STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY Arnold Schwarzenegger, Governor

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: T1 Pile Head Connection Plates (PHCP) **7C-3&4** **Date**: 11-10-2007

Prime Contractor: Kiewit/FCI/Manson-KFM-JV **NCR #217**

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

Type of problem:

Welding	☒	**Concrete**	☐	**Other**	☐	
Welding:	☒	**Curing:**	☐	**Procedural:**	☐	**Bridge No.** 34-0006 L / R
Joint fit-up:	☐	**Coating:**	☐	**Other:**	☐	**Component:** T1 Foundation Footing
Procedural:	☒	**Procedural:**	☐	Loss of preheat temperature		

Description of Non-Conformance: The Contractor failed to maintain the preheat 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 in preheat occurred on PHCP pile 7, plate C, welds 3 & 4 where there were several subsequent weld passes which were deposited prior to the loss of heat. It was noted the top 1 meter of both welds failed to maintain the minimum required preheat.

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; Richard Bettencourt

Name of individual from Contractor notified: KFM General Foreman, Scott McCoy

Time and method of notification: 11/10/07 at approximately 1300 via verbal notification.

Name of Caltrans Engineer notified: Assistant Structure Representative; Jason Wilcox

Time and method of notification: 11/10/07 at approximately 1300 via verbal notification.

QC Inspector's Name: Quality Control Inspector, Heydar Alakbarov

Was the QC Inspector aware of problem: No

Contractor's proposal to correct the problem: Bring the weld up to the required minimum preheat temperature and perform magnetic particle testing prior to 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: Richard Dennis Bettencourt Quality Assurance Inspector

Reviewed By: Albert Carreon/ Bill Levell Lead QA Reviewer

Hardcopy Routing Instructions:
1. Resident Engineer *2. Inspecting Branch Contract File* *3. Responsible Branch Contract File (with supporting documentation)*

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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

Attn: Mr. Rich Bienek
Welding Quality Control Manager

November 16, 2007

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

Letter No. 05.003.01-003653

Subject: NCR - Kiewit-FCI-Manson, 11/10/07 (Failure to Maintain Preheat)

Dear Rich,

The Department issued a Non-conformance Report (NCR) at the SAS T1/E2 Foundations project site on November 10, 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 7, welds C3 and C4. QA verbally notified Mr. Scott McCoy, KFM General Foreman, of this non-conformance on November 10, 2007.

The Department understands that the Contractor returned the weld to the minimum preheat temperature and that MT was performed on the in-place welds prior to resuming welding at these locations. 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