

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-013554**Date Inspected:** 25-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:

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 East, West tower A804+A65, A597+Miscellaneous. The weld designations reviewed are as follows.

ESD1-A65B/B-3, WSD1-A804B/B-3, WD1-A597A/C-31
NDT Notification No-005594

TOWER TRIAL ASSEMBLY

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 West tower lift1-Shearing plate. The weld designations reviewed are as follows.

WSD1-A423A/H-1

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NDT Notification No-005595

TOWER TRIAL ASSEMBLY

This QA Inspector performed randomly Visual Inspection of the area previously tested and accepted by ZPMC Quality Control personnel. The member is identified as West tower lift1-Shearing plate. The weld designations reviewed are as follows.

WSD1-SA225C/H-64, 65, WSD1-SA39-3~6, 11~14, 19, 20

NDT Notification No-005595

This QA Inspector observed the following work in progress:

BAY 11:

SMAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 040614, 040667. Perform Shielded Metal Arc Welding (SMAW) on Tower Strut. Joint identified as ND1-STSA4-6-131M-2-9B, 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.

This QA Inspector observed ZPMC qualified welding personnel identified as 040614. Perform Shielded Metal Arc Welding (SMAW) on Tower Strut. Joint identified as ND1-STSA4-6-131M-2-73A, 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 ND1-STSA4-6-131M-2-6B, 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 040656, 046704, Perform Shielded Metal Arc Welding (SMAW) on Tower Strut. Joint identified as ND1-STSA4-6-135M-2-9B, 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.

This QA Inspector observed ZPMC qualified welding personnel identified as 040656, 046704, Perform Shielded Metal Arc Welding (SMAW) on Tower Strut. Joint identified as ND1-STSA4-6-135M-2-6B, 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 044541, Perform Shielded Metal Arc Welding (SMAW) on Tower Strut. Joint identified as ED1-STSA4-6-127M-2-89, 95, 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-2113.

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This QA Inspector observed ZPMC qualified welding personnel identified as 044551, Perform Shielded Metal Arc Welding (SMAW) on Tower Strut. Joint identified as ED1-STSA4-6-127M-2-17, 18, 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-2113.

This QA Inspector observed ZPMC qualified welding personnel identified as 044541, Perform Shielded Metal Arc Welding (SMAW) on Tower Strut. Joint identified as ED1-STSA4-6-127M-2-19, 20, 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-2113.

This QA Inspector observed ZPMC qualified welding personnel identified as 040690. Perform Shielded Metal Arc Welding (SMAW) on East Tower lift 5, 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. For more information see below attach photo.

During random Visual Inspection, This QA Inspector observed at Bay 11 fit up and welding is going on spare tower strut, for more information see below attach photo.

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-1B, 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-2B, 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.

BAY 10 FCAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 052075. Perform Flux Core Arc Welding (FCAW) on Facade channel. Joint identified as ND1-SFSA4-90-2-4, 7~10, 27~30, 37,38, 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-2132, and WPS-B-T-2133.

This QA Inspector observed ZPMC qualified welding personnel identified as 057018. Perform Flux Core Arc Welding (FCAW) on Facade channel. Joint identified as ND1-SFSA4-90-2-3, 15~22, 39, 40, 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-2122, and WPS-B-T-2123.

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

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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