

**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-000461**Date Inspected:** 05-Dec-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 1330**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2300**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**Witness:** Procedure Qualification Record  
Welding NDT**Welder Qualification**  
**Mechanical Testing, describe:****Fracture Critical****Index Lot #:** L30-141-07**Witness Lot #:** N/A**Bridge No:** 34-0006**Component:** Bid item 52,55 Tower & Girder**Welder:** Xing Ji Zhan**ID #:** N/A**Joint Description:** single V-groove butt joint

N/A

**WPS ID #:** PWPS-B-T-2211-2

N/A

**Base Metal:** ASTM SL345

N/A

**PQR ID #:** HP2007520

N/A

**Thickness:** 28mm

N/A

**Process:** SMAW

N/A

**Electrode Spec/Class:** AWS A5.5/E9018M-H4R

N/A

**Positions:** 1G

N/A

**Backing Material:** 10mm, ASTM A709-50T-2

N/A

**CWI:** Huang Wei

N/A

**Average Amps:** 255

N/A

**AWS Code:** AWS D1.5 (2002)

N/A

**Average Volts:** 22

N/A

**Applicable Sec:** AWS Section 5.13

N/A

**Travel Speed:** 131.4

N/A

**Heat Input:** 2.57Kj

N/A

**Preheat:** 107 C

N/A

**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector Dan Hernandez was on site at ZPMC Welding Lab to observe the welding of the Procedure Qualification Record (PQR) test plate HP2007520, QA Inspector observed weld passes #12 and #13, previous weld passes #1-#11 were observed by QA Inspector Sherri Brannon. HP2007520 is a multiple pass V-Groove weld test coupon welded in the 1G position using the shielded metal arc welding (SMAW) process. Filler metal specification AWS A5.5 and classification E9018M H4R, electrode diameter is 4.8 mm. Test plates were 28 mm thick in a Butt-Joint fit up. Welding was performed per AWS D1.5 2002, Section 5.13. Welding was performed by Zhu Hai Ping. Total passes deposited were 13 with 8 layers. The welding on test coupon appeared to be in compliance with the contract documents. QA Inspector issued lot number L30-141-07 to the test coupon. ZPMC Quality Control (QC) Certified Welding Inspector (CWI) Mr. Haung Wei was observed monitoring welding activities at the workstation.

**Summary of Conversations:**

As identified within the contents of this report.

**Observed welding, testing or results:**

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## WELDING WITNESS REPORT

( *Continued Page 2 of 2* )

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is in general conformance with the contract requirements.  
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.

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<b>Inspected By:</b>	Hernandez, Dan	Quality Assurance Inspector
<b>Reviewed By:</b>	Cuellar, Robert	QA Reviewer

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