

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-000955

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 24-Dec-2010

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

NCR #: ZPMC-0914

Type of problem:

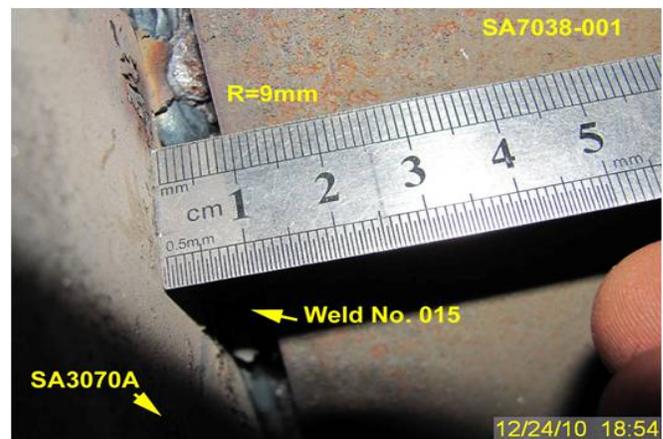
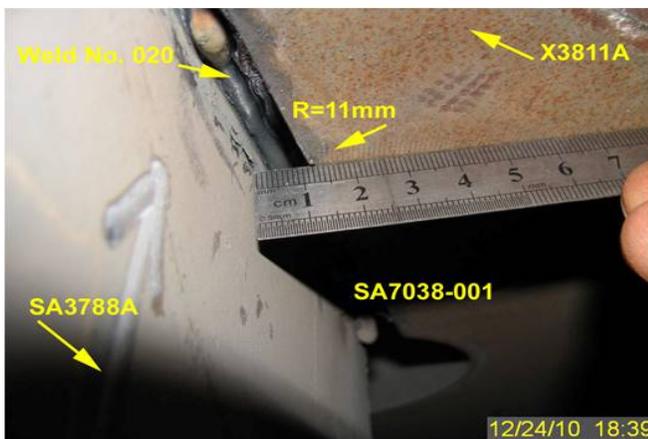
Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: 13AE, SA7038A
Procedural	Procedural	Description:	

Reference Description: Excessive Root Opening on PJP Welds for Lift 13AE Saddle Grillage Wing Plates

Description of Non-Conformance:

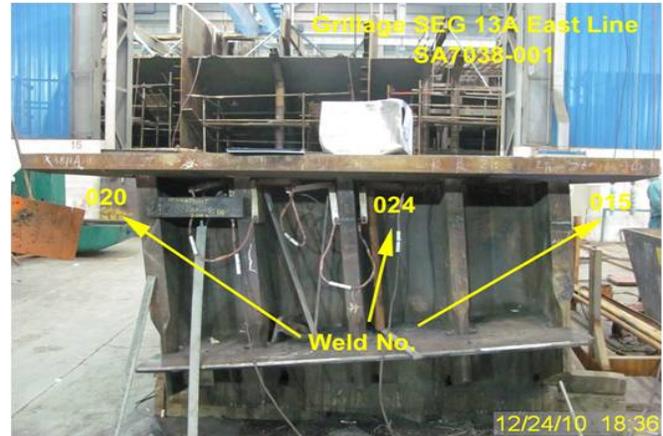
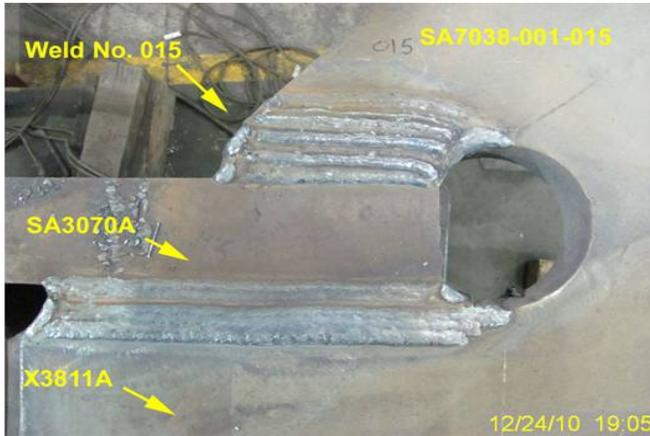
During the Quality Assurance (QA) random in-process observations of the fabrication of the East Saddle Grillage in Bay 14, this Caltrans QA Inspector observed the following issue:

