

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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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-015380**Date Inspected:** 06-Jul-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), Changxing Island **Location:** Shanghai, China

CWI Name:	Li Yang and Wu Zhi Cheng	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) Trial Assembly Areas

Segment 11EW

This QA Inspector performed Green Tag Dimension Control Inspection along with Caltrans QA Inspector Mr. Manoj Prabhune for the Segment 11AW from Panel Points (PP) 106.75 to PP 108.75 at the following locations:

The Floor Beam (FB) flatness was verified and measured from East and West side of the FB at Panel Points (PP) 107 and PP 108. The QA Inspector measured the flatness using 1500mm Straight Edge.

The Deck Panel to the Deck Panel Diaphragm plate plumbness and flatness was verified and measured from east and west side of the Deck Panel Diaphragm at Panel Points (PP) 107 and PP 108. The QA Inspector measured the plumbness using carpenter square and performed a flatness check using 710mm Straight Edge.

The skin flatness was verified and measured across the longitudinal butt weld at Side Panel (SP) to Corner Assembly (CA) at the Cross Beam (CB) and Counter Weight (CW) side from Panel Point (PP) 106.75 to PP 108.

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75. The QA Inspector measured the skin flatness using 600mm Straight Edge.

The skin flatness was verified and measured across the longitudinal butt weld at Deck Panel (DP) to Corner Assembly (CA) at the Cross Beam (CB) and Counter Weight (CW) side from Panel Point (PP) 106.75 to PP 108.

75. The QA Inspector measured the skin flatness using 600mm Straight Edge.

The diameter of the cope holes at the Corner Assembly (CA) were verified and measured at Panel Points (PP) 107, PP 107.5, PP 108, and PP 108.5 at the Cross Beam (CB) and Counter Weight (CW) side. The QA Inspector measured the diameter of the cope holes using a 150mm steel ruler.

The protrusion of the Deck Panel (DP) stiffener inside cope holes area at the Corner Assembly (CA) were verified and measured at the Panel Points (PP) 107, PP 107.5, PP 108, and PP 108.5 at the Cross Beam (CB) and Counter Weight (CW) side. The QA Inspector measured the protrusion of stiffener using a 150mm steel ruler.

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 9AW

This QA Inspector observed the in-process repair welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as CA055-005. The welder identification was 045196 and was observed welding in the 1G (Flat) position using approved Welding Procedure Specification WPS-B-P-2211-Tc-U4b-FCM-1. The Piece Mark was identified as the Side Panel Corner Assembly to Edge Panel at Work Point W1 on the Counter Weight Side.

Segment 9BW

This QA Inspector observed the in-process repair welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as CA059-001. The welder identification was 045196 and was observed welding in the 1G (Flat) position using approved Welding Procedure Specification WPS-B-P-2211-Tc-U4b-FCM-1. The Piece Mark was identified as the Side Panel Corner Assembly to Edge Panel at Work Point W1 on the Counter Weight Side.

Segment 9CE

This QA Inspector observed the in-process repair welding by Flux Cored Arc Welding (FCAW) process on the buttering of the Flange on the Longitudinal Diaphragm (LD) at Work Point E3. The LD was identified as LD12B. The welder identification was 220069 and was observed welding in the 3G (Vertical) position using approved Welding Procedure Specification WPS-345-FCAW-3G (3F)-Repair. Please reference the pictures attached for more comprehensive details.

Segment 9BE to 9CE

This QA Inspector observed the in-process repair welding by Shielded Metal Arc Welding (SMAW) process on a

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Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as OBE9B-008. The welder identification was 054467 and was observed welding in the 4G (Overhead) position using approved Welding Procedure Specification WPS-345-SMAW-4G (4F)-Repair-1. The piece mark was identified as Bottom Panel transverse splice weld.

Segment 9BE to 9CE

This QA Inspector observed the in-process repair welding by Shielded Metal Arc Welding (SMAW) process on a Complete Joint Penetration (CJP) groove weld. The Weld joint was designated as OBE9-006. The welder identification was 220069 and was observed welding in the 4G (Overhead) position using approved Welding Procedure Specification WPS-345-SMAW-4G (4F)-Repair-1. The piece mark was identified as Edge Panel transverse splice weld Cross Beam side. Please reference the pictures attached for more comprehensive details.

Segment 7DW

This QA Inspector observed ZPMC personnel's installing ASTM A325 bolts at partial height diaphragm flange connecting to side panel for Segment 7DW at Panel Points (PP) 56, PP 57 and PP 58. Please reference the pictures attached for more comprehensive details.

