

## **Appendix D:**

Sample Set of Plans for US-60 and National Ave  
(Springfield)



# MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

## RIGHT OF WAY PLANS FOR PROPOSED STATE HIGHWAY

### GREENE COUNTY

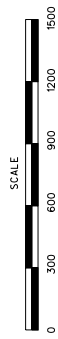
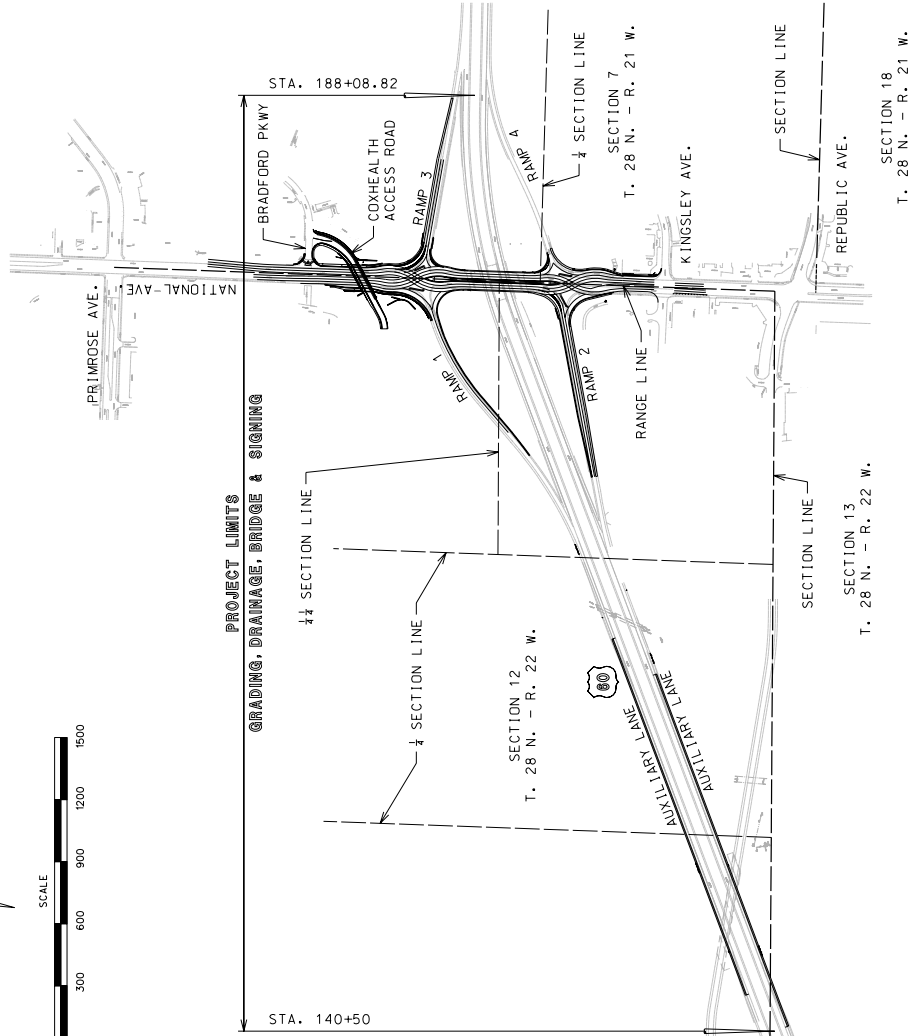
**DESIGN DESIGNATION**  
**ROUTE 60**  
 A.A.D.T. - 2010 = 46,010  
 A.A.D.T. - 2030 = 66,130  
 T = 8%  
 V = 60 M.P.H.  
 FUNCTIONAL CLASSIFICATION-  
 URBAN PRINCIPAL ARTERIAL

**NATIONAL AVE**  
 A.A.D.T. - 2010 = 37,800  
 A.A.D.T. - 2030 = 46,900  
 T = 9%  
 V = 40 M.P.H.  
 FUNCTIONAL CLASSIFICATION-  
 URBAN ARTERIAL

**NORMAL RIGHT OF WAY**  
 TO BE ACQUIRED

**CONVENTIONAL SYMBOLS**  
 (USED IN PLANS)

- |  |   |
|--|---|
|  | BUILDINGS AND STRUCTURES                                |
|  | GUARD RAIL  |
|  | CONCRETE RIGHT-OF-WAY MARKER                            |
|  | STEEL RIGHT-OF-WAY MARKER                               |
|  | LOCATION SURVEY MARKER                                  |
|  | FIBER OPTICS  |
|  | OVERHEAD TELEPHONE                                      |
|  | UNDERGROUND TELEPHONE                                   |
|  | UNDERGROUND POWER                                       |
|  | WATER   |
|  | MANHOLE   |
|  | FIRE HYDRANT  |
|  | WATER VALVE   |
|  | WATER METER   |
|  | DITCH INLET   |
|  | DITCH BLOCK   |
|  | GROUND MOUNTED SIGN                                     |
|  | H-FRAME POWER POLE                                      |
|  | TELEPHONE PEDESTAL                                      |
|  | FENCE   |
|  | CHAIN LINK  |
|  | WOVEN WIRE  |
|  | GATE POST   |
|  | BENCHMARK   |
|  | USE IN PLACE  |
|  | DO NOT DISTURB  |
|  | REMOVE  |
|  | NO DIRECT PAY   |
|  | NOTE: DASHED OR OPEN SYMBOLS INDICATE EXISTING FEATURES |

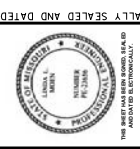


**INDEX OF SHEETS**

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	91-96

**LENGTH OF PROJECT**

BEGINNING OF PROJECT	STA. 140 + 50.00
END OF PROJECT	STA. 188 + 08.82
APPEARANT LENGTH	4758.82 FEET
EQUATIONS AND EXCEPTIONS:	NONE



DATE PREPARED  
 6/3/2009

STATE  
 MO

ROUTE  
 60

COUNTY  
 GREENE

JOB NO.  
 JB0791

CONTRACT ID.

PROJECT NO.

BRIDGE NO.

**MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION**

DESCRIPTION	DATE
A41771	1-76
A41782	1-9
A7792	1-36
A7794	1-2
A7795	1-2
CROSS SECTIONS (XS)	1-32

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



**EFK • Moeen, LLC**  
 585 Parkersburg Parkway Dr  
 St. Louis, MO 63021  
 Phone 314-728-4100  
 Fax 314-728-4199  
 Missouri Certificate of Authority: 001578



MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

JEFFERSON CITY, MO 65102  
105 WEST CAPITOL  
1-888-ASK-MODOT (1-888-273-6636)

**MDOT**

Missouri Certificate of Authority: 001578  
314-729-4190  
314-729-4199  
85 Leavenworth Dr  
St. Louis, MO 63021

**EFK • Moen, LLC**  
Civil Engineering Design

05/14/2009

DATE PREPARED

PROJECT NO. J8P0791

CONTRACT ID. J8P0791

JOB NO. GREENE

COUNTRY 18

STATE MO

DISTRICT 8

SHEET NO. 18

ROUTE 60

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

ISLAND - (B)

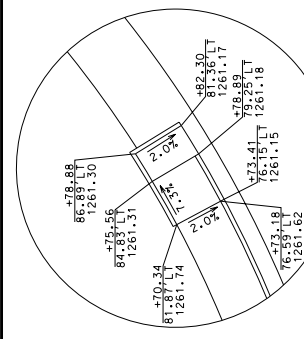
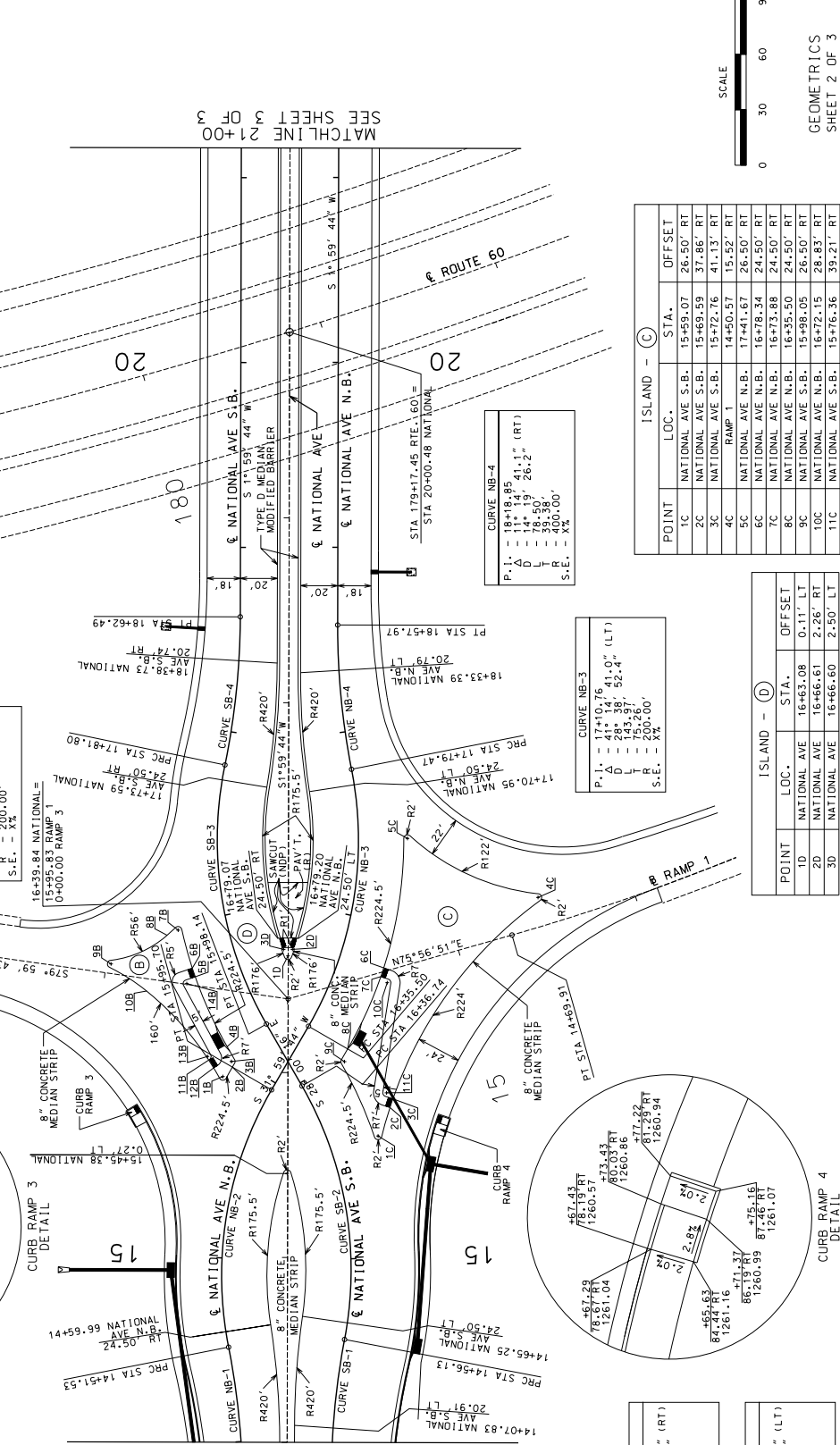
POINT	LOC.	STA.	OFFSET
1B	NATIONAL AVE N.B.	15+89.53	26.50' LT
2B	NATIONAL AVE N.B.	15+95.70	24.50' LT
3B	NATIONAL AVE N.B.	15+98.09	26.50' LT
4B	NATIONAL AVE S.B.	16+36.74	24.50' LT
5B	NATIONAL AVE S.B.	16+73.76	24.50' LT
6B	NATIONAL AVE S.B.	16+78.21	24.50' LT
7B	NATIONAL AVE S.B.	16+97.52	26.50' LT
8B	NATIONAL AVE S.B.	16+96.33	26.50' LT
9B	RAMP 3	0+97.46	5.13' RT
10B	RAMP 3	0+97.46	6.64' RT
11B	NATIONAL AVE N.B.	15+93.06	37.51' LT
12B	NATIONAL AVE N.B.	15+91.01	33.13' LT
13B	NATIONAL AVE N.B.	15+94.18	39.06' LT
14B	NATIONAL AVE S.B.	16+72.04	28.11' LT

ISLAND - (C)

POINT	LOC.	STA.	OFFSET
1C	NATIONAL AVE S.B.	15+59.07	26.50' RT
2C	NATIONAL AVE S.B.	15+59.59	37.86' RT
3C	NATIONAL AVE S.B.	15+72.76	41.31' RT
4C	RAMP 1	14+50.37	15.32' RT
5C	NATIONAL AVE N.B.	17+41.67	26.50' RT
6C	NATIONAL AVE N.B.	16+78.38	24.50' RT
7C	NATIONAL AVE N.B.	16+73.88	24.50' RT
8C	NATIONAL AVE N.B.	16+95.50	24.50' RT
9C	NATIONAL AVE S.B.	15+98.05	26.50' RT
10C	NATIONAL AVE N.B.	16+72.15	28.83' RT
11C	NATIONAL AVE S.B.	15+76.36	39.21' RT

ISLAND - (D)

POINT	LOC.	STA.	OFFSET
1D	NATIONAL AVE	16+63.08	0.11' LT
2D	NATIONAL AVE	15+66.61	2.26' RT
3D	NATIONAL AVE	16+66.60	2.50' LT

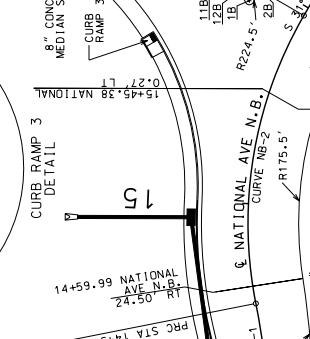


CURVE NB-1

P.I. = 14+12.21  
 $\Delta$  = 14° 18' 09.9" (LT)  
 $D$  = 78.91' 26.2"  
 $L$  = 39.58'  
 $T$  = 30.00'  
 $S.E.$  = XX

CURVE NB-2

P.I. = 15+26.91  
 $\Delta$  = 18° 09.9" (RT)  
 $D$  = 44.19' 52.4"  
 $L$  = 75.38'  
 $T$  = 30.00'  
 $S.E.$  = XX



CURVE SB-1

P.I. = 14+18.96  
 $\Delta$  = 10° 40' 51.3" (RT)  
 $D$  = 74.51' 26.2"  
 $L$  = 37.39'  
 $T$  = 30.00'  
 $S.E.$  = XX

CURVE SB-2

P.I. = 15+30.28  
 $\Delta$  = 40° 40' 51.3" (LT)  
 $D$  = 142.00' 52.4"  
 $L$  = 74.14'  
 $T$  = 30.00'  
 $S.E.$  = XX

CURVE SB-4

P.I. = 18+22.28  
 $\Delta$  = 14° 19' 56.2" (LT)  
 $D$  = 80.68'  
 $L$  = 40.00'  
 $T$  = 30.00'  
 $S.E.$  = XX

CURVE SB-3

P.I. = 17+10.76  
 $\Delta$  = 41° 14' 41.1" (RT)  
 $D$  = 28.39' 52.4"  
 $L$  = 75.26'  
 $T$  = 30.00'  
 $S.E.$  = XX

CURVE NB-3

P.I. = 17+10.76  
 $\Delta$  = 41° 14' 41.0" (LT)  
 $D$  = 28.39' 52.4"  
 $L$  = 75.26'  
 $T$  = 30.00'  
 $S.E.$  = XX

CURVE NB-4

P.I. = 18+18.85  
 $\Delta$  = 14° 19' 41.2" (RT)  
 $D$  = 78.60' 26.2"  
 $L$  = 39.58'  
 $T$  = 30.00'  
 $S.E.$  = XX

CURVE NB-5

P.I. = 17+10.76  
 $\Delta$  = 41° 14' 41.0" (LT)  
 $D$  = 28.39' 52.4"  
 $L$  = 75.26'  
 $T$  = 30.00'  
 $S.E.$  = XX

CURVE NB-6

P.I. = 17+10.76  
 $\Delta$  = 41° 14' 41.0" (LT)  
 $D$  = 28.39' 52.4"  
 $L$  = 75.26'  
 $T$  = 30.00'  
 $S.E.$  = XX

CURVE NB-7

P.I. = 17+10.76  
 $\Delta$  = 41° 14' 41.0" (LT)  
 $D$  = 28.39' 52.4"  
 $L$  = 75.26'  
 $T$  = 30.00'  
 $S.E.$  = XX

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

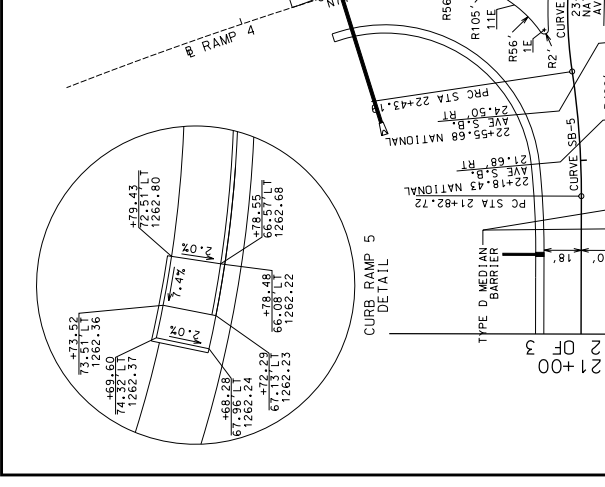
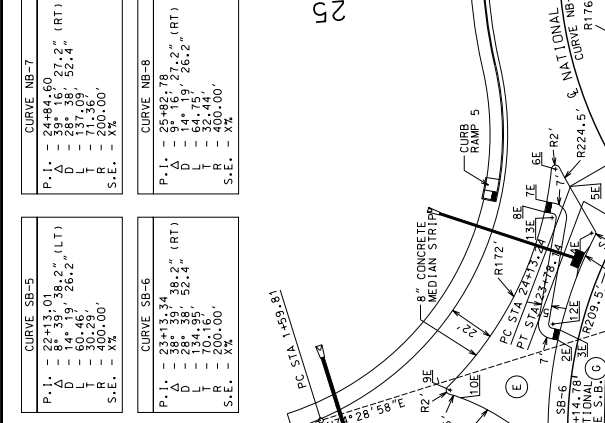
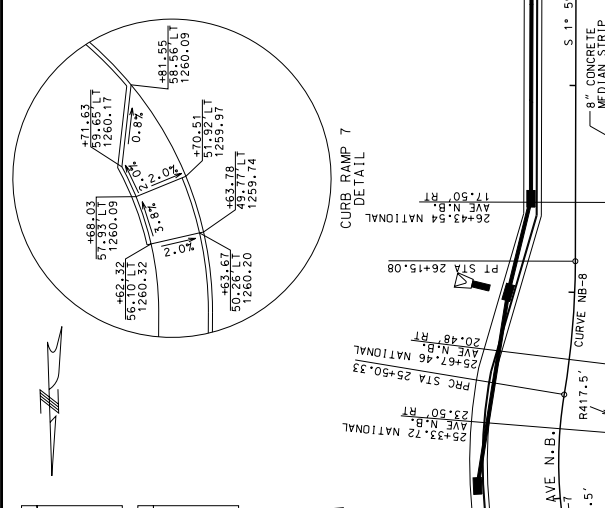
JEFFERSON CITY, MO 65102  
1-888-ASK-MODOT (1-888-279-6636)

Missouri Certificate of Authority: 001578  
 EFK • Moen, LLC  
 816 East Parkway Dr  
 Suite 200  
 St. Louis, MO 63021  
 Phone 314-729-4199  
 Fax 314-729-4199

DATE PREPARED: 05/14/2009  
 SHEET NO.: 8  
 DISTRICT: 8  
 COUNTY: GREENE  
 JOB NO.: J8P0791  
 CONTRACT ID.:  
 PROJECT NO.:  
 BRIDGE NO.:  
 DESCRIPTION:  
 DATE:

ISLAND - (E)

POINT	LOC.	STA.	OFFSET
1E	NATIONAL AVE S.B.	22+63.90	11.50' LT
2E	NATIONAL AVE S.B.	23+15.72	9.50' LT
3E	NATIONAL AVE S.B.	23+20.49	9.50' LT
4E	NATIONAL AVE S.B.	23+67.37	11.50' LT
5E	NATIONAL AVE N.B.	24+13.24	24.50' LT
6E	NATIONAL AVE N.B.	24+22.65	25.50' LT
7E	NATIONAL AVE N.B.	24+12.00	37.92' LT
8E	NATIONAL AVE N.B.	24+08.67	41.15' LT
9E	RAMP 4	0+95.19	4.14' LT
10E	NATIONAL AVE S.B.	22+86.15	52.30' LT
11E	NATIONAL AVE S.B.	22+75.19	25.72' LT
12E	NATIONAL AVE S.B.	23+22.32	13.64' LT
13E	NATIONAL AVE N.B.	24+04.46	39.34' LT



ISLAND - (F)

POINT	LOC.	STA.	OFFSET
1F	NATIONAL AVE N.B.	23+12.86	26.50' RT
2F	RAMP 2	14+78.02	14.15' LT
3F	RAMP 2	14+28.48	4.00' LT
4F	RAMP 2	14+01.92	2.00' LT
5F	NATIONAL AVE S.B.	24+20.95	110.21' RT
6F	NATIONAL AVE S.B.	24+21.32	105.24' RT
7F	NATIONAL AVE N.B.	24+54.74	26.68' RT
8F	NATIONAL AVE N.B.	23+76.09	26.50' RT
9F	NATIONAL AVE N.B.	23+24.05	24.50' RT
10F	NATIONAL AVE N.B.	23+19.60	24.50' RT
11F	NATIONAL AVE N.B.	23+25.48	35.28' RT
12F	NATIONAL AVE S.B.	24+14.48	102.39' RT

ISLAND - (G)

POINT	LOC.	STA.	OFFSET
1G	NATIONAL AVE	22+99.00	2.54' LT
2G	NATIONAL AVE	22+98.99	2.72' RT
3G	NATIONAL AVE	23+04.92	0.08' RT

ISLAND - (H)

POINT	LOC.	STA.	OFFSET
1H	NATIONAL AVE S.B.	24+31.73	11.50' LT
2H	NATIONAL AVE S.B.	24+85.99	11.50' LT
3H	NATIONAL AVE S.B.	27+95.36	17.50' LT



GEOMETRICS  
SHEET 3 OF 3

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

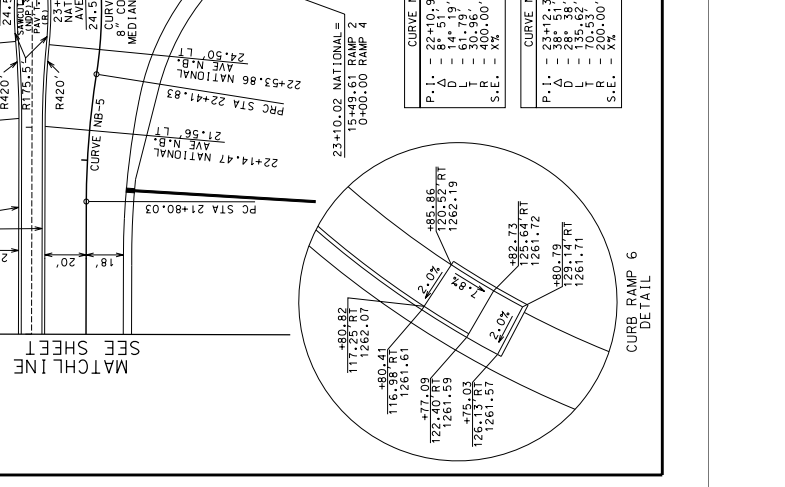
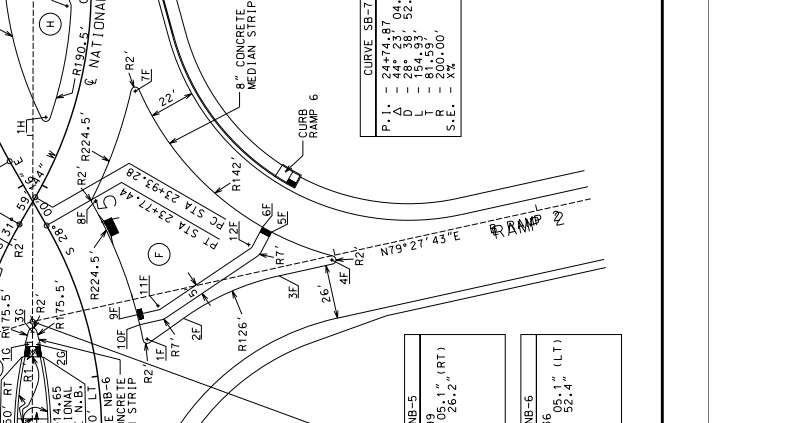
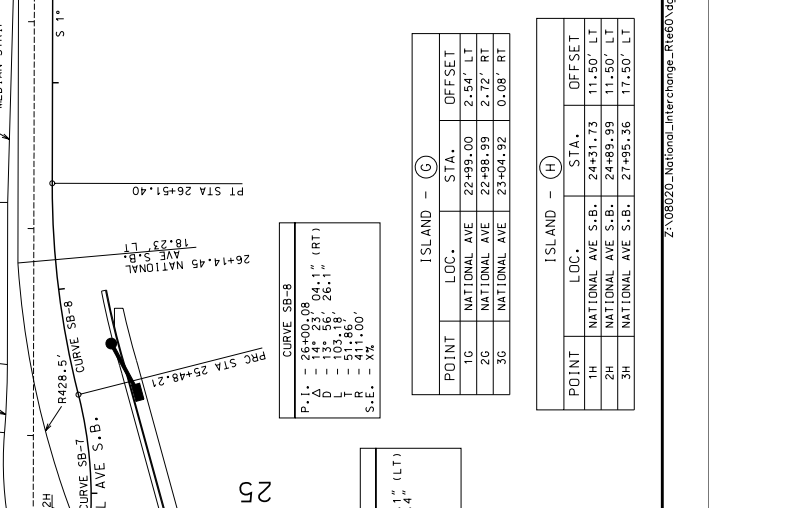
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DATE PREPARED: 05/14/2009  
 SHEET NO.: 8  
 DISTRICT: 8  
 COUNTY: GREENE  
 JOB NO.: J8P0791  
 CONTRACT ID.:  
 PROJECT NO.:  
 BRIDGE NO.:  
 DESCRIPTION:  
 DATE:

ISLAND - (E)

POINT	LOC.	STA.	OFFSET
1E	NATIONAL AVE S.B.	22+63.90	11.50' LT
2E	NATIONAL AVE S.B.	23+15.72	9.50' LT
3E	NATIONAL AVE S.B.	23+20.49	9.50' LT
4E	NATIONAL AVE S.B.	23+67.37	11.50' LT
5E	NATIONAL AVE N.B.	24+13.24	24.50' LT
6E	NATIONAL AVE N.B.	24+22.65	25.50' LT
7E	NATIONAL AVE N.B.	24+12.00	37.92' LT
8E	NATIONAL AVE N.B.	24+08.67	41.15' LT
9E	RAMP 4	0+95.19	4.14' LT
10E	NATIONAL AVE S.B.	22+86.15	52.30' LT
11E	NATIONAL AVE S.B.	22+75.19	25.72' LT
12E	NATIONAL AVE S.B.	23+22.32	13.64' LT
13E	NATIONAL AVE N.B.	24+04.46	39.34' LT



ISLAND - (F)

POINT	LOC.	STA.	OFFSET
1F	NATIONAL AVE N.B.	23+12.86	26.50' RT
2F	RAMP 2	14+78.02	14.15' LT
3F	RAMP 2	14+28.48	4.00' LT
4F	RAMP 2	14+01.92	2.00' LT
5F	NATIONAL AVE S.B.	24+20.95	110.21' RT
6F	NATIONAL AVE S.B.	24+21.32	105.24' RT
7F	NATIONAL AVE N.B.	24+54.74	26.68' RT
8F	NATIONAL AVE N.B.	23+76.09	26.50' RT
9F	NATIONAL AVE N.B.	23+24.05	24.50' RT
10F	NATIONAL AVE N.B.	23+19.60	24.50' RT
11F	NATIONAL AVE N.B.	23+25.48	35.28' RT
12F	NATIONAL AVE S.B.	24+14.48	102.39' RT

ISLAND - (G)

POINT	LOC.	STA.	OFFSET
1G	NATIONAL AVE	22+99.00	2.54' LT
2G	NATIONAL AVE	22+98.99	2.72' RT
3G	NATIONAL AVE	23+04.92	0.08' RT

ISLAND - (H)

POINT	LOC.	STA.	OFFSET
1H	NATIONAL AVE S.B.	24+31.73	11.50' LT
2H	NATIONAL AVE S.B.	24+85.99	11.50' LT
3H	NATIONAL AVE S.B.	27+95.36	17.50' LT



GEOMETRICS  
SHEET 3 OF 3

DATE PREPARED	05/14/2009
STATE	MD
DISTRICT	8
COUNTY	20
JOB NO.	GREENE
CONTRACT ID.	J8P0791
PROJECT NO.	
BRIDGE NO.	
DESCRIPTION	
DATE	

