

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-000915**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 23-Nov-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0877**Type of problem:****Welding****Concrete****Other****Welding****Curing****Procedural****Bridge No:** 34-0006**Joint fit-up****Coating****Other****Component:** Bikepath BK004C2-024**Procedural****Procedural****Description:**

Reference Description: ZPMC performed fabrication without following the "Weld Procedure Requirements for New Welds" by Rager/McQuaid

Description of Non-Conformance:

During Caltrans Quality Assurance (QA) in process observations of the fabrication of OBG Bike Path bottom cover plate, this QA discovered the following issue(s):

ZPMC welding personnel did not follow the "Weld Procedure Requirements for New Welds" by Rager/McQuaid

The following requirements were not followed:

-3l) Preparation for Welding: Alternatively, preheating using gas preheating torches shall be applied to the weld joint and surrounding area in such a way that the entire area to be welded and all adjacent material out to a distance of 75mm in any direction is heated to the value shown in AWS D1.5, clause 12.14 (Table 12.3 or Table 12.4 as appropriate). Preheat temperature is always stated as a minimum value.

-6a) Non Destructive Testing: All back gouged groove welds are to have their gouged areas ground to bright metal and inspected 100% by VT and MT examination before welding may begin from the second side.

-The weld is identified as BK004C2-024-018, 016.

-The welding process used was Flux Core Arc Welding (FCAW).

-The area was being not preheated to 165 degrees.

-ZPMC personnel did not inspect 100% VT and MT of backgouged area before welding began from the second side.

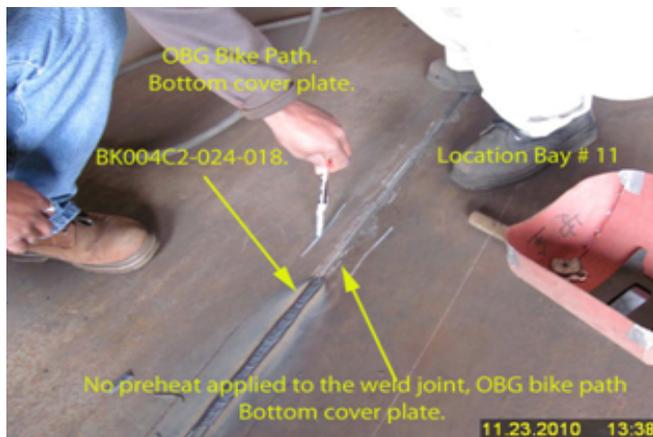
-The weld is a Completed joint Penetration, (CJP) joining 6mm plate to 6mm plate.

-The weld is not SPCM.

-OBG Bike path, Bottom cover plate is located in Bay # 11.

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

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Applicable reference:

“Weld Procedure Requirements for New Welds” by Rager/McQuaid

-1a) Scope: This procedure is to be used for all new and totally replaced welds that are being made in conformance with the AWS D1.5 Bridge Welding Code, the Caltrans Special Provisions and this Welding Procedure

-3l) Preparation for Welding: Alternatively, preheating using gas preheating torches shall be applied to the weld joint and surrounding area in such a way that the entire area to be welded and all adjacent material out to a distance of 75mm in any direction is heated to the value shown in AWS D1.5, clause 12.14 (Table 12.3 or Table 12.4 as appropriate). Preheat temperature is always stated as a minimum value.

-6a) Non Destructive Testing: All back gouged groove welds are to have their gouged areas ground to bright metal and inspected 100% by VT and MT examination before welding may begin from the second side.

Who discovered the problem: Shailesh Gaikwad

Name of individual from Contractor notified: Steve Lawton

Time and method of notification: 900 hours, 11.24.2010, Email

Name of Caltrans Engineer notified: Laraine Woo

Time and method of notification: 9:30_11/24/10_Verbal

QC Inspector's Name: Yu Dong Ping.

Was QC Inspector aware of the problem:

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 3 of 3)

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 Jim Devey, (86) 150-0002-6784, who represents the Office of Structural Materials for your project.

Inspected By:	Tsang, Eric	SMR
Reviewed By:	Devey, Jim	SMR

NCT

(Continued Page 2 of 2)

Transmitted by: Laraine Woo Transportation Engineer

Attachments: ZPMC-0877

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: 05.03.06-000872

Subject: NCR No. ZPMC-0877

Dated: 01-Dec-2010

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000870 **Rev:** 00

Contractor's Proposed Resolution:

Reference Resolution: As this NCR was written without a contractual basis it should be withdrawn.

The "NEW WELD PROCEDURE (Rager/McQuaid)" quoted as the basis for this NCR is not a contract document only a recommendation from the QA/QC Committee. If the Department wants to incorporate the QA/QC committee's recommendations as a contract requirement a contract change order should be issued. As this NCR was written without a contractual basis it should be withdrawn.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000870R00

Caltrans' comments:

Status: REJ

Date: 03-Dec-2010

CT acknowledges contractor's response. However, successful NDT will close this NCR.

