AUG 04 2011

Form C-104
Rev. 02/2009

VALUE ENGINEERING CHANGE PROPOSAL
MISSOURI DEPARTMENT OF TRANSPORTATION

☒ **Conceptual Proposal** ☐ **Final Proposal** **Date** 7/20/11

Contract ID 101217-503 **Job No.** J5S2179

County Miller/Camden **Original Bid Cost** 8,337,512.67

Contractor Bloomsdale Excavating Co., Inc. **By** Harley "Sonny" Kamper

Designed By _____ **Phone** 573-364-8149

VECP# 11-49 **(to be completed by C.O.)** **VECP** ☒ **or** **PDVECP** ☐

1. **Description of existing requirements and proposed change(s). Advantages/Disadvantages**
   Plans for new Rte. MM has a conflict for stage 1 sta 250+00 left slope encroaches on existing Rte. MM by approx. 50'. Another conflict for stage 2 sta 246+00 right pavement and shoulder encroaches on the by-pass by approx. 15'. Both conflicts require the Rte MM construction for stage 3 to be revised. Bloomsdale proposes to construct a new by-pass on the west side of existing Rte. MM and shortening the existing by-pass by about 275'. This new relocation would allow stage 2 construction to be eliminated.

2. **Estimate of reduction in construction costs.** $ 21,625

3. **Prediction of any effects the proposed change(s) will have on other department costs, such as maintenance and operations.**
   MoDOT Design: Review and implementation of revised alignment, profile, & superelev. grades.
   Maintenance: None
   Operations: None

4. **Anticipated date for submittal of detailed change(s) of items required by Section 104.6 of the Specifications.**

   7/28/11
   (date)

5. **Deadline for issuing a change order to obtain maximum cost reduction, noting the effect of contract completion time or delivery schedule.**

   8/04/11 (date) None (effect)

6. **Dates of any previous or concurrent submission of the same proposal.**

   N/A
   (date and/or dates)

Additional Comments:

**** Portion Below This Line To Be Filled Out by MoDOT ****

Comments:

I recommend approval of this Value Engineering Concept. MODOT Design has been asked to review the concept and provide the detailed design changes in order to expedite the project and prevent delays. Although there is an error in the Stage 1 Construction this V.E. Concept and calculations do not take advantage of any of these errors.

Joshua D. [illegible] Asst. R.E. — 08/02/2011

Submitted By Resident Engineer — Date

Comments:

This VE proposes a very feasible and cost-effective approach to constructing stages 1, 2 + 3 on the project's west end, which otherwise would have been infeasible. Additional comments Re: this VE proposal are found in P. Lemongelli's email on 7/29/11 (attached).

☒ **Approval Recommended**

☐ **Rejection Recommended**

[signature] — 8/2/11

District Engineer — Date

Comments:

☐ **Approval Recommended**

☐ **Rejection Recommended**

Federal Highway Administration
Required for FHWA Full Oversight Projects

Date

Comments:

8/8/11 APPROVAL RECOMMENDED BECAUSE OF STAGE 2 BYPASS ELIMINATION

JPD

☒ **Approval**

☐ **Rejection**

David D. [illegible] — 8-8-11

State Construction and Materials Engineer — Date

Distribution: Resident Engineer, Project Manager, District Construction & Materials Engineer, State Construction & Materials Engineer, FHWA Value Engineering Administrator – MoDOT, P. O. Box 270, Jefferson City, MO 65102

Re: Fw: VECP @ Rt MM
John P Donahue to: Patricia L Lemongelli 08/01/2011 08:56 AM

History: This message has been forwarded.

Patty,

Per our discussion I am fine with the VE proposal. Thanks.

John

John P. Donahue, P.E.
Construction and Materials Liaison Engineer
Missouri DOT
1617 Missouri Blvd.
Jefferson City, MO 65109
Tel: (573) 526-4334
Mobile: (573) 690-3828

Patricia L Lemongelli John, just to keep you in the loop on the discu... 07/29/2011 05:00:27 PM

From: Patricia L Lemongelli/D5/MODOT
To: John P Donahue/SC/MODOT@MODOT
Date: 07/29/2011 05:00 PM
Subject: Fw: VECP @ Rt MM

John, just to keep you in the loop on the discussion regarding the VECP sent to you late Thursday for the Miller Rte 242 project. Bloomsdale was needing direction in order to proceed with some of the earthwork associated with the proposal and I went ahead a gave them verbal approval to do so, knowing central office makes the ultimate decision on approving the VE. The concept is a good one and we had all felt comfortable with it in previous discussion.

Let me know if you have any questions or concerns. I plan to be off on Monday, but you can call my cell at 680-9788.

Thanks,
Patty
----- Forwarded by Patricia L Lemongelli/D5/MODOT on 07/29/2011 04:52 PM -----

From: Patricia L Lemongelli/D5/MODOT
To: "Harley M Kamper, Bloomsdale Excavating" <hmk@blex.com>, rlb@blex.com
Cc: Joshua D Kincaid/D5/MODOT@MODOT, Phillip R Thompson/D5/MODOT@MODOT, Robert J Jany/D5/MODOT@MODOT, Jason R Vanderfeltz/D5/MODOT@MODOT
Date: 07/29/2011 04:42 PM
Subject: Re: VECP @ Rt MM

As a follow to my phone conversation with Leroy this afternoon, I'm giving my verbal approval to proceed with the concept outlined in the VECP submitted for the Rte MM bypass on the Rte 242 project. No one has been available at central office to approve and note that they do have ultimate approval responsibility, but I do not foresee this to be an issue once they're able to review (contrary to our previous experience). Early next week when all are available, we can proceed with processing the paperwork. In the meantime, I feel it's very acceptable to allow Bloomsdale to proceed in the direction as proposed in the VE.

7/29 email

Both district design and myself have reviewed the proposal and feel that it has good merit and would bring value if pursued. As discussed with Leroy, we still need to work out some of the design details to ensure

7/29 email

that the new bypass on the west side meets appropriate design standards, including geometrics (particularly the "S" curve on the south end), typical, and temporary traffic control (speed limit, signing, temp barrier on the bypass and protection of the bridge pier). Our design staff is willing to work on plan sheets for the typical, profile, alignment, x-sections, and determine temp traffic control, including whether we need temp barrier on both sides of the bypass, which could add to the savings.

Regarding the partial construction of the original bypass on the east side - I'm asking that Bloomsdale please review the possibility of shifting the tie-in of new Rte MM to existing MM further north to potentially avoid the need for the bypass on the east. It's worth considering.

Thanks for everyone's help on this.
Patty

Patty Lemongelli, P.E.
Central District - Construction and Materials
Missouri Department of Transportation
P.O. Box 718
Jefferson City Missouri 65102
Patricia.Lemongelli@modot.mo.gov
(573) 751-6851 office (573) 526-4040 fax
(573) 680-9788 cell

"Harley M Kamper, Bloomsdale Excavating" Hello Patty, I was just... 07/28/2011 10:27:24 AM

From: "Harley M Kamper, Bloomsdale Excavating" <hmk@blex.com>
To: <Patricia.Lemongelli@modot.mo.gov>
Date: 07/28/2011 10:27 AM
Subject: VECP @ Rt MM

Hello Patty,
I was just curious if you had heard anything on the VECP we submitted on the Rt MM bypass.
Thanks.

Harley "Sonny" Kamper

Project Manager

Office: (573) 364-8149

Cell: (314) 808-3808

Email: hmk@blex.com

BLOOMSDALE INCORPORATED
Since 1946

7/2011

MoDOT - RTE. 242 - MILLER/CAMDEN CO.
Conceptual VECP Proposal Submittal Data
Bloomsdale Excavating Co., Inc.
W. By-Pass Rte. MM

INDEX

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Tab 2 - VECP Proposal Form

Tab 3 - VECP Cost & Quantity Comparison

Tab 4 - Alignment and Stage Construction

Tab 5 - Quantity Calculations and X-Sections

Tab 1

BLOOMSDALE EXCAVATING

Since 1946

Jul. 20, 2011

Mr. Josh Kincaid, Resident Engineer
Missouri Department of Transportation
Camdenton Project Office
93 Morgan Street
Camdenton, MO. 65020

Re: Miller/Camden Co.
Rte. 242
Job No. J5S2179

Dear Mr. Kincaid:

In preparation for construction of the new Rte. MM roadway and related stage construction phases shown in the plans, we have discovered some conflicts that prevent us from constructing the roadway to the limits shown. Specifically in Stage 1, the plans indicate that Rte. MM should be constructed from the intersection with Rte. 242 south to sta. 250+00. The left slope at sta. 250+00 will extend approximately 50 ft. into the existing Rte. MM roadway. Construction cannot extend south of sta. 251+00 in order for the slope to not interfere with the existing roadway.

In Stage 2, Rte. MM is to be constructed from sta. 243+00 to sta. 246+00. A portion of the right side of the pavement and the right shoulder extend into the specified By-Pass fill. The roadway will have to be stopped short of sta. 246+00 or the By-Pass moved out to provide clearance for construction.

Bloomsdale Excavating Co., Inc. would like to propose a VECP to construct a new By-Pass on the west side of existing Rte. MM. This location would allow traffic to be switched once and the new Rte. MM could be constructed from the intersection south to sta. 244+50. Then traffic could be switched to a portion of the original By-Pass so the south tie-in to the existing pavement can be made. This proposal would delete the original stage 2 construction shown in the plans. This would eliminate one traffic lane shift resulting in less confusion and more safety for the traveling public.

Included is our preliminary alignment location and quantity changes as a result of this relocation. We have attached a Conceptual Proposal VECP to determine if the proposal is feasible. As you are aware, design changes and approvals need to be expedited in order not to impact project completion.

We are available at your earliest convenience to discuss this proposal in more detail.

Sincerely,

Harley "Sonny" Kamper
Project Manager

Tab 2

Tab 3

7/19/2011

MoDOT - RTE. 242 - MILLER/CAMDEN CO.
W. By-Pass VECP Proposal Costs
Bloomsdale Excavating Co., Inc.

A) Bid Items Deleted by Proposed Changes :

1) Placing Rock Fill : 155 cy @ $5.60/cy =	$868
2) Partial By-Pass Fill Compaction : 7,197 cy @ $0.15/cy =	$1,080
3) Partial By-Pass Fill Removal : 7,197 cy @ $3.25/cy =	$23,390
4) Partial By-Pass Base & Surf. : 916 sy @ $24.35/sy =	$22,305
5) Striping - Stage 2 : 6,888 lf =	$3,594
6) Pave. Mark. Removal-Stage 2 : 4,252 lf @ $0.57/lf =	$2,424
VECP Deleted Amount :	$53,661

B) Bid Items Added by Proposed Changes :

1) Revised By-Pass Fill : 1,736 cy @ $0.15/cy =	$260
2) Revised By-Pass Base & Surf. : 1,088 sy @ $27.00/sy =	$29,376
3) Remove & Replace Guardrail : 120 lf @ $20.00/lf =	$2,400
VECP Added Amount :	$32,036

C) VECP Net Decrease in W. By-Pass Costs = $21,625

D) 50/50 Split of VECP Costs = $10,813

Tab 4

MoDOT - RTE. 242 - MILLER/CAMDEN CO.
Offset from C.L. of New Rte. MM
Bloomsdale Excavating Co., Inc.

Station :	Left Edge By-Pass	Edge Exist Pave.	Right Edge By-Pass	Approx. Rt. Edge Elev.
243+00	35	n/a	5	769.5
243+60	45	40	15	769.0
244+00	70	45	40	767.2
244+44	80	48	50	764.7
245+00	85	53	55	763.9
246+00	90	66	60	762.5
247+00	100	81	70	760.8
248+00	115	98	85	758.1
249+00	120	116	90	755.9
250+00	130	n/a	100	754.0

PAVEMENT EDGE TREATMENT

STA. 262+92 TO STA. 266+00 C/L (308')
HSB PKWY CONN.

