

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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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-012007**Date Inspected:** 08-Feb-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:** Mr. Wuzhi Chang/Mr. Li Yang**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:** Orthotropic Box Girder (OBG)**Summary of Items Observed:**

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

Bay 11, Bolt Tension Test.

This QA inspector witnessed the lot testing of the A325M High Strength Bolts to determine the torque values for the minimum tension required. Below is a list of the lots tested and the average torque values determined. Also witnessed the testing for rotational capacity on same lot numbers.

1. Bolt Lot No: 5887Z, size M20 x 55, RC Set# DHGM200008, Nut Lot No: MD411Y, Washer Lot No: B8830Y and average torque value was 367 N-m.

2. Bolt Lot No: 6115Z, size M20 x 65, RC Set# DHGM200017, Nut Lot No: NS321Z, Washer Lot No: B8830Y and average torque value was 347 N-m.

3. Bolt Lot No: 6116Z, size M20 x 95, RC Set# DHGM200018, Nut Lot No: NS321Z, Washer Lot No: B8830Y and average torque value was 347 N-m.

4. Bolt Lot No: 6117Z, size M20 x 150, RC Set# DHGM200019, Nut Lot No: NS321Z, Washer Lot No: B8830Y and average torque value was 343 N-m.

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5. Bolt Lot No: 6117Y, size M20 x 150, RC Set# DHGM200023, Nut Lot No: NS321Z, Washer Lot No: B8830Y and average torque value was 340 N-m.

6. Bolt Lot No: 6737Z, size M20 x 150, RC Set# DHGM200025, Nut Lot No: NS321Z, Washer Lot No: B8830Y and average torque value was 333 N-m.

Torque wrench was been used with Sr. No. 2# and Skidmore No: 13865.

OBG TRIAL ASSEMBLY

SEGMENT: 5CW

This QA Inspector observed ZPMC personnel performing Heat Straightening on weld joint no: SEG025A. The weld is connecting to Side plate (SP93A) and Side plate (SP411A) plate thickness is 18 mm. Against Caltrans Engineer approved document No: HSR (B)-350.Rev 0.

The attached photographs provide additional detail.

SEGMENT: 7BW

Flux Cored Arc Welding (FCAW) welding of weld joint OBW7B-008. Welder is identified as 045143. ZPMC Quality Control (QC) is identified as Mr. Li Yang. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-2231T.

Shielded Metal Arc Welding (SMAW) welding of weld joint SEG035-044. Welder is identified as 068917. ZPMC Quality Control (QC) is identified as Mr. Mr. Li Yang. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-P-2234-TC-U4b-FCM-1.

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



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Summary of Conversations:

Only general conversation was held between QA and Quality Control (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 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Prabhu,Surendra	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer
