

**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:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-009819**Date Inspected:** 21-Oct-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** Liu Zhong An  
**Inspected CWI report:** Yes No N/A  
**Electrode to specification:** Yes No N/A  
**Qualified Welders:** Yes No N/A  
**Approved Drawings:** Yes No N/A

**CWI Present:** Yes No  
**Rod Oven in Use:** Yes No N/A  
**Weld Procedures Followed:** Yes No N/A  
**Verified Joint Fit-up:** Yes No N/A  
**Approved WPS:** Yes No N/A  
**Delayed / Cancelled:** Yes No N/A

**Bridge No:** 34-0006**Component:** Tower/OBG**Summary of Items Observed:**

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

BAY #11

This QA Inspector randomly observed the following work in progress.

**EAST TOWER LIFT # 4**

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 040733 performing Shielded Metal Arc Welding process for the weld ESTL4-2B/L-58B located on PCMK corner weld between skin B and skin C of East tower lift# 4. ZPMC QC Mr. Fu Wei Min monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-345-SMAW-4G (4F) Repair.

**UTRASONIC INSPECTION****EAST TOWER LIFT # 4**

This Q.A Inspector performed Ultrasonic Testing of approximately 10% of the area previously tested and accepted by ZPMC Quality control personnel. This QA Inspector generated a (U.T) report for this date. The members are identified as work piece position at corner seam between skin A and skin B of East Tower Lift 4. Weld

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Designation is as follows.

ESTL4-2B/L-59

BAY #10

This QA Inspector randomly observed the following work in progress.

SOUTH TOWER LIFT # 4

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 040343 performing Flux Cored Arc Welding process for the weld SSSL4-G/L-94 located on PCMK South tower lift# 4. ZPMC QC Mr. Yuan Hui Gang monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-4333-TC-P4-F.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 053869 performing Flux Cored Arc Welding process for the weld SSSL4-G/L-111 located on PCMK South tower lift# 4. ZPMC QC Mr. Yuan Hui Gang monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-4332-TC-P4-F.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 053870 performing Flux Cored Arc Welding process for the weld SSSL4-C/L-38 located on PCMK South tower lift# 4. ZPMC QC Mr. Yuan Hui Gang monitoring this welding. The welding variables recorded by QC appeared to comply with the WPS-B-T-4333-TC-P4-F.

BLASTING SHOP

VISUAL INSPECTION

OBG SEGMENT 6CE

This Quality Assurance (QA) Inspector performed random visual testing after blasting on weld seam of deck panel 'U' rib, Corner unit, Top floor beam diaphragm and Chevron assembly in between PP45 and splice weld joint between OBG segment 6BE and 6CE. During the random visual inspection this Quality Assurance (QA) Inspector observed spatter, pinhole, grinding mark, undercut, and arc- strike like discontinuity in various locations. Regarding this issue this QA Inspector informed to task leader and other supervisor.

TRIAL ASSEMBLY YARD

OBSERVATION

OBG SEGMENT 1AAW- 1AW

During the random visual inspection this Quality Assurance (QA) Inspector observed ZPMC personnel gouged the bottom panel splice weld between OBG segment 2AE and 2BE. The length of gouging measured approximately 1300mm and the 'Y' location of gouged area start approximately 3550mm from cross beam side longitudinal diaphragm.

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

**Summary of Conversations:**

No relevant conversations.

**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 Serge Sinevod 13482570045, 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>	Dawson,Paul	QA Reviewer

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