

**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-000627

**Prime Contractor:** American Bridge/Fluor Enterprises, a JV

**Date:** 12-Jan-2010

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

**NCR #:** ZPMC-0600

### 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> Segment 8CW Floor Beam to Bottom Panel Joint
<b>Procedural</b>	<b>Procedural</b>	<b>Description:</b> Missed MT indication by QC	

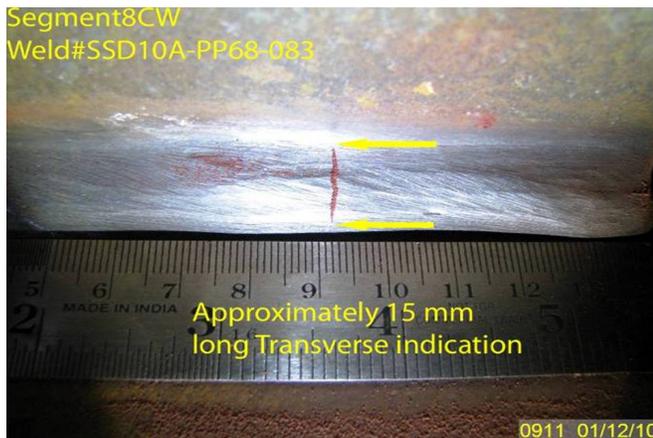
**Reference Description:** One Transverse Indication discovered with MT after ZPMC had tested and accepted this weld in Segment 8CW

### Description of Non-Conformance:

During the Quality Assurance Magnetic Particle Testing (MT) review of welds located on Segment 8CW, this Quality Assurance Inspector (QA) discovered the following issue:

- One (1) Transverse linear indication measuring approximately 15mm in length.
- The Y location is 140mm from the left end of the weld.
- The indication is clearly marked on the material near the weld.
- The weld is identified as: SSD10A-PP68-083.
- This weld is a Fillet Weld joining the Bottom Plate (BP150A) to Floor Beam (FB5B) web plate.
- This weld is designated as Seismic Performance Critical Member (SPCM) on the approved drawing (SEGSD10).
- OBG segment 8CW is located outside in west of Blast Shop area.

The Notice of Witness Inspection Number (NWIT) is 005037. The indication is located inside the area that has been previously tested and accepted by ZPMC Quality Control (QC) personnel. ZPMC's QC personnel are required to perform twenty five (25%) percent MT inspection of this weld.



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## QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

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**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 6.26.2 – “Welds that are subject to MT in addition to visual inspection shall have no cracks.

**Who discovered the problem:** Hiranah Patel

**Name of individual from Contractor notified:** Peter Shaw

**Time and method of notification:** 1030 hours, 01-12-10, Verbal

**Name of Caltrans Engineer notified:** Bill Howe

**Time and method of notification:** 1530 hours, 01-12-10, Verbal

**QC Inspector's Name:** Zhang Wei

**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.

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**Inspected By:** Carreon,Albert

Lead Reviewer/Task Leader

**Reviewed By:** Wahbeh,Mazen

SMR

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## NCR PROPOSED RESOLUTION

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

**Dated:** 22-Jan-2010

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

**Attention:** Pursell, Gary  
Resident Engineer

**Job Name:** SAS Superstructure

**Document No.:** ABF-NPR-000534 Rev: 00

**Ref:** 05.03.06-000590

**Subject:** NCR No. ZPMC-0600

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### Contractor's Proposed Resolution:

**Reference Resolution:** ABF is submitting NDT documentation to show that welds with missed indications are acceptable after repair.

Per discussion in China with representatives of the Department, ABF is submitting NDT documentation to show that welds with missed indications are acceptable after repair. Based on this ZPMC requests closure of this NCR.

**Submitted by:** Ishibashi, Joshua

**Attachment(s):** ABF-NPR-000534R00;

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### Caltrans' comments:

**Status:** CLO

**Date:** 26-Jan-2010

The documentation submitted by the contractor has been reviewed by the Engineer and is found to be acceptable. Based on the discussion in China with the contractor's representatives, other weld repair reports from ZPMC shall be included in the QA Data Base when available.

**Submitted by:** Chao, Ching

**Date:** 26-Jan-2010

**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, P.R. China**Report No:** NCS-000491**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**Date:** 27-Jan-2010**Submitting Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **NCR #:** ZPMC-0600**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:** 12-Jan-2010**Description of Non-Conformance:**

During the Quality Assurance Magnetic Particle Testing (MT) review of welds located on Segment 8CW, this Quality Assurance Inspector (QA) discovered the following issue:

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

Repair indication and perform the required NDT.

**Corrective action taken:**

ABF submitted internal NDT documentation verifying the weld is now in conformance with Contract specifications. Per Team China discussions, documentation from ZPMC verifying the repairs were made and NDT was performed by ZPMC technicians will be submitted at a later date and added to the Data Base.

**Did corrective action require Engineer's approval?** Yes No**If so, name of Engineer providing approval:****Date:****Is Engineer's approval attached?**

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## QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION

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**Yes    No**

**Comments:**

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<b>Inspected By:</b>	Simonis,Jim	Quality Assurance Inspector
<b>Reviewed By:</b>	Wahbeh,Mazen	QA Reviewer

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