

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-000896

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 23-Nov-2010

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

NCR #: ZPMC-0858

Type of problem:

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: VP3007A
Procedural	Procedural	Description:	

Reference Description: Weld Procedure Requirements for New Welds Not Followed

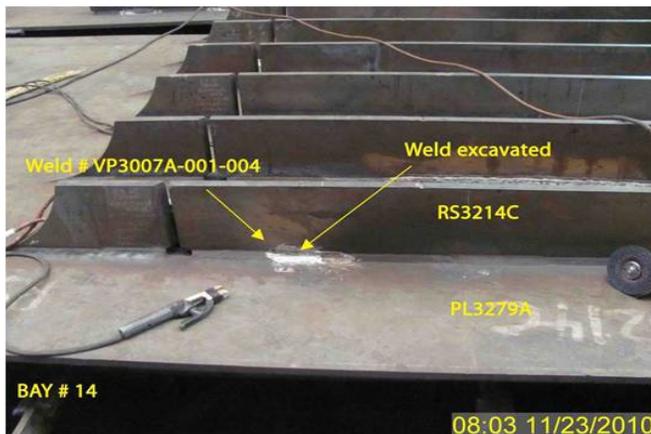
Description of Non-Conformance:

During the Quality Assurance (QA) random in-process observations of the fabrication of OBG in Bay #14, this Caltrans QA Inspector observed ZPMC welding personnel appear to not be following the following section of the New weld Procedure:

6. Non Destructive testing (6A)

- ZPMC personnel performed weld repair for the weld between "I" rib stiffener (RS3214C) and plate (PL3279A) without performing NDT (Magnetic Particle testing) on the excavated area.
- Weld number identified as VP3007A-001-004
- Weld details as complete joint penetration(CJP) , Fracture critical weld (FCW)
- PL3279A designated on the approved shop drawings as Seismic Performance Critical Members (SPCM).
- The welding performed with Shielded Metal Arc Welding (SMAW) process.

See attached photographs for additional detail.



QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Applicable reference:

NEW WELD PROCEDURE (Rager / McQuaid)

6A Non Destructive Testing: 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: Shrikant Utekar

Name of individual from Contractor notified: Peter Shaw

Time and method of notification: 15:20 Hrs, 11/23/10, Verbal.

Name of Caltrans Engineer notified: Laraine Woo

Time and method of notification: 10:00 Hrs, 11/24/10, Email.

QC Inspector's Name:

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: 24-Nov-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: 05.03.06-000853

Subject: NCR No. ZPMC-0858

Reference Description: Weld Procedure Requirements for New Welds Not 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:** 13

Remarks:

During the Quality Assurance (QA) random in-process observations of the fabrication of OBG in Bay #14, this Caltrans QA Inspector observed ZPMC welding personnel appear to not be following the following section of the New weld Procedure:

- 6. Non Destructive testing (6A)
 - ZPMC personnel performed weld repair for the weld between "I" rib stiffener (RS3214C) and plate (PL3279A) without performing NDT (Magnetic Particle testing) on the excavated area.
 - Weld number identified as VP3007A-001-004
 - Weld details as complete joint penetration(CJP) , Fracture critical weld (FCW)
 - PL3279A designated on the approved shop drawings as Seismic Performance Critical Members (SPCM).
 - The welding performed with Shielded Metal Arc Welding (SMAW) process.

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-0858

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: 05.03.06-000853

Subject: NCR No. ZPMC-0858

Dated: 29-Nov-2010

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000851 **Rev:** 00

Contractor's Proposed Resolution:

Reference Resolution:

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 basis it should be withdrawn.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000851R00

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: 05.03.06-000853

Subject: NCR No. ZPMC-0858

Dated: 08-Dec-2010

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000851 **Rev:** 01

Contractor's Proposed Resolution:

Reference Resolution: We understand your response and we will not submit the normal NCR closure package with NDT reports for this and expect that CT will close these as the green tags for these components are issued.

We understand your response and we will not submit the normal NCR closure package with NDT reports for this and expect that CT will close these as the green tags for these components are issued.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000851R01

Caltrans' comments:

Status: REJ

Date: 09-Dec-2010

Normal NCR closure package with NDT reports shall be submitted with the NPR to close out the NCR.

Submitted by: Woo, Laraine

Date: 09-Dec-2010

Attachment(s):

NCR PROPOSED RESOLUTION

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

Attention: Siegenthaler, Peter
Resident Engineer

Ref: 05.03.06-000853

Subject: NCR No. ZPMC-0858

Dated: 22-Feb-2011

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000851 Rev: 02

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-000851R02;

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-0858 is closed.

Submitted by: Eagen, Sean

Attachment(s):

Date: 23-Feb-2011

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QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

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Report No: NCR-000896

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 23-Nov-2010

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

NCR #: ZPMC-0858

Type of problem:

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: VP3007A
Procedural	Procedural	Description:	

Reference Description: Weld Procedure Requirements for New Welds Not Followed

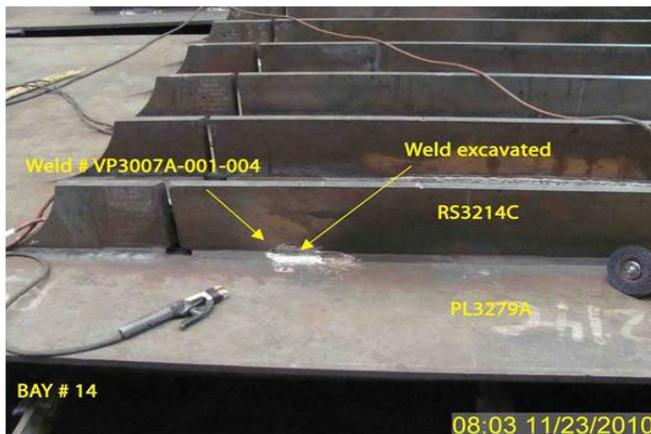
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QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

