

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-009953**Date Inspected:** 11-Oct-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Jha**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 day CALTRANS OSM Quality Assurance Inspector (QA) S. Manjunath. Math was present during the times noted above for observations relative to the work being performed.

Orthotropic Box Girder (OBG) Trial Assembly Area

Segment 2AW

This Quality Assurance (QA) Inspector witnessed final tension verification for Plate connecting FL3 to Side Panel at PP 14, PP 15 and PP 16 for Segment 2AW Cross Beam Side. Inspected 10% on a random basis and found the tension to be in general compliance.

Bolt sizes used are M22x65 RC Lot No. DHGM240009 and final Torque required was 567 N-m.

Bolt sizes used are M22x70 RC Lot No. DHGM240010 and final Torque required was 560 N-m.

Manual Torque wrench was been used with Serial No. XQ2-599.

Segment 1AW to 1AAW

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) and Submerged Arc Welding (SAW) for Transverse Segment weld at Deck Panel and welding been performed against

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

B-CWR829. The weld joint was been identified as OBW1-010. The welder is identified as 046830 and 047976. The excavation was performed after leaving 640mm from edge panel and then excavated 5995mm(approx), 20mm deep(approx) from Cross Beam Side. In process SAW and SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-345-SAW-1G-Repair-1 and WPS-345-SMAW-1G (1F) – Repair-1.

Segment 1AW to 1AAW

This QA Inspector observed ZPMC welding personnel performing Submerged Arc Welding (SAW) for Transverse Segment weld at Deck Panel and welding been performed against B-CWR829. The weld joint was been identified as OBW1-001 and OBW1-009. The welder is identified as 049804. The excavation was performed after leaving 1570mm from edge panel and then excavated 1570mm(approx), 20mm deep(approx) from Counter Weight Side. In process SAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-345-SAW-1G-Repair-1.

Segment 1AW to 1AAW

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for buttering I –Rib Stiffener which are welded at overhead position of 1AW to 1AAW for Deck Panel and welding been performed against B-CWR778. The weld joint was been identified as T1, T6, T9 and T15. The welder is identified as 220063, 220064 and 220067. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-345-SMAW-3G (3F)-FCM-Repair-1.

Segment 1AW to 1AAW

This QA Inspector observed I-Rib buttering was in progress by FCAW welding process as the cope to the I-Rib distance found to be less as cope hole are larger in size, those whole buttering is finished flush grinding been performed.

Segment 1AW to 1AAW

This QA Inspector observed 1AW to 1AAW transverse segment weld been excavated 20 mm deep from Y-Datum 70 to 4122 (71 Indication found) and 23561 to 23856 (71 to 85 Indication found) against the ZPMC MT report B787-MT-14335 Dated Oct 16, 2009.

Lift 2 East

This QA Inspector observed blasting activity been performed internal side of the Segment 2AE and 2BE.

Lift 2 West

This QA Inspector observed blasting activity been performed inside side of the Segment 2AW and 2BW.

Segment 1BE to 1AE

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

This QA Inspector observed UT been performed to Edge Panel and Bottom Panel between PP 10 and PP 10.5 for Transverse Segment Weld by ABF QA's.

Segment 5BW to 5AW

This QA Inspector observed excavation been performed to Transverse Segment weld for Segment 5BW to 5AW for UT rejected areas and excavation performed at Side Panel CB side at 1(one) location from external side, Side Panel CW side 5(five) locations from external side and Bottom Panel 4(Four) Location.

Segment 1AE to 1AAE

This QA Inspector observed MT test been performed for Transverse segment weld from inside by ZPMC personnel.

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
Reviewed By:	Carreon,Albert	QA Reviewer