TRAFFIC CONTROL LEGEND

- SIGN (SINGLE SIDED)
- CHANNELIZER
- BARRICADE

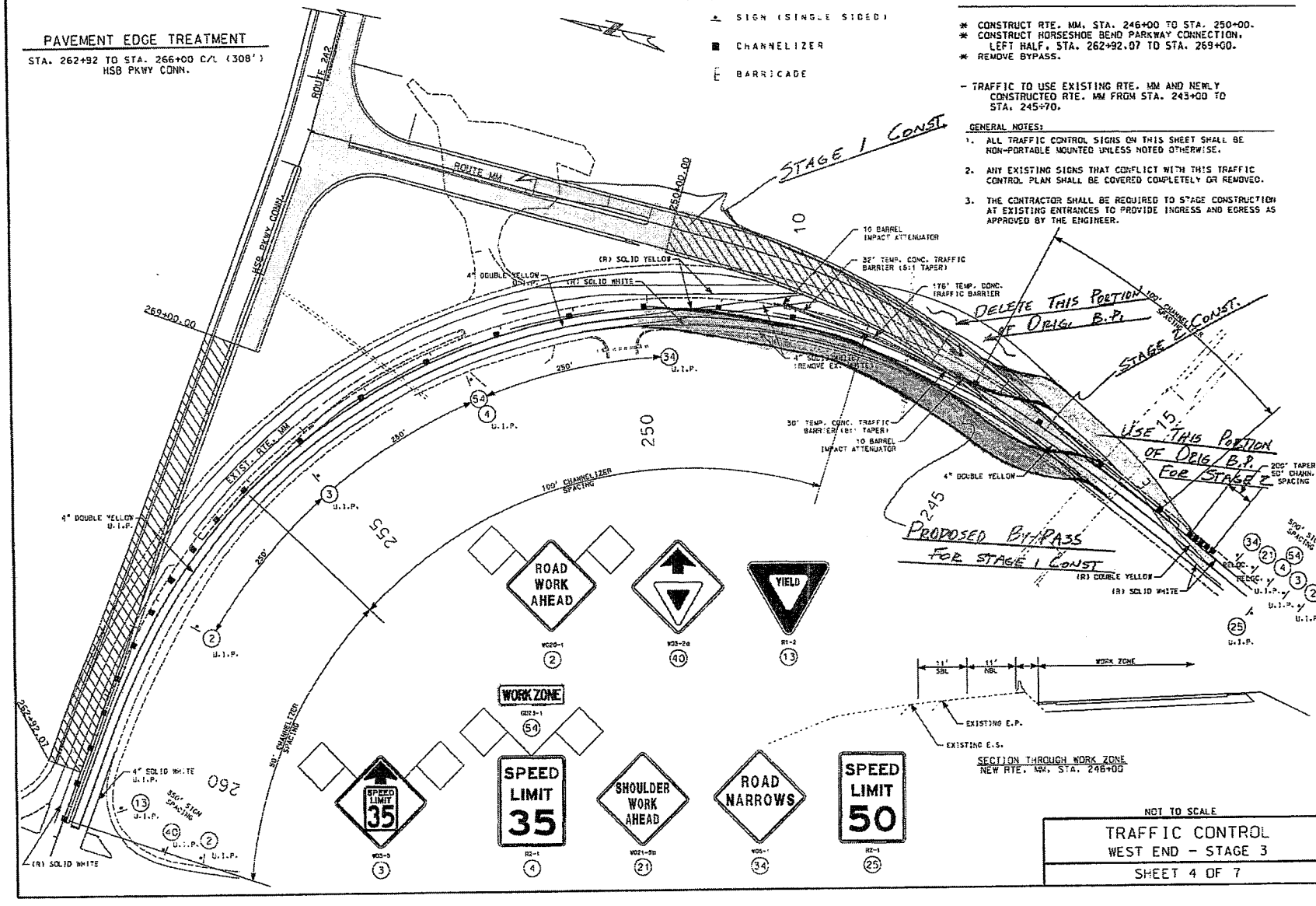
STAGE 3 CONSTRUCTION

* CONSTRUCT RTE. MM. STA. 246+00 TO STA. 250+00.
* CONSTRUCT HORSESHOE BEND PARKWAY CONNECTION, LEFT HALF. STA. 262+92.07 TO STA. 269+00.
* REMOVE BYPASS.

- TRAFFIC TO USE EXISTING RTE. MM AND NEWLY CONSTRUCTED RTE. MM FROM STA. 243+00 TO STA. 245+70.

GENERAL NOTES:

1. ALL TRAFFIC CONTROL SIGNS ON THIS SHEET SHALL BE NON-PORTABLE MOUNTED UNLESS NOTED OTHERWISE.
2. ANY EXISTING SIGNS THAT CONFLICT WITH THIS TRAFFIC CONTROL PLAN SHALL BE COVERED COMPLETELY OR REMOVED.
3. THE CONTRACTOR SHALL BE REQUIRED TO STAGE CONSTRUCTION AT EXISTING ENTRANCES TO PROVIDE INGRESS AND EGRESS AS APPROVED BY THE ENGINEER.



NOT TO SCALE

TRAFFIC CONTROL
WEST END - STAGE 3

SHEET 4 OF 7

STATE OF MISSOURI
JASON R. WINDERFELDT
NUMBER PE-2003026142
PROFESSIONAL ENGINEER

DATE PREPARED	10/26/2010
ROUTE 242	STATE MO
DISTRICT 5	SHEET NO. 25
COUNTY MILLER	
JOB NO. J552179	
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SCALED AND DATED.

REV.

Tab 5

7/19/11

MoDOT - RTE. 242 - MILLER/CAMDEN CO.
Partial By-Pass Fill Deleted
Bloomsdale Excavating Co., Inc.

Note: ***See attached x-section sheets with deleted area shaded in red.***

Station :	End Area	Distance ft.	Volume c.y.	Accum. Volume
24488.21	0			
		11.79	40	40
24500	184			
		28	380	420
24528	548			
		72	1,653	2,073
24600	692			
		100	3,089	5,162
24700	976			
		100	1,985	7,147
24800	96			
		28	50	7,197
24828	0			

Total = 7,197 c.y.

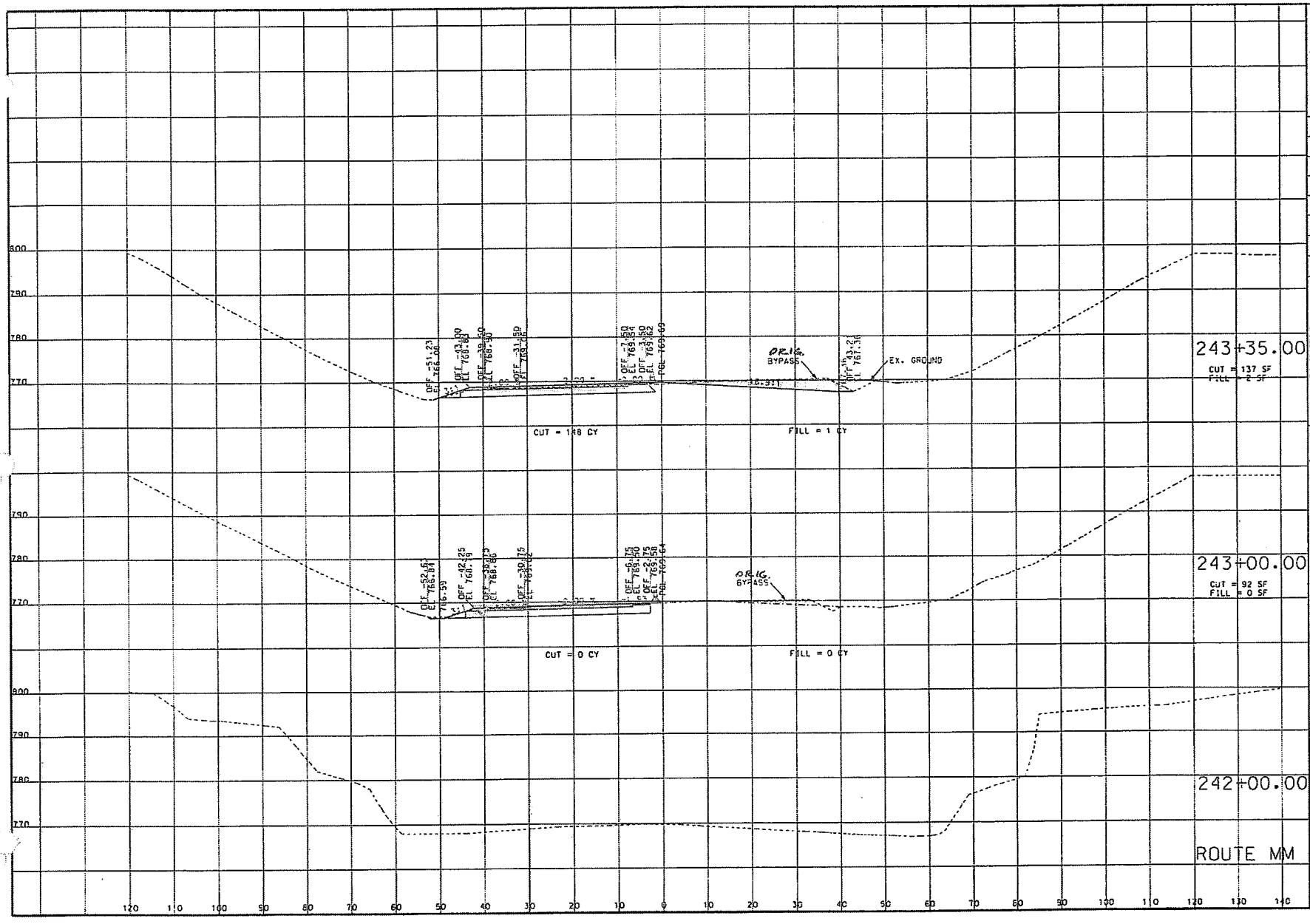
7/19/11

MoDOT - RTE. 242 - MILLER/CAMDEN CO.
Revised By-Pass Fill Quantity
Bloomsdale Excavating Co., Inc.

Note: ***See attached x-section sheets with the revised fill quantity shaded in yellow.***

Station :	End Area	Distance ft.	Volume c.y.	Accum. Volume
24335	0			
		25.35	8	8
24360.35	16			
		39.43	85	92
24399.78	100			
		0.22	1	93
24400	100			
		44	248	341
24444	204			
		44.21	298	639
24488.21	160			
		11.79	75	714
24500	184			
		28	170	884
24528	144			
		72	309	1,193
24600	88			
		100	296	1,490
24700	72			
		100	207	1,697
24800	40			
		28	26	1,723
24828	10			
		72	13	1,736
24900	0			

Total = 1,736 c.y.



STATE OF MISSOURI
JOHN R. WANDERSEE
NUMBER PE-2006026245
PROFESSIONAL ENGINEER

THIS SHEET WAS NOT SEALED, SIGNED AND DATED ELECTRONICALLY

DATE PREPARED
10/21/2010

ROUTE	STATE
242	MO

SECTION OF	SHEET NO.
5	81

COUNTY
MILLER

JOB NO.
J552179

CONTRACT NO.

PROJECT NO.

BRIDGE NO.

DESCRIPTION	DATE

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

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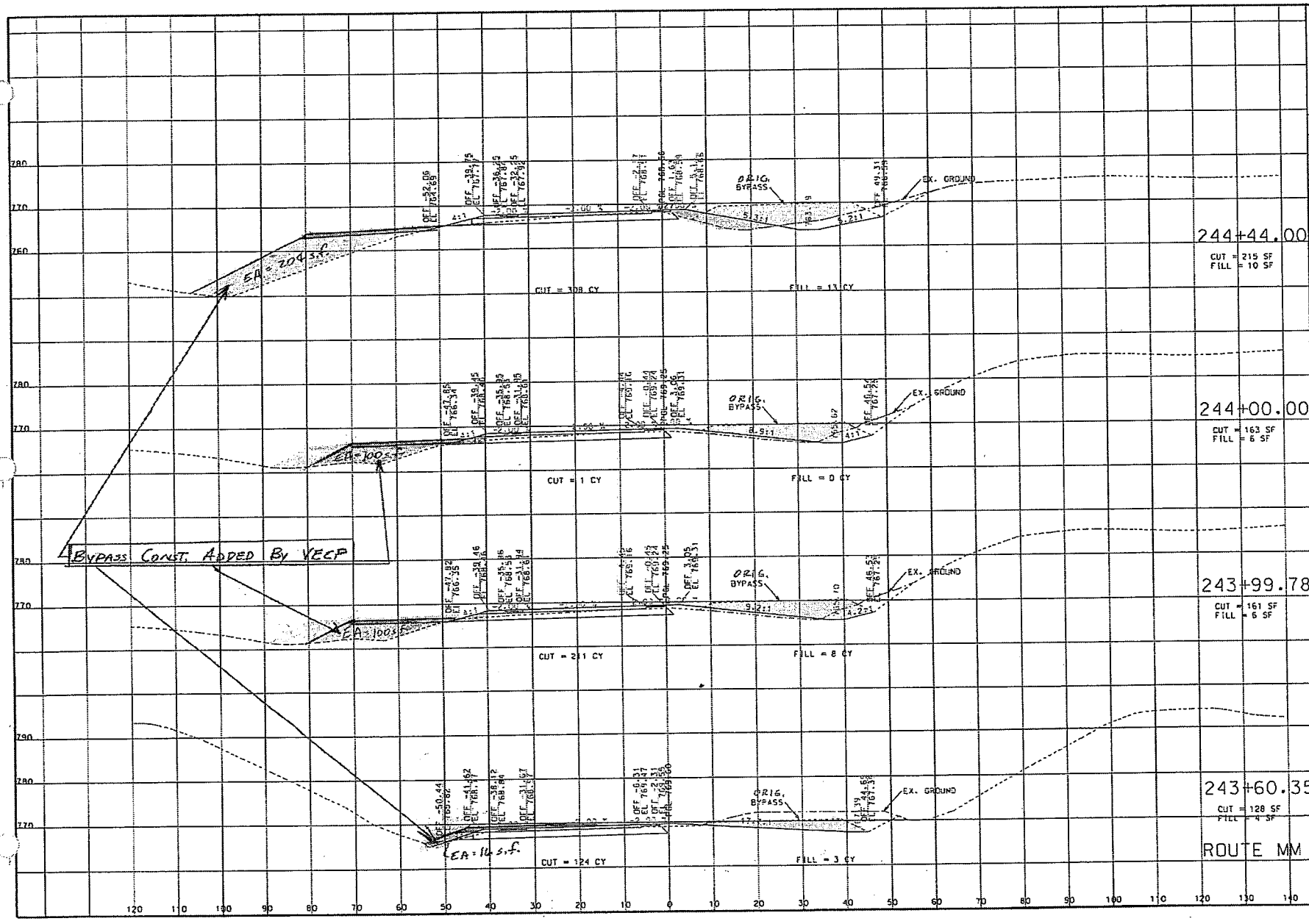
REV.