- The connection plate (X3811A) to the Grillage Plate A (X3788A, X3787A, X3786A) Partial Joint Penetration corner welds with root openings between 9mm to 11mm in a total of three (3) locations.
 - The maximum allowable root opening per the applicable WPS is 3mm as fit up.
 - The affected welds are designated as SA7038-015, 020 and 024.
 - The welds are designated on the contract drawings as Seismic Performance Critical Members (SPCM), and require through thickness properties (TTP).
 - The members are located in OBG fabrication Bay 13.
- See attached photographs for additional detail.



QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)



Applicable reference:

Approved Welding Procedure Specification: WPS B-T-2331-ESAB.

Contract Special Provisions; SECTION 8-3. WELDING “Inspection and approval of all joint preparations, assembly practices, joint fit-ups, welding techniques, and the performance of each welder, welding operator, and tack welder shall be documented by the QC Inspector on a daily basis for each day that welding is performed. For each inspection, the QC Inspector shall confirm and document compliance with the requirements of the AWS code criteria and the requirements of these special provisions on all weld joints before welding, during welding, and after the completion of each weld.”

Who discovered the problem: Robert A. DeArmond

Name of individual from Contractor notified: Ji Cai Tang

Time and method of notification: 12-24-10, 1900 hours, Verbal

Name of Caltrans Engineer notified: Laraine Woo

Time and method of notification: 12-26-10, 1030 hours, Verbal

QC Inspector's Name: Li 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: 27-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: 05.03.06-000911

Subject: NCR No. ZPMC-0914

Reference Description: Excessive Root Opening on PJP Welds for Lift 13AE Saddle Grillage Wing Plates

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 the East Saddle Grillage in Bay 14, this Caltrans QA Inspector observed the following issue:
- The connection plate (X3811A) to the Grillage Plate A (X3788A, X3787A, X3786A) Partial Joint Penetration corner welds with root openings between 9mm to 11mm in a total of three (3) locations.
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 - The members are located in OBG fabrication Bay 13.

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-0914

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: 05.03.06-000911

Subject: NCR No. ZPMC-0914

Dated: 13-Jan-2011

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000908 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: "In addition to ZPMC's comments, fit up issues will be attempted to be resolved prior to proceeding with work if it is feasible. To prevent this type of NCR."

"In addition to ZPMC's comments, fit up issues will be attempted to be resolved prior to proceeding with work if it is feasible. To prevent this type of NCR."

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000908R00;

Caltrans' comments:

Status: CLO

Date: 13-Jan-2011

This proposed resolution is acceptable. The documentation received is sufficient and the Department concurs that Non-Conformance ZPMC-0914 is closed.

Submitted by: Eagen, Sean

Attachment(s):

Date: 13-Jan-2011



No. B-964

LETTER OF RESPONSE

TO: American Bridge/Flour

DATE: 2011-01-12

REGARDING: NCR-000964(ZPMC-0914)

The welds were finished according to approved RFI. ZPMC is providing the NDT records to show the acceptability of these welds. Based on this, ZPMC is requesting closure of this NCR.

