

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 #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.25B**QUALITY ASSURANCE -- NON-CONFORMANCE REPORT****Location:** Changxing Island, Shanghai, China**Report No:** NCR-000784**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 03-Jul-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0746**Type of problem:**

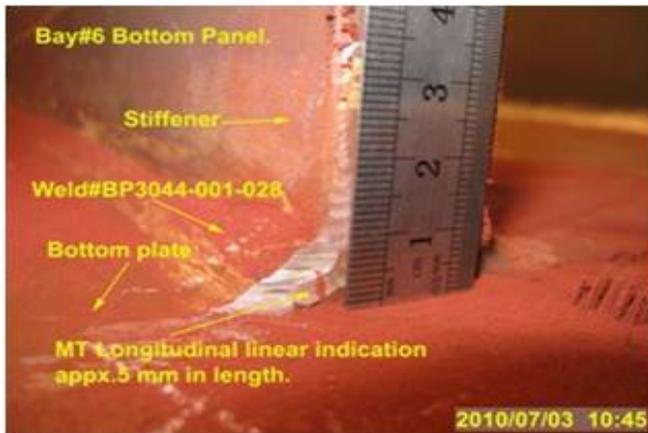
Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: 13CE, BP3044A
Procedural	Procedural	Description:	

Reference Description: Missed MT Indication Discovered by Quality Assurance (QA)**Description of Non-Conformance:**

During Quality Assurance Magnetic Particle Testing (MT) review of welds located on Orthotropic Box Girder (OBG) Bottom Panel (BP) BP3044A, (QA) discovered the following issue:

- One (1) Longitudinal Linear indication measuring approximately 5 mm in length.
- The weld is identified as: BP3044-001-028.
- The weld is a fillet weld joining Bottom plate (PL3232A) to Stiffener plate.
- The fillet weld size measured to be 9 mm.
- The "Y" location is approximately 0 from the nearest end of the weld.
- BP3044A is located in the OBG Sub assembly Bay # 6.

The Notice of Witness Inspection Number (NWIT) is 06109. The indication is located within the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. As per the contract documents, ZPMC QC personnel are required to perform 10% MT inspection of these welds.



QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Applicable reference:

AWS D1.5 2002 figure 6.8 – “Specifies for fillet weld sizes between 6mm and 13mm the maximum discontinuity length is approximately 2mm to 4mm”.

AWS D1.5 2002 section 6.26.1.2 - Thorough fusion shall exist between adjacent layers of weld metal and between weld metal and base metal.

AWS D1.5 2002 Section 6.26.2 – Welds that are subject to MT in addition to visual inspection shall have no cracks.

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.”

Who discovered the problem: Surendra Prabhu

Name of individual from Contractor notified: Wang Wen Bin

Time and method of notification: 1320 hours, 07-03-10 Verbal

Name of Caltrans Engineer notified: Stanley Ku

Time and method of notification: 1250 hours, 07-03-10, Email

QC Inspector's Name: Shu Yang Hua

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
 666 Feng Bin Road Room 708, Changxing Island
 Shanghai 201913 PR China
 Tel: 021-56856666 ext 207061 Fax:

NON-CONFORMANCE REPORT TRANSMITTAL

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

Date: 05-Jul-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: 05.03.06-000741

Subject: NCR No. ZPMC-0746

Reference Description: Missed MT Indication Discovered by Quality Assurance (QA)

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:

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The Notice of Witness Inspection Number (NWIT) is 06109. The indication is located within the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. As per the contract documents, ZPMC QC personnel are required to perform 10% MT inspection of these welds.

See the attached NCR No. ZPMC-0746 for details.

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: Ching Chao

Attachments: ZPMC-0746

cc: Gary Pursell, Peter Siegenthaler, Stanley Ku, Contract Files, Ching Chao, Bill Casey

NCT

(Continued Page 2 of 2)

File: 05.03.06

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000741

Subject: NCR No. ZPMC-0746

Dated: 22-Jul-2010

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000730 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: ZPMC has issued an internal NCR and has discussed preventative measures with the ABF QCM. ZPMC has attached the acceptable MT report after repair. ZPMC requests closure of this NCR.

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Submitted by: Lawton, Steve

Attachment(s): ABF-NPR-000730R00;

Caltrans' comments:

Status: CLO

Date: 29-Jul-2010

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

Submitted by: Woo, Laraine

Date: 29-Jul-2010

Attachment(s):



No. B-830

LETTER OF RESPONSE

TO: American Bridge/Flour

DATE: 2010-7-21

REGARDING: NCR-000784(ZPMC-0746)

ZPMC has issue an internal NCR to address this issue and ZPMC QA personnel have talked with the head of the NDT department. The missed indications have been repaired and were tested to be acceptable. ZPMC is providing the NDT records and is requesting closure of this NCR.