STATE OF MISSOURI
JASON D. KINDERVATER
NUMBER PE-2003035068
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED: 10/21/2010

ROUTE	STATE
242	MO
DISTRICT: 5	SHEET NO.: 82

COUNTY: MILLER
JOB NO.: J5S2179
CONTRACT ID:
PROJECT NO.:
BRIDGE NO.:

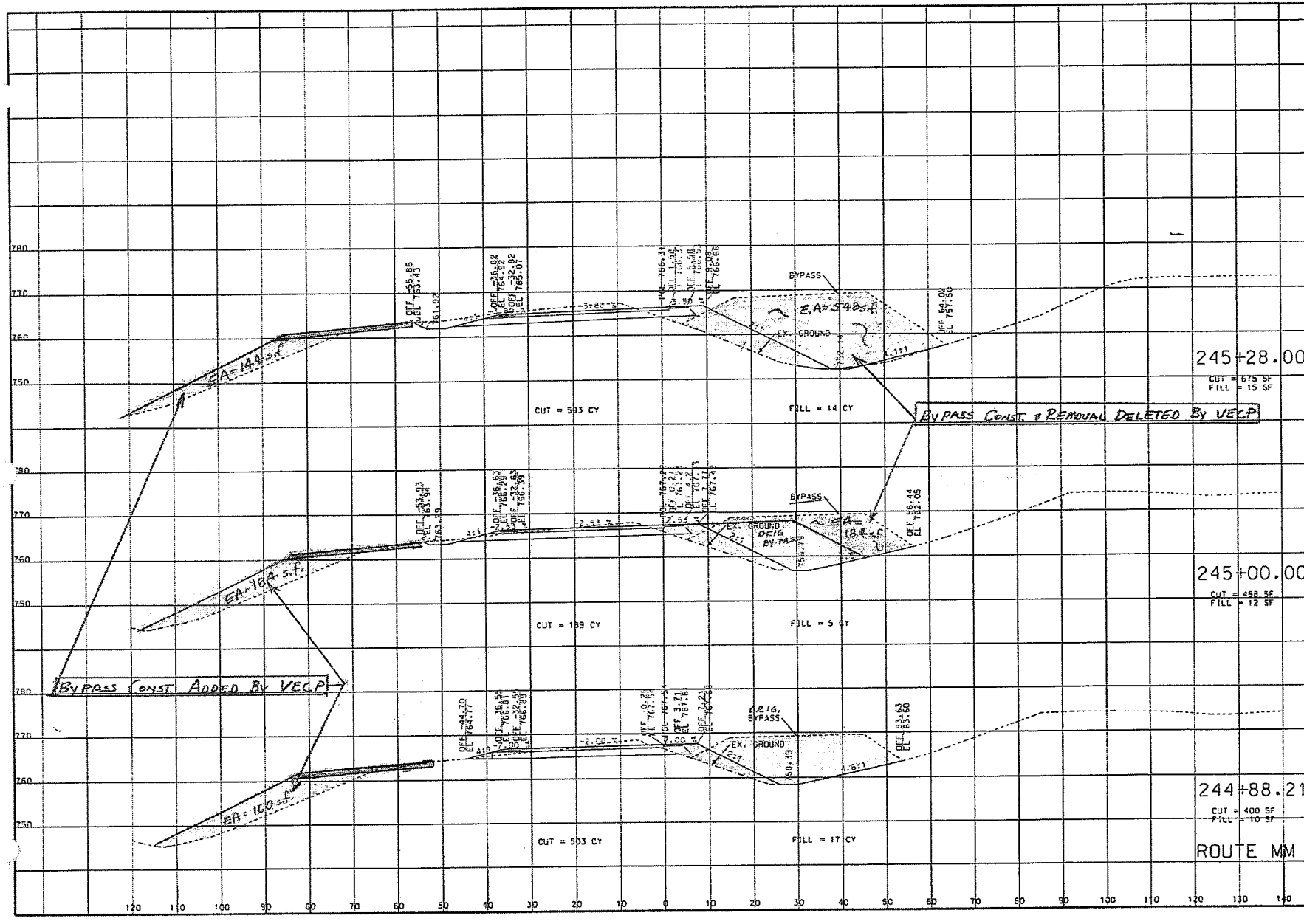
DATE	DESCRIPTION

IF A SEAL IS PRESENT ON THIS SHEET IT WAS SEALED AND DATED ELECTRONICALLY

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION
105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

MoDOT

REV.



STATE OF MISSOURI
JASON R. WINDMILLER
NUMBER PE-2003033046
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED
10/21/2010

ROUTE	STATE
242	MO
DISTRICT	SHEET NO.
5	83

COUNTY
MILLER

JOB NO.
J5S2179

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

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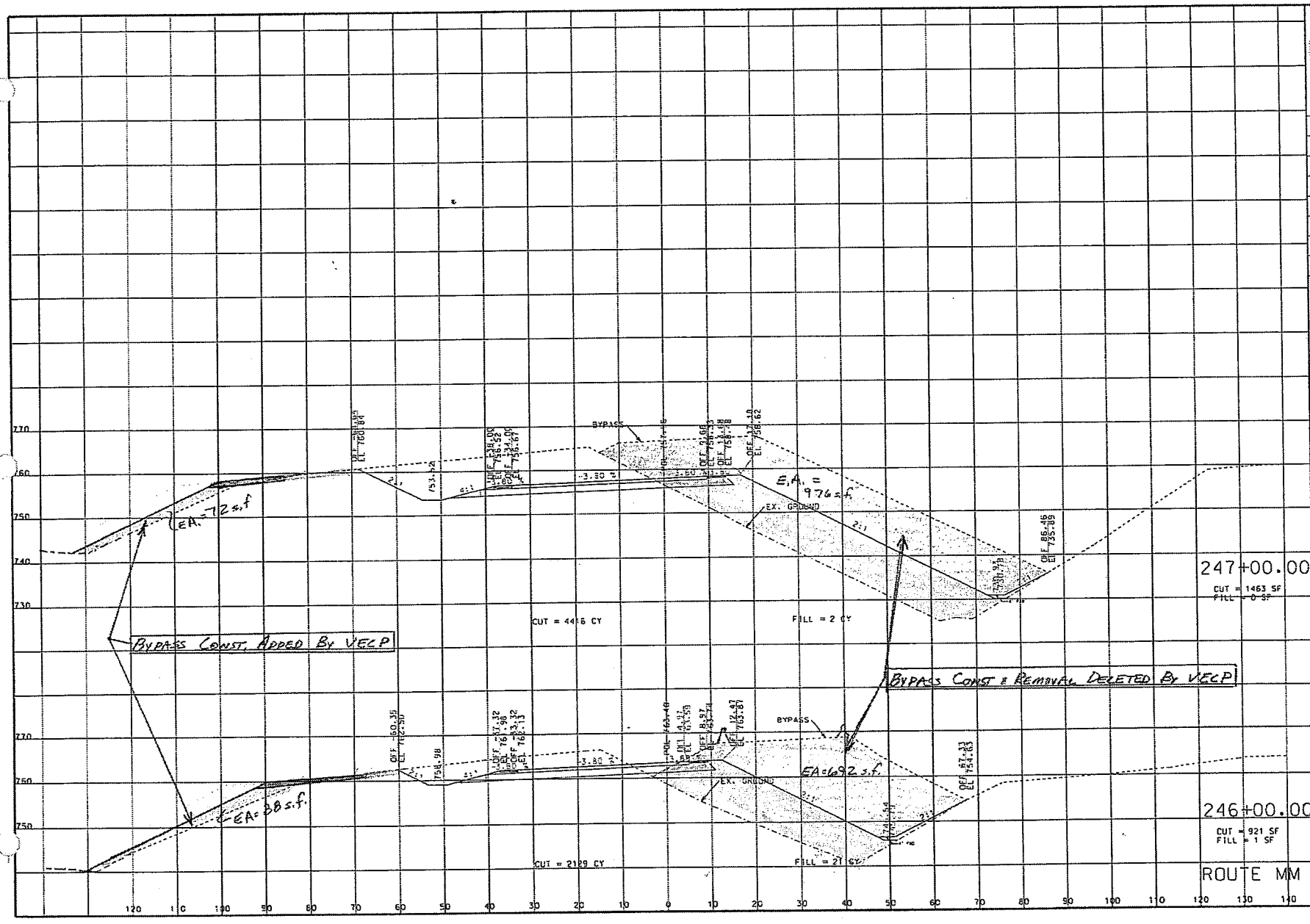

