

**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-007269**Date Inspected:** 10-Jun-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:** Huang Wen pang**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:** OBG 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 #008 located on FB003 – 160. Welder is identified as 203871. ZPMC QC is identified as Zhang Hai Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2233 – Tc – u4b – F.

FCAW process welding of weld joint #032 located on FB003 – 160. Welder is identified as 048433. ZPMC QC is identified as Zhang Hai Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2233 – Tc – u4b – F.

**BAY 3**

This QA Inspector observed the following work in progress:

SAW process welding of weld joint #001 located on Cross Beam CB202C - 010. Welder is identified as 044780. ZPMC QC is identified as Yin Dong Hai. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2221 – B – L2C – S – 2.

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FCAW process welding of weld joint #059 located on Floor Beam FB028 – 012. Welder is identified as 044790. 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.

SMAW process Tack welding of weld joint #100 located on CSD6– PP79. Welder is identified as 251259. ZPMC QC is identified as Yin Donghai. The welding variables recorded by QC appeared to comply with the WPS – B – P – 2112.

FCAW process welding of weld joint #001 located on Longitudinal DiaphragmLD016 – 029. Welder is identified as 214338. ZPMC QC is identified as Yin Dong Hai. The welding variables recorded by QC appeared to comply with the WPS – B – T – 2132 – 3.

SMAW process welding of a repair weld joint #045 located on Floor Beam FB0012 – 039. Welder is identified as 044824. ZPMC QC is identified as Liu Wei Wei. The welding variables recorded by QC appeared to comply with the WPS – B – 345 – FCAW – 2G (2F) – FCM – Repair.

This QA Inspector observed the following work not in compliance:

During random in-process visual inspection on Bay # 03, observed welding being performed without required amount of pre-heat on Cross Beam welds of Fracture Critical Members (FCM). The weld designations are as follows;

1) CB202C – 010 – 004, SAW by 044780, the recorded temperature is 400C, while required preheat temperature according to approved WPS-B-T-2221-L2c-S-2 is 600C.

2) CB202E – 010 – 003, FCAW by 208035, the recorded temperature is 380C while required preheat temperature according to approved WPS-B-T-2231-B-u2-F-1 is 600C.

For further details, please see Incident report (040120F4\_TL015\_B227\_06-10-09\_welding being performed without required amount of pre-heat on Cross Beam welds(FCM)).

## BAY 5

This QA Inspector observed the following work in progress:

SMAW process welding of a repair weld joint #008 located on Bike Path BK001 – 015. Welder is identified as 216713. ZPMC QC is identified as Xu Hong Min. The welding variables recorded by QC appeared to comply with the WPS – B – 345 – SMAW – 2G (2F) - Repair.

Unless otherwise noted, all work observed on this date appeared to generally comply with 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 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>	Prue,Erik	QA Reviewer

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