

DEPARTMENT OF TRANSPORTATION
 DIVISION OF ENGINEERING SERVICES
 Office of Structural Materials
 Quality Assurance and Source Inspection



Bay Area Branch
 690 Walnut Ave. St. 150
 Vallejo, CA 94592-1133
 (707) 649-5453
 (707) 649-5493

Contract #: 04-0120F4
 Cty: SF/ALA Rte: 80 PM: 13.2/13.9
 File #: 69.25B

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

Location: Changxing Island, Shanghai, China **Report No:** NCR-000825
Prime Contractor: American Bridge/Fluor Enterprises, a JV **Date:** 15-Aug-2010
Submitting Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0787

Type of problem:

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: Lift 13 SP3113A
Procedural	Procedural	Description:	

Reference Description: Missed MT Crack Discovered by QA on Lift 13 Side Plate - SP3113A

Description of Non-Conformance:

During the Quality Assurance Magnetic Particle Testing (MT) review of welds located on Orthotropic Box Girder (OBG) Side panel, SP3113A, this Quality Assurance Inspector (QA) discovered the following issue:

- One Longitudinal crack indication measuring approximately 65mm in length.
- The weld is identified as SP3113-001-050.
- The weld is a fillet weld T-joint, joining the Longitudinal stiffener identified as RS3446C to the Transverse diaphragm identified as X4174A.
- Y location of this indication is approximately 30 mm from the Bottom plate.
- The indication is clearly marked on the material.
- This side panel is located in Bay# 10.
- The Notice of Witness Inspection Number (NWIT) is 06404.
- This weld is within an area previously tested and accepted by ZPMC Quality Control (QC) personnel.

According to the contract documents, ZPMC QC personnel are required to perform 100% MT inspection of this weld.



QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Applicable reference:

Special Provisions Section 8.3 – “Quality Control (QC) shall be the responsibility of the Contractor. As a minimum, the Contractor shall perform inspection and testing of each weld joint prior to welding, during welding, and after welding as specified in this section and to ensure that materials and workmanship conform to the requirements of the contract documents.”

AWS D1.5 (02) Section 6.26.2 – “Welds that are subject to MT in addition to visual inspection shall have no cracks.

Who discovered the problem: Baskar Govindarajan

Name of individual from Contractor notified: Liu Chen

Time and method of notification: 10:20_08/15/10_Verbal

Name of Caltrans Engineer notified: Laraine Woo

Time and method of notification: 08:30_8/16/10_Email

QC Inspector's Name: Qiu Wen

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

NA

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 Mazen Wahbeh,(818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Devey,Jim	SMR
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Reviewed By:	Wahbeh,Mazen	SMR
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DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge
 333 Burma Road
 Oakland CA 94607
 Tel: Fax:

NON-CONFORMANCE REPORT TRANSMITTAL

To: AMERICAN BRIDGE/FLUOR, A JV
 375 BURMA ROAD
 OAKLAND CA 95607

Date: 16-Aug-2010

Contract No: 04-0120F4
 04-SF-80-13.2 / 13.9

Dear: Mr. Charles Kanapicki
Job Name: SAS Superstructure

Attention: Mr. Thomas Nilsson Project/Fabrication Manager
Document No: 05.03.06-000782

Subject: NCR No. ZPMC-0787

Reference Description: Missed MT Crack Discovered by QA on Lift 13 Side Plate - SP3113A

The attached Non-Conformance Report describes an occurrence where the contractor did not comply with a requirement of the contract document as indicated below:

- Material or Workmanship not in conformance with contract documents.
- Quality Control (QC) not performed in conformance with contract documents.
- Recurring QC issue that constitutes a systematic problem in quality control.
- Non-Conformance Resolved.

Material Location: OBG **Lift:** 13

Remarks:

- During Quality Assurance Magnetic Particle Testing (MT) review of welds located on Orthotropic Box Girder (OBG) Side panel, SP3113A, Caltrans Quality Assurance Inspector (QA) discovered the following issue:
- One Longitudinal crack indication measuring approximately 65mm in length.
- The weld is identified as SP3113-001-050.
- The weld is a fillet weld T-joint, joining the Longitudinal stiffener identified as RS3446C to the Transverse diaphragm identified as X4174A.
- Y location of this indication is approximately 30 mm from the Bottom plate.
- The indication is clearly marked on the material.
- This side panel is located in Bay# 10.
- The Notice of Witness Inspection Number (NWIT) is 06404.
- This weld is within an area previously tested and accepted by ZPMC Quality Control (QC) personnel.

According to the contract documents, ZPMC QC personnel are required to perform 100% MT inspection of this weld.

Action Required and/or Action Taken:

Propose a resolution for the identified non-conformance with revised procedures to prevent future occurrences. A response for the resolution of this issue is expected within 7 days.

