

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
MATERIALS ENGINEERING AND TESTING 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
FAX: (707) 649-5493

Contract #: 04-0120E4
Cty SF Rte 80 PM 13.4/13.8
File # 1.25 B

QUALITY ASSURANCE - NONCONFORMANCE REPORT

Location: E2East Foundation

Date: 02-23-07

Prime Contractor: Kiewit/FCI/Manson-KFM-JV

NCR #145

Submitting Contractor: Kiewit/FCI/Manson-KFM-JV

Type of problem:

- Welding [X] Concrete [] Other []
Welding: [X] Curing: [] Procedural: [] Bridge No. 34-0006 L / R
Joint fit-up: [] Coating: [] Other: [] Component: E2E foundation footing
Procedural: [X] Procedural: [] Loss of preheat temperature

Description of Non-Conformance: The Contractor failed to maintain the preheat temperature during the welding of E2E pile head connector plates (PHCP) as required by Caltrans Special Provisions, Section 10-1.31, Field Welding of Pile/Sleeve Connector Plates, Line F. The loss in preheat occurred on pile head connector plates (PHCP) Pile 5D2. Several weld passes had been deposited prior to the loss of heat.

Applicable reference: Caltrans Special Provisions, Section 10-1.31, Field Welding of Pile/Sleeve Connector Plates, Line F

Who discovered the problem: KFM Superintendent, Joel Dodd

Name of individual from Contractor notified: KFM Superintendent, Joel Dodd

Time and method of notification: 02/23/07 at approximately 05:00 via telephone notification

Name of Caltrans Engineer notified: Saman Soheilifard, Caltrans Assistant Structure Representative

Time and method of notification: 1400 hours February 23, 2007 via telephone notification

QC Inspector's Name: Kevin Carpenter, KFM QC

Was the QC Inspector aware of problem: No

Contractor's proposal to correct the problem: The contractor has issued a non-conformance report (NCR #9). The Contractor has elected to leave the weld in place and perform magnetic particle testing, bring the weld up to the required minimum preheat, and commence welding.

Comments: This report is for the purpose of determining general 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 Ryan Smith, (858) 232-6799, who represents the Office of Structural Materials for your project.

Inspected By: Bill Levell [Signature] Quality Assurance Inspector

Reviewed By: Albert Carreon [Signature] Lead QA Reviewer

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Quality Assurance Inspector

Reviewed By: Albert Carreon

Lead QA Reviewer

006485 FEB 27 6 RECEIVED

DEPARTMENT OF TRANSPORTATIONDIVISION OF ENGINEERING SERVICES
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Quality Assurance and Source Inspection**Bay Area Branch**690 Walnut Ave., St. 150
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FAX: (707) 649-5493Contract # : 04-0120E4
Cty SF Rte 80 PM 13.4/13.8
File # 1.25A**QUALITY ASSURANCE - NONCONFORMANCE RESOLUTION****Location:** SFOBB Jobsite**Date:** March 2, 2007**Prime Contractor:** Kiewit/FCI/Manson (KFM) – Joint Venture**NCR #** 145**Submitting Contractor:** Kiewit/FCI/Manson (KFM) – Joint Venture**Type of problem:**

Welding	<input checked="" type="checkbox"/>	Concrete	<input type="checkbox"/>	Other	<input checked="" type="checkbox"/>
Welding:	<input type="checkbox"/>	Curing:	<input type="checkbox"/>	Procedural:	<input type="checkbox"/>
Joint fit-up:	<input type="checkbox"/>	Coating:	<input type="checkbox"/>	Other:	<input checked="" type="checkbox"/> Loss of preheat temperature
Procedural:	<input checked="" type="checkbox"/>	Procedural:	<input type="checkbox"/>		

Bridge No. 34-0006L/R**Component** E2 Foundation Footing**Date nonconformance report was written:** February 23, 2007**Description of Non-Conformance:** The Contractor failed to maintain the preheat temperature during the welding of E2E pile head connection plates (PHCP) identified as Pile 5D2 as required by Caltrans Special Provisions, Section 10-1.31, Field Welding of Pile/Sleeve Connector Plates, Line F.**Contractor's proposal to correct the problem:** The Contractor issued a Non-Conformance Report (NCR) identified as NCR 009. The Contractor elected to leave the weld in place and perform Magnetic Particle (MT) Testing, then preheat and commence welding.**Corrective action taken:** The Contractor performed Magnetic Particle Testing after the weld was brought back up to the minimum required preheat temperature.**Did corrective action require Engineer's approval?** Yes No**If so, name of the Engineer providing approval:** Structural Materials Representative (SMR) **Date:** 3-2-07
Ryan Smith, in accordance with response to KFM Submittal 1358-00.**Is Engineer's approval attached:** Yes No**Comments:** This report is for the purpose of determining general 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 Ryan Smith, (858) 232-6799, who represents the Office of Structural Materials for your project.

Inspected By: Bill Levell

Quality Assurance Inspector

Reviewed By: Ryan Smith

Structural Materials Representative (SMR)



P.O. BOX 23223 Oakland, CA 94623
 Phone (510) 419-0120 / Fax (510) 832-1456

LETTER OF SUBMITTAL
SAS Foundations E2/T1 Project

Run Date 23-Feb-07
 Time 3:32 PM

Dated: 23-Feb-2007
 To: Pedro Sanchez
 Caltrans - SAS E2/T1 Foundation Project
 333 Burma Road
 Oakland CA 94607
 Phone: 510-286-0538 Fax:

SUBMITTAL No: KFM-SUB-001358 Rev: 00
 Co/Job # 364-4347
 Contract # 04-0120E4
 Sub/Supplier:
 Sub/Supplier No:

Subject: KFM NCR 9 - Loss of Preheat, Weld 5 D 2

Special Provis. (SP) REF: 8-3.01

Standard Spec. (SS) REF:

RESUBMITTAL/SUPPLEMENTAL REF:

We are sending the following attached items: Attached

Via Fax

- Contract Plans/Specs
- Drawings/Calculations
- Change Order
- Copy of Letter

- Certs of Compl./Samples
- Schedule
- Progress Estimate Request
- Payroll Information

- Working Drawings
- WQCP and/or Addenda
- Weekly Weld Reports
- CWR Procedure

Item	Date	Copies	Description	Drawing No	Rev	Status	Pages
01	23-Feb-07	3	KFM NCR 9 Loss of Preheat Weld 5 D 2		0	Pending	1

These are transmitted as checked below:

- For Approval
- For Your Use
- For Review/Comment
- As Requested
- Return For Correction
- For Information

Remarks:

CC:

Please review / approve by : 05-Mar-2007 _____

Submitted By: **Scott Thompson**
 (KFM Staff Member – Originator of Transmittal)

Checked & Sent By: *S. Bunk*
 Contract Admin/DCS Staff

NON-CONFORMANCE REPORT	9
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Location of Mat'l/Item: E2E Foundation, Pile 5, Plate D, Weld 2
Title/Description: Loss preheat on weld
Group: E2 Foundations
Superintendent: Joel Dodd
Foreman: Scott McCoy

Report of Condition/Cause of Non-Conformance: On 2/22/07 at 22:00:00
loss of preheat was noticed after shift, by Westar. KFM was notified and determined that there was a failure in the heater 3/o cable connection. Only one weld loss preheat down to 160 degree Fahrenheit before heat could be restored. The weld affected by the loss of preheat had subsequent weld passed atop a root pass. QA inspector was notified of the condition at the start of shift.

Recommended Corrective Action:
Replace burnt cam lock connection to heater, bring preheat back up to specification, notify QA MT weld joint and document, complete weld, per Distortion Control plan.

Originator Signature:	Date:	Superintendent Signature:	Date:
Joel D. Dodd	2/23/07	<i>Joel D. Dodd</i>	2/23/07

Designer Comments on Corrective Action:

Corrective Actions Verified Complete and Inspected:

Reference Documents:

Date Closed:	
Signature:	

DEPARTMENT OF TRANSPORTATION - District 4 Toll Bridge Program

333 Burma Rd.
Oakland, CA 94607
(510) 286-0538, (510) 286-0550 fax



Kiewit-FCI-Manson, JV
220 Burma Rd.
Oakland, CA 94607

March 2, 2007

Attn: Mr. Kevin Carpenter
Welding Quality Control Manager

Contract No. 04-0120E4
04-SF-80-13.4, 13.8
SAS T1 & E2 Foundations
SFOBB-ESSSP

Letter No. 05.003.01-002908

Subject: NCR - Kiewit-FCI-Manson, 02/23/07 (Failure to Maintain Preheat Temperature)
Response to Submittal No. 1358, Revision No. 00 (KFM NCR 9 – Loss of Preheat, Weld 5D2)

Dear Kevin,

The Department issued a Non-conformance Report (NCR) at the SAS T1/E2 Foundations project site on February 23, 2007. The NCR was generated when the Contractor failed to maintain the preheat temperature as required by the Special Provisions, Section 10-1.31, Subsection "Field Welding of Pile/Sleeve Connector Plates," Line F, during welding of Pier E2 Pile Head Connection Plate (PHCP) at pile E2E-5 weld D2. There were several weld passes that had been deposited prior to the loss of preheat. Mr. Joel Dodd, KFM Superintendent, discovered the problem and notified the Department via telephone on February 23, 2007. The Department has reviewed Kiewit-FCI-Manson (KFM) Submittal No. 1358, Revision No. 00, dated February 23, 2007, which contained KFM NCR No. 9, issued to document the same issue. The Department does not find it acceptable to allow the temperature of the PHCP welds to drop below their minimum preheat temperature. Furthermore, the Contractor should continue to improve their welding procedures so that the minimum preheat temperature can be maintained continuously from beginning to completion of the entire weld in accordance with the subsection "Field Welding of Pile/Sleeve Connector Plates," found in Section 10-1.31, "Structural Steel," of the Special Provisions.

The Department considers both this NCR and KFM Submittal No. 1358 (KFM NCR No. 9) to be resolved; however, the Department reserves the right to readdress this issue with the Contractor should it reoccur in the future.

If you have any questions or need additional information, please contact Mark Vilcheck at (510) 286-0526.

Sincerely,

Mark P. Woods
Senior Bridge Engineer

For: Pedro J. Sanchez
Resident Engineer

cc: P. Sanchez
M. Vilcheck
R. Smith

file: 05.003.01, 09.006.03, 55.1358