

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-008667**Date Inspected:** 16-Aug-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:	Li Jia, Xu Yu Min, Tu Jun, Wang Chao			CWI Presence:	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 (QA) Inspector George Goulet was present during the times noted above for observations relative to the work being performed.

OBG Trial Assembly Area

This QA Inspector, George Goulet, randomly observed the following work in progress in the trial assembly area:

4BW/FL3, panel point 28 – FCAW welding of a bolt hole misaligned by 8mm located on the beam web plate RB-X8 displayed on drawing FB25. Welder was identified as 202841. ZPMC QC was identified as CWI Li Jia (QC1). Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Pan Wen Long, who was not a CWI. The welding variables recorded by QC1 and QC1's assistant appeared to comply with WPS-345-FCAW-1G(1F)-repair-misdrilled hole listed on ZPMC repair order B-WR7001.

Welder was working from an extended man-lift. QC1 informed this QA Inspector, George Goulet, that the hole had been gouged into an elongated cavity before beginning welding.

5AW, west of panel point 29 - SMAW welding of north side of north longitudinal diaphragm to side plate weld. Welder was identified as 062092. ZPMC QC was identified as CWI Xu Yu Min (QC2). Assisting QC2 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Pan Wen Long, who was not a CWI. The welding variables recorded by QC2 and QC2's assistant appeared to comply with WPS-345-SMAW-2G(2F)-FCM-repair-1. QC2 informed this QA Inspector, George Goulet, that this welding was being performed after MT and grinding.

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Bike path, BK2 attachment flange - FCAW welding of weld joint BK2-001-007 located on the bike path cantilever beam. Welder was identified as 202841. ZPMC QC was identified as QC2. Assisting QC2 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Pan Wen Long, who was not a CWI. The welding variables recorded by QC2 and QC2's assistant appeared to comply with WPS-B-T-2233-Tc-U4c-F.

3AE, panel point 20 – sandblasting lower floor beam area.

Bay 10

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

FCAW welding of weld joint NSTL3-3B/K-84B located on PCMK north tower shaft, lift 3, skins A to E at the upper shaft rotating device. Welder was identified as 052075. ZPMC QC was identified as CWI Tu Jun (QC3). Assisting QC3 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Li Peng Fei, who was not a CWI. The welding variables recorded by QC3 and QC3's assistant appeared to comply with WPS-B-T-2231-Tc-U4b-F.

FCAW welding of weld joint NSTL3-3B/K-84B located on PCMK north tower shaft, lift 3, skins A to E at the lower shaft rotating device. Welder was identified as 050041. ZPMC QC was identified as QC3. Assisting QC3 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Li Peng Fei, who was not a CWI. The welding variables recorded by QC3 and QC3's assistant appeared to comply with WPS-B-T-2231-Tc-U4b-F.

FCAW welding of weld joints NSD1-TL8C/C-108, 200 located on PCMK north tower shaft, skins A to E inside corner. Welders were identified respectively as 040269, 057220. ZPMC QC was identified as CWI Wang Chuan Qing (QC4). Assisting QC4 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Yuan Hui Gang, who was not a CWI. The welding variables recorded by QC4 and QC4's assistant appeared to comply with WPS-B-T-3212-B-U2a-2. Also at this location and appearing to be monitoring the welding and recording data was ABF Representative Zhang Qin Jian.

FCAW welding of weld joints NSD1-TL8H/C-1, 95 located on PCMK north tower shaft, skins A to E inside corner. Welders were identified respectively as 056200, 052930. ZPMC QC was identified as QC4. Assisting QC4 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Yuan Hui Gang, who was not a CWI. The welding variables recorded by QC4 and QC4's assistant appeared to comply with WPS-B-T-3212-B-U2a-2. Also at this location and appearing to be monitoring the welding and recording data was ABF Representative Zhang Qin Jian.

FCAW welding of weld joint NSD1-TL8F/C-2 located on PCMK north tower shaft, skins A to E inside corner. Welder was identified as 057259. ZPMC QC was identified as QC4. Assisting QC4 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Yuan Hui Gang, who was not a CWI. The welding variables recorded by QC4 and QC4's assistant appeared to comply with WPS-B-T-3212-B-U2a-2. Also at this location and appearing to be monitoring the welding and recording data was ABF Representative Zhang Qin Jian.

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FCAW welding of weld joint NSD1-TL8E/C-59 located on PCMK north tower shaft, skins A to E inside corner. Welder was identified as 040333. ZPMC QC was identified as QC4. Assisting QC4 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Yuan Hui Gang, who was not a CWI. The welding variables recorded by QC4 and QC4's assistant appeared to comply with WPS-B-T-3212-B-U2a-2. Also at this location and appearing to be monitoring the welding and recording data was ABF Representative Zhang Qin Jian.

Bay 11

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

FCAW welding of weld joint WSD1-FCSA4-2B/C-5 located on PCMK west tower, lift 4, skin C. Welder was identified as 068858. ZPMC QC was identified as CWI You Qi Guo (QC5). The welding variables recorded by QC4 appeared to comply with WPS-345-FCAW-2G(2F)repair. Also at this location and appearing to be monitoring the welding and recording data was ABF Representative Luo Lai Quan.

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

Summary of Conversations:

As noted above, and this QA Inspector, George Goulet, asked each QC monitoring the welding if all the welding variables observed by QC appeared to comply with the appropriate WPS, including the preheat requirements according to thickness of the thickest member being welded. Each QC showed this QA Inspector, George Goulet, that QC was carrying the proper temperature sticks to monitor the minimum and maximum preheat and interpass temperatures and replied that all QC observed did appear to comply.

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.

Inspected By:	Goulet,George	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer
