

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-000118**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 12-Apr-2008**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0113**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: DP-136-001
Procedural	Procedural	Descriptor:	OBG Deck Panel

Reference Description:**Description of Non-Conformance:**

The Contractor performed repairs on closed rib to box shell plate weld and on base metal without receiving prior Engineer approval. The Contractor performed repairs for excessive porosity on the GMAW root pass at weld numbers -003, -004, -007 and -008 on deck panel DP-136-001. The porosity in weld -008 was excavated into the base metal and repaired by using hand held GMAW equipment. All other welds were repaired using the Gantry closed rib welding machine.

Applicable reference:

Special Provisions, Section 10-1.59 Steel Structures, Subsection, Welding of Closed Ribs to Box Shell Plate (p. 328): "Repair welding methods and procedures shall be approved by the Engineer."
Contractor's Welding Quality Control Plan, Section 9.2.1.2: "Prior approval of the Engineer shall be obtained for repairs to base metal...."

Who discovered the problem: QA Inspector Steve Hall**Name of individual from Contractor notified:** ABFJV QC Inspector Art Peterson**Time and method of notification:** 4/13/08, 2015, via phone**Name of Caltrans Engineer notified:** Stanley Ku**Time and method of notification:** 4/14/2008, 1410, verbal**QC Inspector's Name:** ZPMC QC Inspector Li Yan hua**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.

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Inspected By: Lowry,Patrick

Quality Assurance Inspector

Reviewed By: Lowry,Patrick

QA Reviewer



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 Enterprises, a JV
375 BURMA ROAD
OAKLAND CA 95607

Date: 16-Apr-2008

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

Dear: Mr. Charles Kanapicki

Job Name: SAS Superstructure

Attention: Mr. Dave Williams Consultant

Document No: 05.03.06-000094

Subject: NCR No. ZPMC-0113

Reference Description: The Contractor performed repairs on closed rib to box shell plate weld and on base metal without receiving

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 - No Response Required.

Material Location: OBG **Lift:**

Remarks:

The Contractor performed repairs for excessive porosity on the GMAW root pass at weld numbers -003, -004, -007 and -008 on deck panel DP-136-001. The porosity in weld -008 was excavated into the base metal and repaired by using hand held GMAW equipment. All other welds were repaired using the Gantry closed rib welding machine.

Action Required and/or Action Taken:

This is a recurring issue. A response for the resolution of this issue is expected within 14 days.

Transmitted by: Stanley Ku Sr. Bridge Engineer

Attachments: ZPMC-0113

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

File: 05.03.06

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000094

Subject: NCR No. ZPMC-0113

Dated: 18-Aug-2008

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000072 **Rev:** 00

Contractor's Proposed Resolution:

Reference Resolution: The fabricator proceeded with repairs per the approved external weld repair procedure. Grinding, welding and subsequent NDT was performed as stated in the repair procedure. We consider this NCR closed.

Please see attached.

Submitted by: Kanapicki, Charles

Attachment(s): ABF-NPR-000072R00;

Caltrans' comments:

Status: REJ

Date: 11-Sep-2008

The response is not acceptable. The excavation of base metal was not described in the approved repair procedure. If the excavation of base metal is necessary for the repair of undercut, this to be incorporated into the repair procedure, and the maximum depth of the excavation of base metal is to be specified in the repair procedure.

Submitted by: Wright, Doug

Attachment(s):

Date: 11-Sep-2008

DEPARTMENT OF TRANSPORTATION

CHINA FABRICATION TEAM

506 Shangcheng Rd., Pudong New District
Shanghai 200120, PRC

REVIEW OF CONTRACTOR'S TRANSMITTAL

To: Dave Williams, American Bridge – Fluor, a Joint Venture
Gary Pursell, Resident Engineer

Review Date: 07/21/2008From: Chengwen Liu, Structure Materials RepresentativeContract No.: 04-0120F4Date/Time Submittal Received: 07-18-2008
 China Standard Time
(GMT+08:00)
Contractor's Transmittal #: TL-08-1517 Rev. # 00

<input type="checkbox"/> substantially complies with contract requirements and is approved	
<input type="checkbox"/> substantially complies with contract requirements and is approved as noted.	
<input checked="" type="checkbox"/> Lacks sufficient information and/or contains unacceptable items that must be corrected or prior to resubmittal	
Verbal Notification	<input type="checkbox"/> No <input type="checkbox"/> Yes Date: _____ Time: _____
Name of individual from Contractor Notified: _____	
This submittal is a:	<input type="checkbox"/> Welding Report <input type="checkbox"/> Critical Weld Repair <input type="checkbox"/> Request for Information <input type="checkbox"/> Heat Straightening Request <input type="checkbox"/> Fabrication Procedures <input checked="" type="checkbox"/> Other: Response to NCR
Submitting Contractor: <u>ZPMC</u>	
ITEMS REVIEWED	COMPLIES
1.	Response to NCR # ZPMC-0113* (* should be ZPMC-0133)
	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Repair Procedure for U-rib Welds (surface defects only), Section 2.3.2 states: "When undercut value > 0.25 mm, clear the weld surface to prepare for weld repair, and repair the welds according to step 2.2." Please note excavation of base metal was not described in the approved repair procedure. If the excavation of base metal is necessary for the repair of undercut defects, METS recommends this to be incorporated into the repair procedure. Also, METS recommends the maximum depth of the excavation of base metal to be specified in the repair procedure. Please note Transmittal TL-08-1517 contained response to NCR # ZPMC-0133, instead of ZPMC-0113.	
2.	<input type="checkbox"/> Yes <input type="checkbox"/> No
3.	<input type="checkbox"/> Yes <input type="checkbox"/> No
4.	<input type="checkbox"/> Yes <input type="checkbox"/> No
5.	<input type="checkbox"/> Yes <input type="checkbox"/> No

Remarks: METS has completed the review of ABF-TL-08-1517, which consists of response to NCR # ZPMC-0133. METS recommends the aforementioned documentation to be revised and resubmitted.

Reviewer: Ady Velasco *AV*Date: 07/21/2008
 Construction Concurrence: cc Initial 7/24/08 Date
Received by (ABVJV): py Date: 7/24/08 Time: 1100

17 July 2008

Reply to: SL-ABF-08-0127

Attention: Gary Pursell

Reference: San Francisco Oakland Bay SAS Bridge Superstructure
Caltrans Contract No. 04-0120F4
ABF Job No. 660110

Subject: NCR# ZPMC-0113

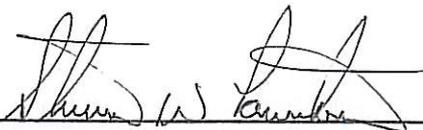
Mr. Pursell:

This letter is issued to provide formal response addressing the proposed resolution to NCR # ZPMC-0113.

The Contractor performed base metal repairs without prior approval of the engineer at weld joint #'s -001, -002, -005, -006, -009 and -010 of deck panel DP-051-001. These six areas were ground for repair of undercut to a depth between 2mm and 3.5mm.

The fabricator proceeded with repairs per the approved external weld repair procedure. Grinding, welding and subsequent NDT was performed as stated in the repair procedure, therefore we consider this NCR as closed.

If further clarifications are needed, please contact me.



Steve Lawton

Foreign Quality Assurance Manager
American Bridge Fluor Joint Venture

<input type="checkbox"/>	APPROVED
<input type="checkbox"/>	APPROVED AS NOTED
<input checked="" type="checkbox"/>	RETURNED FOR CORRECTION Pursuant to Section 5-1.02 of the Standard Specifications State of California
DEPARTMENT OF TRANSPORTATION Division of Engineering Service Office of Structure Construction	
Structure Representative	Date <u>7/24/08</u>

	<h2 style="margin: 0;">TRANSMITTAL LETTER</h2>
---	--

PROJECT: SAN FRANCISCO OAKLAND BAY BRIDGE

DATE: 06/16/2008

TO: RUBY/ ABFJV QA DEPARTMENT

FROM: ZPMC QA DEPARTMENT

SUBJECT: NCR-000139FOR CLOSURE

SUBMITTED FOR YOUR APPROVAL.

ENCLOSED WITH THIS TRANSMITTAL IS ONE

- (1) COPY OF LETTER OF RESPONSE WITH NO.B-272FOR CLOSURE.
- (2) COPY OF NCR WITH NUMBER NCR-000139 (ZPMC-0133) .

PLEASE SIGN THIS TRANSMITTAL AND RETURN TO ME.

ACKNOWLEDGEMENT:

Ruby L.

PLAN HOLDER

RECEIVED 16 JUN 2008

0903

DATE



COMPANY

PLAN NUMBER: N/A

#R787-QCP-102

<input type="checkbox"/> APPROVED <input type="checkbox"/> APPROVED AS NOTED <input checked="" type="checkbox"/> RETURNED FOR CORRECTION Pursuant to Section 5-1.02 of the Standard Specifications State of California DEPARTMENT OF TRANSPORTATION Division of Engineering Service Office of Structure Construction _____ Structure Representative	_____ Date 7/24/08
--	--



No. B-272

LETTER OF RESPONSE

TO: American Bridge/Flour JV

DATE: 2008-6-13

REGARDING: NCR000139 (ZPMC-0133)

With this letter of response, ZPMC requests closure for caltrans NCR000139 (ZPMC-0133) . We performed the U-rib panel weld surface repairs with prior approval of the procedure by engineer. In the section 2.3(undercut repair procedure) it clearly describe that contractor can repair the undercut with the same method of incomplete fusion. After we remove the incomplete fusion for welding repair ,that should grind the weld and adjacent base material to confirm the a appropriate groove. And then we can directly repair with the correct repair WPS after MT. Since the repair procedure has been approved , then we can do the repair without approval again.

So ZPMC considers NCR000139 (ZPMC-0133) can be closed.

Please check the attached documentation for closure the NCR000139.

ATTACHMENT:

NCR000139 (ZPMC-0133)

2008. 6. 13 ZhaoShuangbao

<input type="checkbox"/>	APPROVED
<input type="checkbox"/>	APPROVED AS NOTED
<input checked="" type="checkbox"/>	RETURNED FOR CORRECTION
Pursuant to Section 8-1.02 of the Standard Specifications State of California	
DEPARTMENT OF TRANSPORTATION Division of Engineering Service Office of Structure Construction	
Structure Representative	7/24/08

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000094

Subject: NCR No. ZPMC-0113

Dated: 24-Sep-2008

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000072 **Rev:** 01

Contractor's Proposed Resolution:

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

Please find attached.

Submitted by:

Attachment(s): ABF-NPR-000072R01;

Caltrans' comments:

Status: CLO

Date: 09-Nov-2008

The proposed resolution is acceptable. The repair procedure was submitted as part of ABF-SUB-634R06, and approved as noted. Also, the welds in question were accepted as shown on the attached NDT reports. The Department concurs that Non-Conformance ZPMC-0113 is closed.

Submitted by: Wright, Doug

Date: 10-Nov-2008

Attachment(s):



No. B-295

LETTER OF RESPONSE

TO: American Bridge/Flour JV

DATE: 2008-8-28

REGARDING:

NCR-000069/000070/000078/000114/000095/000098/000097/000115/000118/000084/000123

With this letter of response, ZPMC requests closure for Caltrans NCR-000069/000070/000078/000114/000095/000098/000097/000115/000118/000084/000123 (ZPMC-0067/0068/0076/0110/0093/0096/0095/0111/0113/0082/0119). All of the non-conformance reports describe it is that zpmc repair the deck panel in the work process without received the engineer approval. As considered the welding continuity in the workshop, we directly repaired the defects which caused by the cease-arc, so that the panel fabrication can keep on performing. But not waiting for the CWR report approval for a few days. At the same time we had provided the repair procedure for welding process to government's approval. Then ZPMC can repair any defects in process following that procedure.

Furthermore we also attach the correlative VT and NDT reports which after repair and the final inspection, So that it's can prove those deck panel have reached the special requirements.

So ZPMC considers

NCR-000069/000070/000078/000114/000095/000098/000097/000115/000118/000084/000123 can be closed.

Please reference attached documentation for acceptance and closure the NCR-000069/000070/000078/000114/000095/000098/000097/000115/000118/000084/000123.

ATTACHMENT:

NCR-000069/000070/000078/000114/000095/000098/000097/000115/000118/000084/000123 (ZPMC-0067/0068/0076/0110/0093/0096/0095/0111/0113/0082/0119)

VT and MT reports which in the repair process

FVT and final MT reports for the deck panels

Zhuo Shuangbao

2008.8.28.

Thomas W Lamb
ABF QCM
9 SEPT. 08



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 Enterprises, a JV
375 BURMA ROAD
OAKLAND CA 95607

Date: 16-Apr-2008

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

Dear: Mr. Charles Kanapicki
Attention: Mr. Dave Williams Consultant
Subject: NCR No. ZPMC-0113

Job Name: SAS Superstructure
Document No: 05.03.06-000094

Reference Description: The Contractor performed repairs on closed rib to box shell plate weld and on base metal without receiving

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 - No Response Required.

Material Location: OBG

Lift:

Remarks:

The Contractor performed repairs for excessive porosity on the GMAW root pass at weld numbers -003, -004, -007 and -008 on deck panel DP-136-001. The porosity in weld -008 was excavated into the base metal and repaired by using hand held GMAW equipment. All other welds were repaired using the Gantry closed rib welding machine.

Action Required and/or Action Taken:

This is a recurring issue. A response for the resolution of this issue is expected within 14 days.

Transmitted by: Stanley Ku Sr. Bridge Engineer

Attachments: ZPMC-0113

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

File: 05.03.06

DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
 Office of Structural Materials
 Quality Assurance and Source Inspection

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

Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.25B

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

Location: Changxing Island, Shanghai, PRC

Report No: NCR-000118

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 12-Apr-2008

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

NCR #: ZPMC-011

Type of problem:

Welding Concrete Other
 Welding Curing Procedural Bridge No: 34-0006
 Joint fit-up Coating Other Component: DP-136-001
 Procedural Procedural Description: OBG Deck Panel

Reference Description:**Description of Non-Conformance:**

The Contractor performed repairs on closed rib to box shell plate weld and on base metal without receiving prior Engineer approval. The Contractor performed repairs for excessive porosity on the GMAW root pass at weld numbers -003, -004, -007 and -008 on deck panel DP-136-001. The porosity in weld -008 was excavated into the base metal and repaired by using hand held GMAW equipment. All other welds were repaired using the Gantry closed rib welding machine.

Applicable reference:

Special Provisions, Section 10-1.59 Steel Structures, Subsection, Welding of Closed Ribs to Box Shell Plate (p. 328): "Repair welding methods and procedures shall be approved by the Engineer."

Contractor's Welding Quality Control Plan, Section 9.2.1.2: "Prior approval of the Engineer shall be obtained for repairs to base metal..."

Who discovered the problem: QA Inspector Steve Hall

Name of individual from Contractor notified: ABFJV QC Inspector Art Peterson

Time and method of notification: 4/13/08, 2015, via phone

Name of Caltrans Engineer notified: Stanley Ku

Time and method of notification: 4/14/2008, 1410, verbal

QC Inspector's Name: ZPMC QC Inspector Li Yan hua

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.

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Inspected By: Lowry,Patrick

Quality Assurance Inspector

Reviewed By: Lowry,Patrick

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-000115**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 07-Nov-2008**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0113**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component:
Procedural	Procedural	Description:	

Date the Non-Conformance Report was written: 12-Apr-2008**Description of Non-Conformance:**

The Contractor performed repairs on closed rib to box shell plate weld and on base metal without receiving prior Engineer approval. The Contractor performed repairs for excessive porosity on the GMAW root pass at weld numbers -003, -004, -007 and -008 on deck panel DP-136-001. The porosity in weld -008 was excavated into the base metal and repaired by using hand held GMAW equipment. All other welds were repaired using the Gantry closed rib welding machine.

Contractor's proposal to correct the problem:

The Contractor provided VT and MT reports after cover pass; submittal 634R06 addressed cover pass repair procedures. Although this does not correct the systemic problem, METS was directed by Team China Construction to close the NCR.

Corrective action taken:

Closed by Caltrans Construction. METS closed the NCR based on Construction's direction.

Did corrective action require Engineer's approval? Yes No**If so, name of Engineer providing approval:** Stanley Ku and Doug Wright **Date:** 07-Nov-2008**Is Engineer's approval attached?** Yes No Email of concurrence to close NCR is on file.**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 Sang Le, who represents the Office of Structural Materials for your project.

Inspected By: Dautermann, Peter

Quality Assurance Inspector

Reviewed By: Dautermann, Peter

QA Reviewer