

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, China**Report No:** NCR-000919**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 24-Nov-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0881**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: Lift 14E, LD3049B-001-416/417
Procedural	Procedural	Description:	

Reference Description: New Welding Procedure Not Being Followed**Description of Non-Conformance:**

During Caltrans QA in process observations of the fabrication of LD3049B-001, this QA discovered the following issue(s): ZPMC welding personnel did not appear to be following the NEW WELD PROCEDURE (Rager / McQuaid)

The following requirements were not followed:

6. Non Destructive testing (6A)

NOTE: The above table is relative to section 6 of the NEW WELD PROCEDURE (Rager/McQuaid) and the corresponding paragraph letters.

The weld is identified as LD3049B-001-416 & 417

The welding process used was FCAW

The weld is a complete joint penetration joining X4965B to X4965B (stiffener splice)

The weld not SPCM

LD3049B-001 is located in Bay Number 2

Reference additional details in the pics attached below.

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)



Applicable reference:

NEW WELD PROCEDURE (Rager / McQuaid)

6) Non Destructive Testing.

A. All back gouged groove welds are to have their gouged areas ground to bright metal and inspected 100% by VT and MT examination before welding may begin from the second side.

Who discovered the problem: Rene Hernandez

Name of individual from Contractor notified: Wang Wen Bin

Time and method of notification: 16:15_ 11/24/10_ verbal

Name of Caltrans Engineer notified: Laraine Woo

Time and method of notification: 10:00_ 11/26/10_ email

QC Inspector's Name: Tian Lei

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

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: 26-Nov-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-0881

Job Name: SAS Superstructure
Document No: 05.03.06-000876

Reference Description: New Welding Procedure Not Being Followed

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 Caltrans QA in process observations of the fabrication of LD3049B-001, this QA discovered the following issue(s):
 ZPMC welding personnel did not appear to be following the NEW WELD PROCEDURE (Rager / McQuaid)
 The following requirements were not followed:

6. Non Destructive testing (6A):
 All back gouged groove welds are to have their gouged areas ground to bright metal and inspected 100% by VT and MT examination before welding may begin from the second side.

The weld is identified as LD3049B-001-416 & 417
 The welding process used was FCAW
 The weld is a complete joint penetration joining X4965B to X4965B (stiffener splice)
 The weld not SPCM
 LD3049B-001 is located in Bay Number 2

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-0881

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: 05.03.06-000876

Subject: NCR No. ZPMC-0881

Dated: 01-Dec-2010

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000874 **Rev:** 00

Contractor's Proposed Resolution:

Reference Resolution: As this NCR was written without a contractual basis it should be withdrawn.

The "NEW WELD PROCEDURE (Rager/McQuaid)" quoted as the basis for this NCR is not a contract document only a recommendation from the QA/QC Committee. If the Department wants to incorporate the QA/QC committee's recommendations as a contract requirement a contract change order should be issued. As this NCR was written without a contractual basis it should be withdrawn.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000874R00

Caltrans' comments:

Status: REJ

Date: 03-Dec-2010

CT acknowledges contractor's response. However, successful NDT will close this NCR.

Submitted by: Chao, Ching

Attachment(s):

Date: 03-Dec-2010

NCR PROPOSED RESOLUTION

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

Attention: Siegenthaler, Peter
Resident Engineer

Ref: 05.03.06-000876

Subject: NCR No. ZPMC-0881

Dated: 22-Feb-2011

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000874 Rev: 01

Contractor's Proposed Resolution:

Reference Resolution:

See attached NDT results to show the weld is acceptable. Based on this ZPMC requests closure of this NCR.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000874R01;

Caltrans' comments:

Status: CLO

Date: 23-Feb-2011

This proposed resolution is acceptable. The documentation received is sufficient and the Department concurs that Non-Conformance ZPMC-0881 is closed.

Submitted by: Eagen, Sean

Attachment(s):

Date: 23-Feb-2011

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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-000919**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 24-Nov-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0881**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: Lift 14E, LD3049B-001-416/417
Procedural	Procedural	Description:	

Reference Description: New Welding Procedure Not Being Followed**Description of Non-Conformance:**

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The following requirements were not followed:

6. Non Destructive testing (6A)

NOTE: The above table is relative to section 6 of the NEW WELD PROCEDURE (Rager/McQuaid) and the corresponding paragraph letters.

The weld is identified as LD3049B-001-416 & 417

The welding process used was FCAW

The weld is a complete joint penetration joining X4965B to X4965B (stiffener splice)

The weld not SPCM

LD3049B-001 is located in Bay Number 2

Reference additional details in the pics attached below.

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)



Applicable reference:

NEW WELD PROCEDURE (Rager / McQuaid)

6) Non Destructive Testing.

A. All back gouged groove welds are to have their gouged areas ground to bright metal and inspected 100% by VT and MT examination before welding may begin from the second side.