ATTACHMENT:

NCR-000784(ZPMC-0746)

B787-MT-24641 R1

sq sw

7/21/10



DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge

666 Feng Bin Road Room 708, Changxing Island
Shanghai 201913 PR China

Tel: 021-56856666 ext 207061 Fax:

NON-CONFORMANCE REPORT TRANSMITTAL

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

Date: 05-Jul-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: 05.03.06-000741

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(Continued Page 2 of 2)

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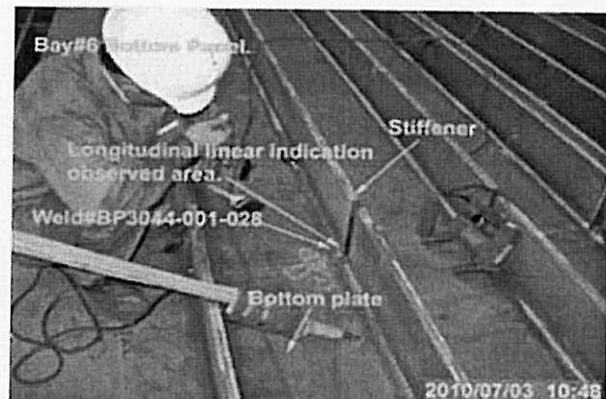
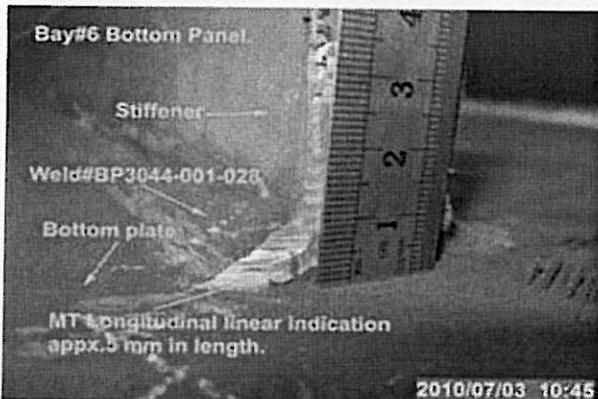
Bay Area Branch
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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.25B**QUALITY ASSURANCE -- NON-CONFORMANCE REPORT****Location:** Changxing Island, Shanghai, China**Report No:** NCR-000784**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 03-Jul-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0746**Type of problem:**Welding Concrete Other Welding Curing Procedural Bridge No: 34-0006Joint fit-up Coating Other Component: 13CE, BP3044AProcedural Procedural Description:**Reference Description:** Missed MT Indication Discovered by Quality Assurance (QA)**Description of Non-Conformance:**

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QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

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Time and method of notification: 1250 hours, 07-03-10, Email

QC Inspector's Name: Shu Yang Hua

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

NA

Comments:

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Inspected By:	Devey,Jim	SMR
Reviewed By:	Wahbeh,Mazen	SMR

2PMC-0746



REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 B787-MT-24641R1 DATE日期 2010.07.07 PAGE OF页码 1/1 Revision No: 0

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

DRAWING NO. BP3044A CALTRANS CONTRACT NO.: 04-0120F4
 图号: SIDE PLATE 加州工程编号:

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 22/25mm
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WELDING PROCESS 焊接方法	SMAW	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			
BP3044-001-028	1R1			ACC.		100%MT

AFTER B-WR13915

BLANK

EXAMINED BY主探 Jin jian ting jinjian ting 20/0.07.07 LEVEL - II SIGN 签名 / DATE日期	REVIEWED BY 审核 SUN GONG CHANG 20/0.07.07 LEVEL-II SIGN / DATE日期
质量经理 / QCM	用户CUSTOMER
签字 SIGN / 日期 DATE	签字 SIGN / 日期 DATE

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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-000692**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 29-Jul-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0746**Type of problem:**

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

Date the Non-Conformance Report was written: 03-Jul-2010**Description of Non-Conformance:**

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Contractor's proposal to correct the problem:

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

Corrective action taken:

Contractor supplied post repair NDT documentation verifying weld conforms with Contract weld quality requirements. An internal NCR was also issued by ZPMC in regards to this issue.

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:**

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QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

(Continued Page 2 of 2)

Inspected By: Simonis,Jim

Quality Assurance Inspector

Reviewed By: Wahbeh,Mazen

QA Reviewer