KFM
KIEWIT / FCI / MANSON, A JV

P.O. BOX 23223 Oakland, CA 94623
Phone (510) 419-0120 / Fax (510) 839-0666

LETTER OF SUBMITTAL
KFM Skyway Project # 04-012024

Run Date 03-Dec-04
Time 8:02 AM

Dated: 03-Dec-2004

SUBMITTAL No: KFM-SUB-003370 Rev: 00

To: Doug Coe
Cattrans-Skyway Project
345 Burma Road
Oakland CA 94607
Phone: Fax:

Co/Job # 364-3726
Contract # 04-012024
Sub/Supplier: USI
Sub/Supplier No:

Subject: USI - KFM NCR #37 (METS NCR #23) Closing Documents

Special Provis. (SP) REF: 08-3.01
Standard Spec. (SS) REF:
RESUBMITTAL/SUPPLEMENTAL REF:

We are sending the following attached items: ☑ Attached ☐ Via Fax

☐ Drawing ☑ Plans ☐ Prog. Pmt
☐ Samples ☐ Certificates of Compliance ☐ Calculations
☐ Payroll ☐ Specs ☐ Copy of Letter
☐ Change Order ☐ Schedule ☐ Invoice

Item	Date	Copies	Description	Drawing No	Rev	Status	Pages
01	02-Dec-04	1	KFM NCR #37 (METS NCR #23) Closing Documents		0	Pending	15

These are transmitted as checked below:

☑ For Approval ☐ For Review/comment ☐ Return For Correction
☐ For Your Use ☐ As Requested ☐ For Information

Remarks:

cc:

Please review / approve by : 09-Dec-2004

Submitted By: Rich Bienek
(KFM Staff Member – Originator of Transmittal)

Checked & Sent By: SBurk
Contract Admin/DCS Staff

Copy To: Job Office Files

An Equal Opportunity Employer

UNIVERSAL STRUCTURAL, INC.

USI
UNIVERSAL STRUCTURAL, INC.

November 17,2004

Kiewit I FCI / Manson, JV (KFM)
220 Burma Road
Oakland, CA 94607
Phone: (510) 419-0120
Fax: (510) 839-0666

Attention: Paul Hegarty / Rich Bienek

Reference: SFOBB Skyway Project
USI #23932 (NCR LTR# 37.111704)

Subject: Response to Caltrans State Letter # 5.03.01-00461
KFM NCR #37

Mr. Hegarty & Mr. Bienek,

Universal Structural, Inc. received Caltrans State Letter # 5.03.01-004618, dated May 28, 2004. Caltrans stated that
'This Non-Conformance Report (NCR) is issued by the State to KFM is a result of your subcontractor, USI. On 05/24/04, QA inspector, Joe Adame, observed welding that is in non-conformance relative to wing plate assembly pa26a for the weld that joins plate p26a to p26b (weld joint #5). ***NOTE* SEE** *BELOW Items observed in non-conformance include the following:*
1. The QA inspector observed improper shim and shim placement for the butt splice procedure. The 2 x 4 piece of wood was placed in the center under the splice for shimming purposes. The measure X dimension was approximately 38 mm. However, the "Typical Butt Splice Procedure" (KFM-SUB-000391R08, page 69 of 104), specifies an X dimension of 12 mm. Although Note 9 allows for the addition of shims and restraints to counteract distortion, proper supervision and documentation of the distortion controls do not appear to have been utilized."

***NOTE* :** p26a to p26b was stated incorrectly, this should read p26b to p26c
weld joint #5 was stated incorrectly, this should be weld joint #2.
USI's response: The use of a 2" wood shim was used in place of 12mm shim. It was later noted by the Bay Foreman; see attached copy of USI's internal NCR No. 31. Instruction of proper use of shim's and correct shim material was instructed to the employee. The areas of distortion was corrected and brought back to proper tolerances, see Heat Straightening Request (HSR) Number: 04-24 Rev. 2 and attachments. Please notify Caltrans and request a letter to close this NCR.

Category III

If you have any questions or need further clarification, please contact me at your earliest possible convenience.

Sincerely,
Universal Structural, Inc.

Brad Murphy
Sales Manager

cc: file

BL PH
6/2/04

STATE OF CALIFORNIA-BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor
DEPARTMENT OF TRANSPORTATION
SFOBB – Skyway Project
345 Burma Road
Oakland, CA 94607
Facsimile Number. (610) 622-5165

Flex Your Power
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May 28,2004

KFM, a JV
220 Burma Road
Oakland, CA 94607

KFM 37

Contract: 04–012024
04-SF, Ala-80-13.9/14.3, 0.0/1.6
SFOBB Skyway Project
State Letter # 5.03.1-004618

Subject: USI NCR No. 23: Non-Conformances Related to Welding for Wing Plate Assembly pa26a

Dear Mr. Skoro,
Attention: Paul Hegarty,

This Non-Confomance Report (NCR) is **issued** by the State to KFM as a result of your subcontractor, **USI.** On 05/24/04, **QA** insepector, Joe Adame, observed welding that **is** in non-conformance relative to wing plate assembly pa26a for the weld that joins plate p26a to p26b (weld joint #5). Items observed in non-conformance include the following:

1. The **QA** inspector observed improper shim **and shim** placement for the **butt** splice procedure. The **2x4** piece **of** wood **was** placed in the center under the splice for **shimming** purposes. **The** measure 'X' dimension **was** approximately **38** mm. However, the "Typical Butt Splice Procedure" (KFM-SUB-000391R08, page 69 of 104), specifies **an** 'X' dimension of 12 mm. Although Note 9 allows for the addition of shims and restraints to counteract distortion, proper supervision and documentation of the distortion controls do not appear to have been utilized.

This NCR **will** be tracked as USI NCR No. 23. USI was verbally notified of this **NCR by** Caltrans' **METS** on 05/24/04. Please review and address how you plan to resolve **this** NCR and **bring** your work back into compliance with our contract.

Should you have any questions, please contact David Wu at (510) 622-5104.

Sincerely,

David W. Wu

David Wu
Senior **Bridge** Engineer

For: Mr. Douglas Coe
Resident Engineer

cc: D. Coe, I. Khinsann, V. Iyer, S. Abbas, B. Chew, H. El-Natur, P. Lowry, I. Kwong

file: 5.03.1, 9.07.8

CODE ____

UNIVERSAL STRUCTURAL
NON-CONFORMANCE REPORT

Date: 6/2/04
Initiator: George Mason
Job Number: 23932
NCR No.: 31

Copies to: Step 1 - ☒Plant Manager ☐Superintendent
Step 2 - ☐QC Manager ☐Department Head ☐General Manager ☐Project Manager

Step 1 - Details of Non-conformance:
Splice between p26b & p26c on Right Wing Plate Assembly pa26
The right end of the splice has about 5 m. of excessive deviation as noted on attached sheet. 6/2/2004

Responsible Department: _____ Department Supervisor _____

Step 2 - Corrective Action: Engineer approval required: (yes) no
Heat affected area of 1 strip heat 2600 mm Long
Not to exceed 1000°F.

Complete 6-16-04
Signed: Kenneth D. Colt Date: 12-2-04

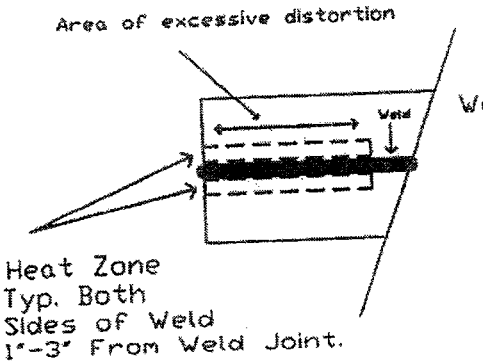
Step 3 - Corrective Action to prevent re-occurrence:

Signed: _____ Date: _____

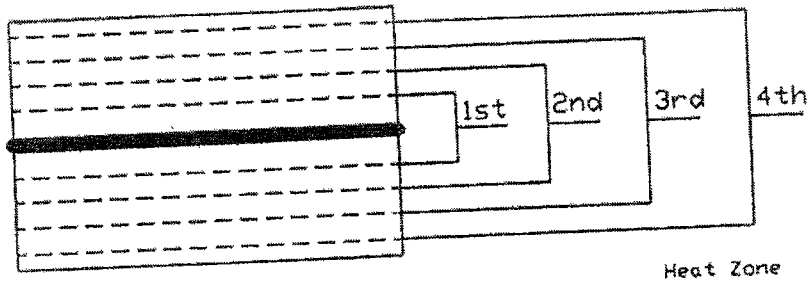
Step 4 - Corrective Action Approval:
Approved: _____
Not Approved, further corrective action required: _____

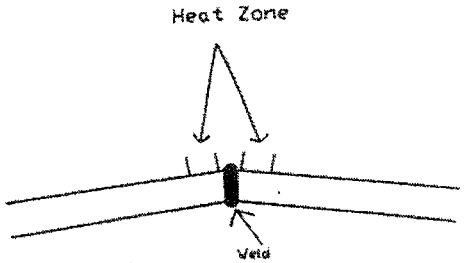
TYPICAL BUTT WELD DISTORTION REPAIR PROCEDURE

Right Wing Plate Assembly

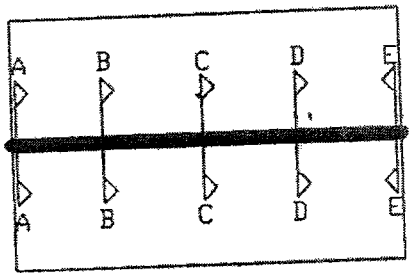


Heat Progression





1. Line heats to be applied full length of weld where excessive distortion is present.
2. First lined heat shall be placed nearest to the weld and progress away previous line heat
3. Each line heat will be applied to both sides parallel to the weld and allowed to cool. Check prior to application of next progress heats.
4. Our goal is to achieve acceptability in four progressions.
5. All deviations discovered in previous applications will be implemented in conjunction with fabrication plan rev. 9. Deviations found in this NCR will be reviewed for possible corrections in the fab plan for future operations.



	SECTION	DEVIATION FROM SQUARE					
		Original Check	1st Heat	2nd Heat	3rd Heat	4th Heat	5th Heat
LE	A-A	0	0				
	B-B	5	1				
	C-C	5	1				
	D-D	5	2				
RE	E-E	10	3				

Universal Structural, Inc.
Heat Straightening Request

DATE:	INITIATOR	DEPARTMENT:	HSR NUMBER:
June 4, 2004 June 11,2004 Rev. 1 June 15,2004 Rev.2	Ralph Seeley	Production	04-24 Rev. 2
JOB NUMBER.	JOB NAME:	DRAWING	CODE/SPECIFICATION
23932	SFOBB	26	AWS D1.5

QA W A G E R C. Amonson **DATE: 6/15/04**

RECOMMENDED DISPOSITION:

Areas distorted by welding shall be straightened by **application** of a limited amount of localized heat with minimal mechanical assistance. The temperature of heated areas shall not exceed 1100 degrees F. (600 degrees C.).

All application of heat **to** base metal shall **be** controlled by using Temp Sticks or **Thermocouples** to assure that heat does not exceed allowable.. Weld joints are to be heated on both sides, parallel to the weld. This line heat will be located approximately 1 **to** 3 inches **from** the weld joint on the outside **of** the surface that is distorted. See the notes on the attached sketch for **further** details.

QA MANAGER	DATE	PROJECT MANAGER	DATE
C. Amonson	6/15/04	Brad Young	6/15/04
PLANT W A G E R	**DATE**	**KFM/QA MANAGER**	**DATE**
Ralph Seeley	6/15/04	Rich Bienek	

Complete Per K.E. Ed Malen 6/14/04

PLANT MANAGER	DATE	CUSTOMER	DATE
Ralph Seeley	6/4/04		
FINAL REVIEW			DATE

Verbal OK from CT on 6-16-04 JJ

BL PH 6/24/04

STATE OF CALIFORNIA-BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
SFOBB – Skyway Project
5 Burma Road
Oakland, CA 94607
Facsimile Number: (510)622-5165

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June 24, 2004

KFM, a JV
220 Burma Road
Oakland, CA 94607

Contract: 04-012024
04-SF, Ala-80-13.9/14.3, 0.0/1.6
SFOBB Skyway Project
State Letter # 5.03.1-004873

Subject: Response to KFM-SUB-002415R02: USI Heat Straighten Request #04-24 Rev.2

Dear Mr. Skoro,
Attention: Mr. Rich Bienek,

The State has reviewed KFM-SUB-002415R02: USI Heat Straighten Request #04-24 Rev.2 regarding the request to heat straighten wing plate pa26. The subject submittal is approved as noted with the following comments:

The State will allow USI to apply one progression of heat in accordance with USI's 'Typical Butt Weld Distortion Repair Procedure." Heat straightening should occur in the presence of a State QA inspector. After the first progression of heat is applied, the measurements of the affected dimensions should be communicated to the Stab QA inspector on the shop floor. At this time, the State may approve the second progression of heat in accordance with the "Typical Butt Weld Distortion Repair Procedure." Subsequently, non-destructive testing (NDT) shall be performed in accordance with AWS D1.5 Section 6.7.3.

Should you have any questions, please contact David Wu at (510) 622-5104 or Patrick Lowry at (858) 344-2712.

Sincerely,

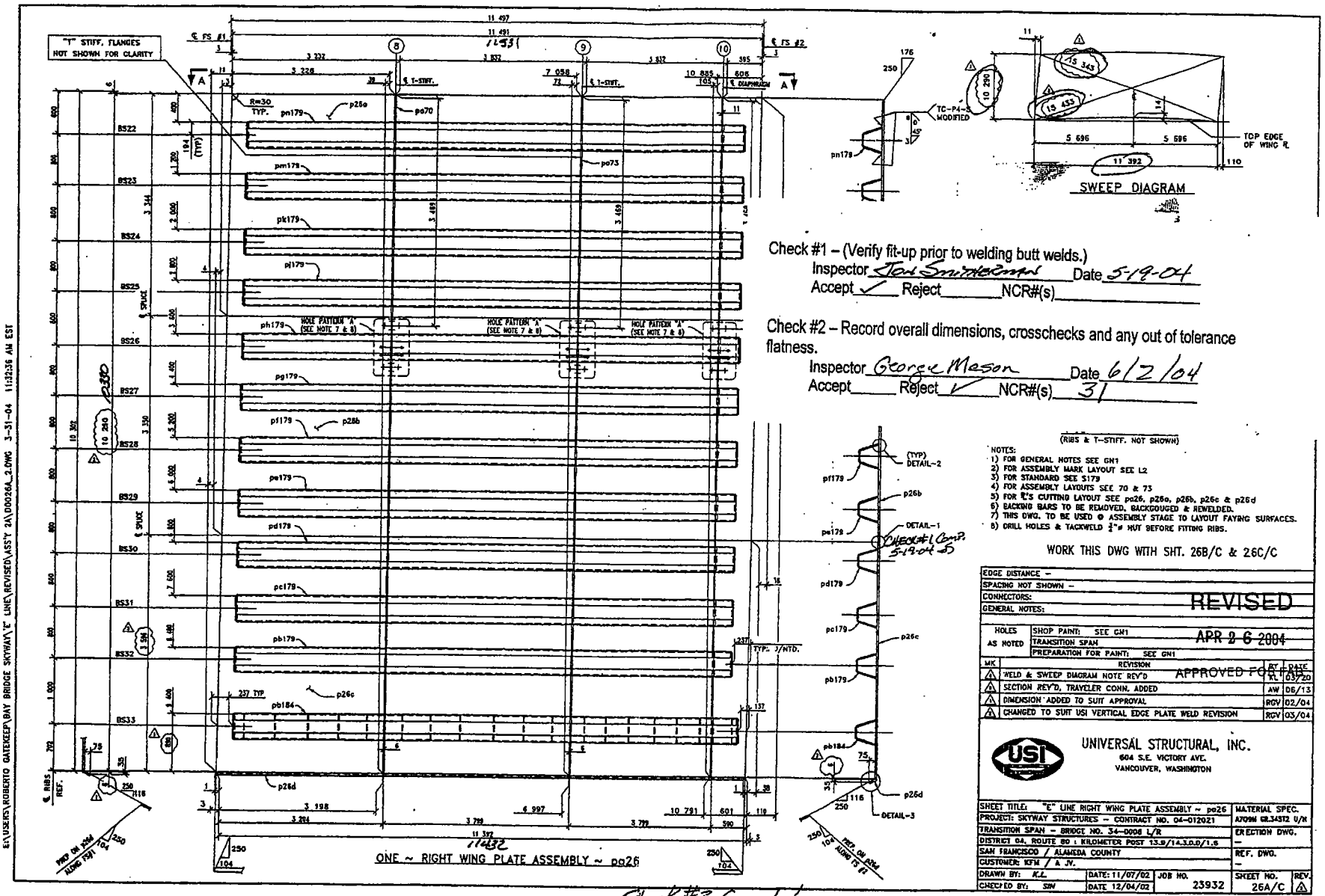
David Wu

David Wu
Senior Bridge Engineer

For: Mr. Douglas Coe
Resident Engineer

cc: D. Coe, L Khinsann, V. Iyer. D. Wu, S. Abbas. B. Chew, H. El-Natur, P. Lowry, I. Kwong

file: 5.03.1, 9.06.8



Check #1 – (Verify fit-up prior to welding butt welds.)
Inspector Tom Smithermann Date 5-19-04
Accept ✓ Reject ____ NCR#(s) ____

