

**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 #: 1.25B**QUALITY ASSURANCE -- NON-CONFORMANCE REPORT****Location:** Changxing Island, Shanghai, PRC**Report No:** NCR-000067**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 12-Feb-2008**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island**NCR #:** ZPMC-0066**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> 89 meter mockup
<b>Procedural</b>	<b>Procedural</b>	<b>Description:</b> Tower Skin CJP weld NDT	

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

ABF allowed ZPMC to cover complete joint penetration (CJP) groove welds prior to being accepted by non destructive testing. ZPMC welded two corner stiffener plates over skin plate corner CJP at skin plate B to C and at skin plate C to D. ABF/ZPMC was not able to provide QC reports which documented the ultrasonic testing of the enclosed welds. AWS D1.5-2002 Paragraph 6.20.2 requires the Contractor provide documentation of NDT testing before acceptance by the Engineer. The Contractor will not be able to comply after the welds are covered.

**Applicable reference:**

AWS D1.5-2002 Section 6, Paragraph 6.20.2 that states "Before a weld subject to ultrasonic testing by the contractor for the Engineer is accepted, all report forms pertaining to the weld, including any that show unacceptable quality prior to repair, shall be submitted to the QA Inspector."

**Who discovered the problem:** Joe Lanz, Quality Assurance Inspector**Name of individual from Contractor notified:****Time and method of notification:****Name of Caltrans Engineer notified:** Ching Chao, Structure Representative**Time and method of notification:** 2/15/08;1630, Verbal**QC Inspector's Name:** Xue Hai Rang, Quality Control Inspector**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.

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# QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

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**Inspected By:** Wahbeh,Mazen

SMR

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**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, PRC**Report No:** NCS-000383**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 21-Dec-2009**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0066**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>Description:</b>	

**Date the Non-Conformance Report was written:** 12-Feb-2008**Description of Non-Conformance:**

ABF allowed ZPMC to cover complete joint penetration (CJP) groove welds prior to being accepted by non destructive testing. ZPMC welded two corner stiffener plates over skin plate corner CJP at skin plate B to C and at skin plate C to D. ABF/ZPMC was not able to provide QC reports which documented the ultrasonic testing of the enclosed welds. AWS D1.5-2002 Paragraph 6.20.2 requires the Contractor provide documentation of NDT testing before acceptance by the Engineer. The Contractor will not be able to comply after the welds are covered.

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

ZPMC will revise their fabrication procedure to allow NDT of tower seams prior to welding diagonal stiffeners.

**Corrective action taken:**

Letter No. 05.03.01-003087 concluded the successful completion of 77m and 89m mock-ups. Furthermore, ZPMC has allowed NDT of tower seams prior to welding diagonal stiffeners of permanent tower shafts.

**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:**

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 Serge Sinevod, 139-1686-1597, who represents the Office of Structural Materials for your project.

**Inspected By:** Sinevod, Serge

Quality Assurance Inspector

**Reviewed By:** Wahbeh, Mazen

QA Reviewer