

**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-011346**Date Inspected:** 22-Dec-2009**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 Components**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance 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:

SMAW welding of weld joint NSTL4-3B/L-1A located outside PCMK north tower, lift 4, skin C to skin D, 470mm weld at approximately 144M elevation. Welder was identified as 050038. ZPMC QC was identified as CWI Wang Chuan Qing (QC1). The welding variables recorded by QC appeared to comply with WPS-B-T-2211-C-U2.

FCAW welding of cover pass visual testing rejects by QC1 in weld joint NSTL4-3B/L-1A located outside PCMK north tower, lift 4, skin C to skin D, between approximately 135M and 146M elevation. Welder was identified as 040434. ZPMC QC was identified as QC1. The welding variables recorded by QC1 appeared to comply with WPS-345-FCAW-1G(1F)-repair. QC1 told this QA Inspector that no written ZPMC repair report existed pertaining to this issue. Also at this location and appearing to be monitoring the welding operation was ABF Representative Li Nan.

SMAW welding of various approximately 50mm diameter steel rings to PCMK north tower, lift 4, skin C. Welders were identified as 050038 and 040475. ZPMC QC was identified as QC1. The welding variables recorded by QC1 appeared to comply with WPS-B-T-2112.

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# WELDING INSPECTION REPORT

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Bay 11

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

SMAW repair welding of weld joint ESTL4-2B/L-58B located inside PCMK east tower, lift 4, skin B to skin C, between approximately 122.5M and 123M elevations. Welder was identified as 040733. ZPMC QC was identified as CWI Liu Xiao Zhong (QC2). The welding variables recorded by QC2 appeared to comply with WPS-345-SMAW-2G(2F)-repair.

SMAW repair welding of weld joint ESTL4-2B/L-58B located inside PCMK east tower, lift 4, skin B to skin C, between approximately 128.5M and 129M elevations. Welder was identified as 049099. ZPMC QC was identified as CWI Liu Xiao Zhong (QC2). The welding variables recorded by QC2 appeared to comply with WPS-345-SMAW-2G(2F)-repair.

At the above noted two locations inside east tower, electric preheat was being constantly applied on the outside of the tower skin and on the inside, at the site of welding, during prolonged lapses in the welding operation.

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 Serge Sinevod, 134-8257-0045, 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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