

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-000667
Prime Contractor: American Bridge/Fluor Enterprises, a JV **Date:** 30-Jan-2010
Submitting Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0637

Type of problem:

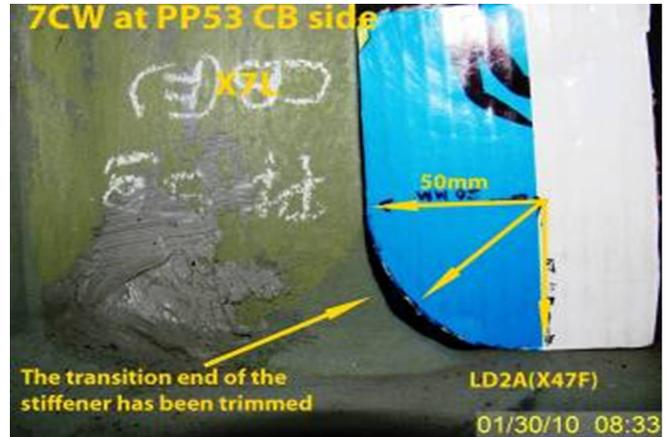
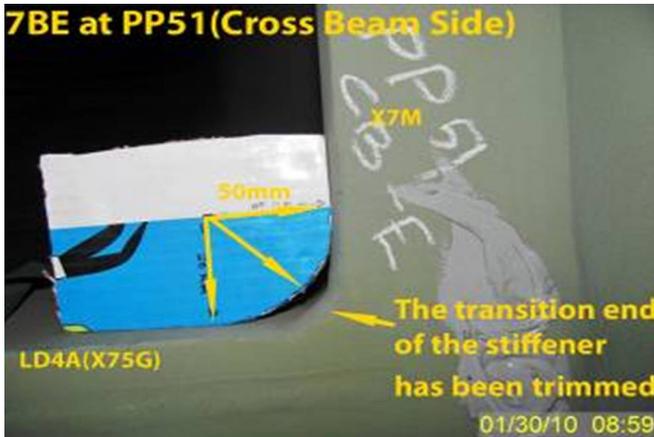
Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: Lift 7 West X7 Stiffener to Longitudinal Diaphragm
Procedural	Procedural	Description:	

Reference Description: The radius and transition of the X7 FB vertical stiffener plates are not fabricated per the approved shop drawings

Description of Non-Conformance:

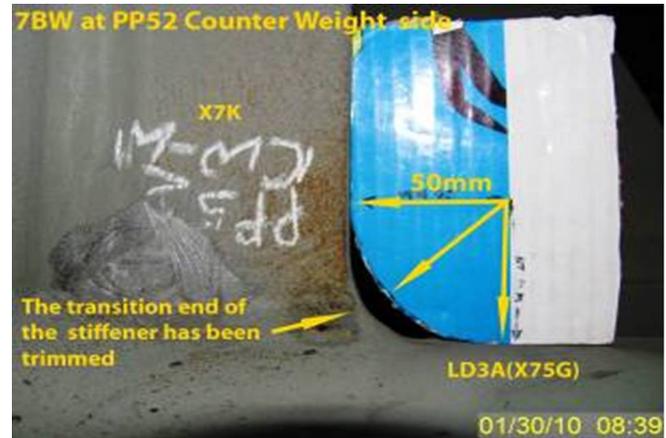
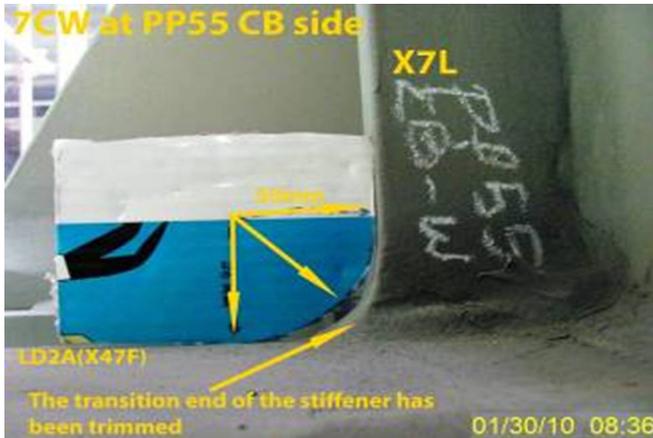
During the Quality Assurance (QA) random in-process visual inspection of the OBG segments 7BW and 7CW in the Trial Assembly area, this QA inspector discovered the following issues:

- The R=50mm portion at the transition end of the X7 floorbeam vertical flange (stiffener) to Longitudinal Diaphragm has been trimmed and found four locations that were not in compliance with the approved shop drawings (OBG Standards- Floor beam Details-X7).
- The 1st Weld joint is identified as SEG035C-032 at PP51 Crossbeam Side.
- The 2nd Weld joint is identified as SEG035B-040 at PP52 Counter weight Side.
- The 3rd Weld joint is identified as SEG037C-023 at PP53 Crossbeam Side.
- The 4th Weld joint is identified as SEG035C-008 at PP55 Crossbeam Side.
- All joints are Partial Joint Penetration (PJP) as per WD20W, weld joint connecting the vertical floorbeam flange (stiffener) X7 to the Longitudinal Diaphragm top flange plate.



QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)



Applicable reference:

AWS D1.5 2002 Section 3.2.5: Reentrant corners of base-metal cut edges shall be formed to provide a smooth transition with a radius of not less than 25 mm [1 in.] that meets the adjacent edges without offset or cutting past the point of tangency. The reentrant corners may be formed by thermal cutting, followed by grinding to meet the surface requirements of 3.2.2.

Who discovered the problem: Subhasis Bera

Name of individual from Contractor notified: Kevin Dye

Time and method of notification: 1630 hours, 01-30-10, Verbal

Name of Caltrans Engineer notified: Ching Chao

Time and method of notification: 1530 hours, 01-31-10, Email

QC Inspector's Name: Wang Lu

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,(818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By: Carreon,Albert

Lead Reviewer/Task Leader

Reviewed By: Wahbeh,Mazen

SMR



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: 31-Jan-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: 05.03.06-000626

Subject: NCR No. ZPMC-0637

Reference Description: The radius and transition of the X7 FB vertical stiffener plates are not fabricated per the approved shop drawings

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:** 07

Remarks:

During the Quality Assurance (QA) random in-process visual inspection of the OBG segments 7BW and 7CW in the Trial Assembly area, this QA inspector discovered the following issues:

- The R=50mm portion at the transition end of the X7 floorbeam vertical flange (stiffener) to Longitudinal Diaphragm has been trimmed and found four locations that were not in compliance with the approved shop drawings (OBG Standards- Floor beam Details-X7).
- The 1st Weld joint is identified as SEG035C-032 at PP51 Crossbeam Side.
- The 2nd Weld joint is identified as SEG035B-040 at PP52 Counter weight Side.
- The 3rd Weld joint is identified as SEG037C-023 at PP53 Crossbeam Side.
- The 4th Weld joint is identified as SEG035C-008 at PP55 Crossbeam Side.
- All joints are Partial Joint Penetration (PJP) as per WD20W, weld joint connecting the vertical floorbeam flange (stiffener) X7 to the Longitudinal Diaphragm top flange plate.

Please see the attached NCR ZPMC-637 for details.

Action Required and/or Action Taken:

Propose a resolution for the identified non-conformance with revised procedures to prevent future occurrences and provide documentation to show that the radius and transition on the FB stiffeners have been repaired according to the approved show drawings. A response for the resolution of this issue is expected within 14 days.

