

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



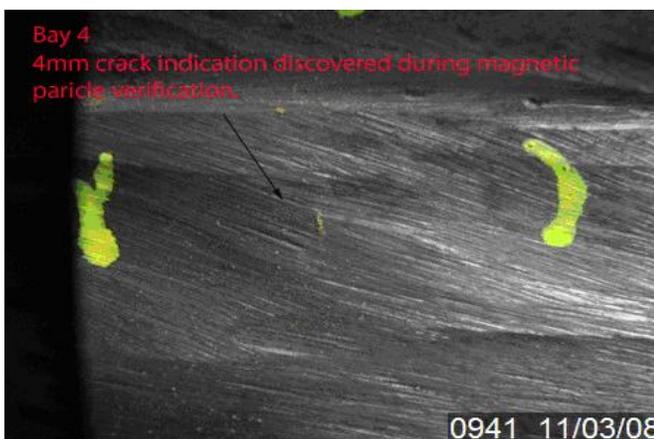
Bay Area Branch  
690 Walnut Ave. St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.25B**QUALITY ASSURANCE -- NON-CONFORMANCE REPORT****Location:** Changxing Island, Shanghai, PRC**Report No:** NCR-000210**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 03-Nov-2008**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0187**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> 62 meter East Tower Diaphragm
<b>Procedural</b>	<b>Procedural</b>	<b>Description:</b> PJP ESDI SA411-2	

**Reference Description:** Crack indication overlooked by Quality Control**Description of Non-Conformance:**

The Quality Assurance Inspector discovered a crack indication overlooked by Quality Control while performing magnetic particle verification on partial joint penetration (PJP) weld ESDI SA411-2 located on the 62 meter East Tower Diaphragm. The Quality Assurance Inspector informed American Bridge/Fluor Quality Assurance Inspector Zhang Huilong about the crack indication overlooked by ZPMC Quality Control Inspectors. Mr. Huilong agreed with the Quality Assurance Inspector and informed ZPMC Quality Control Inspectors about the overlooked crack indication. The Quality Assurance Inspector observed ZPMC personnel removed 6mm of filler metal by grinding before the crack was removed. Mr. Huilong informed the Quality Assurance Inspector a critical weld repair will be issued prior to welding the repair.

**Applicable reference:**

AWS D1.5 2002 Section 6

**Who discovered the problem:** Quality Assurance Inspector Raymond Lara**Name of individual from Contractor notified:** ABFJV QC Inspector Zhang Huilong

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## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

( Continued Page 2 of 2 )

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**Time and method of notification:** 09:45 am., verbal

**Name of Caltrans Engineer notified:** Scott Kennedy

**Time and method of notification:** 06-Nov-2008 09:00 a.m., verbal

**QC Inspector's Name:** ZPMC--N/A

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

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<b>Inspected By:</b>	Ishibashi,Josh	SMR
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<b>Reviewed By:</b>	Smith,Ryan	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:** 12-Nov-2008

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

**Dear:** Mr. Charles Kanapicki

**Job Name:** SAS Superstructure

**Attention:** Mr. Dave Williams Consultant

**Document No:** 05.03.06-000181

**Subject:** NCR No. ZPMC-0187

**Reference Description:** Crack indication overlooked by Quality Control / East Shaft 62 m Tower Diaphragm

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:** Tower **Lift:** 02

**Remarks:**

The Quality Assurance Inspector discovered a crack indication overlooked by Quality Control while performing magnetic particle verification on partial joint penetration (PJP) weld ESDI SA411-2 located on the 62 meter East Tower Diaphragm. The Quality Assurance Inspector informed American Bridge/Fluor Quality Assurance Inspector Zhang Huilong about the crack indication overlooked by ZPMC Quality Control Inspectors. Mr. Huilong agreed with the Quality Assurance Inspector and informed ZPMC Quality Control Inspectors about the overlooked crack indication. The Quality Assurance Inspector observed ZPMC personnel removed 6mm of filler metal by grinding before the crack was removed. Mr. Huilong informed the Quality Assurance Inspector a critical weld repair will be issued prior to welding the repair.

**Action Required and/or Action Taken:**

Propose a resolution for the identified non-conformance that addresses the failure of Quality Control to identify the linear indication (NDT). Provide documentation of the steps taken by the Quality Control Manager to prevent future occurrences. Recent failures by Quality Control to identify linear indications have resulted in the issuance of NCR ZPMC-0179 and two incident reports concerning missed indications on 09/26/08 (OBG) and 10/20/08 (Tower).

**Transmitted by:** Scott Kennedy Sr. Bridge Engineer

**Attachments:** ZPMC-0187

**cc:** Rick Morrow, Gary Pursell, Mark Woods, Doug Coe

**File:** 05.03.06

## NCR PROPOSED RESOLUTION

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

**Attention:** Pursell, Gary  
Resident Engineer

**Ref:** 05.03.06-000181

**Subject:** NCR No. ZPMC-0187

**Dated:** 24-Nov-2008

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

**Job Name:** SAS Superstructure

**Document No.:** ABF-NPR-000183 Rev: 00

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**Contractor's Proposed Resolution:**

**Reference Resolution:** ABF has requested an MT training session be conducted as a preventative action measure.

ZPMC NDT department has been notified of the missed indication. ABF has requested an MT training session be conducted as a preventative action measure. ZPMC will submit training documentation as objective evidence to close this NCR.

**Submitted by:**

**Attachment(s):** ABF-NPR-000183R00

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**Caltrans' comments:**

**Status:** AAP

**Date:** 07-Dec-2008

The response is acceptable, but the Non-Conformance is not closed.

Provide documentation of the Magnetic Particle Testing (MT) training, documentation of the weld repairs that were performed, and that the repairs were acceptable. The Department will review the Contractor's proposal to close Non-Conformance ZPMC-0187 at that time.

**Submitted by:** Wright, Doug

**Date:** 09-Dec-2008

**Attachment(s):** NPR CT Comments

## NCR PROPOSED RESOLUTION

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

**Attention:** Pursell, Gary  
Resident Engineer

**Ref:** 05.03.06-000181

**Subject:** NCR No. ZPMC-0187

**Dated:** 07-Jan-2009

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

**Job Name:** SAS Superstructure

**Document No.:** ABF-NPR-000183 Rev: 01

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**Contractor's Proposed Resolution:**

**Reference Resolution:** ZPMC requests closure of this NCR based on attached documentation.

Please see attached documents.

**Submitted by:**

**Attachment(s):** ABF-NPR-000183R01; docs to close NCR ZPMC-0187

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**Caltrans' comments:**

**Status:** CLO

**Date:** 12-Jan-2009

The proposed resolution is acceptable. An internal NCR was written, and the MT technicians received additional training. Also, the welds in question have been accepted by VT and MT as shown in the attached documents. The Department concurs that Non-Conformance ZPMC-0187 is closed.

**Submitted by:** Wright, Doug

**Date:** 12-Jan-2009

**Attachment(s):**



## TRANSMITTAL LETTER

PROJECT: SAN FRANCISCO OAKLAND BAY BRIDGE

DATE: 12/31/2008

TO: RUBY/ ABFJV QA DEPARTMENT

FROM: ZPMC QA DEPARTMENT

SUBJECT: CALTRANS NCR FOR CLOSURE

SUBMITTED FOR YOUR APPROVAL.

ENCLOSED WITH THIS TRANSMITTAL IS ONE

- (1) COPY OF LETTER OF RESPONSE WITH NO.B-328 FOR CLOSURE.
- (2) COPY OF NCR WITH NUMBER  
NCR-210(ZPMC-0187)/NCR-216(ZPMC-0192)/NCR-215(ZPMC-0191)
- (3) COPY OF THE MT TRAINING DOCUMENTATION
- (4) COPY OF THE ACCEPTABLE VT AND MT INSPECTION REPORTS
- (5) ZPMC INTERNAL NCR

PLEASE SIGN THIS TRANSMITTAL AND RETURN TO ME.

ACKNOWLEDGEMENT:

  
 \_\_\_\_\_  
 PLAN HOLDER

31-DEC-2008  
 \_\_\_\_\_  
 DATE

ABFJV  
 \_\_\_\_\_  
 COMPANY

\_\_\_\_\_  
 PHONE NO.

PLAN NUMBER: N/A  
 #R787-QCP-102



No. B-328

## LETTER OF RESPONSE

**TO: American Bridge/Flour JV**

**DATE: 2008-12-30**

**REGARDING: NCR-000210/216/215(ZPMC-0187/192/191)**

With this letter of response, ZPMC requests closure for Caltrans NCR-000210/216/215(ZPMC-0187/192/191). We have trained our NDT operator with the dry magnetic particles. And provided the meeting content and sign list for objective evidence.

And our NDT QC had re-inspected the location which overlooked in the first time. Actually it's our mistake without enough carefully. But we have performed the repair and completed with the MT, therefore attached the visual and MT report to support that the weld quality had reached the requirement of the standard.

So ZPMC considers NCR-000210/216/215(ZPMC-0187/192/191) can be closed, and provide the attached documents to these weld crack repair.

Please check the attached documentation for acceptance and close the NCR-000210/216/215(ZPMC-0187/192/191).

**ATTACHMENT:**

NCR-000210/216/215(ZPMC-0187/192/191)

The MT training documentation

The acceptable VT and MT inspection reports

ZPMC internal NCR

*Zhao Jianshan*

*2008.12.30*

*Craig Kups for  
Steve Jantsch  
FQA Manager  
2008-12-31*





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: 12-Nov-2008

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

Dear: Mr. Charles Kanapicki  
Attention: Mr. Dave Williams Consultant  
Subject: NCR No. ZPMC-0187

Job Name: SAS Superstructure  
Document No: 05.03.06-000181

Reference Description: Crack indication overlooked by Quality Control / East Shaft 62 m Tower Diaphragm

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: Tower

Lift: 02

### Remarks:

The Quality Assurance Inspector discovered a crack indication overlooked by Quality Control while performing magnetic particle verification on partial joint penetration (PJP) weld ESDI SA411-2 located on the 62 meter East Tower Diaphragm. The Quality Assurance Inspector informed American Bridge/Fluor Quality Assurance Inspector Zhang Huilong about the crack indication overlooked by ZPMC Quality Control Inspectors. Mr. Huilong agreed with the Quality Assurance Inspector and informed ZPMC Quality Control Inspectors about the overlooked crack indication. The Quality Assurance Inspector observed ZPMC personnel removed 6mm of filler metal by grinding before the crack was removed. Mr. Huilong informed the Quality Assurance Inspector a critical weld repair will be issued prior to welding the repair.

### Action Required and/or Action Taken:

Propose a resolution for the identified non-conformance that addresses the failure of Quality Control to identify the linear indication (NDT). Provide documentation of the steps taken by the Quality Control Manager to prevent future occurrences. Recent failures by Quality Control to identify linear indications have resulted in the issuance of NCR ZPMC-0179 and two incident reports concerning missed indications on 09/26/08 (OBG) and 10/20/08 (Tower).

Transmitted by: Scott Kennedy Sr. Bridge Engineer

Attachments: ZPMC-0187

cc: Rick Morrow, Gary Pursell, Mark Woods, Doug Coe

File: 05.03.06

**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, PRC

**Report No:** NCR-000210

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

**Date:** 03-Nov-2008

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

**NCR #:** ZPMC-0187

**Type of problem:**

Welding  Concrete  Other   
 Welding  Curing  Procedural  **Bridge No:** 34-0006  
 Joint fit-up  Coating  Other  **Component:** 62 meter East Tower Diaphragm  
 Procedural  Procedural  **Description:** PJP ESDI SA411-2

**Reference Description:** Crack indication overlooked by Quality Control

**Description of Non-Conformance:**

The Quality Assurance Inspector discovered a crack indication overlooked by Quality Control while performing magnetic particle verification on partial joint penetration (PJP) weld ESDI SA411-2 located on the 62 meter East Tower Diaphragm. The Quality Assurance Inspector informed American Bridge/Fluor Quality Assurance Inspector Zhang Huilong about the crack indication overlooked by ZPMC Quality Control Inspectors. Mr. Huilong agreed with the Quality Assurance Inspector and informed ZPMC Quality Control Inspectors about the overlooked crack indication. The Quality Assurance Inspector observed ZPMC personnel removed 6mm of filler metal by grinding before the crack was removed. Mr. Huilong informed the Quality Assurance Inspector a critical weld repair will be issued prior to welding the repair.



