

**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-005804**Date Inspected:** 23-Mar-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1830**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 630**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

<b>CWI Name:</b>	Shi Lei, Chen Likun and Le Li			<b>CWI Present:</b>	<b>Yes</b>	<b>No</b>	
<b>Inspected CWI report:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Rod Oven in Use:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Electrode to specification:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Weld Procedures Followed:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Qualified Welders:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Verified Joint Fit-up:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Approved Drawings:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>	<b>Approved WPS:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
<b>Bridge No:</b>	34-0006			<b>Delayed / Cancelled:</b>	<b>Yes</b>	<b>No</b>	<b>N/A</b>
				<b>Component:</b>	OBG Assembly, Tower		

**Summary of Items Observed:**

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

This QA Inspector performed Magnetic Particle Testing (MT) of approximately 25% of the area previously tested by ZPMC MT personnel. This QA Inspector generated a TL-6028 MT report on this date. The weld designation numbers is as follows:

Bay 2

SEG1-030, 021, 018, 027, 024 and 033

This QA Inspector observed the following work in progress:

OBW3

ZPMC's qualified welding personnel identified as Mr. Zhang Feng (09769) perform SMAW (Fit up) welding on weld joint identified as OBW3-003. ZPMC QC identified Mr. Shi Ling was present to monitor the welding process.

The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-4113-3.

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### Bay 10

ZPMC's qualified welding personnel's are identified as Mr. Zhang Lian Wei (040450), Mr. Gao Qiang (057258), Mr. Chen Liang (053671) and Mr. Huang Zhao (056200) perform SMAW welding on weld joint identified as WD1-A467-23M-4-39/40, 33/34, WD1-A467-33M-4-93/94 and 87/88. ZPMC QC identified Mr. Wu Ming Kai was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-P-2112.

ZPMC welding personnel Mrs. Lu Haixian (040251) performing groove welding of weld joint NSD1-FASA3-1A/E-1B. The personnel were observed welding in the 1G (flat) position utilizing a Submerged Arc Welding (SAW) process. ZPMC QC identified Mr. Chen Likun and was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2221-BU3C-S-2.

### Bay 11

ZPMC welding personnel Mrs. Zou Xiaohua (0207463) performing groove welding of weld joint ESD1-FCSA3-2B/C-44A. The personnel were observed welding in the 1G (flat) position utilizing a Submerged Arc Welding (SAW) process. ZPMC QC identified Mr. Li Ming and was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2221-BU2C-S-2.

ZPMC's qualified welding personnel's are identified as Mr. Chen Dinghang (067138), Mr. Zhang Lliang (067036), Wei Xingli (067499) and Dong Changxi (070046) perform FCAW welding on weld joint identified as ESD1-A164H/J-216, ESD1-A164E/J-227, ESD1-A165D/J-229 and ESD1-167C/J-106. ZPMC QC identified Mr. Xu Jin Long was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-4333-TC-P4-F.

### Bay 13

ZPMC welding personnel Mrs. Duan Xiuzhi (050502) performing groove welding of weld joint SEG007\*-005 and 006. The personnel were observed welding in the 1G (flat) position utilizing a Submerged Arc Welding (SAW) process. ZPMC QC identified Mr. Li Ming and was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2231-B-U2.

### Bay 2

ZPMC's qualified welding personnel's are identified as Mr. Jian Yong Sheng (045240), Mr. Liu Houguang (045260) and Mr. Bi Laishu (045280) perform FCAW welding on weld joint identified as CA105-002,003, CA107-002 and 003. ZPMC QC identified Mr. Shi Lei was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2232-TC-44b-F and WPS-B-T-2233-TC-44b-F.

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ZPMC's qualified welding personnel's are identified as Mr. Ji Yi (045268) perform SMAW (repair) welding on weld joint identified as FB011-030-021. ZPMC QC identified Mr. Shi Lei was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-345-SMAW-1G (1F)-Repair.

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

### Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

### 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 Eric Tsang (134-8257-0045), who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Alaniz,Joe	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon,Albert	QA Reviewer

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