

MAD NOV 2016

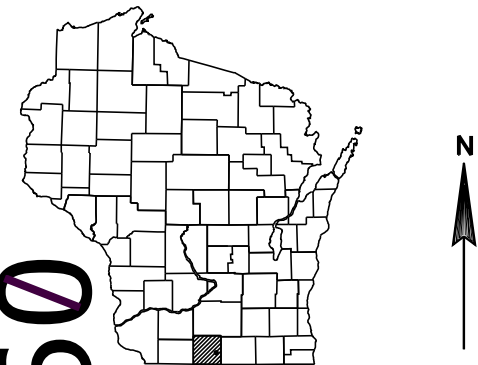
PROJECT ID: 5660-00-63

COUNTY: GREEN

ORDER OF SHEETS

Section No. 1	Title
Section No. 2	Typical Sections and Details
Section No. 3	Estimate of Quantities
Section No. 3	Miscellaneous Quantities
Section No. 4	Right of Way Plat
Section No. 5	Plan and Profile
Section No. 6	Standard Detail Drawings
Section No. 7	Sign Plates
Section No. 8	Structure Plans
Section No. 9	Computer Earthwork Data
Section No. 9	Cross Sections

TOTAL SHEETS = 200

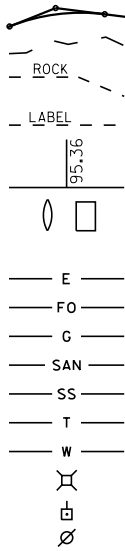


DESIGN	DESIGNATION	VILLAGE OF ALBANY
A.A.D.T.	2016	= 3900
A.A.D.T.	2036	= 4300
D.H.V.	2036	= 485
D.D.		= 60/40
T.		= 13.9%
DESIGN SPEED		= 25 MPH
ESALS		= 956,300

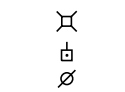
CONVENTIONAL SYMBOLS

PLAN	
CORPORATE LIMITS	////
PROPERTY LINE	---
LOT LINE	- - - -
LIMITED HIGHWAY EASEMENT	L ---
EXISTING RIGHT OF WAY	---
PROPOSED OR NEW R/W LINE	---
SLOPE INTERCEPT	- - - -
REFERENCE LINE	---
EXISTING CULVERT	- - - -
PROPOSED CULVERT (Box or Pipe)	[]
COMBUSTIBLE FLUIDS	CAUTION
MARSH AREA	~ ~ ~ ~
WOODED OR SHRUB AREA	~~~~~

PROFILE	
GRADE LINE	---
ORIGINAL GROUND	---
MARSH OR ROCK PROFILE (To be noted as such)	---
SPECIAL DITCH	---
GRADE ELEVATION	95.36
CULVERT (Profile View)	[]
UTILITIES	
ELECTRIC	— E —
FIBER OPTIC	— FO —
GAS	— G —
SANITARY SEWER	— SAN —
STORM SEWER	— SS —
TELEPHONE	— T —
WATER	— W —
UTILITY PEDESTAL	[]
POWER POLE	[]
TELEPHONE POLE	[]

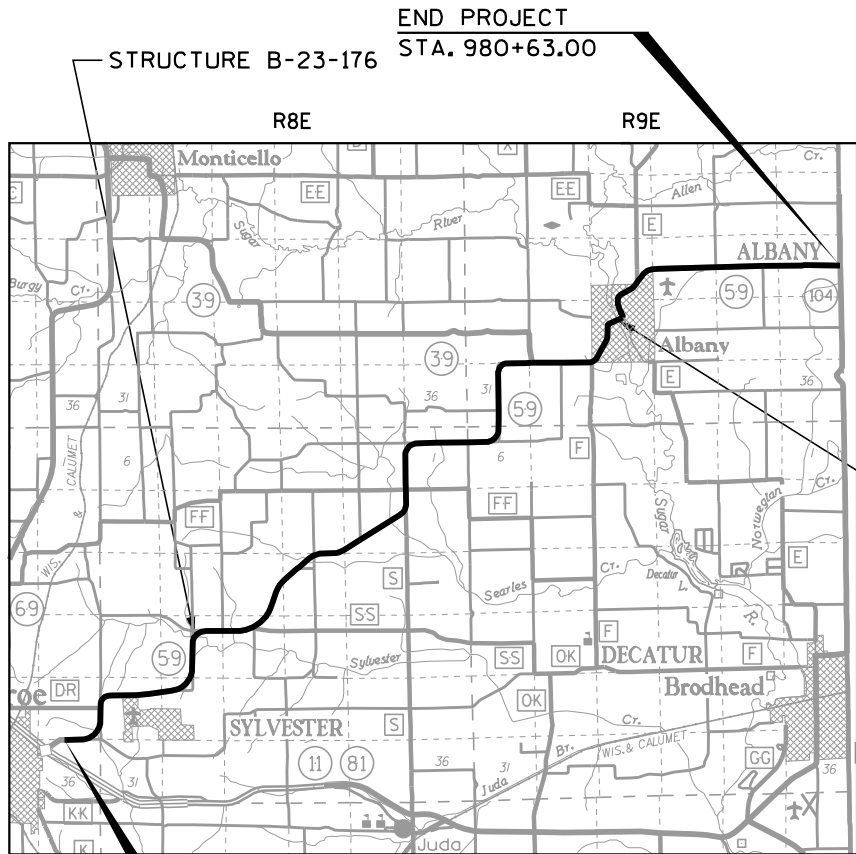


— E —
— FO —
— G —
— SAN —
— SS —
— T —
— W —



LAYOUT
SCALE 0 1 MI.

STATE PROJECT NUMBER
5660-00-63



BEGIN PROJECT
STA. 53+08.00
N=140,596.92
E=618,907.86

END PROJECT
STA. 980+63.00

TOTAL NET LENGTH OF CENTERLINE = 17.541 MI.

COORDINATES ON THIS PLAN ARE REFERENCED TO THE WISCONSIN COUNTY COORDINATE SYSTEM (WCCS), GREEN COUNTY.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
5660-00-63	WISC 2016345	1

ORIGINAL PLAN PREPARED BY:

BAXTER & WOODMAN
Consulting Engineers

Daniel C. Durig
1-19-16

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	TRANSMART TECHNOLOGIES
Designer	BAXTER & WOODMAN, INC.
Project Manager	CHRIS HODGES, PE, RLS
Regional Examiner	
Regional Supervisor	KARLA KNORR, PE
C.O. Examiner	

APPROVED FOR THE DEPARTMENT

DATE: 1/19/16

(Signature)

E

GENERAL NOTES

- 1 NO SHRUBS OR TREES ARE TO BE REMOVED WITHOUT APPROVAL OF THE ENGINEER.
- 2 PIPE AND INLET ELEVATIONS AS SHOWN ON THE PLANS MAY BE ADJUSTED BY THE ENGINEER.
- 3 THE EROSION CONTROL ITEMS SHOWN ON THE PLANS ARE AT SUGGESTED LOCATIONS. THE ENGINEER SHALL DETERMINE THE EXACT LOCATIONS. ALL EROSION CONTROL MEASURES SHALL BE MAINTAINED UNTIL SUCH TIME AS THE ENGINEER DETERMINES THE MEASURE IS NO LONGER NEEDED.
- 4 EROSION CONTROL DEVICES SHALL BE PLACED IN SEQUENCE WITH CONSTRUCTION OPERATIONS OR AS DETERMINED BY THE ENGINEER.
- 5 THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATION WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.
- 6 SEE SUBSURFACE EXPLORATION REPORTS FOR SOIL BORING INFORMATION. REPORTS ARE AVAILABLE FROM THE WISDOT SW REGION PROJECTS SECTION CHRIS HODGES, PROJECT MANAGER, PHONE (608) 246-7911
- 7 SHRINKAGE OF EARTHWORK IS VARIABLE AND IS ESTIMATED AS SHOWN IN THE YARDAGE SUMMARIES.
- 8 HMA PAVEMENT 4 LT 58-28 S SHALL BE CONSTRUCTED WITH THE FOLLOWING LAYERS:

THICKNESS	LAYERS
2½-INCH	ONE 2½" UPPER LAYER
3½-INCH	ONE 1¾" UPPER LAYER ONE 1¾" LOWER LAYER
4-INCH	ONE 2" UPPER LAYER ONE 2" LOWER LAYER
5-INCH	ONE 2½" UPPER LAYER ONE 2"½ LOWER LAYER
- 9 WHEN THE QUANTITY OF ITEMS OF BASE OR SURFACE COURSE IS MEASURED FOR PAYMENT BY THE TON, THE THICKNESS OF THE COURSE SHOWN ON THE PLANS IS APPROXIMATE, AND THE ACTUAL THICKNESS WILL DEPEND ON THE DISTRIBUTION OF THE MATERIAL AS DIRECTED BY THE ENGINEER.
- 10 STATIONING, DISTANCES AND OFFSETS FOR SIGNS SHOWN ON THE PLANS ARE APPROXIMATE AND THE LOCATIONS OF SIGNS ARE TO BE DETERMINED IN THE FIELD BY THE ENGINEER.
- 11 RESTORATION OF EXPOSED SLOPES AND DITCHES SHALL TAKE PLACE NOT MORE THAN 5 WORKING DAYS AFTER FINISHED GRADING IS COMPLETE.
- 12 PAVEMENT REMOVAL WILL BE TO THE NEAREST JOINT, OR AS DIRECTED BY THE ENGINEER.
- 13 THE HMA PAVEMENT WEIGHT CALCULATIONS ARE BASED ON 110 LBS/SY/IN.
- 14 JOINT TIES FOR CONCRETE PIPE SHALL BE PROVIDED AT ALL REINFORCED CONCRETE APRON ENDWALL LOCATIONS. APRON ENDWALLS SHALL BE TIED FOR THE LAST THREE JOINTS AT PIPE ENDS. THE COST OF THESE TIES SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR THE REINFORCED CONCRETE PIPE.
- 15 KEEP ALL EQUIPMENT AND MATERIALS OUT OF ADJACENT WETLANDS.
- 16 PRIOR TO ORDERING DRAINAGE PIPES AND STRUCTURES, THE CONTRACTOR SHALL FIELD VERIFY RELATED DRAINAGE INFORMATION IN THE PLANS AND PROVIDE DOCUMENTATION TO THE ENGINEER IN ACCORDANCE WITH THE SPECIFICATIONS.
- 17 AGGREGATE CONVERSION RATES:
BASE AGGREGATE DENSE ¾-INCH, 1 ¼-INCH: 2.0 TONS/CY
- 18 THE CONTRACTOR'S PAVING OPERATIONS SHALL BE CONSISTENT WITH THE PLAN TYPICAL SECTIONS AND CONSTRUCTION DETAILS TO PREVENT HMA LONGITUDINAL JOINTS FROM BEING LOCATED WITHIN A DRIVING, TURNING, PASSING, OR PARKING LANE.
- 19 CONTRACTOR INFORMATION: APPROX. 19,000 TONS EXPECTED FROM REMOVING ASPHALTIC SURFACE MILLING.

DNR LIAISON

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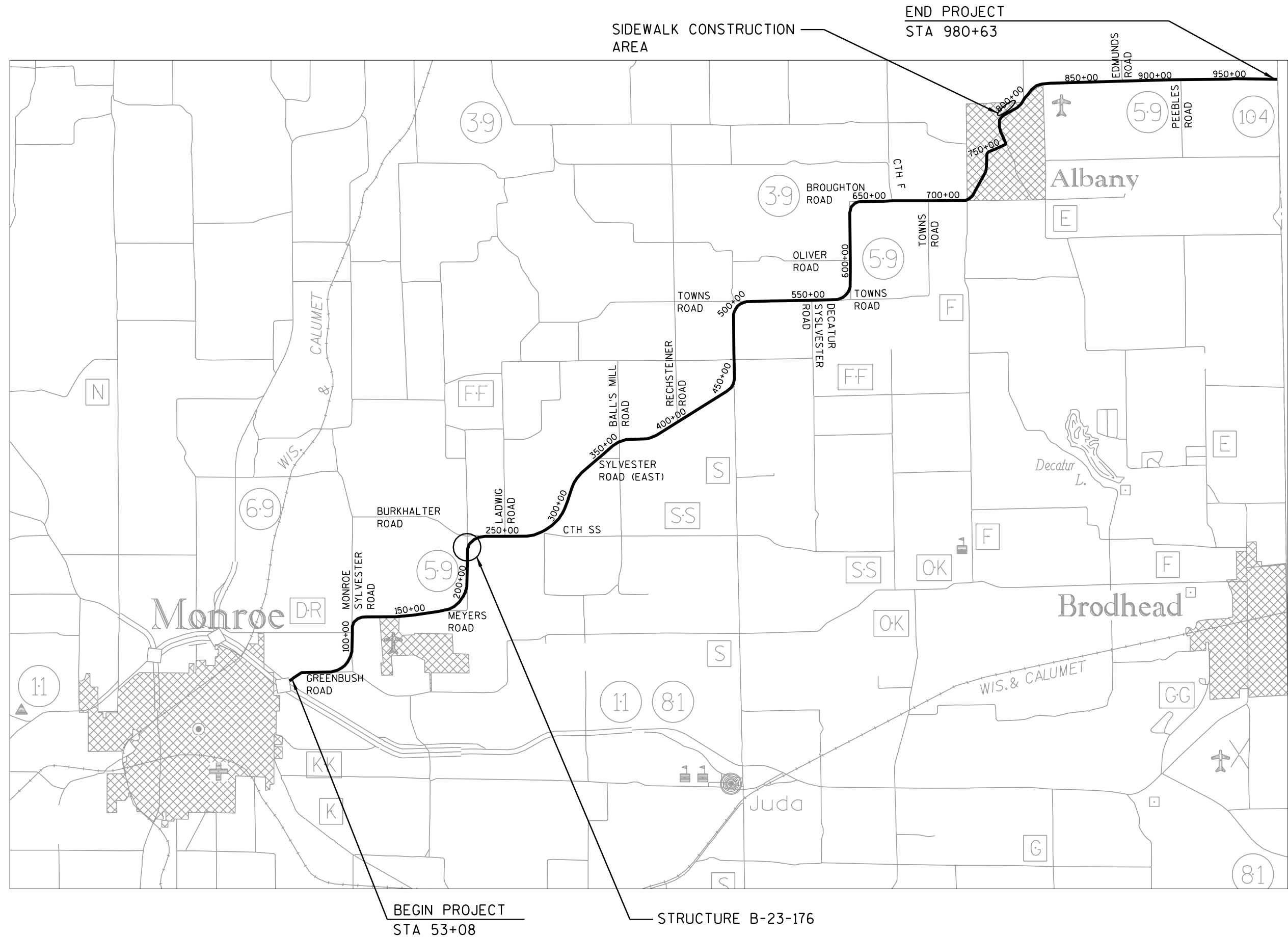
Dial 811 or (800)242-8511
www.DiggersHotline.com

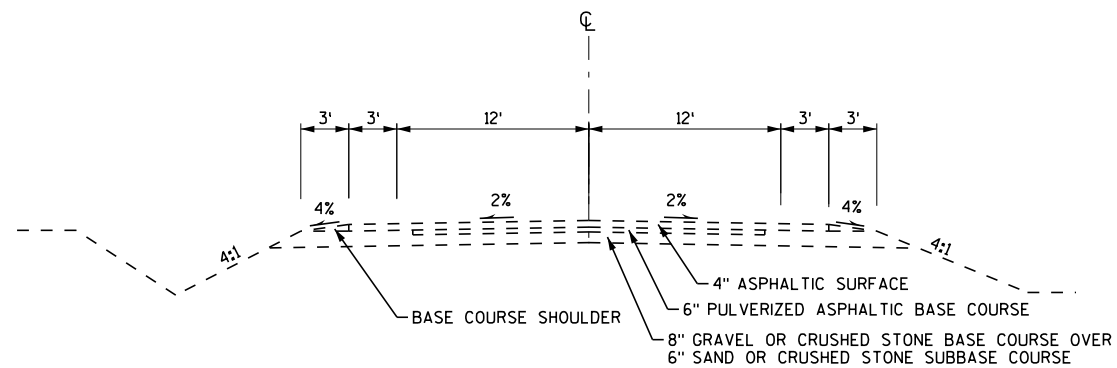
STANDARD ABBREVIATIONS

AP	ACCESS POINT	NOM	NOMINAL
AC	ACRE	NC	NORMAL CROWN
ADJ	ADJUST	N	NORTH
AECPRC	APRON ENDWALLS FOR CULVERT	Y	NORTH GRID COORDINATE
	PIPE REINFORCED CONCRETE	NB	NORTHBOUND
AH	AHEAD	NO	NUMBER
AC	ASPHALT CEMENT	OPT	OPTIONAL
ASPH	ASPHALTIC	OD	OUTSIDE DIAMETER
ACP	ASPHALTIC CONCRETE PAVEMENT	PAVT	PAVEMENT
AVG	AVERAGE	PLE	PERMANENT LIMITED EASEMENT
ADT	AVERAGE DAILY TRAFFIC	PACS	PIPE ARCH CORRUGATED STEEL
BK	BACK	PT	POINT
BAD	BASE AGGREGATE DENSE	PC	POINT OF CURVATURE
BM	BENCHMARK	PI	POINT OF INTERSECTION
CB	CATCH BASIN	PT	POINT OF TANGENCY
C/L	CENTER LINE	PVC	POINT OF VERTICAL CURVE
C/L CONST	C/L CONST	PVI	POINT OF VERTICAL INTERSECTION
CL	CLASS	PVT	POINT OF VERTICAL TANGENCY
CONC	CONCRETE	PVC	POLYVINYL CHLORIDE
CONST	CONSTRUCTION	PCC	PORTLAND CEMENT CONCRETE
CMCP	CORRUGATED METAL CULVERT PIPE	LB	POUND
CTH	COUNTY TRUNK HIGHWAY	PSF	POUNDS PER SQUARE FOOT
CABC	CRUSHED AGGREGATE BASE COURSE	PSI	POUNDS PER SQUARE INCH
CFS	CUBIC FEET PER SECOND	PE	PRIVATE ENTRANCE
CY	CUBIC YARD	PL	PROPERTY LINE
CP	CULVERT PIPE	Q100	100-YEAR FLOW RATE
CPCS	CULVERT PIPE CORRUGATED STEEL	R	RADIUS
CPRC	CULVERT PIPE REINFORCED CONCRETE	RR	RAILROAD
CPRCHE	CULVERT PIPE REINFORCED CONCRETE	R	RANGE
	HORIZONTAL ELLIPTICAL	R/L	R/L
C & G	CURB AND GUTTER	REINF	REINFORCING OR REINFORCEMENT
D	DEGREE OF CURVE	REQD	REQUIRED
DHV	DESIGN HOUR VOLUME	RT	RIGHT
DIA	DIAMETER	R/W	RIGHT-OF-WAY
DD	DIRECTIONAL DISTRIBUTION	RD	ROAD
DWY	DRIVEWAY	RDWY	ROADWAY
E	EAST	SEC	SECTION
X	EAST GRID COORDINATE	SHLDR	SHOULDER
EB	EASTBOUND	S	SOUTH
EL	ELEVATION	SB	SOUTHBOUND
ESALS	EQUIVALENT SINGLE AXLE LOADS	SO	SQUARE
EXC	EXCAVATION	SF	SQUARE FEET
EBS	EXCAVATION BELOW SUBGRADE	SW	SIDEWALK
EXIST	EXISTING	SY	SQUARE YARD
FERT	FERTILIZE	SDD	STANDARD DETAIL DRAWINGS
FE	FIELD ENTRANCE	STH	STATE TRUNK HIGHWAYS
FL	FLOW LINE	STA	STATION
FT	FOOT	SS	STORM SEWER
GN	GRID NORTH	SSPRC	STORM SEWER PIPE REINFORCED CONCRETE
HES	HIGH EARLY STRENGTH	ST	STREET
HW	HIGH WATER	STR	STRUCTURE OR STRUCTURAL
HMA	HOT MIX ASPHALT	SEC	SUPERELEVATION
CWT	HUNDREDWEIGHT	T	TANGENT
HWD	HYDRANT	TEMP	TEMPORARY
INL	INLET	TI	TEMPORARY INTEREST
ID	INSIDE DIAMETER	TLE	TEMPORARY LIMITED EASEMENT
I	INTERSECTION ANGLE	+	TON
INV	INVERT	T/L	TRANSIT LINE
IP	IRON PIPE OR PIN	T	TRUCKS (PERCENT OF)
JT	JOINT	TYP	TYPICAL
LT	LEFT	USH	UNITED STATES HIGHWAY
LT	LENGTH OF CURVE	VAR	VARIABLE
LF	LINEAR FOOT	V	VELOCITY OF DESIGN SPEED
LP	LOW POINT	VERT	VERTICAL
LS	LUMP SUM	VC	VERTICAL CURVE
MH	MANHOLE	VOL	VOLUME
MAX	MAXIMUM	WM	WATERMAIN
Mgal	MEGAGALLON	WV	WATER VALVE
MPH	MILES PER HOUR	W	WEST
MIN	MINIMUM	WB	WESTBOUND
MON	MOUNMENT	YD	YARD

ORDER OF SECTION 2 SHEETS

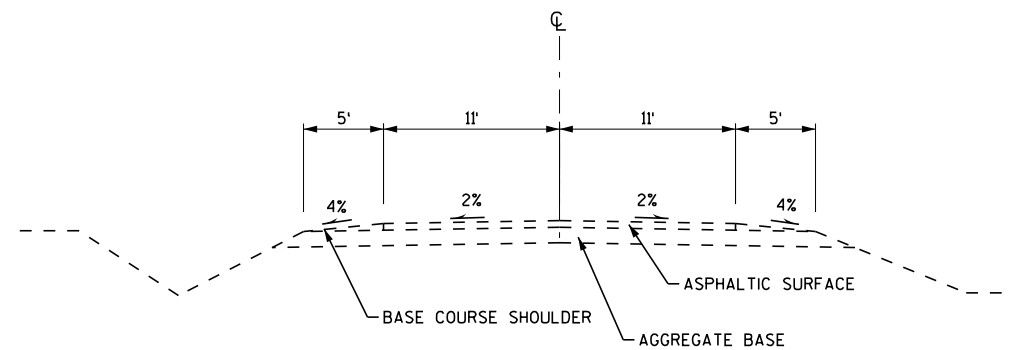
- GENERAL NOTES
- PROJECT OVERVIEW
- TYPICAL SECTIONS
- CONSTRUCTION DETAILS
- EROSION CONTROL PLAN
- PERMANENT SIGNING / PAVEMENT MARKING PLAN
- DETOUR PLAN





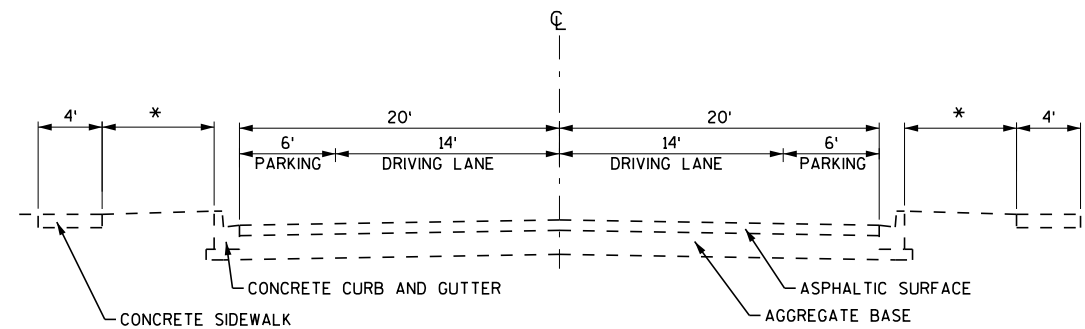
**STH 59
TYPICAL EXISTING SECTION**

STA 53+08 TO STA 268+00 STA 640+00 TO STA 654+00
 STA 277+00 TO STA 348+81 STA 664+00 TO STA 679+00
 STA 349+00 TO STA 429+55 STA 688+00 TO STA 711+24
 STA 429+81 TO STA 555+00 STA 711+43 TO STA 748+00
 STA 605+60 TO STA 628+00



**STH 59
TYPICAL EXISTING SECTION**

STA 789+00 TO STA 980+00

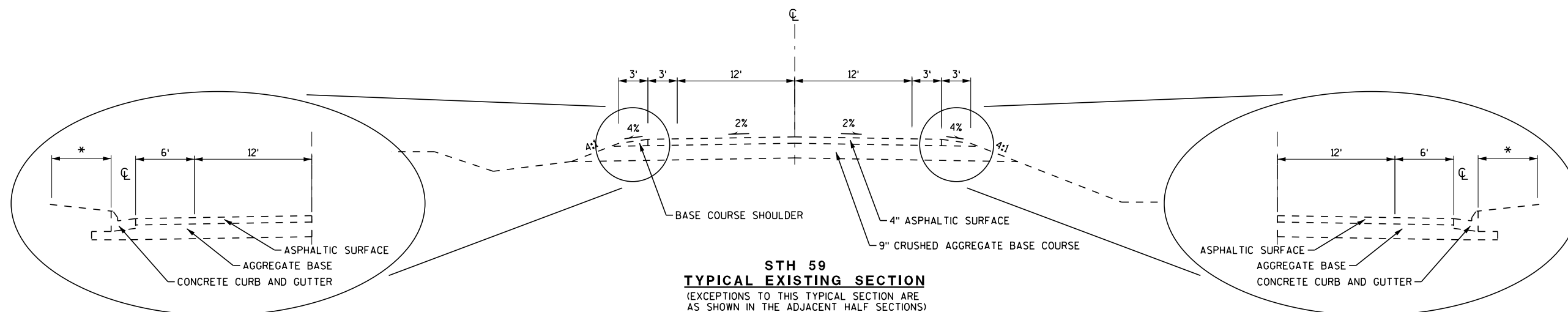


**STH 59/MAIN STREET/MECHANIC STREET
TYPICAL EXISTING SECTION**

STA 748+00 TO STA 758+72
 STA 760+10 TO STA 789+00

* TERRACE WIDTH AND SIDEWALK LOCATION VARIES

EXISTING BUILDING FACES ARE PRESENT AT BACK OF WALK FROM STA 760+10 TO STA 764+00
 CONCRETE MEDIAN AND ADDITIONAL 6 FEET OF PAVEMENT WIDTH EXIST FROM STA 765+00 TO 766+00



**STH 59
TYPICAL EXISTING HALF SECTION**

STA 558+00 TO STA 565+00 LT
 STA 584+00 TO STA 587+00 LT
 STA 600+00 TO STA 604+00 LT

**STH 59
TYPICAL EXISTING SECTION**

(EXCEPTIONS TO THIS TYPICAL SECTION ARE
 AS SHOWN IN THE ADJACENT HALF SECTIONS)

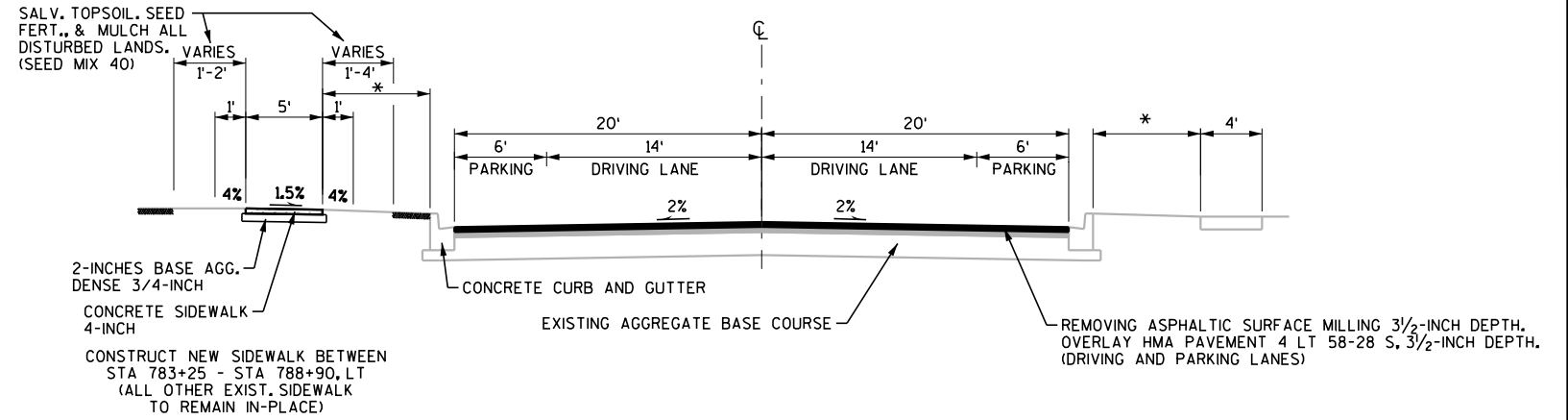
STA 268+00 TO STA 277+00
 STA 348+81 TO STA 349+00
 STA 429+55 TO STA 429+81
 STA 555+00 TO STA 605+60
 STA 628+00 TO STA 640+00
 STA 654+00 TO STA 664+00
 STA 679+00 TO STA 688+00
 STA 711+24 TO STA 711+43

