

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-000455**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 29-Sep-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0428**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: OBG Segment 6CE
Procedural	Procedural	Description:	Missed MT longitudinal and transverse indications

Reference Description: Missed MT longitudinal and transverse indications by QC for Segment 6CE deck drainage plate and X3S Stiffeners

Description of Non-Conformance:

During a random verification of Magnetic Particle Testing (MT) of the various components in OBG segment 6CE, a Caltrans Quality Assurance (QA) Inspector discovered a total of three (3) transverse and four (4) longitudinal linear indications that measured from 5mm to 20mm in length.

-Deck Drainage Plate to Deck Plate Attachment Fillet Weld-OBE6D-005: Three (3) 10mm Transverse Indications.

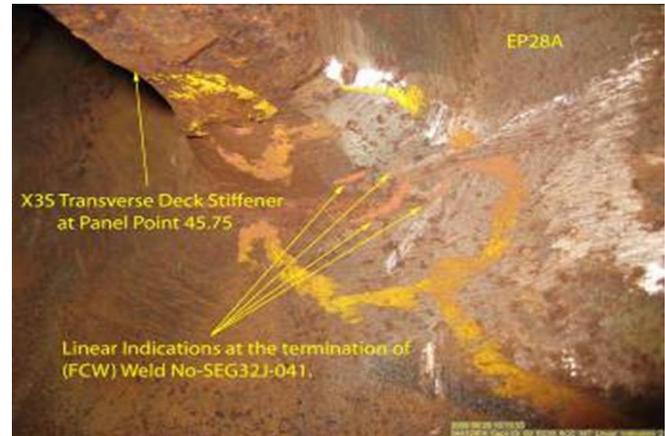
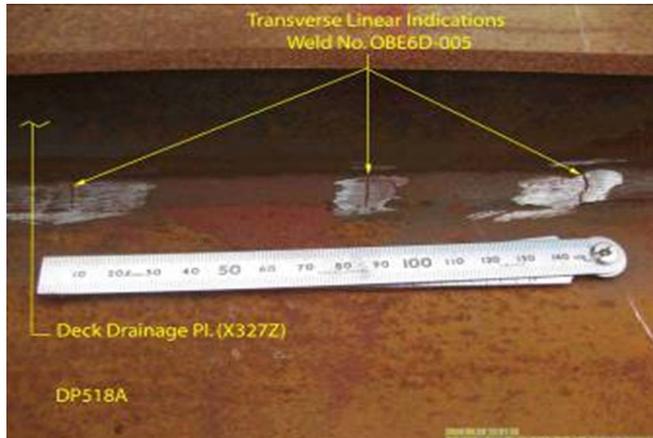
-X3S Stiffener to Edge Plate CJP Weld at PP45.75 Weld -SEG32J-041: Four (4) 5-20mm Longitudinal Indications.

These welds were previously tested and accepted by ZPMC QC MT technicians.



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 6.26.2 – “Welds that are subject to MT in addition to visual inspection shall have no cracks.”

Who discovered the problem: Rodney Patterson

Name of individual from Contractor notified: Peter Shaw

Time and method of notification: 1730 hours, Verbal

Name of Caltrans Engineer notified: Bill Howe

Time and method of notification: 1830 hours, Email

QC Inspector's Name: Zhong Wei

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: Tsang, Eric 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: 27-Oct-2009
Contract No: 04-0120F4
04-SF-80-13.2 / 13.9

Dear: Mr. Charles Kanapicki
Attention: Mr. Tara Washington Document Control Assistant
Subject: NCR No. ZPMC-0428

Job Name: SAS Superstructure
Document No: 05.03.06-000418

Reference Description: Missed MT longitudinal and transverse indications by QC for Segment 6CE deck drainage plate and X3S Stiffeners

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:** 06

Remarks:

During a random verification of Magnetic Particle Testing (MT) of the various components in OBG segment 6CE, a Caltrans Quality Assurance (QA) Inspector discovered a total of three (3) transverse and four (4) longitudinal linear indications that measured from 5mm to 20mm in length.

