

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 #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-020041**Date Inspected:** 08-Apr-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name:	Liu Hua Jie, Lu Li Qing, Geng W			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 date Caltrans OSM Quality Assurance (QA) Inspector, Amit K. Juvekar, was present during the times noted above for observations relative to the work being performed.

This QA Inspector observed the following work in progress:

Assembly, Bay 14, 12CW.

During the Quality Assurance (QA) random in-process visual inspection of Floor beams & Longitudinal diaphragms at 12CW, this Caltrans Quality Assurance Inspector (QA) observed the following:

- At PP115, offset observed approximately about 7mm, between FL1-Floor beam 3099 (Plate mark-flange: X3184E) & FL2-1-Floor beam 3065A (Plate mark-flange: X3156A). (Vertical offset as shown in photographs).
- Welding has been completed on FL1 to Side panel & FL2-1 to LD.

This QA inspector have submitted Incident report for this issue on this date. The attached photographs provide additional detail.

Assembly, Bay 14, 12AW, Longitudinal Diaphragm to Bottom Panel.

FCAW welding of weld joint SEG3004V-045; located on assembly, Bay 14, 12AW. Welder is identified as 048696; ZPMC Quality Control Inspector (QC) is identified as Liu Hua Jie. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-B-T-2232-TC-U4B-F.

Assembly, Bay 14, 12AW, Deck plate (DP3043) to Deck plate (DP3044).

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

FCAW welding of weld joint SEG3004*-023, 005; located on assembly, Bay 14, 12AW. Welder is identified as 204130; ZPMC Quality Control Inspector (QC) is identified as Liu Hua Jie. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-B-T-2231-B-U2-F.

Assembly, Bay 14, 12AW, PP110, FL3 to Side panel.

FCAW welding of weld joint SEG3004AL-030, 024; located on assembly, Bay 14, 12AW. Welder is identified as 058245; ZPMC Quality Control Inspector (QC) is identified as Liu Hua Jie. The welding variables recorded by Quality Control Inspector (QC) appeared to comply with the Applicable WPS: WPS-B-T-2233-TC-U4B-F.

Assembly, Bay 13, Mock-Up for 13AE.

During the Quality Assurance (QA) random in-process visual inspection, this QA inspector observed ZPMC carrying out Mock-Up for 13AE. This QA inspector noticed following things
- fit up of floor beam FB3110A with bottom panel in process.

This QA Inspector carried out NDE on following
Bay 16, Tower Façade Plate.

This QA inspector performs Random Visual Testing & random Magnetic Particle Testing (MT) of approximately 15% area previously tested and accepted by ZPMC Quality Control personnel (Notification # 005485). This QA Inspector generated an MT report (TL-6028) for this date. The members are identified as

- 1) ND1-A211-1.
- 2) ND1-A243-2.
- 3) ND1-A214-1-1, 2, 3, 4.
- 4) ND1-A261-1-3, 4, 5, 6.
- 5) SD1-A267-1.
- 6) SD1-242-1-2.
- 7) ND1-A214-2-1,2,3, 4.
- 8) ND1-A216-2-3, 4, 5, 6.

Bay 14, OBG X37-Stiffeners.

This QA inspector performs Random Magnetic Particle Testing (MT) of approximately 15% area previously tested and accepted by ZPMC Quality Control personnel (Notification # 005489). This QA Inspector generated an MT report (TL-6028) for this date. The members are identified as

- 1) CA89-055 to 060, 107, 108.
- 2) CA89-079 to 084, 111, 112.
- 3) CA61-079 to 084, 111, 112.

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

WELDING INSPECTION REPORT

(Continued Page 3 of 3)



Summary of Conversations:

No relevant conversations.

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, 1500.042.2372, who represents the Office of Structural Materials for your project.

Inspected By: Juvekar,Amit

Quality Assurance Inspector

Reviewed By: Miller,Mark

QA Reviewer