

**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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018943**Date Inspected:** 09-Dec-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:** Mr. 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 / OBG**Summary of Items Observed:**

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

Bay #10

This QA Inspector observed the following work in progress

Tower

Shielded Metal Arc Welding (SMAW)

Weld joint # 27 located on South Tower, Lift4, Skin A, Façade support plate SSD1- FASA4 -1B/E -2. Welder is identified as 040365. ZPMC Quality Control (QC) Inspector is identified as Zhu Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 4311 –TC –P4.

Weld joint # 28 located on South Tower, Lift4, Skin A, Façade support plate SSD1- FASA4 -1B/E -2. Welder is identified as 050038. ZPMC Quality Control (QC) Inspector is identified as Zhu Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 4114 -1.

Orthotropic Box Girder (OBG)

---

---

## WELDING INSPECTION REPORT

( Continued Page 2 of 4 )

---

---

### Flux cored Arc welding (FCAW)

Weld joint # 018 located on Bike path BK 007A2 -001. Welder is identified as 053869. ZPMC Quality Control (QC) Inspector is identified as Yu Zhi Lai. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 -Esab.

Repair welding of Weld joint # 002 as per WRR no. B-WR-18407, located on GGL – MQ – 2021 -80. Welder is identified as 040367. ZPMC Quality Control (QC) Inspector is identified as Li Peng Fei. The welding variables recorded by QC appeared to comply with the WPS – 345 –FCAW – 2G (2F) -Repair.

### Shielded Metal Arc Welding (SMAW)

Weld joint # 041, 042 located on Bike path BK 007A6 -001. Welder is identified as 057242. ZPMC Quality Control (QC) Inspector is identified as Yu Zhi Lai. The welding variables recorded by QC appeared to comply with the WPS – B – P – 2112.

### Magnetic Particle Testing (MT)

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 07695 & 07700

This QA inspector performed (MT) of approximately 15% of an area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA Inspector generated an TL 6028 MT report for this date. The member is identified as OBG Bike path components and Tower components. The weld designations reviewed are as follows:

BK 004A2-030 – Jt. nos. -016, 018 (Bike path)  
NSD1 –FFSA6-3 – Jt. no. -23B (Lift 6 plate)  
SFSA4-600-1 –Jt. nos -1, 2 (Façade bracket)  
SFSA4-600-2 –Jt. nos -1, 2 (Façade bracket)  
SFSA4-600-3 –Jt. nos -1, 2 (Façade bracket)  
SFSA4-600-4 –Jt. nos -1, 2 (Façade bracket)  
SFSA4-601-1 –Jt. nos -1, 2 (Façade bracket)  
SFSA4-602-1 –Jt. nos -1, 2 (Façade bracket)

### Bay #11

This QA Inspector observed the following work in progress

### Tower

### Flux cored Arc welding (FCAW)

---

---

# WELDING INSPECTION REPORT

( Continued Page 3 of 4 )

---

---

Weld joint # 09, 10 located on West Tower, Lift6 plate WSD1-FFSA6 -4. Welder is identified as 046769, 205649. ZPMC Quality Control (QC) Inspector is identified as Li Bin. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132 -Esab.

Weld joint # 01, 02 located on West Tower, Lift6 plate WSD1-FFSA6 -4. Welder is identified as 040736, 205649. ZPMC Quality Control (QC) Inspector is identified as Li Bin. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132 -Esab.

## Magnetic Particle Testing (MT)

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 07695

This QA inspector performed (MT) of approximately 15% of an area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA Inspector generated a TL 6028 MT report for this date. The member is identified as OBG Bike path components. The weld designations reviewed are as follows:

BK 004A2-023 – Jt. nos. -016, 018 (Bike path)

For further information see below pictures:-

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.



---

---

# WELDING INSPECTION REPORT

( Continued Page 4 of 4 )

---

---

**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 Thomas Hu (15002048250), who represents the Office of Structural Materials for your project.

---

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

---