

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, China**Report No:** NCR-000064**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 31-Jan-2008**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0062**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: Tower-89m Mockup
Procedural	Procedural	Descriptor:	

Description of Non-Conformance:

ABF/ZPMC did not perform proper preheat in accordance with the approved WPS at two locations on the 89m mockup. The required preheat temperature according to the WPS is 180°C, the observed during temperature at the two locations was 160°C. The ZPMC QC inspector was not aware of the non conformance until the QA inspector performed his verification. This is not in conformance with AWS D1.5, 2002, Section 12.14, "Preheat and Interpass Temperature Control":

"The minimum preheat and interpass temperature for AASHTO M270M (M270) Grade 250 (36), 345 (50), 345W (50W), and 485W (70W) (ASTM A 709M (A 709) Grade 250 [36], 345 [50], 345W [50W], and 485W [70W]) steels shall be as described in Tables 12.3 and 12.4."

AWS D1.5, 2002, Section 12, Table 12.4

"M270M (M270) (A 709M [A 7091] Gr. 345W (50W), 485W (70W) Minimum Preheat and Interpass Temperatures"

Applicable reference:

1) AWS D1.5, 2002, Section 12.14, "Preheat and Interpass Temperature Control":

"The minimum preheat and interpass temperature for AASHTO M270M (M270) Grade 250 (36), 345 (50), 345W (50W), and 485W (70W) (ASTM A 709M (A 709) Grade 250 [36], 345 [50], 345W [50W], and 485W [70W]) steels shall be as described in Tables 12.3 and 12.4."

2) AWS D1.5, 2002, Section 12, Table 12.4

"M270M (M270) (A 709M [A 7091] Gr. 345W (50W), 485W (70W) Minimum Preheat and Interpass Temperatures"

Who discovered the problem: Scott Croff, Quality Assurance Inspector

Name of individual from Contractor notified:

Time and method of notification:

Name of Caltrans Engineer notified: Ching Chao, Structures Construction Senior

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Time and method of notification: 2/4/08, Verbal

QC Inspector's Name: Xu Lefeng, ZPMC Quality Control Inspector

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

Unknown at this time.

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: Wahbeh,Mazen

Quality Assurance Inspector

Reviewed By: Wahbeh,Mazen

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: 15-Feb-2008

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

Attention: Dave Williams Consultant

Job Name: SAS Superstructure

Document No: 05.03.06-000033

Subject: NCR No. ZPMC-0062

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-0062

Remarks:

Please see attachment 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: 05.03.06-000033

Subject: NCR No. ZPMC-0062

Dated: 24-Apr-2008

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000024 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: ZPMC QC is requesting more specific location information

Please see the attached response from ZPMC. ABFJV has reviewed and concurs with this response. ABFJV 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-000024R00;

Caltrans' comments:

Status: CLO

Date: 11-Nov-2008

The location information requested is the 89m Tower mock-up diaphragm plate to skin plate PJP weld identified as MUB-MA21-A/J-63.

The conditional acceptance of the 77m and 89m Tower mock-ups was addressed in State Letter 05.03.01-002737. The Department considers Non-Conformance ZPMC-0062 closed.

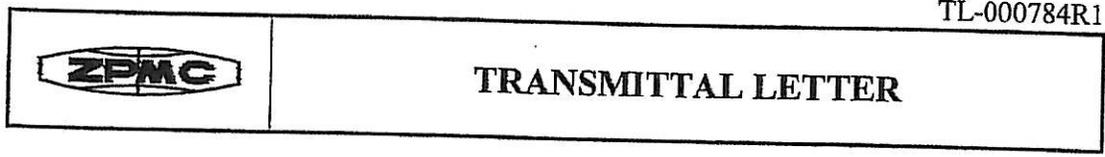
Submitted by: Wright, Doug

Attachment(s):

Date: 12-Nov-2008

NCT 33

TL-000784R1



PROJECT: SAN FRANCISCO OAKLAND BAY BRIDGE
 DATE: 03/17/2008
 TO: RUBY/ ABFJV QA DEPARTMENT
 FROM: ZPMC QA DEPARTMENT
 SUBJECT: LETTER OF RESPONSE
 REQUEST FOR REVIEW & SUBMITTAL TO CALTRANS FOR APPROVAL.

ENCLOSED WITH THIS TRANSMITTAL IS ONE

- (1) COPY OF LETTER OF RESPONSE WITH NO. ~~CT-096, CT-086, CT-087, CT-093,~~ ^{CFK} ~~CT-088~~ 4/23/08
- (2) COPY OF ~~NCR-000019, NCR-000059, NCR-000064/~~ ^{ZPMC 62} ~~NCR-000065, NCR-000068.~~ ^{CFK 4/23/08}

PLEASE SIGN THIS TRANSMITTAL AND RETURN TO ME.

ACKNOWLEDGEMENT:

Ruby L
 PLAN HOLDER

4/19/08 1050
 DATE

AN/TV
 COMPANY

 PHONE NO.

