

**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-000520  
**Prime Contractor:** American Bridge/Fluor Enterprises, a JV **Date:** 25-Nov-2009  
**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0493

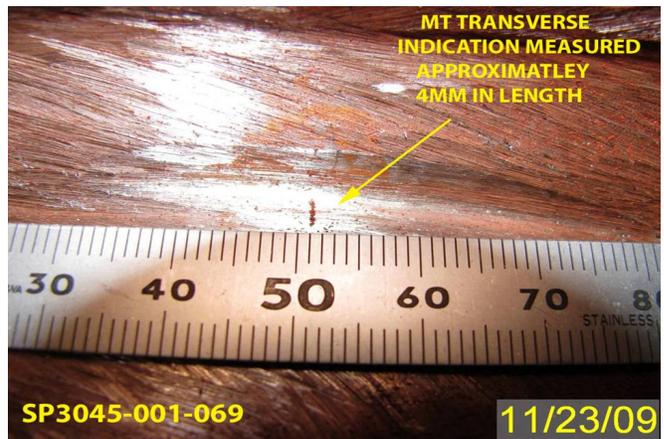
**Type of problem:**

<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 12CW Weld # SP3045-001-069
<b>Procedural</b>	<b>Procedural</b>	<b>Description:</b>	

**Reference Description:** Transverse Linear indication discovered with MT after the contractor's NDT acceptance for Segment 12CW

**Description of Non-Conformance:**

During random verification Magnetic Particle Testing (MT) of the OBG Side Plate (Segment 12CW) located in Bay # 6 as per the "NDT Inspection Notification Sheet" # 004714 submitted by ZPMC, this Caltrans Quality Assurance Inspector (QA) observed One (1) Transverse linear indication located in the fillet weld joining the T-rib to plate. The indication length measured approximately 4mm in length. The Side Plate is identified as SP3045-001-069. This indication was discovered within the area previously tested and accepted by ZPMC.



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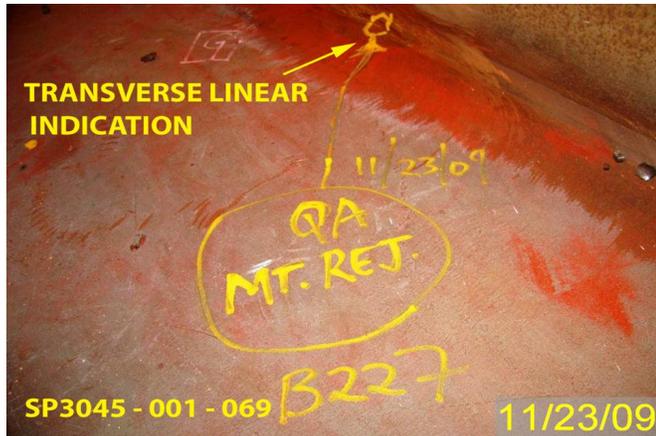
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# QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

( Continued Page 2 of 2 )

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**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 6.26.2 – “Welds that are subject to MT in addition to visual inspection shall have no cracks.

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

**Name of individual from Contractor notified:** Chang Bao Qian

**Time and method of notification:** 1130 hours, Verbal

**Name of Caltrans Engineer notified:** Ching Chao and Bill Howe

**Time and method of notification:** 1230 hours, Verbal

**QC Inspector's Name:** Huang Min

**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, +(86) 134.7247.7571, who represents the Office of Structural Materials for your project.