**STH 59
TYPICAL EXISTING HALF SECTION**

STA 558+00 TO STA 565+00 RT
 STA 659+00 TO STA 662+67 RT
 STA 682+00 TO STA 686+67 RT
 STA 600+00 TO STA 604+00 RT
 STA 731+00 TO STA 737+00 RT

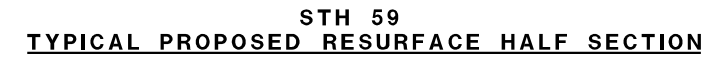
* BLOCK RETAINING WALL EXISTS FROM STA 559+50 TO STA 562+75 RT
 6 FT BEHIND BACK OF CURB

2 |

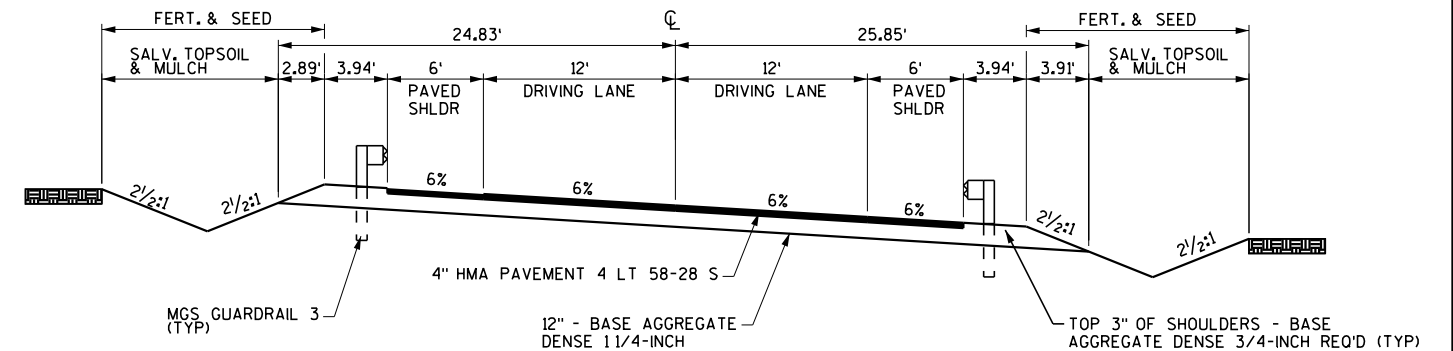


STH 59/MAIN STREET/MECHANIC STREET
TYPICAL PROPOSED RESURFACE SECTION

B-23-096 IS LOCATED BETWEEN STA 758+72 AND STA 760+10



** BLOCK RETAINING WALL EXISTS AT STA 559+50 TO STA 562+75 RT 6 FT BEHIND BACK OF CURB

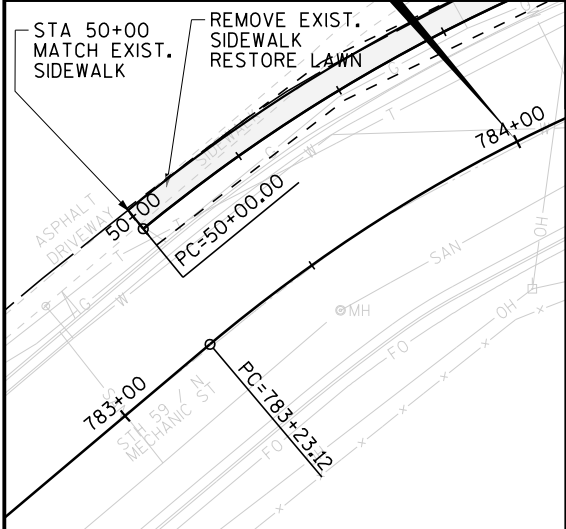
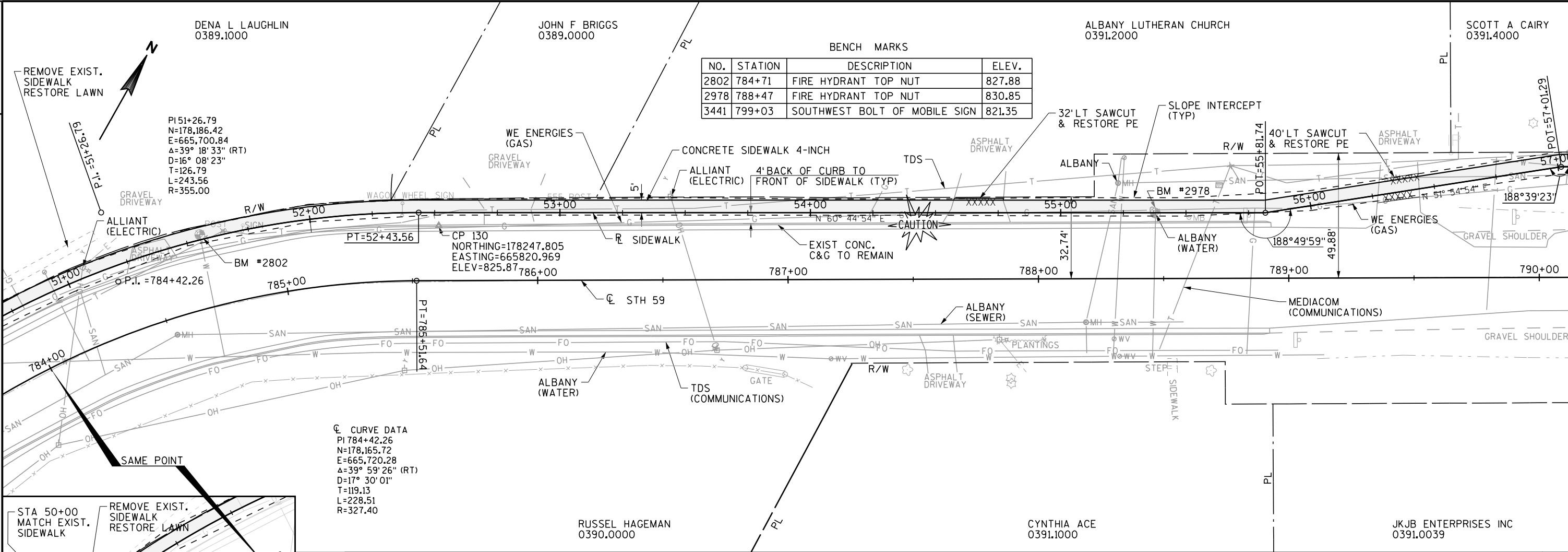


STH 59
TYPICAL PROPOSED SUPERELEVATED SECTION

STA 222+00 TO STA 225+00

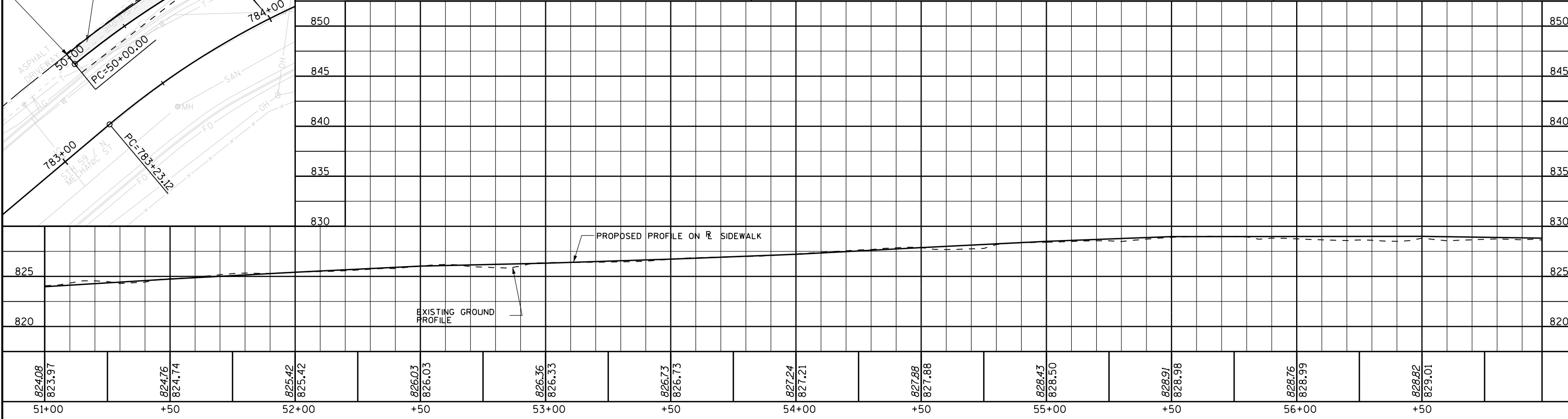
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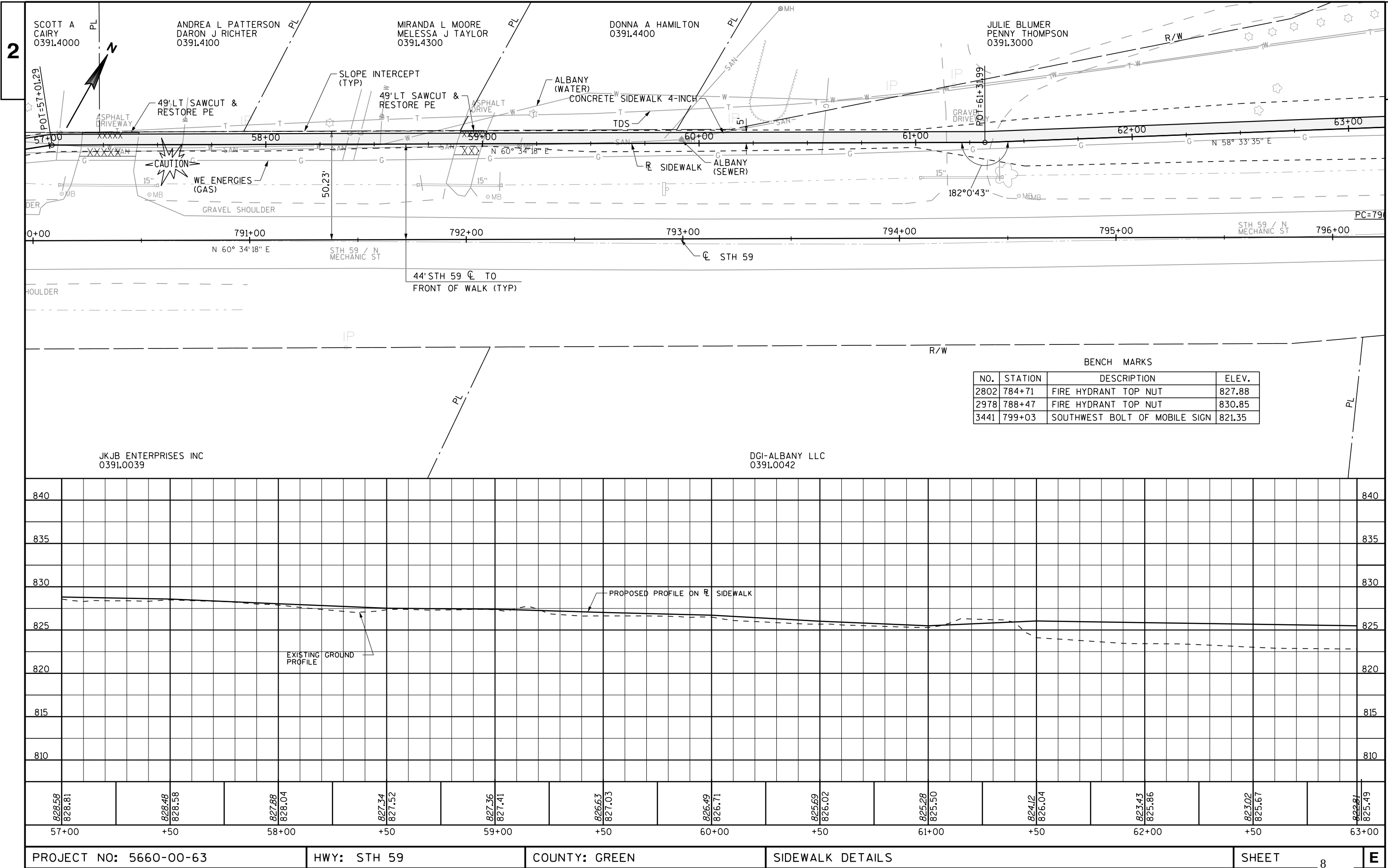
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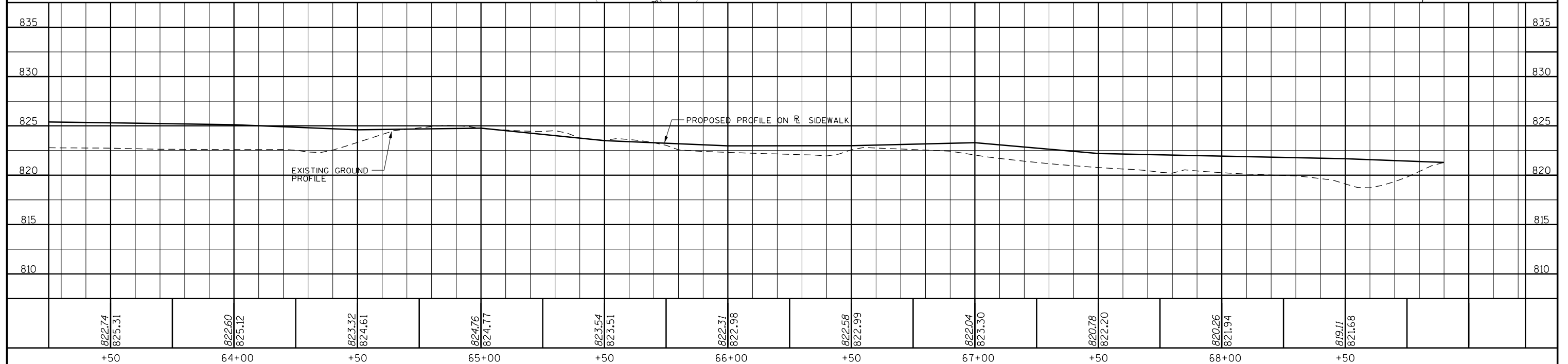
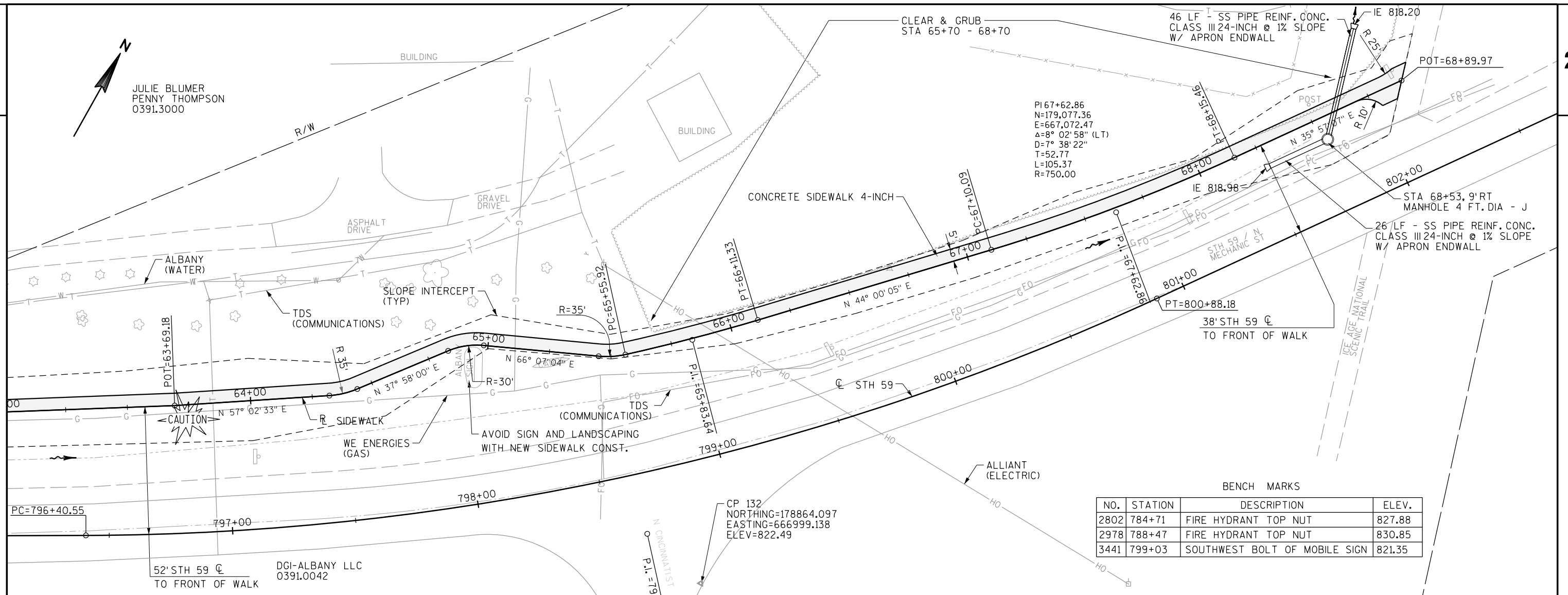


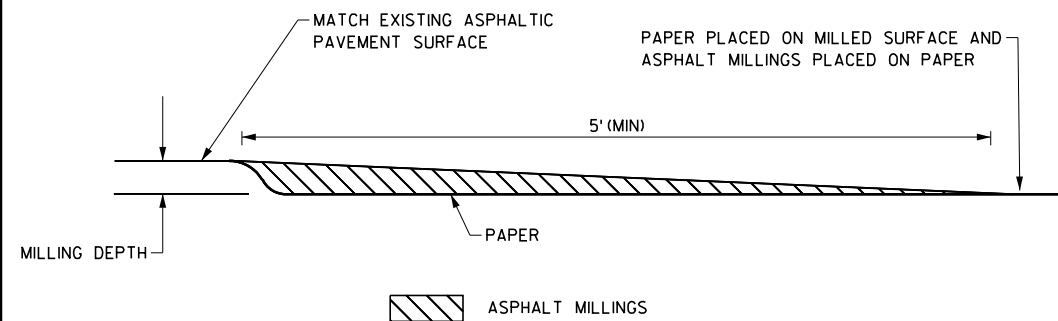
Q CURVE DATA
PI 784+42.26
N=178,165.72
E=665,720.28
Δ=39° 59' 26" (RT)
D=17° 30' 01"
T=119.13
L=228.51
R=327.40

NO.	STATION	DESCRIPTION	ELEV.
2802	784+71	FIRE HYDRANT TOP NUT	827.88
2978	788+47	FIRE HYDRANT TOP NUT	830.85
3441	799+03	SOUTHWEST BOLT OF MOBILE SIGN	821.35



