

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-000628**Date Inspected:** 12-Oct-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:	Sha Zhi & Zhang Xu Liang	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 Mockup	

Summary of Items Observed:

Caltrans Quality Assurance (QA) Inspector, Mike Hasler was present to observe the fitup, welding and related activities associated with the fabricating of Caltrans Mock-up, 77M, 89M and 114M, 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	Skin Plate E	NA	NA	Work in Progress.

Caltrans QA Inspector witnessed ZPMC QC non-destructive testing technician, Mr. Zhou Danyun perform magnetic particle test (MT) and Visual Test (VT) inspection of the partial joint penetration root weld pass. The location is identified as plate piecemark number mp502 to MA38, weld number 16, outside side. The MT testing appeared to be in general conformance with AWS D1.5 2002 requirements.

Caltrans QA Inspector performed MT and VT inspection of the root pass weld identified as weld 16. See Caltrans Magnetic Particle Test Report, TL6028, generated on this date for additional information. Following digital picture illustrates Caltrans distinguishing inspection symbol, identifying weld 16, root pass has been VT/MT tested.

Caltrans QA Inspector observed submerged arc welding (SAW) in progress at partial joint penetration plate splice weld, identified as weld number 15, inside side. The welder operator is identified as Mr. Wu Zhibin, welder stamp 049804, welding fill pass weld in the flat position. The welder is using welding procedure specification, WPS-B-T-2321-B-P3-S, Revision 0. Caltrans QA Inspector measured current welding parameters at approximately 630 amps, 32.0 volts and travel speed, 600 millimeters per minute (mm/min). Preheat and interpass temperatures were verified during welding activities. Preheat temperature prior to the start of welding measures more than 110 degrees Celsius (230 degree Fahrenheit) but less than 232 degrees Celsius (450 degrees Fahrenheit) during maximum interpass temperature verification. SAW consumables were verified and identified as JW-3, classification EM12K,

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diameter 4.8 mm (.189 inches) electrode and, JF-B Flux, classification F7A2. Following digital pictures illustrate ZPMC MT inspection, Caltrans inspection symbol and welding fill pass, weld 15.



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: Hasler, Mike

Quality Assurance Inspector

Reviewed By: Cuellar, Robert

QA Reviewer
