

**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-018085**Date Inspected:** 13-Nov-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:** OBG components.**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Mr. Shailesh Wadkar 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 Inspector observed and/or found the following:

OBG Trial Assembly Yard:

This QA Inspector observed the following work in progress:

OBG Seg 11DE and 11EE:

The Shielded Metal Arc Welding (SMAW) process on weld joint no: OBE11C-008 [Side Panel (SP) to SP – E3 side; transverse splice complete joint penetration (CJP) weld]. The welders are identified as 053871 and 040320 and were observed welding in the 4G position. ZPMC Quality Control (QC) was identified as Wang Li Yang. The welding variables recorded by QC appeared to comply with WPS: B-P-2214-B-U2-FCM-1.

OBG Seg 11DE:

The SMAW process on weld joint no: CA090-002 [Deck Panel (DP) to Edge Panel (EP) – E2 side; hold back CJP weld]. The welder is identified as 044515 and was observed welding in the 4G position. ZPMC QC was identified as Wang Li Yang. The welding variables recorded by QC appeared to comply with WPS:

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B-P-2214-TC-U4b-FCM-1.

The Flux Cored Arc Welding (FCAW) process on weld joint no: SEG072A-046 (SP to EP – E6 side; hold back CJP weld). The welder is identified as 040367 and was observed welding in the 2G position. ZPMC QC was identified as Wang Li Yang. The welding variables recorded by QC appeared to comply with WPS:

B-T-2232-TC-U4b-F.

OBG Seg 11EE:

The SMAW process on weld joint no: CA094-006 (DP to EP – E2 side; hold back CJP weld). The welder is identified as 044515 and was observed welding in the 4G position. ZPMC QC was identified as Wang Li Yang. The welding variables recorded by QC appeared to comply with WPS: B-P-2214-TC-U4b-FCM-1.

The FCAW process on weld joint no: CA093-001 (SP to EP – E6 side; hold back CJP weld). The welder is identified as 040367 and was observed welding in the 2G position. ZPMC QC was identified as Wang Li Yang. The welding variables recorded by QC appeared to comply with WPS: B-T-2232-TC-U4b-F.

The SMAW process on weld joint no: SEG074C-001 [Longitudinal Diaphragm (LD) to Floor Beam (FB) – E3 side; CJP weld at Panel Point (PP): 107]. The welder is identified as 050289 and was observed welding in the 4G position. ZPMC QC was identified as Wang Li Yang. The welding variables recorded by QC appeared to comply with WPS: B-P-2214-TC-U4b-FCM-1.

OBG Seg 11CW and Seg 11DW:

Repair welding of weld joint no: OBW11A-001 (EP to EP – W2 side; CJP weld). The welder is identified as 040611 and was observed welding in the 4G position. Welding process was identified as SMAW. ZPMC QC was identified as Zhou Peng. The welding variables recorded by QC appeared to comply with WPS: 345-SMAW-4G(4F)-FCM-Repair. Repair welding was done as per Welding Repair Report (WRR): B-WR 16824 Rev-0.

OBG Seg 11DW:

This QA Inspector observed ZPMC personnel doing heat straightening on DP of Seg 11DW at Cross Beam 16 location. Heat straightening was done as per heat straightening report (HSR): HSR1 (B)-9827. ZPMC QC was identified as Zhou Peng. See attached photo for further details. See attached photos for further details.

OBG Seg 11BE:

This QA Inspector observed ZPMC personnel doing heat straightening on LD (at both E3 and E4 location) of Seg 11BE at PP101. Heat straightening was done as per HSR report: 9824. ZPMC QC was identified as Wang Li Yang. See attached photo for further details. See attached photos for further details.

Cross Beam 15 (CB15):

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The SMAW process on weld joint nos: CB202A-015-001 and 003 [(DP to East Side Panel (ESP) – CJP hold back weld and CB202A-015-013 and 015 (DP to West Side Panel (WSP) – CJP hold back weld)]. The welders are identified as 052930 and 040581 and were observed welding in the 4G position. ZPMC QC was identified as Zhu Yuan Yuan. The welding variables recorded by QC appeared to comply with WPS: B-P-2214-TC-U4b-FCM-1.

Bay 14:

OBG Seg 13BW:

Repair welding of weld joint no: SEG3014K-099. The welder is identified as 045143 and was observed welding in the 2G position. Welding process was identified as FCAW. ZPMC QC was identified as Sun Tian Ling. The welding variables recorded by QC appeared to comply with WPS: 345-FCAW-2G(2F)-FCM-Repair. Repair welding was done as per WRR: B-WR 16631 Rev-0.

The FCAW process on weld joint no: SEG3013U-095 and 096. The welder is identified as 047866 and was observed welding in the 2G position. ZPMC QC was identified as Wang Xian Ping. The welding variables recorded by QC appeared to comply with WPS: B-T-2232-TC-U4b-F.

OBG Seg 14W:

This QA Inspector observed ZPMC personnel doing fit-up of Side panel SP3131 with Bottom Panel BP3087. See attached photos for further details.

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



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## Summary of Conversations:

No significant 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; phone: 15000422372., who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Wadkar,Sailesh	Quality Assurance Inspector
<b>Reviewed By:</b>	Dsouza,Christopher	QA Reviewer

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