

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-000461
Prime Contractor: American Bridge/Fluor Enterprises, a JV **Date:** 05-Oct-2009
Submitting Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0434

Type of problem:

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: OBG 1AAW-1AW Splice Weld
Procedural	Procedural	Description:	

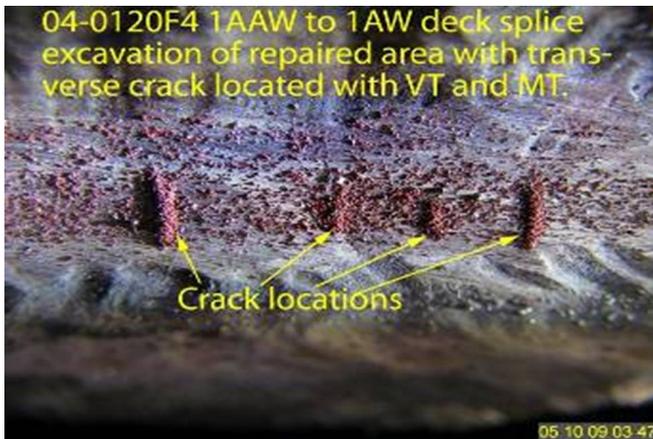
Reference Description: No MT was performed by the QC to ensure that the excavation is free of defect

Description of Non-Conformance:

During a random visual inspection of repair work located at 1AAW to 1AW splice weld OBW1-001. The Caltrans Quality Assurance (QA) Inspector observed ZPMC workers performing weld repair excavations at two (2) separate areas along this weld splice. ZPMC performed this repair utilizing the welding repair report (B-WR8006). This welding repair report did not describe any magnetic particle testing (MT) verifications in the excavation prior to re-welding nor after the completion of welding to ensure that the joint is free of defect. METS QA Inspector performed Magnetic Particle (MT) testing at the excavated areas and found some transverse cracks present in 2 excavated areas as shown below.

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2. Y location 660~3,090mm (off Cross Beam side), length of excavation 2,430mm, fifty nine (59) indications verified.



QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Applicable reference:

Special Provisions 8-3; In addition to the provisions in AWS D1.5, Section 3.7.4 and Section 12.17, regardless of NDT method, and all repairs of cracks require prior approval of the Engineer. The Engineer shall be notified immediately in writing when welding problems, deficiencies, base metal repairs, or any other type of repairs not submitted in the WQCP are discovered and also the proposed repair procedures to correct them.

AWS D1.5-2002 Section 3,7,2,4 Crack in Weld or Base Metal; The extent of the crack shall be ascertained by the use of MT, PT, or other equally positive means; the metal shall be removed for the full length of the crack plus 50mm [2"] beyond the end of each crack and re-welded.

AWS D1.5-2002 Section 6.26.2; "Welds that are subject to RT or MT in addition to visual inspection shall have no cracks and shall be unacceptable if the RT or MT shows any of the types of discontinuities described in 6.26.2.1, 6.26.2.2, 6.26.2.3, or 6.26.2.4."

AWS D1.5-2002 Section 6.26.1; "The weld shall have no cracks."

Who discovered the problem: Joe Alaniz

Name of individual from Contractor notified: Kevin Chen

Time and method of notification: 1620 hours, Verbal

Name of Caltrans Engineer notified: Ching Chao

Time and method of notification: 0800 hours, Email

QC Inspector's Name: Xu Yumin

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

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: 05-Nov-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: 05.03.06-000429

Subject: NCR No. ZPMC-0434

Reference Description: No MT was performed by the QC to ensure that the excavation is free of defect

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:** 01

Remarks:

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2. Y location 660~3,090mm (off Cross Beam side), length of excavation 2,430mm, fifty nine (59) indications verified.

Action Required and/or Action Taken:

Submit a repair procedure to the engineer for approval.

Transmitted by: Bill Howe

Attachments: ZPMC-0434

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

File: 05.03.06

NCR PROPOSED RESOLUTION

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

Dated: 20-Nov-2009

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

Attention: Pursell, Gary
Resident Engineer

Job Name: SAS Superstructure

Document No.: ABF-NPR-000426 Rev: 00

Ref: 05.03.06-000429

Subject: NCR No. ZPMC-0434

Contractor's Proposed Resolution:

Reference Resolution: ZPMC has completed repairs associated with the non conformance and is providing weld repair reports and NDT documentation to show the soundness of the weld. ZPMC requests closure of this NCR.

ZPMC has completed repairs associated with the non conformance and is providing weld repair reports and NDT documentation to show the soundness of the weld. ZPMC requests closure of this NCR.

Submitted by:

Attachment(s): ABF-NPR-000426R00;

Caltrans' comments:

Status: CLO

Date: 30-Nov-2009

The documentation submitted has been reviewed by the Engineer and is considered sufficient to close the NCR.

Submitted by: Chao, Ching

Date: 30-Nov-2009

Attachment(s):



No. B-498

LETTER OF RESPONSE

TO: American Bridge/Flour

DATE: 2009-11-20

REGARDING: NCR-000461 (ZPMC-0434)

With this letter of response, ZPMC requests closure for Caltrans NCR-000461 (ZPMC-0434). Per the meeting memo of the three parties we have done the weld repair for the transverse splice between 1AAW and 1AW deck plate. We first prepared one CWR for the engineer approval and then repair the weld with the comments and requirement of the CWR, before we start the repair all of the forman and QC were instructed with the new procedure of repairing for the planar indication which found by the UT scanning from pattern D. So far the weld has been complete with the weld repair and accepted by the UT re-inspection, the result has been also verified by the ABF and record as the formal documentation.

We are providing the related weld repair report(please find the CWR876R1 from document control)and final UT report to support the weld repair has been complete and accepted with the NDT method.

so base on the above explanation, ZPMC applies to close the caltrans's report NCR-000461 (ZPMC-0434).

Please reference attached document for acceptance and closure the NCR-000461 (ZPMC-0434).

ATTACHMENT:

NCR-000461 (ZPMC-0434)

The acceptable UT reports

A handwritten signature in black ink, which appears to read "Zhuo Shuangbao". The signature is written in a cursive, flowing style.

2009. 11. 20



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: 05-Nov-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: 05.03.06-000429
Subject: NCR No. ZPMC-0434

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Transmitted by: Bill Howe

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File: 05.03.06

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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-000461

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 05-Oct-2009

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

NCR #: ZPMC-0434

Type of problem:

Welding Concrete Other

Welding Curing Procedural

Joint fit-up Coating Other

Procedural Procedural Description:

Bridge No: 34-0006

Component: OBG 1AAW-1AW Splice Weld

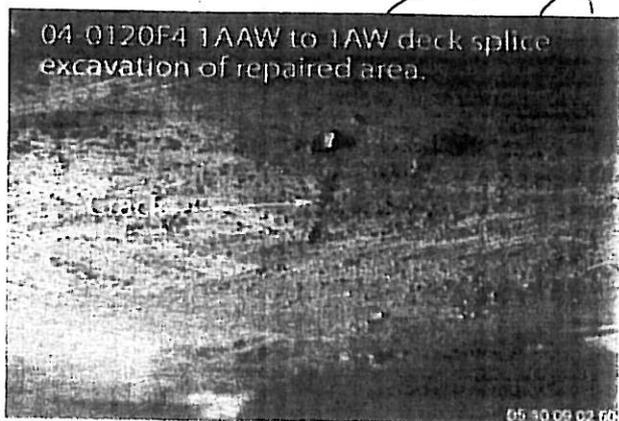
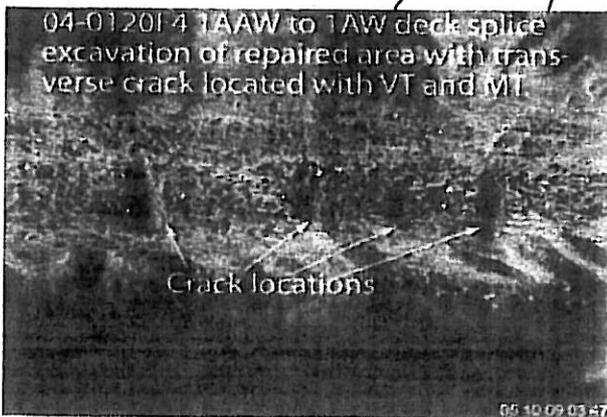
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Deck Splice

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

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Time and method of notification: 1620 hours, Verbal

Name of Caltrans Engineer notified: Ching Chao

Time and method of notification: 0800 hours, Email

QC Inspector's Name: Xu Yumin

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

N/A

Comments:

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Inspected By: Carreon,Albert

Lead Reviewer/Task Leader

Reviewed By: Wahbeh,Mazen

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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-000395**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 25-Dec-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0434**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: 05-Oct-2009**Description of Non-Conformance:**

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Contractor's proposal to correct the problem:

The contractor will repair the weld and perform NDT to verify that the weld is acceptable.

Corrective action taken:

ZPMC has repaired the indications documented in the NCR. ABFJV conducted the NDT and found that the welds are acceptable.

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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QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

(Continued Page 2 of 2)

Inspected By: Tsang, Eric

Quality Assurance Inspector

Reviewed By: Wahbeh, Mazen

QA Reviewer