

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-002523**Date Inspected:** 11-Apr-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:** Zhao Chen Sun and 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

This QA Inspector observed ZPMC welding personnel performing Submerged Arc Welding (SAW) on Tower Skin plate weld joint numbers SSD1-SA159-D/J-3B and SSD1-SA159-D/J-4B. This QA Inspector observed the welding appeared to comply with Welding Procedure Specification (WPS) WPS-B-T-2221-B-U3c-S.

This QA Inspector observed ZPMC personnel grinding Tower Skin plate weld joint number SSD1-SA173-A/K-15B after back gouging.

The QA Inspector observed ZPMC QC personnel were present and monitoring the work. The work observed by this QA Inspector appeared to comply with the contract requirements.

New Tower Shop

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Bay 2

This QA Inspector observed ZPMC personnel performing the following fabrication and inspections on Tower Skin plates. ZPMC personnel were performing grinding on the back gouged section of Tower Skin plate weld joint number ESD1-SA227-A/H-16B. This QA Inspector observed ZPMC personnel heat straightening various Tower Skin plates.

This QA Inspector observed ZPMC welding personnel Li Wei, ID #048532 fit and tack weld Tower Skin plates P91 and P609 for weld joint number ESD1-SA216-A/K-15A. This welding observed by this QA Inspector appeared to comply with WPS-B-P-2211-B-T-UCb.

This QA Inspector observed ZPMC QC personnel performing Ultrasonic Testing (UT) on Tower Skin plate weld joint number ESD1-SA107-A/J-16B. The UT inspection was not completed during this QA Inspectors' shift and the overall status of the weld joint is unknown at this time.

OBG Preassembly Bay 2

The QA Inspector observed ZPMC personnel flame cutting plate material for the Tower and flame cutting macroetch coupons from the 77-meter Mock-Up.

OBG Preassembly Bay 3

This QA Inspector observed ZPMC welding personnel Li Shuliang, ID #048801, Zhang Wei, ID #066413, Liu Qingyong, ID #066479, Yang Genchang, ID #066428, LiZhengxu, ID #066179, and Fu Yanjie, ID #066268 fit and tack weld plate stiffeners onto End Plates: EP008-001, EP003-001, EP005-001, EP006-001, EP009-001, EP020-001, EP014-001 and EP018-001.

This QA Inspector observed ZPMC personnel heat straightening various Side Plates and flame cutting W21 x 57's to form WT's.

This QA Inspector observed ZPMC personnel performing Flux Cored Arc Welding (FCAW) at the forward gantry welding station on Side Plate SP359-001. This QA Inspector monitored the welding and the work observed appeared to comply with WPS-b-t-2132-3.

The QA Inspector observed ZPMC QC personnel present and monitoring the work. The work observed by this QA Inspector appeared to comply with the contract requirements.

OBG Preassembly Bay 4

This QA Inspector observed ZPMC welding personnel Jiang Jingteng, ID #046830 performing SAW on Internal Tower Diaphragm plate weld joint number NSD1-SA335-1A. This QA Inspector verified the welding parameters as 631 amperes and 30.9 volts. The welding observed appeared to comply with WPS-B-T-3221-B-U3c-S-1.

The QA Inspector observed ZPMC QC personnel present and monitoring the work. The work observed by this QA

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Inspector appeared to comply with the contract requirements.

Summary of Conversations:

The QA Inspector had no significant 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:	Stovall,Paul	Quality Assurance Inspector
Reviewed By:	Hager,Craig	QA Reviewer
