

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-007197**Date Inspected:** 05-Jun-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 1845**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 645**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Jin Dong Liang**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 (QA) Inspector George Goulet was present during the times noted above for observations relative to the work being performed.

Trial Assembly Area

This QA Inspector, George Goulet, randomly observed the following in segments 4AE/4BE:

ZPMC workers performed final bolt tightening of ASTM A325 bolt sets on the 4AE/4BE transverse seam on the south side plates, starting at the south longitudinal diaphragm and using a hydraulic bolt tightening wrench as follows: Hydra Electric Pump, Model MP582-11, Serial number PW090331002 and Hydra HY.Wrench, Model 2XLCT-36mm, Serial number Y090520001. The workers appeared to be tightening the nuts to the turn-of-nut specification of 180° to 210°.

None of the above work was finished at the end of the work shift.

Bay 10

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

SAW welding of weld joints SSD1-FDSA4-1A/C-15B, 13 located on PCMK south tower, lift 4, skin D. ZPMC QC was identified as CWI Jin Dong Liang (QC1). Welder was identified as 040460. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Zong Yi, who was not a CWI. The welding variables recorded by QC1 and his assistant appeared to comply with

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WPS-B-T-2221-B-U3c-S-2 for the CJP weld and WPS-B-T-2321-B-P3-S-2 for the PJP weld. Also at this location and appearing to be monitoring the welding was ABF Representative Ma Zhen Yi (ABF).

SAW welding of weld joint SSD1-FDSA4-1A/C-17B located on PCMK south tower, lift 4, skin D. ZPMC QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Zong Yi, who was not a CWI. The welding variables recorded by QC1 and his assistant appeared to comply with WPS-B-T-2221-B-U3c-S-2. Also at this location and appearing to be monitoring the welding was ABF.

SAW welding of weld joints SSD1-FDSA4-1A/C-16A, 17A located on PCMK south tower, lift 4, skin D. Welder was identified as 209106. ZPMC QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Zong Yi, who was not a CWI. The welding variables recorded by QC1 and his assistant appeared to comply with WPS-B-T-2221-B-U3c-S-2. Also at this location and appearing to be monitoring the welding was ABF.

SMAW tack welding of weld joints SSD1-FDSA4-1A/C-5A,3 located on PCMK south tower, lift 4, skin D. Welders were identified respectively as 206568, 049225. ZPMC QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Zong Yi, who was not a CWI. The welding variables recorded by QC1 and his assistant appeared to comply with WPS-B-T-2211-B-U3b for the CJP weld and WPS-B-T-2321-B-P3-S-2 for the PJP weld. Also at this location and appearing to be monitoring the welding was ABF.

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 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
