

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-000537**Date Inspected:** 28-Sep-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 2330**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 800**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Xu Lefeng, Huang Li**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:** CalTrans mock-ups**Summary of Items Observed:**

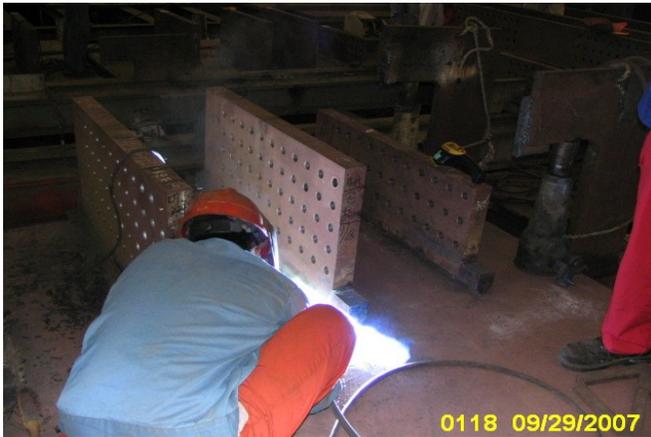
Caltrans Quality Assurance (QA) Inspector, Dan Hernandez was present to observe the fitup, welding and related activities associated with the fabricating of Caltrans Mock-up 114.00, for the San Francisco Oakland Bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

Item	Description	WBS	Dwg No.	Status
1	Mock-Up 114.00, skin plate D Assembly (Lower Section)			in progress
	<p>Caltrans QA Inspector observed flux cored arc welding (FCAW) in progress at stiffener plate mp1011-3 to skin plate MA110. The weld joints are identified as MUSA-MA110 #9 Complete Joint Penetration (CJP), double bevel T-joint. The welder is observed welding root pass in the 2G horizontal position using a chipping hammer and wire brush during interpass weld cleaning. The approved welder is identified as Mr. Jiang Zhou, welder stamp 040261. The welder is using welding procedure specification WPS-B-T-2232-TC-U5-F, Revision 1. Caltrans QA observed ZPMC Quality Control (QC) Certified Welding Inspector (CWI) Mr. Xu Lefeng and Bureau Veritas Inspector, Mr. Huang Li monitoring welding activities at the workstation. Caltrans QA measured current welding parameters at approximately 293 amps, 30.3 volts and 251 millimeters per minute (mm/min) travel speed. Preheat and interpass temperatures were verified during welding activities. The preheat temperature prior to the start of welding measures more than 110 Celsius (230 degree Fahrenheit) but less than 232 Celsius (450 degrees Fahrenheit) during maximum interpass temperature verification. FCAW welding consumable is verified and identified as Supercored 71H, classification E71T-1, diameter 1.4 mm (.055 inches).</p>			

Caltrans QA Inspector observed ZMPC QC Zhou Dong Yun perform Magnetic particle (MT) inspection on root pass of stiffener plate mp1011-3 to skin plate MA110 welds #10 and #11 Partial Point Penetration (PJP). Inspected area appeared to be free of discontinuities.

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2 Skin Plate B (upper section)

ZPMC MT

Caltrans QA Inspector observed ZPMC QC Zhou Dong Yun perform MT inspection on back gouged area of rejected CJP weld at stiffener plates mp1006 and mp1009 to MA101, 530mm of weld #8 and 120mm of weld #5. Inspected area appeared to be free of discontinuities.



Summary of Conversations:

As identified within the contents of this report.

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 Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By: Hernandez,Dan

Quality Assurance Inspector

Reviewed By: Cuellar,Robert

QA Reviewer