

**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-010416**Date Inspected:** 25-Nov-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:** Liu Fawen**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:** Orthotropic Box Girder Components**Summary of Items Observed:**

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

**BAY 1**

The following NDT inspection carried out as per the ZPMC submitted Notification No. 004728

**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 member is identified as OBG Component. The weld designations reviewed are as follows:

1. CW002 – PP098 – 131~133 – Green Tag # 11242
  - a. CW002a – PP098 – 001; 007
2. CW002 – PP104 – 131~133 – Green Tag # 11243
  - a. CW002a – PP104 – 001; 007
3. CW002 – PP096 – 131~133
  - a. CW002a – PP096 – 001; 007

**BAY 2**

The following NDT inspection carried out as per the ZPMC submitted Notification No. 004731

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### 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 member is identified as OBG Component. The weld designations reviewed are as follows:

1. FB3013 – 001 – 010; 021; 026; 043 – Green Tag # 11204
2. FB3079 – 001 – 035; 029 – Green Tag # 11219

This QA Inspector observed the following work in progress:

### Flux Core Arc Welding:

This process welding of weld joint # 005 located on Longitudinal Diaphragm LD3022 – 001. Welder is identified as 045276. ZPMC QC is identified as Yang Qing Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 – B – U2 – F – 1.

This process welding of weld joint # 012 located on Longitudinal Diaphragm LD3014A – 001. Welder is identified as 045276. ZPMC QC is identified as Yang Qing Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2231 – B – U2 – F – 1.

### BAY 3

This QA Inspector observed the following work in progress:

### Submerged Arc Welding:

This process welding of weld joint # 023 located on Longitudinal Diaphragm LD3011 – 001. Welder is identified as 044780. ZPMC QC is identified as Guo Yuan Ting. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2221 – B – L2c – S – 2.

This process welding of weld joint # 003 located on Longitudinal Diaphragm LD3011 – 001. Welder is identified as 062406. ZPMC QC is identified as Guo Yuan Ting. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2221 – B – L2c – S – 2.

### BAY 5

This QA Inspector observed the following work in progress:

### Flux Core Arc Welding:

This process welding of weld joint # 011 located on Traveler Rail 10TR1 – 008. Welder is identified as 250353. ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132.

This process welding of weld joint # 005 located on Traveler Rail 11TR2 – 009. Welder is identified as 069089. 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.

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This process welding of weld joint # 011 located on Traveler Rail 11TR2 – 023. Welder is identified as 215078. ZPMC QC is identified as Zhong Chong Biao. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132.

This process welding of weld joint # 013 located on Traveler Rail 11TR2 – 009. Welder is identified as 066064. 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.

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
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<b>Reviewed By:</b>	Hall,Steven	QA Reviewer
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