

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-000519

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 20-Nov-2009

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

NCR #: ZPMC-0492

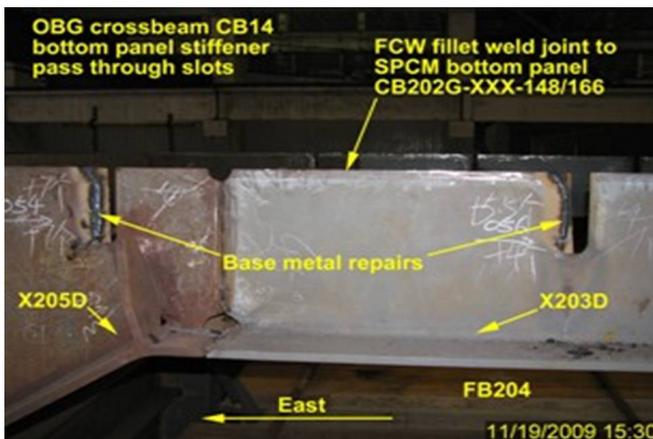
Type of problem:

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: OBG Crossbeam 14 Intermediate Diaphragm
Procedural	Procedural	Description:	

Reference Description: ZPMC performed base metal weld build-up without the Engineer's approval or an approved Critical Weld Repair procedure for CB14

Description of Non-Conformance:

This Quality Assurance (QA) inspector observed ZPMC welding personnel building up additional base metal weld to correct the dimensional/fit-up issue of the intermediate diaphragm slot holes, where the bottom panel stiffeners go through. The slots are located in the web plates of floor beam diaphragms identified as FB204 and FB205 at CB14. Piece Mark (PCMK) numbers affected are X203D, X205E, X205D and X205F at all four diaphragm locations. Weld numbers affected are as follows: CB202G-041-055, 056, 057, 058, 061 and 062; CB202G-042-053~062; CB202G-043-053~058, 061 and 062; CB202G-044-053~062; CB202G-041-051 and 052; CB202G-042-051 and 052; CB202G-043-051 and 052; CB202G-044-051 and 052. These base metal build-up were performed without the Engineer's approval or an approved critical weld repair procedure (CWR).



Applicable reference:

-AWS D1.5 2002 section 3.1.5: "Welds shall be prohibited on the work except as follows:

- (1) Base-metal repair performed in conformance with AASHTO M160/M160M (ASTM A 6/A 6M),

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Specification for General Requirements for Rolled Steel Plates, Shapes, Sheet Piling, and Bars for Structural Use, Article 9, by the mill or fabricator.

- (2) All welds detailed on approved shop drawings.
- (3) Repair welds authorized by this code.
- (4) Other welds approved by the Engineer.”

-AWS D1.5 2002 section 3.7.4: “Prior approval of the Engineer shall be obtained for repairs to base metal (other than those required by 3.2), repair of major or delayed cracks, repairs to ESW and EGW welds with internal defects, or for a revised design to compensate for deficiencies.”

Who discovered the problem: Steve Hall

Name of individual from Contractor notified: Kelvin Chueng

Time and method of notification: 1130 hours, Verbal

Name of Caltrans Engineer notified: Ching Chao and Bill Howe

Time and method of notification: 1330 hours, Verbal

QC Inspector's Name: Zhang 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:	Carreon,Albert	Lead Reviewer/Task Leader
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:	23-Dec-2009
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-0492	Document No:	05.03.06-000482

Reference Description: ZPMC performed base metal weld build-up without the Engineer's approval or an approved Critical Weld Repair procedure for CB14

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: Xbeam **Lift:** 14

Remarks:

This Quality Assurance (QA) inspector observed ZPMC welding personnel building up additional base metal weld to correct the dimensional/fit-up issue of the intermediate diaphragm slot holes, where the bottom panel stiffeners go through. The slots are located in the web plates of floor beam diaphragms identified as FB204 and FB205 at CB14. Piece Mark (PCMK) numbers affected are X203D, X205E, X205D and X205F at all four diaphragm locations. Weld numbers affected are as follows: CB202G-041-055, 056, 057, 058, 061 and 062; CB202G-042-053~062; CB202G-043-053~058, 061 and 062; CB202G-044-053~062; CB202G-041-051 and 052; CB202G-042-051 and 052; CB202G-043-051 and 052; CB202G-044-051 and 052. These base metal build-up were performed without the Engineer's approval or an approved critical weld repair procedure (CWR).

