

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



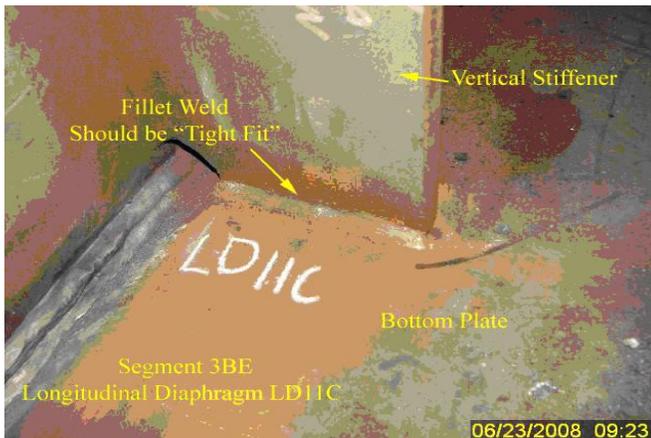
Bay Area Branch  
690 Walnut Ave. St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

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-000152**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 23-Jun-2008**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0143**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> Segment 3BE
<b>Procedural</b>	<b>Procedural</b>	<b>Descriptor:</b>	OBG Segment Assembly

**Reference Description:** Workmanship not in conformance**Description of Non-Conformance:**

The Contractor fabricated components that do not conform to approved working drawings. The bottom of vertical stiffeners, located on the longitudinal diaphragms, have been fillet welded to the bottom plates BP10A and the BP12A. The shop drawings note "Tight Fit" and "No Weld" between the vertical stiffener and the bottom plates. The following longitudinal diaphragms have had the vertical stiffener welded to the bottom plates: LD11C-001, LD12C, LD008-002, LD006B-001.

**Applicable reference:**

Shop Drawing Segment Assembly Standard Sections Sheet No. SEGSD29, approved on 3/24/08

**Who discovered the problem:** Caltrans QA Inspector Mahlon Lindenmuth**Name of individual from Contractor notified:** ABFJV QC Mr. Art Peterson**Time and method of notification:** 1025 / Verbal**Name of Caltrans Engineer notified:** Stanley Ku**Time and method of notification:** 1415, verbal notification on 06-24-2008

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## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

( Continued Page 2 of 2 )

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**QC Inspector's Name:** ZPMC QC Chen chih Meng

**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 Abifhram Velasco, who represents the Office of Structural Materials for your project.

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**Inspected By:** Velasco,Abifhram

SMR

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**Reviewed By:** Velasco,Abifhram

SMR



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:** 30-Jun-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:** 05.03.06-000125

**Subject:** NCR No. ZPMC-0143

**Reference Description:** Workmanship not in conformance

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:**

**Lift:**

**Remarks:**

The Contractor fabricated components that do not conform to approved working drawings. The bottom of vertical stiffeners, located on the longitudinal diaphragms, have been fillet welded to the bottom plates BP10A and the BP12A. The shop drawings note "Tight Fit" and "No Weld" between the vertical stiffener and the bottom plates. The following longitudinal diaphragms have had the vertical stiffener welded to the bottom plates: LD11C-001, LD12C, LD008-002, LD006B-001.

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

Propose a resolution for the identified non-conformance to prevent future occurrences.

**Transmitted by:** Stanley Ku Sr. Bridge Engineer

**Attachments:** ZPMC-0143

**cc:** Rick Morrow, Gary Pursell, Brian Boal, Jason Tom, Ching Chao

**File:** 05.03.06

## NCR PROPOSED RESOLUTION

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

**Attention:** Pursell, Gary  
Resident Engineer

**Ref:** 05.03.06-000125

**Subject:** NCR No. ZPMC-0143

**Dated:** 11-Sep-2008

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

**Job Name:** SAS Superstructure

**Document No.:** ABF-NPR-000137 Rev: 00

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### Contractor's Proposed Resolution:

**Reference Resolution:** Production personnel as well as QC did not interpret the drawings correctly. ZPMC is submitting a repair plan to ABFJV.

ZPMC production inadvertently welded the bottom of vertical stiffeners, located at the longitudinal diaphragms, to the bottom plates in several locations. Production personnel as well as QC did not interpret the drawings correctly. ZPMC is submitting a repair plan to ABFJV.

### Submitted by:

**Attachment(s):** ABF-NPR-000137R00

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### Caltrans' comments:

**Status:** REJ

**Date:** 29-Sep-2008

The proposed resolution is not acceptable. The resolution states that ZPMC is submitting a repair plan to ABFJV. Please re-submit a proposed resolution when the repair plan has been submitted, and when the non-conforming condition has been corrected. Also provide 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-0143 at that time.

**Submitted by:** Wright, Doug

**Date:** 29-Sep-2008

**Attachment(s):**

## NCR PROPOSED RESOLUTION

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

**Attention:** Pursell, Gary  
Resident Engineer

**Ref:** 05.03.06-000125

**Subject:** NCR No. ZPMC-0143

**Dated:** 03-Dec-2008

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

**Job Name:** SAS Superstructure

**Document No.:** ABF-NPR-000137 Rev: 01

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**Contractor's Proposed Resolution:**

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

ZPMC has removed the weld as instructed to comply with drawing requirements. To prevent this non-conformance, ZPMC has generated an internal NCR. ZPMC requests this NCR be closed.

**Submitted by:**

**Attachment(s):** to close this NCR; ABF-NPR-000137R01

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**Caltrans' comments:**

**Status:** AAP

**Date:** 08-Dec-2008

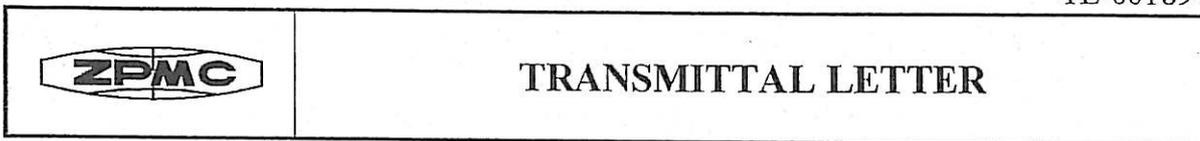
The response is acceptable, but the Non-Conformance is not closed.

The attachment did not include any documentation showing that the area of weld removal is acceptable. Please provide Magnetic Particle Testing (MT) documentation of the area of weld removal. The Department will review the Contractor's proposal to close Non-Conformance ZPMC-0143 at that time.

**Submitted by:** Wright, Doug

**Date:** 09-Dec-2008

**Attachment(s):**



PROJECT: SAN FRANCISCO OAKLAND BAY BRIDGE

DATE: 12/01/2008

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-320 FOR CLOSURE.
- (2) COPY OF NCR WITH NUMBER NCR-000152(ZPMC-0143).
- (3) COPY OF ZPMC INTERNAL NCR
- (4) COPY OF RFI-ZPM-00512R00

PLEASE SIGN THIS TRANSMITTAL AND RETURN TO ME.

ACKNOWLEDGEMENT:

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

Dec 1st, 2008 10:32am  
 \_\_\_\_\_  
 DATE

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

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

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



No. B-320

## LETTER OF RESPONSE

**TO:** American Bridge/Flour JV

**DATE:** 2008-12-1

**REGARDING:** NCR-000152(ZPMC-0143)

With this letter of response, ZPMC requests closure for Caltrans NCR-000152 (ZPMC-0143). We have removed the weld by smooth grinding without any damage to the bottom plate. Moreover we have confirmed the gaps less than 4mm.

Therefore ZPMC considers the problems have been changed according with the response of RFI -ZPM-000512R00 and the NCR-000152 (ZPMC-0143) can be closed.

Please check the attached documentation for acceptance and close the NCR-000152 (ZPMC-0143).

**ATTACHMENT:**

NCR-000152 (ZPMC-0143)  
ZPMC internal non-conformance report  
RFI -ZPM-000512R00

*Zhaoshuang Bao*

*2008.12.1*



# 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-B-082  
 NCR 编号: NCR-B-082

Item: workmanship not in the conformance  
 名称描述: 施工与图纸要求不符

Item Number: LD11C-001/LD12C/LD008-0  
 件号: 02/LD006B-001

Drawing Number: LD11C-001/LD12C/LD008-0  
 图号: 02/LD006B-001

Location: assembly shop  
 位置: 后场拼装车间

Date: 2008-6-23  
 日期: 2008-6-23

Description of Nonconformance:  
 不符合项状态描述:

The contractor fabricated components that do not conform to approved working drawings, the bottom of vertical stiffeners, located on the longitudinal diaphragms, have been fillet welded to the bottom plates BP 10A and the BP12A. the shop drawings note "tight fit" and "no weld" between the vertical stiffener and the bottom plate.

