

**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-000457**Date Inspected:** 19-Nov-2007**Project Name:** SAS Superstructure**OSM Arrival Time:** 600**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**  
**Mechanical Testing, describe:****Fracture Critical****Index Lot #:** L30**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-2231

N/A

**Base Metal:** ASTM A709-50F-2

N/A

**PQR ID #:** HP2007259

N/A

**Thickness:** 26mm

N/A

**Process:** FCAW

N/A

**Electrode Spec/Class:** AWS A5.20/E71T-1

N/A

**Positions:** 1G

N/A

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

N/A

**CWI:** Huang Wei

N/A

**Average Amps:** 304.3

N/A

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

N/A

**Average Volts:** 29.4

N/A

**Applicable Sec:** AWS Section 5.13

N/A

**Travel Speed:** 436

N/A

**Heat Input:** 1.23Kj

N/A

**Preheat:** 87 C

N/A

**Summary of Items Observed:**

CalTrans Quality Assurance (QA) Inspector was on site at ZPMC Welding Lab to observe the welding of the Procedure Qualification Record (PQR) test plate HP2007259. PQR HP 2007259 is a multiple pass groove weld test coupon welding in the 1G position using the Flux cored arc welding (FCAW) process. Filler metal specification AWS A5.20 and classification E71T-1, electrode diameter 1.4 mm. Test plates were 26 mm thick with a 10 mm back up bar in a butt-Joint fit up. Welding was performed per AWS D1.5 2002, Section 5.13 Production Procedure WPS. Welding was performed by Xing Ji Zhan. QA Inspector observed passes 1-10 during the Day Shift. ZPMC Quality Control (QC) Certified Welding Inspector (CWI) Mr. Huang Wei and Bureau Veritas Inspector Mr. Arbin Huang were observed monitoring welding activities at the workstation.

**Summary of Conversations:**

As identified within the contents of this report.

is in general conformance with the contract requirements.

**Observed welding, testing or results:**

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# WELDING WITNESS REPORT

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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.

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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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