

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

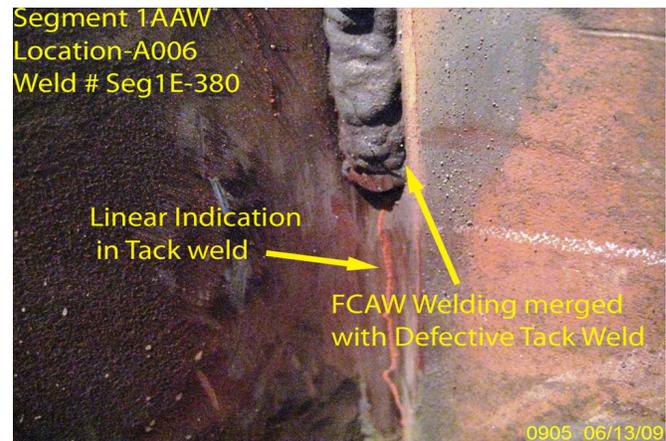
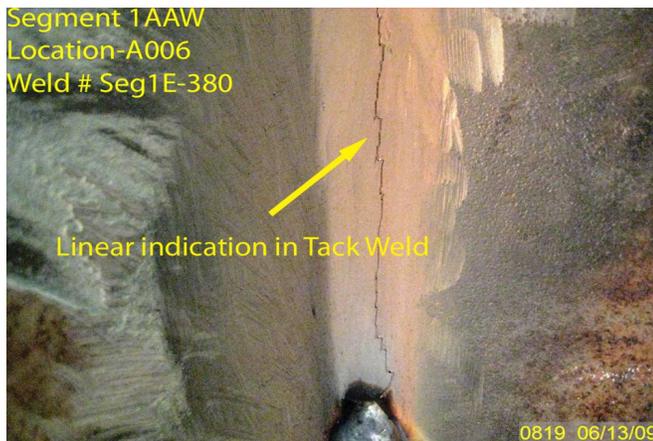
Quality Assurance and Source Inspection



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-000330**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 13-Jun-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0304**Type of problem:****Welding****Concrete****Other****Welding****Curing****Procedural****Bridge No:** 34-0006**Joint fit-up****Coating****Other****Component:** OBG Segment 1AAW**Procedural****Procedural****Description:****Reference Description:** Welding Over Cracked Tack Welds, Segment 1AAW**Description of Non-Conformance:**

During verification of joint fit-up of segment weld #Seg1E-380 (location A006, Segment 1AAW), Caltrans Quality Assurance (QA) Inspector discovered a total of four (4) linear indications (approximately 100~150mm) in the tack weld areas. QA Inspector confirmed the linear indications by magnetic particle testing (MT). ZPMC personnel performed flux core arc welding (FCAW) over the tacks without removing the indications.

**Applicable reference:**

Special Provisions Section 8.3: "Quality Control (QC) shall be the responsibility of the Contractor. As a minimum, the Contractor shall perform inspection and testing of each weld joint prior to welding, during welding, and after welding as specified in this section and to ensure that materials and workmanship conform to the requirements of the contract documents."

AWS D1.5 (02) Section 3.3.7.1: "Tack welds shall be subject to the same quality requirements as the final welds."

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

AWS D1.5 (02) Section 6.26.2: "Welds that are subject to MT in addition to visual inspection shall have no cracks."

Who discovered the problem: Hiranch Patel

Name of individual from Contractor notified: Wang Wen Bin

Time and method of notification: 1700 hours, 06/13/09, Verbal

Name of Caltrans Engineer notified: Stanley Ku

Time and method of notification: 800 hours, 06/15/09, Verbal

QC Inspector's Name: Li Zhi Jiang

Was QC Inspector aware of the problem: 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 Skyler Guest, (86) 1500-042-2360, who represents the Office of Structural Materials for your project.

Inspected By: Guest,Skyler

SMR

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: 22-Jun-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: 05.03.06-000294

Subject: NCR No. ZPMC-0304

Reference Description: Welding Over Cracked Tack Welds, Segment 1AAW

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:** 01

Remarks:

During verification of joint fit-up of segment weld #Seg1E-380 (location A006, Segment 1AAW), Caltrans Quality Assurance (QA) Inspector discovered a total of four (4) linear indications (approximately 100~150mm) in the tack weld areas. QA Inspector confirmed the linear indications by magnetic particle testing (MT). ZPMC personnel performed flux core arc welding (FCAW) over the tacks without removing the indications.

See attached NCR No. ZPMC-304 for details.

Action Required and/or Action Taken:

Propose a resolution for the identified non-conformance with revised procedures to remedy the materials/workmanship issue and to prevent future occurrences.

Transmitted by: Ching Chao

Attachments: ZPMC-0304

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

File: 05.03.06

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000294

Subject: NCR No. ZPMC-0304

Dated: 21-Jul-2009

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000266 **Rev:** 00

Contractor's Proposed Resolution:

Reference Resolution: ZPMC has responded to the NCR and has attached the necessary documents for closure. ZPMC requests closure of this NCR.

ZPMC has responded to the NCR and has attached the necessary documents for closure. ZPMC requests closure of this NCR.

Submitted by:

Attachment(s): ABF-NPR-000266R00;

Caltrans' comments:

Status: CLO

Date: 10-Aug-2009

The proposed resolution is acceptable. The tack welds were removed, and the removal was verified by MT. Also, weld in question has been accepted by VT and MT as shown in the attached documents. The Department concurs that Non-Conformance ZPMC-0304 is closed.