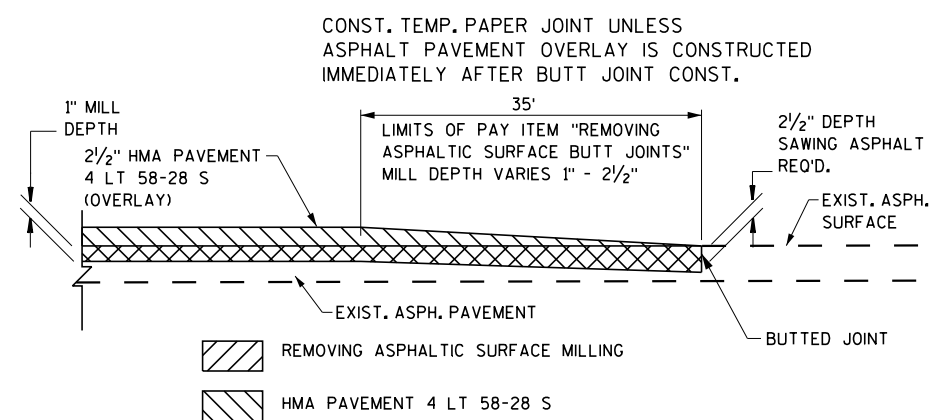




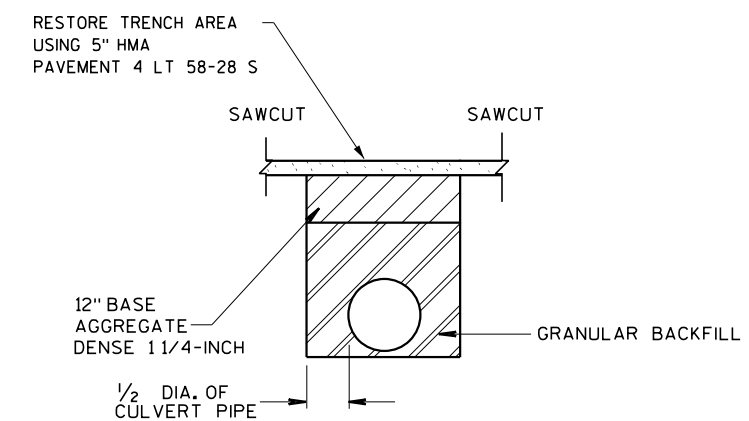


TYPICAL TEMPORARY PAPER JOINT DETAIL

COST IS INCIDENTAL TO THE ITEM OF SALVAGE ASPHALTIC PAVEMENT MILLING

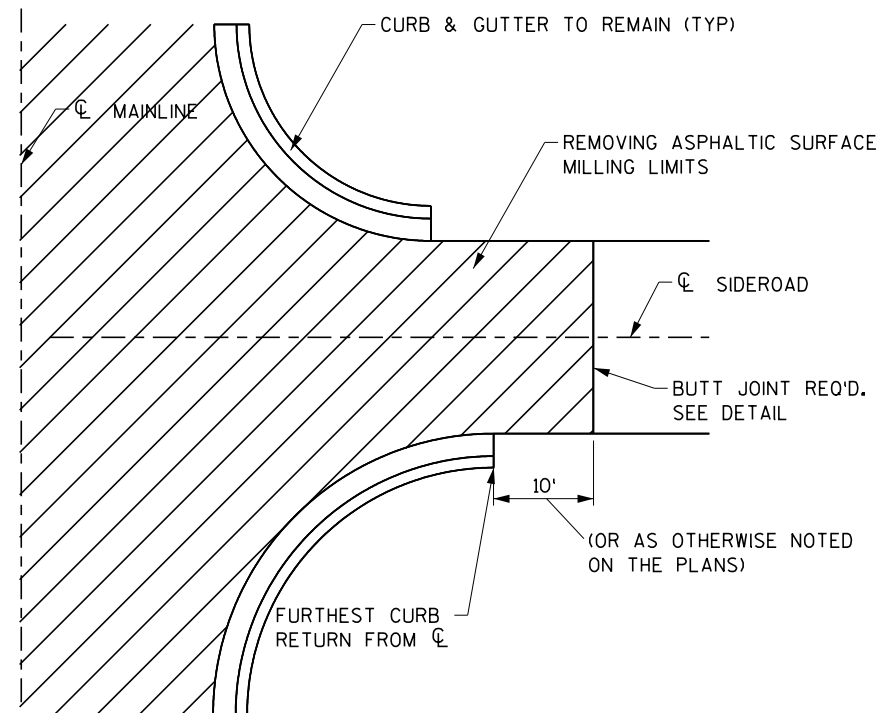


MAINLINE BUTT JOINT DETAIL

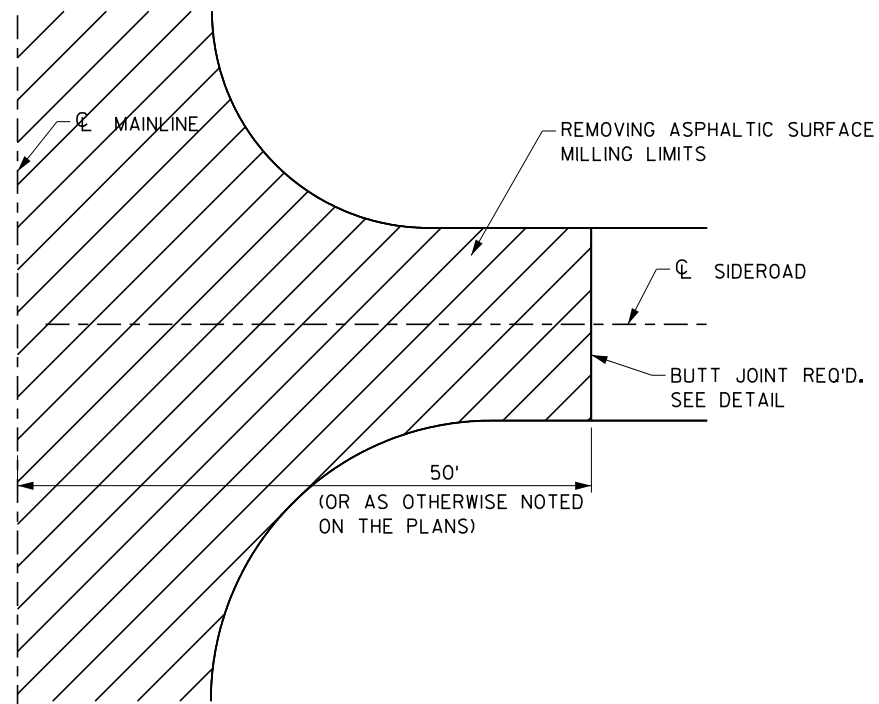


DETAIL FOR CULVERT PIPE INSTALLATION IN AREAS OF EXISTING PAVEMENT

2

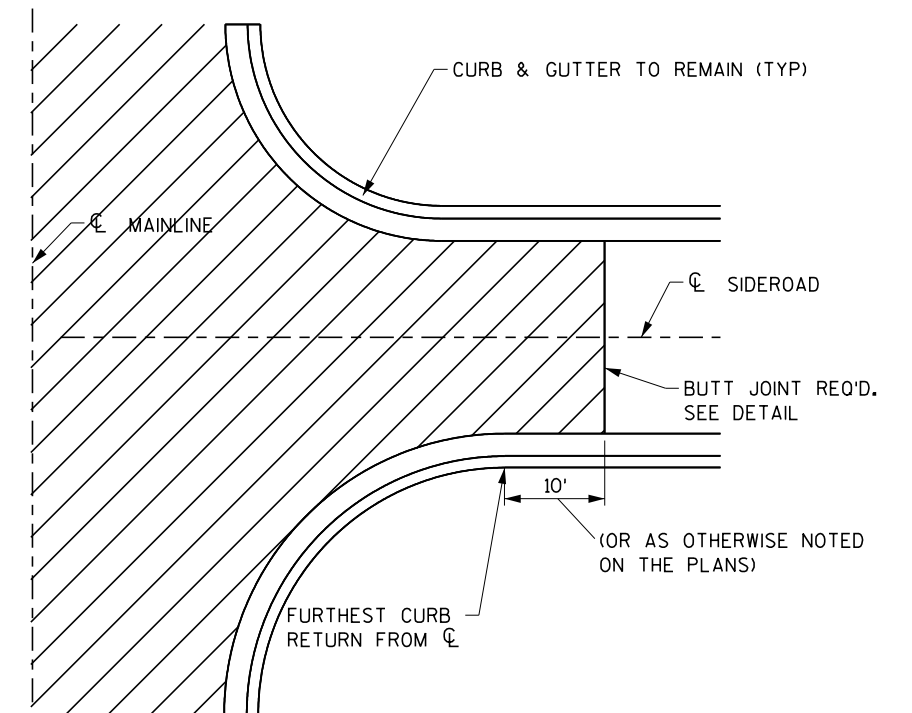


RURAL SIDEROAD DETAIL - WITH CURB & GUTTER

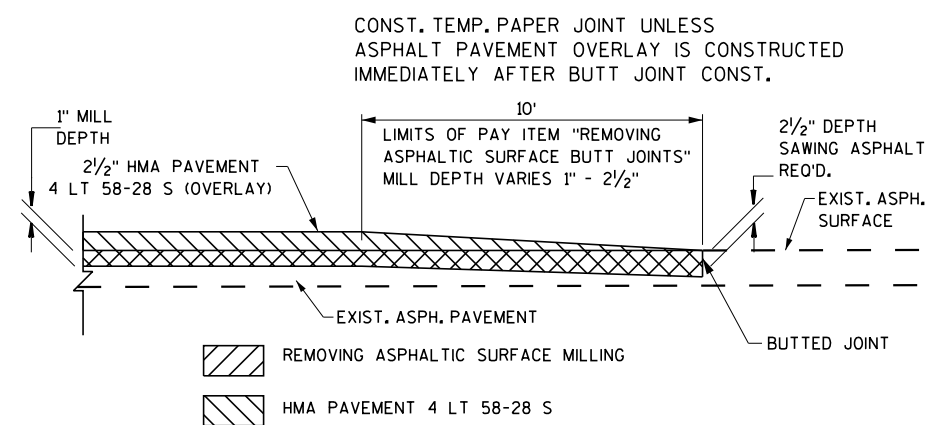


RURAL SIDEROAD DETAIL - NO CURB & GUTTER

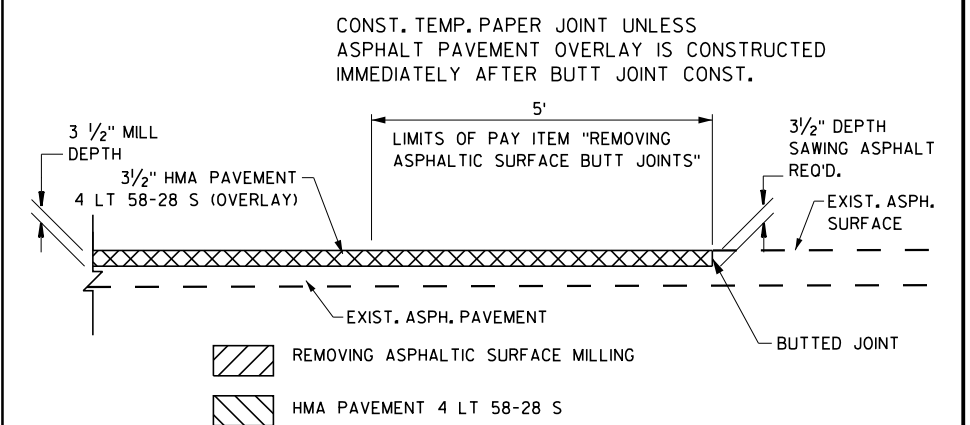
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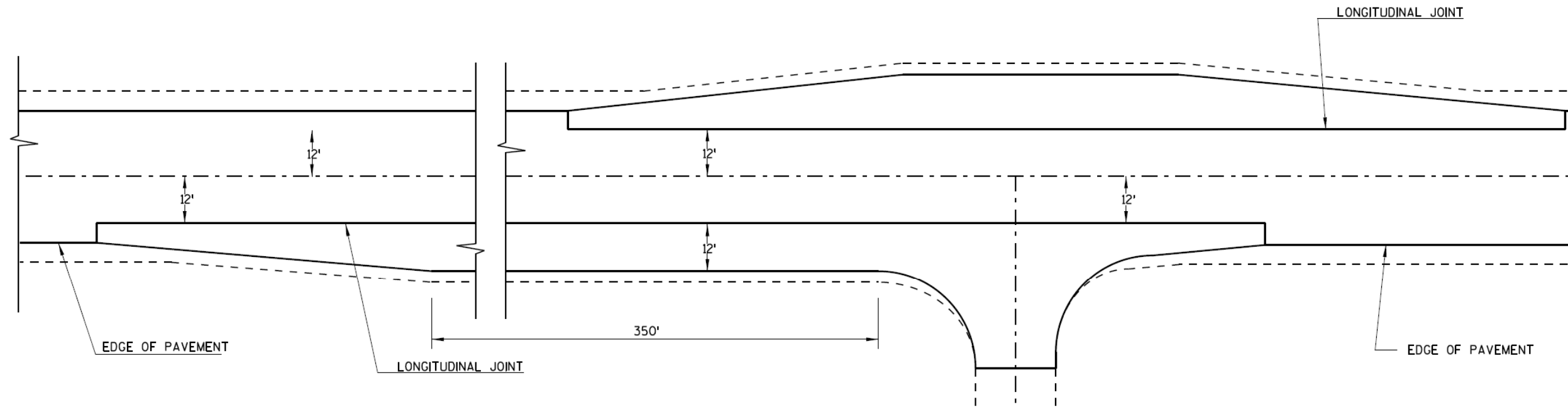
URBAN SIDEROAD DETAIL



RURAL SIDE ROAD BUTT JOINT DETAIL

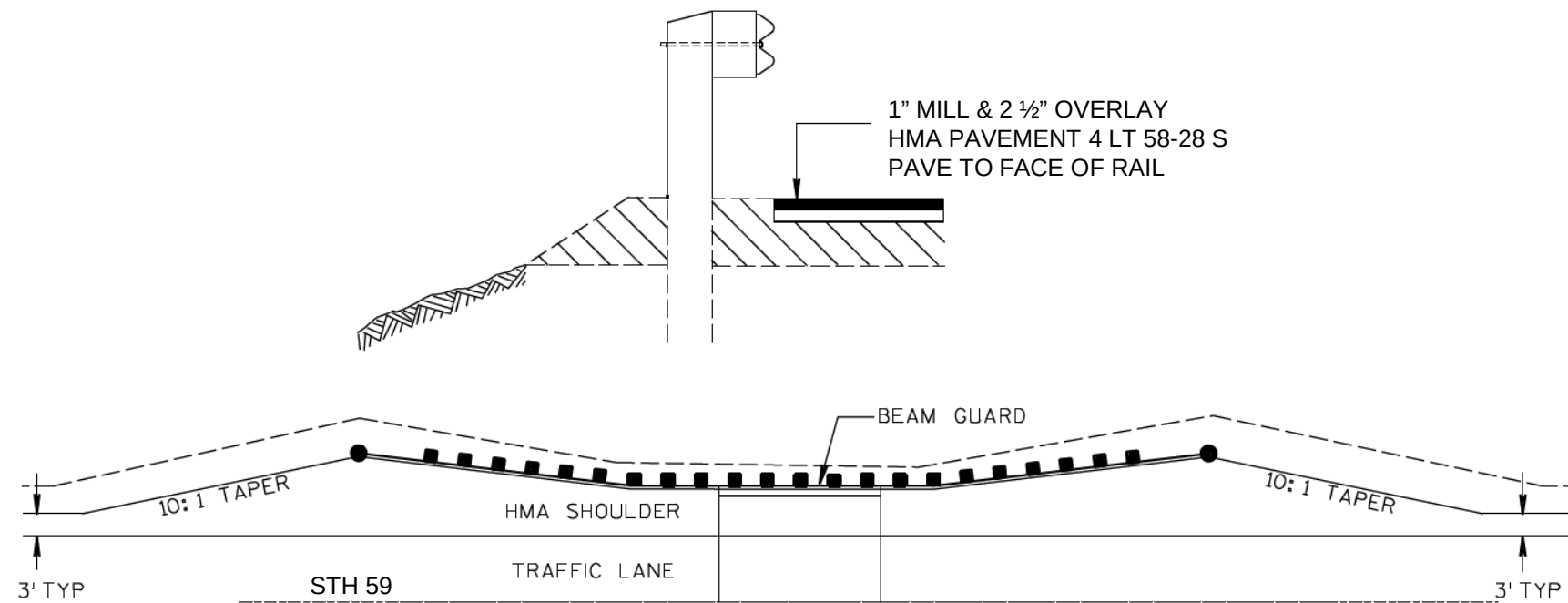


URBAN SIDE ROAD BUTT JOINT DETAIL

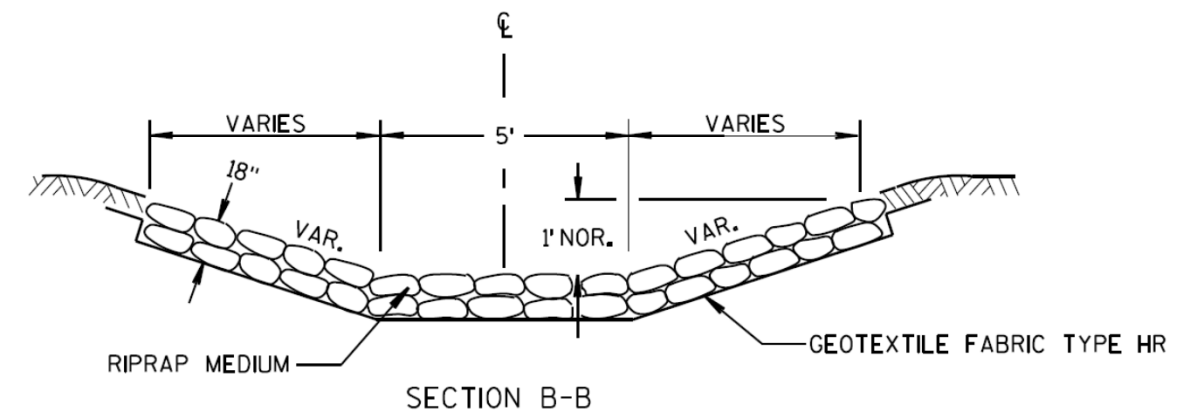
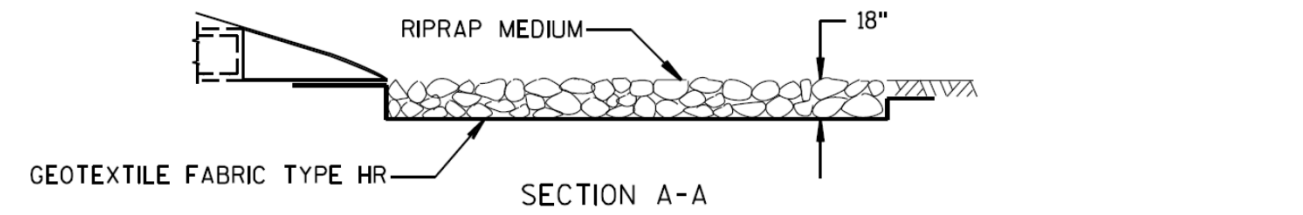
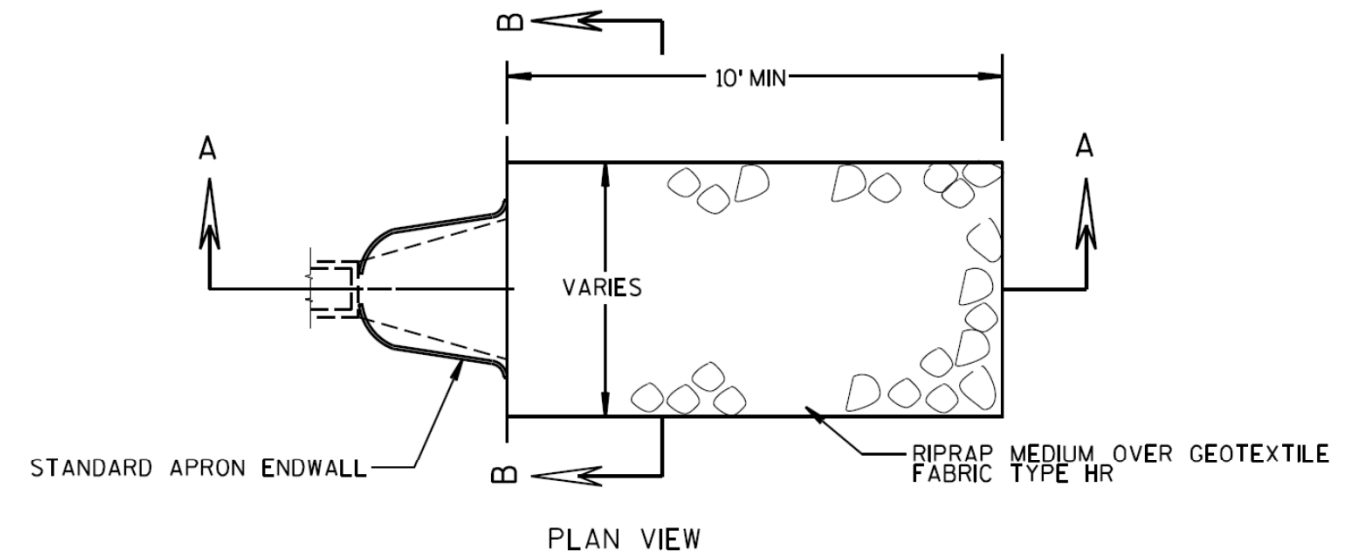


HMA LONGITUDINAL JOINT DETAIL *

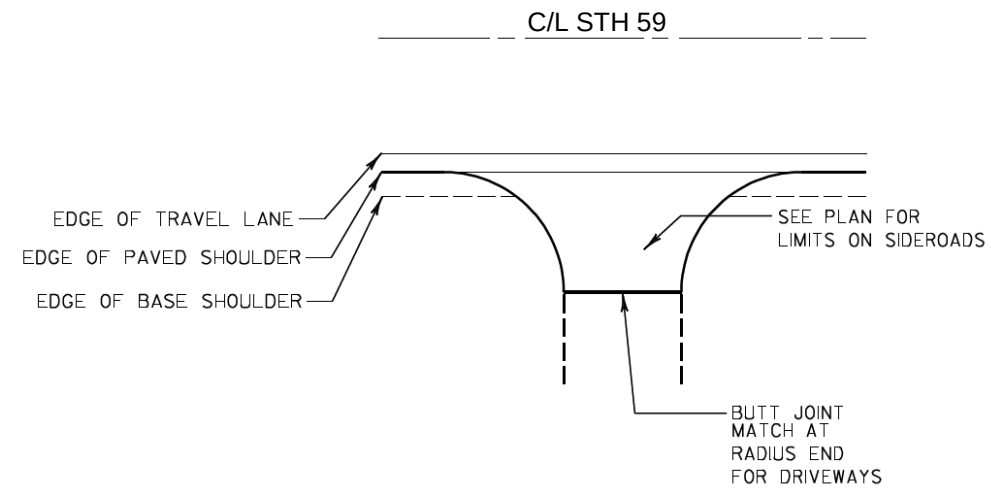
* TO BE USED AT ALL INTERSECTIONS, BYPASS,
PASSING LANE AND RURAL CURB SECTIONS



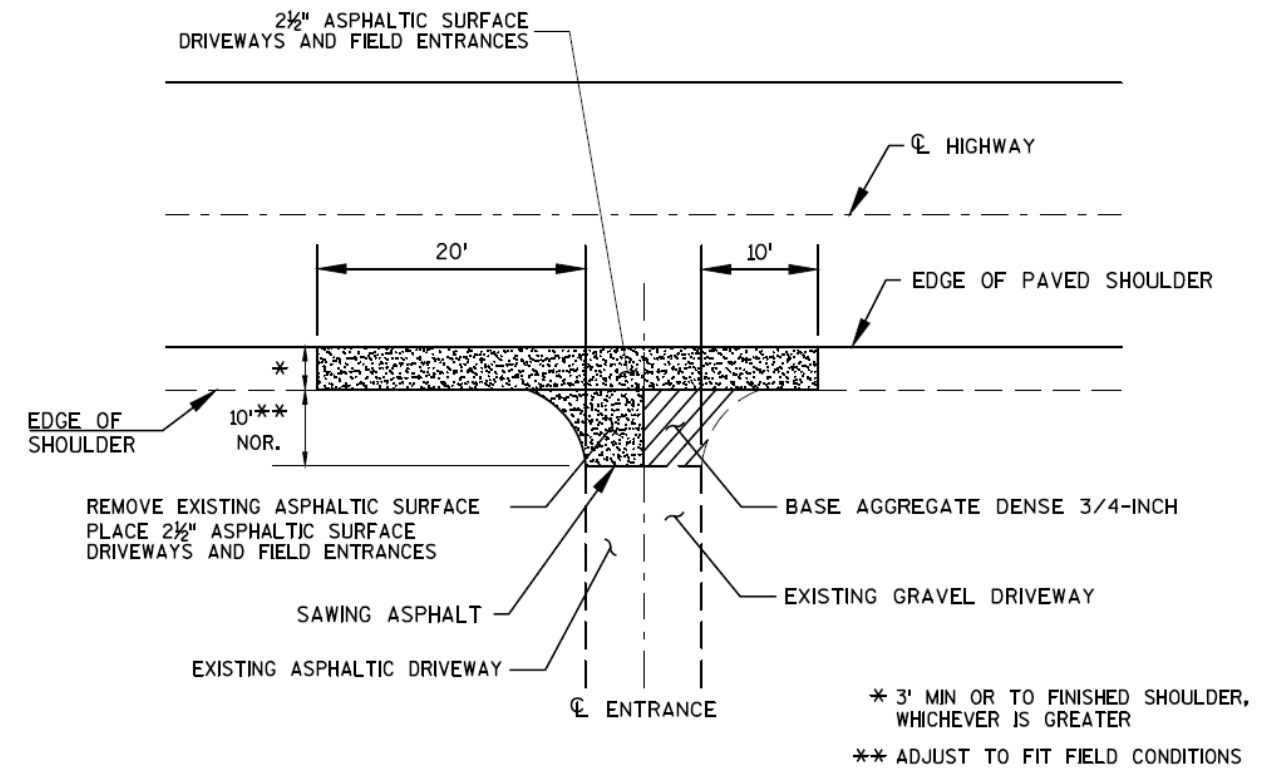
DETAIL FOR ASPHALTIC SHOULDER AT BEAM GUARD



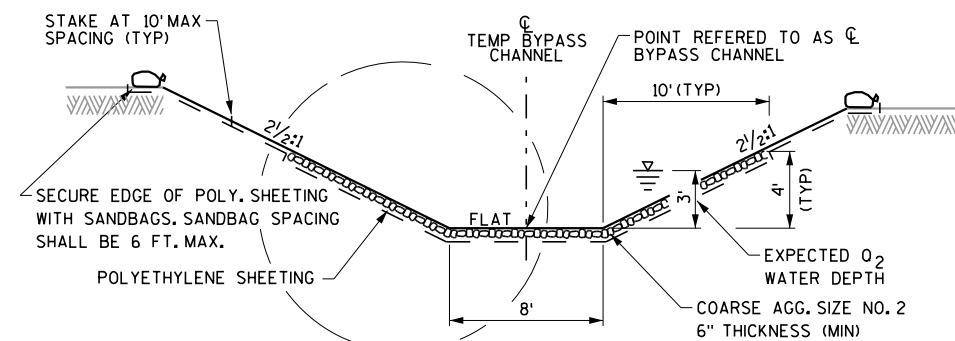
RIPRAP MEDIUM OVER GEOTEXTILE FABRIC TYPE HR DETAIL
SCALE: NONE



BUTT JOINT LOCATION AT PAVED DRIVEWAYS

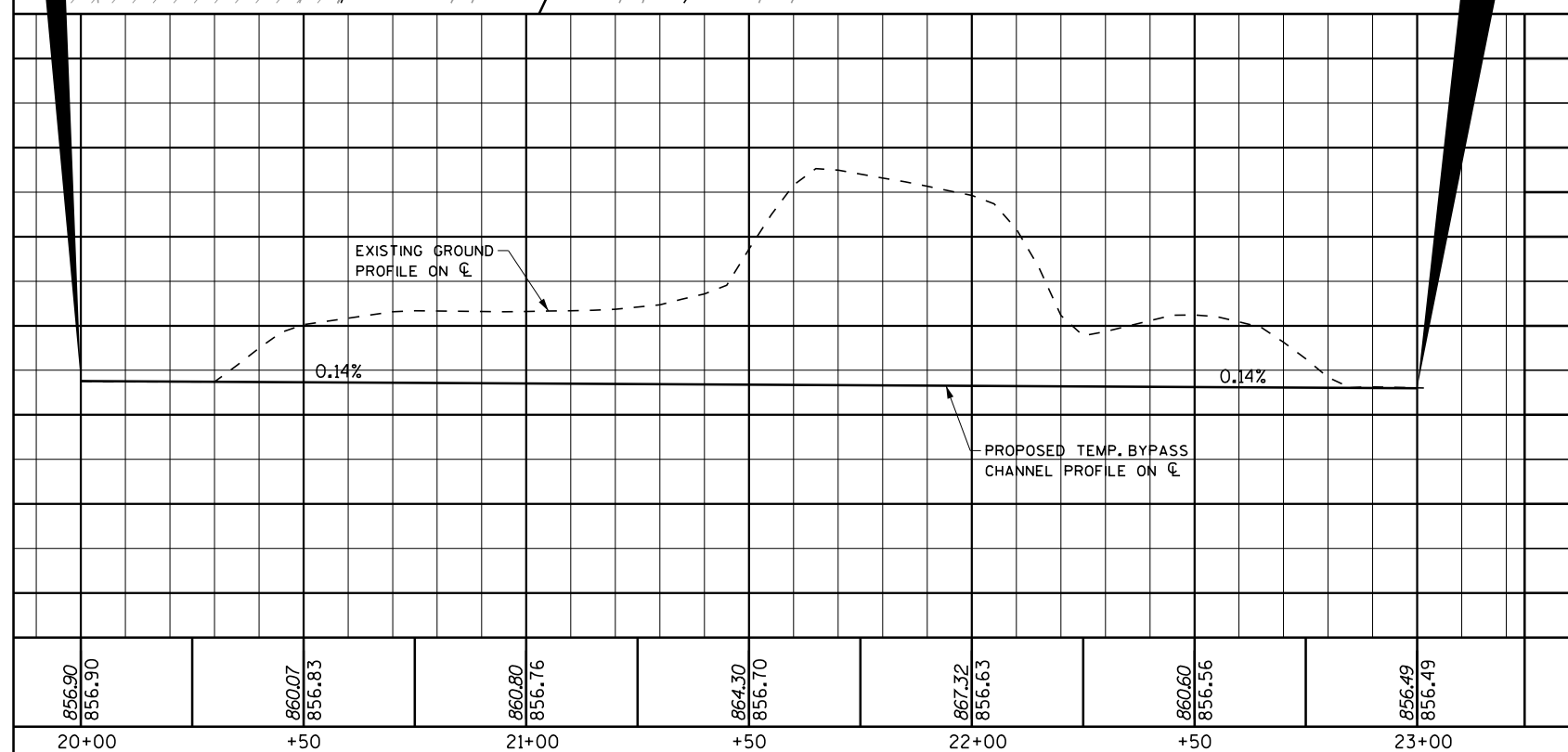
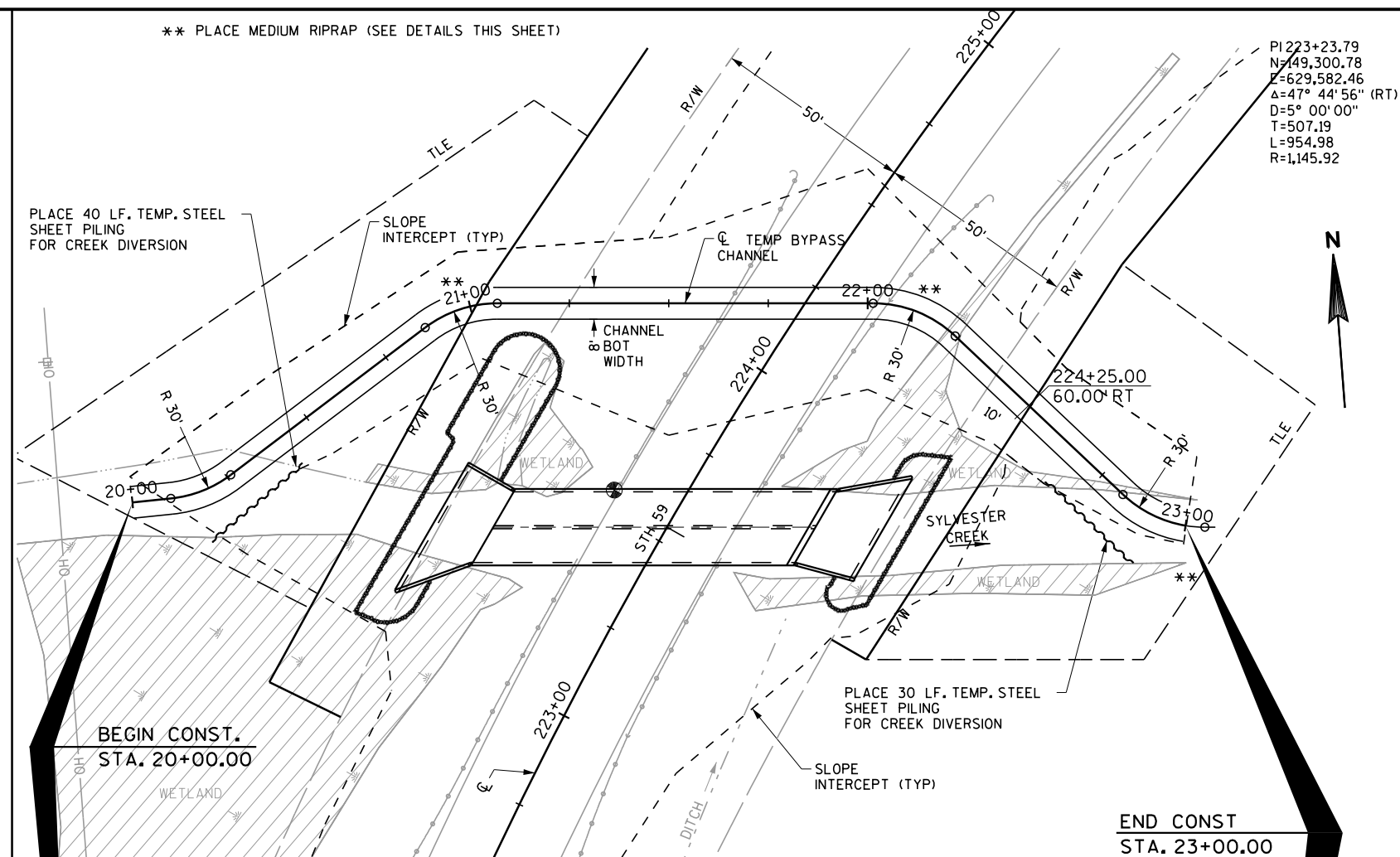


