

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-014931**Date Inspected:** 27-Apr-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 11

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

No apparent welding related work was being performed in Bay 11. ZPMC workers were performing match drilling with magnetically mounted drills through previously scored holes into various strut flanges. No template was being used.

Bay 10

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

No apparent welding related work was being performed in Bay 10. ZPMC workers were performing match drilling with magnetically mounted drills through previously scored holes into PCMK east tower, lift 3, skin A, 99M and 109M diaphragm doubler plates from the outside in. No template was being used.

Heavy Dock

This QA Inspector randomly observed the following work in progress on the Heavy Dock.

ABF Representative Zhao Ying Sheng (ABF1) informed this QA Inspector that no welding related work was

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being performed on the heavy dock. However, ABF1 said ZPMC personnel were fitting up struts to check bolting alignment at the 53M, 65M, and 77M levels.

OBG Trial Assembly Area

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

SMAW welding of temporary alignment jacking plates located outside PCMK OBG 7DW/7EW transverse joint, bottom plate to bottom plate. Welder was identified as 045196. ZPMC QC was identified as ZPMC CWI Liu Hua Jie (QC1). Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Wang Zhu, who was not a CWI. The welding variables recorded by QC1's assistant appeared to comply with WPS-B-P-2114-FCM-1.

SMAW welding of weld joints EP059-001-013, 014 located inside at PCMK OBG 7CW/7DW joint, north (counterweight) side I-rib to I-rib. Welder was identified as 045221. ZPMC QC was identified as QC1. The welding variables recorded by QC1 appeared to comply with WPS-B-P-2211-B-U2a-1.

FCAW root pass welding of weld joint OBE8C-004 located inside at PCMK OBG 8BE/8CE transverse joint, south (bike path) side, lower side plate to side plate. Welders were identified as 222316, 220069. ZPMC QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Zhang Xiaoming, who was not a CWI. The welding variables recorded by QC1's assistant appeared to comply with WPS-B-T-2233T with ceramic backing. The root gap appeared to be within the tolerances of the above noted WPS.

FCAW root pass welding of weld joint OBE8C-005 located inside at PCMK OBG 8BE/8CE transverse joint, south (bike path) side, upper side plate to side plate. Welder was identified as 220066. ZPMC QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Zhang Xiaoming, who was not a CWI. The welding variables recorded by QC1's assistant appeared to comply with WPS-B-T-2233T with ceramic backing. The root gap appeared to be within the tolerances of the above noted WPS.

FCAW welding of weld joints EP095-001-013, 014 located inside at PCMK OBG 8BE/8CE joint, south (bike path) side I-rib to I-rib. Welder was identified as 220063. ZPMC QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Zhang Xiaoming, who was not a CWI. The welding variables recorded by QC1's assistant appeared to comply with WPS-B-P-2211-B-U2-F.

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

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remedial efforts please contact Eric Tsang, 150-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By:	Goulet,George	Quality Assurance Inspector
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Reviewed By:	Dawson,Paul	QA Reviewer
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