

**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**QUALITY ASSURANCE -- NON-CONFORMANCE REPORT****Location:** Job Site**Report No:** NCR-000105**Prime Contractor:** MCM Construction, Inc.**Date:** 31-Jul-2008**Submitting Contractor:** MCM Construction, Inc.**NCR #:** NCR-000105**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> 1.8 meter CISS pile
<b>Procedural</b>	<b>Procedural</b>	<b>Description:</b>	Water entering weld zone

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

The QA Inspector observed the coffer dam at a E-17R flooded due to mechanical pump failure. The QA Inspector noted the flooded coffer dam allowed water into the immediate weld area while the weld and surrounding base material was maintained at 225 degrees F. E-17R-4 weld #2, E-17R-7 weld #3, E-17R-7 weld #5, E-17R-7 weld #6, E-17R-8 weld #5, E-17R-8 weld #6, were maintained at 225°F at the time of water encroaching on the weld zone. It was noted all nine piles and corresponding welds were completely submerged with water.

**Applicable reference:**

AWS D1.1 2006 section 5.12.2

Caltrans Special Provisions field welding note K

**Who discovered the problem:** MCM False Work Personnel**Name of individual from Contractor notified:** MCM Welding Superintendent Chris Smith**Time and method of notification:** 0600 in person**Name of Caltrans Engineer notified:** Assistant Structures Representative Mark Baker**Time and method of notification:** 0630 via phone notification**QC Inspector's Name:** Dave Aultman**Was QC Inspector aware of the problem:** Yes No**Contractor's proposal to correct the problem:**

Replace the pump and de-water the coffer dam, pressure wash the in process welds. After the pressure washing is completed the contractor will wire wheel all in process welds, bring the temperature back up to 225 degrees F and perform magnetic particle testing. Prior to the commencement of welding.

**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

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# QUALITY ASSURANCE -- NON-CONFORMANCE REPORT

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Structural Materials for your project.

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**Inspected By:** Bettencourt,Rick

**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-000108**Prime Contractor:** MCM Construction, Inc.**Date:** 05-Jan-2009**Submitting Contractor:** MCM Construction, Inc.**NCR #:** NCR-000105**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:** 31-Jul-2008**Description of Non-Conformance:**

The QA Inspector observed the coffer dam at a E-17R flooded due to mechanical pump failure. The QA Inspector noted the flooded coffer dam allowed water into the immediate weld area while the weld and surrounding base material was maintained at 225 degrees F. E-17R-4 weld #2, E-17R-7 weld #3, E-17R-7 weld #5, E-17R-7 weld #6, E-17R-8 weld #5, E-17R-8 weld #6, were maintained at 225°F at the time of water encroaching on the weld zone. It was noted all nine piles and corresponding welds were completely submerged with water.

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

Replace the pump and de-water the coffer dam, pressure wash the in process welds. After the pressure washing is completed the contractor will wire wheel all in process welds, bring the temperature back up to 225 degrees F and perform magnetic particle testing. Prior to the commencement of welding.

**Corrective action taken:**

See MCM-SUB-000710R0

**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:** Estabrook, James

Quality Assurance Inspector

**Reviewed By:** Mullen, Tony

QA Reviewer