

**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, P.R. China**Report No:** NCR-000646**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 23-Jan-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0617**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> OBG Segment 12CE |
| <b>Procedural</b>   | <b>Procedural</b> | <b>Description:</b> Unapproved Buttering of Side Panel Splice Welds |                                    |

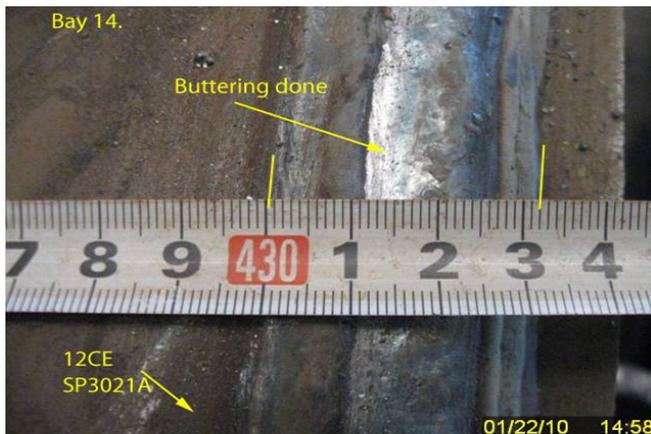
**Reference Description:** ZPMC performed unapproved buttering to correct root opening size on side panels for OBG Segment 12CE

**Description of Non-Conformance:**

During random In-process Visual Inspection of OBG Segment 12CE, this Quality Assurance Inspector (QA) discovered the following issues:

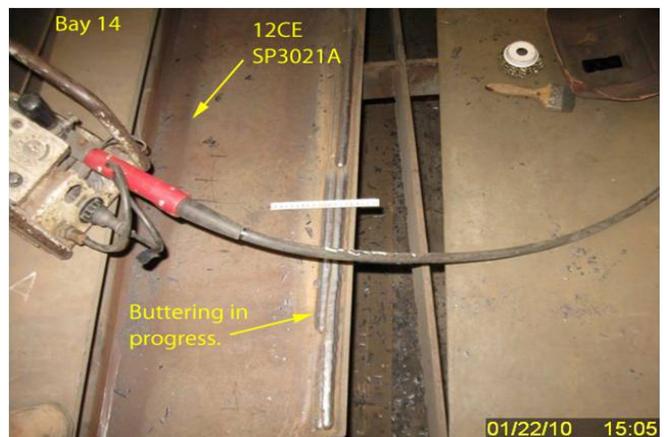
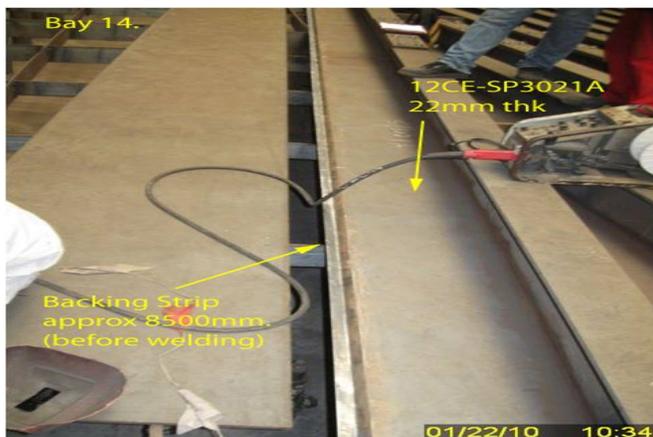
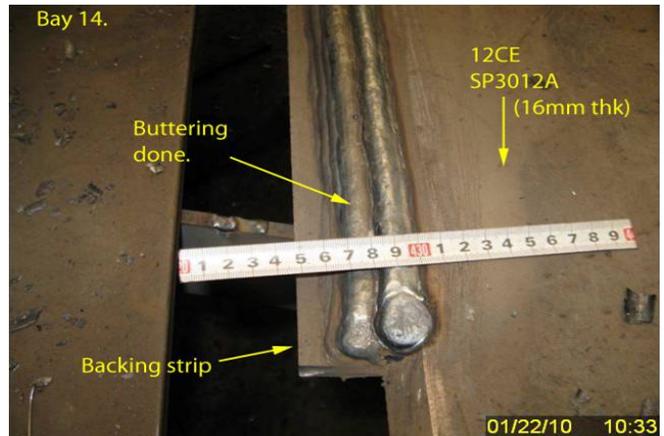
- Deposition of weld metal (buttering/build up) of up to 21mm measured horizontally from the groove face to correct excessive root opening by Flux Cored Arc Welding (FCAW) without the prior approval of the engineer.
- Buttering was performed on Side Panel SP3012A (38mm x L=1500mm) and SP3021A (30mm x L=2000mm)
- ZPMC onsite Quality Control Inspector (QC), Mr. Guo Xing Hui, produced Welding Repair Report (WRR)-B-WR-10076 Dated January 9th, 2010 for the work being performed.
- The material being welded is Non SPCM.
- The Side Panel components are located in Bay 14.

For further information, please see the attached photos and applicable reference below.



# QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

( Continued Page 2 of 3 )



## 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 3.3.4.2 – “Root openings larger than those allowed in 3.3.4.1 may be corrected by welding only with the approval of the Engineer”.

**Who discovered the problem:** Shailesh Vasant Wadkar.

**Name of individual from Contractor notified:** Mr. Wang Wei Nan

**Time and method of notification:** 16:00 / 01-22-10 / Verbal

**Name of Caltrans Engineer notified:** Bill Howe

**Time and method of notification:** 18:00 / 01-23-10 / e-mail

**QC Inspector's Name:** Mr. Guo Xing Hui.

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

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

N/A

## 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

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# QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

( Continued Page 3 of 3 )

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Office of Structural Materials for your project.

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**Inspected By:** Simonis,Jim

QA Inspector

**Reviewed By:** Wahbeh,Mazen

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:** 24-Jan-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:** 05.03.06-000608

**Subject:** NCR No. ZPMC-0617

**Reference Description:** ZPMC performed unapproved buttering to correct root opening size on side panels for OBG Segment 12CE

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:** 12

### Remarks:

During random In-process Visual Inspection of OBG Segment 12CE, this Quality Assurance Inspector (QA) discovered the following issues:

- Deposition of weld metal (buttering/build up) of up to 21mm measured horizontally from the groove face to correct excessive root opening by Flux Cored Arc Welding (FCAW) without the prior approval of the engineer.
- Buttering was performed on Side Panel SP3012A (38mm x L=1500mm) and SP3021A (30mm x L=2000mm)
- ZPMC onsite Quality Control Inspector (QC), Mr. Guo Xing Hui, produced Welding Repair Report (WRR)-B-WR-10076 Dated January 9th, 2010 for the work being performed.
- The material being welded is Non SPCM.
- The Side Panel components are located in Bay 14.

Please see attached NCR ZPMC-617 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 14 days.

**Transmitted by:** Ching Chao

**Attachments:** ZPMC-0617

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

**File:** 05.03.06

## NCR PROPOSED RESOLUTION

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

**Attention:** Pursell, Gary  
Resident Engineer

**Ref:** 05.03.06-000608

**Subject:** NCR No. ZPMC-0617

**Dated:** 29-Jan-2010

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

**Job Name:** SAS Superstructure

**Document No.:** ABF-NPR-000548 Rev: 00

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**Contractor's Proposed Resolution:**

**Reference Resolution:** The weld built measured by the inspector was not in its final state. After grinding, the build up measured 15mm which is allowable by AWS D1.5. Based on this ZPMC requests closure of this NCR.

The weld built measured by the inspector was not in its final state. After grinding, the build up measured 15mm which is allowable by AWS D1.5. Based on this ZPMC requests closure of this NCR.

**Submitted by:** Ishibashi, Joshua

**Attachment(s):** ABF-NPR-000548R00;

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**Caltrans' comments:**

**Status:** AAP

**Date:** 02-Feb-2010

Approval pending MT, VT and UT.

**Submitted by:** Howe, Bill

**Date:** 02-Feb-2010

**Attachment(s):**



No. B-597

## LETTER OF RESPONSE

**TO: American Bridge/Flour**

**DATE: 2010-1-29**

**REGARDING: NCR-00646 (ZPMC-0617)**

With this letter of response, ZPMC requests withdraw/closure of CT NCR-00646 (ZPMC-0617) , what mentioned that CT Inspector observed unapproved buttering was carrying out.

- This CT inspector noticed that ZPMC has issued B-WR-10076.
- This CT inspector measured the buttering area to be 21mm at horizontally direction. CT inspector should have rich experience and be realized that it's not the final status for buttering. According to B-WR-10076 this buttering area should be maximum 15mm after grinding what is allowed refer to AWS D1.5 section 3.3.4.1.
- No ZPMC QA personnel was notified by this CT inspector prior to the Incident Report was issued.

Based on the responses above, ZPMC requests withdraw/closure of this NCR.

**ATTACHMENT:**

NCR-00646 (ZPMC-0617)

B-WR10076 (Draft Only)

*Handwritten signature*  
*1/29/10*



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

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375 BURMA ROAD  
OAKLAND CA 95607

**Date:** 24-Jan-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:** 05.03.06-000608

**Subject:** NCR No. ZPMC-0617

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**Material Location:** OBG

**Lift:** 12

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During random In-process Visual Inspection of OBG Segment 12CE, this Quality Assurance Inspector (QA) discovered the following issues:

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**Attachments:** ZPMC-0617

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

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 (707) 649-5453  
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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-000646

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

**Date:** 23-Jan-2010

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

**NCR #:** ZPMC-0617

### Type of problem:

Welding  Concrete  Other

Welding  Curing  Procedural  **Bridge No:** 34-0006

Joint fit-up  Coating  Other  **Component:** OBG Segment 12CE

Procedural  **Procedural**  **Description:** Unapproved Buttering of Side Panel Splice Welds

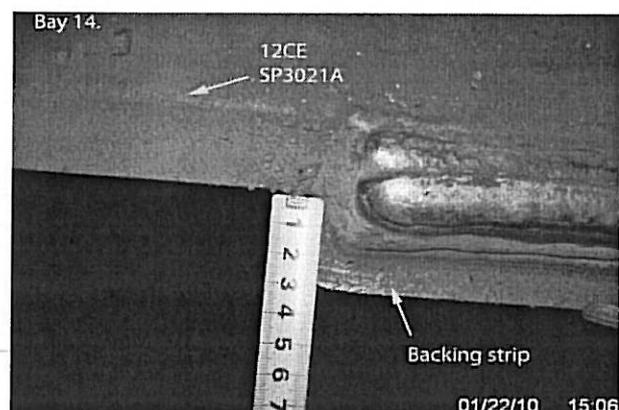
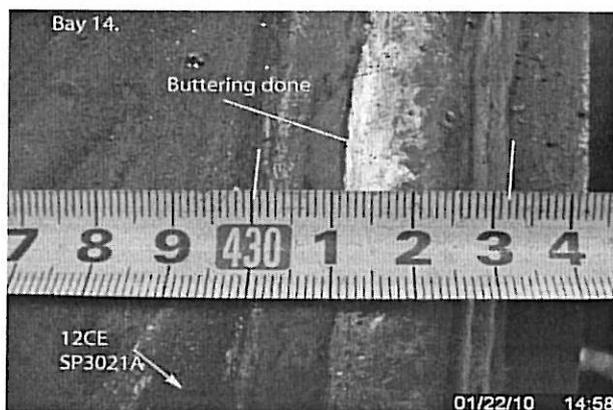
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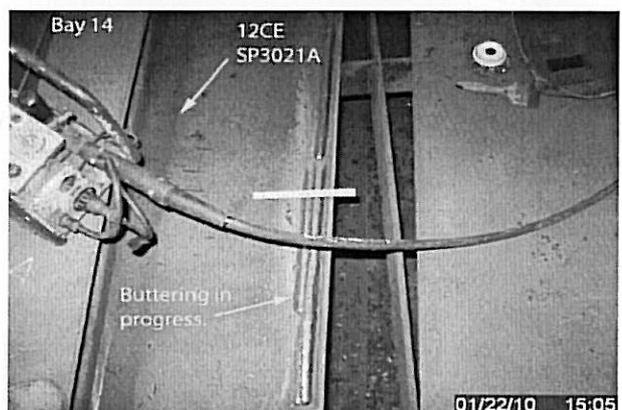
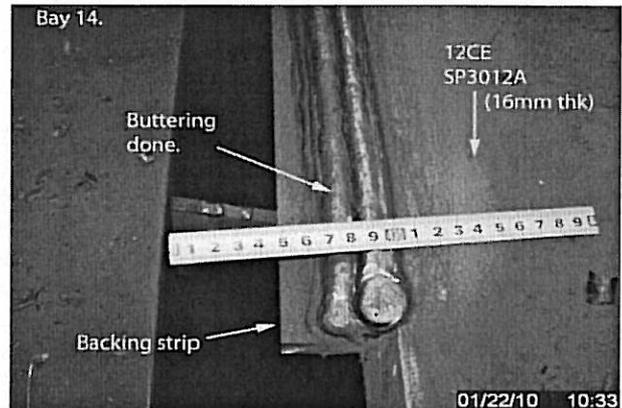
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## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 3)



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**Name of Caltrans Engineer notified:** Bill Howe

**Time and method of notification:** 18:00 / 01-23-10 / e-mail

**QC Inspector's Name:** Mr. Guo Xing Hui.

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

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

N/A

### Comments:

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# 焊缝返修报告

## Welding Repair Report

版本 Rev. No.

0

|                      |                 |                    |  |                              |           |
|----------------------|-----------------|--------------------|--|------------------------------|-----------|
| 项目名称<br>Project Name | 美国海湾大桥<br>SFOBB | 部件图号<br>Drawing No | SEG3003A                                 | 报告编号<br>Report No.           | B-WR10076 |
| 合同号<br>Contract No.: | 04-0120F4       | 部件名称<br>Items Name | 斜底板与底板<br>Side plate and<br>bottom plate | NDT报告编号<br>Report No. of NDT | NA        |
| 项目编号<br>Project No.: | ZP06-787        |                    |  |                              |           |

焊缝缺陷描述:

**Description of welding discontinuity:**

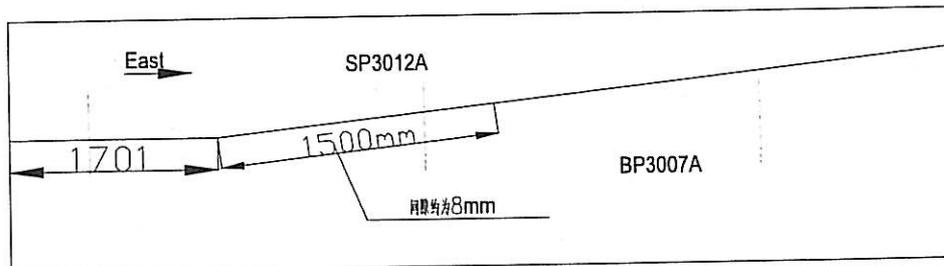
检查发现12CE的底板BP3007A与SP3012A的拼缝间隙超标, 最大8mm, 长度约为1500mm, 底板BP3009A与SP3021A的拼缝间隙超标, 最大15mm, 长度约为5000mm, 具体如下图所示  
After inspection 12CE bottom plate gap at BP3007A and SP3012A, the gap was maximum 8mm, 1500m in length, maximum 15mm at BP3009A and SP3021A, the detail sees the following draft.

检验员 (Inspector): GENGWEI 日期(Date): 2010-1-19

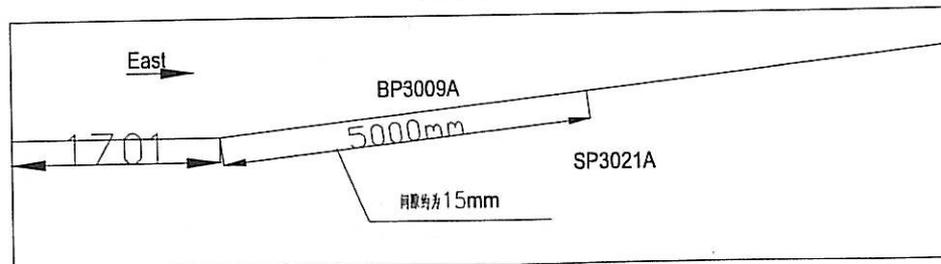
焊缝返修位置示意图:

**Draft of welding discontinuity:**

VIEW A



VIEW B



产生原因:

Caused:

焊接变形和制作误差。

Weld distortion and fabricate error.

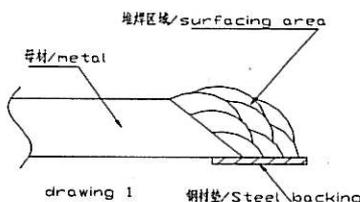
车间负责人(Foreman):

日期(Date):

处理意见

Disposition :

1. 将要修补的区域打磨光滑;
2. 准备一个正确的接头形式, 具体参见返修的WPS;
3. 返修前对修补区域进行VT检测, 确定修补区域无杂质存在;
4. 按照图一所示加钢衬垫;
5. 根据返修的焊接返修工艺规程(WPS)进行预热及焊接;
6. 去除钢衬垫, 将修补焊缝打磨至与周围母材平齐;
7. 对返修区域做NDT(VT MT UT)以保证金属融合的深度;
8. 按照图纸要求重新预制坡口;



1. Grind the edge of the repair area cleanly;
2. Prepare an right joint according to the approved WPS;
3. Perform VT to the repair area to ensure no impurity exist;
4. Add steel backing according to the attached drawing 1;
5. Preheat and weld according to the relevant repaired WPS;
6. Remove the steel backing and grind the weld flush with around metal;
7. Perform post NDT (VT MT UT) of repaired area to insure sound weld metal has been de posited.
8. Prepare excavation again according to the shop drawings

工艺:  
Technical engineer

审核:  
Approved by

日期  
Date



# 焊缝返修报告

## Welding Repair Report

版本 Rev. No.

**0**

|                      |                 |                     |  |                             |           |
|----------------------|-----------------|---------------------|--|-----------------------------|-----------|
| 项目名称<br>Project Name | 美国海湾大桥<br>SFOBB | 部件图号<br>Drawing No. | SEG3003A                                 | 报告编号<br>Report No.          | B-WR10076 |
| 合同号<br>Contract No.: | 04-0120F4       | 部件名称<br>Items Name  | 斜底板与底板<br>Side plate and<br>bottom plate | NDT报告编号<br>Report No.of NDT | NA        |
| 项目编号<br>Project No.: | ZP06-787        |                     |  |                             |           |

纠正措施:

**Correction action to prevent re occurrence:**

加强制作过程中的监控, 减少误差。

**Enhance supervision in process of fabrication to reduce error.**

车间负责人(Foreman):

日期(Date):

|  |   |   |  |
|--|---|---|--|
| 参照的WPS编号<br>Repair WPS No.                           | WPS-345-SMAW-1<br>G(1F)- Repair<br>WPS-345-FCAW-1<br>G(1F)-Repair<br>WPS-345-SMAW-2<br>G(2F)- Repair<br>WPS-345-FCAW-2<br>G(2F)- Repair | 工艺员<br>technologist                             |  |
| 返修(碳刨)前预热温度<br>Preheat temperature<br>before gouging |   | 返修的缺陷<br>Description<br>of discontinuity        |  |
| 焊前处理检查<br>Inspection<br>before welding               |   | 焊前预热温度<br>Preheat temperature<br>before welding |  |
| 最大碳刨深度<br>Max. depth of gouging                      |   | 碳刨总长<br>Total length of gouging                 |  |
| 焊工<br>welder   | 焊接类型<br>welding type  | 焊接位置<br>position                                |  |
| 焊接电流<br>Current                                      | 焊接电压<br>Voltage   | 焊接速度<br>Speed                                   |  |
| <b>返修后检查</b><br>Inspection After repairing:          |   |   |  |
| 外观检查<br>VT result                                    | 检验员<br>Inspector  | 日期<br>Date                                      |  |
| NDT复检<br>NDT result                                  | 探伤员<br>NDT person   | 日期<br>Date                                      |  |
| 见证:<br>Witness/Review:                               |   |   |  |
| 备注:<br>Remark:                                       |   |   |  |

#R787-QCP-900

## NCR PROPOSED RESOLUTION

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

**Attention:** Pursell, Gary  
Resident Engineer

**Ref:** 05.03.06-000608

**Subject:** NCR No. ZPMC-0617

**Dated:** 23-Apr-2010

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

**Job Name:** SAS Superstructure

**Document No.:** ABF-NPR-000548 Rev: 01

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**Contractor's Proposed Resolution:**

**Reference Resolution:** After grinding the horizontal height of the weld metal from the groove face was 15mm, which does not require the Engineer's approval. Based on this ZPMC requests closure this NCR.

After grinding the horizontal height of the weld metal from the groove face was 15mm, which does not require the Engineer's approval. Based on this ZPMC requests closure this NCR.

**Submitted by:** Ishibashi, Joshua

**Attachment(s):** ABF-NPR-000548R01;

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**Caltrans' comments:**

**Status:** REJ

**Date:** 27-Apr-2010

Please provide a copy of the WRR used for this repair showing that the amount of weld metal deposited was 15mm as indicated.

**Submitted by:** Eagen, Sean

**Attachment(s):**

**Date:** 27-Apr-2010



No. B-735

## LETTER OF RESPONSE

**TO: American Bridge/Flour**

**DATE: 2010-4-21**

**REGARDING: NCR-000646(ZPMC-0617)**

The buttering size is 15mm after grinding, according to AWS D1.5 it's not required to notify the engineer if the buttering size is within 20mm. Please be noticed that this panel has now been assembled into 12CE and the dimension was measured to be acceptable. And based on the pervious response, ZPMC is requesting this NCR to be closed.

**ATTACHMENT:**

NCR-000646(ZPMC-0617)

A handwritten signature in black ink, appearing to be "J. W.", is located below the attachment information.

4/21/10



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:

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**Date:** 24-Jan-2010

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**Attention:** Mr. Thomas Nilsson Project/Fabrication Manager

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**Material Location:** OBG

**Lift:** 12

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**Transmitted by:** Ching Chao

**Attachments:** ZPMC-0617

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

**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, P.R. China

**Report No:** NCR-000646

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

**Date:** 23-Jan-2010

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

**NCR #:** ZPMC-0617

**Type of problem:**

Welding  Concrete  Other

Welding  Curing  Procedural  Bridge No: 34-0006

Joint fit-up  Coating  Other  Component: OBG Segment 12CE

Procedural  Procedural  Description: Unapproved Buttering of Side Panel Splice Welds

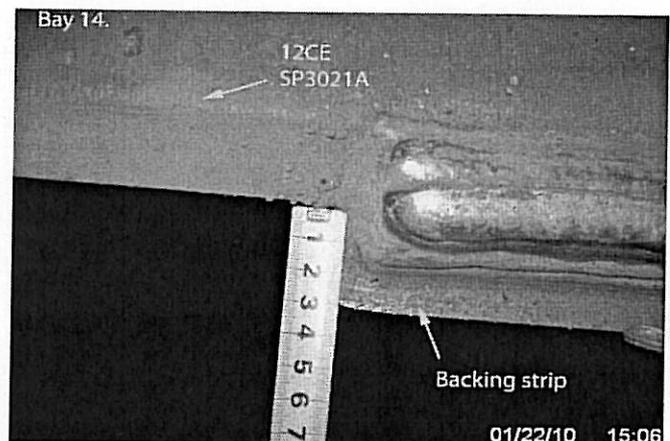
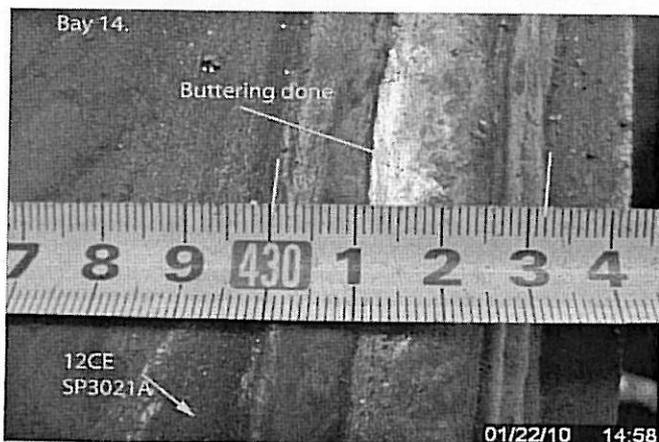
**Reference Description:** ZPMC performed unapproved buttering to correct root opening size on side panels for OBG Segment 12CE

**Description of Non-Conformance:**

During random In-process Visual Inspection of OBG Segment 12CE, this Quality Assurance Inspector (QA) discovered the following issues:

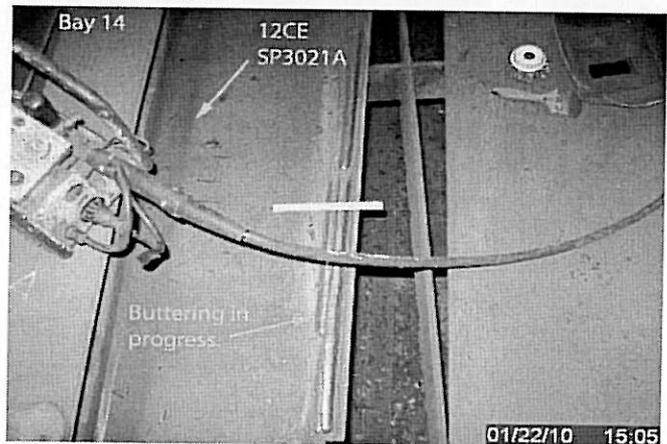
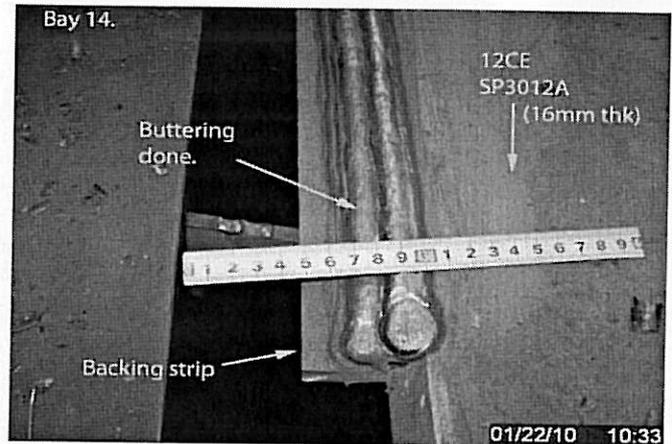
- Deposition of weld metal (buttering/build up) of up to 21mm measured horizontally from the groove face to correct excessive root opening by Flux Cored Arc Welding (FCAW) without the prior approval of the engineer.
- Buttering was performed on Side Panel SP3012A (38mm x L=1500mm) and SP3021A (30mm x L=2000mm)
- ZPMC onsite Quality Control Inspector (QC), Mr. Guo Xing Hui, produced Welding Repair Report (WRR)-B-WR-10076 Dated January 9th, 2010 for the work being performed.
- The material being welded is Non SPCM.
- The Side Panel components are located in Bay 14.

For further information, please see the attached photos and applicable reference below.



# QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 3)



## 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 3.3.4.2 – “Root openings larger than those allowed in 3.3.4.1 may be corrected by welding only with the approval of the Engineer”.

**Who discovered the problem:** Shailesh Vasant Wadkar.

**Name of individual from Contractor notified:** Mr. Wang Wei Nan

**Time and method of notification:** 16:00 / 01-22-10 / Verbal

**Name of Caltrans Engineer notified:** Bill Howe

**Time and method of notification:** 18:00 / 01-23-10 / e-mail

**QC Inspector's Name:** Mr. Guo Xing Hui.

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

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

N/A

## 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

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# QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

( Continued Page 3 of 3 )

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Office of Structural Materials for your project.

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**Inspected By:** Simonis, Jim

QA Inspector

**Reviewed By:** Wahbeh, Mazen

SMR

## NCR PROPOSED RESOLUTION

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

**Attention:** Pursell, Gary  
Resident Engineer

**Ref:** 05.03.06-000608

**Subject:** NCR No. ZPMC-0617

**Dated:** 21-May-2010

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

**Job Name:** SAS Superstructure

**Document No.:** ABF-NPR-000548 Rev: 02

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**Contractor's Proposed Resolution:**

**Reference Resolution:** Per the Engineer's request ZPMC is submitting the WRR used when performing the weld build up. Based on this ZPMC requests closure of this NCR.

Per the Engineer's request ZPMC is submitting the WRR used when performing the weld build up. Based on this ZPMC requests closure of this NCR.

**Submitted by:** Ishibashi, Joshua

**Attachment(s):** ABF-NPR-000548R02;

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**Caltrans' comments:**

**Status:** REJ

**Date:** 25-May-2010

Please provide NDT results from UT specified in the WRR.

**Submitted by:** Eagen, Sean

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

**Date:** 25-May-2010



No. B-767

## LETTER OF RESPONSE

**TO: American Bridge/Flour**

**DATE: 2010-5-21**

**REGARDING: NCR-000646(ZPMC-0617)**

As Engineer's request, ZPMC is providing the WRR what was used on this issue and is request closure of this NCR.

**ATTACHMENT:**

NCR-000646(ZPMC-0617)

B-WR10076

*[Handwritten signature]*

5/21/10



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:** 24-Jan-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:** 05.03.06-000608

**Subject:** NCR No. ZPMC-0617

**Reference Description:** ZPMC performed unapproved buttering to correct root opening size on side panels for OBG Segment 12CE

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:** 12

### Remarks:

During random In-process Visual Inspection of OBG Segment 12CE, this Quality Assurance Inspector (QA) discovered the following issues:

- Deposition of weld metal (buttering/build up) of up to 21mm measured horizontally from the groove face to correct excessive root opening by Flux Cored Arc Welding (FCAW) without the prior approval of the engineer.
  - Buttering was performed on Side Panel SP3012A (38mm x L=1500mm) and SP3021A (30mm x L=2000mm)
  - ZPMC onsite Quality Control Inspector (QC), Mr. Guo Xing Hui, produced Welding Repair Report (WRR)-B-WR-10076 Dated January 9th, 2010 for the work being performed.
  - The material being welded is Non SPCM.
  - The Side Panel components are located in Bay 14.
- Please see attached NCR ZPMC-617 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 14 days.

**Transmitted by:** Ching Chao

**Attachments:** ZPMC-0617

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

**File:** 05.03.06

**DEPARTMENT OF TRANSPORTATION**  
**DIVISION OF ENGINEERING SERVICES**  
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 (707) 649-5453  
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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-000646

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

**Date:** 23-Jan-2010

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

**NCR #:** ZPMC-0617

**Type of problem:**

Welding  Concrete  Other

Welding  Curing  Procedural  Bridge No: 34-0006

Joint fit-up  Coating  Other  Component: OBG Segment 12CE

Procedural  Procedural  Description: Unapproved Buttering of Side Panel Splice Welds

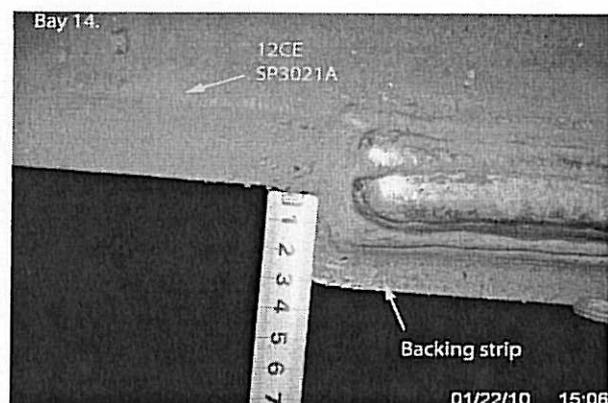
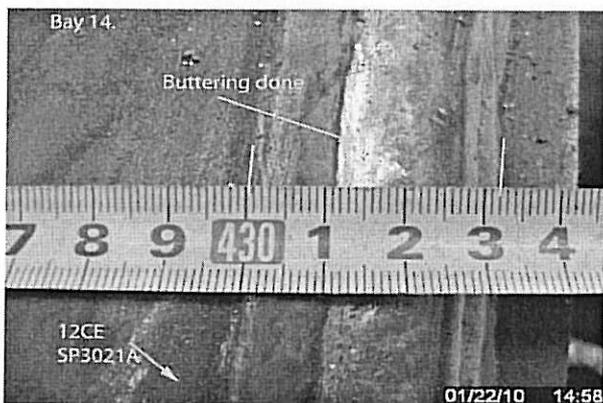
**Reference Description:** ZPMC performed unapproved buttering to correct root opening size on side panels for OBG Segment 12CE

**Description of Non-Conformance:**

During random In-process Visual Inspection of OBG Segment 12CE, this Quality Assurance Inspector (QA) discovered the following issues:

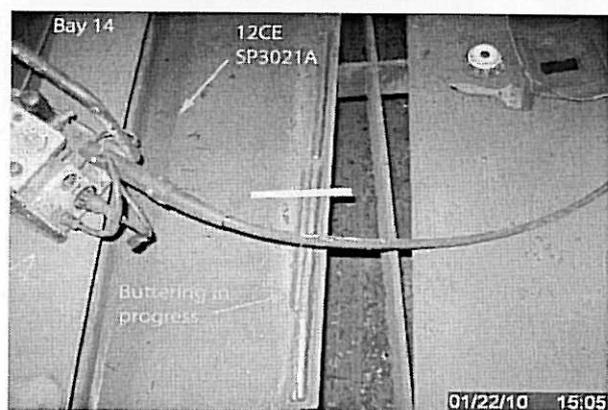
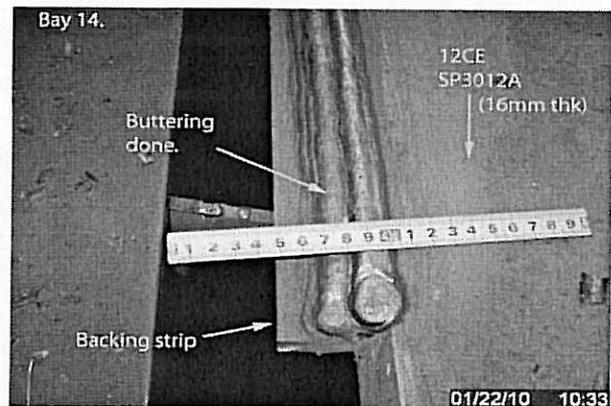
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- Buttering was performed on Side Panel SP3012A (38mm x L=1500mm) and SP3021A (30mm x L=2000mm)
- ZPMC onsite Quality Control Inspector (QC), Mr. Guo Xing Hui, produced Welding Repair Report (WRR)-B-WR-10076 Dated January 9th, 2010 for the work being performed.
- The material being welded is Non SPCM.
- The Side Panel components are located in Bay 14.

For further information, please see the attached photos and applicable reference below.



## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 3)



### 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 3.3.4.2 – “Root openings larger than those allowed in 3.3.4.1 may be corrected by welding only with the approval of the Engineer”.

**Who discovered the problem:** Shailesh Vasant Wadkar.

**Name of individual from Contractor notified:** Mr. Wang Wei Nan

**Time and method of notification:** 16:00 / 01-22-10 / Verbal

**Name of Caltrans Engineer notified:** Bill Howe

**Time and method of notification:** 18:00 / 01-23-10 / e-mail

**QC Inspector's Name:** Mr. Guo Xing Hui.

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

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

N/A

### 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

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## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

( Continued Page 3 of 3 )

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Office of Structural Materials for your project.

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**Inspected By:** Simonis,Jim

QA Inspector

**Reviewed By:** Wahbeh,Mazen

SMR



# 焊缝返修报告

## Welding Repair Report

版本 Rev. No.

0

|                      |                 |                    |                                       |                             |           |
|----------------------|-----------------|--------------------|---------------------------------------|-----------------------------|-----------|
| 项目名称<br>Project Name | 美国海湾大桥<br>SFOBB | 部件图号<br>Drawing No | SEG3003A                              | 报告编号<br>Report No.          | B-WR10076 |
| 合同号<br>Contract No.: | 04-0120F4       | 部件名称<br>Items Name | 斜底板与底板<br>Side plate and bottom plate | NDT报告编号<br>Report No.of NDT | NA        |
| 项目编号<br>Project No.: | ZP06-787        |                    |                                       |                             |           |

焊缝缺陷描述:

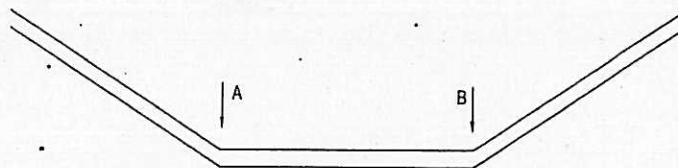
**Description of welding discontinuity:**

检查发现12CE的底板BP3007A与SP3012A的拼缝间隙超标, 最大8mm, 长度约为1500mm, 底板BP3009A与SP3021A的拼缝间隙超标, 最大15mm, 长度约为8450mm, 具体如下图所示  
 After inspection 12CE bottom plate gap at BP3007A and SP3012A, the gap was maximum 8mm, 1500m in length, maximum 15mm at BP3009A and SP3021A, the detail sees the following draft.

