

**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-009954**Date Inspected:** 12-Oct-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:** 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 Area

Segment 5BE to 5CE

This QA Inspector was called off to perform Joint Inspection along with ABF Engineer for measuring and recording the U-Rib 39 Nos. Offset and misalignment and report will be submitted by ABF to Caltrans(QA) for review.

Segment 5AW to 5BW

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) for the Transverse segment weld which was excavated at 5(five) location at Side Panel Counter Weight Side from Y Datum location measured from W3.

Excavation start from 2940mm to 3050mm = 110mm

Excavation start from 3180mm to 3290mm = 110mm

Excavation start from 5320mm to 5420mm = 100mm

Excavation start from 5650mm to 5750mm = 100mm

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Excavation start from 5880mm to 5990mm = 110mm

Welding been performed against Welding Repair Report B-WR8048 and against the UT Report B787-UT-8991. The weld joint was been identified as OBW5A-002. The welder is identified as 048659 and 049769. 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.

Segment 5CE

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for the Longitudinal Diaphragm at PP 35 for Segment 5CE. Welding was been performed against Welding Repair Report B-WR8063. The Longitudinal Diaphragm has been identified as LD 15E. 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-1G(1F)-Repair.

Segment 5AW to 5BW

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) for the Transverse segment weld which was excavated at 1(One) location at Edge Panel Counter Weight Side from Y Datum location measured from W2.

Excavation start from 295mm to 395mm = 100mm

Welding been performed against Welding Repair Report B-WR8040 and against the UT Report B787-UT-8990. The weld joint was been identified as OBW5A-001. The welder is identified as 048659. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-345-SMAW-3G (3F)-FCM-Repair-1.

Segment 5AW to 5BW

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) for the Transverse segment weld which was excavated at 4(Four) location at Bottom Panel. Welding been performed against Welding Repair Report B-WR8043 and against the UT Report B787-UT-8991. The weld joint has been identified as OBW5A-003. The welder is identified as 049769. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-345-SMAW-1G (1F)-FCM-Repair-1.

Segment 5BE

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for the Longitudinal Diaphragm at PP 32 for Segment 5BE. Welding was been performed against Welding Repair Report B-WR8106. The Longitudinal Diaphragm has been identified as LD17K. The welder is identified as 220069. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2233-Tc-U4C-F.

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### Lift 2 East

This QA Inspector observed blasting activity been performed internal side of the Segment 2AE and 2BE.

### Lift 2 West

This QA Inspector observed blasting activity been performed inside side of the Segment 2AW and 2BW.

### Lift 1 West

This QA Inspector observed ZPMC making arrangement for shifting the Lift 1 (West) to other location.

### Segment 5BW

This QA Inspector observed grinding been performed at Edge Panel, Counter Weight side for Rain Water Diverter.

### Segment 5CW

This QA Inspector observed at PP 36 Deck Panel Diaphragm to Floor Beam connecting weld MT indication found area grinding being performed by ZPMC personnel.

#### **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
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<b>Reviewed By:</b>	Carreon,Albert	QA Reviewer
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