

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



Bay Area Branch  
 690 Walnut Ave. St. 150  
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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, P.R. China

**Report No:** NCR-000912

**Prime Contractor:** American Bridge/Fluor Enterprises, a JV

**Date:** 23-Nov-2010

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

**NCR #:** ZPMC-0874

### Type of problem:

<b>Welding</b>	<b>Concrete</b>	<b>Other</b>	
<b>Welding</b>	<b>Curing</b>	<b>Procedural</b>	<b>Bridge No:</b> 34-0006
<b>Joint fit-up</b>	<b>Coating</b>	<b>Other</b>	<b>Component:</b> Bikepath BK008A-002
<b>Procedural</b>	<b>Procedural</b>	<b>Description:</b>	

**Reference Description:** ZPMC performed fabrication without following the "Weld Procedure Requirements for New Welds" by Rager/McQuaid

### Description of Non-Conformance:

During Caltrans Quality Assurance (QA) in process observations of the fabrication of Bikepath: BK008A-002, this QA discovered the following issue(s):

ZPMC welding personnel did not follow the "Weld Procedure Requirements for New Welds" by Rager/McQuaid

The following requirement was not followed:

2f) Assembly: Preheat shall be applied in such a manner to provide a minimum temperature in the area of the weld of 165°C.

The weld is identified as BK008A3-002-026.

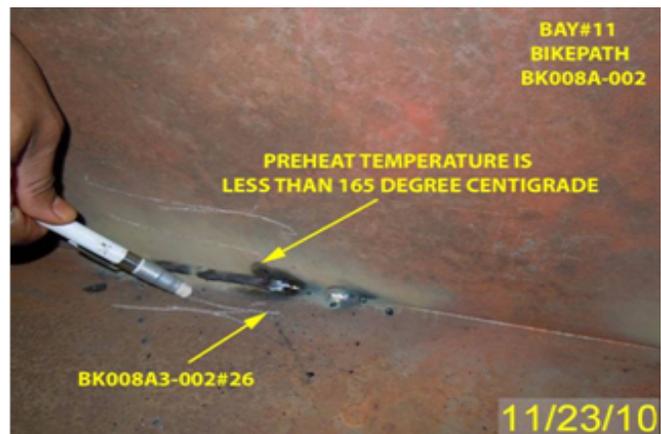
The tack welding process used was Shielded Metal Arc Welding (SMAW).

The area was being preheated using gas torch.

The weld is a fillet tack weld joining stringer plate (BKX14A) to deck plate (BKPL17A).

The weld is not SPCM.

This component is located at fabrication Bay#11.



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## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

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**Applicable reference:**

“Weld Procedure Requirements for New Welds” by Rager/McQuaid

-1a) Scope: This procedure is to be used for all new and totally replaced welds that are being made in conformance with the AWS D1.5 Bridge Welding Code, the Caltrans Special Provisions and this Welding Procedure

-2f) Assembly: Preheat shall be applied in such a manner to provide a minimum temperature in the area of the weld of 165°C.

**Who discovered the problem:** Naddi Sandeep Kumar

**Name of individual from Contractor notified:** Steve Lawton

**Time and method of notification:** 18:30\_11/23/10\_Email

**Name of Caltrans Engineer notified:** Laraine Woo

**Time and method of notification:** 7:30\_11/24/10\_Verbal

**QC Inspector's Name:** Yu Dong Ping

**Was QC Inspector aware of the problem:** Yes No

**Contractor's proposal to correct the problem:**

**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 Devey, (86) 150-0002-6784, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Tsang, Eric	SMR
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<b>Reviewed By:</b>	Devey, Jim	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:** 25-Nov-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:** 05.03.06-000869

**Subject:** NCR No. ZPMC-0874

**Reference Description:** ZPMC performed fabrication without following the "Weld Procedure Requirements for New Welds" by Rager/McQuaid

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:** Bike Path **Lift:**

**Remarks:**

During Caltrans Quality Assurance (QA) in process observations of the fabrication of Bikepath, BK008A-002, this QA discovered the following issue(s):  
 ZPMC welding personnel did not follow the "Weld Procedure Requirements for New Welds" by Rager/McQuaid  
 The following requirement was not followed:

2f) Assembly: Preheat shall be applied in such a manner to provide a minimum temperature in the area of the weld of 165°C.

The weld is identified as BK008A3-002-026.  
 The tack welding process used was Shielded Metal Arc Welding (SMAW).  
 The area was being preheated using gas torch.  
 The weld is a fillet tack weld joining stringer plate (BKX14A) to deck plate (BKPL17A).  
 The weld is not SPCM.  
 This component is located at fabrication Bay#11.

**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-0874

**cc:** Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Contract Files, Ching Chao, Bill Casey

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**File:** 05.03.06

## NCR PROPOSED RESOLUTION

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

**Attention:** Siegenthaler, Peter  
Resident Engineer

**Ref:** 05.03.06-000869

**Subject:** NCR No. ZPMC-0874

**Dated:** 01-Dec-2010

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

**Job Name:** SAS Superstructure

**Document No.:** ABF-NPR-000867 **Rev:** 00

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### Contractor's Proposed Resolution:

**Reference Resolution:** As this NCR was written without a contractual basis it should be withdrawn.

The "NEW WELD PROCEDURE (Rager/McQuaid)" quoted as the basis for this NCR is not a contract document only a recommendation from the QA/QC Committee. If the Department wants to incorporate the QA/QC committee's recommendations as a contract requirement a contract change order should be issued. As this NCR was written without a contractual basis it should be withdrawn.

