

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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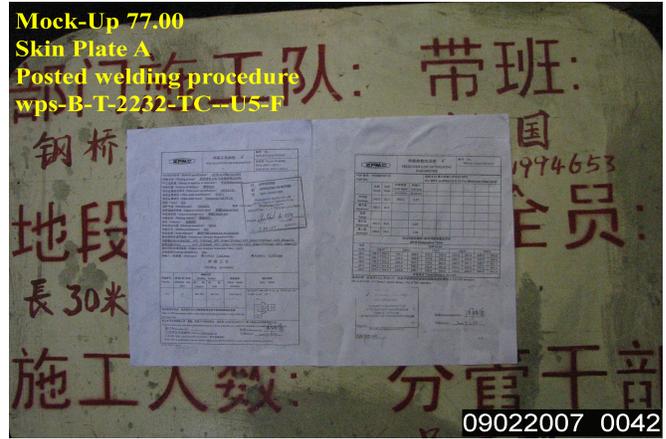
Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-000391**Date Inspected:** 01-Sep-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 2330**Prime 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 Bing, Song Wei Min**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-Up 77.00**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Mike Hasler was present to observe the fitup and welding of the Caltrans Mock-up #77.00, for the San Francisco Oakland Bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

Caltrans QA Inspector observed flux cored arc welding (FCAW), complete joint penetration (CJP) root pass and five fill pass welds in the horizontal position. The subassembly is identified as Skin Plate A; longitudinal stiffener plate piecemark mp1-1, weld number MA2-1, B side. The approved welder is identified as Mr. Zhou Shi Jie. The welder is using welding procedure specification WPS-B-T2232-TC-U5-F, Revision 1. The weld joint preparation prior to welding appears to be ground and wire brushed. Caltrans QA observed ZPMC Quality Control (QC) Certified Welding Inspector (CWI) Mr. Xu Bing and Bureau Veritas inspector, Mr. Song Wei Min monitoring welding activities at the workstation. Caltrans QA Inspector measured current welding parameters at approximately 310 amps, 31 volts and 360 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). After the completion of the root and two fill pass welds. The weld was then backgouged to sound metal. It appears that the following ZPMC work shift change will be completing the weld joint preparation of this backgouge. Following digital picture illustrates welding in progress and posted welding procedure at the work station.

WELDING INSPECTION REPORT

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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