

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-013273**Date Inspected:** 21-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 Tower skirt and Tower skirt pad eye. The weld designations reviewed are as follows.

ESD1-A65B/B-36

ESD1-A65A/B-9, 10, 15, 16

ED1-A435B/C-1

NDT Notification No-005565

This QA Inspector observed the following work in progress:

BAY 11:

SMAW Process:

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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-1-74A, 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 040614. Perform Shielded Metal Arc Welding (SMAW) on Tower Strut. Joint identified as ED1-STSA4-6-123M-1-5B, 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 040667. Perform Shielded Metal Arc Welding (SMAW) on Tower Strut. Joint identified as ED1-STSA4-6-123M-1-10B, 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 041271, 046709. Perform Shielded Metal Arc Welding (SMAW) on Tower Strut. Joint identified as ED1-STSA4-6-127M-1-9A, 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 046709, 041271. Perform Shielded Metal Arc Welding (SMAW) on Tower Strut. Joint identified as ED1-STSA4-6-127M-1-73B, 6A, 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.

Repair Welding, SMAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 040690. Perform Shielded Metal Arc Welding (SMAW) on West Tower lift 5, A/B corner joint. Joint identified as WSD1-TL5-4B/F-20B, 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-485-SMAW-1G (1F) Repair. 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 Angle connection plate. Joint identified as ND1-SA4-69-119M-1, 2, 3, 4-1B, ZPMC CWI Identified as Yu Dong Ping, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-3221-Tc-U5-S-1.

FCAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 053316, Perform Flux Core Arc Welding (FCAW) on East tower lift 4 Fit Lug. Joint identified as ESTL4-2K/L-106, 108, ZPMC QC Identified as Shao Hao Long, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2333-Tc-P4-F.

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BAY 10:

SAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 052917. Perform Submerged Arc Welding (SAW) on Facade plate. Joint identified as SD1-SFSA4-10A/B-1, 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-2221-B-L2c-S.

SAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 052917. Perform Submerged Arc Welding (SAW) on Facade plate. Joint identified as SD1-SFSA4-7A/B-12, 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-2221-B-L2c-S.

During random Visual inspection This QA Inspector observed, ZPMC MT Inspector performing MT on North tower lift 5, A/B corner joint from inside. Joint identified as NSD1-TL5-3B-F-8B, 37B, For more information see below attach photo.

Tower Trial Assembly, FCAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 054069, 040533. Perform Flux Core Arc Welding (FCAW) on Bearing plate of South tower lift 1 skin E. Joint identified as SSD1-SA16F/G-43, 49, ZPMC QC Identified as Fu Wei Min, 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 049220, 042218. Perform Flux Core Arc Welding (FCAW) on Bearing plate of East tower lift 1 skin E. Joint identified as ESD1-SA227F/G-31, 46, ZPMC QC Identified as Fu Wei Min, The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2333-Tc-P4-F.

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