Action Required and/or Action Taken:

Submit a repair plan to the engineer for approval.

Transmitted by: Bill Howe

Attachments: ZPMC-0492

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

File: 05.03.06

NCR PROPOSED RESOLUTION

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

Dated: 10-Jun-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-000683 Rev: 00

Ref: 05.03.06-000482

Subject: NCR No. ZPMC-0492

Contractor's Proposed Resolution:

Reference Resolution: ZPMC will provide the WRR used when performing the base metal repair build up as well as the NDT after to show it is acceptable.

ZPMC will provide the WRR used when performing the base metal repair build up as well as the NDT after to show it is acceptable. Based on this proposal ZPMC requests that this NCR be approved, with actions pending.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000683R00

Caltrans' comments:

Status: AAP

Date: 14-Jun-2010

See response to ABF-NPR-000683R01.

Submitted by: Eagen, Sean

Date: 14-Jun-2010

Attachment(s):

NCR PROPOSED RESOLUTION

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

Dated: 11-Jun-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-000683 Rev: 01

Ref: 05.03.06-000482

Subject: NCR No. ZPMC-0492

Contractor's Proposed Resolution:

Reference Resolution: Weld built up to 20mm does not require Engineer approval. Attached is the WRR used and NDT after to show that the results are acceptable.

Weld built up to 20mm does not require Engineer approval. Attached is the WRR used and NDT after to show that the results are acceptable. Based on this ZPMC requests closure of this NCR.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000683R01;

Caltrans' comments:

Status: AAP

Date: 14-Jun-2010

The NDT results provided with this NPR do not address subject Piece Mark 205F. This proposed resolution is accepted, action pending. Please provide NDT results for Piece Mark 205F.

Submitted by: Eagen, Sean

Date: 14-Jun-2010

Attachment(s):



No. B-789

LETTER OF RESPONSE

TO: American Bridge/Flour

DATE: 2010-6-10

REGARDING: NCR-000519(ZPMC-0492)

The maximum buttering size is 14mm on NON-SPCM material what is not required the engineer's approval prior to repair. ZPMC is providing the WRR & NDT records show the soundness of the buttering area and is requesting closure of this NCR.

ATTACHMENT:

NCR-000519(ZPMC-0492)

B-WR8561

B787-UT-13408

B787-MT-23976

[Handwritten signature]
6/10/10



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: 23-Dec-2009

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: 05.03.06-000482

Subject: NCR No. ZPMC-0492

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- Non-Conformance Resolved.

Material Location: Xbeam **Lift:** 14

Remarks:

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Action Required and/or Action Taken:

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Transmitted by: Bill Howe

Attachments: ZPMC-0492

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

File: 05.03.06

02:02:15.04
05.03.06-000482,NCT

Received
NCT-000482 24 Dec 09 Page 1 of 1

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Specification for General Requirements for Rolled Steel Plates, Shapes, Sheet Piling, and Bars for Structural Use, Article 9, by the mill or fabricator.

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Time and method of notification: 1130 hours, Verbal

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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: Carreon, Albert

Lead Reviewer/Task Leader

Reviewed By: Wahbeh, Mazen

SMR

DEPARTMENT OF TRANSPORTATION
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City: 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-000519

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 20-Nov-2009

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

NCR #: ZPMC-0492

Type of problem:

Welding Concrete Other

Welding Curing Procedural Bridge No: 34-0006

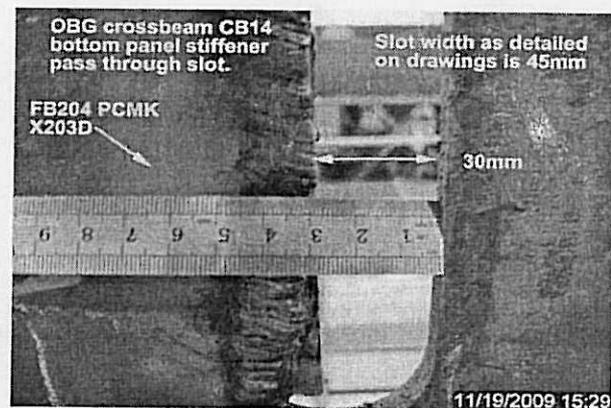
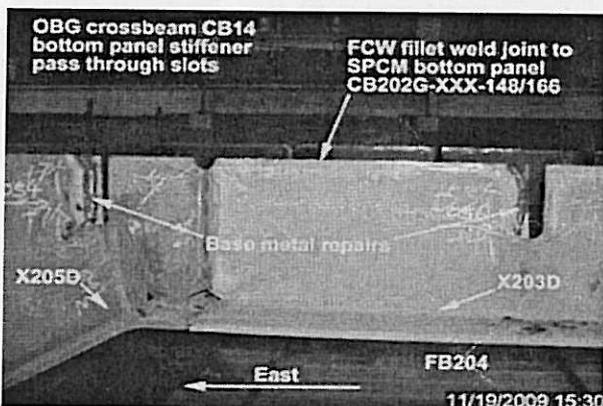
Joint fit-up Coating Other Component: OBG Crossbeam 14 Intermediate Diaphragm

Procedural Procedural Description:

Reference Description: ZPMC performed base metal weld build-up without the Engineer's approval or an approved Critical Weld Repair procedure for CB14

Description of Non-Conformance:

This Quality Assurance (QA) inspector observed ZPMC welding personnel building up additional base metal weld to correct the dimensional/fit-up issue of the intermediate diaphragm slot holes, where the bottom panel stiffeners go through. The slots are located in the web plates of floor beam diaphragms identified as FB204 and FB205 at CB14. Piece Mark (PCMK) numbers affected are X203D, X205E, X205D and X205F at all four diaphragm locations. Weld numbers affected are as follows: CB202G-041-055, 056, 057, 058, 061 and 062; CB202G-042-053~062; CB202G-043-053~058, 061 and 062; CB202G-044-053~062; CB202G-041-051 and 052; CB202G-042-051 and 052; CB202G-043-051 and 052; CB202G-044-051 and 052. These base metal build-up were performed without the Engineer's approval or an approved critical weld repair procedure (CWR).



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焊缝返修报告

版本 Rev. No.

Welding Repair Report

0

项目名称 Project Name	美国海湾大桥 SFOBB	部件图号 Drawing No	CB202G	报告编号 Report No.	B-WR8561
合同号 Contract No.:	04-0120F4	部件名称 Items Name	CB14	NDT报告编号 Report No. of NDT	NA
项目编号 Project No.:	ZP06-787				

焊缝缺陷描述如下:

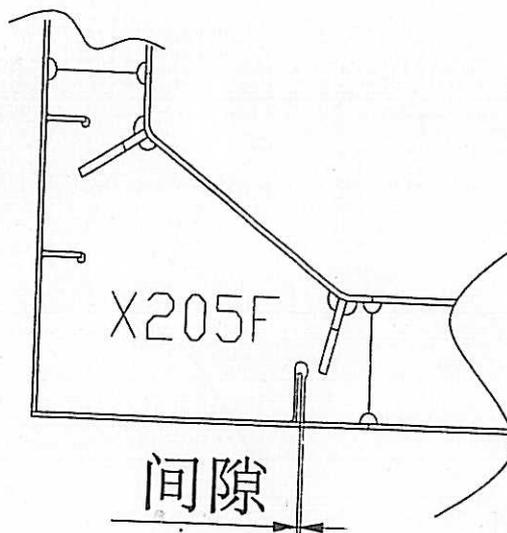
Description of welding discontinuity:

横梁CB14底板预装配发现X205D, X205E, X203D, X204B与I肋间隙偏大。经测量最小间隙4mm最大14mm。
After inspection CB14 bottom plate gap at X205D, X205E, X203D, X204B and I-ribs, minimum 4mm and maximum 14mm.

