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 # **31 .25 B**

QUALITY ASSURANCE - NONCONFORMANCE REPORT

Location: Eaton Metal Products, Salt Lake City, Utah **Date**: 05/12/06

Prime Contractor: Kiewit/FCI/Manson (KFM) **NCR** #089

Submitting Contractor: Eaton Metal Products (EMP)

Type of problem:

Welding	☐	**Concrete**	☐	**Other**	☒	
Welding:	☐	**Curing:**	☐	**Procedural:**	☐	**Bridge No.** 34-0006L/R
Joint fit-up:	☐	**Coating:**	☐	**Other:**	☒	**Component:** Pile Sleeve T1-2 and T1-4
Procedural:	☐	**Procedural:**	☐	Quality control inspector accepting nonconforming item.		

Description of Non-Conformance: The Eaton Metal Products Quality Control UT Level II technician, Chester Beard, failed to record 5 non-conforming areas in two complete joint penetration girth seam welds. This is the fifth NCR written for the similar issues with Mr. Beard.

Three nonconforming areas were located by the QA inspector in the girth seam CJP weld of Pile Sleeve T1-2 joining the 90mm thick plate A40P, Mk#1 to the 75mm thick plate 14P, Mk#4.

Two additional nonconforming areas were located by the QA inspector in the girth seam CJP weld of Pile Sleeve T1-4 joining the 90mm thick plate B86P, Mk#1 to the 75mm thick plate 68P, Mk#4.

Applicable reference: Eaton Metal Products Welding Quality Control Plan, Section 8 – Inspection, AWS D1.5-2002 Section 6.26.3.1 (Table 6.3 Tensile Stress) and Special Provisions Section 8-3.01 Welding.

Who discovered the problem: Quality Assurance representative, Bert Madison.

Name of individual from Contractor notified: Jason Hart, EMP Quality Control Manager.

Time and method of notification: 05/12/06, 11:00 hours, verbal notification.

Name of Caltrans Engineer notified: Mark Vilcheck, Structure Representative

Time and method of notification: May 12, 2006 at approximately

QC Inspector's Name: Chester Beard

Was the QC Inspector aware of problem: No

Contractor's proposal to correct the problem: None provided at this time.

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: Bert Madison BF Madison Quality Assurance Inspector

Reviewed By: James Cochran 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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M e m o r a n d u m

Flex your power!
Be energy efficient!

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

Date: August 10, 2006

File: 04-0120E4
E2/T1 Foundations

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

KFM SUBMITTAL 767-00 – CLOSING DOCUMENTS ISSUES REGARDING PILE SLEEVE T1-2

The Materials Engineering Testing Service (METS) has reviewed KFM Submittal 767-00 regarding the Closing Documents of the Critical Weld Repairs (CWR) and other issues that occurred during the fabrication of the T1-2 Pile Sleeve at Eaton Metal Products (EMP) in Salt Lake City, Utah.

METS understands that that Submittal 767-00 contains the closing documentation for multiple CWR's. The Closing Documentation for these CWR's are approved or rejected with comments:

Number	Original Submittal #	Approved/ Rejected	Notes
CWR 25	360-00 360-01	Approved	1, 2
CWR 25A	360-02	Approved	1
CWR 25B	360-03	Approved	1, 2
CWR 34	535-00	Approved	1, 2
CWR 43	652-00	N/A	3
CWR 44	750-00	Approved	4

Notes:

1. As indicated in the EMP letter dated July 27, 2006, the rejectable indications found in girth seam A40P/14P were removed as a result of the complete removal and replacement

of the girth seam. This method of repair for this girth seam was approved through CWR 043 (SUB 652-00).

2. The Ultrasonic Testing (UT) reports verifying the repairs made to girth seam A42P/F27P appear to be in conformance with the specifications and are acceptable.

3. METS understands that CWR 043 contains the procedure that was used to completely remove and replace the girth seam weld A40P/14P and that no further closing documents were necessary after the approval of SUB 652-00.

4. The Ultrasonic Testing (UT) Report conflicts with the Weld Repair Location Map regarding the depth of repair. The Weld Repair Location Map shows a depth of repair of 33mm and the supporting UT report, dated July 21, 2006, indicates a repair depth of 42mm. METS understands that the repair depth listed on the UT report is correct and the location map is an error.

Additionally, SUB 767-00 contains EMP's response to NCR 089 which was issued on May 12, 2006 after it was observed that Mr. Chester Beard, an Ultrasonic Testing Level II Technician, failed to properly record a Class "A" indication. METS understands that Mr. Beard no longer works on the project and per the EMP letter dated July 27, 2006, the above referenced weld in pile sleeve T1-4 has been reexamined by a subsequent ASNT Level II Technician and all rejectable indications have been repaired. OSM considers NCR 089 to be resolved.

Per previous conversations between METS personnel and EMP personnel regarding the repair methods of the transverse linear indications found in T1-2, T1-4, T1-6, and T1-9, the repair procedure indicated in SUB 767-00 is acceptable and METS understands that this modification to the repair methods has rendered positive results.

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

cc: Rafael Bolon
Tom Shimada
Jim Cochran