

**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-022139**Date Inspected:** 26-Mar-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:** Li Yang**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:** Orthotropic Box Girder (OBG)**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Manoj Prabhune 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:

This QA Inspector randomly observed the following work in progress:

**OBG # TRIAL ASSEMBLY YARD****WELDING:****Segment 13AW**

This QA Inspector observed ZPMC qualified welding personnel identified as 067707 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3013AA-109; located On Orthotropic Box Girder (OBG) Deck Plate to Edge Plate Hold Back CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Zhang Qing. This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. Zhang Qing was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2214-TC-U4b-FCM-1. See attached photo for further details.

**Segment 13AW**

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## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

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This QA Inspector observed ZPMC qualified welding personnel identified as 069683 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3013AD-003; located On Orthotropic Box Girder (OBG) Floor Beam (FL3) to Side Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Zhang Qing .This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. Zhang Qing was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-B-P-2214-TC-U4b-FCM-1. See attached photo for further details

### Segment 13AW

This QA Inspector observed ZPMC qualified welding personnel identified as 203871 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3013M-194; located On Orthotropic Box Girder (OBG) Bottom Plate to I-rib Fillet Weld; ZPMC Quality Control (QC) is identified as Mr. Zhang Qing .This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. Zhang Qing was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-B-T-2132-ESAB.

### Segment 13AW

This QA Inspector observed ZPMC qualified welding personnel identified as 048696 perform Shielded Metal Arc Welding (SMAW), weld joint identified as SEG3013N-093; located On Orthotropic Box Girder (OBG) Bottom Plate to I-rib Fillet Weld; ZPMC Quality Control (QC) is identified as Mr. Zhang Qing .This QA Inspector observed the base material appears to have been preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. Zhang Qing was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-B-T-2132-ESAB.

NDT:

### Segment 12W

This QA Inspector performed Magnetic Particle Testing (MPT) Verification Inspection of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report on this date. The members are identified as Orthotropic Box Girder (OBG) components. The weld designations Verified are as follows.

LD3023-001-026, 027

LD3024-001-060, 062

CA3001-006

CA6501-002

LD3022-001-058, 059

LD3022-001-086, 087

Nondestructive testing (NDT) notification No.08636

Unless otherwise noted, all work observed on this date appeared to generally comply with the applicable contract documents.

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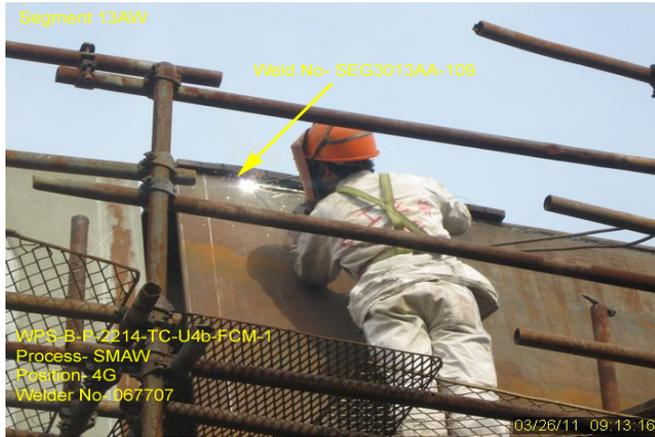
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# WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

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## Summary of Conversations:

No significant conversations were reported on this date.

## 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 Eric Tsang phone: 15000422372, who represents the Office of Structural Materials for your project.

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**Inspected By:** Prabhune,Manoj

Quality Assurance Inspector

**Reviewed By:** Peterson,Art

QA Reviewer