检验员 (Inspector): Guo Yuan ting 日期(Date): 09.11.14

焊缝返修位置示意图:

Draft of welding discontinuity:



Gap

产生原因:

Caused:

焊接变形和制作误差。

Weld distortion and fabricate error.

车间负责人(Foreman): Zhang Guiming 日期(Date): 07.11.15

处理意见

Disposition:

1. 将要修补的区域打磨光滑;
2. 准备一个正确的接头形式, 具体参见返修的WPS;
3. 在一侧贴加钢衬垫, 根据返修的焊接返修工艺规程(WPS)进行预热及焊接, 将X205F堆焊到WPS要求的间隙范围之内;

4. 打磨堆焊区域与邻近母材齐平;

5. 按照图纸要求焊缝进行检测。

MT UT

1. Grind the edge of the repair area cleanly
2. Prepare an right joint according to the approved WPS;
3. Add steel backing on one side, preheat and weld according to the approved repair WPS, perform sur fing to item X205F to make its gap with I-Rib meets the requirement;
4. Grind the repair area flush with the metal base;
5. Perform relevant NDT inspection to repair area according to the working drawing.

工艺: He Xiao Lin
Technical engineer

审核:
Approved by

日期
Date

07.11.15



焊缝返修报告

Welding Repair Report

版本 Rev. No.

0

B-WR8561

NA

项目名称 美国海湾大桥
Project Name SFOBB

部件图号
Drawing No. CB202G

报告编号
Report No.

合同号
Contract No.: 04-0120F4

部件名称
Items Name CB14

NDT报告编号
Report No. of NDT

项目编号
Project No.: ZP06-787

纠正措施:

Correction action to prevent re occurrence:

培训和教育操作工, 提高操作水平。

Train and educate operator to improve operation skill

WPS-345-SMAW-3G(CSF)-Repair

车间负责人(Foreman): Zhang Guiming 日期(Date): 09.11.15

参照的WPS编号
Repair WPS No.WPS-345-SMAW-1
G(1F)- Repair
WPS-345-FCAW-1
G(1F)-Repair-1工艺员
technologistHexiaolin
09.11.15返修(碳刨)前预热温度
Preheat temperature
before gouging

NA

返修的缺陷
Description
of discontinuity

gap

焊前处理检查
Inspection
before welding

Acc

焊前预热温度
Preheat temperature
before welding

73°C

最大碳刨深度
Max. depth of gouging

NA

碳刨总长
Total length of gouging

520mm

焊工
welder 051795焊接类型
welding type SMAW焊接位置
position 3G焊接电流
Current 110A焊接电压
Voltage 22.0V焊接速度
Speed 110mm/min返修后检查
Inspection After repairing:外观检查
VT result Acc检验员
Inspector Chen Xi日期
Date 2009.11.23NDT复检
NDT result Acc探伤员
NDT person Lanfang
Jin Jianbing日期
Date 2009.11.23
2009.11.25见证:
Witness/Review: Acc备注:
Remark:

#R787-QCP-900



REPORT OF MAGNETIC PARTICLE EXAMINATION

磁粉检测报告

REPORT NO. 报告编号 B787-MT-23976 DATE日期 2009.11.25 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: X205/203/204 FLOOR BEAM 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 14/10/12/15 mm

WELDING PROCESS 焊接方法: FCAW TYPE OF JOINT 焊缝类型: NA

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			
X205D				ACC.		after repaired
X205E				ACC.		after repaired
X203D				ACC.		after repaired
X204B				ACC.		after repaired

Base metal per B-WR8561

BLANK

EXAMINED BY主探: Jin Jianting *Jin Jianting* REVIEWED BY审核: Sun Guang chao *Sun Guang chao*
 LEVEL - II SIGN 签名 / DATE日期: 2009-11-25 LEVEL-II SIGN / DATE日期: 2009. 11.25
 质量经理 / QCM: _____ 用户CUSTOMER: _____
 签字 SIGN / 日期 DATE: _____ 签字 SIGN / 日期 DATE: _____

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000482

Subject: NCR No. ZPMC-0492

Dated: 29-Jun-2010

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000683 Rev: 02

Contractor's Proposed Resolution:

Reference Resolution: ZPMC is submitting previously omitted NDT results from the weld build up performed. Based on this documentation and previously submitted documents. ZPMC requests closure of this NCR.

