

**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-008756**Date Inspected:** 03-Aug-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:** Wu Zhi Chen**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

3AW

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) at holes of I-Rib Floor Beam (FL3 to CB connecting plate) in Segment 4BE, 4AE, 3AE and 3BE have insufficient size after cutting the allowance of the connection plate. All 96 pieces which needs surface welding. The Critical Weld Report no. B- WR6550. The welder is identified as 220064. Welder was welding in 1G position. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-345-FCAW-1G (1F)-Repair-Mis-drilled hole.

4AW

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) for the Deck Panel Diaphragm to Floor Beam Flange for the repaired area for segment 4AW at PP 24. The Critical Weld Report B- CWR 634. The welder is identified as 048617. Welder was welding in 1G position. In process SMAW

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appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-345-SMAW-1G(1F)-Repair.

3BE

This Quality Assurance (QA) Inspector observed at PP 23.5 field splice location U-Rib Splice Plates installation is in progress heavy thickness plates and also J- type retro plates installation is in progress.

3AE

This Quality Assurance (QA) Inspector observed Longitudinal Stiffener Cross Beam Side web area plate 840x270x14 mm been removed by flame cut between PP 19.5 to PP 20 and new plate were fitted in this area of replacement.

3BE

This Quality Assurance (QA) Inspector observed Deck Panel Diaphragm to Floor Beam Flange connecting weld re-welded, after visual inspection at several areas grinding and welding in progress for removing the visually found discontinuities.

3AE to 3BE

This Quality Assurance (QA) Inspector observed bolt installation Grade A325-1 MG was in progress between PP 19 to 23 for electric station structure connecting to Bottom Panel T-Ribs.

4AW

This Quality Assurance (QA) Inspector observed repair work to remove crack at 9 locations is in progress for weld connecting Deck Panel Diaphragm to Floor Beam Flange at PP 24. Repair was been performed against CWR B-CWR 634.

4AW to 4BW

This Quality Assurance (QA) Inspector observed between PP 25 and PP 26 Longitudinal Diaphragm Counter Weight Side repair welding was in progress for the weld connecting LD to Bottom Panel due to change in the weld from fillet weld to CJP.

5AW

This Quality Assurance (QA) Inspector observed Deck Panel Diaphragm to Floor Beam Flange connecting weld removal was in progress by grinding to remove crack found by Magnetic Particle Testing.

2AE

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This Quality Assurance (QA) Inspector observed at PP 14 Temporary Sea Fastener bolt tightening for structure was in progress.

1AW to 1AAW

This Quality Assurance (QA) Inspector observed plate I-stiffener for both segment at Bottom Panel, Side Panel (Bike Path and Cross Beam) side gouging was in progress.

1AE to 1AAE

This Quality Assurance (QA) Inspector observed Segment to Segment fitment was in progress. It was noticed from the external side temporary cleats have been welded and "I" stiffener fillet weld have been removed by carbon arc gouging.

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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