

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-016971**Date Inspected:** 22-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:** 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 & OBG Components**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.

TOWER JETTY

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted Notification No. 006732

Ultrasonic Testing (UT)

This QA inspector performed UT of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The member is identified as Tower Component. The weld designation reviewed as follows:

NORTH TOWER LIFT-3; 109 M ELEVATION

NSD1 – FASA3 – 1B/E – 22; 30

BAY#11

This QA Inspector observed the following work in progress

Shielded Metal Arc Welding (SMAW):

Weld joint # 9B located on Lift-5 Bracket SD1 – BRSA5 – 1. Welder is identified as 041271. ZPMC Quality

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Control (QC) Inspector is identified as Liu Dao Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3213 – Tc – U4b.

Weld joint # 13B located on Lift-5 Bracket SD1 – BRSA5 – 1. Welder is identified as 046769. ZPMC Quality Control (QC) Inspector is identified as Liu Dao Feng. The welding variables recorded by QC appeared to comply with the WPS – B – T – 3213 – Tc – U4b.

Witness of Ultrasonic Testing (UT)

This QA inspector Witnessed 100% UT performed by ZPMC Quality Control personnel. The member is identified as Tower Component. The component and weld designation identified as follows:

WEST TOWER LIFT-5, GRILLAGE ASSEMBLY

WSD1 – TL5 – 4B/F – 11B

ORTHOTROPIC BOX GIRDER (OBG) AT BAY#11

This QA Inspector observed the following work in progress

Heat Straightening:

Heat Straightening being performed on Bike Path identified as BK004A - 021 by oxy-acetylene flame method to remove the distortion that occurred after welding. ZPMC Quality Control (QC) Inspector is identified as Yu Dong Ping present at the location. This activity appeared to comply with the Heat Straightening Report # HSR1 (B) – 9416.

Shielded Metal Arc Welding (SMAW):

Weld joint # 008 located on Bike Path BK004A1 – 017. Welder is identified as 054460. ZPMC Quality Control (QC) Inspector is identified as Wang Chuang Xin. The welding variables recorded by QC appeared to comply with the WPS – B – P – 2214 – B – U2.

This QA Inspector observed the following work not in compliance:

Description of Incident:

During the Caltrans Quality Assurance (QA) in-process observations of the fabrication of Bike Path, this QA Inspector discovered the following issue:

-ZPMC personnel performed welding of CJP butt weld joint on Bike Path BK004A-017, without using the weld tabs at both ends.

-The weld is a complete joint penetration (CJP) Butt joint, joining the Bike Path side plate (BKPL3B) to the Top Plate (BKPL2A).

-The weld is identified as BK004A1 – 017 # 008.

-The member is identified as Non-Seismic Performance Critical Member.

-This bike path is located at fabrication Bay#11.

Applicable reference:

AWS D1.5 2002 section(s): 3

3.12.1 “Welds shall be terminated at the end of a joint in a manner that will ensure sound welds. Whenever possible, this shall be done by use of weld tabs (extension bars and runoff plates) placed in a manner that will duplicate the joint detail being welded.”

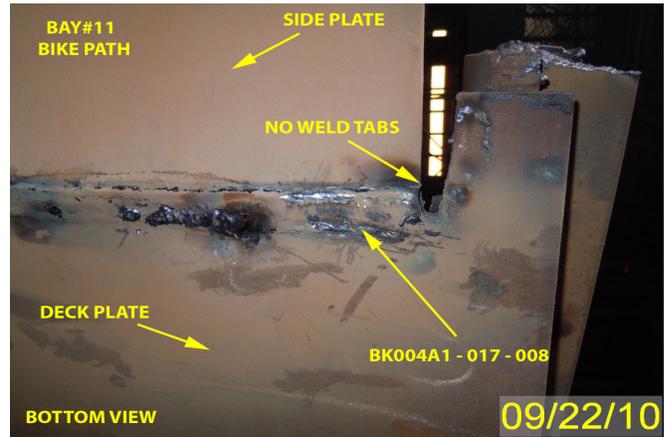
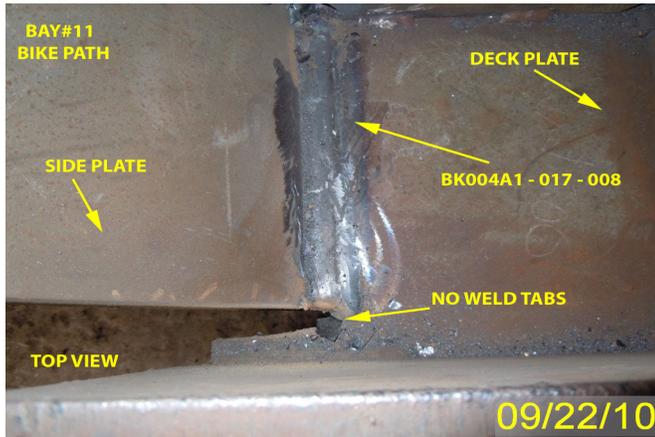
This QA notified ZPMC QC identified as Mr. Li Bin and ABF inspector identified as Mr. Zhao Xian He of the above issue and that an incident report will be generated.

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For further information see below pictures:-

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 Michael Ng - 15921845703, who represents the Office of Structural Materials for your project.

Inspected By: Kumar,Sandeep

Quality Assurance Inspector

Reviewed By: Clifford,William

QA Reviewer