

**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-012026**Date Inspected:** 11-Jan-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 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 repair welding of weld joint NSTL4-3B/L-5A located outside PCMK north tower, lift 4, skins B/C corner, approximately 250mm long at 120M elevation. Welder was identified as 056200. ZPMC QC was identified as CWI Du Zhi Qun (QC1). The welding variables recorded by QC1 appeared to comply with WPS-345-SMAW-4G(4F)-repair listed, in handwriting, on ZPMC repair order T-WR2953. Also present at this location and appearing to be monitoring the welding related operations was ABF Representative Yang Ye Heng.

FCAW repair welding of weld joint NSTL4-3B/L-3B located inside PCMK north tower, lift 4, skins A/E corner, approximately 120mm long at 114M elevation. Welder was identified as 040434. ZPMC QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC Deng Zhi Bing, who was not a CWI. The welding variables recorded by QC1's assistant appeared to comply with WPS-345-FCAW-2G(2F)-repair listed on the ZPMC repair order. Also present at this location and appearing to be monitoring the welding related operations was ABF Representative Yang Ye Heng.

FCAW repair welding of weld joint NSTL4-3B/L-5B located inside PCMK north tower, lift 4, skins B/C corner, approximately 80mm long at 114M elevation. Welder was identified as 040434. ZPMC QC was identified as

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QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC Deng Zhi Bing, who was not a CWI. The welding variables recorded by QC1's assistant appeared to comply with WPS-345-FCAW-2G(2F)-repair listed on ZPMC repair order T-WR2953. Also present at this location and appearing to be monitoring the welding related operations was ABF Representative Yang Ye Heng.

SMAW repair welding of weld joint SSTL4-1D/L-37 located inside PCMK south tower, lift 4,skins C/D corner angle plate to 119M double diaphragm. Welder was identified as 067572. ZPMC QC was identified as QC1. The welding variables recorded by QC1 appeared to comply with WPS-345+485-SMAW-4G(4F)-repair. QC1 informed this QA Inspector that this repair was in response to ZPMC QC visual inspection and no ZPMC repair order existed for this repair.

SMAW repair welding of weld joint SSTL4-1D/L-20, 24 located inside PCMK south tower, lift 4,skins C/D corner angle plate to 131M double diaphragm. Welder was identified as 053829. ZPMC QC was identified as QC1. The welding variables recorded by QC1 appeared to comply with WPS-345+485-SMAW-4G(4F)-repair. QC1 informed this QA Inspector that these repairs was in response to ZPMC QC visual inspection and no ZPMC repair order existed for these repairs.

Bay 11

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

ZPMC personnel drilling through previously scored holes in double diaphragm doubler plates into PCMK west tower, lift 3, skin A, at 99M and 109M double diaphragm areas. Template guides were not being used. It appeared the staging was being attached to the diaphragm strut areas using temporary bolt sets.

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

### Summary of Conversations:

No relevant 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 Skyler Guest, 150-0042-2360, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Goulet,George	Quality Assurance Inspector
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<b>Reviewed By:</b>	Dawson,Paul	QA Reviewer
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