RURAL DRIVEWAY DETAIL



BENCH MARKS				
NO.	STATION	DESCRIPTION	OFFSET	ELEV.
202	223+55	CHISELED SQUARE ON WINGWALL	16' LT	868.44

** PLACE MEDIUM RIPRAP (SEE DETAILS THIS SHEET)



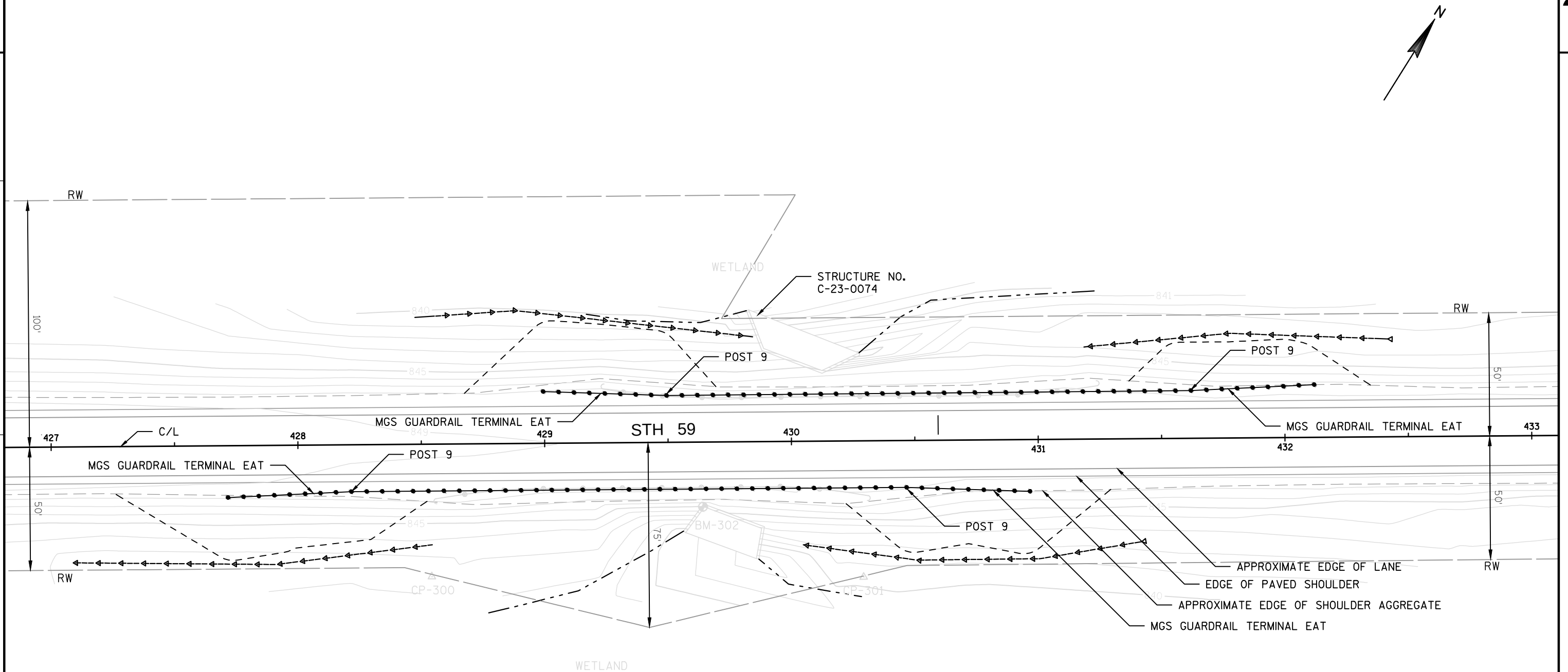


LEGEND

----- APPROXIMATE SLOPE INTERCEPT

←←←←← SILTS FENCE

●●●●● STEEL PLATE BEAM GUARD CLASS A



LEGEND

	APPROXIMATE SLOPE INTERCEPT
	WETLAND BOUNDARY
	SILT FENCE
	MGS GUARDRAIL 3

TranSmart
TECHNOLOGIES

PROJECT NO: 5660-00-63

HWY: STH 59

COUNTY: GREEN

PLAN DETAIL - STA 427+00 - 433+00

SHEET

17

E

FILE NAME : P:\STH 59 - BAXTER WOODMAN\CADD\C3D\SHEETS\PLAN\SITE_3-R.DWG

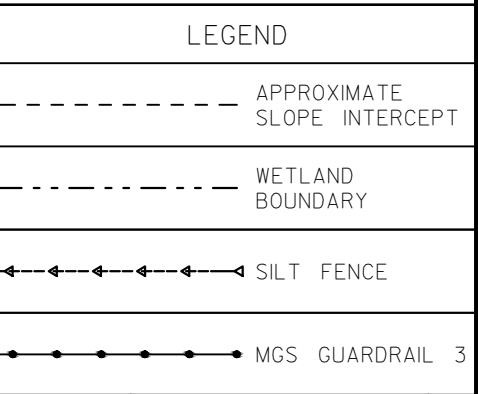
PLOT DATE : 12/4/2015 11:50 AM

PLOT BY : JUSTIN WEISS

PLOT NAME :

PLOT SCALE : 1 IN:40 FT

WISDOT/CADD SHEET 42

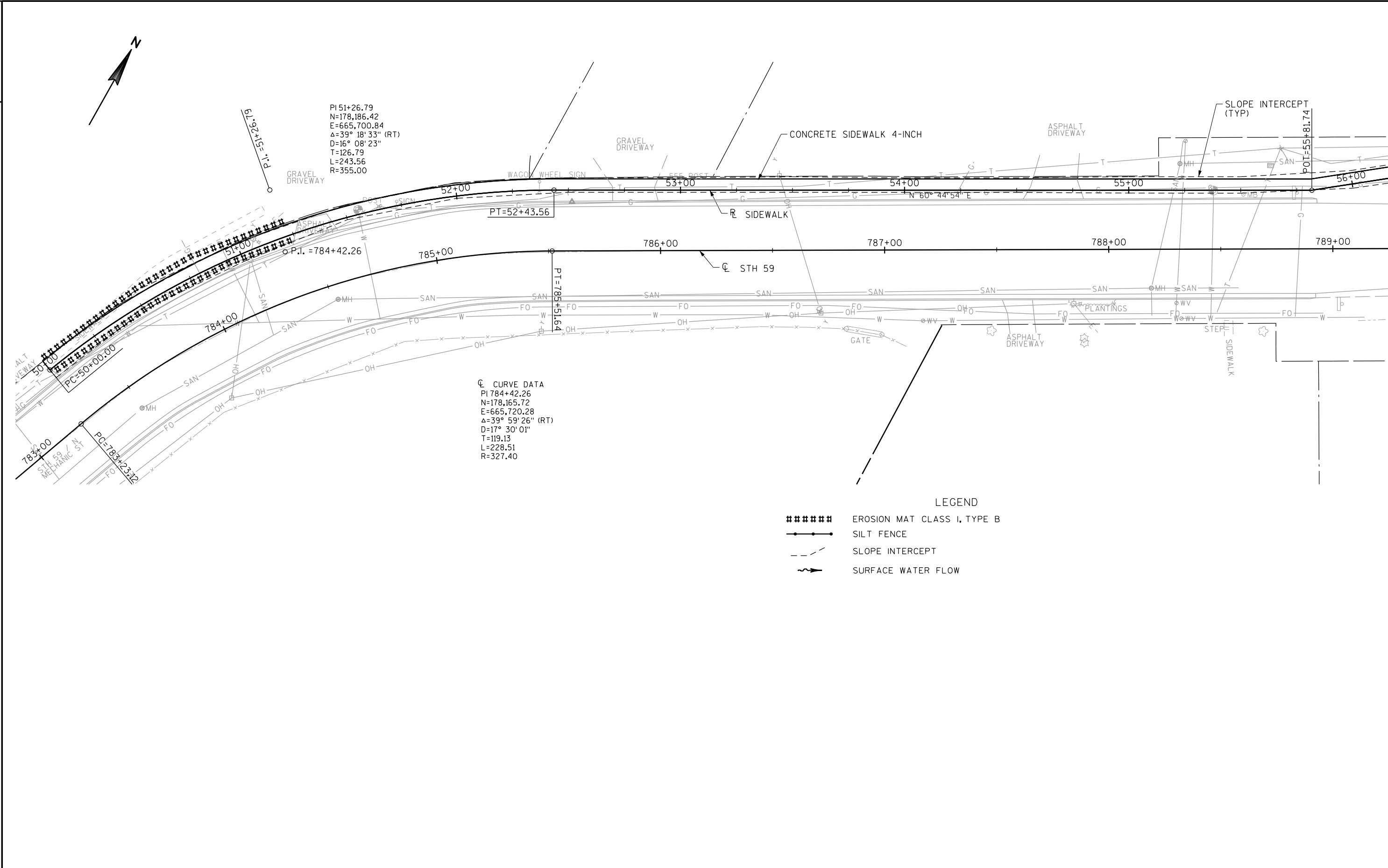




TranSmart
TECHNOLOGIES

2

1000



PROJECT NO: 5660-00-63

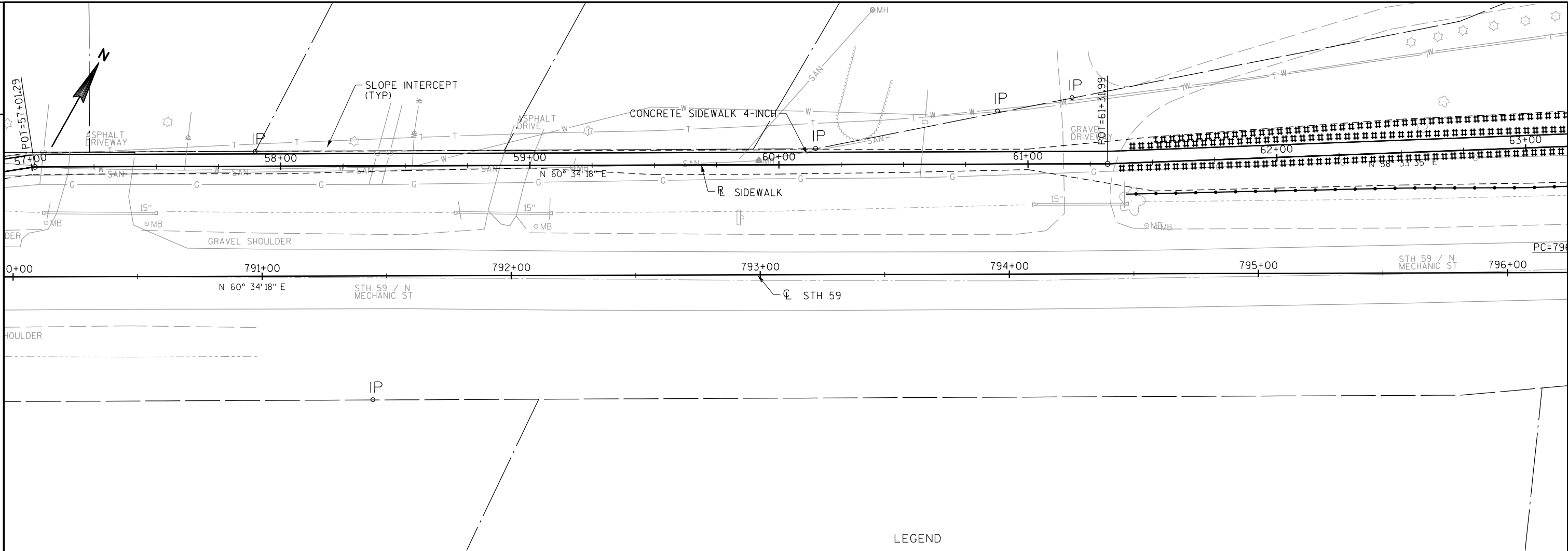
HWY: STH 59

COUNTY: GREEN

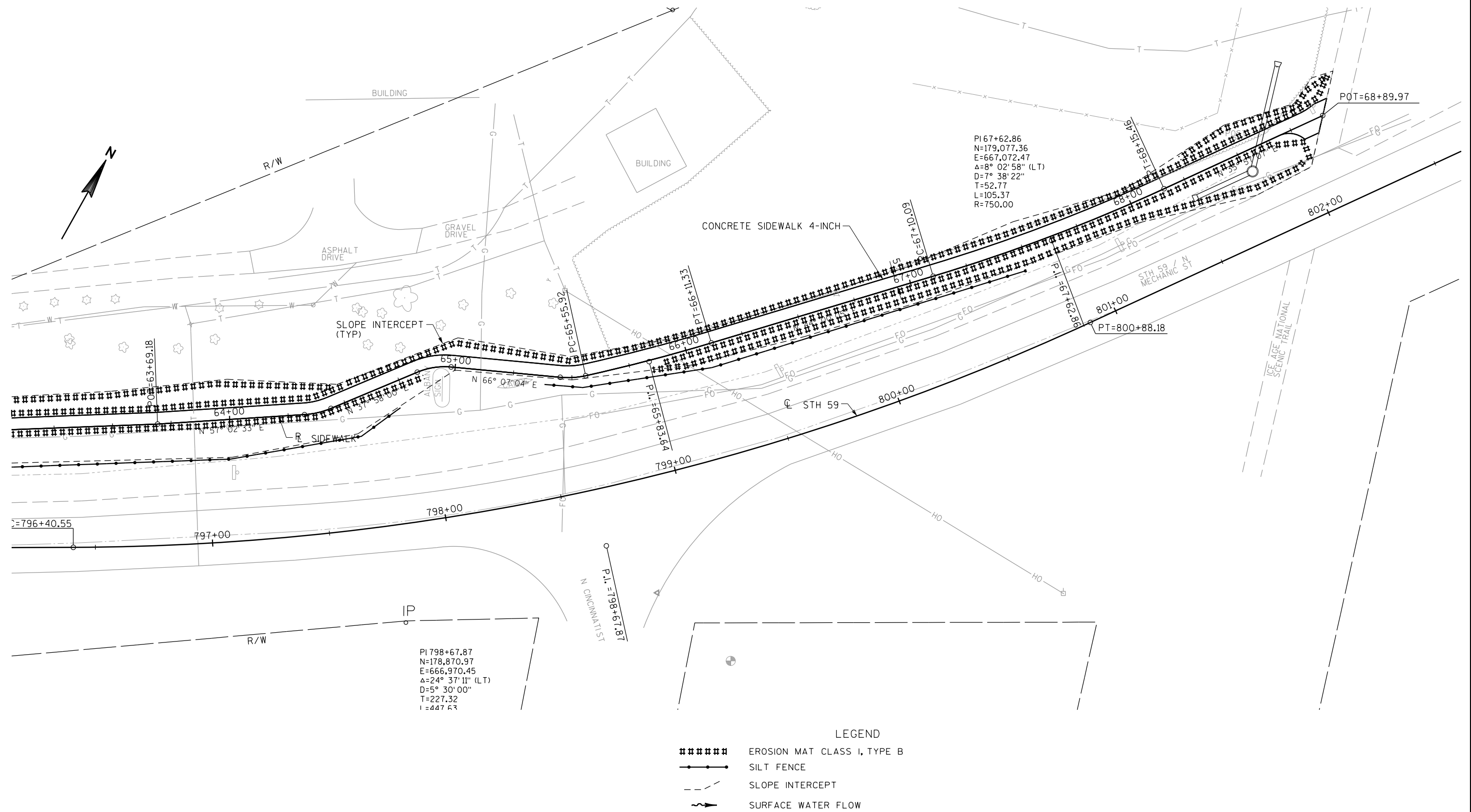
EROSION CONTROL PLAN

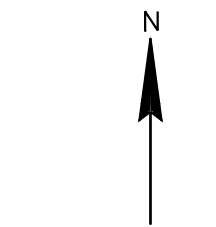
SHEET 20

E



- LEGEND
- ##### EROSION MAT CLASS I, TYPE B
 - SILT FENCE
 - - - SLOPE INTERCEPT
 - ~> SURFACE WATER FLOW





BEGIN PROJECT
STA. 53+08.00

55+00



60+00



STH 59

65+00

70+00

GREENBUSH
ROAD



75+00

NOTES

1. ALL SIGNS/SIGN POSTS SHOWN ON THIS SHEET ARE TO BE REMOVED AND REPLACED UNLESS OTHERWISE NOTED.
2. SIGNS WITHIN THE PROJECT LIMITS NOT SHOWN ON THIS SHEET ARE TO REMAIN IN PLACE.
3. GREY SIGNS INDICATE EXIST SIGNS.
BLACK SIGNS INDICATE NEW/REPLACEMENT SIGNS.
4. W1-8 SIGNS THIS SHEET ARE NEW/ADDITIONAL SIGNS AT NEW LOCATIONS.



80+00

85+00



STH 59

90+00

W1-2R
30" X 30"



50
M.P.H.
REMOVE

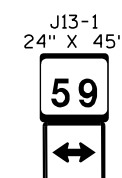


W1-2R
30" X 30"

JEHOVAH'S WITNESSES



J4-1
24" X 36"



J13-1
24" X 45"



J13-1
24" X 45"

CTH DR

HANGER
ROAD



RI-1
30" X 30"



J4-1
24" X 36"



W1-8
18" X 24"



W1-8
18" X 24"



W1-8
18" X 24"



W1-8
(2 EACH)



J1-1
24" X 39"

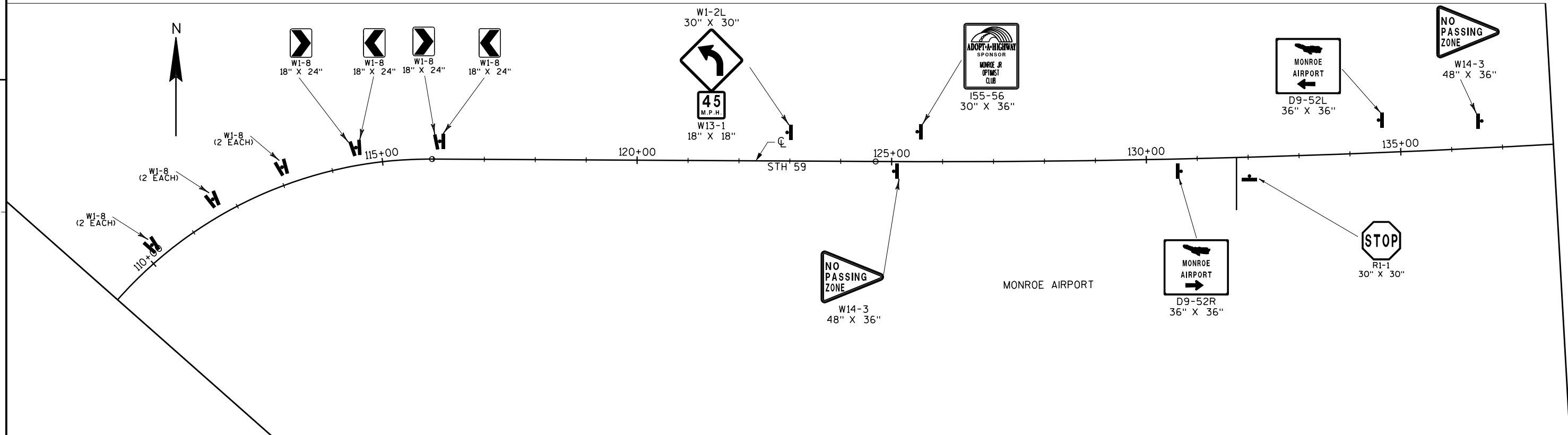


W1-8
(2 EACH)

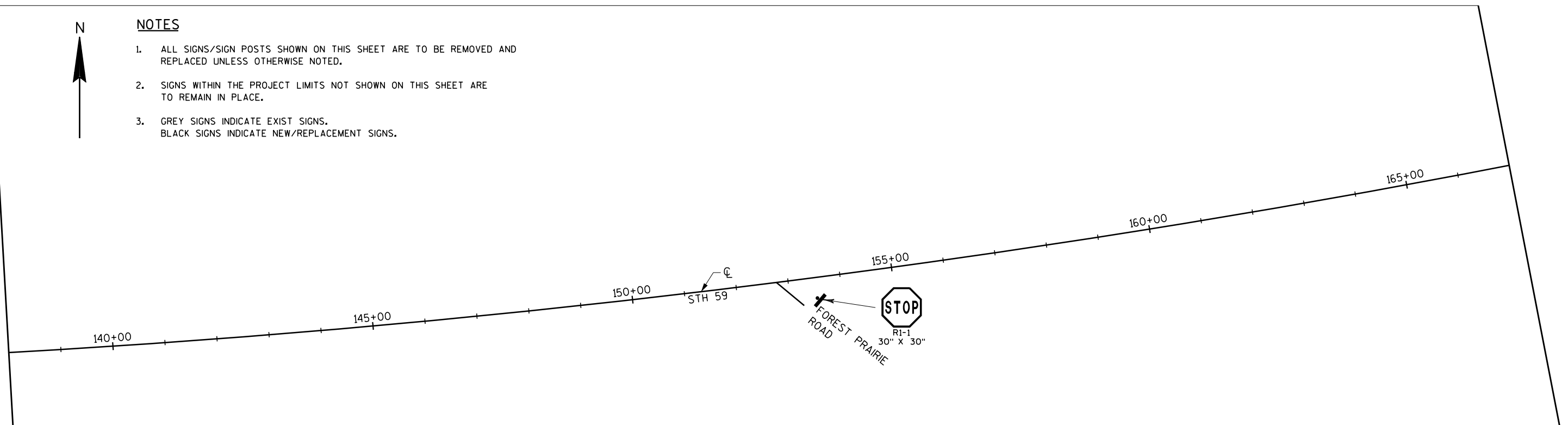


RI-1
30" X 30"

MONROE
SYLVESTER
ROAD

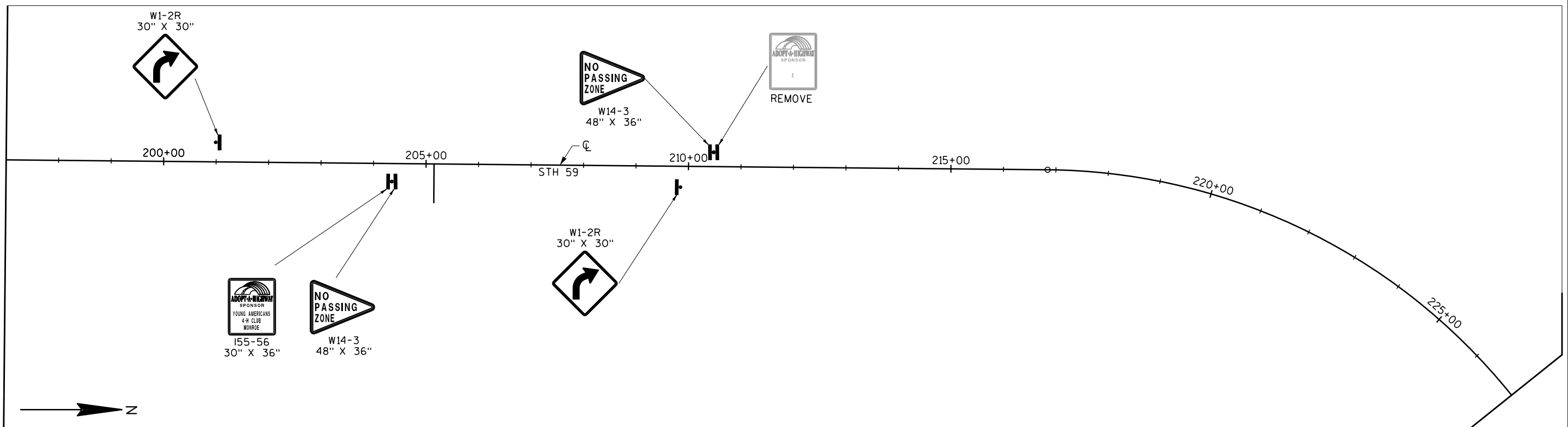
**NOTES**

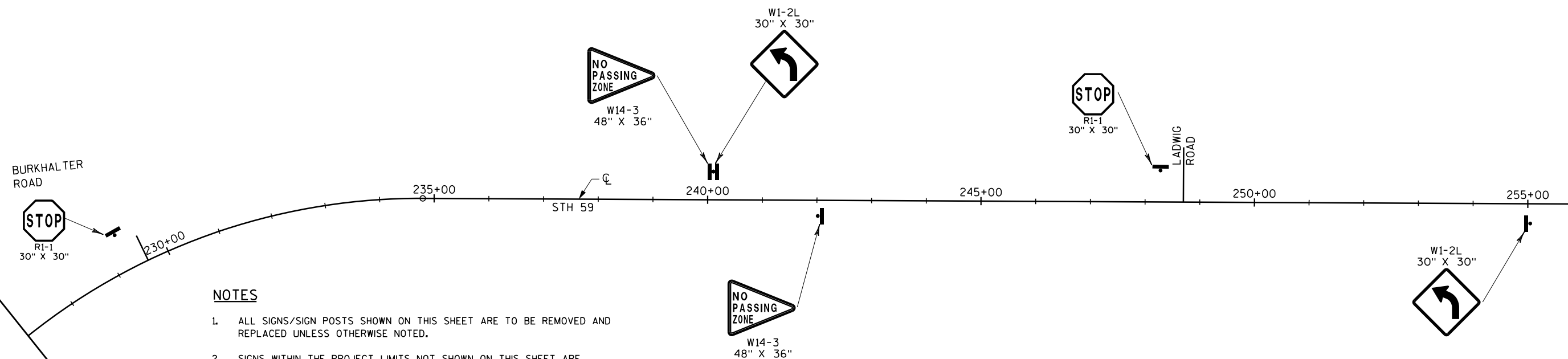
1. ALL SIGNS/SIGN POSTS SHOWN ON THIS SHEET ARE TO BE REMOVED AND REPLACED UNLESS OTHERWISE NOTED.
2. SIGNS WITHIN THE PROJECT LIMITS NOT SHOWN ON THIS SHEET ARE TO REMAIN IN PLACE.
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BLACK SIGNS INDICATE NEW/REPLACEMENT SIGNS.



