

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-000630**Date Inspected:** 11-Oct-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Changxing Island**CWI Name:** Xu Le Feng**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:** 89 & 114 Mock-up**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Larry Viars was present to observe nondestructive testing and welding operations of the Caltrans Mock-up # 89.00 and # 114.00, for the San Francisco Oakland Bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

Caltrans QA Inspector observed ZPMC Quality Control (QC) performing Ultrasonic Testing (UT) on Mock-up # 114.00 Skin plate A sub assembly MA106 Complete Joint Penetration (CJP) stiffener welds 3, 4 and 5. Weld # 7 has a hold tag attached and has an excavation area. This weld was not tested. Weld # 4 and 5 were found unacceptable by ZPMC QC. Weld Joint # 3 was reported unacceptable by ZPMC QC Mr. Li Liming. Weld # 3 the discontinuity was reported to have a length of 20 mm, and a rating of + 6. Testing was performed from the C face. Mr. Liming performed straight beam and 45 degree testing and Ms. E Shuiqin performed 45 degree testing.

ZPMC QC also performed testing of Mock-up # 114.00 assembly A58 weld # 2. Testing was done from the A and B face. Two unacceptable areas were reported by Mr. Li Liming and Ms. E. Shuiqin from the B face. Indications were 12 mm and 25 mm. Mr. Liming performed the 45 degree shear wave testing. Ms. E Shuiqin performed straight beam and 70 degree shear wave testing. The following digital picture below illustrates Ms. E Shuiqin performing straight beam testing from face C.

Magnetic Particle Testing of Mock-up # 89.00 Face D MA 21 weld # 2 root was tested by ZPMC QC Mr. Cai Xin Xin. Mr. Cai found the weld to be acceptable to AWS D1.5 requirements.

The Caltrans QA Inspector monitored nondestructive examinations of Mock-up # 114.00 and #89.00. QA

WELDING INSPECTION REPORT

(Continued Page 2 of 2)

Inspector observed that the testing appeared to be in general conformance with AWS D1.5 2002 requirements.



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:	Viars,Larry	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer
