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 08-Jun-06
Time 11:29 AM

Dated: June 8, 2006

SUBMITTAL No: KFM-SUB-006711 **Rev:** 00

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

Co/Job # 364-3726
Contract # 04-012024
Sub/Supplier: MSS
Sub/Supplier No: LTR 6-6-06

Subject: Mountain States Steel NCR 37 & 38 Response

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

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

☐ Contract Plans/Specs ☐ Certs of Compl./Samples ☐ Working Drawings
☐ Drawings/Calculations ☐ Schedule ☐ WQCP and/or Addenda
☐ Change Order ☐ Progress Estimate Request ☐ Weekly Weld Reports
☑ Copy of Letter ☐ Payroll Information ☐ CWR Procedure

Item	Date	Copies	Description	Drawing No	Rev	Status	Pages
01	08-Jun-06	1	Mountain States Steel response to CT-NCR-37 & 38		0	Pending	9

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 : 26-Jun-2006

Submitted By: Corkey Bates
(KFM Staff Member – Originator of Transmittal)

Checked & Sent By: C. Thomas
Contract Admin/DCS Staff

MOUNTAIN STATES STEEL

325 SOUTH GENEVA ROAD, LINDON, UTAH 84042
Telephone: (801) 785-5085 Fax: (801) 785-1100

KFM, a JV
220 Burma Road
Oakland, CA 94607

June 6, 2006

Attention: Corkey Bates

Ref: SFOBB, Skyway Project
Contract #04-012024
MSS Job #464
State Letter #5.03.1-010083 and 5.03.1-010084

Dear Corkey,
In response to State Letter #5.03.1-010083 and, 5.03.1-010084
Caltrans NCR # 37 and 38.

Panel # 1309BD - on the date of this occurrence, the indications were verified by MSS QC. As a result, Mr. Kim DeSpain was removed from performing ultrasonic testing on this project until further documented training was provided to MSS.
CRWR # 46 was written, submitted and approved for repair of this indication.
Attached are copies of the UT reports and CRWR #46 and State Letter # 5.03.1-009832 for your reference.
MSS understands that there is no remedial work to be performed to this panel.

Please review and close the aforementioned NCR's.

Thank you for your consideration,
MOUNTAIN STATES STEEL, INC,

Keith Stephenson
QA/QC Manager

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

Flex Your Power
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June 01, 2006

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 # 5.03.1-010083

Subject: MSS - NCR No. 37 - Weld Metal Not Conforming With Contract Specifications

Dear Mr. Zink,
Attention: Corkey Bates,

This Non-Conformance Report (NCR) is issued by the Engineer to KFM as a result of the actions of your subcontractor, Mountain States Steel for the following reasons:

Caltrans' Quality Assurance (QA) located two "Class A" indications in bike path box panel 1309BD exceeding AWS D1.5 1996, Table 9.1 values that were previously inspected and accepted by MSS.

The first indication is in the single bevel complete joint penetration #10 weld between 16mm plate piece bh1309 and 16 mm plate piece k1309.

The second indication is in the single bevel complete joint penetration #18 weld between 16mm plate piece bk1309 and 8 mm plate piece g1309.

Both welds appear to have been UT inspected and accepted by MSS representative Mr. John Carroll on March 22, 2006. MSS/QTI UT Level II technician Mr. David (Kim) Despain confirmed both the UT rejections.

This NCR will be tracked as MSS-NCR No. 37. MSS was verbally notified of this NCR by Caltrans' METS on 3-23-2006. Please review and address, how you plan to resolve this NCR and bring your work back into compliance with the Contract.

Should you have any questions, please call David Wu at 510-622-5104.

Sincerely,

<<< ORIGINAL SIGNED >>>

Mr. David Wu
Senior Bridge Engineer

For: Mr. Douglas Coe
Resident Engineer

cc: D. Coe, V. Iyer, I. James, M. Javed, D. Wu, S. Abbas, B. Chew, D. Salladay, H. El-Natur

file: 5.03.1, 9.07.5

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 01, 2006

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 # 5.03.1-010084

Subject: MSS - NCR No. 38 - Weld Metal Not Conforming With Contract Specifications

Dear Mr. Zink,
Attention: Corkey Bates,

This Non-Conformance Report (NCR) is issued by the Engineer to KFM as a result of the actions of your subcontractor, Mountain States Steel for the following reason:

Caltrans' Quality Assurance (QA) located one area of weld repair metal not conforming with the Contract Specifications that were previously inspected and accepted by a MSS/Quality Testing & Inspection (QTI) Ultrasonic Testing (UT) Level II technician Mr. David (Kim) Despain.

Bike Path Box Panel mark 1309BD was found to have a "Class A" (+9 rating) indication that exceeds AWS D1.5 1996, Table 9.1 value in the weld repair area of single bevel complete joint penetration #10r1 weld between 16mm plate piece bh1309 and 16 mm plate piece k1309. Three different Caltrans' QA Inspectors independently confirmed this +9 ultrasonic rating.

MSS/QTI UT Level II technician Mr. David (Kim) Despain performed ultrasonic confirmation inspections along with MSS QC Manager Mr. Keith Stephenson of the UT rejection and initially determined the weld 10r1 repair area is acceptable (+11 rating) and later Mr. Stephenson decided to have MSS personnel perform weld repairs of weld 10r1 with reference to CWR #046, repair #2 of weld #10r1.

This NCR will be tracked as MSS-NCR No. 38. MSS was verbally notified of this NCR by Caltrans' METS on 3-23-2006. Please review and address, how you plan to resolve this NCR and bring your work back into compliance with the Contract.

Should you have any questions, please call David Wu at 510-622-5104.

Sincerely,

<<< ORIGINAL SIGNED >>>

Mr. David Wu
Senior Bridge Engineer

For: Mr. Douglas Coe
Resident Engineer

cc: D. Coe, V. Iyer, I. James, M. Javed, D. Wu, S. Abbas, B. Chew, D. Salladay, H. El-Natur

file: 5.03.1, 9.07.5

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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March 30, 2006

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 # 5.03.1-009832

Subject: Response to KFM-SUB-6404, MSS - CRWR #46

Dear Mr. Zink,
Attention: Corkey Bates,

The Engineer has reviewed the subject submittal wherein KFM/MSS states that piece mark 1309BD has an unacceptable UT indication in the CJP weld between the west end diaphragm plate (ap 1309) and deck plate. The first repair weld was unsuccessful in removing the indication. MSS proposes to perform a critical (second) repair weld of the CJP weld per MSS job #464, Repair Weld Outline #46 and WPS D1.5 TC-U4b-F. The proposal is acceptable to the Engineer.

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

Sincerely,

<<< ORIGINAL SIGNED >>>

Mr. David Wu
Senior Bridge Engineer

For: Mr. Douglas Coe
Resident Engineer

cc: D. Coe, V. Iyer, I. James, M. Javed, D. Wu, S. Abbas, B. Chew, D. Salladay, H. El-Natur

file: 5.03.1, 55.6404

MOUNTAIN STATES STEEL

325 SOUTH GENEVA ROAD, LINDON, UTAH 84042
Telephone: (801) 785-5085 Fax: (801) 785-1100

CRITICAL REPAIR WELD REQUEST

To:	**KIEWIT/FCI/MANSON, A JV**	*MSS CRWR #*	**46**
	P.O. Box 23223	*Project:*	SFOBB SKYWAY
	Oakland, CA 94623	*CO/Job #*	364/3726
	(phone) 510 419-01200 (fax) 510 839-0666	*Contract #*	04-012024
Attn:	**Jeff Foerste**	*MSS Job #:*	**464**

NOTE: A prompt response to this RFI is essential to avoid delays to the project and possible added consequential costs

Initiated by:	MSS	*Date Issued:*	23 March 2006
Shop Drawing Ref.:	1309BD	*Requested by:*	24 March 2006

CONDITION:

Piece mark 1309BD has an unacceptable UT indication in the CJP weld between the west end diaphragm plate (ap1309) & deck plate starting at 914mm from the north side. The first repair weld was unsuccessful in removing the indication.

REQUEST:

Is this acceptable for Mountain States Steel to do a critical (2nd) repair weld of the CJP weld per the attached MSS job #464 REPAIR WELD OUTLINE #46 and WPS D1.5 TC-U4b-F?

QC Manager: Keith Stephenson Shop Superintendent: Howard Ford

COMPLETION:

ATTACHMENTS:

QC Manager: Keith Stephenson Shop Superintendent: Howard Ford

MOUNTAIN STATES STEEL

325 SOUTH GENEVA ROAD, LINDON, UTAH 84042
Telephone: (801) 785-5085 Fax: (801) 785-1100

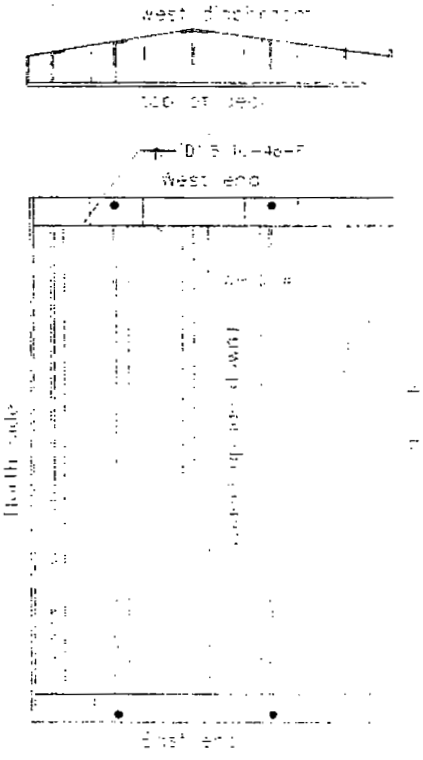
MSS job #464

REPAIR WELD OUTLINE #46

description of discontinuity:

pc mk #1309BD ... weld #10, rounded indication 9mm deep x 3mm long, 914mm from the north side plate.

Sketch of discontinuity - type, size, location, etc. & proposed weld joint configuration:



Method, Sequence, & Extent of excavation:

1. Carbon-arc gouge to clean metal.
2. Grind the gouged surface to shiny metal.

NDE to verify discontinuity removal:

1. MT the excavation to verify cleanliness.
2. UT the repair after completion.

WPS #D1.5 TC-U4b-F

Repair welding & finishing:

1. Fill the gouged area with weld metal. Extra care should be taken to assure good tie-in with existing weld.
2. Clean & visually examine each weld pass to assure no slag, porosity, etc is included in repair weld.
3. Grind to blend with existing weld.

Minimum weld preheat @ 70°F (20°C)

Welding VOLTAGE @ 24 to 30

Welding AMPS @ 242 to 320

The root & final weld passes may not be peened.

No Postweld Heat Treatment is required.

SPECIAL CONSIDERATIONS:

MOUNTAIN STATES STEEL, INC.

325 SOUTH GENEVA ROAD, LINDON, UTAH 84003
Telephone (801)785-5085 Fax (801)785-1100

ULTRASONIC TEST REPORT

REPORT IDENTIFICATION		EQUIPMENT IDENTIFICATION		CUSTOMER IDENTIFICATION	
JOB #	464				
DRAWING #	1309	Equipment:	Krautkramer	PROJECT:	SFOBB
ITEM #	1309BD	Model:	USN58L	CUSTOMER:	KFM
		Ser.#	OIOFPY	CONTRACT:	04-012024
CRWR #:	CRWR # 46	Transducer Ser #:	OOPIPP		
		Mhz:	Size: .63X.75		
		Type:	☑ 70 ☐ 60 ☐ 45 ☐ 0	*ACCEPTANCE STANDARD:*	AWS D1.5(96)tension
		IW Block Ser. #	00-6350		
		Couplant: Cellulose Paste			

