

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-000697

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 12-Mar-2010

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

NCR #: ZPMC-0664

Type of problem:

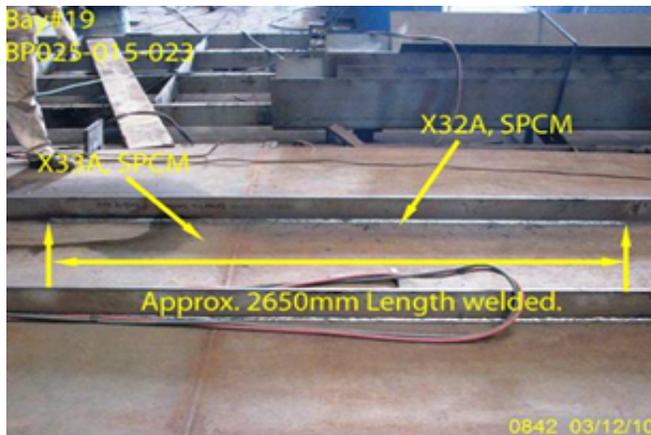
Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: Segment 11DW FL3 Bottom Plate
Procedural	Procedural	Description:	

Reference Description: Welding was performed with improperly stored electrode for Segment 11DW FL3 Bottom Plate

Description of Non-Conformance:

During random Quality Assurance (QA) visual review of the Bottom Plate (BP) components, this QA Inspector discovered the following issue:

- Flux Cored Arc Welding (FCAW) performed on Bottom Plate BP025-015; ZPMC personal welded utilizing electrode wire that has been exposed for more than 24 hours.
- This electrode was exposed and not properly stored since 03-08-10.
- Approximately 2650mm length of weld was welded by this electrode.
- The weld is identified as: BP025-015-023.
- This weld is a 6mm fillet weld type joining BP X32A (SPCM), X33A (SPCM) to the X115A Stiffener.
- This weld is designated as Seismic Performance Critical Member (SPCM) on the approved drawing (BP025B).
- This component is located in OBG fabrication shop Bay #19.



QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)



Applicable reference:

AWS D1.5-2002 section 12.6.7.4 Electrode Storage: When welding is to be suspended for more than 8 hours, electrodes shall be removed from the machines and stored in airtight coverings or placed in a storage or drying oven maintained at a temperature of 120 degree C – 290 degree C [250 degree F- 550 degree F] or as recommended by the manufacturer. Electrodes not consumed within 24 hours of accumulated exposure outside sealed or heated storage shall be re- dried by baking as described in 12.6.7.6. Electrodes shall be identified to facilitate monitoring of total atmospheric exposure time.

WQCP Section 12.4.8.5: Electrodes shall be identified by marking the time exposed to the atmosphere to facilitate monitoring the total atmospheric exposure time. Electrode that is not consumed within 24 hours of accumulated exposure shall be removed and cannot be used for welding SPCMs.

Who discovered the problem: Hiranch Patel

Name of individual from Contractor notified: Peng Wen Jun

Time and method of notification: 1500 hours, 03-12-10, Verbal

Name of Caltrans Engineer notified: Bill Howe

Time and method of notification: 1130 hours, 03-13-10, Email

QC Inspector's Name: Xu Tao

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:	Tsang, Eric	SMR
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Reviewed By:	Wahbeh, Mazen	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: 17-Mar-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: 05.03.06-000654

Subject: NCR No. ZPMC-0664

Reference Description: Welding was performed with improperly stored electrode for Segment 11DW FL3 Bottom Plate

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:** 11

Remarks:

- During random Quality Assurance (QA) visual review of the Bottom Plate (BP) components, this QA Inspector discovered the following issue:
- Flux Cored Arc Welding (FCAW) performed on Bottom Plate BP025-015; ZPMC personal welded utilizing electrode wire that has been exposed for more than 24 hours.
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 - This weld is designated as Seismic Performance Critical Member (SPCM) on the approved drawing (BP025B).
 - This component is located in OBG fabrication shop Bay #19.

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: Bill Howe Sr. Transportation Engineer

Attachments: ZPMC-0664

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: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000654

Subject: NCR No. ZPMC-0664

Dated: 31-Mar-2010

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000643 **Rev:** 00

Contractor's Proposed Resolution:

Reference Resolution: ZPMC has completely removed the weld material that was unacceptable and has rewelded. Attached is the NDT to show that weld is acceptable. Based on this ZPMC requests closure of this NCR.

ZPMC has completely removed the weld material that was unacceptable and has rewelded. Attached is the NDT to show that weld is acceptable. Based on this ZPMC requests closure of this NCR.

Submitted by: Ishibashi, Joshua

Attachment(s): ABF-NPR-000643R00;

Caltrans' comments:

Status: CLO

Date: 05-Apr-2010

This proposed resolution is acceptable. The documentation received is sufficient and the Department concurs that Non-Conformance ZPMC-0664 is closed.

Submitted by: Eagen, Sean

Attachment(s):

Date: 05-Apr-2010



No. B-720

LETTER OF RESPONSE

TO: American Bridge/Flour

DATE: 2010-3-31

REGARDING: NCR-000697(ZPMC-0664)

Partial length of weld what was finished by utilizing unacceptable electrode wire has been removed by gouging. After gouging, MT was performed to ensure no deflection at base metal. ZPMC will pay more attentions on the storage of electrode especially for SPCM welding. ZPMC is providing the MT report after gouging and requesting closure of this NCR.

ATTACHMENT:

NCR-000697(ZPMC-0664)

B787-MT-21615

A handwritten signature in black ink, appearing to be 'J. J. [unclear]', is written above the date.

3/31/10



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: 17-Mar-2010

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-0664

Job Name: SAS Superstructure
Document No: 05.03.06-000654

Reference Description: Welding was performed with improperly stored electrode for Segment 11DW FL3 Bottom Plate

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Material Location: OBG

Lift: 11

Remarks:

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Transmitted by: Bill Howe Sr. Transportation Engineer

Attachments: ZPMC-0664

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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 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-000697

Prime Contractor: American Bridge/Fluor Enterprises, a JV

Date: 12-Mar-2010

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

NCR #: ZPMC-0664

Type of problem:

- Welding Concrete Other
 Welding Curing Procedural
 Joint fit-up Coating Other
 Procedural Procedural Description:

Bridge No: 34-0006

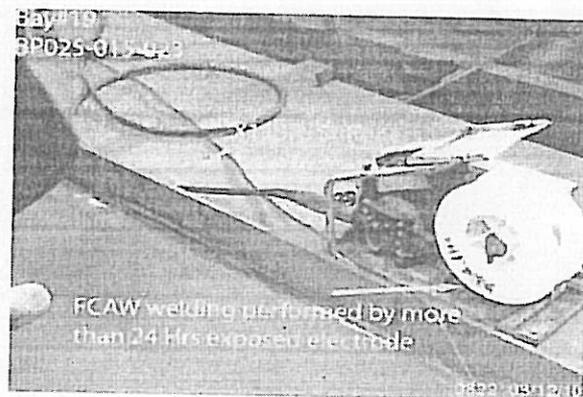
Component: Segment 11DW FL3 Bottom Plate

Reference Description: Welding was performed with improperly stored electrode for Segment 11DW FL3 Bottom Plate

Description of Non-Conformance:

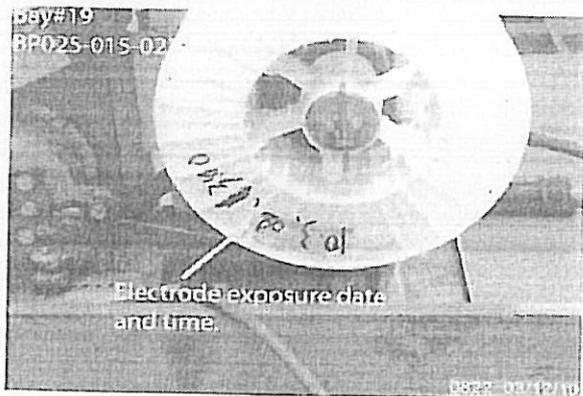
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QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)



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Who discovered the problem: Hiranah Patel
Name of individual from Contractor notified: Peng Wen Jun
Time and method of notification: 1500 hours, 03-12-10, Verbal
Name of Caltrans Engineer notified: Bill Howe
Time and method of notification: 1130 hours, 03-13-10, Email
QC Inspector's Name: Xu Tao
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:	Tsang, Eric	SMR
Reviewed By:	Wahbeh, Mazen	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-000582**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 15-Apr-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0664**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: 12-Mar-2010**Description of Non-Conformance:**

During random Quality Assurance (QA) visual review of the Bottom Plate (BP) components, this QA Inspector discovered the following issue:

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-This component is located in OBG fabrication shop Bay #19.

Contractor's proposal to correct the problem:

Remove said weld, reweld and perform NDT required to verify weld quality.

Corrective action taken:

Contractor submitted post repair NDT documentation verifying weld is now in conformance with Contract specifications.

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:

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QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

(Continued Page 2 of 2)

Inspected By: Simonis,Jim

Quality Assurance Inspector

Reviewed By: Wahbeh,Mazen

QA Reviewer