

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-002561**Date Inspected:** 02-Mar-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Xhu Zhonghai, 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:** See Below**Summary of Items Observed:**

This Caltrans Quality Assurance (QA) Inspector, M. Paul Stovall, was present at Zhenhua Port Machinery Company (ZPMC) on Changxing Island, Shanghai, China to monitor the Quality Control (QC) functions during the fabrication of the Self Anchored Suspension (SAS) and Orthotropic Box Girder (OBG) section of the San Francisco/Oakland Bay Bridge.

New Tower Shop**Bay 1**

The QA Inspector observed ZPMC welding personnel Li Mingqian, ID #054460 use the Shielded Metal Arc Welding Process (SMAW) at the 89-meter Mock-Up weld joint number MUB- for MA21-J/J-29. This is the initial weld at this location. In addition, a connector plate was ground, under the direction of a Weld Repair Report.

OBG Pre-Assembly.

Bay 2

The QA Inspector observed ZPMC personnel grinding various lug plate fillet welds on the 77-meter Mock-Up through out the day. The QA Inspector also observed ZPMC personnel flame cutting plate material for the Tower.

WELDING INSPECTION REPORT

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Bay 3

The QA Inspector observed ZPMC welding personnel He Yumei, ID #048625 use the Flux Cored Arc Welding (FCAW) process to weld areas of the faying surface on various WT's, and other personnel ground the welds. The work observed appeared to comply with the contract documents.

The QA Inspector observed ZPMC QC personnel monitoring the heat straightening of Side Plates (SP) and checking the flatness before and after heat straightening.

The QA Inspector observed ZPMC welding personnel tack welding WT stiffeners onto SP333-01, SP028-001 and, SP120-0. The QA Inspector observed that ZPMC personnel were using the overhead crane to assist with the fit up of the material by lift the bottom plate to decrease the gap between the plate and the stiffeners. The QA Inspector immediately notified ZPMC Certified Welding Inspector (CWI) Xu Xian Ping of this observation. ZPMC CWI Xu Xian Ping notified production personnel and the use of the crane during the fit up and stopped the work.

The QA Inspector observed ZPMC QC personnel perform Magnetic Particle Testing (MT) on the excavation areas of Bottom Plate (BP) BP023-001 and BP022-001 for Critical Weld Repair (CWR) numbers 031 and 032. The QA Inspector performed a MT verification of the ground excavations before welding started. The work observed appeared to comply with the contract requirements. ZPMC Certified Welding Inspector (CWI) Chen Chi Meng was monitoring the CWR in process.

The QA Inspector observed ZPMC welding personnel Li Wenguo, ID #066261, Xu Chang Xue, ID #066002, Li Zhaoqian, ID #048810, and He Yumei, ID #048625 performing Flux Cored Arc Welding (FCAW) of stiffeners on SP023-01 at the forward welding gantry.

Bay 4

The QA Inspector observed ZPMC personnel flame cut bevel angles on various plates for the Tower project.

Summary of Conversations:

The QA Inspector had conversations as noted within the body of the report. See

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:	Stovall,Paul	Quality Assurance Inspector
Reviewed By:	Hager,Craig	QA Reviewer
