

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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-021595**Date Inspected:** 23-Feb-2011**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. Xu Le Feng.**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 10:

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 OBG Bike Path. The weld designations reviewed are as follows.

BK008A3-001-002, 010

BK008A5-001-002, 008

BK16B-001-001, 002

NDT Notification No-08367

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 OBG Bike Path. The weld designations reviewed are as follows.

BK004A2-031-022, 023, 024, 025

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NDT Notification No-08376

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 Tower Lift 6. The weld designations reviewed are as follows.

NSD1-DPSA6-3-3, 4

SSD1-DPSA6-1-1, 2

NDT Notification No-08372

BAY 10

This QA Inspector performed randomly Visual Inspection and 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 OBG Cantilever beam plate. The weld designations reviewed are as follows.

BK16B-001-001

BK16B-001-002

NDT Notification No-08370

BAY 11

This QA Inspector performed randomly Visual Inspection and 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 OBG Bike Path. The weld designations reviewed are as follows.

BK008A5-002-008, 002

BK008A3-002-002, 010

NDT Notification No-08367

This QA Inspector observed the following work in progress:

BAY 10, FCAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 052075, 040302, Perform Flux Core Arc Welding (FCAW) on OBG Bike path deck plate to stringer plate. Joint identified as BK009A3-001-027, 028. ZPMC CWI Identified as Guo Yan Fei. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2132-ESAB. For more information see attached picture number 1.

This QA Inspector observed ZPMC qualified welding personnel identified as 052075, 040302, Perform Flux Core Arc Welding (FCAW) on OBG Bike path deck plate to stringer plate. Joint identified as BK009A5-001-051, 050, 052. ZPMC CWI Identified as Guo Yan Fei. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2132-ESAB.

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This QA Inspector observed ZPMC qualified welding personnel identified as 054069, Perform Flux Core Arc Welding (FCAW) on OBG Cantilever Box. Joint identified as BK15B-002-005, 006, 007, 008, 009, 010, 011. ZPMC QC Identified as Yin Chung Fang. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2133-ESAB and WPS-B-T-2132-ESAB.

SMAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 052493, Perform Shielded Metal Arc Welding (SMAW) on Tower Lift 6 Skin E. Joint identified as NSD1-FESA6-3-12, 13. ZPMC QC Identified as Li Peng Fei. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2113. For more information see attached picture number 2.

BAY 11, SMAW Process:

This QA Inspector observed ZPMC qualified welding personnel identified as 044541, Perform Shielded Metal Arc Welding (SMAW) on OBG Bike Path sole plate. Joint identified as BK005A1-003-039, 040, 041, 042. ZPMC QC Identified as Shao Hai Lang. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2312-Tc-P4.

Green Tagging

This QA inspector performed Visual Inspection for Green Tagging which were previously tested and accepted by ZPMC Quality Control personnel Mr. Guo Yan Fei and ABF QA personnel Mr. Zhao Xian He. The members are identified as OBG Bike Path BK008A-001 (BK008A5-001-002, 008 and BK008A3-001-002, 010). The green Tag number is identified as # 13784.

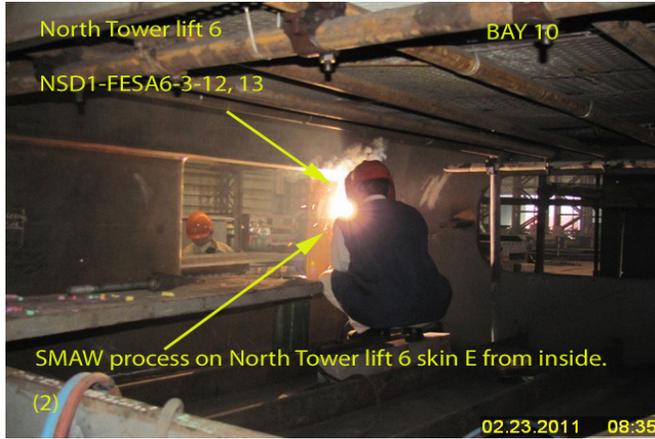
Green Tagging

This QA inspector performed Visual Inspection for Green Tagging which were previously tested and accepted by ZPMC Quality Control personnel Mr. Zhao Chen Sun and ABF QA personnel Mr. Yang Yi Heng. The members are identified as North Tower lift 6 (NSD1-DPSA6-3-1~4 and SSD1-DPSA6-1-1~4). The green Tag number is identified as # 15794 and 15795.

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 Thomas Ho: 150002048250, who represents the Office of Structural Materials for your project.

Inspected By: Gaikwad,Shailesh Quality Assurance Inspector

Reviewed By: Clifford,William QA Reviewer