**NOTES**

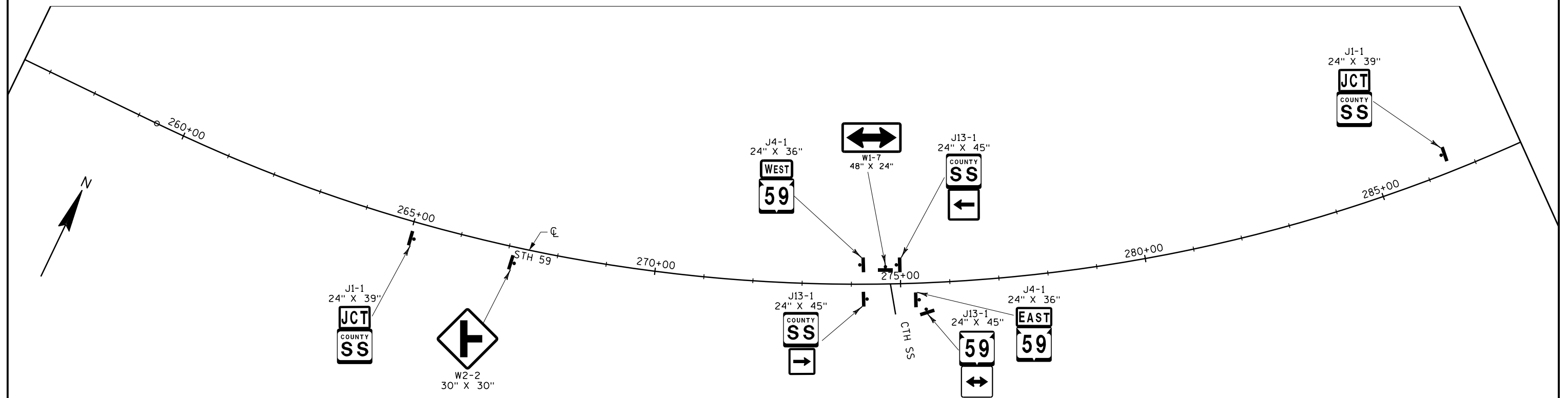
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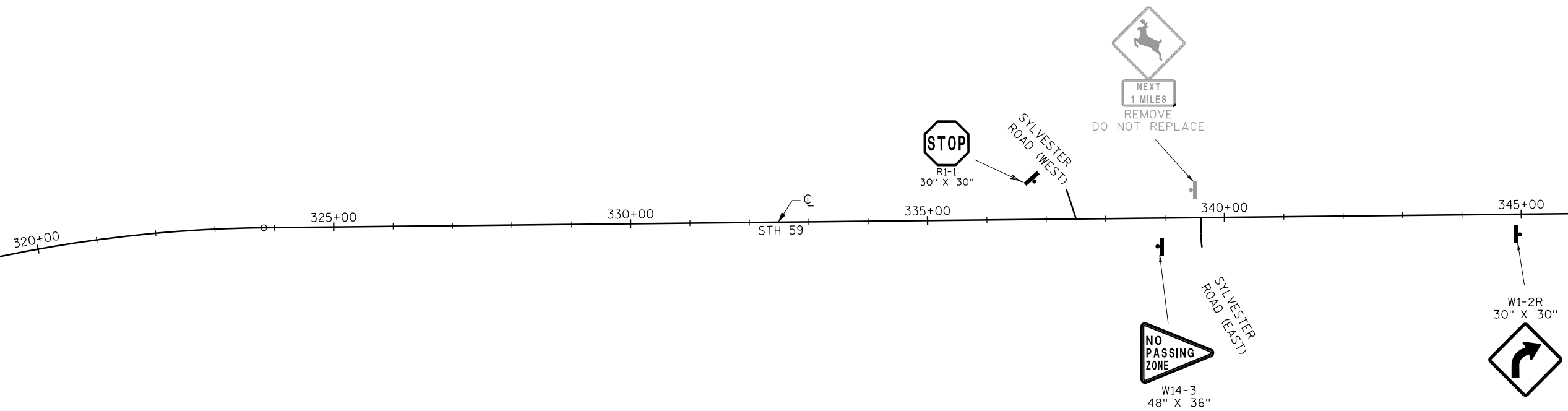
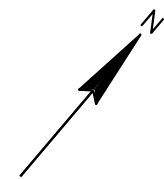
NOTES

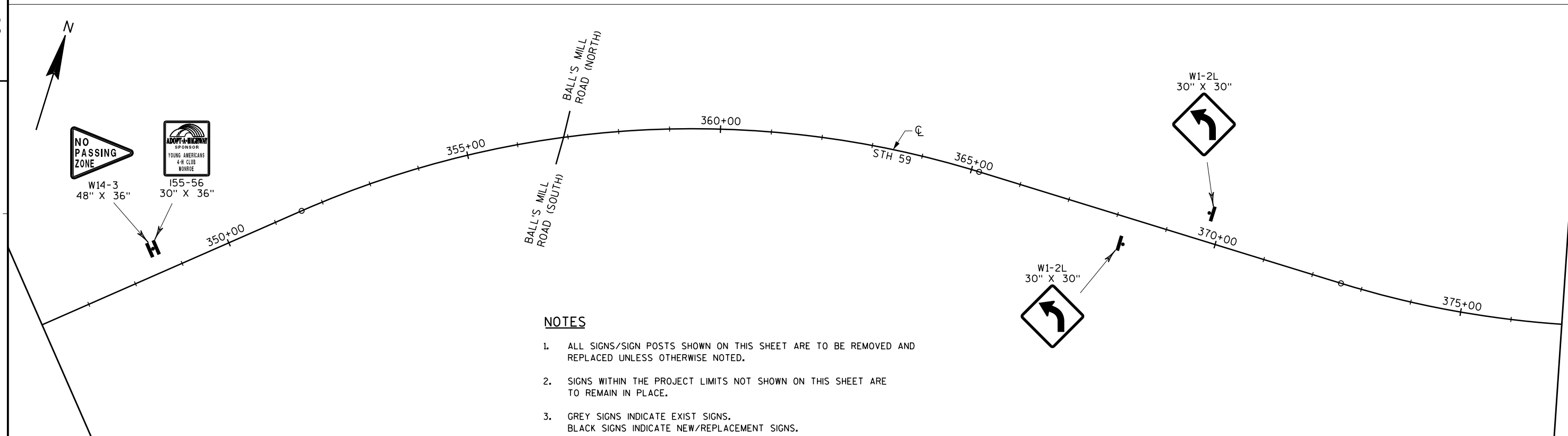
1. ALL SIGNS/SIGN POSTS SHOWN ON THIS SHEET ARE TO BE REMOVED AND REPLACED UNLESS OTHERWISE NOTED.
2. SIGNS WITHIN THE PROJECT LIMITS NOT SHOWN ON THIS SHEET ARE TO REMAIN IN PLACE.
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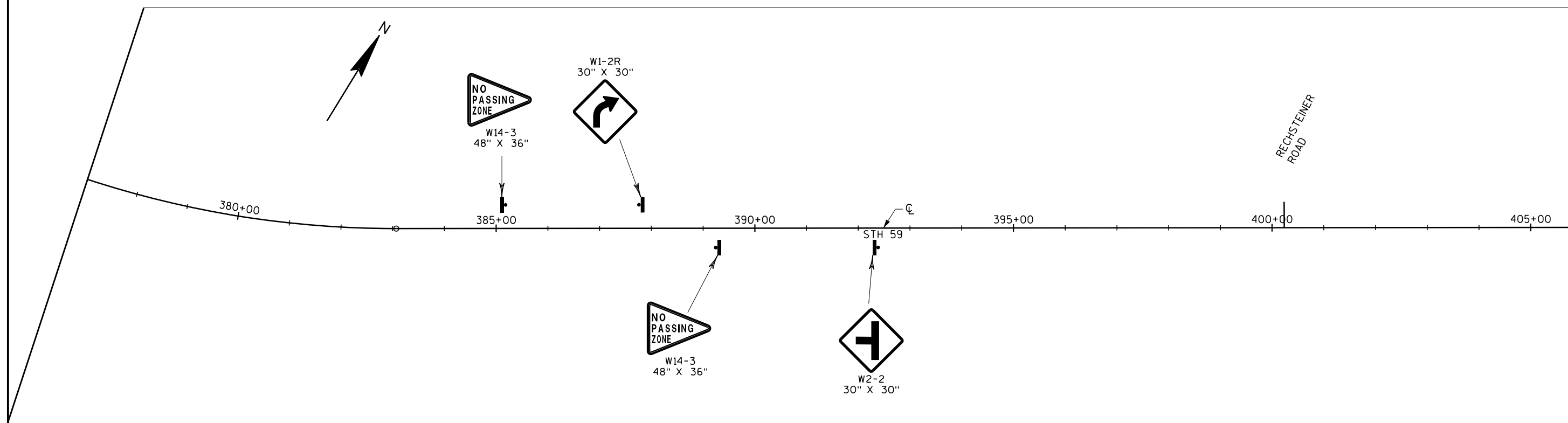
**NOTES**

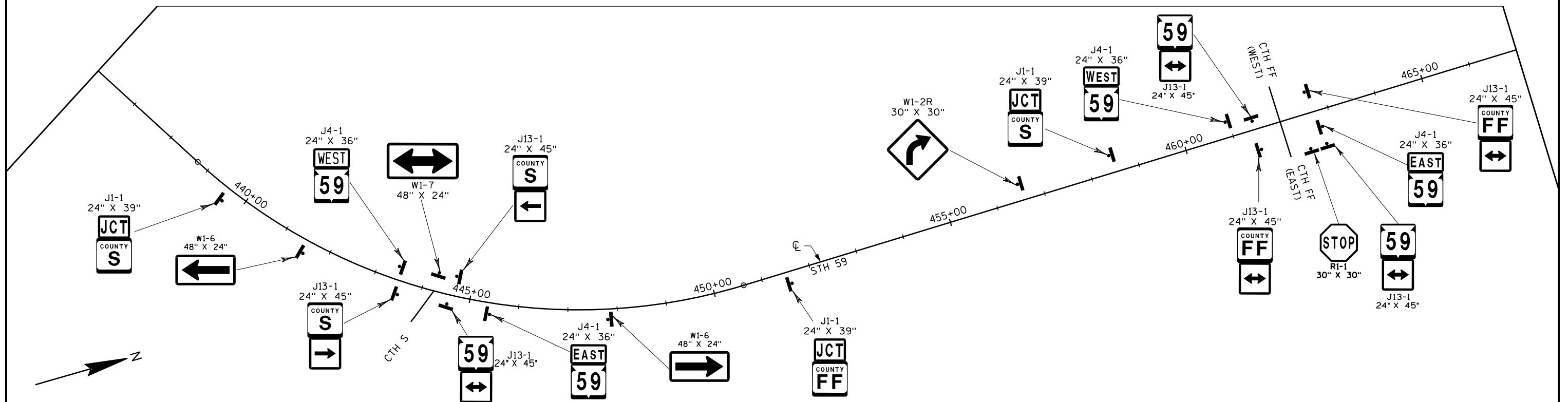
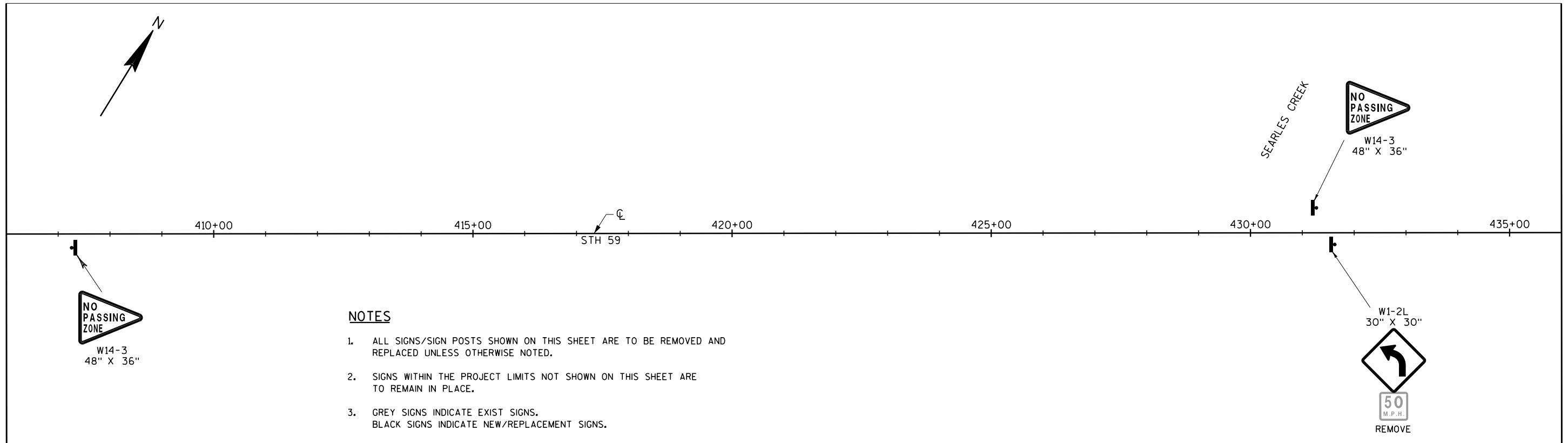
1. ALL SIGNS/SIGN POSTS SHOWN ON THIS SHEET ARE TO BE REMOVED AND REPLACED UNLESS OTHERWISE NOTED.
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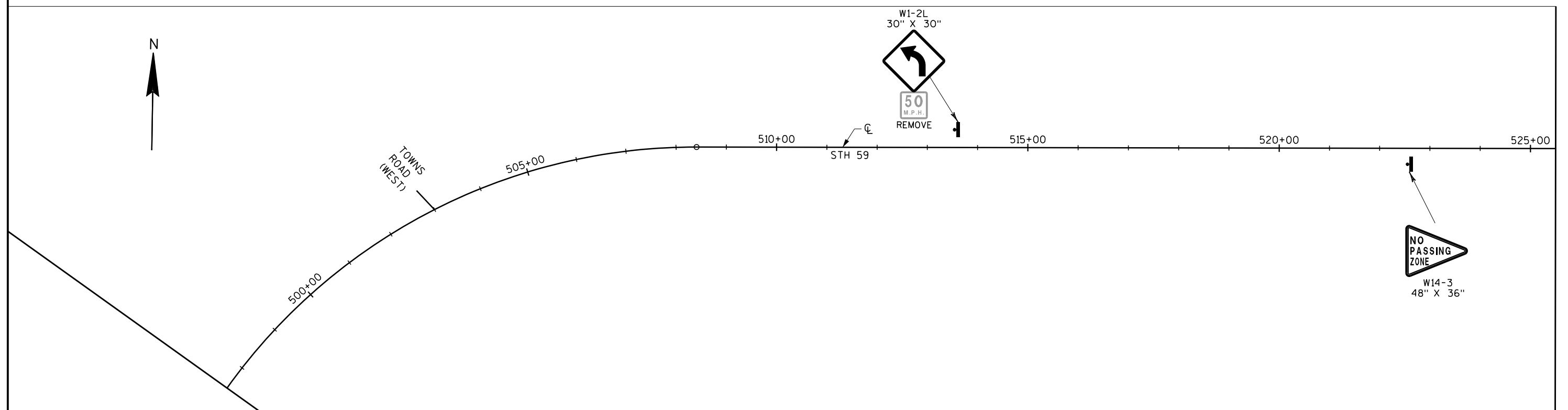
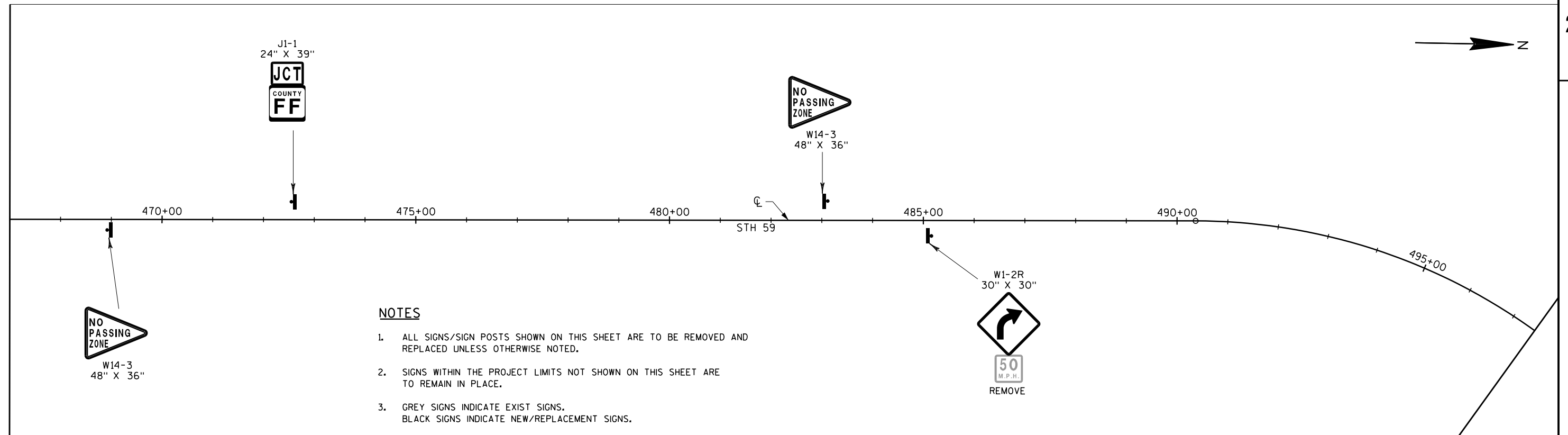


**NOTES**

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W14-3
48" X 36"

530+00

535+00

CL
STH 59

540+00

545+00

550+00

555+00

DECATUR
SYSLVESTER
ROAD

NOTES

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BLACK SIGNS INDICATE NEW/REPLACEMENT SIGNS.

ABRAHAMS WOODS
STATE NATURAL AREA

560+00

CL
STH 59

565+00

570+00

TOWNS
ROAD
(EAST)

W1-2L
30" X 30"



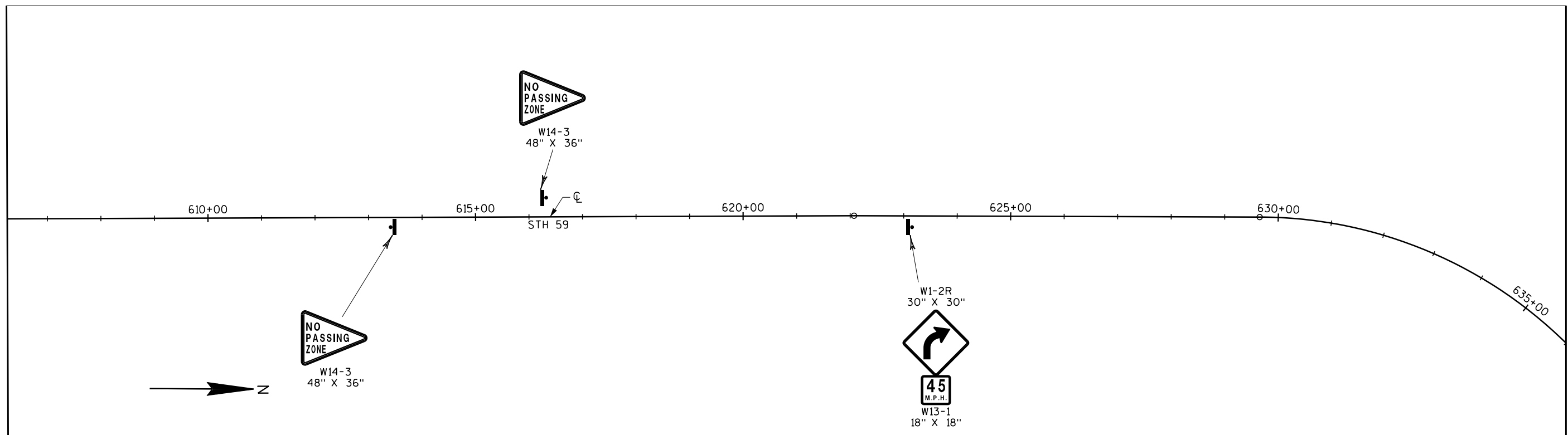
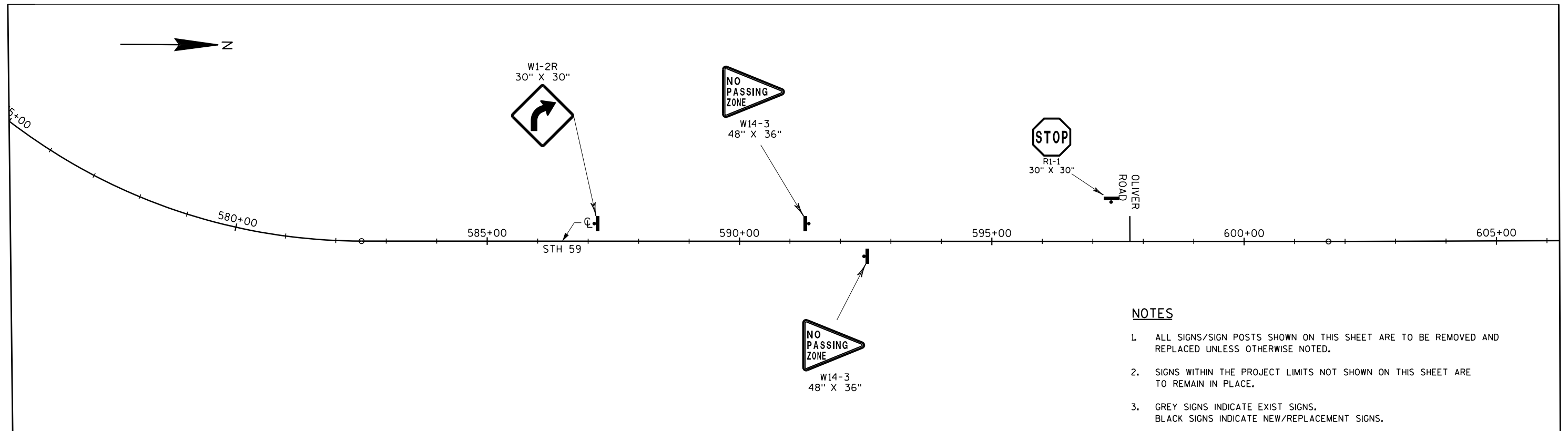
50
M.P.H.
REMOVE

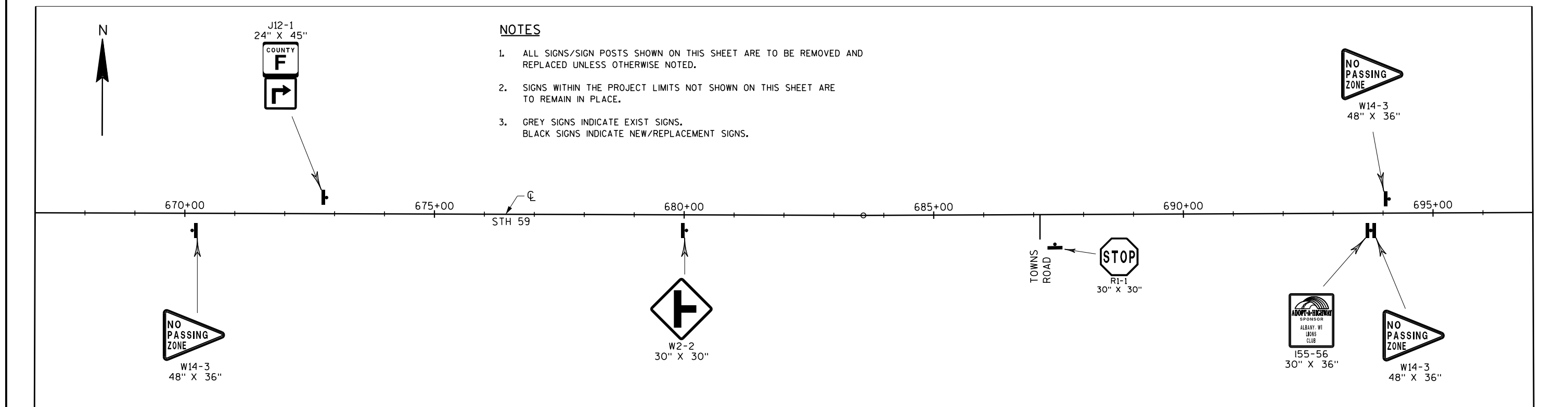
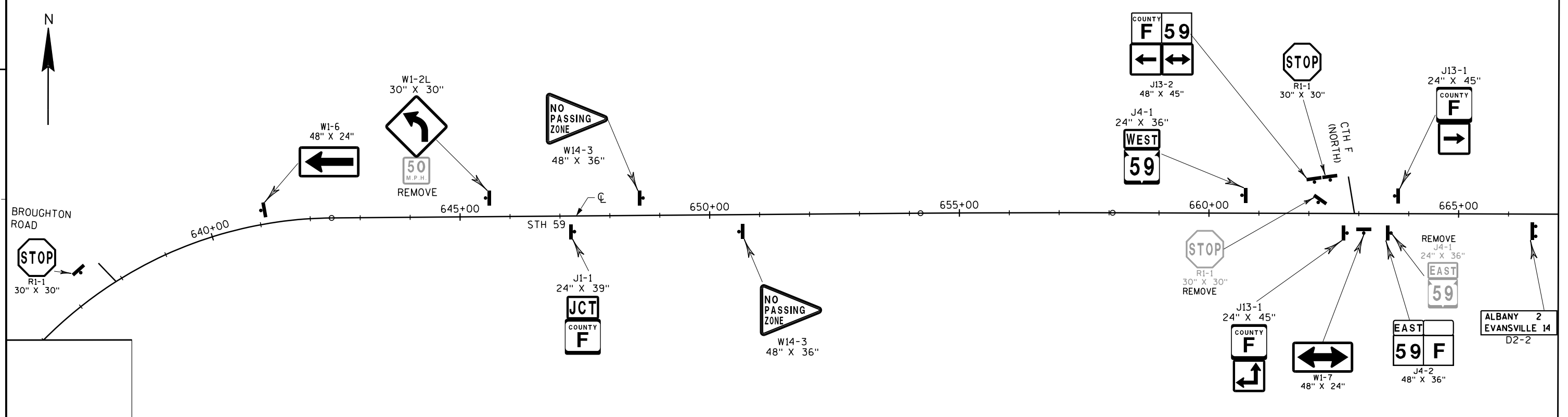
GAP CHURCH & CEMETERY
ENVIRONMENTALLY SENSITIVE AREA



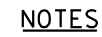
W1-6
48" X 24"





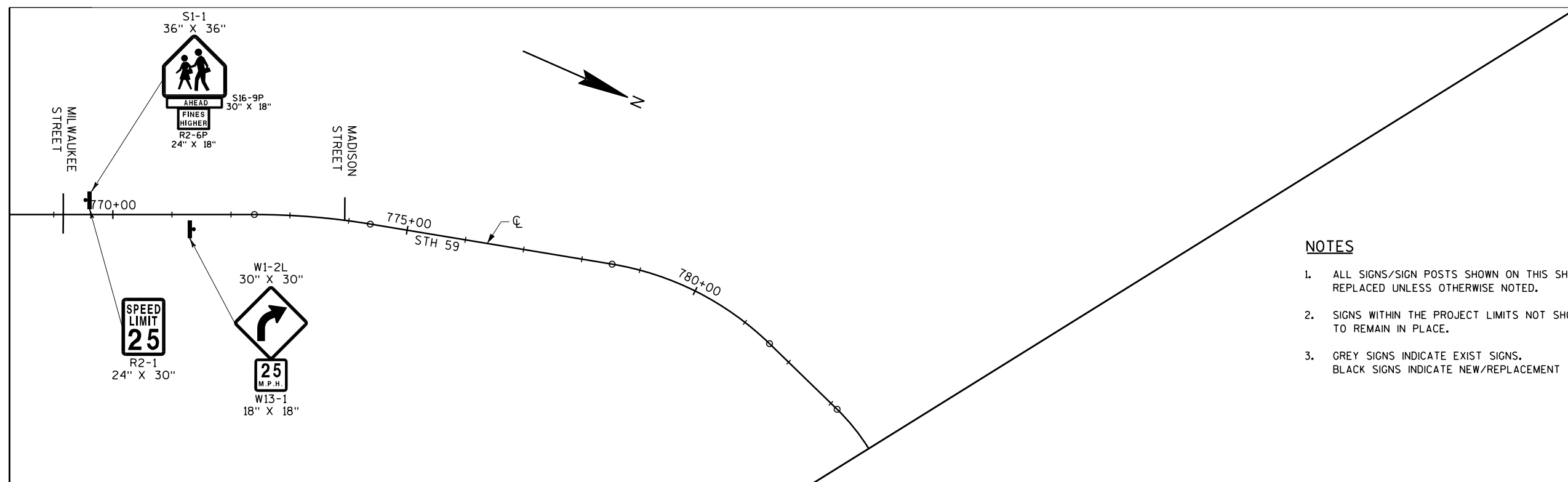
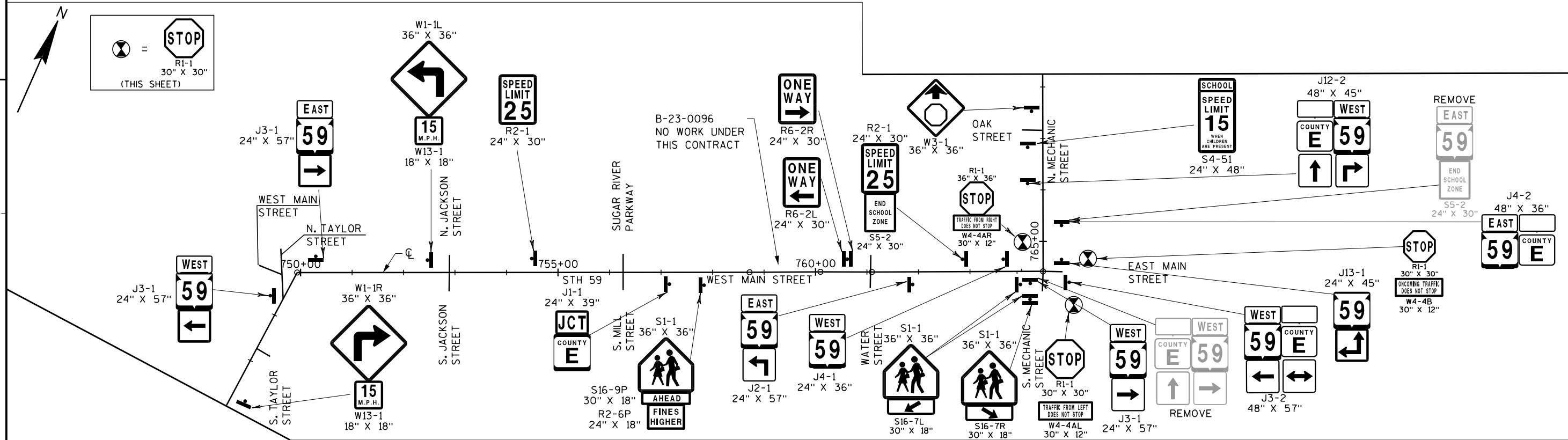
**NOTES**

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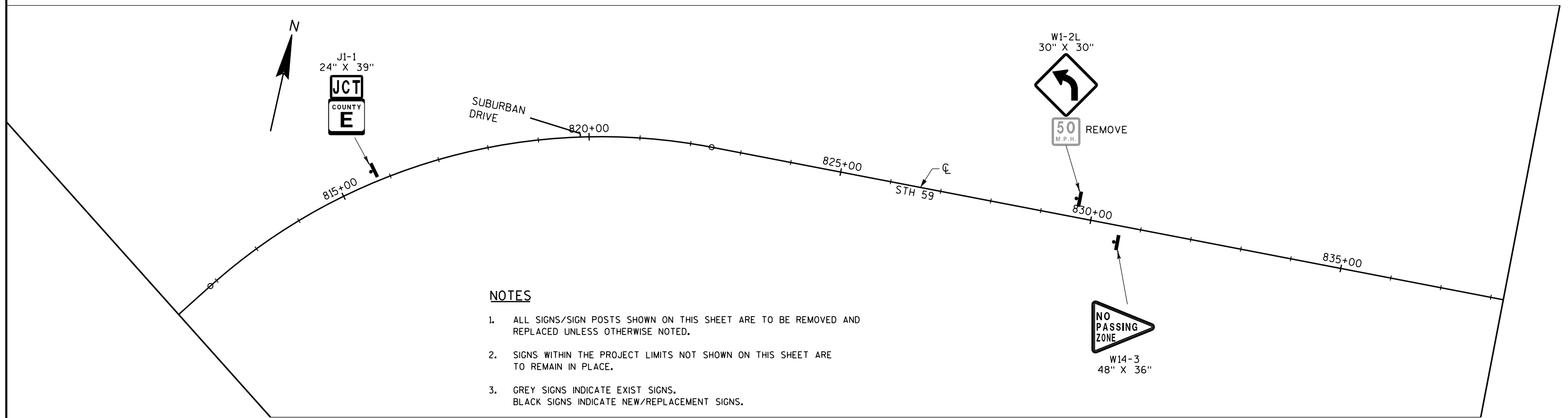
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NOTES

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840+00 845+00 850+00 STH 59 855+00 860+00 865+00

NOTES

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2. SIGNS WITHIN THE PROJECT LIMITS NOT SHOWN ON THIS SHEET ARE TO REMAIN IN PLACE.
3. GREY SIGNS INDICATE EXIST SIGNS.
BLACK SIGNS INDICATE NEW/REPLACEMENT SIGNS.



