

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES
 MATERIALS ENGINEERING AND TESTING SERVICES
 Office of Structural Materials
 Quality Assurance and Source Inspection

Bay Area Branch

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 Vallejo, CA 94592-1133
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Contract # : 04-0120E4
 Cty SF Rte 80 PM: 13.4/13.8
 File # 1 .25 B

QUALITY ASSURANCE - NONCONFORMANCE REPORT**Location:** SAS T1/E2 Foundations**Date:** 8-24-06**Prime Contractor:** Kiewit/FCI/Manson-KFM-JV**NCR #**114**Submitting Contractor:** Kiewit/FCI/Manson-KFM-JV**Type of problem:****Welding** **Concrete** **Other** **Welding:** **Curing:** **Procedural:** **Bridge No.** 34-0006**Joint fit-up:** **Coating:** **Other:** **Component:** Piles E2 West-1, 2 and 5 thru 8**Procedural:** **Procedural:** <<Description>>

Description of Non-Conformance: The contractor used a filler metal that does not meet the contract requirement for hydrogen content in portions of the welding on pile splice for E2 West-1, 2, and 5 through 8. The filler metal materials are considered an essential variable for welding procedure qualification and any change in the filler material brand name or type shall require requalification of the welding procedure. KFM wrote an internal NCR for this issue on 08-11-06 (see attached).

Applicable reference: Caltrans Special Provisions section 10-1.24 Piling section G, page 194**Who discovered the problem:** KFM Contractor Superintendent, Joel Dodd**Name of individual from Contractor notified:** KFM QC Manager, Chris Webb**Time and method of notification:** 08-23-06 14:00 hours, via telephone**Name of Caltrans Engineer notified:** Mark Vilcheck, Structure Representative**Time and method of notification:** 08-11-06 Verbal by Telephone**QC Inspector's Name:** ISI QC, Kevin Carpenter**Was the QC Inspector aware of problem:** No

Contractor's proposal to correct the problem: The Contractor is having the non compliant filler metal (E71T-1H16) tested at the manufacturer in order to verify if the material is fit for purpose.

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: Albert Carreon

Lead QA Reviewer

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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. Chris Webb

January 22, 2007

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

Letter No. 05.003.01-002604

Subject: Response to KFM Letter No. 219 (Use of Filler Metal that does not meet Contract Requirements) and Resolution of Weld Filler Metal NCRs

Dear Chris,

The Department has reviewed Kiewit-FCI-Manson (KFM) Letter No. 219 dated November 17, 2006, which described the circumstances and subsequent test data pertaining to the use of a non-conforming filler metal for the pile splice welding on pile Nos. 1, 2, and 5 through 8 of the westbound footing of Pier E2. This NCR was brought to the Department's attention by KFM and was documented in the Department's Letter No. 1780 dated August 25, 2006. The Department takes no exception to the arguments presented in KFM's Letter No. 219. This NCR is considered to be resolved.

In addition, the Department's Letter No. 1809 dated September 1, 2006, notified KFM of an NCR pertaining to the change in brand name of filler metal without performing procedure qualification tests. It was determined that the chemical and mechanical properties of the Lincoln Outershield E71T-1H8, previously approved for use, and the UltraCore E71T-1H8 are similar; therefore no additional PQR is required to allow use of the UltraCore filler metal. This NCR is considered to be resolved.

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, 09.013