

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 #: xx.25B**QUALITY ASSURANCE -- NON-CONFORMANCE REPORT****Location:** Changxing Island, Shanghai, China**Report No:** NCR-000939**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 12-Dec-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0900**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: DP3168A, Lift 14W
Procedural	Procedural	Description:	

Reference Description: Weld Procedure Not followed for Preheat Requirements**Description of Non-Conformance:**

During the Quality Assurance in process observation of the fabrication of Deck Panel Assembly DP3168-001, this Quality Assurance Inspector (QA) discovered the following issue:

- ZPMC did not appear to properly preheat prior to performing a critical weld repair.
- The applicable WPS specifies a minimum preheat value of 160 C for material up to 40mm.
- This QA observed that a 160 C temp stick did not melt within 75mm of the Complete Joint Penetration (CJP) joint being repaired.
- Weld joint number is identified as DP3168-001-123.
- The weld is a CJP joint, joining members identified as RS3509A (SPCM) To PL3481A (SPCM).
- Material thickness is 22 mm.
- Welding process is Shielded Metal Arc Welding (SMAW)
- The member is located in Bay OBG Bay 6.



QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Applicable reference:

Critical Weld Repair B-CWR-2302 - Specifies WPS-345-SMAW-1G (1F)-Repair as the applicable WPS.
WPS-345-SMAW-1G (1F)-Repair - Specifies a preheat temperature of 160 C for critical weld repairs on material thicknesses up to 40mm.

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."

Who discovered the problem: Kelly Bennett

Name of individual from Contractor notified: Luo Lai Qan

Time and method of notification: 09:00 _12-12-10_Verbal

Name of Caltrans Engineer notified: Laraine Woo

Time and method of notification: 22:30 _12-12-10_Verbal

QC Inspector's Name: Xu Xiang Ping

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:	13-Dec-2010
Dear:	Mr. Charles Kanapicki	Contract No:	04-0120F4 04-SF-80-13.2 / 13.9
Attention:	Mr. Thomas Nilsson Project/Fabrication Manager	Job Name:	SAS Superstructure
Subject:	NCR No. ZPMC-0900	Document No:	05.03.06-000896

Reference Description: Weld Procedure Not followed for Preheat Requirements

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 in process observation of the fabrication of Deck Panel Assembly DP3168-001, Caltrans Quality Assurance Inspector (QA) discovered the following issue:
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 - Welding process is Shielded Metal Arc Welding (SMAW)
 - The member is located in Bay OBG Bay 6.

Action Required and/or Action Taken:

Propose a resolution of 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-0900

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: 05.03.06-000896

Subject: NCR No. ZPMC-0900

Dated: 27-Dec-2010

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000887 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution:

See ZPMC's comments.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000887R00;

Caltrans' comments:

Status: CLO

Date: 29-Dec-2010

The proposed resolution is acceptable. This NCR is considered closed.

Submitted by: Woo, Laraine

Date: 29-Dec-2010

Attachment(s):



PROJECT: S.F.O.B.B.

DATE:2010-12-27

TO: ROSEMARY/ABF JV QA DEPARTMENT

FROM: ZPMC QA DEPARTMENT

SUBJECT: OBG NCR

SUBMITTED FOR YOUR APPROVAL AND SUBMITTAL TO CALTRANS

ENCLOSED WITH THIS TRANSMITTAL IS ONE COPY OF

(01) LR: No. B-950

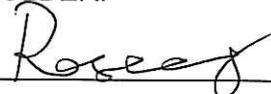
(02) NCR-000939(ZPMC-0900)

B787-UT-17611R2-2

PLEASE SIGN THIS TRANSMITTAL AND RETURN TO ME.

ACKNOWLEDGEMENT

PLAN HOLDER:



DATE: *13:55*
 RECEIVED 27 DEC 2010

COMPANY 

PHONE NO.

PLAN NUMBER:N/A
 #R787-QCP-102



No. B-950

LETTER OF RESPONSE

TO: American Bridge/Flour

DATE: 2010-12-27

REGARDING: NCR-000939(ZPMC-0900)

ZPMC acknowledged this problem and has issued an internal NCR. ZPMC QA personnel have talked with the CWI in responsibility to instruct the requirement to follow the repair procedure during welding. ZPMC is providing the NDT record to show the acceptability of this weld. Based on this, please consider closure of this NCR.

