

**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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-023007**Date Inspected:** 25-Apr-2011**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

<b>CWI Name:</b>	N/A	<b>CWI Present:</b>	<b>Yes</b>	<b>No</b>
<b>Inspected CWI report:</b>	<b>Yes</b> <b>No</b> <b>N/A</b>	<b>Rod Oven in Use:</b>	<b>Yes</b>	<b>No</b> <b>N/A</b>
<b>Electrode to specification:</b>	<b>Yes</b> <b>No</b> <b>N/A</b>	<b>Weld Procedures Followed:</b>	<b>Yes</b>	<b>No</b> <b>N/A</b>
<b>Qualified Welders:</b>	<b>Yes</b> <b>No</b> <b>N/A</b>	<b>Verified Joint Fit-up:</b>	<b>Yes</b>	<b>No</b> <b>N/A</b>
<b>Approved Drawings:</b>	<b>Yes</b> <b>No</b> <b>N/A</b>	<b>Approved WPS:</b>	<b>Yes</b>	<b>No</b> <b>N/A</b>
<b>Bridge No:</b>	34-0006	<b>Delayed / Cancelled:</b>	<b>Yes</b>	<b>No</b> <b>N/A</b>
		<b>Component:</b>	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 12CE to Segment 13AE (Root Gap and Offset) for Field Splice

This QA Inspector performed Dimension Control Inspection for measuring root gap and offset on at the Transverse Splice for the Segment 12CE to Segment 13AE (Field Splice) between Panel Point (PP) 117 to PP 117.5 at the following locations:

Work Point E2 towards Work Point E11 at each I-Rib (Edge Panel Bike Path Side).

Work Point E11 towards Work Point E13 at each I-Rib and T-Ribs (Side Panel Bike Path Side).

Work Point E13 towards Work Point E3 at each I-Rib (Bottom Panel).

Work Point E3 towards Work Point E4 at each T-Rib (Bottom Panel).

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Work Point E4 towards Work Point E14 at each I-Rib (Bottom Panel).

Work Point E14 towards Work Point E16 at each I-Rib and T-Ribs (Side Panel Cross Beam Side).

Work Point E16 towards Work Point E5 at each I-Rib (Edge Panel Cross Beam Side).

Work Point E5 towards Work Point E2 at each I-Rib (Cross Beam side), at each U-Rib and at each I-Rib (Bike Path side) at Deck Panel.

The QA Inspector measured the root gap using taper gauge and measured the offset using a bridge cam gauge, observed few locations root gap does not meet the requirement same has been conveyed to ABF QA Mr. Zhang Xiao Bin and ZPMC QC Song Hui in-turn they confirmed to re-offer inspection to Caltrans QA after rectification.

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 12CW to Segment 13AW (Root Gap and Offset) for Field Splice

This QA Inspector performed Dimension Control Inspection for measuring root gap and offset on at the Transverse Splice for the Segment 12CW to Segment 13AW (Field Splice) between Panel Point (PP) 117 to PP 117.5 at the following locations:

Work Point W5 towards Work Point W16 at each I-Rib (Edge Panel Bike Path Side).

Work Point W16 towards Work Point W14 at each I-Rib and T-Ribs (Side Panel Bike Path Side).

Work Point W14 towards Work Point W4 at each I-Rib (Bottom Panel).

Work Point W4 towards Work Point W3 at each T-Rib (Bottom Panel).

Work Point W3 towards Work Point W13 at each I-Rib (Bottom Panel).

Work Point E13 towards Work Point W11 at each I-Rib and T-Ribs (Side Panel Cross Beam Side).

Work Point E11 towards Work Point W2 at each I-Rib (Edge Panel Cross Beam Side).

Work Point W2 towards Work Point W5 at each I-Rib (Counter Weight side), at each U-Rib and at each I-Rib (Cross Beam side) at Deck Panel.

The QA Inspector measured the root gap using taper gauge and measured the offset using a bridge cam gauge, observed few locations root gap does not meet the requirement same has been conveyed to ABF QA Mr. Zhang Xiao Bin and ZPMC QC Song Hui in-turn they confirmed to re-offer inspection to Caltrans QA after rectification.

The measurements were recorded in the Dimension Control Plan (DCP) on a separate form and submitted to the

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Lead Inspector and Engineer for review and disposition.

Suspender Bracket at Bay # 19

This QA Inspector performed Dimension Control Inspection along with ABF QA Inspector to check and measure the Suspender Bracket (SB) lifting rod hole spacing by placing the socket template at the following suspender brackets.

SB110W which will be installed at Segment 12AW, Counter Weight side.

SB 110E which will be installed at Segment 12AE, Bike Path side.

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.

Bike Path at Bay # 10

This QA Inspector performed Dimension Control Inspection on the Bike Path bottom plate for flatness check across the longitudinal butt weld. Flatness check was performed on following mentioned Bike Paths and Bike Path are identified as:

BK014A-001.

The QA Inspector measured the flatness using 600mm long straight edge across the Butt (CJP) weld and using 1500mm long straight edge between the stiffeners which are plug weld to bottom plate.

Observed flatness within the allowable tolerance. Inspection was performed against the Inspection Notification # 08922.

The result of the inspection was informed to ZPMC QC Supervisor Mr. Xu Le Feng, ABF Mr. Man Kam Hon and Caltrans Lead Inspector Mr. Mark Miller and Mr. Hiranch Patel.

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 15000422372, who represents the Office of Structural Materials for your project.

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**Inspected By:** Math,Manjunath

Quality Assurance Inspector

**Reviewed By:** Miller,Mark

QA Reviewer