- Deck Drainage Plate to Deck Plate Attachment Fillet Weld-OBE6D-005: Three (3) 10mm Transverse Indications.
- X3S Stiffener to Edge Plate CJP Weld at PP45.75 Weld -SEG32J-041: Four (4) 5-20mm Longitudinal Indications.

These welds were previously tested and accepted by ZPMC QC MT technicians.

Action Required and/or Action Taken:

Submit a repair procedure to the engineer for approval.
Note: These welds were previously tested and accepted by ZPMC QC MT technicians.

Transmitted by: Bill Howe

Attachments: ZPMC-0428

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
Attention: Pursell, Gary
Resident Engineer
Ref: 05.03.06-000418
Subject: NCR No. ZPMC-0428

Dated: 14-Dec-2009
Contract No.: 04-0120F4
04-SF-80-13.2 / 13.9
Job Name: SAS Superstructure
Document No.: ABF-NPR-000442 **Rev:** 00

Contractor's Proposed Resolution:

Reference Resolution: ZPMC has repaired the missed indications by grinding and is submitting the NDT documentation which shows that the welds are acceptable. Based on this ZPMC is requesting closure of this NCR.

ZPMC has repaired the missed indications by grinding and is submitting the NDT documentation which shows that the welds are acceptable. Based on this ZPMC is requesting closure of this NCR.

Submitted by: Ishibashi, Joshua
Attachment(s): ABF-NPR-000442R00;

Caltrans' comments:

Status: CLO
Date: 27-Dec-2009

The documentation received is acceptable to close this NCR.

Submitted by: Howe, Bill
Attachment(s):

Date: 27-Dec-2009



No. B-534

LETTER OF RESPONSE

TO: American Bridge/Flour

DATE: 2009-12-14

REGARDING: NCR-000455(ZPMC-0428)

With this letter of response, ZPMC requests closure for CALTRANS NCR-000455(ZPMC-0428) what mentioned that QA observed missed MT indications.

During CT's verification of Magnetic Particle Testing (MT) of the various components in OBG segment 6CE, several longitudinal linear indications were discovered. These indications were found and located exceeded ZPMC's MT area. ZPMC arranged grinder and removed the linear indication by grinding on the welds' surfaces. And MT was done to warrant these welds' quality.

So ZPMC provides internal NCR, MT documentations, hoping CALTRANS could take a review and consider close this NCR.

ATTACHMENT:

NCR-B-289

NCR-000455(ZPMC-0428)

B787-MT-16722

fy *rw*
12/14/09



Nonconformance Report

不符合项报告

Project Name: S.F.O.B.B
 项目名称: 美国加州海湾大桥
 NCR Number:
 NCR 编号: NCR-B-289 (ZPMC-0428)

Item: Missed MT indications
 名称描述: MT 漏检
 Item Number:
 件号: N/A
 Drawing: 6CE
 图号:

Location: Trial Assembly
 位置: 总拼外场
 Date:
 日期: 2009-11-04

Description of Nonconformance:

不符合项状态描述:

During a random verification of Magnetic Particle Testing (MT) of the various components in OBG segment 6CE, a Caltrans Quality Assurance (QA) Inspector discovered a total of three (3) transverse and four (4) longitudinal linear indications that measured from 5mm to 20mm in length.

Deck Drainage Plate to Deck Plate Attachment Fillet Weld-OBE6D-005:Three (3) 10mm Transverse Indications.

X3S Stiffener to Edge Plate CJP Weld at PP45.75 Weld-SEG32J-041:Four (4) 5-20mm longitudinal Indications.

These welds were previously tested and accepted by ZPMC QC MT technicians.

在随机做 MT 检查 OBG 6CE 时, 加州检验员发现 3 处横向和 4 处纵向线性缺陷长度从 5mm 至 20mm。

顶部挡水板到顶板附属角焊缝 OBE6D-005:3 条 10mm 横向裂纹

X3S 筋板到腹板 CJP 焊缝 PP45.75 处 SEG32J-041:4 处 5-20mm 纵向缺陷。

这些焊缝之前已经被 ZPMC MT 检测人员所检查并接受。

Work By: [Signature] Prepared by: Zhangwei Reviewed by QCE: [Signature]
 施工方: [Signature] 准备: 09.11.05 质量工程师批准: [Signature]
 Drawing Error Material Defect Fabrication Error Other
 图纸错误 材料缺陷 制作错误 其他原因

Disposition: Use as is Repair Reject
 处理措施: 回用 返修 拒收

Recommendation:

建议: 确认缺陷, 打磨去除.

Confirm and repair removed by grinding.

Prepared by: [Signature] Approved by QCA: _____
 准备 质量经理批准

Reason for Nonconformance:

不符合原因: 1. 超出检测比例范围外, 1. The defect without in inspection
 2. 在后续检测中漏检; 导致漏检.
 2. Discover defect after repairing.



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NON-CONFORMANCE REPORT TRANSMITTAL

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

Date: 27-Oct-2009

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

Dear: Mr. Charles Kanapicki

Job Name: SAS Superstructure

Attention: Mr. Tara Washington Document Control Assistant

Document No: 05.03.06-000418

Subject: NCR No. ZPMC-0428

Reference Description: Missed MT longitudinal and transverse indications by QC for Segment 6CE deck drainage plate and X3S Stiffeners

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Lift: 06

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Action Required and/or Action Taken:

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Transmitted by: Bill Howe

Attachments: ZPMC-0428

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

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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-000455

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 29-Sep-2009

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

NCR #: ZPMC-04

Type of problem:

Welding Concrete Other

Welding Curing Procedural Bridge No: 34-0006

Joint fit-up Coating Other Component: OBG Segment 6CE

Procedural Procedural Description: Missed MT longitudinal and transverse indications

Reference Description: Missed MT longitudinal and transverse indications by QC for Segment 6CE deck drainage plate and X3S Stiffeners

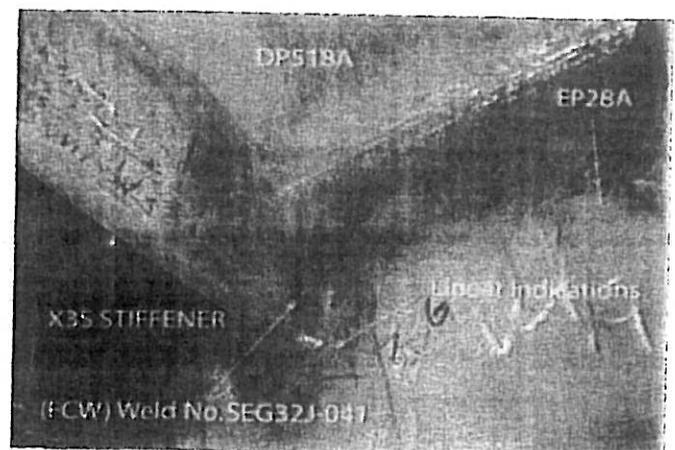
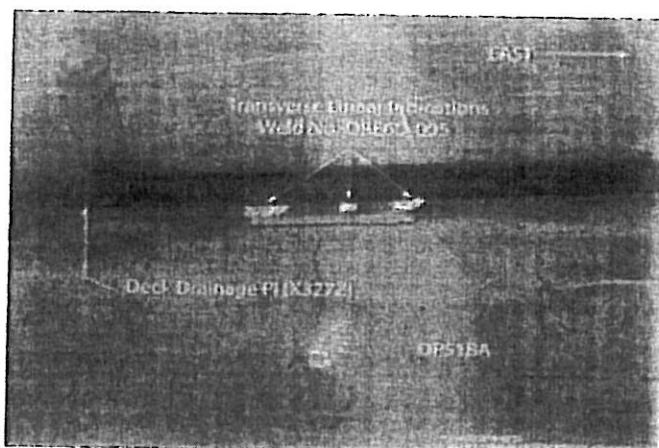
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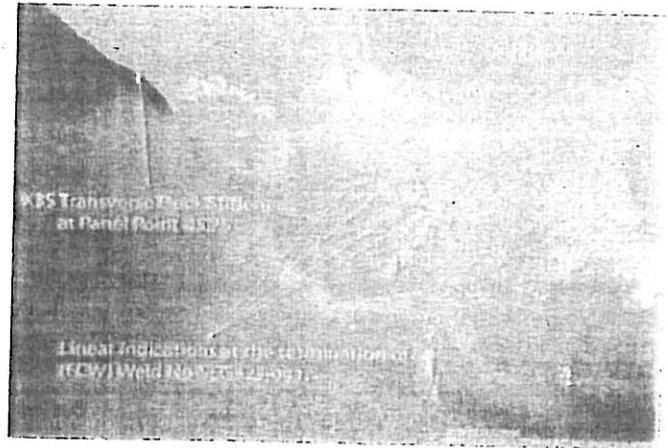
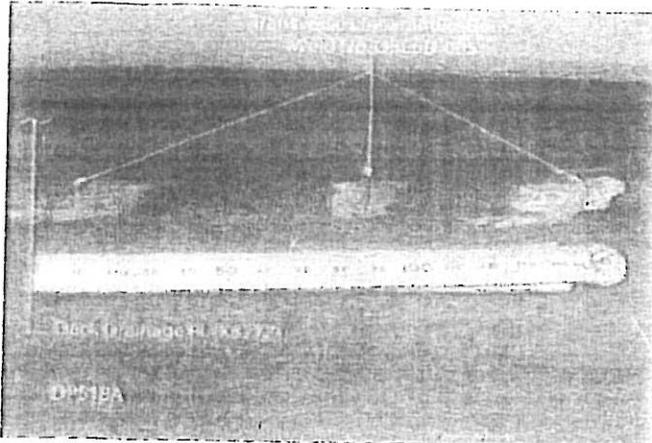
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QUALITY ASSURANCE -- NON-CONFORMANCE REPORT
(Continued Page 2 of 2)