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Time and method of notification: 10:00_ 11/26/10_ email

QC Inspector's Name: Tian Lei

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

Reviewed By: Wahbeh,Mazen SMR



REPORT OF ULTRASONIC EXAMINATION

UT探伤报告

REPORT NO. 报告编号 B787-UT-17647 DATE 2010.11.26 PAGE 1 OF 1 Revision No: 0

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

ITEMS NAME: THE 14 LONGITUDINAL DIAPHRAGM 部件名称	DRAWING NO.: LD3049 图号	CALTRANS CONTRACT NO.: 04-0120F4 加州工程编号 ZP06-787
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REFERENCING CODE 参考规范 AWS D1.5-2002	ACCEPTANCE STANDARD 接受标准 AWS D1.5-2002(Table 6.3)	PROCEDURE NO. 程序编号 ZPQC-UT-01
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WELDING PROCESS 焊接方法 FCAW	JOINT TYPE 焊缝类型 BUTT	CALIBRATION DUE DATE 仪器校正有效期 Dec. 28 ST , 2010
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EQUIPMENT 设备 UT SCOPE	MANUFACTURER 制造商 PANAMETRICS	MODEL NO. 样式编号 EPOCH 4B	SERIAL NO. 序列编号 081610708
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CALIBRATION BLOCK 试块 AWS IIW BLOCK TYPE II	COUPLANT 耦合剂 C.M.C	MATERIAL/THICKNESS 材料厚度 A709M-345T2-X 10mm
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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
AMERICA	70°	2.25MHz	0.75×0.625in				
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 a	Reference Level b	Attenuation Factor c	Indication Rating d	LOCATION OF DISCONTINUITY 不连续位置(mm)						
									Length 长度	Sound Path 声程	Depth from Surface 距表面深度	From'X 距X	From'Y 距Y		
LD3049-001-410		70				48								ACC.	100%
LD3049-001-413		70				48								ACC.	100%
LD3049-001-416	1	70	A	1	56	48	1	+7	10	39	10	-5	90	REJ.	100%
LD3049-001-417		70				48								ACC.	100%

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EXAMINED BY 主探 <i>D. L. G. S. J.</i> 2010.11.26 LEVEL - II SIGN / DATE	REVIEWED BY 审核 <i>Linjian</i> 2010.11.26 LEVEL - II SIGN / DATE
质量经理 / QCM <i>[Signature]</i> 签字 SIGN / 日期 DATE 2010.11.26	用户CUSTOMER _____ 签字 SIGN / 日期 DATE



REPORT OF ULTRASONIC EXAMINATION

UT探伤报告

REPORT NO. 报告编号 B787-UT-17647R1 DATE 2010.12.24 PAGE 1 OF 1 Revision No: 0

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

ITEMS NAME: THE 14 LONGITUDINAL DIAPHRAGM 部件名称	DRAWING NO.: LD3049 图号	CALTRANS CONTRACT NO.: 04-0120F4 加州工程编号 ZP06-787
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REFERENCING CODE 参考规范 AWS D1.5-2002	ACCEPTANCE STANDARD 接受标准 AWS D1.5-2002(Table 6.3)	PROCEDURE NO. 程序编号 ZPQC-UT-01
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WELDING PROCESS 焊接方法 FCAW	JOINT TYPE 焊缝类型 BUTT	CALIBRATION DUE DATE 仪器校正有效期 Dec. 28 ST , 2010
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EQUIPMENT 设备 UT SCOPE	MANUFACTURER 制造商 PANAMETRICS	MODEL NO. 样式编号 EPOCH 4B	SERIAL NO. 序列编号 081610708
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CALIBRATION BLOCK 试块 AWS IIV BLOCK TYPE II	COUPLANT 耦合剂 C.M.C	MATERIAL/THICKNESS 材料厚度 A709M-345T2-X 10mm
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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
AMERICA	70°	2.25MHz	0.75×0.625in				
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
LD3049-001-416	1R1	70				48									ACC.	100%

AFTER B-WR17830

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EXAMINED BY 主探 <u>Dai Goulsley</u> 2010.11.26	REVIEWED BY 审核 <u>Linjian</u> 2010.11.26
LEVEL - II SIGN / DATE	LEVEL - II SIGN / DATE

质量经理 / QCM <u>[Signature]</u>	用户CUSTOMER
签字 SIGN / 日期 DATE 2010.12.26	签字 SIGN / 日期 DATE

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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-000916**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 23-Feb-2011**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0881**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: 24-Nov-2010**Description of Non-Conformance:**

During Caltrans QA in process observations of the fabrication of LD3049B-001, this QA discovered the following issue(s): ZPMC welding personnel did not appear to be following the NEW WELD PROCEDURE (Rager / McQuaid)

The following requirements were not followed:

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The weld is identified as LD3049B-001-416 & 417

The welding process used was FCAW

The weld is a complete joint penetration joining X4965B to X4965B (stiffener splice)

The weld not SPCM

LD3049B-001 is located in Bay Number 2

Reference additional details in the pics attached below.

Contractor's proposal to correct the problem:

Contractor will provide the NDT report to prove the weld is acceptable.

Corrective action taken:

Contractor provided the NDT report. The NDT report proves the weld is acceptable.

Did corrective action require Engineer's approval? Yes No**If so, name of Engineer providing approval:****Date:****Is Engineer's approval attached?**

QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

(*Continued Page 2 of 2*)

Yes No

Comments:

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Inspected By:	Ng,Michael	Quality Assurance Inspector
Reviewed By:	Wahbeh,Mazen	QA Reviewer
