

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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-021779**Date Inspected:** 16-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 and Zhu Zhong Hai**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 Trial Assembly**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector Mr. S. Manjunath Math was present during the time noted above for observations relative to the work being performed.

This QA Inspector randomly observed the following work in progress:

Orthotropic Box Girder (OBG) at Trial Assembly Areas

Traveler Rails at Bay # 10

This QA Inspector performed Dimension Control Inspection on the Traveler Rails 20TR2-039 for the following measurements. ZPMC QC Mr. Zhou Cheng Sun and ABF QA Inspector Mr. Liu Chen was present during the course of inspection.

Traveler Rails Thickness at typical section.

Traveler Rails Flange width at typical section.

Traveler Rails Depth at typical section.

Traveler Rails Flange curl at typical section.

WELDING INSPECTION REPORT

(Continued Page 2 of 4)

Traveler Rails Traveler Rail length.

Traveler Rails Sweep.

The measurements were recorded in the Dimension Control Plan (DCP) on a separate form and submitted to the Lead Inspector and Engineer for review and disposition.

Segment 12BW (Full Height Diaphragm)

This QA Inspector observed the repair welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) groove weld. The weld joint was designated as Seg3006S-035. The welder identification was 046709 and was observed welding in the 2G (Horizontal) position using approved Welding Procedure Specification WPS-345-SMAW-2G(2F)-Repair-FCM-1. The piece mark was identified as full height Longitudinal Diaphragm web to Bottom Panel hold back weld at work point W3. ZPMC performed repair welding in accordance with Welding Repair Report BWR-20338.

Segment 12AW (Side Panel and Edge Panel connecting weld)

This QA Inspector observed the in-process welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as CA3006-006. The welder identification was 046709 and was observed welding in the 2G (Horizontal) position using approved Welding Procedure Specification WPS-B-P-2212-Tc-U4b-FCM-1. The piece mark was identified as Side Panel to Edge Panel hold back weld at work point W1.

Segment 12CW (Full Height Diaphragm)

This QA Inspector observed the repair welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) groove weld. The weld joint was designated as Seg3006T-035. The welder identification was 046709 and was observed welding in the 2G (Horizontal) position using approved Welding Procedure Specification WPS-345-SMAW-2G(2F)-Repair-FCM-1. The piece mark was identified as full height Longitudinal Diaphragm web to Bottom Panel hold back weld at work point W3. ZPMC performed repair welding in accordance with Welding Repair Report BWR-20338.

Segment 12CW (Floor Beam to Stiffener weld)

This QA Inspector observed the in-process welding by Shielded Metal Arc Welding (SMAW) process on a Fillet weld. The weld joint was designated as CA3095-001-005. The welder identification was 041713 and observed welding in the 4F (Overhead) position using approved Welding Procedure Specification WPS-B-P-2114-FCM-1. The piece mark was identified as weld connecting the Floor Beam to the Stiffeners, Counter Weight side.

Please reference the pictures attached for more comprehensive details.

Cross Beam # 17 (Bottom Plate to Vertical Web Plate hold back weld)

WELDING INSPECTION REPORT

(Continued Page 3 of 4)

This QA Inspector observed the repair welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as CB3001A-017-004. The welder identification was 067752 and was observed welding in the 2G (Horizontal) position using approved Welding Procedure Specification WPS-345SMAW-4G(4F)-Repair-FCM-1. The piece mark was identified as weld connecting Bottom Plate to the Vertical Web Plate hold back weld at PP 112. ZPMC performed repair welding in accordance with Welding Repair Report B-WR20414.

Please reference the pictures attached for more comprehensive details.

Segment 12AE to Segment 12BE (U-Rib to U-Rib)

This QA Inspector observed ZPMC QC performing bolts installation at the U-Ribs to U-Rib between PP 112.5 to PP 113 for Segment 12AE to Segment 12BE.

Please reference the pictures attached for more comprehensive details.

Segment 12CE (Catwalk Channel)

This QA Inspector observed ZPMC QC performing match drilling and to the Catwalk structure to the Floor Beam flange between PP 115 to PP 115.2 for Segment 12CE.

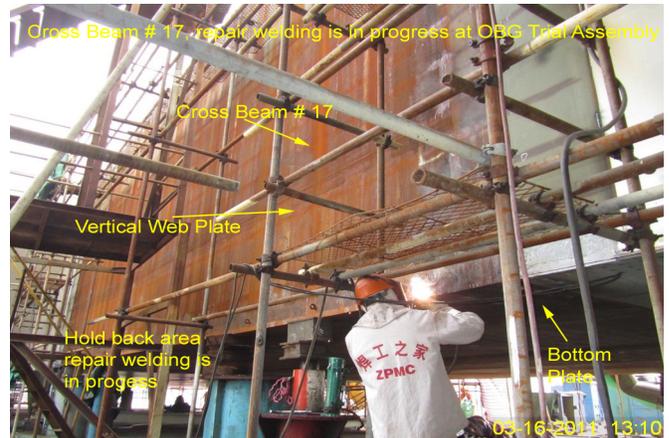
Please reference the pictures attached for more comprehensive details.

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



WELDING INSPECTION REPORT

(Continued Page 4 of 4)



Summary of Conversations:

No relevant 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 15000422372, who represents the Office of Structural Materials for your project.

Inspected By: Math,Manjunath

Quality Assurance Inspector

Reviewed By: Miller,Mark

QA Reviewer