

**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-017800**Date Inspected:** 30-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 10**

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

ZPMC workers were score drilling 33mm holes, using magnetically attached drill presses and a pattern template, at north tower, lift 5, skin A, connection plates.

**Bay 11**

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

ZPMC workers were match drilling 33mm holes, using magnetically attached drill presses, in previously scored holes at east tower, lift 5, skin A, connection plates.

ZPMC personnel installing splice plates in the bottom end of north tower, lift 3, skin A. The splice plates appeared to being installed for storage instead of in the overlap position.

**OBG Trial Assembly Area**

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

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SMAW welding of weld joint OBW11A-023 located on PCMK OBG 11BW upper counterweight attachment plate to edge plate. Welder was identified as 046709. QC was identified as ZPMC CWI Shi Lei (QC1). Also present at this location and appearing to be monitoring the welding and recording data were ABF Representatives Zhang Qi Li and Zhang Xiao Bin. Welding variables recorded by QC1 appeared to comply with WPS-B-P-2214-B-U2-FCM-1 as verbally identified by QC1.

SMAW repair welding of base metal located on PCMK OBG 11BW/11CW transverse joint area, bottom plate. Welder was identified as 962935. QC was identified as QC1. Welding variables recorded by QC1 appeared to comply with WPS-345-SMAW-4G(4F)-FCM-1 as displayed on ZPMC Weld Repair Report presented to this QA Inspector and verbally identified by QC1.

SMAW repair welding of base metal located on PCMK OBG 11BW/11CW transverse joint area, deck plate. Welder was identified as 040656. QC was identified as QC1. Welding variables recorded by QC1 appeared to comply with WPS-345-SMAW-1G(1F)-FCM-1 as displayed on ZPMC Weld Repair Report presented to this QA Inspector and verbally identified by QC1.

SMAW repair welding of base metal located on PCMK OBG 11BW/11CW transverse joint area, side plate T-rib to side plate, south (crossbeam) side, holdback welds. Welder was identified as 202316. QC was identified as QC1. Welding variables recorded by QC1 appeared to comply with WPS-345-SMAW-2G(2F)-FCM-1 as displayed on ZPMC Weld Repair Report presented to this QA Inspector and verbally identified by QC1. QC1 informed this QA Inspector that this welding was being performed to correct indications as a result of ZPMC visual testing.

ABF technicians performed ultrasonic testing on PCMK OBG 11AE/11BE, side plate to bottom plate, holdback welds, north (crossbeam) side.

### 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. No work was being performed on any of the tower components. ZPMC Goldhofer lift vehicles delivered OBG segment 10E to the seawall area adjacent to the Heavy Dock. The ZPMC 1600 ton floating crane was moored in the area near the seawall. A ship was moored to the end of the Heavy Dock.

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

### Summary of Conversations:

As noted above.

### 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
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<b>Reviewed By:</b>	Carreon, Albert	QA Reviewer
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