

**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-000090**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 10-Mar-2008**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0088**Type of problem:**

<b>Welding</b>	<b>Concrete</b>	<b>Other</b>	
<b>Welding</b>	<b>Curing</b>	<b>Procedural</b>	<b>Bridge No:</b> 34-0006
<b>Joint fit-up</b>	<b>Coating</b>	<b>Other</b>	<b>Component:</b> Tower-114m Mockup
<b>Procedural</b>	<b>Procedural</b>	<b>Descriptor:</b>	

**Description of Non-Conformance:**

ABF/ZPMC has deviated from the approved mock-up fabrication plan on the 114m mock-up by using one 50 ton jack to bring the corner stiffener connection plates into alignment. The use of jacks is not in the approved mock-up fabrication procedure, and the manner in which it was utilized does not demonstrate a procedure that is repeatable in actual production.

**Applicable reference:**

Special Provisions, Section 10-1.59 "Steel Structures", "Fabrication/Erection Procedure Mock-Ups", pg. 313.

"For each mock-up, the Contractor shall prepare a written fabrication and welding sequence. The fabrication and welding sequence shall be submitted for review by the Engineer, and approval shall be given before the mock-up is fabricated."

**Who discovered the problem:** Joshua Ishibashi, SMR**Name of individual from Contractor notified:** Dan Raynor, Dave Williams**Time and method of notification:** 3/10/08;1020; Verbal**Name of Caltrans Engineer notified:** Ching Chao,**Time and method of notification:** 3/10/08;1300; Verbal**QC Inspector's Name:** None present**Was QC Inspector aware of the problem:** Yes No**Contractor's proposal to correct the problem:**

None at this time

**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:** Ishibashi,Josh

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:** 21-Mar-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:** 05.03.06-000056

**Subject:** NCR No. ZPMC-0088

**Reference Description:** Tower-114m Mockup / Alignment Jacking

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.

### Remarks:

**Material Location:** Tower **Lift:**

**Non-Conformance:**

ABF/ZPMC has deviated from the approved mock-up fabrication plan on the 114m mock-up by using one 50 ton jack to bring the corner stiffener connection plates into alignment. The use of jacks is not in the approved mock-up fabrication procedure, and the manner in which it was utilized does not demonstrate a procedure that is repeatable in actual production.

### Action Required and/or Action Taken:

Please refer to the attached Non-Conformance Report for details.

**Transmitted by:** Scott Kennedy Sr. Bridge Engineer

**Attachments:** ZPMC-0088

**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:** 05.03.06-000056

**Subject:** NCR No. ZPMC-0088

**Dated:** 25-Aug-2008

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

**Job Name:** SAS Superstructure

**Document No.:** ABF-NPR-000104 Rev: 00

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### Contractor's Proposed Resolution:

**Reference Resolution:** ABFJV has notified ZPMC to follow the fabrication procedure as written

ZPMC used jacking devices for ease of alignment. If jack are required in production ZPMC will add to fabrication procedure for approval by the engineer. ABFJV has notified ZPMC to follow the fabrication procedure as written.

**Submitted by:** Mackey, Kim

**Attachment(s):** ABF-NPR-000104R00

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### Caltrans' comments:

**Status:** CLO

**Date:** 08-Jan-2009

Per State Letter 05.03.01-003242 dated January 7, 2009, the 114m Tower Section Mock-up was successfully completed. The Department concurs that Non-Conformance ZPMC-0088 is closed. As noted in ABF-CAL-LTR-000766, the Department understands that the appropriate fabrication plans will be modified in accordance with Special Provision Section 10-1.59, "Steel Structures," subsection "Working Drawings" through the FCN process.

The use of jacks to correct for shaft misalignment shall not be used in production unless it is shown in the fabrication procedure, and the Engineer has given prior approval in writing.

**Submitted by:** Wright, Doug

**Attachment(s):**

**Date:** 08-Jan-2009

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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-000146**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 08-Jan-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0088**Type of problem:**

<b>Welding</b>	<b>Concrete</b>	<b>Other</b>	
<b>Welding</b>	<b>Curing</b>	<b>Procedural</b>	<b>Bridge No:</b> 34-0006
<b>Joint fit-up</b>	<b>Coating</b>	<b>Other</b>	<b>Component:</b>
<b>Procedural</b>	<b>Procedural</b>	<b>Descriptor:</b>	

**Date the Non-Conformance Report was written:** 10-Mar-2008**Description of Non-Conformance:**

ABF/ZPMC has deviated from the approved mock-up fabrication plan on the 114m mock-up by using one 50 ton jack to bring the corner stiffener connection plates into alignment. The use of jacks is not in the approved mock-up fabrication procedure, and the manner in which it was utilized does not demonstrate a procedure that is repeatable in actual production.

**Contractor's proposal to correct the problem:**

ZPMC used jacking devices for ease of alignment. If jacking devices are required in production ZPMC will add it to fabrication procedure for approval by the engineer. ABFJV has notified ZPMC to follow the fabrication procedure as written.

**Corrective action taken:**

Fabrication procedure has been modified and the 114m mock-up has been fabricated successfully. Letter No. 05.03.01-003242 concluded the successful completion of the 114m mock-up on January 7, 2009.

**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:** Wahbeh, Mazen

QA Reviewer