Submitted by: Chao, Ching

Date: 03-Dec-2010

Attachment(s):

NCR PROPOSED RESOLUTION

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

Attention: Siegenthaler, Peter
Resident Engineer

Ref: 05.03.06-000872

Subject: NCR No. ZPMC-0877

Dated: 08-Dec-2010

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000870 Rev: 01

Contractor's Proposed Resolution:

Reference Resolution: We understand your response and we will not submit the normal NCR closure package with NDT reports for this and expect that CT will close these as the green tags for these components are issued.

We understand your response and we will not submit the normal NCR closure package with NDT reports for this and expect that CT will close these as the green tags for these components are issued.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000870R01

Caltrans' comments:

Status: REJ

Date: 09-Dec-2010

Normal NCR closure package with NDT reports shall be submitted with the NPR to close out the NCR.

Submitted by: Woo, Laraine

Attachment(s):

Date: 09-Dec-2010

NCR PROPOSED RESOLUTION

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

Dated: 22-Feb-2011

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

Attention: Siegenthaler, Peter
Resident Engineer

Job Name: SAS Superstructure

Ref: 05.03.06-000872

Document No.: ABF-NPR-000870 Rev: 02

Subject: NCR No. ZPMC-0877

Contractor's Proposed Resolution:

Reference Resolution:

See attached NDT results to show the weld is acceptable. Based on this ZPMC requests closure of this NCR.

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Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000870R02;

Caltrans' comments:

Status: CLO

Date: 23-Feb-2011

This proposed resolution is acceptable. The documentation received is sufficient and the Department concurs that Non-Conformance ZPMC-0877 is closed.

Submitted by: Eagen, Sean

Date: 23-Feb-2011

Attachment(s):

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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-000915**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 23-Nov-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0877**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: Bikepath BK004C2-024
Procedural	Procedural	Description:	

Reference Description: ZPMC performed fabrication without following the "Weld Procedure Requirements for New Welds" by Rager/McQuaid

Description of Non-Conformance:

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-6a) Non Destructive Testing: All back gouged groove welds are to have their gouged areas ground to bright metal and inspected 100% by VT and MT examination before welding may begin from the second side.

-The weld is identified as BK004C2-024-018, 016.

-The welding process used was Flux Core Arc Welding (FCAW).

-The area was being not preheated to 165 degrees.

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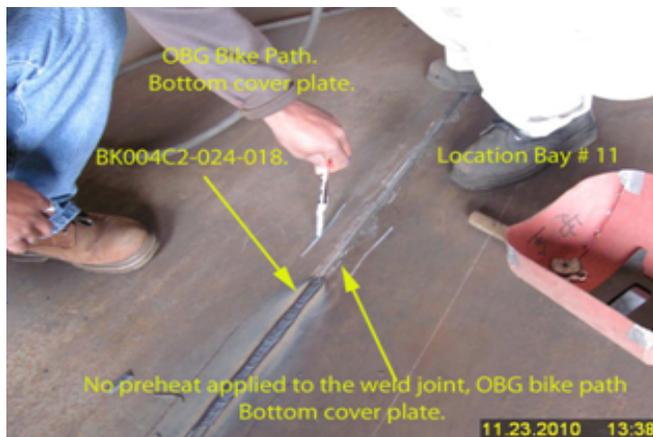
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-OBG Bike path, Bottom cover plate is located in Bay # 11.

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 3)



Applicable reference:

“Weld Procedure Requirements for New Welds” by Rager/McQuaid

-1a) Scope: This procedure is to be used for all new and totally replaced welds that are being made in conformance with the AWS D1.5 Bridge Welding Code, the Caltrans Special Provisions and this Welding Procedure

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Name of Caltrans Engineer notified: Laraine Woo

Time and method of notification: 9:30_11/24/10_Verbal

QC Inspector's Name: Yu Dong Ping.

Was QC Inspector aware of the problem:

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 3 of 3)

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 Jim Devey, (86) 150-0002-6784, who represents the Office of Structural Materials for your project.

Inspected By:	Tsang, Eric	SMR
Reviewed By:	Devey, Jim	SMR

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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-000919**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 23-Feb-2011**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0877**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: 23-Nov-2010**Description of Non-Conformance:**

During Caltrans Quality Assurance (QA) in process observations of the fabrication of OBG Bike Path bottom cover plate, this QA discovered the following issue(s):

ZPMC welding personnel did not follow the "Weld Procedure Requirements for New Welds" by Rager/McQuaid

The following requirements were not followed:

- 3l) Preparation for Welding: Alternatively, preheating using gas preheating torches shall be applied to the weld joint and surrounding area in such a way that the entire area to be welded and all adjacent material out to a distance of 75mm in any direction is heated to the value shown in AWS D1.5, clause 12.14 (Table 12.3 or Table 12.4 as appropriate). Preheat temperature is always stated as a minimum value.
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- The weld is identified as BK004C2-024-018, 016.
- The welding process used was Flux Core Arc Welding (FCAW).
- The area was being not preheated to 165 degrees.
- ZPMC personnel did not inspect 100% VT and MT of backgouged area before welding began from the second side.
- The weld is a Completed joint Penetration, (CJP) joining 6mm plate to 6mm plate.
- The weld is not SPCM.
- OBG Bike path, Bottom cover plate is located in Bay # 11.

Contractor's proposal to correct the problem:

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

Corrective action taken:

Contractor provided the NDT report. The report proves the weld is acceptable.