ZPMC is submitting previously omitted NDT results from the weld build up performed. Based on this documentation and previously submitted documents. ZPMC requests closure of this NCR.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000683R02;

Caltrans' comments:

Status: REJ

Date: 07-Jul-2010

Please provide NDT documentation for the piece marks listed in the NCR.

Submitted by: Woo, Laraine

Date: 07-Jul-2010

Attachment(s):



No. B-806

LETTER OF RESPONSE

TO: American Bridge/Flour

DATE: 2010-6-29

REGARDING: NCR-000519(ZPMC-0492)

ZPMC is providing the WRR and NDT results for engineer to review and is requesting closure of this NCR.

ATTACHMENT:

NCR-000519(ZPMC-0492)

B-WR11788

B787-UT-13663

B787-MT-24520

[Handwritten signature]
6/29/10



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: 23-Dec-2009

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

Dear: Mr. Charles Kanapicki
Attention: Mr. Thomas Nilsson Project/Fabrication Manager
Subject: NCR No. ZPMC-0492

Job Name: SAS Superstructure
Document No: 05.03.06-000482

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- Non-Conformance Resolved.

Material Location: Xbeam

Lift: 14

Remarks:

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Transmitted by: Bill Howe

Attachments: ZPMC-0492

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

File: 05.03.06

02:02:15.04
NCT 05.03.06-000482,NCT

Received
NCT-000482 24 Dec 09 Page 1 of 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

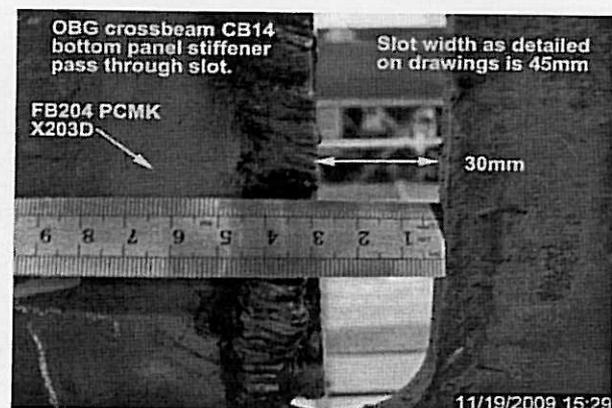
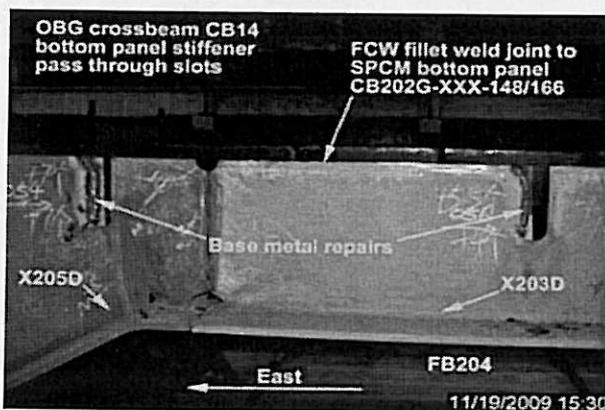
Contract #: 04-0120F4

Cty: 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-000519**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 20-Nov-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0492**Type of problem:**Welding Concrete Other Welding Curing Procedural Joint fit-up Coating Other Procedural Procedural Description: **Bridge No:** 34-0006**Component:** OBG Crossbeam 14 Intermediate Diaphragm

Reference Description: ZPMC performed base metal weld build-up without the Engineer's approval or an approved Critical Weld Repair procedure for CB14

Description of Non-Conformance:

This Quality Assurance (QA) inspector observed ZPMC welding personnel building up additional base metal weld to correct the dimensional/fit-up issue of the intermediate diaphragm slot holes, where the bottom panel stiffeners go through. The slots are located in the web plates of floor beam diaphragms identified as FB204 and FB205 at CB14. Piece Mark (PCMK) numbers affected are X203D, X205E, X205D and X205F at all four diaphragm locations. Weld numbers affected are as follows: CB202G-041-055, 056, 057, 058, 061 and 062; CB202G-042-053~062; CB202G-043-053~058, 061 and 062; CB202G-044-053~062; CB202G-041-051 and 052; CB202G-042-051 and 052; CB202G-043-051 and 052; CB202G-044-051 and 052. These base metal build-up were performed without the Engineer's approval or an approved critical weld repair procedure (CWR).