PIECE MARK 1309BD	WJ #	REPAIR #	WELDER ID	LENGTH OF WELD (mm)	THICKNESS	ACCEPT	REJECT	LEG	INDICATION LEVEL	REFERENCE LEVEL	ATTENUATION FACTOR	INDICATION RATING	LENGTH (mm)	ANGULAR DISTANCE	DEPTH	DISTANCE FROM X	DISTANCE FROM Y
IND.2	10	0	MJS	5010	16		X	1	64	57	0	7	20	1.2	9	6	914
IND.2	10	1	MJS	50	16		X	1	67	57	0	10	3	1.27	9	6	914

Comments:

Welding Process: ☑ FCAW ☐ SAW ☐ SMAW ☐ Other

Visual Acceptance Prior to NDE: ☑ Yes ☐ No

Weld Joint Type: ☑ T-Joint ☐ Butt Joint ☐ Corner Joint

John Carroll III — **LEVEL II TECHNICIAN** — 3/23/2006 — **DATE**

David Draper — **MSS QCM, REVIEW** — 23-Mar-06 — **DATE**

MOUNTAIN STATES STEEL

Welding Procedure Specification

D1.5 TC-U 4b-F

Material Spec. A709 Gr.36, 50, 50W

Welding Process(es) FCAW

Position of Welding Flat & Horizontal

Manual ☐ Machine ☐ Semi-Automatic ☒ Automatic ☐

Filler Metal Specification A5.20 or A5.29

Filler Metal Classification E71T-1 Lincoln Outershield 71 Elite

Flux NA

Shielding Gas 100% Carbon dioxide Gas Flow Rate 35 to45 cfh

Single or Multiple Pass Both

Single or Multiple Arc Single

Welding Current DCEP

Polarity: AC ☐ DCEP ☒ DCEN ☐ Pulsed ☐

Welding Progression Up ☐ Down ☐

Root Treatment Grind, chip, gouge, wirebrush as required

Preheat Temperature T ≤ ¾" @ 50°F; ¾ < T ≤ 1½" @ 70°F; 1½ < T ≤ 2½" @ 150°F Interpass Temperature 450°F (max.)

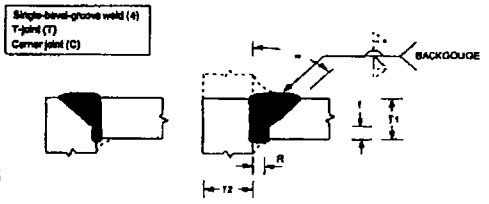
Postheat Treatment None

Heat Input Min 19.0 kJ/in. Max 49.8 kJ/in.

WELDING PROCEDURE

Pass No.	Electrode Size	Amperes	Volts	Travel Speed	Other
ALL	1/16	242	24-26	7.6-18.3 ipm	
ALL	1/16	250	24-26	7.9-18.9 ipm	
ALL	1/16	260	24-27	8.5-19.7 ipm	
ALL	1/16	270	25-28	9.1-21.3 ipm	
ALL	1/16	280	26-29	9.8-23 ipm	
ALL	1/16	290	26-30	10.5-23.8 ipm	
ALL	1/16	300	26-31	11.2-24.6 ipm	
ALL	1/16	310	27-31	11.6-26.4 ipm	
ALL	1/16	320	27-31	12-27.3 ipm	
ALL	1/16	327	27-31	12.2-27.9 ipm	

Joint Detail



Welding Process	Joint Designation	Base Metal Thickness (Unlimited) T1	T2	Groove Preparation: Root Opening Root Face Groove Angle	Tolerances: As Detailed (see 2.8.1)	As Fit Up (see 5.3.4)	Permitted Welding Positions	Notes
FCAW	TC-U4b-GF	U	U	R = 0 to 3 f = 0 to 3 α = 45°	+2, -0 +2, -0 +10°, -5°	+2, -3 Not limited +10°, -5°	F & H	C & L

This procedure may vary due to fabrication sequence, fit-up, pass size, etc., within the limitation of variables given in Section 5.

