

**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-022903**Date Inspected:** 16-Apr-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**CWI Name:** Gang Wei**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:

TRIAL ASSEMBLY YARD

ULTRASONIC TESTING

OBG 13BE-13CE

ABF Report No: UT-13E-24R1

This QA Inspector performed verification Ultrasonic Testing (UT) in accordance with ABF/CT Pattern "D" UT Procedure 001 Revision 1. All recordable Indications if found were recorded on a separate data sheet that Caltrans QA generates after performing a joint inspection with ABF ultrasonic testing personnel. The location of the inspection was identified as the weld between edge plate and deck plate (hold back) of OBG segment 13BE-13CE.

The weld designations were as follows:

CA3013A-003

CA3014A-098

ULTRASONIC TESTING

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## WELDING INSPECTION REPORT

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OBG 13BE-13CE

ABF Report No: UT-13E-23R1

This QA Inspector performed verification Ultrasonic Testing (UT) in accordance with ABF/CT Pattern "D" UT Procedure 001 Revision 1. All recordable Indications if found were recorded on a separate data sheet that Caltrans QA generates after performing a joint inspection with ABF ultrasonic testing personnel. The location of the inspection was identified as the edge panel splice weld between OBG 13BE-13CE. The weld designations were as follows:

OBE13A-008

This QA Inspector randomly observed the following work in progress.

OBG 14EAST

### SHIELDED METAL ARC WELDING PROCESS.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 037723 performing the Shielded Metal Arc Welding process on weld 075 located at PCMK SEG3019D-1. ZPMC QC Mr. Lv Li Qing was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2214-Tc-u5b-Fcm-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 043661 performing the Shielded Metal Arc Welding process on weld 065 located at PCMK SEG3019E-1. ZPMC QC Mr. Lv Li Qing was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2214-Tc-u4b-Fcm-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 044779 performing the Shielded Metal Arc Welding process on weld 087 located at PCMK SEG3019J. ZPMC QC Mr. Lv Li Qing was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2213-B-u2-Fcm-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 044779 performing the Shielded Metal Arc Welding process on weld 021 located at PCMK SEG3019G. ZPMC QC Mr. Lv Li Qing was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2213-B-u2-Fcm-1.

### FLUX CORED ARC WELDING PROCESS.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 067079 performing the Flux Cored Arc Welding process on weld 022 located at PCMK SEG3019M. ZPMC QC Mr. Zhu Yuan Yuan was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2233-ESAB.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 066733 performing the Flux Cored Arc Welding process on weld 021 located at PCMK SEG3019M. ZPMC QC Mr. Lv Li Qing was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2232-ESAB.

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This Quality Assurance (QA) Inspector observed ZPMC qualified welder 067877 performing the Flux Cored Arc Welding process on weld 006 located at PCMK SEG3019W. ZPMC QC Mr. Lv Li Qing was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2232-ESAB.

### WELD REPAIR

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 066418 performing the Shielded Metal Arc Welding process on weld 127 located at PCMK SEG3019BB. ZPMC QC Mr. Lv Li Qing was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-4G (4F)-Fcm-Repair-1. Weld repair report identified as B-WR20575.

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

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

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