Transmitted by: Ching Chao

Attachments: ZPMC-0637

cc: Rick Morrow, Gary Pursell, Contract Files, Ching Chao, Bill Howe

File: 05.03.06

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000626

Subject: NCR No. ZPMC-0637

Dated: 16-Feb-2010

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000599 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: The radius of the X7 FB flange (vertical stiffener) meets the specified minimum radius stated in the code and meets the adjacent edges without offset or cutting past the point of tangency.

The 50mm radius at the bottom of the X7 FB flange (vertical stiffener) as shown on the drawing does not specify a minimum or maximum tolerance. Per AWS D1.5 paragraph 3.2.4, the minimum tolerance of a radius for re-entrant corners is 25mm. The radius of the X7 FB flange (vertical stiffener) meets the specified minimum radius stated in the code and meets the adjacent edges without offset or cutting past the point of tangency. ZPMC considers this radius acceptable without any further work required and requests closure of this NCR. Also, please note that this NCR references the wrong paragraph from AWS D1.5, the correct reference is Section 3.2.4 not Section 3.2.5 as stated in the NCR.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000599R00

Caltrans' comments:

Status: REJ

Date: 17-Feb-2010

Provide the radius shown on the shop drawings.

Submitted by: Howe, Bill

Date: 17-Feb-2010

Attachment(s):

NCR PROPOSED RESOLUTION

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

Dated: 30-Mar-2010

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

Attention: Pursell, Gary
Resident Engineer

Job Name: SAS Superstructure

Document No.: ABF-NPR-000599 Rev: 01

Ref: 05.03.06-000626

Subject: NCR No. ZPMC-0637

Contractor's Proposed Resolution:

Reference Resolution: In the cases documented in the NCR, the vertical flange plate has not been altered after initial welding and therefore is acceptable per the response.

Per The Department's response to ABF-RFI-002075R00, "Where the base metal of the vertical flange PL has not been altered (cut, grind, burn, etc) after initial welding was performed and the welding passed the NDT testing, no action is needed." In the cases documented in the NCR, the vertical flange plate has not been altered after initial welding and therefore is acceptable per the response. Based on this ZPMC requests closure of this NCR.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000599R01;

Caltrans' comments:

Status: CLO

Date: 06-Apr-2010

This proposed resolution is acceptable. The Department concurs that Non-Conformance ZPMC-0637 is closed.

Submitted by: Eagen, Sean

Date: 06-Apr-2010

Attachment(s):

REQUEST FOR INFORMATION (RFI)

RFI No.: ABF-RFI-002075R00 Submitted By: Jiao, Gang Pages: 3
 RFI Date: 05-March-2010 Contact Name: Jiao, Gang Pages Attached: 2
 Phone No. 86-134-8265-6572

Subject: Reentrant Corner at Floorbeam Vertical Flange

References:

Sub/Sup: ABF **Sub RFI #:**

Response Required by: 12-March-2010 **Response affects critical path activity?** Yes

Description:

The reentrant corner (flare) in the approved drawings specify a 50mm radius for the connection between vertical floorbeam flange (stiffener) X7J and Longitudinal Diaphragm flange plate X42A. It has been noted that at some locations the as-built reentrant corner is less than 50mm in radius. Per AWS D1.5 Section 3.2.4, ABFJV considers the minimum acceptable radius for a reentrant corner as 25mm provided there is a smooth transition that meets the adjacent edges. Please confirm this understanding is correct.

For your information please find Contract Drawing 632 showing the weld for the area in question and WD20W on shop drawing WD2 showing the as fabricated condition.

Please review and respond.

Contractor Disposition:

This RFI is being submitted for:

The Cost and Time Impact from this RFI is: Not selected

Response:

Agreed Ext. Due Date:

Pages:

Pages Attached: _____

Where the base metal of the vertical flange PL has not been altered (cut, grind, burn, etc) after initial welding was preformed and the welding passed the NDT testing, no action is needed.

