

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-011070**Date Inspected:** 02-Jan-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 Trail 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 6BW to 6CW

This QA Inspector measured and recorded the Offset and Root Gap for Segment 6BW to 6CW between Panel Point (PP) 43 to PP 44 along with Caltrans QA Mr. Manikandhan and generated the report, submitted to the Team Leader and Engineer for review.

Signed Off Green Tag's

This Quality Assurance (QA) Inspector witnessed final tension verification for following depicted locations. Inspected 10% on a random basis and found the tension to be in general compliance and thus signed off the Green Tags.

At Segment 1AE at Panel Point (PP) 8.5 for Corner Assembly Edge Plate Splice (South side) Bolt Size used was M24 x 75 RC Set# DHGM240020 and M24 x 75 RC Set# DHGM240020 and final torque required was 600 N-m

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Green Tag No. 522.

At Segment 1AAE at Panel Point (PP) 8 .0 to 8.5 for Corner Assembly Barrier Angle (North and South side) Bolt Size used was M22 x 120 RC Set# DHGM220053 and final torque required was 440N-m Green Tag No. 522.

At Segment 1AAW at Panel Point (PP) 8 .0 to 8.5 for Corner Assembly Barrier Angle (North and South side) Bolt Size used was M22 x 120 RC Set# DHGM220051 and final torque required was 433N-m Green Tag No. 524.

At Segment 1AAE at Panel Point (PP) 8 .5 to 9.0 for Corner Assembly Barrier Angle (North and South side) Bolt Size used was M22 x 120 RC Set# DHGM220053 and final torque required was 440N-m Green Tag No. 525.

At Segment 1AAW at Panel Point (PP) 8 .5 to 9.0 for Corner Assembly Barrier Angle (North and South side) Bolt Size used was M22 x 120 RC Set# DHGM220051 and final torque required was 433N-m Green Tag No. 526.

At Segment 2AE and 2AW at Panel Point (PP) 14.5 to PP 15 for Catwalk Step Stool (Bottom Panel Location Cross Beam side) Bolt Size used was M16 x 55 RC Set# DHGM160012 and final torque required was 200 N-m Green Tag No. 527.

At Lift 3West and 4 West from Panel Point (PP) 19 to PP 28 for Catwalk Handrail (Side Panel to Bottom Panel Location) Bolt Size used was M16 x 95 RC Set# DHGM160017 and final torque required was Snug Tight Green Tag No. HR005.

At Lift 1West and 2 West from Panel Point (PP) 8.5 to PP 18 for Catwalk Handrail (Side Panel to Bottom Panel Location) Bolt Size used was M16 x 95 RC Set# DHGM160017 and final torque required was Snug Tight Green Tag No. HR006.

Segment 6BW to 6CW

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Transverse Splice Weld for Deck Panel Corner Assembly Counter Weight side for Segment 6BW to 6CW. Weld identified as OBW6A-002. The welders are identified as 220067. 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 root gap was exceeding the requirement of WPS thus ZPMC QC was having Welding Repair Report B-WR9652 Rev.0.

Segment 6AW

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) for Counter Weight connecting plate for the Segment 6AW. Weld identified as OBW6F-003. The welder was identified as 037743. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-P-2114-Tc-U4b-FCM-1.

Segment 6BW to 6CW

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This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Transverse Splice Weld for Bottom Panel for Segment 6BW to 6CW. Weld identified as OBW6C-003. The welders are identified as 220066 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 root gap was exceeding the requirement of WPS thus ZPMC QC was having Welding Repair Report B-WR9652 Rev.0.

Segment 6AW

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) for Counter Weight connecting plate for the Segment 6AW. Weld identified as OBW6F-004. The welder was identified as 220066. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2232-Tc-U5-F.

Segment 6BW to 6CW

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Transverse Splice Weld for Deck Panel side for Segment 6BW to 6CW. Weld identified as OBW6A-003. The welders are identified as 220069. 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 root gap was exceeding the requirement of WPS thus ZPMC QC was having Welding Repair Report B-WR9652 Rev.0.

Segment 5CE

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) at Weld connecting Bottom Panel to Side Panel Bike Path side for Segment 5CE at E3 location. The welder was identified as 054467. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-345-SMAW-4G (4F)-Repair. The repair work was been performed against the ABF RFI no. ABF-RFI-001938 Rev.1.

Segment 6AE to 6BE

This QA Inspector observed ZPMC personnel performing flame cut for the Side Panel Bike path side as distortion was observed at T-Ribs and the work was been performed against Welding Repair Report no. B-WR 9154 Rev. 0.

Segment 5BW

This QA Inspector observed ZPMC personnel at Segment 5BW Counter Weight erected at location and Counter weight Deck Panel connecting plate drilling was in progress.

Segment CB5

This QA Inspector observed ZPMC personnel at CB5 connecting 6AW to 6AE deck panel FL3 extension to CB5 connection drilled splice plate placed all around the Cross Beam and ZPMC QC inspection the location so as drilling can be started.

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Segment 6BW to 6CW

This QA Inspector observed ZPMC personnel at Segment 6BW to 6CW Deck Panel to Deck panel and Side Panel to Side Panel Cross beam side fit-up was in progress for Transverse Segment Splice.

Segment 6AE to 6BE

This QA Inspector observed ZPMC personnel at Segment 6AE to 6BE Transverse splice weld to longitudinal weld at corner assembly for side panel deformation found to be 7mm thus the weld at side panel and side pane corner assembly flame cut and adjustment and fit-up is in progress.

Segment 5BE to 5CE

This QA Inspector observed ABF QC's performing Ultrasonic Test (UT) for Edge Panel Bike Path side for Segment 5BE to 5CE for Transverse Segment weld.

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

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