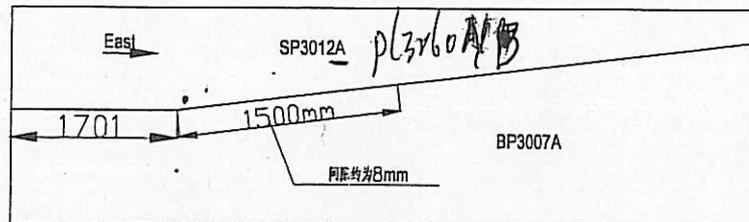
检验员 (Inspector): GENGWEL 日期(Date): 2010-1-19

焊缝返修位置示意图:

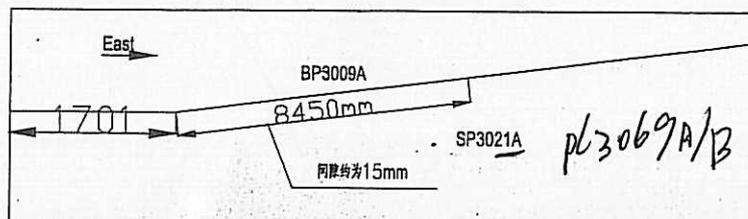
**Draft of welding discontinuity:**



VIEW A



VIEW B



产生原因:

Caused:

焊接变形和制作误差。

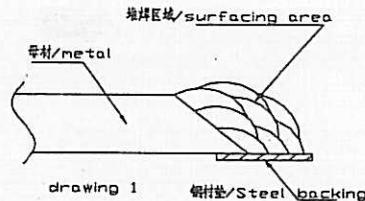
Weld distortion and fabricate error.

车间负责人(Foreman): *Li Shi Gang* 日期(Date): 2010-1-20

处理意见

Disposition :

1. 将要修补的区域打磨光滑;
2. 准备一个正确的接头形式, 具体参见返修的WPS;
3. 返修前对修补区域进行VT检测, 确定修补区域无杂质存在;
4. 按照图一所示加钢衬垫;
5. 根据返修的焊接返修工艺规程(WPS)进行预热及焊接;
6. 去除钢衬垫, 将修补焊缝打磨至与周围母材平齐;
7. 对返修区域做NDT (VT MT UT) 以保证金属融合的深度;
8. 按照图纸要求重新预制坡口;



1. Grind the edge of the repair area cleanly;
2. Prepare an right joint according to the approved WPS;
3. Perform VT to the repair area to ensure no impurity exist;
4. Add steel backing according to the attached drawing 1;
5. Preheat and weld according to the relevant repaired WPS;
6. Remove the steel backing and grind the weld flush with around metal;
7. Perform post NDT (VT MT UT) of repaired area to insure sound weld metal has been de posited.
8. Prepare excavation again according to the shop drawings

工艺: *Huixiao Lin*  
Technical engineer

审核:  
Approved by

*dujiambao* 日期 2010-1-20  
Date



# 焊缝返修报告

## Welding Repair Report

版本 Rev. No.

0

|                      |                 |                     |  |                              |           |
|----------------------|-----------------|---------------------|--|------------------------------|-----------|
| 项目名称<br>Project Name | 美国海湾大桥<br>SFOBB | 部件图号<br>Drawing No. | SEG3003A                                 | 报告编号<br>Report No.           | B-WR10076 |
| 合同号<br>Contract No.: | 04-0120F4       | 部件名称<br>Items Name  | 斜底板与底板<br>Side plate and<br>bottom plate | NDT报告编号<br>Report No. of NDT | NA        |
| 项目编号<br>Project No.: | ZP06-787        |                     |  |                              |           |

纠正措施:

**Correction action to prevent re occurrence:**

加强制作过程中的监控, 减少误差。

**Enhance supervision in process of fabrication to reduce error.**车间负责人(Foreman): *Li Shi Gang* 日期(Date): 2010-1-20

|  |   |   |                              |
|--|---|---|------------------------------|
| 参照的WPS编号<br>Repair WPS No.                           | WPS-345-SMAW-1<br>G(1F)- Repair<br>WPS-345-FCAW-1<br>G(1F)-Repair<br>WPS-345-SMAW-2<br>G(2F)- Repair<br>WPS-345-FCAW-2<br>G(2F)- Repair | 工艺员<br>technologist                             | <i>Wuxiaozi</i>              |
| 返修(碳刨)前预热温度<br>Preheat temperature<br>before gouging | NA  | 返修的缺陷<br>Description<br>of discontinuity        | NA                           |
| 焊前处理检查<br>Inspection<br>before welding               | Acc   | 焊前预热温度<br>Preheat temperature<br>before welding | 107°C                        |
| 最大碳刨深度<br>Max. depth of gouging                      | NA  | 碳刨总长<br>Total length of gouging                 | NA                           |
| 焊工<br>welder   | <i>05491</i>  | 焊接类型<br>welding type                            | <i>FCAW</i>                  |
| 焊接电流<br>Current                                      | <i>305</i>  | 焊接电压<br>Voltage                                 | <i>30.1</i>                  |
|  |   | 焊接位置<br>position                                | <i>1G</i>                    |
|  |   | 焊接速度<br>Speed                                   | <i>298</i>                   |
| <b>返修后检查</b><br>Inspection After repairing:          |   |   |                              |
| 外观检查<br>VT result                                    | <i>Acc</i>  | 检验员<br>Inspector                                | <i>Greg Wei</i>              |
| NDT复检<br>NDT result                                  | <i>MT Acc<br/>UT Acc</i>  | 探伤员<br>NDT person                               | <i>孙成力<br/>Sun Chengli</i>   |
| 见证:<br>Witness/Review:                               |   | 日期<br>Date                                      | <i>2010.01.27</i>            |
| 备注:<br>Remark:                                       |   | 日期<br>Date                                      | <i>2010.1.28<br/>10.1.28</i> |

#R787-QCP-900

## NCR PROPOSED RESOLUTION

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

**Attention:** Pursell, Gary  
Resident Engineer

**Ref:** 05.03.06-000608

**Subject:** NCR No. ZPMC-0617

**Dated:** 10-Jun-2010

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

**Job Name:** SAS Superstructure

**Document No.:** ABF-NPR-000548 Rev: 03

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**Contractor's Proposed Resolution:**

**Reference Resolution:** ZPMC is providing NDT of the welds after repair and is requesting closure based on the acceptable results.  
ZPMC is providing NDT of the welds after repair and is requesting closure based on the acceptable results.

**Submitted by:** Ishibashi, Joshua  
**Attachment(s):** ABF-NPR-000548R03;

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**Caltrans' comments:**

**Status:** AAP

**Date:** 14-Jun-2010

The NDT report provided with the NPR is for PL3069S and not PL3069A that is the subject of the NCR. This proposed resolution is accepted, action pending. Please provide NDT results for buttering performed on PL3069A.

**Submitted by:** Eagen, Sean  
**Attachment(s):**

**Date:** 14-Jun-2010



No. B-785

## LETTER OF RESPONSE

**TO: American Bridge/Flour**

**DATE: 2010-6-10**

**REGARDING: NCR-000646(ZPMC-0617)**

ZPMC is providing the NDT records to show the acceptance of the buttering. Based on this, ZPMC is requesting closure of this NCR.

**ATTACHMENT:**

NCR-000646(ZPMC-0617)

B787-MT-18953

B787-UT-11127

A handwritten signature in black ink, appearing to be 'J. M. W.' with a stylized flourish at the end.

