

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-003182**Date Inspected:** 30-Jun-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 630**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1730**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Fu Yu Hong**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**Summary of Items Observed:**

CALTRANS Quality Assurance (QA) Inspector, Alfredo Acuna was present for the fabrication scheduled for this project at the ZPMC facility in Shanghai, China for the San Francisco Oakland Bay Self Anchored Suspension Bridge.

The QA inspector observed ZPMC performing layout, cutting, beveling, milling, fitting and welding activities in bay # 1 and 2 on Tower Assembly shop.

Ultrasonic testing

The QA inspector performed ultrasonic testing (UT) at the completed joint penetration at the longitudinal stiffener splices, weld joints # ESD1-SA-107-E/J-1A, 2A, 7A and 8A. The QA inspector performed 10 % UT at random locations. The QA inspector found that welds areas tested appeared to be in compliance with the contract documents. See UT report TL_6027 generated on this date.

The QA inspector performed ultrasonic testing (UT) at the oxyfuel flame notches repair areas at random locations on the skin A East Shaft at the access holes for the shear link connections. The QA inspector found that welds areas tested appeared to be in compliance with the contract documents. See UT report TL_6027 generated on this date.

East Shaft Skin E lift # 1

The QA inspector observed ZPMC welding operator Sun Ping identification # 040741 performing welding operations with the submerged arc welding (SAW) process using the WPS-BT2221-U3 c-S in the flat (1G) position at the weld joint # ESD1-SA227-A/H-56A. The QA inspector performed welding parameters verifications. The QA inspector found that the welding parameters appeared to be in compliance with the contract documents.

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East Shaft Skin E lift # 1

The QA inspector observed ZPMC welding operator Zhang Bing Hua (053316) performing welding operations with the submerged arc welding (SAW) process using the WPS-BT2221-U3 c-S in the flat (1G) position at the junction of the weld joint # SSD1-SA-216 G/K-1A skin plate connection. The QA inspector performed welding parameters verifications. The QA inspector found that the welding parameters appeared to be in compliance with the contract documents.

Magnetic Particle Testing (MT) East Shaft Skin A

The QA inspector performed random MT operations at the longitudinal stiffeners A1 thru A4 at the end of the weld locations where the run on tabs (temporary attachments) were removed. The QA inspector found that welds appeared to be in compliance with the contract documents.

Heat Straightening Operations

The QA inspector observed ZPMC performing heat straightening operations at the longitudinal stiffener A1 for the skin A, East Shaft plate # p38(E) + P322(A) E correcting a 3 mm total deformation according with the HSR1(T)-2500. ZPMC's heat straightening operations appeared to be in compliance with the contract documents.

Summary of Conversations:

The QA inspector did not have any relevant conversation on this date.

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 Joshua T. Ishibashi, 086-13764710411, who represents the Office of Structural Materials for your project.

Inspected By:	Acuna, Alfredo	Quality Assurance Inspector
Reviewed By:	Cochran, Jim	QA Reviewer