R1-1
30" X 30"

EDMUNDS
ROAD



I55-56
30" X 36"



W14-3
48" X 36"

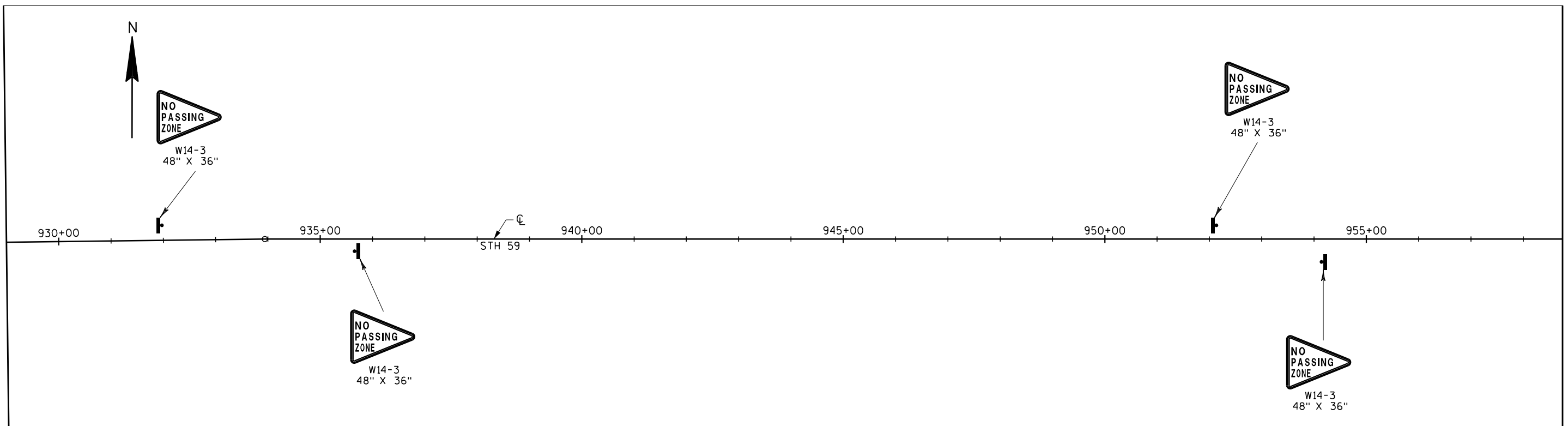
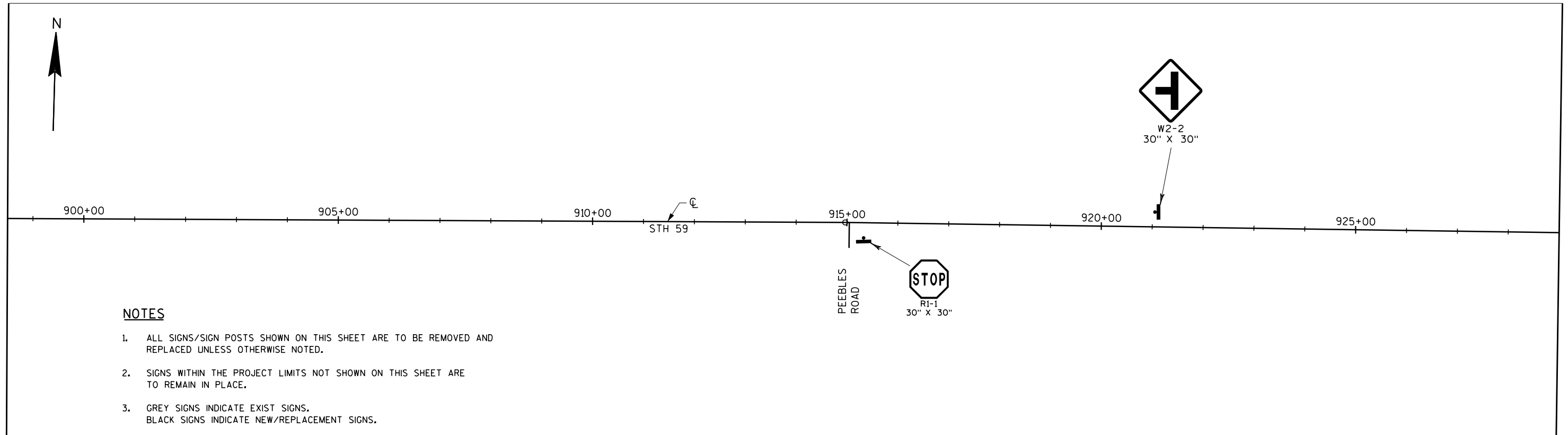


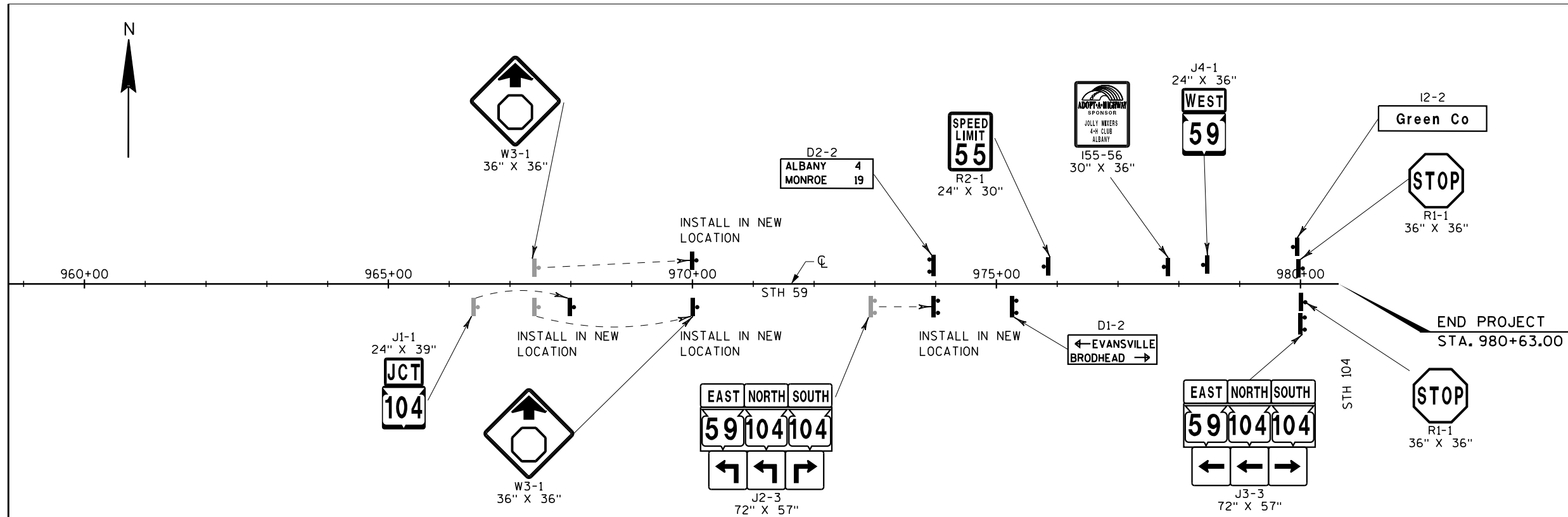
S3-1
36" X 36"

870+00 875+00 880+00 STH 59 885+00 890+00 895+00

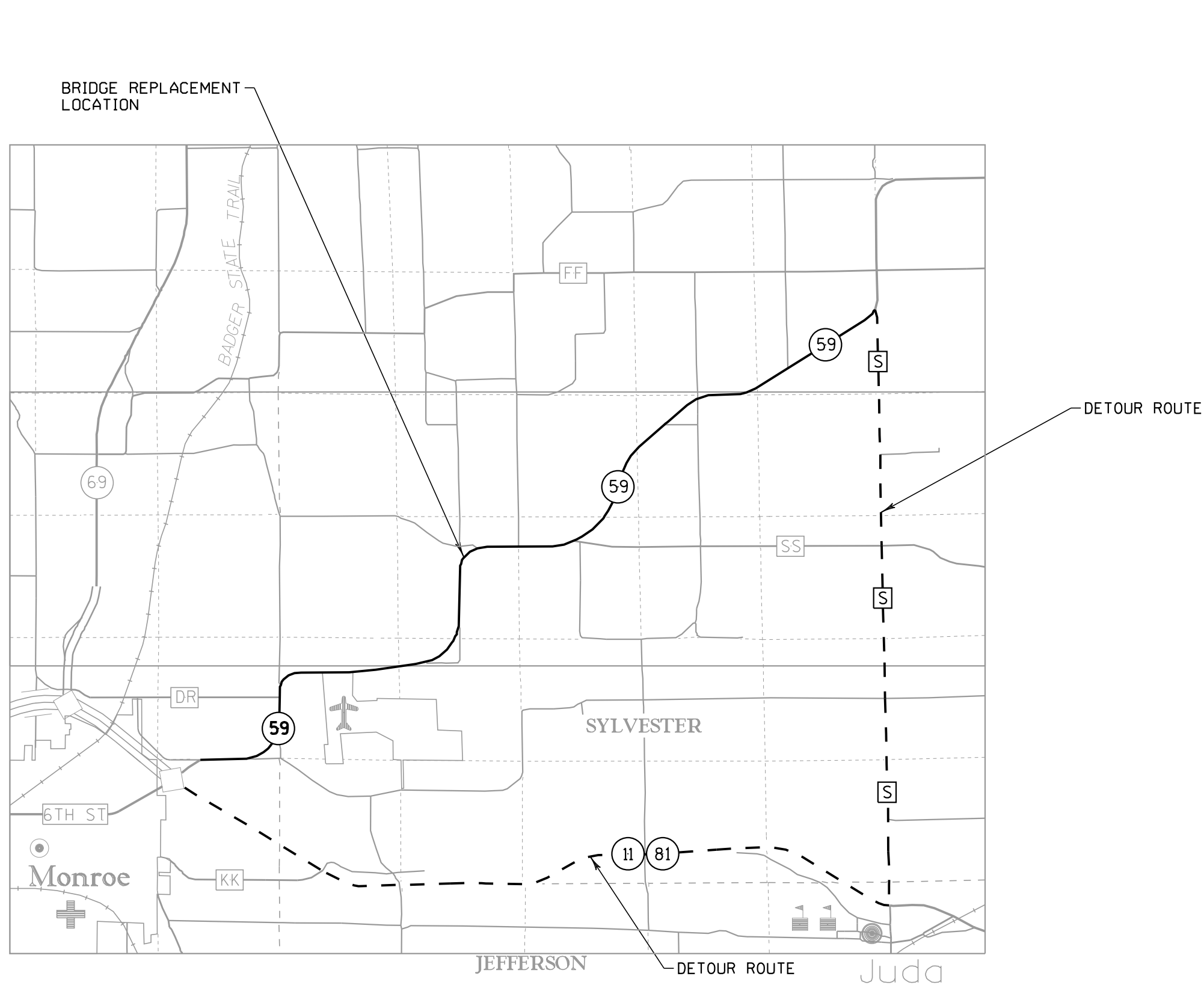


I55-56
30" X 36"



**NOTES**

1. ALL SIGNS/SIGN POSTS SHOWN ON THIS SHEET ARE TO BE REMOVED AND REPLACED UNLESS OTHERWISE NOTED.
2. SIGNS WITHIN THE PROJECT LIMITS NOT SHOWN ON THIS SHEET ARE TO REMAIN IN PLACE.
3. GREY SIGNS INDICATE EXIST SIGNS.
BLACK SIGNS INDICATE NEW/REPLACEMENT SIGNS.



NOTES

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MUTCD. ADJUSTMENTS TO FIT FIELD CONDITIONS SHALL BE APPROVED BY THE ENGINEER.

ALL TRAFFIC CONTROL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED IN THE PLANS.

"WO" SIGNS ARE THE SAME AS "W" SIGNS AND "MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL AND DETOUR SIGNS SHOULD BE ADJUSTED TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY STOP SIGNS WHICH ARE REMOVED FOR A CONSTRUCTION OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED.

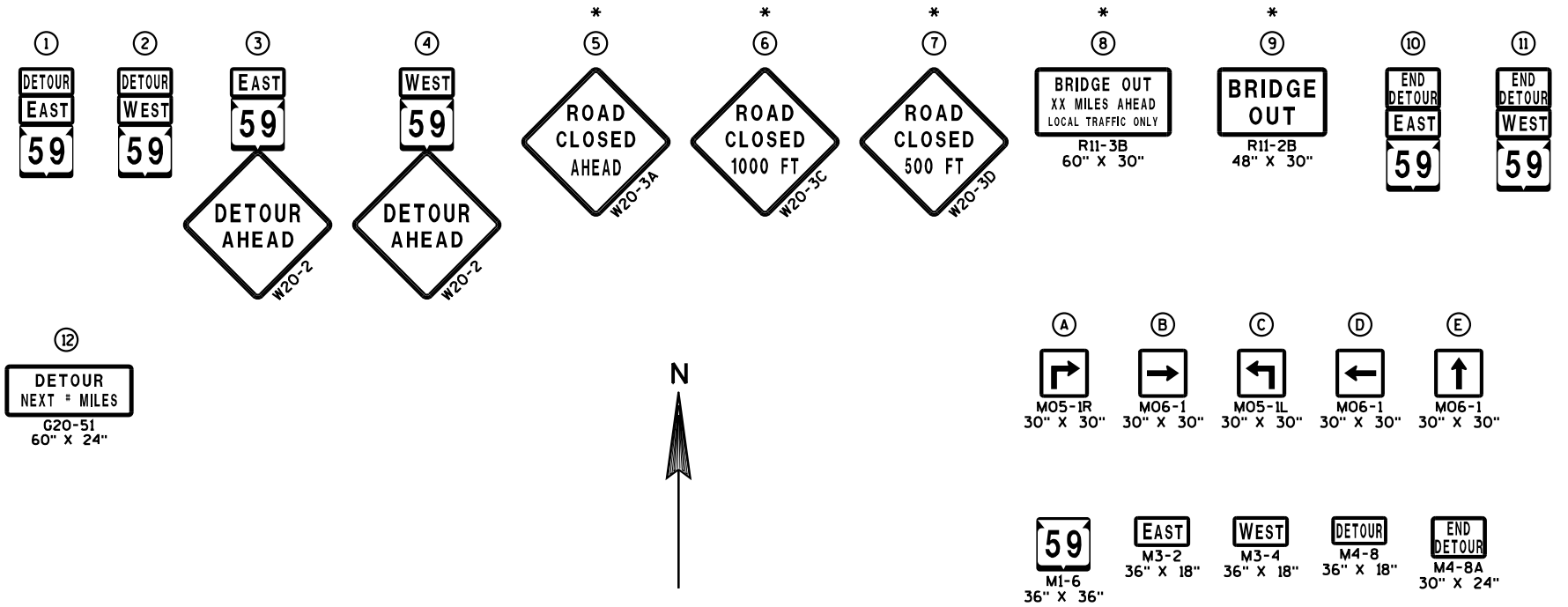
ALL M3 SERIES SIGNS (NORTH, SOUTH, EAST, WEST) WHICH ARE PART OF ANY DETOUR ROUTE MARKERS, SIGNING, ASSEMBLY, OR ATTACHED TO A WARNING SIGN SHALL BE BLACK LETTERING ON A WHITE BACKGROUND.

REFER TO STANDARD DETAIL DRAWINGS FOR TRAFFIC CONTROL DETAILS NOT SHOWN ON THIS SHEET.

ALL SIGNS SHOWN ON DETOUR PLAN SHALL BE PAID FOR AS TRAFFIC CONTROL DETOUR SIGNS UNLESS OTHERWISE NOTED.

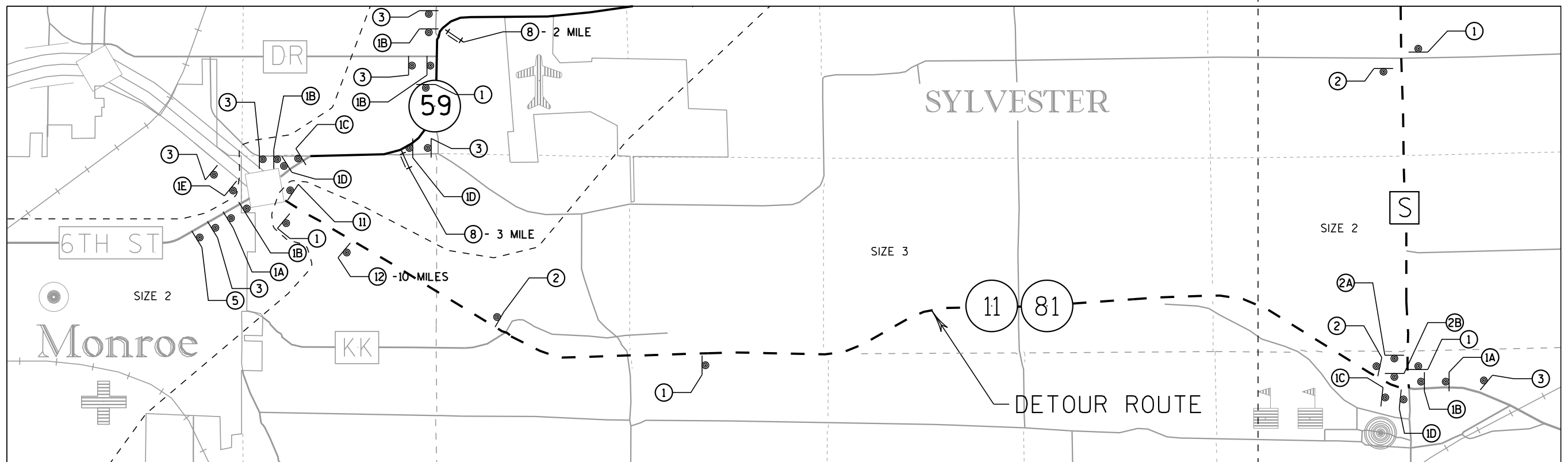
LEGEND

-  TRAFFIC CONTROL BARRICADE TYPE III WITH/WITHOUT ATTACHED SIGN AND TYPE A WARNING LIGHTS
-  SIGN/SIGN NUMBER
-  DETOUR ROUTE
-  STH 59
-  WORK ZONE



* PAID FOR AS TRAFFIC CONTROL SIGNS

PLACE ORANGE FLAGGING ON "STOP AHEAD" AND "STOP" SIGNS ON THE NORTH APPROACH TO THE CTH S / STH 11 INTERSECTION. REMOVE FLAGS UPON REMOVAL OF DETOUR SIGNING.



NOTES
THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MUTCD. ADJUSTMENTS TO FIT FIELD CONDITIONS SHALL BE APPROVED BY THE ENGINEER.

ALL TRAFFIC CONTROL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED IN THE PLANS.

"WO" SIGNS ARE THE SAME AS "W" SIGNS AND "MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

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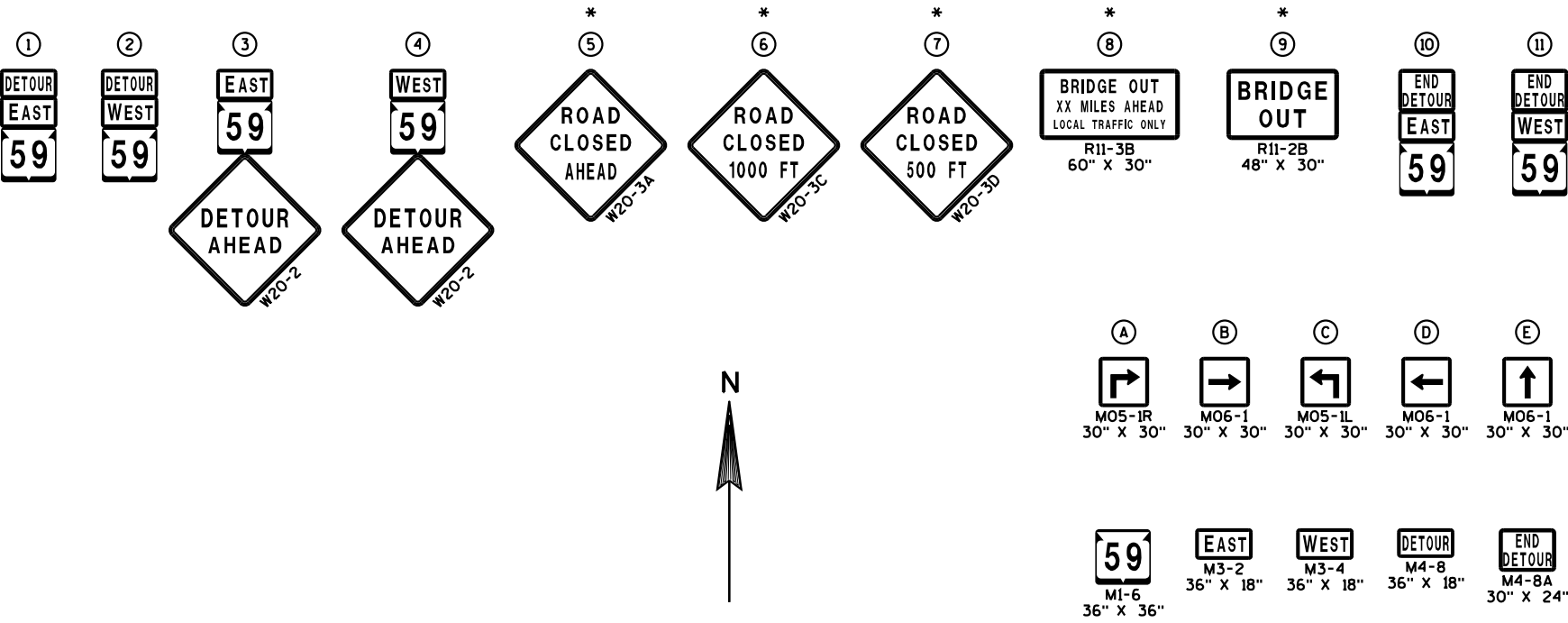
SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ANY STOP SIGNS WHICH ARE REMOVED FOR A CONSTRUCTION OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED.

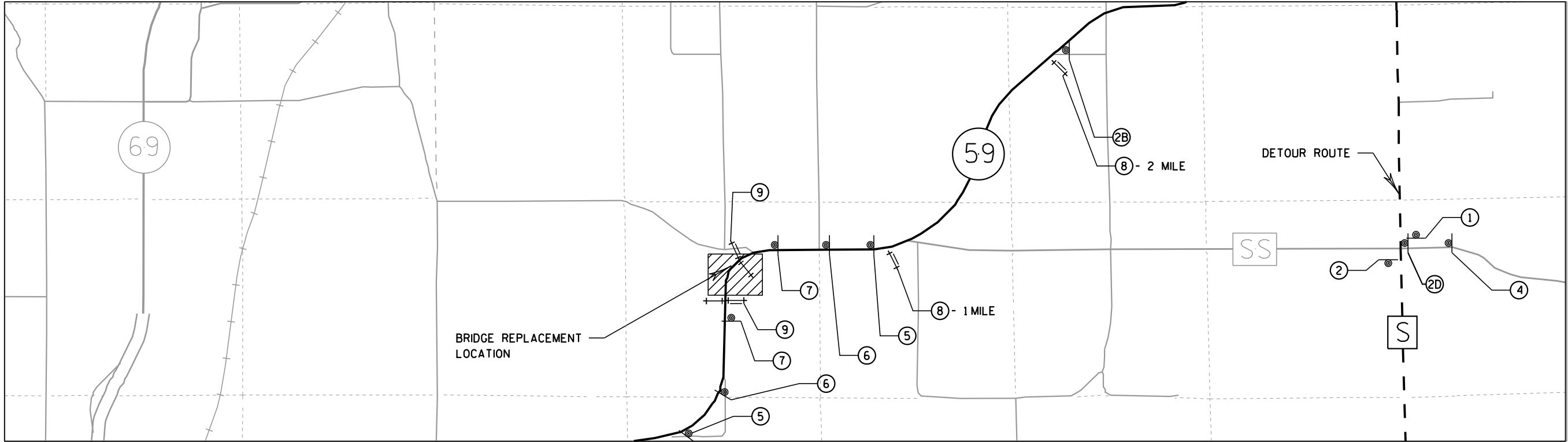
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REFER TO STANDARD DETAIL DRAWINGS FOR TRAFFIC CONTROL DETAILS NOT SHOWN ON THIS SHEET.