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Name of individual from Contractor notified: Peter Shaw

Time and method of notification: 1730 hours, Verbal

Name of Caltrans Engineer notified: Bill Howe

Time and method of notification: 1830 hours, Email

QC Inspector's Name: Zhong Wei

Was QC Inspector aware of the problem: Yes No

Contractor's proposal to correct the problem:

N/A

Comments:

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Inspected By: Tsang, Eric

SMR

Reviewed By: Wahbeh, Mazen

SMR



REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 B787-MT-16722 DATE日期 2009.10.05 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: 6CE DECK PLATE DRIP PLATE 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. 28ST, 2009

EQUIPMENT 设备: MT YOKE MANUFACTURER 制造商: PARKER MODEL NO. 样式编号: B310S SERIAL NO. 连续编号: 5395 5617 5620

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: WELDING 焊接件 CASTING 铸件 FORGING 锻造 Material & thickness 母材, 厚度: A709M-345T2/F2-X 8/20/25mm

WELDING PROCESS 焊接方法: SMAW TYPE OF JOINT 焊缝类型: CORNER-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			
OBE6D-005				ACC.		after repaired
SEG32J-041				ACC.		after repaired

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EXAMINED BY主探 Sun Gongchang <i>Sun Gongchang</i> 09.10.05 LEVEL - II SIGN 签名 / DATE日期 质量经理 / QCM	REVIEWED BY 审核 <i>Su Wei</i> LEVEL-II SIGN / DATE日期 09.10.05 用户CUSTOMER
签字 SIGN / 日期 DATE	签字 SIGN / 日期 DATE

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
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(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-000444**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 13-Jan-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0428**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: 29-Sep-2009**Description of Non-Conformance:**

During a random verification of Magnetic Particle Testing (MT) of the various components in OBG segment 6CE, a Caltrans Quality Assurance (QA) Inspector discovered a total of three (3) transverse and four (4) longitudinal linear indications that measured from 5mm to 20mm in length.

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-X3S Stiffener to Edge Plate CJP Weld at PP45.75 Weld -SEG32J-041: Four (4) 5-20mm Longitudinal Indications.

These welds were previously tested and accepted by ZPMC QC MT technicians.

Contractor's proposal to correct the problem:

Remove indications by means of grinding.

Corrective action taken:

Contractor removed the indication by means of grinding and provided NDT reports verifying the removal of the defect.

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)

Inspected By: Simonis,Jim

Quality Assurance Inspector

Reviewed By: Wahbeh,Mazen

QA Reviewer