

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-014868**Date Inspected:** 06-Jun-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See Below**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:**

CWI Inspector: Mr. Liu Hua Jie

On this date CALTRANS OSM Quality Assurance (QA) Inspector, Mr. Paul Dawson, arrived on site at the Zhenhua Port Machinery Company (ZPMC) facility at Changxing Island, in Shanghai China, for the purpose of monitoring welding and fabrication of the San Francisco / Oakland Bay Bridge (SFOBB) components. This QA Inspector observed the following:

OBG Segment Trial Assembly

ZPMC issued "Inspection Notification Sheet" number 05907 informing Caltrans QA that ZPMC has completed ultrasonic inspections of OBG counterweight block splice welds OBW9A-001, OBW9A-002, OBW8A-023 and OBW8A-024 and the welds are ready for Caltrans QA personnel to perform ultrasonic inspections of these welds. This QA Inspector performed random visual and ultrasonic inspections of these welds and items observed by this QA Inspector appear to comply with AWS D1.5 UT requirements. For additional information on these inspections see the TL6027 Ultrasonic Test Report and the photograph below.

This QA Inspector observed ZPMC welder Mr. Tian Zhaoquan, stencil 045246 is using shielded metal arc welding procedure WPS-345-SMAW-4G(4F)-FCM-Repair-1 to make 4G (overhead) position shielded metal arc repair weld SEG045A-013 as authorized on critical weld repair document CWR-1591. This weld had been ultrasonically rejected and is located at OBG segment 8AW. This QA Inspector observed Mr. Tian Zhaoquan has a welding current of approximately 140 amps and Mr. Tian Zhaoquan appears to be certified to make this weld. This QA

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Inspector observed the welding electrodes are being stored in a heated portable electrode storage oven and the base material appears to have been preheated with an electrical heating element that is located on the interior of the OBG. Items observed on this date appeared to generally comply with applicable contract documents.

ABF issued "Inspection Notification Sheet" number 06052010-2 item #3 informing QA that on 06-06-2010 at 19:30 hours ABF Inspectors will be performing ultrasonic (UT) inspections of repaired weld SEG043A-045 which joins OBG segment 8AW cross beam side plate to the bottom plate. This weld is located in the trial assembly area. ABF/Sense UT Inspectors informed this QA Inspector that this weld repair area is accepted. This QA Inspector performed random visual and ultrasonic inspections utilizing scanning patterns A, B, C and D (AWS D1.5 Fig 6.7) and the weld repairs appear to comply with project specifications. Note: These inspections are being documented and tracked on "Verification Witness Request" documents. See the TL-6027 UT report for additional information concerning this inspection.



Summary of Conversations:

See Above.

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 phone: 150-0042-2372 , who represents the Office of Structural Materials for your project.

Inspected By:	Dawson,Paul	Quality Assurance Inspector
Reviewed By:	Carreon,Albert	QA Reviewer
