

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

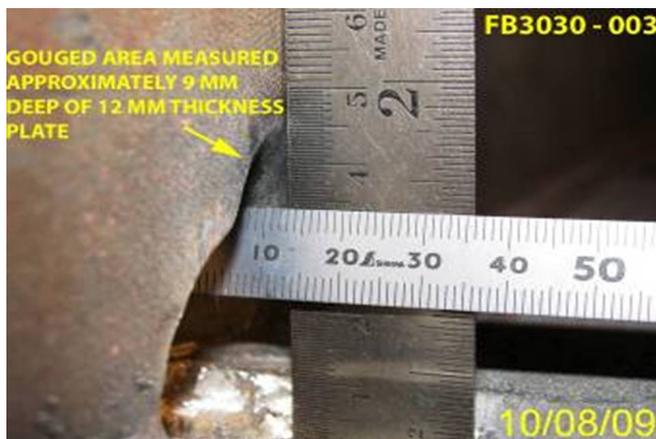
Quality Assurance and Source Inspection



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-000473**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 08-Oct-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0446**Type of problem:****Welding****Concrete****Other****Welding****Curing****Procedural****Bridge No:** 34-0006**Joint fit-up****Coating****Other****Component:** Floor Beam FB303-003-096**Procedural****Procedural****Description:****Reference Description:** Damage to the base metal at the top of a cope hole during weld repair.**Description of Non-Conformance:**

During a random visual inspection of Floor Beams located in BAY 2, the Caltrans Quality Assurance (QA) Inspector observed ZPMC performing a weld repair on Floor Beam FB303-003-096 (Lift 12E at PP 113, 114 and 115) as per weld repair report B-WR7901. During this repair process, it was observed that the welder gouged into the top of the cope hole area approximately 14mm in length and 9mm in deep. This created damage to the base metal at the top of the cope hole. The cope's radius and size is now deviated from the approved drawings.



QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)



Applicable reference:

AWS D1.5 2002 Section 3.3.2; "In all thermal cutting, the cutting flame shall be so adjusted and manipulated as to avoid cutting beyond (inside) the prescribed lines. Steel and weld metal may be thermally cut, provided a smooth and regular surface free from cracks and notches is secured, and provided that an accurate profile is secured by the use of mechanical guide."

AWS D1.5 2002 Section 3.7.4; "Prior approval of the Engineer shall be obtained for repairs to base metal, or for a revised design to compensate for deficiencies."

Who discovered the problem: Sandeep Kumar Naddi

Name of individual from Contractor notified: Wang Wen Bin

Time and method of notification: 1400 hours, Verbal

Name of Caltrans Engineer notified: Ching Chao

Time and method of notification: 1500 hours, Email

QC Inspector's Name: Zhang Hai Feng

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: 12-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: 05.03.06-000436

Subject: NCR No. ZPMC-0446

Reference Description: Damage to the base metal at the top of a cope hole during weld repair.

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:** 12

Remarks:

During a random visual inspection of Floor Beams located in BAY 2, the Caltrans Quality Assurance (QA) Inspector observed ZPMC performing a weld repair on Floor Beam FB303-003-096 (Lift 12E at PP 113, 114 and 115) as per weld repair report B-WR7901. During this repair process, it was observed that the welder gouged into the top of the cope hole area approximately 14mm in length and 9mm in deep. This created damage to the base metal at the top of the cope hole. The cope's radius and size is now deviated from the approved drawings.

Action Required and/or Action Taken:

Submit a repair procedure to the engineer for approval.

Transmitted by: Bill Howe

Attachments: ZPMC-0446

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: 18-Dec-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-000446 Rev: 00

Ref: 05.03.06-000436

Subject: NCR No. ZPMC-0446

Contractor's Proposed Resolution:

Reference Resolution: ZPMC will submit a CWR for the repair to the damaged base metal and NDT documentation will provided to show that the weld is acceptable.

ZPMC will submit a CWR for the repair to the damaged base metal and NDT documentation will provided to show that the weld is acceptable. Based on this course of action, ZPMC requests that the proposal be accepted with action pending.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000446R00

Caltrans' comments:

Status: AAP

Date: 30-Dec-2009

Request accepted.

Submitted by: Howe, Bill

Date: 30-Dec-2009

Attachment(s):

NCR PROPOSED RESOLUTION

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

Dated: 11-Jan-2010

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

Attention: Pursell, Gary
Resident Engineer

Job Name: SAS Superstructure

Document No.: ABF-NPR-000446 Rev: 01

Ref: 05.03.06-000436

Subject: NCR No. ZPMC-0446

Contractor's Proposed Resolution:

Reference Resolution: ZPMC has corrected the condition. Attached are the inspection documents as well as the Green tag signed by CT. ZPMC requests closure of this NCR.

ZPMC has corrected the condition. Attached are the inspection documents as well as the Green tag signed by CT. ZPMC requests closure of this NCR.

Submitted by: Lawton, Steve

Attachment(s): ABF-NPR-000446R01;

Caltrans' comments:

Status: CLO

Date: 11-Jan-2010

The documents received are sufficient to close this NCR.

Submitted by: Howe, Bill

Date: 11-Jan-2010

Attachment(s):



No. B-561

LETTER OF RESPONSE

TO: American Bridge/Flour

DATE: 2010-1-7

REGARDING: NCR-000473(ZPMC-0446)

With this letter of response, ZPMC requests closure of CT NCR-000473(ZPMC-0446), what mentioned that QA observed unacceptable cope hole in FB3030-003-096.

It was observed by this CT inspector that during the in-process excavation, a cope hole was damaged by poor workmanship. ZPMC has fixed the damage and Final Inspection was finished together with this CT inspector. After then Green Tag was achieved.

So ZPMC provides NDT documentation and Green TAG, hoping CT could take a review and consider close this NCR.

ATTACHMENT:

NCR-000473(ZPMC-0446)

QA APPROVAL REQUESR FORM FOR FB3030-003

B787-UT-8896R1

Ly
1/7/10

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

05/2009

NON-CONFORMANCE REPORT TRANSMITTAL

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

Date: 12-Nov-2009

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

Dear: Mr. Charles Kanapicki
Attention: Mr. Thomas Nilsson Project/Fabrication Manager

Job Name: SAS Superstructure

Subject: NCR No. ZPMC-0446

Document No: 05.03.06-000436

Reference Description: Damage to the base metal at the top of a cope hole during weld repair.

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Material Location: OBG

Remarks:

Lift: 12

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Action Required and/or Action Taken:

Submit a repair procedure to the engineer for approval.

Transmitted by: Bill Howe

Attachments: ZPMC-0446

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Doug Coe, Jason Tom, Contract Files, Ching Chao
File: 05.03.06

05.03.06-000436.NCT

DEPARTMENT OF TRANSPORTATION
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Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
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Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4
City: 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-000473

Prime Contractor: American Bridge/Fiuor Enterprises, a JV

Date: 08-Oct-2009

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

NCR #: ZPMC-0446

Type of problem:

- Welding Concrete Other
- Welding Curing Procedural
- Joint fit-up Coating Other
- Procedural Procedural Description:

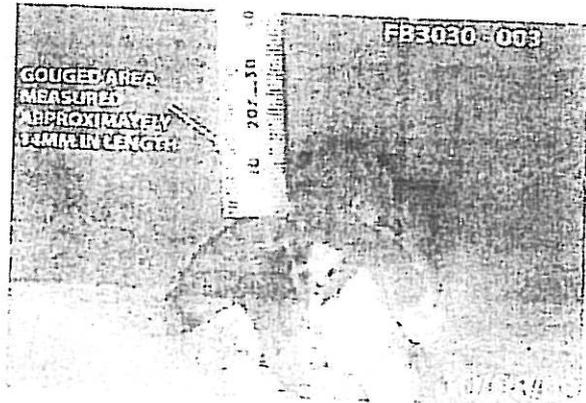
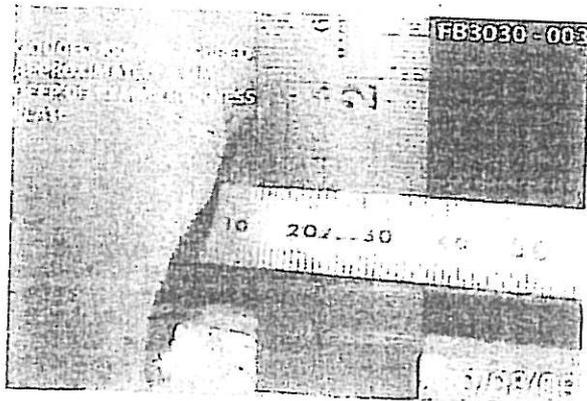
Bridge No: 34-0006

Component: Floor Beam FB303-003-096

Reference Description: Damage to the base metal at the top of a cope hole during weld repair.

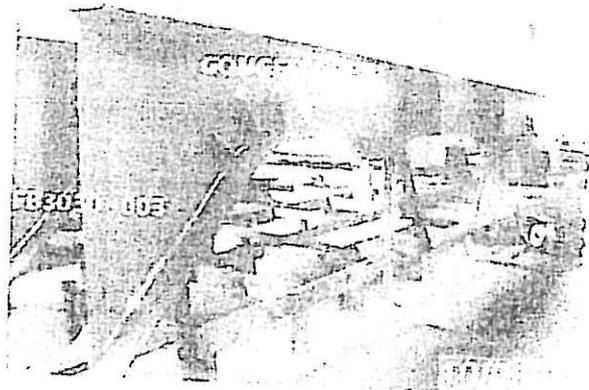
Description of Non-Conformance:

During a random visual inspection of Floor Beams located in BAY 2, the Caltrans Quality Assurance (QA) Inspector observed ZPMC performing a weld repair on Floor Beam FB303-003-096 (Lift 12E at PP 113, 114 and 115) as per weld repair report B-WR7901. During this repair process, it was observed that the welder gouged into the top of the cope hole area approximately 14mm in length and 9mm in deep. This created damage to the base metal at the top of the cope hole. The cope's radius and size is now deviated from the approved drawings.



QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)



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Name of individual from Contractor notified: Wang Wen Bin

Time and method of notification: 1400 hours, Verbal

Name of Caltrans Engineer notified: Ching Chao

Time and method of notification: 1500 hours, Email

QC Inspector's Name: Zhang Hai Feng

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

Reviewed By: Wahbeh, Mazen

Lead Reviewer/Task Leader
SMR

QA APPROVAL REQUEST FORM

Component: FB3030-003 Date: 27-Oct-2009

In-Process tag No.: 10521
*Attach In-Process tag

Green tag No.: 10723

Lift/OBG Segment 塔吊装段/OBG 桥段: 12

Weld numbers: FB3030-003-001 to 006, 067 to 096.

Zhan Hai Feng 09.10.27
 ZPMC Team Representative Date

Luo Gui Lin 27-Oct-2009
 ABF Team Representative Date

B227 (Sandeep Kumar) 10/28/09
 CT Team Representative Date

DOCUMENTATION REVIEW

	Yes	No
NDE complete	<input type="checkbox"/>	<input type="checkbox"/>
Repairs complete	<input type="checkbox"/>	<input type="checkbox"/>
NCR's closed	<input type="checkbox"/>	<input type="checkbox"/>

 ABF QA Manager Date



REPORT OF ULTRASONIC EXAMINATION

UT探伤报告

REPORT NO. 报告编号 B787-UT-8896R1 DATE 2009.10.14 PAGE 1 OF 1 Revision No: 0

PROJECT NO.: 工程编号 ZP06-787 CONTRACTOR: CALTRANS

ITEMS NAME: 12th lifting floor beam DRAWING NO.: FB3030 CALTRANS CONTRACT NO.: 04-0120F4
 部件名称 图号 加州工程编号

REFERENCING CODE 参考规范 ACCEPTANCE STANDARD 接受标准 PROCEDURE NO. 程序编号
 AWS D1.5-2002 AWS D1.5-2002(Table 6.3) ZPQC-UT-01

WELDING PROCESS 焊接方法 JOINT TYPE 焊缝类型 CALIBRATION DUE DATE 仪器校正有效期
 FCAW BUTT Dec. 28ST, 2009

EQUIPMENT 设备 MANUFACTURER 制造商 MODEL NO. 样式编号 SERIAL NO. 序列编号
 UT SCOPE PANAMETRICS EPOCH-4B 071565311, 061488510, 061495811, 070152011,

CALIBRATION BLOCK 试块 COUPLANT 耦合剂 MATERIAL/THICKNESS 材料厚度
 AWS IIW BLOCK TYPE II C.M.C A709M-345T2-X 20mm

TRANSDUCER 探头

MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸	MANUFACTURER 制造商	ANGLE 角度	FREQUENCY 频率	SIZE 尺寸
Changchao	70°	2.5MHz	18×18mm				
Changchao	0°	2.5MHz	20mm	Reference Level 参考灵敏度		20dB	

Base metal inspected per AWS D1.5-2002 Section 6.19.5 0° UT OK.

WELD IDENTIFICATION 焊缝部件编号	INDICATION NO. 指示号	PROBE ANGLE 探测角度	FROM FACE 检测面	LEG (次数)	DECIBELS 分贝				DISCONTINUITY 不连续性					Discontinuity Evaluation 缺陷估计	Remark 备注	
					Indication Level	Reference Level	Attenuation Factor	Indication Rating	LOCATION OF DISCONTINUITY 不连续位置(mm)							
									a	b	c	d	Length 长度			Sound Path 声程
FB3030-002-095	1R1	70													ACC.	
FB3030-003-096	1R1	70													ACC.	

AFTER B-WR7900-7901

BLANK

EXAMINED BY 主探 <i>Hanfeng</i> LEVEL - II SIGN / DATE 质量经理 / QCM 签字 SIGN / 日期 DATE	REVIEWED BY 审核 <i>Zhuig</i> LEVEL - II SIGN / DATE 用户 CUSTOMER 签字 SIGN / 日期 DATE
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Quality Assurance and Source Inspection



Bay Area Branch
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Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

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-000470**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 22-Jan-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0446**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: 08-Oct-2009**Description of Non-Conformance:**

During a random visual inspection of Floor Beams located in BAY 2, the Caltrans Quality Assurance (QA) Inspector observed ZPMC performing a weld repair on Floor Beam FB303-003-096 (Lift 12E at PP 113, 114 and 115) as per weld repair report B-WR7901. During this repair process, it was observed that the welder gouged into the top of the cope hole area approximately 14mm in length and 9mm in deep. This created damage to the base metal at the top of the cope hole. The cope's radius and size is now deviated from the approved drawings.

Contractor's proposal to correct the problem:

Repair damage and perform required NDT.

Corrective action taken:

Base metal damage was repaired and NDT was performed to verify the repair is in compliance with Contract specifications.

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 Jim Simonis, who represents the Office of Structural Materials for your project.

Inspected By: Simonis, Jim

Quality Assurance Inspector

Reviewed By: Wahbeh, Mazen

QA Reviewer