Transmitted by: Laraine Woo Transportation Engineer

Attachments: ZPMC-0787

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Jason Tom, Contract Files, Ching Chao, Bill Casey
File: 05.03.06

NCR PROPOSED RESOLUTION

To: CALTRANS - SAS Superstructure
333 Burma Road
Oakland CA 94607

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000782

Subject: NCR No. ZPMC-0787

Dated: 30-Aug-2010

Contract No.: 04-0120F4
04-SF-80-13.2 / 13.9

Job Name: SAS Superstructure

Document No.: ABF-NPR-000751 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: The missed indication has been removed and ZPMC has retested the area. The attached NDT records show that the repair was successful and the weld is acceptable.

The missed indication has been removed and ZPMC has retested the area. The attached NDT records show that the repair was successful and the weld is acceptable. In the future ABFJV will be performing inspections alongside ZPMC to reduce the number of missed indications. Based on this ZPMC requests closure of this NCR.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000751R00;

Caltrans' comments:

Status: CLO

Date: 08-Sep-2010

The proposed resolution is acceptable. This NCR is considered closed.

Submitted by: Woo, Laraine

Date: 08-Sep-2010

Attachment(s):



No. B-854

LETTER OF RESPONSE

TO: American Bridge/Flour

DATE: 2010-8-27

REGARDING: NCR-000825(ZPMC-0787)

The missed indication in record has been removed, repaired and retested to be acceptable. ZPMC is providing the NDT record for depairment for review. Based on this, please consider closure of this NCR.

ATTACHMENT:

NCR-000825(ZPMC-0787)

B787-MT-26149 R1

fw

8/27/10



DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge
 333 Burma Road
 Oakland CA 94607
 Tel: Fax:

NON-CONFORMANCE REPORT TRANSMITTAL

To: AMERICAN BRIDGE/FLUOR, A JV Date: 16-Aug-2010
 375 BURMA ROAD
 OAKLAND CA 95607 Contract No: 04-0120F4
 04-SF-80-13.2 / 13.9
 Dear: Mr. Charles Kanapicki Job Name: SAS Superstructure
 Attention: Mr. Thomas Nilsson Project/Fabrication Manager Document No: 05.03.06-000782
 Subject: NCR No. ZPMC-0787
 Reference Description: Missed MT Crack Discovered by QA on Lift 13 Side Plate - SP3113A

The attached Non-Conformance Report describes an occurrence where the contractor did not comply with a requirement of the contract document as indicated below:

- Material or Workmanship not in conformance with contract documents.
- Quality Control (QC) not performed in conformance with contract documents.
- Recurring QC issue that constitutes a systematic problem in quality control.
- Non-Conformance Resolved.

Material Location: OBG Lift: 13

Remarks:

During Quality Assurance Magnetic Particle Testing (MT) review of welds located on Orthotropic Box Girder (OBG) Side panel, SP3113A, Caltrans Quality Assurance Inspector (QA) discovered the following issue:

- One Longitudinal crack indication measuring approximately 65mm in length.
- The weld is identified as SP3113-001-050.
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According to the contract documents, ZPMC QC personnel are required to perform 100% MT inspection of this weld.

Action Required and/or Action Taken:

Propose a resolution for the identified non-conformance with revised procedures to prevent future occurrences. A response for the resolution of this issue is expected within 7 days.

Transmitted by: Laraine Woo Transportation Engineer
 Attachments: ZPMC-0787

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Jason Tom, Contract Files, Ching Chao, Bill Casey
 File: 05.03.06

02:02:15.04
 05.03.06-000782,NCT

Received
 NCT-000782 16 Aug 10 Page 1 of 1

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Contract #: 04-0120F4City: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.25B

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

Location: Changxing Island, Shanghai, China

Report No: NCR-000825

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 15-Aug-2010

Submitting Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC); Changxing Island

NCR #: ZPMC-0787

Type of problem:

Welding Concrete Other Welding Curing Procedural Joint fit-up Coating Other Procedural Procedural Description:

Bridge No: 34-0006

Component: Lift 13 SP3113A

Reference Description: Missed MT Crack Discovered by QA on Lift 13 Side Plate - SP3113A

Description of Non-Conformance:

During the Quality Assurance Magnetic Particle Testing (MT) review of welds located on Orthotropic Box Girder (OBG) Side panel, SP3113A, this Quality Assurance Inspector (QA) discovered the following issue:

-One Longitudinal crack indication measuring approximately 65mm in length.

-The weld is identified as SP3113-001-050.

-The weld is a fillet weld T-joint, joining the Longitudinal stiffener identified as RS3446C to the Transverse diaphragm identified as X4174A.

-Y location of this indication is approximately 30 mm from the Bottom plate.

-The indication is clearly marked on the material.

-This side panel is located in Bay# 10.

-The Notice of Witness Inspection Number (NWIT) is 06404.

-This weld is within an area previously tested and accepted by ZPMC Quality Control (QC) personnel.

According to the contract documents, ZPMC QC personnel are required to perform 100% MT inspection of this weld.



QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Applicable reference:

Special Provisions Section 8.3 – “Quality Control (QC) shall be the responsibility of the Contractor. As a minimum, the Contractor shall perform inspection and testing of each weld joint prior to welding, during welding, and after welding as specified in this section and to ensure that materials and workmanship conform to the requirements of the contract documents.”

AWS D1.5 (02) Section 6.26.2 – “Welds that are subject to MT in addition to visual inspection shall have no cracks.

Who discovered the problem: Baskar Govindarajan

Name of individual from Contractor notified: Liu Chen

Time and method of notification: 10:20_08/15/10_Verbal

Name of Caltrans Engineer notified: Laraine Woo

Time and method of notification: 08:30_8/16/10_Email

QC Inspector's Name: Qiu Wen

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

NA

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 Mazen Wahbeh,(818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By: Devey,Jim

SMR

Reviewed By: Wahbeh,Mazen

SMR

ZPMC - 0787



REPORT OF MAGNETIC PARTICLE EXAMINATION
磁粉检测报告

REPORT NO. 报告编号 B787-MT-26149R1 DATE日期 2010.08.27 PAGE OF页码 1/1 Revision No: 0

PROJECT NO. ZP06-787 CONTRACTOR: CALTRANS
工程编号: 用户:

DRAWING NO. SP3113 CALTRANS CONTRACT NO.:
图号: THE 13 LIFTING SIDE PLATE 加州工程编号 04-0120F4

REFERENCING CODE 参考规范编码 AWS D1.5-2002	ACCEPTANCE STANDARD 接受标准 AWS D1.5-2002	PROCEDURE NO. 程序编号 ZPQC-MT-01	CALIBRATION DUE DATE 仪器校正有效期 Dec. 28 ST , 2010
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EQUIPMENT 设备 MT YOKE	MANUFACTURER 制造商 PARKER	MODEL NO. 样式编号 B310S	SERIAL NO. 连续编号 5395 5617 5620
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MAGNETIZING METHOD 磁化方法	Continuous magnetic yoke 磁轭式连续法	CURRENT 电流	AC
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PARTICLE TYPE 磁粉类型	Dry magnet powder 干磁粉	YOKE SPACING 磁轭间距	70~150mm
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MATERIAL TO BE EXAMINED 检测材料	<input checked="" type="checkbox"/> WELDING 焊接件 <input type="checkbox"/> CASTING 铸件 <input type="checkbox"/> FORGING 锻造	Material & thickness 母材, 厚度	A709M-345T2-X 12/16/25mm
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WELDING PROCESS 焊接方法	FCAW	TYPE OF JOINT 焊缝类型	T-JOINT
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WELD I.D. 焊缝编号	DISCONTINUITY 不连续性			ACCEPT 接受	REJECT 拒收	REMARKS 备注
	INDICATION 指示	TYPE 类型	LENGTH IN mm 长度			
SP3113-001-50	1R1			ACC.		100%MT

AFTER B-CWR1800REV0

BLANK

EXAMINED BY 主探 Xu Bing <i>Xu Bing</i> 2010.08.27 LEVEL - II SIGN 签名 / DATE 日期 质量经理 / QCM	REVIEWED BY 审核 <i>Xu Bing</i> 2010.08.27 LEVEL-II SIGN / DATE 日期 用户 CUSTOMER
签字 SIGN / 日期 DATE	签字 SIGN / 日期 DATE

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

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Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: xx.25A**QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION****Location:** Changxing Island, Shanghai, China**Report No:** NCS-000750**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 07-Sep-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0787**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component:
Procedural	Procedural	Descriptor:	

Date the Non-Conformance Report was written: 15-Aug-2010**Description of Non-Conformance:**

During the Quality Assurance Magnetic Particle Testing (MT) review of welds located on Orthotropic Box Girder (OBG) Side panel, SP3113A, this Quality Assurance Inspector (QA) discovered the following issue:

- One Longitudinal crack indication measuring approximately 65mm in length.
- The weld is identified as SP3113-001-050.
- The weld is a fillet weld T-joint, joining the Longitudinal stiffener identified as RS3446C to the Transverse diaphragm identified as X4174A.
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- This side panel is located in Bay# 10.
- The Notice of Witness Inspection Number (NWIT) is 06404.
- This weld is within an area previously tested and accepted by ZPMC Quality Control (QC) personnel.

According to the contract documents, ZPMC QC personnel are required to perform 100% MT inspection of this weld.

Contractor's proposal to correct the problem:

Repair said indication and perform NDT required to verify weld quality.

Corrective action taken:

Contractor has submitted post repair NDT data and ABF has agreed to perform MT alongside ZPMC in order to prevent technicians from missing indications.

Did corrective action require Engineer's approval? Yes No**If so, name of Engineer providing approval:** **Date:****Is Engineer's approval attached?** Yes No**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 Jim Simonis, who represents the Office of Structural

QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

(Continued Page 2 of 2)

Materials for your project.

Inspected By: Simonis,Jim

Quality Assurance Inspector

Reviewed By: Wahbeh,Mazen

QA Reviewer
