

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018876**Date Inspected:** 26-Dec-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)**Location:** Shanghai, China**CWI Name:** Li Yang and Zhu Zhong Hai**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 Mr. 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) at Trial Assembly Areas

Segment 14AE to Segment 14BE (U-Rib to U-Rib)

This QA Inspector performed Dimension Control Inspection for measuring offset along with Caltrans QA Inspector Mr. Murugan Manikandan on the U-Rib to U-Rib from Cross Beam side towards Bike Path side at a total of 36 locations on Segment 14AE to Segment 14BE between Panel Points (PP) 127.3 to PP 127.5 at the following locations:

The offset was measured within 50mm from the Deck Panel on U-Rib on the South and North side. The QA Inspector measured the Offset using 1(One) Meter Straight Edge.

The measurements were recorded in the Dimension Control Plan (DCP) on a separate form and submitted to the Lead Inspector and Engineer for review and disposition.

Note: As per design at location 13; 20 and 27 there are no U-Ribs.

WELDING INSPECTION REPORT

(Continued Page 2 of 4)

Bike Path Cantilever Support (at OBG Trail Assembly)

This QA Inspector performed Dimension Inspection to check and measure various items of the Bike Path Cantilever support at Orthotropic Box Girder (OBG) and the following items were inspected.

Bike Path type identified as BK1A.

1. Overall length of support (end of cantilever to edge panel contact flange) at east and west side.
2. Distance from end of cantilever to nearest anchor bolt at east and west side.
3. Longitudinal center to center spacing between anchor bolts at east and west side
4. Transverse center to center spacing between anchor bolts at east and west side.

The inspected Bike Path supports identified as below.

BK001-010 at PP 103 for Segment 11CE

BK001-012 at PP 105 for Segment 11DE

BK001-013 at PP 107 for Segment 11EE

The measurements were recorded in the Dimension Control Plan (DCP) on a separate form and submitted to the Lead Inspector and Engineer for review and disposition.

Segment 12AW to Segment 12BW (Deck Panel I-Rib Stiffeners)

This QA Inspector observed the in-process welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as 3039-001-024. The welder identification was 041713 and observed welding in the 3G (Vertical) position using approved Welding Procedure Specification WPS-B-T-3213-B-U3b. The piece mark was identified as Deck Panel I-Rib splice weld at Cross Beam side.

Segment 12AW to Segment 12BW (Deck Panel I-Rib Stiffeners)

This QA Inspector observed the in-process welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as 3049-001-040. The welder identification was 057333 and observed welding in the 3G (Vertical) position using approved Welding Procedure Specification WPS-B-T-3213-B-U3b. The piece mark was identified as Deck Panel I-Rib splice weld at Counter Weight side.

Segment 12AW to Segment 12BW (Deck Panel Transverse Splice)

This QA Inspector observed the in-process welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as OBW12-001. The welder

WELDING INSPECTION REPORT

(Continued Page 3 of 4)

identification was 044551, 046709 and 040656 and was observed welding in the 4G (Overhead) position using approved Welding Procedure Specification WPS-B-P-2214-B-U2-FCM-1. The piece mark was identified as the Deck Panel, transverse splice weld.

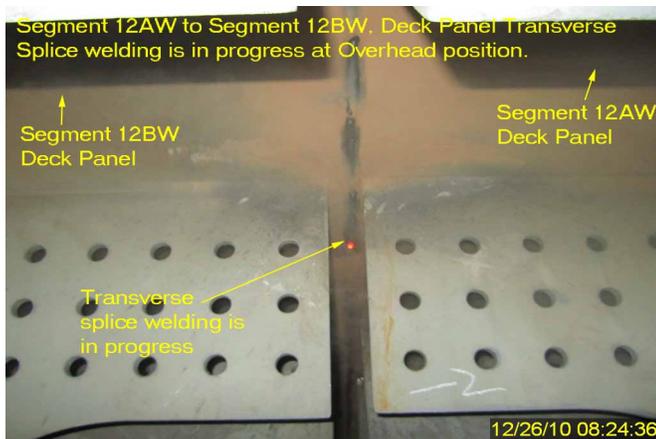
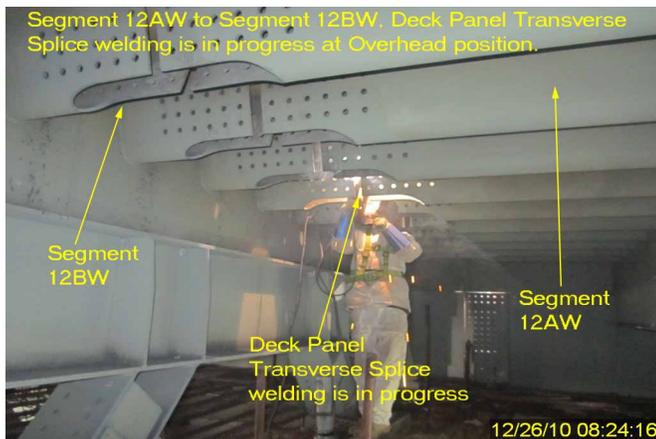
Please reference the pictures attached for more comprehensive details.

Segment 12AW (Full Height Diaphragm)

This QA Inspector observed the in-process welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as Seg3004V-051. The welder identification was 046704 and was observed welding in the 2G (Horizontal) position using approved Welding Procedure Specification WPS-B-P-2212-Tc-U4b-FCM-1. The piece mark was identified as full height Longitudinal Diaphragm web to Bottom Panel hold back weld at work point W4.

Please reference the pictures attached for more comprehensive details.

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



Summary of Conversations:

WELDING INSPECTION REPORT

(Continued Page 4 of 4)

No relevant conversations were reported on this date.

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 Tsang 150000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Math,Manjunath	Quality Assurance Inspector
Reviewed By:	Dsouza,Christopher	QA Reviewer