**Applicable reference:**

-AWS D1.5 2002 section 3.1.5: "Welds shall be prohibited on the work except as follows:

- (1) Base-metal repair performed in conformance with AASHTO M160/M160M (ASTM A 6/A 6M),

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Specification for General Requirements for Rolled Steel Plates, Shapes, Sheet Piling, and Bars for Structural Use, Article 9, by the mill or fabricator.

- (2) All welds detailed on approved shop drawings.
- (3) Repair welds authorized by this code.
- (4) Other welds approved by the Engineer."

-AWS D1.5 2002 section 3.7.4: "Prior approval of the Engineer shall be obtained for repairs to base metal (other than those required by 3.2), repair of major or delayed cracks, repairs to ESW and EGW welds with internal defects, or for a revised design to compensate for deficiencies."

Who discovered the problem: Steve Hall

Name of individual from Contractor notified: Kelvin Chueng

Time and method of notification: 1130 hours, Verbal

Name of Caltrans Engineer notified: Ching Chao and Bill Howe

Time and method of notification: 1330 hours, Verbal

QC Inspector's Name: Zhang 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: Carreon,Albert

Lead Reviewer/Task Leader

Reviewed By: Wahbeh,Mazen

SMR



焊缝返修报告

版本 Rev. No.

Welding Repair Report

0

项目名称 Project Name	美国海湾大桥 SFOBB	部件图号 Drawing No	CB202G	报告编号 Report No.	B-WR11788
合同号 Contract No.:	04-0120F4	部件名称 Items Name	CB14	NDT报告编号 Report No.of NDT	NA
项目编号 Project No.:	ZP06-787				

焊缝缺陷描述如下:

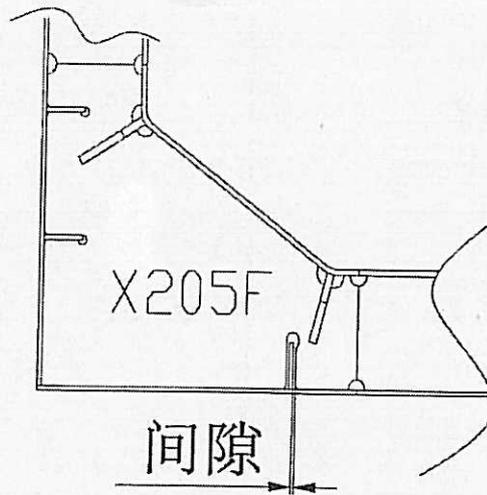
Description of welding discontinuity:

横梁CB14底板预装配发现X205F与I肋间隙偏大。经测量最小间隙4mm最大14mm。

After inspection CB14 bottom plate, gap was found at X205F and I-ribs, minimum 4mm and maximum 14mm.

检验员 (Inspector): Guo yuan ting 日期(Date): 09.11.14

焊缝返修位置示意图:

Draft of welding discontinuity:

Gap

产生原因:

Caused:

焊接变形和制作误差。

Weld distortion and fabricate error.

车间负责人(Foreman): Hu yu zhang 日期(Date): 10.06.28

处理意见

Disposition:

1. 将要修补的区域打磨光滑;
2. 准备一个正确的接头形式, 具体参见返修的WPS;
3. 在一侧贴加钢衬垫, 根据返修的焊接返修工艺规程 (WPS) 进行预热及焊接, 将X205F堆焊到WPS要求的间隙范围之内;
4. 打磨堆焊区域与邻近母材齐平;
5. 按照图纸要求焊缝进行检测。

1. Grind the edge of the repair area cleanly
2. Prepare an right joint according to the approved WPS;
3. Add steel backing on one side, preheat and weld according to the approved repair WPS, perform sur fing to item X205F to make its gap with I-Rib meets the requirement;
4. Grind the repair area flush with the metal base;
5. Perform relevant NDT inspection to repair area according to the working drawing.