6/10/10



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:** 24-Jan-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:** 05.03.06-000608

**Subject:** NCR No. ZPMC-0617

**Reference Description:** ZPMC performed unapproved buttering to correct root opening size on side panels for OBG Segment 12CE

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:** 12

### Remarks:

During random In-process Visual Inspection of OBG Segment 12CE, this Quality Assurance Inspector (QA) discovered the following issues:

- Deposition of weld metal (buttering/build up) of up to 21mm measured horizontally from the groove face to correct excessive root opening by Flux Cored Arc Welding (FCAW) without the prior approval of the engineer.
- Buttering was performed on Side Panel SP3012A (38mm x L=1500mm) and SP3021A (30mm x L=2000mm)
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- The material being welded is Non SPCM.
- The Side Panel components are located in Bay 14.

Please see attached NCR ZPMC-617 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 14 days.

**Transmitted by:** Ching Chao

**Attachments:** ZPMC-0617

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

**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

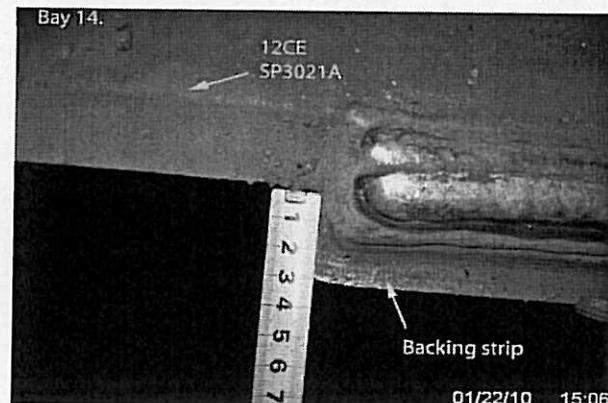
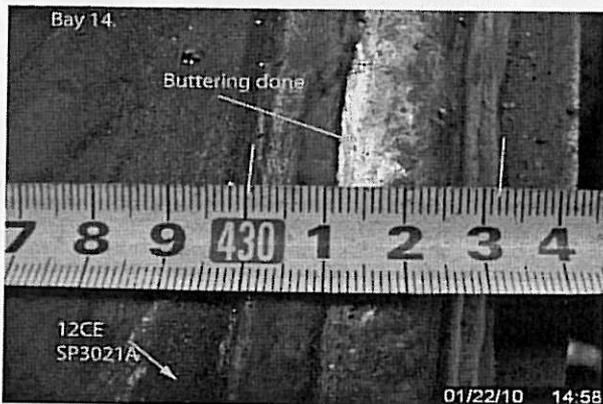
File #: 69.25B

**QUALITY ASSURANCE -- NON-CONFORMANCE REPORT****Location:** Changxing Island, Shanghai, P.R. China**Report No:** NCR-000646**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 23-Jan-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0617**Type of problem:**Welding  Concrete  Other Welding  Curing  Procedural  **Bridge No:** 34-0006Joint fit-up  Coating  Other  **Component:** OBG Segment 12CEProcedural  **Description:** Unapproved Buttering of Side Panel Splice Welds**Reference Description:** ZPMC performed unapproved buttering to correct root opening size on side panels for OBG Segment 12CE**Description of Non-Conformance:**

During random In-process Visual Inspection of OBG Segment 12CE, this Quality Assurance Inspector (QA) discovered the following issues:

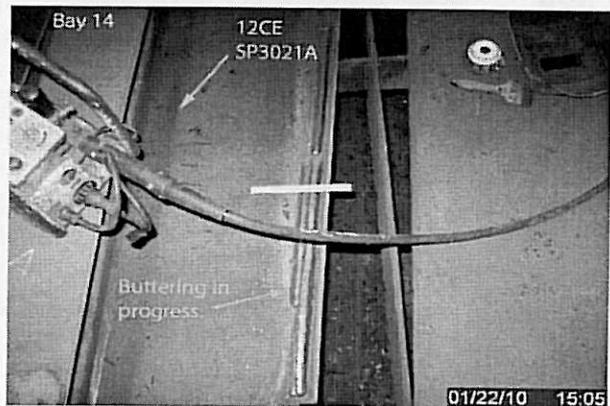
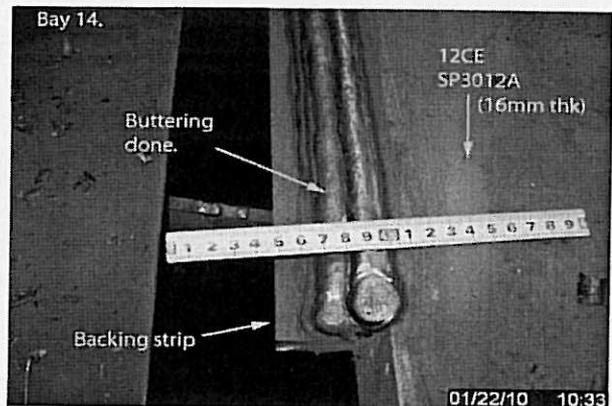
- Deposition of weld metal (buttering/build up) of up to 21mm measured horizontally from the groove face to correct excessive root opening by Flux Cored Arc Welding (FCAW) without the prior approval of the engineer.
- Buttering was performed on Side Panel SP3012A (38mm x L=1500mm) and SP3021A (30mm x L=2000mm)
- ZPMC onsite Quality Control Inspector (QC), Mr. Guo Xing Hui, produced Welding Repair Report (WRR)-B-WR-10076 Dated January 9th, 2010 for the work being performed.
- The material being welded is Non SPCM.
- The Side Panel components are located in Bay 14.

For further information, please see the attached photos and applicable reference below.



## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

( Continued Page 2 of 3 )



### 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 3.3.4.2 – “Root openings larger than those allowed in 3.3.4.1 may be corrected by welding only with the approval of the Engineer”.

**Who discovered the problem:** Shailesh Vasant Wadkar.

**Name of individual from Contractor notified:** Mr. Wang Wei Nan

**Time and method of notification:** 16:00 / 01-22-10 / Verbal

**Name of Caltrans Engineer notified:** Bill Howe

**Time and method of notification:** 18:00 / 01-23-10 / e-mail

**QC Inspector's Name:** Mr. Guo Xing Hui.

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

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

N/A

### 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

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## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

( Continued Page 3 of 3 )

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Office of Structural Materials for your project.

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**Inspected By:** Simonis,Jim

QA Inspector

**Reviewed By:** Wahbeh,Mazen

SMR





## NCR PROPOSED RESOLUTION

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

**Attention:** Pursell, Gary  
Resident Engineer

**Ref:** 05.03.06-000608

**Subject:** NCR No. ZPMC-0617

**Dated:** 29-Jun-2010

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

**Job Name:** SAS Superstructure

**Document No.:** ABF-NPR-000548 **Rev:** 04

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### Contractor's Proposed Resolution:

**Reference Resolution:** Previously submitted NDT documents were for the incorrect plates. ZPMC is submitting NDT documents with the correct plates to show that the weld up is acceptable.

Previously submitted NDT documents were for the incorrect plates. ZPMC is submitting NDT documents with the correct plates to show that the weld up is acceptable. ABFJV has had discussions with the ZPMC QA Manager and he has agreed to increase CWI presence in all areas to prevent lapse in QC oversight in the future. Based on these actions and submitted documents, ZPMC requests closure of this NCR.

**Submitted by:** Ishibashi, Joshua

**Attachment(s):** ABF-NPR-000548R04;

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### Caltrans' comments:

**Status:** AAP

**Date:** 07-Jul-2010

The preventative measures taken by the QCM is acceptable. The area has been repaired and NDT documents with the correct plates have been submitted. This NCR is considered closed.

