

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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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-016150**Date Inspected:** 11-Aug-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), Changxing Island **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) Trial Assembly Areas

Segment 9BW to Segment 9CW (Skin Flatness)

This QA Inspector performed Joint Inspection along with the ABF Survey Team to check the Skin Flatness between Segment 9BW to Segment 9CW between Panel Points (PP) 76 and PP 77 at the following locations:

The skin flatness was measured on North side (Cross Beam side at B1 and B2 location) and South side (Bike Path side at B3 and B4 location) at 100mm from the weld connecting Bottom Panel to Side Panel using 5000mm string line to verify overall flatness. Straight Edges of 600mm and 630 mm of length was also used to measure the localized flatness.

The skin flatness was measured on North side (Cross Beam side at T1 location) and South side (Bike Path side at T2 location) at 100mm from the weld connecting Deck Panel to Edge Panel using 5000mm string line to verify overall flatness. The Straight Edge of 600mm and 630 mm length was also used to measure the localized flatness.

WELDING INSPECTION REPORT

(Continued Page 2 of 4)

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 9EW to 10AW

This QA Inspector performed Dimension Control Inspection along with Caltrans QA Mr. Manoj Prabhune for measuring Root Gap and Offset at the Transverse Splice for the Segment 9EW to Segment 10AW between Panel Point (PP) 85 to PP 86 at the following locations:

Work Point W5 towards Work Point W6 (Edge Panel Cross Beam Side).

Work Point W6 towards Work Point W4 (Side Panel Cross Beam Side).

Work Point W4 towards Work Point W3 (Bottom Panel).

Work Point W3 towards Work Point W1 (Side Panel Counter Weight Side).

Work Point W1 towards Work Point W2 (Edge Panel Counter Weight Side).

Work Point W2 towards Work Point W5 (Deck Panel).

The QA Inspector measured the Root Gap using 1(One) Taper Gauge and measured the Offset using a Bridge Cam gauge.

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 9BW to Segment 9CW

This QA Inspector observed the repair welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as EP112-001-013. The welder identification was 067609 and was observed welding in the 4G (Overhead) position using approved Welding Procedure Specification WPS-345-SMAW-4G(4F)-FCM-Repair-1. The piece mark was identified as the Edge Panel I-Ribs, Counter Weight side. ZPMC performed repair welding in accordance with CWR-14507.

Segment 9BW to Segment 9CW

This QA Inspector observed the repair welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as EP112-001-014. The welder identification was 067609 and was observed welding in the 4G (Overhead) position using approved Welding Procedure Specification WPS-345-SMAW-4G(4F)-FCM-Repair-1. The piece mark was identified as the Edge Panel I-Ribs, Counter Weight side. ZPMC performed repair welding in accordance with CWR-14508.

Segment 9BW to Segment 9CW

WELDING INSPECTION REPORT

(Continued Page 3 of 4)

This QA Inspector observed the repair welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as DP685-001-021. The welder identification was 045196 and was observed welding in the 3G (Vertical) position using approved Welding Procedure Specification WPS-485-SMAW-3G(3F)-FCM-Repair-1. The piece mark was identified as the Deck Panel I-Ribs, Cross Beam side. ZPMC performed repair welding in accordance with CWR-14513.

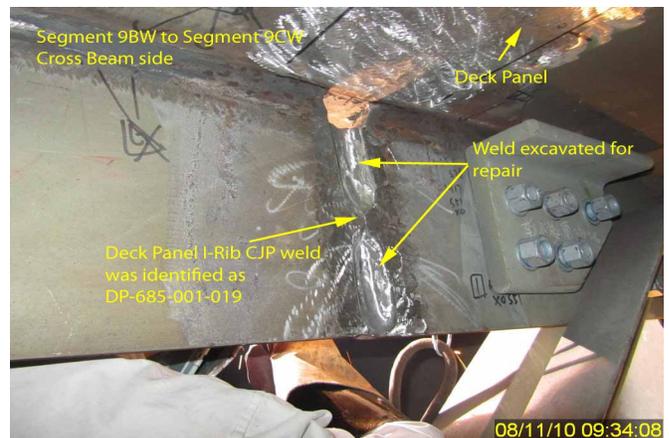
Segment 9BW to Segment 9CW

This QA Inspector observed the repair welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as DP685-001-020. The welder identification was 045196 and was observed welding in the 3G (Vertical) position using approved Welding Procedure Specification WPS-485-SMAW-3G(3F)-FCM-Repair-1. The piece mark was identified as the Deck Panel I-Ribs, Cross Beam side. ZPMC performed repair welding in accordance with CWR-14514.

Segment 9BW to Segment 9CW

This QA Inspector observed the repair welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as DP685-001-019. The welder identification was 045196 and was observed welding in the 3G (Vertical) position using approved Welding Procedure Specification WPS-485-SMAW-3G(3F)-FCM-Repair-1. The piece mark was identified as the Deck Panel I-Ribs, Cross Beam side. ZPMC performed repair welding in accordance with CWR-14515. 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:

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

WELDING INSPECTION REPORT

(Continued Page 4 of 4)

your project.

Inspected By:	Math,Manjunath	Quality Assurance Inspector
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Reviewed By:	Peterson,Art	QA Reviewer
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