

**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:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-018941**Date Inspected:** 06-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

Flux cored Arc welding (FCAW)

Weld joint # 3, 4 located on North Tower, Lift6, Skin to stiffener NSD1 -FCSA6 -3. Welder is identified as 052075, 040533. ZPMC Quality Control (QC) Inspector is identified as Li Peng Fei. The welding variables recorded by QC appeared to comply with the WPS - B - P - 2132 -ESAB.

Weld joint # 5, 6 located on North Tower, Lift6, Skin to stiffener NSD1 -FCSA6 -3. Welder is identified as 040434, 057258. ZPMC Quality Control (QC) Inspector is identified as Li Peng Fei. The welding variables recorded by QC appeared to comply with the WPS - B - P - 2132 -ESAB.

Shielded Metal Arc Welding (SMAW)

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Weld joint # 9, 10 located on South Tower, Lift4, Skin D, Facade support plate SSD1-FDSA4 -2 B/C. 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 – P – 2314-TC-P4.

## Magnetic Particle Testing (MT)

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 07653, 07656

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 Façade plate, Tower components. The weld designations reviewed are as follows:

SD1 –SFSA4-7A/B – Jt. nos. -03, 04, 10, 17, 18 (Façade plate)

SD1 –SFSA4-7B/B – Jt. nos. -011, 12 (Façade plate)

L4-E18A/D-119 m – Jt. no. -021 (Ladder support plate)

L4-E18A/D-123 m – Jt. no. -021 (Ladder support plate)

L4-E18A/D-131 m – Jt. no. -021 (Ladder support plate)

L4 –E18A/D-123m –Jt. no. 13 (Ladder support plate)

L4 –E18A/D-131m –Jt. no. 13 (Ladder support plate)

L4 –E18A/D-135m –Jt. no. 13 (Ladder support plate)

L4 –E18A/D-143m –Jt. no. 13 (Ladder support plate)

## Bay #11

This QA Inspector observed the following work in progress

## Tower

### Flux cored Arc welding (FCAW)

Weld joint # 05, 06 located on West Tower, Lift6 plate WSD1-FGSA6 -1. Welder is identified as 040704. ZPMC Quality Control (QC) Inspector is identified as Mao Bin Bin. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132 -Esab.

Weld joint # 07, 08 located on West Tower, Lift6 plate WSD1-FGSA6 -2. Welder is identified as 040704. ZPMC Quality Control (QC) Inspector is identified as Mao Bin Bin. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132 -Esab.

## Orthotropic Box Girder (OBG)

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## Flux cored Arc welding (FCAW)

Weld joint # 22, 23 located on Bike path BK 004ASD1 -022. Welder is identified as 053316. ZPMC Quality Control (QC) Inspector is identified as Yu Dong Ping. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 -Esab.

Weld joint # 72, 73 located on Bike path BK 004C3 -024. Welder is identified as 040723, 054460. ZPMC Quality Control (QC) Inspector is identified as Yu Dong Ping. The welding variables recorded by QC appeared to comply with the WPS – B – P – 2133.

## Shielded Metal Arc Welding (SMAW)

Weld joint # 017 located on Hole plugging in Bike path BK 004A2 -034. Welder is identified as 066326. ZPMC Quality Control (QC) Inspector is identified as Yu Dong Ping. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2112 -Plug.

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.



## Summary of Conversations:

No relevant Conversations.

## Comments

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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.

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

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