**Submitted by:** Woo, Laraine

**Date:** 07-Jul-2010

**Attachment(s):**



No. B-803

## LETTER OF RESPONSE

**TO: American Bridge/Flour**

**DATE: 2010-6-28**

**REGARDING: NCR-000646(ZPMC-0617)**

Wrong plate number was typed in the previously submitted NDT records. ZPMC is providing the corrected reports and is requesting closure of this NCR.

**ATTACHMENT:**

NCR-000646(ZPMC-0617)

B787-UT-11127

B787-MT-18953

A handwritten signature in black ink, appearing to be 'J. W.' or similar, written in a cursive style.

6/28/10



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:** 24-Jan-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:** 05.03.06-000608

**Subject:** NCR No. ZPMC-0617

**Reference Description:** ZPMC performed unapproved buttering to correct root opening size on side panels for OBG Segment 12CE

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:** 12

### Remarks:

During random In-process Visual Inspection of OBG Segment 12CE, this Quality Assurance Inspector (QA) discovered the following issues:

- Deposition of weld metal (buttering/build up) of up to 21mm measured horizontally from the groove face to correct excessive root opening by Flux Cored Arc Welding (FCAW) without the prior approval of the engineer.
  - Buttering was performed on Side Panel SP3012A (38mm x L=1500mm) and SP3021A (30mm x L=2000mm)
  - ZPMC onsite Quality Control Inspector (QC), Mr. Guo Xing Hui, produced Welding Repair Report (WRR)-B-WR-10076 Dated January 9th, 2010 for the work being performed.
  - The material being welded is Non SPCM.
  - The Side Panel components are located in Bay 14.
- Please see attached NCR ZPMC-617 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 14 days.

**Transmitted by:** Ching Chao

**Attachments:** ZPMC-0617

**cc:** Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Jason Tom, Contract Files, Ching Chao, Bill Howe  
**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, P.R. China

**Report No:** NCR-000646

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

**Date:** 23-Jan-2010

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

**NCR #:** ZPMC-0617

**Type of problem:**

Welding  Concrete  Other

Welding  Curing  Procedural  **Bridge No:** 34-0006

Joint fit-up  Coating  Other  **Component:** OBG Segment 12CE

Procedural  **Description:** Unapproved Buttering of Side Panel Splice Welds

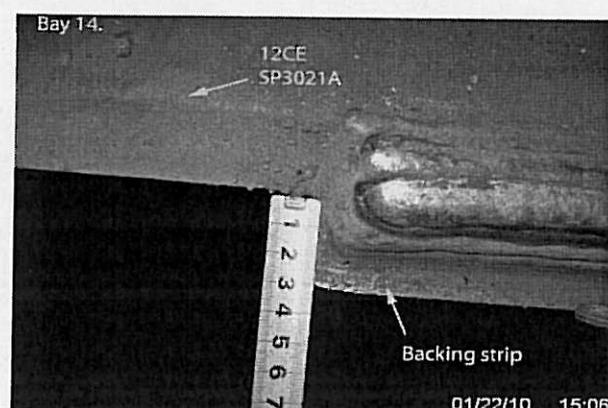
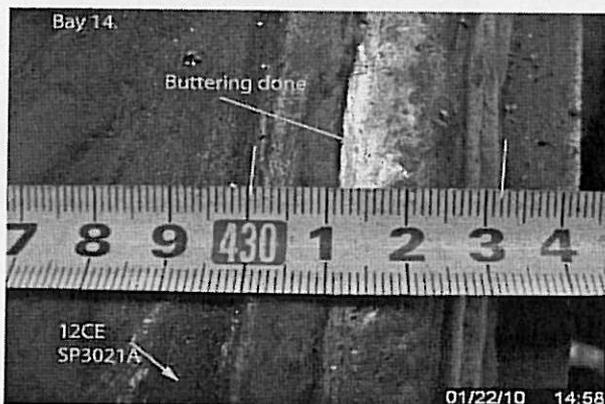
**Reference Description:** ZPMC performed unapproved buttering to correct root opening size on side panels for OBG Segment 12CE

**Description of Non-Conformance:**

During random In-process Visual Inspection of OBG Segment 12CE, this Quality Assurance Inspector (QA) discovered the following issues:

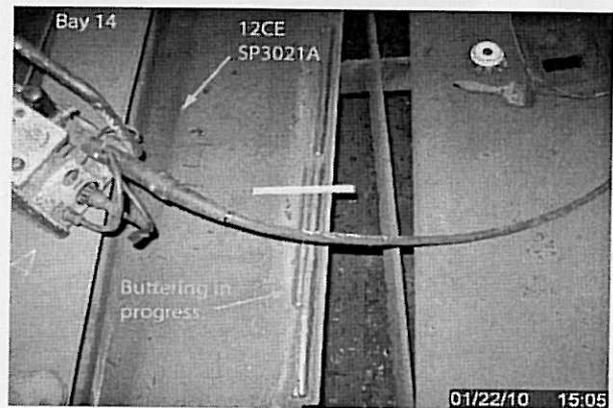
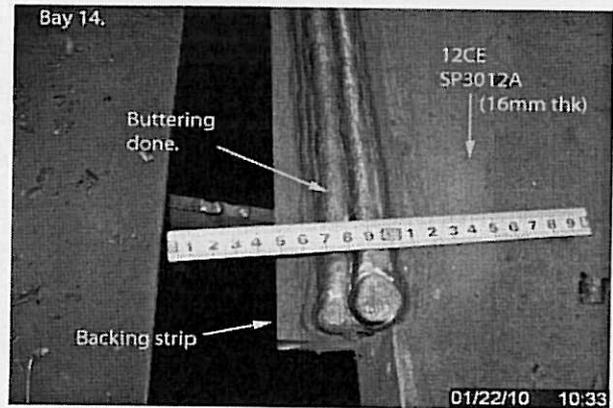
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For further information, please see the attached photos and applicable reference below.



## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 3)



### 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.”

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**Who discovered the problem:** Shailesh Vasant Wadkar.

**Name of individual from Contractor notified:** Mr. Wang Wei Nan

**Time and method of notification:** 16:00 / 01-22-10 / Verbal

**Name of Caltrans Engineer notified:** Bill Howe

**Time and method of notification:** 18:00 / 01-23-10 / e-mail

**QC Inspector's Name:** Mr. Guo Xing Hui.

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

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

N/A

### 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

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## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

( Continued Page 3 of 3 )

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Office of Structural Materials for your project.

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**Inspected By:** Simonis, Jim

QA Inspector

**Reviewed By:** Wahbeh, Mazen

SMR





**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, P.R. China**Report No:** NCS-000716**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 07-Jul-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0617**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-Jan-2010**Description of Non-Conformance:**

During random In-process Visual Inspection of OBG Segment 12CE, this Quality Assurance Inspector (QA) discovered the following issues:

- Deposition of weld metal (buttering/build up) of up to 21mm measured horizontally from the groove face to correct excessive root opening by Flux Cored Arc Welding (FCAW) without the prior approval of the engineer.
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- The material being welded is Non SPCM.
- The Side Panel components are located in Bay 14.

For further information, please see the attached photos and applicable reference below.

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

Provide WRR used during repair work along with subsequent NDT documentation verifying weld quality.

**Corrective action taken:**

Contractor has submitted WRR used during repairs as well as NDT documentation verifying repair welds meet Contract weld quality requirements.

**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

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## QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

( Continued Page 2 of 2 )

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Materials for your project.

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**Inspected By:** Simonis,Jim

Quality Assurance Inspector

**Reviewed By:** Wahbeh,Mazen

QA Reviewer

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