

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-002011**Date Inspected:** 18-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:** Changxing Island**CWI Name:** Chen Xi**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 and Tower**Summary of Items Observed:**

Caltrans Quality Assurance (QA) Inspector, Larry Viars was present observe production welding of the deck plate U-rib splice welds and perform random Visual Testing (VT) of the Orthotropic Box Girder (OBG) components, for the San Francisco Oakland Bay Self Anchored Suspension Bridge, at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

The Caltrans QA Inspector observed ZPMC welder Mr. Zhao Chengshuang performing Flux Cored Arc Welding (FCAW) on U-rib Complete Joint Penetration (CJP) splice welds DP192-001-191 and DP192-001-192 in the 3G position. Splice welds were back gouged to sound metal, ground smooth, and welding completed. The following parameters were recorded from weld DP192-001-191, amperage 207, voltage 24.2, travel speed of 108 mm/min, with a heat input of 2.78 kJ/mm. The above mentioned welding appeared to be in conformance with the posted welding procedure specification, WPS-B-T-2233-B-U2-F.

The Caltrans QA Inspector performed Magnetic Particle Testing (MT) the 43 meter North Tower shaft bottom plate weld # NSD1-SA335 1A (SA335 to P459). During testing a 15 mm crack was found in the bevel to weld fusion zone at the weld termination. ZPMC QC Mr. Botin Rui had found the weld to be acceptable on 4-17-08. An incident report was issued for the Quality Control (QC) oversight. Please see MT report TL-6028 generated on this date for further information. The attached photo below shows the above mentioned crack found during MT.

WELDING INSPECTION REPORT

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Summary of Conversations:

As identified within the contents of this report.

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:	Viars,Larry	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer
