DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

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Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-021313
Date Inspected: 27-Feb-2011

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

OSM Arrival Time: 700
OSM Departure Time: 1900
Location: Shanghai, China

CWI Name: Zho Zhong Hai

Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**CWI Present:**	☑ Yes	☐ No	
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☐ 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 12BE~ 12CE
This QA Inspector observed ZPMC qualified welding personnel identified as 067752 perform Shielded Metal Arc Welding (SMAW), weld joint identified as OBE12E-003; located On Orthotropic Box Girder (OBG) Side Plate to Side Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Wang Li Yang. This QA Inspector observed a welding current of approximately 147 amps and 25 volts and the base material appears to have been preheated by an electrical heating elements prior to welding The Critical Welding Repair Report (CWRR) was B-CWR2812 Rev-1 .This QA Inspector observed the base material appears to have been being preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. Wang Li Yang was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW-4G (4F) FCM-Repair-1. See attached photo for further details.

Segment 12BW~ 12CW

This QA Inspector observed ZPMC qualified welding personnel identified as 046709 perform Shielded Metal Arc Welding (SMAW), weld joint identified as OBW12A-002; located On Orthotropic Box Girder (OBG) Deck Plate to Deck Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Zhou Peng. This QA Inspector observed a welding current of approximately 167 amps and 24.7 volts and the base material appears to have been preheated by an electrical heating elements prior to welding The Welding Repair Report (WRR) was B-WR20315 . This QA Inspector observed the base material appears to have been being preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. Zhou Peng was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW-4G (4F) FCM-Repair-1. See attached photo for further details.

Segment 12BW~ 12CW

This QA Inspector observed ZPMC qualified welding personnel identified as 040611 perform Shielded Metal Arc Welding (SMAW), weld joint identified as OBW12A-001; located On Orthotropic Box Girder (OBG) Deck Plate to Deck Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr.Zhu Zhong Hai. This QA Inspector observed a welding current of approximately 176 amps and 23.8 volts and the base material appears to have been preheated by an electrical heating elements prior to welding The Welding Repair Report (WRR) was B-WR20315. This QA Inspector observed the base material appears to have been being preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr.Zhu Zhong Hai was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW-1G (1F) FCM-Repair-1.

Segment 12BW~ 12CW

This QA Inspector observed ZPMC qualified welding personnel identified as 041713 perform Shielded Metal Arc Welding (SMAW), weld joint identified as CA3012-012; located On Orthotropic Box Girder (OBG) Deck Plate to Deck Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Zhou Peng. This QA Inspector observed a welding current of approximately 165 amps and 24.8 volts and the base material appears to have been preheated by an electrical heating elements prior to welding The Welding Repair Report (WRR) was B-WR20315.This QA Inspector observed the base material appears to have been being preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. Zhou Peng was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW-4G (4F) FCM-Repair-1.

Segment 12BW~ 12CW

This QA Inspector observed ZPMC qualified welding personnel identified as 044502 perform Shielded Metal Arc Welding (SMAW), weld joint identified as CA3003-006; located On Orthotropic Box Girder (OBG) Deck Plate to Edge Plate CJP Weld; ZPMC Quality Control (QC) is identified as Mr. Zhou Peng. This QA Inspector observed a welding current of approximately 159 amps and 24 volts and the base material appears to have been preheated by an electrical heating elements prior to welding The Critical Welding Repair Report (CWRR) was B-CWR2808 Rev-1.This QA Inspector observed the base material appears to have been being preheated by an electrical heating element prior to welding. ZPMC Quality Control (QC) Mr. Zhou Peng was onsite monitoring the welding variables. The welding variables recorded by QC appeared to comply with applicable WPS-345-SMAW-2G (2F) FCM-Repair-1.

WELDING INSPECTION REPORT

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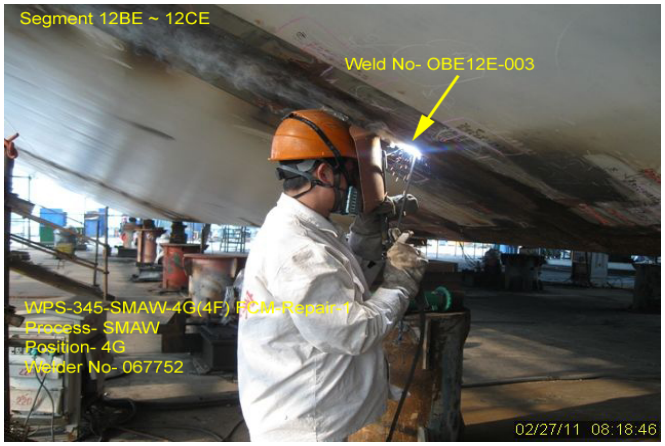
Unless otherwise noted, all work observed on this date appeared to generally comply with the applicable contract documents.



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.

Inspected By:	Prabhune,Manoj	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer