

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-000803**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 14-Jul-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0765**Type of problem:**

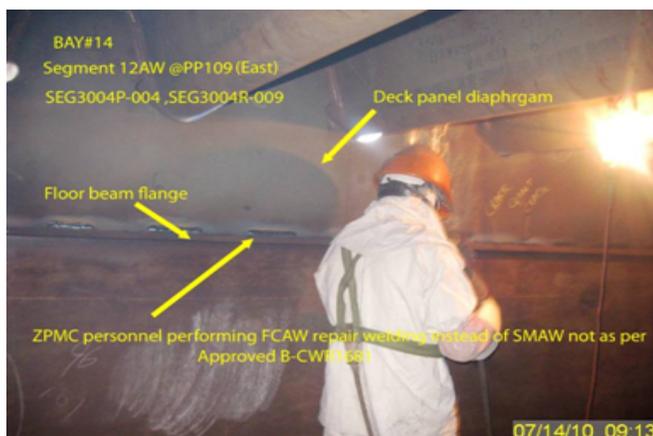
Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: Segment 12AW Floorbeam
Procedural	Procedural	Description:	

Reference Description: ZPMC performed critical weld repair in Segment 12AW Floorbeam without following the procedure in the approved CWR

Description of Non-Conformance:

During random in-process observation of the Critical Weld Repair (CWR) in Segment 12AW, this Caltrans Quality Assurance (QA) Inspector discovered the following issue:

- The Critical Weld Repair (CWR) was completed using the Flux Core Arc Welding process (FCAW). The approved CWR describes using the Shielded Metal Arc Welding (SMAW) process for these repairs.
- These are repairs of fillet welds which connect the Deck Panel Diaphragm (X3271) to the Floor Beam FL-1 (FB3051A) and FL2-1 (FB3059A).
- These repairs are located at panel point 109 (East face).
- The welds are identified as SEG3004P-004 and SEG3004R-009.
- These weld joints are designated as Non-Seismic Performance Critical Members (Non-SPCM).
- The Critical Weld Repair Report was identified as B-CWR1681.
- The OBG Segment 12AW is located inside the Fabrication Bay 14 West.



QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Applicable reference:

ZPMC Critical Weld Repair Report# B-CWR1681.

Who discovered the problem: Chandra Sudalaimuthu

Name of individual from Contractor notified: Peter Shaw

Time and method of notification: 16:00 hours, 07/14/10, Verbal

Name of Caltrans Engineer notified: Laraine Woo

Time and method of notification: 08:00 hours, 07/15/10, 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 Jim Devey, (86) 150-0002-6784, who represents the Office of Structural Materials for your project.

Inspected By:	Tsang, Eric	SMR
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Reviewed By:	Devey, Jim	SMR
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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: 16-Jul-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: 05.03.06-000760

Subject: NCR No. ZPMC-0765

Reference Description: ZPMC performed critical weld repair in Segment 12AW Floorbeam without following the procedure in the approved CWR

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 random in-process observation of the Critical Weld Repair (CWR) in Segment 12AW, this Caltrans Quality Assurance (QA) Inspector discovered the following issue:
- The Critical Weld Repair (CWR) was completed using the Flux Core Arc Welding process (FCAW). The approved CWR describes using the Shielded Metal Arc Welding (SMAW) process for these repairs.
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 - These weld joints are designated as Non-Seismic Performance Critical Members (Non-SPCM).
 - The Critical Weld Repair Report was identified as B-CWR1681.
 - The OBG Segment 12AW is located inside the Fabrication Bay 14 West.

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-0765

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Jason Tom, 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: 05.03.06-000760

Subject: NCR No. ZPMC-0765

Dated: 27-Sep-2010

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000798 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: ZPMC has submitted the CWR for the work that was being done at the time the NCR was being written which has subsequently approved.

ZPMC has submitted the CWR for the work that was being done at the time the NCR was being written which has subsequently approved. ZPMC is also providing the NDT documents to show the weld is acceptable. ZPMC has issued an internal NCR to ensure that this does not become a widespread issue and inspectors ensure they work being done matches the repair document present. Based on this ZPMC requests closure of this NCR.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000798R00;

Caltrans' comments:

Status: CLO

Date: 07-Oct-2010

The proposed resolution is acceptable. This NCR is considered closed.

Submitted by: Woo, Laraine

Date: 07-Oct-2010

Attachment(s):



No. B-897

LETTER OF RESPONSE

TO: American Bridge/Flour

DATE: 2010-9-27

REGARDING: NCR-000803 (ZPMC-0765)

ZPMC has issued an internal NCR to address this problem. To show the actual welding repair method what was used, ZPMC has submitted the corrected CWR, B-CWR1681 R1. And ZPMC is providing the NDT record to show the acceptance of this weld after repair. Based on this, ZPMC is requesting closure of this NCR.

ATTACHMENT:

NCR-000803 (ZPMC-0765)

B787-MT-24206 R1-2

JL

9/27/10



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: 16-Jul-2010
Contract No: 04-0120F4
04-SF-80-13.2 / 13.9
Job Name: SAS Superstructure
Document No: 05.03.06-000760

Dear: Mr. Charles Kanapicki
Attention: Mr. Thomas Nilsson Project/Fabrication Manager
Subject: NCR No. ZPMC-0765

Reference Description: ZPMC performed critical weld repair in Segment 12AW Floorbeam without following the procedure in the approved CWR
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:

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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-0765

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Jason Tom, Contract Files, Ching Chao, Bill Casey
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-000803

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 14-Jul-2010

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

NCR #: ZPMC-0765

Type of problem:

Welding Concrete Other

Welding Curing Procedural Bridge No: 34-0006

Joint fit-up Coating Other Component: Segment 12AW Floorbeam

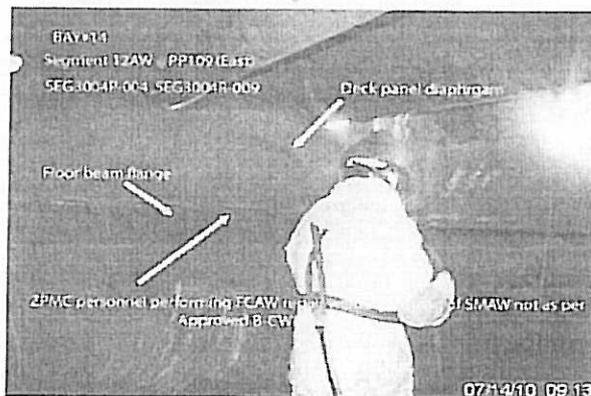
Procedural Procedural Description:

Reference Description: ZPMC performed critical weld repair in Segment 12AW Floorbeam without following the procedure in the approved CWR

Description of Non-Conformance:

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QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

Applicable reference:

ZPMC Critical Weld Repair Report# B-CWR1681.

Who discovered the problem: Chandra Sudalaimuthu

Name of individual from Contractor notified: Peter Shaw

Time and method of notification: 16:00 hours, 07/14/10, Verbal

Name of Caltrans Engineer notified: Laraine Woo

Time and method of notification: 08:00 hours, 07/15/10, 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:

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Inspected By: Tsang, Eric

SMR

Reviewed By: Devey, Jim

SMR



REPORT OF MAGNETIC PARTICLE EXAMINATION
磁粉检测报告

REPORT NO. 报告编号 B787-MT-24206R1-2 DATE日期 2010.08.22 PAGE OF页码 1/1 Revision No: 0

PROJECT NO. ZP06-787 CONTRACTOR: CALTRANS
工程编号: 用户:

DRAWING NO. SEG3004* CALTRANS CONTRACT NO.:
图号: 12AW DECK PLATE SPLICE 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. 28 ST , 2010
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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
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MAGNETIZING METHOD Continuous magnetic yoke CURRENT AC
磁化方法 磁轭式连续法 电流

PARTICLE TYPE Dry magnet powder YOKE SPACING 70~150mm
磁粉类型 干磁粉 磁轭间距

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 14/20mm	A709M-345T2-X
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WELDING PROCESS NA TYPE OF JOINT T-JOINT
焊接方法 焊缝类型

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			
SEG3004P-004	1R1			ACC.		100%MT
	2R1			ACC.		100%MT
	3R1			ACC.		100%MT
	4R1			ACC.		100%MT
	5R1			ACC.		100%MT
	6R1			ACC.		100%MT
	7R1			ACC.		100%MT
SEG3004R-009	1R1			ACC.		100%MT
	2R1			ACC.		100%MT
	3R1			ACC.		100%MT
	4R1			ACC.		100%MT
	5R1			ACC.		100%MT
	6R1			ACC.		100%MT

AFTER B-CWR1681

EXAMINED BY 主探 Sun Gongchang Sun Gongchang 2010.08.22	REVIEWED BY 审核 Li Liming Li Liming 2010.08.22
LEVEL-II SIGN 签名 / DATE日期	LEVEL-II SIGN / DATE日期
质量经理 / QCM Lu Jianhui Lu Jianhui 2010.08.22	用户 CUSTOMER
签字 SIGN / 日期 DATE	签字 SIGN / 日期 DATE

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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-000813**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 27-Sep-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0765**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: 14-Jul-2010**Description of Non-Conformance:**

During random in-process observation of the Critical Weld Repair (CWR) in Segment 12AW, this Caltrans Quality Assurance (QA) Inspector discovered the following issue:

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- The Critical Weld Repair Report was identified as B-CWR1681.
- The OBG Segment 12AW is located inside the Fabrication Bay 14 West.

Contractor's proposal to correct the problem:

Contractor submitted the CWR for the repair work, by the time NCR has been issued. Contractor proposes to repair the weld, and provide the NDT report to prove the weld is acceptable. Contractor will issue an internal NCR to the inspector, and ensure the repair work is the same as the repair document presented.

Corrective action taken:

Contractor repaired the welds, and NDT report was provided. The NDT report shows that the weld is acceptable. Contractor issued an internal NCR to the inspector. Contractor ensured the repair work was the same as the repair document presented.

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
