

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, P.R. China

Report No: NCR-000969

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 12-Jan-2011

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

NCR #: ZPMC-0928

Type of problem:

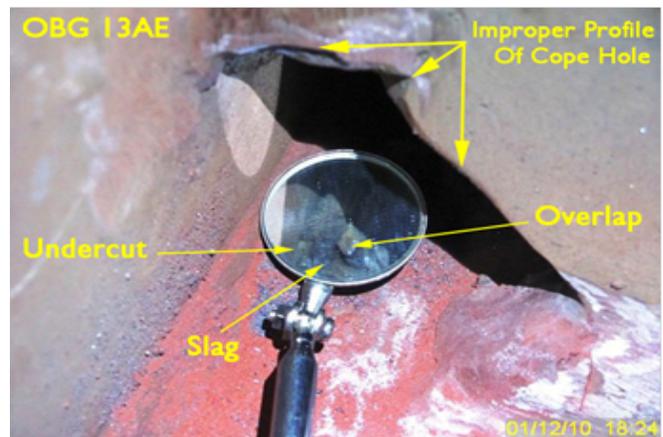
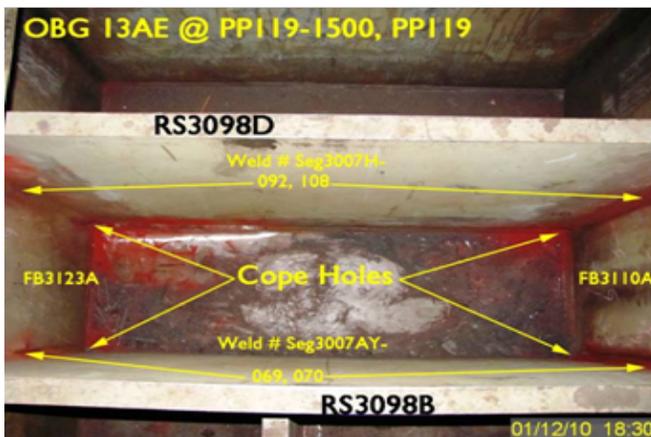
Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: OBG Segment 13AE
Procedural	Procedural	Description: Missed VT discontinuities	

Reference Description: QA found missed VT discontinuities near the cope hole termination in Segment 13AE at 4 locations after QC has accepted the welds

Description of Non-Conformance:

During Quality Assurance (QA) Visual Testing (VT) review of welds located on segment 13AE, this Caltrans (CT) QA Inspector discovered the following issue:

- Cope hole weld terminations were not built to be in compliance with the contract documents.
 - Non compliant discontinuities (slag, undercut and overlap) were observed at the end of the welds and inside the cope holes at 4 locations.
 - The affected weld joints are identified as SEG3007H-092 & 108 and SEG3007AY-069 & 070.
 - The welds are Partial Joint Penetration (PJP) welds joining built up plate stiffeners identified as RS3098B and RS3098B to the web plates of floor beams identified as FB3123A and FB3110A.
- The Notice of Witness Inspection Number (NWIT) is 08153. The discontinuities are located within the areas that were previously tested and accepted by ZPMC Quality Control (QC) personnel. As per the contract documents, ZPMC's QC personnel are required to perform 100% VT inspection of these welds.



QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Applicable reference:

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.”

AWS D1.5 (02) Section 3.12.3 ...the ends of the welds shall be made smooth and flush with the edges of the abutting parts.

AWS D1.5 (02) Section 3.12.1 Welds shall be terminated at the end of a joint in a manner that will ensure sound welds.

Who discovered the problem: Vikram Singh & Robin Sharma

Name of individual from Contractor notified: Yu Jiao

Time and method of notification: 1900 hours, 01/12/2011

Name of Caltrans Engineer notified: Sean Eagen, Roman Granados

Time and method of notification: 19:00_01/13/11_Email

QC Inspector's Name: Wang Xu

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

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:	Tsang, Eric	SMR
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Reviewed By:	Wahbeh, Mazen	SMR
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DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge
 666 Feng Bin Road Room 708, Changxing Island
 Shanghai 201913 PR China
 Tel: 021-56856666 ext 207061 Fax:

NON-CONFORMANCE REPORT TRANSMITTAL

To:	AMERICAN BRIDGE/FLUOR, A JV 375 BURMA ROAD OAKLAND CA 95607	Date:	14-Jan-2011
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-0928	Document No:	05.03.06-000926

Reference Description: QA found missed VT discontinuities near the cope hole termination in Segment 13AE at 4 locations after QC has accepted the welds

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 Quality Assurance (QA) Visual Testing (VT) review of welds located on segment 13AE, this Caltrans (CT) QA Inspector discovered the following issue:

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The Notice of Witness Inspection Number (NWIT) is 08153. The discontinuities are located within the areas that were previously tested and accepted by ZPMC Quality Control (QC) personnel. As per the contract documents, ZPMC's QC personnel are required to perform 100% VT inspection of these welds.

Action Required and/or Action Taken:

Propose a resolution for this non-conformance and provide documentation that the deficiency has been brought into compliance with the contract requirements. Propose a resolution that addresses the apparent failure of Quality Control to identify the indication. Additionally, provide documentation of the steps taken by the Quality Control Manager to prevent future occurrences.

The response for the resolution of this issue is requested within 7 days.

Transmitted by: Sean Eagen Transportation Engineer
Attachments: ZPMC-0928

NCT

(*Continued Page 2 of 2*)

cc: Rick Morrow, 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: 05.03.06-000926

Subject: NCR No. ZPMC-0928

Dated: 18-Jan-2011

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000913 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution:

ZPMC-0928
Please see ZPMC's comments

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000913R00;

Caltrans' comments:

Status: CLO

Date: 18-Jan-2011

This proposed resolution is acceptable. The documentation received is sufficient and the Department concurs that Non-Conformance ZPMC-0928 is closed.

Submitted by: Eagen, Sean

Attachment(s):

Date: 18-Jan-2011



No. B-966

LETTER OF RESPONSE

TO: American Bridge/Flour

DATE: 2011-01-15

REGARDING: NCR-000969(ZPMC-0928)

ZPMC acknowledged this problem and has issued an internal NCR. ZPMC QA personnel have talked with the floor CWI to address this issue. These indications have been removed and been inspected to be acceptable. ZPMC is providing the NWIT and the Tracking list to show these areas have been accepted by department's inspector. Based on this, please consider closure of this NCR.

ATTACHMENT:

NCR-000969(ZPMC-0928)

NWIT & TRACKING LIST FOR 08169

Ly
1/15/2011

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QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

Location: Changxing Island, Shanghai, P.R. China

Report No: NCR-000969

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 12-Jan-2011

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

NCR #: ZPMC-0928

Type of problem:

Welding Concrete Other

Welding Curing Procedural Bridge No: 34-0006

Joint fit-up Coating Other Component: OBG Segment 13AE

Procedural Procedural Description: Missed VT discontinuities

Reference Description: QA found missed VT discontinuities near the cope hole termination in Segment 13AE at 4 locations after QC has accepted the welds

Description of Non-Conformance:

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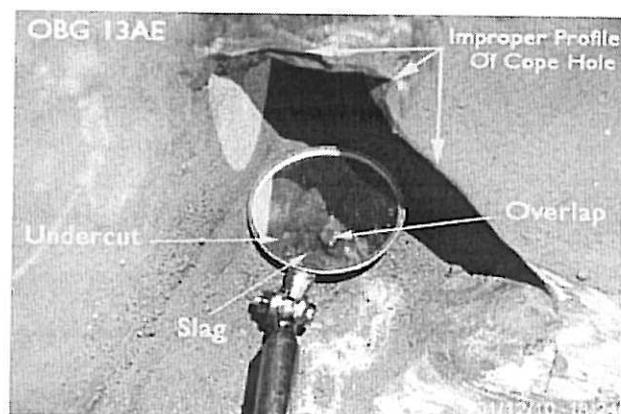
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QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

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Time and method of notification: 1900 hours, 01/12/2011

Name of Caltrans Engineer notified: Sean Eagen, Roman Granados

Time and method of notification: 19:00_01/13/11_Email

QC Inspector's Name: Wang Xu

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

Comments:

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Inspected By: Tsang, Eric SMR

Reviewed By: Wahbeh, Mazen SMR



NDT客户检验通知单
NDT Inspection Notification Sheet

序号 No	检验内容 Inspection	待检验构件 Inspection part	产品分类 Section	检验场地 Inspection Place	申请递交时间: Submit time: 2011-01-14 14:10	文件编号:08169 Document No.
1	VT FOR WELDS	SEE ATTACHED ZPMC-0928	OBG	BAV 14	计划检验时间 Inspection Time 14:40 TAGGING IN PROCESS	CT 计划赴检时间 CT Estimated Inspection Time

- 1、见证通知发出后，现场等待时间通常不超过30分钟；如有变动，现场通知。
- 2、ZPMC give this table to AB/F, Zpmc will do the inspection in 30 minutes. If we change the plan, we will inform AB/F in the shop.
- 3、ZPMC根据自己的检验控制点 (HOLD POINT) 进行日常检验。
- 4、ZPMC will do any inspection according to the HOLD POINT.
- 5、此单为临时试用单，仅适用于完工焊缝的NDT检验见证通知。
- 6、This table is a temporary one, just for final NDT inspection notification.
- 7、QC检验完成后，QA是否需要复验，由QA自行决定，QC不再另行通知。复验等待时间通常为1小时。
- 8、When ZPMC QC finish NDT inspection, Caltrans QA can decide if they want to request it. ZPMC QC will not inform Caltrans again. The waiting time is 1 hour ordinarily.
- 9、AB/F接到CT后会在同班时间内通知ZPMC具体CT现场报验时间
- 10、AB/F to notify ZPMC in the same shift that CT will attend and at what time.
- 11、加州现场检验完成后会告知AB/F检验结果，AB/F会在1小时内告知ZPMC加州复验结果。
- 12、CT to notify AB/F that the work has been completed and the result. AB/ to notify ZPMC that the work has been completed and the result within 1 hour.