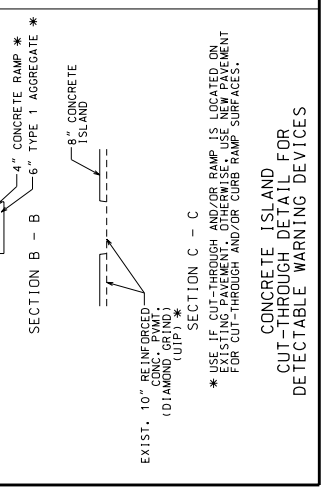
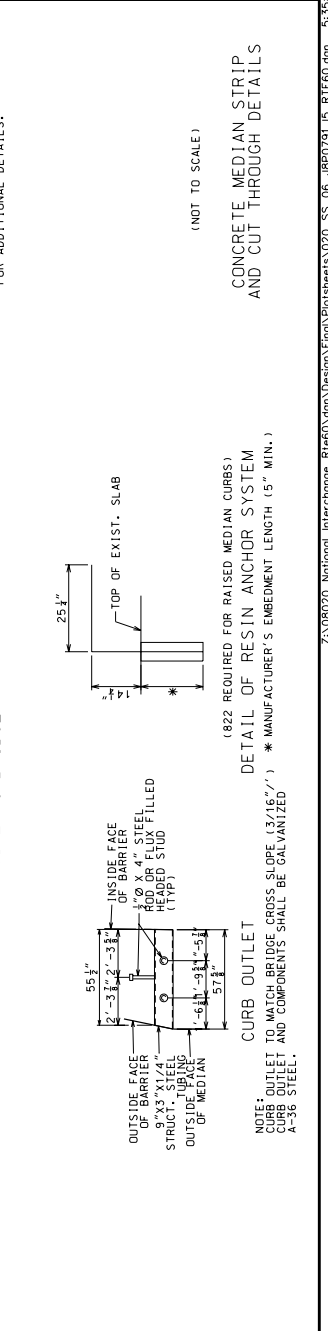
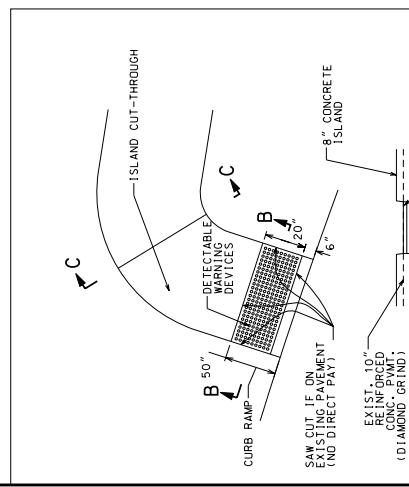
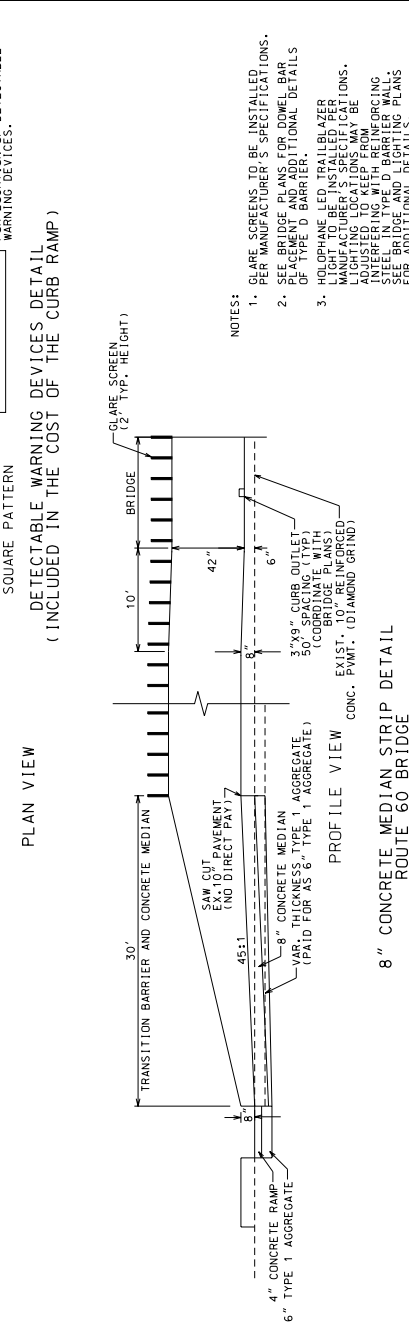
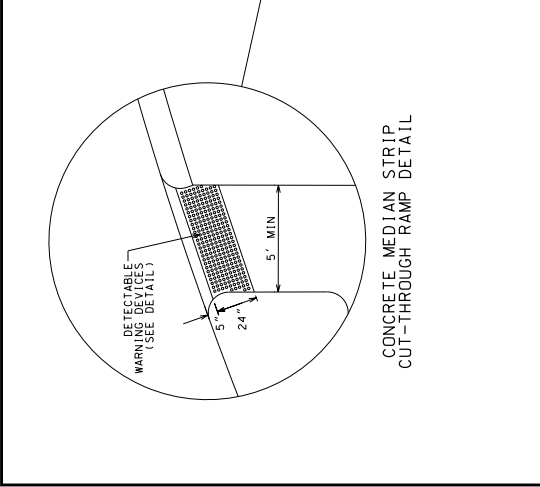
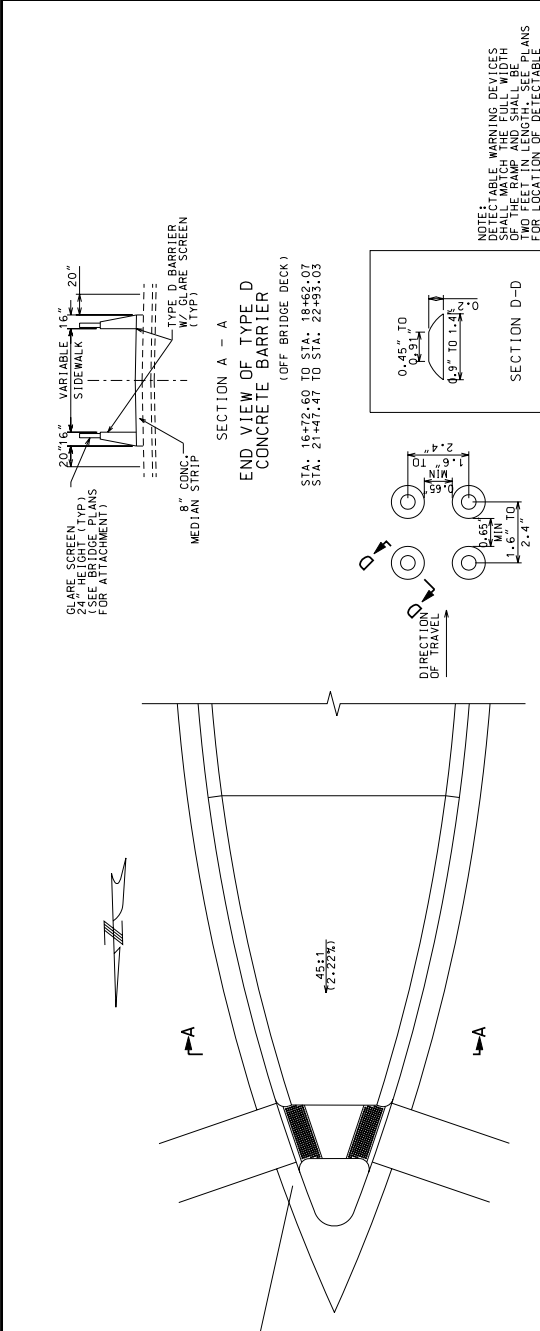
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

105 WEST CAPITOL JEFFERSON CITY, MO 65102

1-888-ASK-MODOT (1-888-273-6636)

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 2200 River Parkway Dr  
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 Phone 314-729-4199  
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Missouri Certificate of Authority: 001578



NOTE: DETECTABLE WARNING DEVICES SHALL BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. SEE BRIDGE PLANS FOR DETAIL BAR PLACEMENT AND ADDITIONAL DETAILS OF TYPE D BARRIER.

NOTE: CLARE SCREENS TO BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS. SEE BRIDGE PLANS FOR DETAIL BAR PLACEMENT AND ADDITIONAL DETAILS OF TYPE D BARRIER.

NOTE: HOLOPHANE LED TRAILBLAZER LIGHTING LOCATIONS MAY BE MANUFACTURER'S SPECIFICATIONS. INTERFERING WITH REINFORCING STEEL IN TYPE D BARRIER WALL. SEE BRIDGE PLANS FOR ADDITIONAL DETAILS.

NOTE: (822 REQUIRED FOR RAISED MEDIAN CURBS) DETAIL OF RESIN ANCHOR SYSTEM \* MANUFACTURER'S EMBEDMENT LENGTH (5" MIN.)

NOTE: OUTLET TO MATCH BRIDGE CROSS SLOPE (3/16"/7'). \* MANUFACTURER'S EMBEDMENT LENGTH (5" MIN.) A-36 STEEL.

NOTE: USE IF CUT-THROUGH AND/OR RAMP IS LOCATED ON EXISTING PAVEMENT. OTHERWISE USE NEW PAVEMENT FOR CUT-THROUGH AND/OR CURB RAMP SURFACES.

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



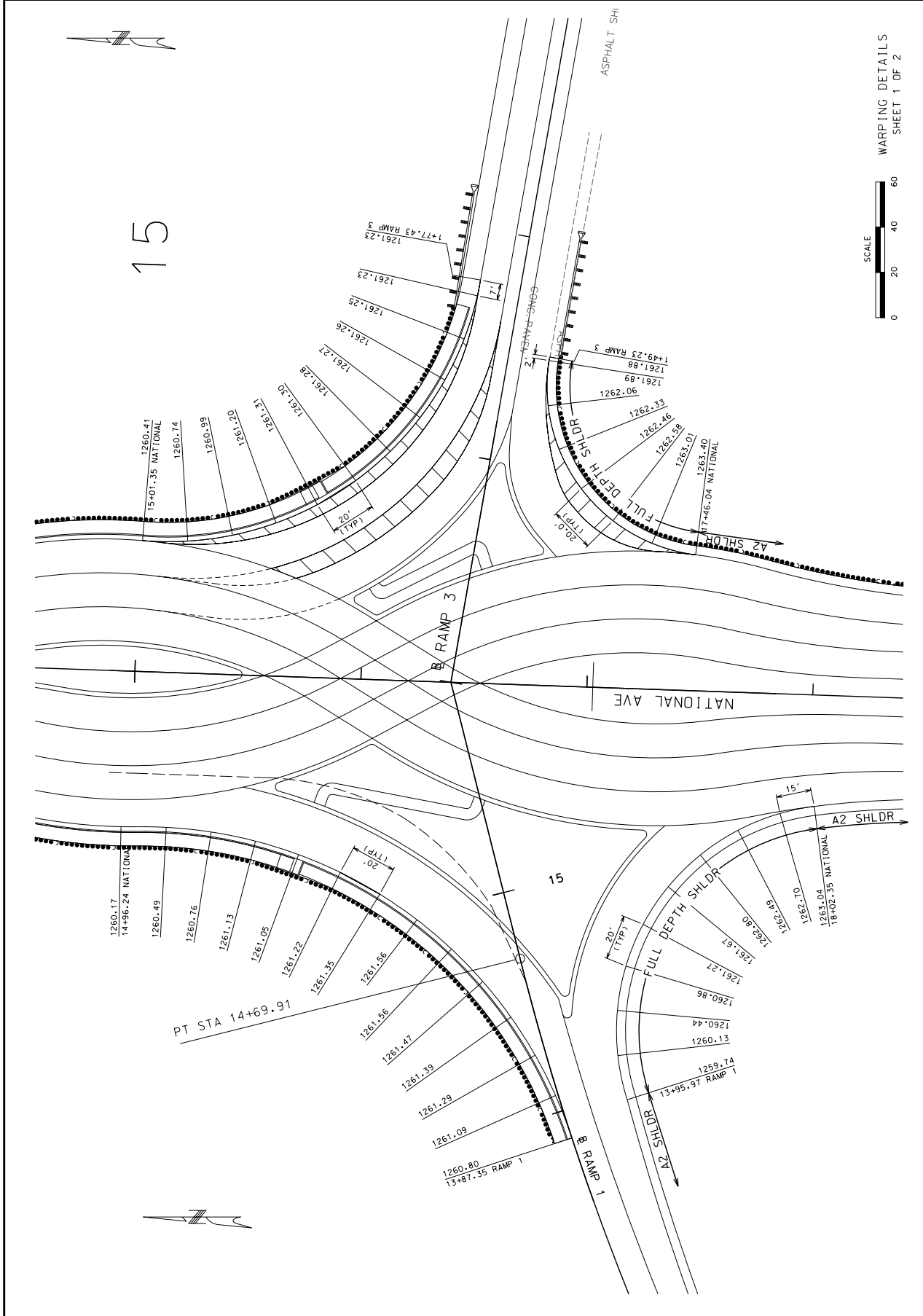
DATE PREPARED: 6/9/2009  
 STATE: MO  
 COUNTY: GREENE  
 JOB NO.: J8P0791  
 CONTRACT ID:  
 PROJECT NO.:  
 BRIDGE NO.:

