

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-010845**Date Inspected:** 22-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 6BE to 6CE

This QA Inspector prepared Incident Report No.04-0120F4_TL-15_B278_12-22-09_6AE to 6BE (Cross Beam and Bike Path)_6BE to 6CE(Cross Beam side)_Skin Flatness as it was found that Side Panel to Side Panel Corner Assembly weld Skin Flatness was out of tolerance when measured Transverse to Longitudinal weld for more comprehensive details please refer the report.

Segment 6BE to 6CE

This QA Inspector observed ZPMC welding personnel performing Heat Straightening for Longitudinal Diaphragm for Cross Beam and Bike Path side for Segment 6BE to 6CE between Panel Point (PP) 43 and PP 44 against HSR 1(B)-7991 Rev.0 Dated Dec. 11, 2009. The following locations were indicated for Heat Straightening.

LD014B-001~010

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LD013B-001~010

Seg.030B-033~034

Seg.030C-007~008

Seg.032F-035~038

Seg.032D-035~038

CB5 (Connecting at Segment 6AE FL3 at PP 40)

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) for CB5 at Panel Point 40. Weld Joint identified as Seg028J-073, 005, 014 and 023. The welder was identified as 220067. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i. e., WPS-B-T-2233-Tc-U4b-F. The welding parameters measured and recorded by ZPMC QC were within the tolerance.

Segment 6AW to 6BW

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) for back gouged Transverse Splice weld at Side Panel Counter Weight side for Segment 6AW to 6BW between Panel Point (PP) 40 and PP 41. Weld Identified as OBW6B-002. The welder was identified as 066261. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-P-2214-B-U2-FCM-1. The welding parameters measured and recorded by ZPMC QC were within the tolerance.

Segment 6AW to 6BW

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) for back gouged Transverse Splice weld at Bottom Panel for Segment 6AW to 6BW between Panel Point (PP) 40 and PP 41. Weld Identified as OBW6B-003. The welder was identified as 067942 and 067571. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-P-2214-B-U2-FCM-1. The welding parameters measured and recorded by ZPMC QC were within the tolerance.

Segment 5CW to 6AW

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) for Longitudinal Diaphragm for Segment 5CW to 6AW. Weld Identified as Seg027*-044. 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. The welding parameters measured and recorded by ZPMC QC were within the tolerance.

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Segment 6AE and 6BE

This QA Inspector observed ZPMC personnel performing Fit up for X37A for Segment 6AE between Panel Point (PP) 37 and PP 37.5 and Segment 6BE between PP 41.5 to PP 42. The X37A were flame cut and removed from location as it was noticed gap between the Deck Panel I-Rib bolt connecting areas. The work is been performed against the B-WR 8987 Rev.0 Dated Dec 06, 2009. The welder is been identified as 201087. In process Shielded Metal Arc Welding (SMAW) welding appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-345+485-SMAW-3G (3F)-Repair. The welding parameters measured and recorded by ZPMC QC were within the tolerance.

Segment 5CE to 6AE

This QA Inspector observed ZPMC personnel performing welding for Corner Assembly at Location (E2) i.e., Deck Panel to Edge Panel connection area for Segment 5CE to 6AE between Panel Point (PP) 36 and PP 37.

Segment 5CE to 6AE

This QA Inspector observed ZPMC personnel performing grinding for Fillet weld connection the Longitudinal Diaphragm to Bottom Panel for Segment 5CE to 6AE between Panel Point (PP) 36 to PP 37.

Segment 5CE to 6AE

This QA Inspector observed ZPMC personnel performing grinding for Side Panel T-Rib Hold back welded areas and Edge Panel I-Rib Stiffeners Cross Beam Side for the discontinuities as marked by ZPMC CWI for Segment 5CE to 6AE between Panel Point (PP) 36 to PP 37.

Segment 5AE to 5BE

This QA Inspector observed ZPMC personnel performing Magnetic Particle Test (MT) for Bottom Panel T-Rib hold back area is in progress.

Segment 6BE to 6CE

This QA Inspector observed ZPMC personnel performing Magnetic Particle Test (MT) for Bottom Panel T-Rib hold back area is in progress.

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

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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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