- LEGEND**
- TRAFFIC CONTROL BARRICADE TYPE III WITH/WITHOUT ATTACHED SIGN AND TYPE A WARNING LIGHTS
 - SIGN/SIGN NUMBER
 - DETOUR ROUTE
 - STH 59
 - WORK ZONE



* PAID FOR AS TRAFFIC CONTROL SIGNS



2

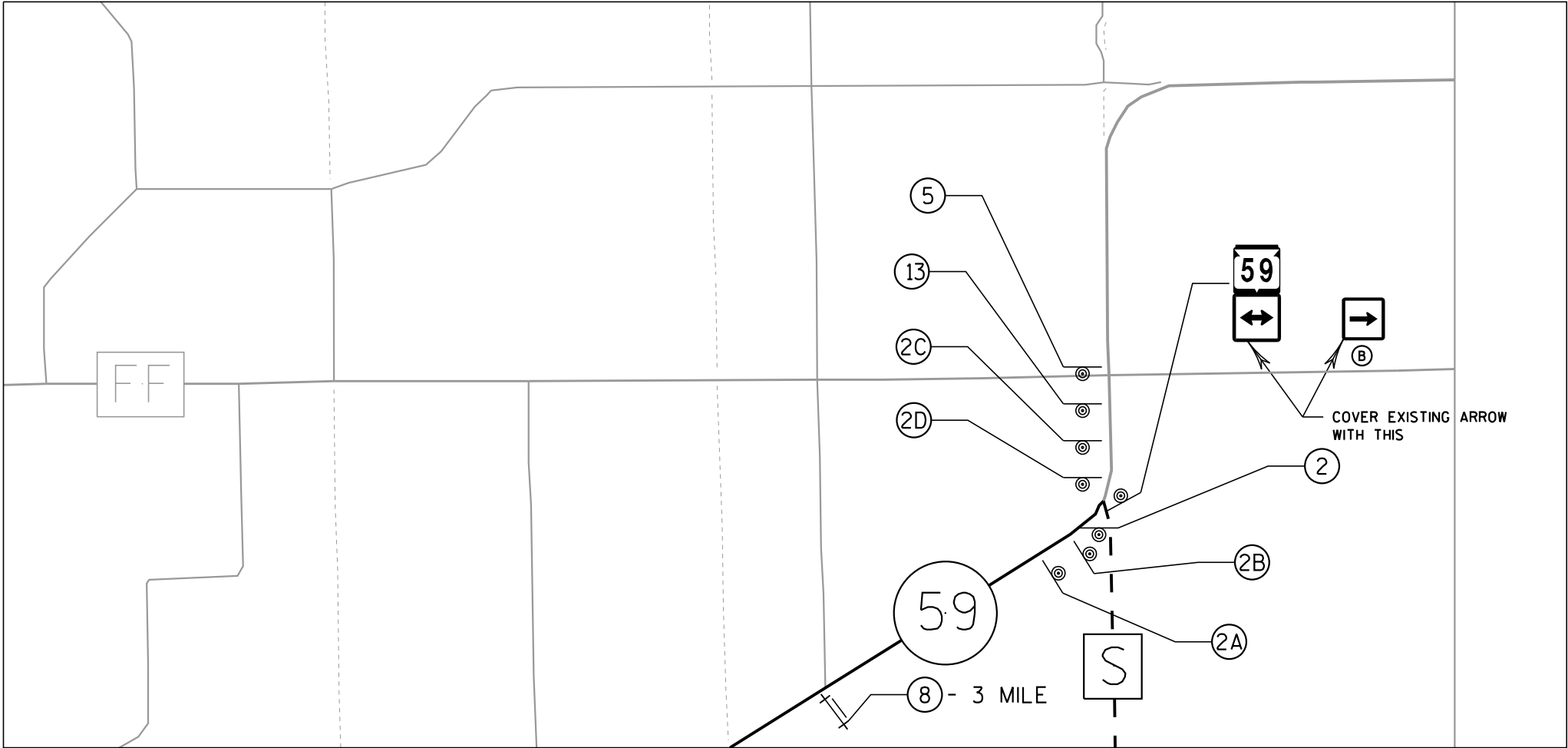
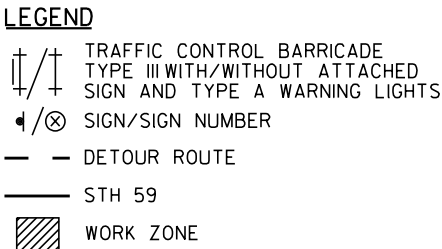
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EXCEPT THE BACKGROUND IS ORANGE.

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ANY STOP SIGNS WHICH ARE REMOVED FOR A
CONSTRUCTION OPERATION SHALL BE
IMMEDIATELY RE-ESTABLISHED.

REFER TO STANDARD DETAIL DRAWINGS FOR
TRAFFIC CONTROL DETAILS NOT SHOWN ON
THIS SHEET.



* PAID FOR AS TRAFFIC CONTROL SIGNS

2



2



PROJECT NO: 5660-00-63

HWY: STH 59

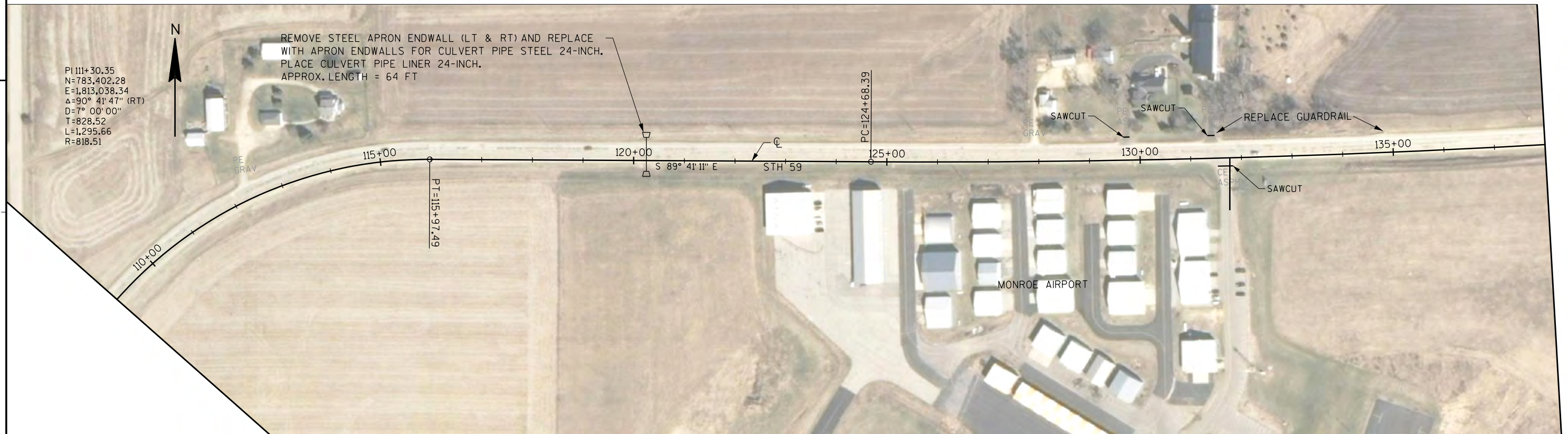
COUNTY: GREEN

PLAN / PLAN DETAILS

SHEET 44

E

2



2



PROJECT NO: 5660-00-63

HWY: STH 59

COUNTY: GREEN

PLAN / PLAN DETAILS

SHEET 45

E

2



2



PROJECT NO: 5660-00-63

HWY: STH 59

COUNTY: GREEN

PLAN / PLAN DETAILS

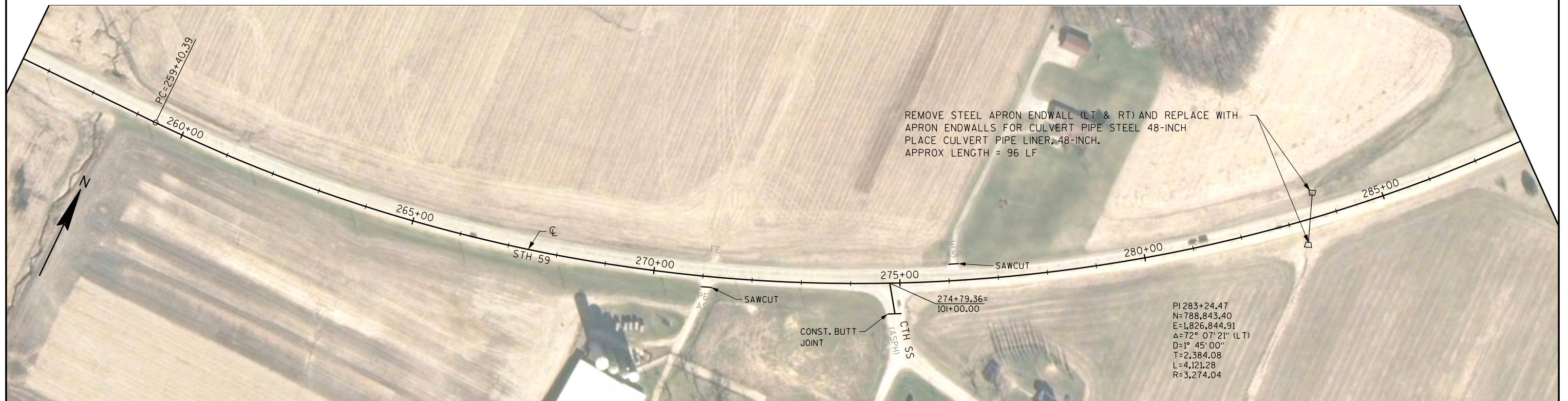
SHEET 46

E

2



2



PROJECT NO: 5660-00-63

HWY: STH 59

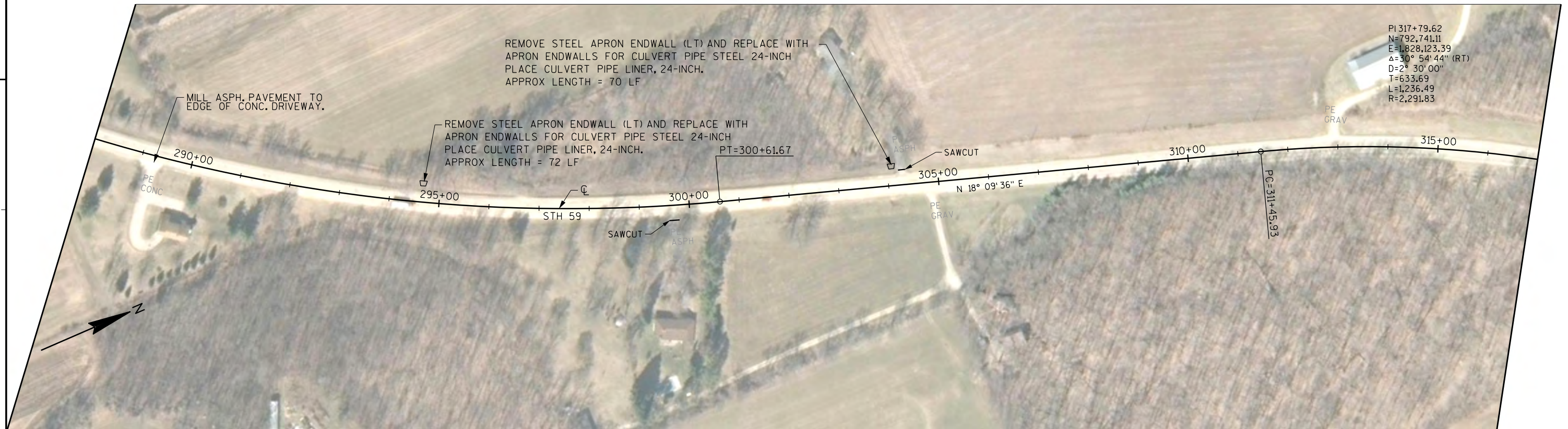
COUNTY: GREEN

PLAN / PLAN DETAILS

SHEET 47

E

2



2



PROJECT NO:

5660-00-63

HWY:

STH 59

COUNTY:

GREEN

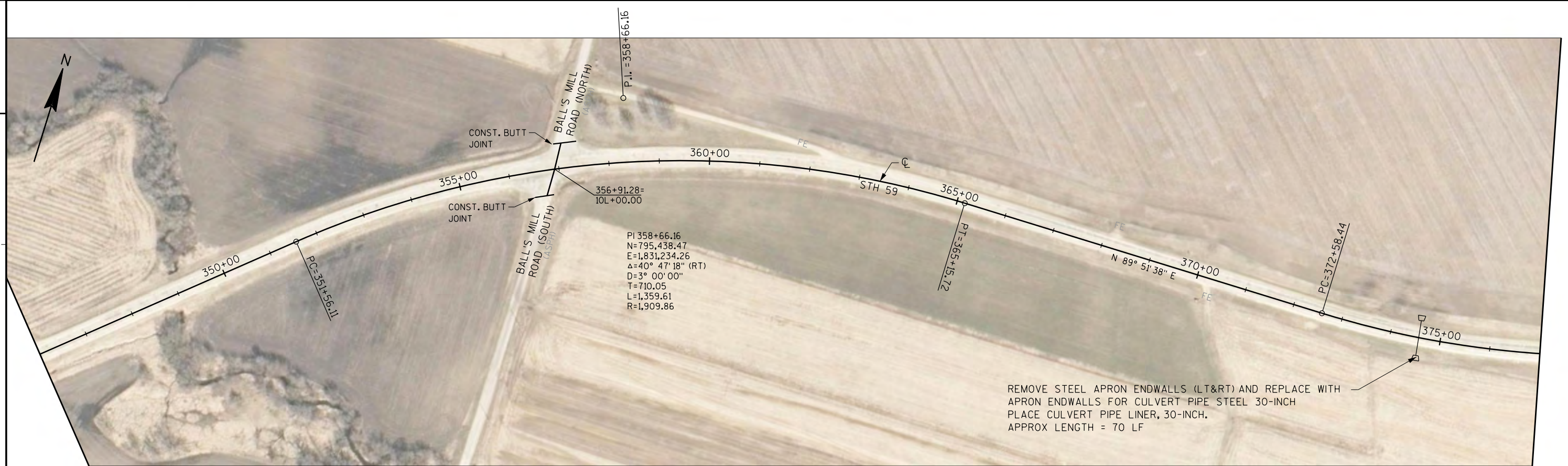
PLAN / PLAN DETAILS

SHEET

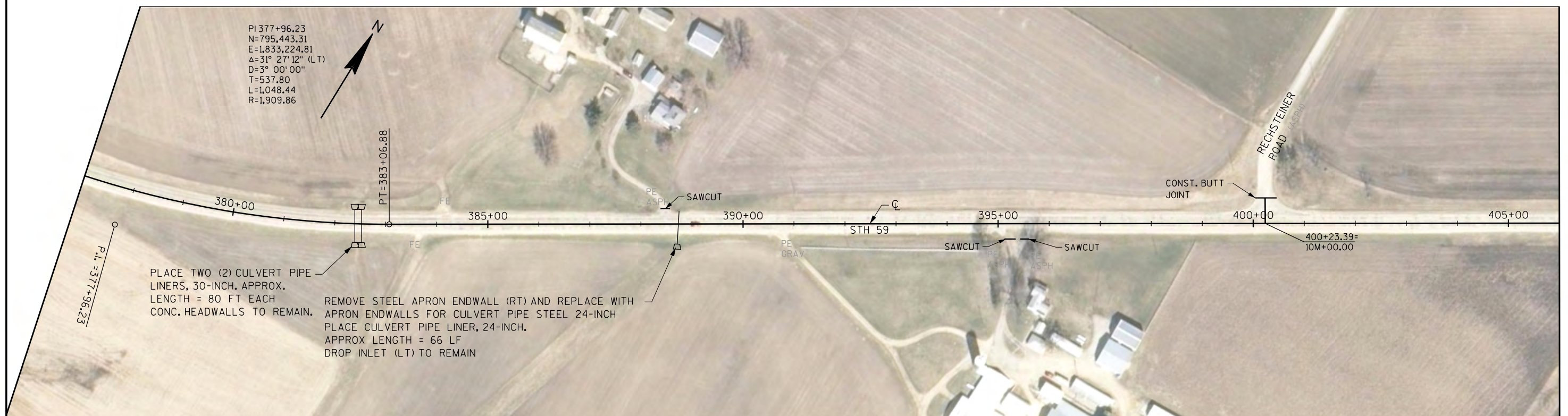
48

E

2



2



PROJECT NO: 5660-00-63

HWY: STH 59

COUNTY: GREEN

PLAN / PLAN DETAILS

SHEET 49

E





2



2



PROJECT NO: 5660-00-63

HWY: STH 59

COUNTY: GREEN

PLAN / PLAN DETAILS

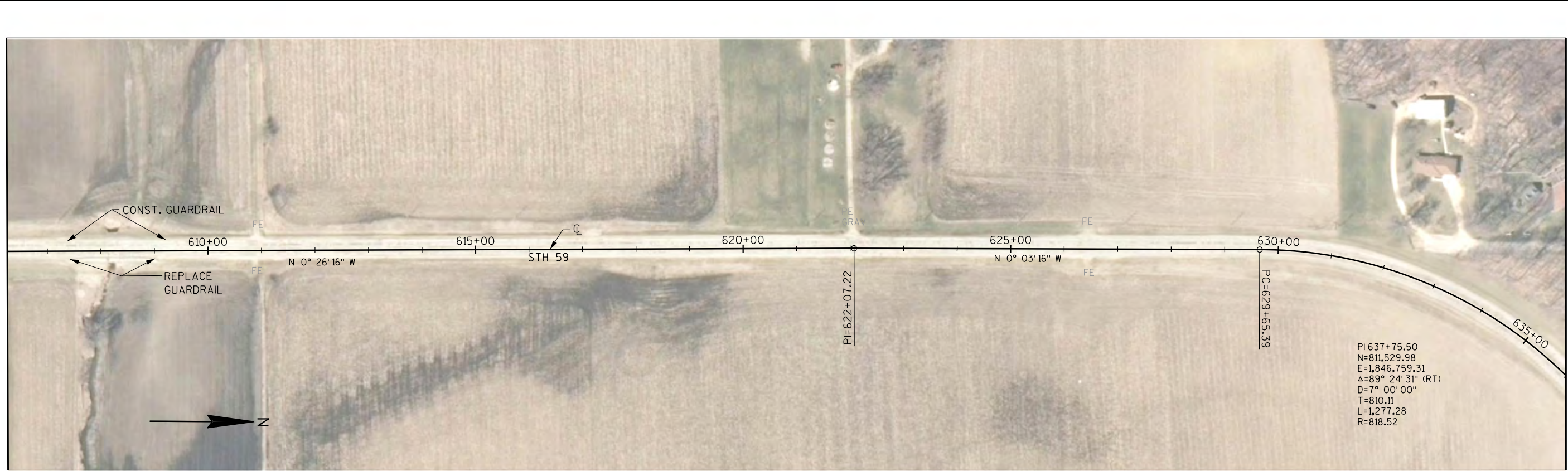
SHEET 52

E

2



2



PROJECT NO:	5660-00-63
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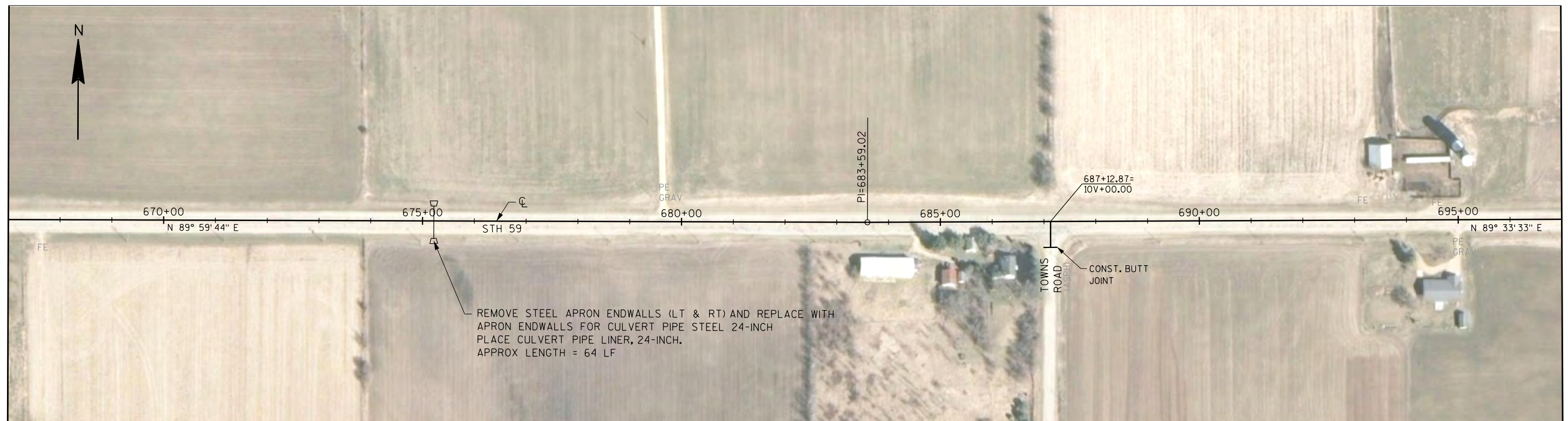
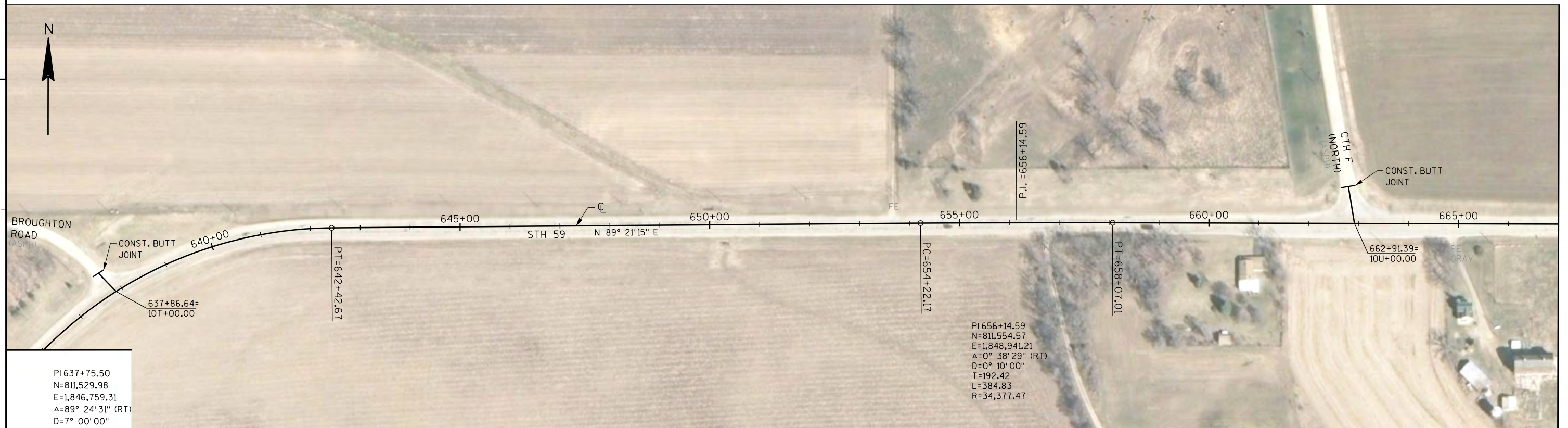
HWY:	STH 59
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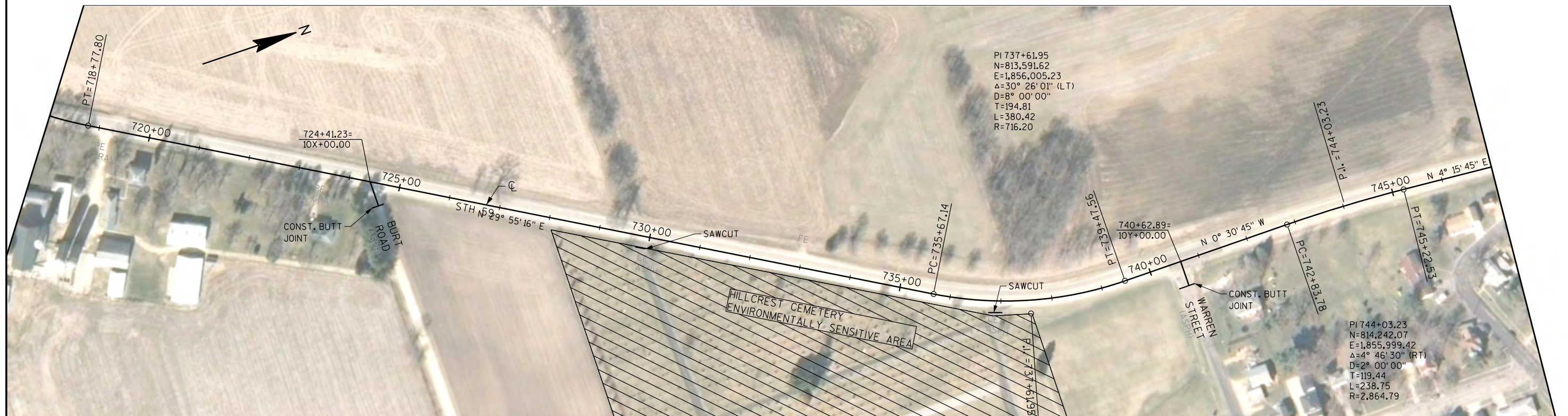
COUNTY: GREEN

PLAN / PLAN DETAILS

SHEET	53	E
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11





PROJECT NO: 5660-00-63

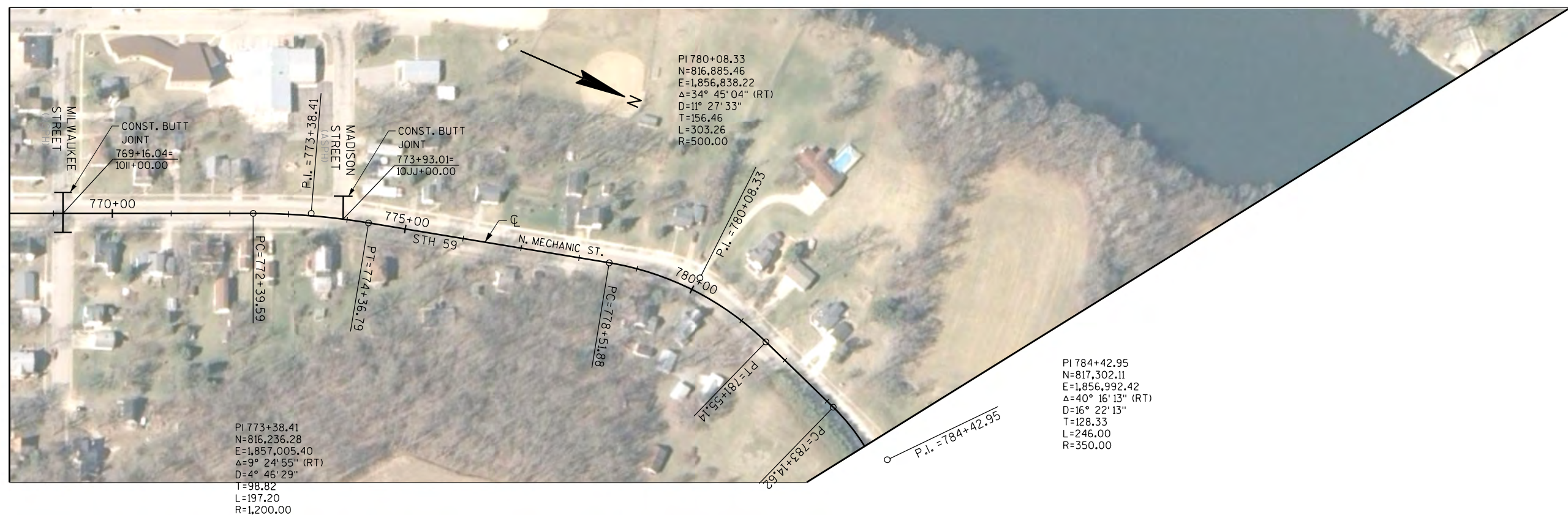
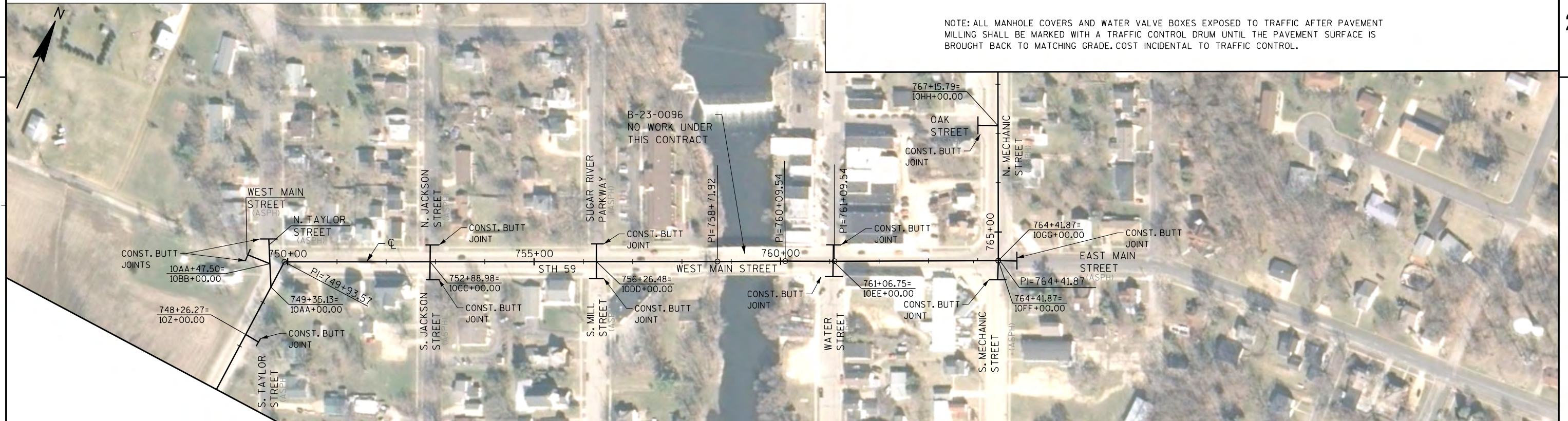
HWY: STH 59

