

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-013557**Date Inspected:** 28-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:** Yu Dong Ping**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:

BAY 11

This QA Inspector performed randomly Visual Inspection 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 4 A/E corner back fill plate. The weld designations reviewed are as follows.

NSTL4-3C/L-40, 101, NSTL4-3F/L-32, 100, NSTL4-3G/L-29, 98, NSTL4-3I/L-31, 96

NSTL4-3J/L-28, 97, NSTL4-3K/L-31, 97, NSTL4-3H/L-30, 131,

NDT Notification No-005619

This QA Inspector observed the following work in progress:

BAY 11:**SMAW Process:**

This QA Inspector observed ZPMC qualified welding personnel identified as 040724. Perform Shielded Metal Arc

WELDING INSPECTION REPORT

(Continued Page 2 of 4)

Welding (SMAW) on Tower Strut. Joint identified as ED1-STSA4-6-139M-1-9B, ZPMC QC Identified as Mao Bin Bin, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3212-Tc-U5b-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 046709. Perform Shielded Metal Arc Welding (SMAW) on Tower Strut. Joint identified as ND1-STSA4-6-123M-1-9B, ZPMC QC Identified as Mao Bin Bin, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2212-Tc-U5b-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 046709, 041271. Perform Shielded Metal Arc Welding (SMAW) on Tower Strut. Joint identified as ND1-STSA4-6-123M-1-6B, 73A, ZPMC QC Identified as Mao Bin Bin, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3212-Tc-U5b-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 040667. Perform Shielded Metal Arc Welding (SMAW) on Tower Strut. Joint identified as ED1-STSA4-6-123M-1-9B, ZPMC QC Identified as Mao Bin Bin, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3212-Tc-U5b-1.

This QA Inspector observed ZPMC qualified welding personnel identified as 040690. Perform Shielded Metal Arc Welding (SMAW) on East Tower lift 5 A/E corner, Grillage plate. Joint identified as ESD1-TL5-2B/F-35B, 1A, ZPMC QC Identified as Libin, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3213-B-U3b.

SAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 044550. Perform Submerged Arc Welding (SAW) on Grillage plate. Joint identified as GTSA5-B/G-1A, ZPMC QC Identified as Xu Jie, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2221-B-U3c-S-2.

This QA Inspector observed ZPMC qualified welding personnel identified as 042195. Perform Submerged Arc Welding (SAW) on Grillage plate. Joint identified as GTSA5-B/G-2A, ZPMC QC Identified as Xu Jie, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2221-B-U3c-S-2.

This QA Inspector observed ZPMC qualified welding personnel identified as 040611. Perform Shielded Metal Arc Welding (SMAW) on East Tower lift 3 Skin C, cable tray welding. Joint identified as ESD1B22-3-EL96.915M, 95. 741M-1-1-E, 1-2-E, 2-1-E, 2-2-E, ZPMC QC Identified as Mao Mao Zhao, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2113.

FCAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 203269. Perform Flux Core Arc Welding (FCAW) on East tower lift 4 A/E corner fit lug. Joint identified as ESTL4-2C/L-50, 119, ZPMC CWI Identified as Lilin, The welding parameters as measured using QC's calibrated instrument appeared to be in

WELDING INSPECTION REPORT

(Continued Page 3 of 4)

general compliance with WPS-B-T-2333-Tc-P4-F.

This QA Inspector observed ZPMC qualified welding personnel identified as 203269. Perform Flux Core Arc Welding (FCAW) on East tower lift 4 A/E corner fit lug. Joint identified as ESTL4-2F/L-49, ZPMC CWI Identified as Lilin, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2333-Tc-P4-F.

This QA Inspector observed ZPMC qualified welding personnel identified as 042218. Perform Flux Core Arc Welding (FCAW) on East tower lift 4 A/E corner fit lug. Joint identified as ESTL4-2K/L-112, 47, ZPMC CWI Identified as Lilin, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2333-Tc-P4-F.

Repair Welding:

This QA Inspector observed ZPMC qualified welding personnel identified as 044541. Perform Shielded Metal Arc Welding (SMAW) on Grillage Plate. Joint identified as WSD1-TL5-4B/F-10A/B, ZPMC QC Identified as Xu Jie with Temporary welding repair report WRR-T-WR3207, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-485-SMAW-1G (1F)-Repair-1. For more information see below attach photo.

BAY 10

FCAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 052075, 057018. Perform Flux Core Arc Welding (FCAW) on Facade Channel. Joint identified as ND1-SFSA4-90-5-9, 10, 29, 30, 17~20, ZPMC QC Identified as Yu Zhi Lai, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2133.

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



Summary of Conversations:

WELDING INSPECTION REPORT

(Continued Page 4 of 4)

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 |
