

**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 #: 04-0120L4Cty: SF/ALA Rte: 80 PM: 1.6/2.7File #: 1.25B


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**QUALITY ASSURANCE -- NON-CONFORMANCE REPORT**


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**Location:** Job Site**Report No:** NCR-000089**Prime Contractor:** MCM Construction, Inc.**Date:** 22-May-2008**Submitting Contractor:** MCM Construction, Inc.**NCR #:** NCR-000089**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> 1.8M CISS pile splice E22L-6
<b>Procedural</b>	<b>Procedural</b>	<b>Description:</b>	Failure to maintain minimum preheat temperature.

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

At approximately 1030 hours, the in-process splice weld of E22L pile #6 was observed to have a preheat / interpass temperature less than 225°F between Y locations 125"-175". The contractor's personnel used a torch to raise the preheat / interpass above 225°F and then resumed welding. Magnetic particle testing (MT) was not conducted before welding resumed (MT is typically conducted after preheat / interpass temperature loss and restoration).

**Applicable reference:**

Contract Special Provisions, Section 10-1.50, field welding note J.

AWS D1.1 2006, Table 3.2, Category C.

**Who discovered the problem:** Mark Baker, Assistant Structures Representative**Name of individual from Contractor notified:** Chris Smith, MCM Quality Control Manager**Time and method of notification:** 1300 hours, 5-22-2008, phone conversation**Name of Caltrans Engineer notified:** Mark Baker, Assistant Structures Representative**Time and method of notification:** 1200 hours, 5-22-2008, phone conversation**QC Inspector's Name:** David Aultman**Was QC Inspector aware of the problem:** Yes No**Contractor's proposal to correct the problem:**

Unknown.

**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 Mohammad Fatemi, who represents the Office of Structural Materials for your project.

**Inspected By:** Croff, Scott

QA Inspector

**Reviewed By:** Levell, Bill

QA

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Contract #: 04-0120L4Cty: SF/ALA Rte: 80 PM: 1.6/2.7File #: xx.25A**QUALITY ASSURANCE -- NON-CONFORMANCE RESOLUTION****Location:** Job Site**Report No:** NCS-000093**Prime Contractor:** MCM Construction, Inc.**Date:** 26-Jun-2008**Submitting Contractor:** MCM Construction, Inc.**NCR #:** NCR-000089**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:** 22-May-2008**Description of Non-Conformance:**

At approximately 1030 hours, the in-process splice weld of E22L pile #6 was observed to have a preheat / interpass temperature less than 225°F between Y locations 125"-175". The contractor's personnel used a torch to raise the preheat / interpass above 225°F and then resumed welding. Magnetic particle testing (MT) was not conducted before welding resumed (MT is typically conducted after preheat / interpass temperature loss and restoration).

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

Leave as is.

**Corrective action taken:**

The QA Inspector noted the temperature drop was less than 25 degrees F, and AWS D1.1 Table 4.5 allows a decrease from preheat temperature not greater than 25 degree F. The contractor realizes the drop in temperature was an oversight and intends to perform magnetic particle testing anytime a loss of preheat occurs in all future instances (Reference MCM-SUB-00592-R00).

**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:** Levell, Bill

Quality Assurance Inspector

**Reviewed By:** Fatemi, Mohammad

QA Reviewer