

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-007186**Date Inspected:** 23-May-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:** Li Ming, Wan Wen Zhong**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 work in progress at the Trial Assembly Area: Fitting and match-drilling of 24mm holes through lap plates into the flanges of longitudinal stiffeners of bottom plates and side plates of OBG section 5AE after pinning and bolting the other ends of the lap plates across the seam to existing holes in the corresponding members of OBG section 4BE. The drillers appeared to be using water to lubricate and cool the drill during operation. Temporary bolts were used to hold the lap plates in place, during and after the drilling operation.

Bay 10

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

SAW welding of weld joints SSD1-FASA4-1A/F-19A, 15A located on PCMK south tower, lift 4. Welders were identified respectively as 207746, 207745. ZPMC QC was identified as Li Ming (QC1). Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Yu Zhi Lai, 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.

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FCAW welding of weld joints NSD1-FCSA3-1B/C-61, 62 located on PCMK north tower, lift 3, skin C, using the northwest gantry. Welders were identified respectively as 040261, 048784. ZPMC QC was identified as QC1. The welding variables recorded by QC1 and his assistant appeared to comply with WPS-B-T-2332-Tc-P5-F.

SMAW fitting and tack welding of weld joints NSD1-FESA3-1D/D-1, 2 located on PCMK north tower, lift 3, skin E. Welders were identified respectively as 206568, 049225. ZPMC QC was identified as CWI Wan Wen Zhong (QC2). Assisting QC2 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Sun Tian Liang. The welding variables recorded by QC2 and his assistant appeared to comply with WPS-B-T-4312-Tc-P4.

FCAW welding of weld joints SSSL3-1C/K-30, 44 located on PCMK south tower shaft interior, lift 3. Welder was identified as 057244. ZPMC QC was identified as QC2. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Shi Jing Wei, who was not a CWI. The welding variables recorded by QC1 and his assistant appeared to comply with WPS-B-T-4332-Tc-P5-F. Also at this location and appearing to be monitoring the welding was ABF Representative Ma Zhen Yi.

FCAW welding of weld joints SSSL3-1C/K-29, 43, 55 located on PCMK south tower shaft interior, lift 3. Welder was identified as 057180. ZPMC QC was identified as QC2. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Inspector Shi Jing Wei, who was not a CWI. The welding variables recorded by QC1 and his assistant appeared to comply with WPS-B-T-4333-Tc-P5-F. Also at this location and appearing to be monitoring the welding was ABF Representative Ma Zhen Yi.

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 him 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 he was carrying the proper temperature sticks to monitor the minimum and maximum preheat and interpass temperatures and replied that all he 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
