

**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-015917**Date Inspected:** 26-Jul-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:** Li Yang**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 Segment**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance (QA) Inspector, Dan Hernandez was present during the times noted above to observe the fit up, welding and related activities associated with the fabrication of the San Francisco Oakland Bay Self Anchored Suspension Bridge at Zhenhua Port Machinery Company (ZPMC) facility on Changxing Island.

OBG Trial Assembly Yard

BK1-041

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as BK001-041-005, side panel to connection plate. The welder is identified as #220066 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-T-2233-TC-U4c-F.

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as BK001-041-007, side panel to connection plate. The welder is identified as #051246 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-T-2233-TC-U4c-F.

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as BK001-041-009, top panel to connection plate. The welder is identified

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as #220066 and was observed welding in the 1G (flat) position using approved Welding Procedure Specification WPS-B-T-2231-TC-U4b-F.

BK1-040

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as BK001-040-005, side panel to connection plate. The welder is identified as #051246 and was observed welding in the 3G (vertical) position using approved Welding Procedure Specification WPS-B-T-2233-TC-U4c-F.

Segment 9CE

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a fillet weld joint. The Weld joint is designated as SSD29-PP77.5-004, Side Plate angle stabilizer to gusset plate. The welder is identified as #044779 and was observed welding in the 3F (vertical) position using approved Welding Procedure Specification WPS-B-P-2113.

Segment 9BW

This QA Inspector observed Flux Cored Arc Welding (FCAW) in progress of a fillet weld joint. The Weld joint is designated as BP201-011-007, Bottom Panel I-rib stiffener hold back weld. The welder is identified as #045280 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-T-2132.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a fillet weld joint. The Weld joint is designated as FB023-011-005, FL3 I-rib stiffener hold back weld. The welder is identified as #069841 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-P-2112-FCM-1.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a fillet weld joint. The Weld joint is designated as BP206-011-003, FL3 I-rib stiffener hold back weld. The welder is identified as #037780 and was observed welding in the 2F (horizontal) position using approved Welding Procedure Specification WPS-B-P-2112-FCM-1.

Segment 9CE/9DE

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a Complete Joint Penetration (CJP) weld joint. The Weld joint is designated as OBE9C-003, Bottom Plate splice. The welder is identified as #048659 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-345-SMAW-4G (4F)-Repair-1 UT repair for CWR1704.

For the above mentioned welding activities ZPMC Quality Control (QC) Inspectors are identified as Wang Li Yang and Wang Zhu. The welding variables recorded by QC appeared to comply with the Applicable WPS.

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## Segment 9DE

This QA Inspector observed ABF personnel performing Ultrasonic Testing on the Side Plate to Bottom Plate hold back weld, bike path side.

## Segment 9DE/9EE

This QA Inspector observed ZPMC personnel performing Magnetic Particle Testing on the Side Plate WT stiffener hold back fillet welds, cross beam side.

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

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<b>Inspected By:</b>	Hernandez,Dan	Quality Assurance Inspector
<b>Reviewed By:</b>	Peterson,Art	QA Reviewer

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