

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-000851**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 27-Sep-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0813**Type of problem:**

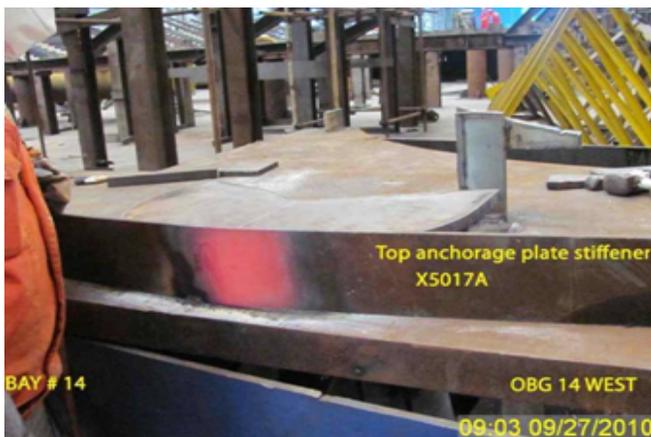
Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: Lift 14 Top Anchorage Plate Stiffener
Procedural	Procedural	Description:	

Reference Description: Excessive heat was utilized during heat straightening of the top anchorage plate stiffener

Description of Non-Conformance:

During the Quality Assurance (QA) random in-process observations of the fabrication of OBG lift 14 components, this Caltrans QA Inspector observed the following:

- ZPMC personnel performing hot bending on the top anchorage plate stiffener identified as X5017A.
- This QA Inspector observed the 1100°C Tempstick was melted when struck against the red base metal.
- The material was heated to a bright red condition and the temperature is above 1100°C.
- Thickness of the stiffener measured 14mm.
- This stiffener in OBG Fabrication Bay #14.

**Applicable reference:**

AWS D1.5 2002; 3.7.3 - Members distorted by welding shall be straightened by mechanical means or by carefully supervised application of a limited amount of localized heat as approved by the Engineer. The temperature of the heated areas as measured by approved methods shall not exceed 600C for quenched and

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

tempered steel nor 650C for other steels.

AASHTO 2004; 11.4.3.3.3 Hot-Bending

If a radius shorter than the minimum specified for cold-bending is essential, the plates shall be bent hot at a temperature not greater than 1200°F (650°C).

Who discovered the problem: Shrikant Utekar

Name of individual from Contractor notified: Shao Jian Yuan

Time and method of notification: 0915 hours, 09/27/10, Verbal

Name of Caltrans Engineer notified: Chris Havel

Time and method of notification: 1640 hours, 09/27/10, Verbal

QC Inspector's Name: Wang Jie

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 Jim Devey, (86) 150-0002-6784, who represents the Office of Structural Materials for your project.

Inspected By:	Tsang, Eric	SMR
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Reviewed By:	Devey, Jim	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: 28-Sep-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: 05.03.06-000808

Subject: NCR No. ZPMC-0813

Reference Description: Excessive heat was utilized during heat straightening of the top anchorage plate stiffener

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:** 14

Remarks:

- During the Quality Assurance (QA) random in-process observations of the fabrication of OBG lift 14 components, Caltrans QA Inspector observed the following:
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 - This QA Inspector observed the 1100°C Tempstick was melted when struck against the red base metal.
 - The material was heated to a bright red condition and the temperature is above 1100°C.
 - Thickness of the stiffener measured 14mm.
 - This stiffener in OBG Fabrication Bay #14.

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-0813

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: Siegenthaler, Peter
Resident Engineer

Ref: 05.03.06-000808

Subject: NCR No. ZPMC-0813

Dated: 12-Oct-2010

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000805 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: ZPMC acknowledges that this piece was overheated. This piece has been rejected by ZPMC and will not be used.

ZPMC acknowledges that this piece was overheated. This piece has been rejected by ZPMC and will not be used. The work crew who performed the overheating will be fined in order to pay for the overheated stiffener. This financial penalty will be a deterrent to these workers and others performing overheating. After heating, ZPMC performed NDT and is providing the result to show the material is acceptable. Based on this ZPMC requests closure of this NCR.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000805R00;

Caltrans' comments:

Status: CLO

Date: 13-Oct-2010

Contractor rejected the material and will re-fabricate a new piece. This NCR is closed.