ZPMC 在生产过程中没有按照图纸要求进行施工. 批准的图纸上只是要求对纵筋的纵向加劲和底板间进行紧密接触和不焊接的要求, 而我们现场实际是对该处进行了焊接角焊缝, 具体的纵筋编号为 LD11C-001/LD12C/LD008-0 02/LD006B-001.

Work By: Shi Jian Yong  
 施工方: 2008.7.11

Prepared by: Lu Kuning  
 准备: 2008.7.9

Reviewed by QCE: Zhou Shuangkui  
 质量工程师批准: 2008.7.9

Drawing Error     Material Defect     Fabrication Error     Other  
 图纸错误                      材料缺陷                      制作错误                      其他原因

Disposition:  Use as is     Repair     Reject  
 处理措施:                      回用                      返修                      拒收

Recommendation:  
 建议 ① 严格按照工艺要求及对应WPS进行处理. Fabricate according to the procedures and associated WPS.  
 ② 建议现场检验员确认每道接头处是否焊接. RC on the site shall confirm whether the joint should be welded.

Prepared by: Lv Guang Bin  
 准备: 2008.7.11

Approved by QCA: Hu Gang  
 质量经理批准: 2008.7.11

Reason for Nonconformance:  
 不符合原因: ① 施工队带班安排工作不到位, 导致焊工对板外进行了焊接. The leader worker arranged tasks improperly, which caused the workers fillet welded the vertical stiffeners to the bottom plate.

预防措施  
 ① 对施工队批评教指正. Correct the workers.  
 ② 焊缝在焊接前建议检验员确认 RC shall inspect the welds before welding.  
 ③ 加强现场监督. Enhance inspection.

Approved by/批准: Lv Guang Bin 2008.7.11

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: Tang Jinhao 7.24.08

Verification:  Acceptable     Unacceptable  
 确认:                      可接受                      不可接受

Verified by QCI/质检确认: Chen Chin-Ming  
 2008.07.31

Reviewed by QCA/质检主任审核: Hu Gang  
 2008.8.3



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: 30-Jun-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: 05.03.06-000125

Subject: NCR No. ZPMC-0143

Reference Description: Workmanship not in conformance

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:

Lift:

Remarks:

The Contractor fabricated components that do not conform to approved working drawings. The bottom of vertical stiffeners, located on the longitudinal diaphragms, have been fillet welded to the bottom plates BP10A and the BP12A. The shop drawings note "Tight Fit" and "No Weld" between the vertical stiffener and the bottom plates. The following longitudinal diaphragms have had the vertical stiffener welded to the bottom plates: LD11C-001, LD12C, LD008-002, LD006B-001.

Action Required and/or Action Taken:

Propose a resolution for the identified non-conformance to prevent future occurrences.

Transmitted by: Stanley Ku Sr. Bridge Engineer

Attachments: ZPMC-0143

cc: Rick Morrow, Gary Pursell, Brian Boal, Jason Tom, Ching Chao

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  
City: 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-000152

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 23-Jun-2008

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

NCR #: ZPMC-0143

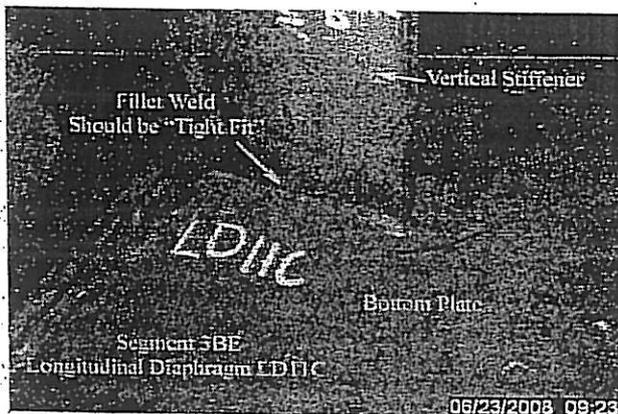
### Type of problem:

Welding  Concrete  Other   
Welding  Curing  Procedural  Bridge No: 34-0006  
Joint fit-up  Coating  Other  Component: Segment 3BE  
Procedural  Procedural  Descriptor: OBG Segment Assembly

Reference Description: Workmanship not in conformance

### Description of Non-Conformance:

The Contractor fabricated components that do not conform to approved working drawings. The bottom of vertical stiffeners, located on the longitudinal diaphragms, have been fillet welded to the bottom plates BP10A and the BP12A. The shop drawings note "Tight Fit" and "No Weld" between the vertical stiffener and the bottom plates. The following longitudinal diaphragms have had the vertical stiffener welded to the bottom plates: LD11C-001, LD12C, LD008-002, LD006B-001.



