

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave. St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

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-016557**Date Inspected:** 23-Aug-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 WSD1-TL5-4B/F-4 located on PCMK west tower, lift 5, internal connection plates. Alternating welders were identified as 066413, 067656. QC was identified as ZPMC CWI Liu Yang (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-T-3213-TC-U4c.

SMAW welding of weld joint WSD1-TL5-4B/F-24 located on PCMK west tower, lift 5, internal connection plates. Alternating welders were identified as 066398, 066401. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was QCA1, who was not a CWI. Welding variables recorded by QCA1 appeared to comply with WPS-B-T-3213-TC-U4c.

SMAW welding of weld joint WSD1-TL5-4B/F-13A located on PCMK west tower, lift 5, external connection plate to skin A. Alternating welders were identified as 037780, 037743. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was QCA1, who was not a CWI. Welding variables recorded by QCA1 appeared to comply with WPS-B-T-3213-TC-U5b.

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SMAW welding of weld joint WSD1-TL5-4B/F-17A located on PCMK west tower, lift 5, external connection plate to skin A. Alternating welders were identified as 037840, 068924. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was QCA1, who was not a CWI. Welding variables recorded by QCA1 appeared to comply with WPS-B-T-3213-TC-U5b.

SMAW welding of weld joint ESD1-TL5-2B/F-19 located on PCMK east tower, lift 5, internal connection plates. Alternating welders were identified as 044541, 040724. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was QCA1, who was not a CWI. Welding variables recorded by QCA1 appeared to comply with WPS-B-T-3213-TC-U4c.

SMAW welding of weld joint ESD1-TL5-2B/F-15 located on PCMK east tower, lift 5, internal connection plates. Alternating welders were identified as 057226, 056200. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was QCA1, who was not a CWI. Welding variables recorded by QCA1 appeared to comply with WPS-B-T-3213-TC-U4c.

SMAW welding of weld joint ESD1-TL5-2B/F-20 located on PCMK east tower, lift 5, internal connection plates. Alternating welders were identified as 044504, 057220. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was QCA1, who was not a CWI. Welding variables recorded by QCA1 appeared to comply with WPS-B-T-3213-TC-U4c.

SMAW welding of weld joint ESD1-TL5-2B/F-18 located on PCMK east tower, lift 5, internal connection plate to skin D. Alternating welders were identified as 040273, 057258. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was QCA1, who was not a CWI. Welding variables recorded by QCA1 appeared to comply with WPS-B-T-3213-TC-U4c.

### Bay 10

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

SMAW welding of weld joint NSD1-TL5-3B-F-21A located on PCMK north tower, lift 5, external connection plate to skin A. Alternating welders were identified as 066258, 066361. QC was identified as ABF CWI Yang Yi Heng (QC2). Welding variables recorded by QC2 appeared to comply with WPS-B-T-3213-TC-U5b.

SMAW repair welding of weld joint NSD1-TL5-3F-F-22A located on PCMK north tower, lift 5, connection plates. Welder was identified as 067588. QC was identified as QC2. Welding variables recorded by QC2 appeared to comply with WPS-485-SMAW-3G(3F)-repair as listed on T-WR3504 presented to this QA Inspector by QC2.

SMAW welding of weld joint NSD1-TL5-3B-F-15 located on PCMK north tower, lift 5, internal connection plate to skin A. Alternating welders were identified as 067707, 066416. QC was identified as QC2. Welding variables recorded by QC2 appeared to comply with WPS-B-T-3213-TC-U4c.

### Heavy Dock

This QA Inspector randomly observed the following work being performed on the Heavy Dock:

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This QA Inspector observed no apparent work was being performed on the Heavy Dock. All 4 tower lift's 3 were connected and positioned vertically on a base pedestal at end of the heavy dock. West and north towers, lift 2 were positioned horizontally near the end of the Heavy Dock. The ZPMC 2200 ton floating crane was moored to the end of the Heavy Dock and sitting idle.

### Trial Assembly Area

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

SMAW repair welding of weld joint SP657-001-031 located on PCMK OBG 9CW/9DW, side plate, counterweight (north) side. Welder was identified as 046704. QC was identified as Shi Lei (QC3). Assisting QC3 at this location and appearing to be monitoring the welding and recording data was QCA2, who was not a CWI. Welding variables recorded by QCA2 appeared to comply with WPS-385-SMAW-3G(3F)-FCM-repair-1 as listed on WR14646 presented to this QA Inspector by QCA2.

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>	Dawson,Paul	QA Reviewer

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