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



No. CT-87

LETTER OF RESPONSE

TO: American Bridge/Flour JV

DATE: 2007-2 -25

REGARDING: NCR-000064 (ZPMC-0062)

ZPMC received CT NCR-000064 on 21-Feb-2008, it mentioned the improper preheat 160°C was performed in accordance with 180°C the approved WPS required at two locations on 89M mockup. Due to the untimely notification and not so much detail described about the nonconformance, ZPMC can't find out the actual location and the relevant WPS' requirement concerning the nonconformance. So ZPMC can't accept this CT NCR-000064 until now and wants more information of the event to issue the internal NCR.

ZPMC requests Caltrans can withdraw NCR-000064 (ZPMC-0062).

ATTACHMENT:

NCR-000064 (ZPMC-0062)

Lu Jianhua
02/26/08



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: 15-Feb-2008

Contract No: 04-0120F4

Job Name: 04-SF-80-13.2 / 13.9

Attention: Dave Williams Consultant

Document No: 05.03.06-000033

Subject: NCR No. ZPMC-0062

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-0062

Remarks:

Please see attachment 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

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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, China

Report No: NCR-000064

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 31-Jan-2008

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

NCR #: ZPMC-0062

Type of problem:

Welding **Concrete** **Other**

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

Joint fit-up **Coating** **Other** **Component:** Tower-89m Mockup

Procedural **Procedural** **Description:**

Description of Non-Conformance:

ABF/ZPMC did not perform proper preheat in accordance with the approved WPS at two locations on the 89m mockup. The required preheat temperature according to the WPS is 180°C, the observed during temperature at the two locations was 160°C. The ZPMC QC inspector was not aware of the non conformance until the QA inspector performed his verification. This is not in conformance with AWS D1.5, 2002, Section 12.14, "Preheat and Interpass Temperature Control":

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Applicable reference:

1) AWS D1.5, 2002, Section 12.14, "Preheat and Interpass Temperature Control":

"The minimum preheat and interpass temperature for AASHTO M270M (M270) Grade 250 (36), 345 (50), 345W (50W), and 485W (70W) (ASTM A 709M (A 709) Grade 250 [36], 345 [50], 345W [50W], and 485W [70W]) steels shall be as described in Tables 12.3 and 12.4."

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"M270M (M270) (A 709M [A 7091] Gr. 345W (50W), 485W (70W) Minimum Preheat and Interpass Temperatures"

Who discovered the problem: Scott Croff, Quality Assurance Inspector

Name of individual from Contractor notified:

Time and method of notification:

Name of Caltrans Engineer notified: Ching Chao, Structures Construction Senior

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Time and method of notification: 2/4/08, Verbal

QC Inspector's Name: Xu Lefeng, ZPMC Quality Control Inspector

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

Unknown at this time.

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: Wahbeh, Mazen

Quality Assurance Inspector

Reviewed By: Wahbeh, Mazen

QA Reviewer

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QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

Location: Changxing Island, Shanghai, China**Report No:** NCS-000942**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 08-Nov-2008**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0062**Type of problem:**

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

Date the Non-Conformance Report was written: 31-Jan-2008**Description of Non-Conformance:**

ABF/ZPMC did not perform proper preheat in accordance with the approved WPS at two locations on the 89m mockup. The required preheat temperature according to the WPS is 180°C, the observed during temperature at the two locations was 160°C. The ZPMC QC inspector was not aware of the non conformance until the QA inspector performed his verification. This is not in conformance with AWS D1.5, 2002, Section 12.14, "Preheat and Interpass Temperature Control":

"The minimum preheat and interpass temperature for AASHTO M270M (M270) Grade 250 (36), 345 (50), 345W (50W), and 485W (70W) (ASTM A 709M (A 709) Grade 250 [36], 345 [50], 345W [50W], and 485W [70W]) steels shall be as described in Tables 12.3 and 12.4."

AWS D1.5, 2002, Section 12, Table 12.4

"M270M (M270) (A 709M [A 7091] Gr. 345W (50W), 485W (70W) Minimum Preheat and Interpass Temperatures"

Contractor's proposal to correct the problem:

Contractor request more information of the location of the non-conformance before issuing an internal NCR to address the issue.

Corrective action taken:

Contractor submitted NPR to request more information of the location of the non-conformance. The Department clarified in response the exact location is the 89m Tower mock-up diaphragm plate to skin plate weld identified as MUB-MA21-A/J-63. Department referred Contractor to State Letter ref.05.03.01-002737 which states that "Steel Structures," Subsection "Fabrication," the Department has concluded that the Tower Diaphragm Type 3B (77m) and the Tower Section (89m) Mock-ups are satisfactory with the condition that ABF will continue to perform partial mock-ups to develop acceptable repeatable procedures for the outstanding issues associated with the mock-ups. Department considered NCR can be closed.

Did corrective action require Engineer's approval?

QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

(Continued Page 2 of 2)

Yes No

If so, name of Engineer providing approval:

Date:

Is Engineer's approval attached? Yes No

Comments:

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Inspected By: Ng,Michael

Quality Assurance Inspector

Reviewed By: Wahbeh,Mazen

QA Reviewer