

**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 13.4/13.80  
 File # 01 .25 B

**QUALITY ASSURANCE - NONCONFORMANCE REPORT****Location:** SFOBB Jobsite**JOBSITE NCR** **Date:** 10/08/2007**Prime Contractor:** Kiewit/FCI/Manson (KFM)**NCR #207****Submitting Contractor:** KFM**Type of problem:****Welding**  **Concrete**  **Other** **Welding:**  **Curing:**  **Procedural:**  **Bridge No.** 34-0006 L/R**Joint fit-up:**  **Coating:**  **Other:**  **Component:** T1 Foundation**Procedural:**  **Procedural:** 

**Description of Non-Conformance:** The Contractor failed to maintain the pre-heat temperature during the welding of T1 pile head connection plate (PHCP) as required by Caltrans Special Provisions, Section 10-1.31, Field Welding of Pile/Sleeve Connection Plates, Line F. The loss of preheat occurred on PHCP pile sleeve 11, plate G, weld 1 & 2, beginning at the top weld radius on both sides, extending approximately 100 centimeters downward on side 1 and 2. The preheat temperature loss was verified utilizing a temperature indicating markers and noted the temperature at 150°F. There was one fill pass deposited over the weld root for each side prior to the loss of heat.

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

**Who discovered the problem:** Quality Assurance Inspector, Edward Leach

**Name of individual from Contractor notified:** KFM General Welding Foreman, Jim Belcher

**Time and method of notification:** 0145hrs-10/09/2007 – Verbal

**Name of Caltrans Engineer notified:** Assistant Caltrans Structures Representative, Jason Wilcox

**Time and method of notification:** 0200hrs-10/09/2007 – Verbal

**QC Inspector's Name:** Inspection Services, Inc. Quality Control Inspector, Heydar Alakbarov

**Was the QC Inspector aware of problem:** No

**Contractor's proposal to correct the problem:** Leave the weld passes in place, bring the weld back up to the required minimum preheat temperature and perform magnetic particle testing before 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: Edward Leach

Quality Assurance Inspector

Reviewed By: Albert Carreon

Lead QA Reviewer

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**QUALITY ASSURANCE - NONCONFORMANCE REPORT**


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Inspected By: Edward Leach

Quality Assurance Inspector

Reviewed By: Albert Carreon

Lead QA Reviewer

**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

October 12, 2007

Attn: Mr. Rich Bienek  
Welding Quality Control Manager

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

Letter No. 05.003.01-003552

Subject: NCR - Kiewit-FCI-Manson, 10/08/07 (Failure to Maintain Preheat)

Dear Rich,

The Department issued a Non-conformance Report (NCR) at the SAS T1/E2 Foundations project site on October 8, 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 T1 Pile Head Connection Plate (PHCP) at pile 11, welds G1 and G2. QA verbally notified Mr. Jim Belcher, KFM General Welding Foreman, of this non-conformance on October 9, 2007.

The Department understands that the Contractor returned the weld to the minimum preheat temperature and that MT was performed on the in-place weld prior to resuming welding. The Department considers this NCR to be closed. However future instances of loss of preheat will be documented as necessary.

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

Sincerely,

Mark Vilcheck  
Structure Representative

For: Pedro J. Sanchez  
Resident Engineer

cc: P. Sanchez  
M. Woods  
R. Smith

file: 05.003.01, 09.006.03