ZPMC 联系人:
Requested By:

[Handwritten signature]

AB/F 签收人:
AB/F Receiver:

Teddy

签收时间:
Time:

1.14.2011 14:10

签收时间:
Time:

NOTIFICATION DAILY DOCUMENT TRACKING

The following (NWT) have been received.

Issues with access and/or other issues are noted below.

DATE: Friday-1-14-11

NWT	ITEM#	NDT	LOCATION	COMPLETE	REMARKS/COMMENTS
#08164	1~3	MT	Bay 14	Cancelled	Cancelled by ABF, MT not complete
#08164	4~6	MT	Bay 14	Yes	SEG3013AU-060 Linear indication noted at toe of weld IR generated.
#08165	1~6	MT	Bay 14	Yes	
#08166	1~4	UT	Bay 14	Yes	Item 1 DP3108-001-153 Cancelled
#08167	1~3	MT	Bay 14	Cancelled	Cancelled by ZPMC QA
#08168	1	MT	Bay 14	Yes	MT for NCR ZPMC-0921
#08169	1	VT	Bay 14	Yes	VT for NCR ZPMC-0968

Note: QA review of welds listed on each item have been noted as complete/incomplete. For detail see Remarks/Comments. QA review consists of randomly selected welds. QA NDT of weld consist of a percentage based sampling



REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 B787-MT-35523		DATE日期 2011.01.15	PAGE OF页码 1/1	Revision No: 0
PROJECT NO. 工程编号: ZP06-787		CONTRACTOR: 用户: CALTRANS		
DRAWING NO. 图号: SEG3007 13AE		CALTRANS CONTRACT NO.: 加州工程编号 04-0120F4		
REFERENCING CODE 参考规范编码 AWS D1.5-2002	ACCEPTANCE STANDARD 接受标准 AWS D1.5-2002	PROCEDURE NO. 程序编号 ZPQC-MT-01	CALIBRATION DUE DATE 仪器校正有效期 Dec. 28 ST , 2011	
EQUIPMENT 设备 MT YOKE	MANUFACTURER 制造商 PARKER	MODEL NO. 样式编号 DA-400S	SERIAL NO. 连续编号 17364	
MAGNETIZING METHOD 磁化方法	Continuous magnetic yoke 磁轭式连续法	CURRENT 电流	AC	
PARTICLE TYPE 磁粉类型	Dry magnet powder 干磁粉	YOKE SPACING 磁轭间距	70~150mm	
MATERIAL TO BE EXAMINED 检测材料	<input checked="" type="checkbox"/> WELDING 焊接件 <input type="checkbox"/> CASTING 铸件 <input type="checkbox"/> FORGING 锻造	Material & thickness 母材, 厚度	A709M-345T2/F2 45/100 mm	
WELDING PROCESS 焊接方法	SMAW	TYPE OF JOINT 焊缝类型	T JOINT	

WELD I.D. 焊缝编号	DISCONTINUITY不连续性			ACCEPT 接受	REJECT 拒收	REMARKS 备注
	INDICATION 指示	TYPE 类型	LENGTH IN mm 长度			
SEG3007AY-067				ACC.		100%MT
SEG3007AY-070				ACC.		100%MT
SEG3007H-092				ACC.		100%MT
SEG3007H-108				ACC.		100%MT
SEG3007AY-069				ACC.		100%MT
SEG3007AY-072				ACC.		100%MT
SEG3007H-093				ACC.		100%MT
SEG3007H-109				ACC.		100%MT
BLANK						

EXAMINED BY 主探
 Gu Yunwu *[Signature]*
 LEVEL - II SIGN 签名 / DATE日期 2011-01-15
 质量经理 / QCM *[Signature]*
 签字 SIGN / 日期 DATE
 (FORM# ZPQC-MT01)

REVIEWED BY 审核
 Wang Wei *[Signature]*
 LEVEL-II SIGN / DATE日期 2011-01-15
 用户CUSTOMER
 签字 SIGN / 日期 DATE

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

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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-000929**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 18-Jan-2011**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0928**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-Jan-2011**Description of Non-Conformance:**

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Contractor's proposal to correct the problem:

Contractor proposes to remove the indications and repair the welds. Contractor will provide the NWIT for VT re-inspection to prove the welds are acceptable. ZPMC will issue an internal NCR to the QC personnel responsible.

Corrective action taken:

Contractor removed the indications, and repaired the welds. Provided the NWIT for VT re-inspection to confirm the welds have been accepted. Contractor also issued an internal NCR to the QC personnel involved.

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
