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-000961
Prime Contractor: American Bridge/Fluor Enterprises, a JV **Date:** 29-Dec-2010
Submitting Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0920

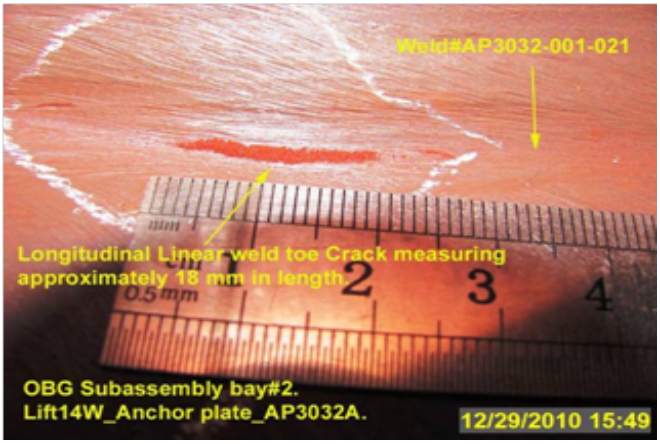
Type of problem:

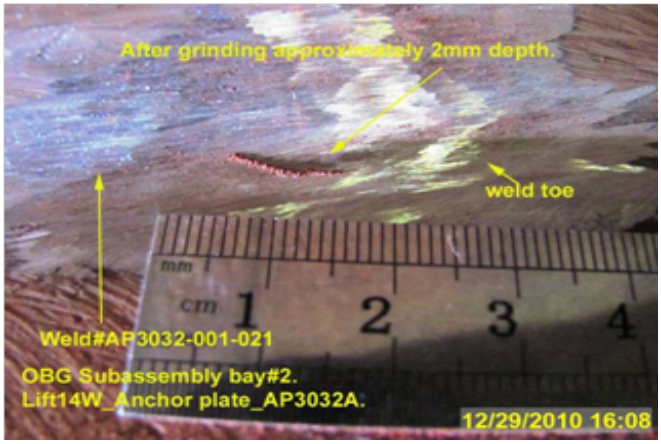
Welding	☐	**Concrete**	☐	**Other**	☑	
Welding	☐	**Curing**	☐	**Procedural**	☐	**Bridge No:** 34-0006
Joint fit-up	☐	**Coating**	☐	**Other**	☑	**Component:** Lift 14W Anchor Plate
Procedural	☐	**Procedural**	☐	**Description:**		QA found a missed MT indication

Reference Description: QA found 1 MT longitudinal linear toe crack in Lift 14W Anchor Plate

Description of Non-Conformance:

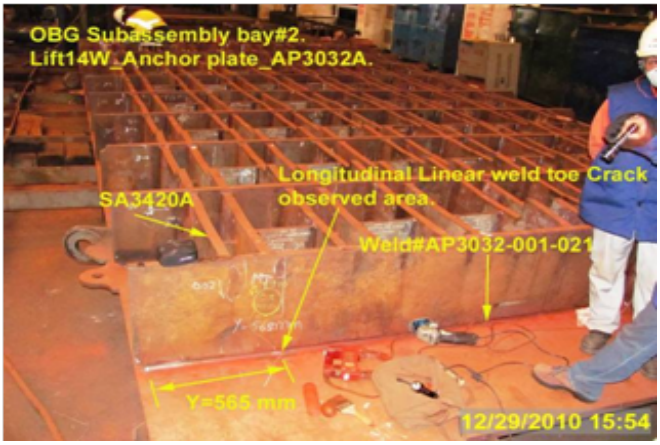
During Quality Assurance (QA) Magnetic Particle Testing (MT) review of welds located on Orthotropic Box Girder (OBG) 14 West Anchor plate (AP) AP3032A, this QA Inspector discovered the following issue:
-One longitudinal linear toe crack measuring approximately 18 mm in length.
-The weld is identified as: AP3032-001-021.
-The weld is designated as SPCM.
-This weld is a fillet weld joining anchor base plate (X5055A-SPCM) to Stiffener plate (X5057A-SPCM).
-The "Y" location is approximately 565 mm from nearest end of the weld.
-The "Y" location measured from bearing stiffener identified as SA3420A side.
-AP3032A is located in the OBG Sub assembly Bay # 2.
-The Notice of Witness Inspection Number (NWIT) is 07974. The indication is located within an area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. As per the contract documents, ZPMC QC personnel are required to perform 100% MT inspection of this weld.

