

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
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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-019660**Date Inspected:** 09-Jan-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.

BK007A6-001-070, 080, 088, 098, 061, 082, 102

BK007A8-001-090, 061, 065, 086, 102, 070, 080

NDT Notification No-08102

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

BK012A1-001-009

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# WELDING INSPECTION REPORT

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BK011A1-001-009  
NDT Notification No-08112

## 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 Tower. The weld designations reviewed are as follows.

ESD1-FDSA6-2-15  
WSD1-FDSA6-4-9  
NDT Notification No-08114

This QA Inspector observed the following work in progress:

## BAY 10:

OBG Bike path, FCAW process:

This QA Inspector observed ZPMC qualified welding personnel identified as 040302, 053869 Perform Flux Core Arc Welding (FCAW) on OBG Bike path Stringer plate. Joint identified as BK009A7-001-053, 054, 520, 521. 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-ESAB.

SMAW process:

This QA Inspector observed ZPMC qualified welding personnel identified as 040581, 057220, 057266, Perform Shielded Metal Arc Welding (SMAW) on OBG Traveler rail. Joint identified as 26TR1-003, 004, 013, 014. ZPMC QC Identified as Jiang Xiang Bo. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2211-B-U2. For more information see below attached picture number 1.

BAY 11: SMAW process

This QA Inspector observed ZPMC qualified welding personnel identified as 044541, 054460, Perform Shielded Metal Arc Welding (SMAW) on OBG Bike path. Joint identified as BK008A3-002-002, 010. 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-P-2311-Tc-U4c.

This QA Inspector observed ZPMC qualified welding personnel identified as 046769, Perform Shielded Metal Arc Welding (SMAW) on OBG Bike path. Joint identified as BK008A5-002-002. 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-P-2311-Tc-U4c.

FCAW process:

This QA Inspector observed ZPMC qualified welding personnel identified as 205649, 040736, Perform Flux Core Arc Welding (FCAW) on OBG Bike path plate. Joint identified as BK008A6/A8-072, 073. ZPMC QC Identified as Wang Chuang Xin. The welding parameters as measured using QC's calibrated instrument appeared to be in

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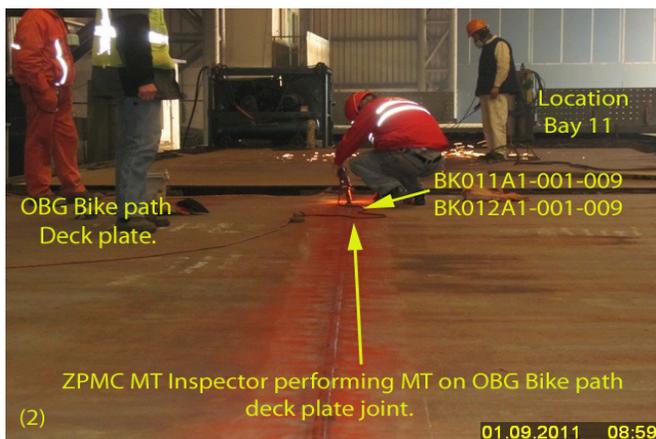
general compliance with WPS-B-T-2132-ESAB.

This QA Inspector observed ZPMC qualified welding personnel identified as 040736, Perform Flux Core Arc Welding (FCAW) on OBG Bike path plate. Joint identified as BK008A3-002-017, 018, 021, 022. ZPMC QC Identified as Wang Chuang Xin. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2132-ESAB.

### Magnetic Particle Testing:

This QA Inspector observed ZPMC Magnetic Particle Testing Inspector, performed MT on OBG Bike path Deck plate joint. Joint identified as BK011A1-001-009 and BK012A1-001-009. For more information see below attached picture number 2.

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

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**Inspected By:** Gaikwad,Shailesh

Quality Assurance Inspector

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**Reviewed By:** Clifford,William

QA Reviewer