

**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-017584**Date Inspected:** 15-Oct-2010**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:** See below**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:** Tower and OBG Components**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance Inspector (QA Inspector) George Goulet was present during the times noted above for observations relative to the work being performed.

**Bay 11**

This QA Inspector randomly observed the following work in progress in Bay 11:

SMAW tack welding of weld joints BK004A8-021-001, 002, 007, 130 located on PCMK OBG BK004-021, outer transverse end plate stiffener to deck plate, bearing plate, and side plates. Welder was identified as 201500. QC was identified as ZPMC CWI Yu Dong Ping (QC1). Welding variables recorded by QC1 appeared to comply with WPS-B-P-2312-TC-P4, WPS-B-P-2313-TC-P4.

SMAW welding of weld joints WSD1-FASA3-2-C/B-012, 021 located on PCMK west tower, lift 3, skin C to manhole cowling at approximately 90M elevation. Welders were identified respectively as 040690, 041271. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Xu Jie (QCA1), who was not a CWI. Welding variables recorded by QCA1 appeared to comply with WPS-B-P-2112, WPS-B-P-2113, WPS-B-P-2114.

ZPMC personnel drilling 4 – 10mm holes in an approximate 40mm x 60mm rectangular pattern from outside into, but not completely through, west tower, lift 3, top corner of skin D at skin C and top corner of skin B at skin C.

**Bay 10**

This QA Inspector randomly observed the following work in progress in Bay 10:

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# WELDING INSPECTION REPORT

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SMAW tack welding of undetermined weld joints located on PCMK BK004-028, inner transverse end plate stiffener to underside of deck plate. Welder was identified as 040649. QC was identified as ZPMC CWI Qiu Wen (QC2). QC2 informed this QA Inspector that he was unable to identify the weld joints because the workers were only fitting and tacking the plates and he had no shop drawing or weld map. Welding variables recorded by QC2 appeared to comply with WPS-B-P-2314.

Heat straightening of PCMK OBG BK004-028, deck plate. QC was identified as QC2. Heat treatment observed by this QA Inspector and recorded by QC2 appeared to comply with HSR1(B)-9343 as presented to this QA Inspector by QCA1.

ZPMC personnel performing removal of bolted attachments from north tower, lift 3.

### OBG Trial Assembly Area

This QA Inspector randomly observed the following in the OBG Trial Assembly Area:

ZPMC CWI Liu Hua Jie, ABF Representative Zhang Xiao Bin, and ABF Representative Zhang Qi Li informed this QA Inspector that no welding related work was being performed in the Trial Assembly Area.

### Heavy Dock

This QA Inspector randomly observed the following on the Heavy Dock:

All 4 towers, lift 4 were positioned on a base separate pedestal at end of the Heavy Dock. The ZPMC 4000 ton floating crane was being towed from the end of the Heavy Dock. The ZPMC 1300 ton floating crane was moored to the Heavy Dock and sitting idle. South tower, lift 3 was positioned horizontally on stanchions on the deck at the end of the Heavy Dock. No work was being performed on any of the tower components.

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

### Summary of Conversations:

No significant 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 Micheal Ng, 159-2184-5703, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Goulet,George	Quality Assurance Inspector
<b>Reviewed By:</b>	Clifford,William	QA Reviewer

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