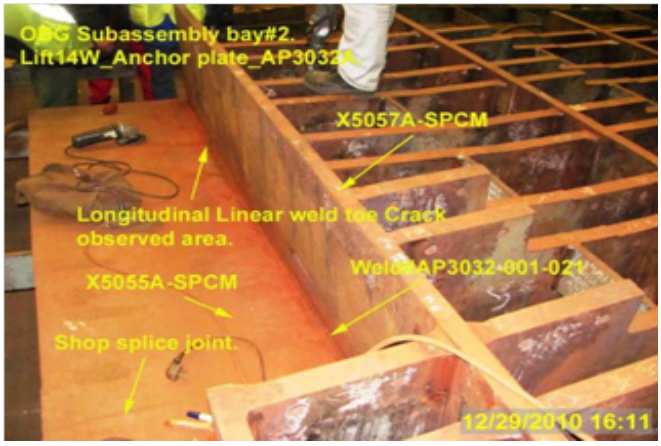




QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)





Applicable reference:
AWS D1.5 (02) Section 6.26.2 – "Welds that are subject to MT in addition to visual inspection shall have no cracks".

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: Surendra Prabhu
Name of individual from Contractor notified: Wang Wen Bin
Time and method of notification: 1700 hours, 12-29-10 Verbal
Name of Caltrans Engineer notified: Laraine Woo
Time and method of notification: 13:45_12-30-10_Verbal
QC Inspector's Name: Li Jia
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
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:**	31-Dec-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:**	05.03.06-000918
Subject:	NCR No. ZPMC-0920		

Reference Description: QA found 1 MT longitudinal linear toe crack in Lift 14W Anchor Plate

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 Quality Assurance (QA) Magnetic Particle Testing (MT) review of welds located on Orthotropic Box Girder (OBG) 14 West Anchor plate (AP) AP3032A, this QA Inspector discovered the following issue:

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-AP3032A is located in the OBG Sub assembly Bay # 2.

-The Notice of Witness Inspection Number (NWIT) is 07974. The indication is located within an area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. As per the contract documents, ZPMC QC personnel are required to perform 100% MT inspection of this weld.

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-0920

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Contract Files, Ching Chao, Bill Casey

File: 05.03.06

AMERICAN BRIDGE/FLUOR ENTERPRISES, a JV

P.O. BOX 23223 Oakland, CA 94623

Phone (510) 419-0120 / Fax (510) 839-0666

NCR PROPOSED RESOLUTION

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

Attention: Siegenthaler, Peter
Resident Engineer

Ref: 05.03.06-000918

Subject: NCR No. ZPMC-0920

Dated: **10-Jan-2011**

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

Job Name: SAS Superstructure

Document No.: **ABF-NPR-000900 Rev: 00**

Contractor's Proposed Resolution:

Reference Resolution: In addition to ZPMC's comments, ABFJV has noted which inspector missed the indication so that the inspector can receive additional training if he shows a pattern of missed indications.

"In addition to ZPMC's comments, ABFJV has noted which inspector missed the indication so that the inspector can receive additional training if he shows a pattern of missed indications. Based on this ZPMC requests closure of this NCR."

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000900R00;

Caltrans' comments:

Status: CLO

Date: 10-Jan-2011

This proposed resolution is acceptable. The documentation received is sufficient and the Department concurs that Non-Conformance ZPMC-0920 is closed.

Submitted by: Eagen, Sean

Date: 10-Jan-2011

Attachment(s):

No. B-956

LETTER OF RESPONSE

TO: American Bridge/Flour
DATE: 2011-01-07
REGARDING: NCR-000961(ZPMC-0920)

ZPMC acknowledged this problem and has issued an internal NCR. This indication has been removed, repaired and re-tested to be acceptable. ZPMC is providing the NDT record and is requesting closure of this NCR.

ATTACHMENT:
NCR-000961(ZPMC-0920)
B787-MT-35328 R1

zhangWei
1/7/11

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: 31-Dec-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: 05.03.06-000918

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cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Contract Files, Ching Chao, Bill Casey

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Cty: SF/ALA Rte: 80 PM: 13.2/13.9
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QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

Location: Changxing Island, Shanghai, P.R. China **Report No:** NCR-000961
Prime Contractor: American Bridge/Fluor Enterprises, a JV **Date:** 29-Dec-2010
Submitting Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0920

Type of problem:

Welding	☐	**Concrete**	☐	**Other**	☑	
Welding	☐	**Curing**	☐	**Procedural**	☐	**Bridge No:** 34-0006
Joint fit-up	☐	**Coating**	☐	**Other**	☑	**Component:** Lift 14W Anchor Plate
Procedural	☐	**Procedural**	☐	**Description:** QA found a missed MT indication		

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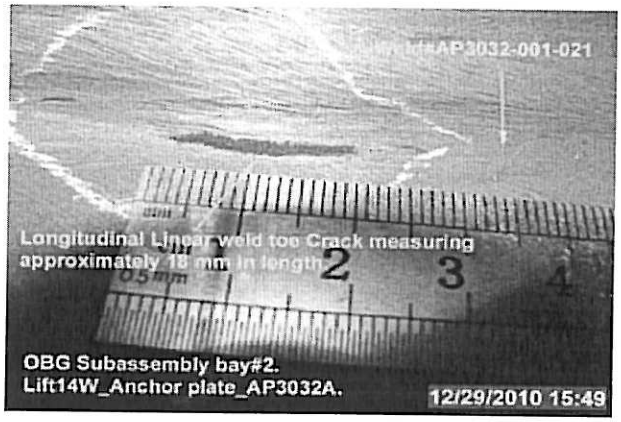

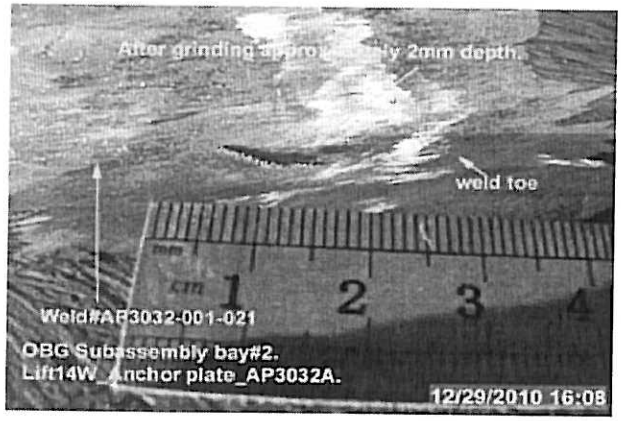

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

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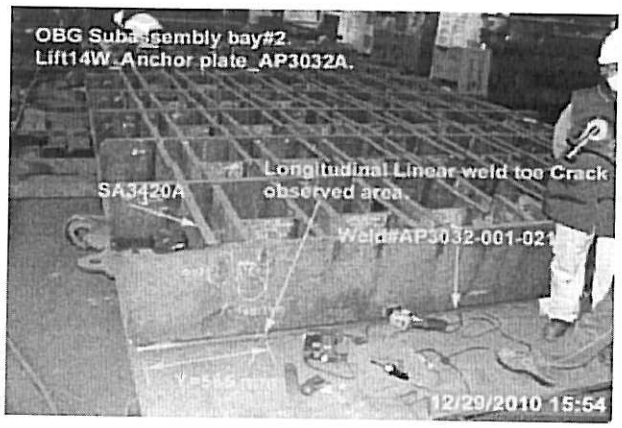

