

**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-016714**Date Inspected:** 20-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

<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>	Orthotropic Box Girder (OBG)	

**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Manoj Prabhune was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

This QA Inspector randomly observed the following work in progress:

**OBG # TRIAL ASSEMBLY YARD**

This Quality Assurance (QA) received ZPMC inspection notification sheet 00458 to perform final tension verification for Corner Assembly connecting the Road Barrier Brackets, Inclined Truss Post and Vertical Truss Post at Cross Beam and Bike Path side between Panel Points (PP) 79 to PP 85 for Segment 9AW. Inspected 10% on a random basis and found the tension to be in general compliance.

Bolt sizes used were M22 x 55 DHGM220011 and final torque required was 457 N-m.

Bolt sizes used were M22 x 85 DHGM220013 and final torque required was 433 N-m.

Bolt sizes used were M22 x 120 DHGM220053 and final torque required was 440 N-m.

Bolt sizes used were M24 x 60 DHGM220014 and final torque required was 567 N-m.

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Bolt sizes used were M22 x 85 DHGM220013 and final torque required was 540 N-m.

Bolt sizes used were M22 x 85 DHGM220013 and final torque required was 533 N-m.

Manual Torque wrench was been used with Sr. No. XO2-666

Note: Except Panel Point 79.5 to PP80 Cross beam side & Panel Point 82.5 to PP83 Bike Path & Cross Beam side balance.

Segment # 9BE ~9CE

This Quality Assurance (QA) received ZPMC inspection notification sheet 00458 to perform final tension verification for Longitudinal Diaphragm to Longitudinal Diaphragm from Bike path side & Cross Beam Side at Panel point 76 & 77 for Segment 9BE ~ 9CE. Inspected 10% on a random basis and found the tension to be in general compliance.

Bolt sizes used were M24 x 70 DHGM240075 and final torque required was 680 N-m.

Bolt sizes used were M24 x 95 DHGM240021 and final torque required was 540 N-m.

Manual Torque wrench was been used with Sr. No. XO2-666

Segment # 9BE ~ 9CE

This Quality Assurance (QA) received ZPMC inspection notification sheet 00458 to perform final tension verification for T-rib to T-rib (Bike path side & Cross Beam Side) & Bottom Panel at Panel point 76 & 77 for Segment 9BE ~ 9CE. Inspected 10% on a random basis and found the tension to be in general compliance.

Bolt sizes used were M22 x 65 DHGM220002 and final torque required was 513 N-m.

Bolt sizes used were M22 x 70 DHGM220028 and final torque required was 440 N-m.

Manual Torque wrench was been used with Sr. No. XO2-666

Segment # 9BW ~ 9CW

This QA inspector performed Magnetic Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT reports for this date. The members are identified as Tower Components. The weld designations reviewed are as follows.

OBW9-010, OBW9B-009 / 010, OBW9B-008

Nondestructive testing (NDT) notification No. 004956

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

**Summary of Conversations:**

Only general conversation was held between QA and QC concerning this project.

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

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<b>Inspected By:</b>	Prabhune,Manoj	Quality Assurance Inspector
<b>Reviewed By:</b>	Patterson,Rodney	QA Reviewer

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