Procedure No. 1 & 1.75 FCAW 2005 FC Contractor MOUNTAIN STATES STEEL, INC.

Revision No. 4 Authorized By DGD DAVID G. DRAPER Date 1/6/2006

79:10/31

MOUNTAIN STATES STEEL, INC.

325 SOUTH GENEVA ROAD, LINDON, UTAH 84003
Telephone (801)785-5085 Fax (801)785-1100

ULTRASONIC TEST REPORT

REPORT IDENTIFICATION		EQUIPMENT IDENTIFICATION		CUSTOMER IDENTIFICATION	
JOB #	464				
DRAWING #	1309	Equipment:	Krautkramer	PROJECT:	SFOBB
ITEM #	1309BD	Model:	USN 50	CUSTOMER:	KFM
		Ser.#	600654	CONTRACT:	04-012024
CRWR #:		Transducer Ser #:	OOHHDX		
		Mhz: 2.25	Size: .63x.75		
		Type: ☑ 70 ☐ 60		*ACCEPTANCE*	
		☐ 45 ☐ 0		*STANDARD:*	AWS D1.5 table 6.3 tensile
		IW Block Ser. #	00-6350		
		Couplant: Cellulose Paste			

PIECE MARK	WJ #	REPAIR #	WELDER ID	LENGTH OF WELD (mm)	THICKNESS	ACCEPT	REJECT	LEG	INDICATION LEVEL	REFERENCE LEVEL	ATTENUATION FACTOR	INDICATION RATING	LENGTH (mm)	ANGULAR DISTANCE	DEPTH	DISTANCE FROM X	DISTANCE FROM Y
1309BD	10--3		SC	5010	16		x	1--2	50	48	0	2	60	21	8	0	910
1309BD	18--1		SC	380	16		x	1--2	54	48	0	6	50	24	8	0	0
1309BD	13-4	1	X		16	x		1--2		48							
1309BD	10--3	1	MJS	5010	16	x		1--2		48							
1309BD	18--1	1	X	380	16	x		1--2		48							

Comments: 10--3 & 18--1 found by P. Dawson of caltrans. 13-4 found by J Carroll On 3--22 but repaired on 3--23

Welding Process: ☑ FCAW ☐ SAW ☐ SMAW ☐ Other

Visual Acceptance Prior to NDE: ☑ Yes ☐ No

Weld Joint Type: ☐ T-Joint ☐ Butt Joint ☑ Corner Joint

D.K. Dawson — LEVEL II TECHNICIAN — 3/23/2006 DATE

David Dawson — MSS QCM, REVIEW — 3/23/06 DATE

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

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July 22, 2006

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 # 5.03.1-010230

Subject: Response to KFM-SUB-6711, Resolution to MSS - NCR Nos. 37 & 38 - Weld Metal Not Conforming With Specs.

Dear Mr. Zink,
Attention: Corkey Bates,

The Engineer has reviewed the subject submittal to resolve NCR Nos. 37 & 38. MSS has since repaired the welds in question and re-trained the QC inspector. As a result the two NCRs are resolved.

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

Sincerely,

<<< ORIGINAL SIGNED >>>

Mr. David Wu
Senior Bridge Engineer

For: Mr. Douglas Coe
Resident Engineer

cc: D. Coe
V. Iyer
I. James
M. Javed
D. Wu
S. Abbas
B. Chew
H. El-Natur

file: 5.03.1, 9.07.5