

**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-021657**Date Inspected:** 08-Mar-2011**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

<b>CWI Name:</b>	Mr. An Qing xiang / Mr. Sha zhi	<b>CWI Present:</b>	Yes	No
<b>Inspected CWI report:</b>	Yes No N/A	<b>Rod Oven in Use:</b>	Yes	No N/A
<b>Electrode to specification:</b>	Yes No N/A	<b>Weld Procedures Followed:</b>	Yes	No N/A
<b>Qualified Welders:</b>	Yes No N/A	<b>Verified Joint Fit-up:</b>	Yes	No N/A
<b>Approved Drawings:</b>	Yes No N/A	<b>Approved WPS:</b>	Yes	No N/A
		<b>Delayed / Cancelled:</b>	Yes	No N/A
<b>Bridge No:</b>	34-0006	<b>Component:</b>	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:

OBG Assembly bay- 14.

This QA Inspector randomly observed the following work in progress:

Shielded Metal Arc Welding (SMAW) welding of weld joint identified as SEG3013B-251. Welder is identified as 045196. ZPMC Quality Control (QC) is identified as Mr. Liu fang. The welding variables recorded by QC personnel observed appeared to comply with Welding Procedure Specification (WPS): WPS-B-P-2213-B-U2-FCM-1.

SMAW welding of weld joint identified as SEG3013D-222. Welder is identified as 065443. ZPMC Quality Control (QC) is identified as Mr. Liu fang. The welding variables recorded by QC personnel observed appeared to comply with WPS: WPS-B-P-2213-B-U2-FCM-1.

SMAW welding of weld joint identified as SA3020D-061. Welder is identified as 067520. ZPMC Quality Control (QC) is identified as Mr. Zheng zhi wei. The welding variables recorded by QC personnel observed appeared to comply with WPS: WPS-B-P-2212-TC-U4b-FCM-1.

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Flux Cored Arc Welding (FCAW) welding of weld joint identified as SEG3020L-088,089. Welder is identified as 204730. ZPMC Quality Control (QC) is identified as Mr. Zheng zhi wei. The welding variables recorded by QC personnel observed appeared to comply with WPS: WPS-B-T-2132-ESAB.

FCAW welding of weld joint identified as SEG3013L-139,140. Welder is identified as 045143. ZPMC Quality Control (QC) is identified as Mr. Liu fang. The welding variables recorded by QC personnel observed appeared to comply with WPS: WPS-B-T-2233-ESAB.

ZPMC personnel performing weld back gouging for the deck panel weld joint identified as DP3126-001-185. Refer the attached picture no 1 and 2 for reference.

ZPMC UT Technician performing Ultrasonic Testing for the weld joint identified as SEG3020AP-002. Refer the attached picture no 3 and 4 for reference.

AB/F QA Inspector performing Magnetic Particle Testing on weld back gouged area for the weld joint identified as SA3231B-001. Refer the attached picture no 5 and 6 for reference.

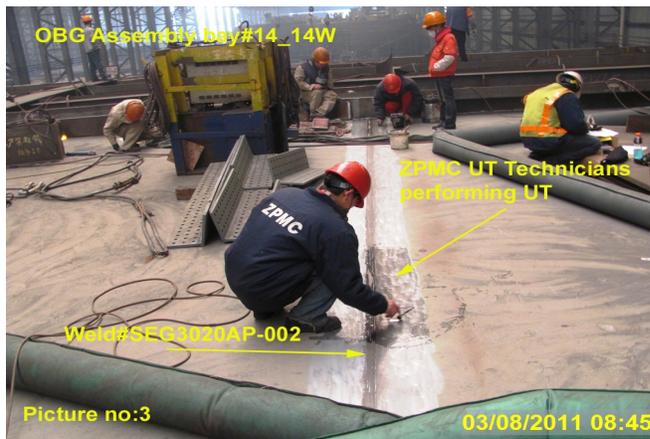
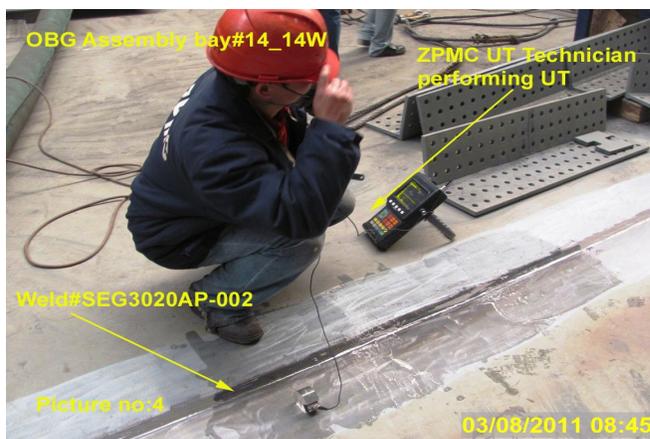
ZPMC personnel heat straightening OBG members identified as FB3325A and LD3049A at panel point no.127. The effected weld joint is identified as SEG3020X-008. Distortion appeared to be caused by welding of the material. ZPMC Quality Control (QC) inspector identified as Mr. An Qing xiang was present to monitor the heat straightening process. The heat straightening appeared to comply with Heat Straightening Report (HSR) number HSR1 (B)-10171. This QA noted that above mentioned weld joint is NDT completed on date 3/5/2011. The HSR was being performed after completion of NDT. This QA informed to QC inspector Mr. xiang. Mr. xiang informed to this QA that after completion of HSR process this joint will be re UT Tested by ZPMC QC UT Technicians. This QA Inspector also informed to Shop lead QA Inspector of this issue. Refer the attached picture no 7 and 8 for reference.

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 15000422372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Prabhu,Surendra	Quality Assurance Inspector
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<b>Reviewed By:</b>	Peterson,Art	QA Reviewer
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