

**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-013346**Date Inspected:** 24-Mar-2010**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:** Zhou Cheng/Liu Hua Jie**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 Components**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Hiranch Patel, was present during the times noted above for observations relative to the work being performed.

**Segment 9AW**

This QA Inspector performed a preliminary random visual inspection after the grit blast of the external components of the deck panel, side panel, and bottom panel and corner assemblies of this segment. Areas of visual weld defects that will require welding were taped and will be repaired after the coating is applied. ZPMC QC personnel are aware of these areas and were present during the inspection.

**Bay#19**

During random in process inspection of Bike Path, BK4A, this QA inspector observed following issue. ZPMC personal performed carbon arc gouging of the parts of BK004A-002, BK004A-005, BK004A-003, BK004A-001 and BK004A-007. According to fit up procedure ZPMC personal remove the weld of the closure plate and interior diaphragm plates and longitudinal stiffeners from bike path. After removing the parts ZPMC personal performed grinding to make smooth surface. ZPMC personal will performed MT for surface cracks detection because of cutting the welds. The removed parts are identified as:

BKPL8- Closure plate,

BKX7P- Stiffener

BKX11E~G / BKX11EA~GA- Interior diaphragm plate.

For further information, please see the attached pictures below.

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### Bay#19

During random in process inspection of Bike Path, BK4A-005, this QA inspector observed that more than 2mm gap between plates X10A and X10C. According to approved drawings this joint is a tight fit. ZPMC personal has to minimize the gap between these plates and make it less than 2mm.

### Bay#19

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The member is identified as OBG Components. The weld designations reviewed are as follows:

-(BP026-013-001, 003)

### Bay#19

This QA inspector performed MT of approximately 15% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The member is identified as OBG Components. The weld designations reviewed are as follows:

-(BP026-011-004~009, 020~023/044, 048)

### Bay#08

SAW welding of weld joint BK004A1-053-009 located on Bike Path BK4A. Welder is identified as 251393 (1G). ZPMC QC is identified as Zhang Qiao. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2221-B-L2c-S-2.

### Bay#14

FCAW welding of weld joint Seg3006B-038, 057 located on Segment 12CW. Welder is identified as 204730 (2F). ZPMC QC is identified as Li Ming Yang. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2132.

FCAW welding of weld joint Seg3006C-039, 060 located on Segment 12CW. Welder is identified as 204730 (2F). ZPMC QC is identified as Li Ming Yang. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2132.

FCAW welding of weld joint Seg3006D-012, 013 located on Segment 12CW. Welder is identified as 045246 (3F). ZPMC QC is identified as Li Ming Yang. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2133.

FCAW welding of weld joint Seg3006E-014, 013 located on Segment 12CW. Welder is identified as 045218 (3F). ZPMC QC is identified as Li Ming Yang. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2133.

SMAW welding of weld joint Seg3006D-007 located on Segment 12CW. Welder is identified as 67665 (4G). ZPMC QC is identified as Li Ming Yang. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-P-2214-Tc-U4b-FCM-1.

FCAW welding of weld joint Seg3006D-014 located on Segment 12CW. Welder is identified as 045246 (3G).

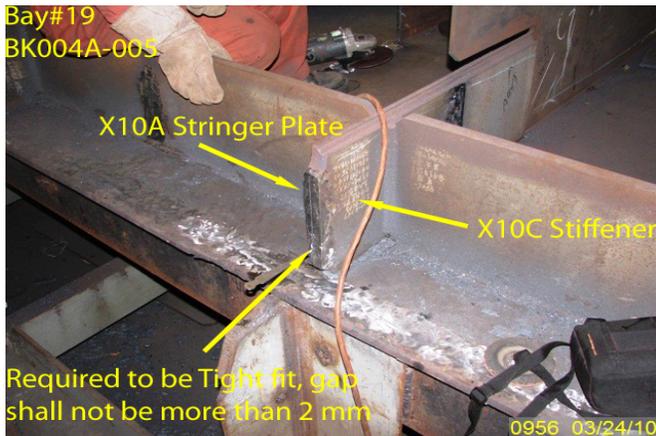
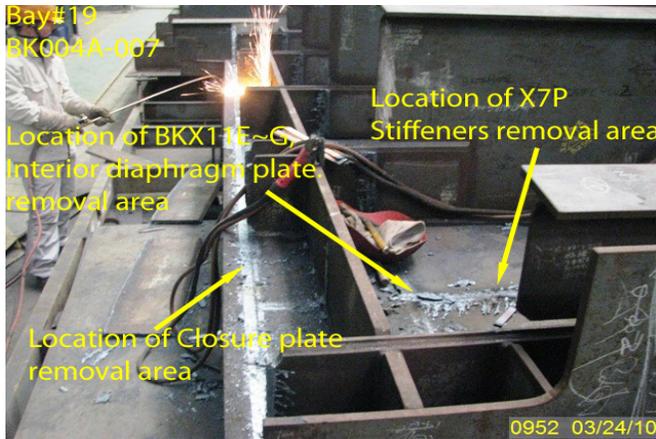
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ZPMC QC is identified as Li Ming Yang. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2233-Tc-U4b-F.

FCAW welding of weld joint Seg3006E-015 located on Segment 12CW. Welder is identified as 045218 (3G). ZPMC QC is identified as Li Ming Yang. The welding variables recorded by QC appeared to comply with the Applicable WPS-B-T-2233-Tc-U4b-F.

Unless otherwise noted, all observed on this date appeared to generally comply with applicable contract documents.



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**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 Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Patel,Hiranch	Quality Assurance Inspector
<b>Reviewed By:</b>	McClendon,Timothy	QA Reviewer

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