工艺: He xiaolin
Technical engineer

审核:
Approved by

日期10.06.28
Date

#R787-QCP-900



焊缝返修报告

Welding Repair Report

版本 Rev. No.

0

项目名称 Project Name	美国海湾大桥 SFOBB	部件图号 Drawing No.	CB202G	报告编号 Report No.	B-WR11788
合同号 Contract No.:	04-0120F4	部件名称 Items Name	CB14	NDT报告编号 Report No. of NDT	NA
项目编号 Project No.:	ZP06-787				

纠正措施:

Correction action to prevent re occurrence:

培训和教育操作工, 提高操作水平。

Train and educate operator to improve operation skill

车间负责人(Foreman): Hu yuzhang 日期(Date): 06.28

参照的WPS编号 Repair WPS No.	WPS-345-SMAW-1 G(1F)- Repair WPS-345-FCAW-1 G(1F)-Repair-1	工艺员 technologist	He xiaolin 10.06.28
返修(碳刨)前预热温度 Preheat temperature before gouging	NA	返修的缺陷 Description of discontinuity	gap
焊前处理检查 Inspection before welding	Au	焊前预热温度 Preheat temperature before welding	73°C
最大碳刨深度 Max. depth of gouging	NA	碳刨总长 Total length of gouging	520 mm
焊工 welder	057795	焊接类型 welding type	SMAW
		焊接位置 position	3G
焊接电流 Current	110A	焊接电压 Voltage	220V
		焊接速度 Speed	110 m/min
返修后检查 Inspection After repairing:			
外观检查 VT result	Au	检验员 Inspector	Lizhijiang
		日期 Date	2009.11.23
NDT复检 NDT result	ACL	探伤员 NDT person	Chachao
		日期 Date	2009.11.23
见证: Witness/Review:			
备注: Remark:			

#R787-QCP-900

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000482

Subject: NCR No. ZPMC-0492

Dated: 13-Jul-2010

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000683 Rev: 03

Contractor's Proposed Resolution:

Reference Resolution: It is unclear why the Department is requesting NDT for closure of this NCR when all requested NDT has been provided in previous submittals, please refer to ABF-NPR-00683R01 and ABF-NPR-00683R02.

It is unclear why the Department is requesting NDT for closure of this NCR when all requested NDT has been provided in previous submittals, please refer to ABF-NPR-00683R01 and ABF-NPR-00683R02. See attachments for reference, based on previously submitted documentation ZPMC request closure of this NCR.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000683R03;;; ; ; ;

Caltrans' comments:

Status: CLO
Date: 14-Jul-2010

The documentation received is sufficient to close this NCR.

Submitted by: Woo, Laraine

Attachment(s):

Date: 14-Jul-2010

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-000717**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 14-Jul-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0492**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: 20-Nov-2009**Description of Non-Conformance:**

This Quality Assurance (QA) inspector observed ZPMC welding personnel building up additional base metal weld to correct the dimensional/fit-up issue of the intermediate diaphragm slot holes, where the bottom panel stiffeners go through. The slots are located in the web plates of floor beam diaphragms identified as FB204 and FB205 at CB14. Piece Mark (PCMK) numbers affected are X203D, X205E, X205D and X205F at all four diaphragm locations. Weld numbers affected are as follows: CB202G-041-055, 056, 057, 058, 061 and 062; CB202G-042-053~062; CB202G-043-053~058, 061 and 062; CB202G-044-053~062; CB202G-041-051 and 052; CB202G-042-051 and 052; CB202G-043-051 and 052; CB202G-044-051 and 052. These base metal build-up were performed without the Engineer's approval or an approved critical weld repair procedure (CWR).

Contractor's proposal to correct the problem:

Provide WRR used and subsequent NDT reports required to verify repair quality.

Corrective action taken:

Contractor has submitted WRR used during repairs as well as NDT documentation verifying repair welds meet Contract weld quality requirements.

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

Inspected By: Simonis, Jim

Quality Assurance Inspector

QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

(Continued Page 2 of 2)

Reviewed By: Wahbeh,Mazen

QA Reviewer