**Submitted by:** Ishibashi, Joshua

**Attachment(s):** ABF-NPR-000867R00

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### Caltrans' comments:

**Status:** REJ

**Date:** 08-Dec-2010

CT acknowledges contractor's response. However, successful NDT will close this NCR.

**Submitted by:** Woo, Laraine

**Attachment(s):**

**Date:** 08-Dec-2010

## NCR PROPOSED RESOLUTION

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

**Attention:** Siegenthaler, Peter  
Resident Engineer

**Ref:** 05.03.06-000869

**Subject:** NCR No. ZPMC-0874

**Dated:** 08-Dec-2010

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

**Job Name:** SAS Superstructure

**Document No.:** ABF-NPR-000867 **Rev:** 01

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### Contractor's Proposed Resolution:

**Reference Resolution:** We understand your response and we will not submit the normal NCR closure package with NDT reports for this and expect that CT will close these as the green tags for these components are issued.

We understand your response and we will not submit the normal NCR closure package with NDT reports for this and expect that CT will close these as the green tags for these components are issued.

**Submitted by:** Ishibashi, Joshua

**Attachment(s):** ABF-NPR-000867R01

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### Caltrans' comments:

**Status:** REJ

**Date:** 09-Dec-2010

Normal NCR closure package with NDT reports shall be submitted with the NPR to close out the NCR.

**Submitted by:** Woo, Laraine

**Date:** 09-Dec-2010

**Attachment(s):**

## NCR PROPOSED RESOLUTION

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

**Attention:** Siegenthaler, Peter  
Resident Engineer

**Ref:** 05.03.06-000869

**Subject:** NCR No. ZPMC-0874

**Dated:** 22-Feb-2011

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

**Job Name:** SAS Superstructure

**Document No.:** ABF-NPR-000867 Rev: 02

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**Contractor's Proposed Resolution:**

**Reference Resolution:**

See attached NDT results to show the weld is acceptable. Based on this ZPMC requests closure of this NCR.

**Submitted by:** Ishibashi, Joshua

**Attachment(s):** ABF-NPR-000867R02;

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**Caltrans' comments:**

**Status:** CLO

**Date:** 23-Feb-2011

This proposed resolution is acceptable. The documentation received is sufficient and the Department concurs that Non-Conformance ZPMC-0874 is closed.

**Submitted by:** Eagen, Sean

**Attachment(s):**

**Date:** 23-Feb-2011



REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 B787-MT-35326		DATE日期 2011.01.05		PAGE OF页码 1/14	Revision No: 0	
PROJECT NO. 工程编号: ZP06-787			CONTRACTOR: 用户: CALTRANS			
DRAWING NO. 图号: BK8A-002-14A bike path			CALTRANS CONTRACT NO.: 加州工程编号 04-0050F4			
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 <sup>ST</sup> , 2011			
EQUIPMENT 设备 MT YOKE	MANUFACTURER 制造商 PARKER	MODEL NO. 样式编号 DA-400S	SERIAL NO. 连续编号 17365			
MAGNETIZING METHOD 磁化方法	Continuous magnetic yoke 磁轭式连续法	CURRENT 电流	AC			
PARTICLE TYPE 磁粉类型	Dry magnet powder 干磁粉	YOKE SPACING 磁轭间距	70~150mm			
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 16/10/25 mm			
WELDING PROCESS 焊接方法	FCAW	TYPE OF JOINT 焊缝类型	T-JOINT			
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			
BK008A3-002-025				ACC.		100%MT
BK008A3-002-026				ACC.		100%MT
BK008A7-002-001				ACC.		100%MT
BK008A7-002-002				ACC.		100%MT
BK008A7-002-007				ACC.		100%MT
BK008A7-002-008				ACC.		100%MT
BK008A7-002-217				ACC.		100%MT
BK008A7-002-218				ACC.		100%MT
BK008A7-002-228				ACC.		100%MT
BK008A7-002-229				ACC.		100%MT
BK008A7-002-230				ACC.		100%MT
BK008A7-002-061				ACC.		100%MT
BK008A7-002-062				ACC.		100%MT
BK008A7-002-067				ACC.		100%MT
BK008A7-002-068				ACC.		100%MT
BK008A3-002-051				ACC.		100%MT
EXAMINED BY 主探 Di Kun lun <u>Di Kun Lun</u> 1/5/11			REVIEWED BY 审核 <u>Wang Wei</u> 1/5/11			
LEVEL - II SIGN 签名 / DATE日期			LEVEL-II SIGN / DATE日期			
质量经理 / QCM <u>[Signature]</u>			用户CUSTOMER			
签字 SIGN / 日期 DATE			签字 SIGN / 日期 DATE			

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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 #: xx.25A**QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION****Location:** Changxing Island, Shanghai, P.R. China**Report No:** NCS-000920**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 23-Feb-2011**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0874**Type of problem:**

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

**Date the Non-Conformance Report was written:** 23-Nov-2010**Description of Non-Conformance:**

During Caltrans Quality Assurance (QA) in process observations of the fabrication of Bikepath: BK008A-002, this QA discovered the following issue(s):

ZPMC welding personnel did not follow the "Weld Procedure Requirements for New Welds" by Rager/McQuaid

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The weld is a fillet tack weld joining stringer plate (BKX14A) to deck plate (BKPL17A).

The weld is not SPCM.

This component is located at fabrication Bay#11.

**Contractor's proposal to correct the problem:**

Contractor will provide the NDT report to prove the weld is acceptable.

**Corrective action taken:**

Contractor provided the NDT report. The NDT report shows the weld is acceptable.

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

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# QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

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**Inspected By:** Ng,Michael

Quality Assurance Inspector

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**Reviewed By:** Wahbeh,Mazen

QA Reviewer