

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-013259**Date Inspected:** 05-Apr-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Du Zhi Qun**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:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Shailesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

This QA Inspector performed random Visual inspection and Magnetic Particle Testing (MT) of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated a TL- 6028 (MT) report for this date. The member is identified as North Tower Lift 1 skin D outside Bearing plate. The weld designations reviewed are as follows.

NSD1-SA22B/E-23, 20, 19, 14, 11, 8, 39, 40

NDT Notification No-005474

This QA Inspector performed Ultrasonic Testing (UT) of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated a TL- 6027(UT) report for this date. The member is identified as West Tower lift 4 A/E corner seam in Between 119M, 131M, 135M, 139M, 143M, The weld designations reviewed are as follows.

WSTL4-2B/L-60A/B

NDT Notification No-005475

This QA Inspector observed the following work in progress:

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

BAY 10

This QA Inspector observed ZPMC qualified welding personnel identified as 0503060. Perform Submerged Arc Welding (SAW) on North Tower lift 5 A/E corner joint. Joint identified as NSD1-TL5-5-3B-F-40A, ZPMC QC Identified Deng Zhi Bing. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3221-C-U5-S-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 0503060. Perform Shielded Metal Arc Welding (SMAW) on North tower lift 4 B/C corner joint Diagonal stiffener. Joint identified as NSTL4-3D/L-53. ZPMC QC Identified as Deng Zhi Bing. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-SMAW-3G (3F)-Repair. For more information see below attach photo.

This QA Inspector observed ZPMC qualified welding personnel identified as 053869. Perform Flux Core Arc Welding (FCAW) on North tower lift 4 A/E corner Back fill plate welding. Joint identified as NSTL4-3I/L-30. ZPMC CWI Identified as Du Zhi Qun, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-4333-Tc-P4-F.

This QA Inspector observed ZPMC qualified welding personnel identified as 057180. Perform Flux Core Arc Welding (FCAW) on North tower lift 4 A/E corner Back fill plate welding. Joint identified as NSTL4-3I/L-97. ZPMC QC Identified as Yuan Hai Gang, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-4333-Tc-P4-F.

BAY 11:

During random Visual inspection This QA Inspector observed, ZPMC Ultrasonic Testing (UT) inspector performing UT on Tower Strut after Heat Straightening, Item identified as WD1-A6003-1, 3, 5, 2. For more information see below attach photo No. 1.

This QA Inspector observed ZPMC qualified welding personnel identified as 044560. Perform Submerged Arc Welding (SAW) on Tower strut flange plate. Joint identified as WD1-STSA4-5-139M-1-21B, SD1-STSA4-5-139M-1-21B, WD1-STSA4-5-135M-1-21B, ZPMC CWI Identified as An Qing Xiang, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-4221-B-U3c-S-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 040699. Perform Submerged Arc Welding (SAW) on Tower strut flange plate. Joint identified as SD1-STSA4-5-139M-1-4B, ZPMC CWI Identified as An Qing Xiang, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-4221-B-U3c-S-1.

Repair Welding:

Repair Welding

This QA Inspector observed ZPMC qualified welding personnel identified as 202323. Perform Shielded Metal Arc Welding (SMAW) on West tower lift 4 A/B corner joint. Joint identified as WSTL4-2B/L-59A. ZPMC QC Identified as Zhao Mao Mao. With temporary welding repair report WRR-T-WR3131. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-SMAW-4G

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

(4F)-Repair. For more information see below attach photo No. 2.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.



Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

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 Skyler Guest phone: 15000422360, who represents the Office of Structural Materials for your project.

Inspected By:	Gaikwad,Shailesh	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer
