

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, China

Report No: NCR-000822

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 27-Aug-2010

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

NCR #: ZPMC-0784

Type of problem:

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: FB3186A, Lift 13
Procedural	Procedural	Description:	

Reference Description: Missed MT Transverse Crack Discovered by QA

Description of Non-Conformance:

During the Quality Assurance Magnetic Particle Testing (MT) review of welds located on OBG Floor Beam FB3186-001 this Quality Assurance Inspector (QA) discovered the following issues:

- One transverse linear crack indication measuring approximately 15mm in length.
- The weld is identified as FB3186-001-108.
- The weld is a fillet weld T-joint, joining the stiffener plate (X4327) to the floor beam web (X243A).
- This floor beam is located in OBG subassembly Bay 2.

The NDT Inspection Notification Sheet is Document No. 06290. The indication is located within an area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. ZPMC's QC personnel are required to perform 25% MT inspection of this weld.

For further information, please see the attached pictures below.



Applicable reference:

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

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

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 are subject to MT in addition to visual inspection shall have no cracks.

Who discovered the problem: Rene Hernandez

Name of individual from Contractor notified: Chen Ji Wei

Time and method of notification: 1530 hours, 07/27/10, Verbal

Name of Caltrans Engineer notified: Stanley Ku

Time and method of notification: 08:30_8/02/10_Email

QC Inspector's Name: Chen Xi

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

NA

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:	Devey,Jim	SMR
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Reviewed By:	Wahbeh,Mazen	SMR
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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: 03-Aug-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-0784

Job Name: SAS Superstructure
Document No: 05.03.06-000779

Reference Description: Missed MT Transverse Crack Discovered by QA

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:** 13

Remarks:

During the Quality Assurance Magnetic Particle Testing (MT) review of welds located on OBG Floor Beam FB3186-001 this Quality Assurance Inspector (QA) discovered the following issues:

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- This floor beam is located in OBG subassembly Bay 2.

The NDT Inspection Notification Sheet is Document No. 06290. The indication is located within an area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. ZPMC's QC personnel are required to perform 25% MT inspection of this weld.

Action Required and/or Action Taken:

Propose 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-0784

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

File: 05.03.06

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000779

Subject: NCR No. ZPMC-0784

Dated: 13-Aug-2010

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000738 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: ZPMC-0784 is a duplicate of NCR ZPMC-0780, please rescind or close ZPMC-0784.

ZPMC-0784 is a duplicate of NCR ZPMC-0780, please rescind or close ZPMC-0784.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000738R00;

Caltrans' comments:

Status: CLO

Date: 17-Aug-2010

This NCR is duplicated with NCR No. ZPMC-0780.

Submitted by: Woo, Laraine

Date: 17-Aug-2010

Attachment(s):

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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-000818**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 27-Jul-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0780**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: FB3186A Lift 13
Procedural	Procedural	Description:	

Reference Description: Missed MT Transverse Crack Discovered**Description of Non-Conformance:**

During the Quality Assurance Magnetic Particle Testing (MT) review of welds located on OBG Floorbeam FB3186-001 this Quality Assurance Inspector (QA) discovered the following issues:

- One transverse linear crack indication measuring approximately 15mm in length.
- The weld is identified as FB3186-001-108.
- The weld is a fillet weld T-joint, joining the stiffener plate to floorbeam web.
- This floor beam is located in OBG subassembly Bay 2.

The NDT Inspection Notification Sheet is Document No. 06290. The indication is located within an area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. ZPMC's QC personnel are required to perform 25% MT inspection of this weld.

For further information, please see the attached pictures below.

**Applicable reference:**

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

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

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 are subject to MT in addition to visual inspection shall have no cracks.

Who discovered the problem: Rene Hernandez

Name of individual from Contractor notified: Chen Ji Wei

Time and method of notification: 1530 hours, 07/27/10, Verbal

Name of Caltrans Engineer notified: Laraine Woo

Time and method of notification: 18:00 hours, 7/28/10, Email

QC Inspector's Name: Chen Xi

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

NA

Comments:

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Inspected By:	Devey,Jim	SMR
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Reviewed By:	Wahbeh,Mazen	SMR
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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-000822**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 27-Aug-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0784**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: FB3186A, Lift 13
Procedural	Procedural	Description:	

Reference Description: Missed MT Transverse Crack Discovered by QA**Description of Non-Conformance:**

During the Quality Assurance Magnetic Particle Testing (MT) review of welds located on OBG Floor Beam FB3186-001 this Quality Assurance Inspector (QA) discovered the following issues:

- One transverse linear crack indication measuring approximately 15mm in length.
- The weld is identified as FB3186-001-108.
- The weld is a fillet weld T-joint, joining the stiffener plate (X4327) to the floor beam web (X243A).
- This floor beam is located in OBG subassembly Bay 2.

The NDT Inspection Notification Sheet is Document No. 06290. The indication is located within an area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. ZPMC's QC personnel are required to perform 25% MT inspection of this weld.

For further information, please see the attached pictures below.

**Applicable reference:**

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

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

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AWS D1.5 (02) Section 6.26.2 – “Welds that are subject to MT in addition to visual inspection shall have no cracks.

Who discovered the problem: Rene Hernandez

Name of individual from Contractor notified: Chen Ji Wei

Time and method of notification: 1530 hours, 07/27/10, Verbal

Name of Caltrans Engineer notified: Stanley Ku

Time and method of notification: 08:30_8/02/10_Email

QC Inspector's Name: Chen Xi

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

NA

Comments:

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Inspected By:	Devey,Jim	SMR
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Reviewed By:	Wahbeh,Mazen	SMR
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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, China**Report No:** NCS-000802**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 18-Aug-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0784**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: 27-Aug-2010**Description of Non-Conformance:**

During the Quality Assurance Magnetic Particle Testing (MT) review of welds located on OBG Floor Beam FB3186-001 this Quality Assurance Inspector (QA) discovered the following issues:

- One transverse linear crack indication measuring approximately 15mm in length.
- The weld is identified as FB3186-001-108.
- The weld is a fillet weld T-joint, joining the stiffener plate (X4327) to the floor beam web (X243A).
- This floor beam is located in OBG subassembly Bay 2.

The NDT Inspection Notification Sheet is Document No. 06290. The indication is located within an area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. ZPMC's QC personnel are required to perform 25% MT inspection of this weld.

Contractor's proposal to correct the problem:

Remove crack and perform weld repair with NDT verification.

Corrective action taken:

Weld repair was performed. NDT reports were provided verifying that the weld is now in conformance with the contract requirements.

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