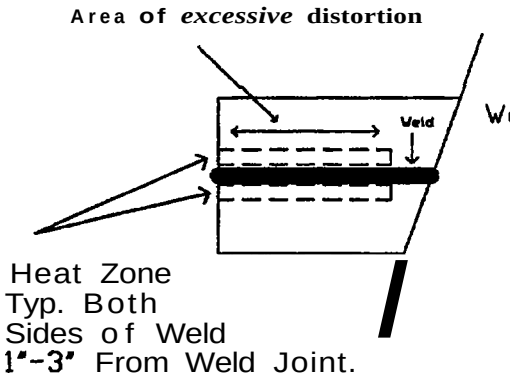
Check #2 – Record overall dimensions, crosschecks and any out of tolerance flatness.
Inspector George Mason Date 6/2/04
Accept ____ Reject ✓ NCR#(s) 31

Check #1 Comp. 5-19-04

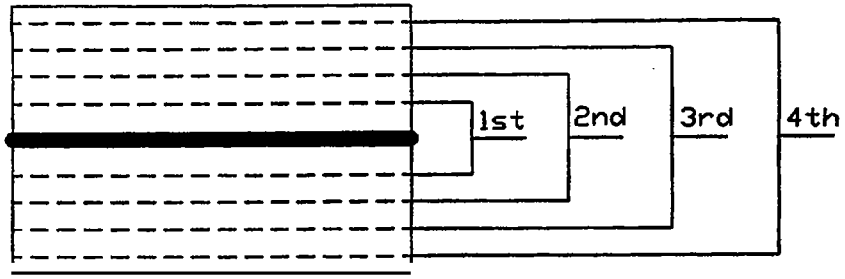
Check #3 Incomplete

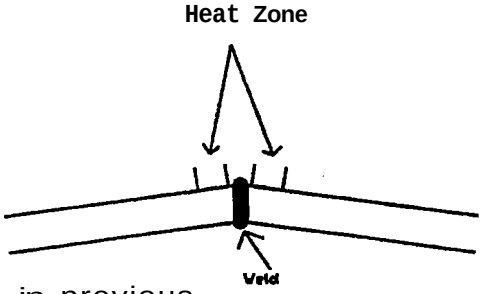
TYPICAL BUTT WELD DISTORTION REPAIR PROCEDURE

Right Wing Plate Assembly
Pa 26

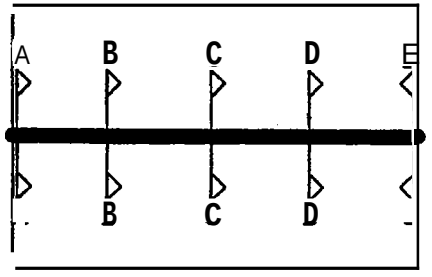


Heat Progression





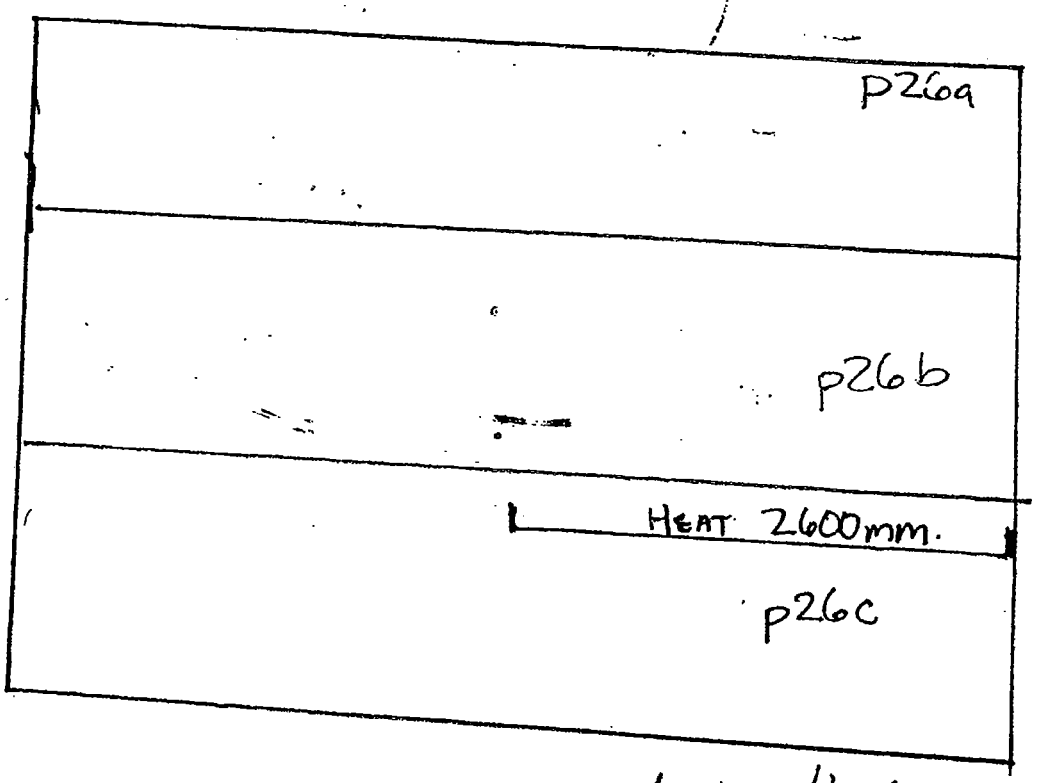
1. Line heats to be applied full length of weld where excessive distortion is present.
2. First lined heat shall be placed nearest to the weld and progress away previous line heat
3. Each line heat will be applied to both sides parallel to the weld and allowed to cool. Check prior to application of next progress heats.
4. Our goal is to achieve acceptability in four progressions.
5. All deviations discovered in previous applications will be implemented in conjunction with fabrication plan rev. 9. Deviations found in this NCR will be reviewed for possible corrections in the fab plan for future operations.

