

**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



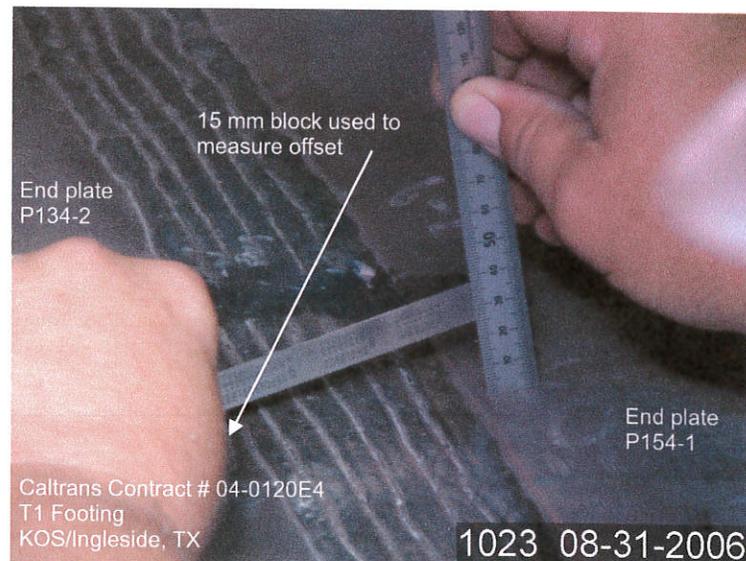
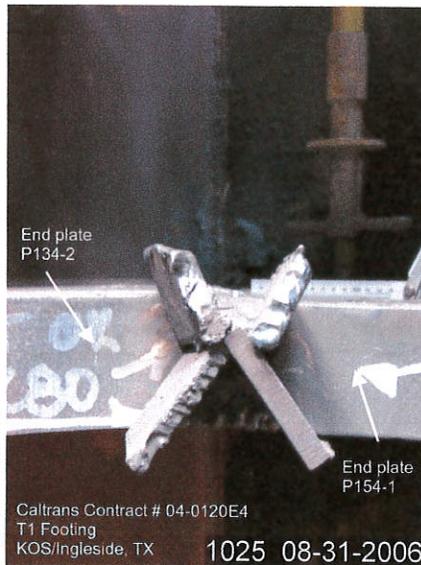
Contract #: **04-0120E4**  
 Cty **SF** Rte **80** PM **13.4/13.8**  
 File # **45.25 B**

## QUALITY ASSURANCE - NONCONFORMANCE REPORT

**Location:** Kiewit Offshore Services**Date:** August 31, 2006**Prime Contractor:** Kiewit/FCI/Manson (KFM) Joint Venture**NCR #119****Submitting Contractor:** Kiewit Offshore Services**Type of problem:**

**Welding**  **Concrete**  **Other**   
**Welding:**  **Curing:**  **Procedural:**  **Bridge No.** 34-0006L/R  
**Joint fit-up:**  **Coating:**  **Other:**  **Component:** T1 footing  
**Procedural:**  **Procedural:**

**Description of Non-Conformance:** KOS Quality Control has allowed the welding of a complete joint penetration weld joining end plates P154-1 and P134-2 with an offset (misalignment) varying between approximately seven and ten millimeters. The misalignment is outside the tolerances set in AWS D1.5-2002, Section 3.3.3.

**Applicable reference:** AWS D1.5 2002 section 3.3.3**Who discovered the problem:** Caltrans Quality Assurance Inspector, David Flygare**Name of individual from Contractor notified:** KOS Quality Control Representative, Mr. George Barnhill**Time and method of notification:** 1600, verbal notification to Mr. George Barnhill on 08-31-2006.**Name of Caltrans Engineer notified:** Mark Vilcheck, Structural Representative**Time and method of notification:** September 1, 2006, 1340 via telephone conversation**QC Inspector's Name:** KOS Quality Control Representative Mr. George Barnhill**Was the QC Inspector aware of problem:** Yes

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# QUALITY ASSURANCE - NONCONFORMANCE REPORT

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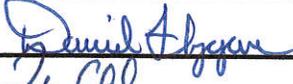
**Contractor's proposal to correct the problem:** The Contractor has stated they will submit an RFI detailing their proposal to correct the misalignment.

**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.

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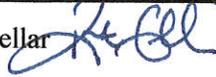
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Inspected By: David Flygare



Quality Assurance Inspector

Reviewed By: Robert Cuellar



Lead QA Reviewer

**DEPARTMENT OF TRANSPORTATION**

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 MATERIALS ENGINEERING AND TESTING SERVICES  
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Contract #: **04-0120E4**  
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## QUALITY ASSURANCE - NONCONFORMANCE REPORT

**Location:** Kiewit Offshore Services

**Date:** August 31, 2006

**Prime Contractor:** Kiewit/FCI/Manson (KFM) Joint Venture

**NCR #119**

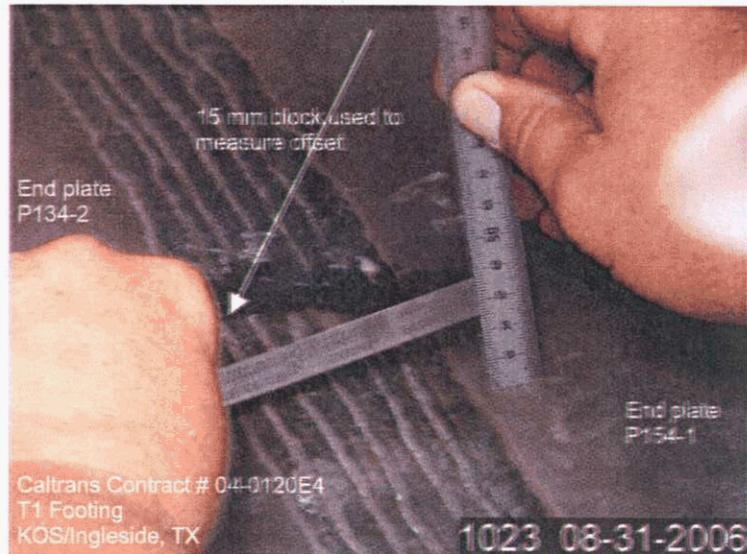
**Submitting Contractor:** Kiewit Offshore Services

**Type of problem:**

**Welding**  **Concrete**  **Other**   
**Welding:**  **Curing:**  **Procedural:**  **Bridge No.** 34-0006L/R  
**Joint fit-up:**  **Coating:**  **Other:**  **Component:** T1 footing  
**Procedural:**  **Procedural:**

RECEIVED  
005341 SEP-58

**Description of Non-Conformance:** KOS Quality Control has allowed the welding of a complete joint penetration weld joining end plates P154-1 and P134-2 with an offset (misalignment) varying between approximately seven and ten millimeters. The misalignment is outside the tolerances set in AWS D1.5-2002, Section 3.3.3.



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**Name of individual from Contractor notified:** KOS Quality Control Representative, Mr. George Barnhill

**Time and method of notification:** 1600, verbal notification to Mr. George Barnhill on 08-31-2006.

**Name of Caltrans Engineer notified:** Mark Vilcheck, Structural Representative

**Time and method of notification:** September 1, 2006, 1340 via telephone conversation

**QC Inspector's Name:** KOS Quality Control Representative Mr. George Barnhill

**Was the QC Inspector aware of problem:** Yes

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# QUALITY ASSURANCE - NONCONFORMANCE REPORT

*(Continued, Page 2 of 2)*

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Inspected By: David Flygare

Quality Assurance Inspector

Reviewed By: Robert Cuellar

Lead QA Reviewer

RECEIVED  
005341 SEP-5 06

**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

February 5, 2007

Attn: Mr. Lee Zink  
Project Director

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

Letter No. 05.003.01-002781

Subject: Response to Submittal No. 1126, Revision No. 00 (KOS Response to NCR 119 (SL-1966))

Dear Lee,

The Department has reviewed Kiewit-FCI-Manson (KFM) Submittal No. 1126, Revision No. 00, dated November 29, 2006, which responded to the Department's Non-conformance Report (NCR) No. 119. The Department's Letter No. 1811, dated September 6, 2006, notified KFM of the NCR for Kiewit Offshore Services (KOS) dated August 31, 2006. The Department hereby approves Submittal No. 1126, Revision No. 00, pursuant to Section 8-3.01, "Welding," of the Special Provisions. The NCR for KOS dated August 31, 2006, is considered to be resolved.

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

Sincerely,

Rafael Bolon  
District Representative

For: Pedro J. Sanchez  
Resident Engineer

cc: P. Sanchez  
M. Woods  
M. Vilcheck  
R. Smith

file: 05.003.01, 09.006.03, 55.1126

## Memorandum

*Flex your power!  
Be energy efficient!*

To: MARK VILCHECK  
Structure Representative  
333 Burma Road  
Oakland, CA 94607

Date: January 22, 2007

File: 04-0120E4  
E2/T1 Foundations

COMPLETED

From: RYAN T. SMITH  
Structural Materials Representative  
Quality Assurance and Source Inspection Branch  
Office of Structural Materials

KFM SUBMITTAL 1126-00 –KIEWIT OFFSHORE SERVICES (KOS) RESPONSE TO NONCONFORMANCE REPORTS 119

The Office of Structural Materials (OSM) has reviewed the KFM Submittal 1126-00, dated November 29, 2006. In this submittal the Contractor is requesting to close the METS Nonconformance Report (NCR) 119, which documented the welding of a Complete Joint Penetration (CJP) weld with misalignment that exceeded the allowable tolerance.

The AWS D1.5-2002 Code, Section 3.3.3 and Figure 3.2 allows parts to be joined by groove welds which have an offset from theoretical alignment not exceed 10 percent of the thickness of the thinner part joined, but in no case shall be more than 3 mm. In August 2006, METS documented that the Contractor elected to proceed with welding the joint connecting P154-1 to P134-2 with misalignment measured at 7-10mm. The Contractor indicated that this condition occurred during the fit-up of a subassembly due to their efforts to maintain the correct alignment of existing anchor bolt holes in the endplates.

As stated in Contractor's response to NCR 119, METS also documented excessive misalignment in the welds connecting end plates P154 and P156, P157 and P155, & P157 and P147. In order to repair these areas, the Contractor submitted KFM RFI's 288, 293, and 297 requesting to correct the alignment of these members by transitioning the complete joint penetration (CJP) butt welds at 2.5:1 slope. The Department approved the Contractor's request in State Letter 05.003.01-001966 provided that additional measures were met in order to prevent the misalignment from adversely affecting the performance of the anchor rods adjacent to the CJP weld.

Mark Vilcheck  
January 22, 2007  
Page 2

As of the date of this memorandum, the Contractor has completed the repairs in accordance with State Letter 05.003.01-001966 and the repairs have been verified by METS. Based on the comments above, METS considers NCR 119 to be closed at this time.

If you have any questions, or would like to discuss the issues, please call me at (858) 232-6799.

cc: Rafael Bolon  
Tom Shimada  
Patryk Pich  
Robert Cuellar