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 #: 04-0120F4
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-022313
Date Inspected: 13-Mar-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:	An Qing Xiang			**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: OBG Components

Summary of Items Observed:
On this day CALTRANS OSM Quality Assurance (QA) Inspector, Anand Upadhye was present during the times noted above for observations relative to the work being performed.

NDT
BAY 14

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted notification number 08535.
Magnetic Particle Testing (MT).

This QA inspector performed MT of approximately 15 % of the area previously tested and accepted by ZPMC Quality control personnel. This QA inspector generated MT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

DP3173-001-247~250, 255~258.

DP3174-001-218~221, 226~229, 234~237, 242~245.

WELDING
This QA Inspector observed the following work in progress:

BAY 14

This QA Inspector observed ZPMC qualified welding personnel identified as 067275 perform welding by Flux Cored Arc Welding (FCAW), on Bottom plate I-rib stiffener to floor beam weld of OBG Segment 14W. Weld joint is identified as SEG3020J-105, 109, 113. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-T-2233-ESAB. This QA Inspector noted welding variables were 230~245 amperes and 24.8 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified welding personnel identified as 066912 perform welding by Flux Cored Arc Welding (FCAW), on Bottom plate I-rib stiffener to floor beam weld of OBG Segment 14W. Weld joint is identified as SEG3020K-350, 354, 358. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-T-2233-ESAB. This QA Inspector noted welding variables were 240~250 amperes and 24.2 volts, which appears to be in compliance with the approved WPS. See attached picture.

This QA Inspector observed ZPMC qualified welding personnel identified as 067275 perform welding by Flux Cored Arc Welding (FCAW), on Bottom plate I-rib stiffener to floor beam weld of OBG Segment 14W. Weld joint is identified as SEG3020K-334, 338, 342. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-T-2233-ESAB. This QA Inspector noted welding variables were 230~245 amperes and 24.8 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified welding personnel identified as 204730 perform welding by Flux Cored Arc Welding (FCAW), on Bottom plate I-rib stiffener to floor beam weld of OBG Segment 14W. Weld joint is identified as SEG3020K-310, 314, 318. ZPMC Quality Control (QC) Inspector identified as Zhu Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-T-2233-ESAB. This QA Inspector noted welding variables were 230~250 amperes and 25.7 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified welding personnel identified as 037996 perform welding by Shielded Metal Arc Welding (SMAW), on Deck plate to Edge plate weld of OBG Segment 13AW. Weld joint is identified as SEG3013AH-110. ZPMC Quality Control (QC) Inspector identified as Shen Jian Bo was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2214-Tc-U4b-FCM-1. This QA Inspector noted welding variables were 135~150 amperes and 24.5 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified welding personnel identified as 066361 perform welding by Shielded Metal Arc Welding (SMAW), on Deck panel diaphragm to deck panel I-rib stiffener weld of OBG Segment 13AW. Weld joint is identified as DP3120-001-012. ZPMC Quality Control (QC) Inspector identified as Zhang Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2213-Tc-U4b-FCM-1. This QA Inspector noted welding variables were 140~160 amperes and 26.4 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified welding personnel identified as 051348 perform repair welding by

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Shielded Metal Arc Welding (SMAW), on floor beam to longitudinal diaphragm weld of OBG Segment 14W. Weld joint is identified as SEG3020AV-004, 012. ZPMC Quality Control (QC) Inspector identified as An Qing Xiang was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-345-SMAW-4G (4F)-FCM-Repair-1 and welding repair report B-WR20393. This QA Inspector noted welding variables were 155~170 amperes and 23.9 volts, which appears to be in compliance with the approved WPS. See attached picture.

Unless otherwise noted, all work observed on this date appeared to generally comply with 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:	Upadhye,Anand	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer