

**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-026041**Date Inspected:** 04-Jul-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>	Yes	No
<b>Inspected CWI report:</b>	Yes No N/A	<b>Rod Oven in Use:</b>	Yes No N/A	
<b>Electrode to specification:</b>	Yes No N/A	<b>Weld Procedures Followed:</b>	Yes No N/A	
<b>Qualified Welders:</b>	Yes No N/A	<b>Verified Joint Fit-up:</b>	Yes No N/A	
<b>Approved Drawings:</b>	Yes No N/A	<b>Approved WPS:</b>	Yes No N/A	
		<b>Delayed / Cancelled:</b>	Yes No N/A	
<b>Bridge No:</b>	34-0006	<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

Traveler Rails behind Paint Shop # 2

This QA Inspector witnessed the final bolt tension verification on bolts connecting the Traveler Rails behind the Paint Shop #2. The QA Inspector verified the bolt tension for bolts connecting the Angle piece to Traveler Rail web on a random basis and the results appeared not to be in general compliance.

The bolt sizes used were M16 x 75 RC Lot # DHGM160023 and the final torque value established was 190 N-m.

The bolt sizes used were 5/8" x 3" RC Lot # DHG51195 and the final torque value established was 183 N-m.

The Manual Torque wrench used was Serial No. XO2-777.

The Traveler Rail on which bolt tension verification performed are identified as depicted below total 4 pieces.

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Traveler Rail # 11TR3-016 -ES 106~108.

Traveler Rail # 11TR3-004 -EB 106~108.

Traveler Rail # 10TR3-013 -BP 106~108.

Traveler Rail # 10TR3-021 –SP106~108.

Inspection Results: The QA Inspector observed gap between the Angle Piece installed at center of the traveler rail Flange asked the ZPMC QC to fix it. Thus ZPMC QC cancelled the Inspection and informed the QA that he will re-offer after rectification.

Traveler Rails behind Paint Shop # 2

This QA Inspector witnessed the final bolt tension verification on bolts connecting the Traveler Rails behind the Paint Shop #2. The QA Inspector verified the bolt tension for bolts connecting the Angle piece to Traveler Rail web on a random basis and the results appeared to be in general compliance.

The bolt sizes used were M16 x 75 RC Lot # DHGM160023 and the final torque value established was 190 N-m.

The bolt sizes used were 5/8" x 3" RC Lot # DHG51195 and the final torque value established was 183 N-m.

The Manual Torque wrench used was Serial No. XO2-777.

The Traveler Rail on which bolt tension verification performed are identified as depicted below total 4 pieces.

Traveler Rail # 11TR3-016 -ES 106~108.

Traveler Rail # 11TR3-004 -EB 106~108.

Traveler Rail # 10TR3-013 -BP 106~108.

Traveler Rail # 10TR3-021 –SP106~108.

Inspection Results: The QA Inspector observed gap between the Angle Piece installed at center of the traveler rail Flange is mitigated by adding shim plates and torque by using a temporary bolts, the gap was checked and observed within the tolerance. Thus the above mentioned traveler Rails were accepted.

Please reference the pictures attached for more comprehensive details.

Segment 13BE (Vertical Plate, Stiffener)

This QA Inspector performed Dimension Control Inspection on the Vertical Plate Stiffener at Bike Path side between work point E18 to E17.

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Observed the first Stiffener from the bottom distortion as 31mm, between PP 120.5 to PP 121.

Observed the first Stiffener from the bottom distortion as 25mm, between PP 121.5 to PP 122.

The measurements were recorded and forwarded to Lead Inspector Mr. Mark Miller for review, disposition and for adding it in the Master Punch List.

Segment 13BE to Segment 13CE (Vertical Plate, Stiffener)

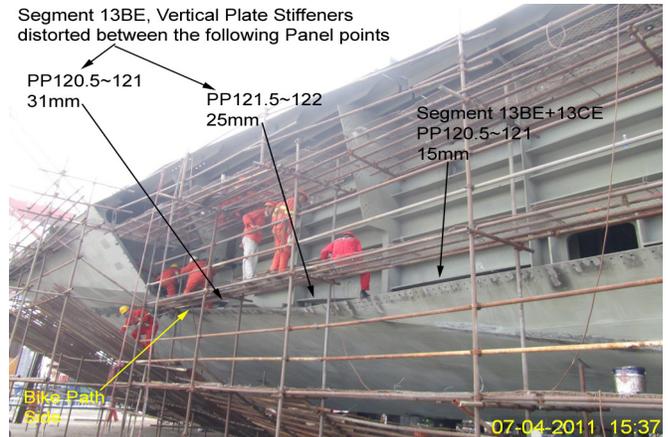
This QA Inspector performed Dimension Control Inspection on the Vertical Plate Stiffener at Bike Path side between work point E18 to E17.

Observed the first Stiffener from the bottom distortion as 15mm, between PP 122 to PP 122.5.

The measurements were recorded and forwarded to Lead Inspector Mr. Mark Miller for review, disposition and for adding it in the Master Punch List.

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.



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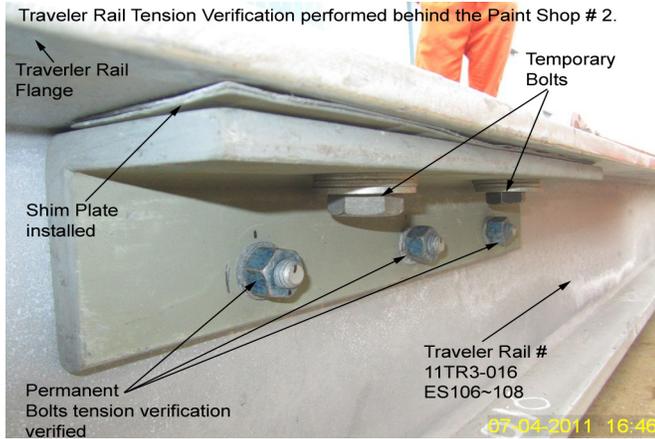
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## Summary of Conversations:

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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<b>Inspected By:</b>	Math,Manjunath	Quality Assurance Inspector
<b>Reviewed By:</b>	Miller,Mark	QA Reviewer

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