

**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-014171**Date Inspected:** 13-May-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:** Zhao Chen Sun**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 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 TRIAL ASSEMBLY**

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 005717

**Visual Inspection Testing (VT)**

This QA inspector performed VT of the area previously tested and accepted by ZPMC Quality Control personnel. The member is identified as Tower Component. The identified component and weld designations reviewed are as follows:

**NORTH TOWER LIFT – 1 FACADE CONNECTION PLATE**

NSD1 – SA159C/J – 27A/B

NSD1 – SA159C/J – 25; 26; 28; 29

**Magnetic Particle Testing (MT)**

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

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# WELDING INSPECTION REPORT

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## NORTH TOWER LIFT – 1 FACADE CONNECTION PLATE

NSD1 – SA159C/J – 27A/B

NSD1 – SA159C/J – 25; 26; 28; 29

### 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:

NORTH TOWER LIFT – 1 FACADE CONNECTION PLATE – GREEN TAG # 11669

NSD1 – SA159C/J – 27A/B

### MEASUREMENTS ON VERTICAL TRIAL ASSEMBLY NORTH TOWER LIFT-1

This QA Inspector carried out the measurements on North Tower Lift-1 Exterior side to check the distance from the edge of the base plate anchor bolt holes to the side of the bearing, type-1 & 2 stiffeners for skin 'C'.

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

This QA Inspector observed the following work in progress:

Shielded Metal Arc Welding (SMAW):

Weld joint # 24 located on West Tower Lift – 1 Façade Plate WSD1 – SA39K/K. Welder is identified as 040675.

ZPMC Quality Control (QC) Inspector is identified as Li Jun. The welding variables recorded by QC appeared to comply with the WPS – B – T – 4111. (See attached photo)

### BAY#10

This QA Inspector observed the following work in progress:

Shielded Metal Arc Welding (SMAW):

Weld joint # 35B located on South Tower Lift – 5 SSD1 – TL5 – 1B – F. Welder is identified as 500363. ZPMC Quality Control (QC) Inspector is identified as Deng Zhi Bing. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3213 – B – U3b.

Weld joint # 2B located on South Tower Lift – 5 SSD1 – TL5 – 1B – F. Welder is identified as 500373. ZPMC Quality Control (QC) Inspector is identified as Deng Zhi Bing. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3213 – B – U3b.

### BAY#11

This QA Inspector observed the following work in progress:

Flux cored Arc Welding (FCAW):

Weld joint # 10 located on Bearing Stiffener of Shear plate WD1 – A25B/E. Welder is identified as 040723.

ZPMC Quality Control (QC) Inspector is identified as Shang Hai Long. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2331 – Tc – P4 – F.

Weld joint # 34 located on Bearing Stiffener of Shear plate SD1 – A23A/B. Welder is identified as 062125.

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# WELDING INSPECTION REPORT

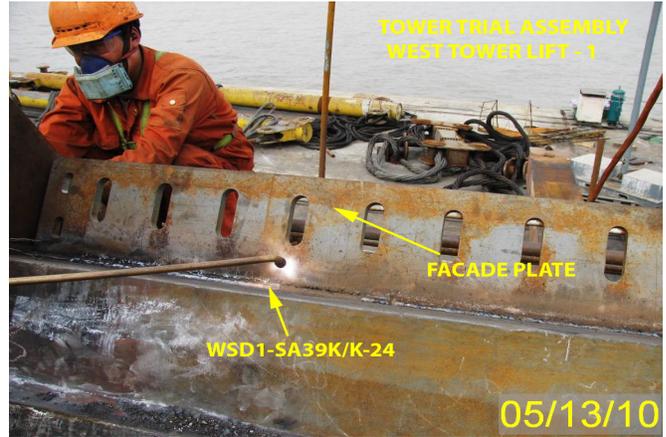
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ZPMC Quality Control (QC) Inspector is identified as Shang Hai Long. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2331 – Tc – P4 – F. (See attached photo)

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 Skyler Guest - 15000422360, who represents the Office of Structural Materials for your project.

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**Inspected By:** Kumar,Sandeep

Quality Assurance Inspector

**Reviewed By:** Clifford,William

QA Reviewer

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