**Applicable reference:**

AWSD1.5 2002 Section 6

**Who discovered the problem:** Quality Assurance Inspector Raymond Lara

**Name of individual from Contractor notified:** ABFJV QC Inspector Zhang Huilong

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## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

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(Continued Page 2 of 2)

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**Time and method of notification:** 09:45 am., verbal

**Name of Caltrans Engineer notified:** Scott Kennedy

**Time and method of notification:** 06-Nov-2008 09:00 a.m., verbal

**QC Inspector's Name:** ZPMC--N/A

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

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**Inspected By:** Ishibashi,Josh

SMR

**Reviewed By:** Smith,Ryan

SMR

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# Nonconformance Report

## 不符合项报告

Project Name: S.F.O.B.B 项目名称: 美国加州海湾大桥		NCR Number: NCR 编号: NCR-T-021(ZPMC-0187)
Item: a crack indication overlooked by MT 名称描述: 磁粉漏探	Item Number: 件号: 62m East diaphragm	Drawing: 图号: ESD1-SA411-2
Location: tower diaphragm in bay 4 位置: 第四车间塔段横隔板	Date: 日期: 2008-12-3	
Description of Nonconformance: 不符合项状态描述:  由于 ZPMC 检验员的漏探造成加州检验员在对东塔 62m 横隔板焊缝 ESD1-SA411-2 进行磁粉复探时发现裂纹, 因此加州开出 NCR 以示警告。 The Quality Assurance Inspector discovered a crack indication overlooked by Quality Control while performing magnetic particle verification on PJP weld ESD1-SA411-2 located on the 62m East Tower Diaphragm. So this NCR was issued to avoid the same situation in the future.		
Work By: <u>L.L. Ming</u> 施工方: 2008.12.03	Prepared by: <u>Zhang Junchi</u> 准备: 2008-12-3	Reviewed by QCE: <u>Zhangshuang</u> 质量工程师批准: 2008.12.3
<input type="checkbox"/> Drawing Error 图纸错误	<input type="checkbox"/> Material Defect 材料缺陷	<input checked="" type="checkbox"/> Fabrication Error 制作错误
<input type="checkbox"/> Other 其他原因		
Disposition: 处理措施:	<input type="checkbox"/> Use as is 回用	<input type="checkbox"/> Repair 返修
<input type="checkbox"/> Reject 拒收		
Recommendation: 建议: <u>按规范程序进行返修.</u> Repair according to procedure.		
Prepared by: <u>L.L. Ming</u> 准备: 2008.12.03	Approved by QCA: _____ 质量经理批准	

Reason for Nonconformance:

不符合原因:

钢网裂缝没有检测到  
The crack was so thick that didn't inspect it.

Prevention of Re-occurrence:

预防措施:

加强现场检验, 控制检验速度。

Enhance inspection on-site and control inspection speed.

Approved by/批准:

*[Signature]*  
2018.12.08

Technical Justification for Use-As-Is/Repair:

Attachment

Non-attachment

回用或返修的技术依据:

附件

无附件

Reviewed /批准:

Verification:

Acceptable

Unacceptable

确认:

可接受

不可接受

Verified by QCI/质检确认:

*[Signature]*

Reviewed by QCA/质检主任审核:









REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 T787-MT-1370R1		DATE日期 2008.12.04		PAGE OF页码 1/1		Revision No: 0	
PROJECT NO. 工程编号: ZP06-787				CONTRACTOR: 用户: CALTRANS			
DRAWING NO. 图号: SA411(E) 2ND LIFT TOWER(E) 62M DIAPHRAGM				CALTRANS CONTRACT NO.: 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 <sup>ST</sup> , 2008	
EQUIPMENT 设备 MT YOKE		MANUFACTURER 制造商 PARKER		MODEL NO. 样式编号 B310S		SERIAL NO. 连续编号 5620 5395 5617	
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 60/38mm	
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				
ESD1-SA411-2	1R1			ACC.		100%MT	
AFTER B-CWR037							
BLANK							
EXAMINED BY主探 Xu Hai 08.12.14				REVIEWED BY 审核 Cai Xin Xin 08.12.14			
LEVEL - II SIGN 签名 / DATE日期				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			



# Nonconformance Report

## 不符合项报告

Project Name: S.F.O.B.B 项目名称: 美国加州海湾大桥		NCR Number: NCR 编号: NCR-B-118
Item: overlook cracks 名称描述: 裂纹漏检	Item Number: 件号:	Drawing: 图号: FB001-017; SP726A-001
Location: OBG Shop 位置: 桥面车间		Date: 日期: 2008-12-4

### Description of Nonconformance:

The Quality Assurance Inspector discovered crack indications overlooked by ZPMC Quality Control Inspectors. The crack indications were discovered while the QA was performing magnetic particle verification on weld #FB011-017-003 located on the FB011-017 floor beam sun assembly and on weld #SP726A-001-030 located on the SP726a-001 side plate sub assembly. QA Inspector informed ABF QA Inspector about the crack indication overlooked by ZPMC QC Inspector. ZPMC QC Inspector agreed with QA Inspector that the crack indications were overlooked by ZPMC QC Inspector.

