

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-002092**Date Inspected:** 07-Apr-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1400**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 130**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Zhu Zhong Hai**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:** OBG side plates/Tower skin plates**Summary of Items Observed:**

CALTRANS Quality Assurance (QA) Inspector, Erik Prue was present for the fabrication scheduled for this project at the ZPMC facility in Shanghai, China for the San Francisco Oakland Bay Self Anchored Suspension Bridge.

Tower Bay 1: QA Inspector randomly observed ZPMC qualified welder Xu Xiu Shui ID#040489 welding cover passes on a Complete Joint Penetration (CJP) butt splice joint designation B-U3c-S on 60mm thick skin plate SSD1-SA173 A/K-13B. Welder was observed welding in the 1G (flat) position utilizing Submerged Arc Welding (SAW) process with a 4.8mm diameter electrode, filler metal Jw-3. QA Inspector observed the ZPMC QC Inspector Mr. Zhu Zhong Hai verifying that the welding parameters and pre-heat were in accordance with the Welding Procedure Specification (WPS). QA Inspector with QC Inspector the preheat temperature to be 120°C and measured the welding parameters to be 696 amps, 32.4 volts, a travel speed of 626. Welding parameters verified by QA Inspector appear to be in general compliance with the approved WPS-B-T-2221-B-U3c-S.

Tower Bay 1: QA Inspector randomly observed ZPMC qualified welder Yun Chuanjin ID#0503060 welding the root on a Complete Joint Penetration (CJP) butt splice joint designation B-U3c-S on 90mm thick skin plate SSD1-SA159 D/J-3B. Welder was observed welding in the 1G (flat) position utilizing Submerged Arc Welding (SAW) process with a 4.8mm diameter electrode, filler metal Jw-3. QA Inspector observed the ZPMC QC Inspector Mr. Zhu Feng verifying that the welding parameters and pre-heat were in accordance with the Welding Procedure Specification (WPS). QA Inspector with QC Inspector the preheat temperature to be at 160°C and measured the welding parameters to be 655 amps, 32.8 volts, a travel speed of 610. Welding parameters verified by QA Inspector appear to be in general compliance with the approved WPS-B-T-2221-B-U3c-S-1.

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Bay 4: QA Inspector witnessed ZPMC QC MT Inspector Mr. Cai Xin Xin perform 10% Magnetic Particle (MT) inspection of total weld lengths of stiffener to side plate fillet welds for SP 015-001 welds 015 thru 028 and SP -060-001 welds 013 thru 24. QA Inspector performed 10% minimum visual and magnetic particle inspections of portions of QC acceptable inspection of stiffener to side plate fillet welds. QA Inspector found QC MT inspection method and welds inspected to be in compliance with AWS D1.5 (02) and the contract documents. For details please see Magnetic particle testing report TL-6028 dated April 07, 2008.



Summary of Conversations:

No significant conversations this day.

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 Patrick Lowry, 858 344-2712, who represents the Office of Structural Materials for your project.

Inspected By:	Prue,Erik	Quality Assurance Inspector
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Reviewed By:	Hager,Craig	QA Reviewer
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