

**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-009519**Date Inspected:** 13-Oct-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 645**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1845**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** Xu Xian Ping  
**Inspected CWI report:** Yes No N/A  
**Electrode to specification:** Yes No N/A  
**Qualified Welders:** Yes No N/A  
**Approved Drawings:** Yes No N/A

**CWI Present:** Yes No  
**Rod Oven in Use:** Yes No N/A  
**Weld Procedures Followed:** Yes No N/A  
**Verified Joint Fit-up:** Yes No N/A  
**Approved WPS:** Yes No N/A  
**Delayed / Cancelled:** Yes No N/A

**Bridge No:** 34-0006**Component:** OBG & TOWER Components**Summary of Items Observed:**

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

**BAY 2**

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint # 022 located on Floor Beam FB3028 – 001. Welder is identified as 045209.

ZPMC QC is identified as Yang Qing Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132 – 3.

FCAW process welding of weld joint # 043 located on Floor Beam FB3037 – 001. Welder is identified as 045209.

ZPMC QC is identified as Yang Qing Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2232 – Tc – U4b – F.

FCAW process welding of weld joint # 043 located on Floor Beam FB3028 – 001. Welder is identified as 045209.

ZPMC QC is identified as Yang Qing Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2232 – Tc – U4b – F.

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### BAY 3

The following NDT inspection carried out as per the ZPMC submitted Notification No. 004393

#### Magnetic Particle Testing

This QA inspector performed MT of approximately 15% 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 OBG Components. The weld designations reviewed are as follows:

1. LD007 – 011 – 003; 005; 012
2. LD007 – 012 – 011
3. LD007 – 014 – 003; 005; 012
4. LD001 – 042 – 011
5. LD001 – 043 – 011
6. LD001 – 044 – 011
7. LD001 – 045 – 011
8. LD001 – 046 – 011
9. LD001 – 048 – 011
10. LD003 – 057 – 011
11. LD002 – 041 – 011
12. LD002 – 044 – 011
13. LD002 – 046 – 011
14. LD002 – 047 – 011
15. LD004 – 057 – 011
16. LD010 – 014 – 003; 005; 012
17. LD010 – 014 – 003; 005; 012
18. LD005 – 012 – 011
19. LD005 – 014 – 003; 005; 012

### BAY 5

The following Visual inspection carried out as per the ZPMC submitted Notification No. 004391

#### Visual Inspection Testing

This QA inspector performed VT of the area previously tested and accepted by ZPMC Quality Control personnel. The members are identified as OBG Components. The identified components reviewed as follows:

1. CTS4D (G; H)
2. CTS4D1 (M)
3. CTS7 (A; B)
4. CTS10 (A; B)
5. CTS9 (A; B; C; D; E; F)
6. CTS11 (A; B; C; D)

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### 7. CTS8 (A; B)

The following NDT inspection carried out as per the ZPMC submitted Notification No. 004393

#### Ultrasonic Testing

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 members are identified as OBG Components. The weld designations reviewed are as follows:

1. CB202A – 011 – 002; 014
2. CB202F – 016 – 001; 002

#### Magnetic Particle Testing

This QA inspector performed MT of approximately 15% 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 OBG Components. The weld designations reviewed are as follows:

1. SP203 – 011 – 029; 030; 031; 033
2. SP206 – 011 – 023; 026; 029; 032
3. CB202F – 016 – 002

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint # 002 located on Bike Path BK001 – 038. Welder is identified as 204342. ZPMC QC is identified as Wang Liyang. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2232 – Tc – U4c – F.

FCAW process welding of weld joint # 002 located on Traveler Rail Bracket TR1A – PP031. Welder is identified as 215009. ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2232 – Tc – U4C – F.

FCAW process welding of weld joint # 014 located on Traveler Rail 10TR3 – 012. Welder is identified as 068918. ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2232 – Tc – U5 – F.

FCAW process welding of weld joint # 002 located on Traveler Rail Bracket TR2A – PP032. Welder is identified as 204342. ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2232 – Tc – U4C – F.

### BAY 6

#### Tower

This QA Inspector observed the following work in progress:

SMAW process welding of weld joint #7B located on Tower Strut WD1 – A305 – 53M – 3. Welder is identified

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as 067707. ZPMC QC is identified as Zhao Chen Sun. The welding variables recorded by QC appeared to comply with the WPS – 485 – SMAW – 2G (2F) – FCM – Repair – 1.

Cross Beam – 9

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #024 located on Cross Beam CB202G – 022. Welder is identified as 053609.

ZPMC QC is identified as Zhou Jie. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2232 – Tc – U4b – F.

FCAW process welding of weld joint #039 located on Cross Beam CB202A – 024. Welder is identified as 053609.

ZPMC QC is identified as Zhou Jie. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2232 – Tc – U4b – F.

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 Eric Tsang - 15000422372, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Kumar,Sandeep	Quality Assurance Inspector
<b>Reviewed By:</b>	Hall,Steven	QA Reviewer

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