

**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-009021**Date Inspected:** 12-Sep-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Li Jha and Xu Yumin**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 day CALTRANS OSM Quality Assurance Inspector (QA) S. Manjunath. Math was present during the times noted above for observations relative to the work being performed.

Orthotropic Box Girder (OBG) Trial Assembly Areas

Segment 5BE

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Longitudinal Diaphragm and weld joint being identified as Seg. 024B-006, Seg. 024B-024, Seg. 024B-026 and Seg. 024B-041 between PP 31 and 32 for Segment 5BE. The welder is identified as 053609. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-345-FCAW-2G(2F)-Repair-1 and WPS-345-FCAW-3G(3F)-FCM-Repair.

CB4

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for Pipes to CB4 East side and weld joint being identified as SP209-001-165 and SP209-001-219 for CB4. The welder is identified as 220063 and 220064. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2131 and WPS-B-T-2134.

Lift 4 (West)

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## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

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This QA Inspector verified along with Mr. Manikandhan (Caltrans QA) the Cope Holes dimension for Longitudinal Diaphragm, Side Panel to Bottom Panel and Bottom Panel to Bottom Panel for Segment Lift 4 (West) from PP 24 to 28 which were already being verified by ZPMC and ABF observed few dimension having some discrepancy which were noted down and submitted to Mr. Mark. J. Miller for review.

Lift 2 (East)

This QA Inspector verified along with Mr. Manikandhan (Caltrans QA) the Cope Holes dimension for Longitudinal Diaphragm, Side Panel to Bottom Panel and Bottom Panel to Bottom Panel for Segment Lift 2 (West) from PP 13 to 18 which were already being verified by ZPMC and ABF observed few dimension having some discrepancy which were noted down and submitted to Mr. John Kinsey 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 2AE, 2BE between PP 16 to 17 Segment Splice to T-Stiffeners – Bottom Panel Location (East side of all Splices and West side of 8th and 10th Splice from CB side) and Bolt Size used was M22 x 70 RC Set# DHGM220004 and final torque required was 453 N-m and Green Tag No. 321.

At Segment 3AE, 3BE between PP 22 to 23 Segment Splice to T-Stiffeners – Bottom Panel Location (East side of all Splices and West side of 8th and 10th Splice from CB side) and Bolt Size used was M22 x 70 RC Set# DHGM220004 and final torque required was 453 N-m and Green Tag No. 322.

Segment 3BW

This Quality Assurance (QA) Inspector observed at 3BW at PP 23.5 MT test being performed by ABF QA for Longitudinal Diaphragm north side.

Segment 3BW

This Quality Assurance (QA) Inspector observed at 3BW between PP 20 and 21 Cable Tray Structure Installation was being performed at north and south side of segment.

Segment 5BW

This Quality Assurance (QA) Inspector observed at 5BW at PP 33 and 34 Lower Chevron temporary bolts installed area North Side bolts being loosened and cleaning between faying surfaces of box section to splice was being performed.

Segment 1AAE to 1AE

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## WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

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This Quality Assurance (QA) Inspector observed between segment 1AAE to 1AE Side Panel Cross Beam side for I-Rib to I-Rib welded stiffener cope holes grinding and radius being performed.

Lift 5 (East)

This Quality Assurance (QA) Inspector observed at Lift 5 East between PP 34 and 35 Cross Beam side Longitudinal Stiffener heat straightening was being performed.

Lift 5 (West)

This Quality Assurance (QA) Inspector observed at Lift 5 West between PP 34 and 35 Cross Beam side Longitudinal Stiffener heat straightening was being performed.

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.

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<b>Inspected By:</b>	Math,Manjunath	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon,Albert	QA Reviewer

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