STATE OF MISSOURI
JAMES A. WINDSHEIMER
NUMBER PE-2004000848
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED
10/21/2010

ROUTE	STATE
242	MO
DISTRICT 5	SHEET NO. 84

COUNTY
MILLER

JOB NO.
J552179

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

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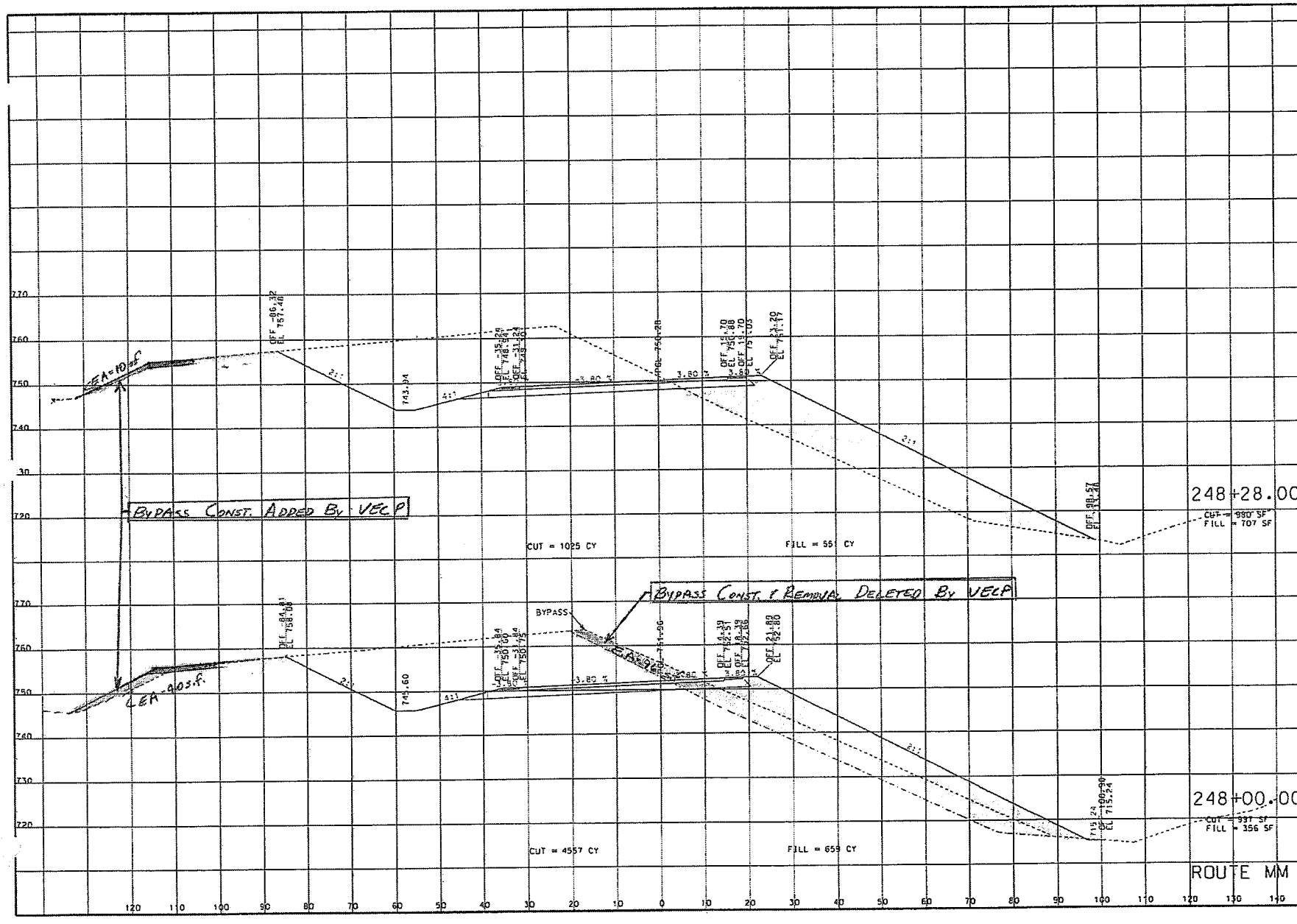


STATE OF MISSOURI
JASON R. MACKENZIE
NUMBER
PE-2003036049
PROFESSIONAL ENGINEER

THIS SHEET WAS SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED: 10/21/2010

ROUTE	STATE
242	MO
DISTRICT	SHEET NO.
5	85

COUNTY: MILLER

JOB NO.: J5S2179

CONTRACT NO.:

PROJECT NO.:

BRIDGE NO.:

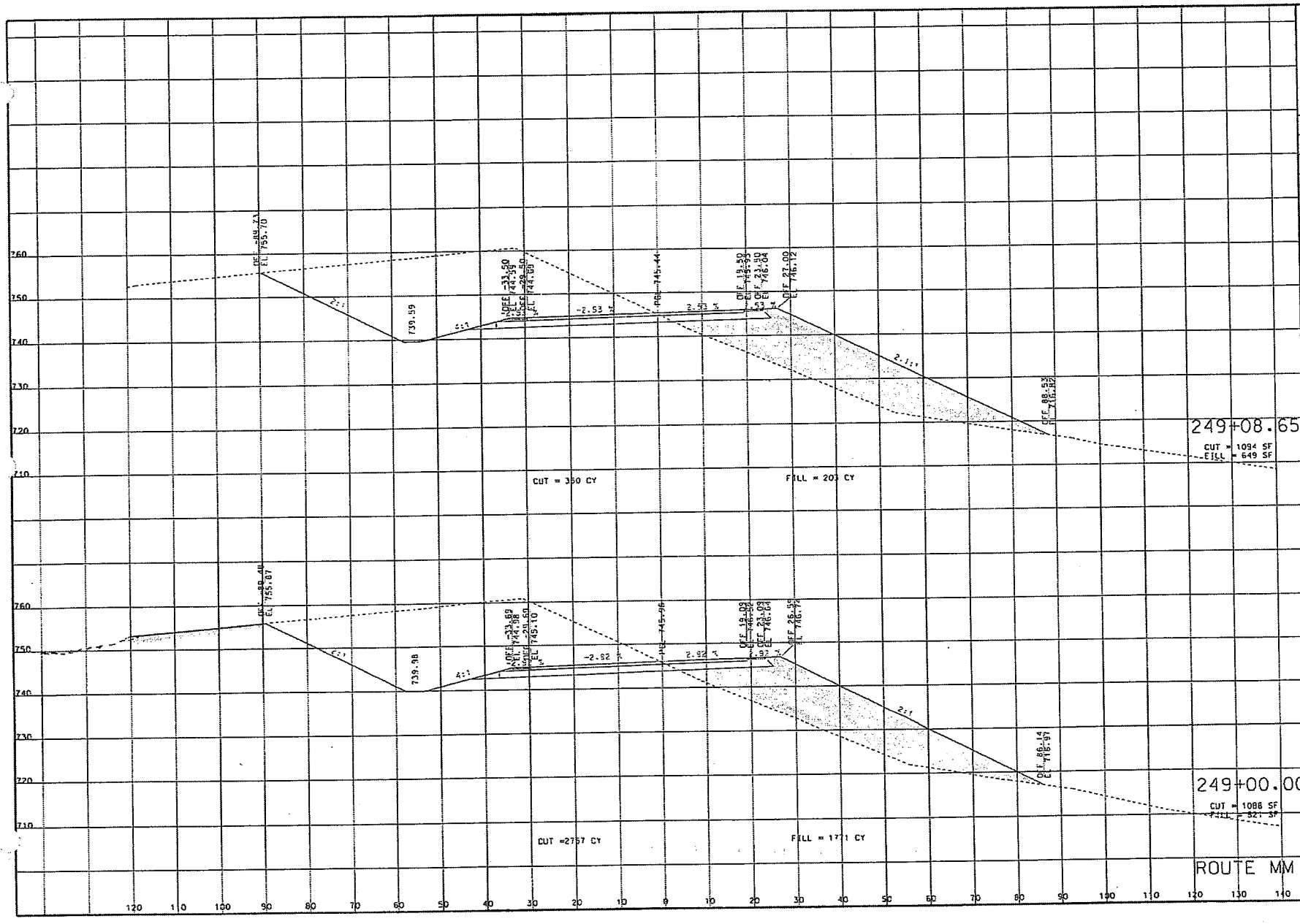
DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

105 WEST CAPITOL
JEFFERSON CITY, MO 65101
1-888-ASK-MODOT (1-888-275-6636)

IT IS A VIOLATION OF THE LAW FOR ANY PERSON, UNLESS ACTING UNDER THE DIRECTION OF A LICENSED PROFESSIONAL ENGINEER, TO ALTER THIS DOCUMENT.



STATE OF MISSOURI
JASON R. VANDERELZ
NUMBER PE-2009026549
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED SEALED AND DATED ELECTRONICALLY

DATE APPROVED	
10/21/2010	
ROUTE 242	STATE MO
DISTRICT 5	SHEET NO. 86
COUNTY MILLER	
JOB NO. J5S2179	
CONTRACT NO.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

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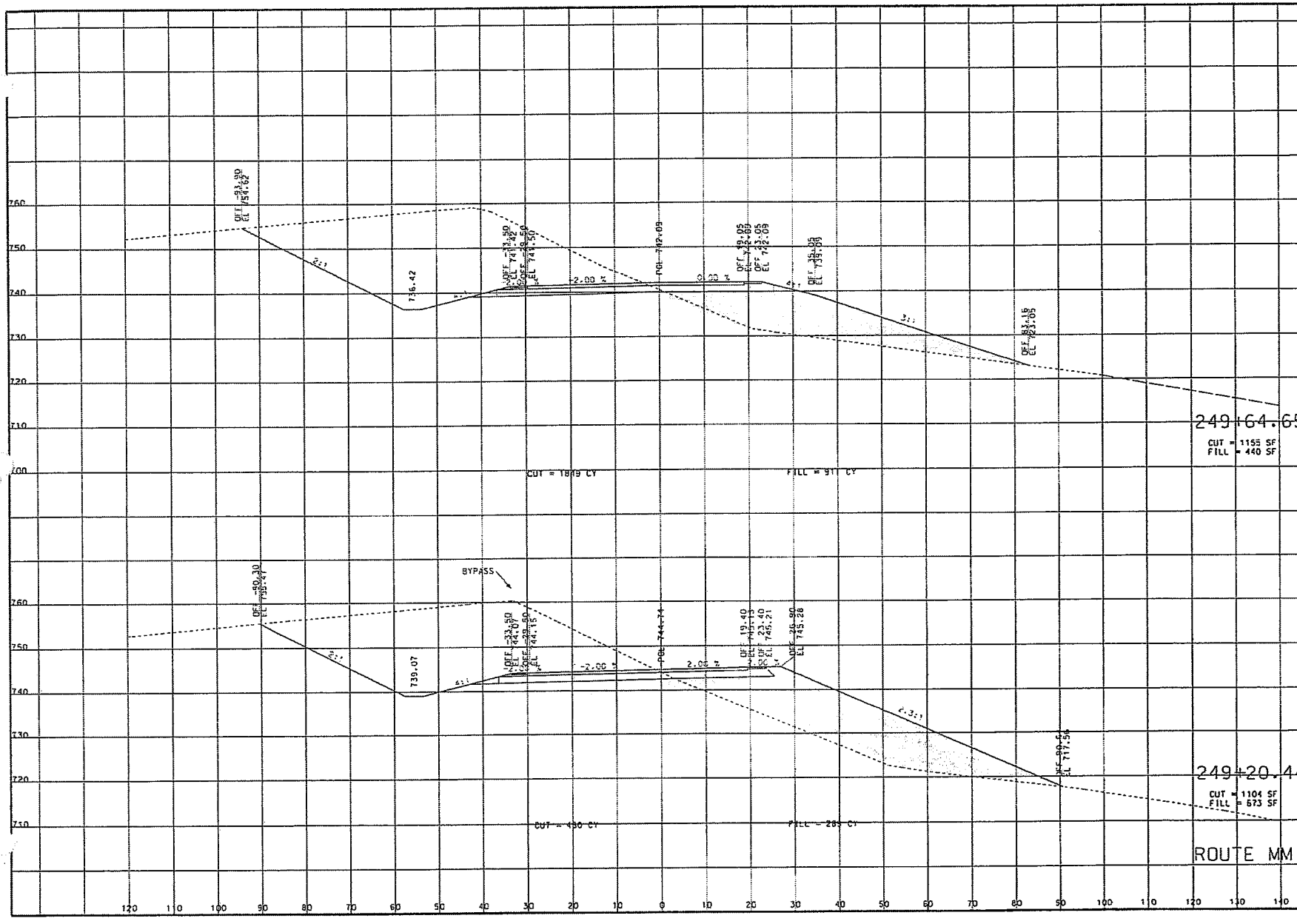

