

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, PRC**Report No:** NCR-000101**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 28-Mar-2008**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0099**Type of problem:**

Welding	Concrete	Other	
Welding	Curing	Procedural	Bridge No: 34-0006
Joint fit-up	Coating	Other	Component: 89M Cross Brace Sub Assembly
Procedural	Procedural	Descriptor:	

Reference Description:**Description of Non-Conformance:**

American Bridge/Fluor allowed ZPMC to visually accept and perform magnetic particle inspection on partial joint penetration weld MUSB-MA29-4 despite the insufficient size of the reinforcement fillet weld. The Quality Assurance Inspector measured the reinforcing fillet weld to be approximately 5 millimeters. Per AWS D1.5 2002 the minimum fillet weld required is 8.5 millimeters for the 35 millimeter thickness plate.

**Applicable reference:**

AWS D1.5 2002 Figure 2.5 note 6. "Groove welds in corner and T-joints shall be reinforced with fillet welds with a leg size equal to or greater than T/4, but need not exceed 10 mm [3/8 in.]."

Who discovered the problem: Greg Bertlesman, Quality Assurance Inspector**Name of individual from Contractor notified:****Time and method of notification:****Name of Caltrans Engineer notified:** Scott Kennedy, Structures Construction**Time and method of notification:** 1515, Verbal

QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

(Continued Page 2 of 2)

QC Inspector's Name: Xu Le Fang

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 Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By: Wahbeh,Mazen

Quality Assurance Inspector

Reviewed By: Wahbeh,Mazen

QA Reviewer



DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge

333 Burma Road
Oakland CA 94607
Tel: Fax:

NON-CONFORMANCE REPORT TRANSMITTAL

To: American Bridge/Fluor Enterprises, a JV
375 BURMA ROAD
OAKLAND CA 95607

Date: 01-Apr-2008

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

Dear: Mr. Charles Kanapicki

Job Name: SAS Superstructure

Attention: Mr. Dave Williams Consultant

Document No: 05.03.06-000078

Subject: NCR No. ZPMC-0099

Reference Description: Undersized Reinforcement Fillet Weld / 89M Mockup Cross Brace Sub Assembly

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 - No Response Required.

Material Location: Tower **Lift:** N/A

Remarks:

Insufficient size of the reinforcement fillet weld and failure of Quality Control inspection to identify the deficiency. See attached NCR No: ZPMC-0099 for details.

Action Required and/or Action Taken:

Propose a resolution for the identified non-conformance with revised procedures to prevent future occurrences.

Transmitted by: Scott Kennedy Sr. Bridge Engineer

Attachments: ZPMC-0099

cc: Rick Morrow, Gary Pursell, Mark Woods, Doug Coe

File: 05.03.06

NCR PROPOSED RESOLUTION

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

Attention: Pursell, Gary
Resident Engineer

Ref: 05.03.06-000078

Subject: NCR No. ZPMC-0099

Dated: 25-Aug-2008

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

Job Name: SAS Superstructure

Document No.: ABF-NPR-000095 Rev: 00

Contractor's Proposed Resolution:

Reference Resolution: The Special Provisions do not require a reinforcement fillet weld on a Tower PJP weld.

We consider this NCR to be closed. The Special Provisions do not require a reinforcement fillet weld on a Tower PJP weld.

Submitted by:

Attachment(s): ABF-NPR-000095R00

Caltrans' comments:

Status: CLO

Date: 11-Nov-2008

Page 321 of Special Provisions Section 10-1.59 states that fillet reinforcement required by Note 6 of Figures 2.4 and 2.5 of AWS D1.5 will not be required for PJP welds in the tower.

The Department considers Non-Conformance ZPMC-0099 closed.

Submitted by: Wright, Doug

Date: 12-Nov-2008

Attachment(s):

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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, PRC**Report No:** NCS-000145**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 22-Dec-2008**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0099**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: 28-Mar-2008**Description of Non-Conformance:**

American Bridge/Fluor allowed ZPMC to visually accept and perform magnetic particle inspection on partial joint penetration weld MUSB-MA29-4 despite the insufficient size of the reinforcement fillet weld. The Quality Assurance Inspector measured the reinforcing fillet weld to be approximately 5 millimeters. Per AWS D1.5 2002 the minimum fillet weld required is 8.5 millimeters for the 35 millimeter thickness plate.

Contractor's proposal to correct the problem:

Special Provisions Section 10-1.59 states that fillet reinforcement required by Note 6 of Figures 2.4 and 2.5 of AWS D1.5 will not be required for PJP welds in the tower.

Corrective action taken:

None.

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: Sinevod, Serge

Quality Assurance Inspector

Reviewed By: Sinevod, Serge

QA Reviewer