

**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-010254**Date Inspected:** 22-Nov-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:****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) Assembly Area

Segment 5CE to 6AE

This QA Inspector measured and recorded the Root Gap for Field Splice which is Tack Welded by means of Temporary Cleats. Readings were measured and recorded for Bottom Panel (18 Nos.), Side Panel Bike Path side (19 Nos.) and Side Panel Cross Beam side (19 Nos.) and Edge Panel Bike Path and Cross Beam side for Segment 5CE to 6AE at PP 36 and PP 37. The report submitted to Engineer for review.

Segment 2BE

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) for Segment 2BE for Bottom Panel to Side Panel Connecting weld and repair welding is performed on basis of UT report UT-2E-007-R1 rejected areas at Y Datum reference 150mm, 230mm, 2290mm, 2165mm, 2260mm and 2120mm. The weld joint number was identified as SEG010A-007. The welder is identified as 067942. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e.,

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## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

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WPS-345-SMAW-1G (1F)-FCM-Repair-1.

### Segment 2BW

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) for Deck Panel to Edge Panel connecting weld. The welder is identified as 067609. The Weld Joint is identified as CA102-006. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-345-SMAW-2G(2F)-FCM-Repair-1.

### Segment 6AE

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for FL3 Floor Beam Extension. The welder is identified as 220069. The Weld Joint is identified as SSD27-PP39-138 and 118. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2231T and WPS-B-T-2233T.

### Segment 6AE

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for FL3 Floor Beam Extension. The welder is identified as 220066. The Weld Joint is identified as SSD27-PP39-048 and 047. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2231T and WPS-B-T-2233T.

### Segment 6AE

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for FL3 Floor Beam Extension. The welder is identified as 220063. The Weld Joint is identified as SSD27-PP39-029 and 032. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2231T and WPS-B-T-2233T.

### Segment 6AW

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for FL3 Floor Beam Extension. The welder is identified as 220066. The Weld Joint is identified as SSD25-PP39-117 and 137. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2231T and WPS-B-T-2233T.

### Segment 6AW

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for FL3 Floor Beam Extension. The welder is identified as 220069. The Weld Joint is identified as SSD25-PP39-118 and 138. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2231T and WPS-B-T-2233T.

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# WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

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## Segment 6AW

This QA Inspector observed ZPMC welding personnel performing Flux Cored Arc Welding (FCAW) for FL3 Floor Beam Extension. The welder is identified as 220063. The Weld Joint is identified as SSD25-PP39-047 and 048. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-B-T-2231T and WPS-B-T-2233T.

## Segment 2AW to 2BW

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) for Segment 2BW for UT rejected area at Edge Panel to Deck Panel Weld the Planar Indications were found during UT Test. The welding is in progress against the Critical Weld Repair B-CWR907 Rev.0. The weld joint number was identified as CA102-002. The welder is identified as 044339. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-345-SMAW-2G (2F)-Repair-1.

## Segment 2AW to 2BW

This QA Inspector observed ZPMC welding personnel performing Shielded Metal Arc Welding (SMAW) for Segment 2BW for UT rejected area at Edge Panel to Deck Panel Weld the Planar Indications were found during UT Test. The welding is in progress against the Critical Weld Repair B-CWR907 Rev.0. The weld joint number was identified as CA102-006. The welder is identified as 044779. In process FCAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e., WPS-345-SMAW-2G (2F)-Repair-1.

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>	Miller,Mark	QA Reviewer

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