

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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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-005582**Date Inspected:** 16-Feb-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Shen Fu You**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**Summary of Items Observed:**

On this day Caltrans OSM Quality Assurance (QA) Inspector Erik Prue was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA Inspector observed and/or found the following:

Bay 14: QA Inspector randomly observed ZPMC qualified welder ID#049861 tack welding longitudinal Diaphragm-031 to bottom plate segment weld joint 007B-002. Welder was observed tack welding in the 1G (flat) position utilizing Shielded Metal Arc Welding (SMAW) process. QA Inspector observed the ZPMC QC Inspector Zhang Xian Ji verifying welding parameters and pre-heat were in accordance with the Welding Procedure Specification (WPS). QA Inspector with QC Inspector observed parameters as follows: preheat temperature to be at 87°C and measured the welding parameters to be 178 amps, 24.8 volts, a travel speed of 100 mm/min. Welding parameters verified by QA Inspector appear to be in general compliance with the approved WPS-B-P-2113-FCM.

OBG Bay 13: QA Inspector performed ultrasonic verification testing of OBG floor beams FB-063-039 and FB-063-040 Complete Joint Penetration (CJP) butt joints. The Ultrasonic Testing (UT) was performed to verify that 10% of the weld meets the requirements of the contract documents and AWS D1.5-2002 after ZPMC QC UT acceptable inspection. The welds and base metal were scanned utilizing a Krautkramer Branson USN 58L #01WHB1. QA Inspector performed a base metal lamination check using a 25mm diameter 2.25 MHz transducer and a shear wave scan using a 20mm x 15mm 2.25 MHz transducer on a 70 degree angle wedge from face A. For details please see the ultrasonic testing report TL-6027 dated 16 Feb, 2009. QA Inspector found the welds inspected to be in compliance with AWS D1.5 2002 Table 6.3 and the contract documents.

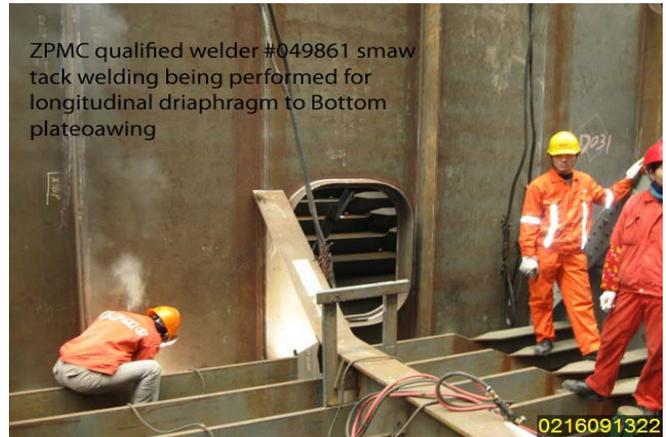
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Unless otherwise noted, all work observed on this date appears to be in general compliance with the applicable contract documents.

Summary of Conversations:

QA Inspector noted 5 bottom plate segments had been laid in east jig bay 14 and asked QC CWI Mr. Shi Lei what lifts the bottom plate were. Mr. Shi Lei informed QA Inspector the bottom plates were for lifts 6AE, 6BE, 6CE, 7AE, and 7BE. QA Inspector asked QC Inspector to mark bottom plates with the appropriate lift number. QC Inspector concurred and marked the bottom plates.



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 Eric Tsang, 15000422372, who represents the Office of Structural Materials for your project.

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| Inspected By: | Prue,Erik | Quality Assurance Inspector |
| Reviewed By: | Carreon,Albert | QA Reviewer |