Submitted by: Woo, Laraine

Attachment(s):

Date: 13-Oct-2010



No. B-898

LETTER OF RESPONSE

TO: American Bridge/Flour

DATE: 2010-9-29

REGARDING: NCR-000851 (ZPMC-0813)

ZPMC acknowledged this problem and has issued an internal NCR. ZPMC has rejected this steel piece and will re-fabricate one to replace. Based on this, ZPMC is requesting closure of this NCR.

ATTACHMENT:

NCR-000851 (ZPMC-0813)

[Handwritten signature]

9/29/10



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: 28-Sep-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: 05.03.06-000808

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Material Location: OBG

Lift: 14

Remarks:

During the Quality Assurance (QA) random in-process observations of the fabrication of OBG lift 14 components, Caltrans QA Inspector observed the following:

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Action Required and/or Action Taken:

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Transmitted by: Laraine Woo Transportation Engineer

Attachments: ZPMC-0813

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

Report No: NCR-000851

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 27-Sep-2010

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

NCR #: ZPMC-0813

Type of problem:

Welding Concrete Other

Welding Curing Procedural

Joint fit-up Coating Other

Procedural Procedural Description:

Bridge No: 34-0006

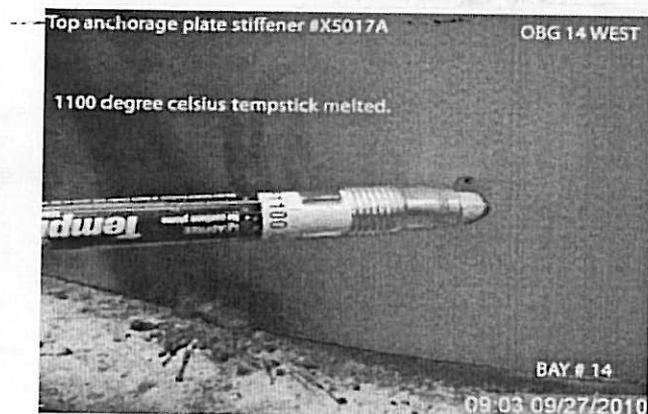
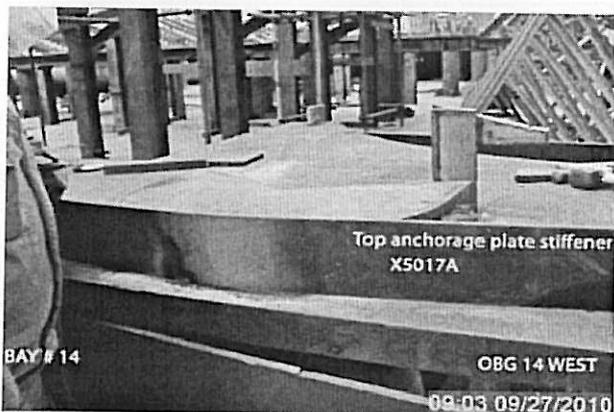
Component: Lift 14 Top Anchorage Plate Stiffener

Reference Description: Excessive heat was utilized during heat straightening of the top anchorage plate stiffener

Description of Non-Conformance:

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QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

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Name of individual from Contractor notified: Shao Jian Yuan

Time and method of notification: 0915 hours, 09/27/10, Verbal

Name of Caltrans Engineer notified: Chris Havel

Time and method of notification: 1640 hours, 09/27/10, Verbal

QC Inspector's Name: Wang Jie

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 Jim Devey, (86) 150-0002-6784, who represents the Office of Structural Materials for your project.

Inspected By: Tsang, Eric

SMR

Reviewed By: Devey, Jim

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, P.R. China**Report No:** NCS-000777**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 13-Oct-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0813**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-Sep-2010**Description of Non-Conformance:**

During the Quality Assurance (QA) random in-process observations of the fabrication of OBG lift 14 components, this Caltrans QA Inspector observed the following:

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- This stiffener in OBG Fabrication Bay #14.

Contractor's proposal to correct the problem:

"ZPMC acknowledges that this piece was overheated. This piece has been rejected by ZPMC and will not be used. The work crew who performed the overheating will be fined in order to pay for the overheated stiffener. This financial penalty will be a deterrent to these workers and others performing overheating. After heating, ZPMC performed NDT and is providing the result to show the material is acceptable."

Corrective action taken:

Reject the material and re-fabricate a new piece.

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:

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.

QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

(Continued Page 2 of 2)

Inspected By: Tsang, Eric

Quality Assurance Inspector

Reviewed By: Wahbeh, Mazen

QA Reviewer