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**Inspected By:** Carreon,Albert

Lead Reviewer/Task Leader

**Reviewed By:** Wahbeh,Mazen

SMR



**DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge**

333 Burma Road  
Oakland CA 94607  
Tel: Fax:

**NON-CONFORMANCE REPORT TRANSMITTAL**

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

**Date:** 25-Dec-2009

**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:** 05.03.06-000526

**Subject:** NCR No. ZPMC-0493

**Reference Description:** Transverse Linear indication discovered with MT after the contractor's NDT acceptance for Segment 12CW

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 verification Magnetic Particle Testing (MT) of the OBG Side Plate (Segment 12CW) located in Bay # 6 as per the "NDT Inspection Notification Sheet" # 004714 submitted by ZPMC, this Caltrans Quality Assurance Inspector (QA) observed One (1) Transverse linear indication located in the fillet weld joining the T-rib to plate. The indication length measured approximately 4mm in length. The Side Plate is identified as SP3045-001-069. This indication was discovered within the area previously tested and accepted by ZPMC.

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

Submit a repair procedure to the engineer for approval. Missed MT indications by ZPMC technicians are a chronic problem. Provide training to the MT technician and provide documemation of proficiency. A response for the resolution of this issue is expected within 7 days.

**Transmitted by:** Bill Howe

**Attachments:** ZPMC-0493

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

**File:** 05.03.06

## NCR PROPOSED RESOLUTION

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

**Dated:** 13-Jan-2010

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

**Attention:** Pursell, Gary  
Resident Engineer

**Job Name:** SAS Superstructure

**Ref:** 05.03.06-000526

**Document No.:** ABF-NPR-000481 **Rev:** 00

**Subject:** NCR No. ZPMC-0493

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### Contractor's Proposed Resolution:

**Reference Resolution:** The indication was immediately removed by small amount of grinding in the presence of the CT inspector, re-inspected and accepted by all parties.

ZPMC acknowledges the indication was missed, however, the indication was immediately removed by small amount of grinding in the presence of the CT inspector, re-inspected and accepted by all parties. The ABF QCM has conducted a refresher training regarding the missed indications. The agenda and training roster are attached.

**Submitted by:** Lawton, Steve

**Attachment(s):** ABF-NPR-000481R00;

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### Caltrans' comments:

**Status:** REJ

**Date:** 13-Jan-2010

This NCR requires an MT report for the SP3045-001-069 and therefore is rejected.

**Submitted by:** Howe, Bill

**Date:** 13-Jan-2010

**Attachment(s):**



No. B-580

## LETTER OF RESPONSE

**TO: American Bridge/Flour**

**DATE: 2010-1-13**

**REGARDING: NCR-00520 (ZPMC-0493)**

With this letter of response, ZPMC requests closure of CT NCR-00520 (ZPMC-0493), what mentioned that CT Inspector observed missed MT indication.

- The MT indication was removed by slight grinding.
- This CT inspector witnessed this grinding process and verified the removal.
- Please confirm with this CT inspector.

Based on the taken actions, ZPMC requests closure of this NCR.

**ATTACHMENT:**

NCR-00520 (ZPMC-0493)

A handwritten signature in black ink, appearing to be "Lm" followed by a flourish.

1/13/10



DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge  
333 Burma Road  
Oakland CA 94607  
Tel: Fax:

## NON-CONFORMANCE REPORT TRANSMITTAL

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

**Date:** 25-Dec-2009

**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:** 05.03.06-000526

**Subject:** NCR No. ZPMC-0493

**Reference Description:** Transverse Linear indication discovered with MT after the contractor's NDT acceptance for Segment 12CW

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 verification Magnetic Particle Testing (MT) of the OBG Side Plate (Segment 12CW) located in Bay # 6 as per the "NDT Inspection Notification Sheet" # 004714 submitted by ZPMC, this Caltrans Quality Assurance Inspector (QA) observed One (1) Transverse linear indication located in the fillet weld joining the T-rib to plate. The indication length measured approximately 4mm in length. The Side Plate is identified as SP3045-001-069. This indication was discovered within the area previously tested and accepted by ZPMC.

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

Submit a repair procedure to the engineer for approval. Missed MT indications by ZPMC technicians are a chronic problem. Provide training to the MT technician and provide documemation of proficiency. A response for the resolution of this issue is expected within 7 days.

**Transmitted by:** Bill Howe

**Attachments:** ZPMC-0493

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

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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-000520

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

**Date:** 25-Nov-200

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

**NCR #:** ZPMC-04

**Type of problem:**

- Welding  Concrete  Other   
 Welding  Curing  Procedural   
 Joint fit-up  Coating  Other   
 Procedural  Procedural  Description:

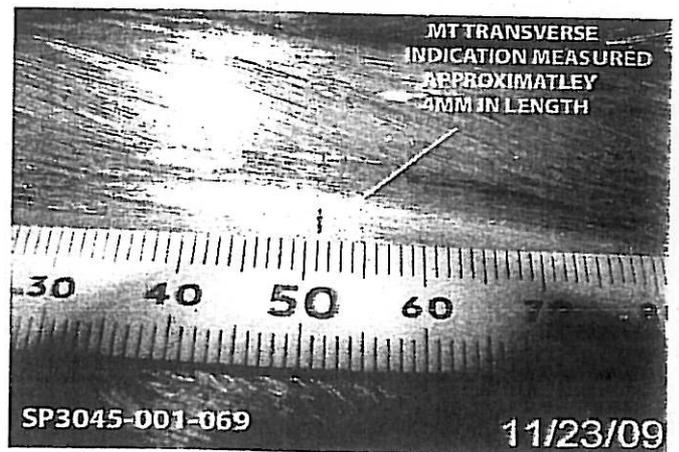
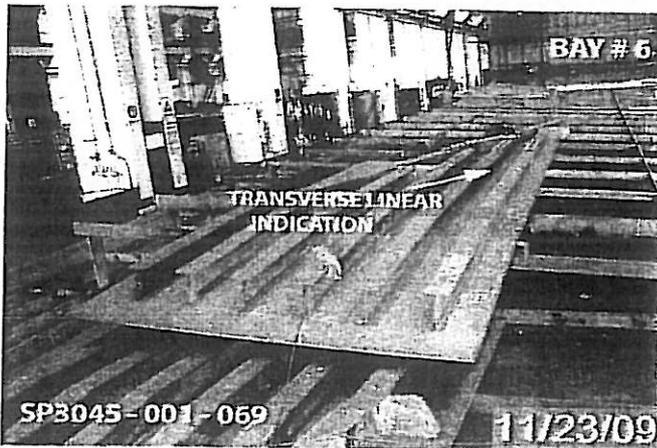
**Bridge No:** 34-0006

**Component:** Segment 12CW Weld # SP3045-001-069

**Reference Description:** Transverse Linear indication discovered with MT after the contractor's NDT acceptance for Segment 12CW

**Description of Non-Conformance:**

During random verification Magnetic Particle Testing (MT) of the OBG Side Plate (Segment 12CW) located in Bay # 6 as per the "NDT Inspection Notification Sheet" # 004714 submitted by ZPMC, this Caltrans Quality Assurance Inspector (QA) observed One (1) Transverse linear indication located in the fillet weld joining the T-rib to plate. The indication length measured approximately 4mm in length. The Side Plate is identified as SP3045-001-069. This indication was discovered within the area previously tested and accepted by ZPMC.



# QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)



### 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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**Name of individual from Contractor notified:** Chang Bao Qian

**Time and method of notification:** 1130 hours, Verbal

**Name of Caltrans Engineer notified:** Ching Chao and Bill Howe

**Time and method of notification:** 1230 hours, Verbal

**QC Inspector's Name:** Huang Min

**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, +(86) 134.7247.7571, who represents the Office of Structural Materials for your project.

**Inspected By:** Carreon, Albert

**Reviewed By:** Wahbeh, Mazen

Lead Reviewer/Task Leader  
SMR



教育培训纪录

培训编号: MT-22-Dec-09

培训内容:	MT Techniques
培训对象:	项目质检
授课人员:	Steve Lawton
培训类型:	内部培训
培训时间:	22-Dec-09 5:00 PM
计划培训地点:	ZPMC QC office

人员签到:

姓名	部门	姓名	部门
孙力杰 Sunlei	钢桥	狄坤伦 Di Kunlun	钢桥
孙广强 Sun Guangqiang	钢桥	蔡新鑫 Cai Xinxin	钢桥
徐海 Xu Hai	钢桥	傅春强 Fu Chunqiang	钢桥
卞源源 Bian Yuanyuan	钢桥	顾云武 Gu Yunwu	钢桥
许兵 Xu Bing	钢桥	金建廷 Jin Jianting	钢桥 MT
李振华 Li Zhenhua	钢桥	常方杰 Chang Fangjie	钢桥
李坤阳 Li Xunyang	QA	袁俊 Yuan Jun	钢桥
王威 Wang Wei	钢桥	刘章敏 Liu Zhangmin	
孙林 Sun Lin	钢桥 MT	徐华祥 Xu Huaxiang	钢桥
丁阿成 Ding A Cheng	钢桥 MT	周东超 Zhou Dongchao	钢桥
贺佳佳 He Jiajia	钢桥	赵成功 Zhao Chenggong	钢桥
黄瑞 Huang Rui	钢桥	孙广强 Sun Guangqiang	钢桥
李黎明 Li Liming	钢桥	徐辉 Xu Hui	钢桥
李昌涛 Li Changtao		刘宏斌 Liu Hongbin	

# Tool Box Training Agenda

**Subject:** MT Techniques

**Reason for Training:** Several CT NCR's of indications missed during ZPMC NDT inspection.

## 1. Safety

- a. Safety Glasses
- b. Gloves (if required)
- c. Knee Pads
- d. Electrical shock

## 2. Tools

- a. Lighting
- b. MT Powder.                      Red for ambient,      Yellow for High Temperature.
- c. Powder Bulb
- d. Powder Blower
- e. MT Yoke                          Adequate working condition
- f. Pie Gage

## 3. Inspection Techniques

- a. Lighting
- b. Position of body (distance of eyes to the weld surface)
- c. Application of Powder      removal of Powder
- d. Continuous method
- e. Two directions
- f. Both sides of weld
- g. Clean and dry surface

## NCR PROPOSED RESOLUTION

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

**Attention:** Pursell, Gary  
Resident Engineer

**Ref:** 05.03.06-000526

**Subject:** NCR No. ZPMC-0493

**Dated:** 18-Jan-2010

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

**Job Name:** SAS Superstructure

**Document No.:** ABF-NPR-000481 Rev: 01

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### Contractor's Proposed Resolution:

**Reference Resolution:** As a means of preventing future occurrences, the ABF QCM has performed refresher MT training. See attached MT training agenda and attendance roster.

As it is necessary to respond to the NCR with a proposed plan of action, ABF is doing so without all of the repair documentation at this time. As a means of preventing future occurrences, the ABF QCM has performed refresher MT training. See attached MT training agenda and attendance roster. The ABF QCM has been discussing missed MT indications with the ZPMC QCM and related NDT supervisory personnel. The ZPMC level III is in the process of assessing personnel, techniques and equipment. Preliminary findings have resulted in ZPMC taking immediate action by performing 100% overchecks of the previously tested areas beginning the week of 18 January 09 as a means of preventing future NCR's for missed indications. ABF has purchased powder dispensers for all the ZPMC MT technicians as a means to help control the amount of powder applied during MT testing. ZPMC requests this NCR be placed in the Approved Action Pending status category until such time that all the repair documents have been assembled and submitted.

**Submitted by:** Lawton, Steve

**Attachment(s):** ABF-NPR-000481R01;

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### Caltrans' comments:

**Status:** AAP

**Date:** 24-Jan-2010

The preventative measures taken by the QCM and the proposed resolution for closing NCR submitted by the contractor are acceptable. The NCR will be closed upon completion of the repair and review of the repair documents by the Engineer when submitted by the contractor.

**Submitted by:** Chao, Ching

**Attachment(s):**

**Date:** 24-Jan-2010

# Tool Box Training Agenda

**Subject:** MT Techniques

**Reason for Training:** Several CT NCR's of indications missed during ZPMC NDT inspection.

## 1. Safety

- a. Safety Glasses
- b. Gloves (if required)
- c. Knee Pads
- d. Electrical shock

## 2. Tools

- a. Lighting
- b. MT Powder.                      Red for ambient,      Yellow for High Temperature.
- c. Powder Bulb
- d. Powder Blower
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- f. Pie Gage

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- c. Application of Powder      removal of Powder
- d. Continuous method
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- f. Both sides of weld
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教育培训纪录

培训编号: MT-22-Dec-09

培训内容:	MT Techniques
培训对象:	项目质检
授课人员:	Steve Lawton
培训类型:	内部培训
培训时间:	22-Dec-09 5:00 PM
计划培训地点:	ZPMC QC office

人员签到:

姓名	部门	姓名	部门
孙力杰 Sunlei	钢桥	狄坤伦 Di Kunlun	钢桥
孙功强 Sun Gongqiang	钢桥	蔡新鑫 Cai Xinxin	钢桥
徐海 Xu Hai	钢桥	傅春强 Fu Zhongqiang	钢桥
卞源源 Bian Yuanyuan	钢桥	顾云武 Gu Yunwu	钢桥
许兵 Xu Bing	钢桥	金建廷 Jin Jianting	钢桥 MT
李振华 Li Zhenhua	钢桥	常方杰 Chang Fangjie	钢桥
李坤阳 Li Xunyang	QA	袁俊 Yuan Jun	钢桥
王威 Wang Wei	钢桥	刘章敏 Liu Zhangmin	
孙林 Sun Lin	钢桥 MT	徐华祥 Xu Huaxiang	钢桥
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李黎明 Li Liming	钢桥	徐辉 Xu Hui	钢桥
李昌涛 Li Changtao		刘宏斌 Liu Hongbin	

## NCR PROPOSED RESOLUTION

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

**Attention:** Pursell, Gary  
Resident Engineer

**Ref:** 05.03.06-000526

**Subject:** NCR No. ZPMC-0493

**Dated:** 14-Apr-2010

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

**Job Name:** SAS Superstructure

**Document No.:** ABF-NPR-000481 Rev: 02

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### Contractor's Proposed Resolution:

**Reference Resolution:** After grinding the weld size was insufficient so ZPMC performed a weld repair as documented in the attached WRR and performed NDT after to show that the weld is acceptable.

ZPMC has removed the indication with grinding as witnessed by the Department's inspector. After grinding the weld size was insufficient so ZPMC performed a weld repair as documented in the attached WRR and performed NDT after to show that the weld is acceptable. Based on that ZPMC requests closure of this NCR.

**Submitted by:** Ishibashi, Joshua

**Attachment(s):** ABF-NPR-000481R02;

---

### Caltrans' comments:

**Status:** CLO

**Date:** 20-Apr-2010

This proposed resolution is acceptable. The documentation received is sufficient and the Department concurs that Non-Conformance ZPMC-0493 is closed

**Submitted by:** Ku, Stanley

**Attachment(s):**

**Date:** 20-Apr-2010



No. B-728

## LETTER OF RESPONSE

**TO: American Bridge/Flour**

**DATE: 2010-4-13**

**REGARDING: NCR-000520(ZPMC-0493)**

The indication was removed by a little grinding with the witness of CT inspector. WRR was written to fix the insufficient weld size. This panel has been green tagged after then. ZPMC is providing the WRR and NDT record and is requesting closure of this NCR.

**ATTACHMENT:**

NCR-000520(ZPMC-0493)

B-WR8771

B787-MT-16212

A handwritten signature in black ink, appearing to be 'J. M. ...', is located below the attachment list.

4/13/10



DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge  
333 Burma Road  
Oakland CA 94607  
Tel: Fax:

## NON-CONFORMANCE REPORT TRANSMITTAL

**To:** AMERICAN BRIDGE/FLUOR, A JV  
375 BURMA ROAD  
OAKLAND CA 95607  
**Date:** 25-Dec-2009  
**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:** 05.03.06-000526  
**Subject:** NCR No. ZPMC-0493

**Reference Description:** Transverse Linear indication discovered with MT after the contractor's NDT acceptance for Segment 12CW

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- Non-Conformance Resolved.

**Material Location:** OBG **Lift:** 12

### Remarks:

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### Action Required and/or Action Taken:

Submit a repair procedure to the engineer for approval. Missed MT indications by ZPMC technicians are a chronic problem. Provide training to the MT technician and provide documentation of proficiency. A response for the resolution of this issue is expected within 7 days.

**Transmitted by:** Bill Howe

**Attachments:** ZPMC-0493

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

**File:** 05.03.06

**DEPARTMENT OF TRANSPORTATION**  
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 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-000520

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

**Date:** 25-Nov-2009

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

**NCR #:** ZPMC-0493

### Type of problem:

Welding  Concrete  Other

Welding  Curing  Procedural  Bridge No: 34-0006

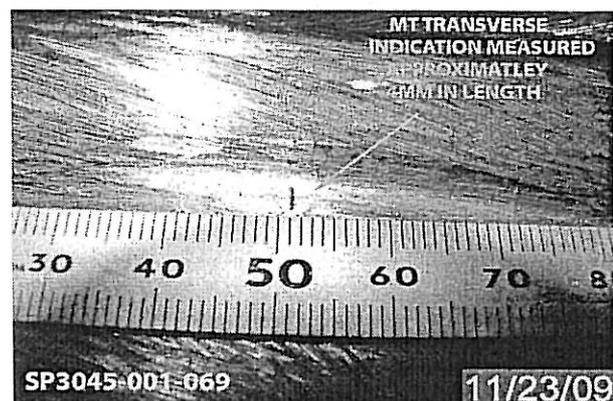
Joint fit-up  Coating  Other  Component: Segment 12CW Weld # SP3045-001-069

Procedural  Procedural  Description:

**Reference Description:** Transverse Linear indication discovered with MT after the contractor's NDT acceptance for Segment 12CW

### Description of Non-Conformance:

During random verification Magnetic Particle Testing (MT) of the OBG Side Plate (Segment 12CW) located in Bay # 6 as per the "NDT Inspection Notification Sheet" # 004714 submitted by ZPMC, this Caltrans Quality Assurance Inspector (QA) observed One (1) Transverse linear indication located in the fillet weld joining the T-rib to plate. The indication length measured approximately 4mm in length. The Side Plate is identified as SP3045-001-069. This indication was discovered within the area previously tested and accepted by ZPMC.

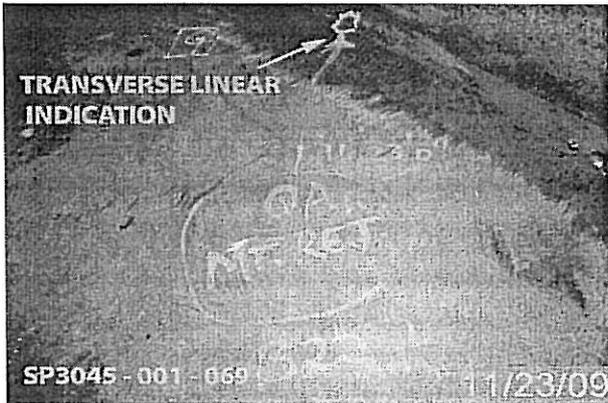


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## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

( Continued Page 2 of 2 )

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**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:** Snadeep Kumar Naddi

**Name of individual from Contractor notified:** Chang Bao Qian

**Time and method of notification:** 1130 hours, Verbal

**Name of Caltrans Engineer notified:** Ching Chao and Bill Howe

**Time and method of notification:** 1230 hours, Verbal

**QC Inspector's Name:** Huang Min

**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, +(86) 134.7247.7571, who represents the Office of Structural Materials for your project.

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**Inspected By:** Carreon,Albert

Lead Reviewer/Task Leader

**Reviewed By:** Wahbeh,Mazen

SMR

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# 焊缝返修报告

## Welding Repair Report

Rev. No.

0

项目名称 Project Name	美国海防大桥 SFOBB	零件图号 Drawing No	SP3045A	报告编号 Report No.	E-WR-771
合同号 Contract No.:	04-0120F4	部件名称 Items Name	12C-E7西线箱梁制底 板12C-E7 west box B ottom plate	NDT报告编号 Report No.of NDT	NA
项目编号 Project No.:	ZF06-737				

### 焊缝缺陷描述:

#### Description of welding discontinuity:

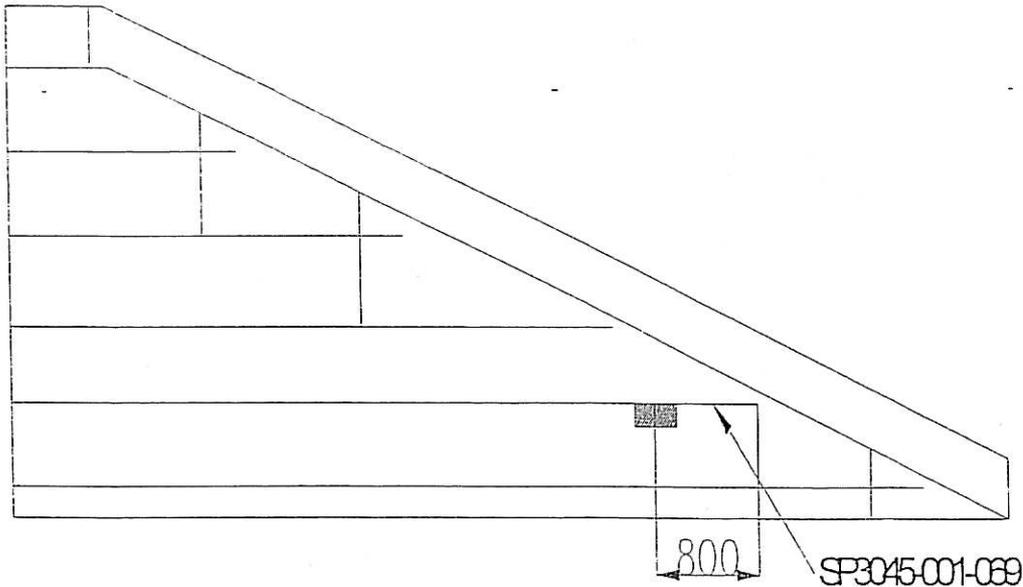
SP3045-001-069在完工打磨焊缝时, 打磨工不慎将母材磨伤达2mm之深。

The base metal was gouged after grinding, 2mm in depth, weld ID: SP3045-001-069.

检验员 (Inspector): Huang Min 日期(Date): 2009.11.24

### 焊缝返修位置示意图:

#### Draft of welding discontinuity:



产生原因

Caused:

工人操作失误，导致母材损伤。

Worker operated error caused base metal gouged.

