

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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-017578**Date Inspected:** 18-Oct-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:** Mr. Qiu Wen.**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 and Orthotropic Box Girder (OBG)**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:

NDT

BAY 11

This QA Inspector performed randomly 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 East Tower lift 3 Grating bracket. The weld designations reviewed are as follows.

GGSA-57PLAN-85M-2-1, 2, 3, 4, 5, 6-E

GGSA-57PLAN-85M-3-1, 2, 3, 4, 5, 6-E

GGSA-57PLAN-85M-4-1, 2, 3, 4, 5, 6-E

GGSA-57PLAN-85M-5-1, 2, 3, 4, 5, 6-E

NDT Notification No-07006

This QA Inspector observed the following work in progress:

BAY 11

WELDING INSPECTION REPORT

(Continued Page 2 of 4)

OBG Bike path plate FCAW process:

This QA Inspector observed ZPMC qualified welding personnel identified as 042218, 049220, Perform Flux Core Arc Welding (FCAW) on OBG bike path stringer plate to deck plate. Joint identified as BK005A3-003-025, 026. 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-2132.

This QA Inspector observed ZPMC qualified welding personnel identified as 042218, 049220, Perform Flux Core Arc Welding (FCAW) on OBG bike path stringer plate to deck plate. Joint identified as BK005A3-003-051, 052. 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-2132.

Repair welding SMAW process:

This QA Inspector observed ZPMC qualified welding personnel identified as 040690, Perform Shielded Metal Arc Welding (SMAW) on stiffener connect plate. Plate identified as SA4-49 (W-C3-B-N-SA4-3). ZPMC QC Identified as Libin with temporary welding repair report WRR-T-WR3554. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-485-SMAW-2G (2F) -Repair. For more information see below attached picture number 1.

This QA Inspector observed ZPMC qualified welding personnel identified as 37748, Perform Shielded Metal Arc Welding (SMAW) on East Tower lift 3 skin D elevator welding. Joint identified as L3-E16A/B-4. ZPMC QC Identified as Zhao Mao Mao. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2114.

This QA Inspector observed ZPMC qualified welding personnel identified as 045290, Perform Flux Core Arc Welding (FCAW) on East Tower lift 3 skin D elevator welding. Joint identified as L3-E16A/B-5. ZPMC QC Identified as Zhao Mao Mao. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2131.

BAY 10

OBG Bike path plate FCAW process:

This QA Inspector observed ZPMC qualified welding personnel identified as 057258, 040434, 057180, Perform Flux Core Arc Welding (FCAW) on OBG bike path plate. Joint identified as BK004A6-028-023, 024, 035, 160. ZPMC QC Identified as Lijun. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2132.

This QA Inspector observed ZPMC qualified welding personnel identified as 053869, Perform Flux Core Arc Welding (FCAW) on OBG bike path plate. Joint identified as BK004A3-028-030, 031, 034, 035, 056, 057, 060, 061. ZPMC QC Identified as Lijun. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2132.

This QA Inspector observed ZPMC qualified welding personnel identified as 053869, Perform Flux Core Arc Welding (FCAW) on OBG bike path plate. Joint identified as BK004A4-028-071, 072, 075, 076. ZPMC QC Identified as Lijun. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2132.

WELDING INSPECTION REPORT

(Continued Page 3 of 4)

Repair welding SMAW process:

This QA Inspector observed ZPMC qualified welding personnel identified as 053829, Perform Shielded Metal Arc Welding (SMAW) on Tower strut and stiffener connect plate base metal repair maximum depth observed 5mm. Item identified as ND1-STSA3-1-89M-1, 99M-1, 109M-1 and STSA3-7, 5, SA4-16. ZPMC QC Identified as Sun Tian Liang with critical welding repair report CWR-T-CWR700. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-485-SMAW-2G (2F) 3G (3F)-Repair.

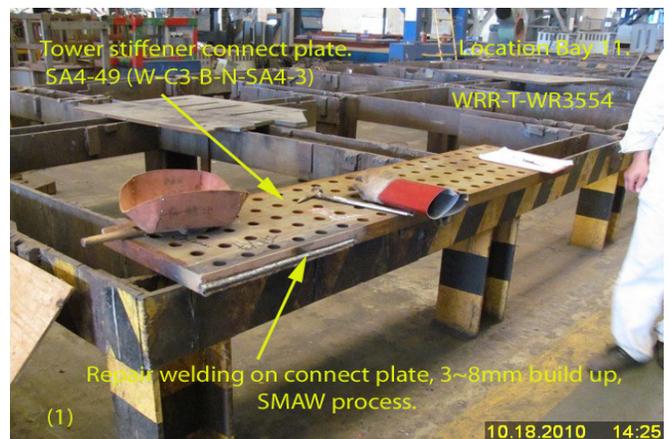
Visual Inspection after Blast at North Tower Lift –III

This Quality Assurance (QA) Inspector performed random visual inspection of East Tower Lift-III outside Skin Plate A to E surfaces after grit blasting at Blast shop number 2. Areas that marked for repair were recorded for future repair. And some areas requiring additional grinding were marked by QA Inspector and repaired by ZPMC personnel. For more information see below attached picture number 2.

Green Tagging

This QA inspector performed Visual Inspection for Green Tagging which were previously tested and accepted by ZPMC Quality Control personnel Mr. Xu Le Feng and ABF QA personnel Mr. Xing Xiao Guang. The members are identified as East tower lift 3 Diaphragm Grating Bracket. The green Tag number is identified as # 14348.

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 Michael Ng Phone: 15921845703, who represents the Office of Structural Materials for your project.

WELDING INSPECTION REPORT

(Continued Page 4 of 4)

Inspected By:	Gaikwad,Shailesh	Quality Assurance Inspector
----------------------	------------------	-----------------------------

Reviewed By:	Clifford,William	QA Reviewer
---------------------	------------------	-------------