

**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-017818**Date Inspected:** 04-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**

This QA Inspector observed the following work in progress for Bay 1.

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

ZPMC QC is identified as Xiang Feng Feng.

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: Barrier Rail

PCMK: E2-SB11-001-019

Welder: 215397

WPS-B-T-2331-B-U2-F (1G)

Heat straightening of PCMK, E2-SB1D-013 under approved Heat Straightening procedure, HSR 1(B)-9389. The in process temperature was at the time of this observation witnessed at less than 600°C. The ZPMC QC was identified as Xiang Feng Feng. 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 8mm.

**Bay 2**

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

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

ZPMC QC is identified as Xiang Feng Feng.

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: Barrier Rail

PCMK: E5-SB1-045-126~131

Welder: 045207

WPS-B-T-2132-3

PCMK: E5-SB1-049-126~131

Welder: 066283

WPS-B-T-2132-3

PCMK: E5-SB1-054-126~131

Welder: 045203

WPS-B-T-2132-3

PCMK: FB3317-001-011,012

Welder: 045209

WPS-B-T-2132-3

Components: Vertical plate

PCMK: VP3014-001-019

Welder: 045240

Report: B-WR15418

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

PCMK: VP3014-001-030

Welder: 045221

Report: B-CWR1980

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

Bay 3

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

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

ZPMC QC is identified as Chen Xi.

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: FB3272-001-016,017

Welder: 055491

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WPS-B-T-2232-TC-U4b-F

PCMK: FB3273-001-016,017

Welder: 055564

WPS-B-T-2232-TC-U4b-F

PCMK: FB3271-001-134,135

Welder: 214945

WPS-B-T-2132-3

PCMK: FB3263-001-025,013,050

Welder: 044830

WPS-B-T-2232-TC-U4b-F

Heat straightening of PCMK, FB3261-001-016,017 under approved Heat Straightening procedure, HSR 1(B)-9522. The in process temperature was at the time of this observation witnessed at less than 600°C. The ZPMC QC was identified as Chen Xi. 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 8mm.

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; LD3026-001 for item number 1 on NWIT tracker document # 06857.

Bay 6

This QA Inspector observed the following work in progress for Bay 6.

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

ZPMC QC is identified as Feng Ya Jun.

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: Cross beam

PCMK: CB3002K-003-197,198

Welder: 053609

WPS-B-T-2132

PCMK: CB3002J-001-197,198

Welder: 217685

WPS-B-T-2132

Components: Side plate

PCMK: SP3149-001-009

Welder: 048625

WPS-B-T-2231-B-U2a-F

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## Bay 7

This QA Inspector observed the following work in progress for Bay 7.

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

ZPMC QC is identified as Cui Jun Jie.

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: FB3246-002-011

Welder: 053742

WPS-B-T-2233-TC-U4b-F

Components: Deck Plate

PCMK: DP3156-001-18, 19

Welder: 062447

WPS-B-T-4132

PCMK: Barrier Rail

PCMK: W2-SB1A-003-116~121

Welder: 205386

WPS-B-T-2133

PCMK: W2-SB1A-003-82~87

Welder: 215689

WPS-B-T-2132-3

Unless otherwise noted, all work 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 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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