

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-004534**Date Inspected:** 03-Nov-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name:	Zhang Huilong, Lishi Youn	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	

Summary of Items Observed:

On this date, Caltrans Office of Structure Materials (OSM) Quality Assurance Inspector (QA) Raymond Lara was present at jobsite in Zhenhua Port Machinery Company facility on Changxing island, China for the purpose of observing and monitoring the fabrication of the SAS Superstructure.

Bay 1

The Quality Assurance Inspector observed ground tack welds DP261-001 staged and ready for magnetic particle testing. The Quality Assurance Inspector observed grinding tack welds for magnetic particle testing

GMAW ROOT on DP 450-001

The Quality Assurance Inspector observed ZPMC welder 059403, utilizing the gas metal arc welding process on a partial penetration weld joint on DP 450-001 weld 3. The Quality Assurance Inspector observed ZPMC Quality Control Personnel record parameters and verify preheat temperatures. The welding parameters observed by the Quality Assurance Inspector appeared to be within welding procedure specification WPS-B-T-2342 (U rib)-4.

The Quality Assurance Inspector observed ZPMC welder 021840, utilizing the gas metal arc welding process on a partial penetration weld joint on DP 450-001 weld 9. The Quality Assurance Inspector observed ZPMC Quality Control Personnel record parameters and verify preheat temperatures. The welding parameters observed by the Quality Assurance Inspector appeared to be within welding procedure specification WPS-B-T-23-42 (U rib)-4.

Bay 3

The Quality Assurance Inspector observed grinding and fitting up side plate assemblies. The Quality Assurance

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Inspector observed flux core arc welding in process non side panel SP131-001

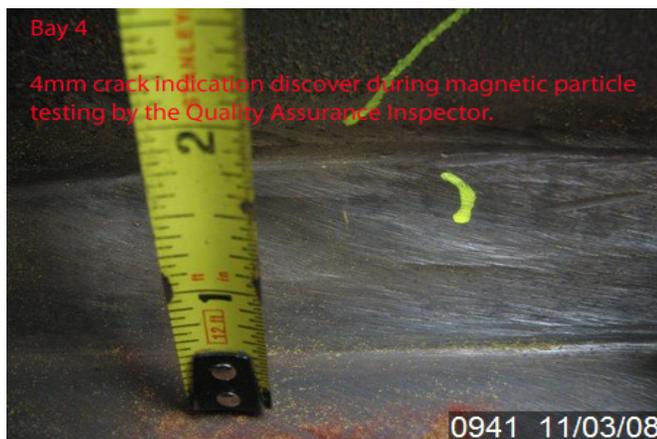
Bay 4

Magnetic Particle Test

The Quality Assurance Inspector performed 25% random magnetic particle testing verification on OBG and tower.

The Quality Assurance Inspector performed the magnetic particle testing verification on the following welds; ESD1-SA409-1, ESD1-SA411-2, SP102-001, SP723-001, SP316-001, and SP617-001. See Caltrans report TL-6028 Magnetic Particle Test Report, dated Nov. 3 2008 for additional information. The Quality Assurance Inspector green tagged the following SP102-001, SP723-001, SP312-001, and SP617-001.

The Quality Assurance Inspector discovered a crack indication overlooked by Quality Control while performing magnetic particle verification on partial joint penetration (PJP) weld ESDI SA411-2 located on the 62 meter East Tower Diaphragm. The Quality Assurance Inspector informed American Bridge/Fluor Quality Assurance Inspector Zhang Huilong about the crack indication overlooked by ZPMC Quality Control Inspectors. Mr. Huilong agreed with the Quality Assurance Inspector and informed ZPMC Quality Control Inspectors about the overlooked crack indication. The Quality Assurance Inspector observed ZPMC personnel removed 6mm of filler metal by grinding before the crack was removed. Mr. Huilong informed the Quality Assurance Inspector a critical weld repair will be issued prior to welding the repair. See Caltrans TL0015 Incident Report for additional information.



Summary of Conversations:

No relevant conversations on this date.

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, (707) 649-5453, who represents the Office of Structural Materials for your project.

Inspected By: Lara, Raymond

Quality Assurance Inspector

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Reviewed By: Wright,Mark

QA Reviewer