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION  
 105 WEST CAPITOL  
 JEFFERSON CITY, MO 65102  
 1-888-ASK-MDOT; 1-888-275-6936

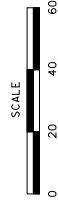


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 St. Louis, MO 63021  
 Phone: 314-729-4100  
 Fax: 314-729-4199  
 Missouri Certificate of Authority: 001578



15

WARPING DETAILS  
 SHEET 1 OF 2





MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION

JEFFERSON CITY, MO 65102  
 105 WEST CAPITOL  
 1-888-ASK-MODOT (1-888-275-6936)

MoDOT

Mount Certificate of Authority: 001578  
 1823 Street Parkway Dr  
 St. Louis, MO 63021  
 Phone 314-728-4100  
 Fax 314-728-4199

EVK • Moen, LLC  
 Civil Engineering Design

REV: 6/19/2009

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

DATE PREPARED	DATE	DESCRIPTION
6/9/2009		

THE SHEET HAS BEEN REVIEWED, CALLED AND DATED ELECTRONICALLY

NO.	DATE	DESCRIPTION

STATE OF MISSOURI  
 MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION  
 EXHIBIT A

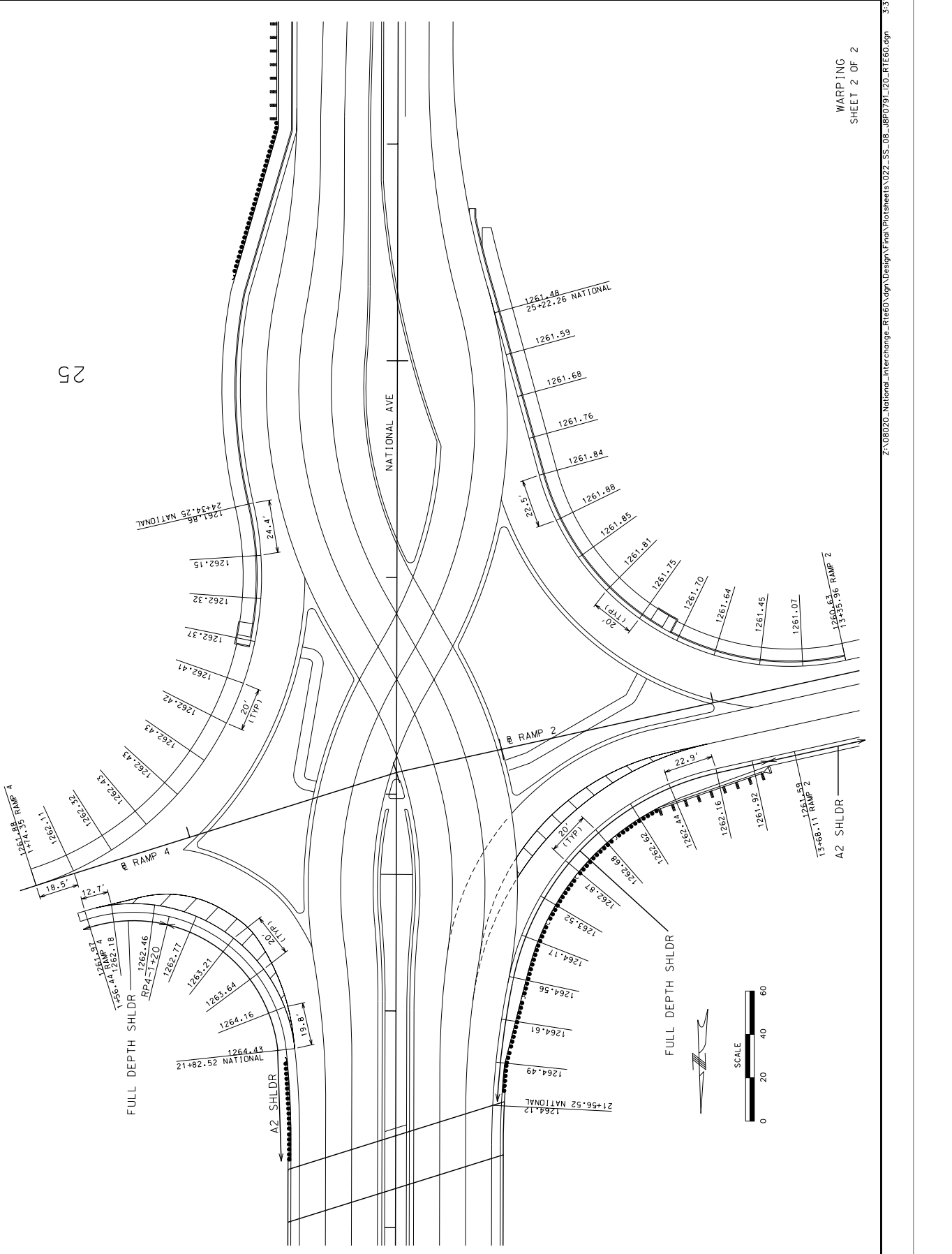
STATE  
 MISSOURI  
 COUNTY  
 GREENE  
 JOB NO.  
 J8P0791  
 CONTRACT ID.  
 PROJECT NO.  
 BRIDGE NO.

DATE PREPARED  
 6/9/2009

ROUTE  
 8

CD  
 22

DIVISION  
 8

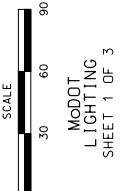
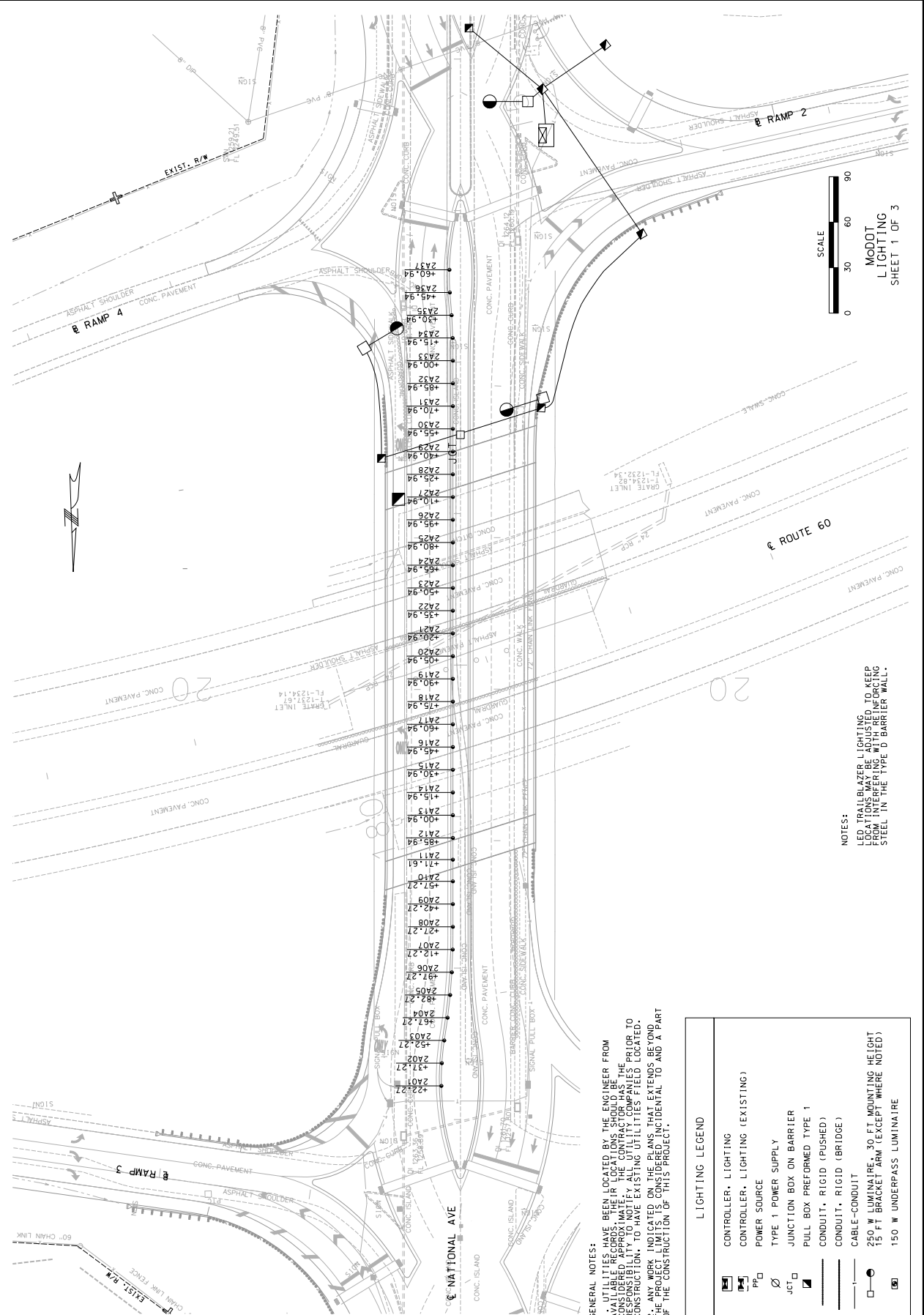


