

**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-012750**Date Inspected:** 17-Feb-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:** Du Zhi Qun, Li Lin**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**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Umesh Gaikwad was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

**SOUTH/NORTH TOWER LIFT 2**

This QA inspector performed Magnetic Particle Testing (MT) of approximately 15% and random Visual Testing (VT) of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an MT report for this date. The members are identified as Tower Components. The weld designations reviewed are as follows.

NORTH TOWER LIFT 2, A/B CORNER SEAM

NORTH TOWER LIFT 2, D/E CORNER SEAM (3mm MT LINEAR INDICATION TRANSVERSE TO WELD AXIS FOUND AT 760mm FROM 77M DOUBLE DIAPHRAGM TOWARDS 74M DIAPHRAGM)

SOUTH TOWER LIFT 2, A/B CORNER SEAM

This Quality Assurance (QA) Inspector observed the following work in progress:

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## NORTH TOWER LIFT 4, B/C CORNER SEAM REPAIR (Y=26750)

SMAW welding of weld joint 5A/B(Repair) located on NSTL4-3B/L.

Welder is identified as 057258. ZPMC CWI is identified as Mr. Gong Liang Zhu.

The welding variables recorded by QC appeared to comply with WPS-345-SMAW-2G(2F)-REPAIR.

## NORTH TOWER LIFT 4, C/D CORNER SEAM REPAIR (T-CWR533, REV. 2)

FCAW welding of weld joint 1A/B(Repair) located on NSTL4-3B/L.

Welder is identified as 040434. ZPMC CWI is identified as Mr. Gong Liang Zhu.

The welding variables recorded by QC appeared to comply with WPS-345-FCAW-2G(2F)-REPAIR.

## SOUTH TOWER LIFT 4

During random in process Visual Inspection this Quality Assurance (QA) Inspector observed that ZPMC personnel performing Magnetic Particle Testing (MT) on the base metal repair welded area on skin A of South Tower lift 4. Attached photographs provide additional details.

## BAY 11

### TOWER STRUT ANGLE CONNECTION PLATE

SAW welding of weld joint 1B located on ED1-SA4-68-139M-6.

Welder is identified as 041716. ZPMC QC is identified as Mr. Mao Bin Bin.

The welding variables recorded by QC appeared to comply with WPS-B-T-3221-Tc-U5-S-1.

SAW welding of weld joint 1B located on ND1-SA4-68-135M-8.

Welder is identified as 042195. ZPMC QC is identified as Mr. Mao Bin Bin.

The welding variables recorded by QC appeared to comply with WPS-B-T-3221-Tc-U5-S-1.

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



### Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

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## 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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<b>Inspected By:</b>	Gaikwad,Umesh	Quality Assurance Inspector
<b>Reviewed By:</b>	Clifford,William	QA Reviewer

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