

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-015650**Date Inspected:** 16-Jul-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:** 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:** OBG Segment**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. M. Manikandan was present during the time noted above for observations relative to the work being performed.

ZPMC SHIP # 19 (Lift 7E)

This QA Inspector witnessed the final bolt tension verification on the retrofit plates of segment 7DE to 7EE. The torque wrench S/N was X02-666. The QA Inspector witnessed 10% of the bolts on a random basis and found the tensioning of the bolts appeared to be in general compliance. The panel point and bolt size designations were as follows:

PP 58 to PP 59:

M24 X 70 – DHGM 240075 – 680 NM.

M24 X 90 – DHGM 240076 – 474 NM.

M24 X 85 – DHGM 240019 – 550 NM.

M24 X 75 – DHGM 240020 – 600 NM.

M24 X 60 – DHGM 240027 – 572 NM.

For additional information please reference the pictures below:

OBG # OUTSIDE YARD (Lift 8E)

This QA Inspector witnessed the final bolt tension verification on the corner assembly angles of Lift 8E. The

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torque wrench S/N was X02-666. The QA Inspector witnessed 10% of the bolts on a random basis and found the tensioning of the bolts appeared to be in general compliance. The panel point and bolt size designations were as follows:

PP 61 and PP 71:

M22 X 120 – DHGM 220052 – 463 NM.

OBG # OUTSIDE YARD (8AE)

This QA Inspector witnessed the final bolt tension verification on the catwalk support of 8AE-FL3. The torque wrench S/N was X02-779. The QA Inspector witnessed 10% of the bolts on a random basis and found the tensioning of the bolts appeared to be in general compliance. The panel point and bolt size designations were as follows:

PP 63 to PP 64:

M16 X 45 – DHGM 160001 – 210 NM.

M16 X 50 – DHGM 160011 – 200 NM.

OBG # OUTSIDE YARD (8CE)

This QA Inspector witnessed the final bolt tension verification on the catwalk support of 8CE-FL3. The torque wrench S/N was X02-779. The QA Inspector witnessed 10% of the bolts on a random basis and found the tensioning of the bolts appeared to be in general compliance. The panel point and bolt size designations were as follows:

PP 69 to PP 70:

M16 X 45 – DHGM 160001 – 210 NM.

M16 X 50 – DHGM 160011 – 200 NM.

ZPMC SHIP # 19 (CB7)

This QA Inspector witnessed the final bolt tension verification on the catwalk railing of crossbeam 7. The QA Inspector witnessed 10% of the bolts on a random basis and found the tensioning of the bolts appeared to be in general compliance. The panel point and bolt size designations were as follows:

M16 X 95 – DHGM 160017 – 153 NM.

ZPMC SHIP # 19 (CB8)

This QA Inspector witnessed the final bolt tension verification on the catwalk railing of crossbeam 8. The QA Inspector witnessed 10% of the bolts on a random basis and found the tensioning of the bolts appeared to be in general compliance. The panel point and bolt size designations were as follows:

M16 X 95 – DHGM 160017 – 153 NM.

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This QA Inspector randomly observed the following work in progress:

OBG # TRIAL ASSEMBLY YARD (9DE-9EE)

The QA Inspector observed the welding operation per the FCAW process on weld joint no. 031 in the (3G) vertical position on side panel I stiffener piece mark number SP709-001. The location was the complete joint penetration groove weld joining the I stiffeners of segment 9DE and 9EE. The welder ID was 068493. The ZPMC CWI was identified as Li Yang. The welding variables recorded by QC appeared to comply with the WPS-B-T-2233T.

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.

Inspected By:	Manikandan, Murugan	Quality Assurance Inspector
Reviewed By:	Peterson, Art	QA Reviewer
