

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave. St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

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-013648**Date Inspected:** 28-Apr-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. Xu Xiang Ping

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 Bay 7

This QA Inspector observed ZPMC welder Mr. Liu Zihong, stencil 062447 is using flux cored welding procedure WPS-345-FCAW-2G(2F)-Repair to make traveler rail repair weld 22TR4-001-003 in accordance with a weld repair document B-WR11890. The reason for this repair is due to ultrasonic rejections as listed on UT report #B787-UT-12195. This QA Inspector observed ZPMC QC Inspector Mr. Wang Liang is monitoring this welding and that Mr. Liu Zihong appears to be certified to make this weld. This QA Inspector observed Mr. Wang Liang has recorded a welding current of 296 amps and 29.3 volts. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Mr. Xin Meng, stencil 053742, is using flux cored welding procedure WPS-345-FCAW-2G(2F)-Repair to make traveler rail repair weld 22TR3-003-009 in accordance with a weld repair document B-WR11875. The reason for this repair is due to ultrasonic rejections as listed on UT report #B787-UT-12194. This QA Inspector measured a welding current of approximately 300 amps and 30.0 volts and

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that Mr. Xin Meng appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

This QA Inspector observed ZPMC welder Ms. He Yumei, stencil 048625 is using flux cored welding procedure WPS-345-FCAW-2G(2F)-Repair to make traveler rail repair weld 22TR2-001-003 in accordance with a weld repair document B-WR11862. The reason for this repair is due to ultrasonic rejections as listed on UT report #B787-UT-12193. This QA Inspector observed ZPMC QC Inspector Mr. Wang Jian has recorded a welding current of 295 amps and 30.1 volts and that Ms. He Yumei appears to be certified to make this weld. Items observed on this date appeared to generally comply with applicable contract documents.

ZPMC issued "Inspection Notification Sheet" number 5623 informing Caltrans QA that ZPMC will perform ultrasonic inspections (UT) of the complete joint penetration welds on fifteen OBG traveler rails that are located in OBG bay7 at 1600 hours today and they will then be ready for Caltrans QA personnel to perform ultrasonic inspections of these welds. This QA Inspector observed ZPMC appears to have UT accepted the traveler rail welds and this QA Inspector performed random visual and ultrasonic inspections of the following welds: 11TR3-018-5, 6, 7, 10, 13, 14; 11TR3-005-5, 6, 7, 10, 13, 14; 11TR3-022-5, 6, 7, 10, 13, 14; 11TR3-007-5, 6, 7, 10, 13, 14; 11TR3-009-5, 6, 7, 10, 13, 14; 11TR3-011-5, 6, 7, 13, 14; 11TR3-006-5, 6, 7, 10, 13, 14 and 11TR3-010-55, 6, 7, 10, 13, 14. 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.



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

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Reviewed By: Carreon,Albert

QA Reviewer