

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-000284**Date Inspected:** 11-Jul-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 800**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Xu Bing**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:** N/A**Summary of Items Observed:**

The CALTRANS Quality Assurance (QA) Inspector, Alfredo Acuna was present for the welding qualification testing pertinent for the welding qualification record (PQR) HP2007247-2 scheduled for this project. ZPMC, welder Chen Ru Yang was observed by the QA Inspector performing welding operations following the preliminary welding procedure specification PWPS-B-T-2234 for the PQR identified as HP2007247-2. Base metal was designated as A-709 Grade 50T-2 (Heat #07200455020202). ZPMC followed the Production procedure WPS criteria (AWS 5.13) using the flux cored arc welding (FCAW-G) process in the overhead (4G) position with the 1.4 mm diameter electrode designated as E71T-1, brand name Supercored 71H. The QA Inspector verified dimensions for the test coupon, amperages, voltages, travel speeds, gas flow, heat and heat interpass temperatures. The QA inspector witnessed passes 1 through 7 (layers 1 thru 4). The QA inspectors performed random verifications of the welding parameters for a total of 7 passes. The QA inspectors found that the welding parameters taken by Quality Control (QC) inspector Xu Bing appeared to be accurate and in accordance with the contract documents. However the weld reinforcement had unacceptable weld profile with excessive convexity. The QA inspector had a conversation with ABF representative Kevin Dye and ZPMC QC inspector Xu Bing the QA inspector brought to the attention of Mr. Dye and Mr. Xu that the weld reinforcement needed to be ground. Mr. Xu and Mr. Dye agreed and relayed to the QA inspector that ZPMC would grind the weld reinforcement and presented again to the QA inspector for final inspection.

Summary of Conversations:

As noted above.

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

WELDING INSPECTION REPORT

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

Inspected By:	Acuna, Alfredo	Quality Assurance Inspector
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Reviewed By:	McClary, David	QA Reviewer
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