

**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-013710**Date Inspected:** 06-Apr-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 welding of weld joint ED1-A435B/L-1 located on PCMK east tower, skirt assembly at the base. Welder was identified as 040759. QC was identified as ZPMC CWI An Qing Xiang (QC1). Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Xu Jin Long, who was not a CWI. The welding variables recorded by QC1's assistant appeared to comply with WPS-B-T-2132.

**Bay 10**

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

Match drilling with magnetically mounted drills through previously scored holes into PCMK south tower, lift 3/lift 4 joint, skin A, from the outside in. No template was being used.

This QA Inspector randomly observed no apparent welding related work being performed in Bay 10.

**Heavy Dock**

This QA Inspector randomly observed the following work in progress on the Heavy Dock:

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FCAW welding of weld joint SSD1-SA16F/G-48 located outside PCMK south tower, lift 1 base, skin E, shear plate stiffener to connection plate. Welder was identified as 057266. ZPMC QC was identified as CWI You Qi Guo (QC2). The welding variables recorded by QC2 appeared to comply with WPS-B-T-2333-TC-P4-F. Also present at this location and appearing to be monitoring the welding related operations was ABF Representative Zhao Ying Sheng.

FCAW welding of weld joint SSD1-SA16F/G-46 located outside PCMK south tower, lift 1 base, skin E, shear plate stiffener to connection plate. Welder was identified as 057244. ZPMC QC was identified as QC2. The welding variables recorded by QC2 appeared to comply with WPS-B-T-2333-TC-P4-F. Also present at this location and appearing to be monitoring the welding related operations was ABF Representative Zhao Ying Sheng.

FCAW welding of weld joint SSD1-SA227F/G-45 located outside PCMK east tower, lift 1 base, skin E, shear plate stiffener to connection plate. Welder was identified as 040704. ZPMC QC was identified as QC2. The welding variables recorded by QC2 appeared to comply with WPS-B-T-2333-TC-P4-F. Also present at this location and appearing to be monitoring the welding related operations was ABF Representative Zhao Ying Sheng.

ABF Representative Zhao Ying Sheng informed this QA Inspector that no work was being performed at any of the tower trial assembly.

### OBG Trial Assembly Area

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

SMAW repair welding of an indication observed by visual testing by ZPMC personnel in weld joint EP065-001-014 located outside PCMK OBG 7AW, south (crossbeam) side, panel points 49 to 50. Welder was identified as 045196. ZPMC QC was identified as CWI Li Yang (QC3). Assisting QC3 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Wang Zhu, who was not a CWI. The welding variables recorded by QC3's assistant appeared to comply with WPS-B-P-2214-B-U2b-FCM.

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 Skyler Guest, 150-0042-2360, who represents the Office of Structural Materials for your project.

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**Inspected By:** Goulet, George

Quality Assurance Inspector

**Reviewed By:** Dawson, Paul

QA Reviewer