### 不符合项状态描述:

QA 检验员发现 ZPMC QC 人员漏检了几处裂纹。裂纹是在 QA 检验员进行磁粉时发现的, 焊缝编号 FB011-017-003 隔板装配以及焊缝编号 SP726A-001-030 斜底板装配。QA 检验员通知现场 ABF 人员关于 ZPMC 漏检的裂纹。ZPMC 人员也同意此处裂纹的漏检

Work By: <i>L.L.W.</i> 施工方: <i>2008.12.10</i>	Prepared by: <i>tao lei</i> 准备: <i>2008-12-4</i>	Reviewed by QCE: <i>Zhao Shuang</i> 质量工程师批准: <i>2008.12.4</i>
<input type="checkbox"/> Drawing Error 图纸错误	<input type="checkbox"/> Material Defect 材料缺陷	<input type="checkbox"/> Fabrication Error 制作错误
<input checked="" type="checkbox"/> Other 其他原因		

Disposition: <input type="checkbox"/> Use as is 处理措施: 回用	<input type="checkbox"/> Repair 返修	<input type="checkbox"/> Reject 拒收
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### Recommendation:

建议: *打磨后重新 MT.*  
*Grind and do MT again.*

Prepared by: <i>L.L.W.</i> 准备: <i>2008.12.10</i>	Approved by QCA: _____ 质量经理批准
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Reason for Nonconformance: 不符合原因:	<i>the crack indications were discovered by means of MT.</i> <i>裂纹由 MT 发现.</i>
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Prevention of Re-occurrence:

预防措施:

加强现场检验, 控制检验速度, 仔细观察磁痕显示。

Enhance supervision on-site and control inspection speed, observe magnetic particle carefully.

Approved by/批准: WZhang 2009.12.10

Technical Justification for Use-As-Is/Repair:

Attachment

Non-attachment

回用或返修的技术依据:

附件

无附件

Reviewed /批准: \_\_\_\_\_

Verification:

Acceptable

Unacceptable

确认:

可接受

不可接受

Verified by QCI/质检确认: Mulligan

Reviewed by QCA/质检主任审核: \_\_\_\_\_

**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 #: xx.25A**QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION****Location:** Changxing Island, Shanghai, PRC**Report No:** NCS-000168**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 14-Jan-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0187**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:** 03-Nov-2008**Description of Non-Conformance:**

The Quality Assurance Inspector discovered a crack indication overlooked by Quality Control while performing magnetic particle verification on partial joint penetration (PJP) weld ESDI SA411-2 located on the 62 meter East Tower Diaphragm. The Quality Assurance Inspector informed American Bridge/Fluor Quality Assurance Inspector Zhang Huilong about the crack indication overlooked by ZPMC Quality Control Inspectors. Mr. Huilong agreed with the Quality Assurance Inspector and informed ZPMC Quality Control Inspectors about the overlooked crack indication. The Quality Assurance Inspector observed ZPMC personnel removed 6mm of filler metal by grinding before the crack was removed. Mr. Huilong informed the Quality Assurance Inspector a critical weld repair will be issued prior to welding the repair.

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

American Bridge/Fluor requested that ZPMC administer additional MT training to its NDT operators.

**Corrective action taken:**

ZPMC has issued an internal NCR to enhance on-site inspection and control inspection speed. ZPMC has provided dry Magnetic Particle Testing (MT) training to its Non-Destructive Testing (NDT) operators. ZPMC has also submitted a sign-in log of all attendees and the material covered. The welds in question have been repaired and the relevant VT and MT reports, indicating sound welds, have been submitted.

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

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# QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

( Continued Page 2 of 2 )

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**Inspected By:** Sinevod,Serge

Quality Assurance Inspector

**Reviewed By:** Wahbeh,Mazen

QA Reviewer