

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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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-004331**Date Inspected:** 28-Sep-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1500**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Yang, Zhi Neng Zhang**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 skin assemblies**Summary of Items Observed:**

Hot Topic: Caltrans Quality Assurance Inspector George Goulet (QA Inspector) was informed by ABF QC Jeff Chan that ZPMC welders were performing doubler plate to SSD1-A skin plate welds using FCAW-G. WPS B-T-4332-TC-P4-F only allows for this weld to be performed on material only up to 75mm. WPS B-T-4312-TC-P4-2 allows for the same groove weld to be performed on material over 75mm. ZPMC CWI's Li Yang and Zhi Neng Zhang told QA Inspector that they were aware of this issue and stated that they had informed their superiors. ABF QC Jeff Chan told QA Inspector that he had emailed this information to ABF Managers Don Walton and Mike Williams. QA Inspector confirmed that ZPMC welders were performing FCAW-G at that location and told ABF QC that QA Inspector would wait until Monday morning before writing an Incident Report if ABF does not.

Tower shop - Bay 1

QA Inspector randomly observed approximately 65 ZPMC workers performing the following: SAW butt welds, cutting beveled edges, and flame heat straightening of plates; FCAW-G fill pass on SSD1 – skin A lap assembly; flame preheating and SMAW of the edges of 700mm x 150mm half-round holes in stiffeners on SSD1-E skin assembly; and the above noted Hot Topic. Also present in this bay were ZPMC CWI's Zhi Neng Zhang and Li Yang as well as ABF QC's Li Nan, Jeff Chan, and Kim Xiao. Items observed appeared to comply with project specifications, with the exception of the above noted Hot Topic.

Tower shop - Bay 2

QA Inspector randomly observed approximately 50 ZPMC workers performing the following: grinding root pass of upper connection plates to stiffeners on ESD1-skin E assembly; flame preheating and SMAW of indications on

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stiffeners on ESD1-skin B assembly; grinding of welds on upper sides of multiple stiffeners where apparently something had been welded and removed on ESD1-A assembly; FCAW-G of fill pass on stiffener to skin plate weld on ESD1-skin A lap assembly; flame heat straightening of skin plates; SAW of skin plate butt welds. Also present in this bay were ZPMC CWI's Donglian Jin and Li Hongfei as well as ABF QC Xing Xiao Guang. Items observed appeared to comply with project specifications.

Summary of Conversations:

As noted above in Summary.

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 Joshua Ishibashi, 136-6471-0411, who represents the Office of Structural Materials for your project.

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