

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave. St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

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-013553**Date Inspected:** 01-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:** An Qing Xiang, Tu Jun**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:

Bay 11, East Tower Lift 4 DE Corner Backfill Plate

This QA inspector performed Ultrasonic Testing (UT) of approximately 10% and random Visual Testing (VT) of the area previously tested and accepted by ZPMC Quality Control personnel. This QA inspector generated UT report for this date. The members are identified as Tower Components. The weld designations reviewed are as follows.

ESTL4-2H/L-52, 119

ESTL4-2I/L-54, 119

ESTL4-2J/L-52, 116

ESTL4-2K/L-54, 118

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

BAY11

---

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 3 )

---

---

### TOWER GRILLAGE PLATE

SMAW welding of weld joint 35A located on ESD1-TL5-2B/F.

Welder is identified as 040619. ZPMC CWI is identified as Mr. An Qing Xiang.

The welding variables recorded by QC appeared to comply with WPS-B-T-3213-B-U3b.

SMAW welding of weld joint 35B located on ESD1-TL5-2B/F.

Welder is identified as 040690. ZPMC CWI is identified as Mr. An Qing Xiang.

The welding variables recorded by QC appeared to comply with WPS-B-T-3213-B-U3b.

### LIFT 4 STRUT PLATE

SMAW welding of weld joint 10B located on ED1-STSA4-6-131M-1.

Welders are identified as 044541 & 044551. ZPMC QC is identified as Mr. Xu Jin Long.

The welding variables recorded by QC appeared to comply with WPS-B-T-2212-Tc-U5b.

SMAW welding of weld joint 5A located on ED1-STSA4-6-139M-2.

Welder is identified as 046709. ZPMC QC is identified as Mr. Xu Jin Long.

The welding variables recorded by QC appeared to comply with WPS-B-T-3212-Tc-U5b-1.

During random verification Visual Testing (VT) of D/E corner backfill plate of East Tower Lift 4, this Quality Assurance (QA) Inspector observed the following issues:

- Tack welds has been used to attach the steel backing on weld joint ESTL4-2K/L-54 at 143M (top) diaphragm.
- These tack welds placed external to the weld joint and was not made continuous by fillet welding for the full length of the backing.
- As per AWS D1.5, section 3.3.7.6; it supposed to be continuous by fillet welding for the full length of the backing.
- This weld joining the backfill plate and double diaphragm plate of East Tower lift 4 at DE corner.
- The members are located in Tower Bay 11.

The Notice of Witness Inspection Number (NWIT) is 005644. This weld has been previously tested and accepted by ZPMC Quality Control (QC) personnel. This issue has an incident report. The attached photograph provides additional detail.

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

---

---

# WELDING INSPECTION REPORT

( Continued Page 3 of 3 )

---

---



## Summary of Conversations:

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

## 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.

---

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

---