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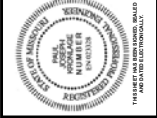
DATE	DESCRIPTION



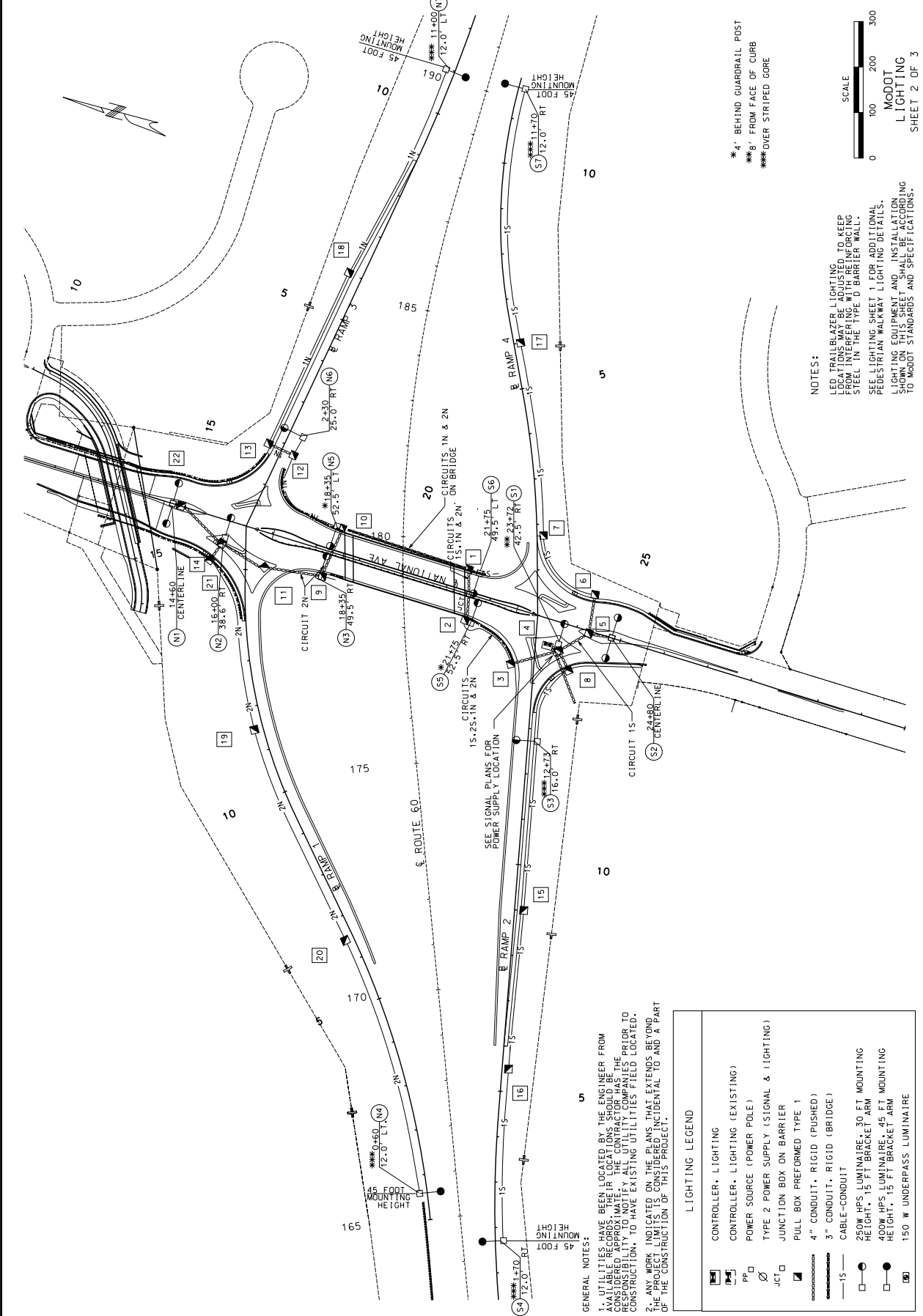
NOTES:  
 LED TRAILBLAZER LIGHTING TO KEEP FROM INTERFERING WITH ENFORCING STEEL IN THE TYPE D BARRIER WALL.

GENERAL NOTES:  
 1. UTILITIES HAVE BEEN LOCATED BY THE ENGINEER FROM AVAILABLE RECORDS. THEIR LOCATIONS SHOULD BE THE RESPONSIBILITY TO NOTIFY ALL UTILITY COMPANIES PRIOR TO CONSTRUCTION, TO HAVE EXISTING UTILITIES FIELD LOCATED.  
 2. ANY WORK INDICATED ON THE PLANS THAT EXTENDS BEYOND THE CONSTRUCTION OF THIS PROJECT.

LIGHTING LEGEND	
	CONTROLLER, LIGHTING (EXISTING)
	POWER SOURCE
	TYPE 1 POWER SUPPLY
	JUNCTION BOX ON BARRIER
	PULL BOX PREFORMED TYPE 1
	CONDUIT, RIGID (PUSHED)
	CONDUIT, RIGID (BRIDGE)
	CABLE-CONDUIT
	250 W LUMINAIRE, 30 FT MOUNTING HEIGHT 15 FT BRACKET ARM (EXCEPT WHERE NOTED)
	150 W UNDERPASS LUMINAIRE

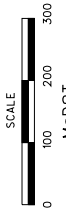


DATE PREPARED	05/29/2009
ROUTE	60
DISTRICT	8
COUNTY	43
GREENE	
JOB NO.	J8P0791
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	
DESCRIPTION	
DATE	



- NOTES:**
- LED TRAILBLAZER LIGHTING TO KEEP LOCATIONS MAY BE ADJUSTED TO KEEP STEEL IN THE TYPE D BARRIER WALL.
  - SEE LIGHTING SHEET 1 FOR ADDITIONAL PEDESTRIAN WALKWAY LIGHTING DETAILS.
  - LIGHTING EQUIPMENT AND INSTALLATION SHOWN ON THIS SHEET SHALL BE ACCORDING TO MDOT STANDARDS AND SPECIFICATIONS.

- \*\*\* 4' BEHIND GUARDRAIL POST
- \*\*\* 8' FROM FACE OF CURB
- \*\*\* OVER STRIPED CORE

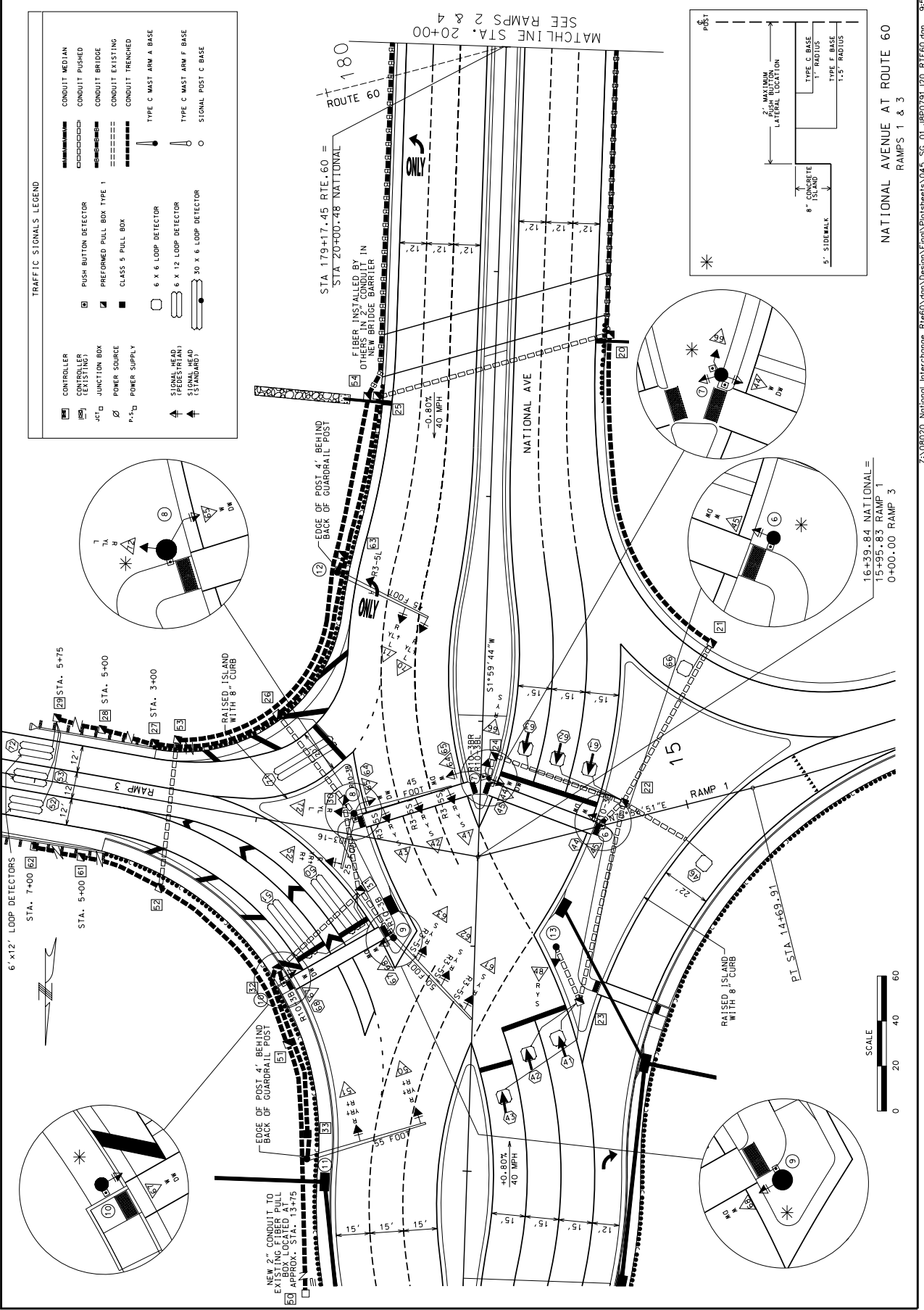


**LIGHTING LEGEND**

[Symbol]	CONTROLLER, LIGHTING
[Symbol]	CONTROLLER, LIGHTING (EXISTING)
[Symbol]	POWER SOURCE (POWER POLE)
[Symbol]	TYPE 2 POWER SUPPLY (SIGNAL & LIGHTING)
[Symbol]	JUNCTION BOX ON BARRIER
[Symbol]	PULL BOX PERFORMED TYPE 1
[Symbol]	4" CONDUIT, RIGID (PUSHED)
[Symbol]	3" CONDUIT, RIGID (BRIDGE)
[Symbol]	CABLE-CONDUIT
[Symbol]	250W HPS LUMINAIRE, 30 FT MOUNTING HEIGHT, 15 FT BRACKET ARM
[Symbol]	400W HPS LUMINAIRE, 45 FT MOUNTING HEIGHT, 15 FT BRACKET ARM
[Symbol]	150 W UNDERPASS LUMINAIRE

- GENERAL NOTES:**
- UTILITIES HAVE BEEN LOCATED BY THE ENGINEER FROM AVAILABLE RECORDS. THEIR LOCATIONS SHOULD BE CONSIDERED APPROXIMATELY. THE CONTRACTOR SHALL PRIOR TO CONSTRUCTION, TO HAVE EXISTING UTILITIES FIELD LOCATED.
  - ANY WORK INDICATED ON THE PLANS THAT EXTENDS BEYOND THE PROJECT LIMITS IS CONSIDERED INCIDENTAL TO AND A PART OF THE CONSTRUCTION OF THIS PROJECT.

