

**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-018654**Date Inspected:** 24-Oct-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1500**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 300**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** ShangHai, China**CWI Name:** Tian Lei**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**Summary of Items Observed:**

Summary of Items Observed: On this date Caltrans OSM Quality Assurance(QA) Inspector, DJ Shin was present during the times noted above for observations relative to the work being performed.

**Bay 1**

Heat straightening of PCMK, 20TR2-036, under approved Heat Straightening procedure, HSR (B)-362, The in process temperature was at the time of this observation witnessed at less than 600°C. The ZPMC QC was identified as Tian Lei. The approved HSR procedure stated that a maximum temperature of 650°C with 1-3 applications. The distortion that was previously measured and recorded on the HSR was Maximum 80mm.

**Bay 2**

This QA Inspector observed the following work in progress for Bay 2.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Tian Lei.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA inspector.

Components: Floor Beam

PCMK: FB3343-001-356

Welder: 045175

Report: B-WR-16135

WPS-345-FCAW-2G (2F)-Repair-1

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PCMK: FB3343-001-272  
Welder: 068852  
Report: B-WR-16140  
WPS-345-FCAW-2G (2F)-Repair-1

PCMK: FB3343-001-049  
Welder: 045240  
Report: B-WR-16141  
WPS-345-FCAW-1G (1F)-Repair-1

PCMK: FB3343-001-031  
Welder: 066673  
Report: B-WR-16154  
WPS-345-FCAW-3G (3F)-Repair-1

This QA Inspector observed the following work in progress for Bay 2.  
ZPMC was using the Flux Core Arc Welding (FCAW) process.  
ZPMC QC is identified as Tian Lei.  
Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).  
Listed below are the locations that were identified by this QA inspector.

Components: Floor Beam  
PCMK: FB3343-001-281  
Welder: 066236  
Report: B-WR-16137  
WPS-345-FCAW-2G (2F)-Repair-1

PCMK: FB3343-001-103  
Welder: 045240  
Report: B-WR-16142  
WPS-345-FCAW-2G (2F)-Repair-1

PCMK: FB3343-001-023  
Welder: 045276  
Report: B-WR-16150  
WPS-345-FCAW-2G (2F)-Repair-1

PCMK: FB3343-001-035  
Welder: 045227  
Report: B-WR-16155  
WPS-345-FCAW-2G (2F)-Repair-1

PCMK: FB3320-001-110

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Welder: 201583  
WPS-B-T-2132-3

PCMK: FB3329-001-018,019  
Welder: 045209  
WPS-B-T-2132-3

### Bay 3

This QA Inspector observed the following work in progress for Bay 3.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Tian Lei.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA inspector.

Components: Floor Beam

PCMK: FB3273-001-053

Welder: 050242

Report: B-WR-16159

WPS-345-FCAW-2G (2F)-FCM-Repair-1

This QA inspector performed Magnetic Particle Testing (MT) and Visual Inspection (VT) 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(s) is/are identified as follows; EB3050-001, EB3051-001, EB3052-001, EB3053-001 for item number 3 of NWIT tracker document # 07088.

### Blasting Shop # 2

QA inspector has performed visual inspection on interior of elevation 83 meter to 99 meter of Tower Lift 3 South side, QA inspector has find out 2 grind plus MT and 4 places to use filler Plate for filled gap between stiffener plate to diaphragm connection.

All indication locations and detail information were turn to QA Inspector Mr. Baskar.

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

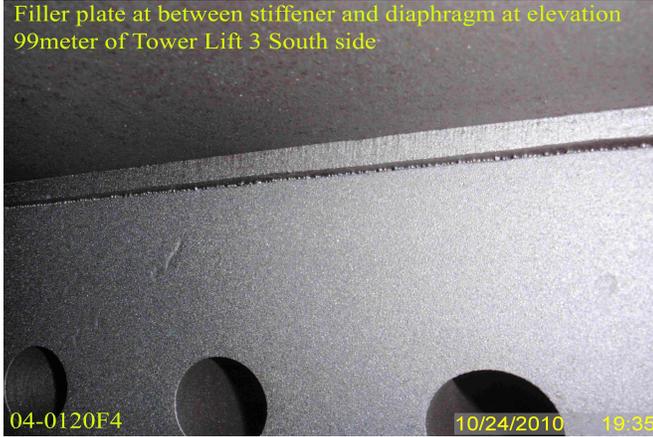
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# WELDING INSPECTION REPORT

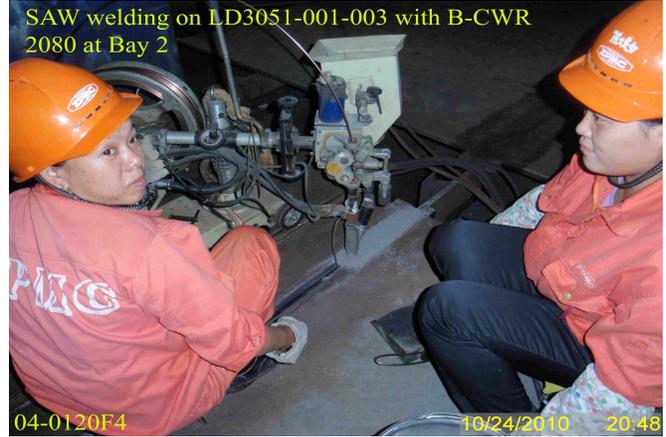
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Filler plate at between stiffener and diaphragm at elevation 99meter of Tower Lift 3 South side



SAW welding on LD3051-001-003 with B-CWR 2080 at Bay 2



## 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 15000422372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Shin,DJ	Quality Assurance Inspector
<b>Reviewed By:</b>	Carreon,Albert	QA Reviewer

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