DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-000185
Date Inspected: 27-May-2007

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

OSM Arrival Time: 900
OSM Departure Time: 1530
Location: Shanghai, China

CWI Name: Wei Huang

Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**CWI Present:**	☑ Yes	☐ No	
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☐ Yes	☐ No	☑ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Approved Drawings:	☐ Yes	☑ No	☐ N/A	**Verified Joint Fit-up:**	☑ Yes	☐ No	☐ N/A
				Approved WPS:	☐ Yes	☑ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: HP200780 & 78-1

Summary of Items Observed:

Caltrans Quality Assurance (QA) Inspector, Bruce Berger was present to observe quality control functions related to welding, testing and fabrication procedures at the Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island for the San Francisco Oakland Bay Self Anchored Suspension Bridge.

Caltrans QA Inspector witnessed ZPMC perform shield metal arc welding (SMAW) procedure qualification record (PQR) HP200780, PWPS-B-T-3113 test. The welder is identified as Mr. Zhu Hai Ping, welding passes one through three. The test plate material type is identified as A709 Grade HPS485W and thickness, 75 mm. The PQR fillet weld testing was performed in the 3F position. The welding consumable is identified as a 4.0 mm electrode, classification E9018M, specification AWS A5.5. Caltrans QA observed ZPMC QA Inspector, Mr. Wei Huang and two associates monitoring and supervising the testing per AWS 5.13 criteria; amperages, voltages, travel speeds, preheat and inter-pass temperatures. Also present at the test site was American Bridge/Fluor (ABF) subcontractor, Inspectech, quality control (QC) inspector, Mr. Dustin Brungardt. QA observed that the wind velocity at the ZPMC testing site appear to be in conformance with AWS D1.5, paragraph 4.14.3 requirements. ZPMC completed PQR testing for HP2007780 before lunch. For details see Welding Witness Report TL-6032 dated May 27, 2007.

After lunch this QA Inspector witnessed ZPMC perform shield metal arc welding (SMAW) procedure qualification record (PQR) HP200778-1, PWPS-B-T-3214 test. The welder was once again identified as Mr. Zhu Hai Ping, welding passes one through ten. The test plate material type is identified as A709 Grade HPS485W and thickness, 25 mm. The PQR testing was performed in the 4G position. The welding consumable is identified as a 4. 0 mm electrode, classification E9018M H4R, specification AWS A5.5. Caltrans QA observed ZPMC QA Inspector, Mr. Wei Huang and two associates monitoring and supervising the testing per AWS 5.13 criteria;

amperages, voltages, travel speeds, preheat and inter-pass temperatures. Also present at the test site was American Bridge/Fluor (ABF) subcontractor, Inspectech, quality control (QC) inspector, Mr. Dustin Brungardt. QA observed that the wind velocity at the ZPMC testing site appear to be in conformance with AWS D1.5, paragraph 4.14.3 requirements. Welding was stopped short of completion of the PQR test due to the end of shift so welding is to continue tomorrow.

Summary of Conversations:

No relevant conversations took place 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 Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Berger,Bruce	Quality Assurance Inspector
Reviewed By:	McClary,David	QA Reviewer