	<b>MDOT</b> MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION 105 WEST CAPITOL JEFFERSON CITY, MO 65102 1-888-ASK-MDOT (1-888-279-6636)	<b>EFK • Moen, LLC</b> Civil Engineering Design 1832 Barrett Parkway Dr Suite 200 St. Louis, MO 63021 Phone 314-729-4190 Fax 314-729-4199 Missouri Certificate of Authority: 001578
	DATE DESCRIPTION PROJECT NO. BRIDGE NO. CONTRACT ID. JOB NO. COUNTY SHEET NO. 45 DATE PREPARED 05/29/2009 STATE MO DISTRICT 8 GREENE J8P0791 CONTRACT ID.	DATE DESCRIPTION PROJECT NO. BRIDGE NO. CONTRACT ID. JOB NO. COUNTY SHEET NO. 45 DATE PREPARED 05/29/2009 STATE MO DISTRICT 8 GREENE J8P0791 CONTRACT ID.



**TRAFFIC SIGNALS LEGEND**

	CONTROLLER		CONDUIT MEDIAN
	CONTROLLER (EXISTING)		CONDUIT PUSHED
	JUNCTION BOX		CONDUIT BRIDGE
	POWER SOURCE		CONDUIT EXISTING
	POWER SUPPLY		CONDUIT TRENCHED
	SIGNAL HEAD (PRESERIALIZED STANDARD)		TYPE C MAST ARM A BASE
	SIGNAL HEAD (PRESERIALIZED STANDARD)		TYPE C MAST ARM F BASE
	SIGNAL HEAD (PRESERIALIZED STANDARD)		SIGNAL POST C BASE
	PUSH BUTTON DETECTOR		
	PREFORMED PULL BOX TYPE 1		
	CLASS 5 PULL BOX		
	6 X 6 LOOP DETECTOR		
	6 X 12 LOOP DETECTOR		
	30 X 6 LOOP DETECTOR		

SCALE: 0 20 40 60

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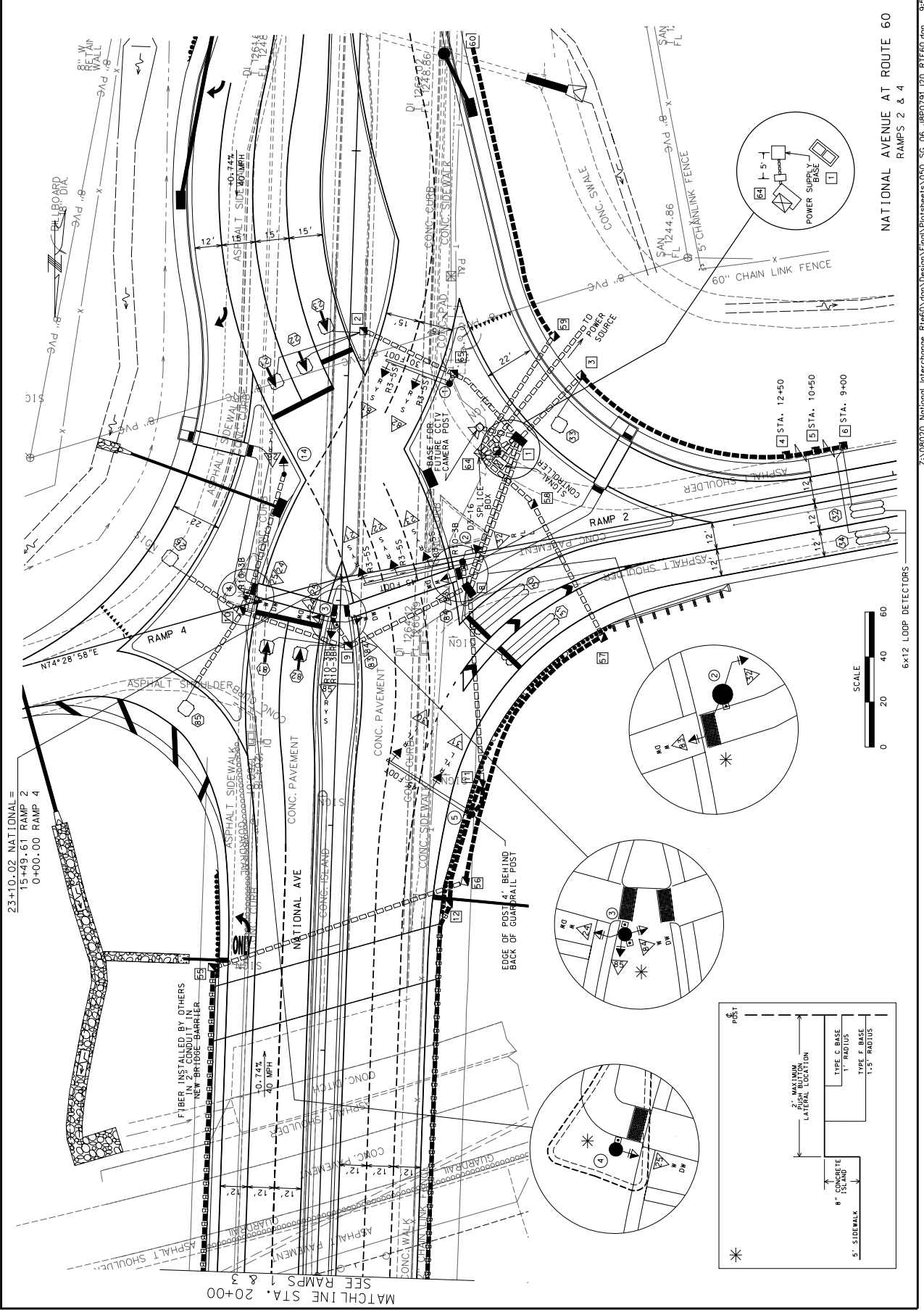
DATE PREPARED	05/29/2009
STATE	MD
ROUTE	60
DISTRICT	8
SHEET NO.	50
COUNTY	GREENE
JOB NO.	J8P0791
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	
DESCRIPTION	
DATE	

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION



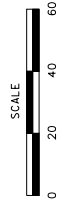
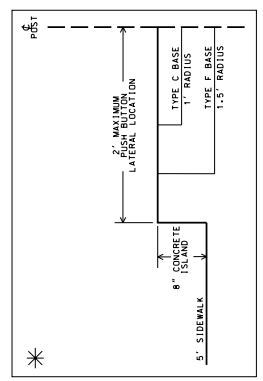
1-888-ASK-MDOT (1-888-279-6363)  
JEFFERSON CITY, MO 65102  
105 WEST CAPITOL

**EFK • Moen, LLC**  
Civil Engineering Design  
1832 Barrett Parkway Dr  
St. Louis, MO 63021  
Phone 314-729-4199  
Fax 314-729-4199  
Missouri Certificate of Authority: 001578



23+10.02 NATIONAL =  
15+49.61 RAMP 2  
0+00.00 RAMP 4

MATCHLINE STA. 20+00  
SEE RAMP 1 & 3



6x12 LOOP DETECTORS

NATIONAL AVENUE AT ROUTE 60  
RAMPS 2 & 4

REV. 1: 08/02/09; National Interchange - Ramps; Design; 0505; 06-06-06-09; 07/91; 20-RT-EE00.dgn; 9:59:53 AM; 05/29/2009

DATE PREPARED	05/29/2009
STATE	MD
DISTRICT	8
SHEET NO.	90
COUNTY	GREENE
JOB NO.	J8P0791
CONTRACT ID.	
PROJECT NO.	
BRIDGE NO.	

DATE	DESCRIPTION

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION  
 105 WEST CAPITOL  
 JEFFERSON CITY, MO 65102  
 1-888-ASM-4MDOT (1-888-279-6636)



**EFK • Moen, LLC**  
 Civil Engineering Design  
 1333 Barrett Parkway Dr  
 St. Louis, MO 63021  
 Phone 314-729-4199  
 Fax 314-729-4199  
 Missouri Certificate of Authority: 001578

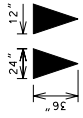
**NOTES:**

- ALL STRIPES IS 6" ON ROUTE 60 AND RAMP 1 AND 2" ON NATIONAL AVE UNLESS OTHERWISE NOTED.
- ALL STRIPES ON NATIONAL AVE IS STATIONED OFF OF N.B. OR S.B. CENTERLINES, UNLESS OTHERWISE NOTED.
- ALL CROSSWALK STRIPES SHALL BE 6".
- NO DIRECT PAV FOR TRUNCATED DOMES AT CROSSWALKS.

