

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-016805**Date Inspected:** 18-Sep-2010**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)**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

Voyage 5

This QA Inspector observed that the ZPMC Ship Zhenhua # 18 sailed out from Jetty # 4 en-route to Yerba Buena Island, California, USA at 10:00 Hrs (local time). Ship is en-route to USA for delivering Lift 9(East), Lift 9(West), Cross Beam (CB) # 11 and CB 12 and Tower Lift 2 comprising East Tower Shaft, West Tower Shaft, South Tower Shaft and North Tower Shaft, .

Please reference the pictures attached for more comprehensive details.

Segment 9DE (Cable Tray at FL3)

This Quality Assurance (QA) Inspector witnessed final bolt tension verification for Cable Tray structure at FL3 which is connected to Bottom Plate I-Ribs at FL3 area between Panel Points (PP) 80 and PP 81 for Segment 9DE. Inspected 10% on a random basis and found the tension to be in general compliance. Inspection was performed

WELDING INSPECTION REPORT

(Continued Page 2 of 4)

against the Notification No. 00495 Dated September 18, 2010.

Bolt sizes used were M3/4" x 2" RC Set# DHGM60631 and final torque required was 346 N-m.

The Manual Torque wrench used was Serial No. XO2-114.

Segment 10BE to 10CE

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 OBE10C-001. The welder identification was 044515 and observed welding in the 4G (Overhead) position using approved Welding Procedure Specification WPS-B-P-2214-B-U2-FCM-1. The piece mark was identified as the Side Panel transverse splice on cross beam side.

Segment 10BE to 10CE

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 OBE10C-002. The welder identification was 044515 and observed welding in the 4G (Overhead) position using approved Welding Procedure Specification WPS-B-P-2214-B-U2-FCM-1. The piece mark was identified as the Side Panel transverse splice on cross beam side.

Segment 10BE to 10CE

This QA Inspector observed the in-process welding by Flux Cored Arc Welding (FCAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as OBE10A-001. The welder identification was 047353 and observed welding in the 3G (Vertical) position using approved Welding Procedure Specification WPS-B-T-2233-B-U2-F. The piece mark was identified as the Edge Panel transverse splice on cross beam side.

Segment 10BE to 10CE

This QA Inspector observed the in-process welding by Flux Cored Arc Welding (FCAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as OBE10A-005. The welder identification was 040367 and observed welding in the 3G (Vertical) position using approved Welding Procedure Specification WPS-B-T-2233-B-U2-F. The piece mark was identified as the Edge Panel transverse splice on bike path side.

Segment 10BE to 10CE

This QA Inspector observed the in-process welding by Flux Cored Arc Welding (FCAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as BP184-001-020 and BP184-001-021. The welder identification was 044473 and observed welding in the 3G (Vertical) position using approved Welding Procedure Specification WPS-B-T-2233-B-U2-F. The piece mark was identified as Bottom Panel T-Rib web splice.

WELDING INSPECTION REPORT

(Continued Page 3 of 4)

Segment 10BE

This QA Inspector observed the in-process fillet welding by Flux Cored Arc Welding (FCAW) process. The weld joint was designated as BP184-001-043/044 and BP184-001-045/046. The welder identification was 044473 and observed welding in the 2F (Horizontal) position using approved Welding Procedure Specification WPS-B-T-2132. The piece mark was identified as Bottom Panel T-Rib hold back weld.

Segment 10CE

This QA Inspector observed the in-process fillet welding by Flux Cored Arc Welding (FCAW) process. The weld joint was designated as BP185-001-025/026 and BP184-001-027/028. The welder identification was 044473 and observed welding in the 2F (Horizontal) position using approved Welding Procedure Specification WPS-B-T-2132. The piece mark was identified as Bottom Panel T-Rib hold back weld.

Segment 10BE

This QA Inspector observed the in-process fillet welding by Flux Cored Arc Welding (FCAW) process. The weld joint was designated as BP130-001-049/050 and BP130-001-051/052. The welder identification was 052763 and observed welding in the 2F (Horizontal) position using approved Welding Procedure Specification WPS-B-T-2132. The piece mark was identified as Bottom Panel T-Rib hold back weld.

Segment 10CE

This QA Inspector observed the in-process fillet welding by Flux Cored Arc Welding (FCAW) process. The weld joint was designated as BP131-001-031/032 and BP131-001-033/034. The welder identification was 052763 and observed welding in the 2F (Horizontal) position using approved Welding Procedure Specification WPS-B-T-2132. The piece mark was identified as Bottom Panel T-Rib hold back weld.

Segment 10CW

This QA Inspector observed the in-process fillet welding by Flux Cored Arc Welding (FCAW) process. The weld joint was designated as SEG063A-040. The welder identification was 053816 and observed welding in the 1F (Flat) position using approved Welding Procedure Specification WPS-B-T-2231-B-U2-F. The piece mark was identified as Side Panel to Bottom Panel hold back weld at work point W3.

Segment 10CW

This QA Inspector observed the in-process fillet welding by Flux Cored Arc Welding (FCAW) process. The weld joint was designated as SEG063A-041. The welder identification was 053816 and observed welding in the 1F (Flat) position using approved Welding Procedure Specification WPS-B-T-2231-B-U2-F. The piece mark was identified as Side Panel to Bottom Panel hold back weld at work point W4.

Segment 11AW

WELDING INSPECTION REPORT

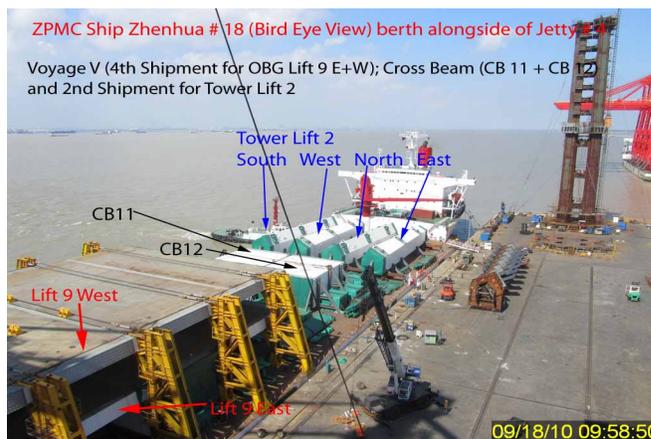
(Continued Page 4 of 4)

This QA Inspector observed the in-process fillet welding by Flux Cored Arc Welding (FCAW) process. The weld joint was designated as SEG065A-013. The welder identification was 053816 and observed welding in the 1F (Flat) position using approved Welding Procedure Specification WPS-B-T-2231-B-U2-F. The piece mark was identified as Side Panel to Bottom Panel hold back weld at work point W3.

Segment 10CW

This QA Inspector observed the in-process fillet welding by Flux Cored Arc Welding (FCAW) process. The weld joint was designated as SEG063A-014. The welder identification was 053816 and observed welding in the 1F (Flat) position using approved Welding Procedure Specification WPS-B-T-2231-B-U2-F. The piece mark was identified as Side Panel to Bottom Panel hold back weld at work point W4.

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



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 150000422372, who represents the Office of Structural Materials for your project.

Inspected By: Math,Manjunath

Quality Assurance Inspector

Reviewed By: Peterson,Art

QA Reviewer