车间负责人(Foreman): *Zhay Guiming* 日期(Date): *07.11.24*

处理意见

Disposition :

1. 按照焊接返修工艺规程 (WPS) 打磨缺陷区域;
2. 对该区域作100%MT检查, 确保缺陷全部去除;
3. 根据批准的焊接返修工艺规程 (WPS) 进行预热及焊接;
4. 将焊接区域打磨至与母材平齐;
5. 对修补区域进行VT与MT检测;

1. Remove all the defects according to the approved repair WPS by means of grinding.
2. Verify with MT and VT no defects remain in the repair area prior to-weld;
3. Preheat and weld according to the relevant WPS.
4. Grind the weld flush with base metal after welding.
5. Perform VT and MT inspection of the repaired area.

工艺:  
Technical engineer

*He Xiaolin*

审核:  
Approved by

*[Signature]*

日期  
Date

*07.11.24*



# 焊缝返修报告

## Welding Repair Report

Rev. No.

0

项目名称 Project Name	美国海河大桥 SFOBB	部件图号 Drawing No.	SP3045A	报告编号 Report No.	B-WR8771
合同号 Contract No.:	04-0120F4	部件名称 Items Name	12C-E7西线箱梁衬底板 12C-E7 west box bottom plate	NDT报告编号 Report No. of NDT	NA
项目编号 Project No.:	ZP06-787				

**纠正措施:**

Corrective action to prevent re occurrence:

培训和教育操作工，提高操作水平。

Train and educate operator to improve operation skill.

车间负责人(Foreman): *zhangguiming* 日期(Date): *09.11.24*

参照的WPS编号 Repair WPS No.	WPS-345-SMAW-2 G(2F)-Repair WPS-345-FCAW-2 G(2F)-Repair-1 WPS-345-SMAW-3 G(3F)-Repair	工艺员 technologist	<i>He Xianlin</i> <i>09.11.24</i>
返修(碳刨)前预热温度 Preheat temperature before gouging	<i>NA</i>	返修的缺陷 Description of discontinuity	<i>母材损伤</i> <i>Base metal was damaged.</i>
焊前处理检查 Inspection before welding	<i>Acc</i>	焊前预热温度 Preheat temperature before welding	<i>126</i>
最大碳刨深度 Max. depth of gouging	<i>2mm</i>	碳刨总长 Total length of gouging	<i>50</i>
焊工 welder	<i>048800</i>	焊接类型 welding type	<i>SMAW</i>
焊接电流 Current	<i>150</i>	焊接位置 position	<i>2F</i>
		焊接电压 Voltage	<i>1</i>
		焊接速度 Speed	<i>96</i>

**返修后检查**  
Inspection After repairing:

外观检查 VT result	<i>Acc</i>	检验员 Inspector	<i>CoTia</i>	日期 Date	<i>09.11.28</i>
NDT复检 NDT result	<i>MIA/C</i>	探伤员 NDT person	<i>Xu Hua Xiang</i>	日期 Date	<i>2009.11.28</i>

见证:  
Witness/Review:

备注:  
Remark:



**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-000589**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 16-Apr-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0493**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:** 25-Nov-2009**Description of Non-Conformance:**

During random verification Magnetic Particle Testing (MT) of the OBG Side Plate (Segment 12CW) located in Bay # 6 as per the "NDT Inspection Notification Sheet" # 004714 submitted by ZPMC, this Caltrans Quality Assurance Inspector (QA) observed One (1) Transverse linear indication located in the fillet weld joining the T-rib to plate. The indication length measured approximately 4mm in length. The Side Plate is identified as SP3045-001-069. This indication was discovered within the area previously tested and accepted by ZPMC.

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

Remove indication by grinding and perform NDT required to verify indication has been successfully removed.

**Corrective action taken:**

Indication was removed by grinding. After grinding a WRR was issued by the Contractor to repair weld profile. Contractor supplied subsequent NDT documentation verifying weld is now in conformance with 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:**

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**Inspected By:** Simonis, Jim

Quality Assurance Inspector

**Reviewed By:** Wahbeh, Mazen

QA Reviewer