

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-012017**Date Inspected:** 09-Feb-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, 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 6AE (Longitudinal Diaphragm) Individual Survey

This QA Inspector performed Individual Survey Inspection with Mr. Manikandan ABF Survey Team for the Deck Panel Diaphragm for Segment 6AE at Panel Point (PP) 37 East side. The measured readings were fed in spread sheet, generated the report and submitted to the Task Leader and Engineer for review.

6AW to 6BW

This QA Inspector observed ZPMC personnel's at Segment 6AW to 6BW at PP 40 and PP 41 Longitudinal Diaphragm North and South side Heat Straightening was in progress against Heat Straightening Report (HSR) Report HSR1(B)-7992 Rev. 0 Dated Dec 11, 2009 for the following welds.

Seg 029B-007~008

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Seg 029C-038~039

Seg 027D-035~038

Seg 027F-035~038

LD 009A-001~010

LD010A-001~010

7BW to 7CW

This QA Inspector observed ZPMC welding personnel performing welding by Shielded Metal Arc Welding (SMAW) for weld connecting Edge Panel Counter Weight side for Transverse Splice Weld. The weld joints are identified as OBW7A -006. The welder is identified as 069683. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-P-2214-B-U2-FCM-1. It was observed that the parameters noted down by ZPMC QC are in compliance with WPS.

7BW to 7CW

This QA Inspector observed ZPMC welding personnel performing welding by Shielded Metal Arc Welding (SMAW) for weld connecting Edge Panel Cross Beam side for Transverse Splice Weld. The weld joints are identified as OBW7A -010. The welder is identified as 068917. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-P-2214-B-U2-FCM-1. It was observed that the parameters noted down by ZPMC QC are in compliance with WPS.

7BW to 7CW

This QA Inspector observed ZPMC welding personnel performing welding by Flux Cored Arc Welding (FCAW) for weld connecting Side Panel Corner Assembly Counter Weight side for Transverse Splice Weld. The weld joints are identified as OBW7C -006. The welder is identified as 068917. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2233T. It was observed that the parameters noted down by ZPMC QC are in compliance with WPS.

7BW

This QA Inspector observed ZPMC welding personnel performing welding by Shielded Metal Arc Welding (SMAW) for weld connecting the Deck Panel to Corner Assembly Counter Weight side for Transverse Splice Weld. The weld joints are identified as Seg 035-044. The welder is identified as 068917. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-P-2214-Tc-U4b-FMC-1. It was observed that the parameters noted down by ZPMC QC are in compliance with WPS.

7CW

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This QA Inspector observed ZPMC welding personnel performing welding by Shielded Metal Arc Welding (SMAW) for weld connecting the Deck Panel to Corner Assembly Counter Weight side for Transverse Splice Weld. The weld joints are identified as CA* 035-006. The welder is identified as 069683. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-P-2214-Tc-U4b-FMC-1. It was observed that the parameters noted down by ZPMC QC are in compliance with WPS.

7BW to 7CW

This QA Inspector observed ZPMC welding personnel performing welding by Flux Cored Arc Welding (FCAW) for weld connecting Deck Panel for Transverse Splice Weld. The weld joints are identified as OBW7A -008. The welder is identified as 220067 and 053609. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2231T-1. It was observed that the parameters noted down by ZPMC QC are in compliance with WPS.

7BW to 7CW

This QA Inspector observed ZPMC welding personnel performing welding by Flux Cored Arc Welding (FCAW) for weld connecting Deck Panel Corner Assembly Counter Weight side for Transverse Splice Weld. The weld joints are identified as OBW7A -007. The welder is identified as 220067 and 053609. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2231T-1. It was observed that the parameters noted down by ZPMC QC are in compliance with WPS.

7BW to 7CW

This QA Inspector observed ZPMC welding personnel performing welding by Flux Cored Arc Welding (FCAW) for weld connecting Deck Panel Corner Assembly Corner Assembly side for Transverse Splice Weld. The weld joints are identified as OBW7A -009. The welder is identified as 220067 and 053609. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2231T-1. It was observed that the parameters noted down by ZPMC QC are in compliance with WPS.

Segment 6CW to 7AW

This QA Inspector observed ZPMC welding personnel performing repair welding from inside by Flux Cored Arc Welding (FCAW) for Linear Misalignment which was found at Side Panel to Bottom Panel after Inspection. The weld joints are identified as Seg033B-001, Seg033B-009 and Seg033B-011. The welder is identified as 220066. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-345-FCAW-3G (3F)-Repair. It was observed that the parameters noted down by ZPMC QC are in compliance with WPS.

Segment 6CW to 7AW

This QA Inspector observed ZPMC welding personnel performing repair welding from External side by Shielded

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Metal Arc Welding (SMAW) for Linear Misalignment which was found at Side Panel to Bottom Panel after Inspection. The weld joints are identified as Seg033A-004. The welder is identified as 037932. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-345-SMAW-4G (4F)-FCM-Repair-1. It was observed that the parameters noted down by ZPMC QC are in compliance with WPS.

7BW to 7CW

This QA Inspector observed ZPMC personnel's at Segment 7BW to 7CW between Panel Point (PP) 52 and PP 53 Bottom Panel; Side Panel (Cross Beam and Counter Weight side) welding is in progress for Transverse Splice.

7AW to 7BW

This QA Inspector observed ZPMC personnel's at Segment 7AW to 7BW between PP 49 and PP 50 Side Panel T-Rib cross beam side hold back welded area grinding was in progress.

7BW to 7CW

This QA Inspector observed ZPMC personnel's at Segment 7BW to 7CW Bottom Panel T-Ribs hold back area welding was in progress.

7BW to 7CW

This QA Inspector observed ZPMC personnel's Segment 7BW to 7CW side panel corner assembly I-Stiffeners hold back area welding was in progress cross beam side.

7AW to 7BW

This QA Inspector observed ZPMC personnel's T-Ribs Web to Web one side welded area carbon arc gouging is in progress till sound weld.

6CW to 7AW

This QA Inspector observed ZPMC personnel's side panel and bottom panel connecting weld at W3 location welding was in progress.

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

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

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your project.

Inspected By:	Math,Manjunath	Quality Assurance Inspector
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Reviewed By:	Miller,Mark	QA Reviewer
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