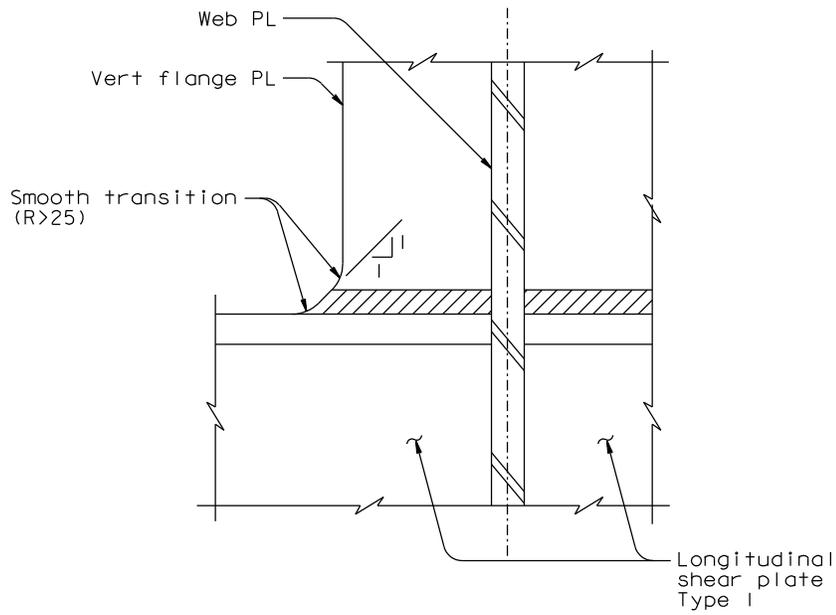
Where the base metal of the flange PL has been altered by any mechanical means (cut, grind, burn, etc.), the reentrant corner shall be transitioned at a 1:1 slope for the height of the PJP 11(8). A smooth transition of radius 25 mm or greater shall be provided at the start and finish of the 1:1 transition.

See attached sketch SK 2075R0-1.

Administrative Action:

This response resolves this RFI.

Date: 12-March-2010	Respondent: Lai, Gary	Phone No.:
----------------------------	------------------------------	-------------------



DETAIL 2
NTS

SFOBB SAS (SAS) Project #04-0120F4
RFI: * 20752R0

Date: 2010-03-11
File Name: SK-2075R0-1

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, P.R. China**Report No:** NCS-000595**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 14-Apr-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0637**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: 30-Jan-2010**Description of Non-Conformance:**

During the Quality Assurance (QA) random in-process visual inspection of the OBG segments 7BW and 7CW in the Trial Assembly area, this QA inspector discovered the following issues:

-The R=50mm portion at the transition end of the X7 floorbeam vertical flange (stiffener) to Longitudinal Diaphragm has been trimmed and found four locations that were not in compliance with the approved shop drawings (OBG Standards- Floor beam Details-X7).

-The 1st Weld joint is identified as SEG035C-032 at PP51 Crossbeam Side.

-The 2nd Weld joint is identified as SEG035B-040 at PP52 Counter weight Side.

-The 3rd Weld joint is identified as SEG037C-023 at PP53 Crossbeam Side.

-The 4th Weld joint is identified as SEG035C-008 at PP55 Crossbeam Side.

-All joints are Partial Joint Penetration (PJP) as per WD20W, weld joint connecting the vertical floorbeam flange (stiffener) X7 to the Longitudinal Diaphragm top flange plate.

Contractor's proposal to correct the problem:

Submit RFI to clarify radius specified on approved shop drawings versus AWS D1.5 minimum requirements for reentrant corners.

Corrective action taken:

In accordance with ABF-RFI-2075 the Department will require a minimum radius of 25mm at said locations.

Reentrant corners which do not meet the requirements of RFI-2075 will be tracked via the punchlist.

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:**

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 Jim Simonis 152.1675.3703, who represents the Office of Structural Materials for your project.

QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

(Continued Page 2 of 2)

Inspected By: Simonis,Jim

Quality Assurance Inspector

Reviewed By: Wahbeh,Mazen

QA Reviewer