

**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-000049**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 30-Dec-2007**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0048**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 L/R
<b>Joint fit-up</b>	<b>Coating</b>	<b>Other</b>	<b>Component:</b> Tower-114m Mockup
<b>Procedural</b>	<b>Procedural</b>	<b>Descriptor:</b>	Lower section 114m mockup

**Description of Non-Conformance:**

ZPMC NDT technician was only conducting ultrasonic testing from face "A" and "B" only. The QA inspector observed that no testing (straight beam or shear wave) has been conducted from face "C." The QA inspector noted the ZPMC technician marked the weld as acceptable.

**Applicable reference:**

Special Provisions, Section 10-1.59, pg. 333, Item 12. "Scanning for ultrasonic examination of corner, tee and cruciform welds in thicknesses greater than 50 mm shall include base metal behind and adjacent to the welds."

**Who discovered the problem:** Scott Croff**Name of individual from Contractor notified:****Time and method of notification:****Name of Caltrans Engineer notified:** Ching Chao**Time and method of notification:** 1/10/08, Verbal**QC Inspector's Name:** Li Li Ming**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 Patrick Lowry, 916-227-5719, who represents the Office of Structural Materials for your project.

**Inspected By:** Croff, Scott

Quality Assurance Inspector

**Reviewed By:** Cuellar, Robert

QA Reviewer



**DEPARTMENT OF TRANSPORTATION**  
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 Enterprises, a JV  
375 Burma Road  
Oakland CA 94607

**Date:** 08-Feb-2008

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

**Attention:** Dave Williams          Consultant

**Job Name:** SAS Superstructure

**Document No:** 05.03.06-000011

**Subject:** NCR No. ZPMC-0048

The attached Non-Conformance Report describes an occurrence where the contractor did not comply with a requirement of the contract document as indicated below:

Non-Conformance with quality control procedures. Please take appropriate corrective action. Recurrence may require further administrative action.

Non-Conformance with quality control. Records indicate that this is a recurring issue and constitutes a systematic problem in quality control. Within fourteen (14) days, please submit a plan to correct the deficiency.

Material or workmanship is not in compliance with contract requirements.

**Enclosed please find the following items:**

**NCR No:** ZPMC-0048

**Remarks:**

Please see the attached NCR for details.

**Transmitted by:** Ching Chao

**cc:** Rick Morrow, Gary Pursell, Peter Siegenthaler, Mark Woods, Doug Coe, Jason Tom, Dave Williams, Contract Files, Kannu Balan, Chin

**File:** 05.03.06

## NCR PROPOSED RESOLUTION

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

**Attention:** Pursell, Gary  
Resident Engineer

**Ref:** 05.03.06-000011

**Subject:** NCR No. ZPMC-0048

**Dated:** 23-Apr-2008

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

**Job Name:** SAS Superstructure

**Document No.:** ABF-NPR-000015 **Rev:** 00

---

### Contractor's Proposed Resolution:

**Reference Resolution:** UT procedure corrected immediately on shop floor

Please see the attached response from ZPMC. ABF JV has reviewed and concurs with this response and considers this issue resolved. ABF JV believes, based on our understanding of the NCT process that this NCR was issued closed as the top (first) box on the NCT was checked. Please confirm.

**Submitted by:** Kanapicki, Charles

**Attachment(s):** ABF-NPR-000015R00;

---

### Caltrans' comments:

**Status:** CLO

**Date:** 24-Jun-2008

Straight-beam Ultrasonic Testing (UT) of all 'C' sides was performed, and has continued to be performed since this occurrence. Therefore, we concur that Non-Conformance ZPMC-0048 is closed.

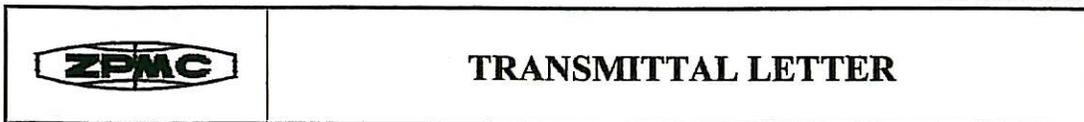
Regarding the comment about ABF's understanding of the NCT process, each Non-Conformance requires a response unless the NCT form specifically states that the NCR is resolved.

**Submitted by:** Wright, Doug

**Attachment(s):**

**Date:** 24-Jun-2008

TL-000785R1



PROJECT: SAN FRANCISCO OAKLAND BAY BRIDGE

DATE: 03/17/2008

TO: RUBY/ ABFJV QA DEPARTMENT

FROM: ZPMC QA DEPARTMENT

SUBJECT: NCR(NCR-000049) FOR CLOSURE / ZPMC AB CJK 4/23/08

SUBMITTED FOR YOUR APPROVAL AND SUBMITTAL TO CALTRANS.

ENCLOSED WITH THIS TRANSMITTAL IS ONE

- (1) COPY OF LETTER OF RESPONSE WITH NO.CT-89 FOR CLOSURE.
- (2) COPY OF NCR WITH NUMBER NCR-000049. / ZPMC AB CJK 4/23/08

PLEASE SIGN THIS TRANSMITTAL AND RETURN TO ME.

ACKNOWLEDGEMENT:

*Ruby Li*

---

PLAN HOLDER

*3/18/08 1050*

---

DATE

*ABFJV*

---

COMPANY

---

PHONE NO.

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



No. CT-89

## LETTER OF RESPONSE

**TO:** American Bridge/Flour JV

**DATE:** 2007-2 -25

**REGARDING:** NCR-000049 (ZPMC-0048)

ZPMC received CT NCR-000049 on 21-Feb-2008, it mentioned ZPMC NDT technician was only conducting ultrasonic testing from face "A" and "B" only, and no testing ( straight beam or shear wave) has been conducted from face "C". At first ZPMC thought the NDT technician can do the UT only from face "A" and "B", since the ultrasonic wave also can test the "C" side base metal from "A" side or "B" side. Further more, it doesn't point out the technician shall use the straight beam or shear wave probe to test the "C" side base metal according to the Item 12 on the Special Provision " Scanning for ultrasonic examination of corner, tee and cruciform welds in thicknesses greater than 50mm shall include base metal behind and adjacent to the welds.". There was the divarication between ZPMC and CT inspector, but after the discussion ZPMC adopted CT's opinion and performed all "C" side UT using the straight beam probe right away.

So ZPMC requests Caltrans can close NCR-000049 (ZPMC-0048).

**ATTACHMENT:**

NCR-000049 (ZPMC-0048)

*Lu Tranhua*  
*02/26/08*

*REVIEWED*  
*ABY CUM*  
*10 APRIL 08*



DEPARTMENT OF TRANSPORTATION  
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 Enterprises, a JV  
375 Burma Road  
Oakland CA 94607

Date: 08-Feb-2008

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

Attention: Dave Williams Consultant

Job Name: SAS Superstructure

Document No: 05.03.06-000011

Subject: NCR No. ZPMC-0048

The attached Non-Conformance Report describes an occurrence where the contractor did not comply with a requirement of the contract document as indicated below:

- Non-Conformance with quality control procedures. Please take appropriate corrective action. Recurrence may require further administrative action.
- Non-Conformance with quality control. Records indicate that this is a recurring issue and constitutes a systematic problem in quality control. Within fourteen (14) days, please submit a plan to correct the deficiency.
- Material or workmanship is not in compliance with contract requirements.

Enclosed please find the following items:

NCR No: ZPMC-0048

Remarks:

Please see the attached NCR for details.

Transmitted by: Ching Chao

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Mark Woods, Doug Coe, Jason Tom, Dave Williams, Contract Files, Kannu Balan, Chin

File: 05.03.06

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

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

Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.25B

**QUALITY ASSURANCE -- NON-CONFORMANCE REPORT**

Location: Changxing Island, Shanghai, PRC

Report No: NCR-000049

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 30-Dec-2007

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

NCR #: ZPMC-0048

**Type of problem:**Welding  Concrete  Other Welding  Curing  Procedural  Bridge No: 34-0006 L/RJoint fit-up  Coating  Other  Component: Tower-114m MockupProcedural  Procedural  Description: Lower section 114m mockup**Description of Non-Conformance:**

ZPMC NDT technician was only conducting ultrasonic testing from face "A" and "B" only. The QA inspector observed that no testing (straight beam or shear wave) has been conducted from face "C." The QA inspector noted the ZPMC technician marked the weld as acceptable.

**Applicable reference:**

Special Provisions, Section 10-1.59, pg. 333, Item 12. "Scanning for ultrasonic examination of corner, tee and cruciform welds in thicknesses greater than 50 mm shall include base metal behind and adjacent to the welds."

Who discovered the problem: Scott Croff

Name of individual from Contractor notified:

Time and method of notification:

Name of Caltrans Engineer notified: Ching Chao

Time and method of notification: 1/10/08, Verbal

QC Inspector's Name: Li Li Ming

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 Patrick Lowry, 916-227-5719, who represents the Office of Structural Materials for your project.

Inspected By: Croff, Scott

Quality Assurance Inspector

Reviewed By: Cuellar, Robert

QA Reviewer

**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-000050**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 19-May-2008**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0048**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 L/R
<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:** 30-Dec-2007**Description of Non-Conformance:**

ZPMC NDT technician was only conducting ultrasonic testing from face "A" and "B" only. The QA inspector observed that no testing (straight beam or shear wave) has been conducted from face "C." The QA inspector noted the ZPMC technician marked the weld as acceptable.

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

ZPMC did not understand that there was a requirement to perform UT inspections from Face 'C' prior to this incident. After discussion with Caltrans, ZPMC understood the requirement and agreed to perform straight-beam UT inspection of all 'C' sides.

**Corrective action taken:**

ZPMC performed straight-beam UT of all 'C' sides and agreed that this will also be performed on future inspections.

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

**Inspected By:** McReynolds, Robert

Quality Assurance Inspector

**Reviewed By:** Wahbeh, Mazen

QA Reviewer