ATTACHMENT:

NCR-000964(ZPMC-0914)

RFI-ZPM-000921

B787-MT-35576

B787-MT-35577

JM
1/12/2011



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-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: 05.03.06-000911
Subject: NCR No. ZPMC-0914

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Transmitted by: Laraine Woo Transportation Engineer

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cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Contract Files, Ching Chao, Bill Casey
File: 05.03.06

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 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-000955

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 24-Dec-2010

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

NCR #: ZPMC-0914

Type of problem:

Welding Concrete Other

Welding Curing Procedural

Joint fit-up Coating Other

Procedural Procedural Description:

Bridge No: 34-0006

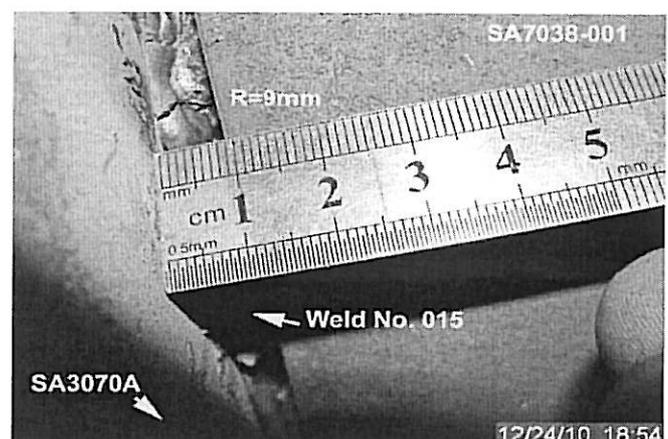
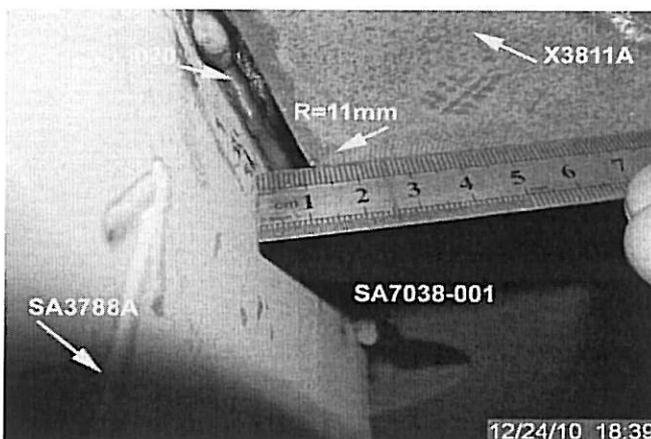
Component: 13AE, SA7038A

Reference Description: Excessive Root Opening on PJP Welds for Lift 13AE Saddle Grillage Wing Plates

Description of Non-Conformance:

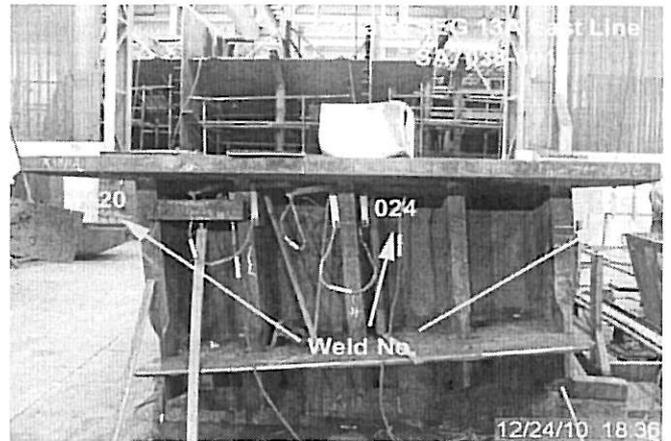
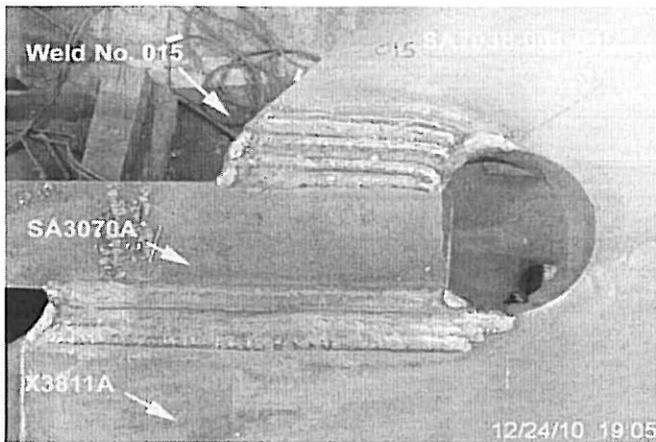
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QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)



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Contract Special Provisions; SECTION 8-3. WELDING "Inspection and approval of all joint preparations, assembly practices, joint fit-ups, welding techniques, and the performance of each welder, welding operator, and tack welder shall be documented by the QC Inspector on a daily basis for each day that welding is performed. For each inspection, the QC Inspector shall confirm and document compliance with the requirements of the AWS code criteria and the requirements of these special provisions on all weld joints before welding, during welding, and after the completion of each weld."