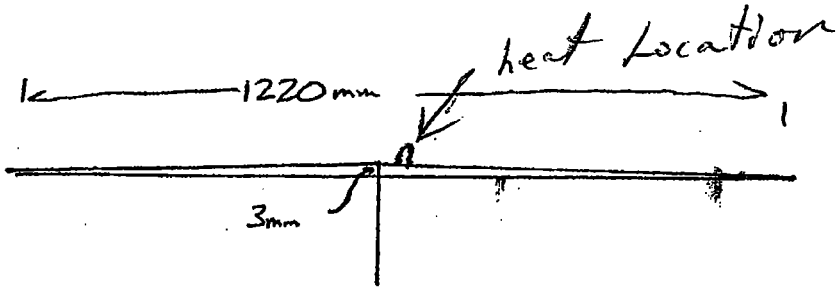


LE

RE

SECTION	DEVIATION FROM SQUARE					
	Original Check	1st Heat	2nd Heat	3rd Heat	4th Heat	5th Heat
A-A	0					
B-B	5					
C-C	5					
D-D	5					
E-E	10					





2600 mm Long heat
Right end of splice / heat Progression
heat on bottom side of PL.

HSR# 24 R2

UNIVERSAL STRUCTURAL INC.

ULTRASONIC TEST REPORT

REPORT IDENTIFICATION

JOB NUMBER 23932
DWG. NO. 26 A/B
ITEM NO. PA 26

EQUIPMENT: KB USN
52/52L/58L
Transducer 2.25 MHZ
COUPLANT: CELLULOSE

ACCEPTANCE STANDARD

AASHTO/AWS D1.5
VISUAL ACCEPTANCE
PRIOR TO NDE
BY: J. GREY
J. LOWENGART
P. HALE
S. REED
B. BELLEVEAU

CUSTOMER IDENTIFICATION

PROJECT: OAKLAND BAY
CUSTOMER: KFM / A JV.
BRIDGE NO. 34-0006 L/R
CONTRACT NO: 04-012024

Base metal tested per AWS D1.5 96, section 6.19.5 with a 2.25 MHZ longitudinal wave transducer

WJ NO'S	WID	TENSION	COMPRESSION	THICKNESS	AREA	ACCEPT	REJECT	TRANSDUCER ANGLE	LEG	INDICATION LEVEL	REFERENCE LEVEL	ATTENUATION FACTOR	INDICATION RATING	LENGTH	ANGULAR DISTANCE	DEPTH	DISTANCE FROM X	DISTANCE FROM Y
2	60	X		16	100%	X		70°	½		41							

Welding Process:
FCAW SAW SMAW

Weld Joint Type:
T-Joint Butt Joint Corner Joint

LEVEL II TECHNICIAN - JOHN LOWENGART — DATE 9-22-04

LEVEL II TECHNICIAN - PETER HALE — DATE

LEVEL II TECHNICIAN - SCOTT REED — DATE

LEVEL II TECHNICIAN - JOHN GREY - — DATE

LEVEL II TECHNICIAN - — DATE

LEVEL II TECHNICIAN - BILL BELLEVEAU — DATE

C. AMONSON - USI QCM, REVIEW — DATE 9/24/04

UT PERFORMED AFTER HEAT STRAIGHTENING (HSR#...)