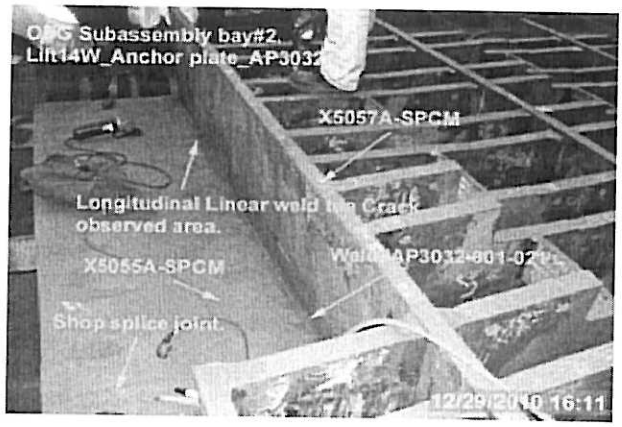

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Time and method of notification: 1700 hours, 12-29-10 Verbal
Name of Caltrans Engineer notified: Laraine Woo
Time and method of notification: 13:45_12-30-10_Verbal
QC Inspector's Name: Li Jia
Was QC Inspector aware of the problem: ☐ **Yes** ☑ **No**
Contractor's proposal to correct the problem:

Comments:
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Inspected By:	Tsang,Eric	SMR
Reviewed By:	Wahbeh,Mazen	SMR

ZPMC

REPORT OF MAGNETIC PARTICLE EXAMINATION
磁粉检测报告

REPORT NO. 报告编号 B787-MT-35328R1	DATE日期 2011.01.05	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:	AP3032 14th lifting anchor box	CALTRANS CONTRACT NO.: 加州工程编号	04-0050F4
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 ,2011
EQUIPMENT 设备	MT YOKE	MANUFACTURER 制造商	USE
MODEL NO. 样式编号	MODEL #ES-X	SERIAL NO. 连续编号	14257
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-345F2-X 40/35MM
WELDING PROCESS 焊接方法	FCAW	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			
AP3032-001-021	1R1				ACC.	100%MT
AFTER B-CWR2641						
BLANK						

EXAMINED BY主探 Peng Zilong Peng zi long LEVEL - II SIGN 签名 / DATE日期 2011.01.05	REVIEWED BY 审核 Yao Chunping LEVEL-II SIGN / DATE日期 2011.01.05
质量经理 / QCM 签字 SIGN / 日期 DATE 2011.01.05	用户CUSTOMER 签字 SIGN / 日期 DATE

(FORM# ZPQC-MT01)

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 #: xx.25A

QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

Location: Changxing Island, Shanghai, P.R. China **Report No:** NCS-000939
Prime Contractor: American Bridge/Fluor Enterprises, a JV **Date:** 10-Jan-2011
Submitting Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0920

Type of problem:

Welding	☐	**Concrete**	☐	**Other**	☑	
Welding	☐	**Curing**	☐	**Procedural**	☐	**Bridge No:** 34-0006
Joint fit-up	☐	**Coating**	☐	**Other**	☑	**Component:**
Procedural	☐	**Procedural**	☐	**Descripton:**		

Date the Non-Conformance Report was written: 29-Dec-2010

Description of Non-Conformance:

During Quality Assurance (QA) Magnetic Particle Testing (MT) review of welds located on Orthotropic Box Girder (OBG) 14 West Anchor plate (AP) AP3032A, this QA Inspector discovered the following issue:
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Contractor's proposal to correct the problem:

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

Corrective action taken:

Contractor repaired the weld, and NDT reports provided subsequently confirmed 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)

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