

**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-017193**Date Inspected:** 15-Sep-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/Qiu wen**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**Summary of Items Observed:**

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

In process Inspection

Bay #11

This QA inspector observed the following work in progress:

SMAW welding of weld joint no: ESD1-TL5-2B/F-26A/B located on Tower Lift 5 Grillage. Welder is identified as #040690. ZPMC QC is identified as Mr. Xu Jie. Welding was performed according to the weld repair report T-WR3596 and UT report number: T787-UT-3187. The welding variables recorded by QC appeared to comply with the WPS-485-SMAW-3G(3F)-Repair.

This QA Inspector observed the following work in progress:

SMAW in the 3G position for the Tower Lift 5 Bracket Plate to Stiffener, weld No: ND1-BRSA5-2-13A. The welder is identified as #054469. ZPMC QC is identified as Mr. Zhao mao mao. The welding variables recorded by QC appear to comply with WPS-B-T-3213-TC-U4b.

This QA Inspector observed the following work in progress:

SMAW in the 3G position for the Tower Lift 5 Bracket Plate to Stiffener, weld No: ND1-BRSA5-2-9B. The welder is identified as #044541. ZPMC QC is identified as Mr. Zhao mao mao. The welding variables recorded by

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QC appear to comply with WPS-B-T-3213-TC-U4b.

This QA Inspector observed the following work in progress:

FCAW in the 2F position for the Bike Path 018, weld No: BK004A5-018-077/076. The welder is identified as #040736. ZPMC QC is identified as Mr. Wang chaung xin. The welding variables recorded by QC appear to comply with WPS-B-T-2132.

Bay #10

This QA inspector observed the following work in progress:

SMAW welding of temporary attachments removal areas located on Tower South Lift 5 Grillage Plate. Welder is identified as #050289. ZPMC QC is identified as Mr. Yuan hui gang. Welding was performed according to the weld repair report T-WR3511. The welding variables recorded by QC appeared to comply with the WPS-485-SMAW-3G(3F)-Repair.

FCAW in the 2F position for the Bike Path 025, weld No: BK004A4-025-014/015. The welders are identified as #057266/053869. ZPMC QC is identified as Mr. Li jun. The welding variables recorded by QC appear to comply with WPS-B-T-2132.

Magnetic Particle Testing:-

Bay #10

This QA inspector performed Magnetic Particle Testing (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 Segment14 Bottom Plate. The weld designation reviewed is as follows:

BP3089-001-004,005,043,044,050,051,058,059,060,061,092,093,121,122.

Bay #11

This QA inspector performed Magnetic Particle Testing (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 Bike Path. The weld designation reviewed is as follows:

9C-BK004A7-021-187

During the Quality Assurance (QA) random in-process observation of the fabrication of Bike Path 021, this QA inspector discovered the following issue:

-ZPMC personnel have performed weld repair one longitudinal crack indication without prior approval of the Engineer.

-The weld is identified as 9C-BK004A7-021-187.

- The weld is a fillet T-joint, joining stiffener identified as BKX7L to stringer plate identified as BKX9C.

-The crack indication is previously discovered and rejected during Magnetic Particle Testing (MT) performed by

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this QA inspector.

- The Bike Path 021 Stringer Plate is located in Bay# 11.
- The Notice of Witness Inspection Number (NWIT) is 006673 dated 9/15/10.

Note: Please reference NCR-ZPMC-800 written by this QA inspector dated 9/11/10 IR log #1562.

This Quality Assurance (QA) Inspector wrote an Incident Report for weld repair without engineer approval. Please reference the Incident Report # 04-0120F4\_TL-15\_B286\_09-15-10\_BK021 weld repair without engineer approval. For further information, please see the attached pictures.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



### Summary of Conversations:

No Relevant Conversation.

### 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 Micheal Ng- 159-2184-5703 , who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Pillai,Pandaram	Quality Assurance Inspector
<b>Reviewed By:</b>	McClendon,Timothy	QA Reviewer

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