STATE OF MISSOURI
JASON R. VANDERFELTZ
NUMBER PE-2006026140
PROFESSIONAL ENGINEER

THIS SHEET WAS SIGNED, SEALED AND DATED ELECTRONICALLY

DATE PREPARED
10/21/2010

ROUTE	STATE
242	MO
DISTRICT	SHEET NO.
5	87

COUNTY
MILLER

JOB NO.
J5S2179

CONTRACT NO.

PROJECT NO.

BRIDGE NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

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105 WEST CAPITOL
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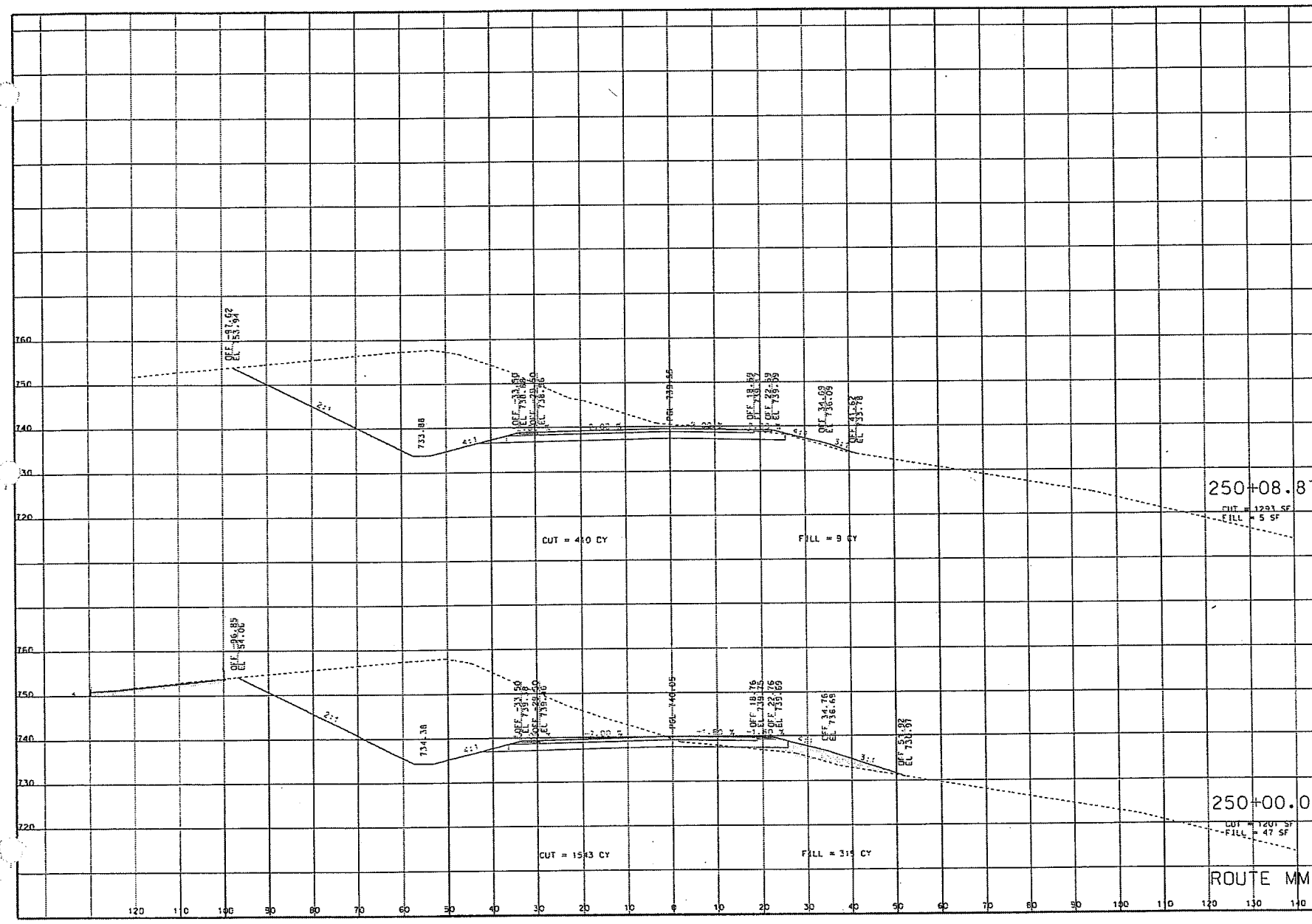
REV.



STATE OF MISSOURI
JASON R. VANDERGRIFF
NUMBER PE-2004019244
PROFESSIONAL ENGINEER

THIS SHEET HAS BEEN SIGNED, SEALED AND DATED ELECTRONICALLY.

IF A SEAL IS PRESENT ON THIS SHEET IT HAS BEEN ELECTRONICALLY SEALED AND DATED.

DATE PREPARED
10/21/2010

ROUTE	STATE
242	MO

DISTRICT	SHEET NO.
5	88

COUNTY
MILLER

JOB NO.
J5S2179

CONTRACT ID.

PROJECT NO.

PARCEL NO.

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

MoDOT

105 WEST CAPITOL
JEFFERSON CITY, MO 65102
1-888-ASK-MODOT (1-888-275-6636)

REV.

VALUE ENGINEERING CHECK SHEET

TYPE OF WORK

(Check one that applies)

- o Bridge/Structure/Footings
- o Drainage Structures (RCP, RCB, CMP's, ect.)
- o TCP/MOT
- ✓ Paving (PCCP, ect.)
- o Grading/MSE Walls
- o Signal/Lighting/ITS
- o Misc

SUMMARY OF PROPOSAL

(If needed, condense summary to a couple of lines)

The contractor proposes to reconfigure the new Route MM stage 1 bypass in such a way as to eliminate the need for the stage 2 bypass.

SCANNING OF DOCUMENT

If the proposal is large, please mark or make note, which pages need to be scanned into the database. If there are special instructions, make note of them here.

_____

_____

_____