

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-019266**Date Inspected:** 22-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:** Qiu Wen.**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:

Bay 14:

Notification no: 007869.

OBG Seg 13AW:

This QA inspector performed Ultrasonic Testing (UT) of approximately 10% of the area previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA Inspector generated a UT report on this date. The members are identified as OBG components. The weld designations reviewed are as follows:

- 1) SEG3013P-297, 302, 307, 312, 317, 322, 327.
- 2) SEG3013Q-132, 137, 142, 147, 152, 157, 162.

This QA Inspector observed the following work in progress:

OBG Seg 13AW:

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ZPMC personnel performing heat straightening on weld jt no: SEG3013K-003 [Floor Beam (FB) 3184A to Side Panel (SP) 3101A, complete joint penetration (CJP) weld at panel point (PP) 119-1500] and on FB3184A (at SA3167A). Heat straightening was done as per heat straightening report (HSR): 9973. Heat straightening was done to correct the distortion of FB after welding. ZPMC QC was identified as Liming Yang. See attached photo for details.

Repair welding of weld joint no: SEG3013B-017 [FB3201A to I-rib stiffener on Bottom Panel (BP), CJP weld at PP120]. The welder is identified as 066163 and was observed welding in the 3G position. Welding process was identified as Shielded Metal Arc Welding (SMAW). ZPMC QC was identified as Liming Yang. The welding variables recorded by this QC appeared to comply with Welding Procedure Specification (WPS):

345-SMAW-3G(3F)-FCM-Repair. Repair welding was done as per Welding Repair Report (WRR): B-WR 19123 Rev-0.

Repair welding of weld joint no: SEG3013L-007 [Longitudinal Diaphragm (LD) 3031A to FB3186A, CJP weld at PP119 - 1500]. The welder is identified as 066002 and was observed welding in the 3G position. Welding process was identified as SMAW. ZPMC QC was identified as Liming Yang. The welding variables recorded by this QC appeared to comply with WPS: 345-SMAW-3G(3F)-FCM-Repair. Repair welding was done as per WRR: B-WR 19237 Rev-0.

Repair welding of weld joint no: SEG3013C-126 (LD3031A to FB3202A, CJP weld at PP120). The welder is identified as 066163 and was observed welding in the 3G position. Welding process was identified as SMAW. ZPMC QC was identified as Liming Yang. The welding variables recorded by this QC appeared to comply with WPS: 345-SMAW-3G(3F)-FCM-Repair. Repair welding was done as per WRR: B-WR 19239 Rev-0.

Repair welding of weld joint no: SEG3013Q-040 (LD3031A to FB3178A, CJP weld at PP118). The welder is identified as 066002 and was observed welding in the 3G position. Welding process was identified as SMAW. ZPMC QC was identified as Liming Yang. The welding variables recorded by this QC appeared to comply with WPS: 345-SMAW-3G(3F)-FCM-Repair. Repair welding was done as per WRR: B-WR 19240 Rev-0.

OBG Seg 13BW:

Repair welding of weld joint no: SEG3014B-210 (FB3217A to I-rib on BP3061A, CJP weld at PP122). The welder is identified as 201583 and was observed welding in the 3G position. Welding process was identified as Flux Cored Arc Welding (FCAW). ZPMC QC was identified as Zhang Lin. The welding variables recorded by this QC appeared to comply with WPS: 345-FCAW-3G(3F)-ESAB-Repair. Repair welding was done as per WRR: B-WR 14310 Rev-0.

OBG Seg 14W:

The SMAW process on weld joint no: SEG3020AZ-001 (SP3143A to BP3094A, CJP weld). The welder is identified as 066261 and was observed welding in the 4G position. ZPMC QC was identified as Zhu Lin. 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: SEG3020AA-026 (LD to BP, CJP weld, at PP126). The welder is identified

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as 058245 and was observed welding in the 2G position. ZPMC QC was identified as Zhu Lin. The welding variables recorded by QC appeared to comply with WPS: B-T-2232-ESAB.

The FCAW process on weld joint no: SEG3020Y-031 (LD3049A to BP, CJP weld). The welder is identified as 045276 and was observed welding in the 2G position. ZPMC QC was identified as Zhu Lin. The welding variables recorded by QC appeared to comply with WPS: B-T-2232-ESAB.

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



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.

Inspected By:	Wadkar,Sailesh	Quality Assurance Inspector
Reviewed By:	Patterson,Rodney	QA Reviewer