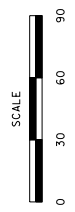
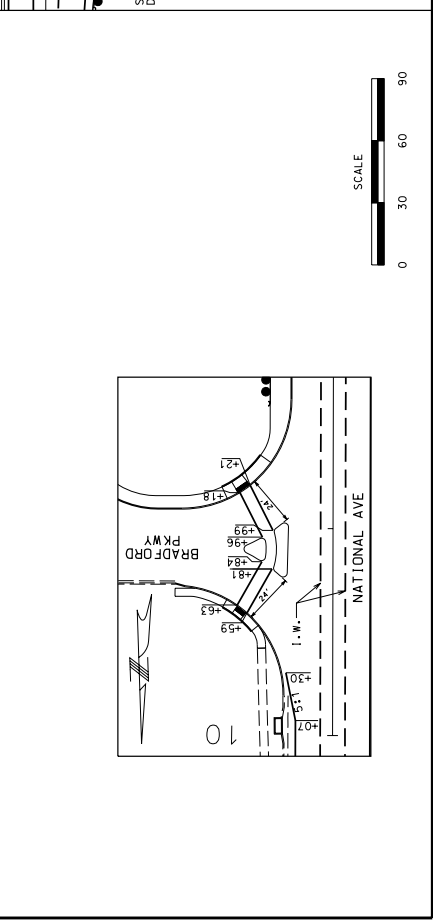
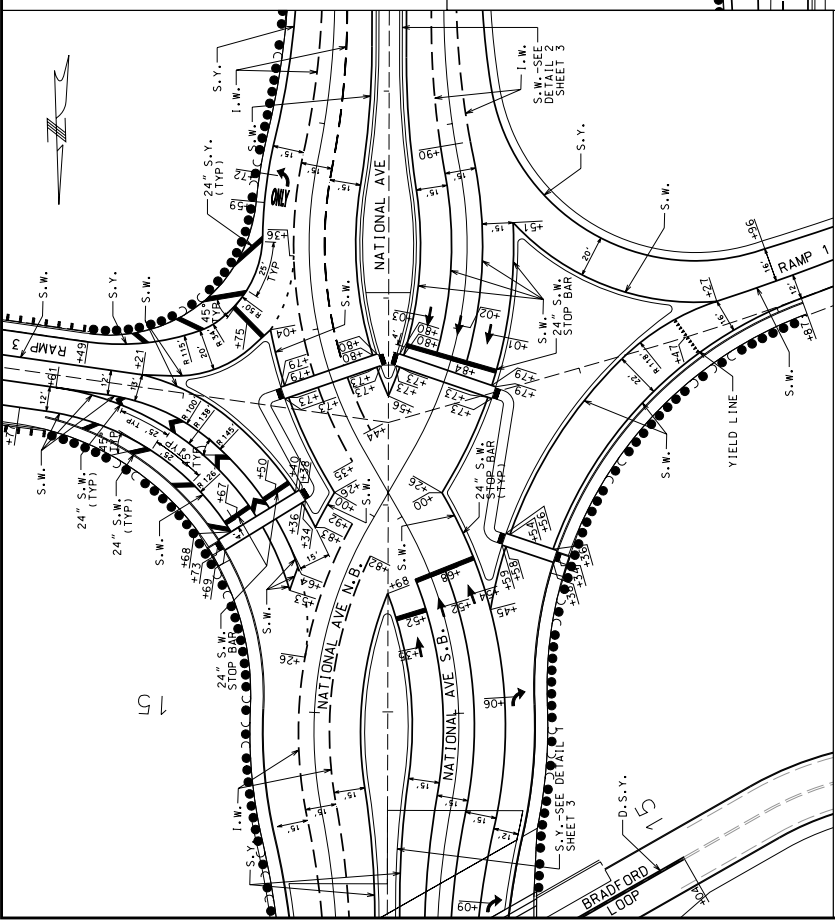
**LEGEND**

S.Y.	- SOLID YELLOW
S.W.	- SOLID WHITE
I.Y.	- INTERMITTENT YELLOW
I.W.	- INTERMITTENT WHITE
D-S.Y.	- DOUBLE SOLID YELLOW

**NOTE:**  
 YIELD LINE SHALL POINT TOWARD APPROACHING VEHICLES



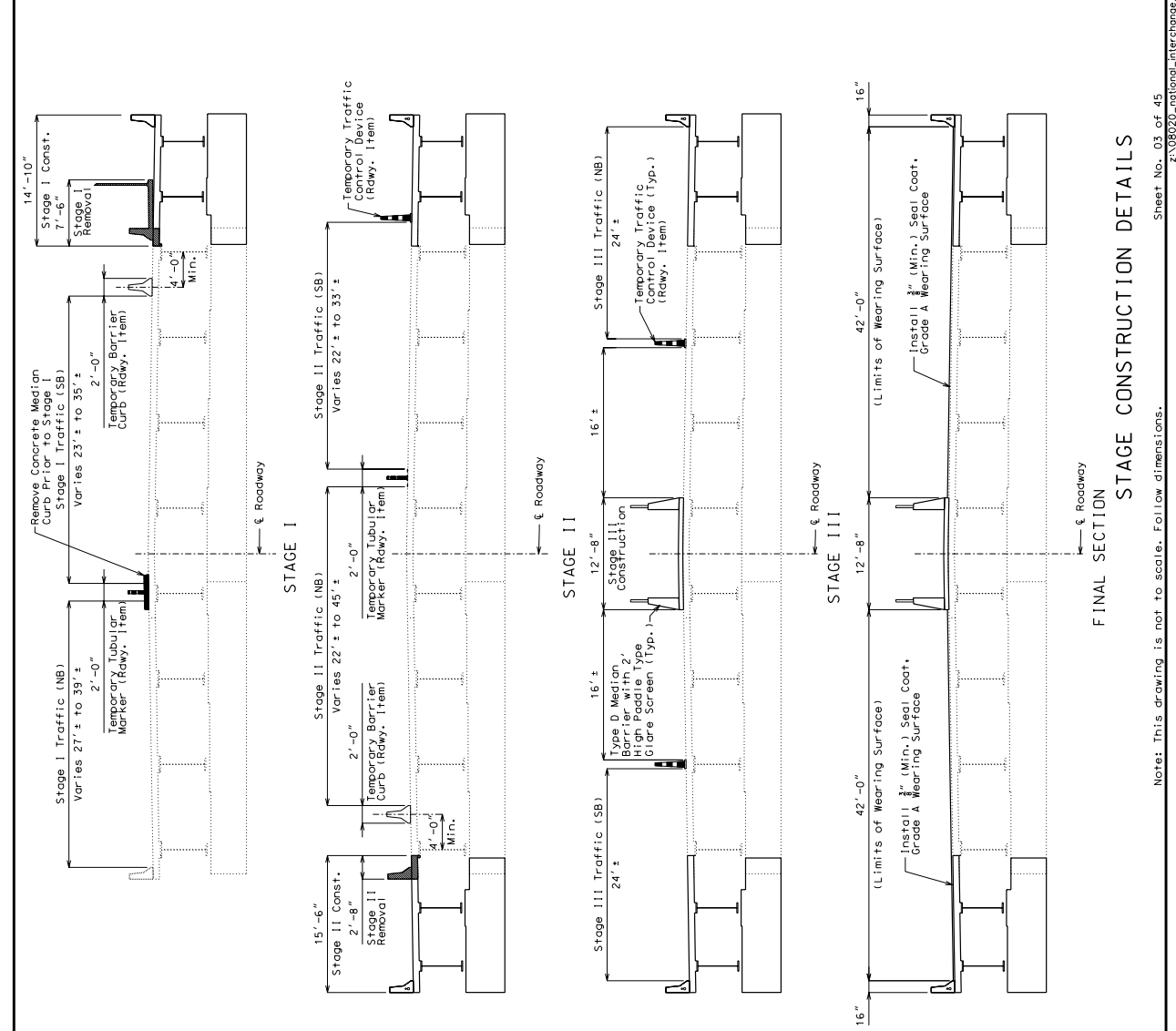
**DETAIL OF YIELD LINE TRIANGLES**



PAVEMENT MARKING  
 SHEET 5 OF 5

STATE OF MISSOURI  
 MISSOURI ENGINEERING DESIGN  
 CIVIL ENGINEERING DESIGN  
 MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION  
 MISSOURI ENGINEERING DESIGN  
 CIVIL ENGINEERING DESIGN  
 13523 Benton Parkway, Dr. Phone 314-729-4100  
 St. Louis, MO 63021 Fax 314-729-4199  
 Missouri (Certificate of Authority: 001578)

**Notes:**  
 Traffic over structure to be maintained during construction.  
 See Roadway plans for traffic control.  
 Temporary Barrier (Roadway Item) shall not be attached to the bridge.  
 Method of attachment for the Type F Temporary Barrier (Roadway Item) shall be the Tie-Down Strap.  
 Seal Coat, Grade A wearing surface shall be in accordance with Sec. 403. The area of the wearing surface will be measured and computed to the nearest square yard. This area will be measured transversely from out to out of overlay and shall include the area of the approach of Approach Beam at Abutment No. 3. Adutment No. 1 to Full Face of Approach Beam at Abutment No. 3.  
 Payment for Wearing Surface will be considered completely covered by the contract unit price per square yard for Seal Coat, Grade A.  
 In order to maintain grade and a minimum thickness of overlay as shown on plans it may be necessary to use additional quantities of overlay at various locations throughout the structure. The cost of furnishing and installing the overlay shall be included in the contract unit price. Materials or equipment for variations in thickness of overlay.



Remove Concrete Median Curb Prior to Stage I  
 Stage I Traffic (SB) Varies 23' ± to 35' ±  
 Stage I Traffic (NB) Varies 27' ± to 39' ±  
 Temporary Barrier Curb (Rowy. Item) 2'-0"  
 Temporary Tubular Marker (Rowy. Item) 2'-0"  
 Stage II Traffic (NB) Varies 22' ± to 45' ±  
 Stage II Traffic (SB) Varies 22' ± to 33' ±  
 Temporary Barrier Curb (Rowy. Item) 2'-0"  
 Temporary Tubular Marker (Rowy. Item) 2'-0"  
 Stage III Traffic (SB) 24' ±  
 Stage III Traffic (NB) 24' ±  
 Type D Median Barrier with High Profile Type Glare Screen (Typ.) 12'-8"  
 Stage III Construction 12'-8"  
 Stage III Traffic (NB) 16' ±  
 Stage III Traffic (SB) 16' ±  
 (Limits of Wearing Surface) 42'-0"  
 (Limits of Wearing Surface) 42'-0"  
 Install 1/2" (Min.) Seal Coat, Grade A Wearing Surface  
 Install 1/2" (Min.) Seal Coat, Grade A Wearing Surface  
 (Limits of Wearing Surface) 42'-0"  
 (Limits of Wearing Surface) 42'-0"  
 Roadway  
 Final Section  
 Stage Construction Details

