

**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-015747**Date Inspected:** 10-Jul-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 10

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

SMAW repair welding of base metal on several areas located on PCMK south tower, lift 5, skin A. Welders were identified as 040581, 500363. QC was identified as ZPMC CWI Zhao Chen Sun (QC1). Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Yuan Hui Gang (QCA1), who was not a CWI. Welding variables recorded by QCA1 appeared to comply with WPS-485-SMAW-3G(2G)-repair as noted on ZPMC Welding Repair Report T-WR with no number and Rev. 0. The drawing number was displayed as FASA5-1. Within the text of the report appeared a reference to 4mm. This QA Inspector observed no areas of base metal being repaired that appeared to be deeper than 4mm. The entire remainder of the text and most of the references in the report was written in Chinese characters. QC1 spoke very little English and QCA1 spoke no English. Also present at this location and appearing to monitor the welding operation was ABF Representative Cui Zhenghua.

Bay 11

This QA Inspector randomly observed no welding related work being performed in Bay 11.

OBG Trial Assembly Area

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

FCAW welding of weld joint OBE9C-002 located on PCMK 9CE/9DE, side plate to side plate transverse joint, north (crossbeam) side. Welders were identified as 220063, 053743, 220069. QC was identified as An Qing Xiang (QC2). Welding variables recorded by QC2 appeared to comply with WPS-B-T-2233T-1.

## Heavy Dock

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

This QA Inspector observed no apparent work was being performed on the heavy dock. All 4 tower lifts 2 were erect with all 4 tower lifts 3 attached above, respectively. The lifts 2/3 worker access tower elevator was unmanned and dark. This QA Inspector did not observe any ZPMC QC or ABF representative presence anywhere on the Heavy Dock.

## Bay 3

This QA Inspector randomly observed the following work in progress in Bay 3:

FCAW welding of weld joint FB3110-001-013 located on floor beam. Welder was identified as 217805. QC was identified as Liu Fa Wen (QC3). Assisting QC3 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Ai Wei (QCA3), who was not a CWI. Welding variables recorded by QC3 appeared to comply with WPS-B-T-2132.

FCAW welding of weld joints FB3121-001-008, 009, 010, 011 located on floor beam. Welder was identified as 206380. QC was identified as QC3. Assisting QC3 at this location and appearing to be monitoring the welding and recording data was QCA3, who was not a CWI. Welding variables recorded by QC3 appeared to comply with WPS-B-T-2132.

FCAW welding of weld joints FB3121-001-108, 109 located on floor beam. Welder was identified as 048038. QC was identified as QC3. Assisting QC3 at this location and appearing to be monitoring the welding and recording data was QCA3, who was not a CWI. Welding variables recorded by QC3 appeared to comply with WPS-B-T-2132.

## Bay 2

This QA Inspector randomly observed the following work in progress in Bay 2:

FCAW layered repair welding of base metal on end of flange of traveler rail 20TR1-006. Welder was identified as 045203. QC was identified as QC3. Assisting QC3 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Cai Xiao Feng (QCA4), who was not a CWI. Welding variables recorded by QCA4 appeared to comply with WPS-485-FCAW-1G(1F)-repair-1 as noted on ZPMC Welding Repair Report B-CWR1580. The item name was displayed as Maintenance Trail Way.

FCAW welding of weld joint FB3185-001-031 located on floor beam. Welder was identified as 045143. QC was identified as QC3. Assisting QC3 at this location and appearing to be monitoring the welding and recording data was QCA4, who was not a CWI. Welding variables recorded by QC4 appeared to comply with

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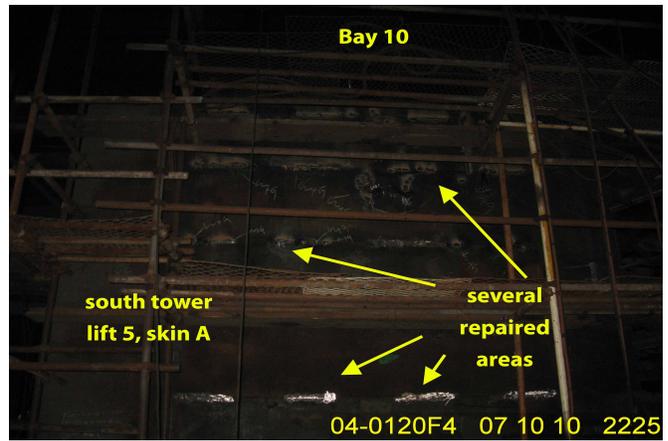
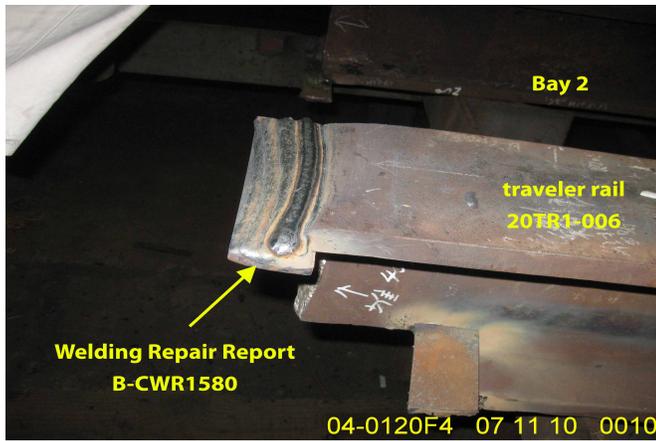
WPS-B-T-2233-TC-U4b-F.

FCAW welding of weld joint FB3234-001-004 located on floor beam. Welder was identified as 062708. QC was identified as QC3. Assisting QC3 at this location and appearing to be monitoring the welding and recording data was QCA4, who was not a CWI. Welding variables recorded by QC4 appeared to comply with WPS-B-T-2132-3.

Bay 7

This QA Inspector randomly observed no welding related work being performed in Bay 7.

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 Eric Tsang, 150-0042-2372, 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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