

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-017971**Date Inspected:** 30-Oct-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) Chanxing Island**Location:** Shanghai, China**CWI Name:** Mr. Xu Tao**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 Segment and Bike Path**Summary of Items Observed:**

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

Magnetic Particle Testing (MT) – NWIT Document No's: 007170

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 members are identified as OBG Bike Path. The weld designations reviewed are as follows:

1. BK006A1-001-016, 017, 019, 020, 021, 022, 023
2. BK006A6-001-001, 002, 007, 165
3. BK006A8-001-001, 002, 007, 130
4. BK006ASD1-001-007, 008, 025, 026
5. BK006A2-001-002, 008, 013, 014, 016, 017, 018, 019, 020, 021

Bay 16

This QA Inspector observed the following work in progress:

Flux Core Arc Welding (FCAW) welding of weld joint W5-SB1-052-082 ~087 located on OBG steel barrier. Welder is identified as 0702541. ZPMC Quality Control (QC) is identified as Mr. Feng Ya Jun. The welding

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variables recorded by QC appeared to comply with the Applicable WPS -B-T-2132.

FCAW welding of weld joint W5-SB1-055-082 ~087 located on OBG steel barrier. Welder is identified as 070217. ZPMC Quality Control (QC) is identified as Mr. Feng Ya Jun. The welding variables recorded by QC appeared to comply with the Applicable WPS -B-T-2132.

Bay 19

This QA Inspector observed the following work in progress:

Flux Core Arc Welding (FCAW) welding of weld joint BK004A5-006-122, 125, 128 and 131 located on OBG of Bike Path. Welder is identified as 062786. ZPMC Quality Control (QC) is identified as Mr. Guo Xing Hui. The welding variables recorded by QC appeared to comply with the Applicable WPS -B-T-2333-B-U2-F.

FCAW welding of weld joint BK004A1-004-006 and 005 located on sole plate of OBG of Bike Path. Welder is identified as 062739. ZPMC Quality Control (QC) is identified as Mr. Guo Xing Hui. The welding variables recorded by QC appeared to comply with the Applicable WPS -B-T-2132.

FCAW welding of weld joint BK004A1-004-008 and 038 located on sole plate of OBG of Bike Path. Welder is identified as 062732. ZPMC Quality Control (QC) is identified as Mr. Guo Xing Hui. The welding variables recorded by QC appeared to comply with the Applicable WPS -B-T-2132.

ZPMC personnel performing heat straightening on OBG Suspender Bracket SB104E. Distortion appeared to be caused by mishandling of the welding/material. ZPMC Quality Control (QC) inspector identified as Mr. Xu Tao was present to monitor the heat straightening process. The heat straightening appeared to comply with HSR1 (B) number 9726.

Description of Incident: During random Quality Assurance visual and work in progress of welds located on OBG Bike Path, ZPMC Quality Control Inspector (QC) discovered that Thirteen (13) Transverse Linear Cracks with each measuring approximately 8 to 13mm in length. The cracks were found on sole plate of bike path identified as BK004A1-011-038. The weld is fillet weld joint, joining the deck panel to sole plate, this plate are identified as non Seismic Performance Critical Member (non SPCM). The indications are clearly marked on the material near the weld. OBG Bike Path BK004A1-011 is located at Bay#19. The Caltrans (CT) Quality Assurance Inspector (QA) requested to ZPMC QC, to prepare Critical weld repair report (CWR) and perform weld repair on above mention weld. See the attached picture.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

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Summary of Conversations:

Only general conversation was held between QA and QC concerning this project.

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 , who represents the Office of Structural Materials for your project.

Inspected By: Kumar,Vibin

Quality Assurance Inspector

Reviewed By: McClendon,Timothy

QA Reviewer