Submitted by: Wright, Doug

Date: 10-Aug-2009

Attachment(s):



No. B-400

LETTER OF RESPONSE

TO: American Bridge/Flour JV

DATE: 2009-7-16

REGARDING: NCR-000330 (ZPMC-0304)

With this letter of response, ZPMC requests closure for caltrans **NCR-000330 (ZPMC-0304)** . After Caltrans found the crack tack welds and told ZPMC's onsite inspector, ZPMC had arranged the worker to remove the tack weld and verified MT before welding. Remind that the Caltrans inspector only saw our worker welding between the two crack tack welds but not cover on them. The final MT of the weld had been done and accepted by ZPMC and CT.

So base on the above explanation and attached documentations, ZPMC applies to close the caltrans's report **NCR-000330 (ZPMC-0304)** .

Please reference attached documentation for acceptance and closure the **NCR-000330 (ZPMC-0304)** .

ATTACHMENT:

NCR-000330 (ZPMC-0304)

The MT report after removing the crack tack welds

The final VT/MT inspection report

Zhao Shuangbao

2009. 7. 16



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: 22-Jun-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: 05.03.06-000294

Subject: NCR No. ZPMC-0304

Reference Description: Welding Over Cracked Tack Welds, Segment IAAW

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: 01

Remarks:

During verification of joint fit-up of segment weld #Seg1E-380 (location A006, Segment IAAW), Caltrans Quality Assurance (QA) Inspector discovered a total of four (4) linear indications (approximately 100-150mm) in the tack weld areas. QA Inspector confirmed the linear indications by magnetic particle testing (MT). ZPMC personnel performed flux core arc welding (FCAW) over the tacks without removing the indications.

See attached NCR No. ZPMC-304 for details.

Action Required and/or Action Taken:

Propose a resolution for the identified non-conformance with revised procedures to remedy the materials/workmanship issue and to prevent future occurrences.

Transmitted by: Ching Chao

Attachments: ZPMC-0304

cc: Rick Morrow, Gary Pursell, Peter Siegenthaler, Stanley Ku, Brian Boal, Doug Coe, Jason Tom, Contract Files, Ching Chao
File: 05.03.06

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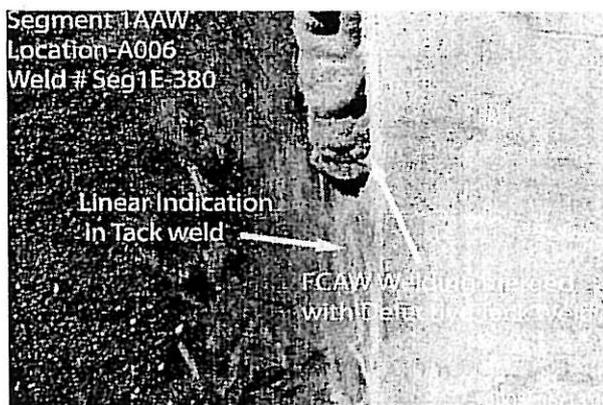
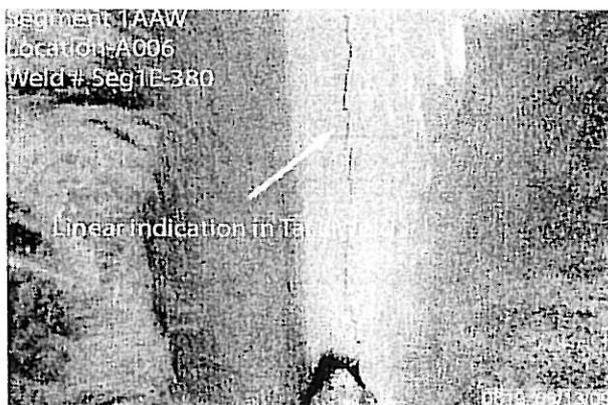
Contract #: 04-0120F4

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-000330**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 13-Jun-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0304**Type of problem:**Welding Concrete Other Welding Curing Procedural **Bridge No:** 34-0006Joint fit-up Coating Other **Component:** OBG Segment 1AAWProcedural Procedural Description:**Reference Description:** Welding Over Cracked Tack Welds, Segment 1AAW**Description of Non-Conformance:**

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**Applicable reference:**

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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-000280**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 25-Aug-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0304**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: 13-Jun-2009**Description of Non-Conformance:**

During verification of joint fit-up of segment weld #Seg1E-380 (location A006, Segment 1AAW), Caltrans Quality Assurance (QA) Inspector discovered a total of four (4) linear indications (approximately 100~150mm) in the tack weld areas. QA Inspector confirmed the linear indications by magnetic particle testing (MT). ZPMC personnel performed flux core arc welding (FCAW) over the tacks without removing the indications.

Contractor's proposal to correct the problem:

Contractor has acknowledged that this item must be addressed, and the item was added to the Master Punchlist.

Corrective action taken:

Work was completed and item was cleared by on Master Punchlist by Caltrans on 6-30-2009. Submittal of documentation by Contractor being tracked on Documentation 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:**

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Inspected By: Simonis, Jim **Quality Assurance Inspector****Reviewed By:** Wahbeh, Mazen **QA Reviewer**