

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-017517**Date Inspected:** 22-Oct-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:** Lv Li Qing**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**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance(QA) Inspector Mr. Shrikant Utekar was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. The QA Inspector observed and/or found the following:

MAGNETIC PARTICLE TESTING

BAY # 16

ZPMC NWIT: 07058

This QA Inspector performed Magnetic Particle Testing (UT) of approximately 15% of the length previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an (MT) report on this date. The members are identified as steel barrier. The weld designations are as follows:

W5-SB1D-002-077, 078, 024, 025, 126, 127, 130, 131, 104, 105, 094, 095, 015, 016, 020, 021, 058, 051, 055, 086

ULTRASONIC TESTING

BAY # 14

ZPMC NWIT: 07069

This QA Inspector performed Ultrasonic Testing (UT) of approximately 10% of the length previously tested and

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accepted by ZPMC Quality Control personnel. This QA Inspector generated an (UT) report on this date. The members are identified as OBG13AE. The weld designations are as follows:

SEG3007AC-013, 014, 015, 016, 017, 018, 019

This QA Inspector randomly observed the following work in progress.

BAY # 14

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 045246 performing the Shielded Metal Arc Welding process on weld 008 located at PCMK SEG3015A. ZPMC QC Mr. Wang Jie was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-2214-B-u2-fcm-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 066326 performing the Shielded Metal Arc Welding process on weld 011 located at PCMK SEG3015A. ZPMC QC Mr. Wang Jie was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-2214-B-u2-fcm-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 201215 performing the Flux Cored Arc Welding process on weld 002 located at PCMK SEG3013H. ZPMC QC Mr. Wang Jie was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2232-Tc-u4b-f.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 047866 performing the Flux Cored Arc Welding process on weld 001 located at PCMK SEG3013H. ZPMC QC Mr. Wang Jie was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2232-Tc-u4b-f.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 201087 performing the Shielded Metal Arc Welding process on weld 002 located at PCMK KP3004-001. ZPMC QC Mr. Zhong Guo Hui was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-2G (2F)-Fcm-Repair. Weld repair report identified as B-WR16039.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 067520 performing the Flux Cored Arc Welding process on weld 058 located at PCMK VP3007-001. ZPMC QC Mr. Zhong Guo Hui was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2232-Tc-u4b-f.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 044801 performing the Flux Cored Arc Welding process on weld 003 located at PCMK VP3008-001. ZPMC QC Mr. Zhong Guo Hui was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2232-Tc-u4b-f.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 044824 performing the Flux Cored Arc Welding process on weld 029 located at PCMK VP3008-001. ZPMC QC Mr. Zhong Guo Hui was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2232-Tc-u4b-f.

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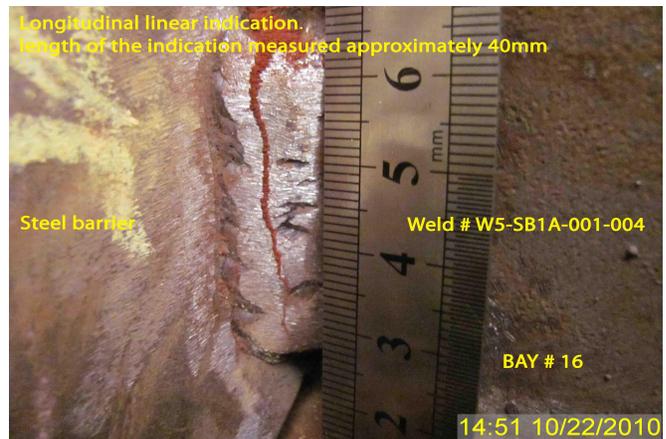
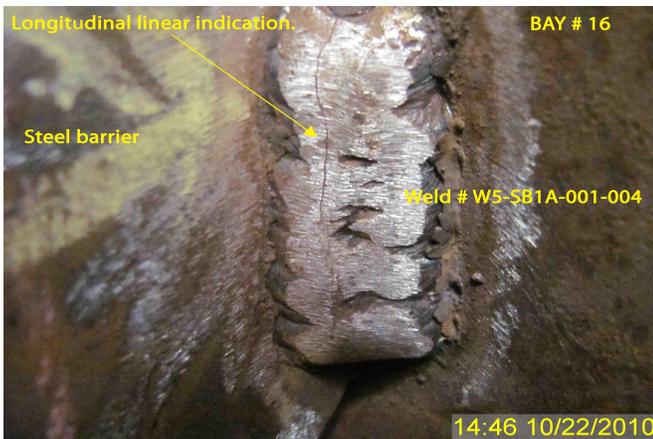
This Quality Assurance (QA) Inspector observed ZPMC qualified welder 066443 performing the Flux Cored Arc Welding process on weld 031 located at PCMK VP3008-001. ZPMC QC Mr. Zhong Guo Hui was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2232-Tc-u4b-f.

This Quality Assurance (QA) Inspector observed ZPMC personnel performing ultrasonic testing for the weld between side panel and bottom panel (counter weight side) of OBG segment 13AW. Weld numbers identified as SEG3013A-002, 003, 004, 005, 006, 007, 008, This QA Inspector observed ZPMC personnel found six rejectable indications during the inspection.

BAY # 16

This QA Inspector received Notice of Witness of Inspection (NWIT) number 07058. The NWIT stated that various steel barrier was located in Bay 16 and was ready for Quality Assurance (QA) Visual verification review. During the visual inspection this QA Inspector discovered a longitudinal linear indication that measured approximately 40mm in length. As per lead QA no need to issue the incident report, ZPMC will be fix it without issuing the incident report and they will be re-notified for visual inspection. The weld number identified as W5-SB1A-001-004, for additional detail see attached photos.

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, +(86) 1500 042 2372, who represents the Office of Structural Materials for your project.

Inspected By:	Utekar,Shrikant	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer
