

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-000629**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 12-Jan-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0602**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: Segment 8CW Corner Assembly Web Plate to I-Rib
Procedural	Procedural	Description: Missed UT Indication by QC	

Reference Description: One class "A" UT Longitudinal Linear Indication discovered after ZPMC NDT had tested and accepted this weld in Segment 8CW

Description of Non-Conformance:

During the Quality Assurance Ultrasonic Testing (UT) review of welds located on Orthotropic Box Girder (OBG) segment 8CW, this Quality Assurance Inspector (QA) discovered the following issue:

- One (1) class "A" longitudinal linear indication measuring approximately 12mm in length.
- The indication dBs rating is a +8.
- Material thickness is 12mm.
- The depth of the indication is approximately 8mm.
- The weld is identified as SSD22-PP69.5-129.
- The weld is designated as Non Seismic Performance Critical Material.
- The indication is clearly marked on or near the weld.
- The Y distance for this indication is at 0mm (near the cope hole, away from the deck panel).
- The weld is a Complete Joint Penetration (CJP) "T" joint joining Corner Assembly Web Plate X36D (Non SPCM) to Deck Plate "I" stiffener (Non SPCM).
- Segment 8CW is located in front of blast Shop.

The Notice of Witness Inspection (NWIT) No. is 005037. The indication is located in an area previously tested and accepted by ZPMC Quality Control (QC) personnel. As per the contract documents, ZPMCs QC personnel are required to perform 100% UT inspection of this weld.

Applicable reference:

AWS D1.5-02 Section 6; Table 6.3 specifies a class A indication as having a rating of 10db and under for material thicknesses 8mm through 20mm.

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."

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Who discovered the problem: Subhasis Bera
Name of individual from Contractor notified: Wang Chao
Time and method of notification: 1030 hours, 01-12-10, Verbal
Name of Caltrans Engineer notified: Bill Howe
Time and method of notification: 1530 hours, 01-12-10, Verabl
QC Inspector's Name: Zhong Wei
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: 13-Jan-2010

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: 05.03.06-000592

Subject: NCR No. ZPMC-0602

Reference Description: One class "A" UT Longitudinal Linear Indication discovered after ZPMC NDT had tested and accepted this weld in Segment 8CW

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:** 08

Remarks:

During the Quality Assurance Ultrasonic Testing (UT) review of welds located on Orthotropic Box Girder (OBG) segment 8CW, this Quality Assurance Inspector (QA) discovered the following issue:

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- Segment 8CW is located in front of blast Shop.

The Notice of Witness Inspection (NWIT) No. is 005037. The indication is located in an area previously tested and accepted by ZPMC Quality Control (QC) personnel. As per the contract documents, ZPMCs QC personnel are required to perform 100% UT 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. Provide the training and equipment as required to the ZPMC MT technician such that these types of indications are found in the future and submit documentation to the engineer that the training has been conducted. A response for the resolution of this issue is expected within 7 days.

NCT

(Continued Page 2 of 2)

Transmitted by: Bill Howe Sr. Transportation Engineer

Attachments: ZPMC-0602

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Jason Tom, Contract Files, 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: 05.03.06-000592

Subject: NCR No. ZPMC-0602

Dated: 22-Jan-2010

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000535 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: ABF is submitting NDT documentation to show that welds with missed indications are acceptable after repair. Per discussion in China with representatives of the Department, ABF is submitting NDT documentation to show that welds with missed indications are acceptable after repair. Based on this ZPMC requests closure of this NCR.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000535R00;

Caltrans' comments:

Status: CLO

Date: 26-Jan-2010

The documentation submitted by the contractor has been reviewed by the Engineer and is found to be acceptable. Based on the discussion in China with the contractor's representatives, other weld repair reports from ZPMC shall be included in the QA Data Base when available.

Submitted by: Chao, Ching

Attachment(s):

Date: 26-Jan-2010

NCT

(Continued Page 2 of 2)

Transmitted by: Bill Howe Sr. Transportation Engineer

Attachments: ZPMC-0602

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

File: 05.03.06

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QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

Location: Changxing Island, Shanghai, P.R. China**Report No:** NCS-000495**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 27-Jan-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0602**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: 12-Jan-2010**Description of Non-Conformance:**

During the Quality Assurance Ultrasonic Testing (UT) review of welds located on Orthotropic Box Girder (OBG) segment 8CW, this Quality Assurance Inspector (QA) discovered the following issue:

- One (1) class "A" longitudinal linear indication measuring approximately 12mm in length.
- The indication dBs rating is a +8.
- Material thickness is 12mm.
- The depth of the indication is approximately 8mm.
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- Segment 8CW is located in front of blast Shop.

The Notice of Witness Inspection (NWIT) No. is 005037. The indication is located in an area previously tested and accepted by ZPMC Quality Control (QC) personnel. As per the contract documents, ZPMCs QC personnel are required to perform 100% UT inspection of this weld.

Contractor's proposal to correct the problem:

Repair indication and perform required NDT.

Corrective action taken:

ABF submitted internal NDT documentation verifying the weld is now in conformance with Contract specifications. Per Team China discussions, documentation from ZPMC verifying the repairs were made and NDT was performed by ZPMC technicians will be submitted at a later date and added to the Data Base.

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: Simonis,Jim

Quality Assurance Inspector

Reviewed By: Wahbeh,Mazen

QA Reviewer