

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, P.R. China**Report No:** NCR-000929**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 04-Dec-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0891**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: OBG Segment 11EE Side Panel
Procedural	Procedural	Description: Missed MT indication by QC	

Reference Description: QA found a missed MT indication after ZPMC had tested and accepted the weld (base metal repair) in Segment 11EE Side Panel

Description of Non-Conformance:

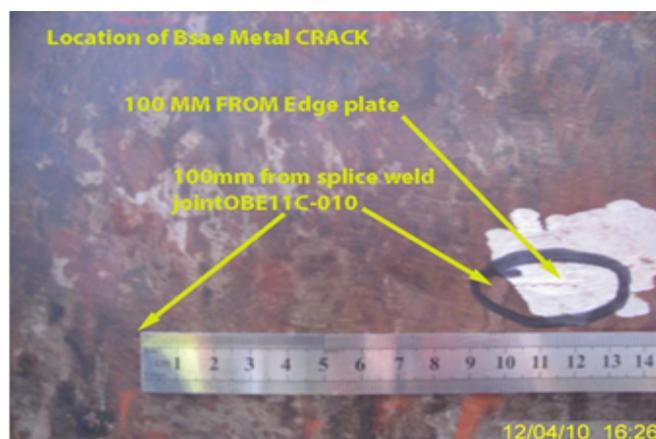
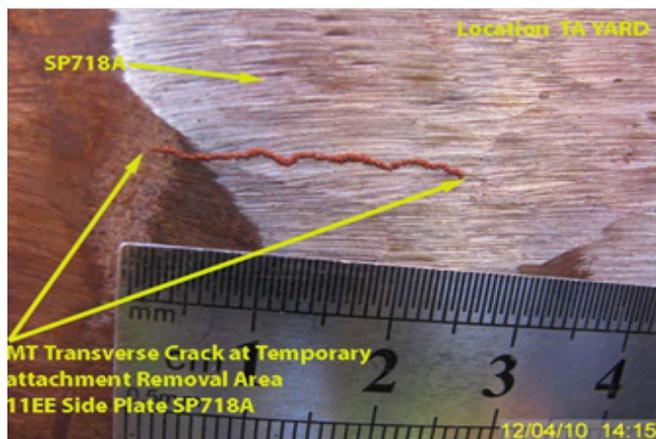
During the Quality Assurance (QA) Magnetic Particle Testing (MT) review of welds Temporary attachment Removal Area located on Orthotropic Box Girder (OBG) 11DE/11EE Transverse Splice Joint, this QA Inspector discovered the following issues:

- One transverse crack was found at the base metal after the removal of the temporary attachment. It is located near the Transverse Splice Weld Joint OBE11C-010 (joining 11DE/11EE).
- The affected side plate identified as SP718A (Segment 11EE).
- Base metal crack length measured approximately = 25mm.
- Y location = 100mm from the Transverse Splice Weld Joint OBE11C-010; 100mm from Edge Plate.
- The indication is clearly marked on the material.
- OBG 11DE/11EE is located at the trial assembly area.
- The Notice of Witness Inspection Number (NWIT) is 07619.

-This weld (base metal repair) is within an area previously tested and accepted by ABF Quality Control (QC) personnel. ABF's QC personnel are required to perform 100% MT inspection.

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 3)



Applicable reference:

Approved Shop Drawings TA100: Temporary Attachment TA100: 100%MT will be performed on the surface when the attachment has been removed.

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 subject to RT or MT in addition to visual inspection shall have no cracks

Who discovered the problem: T.Raghavendra Reddy
Name of individual from Contractor notified: Ding Xing Chi
Time and method of notification: 14:00_12/04/10_Email
Name of Caltrans Engineer notified: Laraine Woo
Time and method of notification: 17:00_12/05/10_Email
QC Inspector's Name: Zhang Wei
Was QC Inspector aware of the problem:

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 3 of 3)

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

Inspected By:	Tsang, Eric	SMR
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: 07-Dec-2010

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

Dear: Mr. Charles Kanapicki
Attention: Mr. Thomas Nilsson Project/Fabrication Manager
Subject: NCR No. ZPMC-0891

Job Name: SAS Superstructure
Document No: 05.03.06-000887

Reference Description: QA found a missed MT indication after ZPMC had tested and accepted the weld (base metal repair) in Segment 11EE Side Panel

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:** 11

Remarks:

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 - The Notice of Witness Inspection Number (NWIT) is 07619.
 - This weld (base metal repair) is within an area previously tested and accepted by ABF Quality Control (QC) personnel. ABF's QC personnel are required to perform 100% MT inspection.

Action Required and/or Action Taken:

Proposed a resolution for the identified non-conformance with revised procedures to prevent future occurrences. A response for the resolution of this issue is expected within 7 days.

Transmitted by: Laraine Woo Transportation Engineer

Attachments: ZPMC-0891

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Contract Files, Ching Chao, Bill Casey

File: 05.03.06

NCR PROPOSED RESOLUTION

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

Attention: Siegenthaler, Peter
Resident Engineer

Ref: 05.03.06-000887

Subject: NCR No. ZPMC-0891

Dated: 12-Jan-2011

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000905 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution:

"Please see ZPMC's comments"

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000905R00;

Caltrans' comments:

Status: CLO

Date: 12-Jan-2011

This proposed resolution is acceptable. The documentation received is sufficient and the Department concurs that Non-Conformance ZPMC-0891 is closed.

Submitted by: Eagen, Sean

Attachment(s):

Date: 12-Jan-2011



No. B-958

LETTER OF RESPONSE

TO: American Bridge/Flour

DATE: 2011-01-11

REGARDING: NCR-000929(ZPMC-0891)

ZPMC acknowledged this problem and has issued an internal NCR. ZPMC has repaired the indications noted in the NCR and is providing NDT documentation after the repair to show the indication has been removed. ABFJV has noted which inspector was responsible for this missed indications and is monitoring his performance as well as all inspector performance, if he continues to miss indications disciplinary action will be undertaken. Based on these actions, ZPMC requests closure of this NCR.

ATTACHMENT:

NCR-000929(ZPMC-0891)

B787-MT-32702 R1

[Handwritten signature]
1/11/2011



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

NON-CONFORMANCE REPORT TRANSMITTAL

To: AMERICAN BRIDGE/FLUOR A IV
 375 BURMA ROAD
 OAKLAND CA 95607

Date: 07-Dec-2010

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

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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-000929

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 04-Dec-2010

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

NCR #: ZPMC-0891

Type of problem:

Welding Concrete Other Welding Curing Procedural Bridge No: 34-0006Joint fit-up Coating Other Component: OBG Segment 11EE Side PanelProcedural Procedural Description: Missed MT indication by QC

Reference Description: QA found a missed MT indication after ZPMC had tested and accepted the weld
 (base metal repair) in Segment 11EE Side Panel

Description of Non-Conformance:

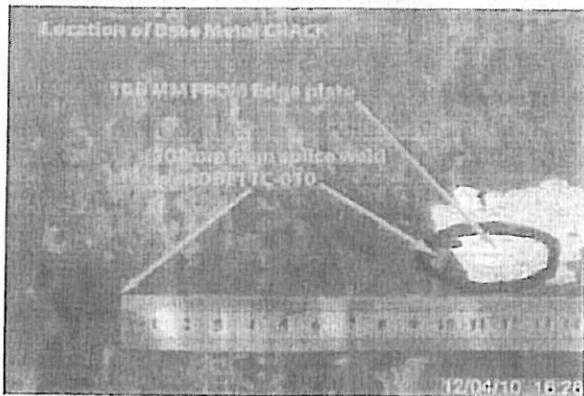
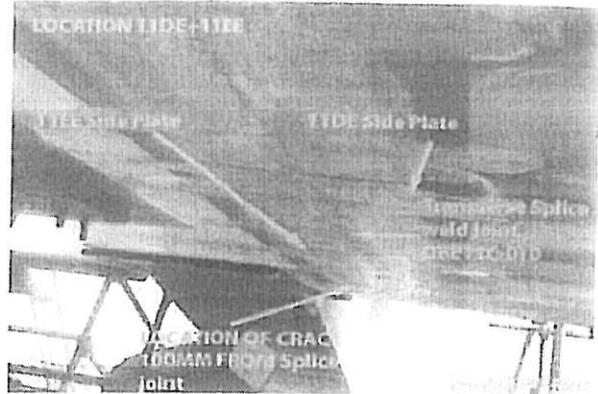
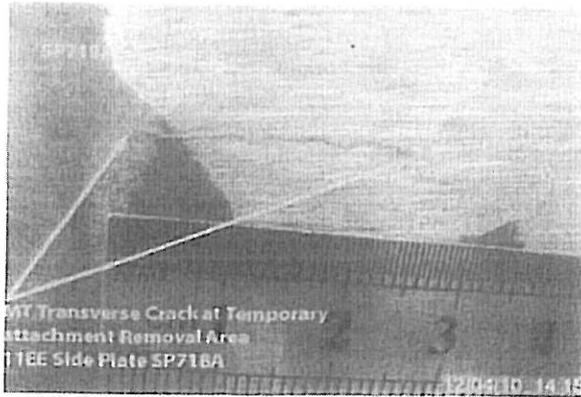
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QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 3)



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Who discovered the problem: T.Raghavendra Reddy

Name of individual from Contractor notified: Ding Xing Chi

Time and method of notification: 14:00_12/04/10_Email

Name of Caltrans Engineer notified: Laraine Woo

Time and method of notification: 17:00_12/05/10_Email

QC Inspector's Name: Zhang Wei

Was QC Inspector aware of the problem:

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 3 of 3)

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

Inspected By: Tsang, Eric

SMR

Reviewed By: Wahbeh, Mazen

SMR

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QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

Location: Changxing Island, Shanghai, P.R. China**Report No:** NCS-000936**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 12-Jan-2011**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0891**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: 04-Dec-2010**Description of Non-Conformance:**

During the Quality Assurance (QA) Magnetic Particle Testing (MT) review of welds Temporary attachment Removal Area located on Orthotropic Box Girder (OBG) 11DE/11EE Transverse Splice Joint, this QA Inspector discovered the following issues:

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-This weld (base metal repair) is within an area previously tested and accepted by ABF Quality Control (QC) personnel. ABF's QC personnel are required to perform 100% MT inspection.

Contractor's proposal to correct the problem:

Contractor will repair the defective area, and provide NDT report to prove the repairs are acceptable. ZPMC will identify the inspector involved, issue an internal NCR and monitor his work. Disciplinary action will be taken if the inspector misses indications continuously.

Corrective action taken:

Contractor repaired the defects, and provided the NDT report to prove the repairs are acceptable. The inspector involved has been identified and his performance is being monitored.

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