### Applicable reference:

Shop Drawing Segment Assembly Standard Sections Sheet No. SEGSD29, approved on 3/24/08.

Who discovered the problem: Caltrans QA Inspector Mahlon Lindenmuth

Name of individual from Contractor notified: ABFJV QC Mr. Art Peterson

Time and method of notification: 1025 / Verbal

Name of Caltrans Engineer notified: Stanley Ku

Time and method of notification: 1415, verbal notification on 06-24-2008

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## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

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QC Inspector's Name: ZPMC QC Chen chih Meng

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 Abifhiram Velasco, who represents the Office of Structural Materials for your project.

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Inspected By: Velasco, Abifhiram

SMR

Reviewed By: Velasco, Abifhiram

SMR

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## REQUEST FOR INFORMATION (RFI)

RFI No.: ABF-RFI-001444R01      Submitted By: Raynor, Dan      Pages: 3  
 RFI Date: 23-July-2008      Contact Name: Raynor, Dan      Pages Attached: 2  
 Phone No. 510-808-4600

Subject: RFI-ZPM-000512R00 Tight Fit Requirement on SEGSD23	
References:	
Sub/Sup:    ZPM	Sub RFI #: RFI-ZPM-000512R01
Response Required by: 30-July-2008	Response affects critical path activity?

**Description:**

Please review and respond to the attached RFI from ZPMC. (RFI-ZPM-000512R01)

**Contractor Disposition:**

This RFI is being submitted for:  
 The Cost and Time Impact from this RFI is: Not selected

**Response:** \_\_\_\_\_      **Agreed Ext. Due Date:** \_\_\_\_\_  
 Pages: 1  
 Pages Attached: 0

It is not acceptable to use welding where tight fit is specified.

Per discussions on Changxing Island, the tight fit requirement under the stiffeners referenced in this RFI is relaxed to 4mm maximum provided gaps under the stiffener greater than 2 mm shall be caulked. Gaps greater than 4 mm shall be shimmed and the shims shall be seal welded to the stiffeners only.

Where stiffeners have been welded to girder bottom plate contrary to the plans (Where tight fit is specified), these welds shall be removed, and damage to the bottom plate shall be repaired per an approved repair procedure. The final gap shall be caulked or shimmed as prescribed above.

**Administrative Action:**

This Response Resolves both RFI 1444R0 and 1444R01. No further action is necessary.

Date: 25-July-2008	Respondent: Altamirano, Victor	Phone No.:
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根据 ABF-RFI-001444R01 (RFI-ZPM-000512R01)回复要求:

紧密贴合不能使用焊接, 如果已经焊接了, 这些未按照图纸施工的地方需要将焊缝去除, 如对底板有损坏, 需按已经批准的修补工艺进行修补; 大于 2mm 小于等于 4mm 的间隙, 可以涂敷密封胶, 如果大于 4mm, 使用垫板密封焊至筋板上, 不能和底板焊接。

Tang Yongbo 7/30/08

## NCR PROPOSED RESOLUTION

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

**Dated:** 11-Feb-2009

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

**Attention:** Pursell, Gary  
Resident Engineer

**Job Name:** SAS Superstructure

**Ref:** 05.03.06-000125

**Document No.:** ABF-NPR-000137 Rev: 02

**Subject:** NCR No. ZPMC-0143

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**Contractor's Proposed Resolution:**

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

With the attached documentation ZPMC requests closure of this NCR.

**Submitted by:**

**Attachment(s):** ZPMC-0143; ABF-NPR-000137R02

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**Caltrans' comments:**

**Status:** CLO

**Date:** 20-Mar-2009

The proposed resolution is acceptable. The MT report documentation requested in Rev 1 of NPR-0137 has been provided. The Department concurs that Non-Conformance ZPMC-0143 is closed.

