

**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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-017468**Date Inspected:** 18-Oct-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 Segments**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

Segment 10AE

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a fillet weld joint. The Weld joint is designated as OBE10D-013, 014, Drip Plate. The welder is identified as #056200 and was observed welding in the 4F (overhead) position using approved Welding Procedure Specification WPS-B-P-2114-FCM-1.

This QA Inspector observed Shielded Metal Arc Welding (SMAW) in progress of a fillet weld joint. The Weld joint is designated as OBE10-013, Arc Plate. The welder is identified as #056200 and was observed welding in the 3F (vertical) position using approved Welding Procedure Specification WPS-B-P-2113-FCM-1.

Segment 11BE

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 SEG068-057, Longitudinal Diaphragm stiffener to Floor Beam.

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## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

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The welder is identified as #044515 and was observed welding in the 4G (overhead) position using approved Welding Procedure Specification WPS-B-P-2214-TC-U4b-FCM-1.

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

### Segment 11CW

This QA Inspector observed beveling of the Side Plate with the use of a mechanical guided torch at the 11BW/11CW splice, cross beam side.

### Segment 10AW

This QA Inspector observed ABF personnel performing Magnetic Particle Testing on the Partial Height Diaphragm to FL3 Web at panel point 86.

### Segment 10AE

This QA Inspector observed ZPMC personnel performing Magnetic Particle Testing on the Partial Height Diaphragm to FL3 Bottom Panel at panel points 87-88.

### Weld Lab

This QA Inspector observed the Macro Etching of Plug Weld Qualification Test coupons for the following personnel

# 04034 Bo Wen Ming  
#40302 Yang Guo Ping  
#57180 Wu Zhi Zhing  
#57258 Gao Qiang  
#52075 Bu Xue Zhen  
#52493 Tang Yong

The Macro Etch Test result appeared to be acceptable.

ABF representative Mike Williams was present.

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

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# WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

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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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**Inspected By:** Hernandez, Dan

Quality Assurance Inspector

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**Reviewed By:** Peterson, Art

QA Reviewer