

**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-002200**Date Inspected:** 05-May-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

<b>CWI Name:</b>	Zhao Chen Sun, Wang Sai Fa	<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>Delayed / Cancelled:</b>	<b>Yes</b>	<b>No</b> <b>N/A</b>
<b>Bridge No:</b>	34-0006	<b>Component:</b>	OBG	

**Summary of Items Observed:**

This Quality Assurance Inspector (QAI) observed welding in the New Tower Bay 1 by Zhenhua Port Machinery Company (ZPMC) welder Chen Hong Xie, welder identification 040460 on weld joint SSD1-SA159 F/J-15 side A with the submerged arc welding (SAW) process. Some of the essential welding variables observed and recorded were; amperage 534, voltage 29.6, travel speed 540 millimeters per minute and preheat temperature 130° Celsius.

This QAI observed welding in the New Tower Bay 1 by ZPMC welder Liu Zhen Hong, welder identification 053673 on weld joint SSD1-SA159 D/J-2 side B with the SAW process. Some of the essential welding variables observed and recorded were; amperage 700, voltage 33.5, travel speed 635 millimeters per minute and preheat temperature 130° Celsius.

This QAI observed welding in the New Tower Bay 2 by ZPMC welder Shen Mei, welder identification 041716 on weld joint ESD1-SA77 A/E-43 side A with the SAW process. Some of the essential welding variables observed and recorded were; amperage 510, voltage 29.4, travel speed 460 millimeters per minute and preheat temperature 105° Celsius.

This QAI observed magnetic particle testing (MT) by ZPMC Technicians Wang Wei and Cai Xinxin on final weld joints ESD1-SA233 A/F-20 side A and ESD1-SA49-15 side B. MT Technician Wang Wei was observed on weld joint ESD1-SA233-20 placing the magnetic yoke at 45 degrees to the direction of the weld rather than zero and 90 degrees to the weld. No indications were observed by either technician and both welds were marked as acceptable.

This QAI reviewed 10 radiographic films for deck panel splice welds of which the radiographic film quality and

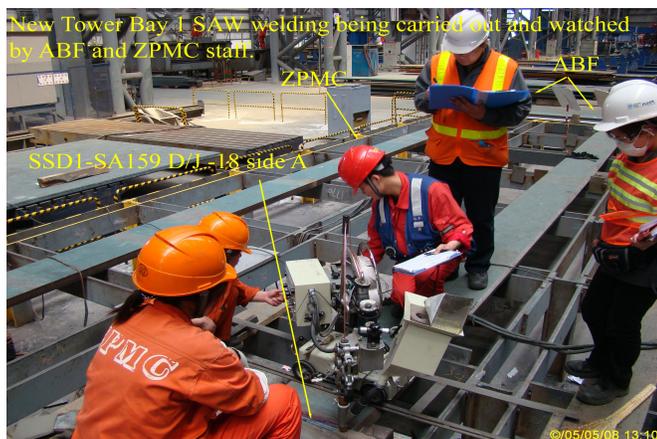
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# WELDING INSPECTION REPORT

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weld quality appeared to be in compliance with the code and specification. For details of film review see radiographic report TL6029 dated May 5, 2008. The film was part of American Bridge Fluor Transmittal TL-08-1131 dated May 5, 2008.



## Summary of Conversations:

No conversations held today.

## 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 Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

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**Inspected By:** Berger, Bruce

Quality Assurance Inspector

**Reviewed By:** Carreon, Albert

QA Reviewer

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