

**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-005228**Date Inspected:** 16-Jan-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Liu Yang / Xu Le Feng.**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:** TOWER COMPONENTS**Summary of Items Observed:**

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

Magnetic Particle Testing:

Bay 11

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(s) & the weld designations reviewed are as follows:

WSD1 – SA 80 D / E – 7A/B, 12A / B, & SA 80 C / E – 7A/B, 14A / B, WEST TOWER; SKIN-D; LIFT-1; Stiffener to Bottom plate. Completed.

WSD1 – SA 296A / E – 11A/B, 12A / B, SA 296A / E – 19A/B, 20A / B, SA 80 C / E – 17/18; WEST TOWER; SKIN-D; LIFT-1; Stiffener to Bottom plate. Completed.

WSD1 – SA 296A / E – 13A/B, 14A / B, SA 296A / E – 21A/B, 22A / B, SA 80 C / E – 15/16; WEST TOWER; SKIN-D; LIFT-1; Stiffener to Bottom plate. Completed.

WSD1 – SA 296A / E – 17A/B, 18A / B, SA 296A / E – 25A/B, 26A / B, SA 80 D / E – 17/18 WEST TOWER;

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SKIN-D; LIFT-1; Stiffener to Bottom plate. Completed.

WSD1 – SA 296A / E – 15A/B,16A / B, SA 296A / E – 23A/B, 24A / B, SA 80 D / E – 15/16 WEST TOWER;  
SKIN-D; LIFT-1; Stiffener to Bottom plate. Completed.

WSD1 – SA 209 A / D - 1 A / B ; WEST TOWER; SKIN-D; LIFT-1; Completed.

Bay 10

SAW - FCM – Materials:

SAW welding of weld joint ND1- A 468 –28M – 2 – 21B, A 468 – 23M – 2 – 22B, A 468 – 23M – 1 – 21B, A 468 – 18M – 2 – 22B, A 468 – 18M – 2 – 21B, located on; PCMK P234 - 1 to P 12 - 1. Welder is identified as 201750. ZPMC QC is identified as Wu Ming Kia. The welding variables recorded by QC appeared to comply with the B – T – 4221 – B – U3C - S – 1.

NON - FCM

SAW welding of weld joint NSD1-SA 11 G / G -3, 9 & NSD1 - SA 61 A / G – 11,14,16A,10A, 13A, 17A located on; SKIN-E; LIFT-2; PCMK P 129 to P 35 to P486. Welder is identified as 201750 / 207745. ZPMC QC is identified as Chen Shou Hau. The welding variables recorded by QC appeared to comply with the B-T -2221-B-U3C-S- 2 & B - T - 2321 - B - P3 - S - 2.

FCAW

1) FCAW welding of welds joint NSD1-SA 109 – 2A located on PCMK SA 109 to P709. Welder is identified as 048378. ZPMC QC is identified as Wan Wen Zhong / Liu Yang. The welding variables recorded by QC appeared to comply with the B-T-2231-TC-U5-F.

2) FCAW welding of welds joint NSD1-SA 108 – 2A, 4A located on PCMK SA 108 to P709. Welder is identified as 040345 / 053474. ZPMC QC is identified as Wan Wen Zhong / Liu Yang. The welding variables recorded by QC appeared to comply with the B-T-2231-TC-U5-F.

3) FCAW welding of welds joint NSD1-SA 166 E / F – 29, 30 & SA 166 D / F 30, 31 located on SKIN – A, Lift - 2. Welder is identified as 068864 / 066882 / 066751 / 069683. ZPMC QC is identified as Liu Liang / Liu Yang. The welding variables recorded by QC appeared to comply with the B-T-2332-TC-P5-F.

BAY 11

SAW - NON-FCM

SAW welding of weld joint WSD1-SA 388 C / D – 1, 3, 21A, 22A, 23A, 24A,33, 35 located on; SKIN-C;  
LIFT-2. Welder is identified as 067993. ZPMC QC is identified as Xiao Yun / Xu Li Feng. The welding variables recorded by QC appeared to comply with the B-T -2221-B-U3C-S- 2 & B – T – 2321- B – P3 – S - 2.

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FCAW

FCAW welding of welds joint NSD1-SA 340 E / F – 9A, 13A,16A, 33A & SA 340 D / F - 1A, 13A, 16A located on PCMK ; SKIN – A, LIFT - 2. Welder is identified as 066279 / 066239 / 068852 / 062782. ZPMC QC is identified as Peng Guo. The welding variables recorded by QC appeared to comply with the B-T-2231-TC-U5-F.

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 Serge Sinevod 134-8257-0045., who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Rao,Gady	Quality Assurance Inspector
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<b>Reviewed By:</b>	Clifford,William	QA Reviewer
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