STATE OF CALIFORNIA-BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor
DEPARTMENT OF TRANSPORTATION
SFOBB - Skyway Project
345 Burma Road
Oakland, CA 94607
Facsimile Number: (510) 622-5165

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June 24, 2004

KFM, a JV
220 Burma Road
Oakland, CA 94607

Contract: 04-012024
04-SF, Ala-80-13.9/14.3, 0.0/1.6
SFOBB Skyway Project
State Letter # 5.03.1-004872

Subject: Response to KFM-SUB-002415R01: USI Heat Straightening Request #04-24Rev1

Dear Mr. Skoro,
Attention: Mr. Rich Bienek,

The State has reviewed KFM-SUB-002415R01: USI Heat Straightening Request #04-24Rev1 regarding the request to heat straighten wing plate p26. The subject submittal is not approved. The Contractor states, 'This deviation has been reviewed and adjustments made to future similar applications." Please re-submit with the specific adjustments made to the Contractor's fabrication procedures and / or distortion control plan to prevent such distortion in the future.

Should you have any questions, please contact David Wu at (510) 622-5104 or Patrick Lowry at (858) 344-2712.

Sincerely,

<<< ORIGINAL SIGNED >>>

David Wu
Senior Bridge Engineer

For: Mr. Douglas Coe
Resident Engineer

cc: D. Coe, I. Khinsann, V. Iyer, D. Wu, S. Abbas, B. Chew, H. El-Natur, P. Lowry, I. Kwong

file: 5.03.1, 9.06.8

Universal Structural, Inc
Heat Straightening Request

DATE:	INITIATOR	DEPARTMENT:	HSR NUMBER
June 4,2004 June 11,2004 Rev.1	Ralph Seeley	Production	04-24. Rev. 1
JOB NUMBER	**JOB NAME:**	**DRAWING**	**CODE/SPECIFICATION**
23932	SFOBB	26	AWS D1.5

NONCONFORMANCE:
Excessive weld distortion has been encountered in the butt weld'between p26b and p26c on the right wing plate p26. This deviation is located at the edge of the plate. Additional comments were required by Caltrains in the original submittal. See the attached sketch for details.

QA MANAGER C. Amonson **DATE: 6/4/04**

RECOMMENDED DISPOSITION:
Areas distorted by welding shall be straightened by application of a limited amount of localized heat with minimal mechanical assistance. The temperature of heated areas shall not exceed 1100 degrees F. (600 degrees C.).
All application of heat to base metal shall be controlled by using Temp Sticks or Thermocouples to assure that heat does not exceed allowable. Weld joints are to be heated on both sides, parallel to the weld. This line heat will be located approximately 1 to 3 inches from the weld joint on the outside of the surface that is distorted. See the notes on the attached sketch for further details.

QA MANAGER	DATE	PROJECT MANAGER	DATE
C. Amonson	6/4/04	Brad Young	6/4/04
PLANT MANAGER	**DATE**	**KFM/QA MANAGER**	**DATE**
Ralph Seeley	6/4/04	Rich Bienek	

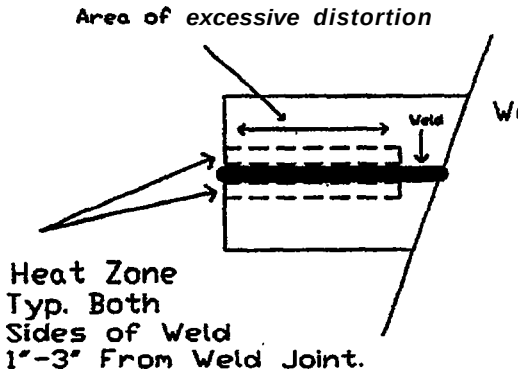
PLANT MANAGER	DATE	CUSTOMER	DATE
Ralph Seeley	6/4/04		

