting Side Panel to Bottom Panel at E4 location at Segment 6AE at PP 37 for UT rejected area, for more comprehensive information refer the attached pictures.

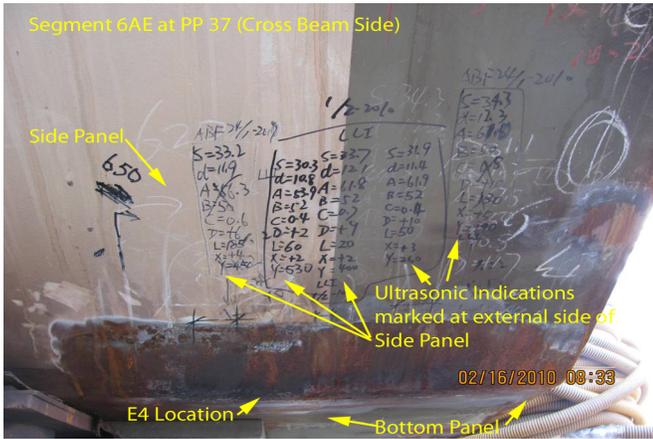
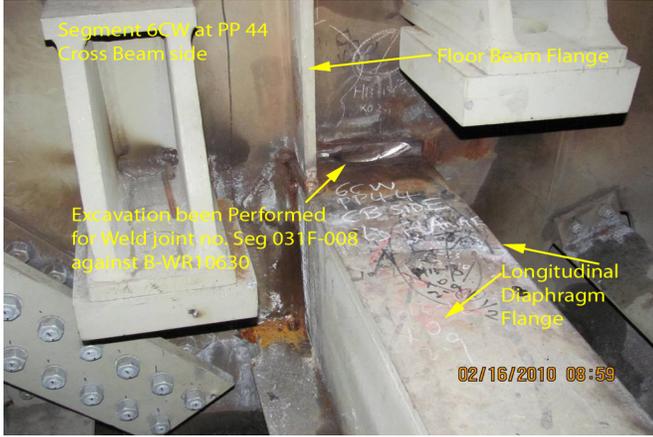
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Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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