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QC Inspector's Name:

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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REPORT OF ULTRASONIC EXAMINATION

UT探伤报告

REPORT NO. 报告编号 B787-UT-18878R1 DATE 2010.11.30 PAGE 1 OF 3 Revision No: 0

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

ITEMS NAME: 13AE VERTICALITY PLATE 部件名称	DRAWING NO.: VP3007 图号	CALTRANS CONTRACT NO.: 04-0120F4 加州工程编号
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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 T JOINT	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 GE	MODEL NO. 样式编号 USM35	SERIAL NO. 序列编号 10526a
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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/F2 25mm
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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	0.75in×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		
VP3007-001-004	1R1	70				42								ACC.	100%
	2R1	70				42								ACC.	100%
VP3007-001-007	1R1	70				42								ACC.	100%
	2R1	70				42								ACC.	100%
	3R1	70				42								ACC.	100%
VP3007-001-010	1R1	70				42								ACC.	100%
	2R1	70				42								ACC.	100%
	3R1	70				42								ACC.	100%
	4R1	70				42								ACC.	100%

EXAMINED BY 主探 <u>Qiu Guan fu</u>	REVIEWED BY 审核 <u>Xu rong gang</u>
LEVEL - II SIGN / DATE 2010.11.30	LEVEL - II SIGN / DATE 2010.11.30

质量经理 / QCM <u>Hu Jianhua</u>	
签字 SIGN / 日期 DATE 2010.11.30	签字 SIGN / 日期 DATE



REPORT OF ULTRASONIC EXAMINATION

UT探伤报告

REPORT NO. 报告编号 B787-UT-18878R1 DATE 2010.11.30 PAGE 2 OF 3 Revision No: 0

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
VP3007-001-016	1R1	70				42									ACC.	100%
	2R1	70				42									ACC.	100%
	3R1	70				42									ACC.	100%
VP3007-001-019	1R1	70				42									ACC.	100%
VP3007-001-022	1R1	70				42									ACC.	100%
VP3007-001-029	1R1	70				42									ACC.	100%
VP3007-001-032	1R1	70				42									ACC.	100%
	2R1	70				42									ACC.	100%
	3R1	70				42									ACC.	100%
VP3007-001-042	1R1	70				42									ACC.	100%
	2R1	70				42									ACC.	100%
VP3007-001-045	1R1	70				42									ACC.	100%
	2R1	70				42									ACC.	100%
	3R1	70				42									ACC.	100%
VP3007-001-048	1R1	70				42									ACC.	100%
VP3007-001-052	1R1	70				42									ACC.	100%
VP3007-001-055	1R1	70				42									ACC.	100%
	2R1	70				42									ACC.	100%
	3R1	70				42									ACC.	100%
VP3007-001-058	1R1	70				42									ACC.	100%
VP3007-001-068	1R1	70				42									ACC.	100%
	2R1	70				42									ACC.	100%

EXAMINED BY 主探 <u>Qin Quan fu</u> LEVEL - II SIGN / DATE 2010.11.30	REVIEWED BY 审核 <u>Xu Yong gang</u> LEVEL - II SIGN / DATE 2010.11.30
质量经理 / QCM <u>Lu Jianhua</u> 签字 SIGN / 日期 DATE 2010.11.30	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-18878R1 DATE 2010.11.30 PAGE 3 OF 3 Revision No: 0

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	3R1	70				42								ACC.	100%	
	4R1	70				42								ACC.	100%	
	5R1	70				42								ACC.	100%	
	6R1	70				42								ACC.	100%	
	7R1	70				42								ACC.	100%	
VP3007-001-071	1R1	70				42								ACC.	100%	
	2R1	70				42								ACC.	100%	
	3R1	70				42								ACC.	100%	

AFTER B-WR17290/17291/17292/17293/17294/17295/17296/17297/17298/17299/17300/17301/17302/17303/17304/17305

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EXAMINED BY主探 <u>Qiu Quanfu</u> LEVEL - II SIGN / DATE <u>2010.11.30</u> 质量经理 / QCM <u>Lu Jianhua</u> 签字 SIGN / 日期 DATE <u>2010.11.30</u>	REVIEWED BY 审核 <u>Xu Yonggang</u> LEVEL - II SIGN / DATE <u>2010.11.30</u> 用户 CUSTOMER _____ 签字 SIGN / 日期 DATE
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DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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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-000924**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 23-Feb-2011**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0858**Type of problem:**

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

Date the Non-Conformance Report was written: 23-Nov-2010**Description of Non-Conformance:**

During the Quality Assurance (QA) random in-process observations of the fabrication of OBG in Bay #14, this Caltrans QA Inspector observed ZPMC welding personnel appear to not be following the following section of the New weld Procedure:

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- PL3279A designated on the approved shop drawings as Seismic Performance Critical Members (SPCM).
- The welding performed with Shielded Metal Arc Welding (SMAW) process.

See attached photographs for additional detail.

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 report shows 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?** Yes No**Comments:**

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QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

(Continued Page 2 of 2)

of Structural Materials for your project.

Inspected By: Ng,Michael

Quality Assurance Inspector

Reviewed By: Wahbeh,Mazen

QA Reviewer
