

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 #: 69.21**WELDING WITNESS REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WWR-000385**Date Inspected:** 06-Aug-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 800**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**Witness:** **Procedure Qualification Record**
Welding **NDT****Welder Qualification** **Fracture Critical**
Mechanical Testing, describe:**Index Lot #:** B71-030-07a**Witness Lot #:** B71-055-07**Bridge No:** 34-0006**Component:** Bid: 52,55 Tower & Girder**Welder:** Zhu Hai Ping**ID #:** N/A**Joint Description:** B-U2a

N/A

WPS ID #: PWPS-B-T-3213

N/A

Base Metal: A709M HPS 485 WT2/Z

N/A

PQR ID #: HP2007149

N/A

Thickness: 90 mm

N/A

Process: SMAW

N/A

Electrode Spec/Class: AWS-A5.1/E-7018-1

N/A

Positions: 3-G

N/A

Backing Material: A709 HPS 485 W

N/A

CWI: Xu Bing

N/A

Average Amps:

N/A

AWS Code: AWS D1.5 (2002)

N/A

Average Volts:

N/A

Applicable Sec: AWS 5.13

N/A

Travel Speed:

N/A

Heat Input:

N/A

Preheat:

N/A

Summary of Items Observed:

The Caltrans Quality Assurance (QA) Inspector was present as requested to witness the mechanical tests for Procedure Qualification (PQR) HP2007149 test plate using shielded metal arc welding (SMAW) with 4.0 mm diameter electrode, in the 3G (vertical) position. The test was performed per the AWS D1.5, Section 5.20 requirements. This test was rejected by Caltrans due to cracks were observed on the macroetch testing and 4 bend test coupons. See daily welding report TL_6031 dated 08-06-07 and 08-07-07 for more detailed information.

Summary of Conversations:

The QA inspector had a conversation with ZPMC, ABF and Caltrans representatives related to the cracking observed on the bend test and the macroetch specimens. The conversations between ABF, ZPMC and Caltrans were ended with the rejection by Caltrans of this PQR. See TL_6031 dated 08-06-07 and 08-07-07 for more detailed information.

is in general conformance with the contract requirements.

Observed welding, testing or results:

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is not in conformance with the contract requirements.

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