ATTACHMENT:

NCR-000939(ZPMC-0900)

B787-UT-17611R2-2


12/27/2010

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Contract #: 04-0120F4
 Cty: SF/ALA Rte: 80 PM: 13.2/13.9
 File #: xx.25B

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

Location: Changxing Island, Shanghai, China

Report No: NCR-000939

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 12-Dec-2010

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

NCR #: ZPMC-0900

Type of problem:

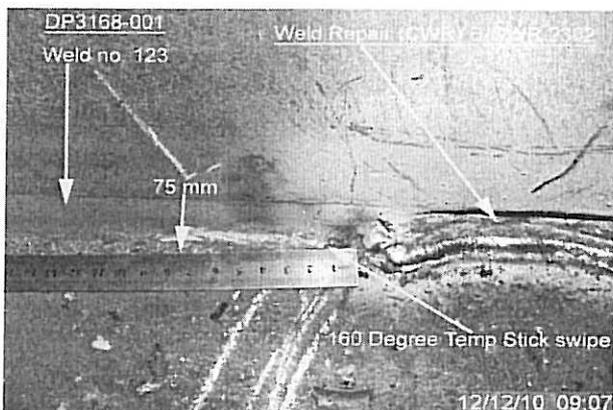
Welding Concrete Other
 Welding Curing Procedural **Bridge No:** 34-0006
 Joint fit-up Coating Other **Component:** DP3168A, Lift 14W
 Procedural Procedural Description:

Reference Description: Weld Procedure Not followed for Preheat Requirements

Description of Non-Conformance:

During the Quality Assurance in process observation of the fabrication of Deck Panel Assembly DP3168-001, this Quality Assurance Inspector (QA) discovered the following issue:

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QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Applicable reference:

Critical Weld Repair B-CWR-2302 - Specifies WPS-345-SMAW-1G (1F)-Repair as the applicable WPS. WPS-345-SMAW-1G (1F)-Repair - Specifies a preheat temperature of 160 C for critical weld repairs on material thicknesses up to 40mm.

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."

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Time and method of notification: 09:00 _12-12-10_Verbal

Name of Caltrans Engineer notified: Laraine Woo

Time and method of notification: 22:30 _12-12-10_Verbal

QC Inspector's Name: Xu Xiang Ping

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

Reviewed By: Wahbeh,Mazen SMR



REPORT OF ULTRASONIC EXAMINATION

UT探伤报告

REPORT NO. 报告编号 B787-UT-17611R2-2 DATE 2010.12.15 PAGE 1 OF 1 Revision No: 0

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

ITEMS NAME: DECK PLATE 部件名称	DRAWING NO.: DP3168A 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 SMAW	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 OLYMPUS	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/F2-X 22/20mm
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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	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
DP3168-001-123	1R2	69.2													ACC.	100%
	2R2	69.2													ACC.	100%
	3R2	69.2													ACC.	100%
	4R2	69.2													ACC.	100%
	5R2	69.2													ACC.	100%
	6R2	69.2													ACC.	100%
	7R2	69.2													ACC.	100%

AFTER B-CWR2302

EXAMINED BY 主探 <u>Jiang Ziwen</u>	REVIEWED BY 审核 <u>Wu Ke wen</u>
LEVEL - II SIGN / DATE 2010.12.15	LEVEL - II SIGN / DATE 2010.12.15
质量经理 / QCM	用户CUSTOMER
签字 SIGN / 日期 DATE	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-000847**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 27-Dec-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0900**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: 12-Dec-2010**Description of Non-Conformance:**

During the Quality Assurance in process observation of the fabrication of Deck Panel Assembly DP3168-001, this Quality Assurance Inspector (QA) discovered the following issue:

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- The member is located in Bay OBG Bay 6.

Contractor's proposal to correct the problem:

Contractor will repair the weld, and provide the NDT report to prove the weld is acceptable. Contractor will issue an internal NCR to their workers.

Corrective action taken:

Contractor repaired the weld, and provided the NDT report to prove the weld is acceptable. Contractor issued the Internal NCR to the workers.

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