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Time and method of notification: 12-26-10, 1030 hours, Verbal

QC Inspector's Name: Li 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

REQUEST FOR INFORMATION (RFI) – ABF&SUB.

RFI No.: RFI-ZPM-000921R00 Submitted by: Zhao, Xing Page(s): 1
 RFI Date: 30-Dec-2010 Contact Name: Wu Yun Phone No. +86-21-51907446

Subject: Out of tolerance Issue for the part of OBG lift 13AE Grillage SA3078

References:

Response required by: 4-Jan-2011 (date) Response affects critical path activity? YES NO

Description:

It is informed that for OBG lift 13AE grillage SA3078, the part X3811A is now out of tolerance for assembly due to the cumulative error (see the attached for location detail).

To facilitate fabrication, we propose to change PJP groove to CJP, but only 100%MT for backing welding & cap welding, UT is not required.

Please confirm if it is acceptable.

This RFI is being submitted for:

- Material Procurement
 Contractor Convenience
 Clarification of the Contract Documents
 Engineering Review Request (ERR) for missing design information/coordination.

The Cost and Time Impact from this RFI is:

- No cost or time impacts in the performance of our Work.
 Cost and/or time impacts in the performance of our Work will result.
 We are unable to determine at this point whether there will be cost and/or time impacts.

Response:

Date:	Respondent:	Phone No.:
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The proposal to change the PJP welds noted in the attachments to be out of root gap tolerance to CJP welds with 100% MT of the backgouge and 100% MT of the finished weld is acceptable

RFI Status: (sign and date)

Closed:	Revision Pending:
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REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 B787-MT-35577		DATE 日期 2011.01.09		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: SA7038 13AE FLOOR BEAM				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. 28 ST , 2010	
EQUIPMENT 设备 MT YOKE		MANUFACTURER 制造商 PARKER		MODEL NO. 样式编号 DA-400S		SERIAL NO. 连续编号 17371	
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-X 75/100 mm					
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				
SA7038-015				ACC.		100%MT	
SA7038-024				ACC.		100%MT	
SA7038-020				ACC.		100%MT	
BLANK							
EXAMINED BY 主探 Gu Yunwu <i>Gu Yunwu</i> 2011.01.09				REVIEWED BY 审核 <i>Sun Gang cheng</i> 2011.01.09			
LEVEL - II SIGN 签名 / DATE 日期				LEVEL - II SIGN / DATE 日期			
质量经理 / QCM <i>[Signature]</i>				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
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.25A**QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION****Location:** Changxing Island, Shanghai, China**Report No:** NCS-000933**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 13-Jan-2011**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0914**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: 24-Dec-2010**Description of Non-Conformance:**

During the Quality Assurance (QA) random in-process observations of the fabrication of the East Saddle Grillage in Bay 14, this Caltrans QA Inspector observed the following issue:

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- See attached photographs for additional detail.

Contractor's proposal to correct the problem:

Contractor will finish the weld according to the approved RFI 921. Contractor will submit a NDT report to prove the weld is acceptable. In addition, to prevent this type of NCR, where feasible attempts will be made to resolve fit up issue prior to proceeding with work.

Corrective action taken:

Contractor finished the weld according to the approved RFI 921. The weld has been changed from PJP to CJP. However Contractor requested UT on this weld to be waived and the request has been accepted. MT report submitted, and 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?**

QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

(*Continued Page 2 of 2*)

Yes No

Comments:

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