FINAL REVIEW **DATE**

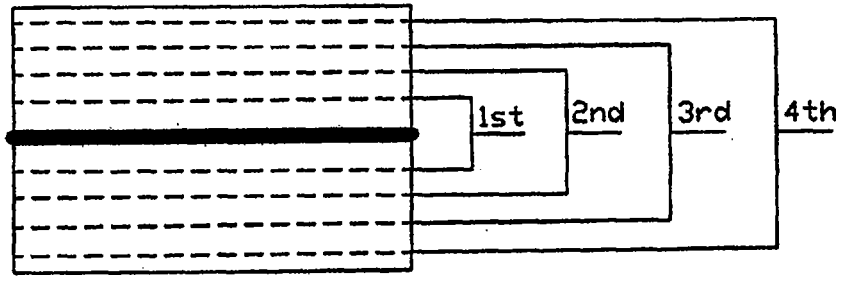
REJECTED ON VERBAL FROM CT DUE TO:
1) WHAT ADJUSTMENTS WERE MADE TO IMPROVE DISTORTION CONTROL
2) WHAT MODIFICATIONS WERE/WILL BE MADE TO FAB PLAN.
(NEED TO SUBSTANTIATE NEW NOTE 6 ON PROCEDURE).
RB 6/14/04

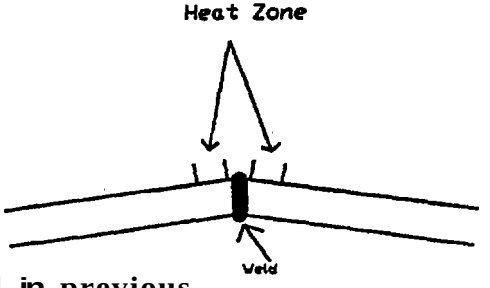
TYPICAL BUTT WELD DISTORTION REPAIR PROCEDURE

Right Wing Plate Assembly
Pa 26



Heat Progression





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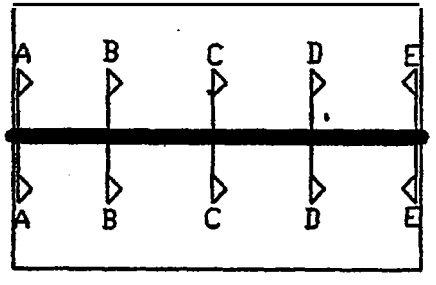

	SECTION	DEVIATION FROM SQUARE					
		Original Check	1st Heat	2nd Heat	3rd Heat	4th Heat	5th Heat
LE	A-A	0					
	B-B	5					
	C-C	5					
	D-D	5					
RE	E-E	10					

DATE:	INITIATOR	DEPARTMENT:	HSR NUMBER:
June 4,2004	Ralph Seeley	Production	04-24
JOB NUMBER.	JOB NAME:	DRAWING	CODE/SPECIFICATION
23932	SFOBB	26	AWS D1.5

NONCONFORMANCE:
Excessive weld distortion has been encountered in the butt weld between p26b and p26c on the right wing plate p26. This **deviation is located at the edge of the plate. See the attached sketch for details.**

QA WAGER C. Amonson **DATE: 6/4/04**

RECOMMENDED DISPOSITION:
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QA MANAGER C. Amonson	DATE 6/4/04	PROJECT MANAGER Brad Young	DATE 6/4/04
PLANT MANAGER Ralph Seeley	DATE 6/4/04	KFM/QA WAGER Rich Bienek	DATE
PLANT MANAGER Ralph Seeley	DATE 6/4/04	CUSTOMER	DATE

DEPARTMENT OF TRANSPORTATION
SFOBB – Skyway Project
345 Burma Road
Oakland, CA 94607
Facsimile Number: (510) 622-5165

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December 21, 2004

KFM, a JV
220 Burma Road
Oakland, CA 94607

Contract: 04-012024
04-SF, Ala-80-13.9/14.3, 0.0/1.6
SFOBB Skyway Project
State Letter # 5.03.1-006413

Subject: Response to KFM-SUB-003370R00: USI KFM NCR #37 (METS NCR #23) Closing Documents

Dear Mr. Skoro,
Attention: Mr. Rich Bienek,

The Engineer has reviewed KFM-SUB-003370R00: USI KFM NCR #37 (METS NCR #23) Closing Documents. The Engineer agrees the Contractor has sufficiently addressed this NCR. As a result, USI NCR No. 23 is resolved.

Should you have any questions, please contact David Wu at (510) 622-5104 or Patrick Lowry at (858) 344-2712.

Sincerely,

<<< ORIGINAL SIGNED >>>

David Wu
Senior Bridge Engineer

For: Mr. Douglas Coe
Resident Engineer

cc: D. Coe, I. Khinsann, V. Iyer, D. Wu, S. Abbas, B. Chew, H. El-Natur, P. Lowry, I. Kwong

file: 5.03.1, 9.07.8