

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-019571**Date Inspected:** 02-Jan-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See below**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**Summary of Items Observed:**

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

Bay 3

This QA Inspector observed the following work in progress for Bay 3.

ZPMC was using the Shielded Metal Arc Welding (SMAW) process.

ZPMC QC is identified as Zhu Jun.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA Inspector.

Component; Traveler Rail

PCMK: 20TR2-032

Weld No: 007,005

Welder: 058087

Critical Weld Repair No. B-CWR1568

WPS-345-SMAW-1G(1F)-Repair

This QA Inspector observed the following work in progress for Bay 3.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Zhu Jun.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

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Listed below are the locations that were identified by this QA Inspector.

Component; Traveler Rail

PCMK: 20TR2-032

Weld No: 009

Welder: 206386

Critical Weld Repair No. B-CWR1568

WPS-345-FCAW-1G(1F)-Repair

Heat straightening of PCMK, 20TR2-032 under approved Heat Straightening procedure, HSR1 (B)-362. The in process temperature was observed as 460°C. The ZPMC QC was identified as Zhu Jun. The approved HSR procedure stated that a maximum temperature of 650°C with 1-3 numbers of applications was allowed. The distortion that was previously measured and recorded on the HSR was Maximum 80mm.

This Caltrans QA Inspector during random observation at ZPMC noted that back gouging was being performed using the Carbon Arc Cutting (CAC) process on AH5131. Also noted at this location was ZPMC grinding these back gouge areas to a bright metal finish in preparation for the welding process, Flux Core Arc Welding (FCAW), as outlined in the contract documents.

Bay 8

This QA Inspector observed the following work in progress for Bay 8.

ZPMC was using the Shielded Metal Arc Welding (SMAW) process.

ZPMC CWI is identified as Liu Fa Wen.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA Inspector.

Component; Bike Path

PCMK: BK004A6-059- fit up

Tack Welder: 054015

WPS-B-P-2113

Bay 14

This QA inspector performed MT of approximately 15% of an area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. This QA Inspector generated an MT report for this date. The member was identified as DP3148. The weld designations reviewed are as follows:

031~035,040~045,049,051~054,060~065,070~077,082~087,092~097,102~107,112,113,

Bay 19

This QA Inspector observed the following work in progress for Bay 19.

ZPMC was using the Flux Core Arc Welding (FCAW) process.

ZPMC QC is identified as Yu Xing Lui.

Welding variables recorded by QC appeared to comply with the approved Welding Procedure Specification (WPS).

Listed below are the locations that were identified by this QA Inspector.

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Component; Suspender Bracket

PCMK: SB022-104

Weld No: 004

Welder: 062761

Weld Repair No. B-WR19580

WPS-345-FCAW-3G(3F)-Repair

Heat straightening of PCMK, BK006A-014 under approved Heat Straightening procedure, HSR1 (B)-9405. The in process temperature was observed as 460°C. The ZPMC QC was identified as Yu Xing Lui. The approved HSR procedure stated that a maximum temperature of 650°C with 1-3 numbers of applications was allowed. The distortion that was previously measured and recorded on the HSR was Maximum 35mm.

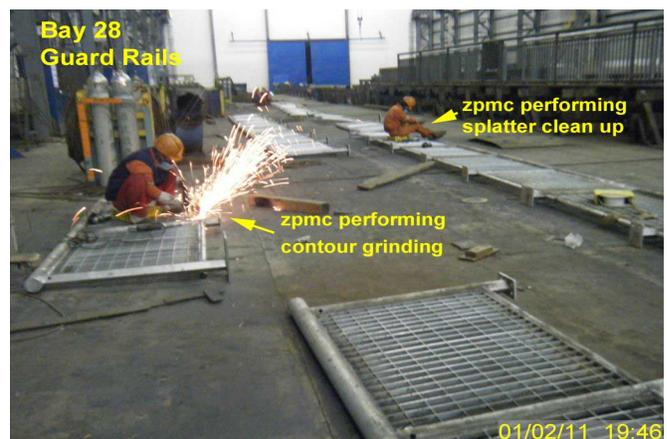
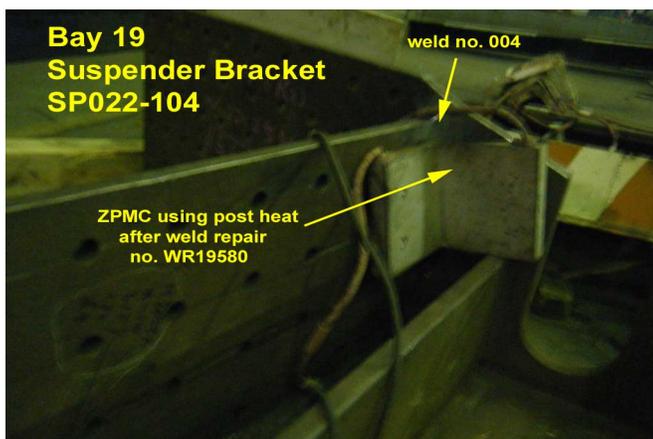
This Caltrans QA Inspector observed at random intervals ZPMC performing grinding of welds located in Bike Path BK004A-014 at various locations due to contour grinding and visual indications as identified by ZPMC QC Inspectors.

Bay 28

This Caltrans QA Inspector observed at random intervals ZPMC performing grinding of welds located in U-Rib splice plates SA3102B-003~010 at various locations due to contour grinding and visual indications as identified by ZPMC QC Inspectors.

This Caltrans QA Inspector observed at random intervals ZPMC performing grinding of welds located in Guard Rails BKR-NS-10 ~ 36 at various locations due to contour grinding and visual indications as identified by ZPMC QC Inspectors.

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



Summary of Conversations:

No significant conversations

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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.

Inspected By:	Leavitt,Kelly	Quality Assurance Inspector
Reviewed By:	Riley,Ken	QA Reviewer
