

**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-011188**Date Inspected:** 29-Dec-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 (OBG) & Tower Com**Summary of Items Observed:**

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

BAY 2

Green Tag

The following green tag issued for the OBG component after completing the NDT requirements are:

1. FB3014 – 002 – Green Tag # 11271

This QA Inspector observed the following work in progress:

Flux Core Arc Welding (FCAW):

Weld joint # 022 located on Longitudinal Diaphragm LD3024 – 001. Welder is identified as 045227. ZPMC Quality Control (QC) Inspector is identified as Zhang Hai Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132 – 3.

Weld joint # 014 located on Longitudinal Diaphragm LD3023 – 001. Welder is identified as 062708. ZPMC Quality Control (QC) Inspector is identified as Zhang Hai Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132 – 3.

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## BAY 3

This QA Inspector observed the following work in progress:

Flux Core Arc Welding (FCAW):

Weld joint # 037 located on Corner Assembly CA3002C – 2. Welder is identified as 208035. ZPMC Quality Control (QC) Inspector is identified as Guo Yuan Ting. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132 – 3.

Weld joint # 238 located on Corner Assembly CA3004E. Welder is identified as 208035. ZPMC Quality Control (QC) Inspector is identified as Guo Yuan Ting. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2133.

Weld joint # 011 located on Cross Beam CB202G – 042. Welder is identified as 204338. ZPMC Quality Control (QC) Inspector is identified as Guo Yuan Ting. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2133.

Weld joint # 002 located on Cross Beam CB202A – 014. Welder is identified as 044790. ZPMC Quality Control (QC) Inspector is identified as Guo Yuan Ting. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2232 – Tc – U4b – F.

## BAY 5

This QA Inspector observed the following work in progress:

Flux Core Arc Welding (FCAW):

Weld joint # 005 located on Traveler Rail 11TR3 – 002. Welder is identified as 069895. ZPMC Quality Control (QC) Inspector is identified as Shen Jian Guo. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2232 – Tc – U5 – F.

Weld joint # 014 located on Traveler Rail 11TR4 – 002. Welder is identified as 067275. ZPMC Quality Control (QC) Inspector is identified as Shen Jian Guo. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2232 – Tc – U5 – F.

Weld joint # 010 located on Traveler Rail 11TR12 – 002. Welder is identified as 069895. ZPMC Quality Control (QC) Inspector is identified as Shen Jian Guo. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2232 – Tc – U5 – F.

## BAY 6

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 004956

Ultrasonic Testing (UT)

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC

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Quality Control personnel. This QA Inspector generated an UT report for this date. The member is identified as TOWER Component. The weld designations reviewed are as follows:

WEST TOWER LIFT 2

WD1 – A305 – 77M – 2 – 1; 2; 7; 8; 9; 10 – (A/B) – Green Tag # 11682

BAY 7

This QA Inspector observed the following work in progress:

Flux Core Arc Welding (FCAW):

Weld joint # 005 located on Traveler Rail 22TR4 – 001. Welder is identified as 068859. ZPMC Quality Control (QC) Inspector is identified as Li Jia. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2232 – Tc – U5 – F.

Weld joint # 003 located on Traveler Rail 22TR2 – 001. Welder is identified as 053742. ZPMC Quality Control (QC) Inspector is identified as Li Jia. 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
<b>Reviewed By:</b>	Hall,Steven	QA Reviewer

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