

**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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018608**Date Inspected:** 14-Dec-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.

**OBG # TRIAL ASSEMBLY YARD (11EW-12AW)**

This QA Inspector along with QA Inspector Mr. Manjunath S Math performed dimensional joint survey inspection on the WT stiffeners to verify the horizontal and vertical offset using 1000mm straight edge and bridge cam gauge. The measurements were recorded on a separate sheet and forwarded to team leader for review and disposition. The segment and panel point designations were as follows:

Segment 11EW to Segment 12AW – PP 108 to PP 109

This QA Inspector randomly observed the following work in progress:

**OBG # TRIAL ASSEMBLY YARD (12BE)**

The QA Inspector observed the welding operation per the SMAW process on weld joint no. 013 in the (2F) horizontal position on bottom panel WT stiffener piece mark no. BP3004-001. The location was the hold back of WT stiffener fillet weld of segment 12BE. The welder ID was 044515. The ZPMC CWI was identified as Li Yang. The welding variables recorded by QC appeared to comply with the WPS-B-P-2112-FCM-1.

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## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

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The QA Inspector observed the welding operation per the SMAW process on weld joint no. 022 in the (2F) horizontal position on bottom panel WT stiffener piece mark no. BP3005-001. The location was the hold back of WT stiffener fillet weld of segment 12BE. The welder ID was 040320. The ZPMC CWI was identified as Li Yang. The welding variables recorded by QC appeared to comply with the WPS-B-P-2112-FCM-1.

The QA Inspector observed the welding operation per the SMAW process on weld joint no. 018 in the (2F) horizontal position on bottom panel WT stiffener piece mark no. BP3006-001. The location was the hold back of WT stiffener fillet weld of segment 12BE. The welder ID was 050289. The ZPMC CWI was identified as Li Yang. The welding variables recorded by QC appeared to comply with the WPS-B-P-2112-FCM-1.

### OBG # TRIAL ASSEMBLY YARD (12AE-12BE)

The QA Inspector observed the welding operation per the FCAW process on weld joint no. 001 in the (3G) vertical position on side panel piece mark no. OBE12D. The location was the transverse splice weld joining segment 12AE and 12BE at work point E4 to E6. The welder ID was 047353. The ZPMC CWI was identified as Li Yang. The welding variables recorded by QC appeared to comply with the WPS-B-T-2233T-ESAB.

The QA Inspector observed the welding operation per the FCAW process on weld joint no. 001 in the (3G) vertical position on side panel piece mark no. OBE12D. The location was the transverse splice weld joining segment 12AE and 12BE at work point E4 to E6. The welder ID was 040458. The ZPMC CWI was identified as Li Yang. The welding variables recorded by QC appeared to comply with the WPS-B-T-2233T-ESAB.

The QA Inspector observed the welding operation per the FCAW process on weld joint no. 002 in the (3G) vertical position on side panel piece mark no. OBE12D. The location was the transverse splice weld joining segment 12AE and 12BE at work point E4 to E6. The welder ID was 052763. The ZPMC CWI was identified as Li Yang. The welding variables recorded by QC appeared to comply with the WPS-B-T-2233T-ESAB.

### OBG # TRIAL ASSEMBLY YARD (11CW-11DW)

The QA Inspector observed the welding operation per the SMAW process on weld joint no. 015 in the (3F) vertical position on edge panel piece mark no. OBW11E. The location was the fillet weld joining deck drainage plate with the edge panel of segment 11CW. The welder ID was 057333. The ZPMC CWI was identified as Li Yang. The welding variables recorded by QC appeared to comply with the WPS-B-P-2113-FCM-1.

### OBG # TRIAL ASSEMBLY YARD

The QA Inspector observed the welding operation per the SMAW process on weld joint no. 001 in the (1G) flat position on reinforced splice plate piece mark no. USP21-052. The location was the complete joint penetration groove weld joining the web and flange of U-rib reinforced splice plate. The welder ID was 047353. The ZPMC CWI was identified as Li Yang. The welding was performed against welding repair report B-WR19038. The welding variables recorded by QC appeared to comply with the WPS-345-SMAW-1G (1F)-FCM-Repair-1.

For additional information please reference the pictures below:

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# WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

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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>	Manikandan,Murugan	Quality Assurance Inspector
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<b>Reviewed By:</b>	Peterson,Art	QA Reviewer
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