

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-001972**Date Inspected:** 15-Apr-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 2300**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 730**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:** Tower and OBG Fabrication**Summary of Items Observed:**

Caltrans 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. The QA Inspector observed the following:

CWI Inspector: Li Yanhua

Orthotropic Box Girder (OBG) and Tower Fabrication:

Bay 1

The QA Inspector observed ZPMC welder Mr. Zhao Chengshuang, stencil 59400 is using welding procedure specification WPS-B-T-2233-B-U2-F to make flux cored closed rib splice weld DP111-001-155. Prior to welding the QA Inspector observed the groove area where Mr. Zhiwu was preparing to weld had been backgouged and ground to a bright metal surface. The QA Inspector observed a welding current of approximately 210 amps and 23.9 volts. Items observed by the QA Inspector appear to comply with project specifications. See the photograph below for additional information.

The QA Inspector observed ZPMC welder Mr. Hao Long, stencil 59446 is using welding procedure specification WPS-B-T-2342-U2 (U-rib) to make flux cored tack welds on OBG deck plate closed rib weld DP007-001-001. The QA Inspector observed a welding current of approximately 320 amps and 30.0 volts. Items observed by the

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

QA Inspector appear to comply with project specifications.

The QA Inspector observed ZPMC welder Mr. Xiao Dianbin, stencil 59440 is using welding procedure specification WPS-B-T-2342-U2 (U-rib) to make flux cored tack welds on OBG deck plate closed rib weld DP007-001-010. The QA Inspector observed a welding current of approximately 320 amps and 30.0 volts. Items observed by the QA Inspector appear to comply with project specifications.

The QA Inspector performed ultrasonic inspection of closed rib complete joint penetration welds DP138-001-191 and DP138-001-194. Both welds appear to comply with project specifications. ZPMC was preparing to stack other closed ribs on top of the welds that the QA Inspector was intending to inspect and the QA Inspector asked ZPMC QC Inspector Mr. Li Yanhua to ask other ZPMC workers to refrain from blocking access to the welds that required ultrasonic inspection. Mr. Yanhua said he was able to keep access to these welds. See the TL-6027 "Ultrasonic Test Report" dated today for additional information.

New tower shop:

Earlier in the day ZPMC presented Caltrans QA personnel with notification that weld SSDI-SA15-A/F 26A/B will be ultrasonically (UT) inspected today and that this weld will be accessible for Caltrans QA to UT inspect for a period of 24 hours. The QA Inspector observed that ZPMC has not marked on the plate that weld SSDI-SA15-A/F 26A/B has been UT accepted. Based on this lack of QC acceptance the QA Inspector was not able to perform UT inspections of this weld.



Summary of Conversations:

See above for summary of conversations.

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.

Inspected By: Dawson,Paul

Quality Assurance Inspector

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Reviewed By: Carreon,Albert

QA Reviewer