

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-010924**Date Inspected:** 29-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 5BW

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) repair welding for Boxed Counter Weight connecting plate for Segment 5BW. Weld identified as OBW5G-005. The welder was identified as 048659. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-345-SMAW-1G (1F)-FCM-Repair-1. The repair work was been performed against the Welding Repair Report B-WR8588 Rev.0.

Segment 5BW

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) repair welding for Boxed Counter Weight connecting plate for Segment 5BW. Weld identified as OBW5G-006. The welder was identified as 054467. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-345-SMAW-4G (4F)-FCM-Repair-1. The repair work was been

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performed against the Welding Repair Report B-WR8589 Rev.0.

Segment 6BW

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) at Corner Assembly for Segment 6BW. Weld identified as CA027-001. The welder was identified as 048617. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-P-2214-Tc-U4b-FCM-1.

Segment 6BW

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) at Corner Assembly for Segment 6BW. Weld identified as CA013-006. The welder was identified as 220066. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2232-Tc-U4b-F.

Segment 5BW to 5CW

This QA Inspector observed ZPMC personnel at Segment 6AW to 6BW Side Panel Counter Weight side (Segment Splice) flush grinding is in progress.

Segment 6BW to 6CW

This QA Inspector observed ZPMC personnel at 6BW to 6CW Transverse splice Fit up is in progress.

Segment 5BW

This QA Inspector observed ZPMC personnel at 5BW Cross Beam side W4 location Bottom Panel to Side Panel weld connection area below Longitudinal Diaphragm UT performed and rejectable indications found thus two location excavation been performed.

Segment 5BW

This QA Inspector observed ZPMC personnel at Segment 5BW Counter Weight Boxed section UT performed by ZPMC and their report no. B787-UT-9612 indicates two rejectable indications for weld OBW5G-005 and repair work is in progress against welding report no. B-WR8588 Rev.0 Y Datum locations reported as 780mm to 3840mm.

Segment 5BW

This QA Inspector observed ZPMC personnel at Segment 5BW Counter Weight Boxed section UT performed by ZPMC and their report no. B787-UT-9612 indicates two rejectable indications for weld OBW5G-006 and repair work is in progress against welding report no. B-WR8589 Rev.0 Y Datum locations reported as 470mm to 990mm.

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Segment 5BW to 5CW

This QA Inspector observed ABF personnel performing Ultrasonic Test (UT) for Deck Panel for Transverse splice at 5BW to 5CW.

Segment 5BW to 5CW

This QA Inspector observed ZPMC personnel at 5BW to 5CW between Panel Point (PP) 34 to PP 35 for Bottom Panel T-Rib hold back area ZPMC performing Magnetic Particle Test (MT) and any discontinuities found were ground off and welded. Welder identified as 068764 SMAW 4G positions.

Segment 5CW to 6AW

This QA Inspector observed ZPMC personnel at Segment 5CW to 6AW between PP 36 and PP 37 for Bottom Panel to Bottom Panel T-Ribs to T-Ribs and Side Panel Counter Weight T-Ribs web splice plate drilling is in progress.

Segment 6CW

This QA Inspector observed ZPMC personnel at Segment 6CW between PP 43.5 to PP 44 Bottom Panel BP034A Weld No. BP123-001-007~018 observed 15mm (max.) deformation as per HSR1(B08050 Rev.0 Dated 12.28.2009 Six (6) nos. T-Ribs Heat straightening been performed at Bottom Panel 7th, 8th, 9th, 10th, 11th and 12th (reference from Cross Beam Side).

Segment 6BW to 6CW

This QA Inspector observed ZPMC personnel at Segment 6BW to 6CW between PP 43 to PP 44 Deck Panel fit up is in progress welder identified as Chen Zhenghua 220067, 4G position and SMAW process.

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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