

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-010576**Date Inspected:** 02-Dec-2009**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**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

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 1AW at Panel Point 9 to 10 Longitudinal Diaphragm Splice (4750mm above the Bottom Panel North and South) and Bolt Size used was M24 x 75 RC Set# DHGM240020 and final torque required was 465 N-m and Green Tag No. 465.

At Segment 1AW at Panel Point 9 to 10 Longitudinal Diaphragm Splice (4750mm above the Bottom Panel North and South) and Bolt Size used was M24 x 90 RC Set# DHGM240028 and final torque required was 540 N-m and Green Tag No. 466.

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At Segment 1AW at Panel Point 9 to 10 Longitudinal Diaphragm Splice (4750mm above the Bottom Panel North and South) and Bolt Size used was M24 x 100 RC Set# DHGM240022 and final torque required was 527 N-m and Green Tag No. 467.

At Segment 1AW at Panel Point 9 to 10 Longitudinal Diaphragm Splice (4750mm above the Bottom Panel North and South) and Bolt Size used was M24 x 110 RC Set# DHGM240023 and final torque required was 523 N-m and Green Tag No. 468.

At Segment 1AW at Panel Point 9 to 10 Longitudinal Diaphragm Splice (4750mm above the Bottom Panel North and South) and Bolt Size used was M24 x 120 RC Set# DHGM240024 and final torque required was 553 N-m and Green Tag No. 469.

At Segment 1AW at Panel Point 9 to 12.5 Longitudinal Diaphragm to Floor Beam Stiffener (1800mm above the Bottom Panel North and South) and Bolt Size used was M22 x 80 RC Set# DHGM220012 and final torque required was 427 N-m and Green Tag No. 470.

At Segment 1AW at Panel Point 8.5 to 12.5 Longitudinal Diaphragm to Floor Beam Stiffener (1800mm above the Bottom Panel North and South) and Bolt Size used was M22 x 85 RC Set# DHGM220047 and final torque required was 427 N-m and Green Tag No. 471.

At Segment 1AW and 1BW at Panel Point 10 to 10.5 U-Rib to U-Rib and Bolt Size used was M22 x 65 RC Set# DHGM220021 and final torque required was 543 N-m and Green Tag No. 472.

At Segment 1AW and 1BW at Panel Point 10 to 10.5 U-Rib to U-Rib and Bolt Size used was M22 x 85 RC Set# DHGM220047 and M22 x 65 RC Set# DHGM220021 and final torque required was 427 N-m and 543 N-m and Green Tag No. 473.

At Segment 1AW and 1BW at Panel Point 10 to 10.5 U-Rib to U-Rib and Bolt Size used was M22 x 80 RC Set# DHGM220012 and M22 x 65 RC Set# DHGM220021 and final torque required was 427 N-m and 543 N-m and Green Tag No. 473.

CB5

This Quality Assurance (QA) Inspector measured and recorded the Gap and Offset between the 6AE to 6BW FL3 to the CB5 and the measurements were been taken along with Caltrans QA Mr. Manikandhan.

CB5 Offset and Mis-alignment Reading between FL3 to CB5

CB5 Offset and Mis-alignment Reading between FL3 to CB5

At PP 38

East Bound

Location Gap Offset

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4th Stiffener 17 1
8th Stiffener 19 1.8
12th Stiffener 22 1.5

West Bound

Location Gap Offset

4th Stiffener 16 1
8th Stiffener 18 1
12th Stiffener 19 1

Note: Reference taken from Bottom Plate

At PP 39

East Bound

Location Gap Offset

4th Stiffener 12 2
8th Stiffener 13 2
12th Stiffener 10 2

West Bound

Location Gap Offset

4th Stiffener 14 1.5
8th Stiffener 16 0.5
12th Stiffener 22 2

Note: Reference taken from Bottom Plate

At PP 40

East Bound

Location Gap Offset

4th Stiffener 18 1
8th Stiffener 14 2
12th Stiffener 13 2

West Bound

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Location Gap Offset

4th Stiffener 18 1

8th Stiffener 21 1

12th Stiffener 23 2

Note: Reference taken from Bottom Plate

CB4 Offset and Mis-alignment Reading between FL3 to CB5 (Bottom Plate)

AT PP 38 to PP 39 East Bound Side

Location Gap

2nd Stiffener 18

4th Stiffener 26

AT PP 38 to PP 39 West Bound Side

Location Gap

2nd Stiffener 14

4th Stiffener 18

AT PP 39 to PP 40 East Bound Side

Location Gap

2nd Stiffener 18

4th Stiffener 19

AT PP 39 to PP 40 West Bound Side

Location Gap

2nd Stiffener 14

4th Stiffener 15

CB4 Offset and Mis-alignment Reading between FL3 to CB5 (Deck Plate)

AT PP 38 to PP 39 West Bound Side

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Location Gap

2nd Stiffener 15
6th Stiffener 21
9th Stiffener 20

AT PP 38 to PP 39 East Bound Side

Location Gap

2nd Stiffener 15
6th Stiffener 15
9th Stiffener 13

AT PP 39 to PP 40 West Bound Side

Location Gap

2nd Stiffener 22
6th Stiffener 23
9th Stiffener 24

AT PP 39 to PP 40 East Bound Side

Location Gap

2nd Stiffener 11
6th Stiffener 12
9th Stiffener 10

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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