Segment 9DW

This QA Inspector observed ZPMC personnel's installing Bottom Plate at FL3 area for Segment 9DW at Panel Points (PP) 80, PP 81 and PP 82. The installation of Bottom Plate is to facilitate match drilling of FL3 Flange to Bottom Plate. Please reference the pictures attached for more comprehensive details.

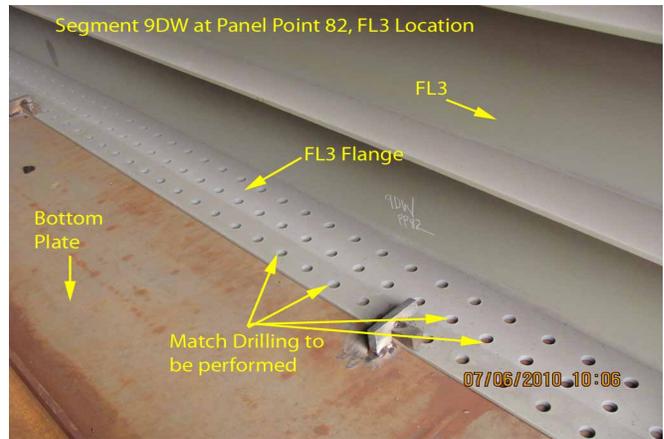
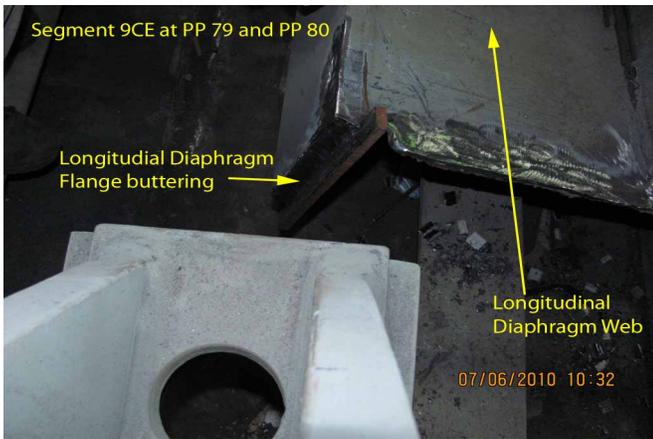
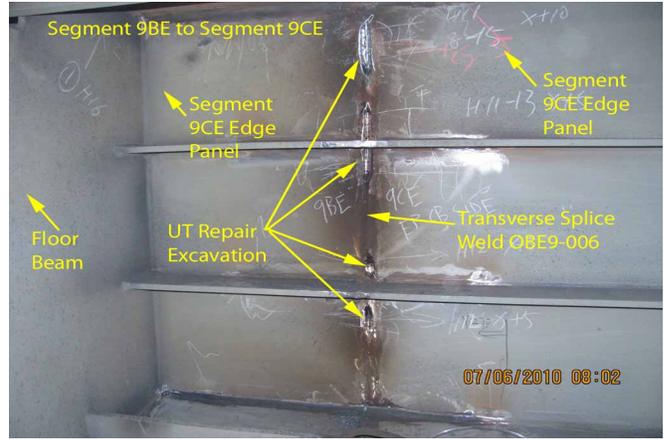
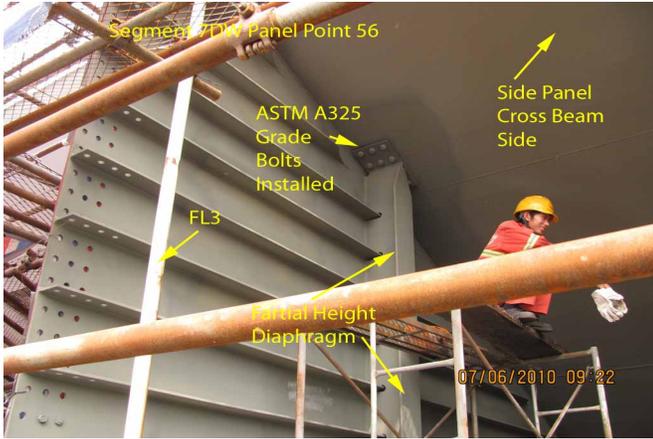
Segment 9DE

This QA Inspector observed ZPMC personnel's installing Bottom Plate at FL3 area for Segment 9DE at Panel Points (PP) 80, PP 81 and PP 82. The installation of Bottom Plate is to facilitate match drilling of FL3 Flange to Bottom Plate.

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

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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 T Sang 1500-0042-2372, who represents the Office of Structural Materials for your project.

Inspected By: Math,Manjunath

Quality Assurance Inspector

Reviewed By: Peterson,Art

QA Reviewer