**Submitted by:** Wright, Doug

**Date:** 20-Mar-2009

**Attachment(s):**



## TRANSMITTAL LETTER

PROJECT: SAN FRANCISCO OAKLAND BAY BRIDGE

DATE: 01/05/2009

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-329 FOR CLOSURE.
- (2) COPY OF NCR WITH NUMBER NCR-152 (ZPMC-0143)
- (3) COPY OF MT REPORTS
- (4) COPY OF ZPMC INTERNAL NCR

PLEASE SIGN THIS TRANSMITTAL AND RETURN TO ME.

ACKNOWLEDGEMENT:

Rosemary  
PLAN HOLDER

Jan 05, 2009 13:34  
DATE

ABFJV  
COMPANY

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

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



No. B-329

## LETTER OF RESPONSE

**TO: American Bridge/Flour JV**

**DATE: 2009-1-5**

**REGARDING: NCR-000152(ZPMC-0143)**

With this letter of response, ZPMC requests closure for Caltrans NCR-000152(ZPMC-0143). According the comments from the caltrans that "please provide magnetic particle testing documentation of the area of weld removal", we provide the corresponding MT report to prove the good quality for the 'tight fit' areas. Therefore we think the department can review the proposal again.

So ZPMC considers NCR-000152(ZPMC-0143) can be closed, and provide the attached documents to these tack weld removal areas.

Please check the attached documentation for acceptance and close the NCR-000152(ZPMC-0143).

**ATTACHMENT:**

**NCR-000152(ZPMC-0143)**

**The MT reports**

**ZPMC internal NCR**

*-hao shuangbao*

*2009.1.5.*



# 母材探伤申请表

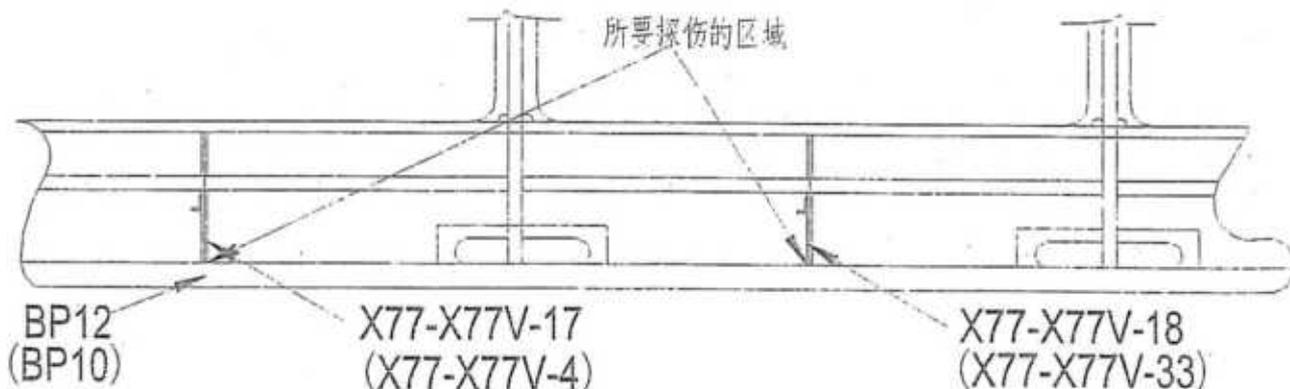
SHANGHAI ZHENHUA PORT MACHINERY CO LTD

APPLICATION FORM FOR BASE MATERIAL NDT

产品名称 Project Name		美国海湾大桥		探伤类别 NDT type	100% MT	数量 Quantity		
序号 No.	零部件图号 Drawing No.	零部件名称 Items	件号 Item No.	数量 Quantity	板厚/尺寸 Thickness/D imension	炉批号 Batch No.	材料 Material	结论 Result
1	SEG16		BP12 X77-X77V-17/ X77-X77V-18	2	14*20*125		A709M-3 45T2-X	✓
2	SEG16		BP10 X77-X77V-4/ X77-X77V-33	2	14*20*125		A709M-3 45T2-X	✓

探伤位置图

Scheme showing the test part



注：“（）”中的为南侧单元；无“（）”的为北侧单元

申请人 Applicant	黄帅 施建刚	日期 Date	2008-12-24	主探者 Inspected by		日期 Date	
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No. B-320

## LETTER OF RESPONSE

TO: American Bridge/Flour JV

DATE: 2008-12-1

REGARDING: NCR-000152(ZPMC-0143)

With this letter of response, ZPMC requests closure for Caltrans NCR-000152 (ZPMC-0143). We have removed the weld by smooth grinding without any damage to the bottom plate. Moreover we have confirmed the gaps less than 4mm.

