

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-009027**Date Inspected:** 19-Sep-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 and Xu Yumin**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 Areas

Segment 1AW to 1AAW

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) for Bottom Panel segment to segment transverse weld, weld being excavated at several locations due to UT reject indications. The weld joint is identified as OBW-1A-003. The welder is identified as 048659. 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 and welding being carried out against B-WR-7652.

Segment 1BW

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) for Rain Water Diverter at Edge Panel Counter Weight side for Segment 1BW. The weld joint is identified as OBW-1B-027. The welder is identified as 037743. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-P-2213-Tc-U4b-FCM-1.

Segment 1AW to 1AAW

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This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Deck Panel segment to segment transverse weld, weld being excavated at several locations due to UT reject indications. The weld joint is identified as OBW-1-001. The welder is identified as 220064. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2231-1-U2a-F and welding being carried out against B-WR-7649.

Transverse Splice Joint Details

This Quality Assurance (QA) Inspector verified status of Transverse Splice welded joints between segment to segment for the following OBG Segments to verify whether they are flush ground or not.

1AAE to 1AE
1AE to 1BE
2AE to 2BE
1AAW to 1AW
1AW to 1BW
2AW to 2BW
3AW to 3BW
4AW to 4BW

Segment 1AE to 1AAE

This Quality Assurance (QA) Inspector observed at 1AE to 1AAE during Inspection for the flat side of all butt welded joints shall not deviate from flatness by more than 5 mm in a length of 600 mm centered over the weld joint but during inspection found at B1, B3 and B4 found 7mm gap which is found to be exceeding the tolerance thus an Incident Report No. 678 was written against that ZPMC and ABF had offered inspection and found acceptable the dimension part of it, but for repairing purpose buttering was being performed which was not acceptable as Welding Repair Report not being approved by CT Engineer.

Segment 1AW to 1AAW

This Quality Assurance (QA) Inspector observed at 1AW to 1AAW during Inspection for the flat side of all butt welded joints shall not deviate from flatness by more than 5 mm in a length of 600 mm centered over the weld joint but during inspection found at B2 and B3 location 1150mm away from B2 point exceeding the tolerance thus an Incident Report No. 681 was written against that ZPMC and ABF had offered inspection and found not acceptable as they had not rectified the location.

Segment 1AW and 1AAW

This Quality Assurance (QA) Inspector observed at 1AW to 1AAW Transverse segment weld being excavated for Deck Panel as rejectable indication observed by UT test, the excavated area MT test was being performed by ZPMC.

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Segment 5BW

This Quality Assurance (QA) Inspector observed at 5BW Lower Chevron CB side bolt snug tightening was in progress between PP 33 and PP 34.

Segment 1AW to 1AAW

This Quality Assurance (QA) Inspector observed at 1AW to 1AAW Transverse Segment to Segment weld at Bottom Panel noticed at 5 location carbon arc gouging was being performed to remove defect discovered by UT examination.

Segment 1BW

This Quality Assurance (QA) Inspector observed at 1BW at PP 12.5 MT was being performed for Side Panel Counter Weight side.

Segment 5BW

This Quality Assurance (QA) Inspector observed at 5BW Rain Water Diverter plate carbon arc gouged and flush ground grinding was being performed for Counter Weight side.

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
Reviewed By:	Carreon,Albert	QA Reviewer
