

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-016887**Date Inspected:** 01-Sep-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:** 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:** 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

Segment # 9CE ~ 9DE

This Quality Assurance (QA) received ZPMC inspection notification sheet 00472 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 80 for Segment 9CE to 9DE. 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 M24 x 65 DHGM220013 and final torque required was 540 N-m.

Bolt sizes used were M24 x 80 DHGM220013 and final torque required was 533 N-m.

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

Segment # 9DE ~ 9EE

This Quality Assurance (QA) received ZPMC inspection notification sheet 00472 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) 82 to PP 83 for Segment 9DE to 9EE. 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.

Bolt sizes used were M24 x 65 DHGM220013 and final torque required was 540 N-m.

Bolt sizes used were M24 x 80 DHGM220013 and final torque required was 533 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 00472 to perform final tension verification for Retrofit Plate from Bike path side & Cross Beam Side at Panel point 74 to 75 and 81 to 82 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 70 DHGM220029 and final torque required was 447 N-m.

Manual Torque wrench was been used with Sr. No. XO2-666. See the attached Photo.

Segment # 9BE ~ 9CE

This Quality Assurance (QA) received ZPMC inspection notification sheet 00472 to perform final tension verification for T-rib to T-rib (16th 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.

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

Segment # 10AE ~ 10BE

This QA inspector observed, ZPMC qualified welding personnel identified as 040320 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SP711-001-031; ZPMC QC is identified as Mr. Wang Li Yang. The welding parameters measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2214-B-U2-FCM-1. See the attached Photo.

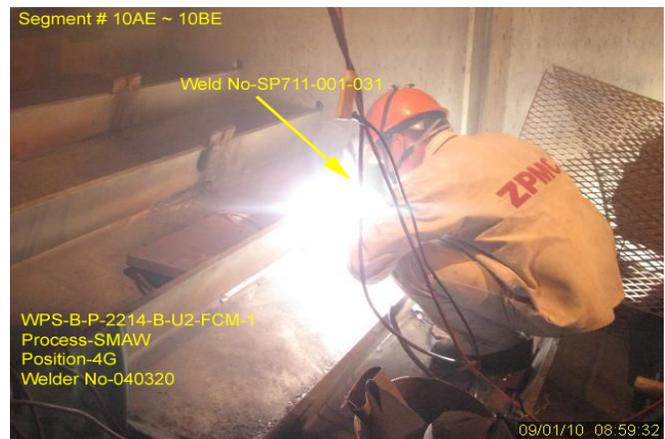
Segment # 10BW ~ 10CW

This QA inspector observed, ZPMC qualified welding personnel identified as 053316 perform Shielded Metal Arc Welding (SMAW), weld joint identified as OBE10C-004; ZPMC QC is identified as Mr. Wang Li Yang. The welding parameters measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2233T-1.

Segment # 10BW ~ 10CW

This QA inspector observed, ZPMC qualified welding personnel identified as 202384 perform Shielded Metal Arc Welding (SMAW), weld joint identified as BP157-001-020; ZPMC QC is identified as Mr. Wang Li Yang. The welding parameters measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2213-B-U2-FCM-1.

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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| Inspected By: | Prabhune,Manoj | Quality Assurance Inspector |
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| Reviewed By: | Patterson,Rodney | QA Reviewer |
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