Therefore ZPMC considers the problems have been changed according with the response of RFI -ZPM-000512R00 and the NCR-000152 (ZPMC-0143) can be closed.

Please check the attached documentation for acceptance and close the NCR-000152 (ZPMC-0143).

ATTACHMENT:

NCR-000152 (ZPMC-0143)

ZPMC internal non-conformance report

RFI -ZPM-000512R00

*zhaoshuang*

*2008.12.1*



# 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-082

Item: workmanship not in the conformance  
 名称描述: 施工与图纸要求不符

Item Number: Drawing Number:  
 件号: 图号: LD11C-001/LD12C/LD008-0  
 02/LD006B-001

Location: assembly shop  
 位置: 后场拼装车间

Date:  
 日期: 2008-6-23

### Description of Nonconformance:

#### 不符合项状态描述:

The contractor fabricated components that do not conform to approved working drawings, the bottom of vertical stiffeners, located on the longitudinal diaphragms, have been fillet welded to the bottom plates BP 10A and the BP12A. the shop drawings note "tight fit" and "no weld" between the vertical stiffener and the bottom plate.

\*PMC 在生产过程中没有按照图纸要求进行施工。批准的图纸上只是要求对纵筋的纵向加劲和底板间进行紧密接触和不焊接的要求，而我们现场实际是对该处进行了焊接角焊缝，具体的纵筋编号为 LD11C-001/LD12C/LD008-0 02/LD006B-001.

Work By: Shi Jian Yang Prepared by: Tu Xuhong Reviewed by QCE: Zhou Shuangbao  
 施工方: 2008.7.11 准备: 2008.7.9 质量工程师批准: 2008.7.9

- Drawing Error 图纸错误  Material Defect 材料缺陷  Fabrication Error 制作错误  Other 其他原因

Disposition:  Use as is 回用  Repair 返修  Reject 拒收

### Recommendation:

- 建议 ① 严格按照工艺要求及对应 WPS 进行处理 Fabricate according to the procedures and associated WPS.  
 ② 建议现场检验员确认每道接头处是否按图  
 ③ RC on the site shall confirm whether the joint should be welded.

Prepared by: LV Guang Bin Approved by QCA: Hu Gang 2008.7.11  
 准备: 2008.7.11 质量经理批准

### Reason for Nonconformance:

不符合原因: ① 施工队带班安排工作不到位, 导致焊工对板外进行了焊接  
 The leader worker arranged tasks improperly, which caused the workers fillet welded the vertical stiffeners to the bottom plate.

#### 预防措施

- ① 对施工队批评教育指正. Correct the workers.  
 ② 焊缝位置焊接前建议检验员确认 RC shall inspect the welds before welding  
 ③ 加强现场监督 Enhance inspection

Technical Justification for Use-As-Is/Repair:  Attachment 附件  Non-attachment 无附件

Verification:  Acceptable 可接受  Unacceptable 不可接受

Reviewed/批准: Tang Jiongbo 7.24.08

Verified by QCE/检验员: \_\_\_\_\_

Reviewed by QCA/质量经理: \_\_\_\_\_



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: 30-Jun-2008

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

Job Name: SAS Superstructure

Document No: 05.03.06-000125

Dear: Mr. Charles Kanapicki

Attention: Mr. Dave Williams Consultant

Subject: NCR No. ZPMC-0143

Reference Description: Workmanship not in conformance

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:

Lift:

Remarks:

The Contractor fabricated components that do not conform to approved working drawings. The bottom of vertical stiffeners, located on the longitudinal diaphragms, have been fillet welded to the bottom plates BP10A and the BP12A. The shop drawings note "Tight Fit" and "No Weld" between the vertical stiffener and the bottom plates. The following longitudinal diaphragms have had the vertical stiffener welded to the bottom plates: LD11C-001, LD12C, LD008-002, LD006B-001.

Action Required and/or Action Taken:

Propose a resolution for the identified non-conformance to prevent future occurrences.

