

**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-015734**Date Inspected:** 15-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:** Gao Zhi Chun  
**Inspected CWI report:** Yes No N/A  
**Electrode to specification:** Yes No N/A  
**Qualified Welders:** Yes No N/A  
**Approved Drawings:** Yes No N/A

**CWI Present:** Yes No  
**Rod Oven in Use:** Yes No N/A  
**Weld Procedures Followed:** Yes No N/A  
**Verified Joint Fit-up:** Yes No N/A  
**Approved WPS:** Yes No N/A  
**Delayed / Cancelled:** Yes No N/A

**Bridge No:** 34-0006**Component:** Tower & OBG Components**Summary of Items Observed:**

On this date Caltrans Office of Structural Materials Quality Assurance Inspector, Sandeep Kumar (QA) was present during the times noted above for observations relative to the work being performed.

**TOWER JETTY****MEASUREMENTS ON VERTICAL TRIAL ASSEMBLY NORTH TOWER LIFT-2&3**

This QA Inspector carried out the dimensional verification on North Tower lift-2 & 3 to check the misalignment and gap between the interior splice plates and longitudinal stiffeners of skin 'A', 'B', 'C', 'D' & 'E'.

Measurements were recorded on the data sheet and submitted to the assigned task leader.

**BAY#10**

This QA Inspector observed the following work in progress

Shielded Metal Arc Welding (SMAW):

Weld joint # 9A located on North tower Lift-5 Grillage Assembly NSD1 – TL5 – 3E/F. Welder is identified as 052930. ZPMC Quality Control (QC) Inspector is identified as Li Peng Fei. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3213 – TC – U5b. (See attached photo)

Weld joint # 14 located on North tower Lift-5 Grillage Assembly NSD1 – TL5 – 3B/F. Welder is identified as

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057220. ZPMC Quality Control (QC) Inspector is identified as Li Peng Fei. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3313 – TC – P5.

Weld joint # 15A located on North tower Lift-5 Grillage Assembly NSD1 – TL5 – 3E/F. Welder is identified as 052930. ZPMC Quality Control (QC) Inspector is identified as Li Peng Fei. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3213 – TC – U5b.

### ORTHOTROPIC BOX GIRDER (OBG) LIFT-13 AT BAY#10

This QA Inspector observed the following work in progress

Fluxcored Arc Welding (FCAW):

Weld joint # 09 located on Edge Plate EP3024 – 001. Welder is identified as 052075. ZPMC Quality Control (QC) Inspector is identified as Lu Wei Chao. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132. (See attached photo)

Weld joint # 28 located on Edge Plate EP3024 – 001. Welder is identified as 053870. ZPMC Quality Control (QC) Inspector is identified as Lu Wei Chao. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132.

Weld joint # 10 located on Edge Plate EP3024 – 001. Welder is identified as 040533. ZPMC Quality Control (QC) Inspector is identified as Lu Wei Chao. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132.

### BAY#11

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 006201

Ultrasonic Testing (UT)

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The member is identified as Tower Component. The weld designations reviewed are as follows:

TOWER STRUT – GREE N TAG#13553

ND1 – STSA4 – 6 – 127M – 1 – 5A; 6A; 9A; 10A

This QA Inspector observed the following work in progress

Shielded Metal Arc Welding (SMAW):

Weld joint # 1B located on Lift-5 Splice Plate Stiffener WSD1 – SPSA5 – 12. Welder is identified as 046704. ZPMC Quality Control (QC) Inspector is identified as Liu Dao Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3211 – Tc – U5b – 1. (See attached photo)

Weld joint # 2B located on Lift-5 Splice Plate Stiffener ESD1 – SPSA5 – 12. Welder is identified as 040614. ZPMC Quality Control (QC) Inspector is identified as Liu Dao Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3211 – Tc – U5b – 1.

Weld joint # 2A located on Lift-5 Splice Plate Stiffener WSD1 – SPSA5 – 20. Welder is identified as 040667.

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ZPMC Quality Control (QC) Inspector is identified as Liu Dao Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3211 – Tc – U5b – 1.

Weld joint # 4B located on Lift-5 Splice Plate Stiffener WSD1 – SPSA5 – 7. Welder is identified as 040656. ZPMC Quality Control (QC) Inspector is identified as Ma Qian Li. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3211 – Tc – U5b – 1.

## ORTHOTROPIC BOX GIRDER (OBG) LIFT-13 AT BAY#11

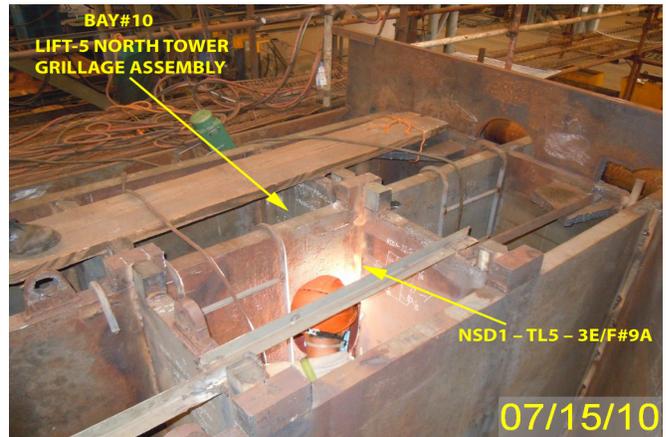
This QA Inspector observed the following work in progress

Fluxcored Arc Welding (FCAW):

Weld joint # 54 located on Side Plate SP3104 – 001. Welder is identified as 040723. ZPMC Quality Control (QC) Inspector is identified as Ma Qian Li. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132.

Weld joint # 67 located on Side Plate SP3104 – 001. Welder is identified as 046706. ZPMC Quality Control (QC) Inspector is identified as Ma Qian Li. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132.

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 Michael Ng - 15921845703, who represents the Office of Structural Materials for your project.

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

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