Transmitted by: Stanley Ku Sr. Bridge Engineer

Attachments: ZPMC-0143

cc: Rick Morrow, Gary Pursell, Brian Boal, Jason Tom, Ching Chao

File: 05.03.06

DEPARTMENT OF TRANSPORTATION  
DIVISION OF ENGINEERING SERVICESOffice of Structural Materials  
Quality Assurance and Source InspectionBay 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: 13.2/13.9File #: 69.25B

## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

Location: Changxing Island, Shanghai, PRC

Report No: NCR-000152

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 23-Jun-2008

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

NCR #: ZPMC-0143

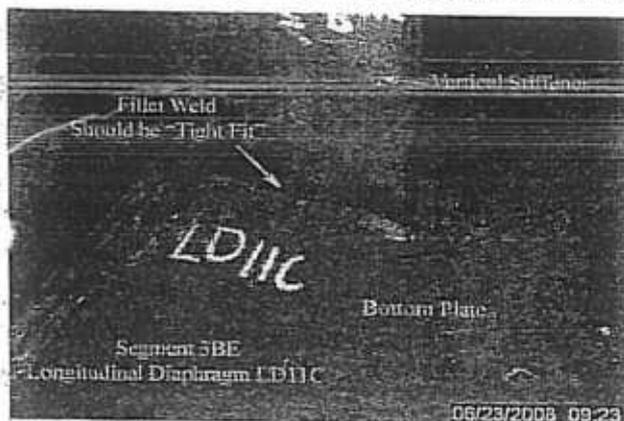
## Type of problem:

Welding  Concrete  Other   
 Welding  Curing  Procedural  Bridge No: 34-0006  
 Joint fit-up  Coating  Other  Component: Segment 3BE  
 Procedural  Procedural  Descripton: OBG Segment Assembly

Reference Description: Workmanship not in conformance

## Description of Non-Conformance:

The Contractor fabricated components that do not conform to approved working drawings. The bottom of vertical stiffeners, located on the longitudinal diaphragms, have been fillet welded to the bottom plates BP10A and the BP12A. The shop drawings note "Tight Fit" and "No Weld" between the vertical stiffener and the bottom plates. The following longitudinal diaphragms have had the vertical stiffener welded to the bottom plates: LD11C-001, LD12C, LD008-002, LD006B-001.



## Applicable reference:

Shop Drawing Segment Assembly Standard Sections Sheet No. SEGSD29, approved on 3/24/08

Who discovered the problem: Caltrans QA Inspector Mahlon Lindenmuth

Name of individual from Contractor notified: ABFJV QC Mr. Art Peterson

Time and method of notification: 1025 / Verbal

Name of Caltrans Engineer notified: Stanley Ku

Time and method of notification: 1415, verbal notification on 06-24-2008

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## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

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(Continued Page 2 of 2)

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QC Inspector's Name: ZPMC QC Chen chih Meng

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 Abifhiram Velasco, who represents the Office of Structural Materials for your project.

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Inspected By: Velasco, Abifhiram

SMR

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Reviewed By: Velasco, Abifhiram

SMR



根据 ABF-RFI-001444R01 (RFI-ZPM-000512R01)回复要求:

紧密贴合不能使用焊接, 如果已经焊接了, 这些未按照图纸施工的地方需要将焊缝去除, 如对底板有损坏, 需按已经批准的修补工艺进行修补: 大于 2mm 小于等于 4mm 的间隙, 可以涂敷密封胶, 如果大于 4mm, 使用垫板密封焊至筋板上, 不能和底板焊接。

Tang Jingbo 7/30/08

**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-000205**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 19-Mar-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0143**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-Jun-2008**Description of Non-Conformance:**

The Contractor fabricated components that do not conform to approved working drawings. The bottom of vertical stiffeners, located on the longitudinal diaphragms, have been fillet welded to the bottom plates BP10A and the BP12A. The shop drawings note "Tight Fit" and "No Weld" between the vertical stiffener and the bottom plates. The following longitudinal diaphragms have had the vertical stiffener welded to the bottom plates: LD11C-001, LD12C, LD008-002, LD006B-001.

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

The contractor will remove the weld and provide the corresponding MT report to prove the good quality for the "tight fit" areas.

**Corrective action taken:**

ZPMC has corrected the problem by removing the welds and installing a shim plate for tight fit. Acceptable supporting documentation on MT results were also provided for review. The non-conformance issue has been addressed properly.

**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 Eric Tsang, +(86) 1500.042.2372, who represents the Office of Structural Materials for your project.

**Inspected By:** Tsang, Eric

Quality Assurance Inspector

**Reviewed By:** Wahbeh, Mazen

QA Reviewer