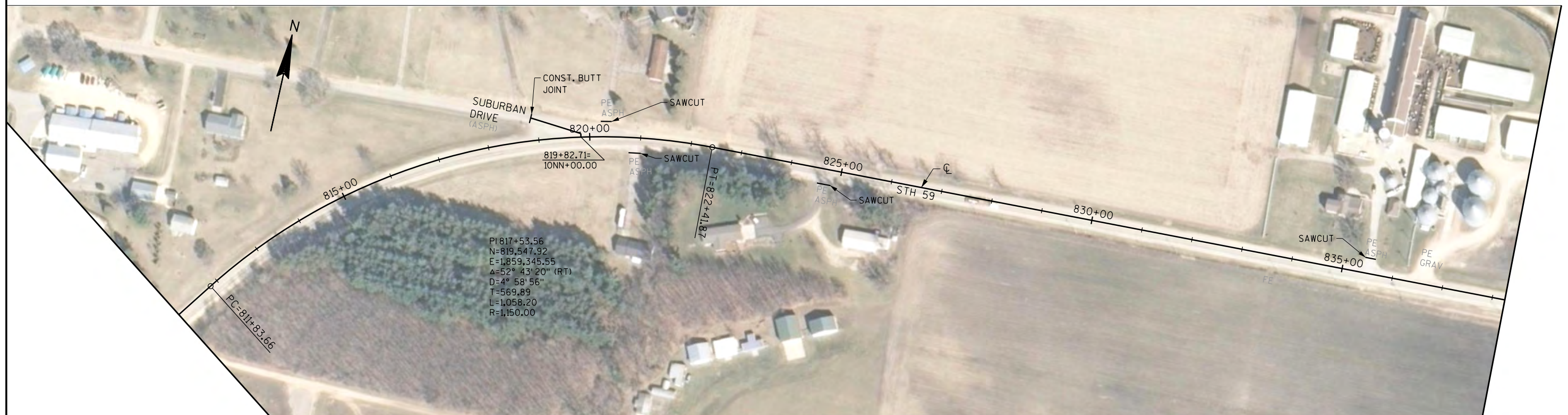
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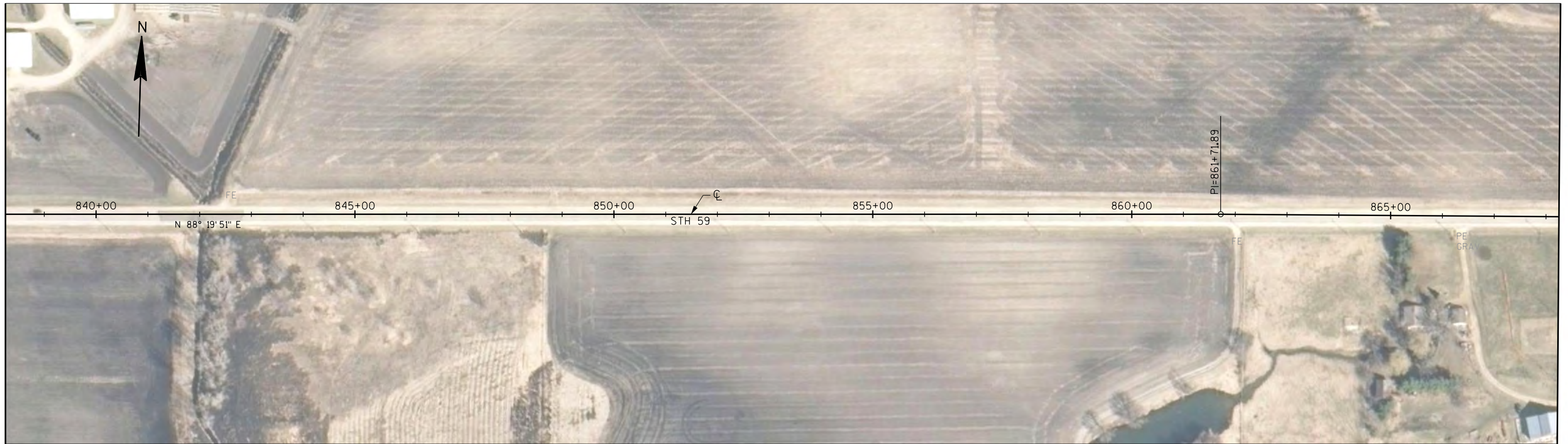
PLAN / PLAN DETAILS

SHEET 55

E









PROJECT NO: 5660-00-63

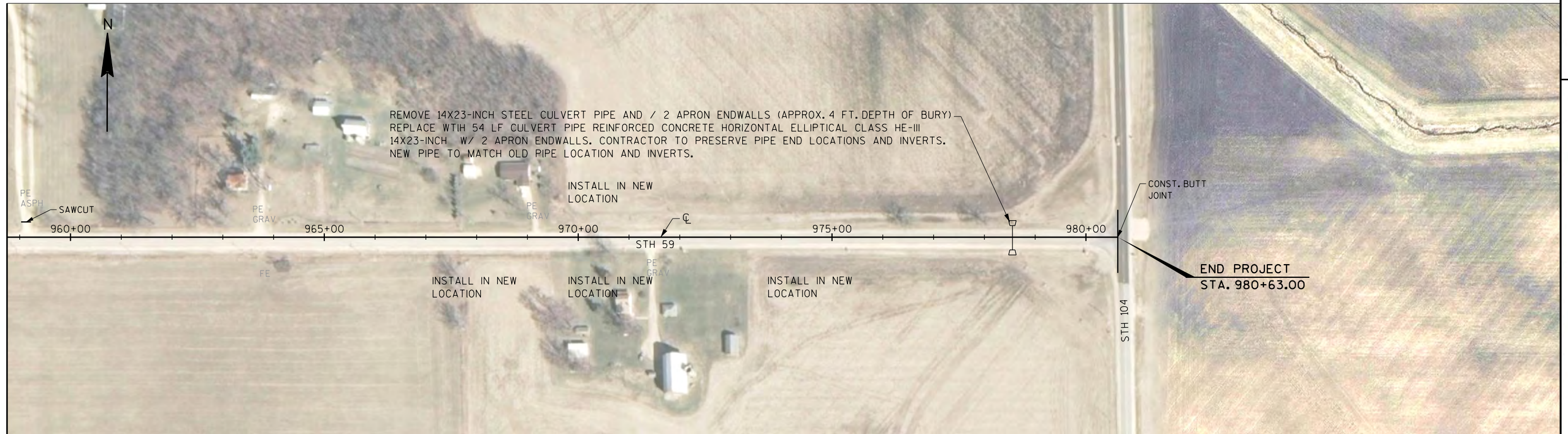
HWY: STH 59

COUNTY: GREEN

PLAN / PLAN DETAILS

SHEET 59

E



DATE 09AUG16		E S T I M A T E O F Q U A N T I T I E S			
LINE				5660-00-63	
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0010	201.0105	Clearing	STA	3.000	3.000
0020	201.0205	Grubbing	STA	3.000	3.000
0030	203.0100	Removing Small Pipe Culverts	EACH	1.000	1.000
0040	203.0500.S	Removing Old Structure Over Waterway (station) 01. 223+54	LS	1.000	1.000
0050	204.0115	Removing Asphaltic Surface Butt Joints	SY	2,170.000	2,170.000
0060	204.0120	Removing Asphaltic Surface Milling	SY	314,000.000	314,000.000
0070	204.0155	Removing Concrete Sidewalk	SY	50.000	50.000
0080	204.0165	Removing Guardrail	LF	1,530.000	1,530.000
0090	204.0180	Removing Delineators and Markers	EACH	36.000	36.000
0100	205.0100	Excavation Common	CY	1,667.000	1,667.000
0110	206.2000	Excavation for Structures Culverts (structure) 01. B-23-176	LS	1.000	1.000
0120	208.0100	Borrow	CY	2,772.000	2,772.000
0130	209.0100	Backfill Granular	CY	964.000	964.000
0140	209.0300.S	Backfill Coarse Aggregate (size) 01. Size No. 2	CY	228.000	228.000
0150	210.0100	Backfill Structure	CY	730.000	730.000
0160	211.0100	Prepare Foundation for Asphaltic Paving (project) 01. 5660-00-63	LS	1.000	1.000
0170	211.0400	Prepare Foundation for Asphaltic Shoulders	STA	1,734.000	1,734.000
0180	213.0100	Finishing Roadway (project) 01. 5660-00-63	EACH	1.000	1.000
0190	305.0110	Base Aggregate Dense 3/4-Inch	TON	11,500.000	11,500.000
0200	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	1,800.000	1,800.000
0210	305.0500	Shaping Shoulders	STA	1,734.000	1,734.000
0220	311.0115	Breaker Run	CY	111.000	111.000
0230	440.4410	Incentive IRI Ride	DOL	70,000.000	70,000.000
0240	455.0605	Tack Coat	GAL	15,700.000	15,700.000
0250	460.2000	Incentive Density HMA Pavement	DOL	30,210.000	30,210.000
0260	460.5224	HMA Pavement 4 LT 58-28 S	TON	47,200.000	47,200.000
0270	465.0120	Asphaltic Surface Driveways and Field Entrances	TON	173.000	173.000
0280	465.0475	Asphalt Center Line Rumble Strips 2-Lane Rural	LF	88,592.000	88,592.000
0290	504.0100	Concrete Masonry Culverts	CY	175.000	175.000
0300	505.0400	Bar Steel Reinforcement HS Structures	LB	23,150.000	23,150.000
0310	505.0600	Bar Steel Reinforcement HS Coated Structures	LB	1,240.000	1,240.000
0320	512.1000	Piling Steel Sheet Temporary	SF	450.000	450.000
0330	516.0500	Rubberized Membrane Waterproofing	SY	23.000	23.000
0340	520.9700.S	Culvert Pipe Liners (size) 01. 24-Inch	LF	611.000	611.000
0350	520.9700.S	Culvert Pipe Liners (size) 02. 30-Inch	LF	438.000	438.000
0360	520.9700.S	Culvert Pipe Liners (size) 03. 36-Inch	LF	200.000	200.000
0370	520.9700.S	Culvert Pipe Liners (size) 04. 42-Inch	LF	136.000	136.000
0380	520.9700.S	Culvert Pipe Liners (size) 05. 48-Inch	LF	96.000	96.000
0390	520.9750.S	Cleaning Culvert Pipes for Liner Verification	EACH	2.000	2.000
0400	521.1024	Apron Endwalls for Culvert Pipe Steel 24-Inch	EACH	15.000	15.000
0410	521.1030	Apron Endwalls for Culvert Pipe Steel 30-Inch	EACH	4.000	4.000
0420	521.1048	Apron Endwalls for Culvert Pipe Steel 48-Inch	EACH	2.000	2.000

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DATE 09AUG16		E S T I M A T E O F Q U A N T I T I E S			
LINE					5660-00-63
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0430	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	2.000	2.000
0440	523.0114	Culvert Pipe Reinforced Concrete Horizontal Elliptical Class HE-III 14x23-Inch	LF	54.000	54.000
0450	523.0514	Apron Endwalls for Culvert Pipe Reinforced Concrete Horizontal Elliptical 14x23-Inch	EACH	2.000	2.000
0460	602.0405	Concrete Sidewalk 4-Inch	SF	9,460.000	9,460.000
0470	602.0415	Concrete Sidewalk 6-Inch	SF	1,060.000	1,060.000
0480	606.0200	Riprap Medium	CY	66.000	66.000
0490	606.0300	Riprap Heavy	CY	94.000	94.000
0500	608.0324	Storm Sewer Pipe Reinforced Concrete Class III 24-Inch	LF	72.000	72.000
0510	611.0530	Manhole Covers Type J	EACH	1.000	1.000
0520	611.2004	Manholes 4-FT Diameter	EACH	1.000	1.000
0530	614.0010	Barrier System Grading Shaping Finishing	EACH	7.000	7.000
0540	614.0305	Steel Plate Beam Guard Class A	LF	312.500	312.500
0550	614.0345	Steel Plate Beam Guard Short Radius	LF	50.000	50.000
0560	614.0370	Steel Plate Beam Guard Energy Absorbing Terminal	EACH	1.000	1.000
0570	614.0390	Steel Plate Beam Guard Short Radius Terminal	EACH	1.000	1.000
0580	614.2300	MGS Guardrail 3	LF	1,863.000	1,863.000
0590	614.2610	MGS Guardrail Terminal EAT	EACH	16.000	16.000
0600	618.0100	Maintenance And Repair of Haul Roads (project) 01. 5660-00-63	EACH	1.000	1.000
0610	619.1000	Mobilization	EACH	1.000	1.000
0620	625.0500	Salvaged Topsoil	SY	4,685.000	4,685.000
0630	627.0200	Mulching	SY	1,415.000	1,415.000
0640	628.1504	Silt Fence	LF	3,058.000	3,058.000
0650	628.1520	Silt Fence Maintenance	LF	3,058.000	3,058.000
0660	628.1905	Mobilizations Erosion Control	EACH	5.000	5.000
0670	628.1910	Mobilizations Emergency Erosion Control	EACH	3.000	3.000
0680	628.2008	Erosion Mat Urban Class I Type B	SY	3,280.000	3,280.000
0690	628.5505	Polyethylene Sheeting	SY	933.000	933.000
0700	628.7504	Temporary Ditch Checks	LF	34.000	34.000
0710	629.0210	Fertilizer Type B	CWT	3.000	3.000
0720	630.0120	Seeding Mixture No. 20	LB	80.000	80.000
0730	630.0140	Seeding Mixture No. 40	LB	30.000	30.000
0740	633.5200	Markers Culvert End	EACH	39.000	39.000
0750	634.0614	Posts Wood 4x6-Inch X 14-FT	EACH	227.000	227.000
0760	637.2210	Signs Type II Reflective H	SF	905.850	905.850
0770	637.2230	Signs Type II Reflective F	SF	761.750	761.750
0780	638.2102	Moving Signs Type II	EACH	2.000	2.000
0790	638.2602	Removing Signs Type II	EACH	247.000	247.000
0800	638.3000	Removing Small Sign Supports	EACH	211.000	211.000
0810	642.5201	Field Office Type C	EACH	1.000	1.000
0820	643.0100	Traffic Control (project) 01. 5660-00-63	EACH	1.000	1.000
0830	643.0420	Traffic Control Barricades Type III	DAY	445.000	445.000
0840	643.0705	Traffic Control Warning Lights Type A	DAY	890.000	890.000
0850	643.0900	Traffic Control Signs	DAY	740.000	740.000
0860	643.0910	Traffic Control Covering Signs Type I	EACH	5.000	5.000
0870	643.0920	Traffic Control Covering Signs Type II	EACH	9.000	9.000

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DATE 09AUG16		E S T I M A T E O F Q U A N T I T I E S			
LINE					5660-00-63
NUMBER	ITEM	ITEM DESCRIPTION	UNIT	TOTAL	QUANTITY
0880	643.2000	Traffic Control Detour (project) 01.	EACH	1.000	1.000
		5660-00-63			
0890	643.3000	Traffic Control Detour Signs	DAY	3,825.000	3,825.000
0900	645.0105	Geotextile Type C	SY	359.000	359.000
0910	645.0120	Geotextile Type HR	SY	334.000	334.000
0920	646.0106	Pavement Marking Epoxy 4-Inch	LF	321,000.000	321,000.000
0930	647.0566	Pavement Marking Stop Line Epoxy 18-Inch	LF	630.000	630.000
0940	647.0766	Pavement Marking Crosswalk Epoxy 6-Inch	LF	1,050.000	1,050.000
0950	648.0100	Locating No-Passing Zones	MI	17.600	17.600
0960	649.0400	Temporary Pavement Marking Removable Tape 4-Inch	LF	46,000.000	46,000.000
0970	650.4000	Construction Staking Storm Sewer	EACH	1.000	1.000
0980	650.4500	Construction Staking Subgrade	LF	2,365.000	2,365.000
0990	650.6000	Construction Staking Pipe Culverts	EACH	1.000	1.000
1000	650.8000	Construction Staking Resurfacing Reference	LF	92,755.000	92,755.000
1010	650.9910	Construction Staking Supplemental Control (project) 01. 5660-00-63	LS	1.000	1.000
1020	650.9920	Construction Staking Slope Stakes	LF	2,365.000	2,365.000
1030	690.0150	Sawing Asphalt	LF	2,480.000	2,480.000
1040	715.0502	Incentive Strength Concrete Structures	DOL	1,050.000	1,050.000
1050	ASP.1T0A	On-the-Job Training Apprentice at \$5.00/HR	HRS	450.000	450.000
1060	ASP.1T0G	On-the-Job Training Graduate at \$5.00/HR	HRS	325.000	325.000
1070	SPV.0060	Special 01. Sand Bags	EACH	100.000	100.000

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			201.0105	201.0205
			CLEARING	GRUBBING
STA	STA	LOCATION	STA	STA
798+85.	802+07.	SUGAR RIVER STATE TRAIL	3	3
			3	3

		203.0100
		REMOVING SMALL PIPE
		CULVERTS
STA	LOCATION	EACH
978+46.	LT/RT	1
		<u>1</u>

			204.0115
			REMOVING ASPHALTIC
			SURFACE BUTT JOINTS
STA	OFFSET	LOCATION	SY
53+08.	CL	BEGIN PROJECT	117
70+10.	RT	GREENBUSH ROAD	33
100+43.	LT	CTH DR	27
100+43.	RT	HANGER ROAD	45
108+05.	LT	MONROE SYLVESTER ROAD	24
152+95.	RT	FOREST PRAIRIE ROAD	27
189+00.	RT	MEYERS ROAD	27
229+55.	LT	BURKHALTER ROAD	38
248+65.	LT	LADWIG ROAD	27
274+75.	RT	CTH SS	31
337+40.	LT	SYLVESTER ROAD WEST	50
339+45.	RT	SYLVESTER ROAD EAST	30
356+60.	RT	BALLS MILL ROAD	42
357+00.	LT	BALLS MILL ROAD	56
400+20.	LT	RECHSTEINER ROAD	51
444+18.	RT	CTH S	36
462+00.	LT	CTH FF	37
462+00.	RT	CTH FF	31
502+95.	LT	TOWNS ROAD WEST	43
549+76.	RT	DECATUR SYLVESTER ROAD	29
570+42.	RT	TOWNS ROAD EAST	35
597+77.	LT	OLIVER ROAD	36
637+90.	LT	BROUGHTON ROAD	31
663+00.	LT	CTH F NORTH	32
687+20.	RT	TOWNS ROAD	30
715+00.	RT	CTH F SOUTH	39
724+50.	RT	BURT ROAD	27
740+62.	RT	WARREN STREET	36
748+40.	RT	SOUTH TAYLOR STREET	20
749+85.	LT	NORTH TAYLOR STREET	40
749+80.	LT	WEST MAIN STREET	29
753+00.	LT	NORTH JACKSON STREET	31
753+00.	RT	SOUTH JACKSON STREET	32
756+33.	RT	SOUTH MILL STREET	33
756+33.	LT	SUGAR RIVER PARKWAY	29

(CONTINUED)			
			204.0115
			REMOVING ASPHALTIC
			SURFACE BUTT JOINTS
STA	OFFSET	LOCATION	SY
761+10.	LT	WATER STREET	33
761+10.	RT	WATER STREET	41
764+41.	RT	MECHANIC STREET	40
764+41.	RT	MAIN STREET	40
767+25.	LT	OAK STREET	40
769+22.	LT	MILWAUKEE STREET	33
769+22.	RT	MILWAUKEE STREET	33
774+00.	LT	MADISON STREET	36
798+75.	RT	CINCINNATI STREET	37
803+80.	LT	CTH E	67
805+05.	RT	OGDEN AVENUE	35
819+75.	LT	SUBURBAN DRIVE	88
875+48.	LT	EDMUNDS ROAD	20
915+12.	RT	PEEBLES ROAD	24
980+63.	CL	END PROJECT	322
			2170

NOTE:
ALL ITEMS ON THIS SHEET ARE IN
CATEGORY 010 UNLESS OTHERWISE NOTED.

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204.0120
REMOVING ASPHALTIC
SURFACE MILLING

STA	STA	LOCATION	SY
53+08.	78+50.	MAINLINE	8473
78+50.	109+00.	MAINLINE	10167
109+00.	138+00.	MAINLINE	9667
138+00.	167+00.	MAINLINE	9667
167+00.	197+00.	MAINLINE	10000
197+00.	227+00.	MAINLINE	10000
227+00.	256+42.	MAINLINE	9807
256+42.	288+00.	MAINLINE	10527
288+00.	317+00.	MAINLINE	9667
317+00.	346+00.	MAINLINE	9667
346+00.	377+00.	MAINLINE	10333
377+00.	406+00.	MAINLINE	9667
406+00.	436+00.	MAINLINE	10000
436+00.	467+00.	MAINLINE	10333
467+00.	497+50.	MAINLINE	10167
497+50.	525+50.	MAINLINE	9333
525+50.	555+50.	MAINLINE	10000
555+50.	575+00.	MAINLINE	6500
575+00.	606+25.	MAINLINE	10417
606+25.	636+00.	MAINLINE	9917
636+00.	667+00.	MAINLINE	10333
667+00.	697+00.	MAINLINE	10000
697+00.	718+00.	MAINLINE	7000
718+00.	748+00.	MAINLINE	10000
748+00.	768+25.	MAINLINE	9000
768+25.	784+00.	MAINLINE	7000
784+00.	789+00.	MAINLINE	2222
789+00.	811+00.	MAINLINE	5133
789+00.	811+00.	SHOULDER	2200
811+00.	838+25.	MAINLINE	6358
811+00.	838+25.	SHOULDER	2725
838+25.	868+25.	MAINLINE	7000
838+25.	868+25.	SHOULDER	3000
868+25.	898+50.	MAINLINE	7058
868+25.	898+50.	SHOULDER	3025
898+50.	929+00.	MAINLINE	7117
898+50.	929+00.	SHOULDER	3050
929+00.	958+75.	MAINLINE	6942
929+00.	958+75.	SHOULDER	2975
958+75.	980+63.	MAINLINE	5105
958+75.	980+63.	SHOULDER	2188
			314000

204.0155
REMOVING CONCRETE
SIDEWALK

STA	STA	LOCATION	SY
783+28.	784+40.	LT	50
			50

204.0165
REMOVING GUARDRAIL

STA	STA	LOCATION	LF
131+50.	134+85.	LT	335
222+40.	223+35.	LT	95
222+65.	223+50.	RT	85
223+55.	224+50.	LT	95
223+80.	224+70.	RT	90
428+50.	430+30.	RT	180
429+20.	431+30.	LT	210
607+40.	609+00.	RT	160
710+55.	712+00.	LT	145
710+65.	712+00.	RT	135
			1530

204.0180
REMOVING DELINEATORS
AND MARKERS

STA	LOCATION	DESCRIPTION	EACH
46+54.	LT/RT	CROSS DRAIN	2
93+53.	LT/RT	CROSS DRAIN	2
120+46.	LT/RT	CROSS DRAIN	2
233+40.	LT/RT	CROSS DRAIN	2
283+08.	LT/RT	CROSS DRAIN	2
293+64.	LT/RT	CROSS DRAIN	2
304+20.	LT/RT	CROSS DRAIN	2
324+80.	LT/RT	CROSS DRAIN	2
373+90.	LT/RT	CROSS DRAIN	2
382+88.	LT/RT	CROSS DRAIN	2
389+21.	LT/RT	CROSS DRAIN	2
408+75.	LT/RT	CROSS DRAIN	2
440+43.	LT/RT	CROSS DRAIN	2
483+72.	LT/RT	CROSS DRAIN	2
524+90.	LT/RT	CROSS DRAIN	2
591+96.	LT/RT	CROSS DRAIN	2
676+44.	LT/RT	CROSS DRAIN	2
978+46.	LT/RT	CROSS DRAIN	2
			36

NOTE:
ALL ITEMS ON THIS SHEET ARE IN
CATEGORY 010 UNLESS OTHERWISE NOTED.

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			205.0100	
			EXCAVATION COMMON	
STA	STA	LOCATION	CY	
221+25.	226+00.	LT & RT (ROADWAY EMBANKMENT)	66	
20+00.	23+00.	LT & RT (TEMP BYPASS CHANNEL)	1463	
50+00.	68+89.	LT & RT (SIDEWALKS)	138	
			1667	
			208.0100	
			BORROW	
STA	STA	LOCATION	CY	
221+25.	226+00.	LT & RT (ROADWAY EMBANKMENT)	1464	
21+50.	22+50.	LT & RT (TEMP BYPASS CHANNEL)	660	
50+00.	68+89.	LT & RT (SIDEWALKS)	648	
			2772	
			209.0100	
			BACKFILL GRANULAR	
STA	STA	LOCATION	CY	
221+25.	226+00.	LT & RT (ROADWAY EMBANKMENT)	934	
978+46.	978+56.	LT/RT	30	
			964	
			209.0300.S.01	
			BACKFILL COARSE	
			AGGREGATE SIZE NO. 2	
STA	STA	LOCATION	CY	
20+00.	23+00.	LT & RT (TEMP BYPASS CHANNEL)	156	
			156	
			211.0100	213.0100
			PREPARE FOUNDATION	FINISHING ROADWAY
			FOR ASPHALTIC PAVING	
STA	STA	LOCATION	LS	EACH
53+08.	980+63.	5660-00-63	1	1
			1	1

211.0400			
PREPARE FOUNDATION			
FOR ASPHALTIC			
SHOULDERS			
STA	STA	LOCATION	STA
53+08.	272+00.	RT	219
53+08.	558+00.	LT	505
274+20.	558+00.	RT	284
565+00.	584+00.	LT	19
565+00.	600+60.	RT	36
587+00.	600+75.	LT	14
603+10.	659+00.	RT	56
604+05.	748+00.	LT	144
662+67.	682+00.	RT	19
686+67.	731+00.	RT	44
736+80.	748+00.	RT	11
789+00.	980+63.	LT	192
789+00.	980+63.	RT	192
			1734
		305.0110	305.0120
		BASE AGGREGATE DENSE	BASE AGGREGATE DENSE
		3/4-INCH	1 1/4-INCH
STA	STA	LOCATION	TON
53+08.	748+00.	LT &RT	10339
221+25.	226+00.	LT &RT	-
783+28.	802+20.	LT	210
789+00.	980+63.	LT &RT	946
978+46.	978+56.	LT/RT	4
		11500	1800
305.0500			
SHAPING SHOULDERS			
STA	STA	LOCATION	STA
53+08.	272+00.	RT	219
53+08.	558+00.	LT	505
274+20.	558+00.	RT	284
565+00.	584+00.	LT	19
565+00.	600+60.	RT	36
587+00.	600+75.	LT	14
603+10.	659+00.	RT	56
604+05.	748+00.	LT	144
662+67.	682+00.	RT	19
686+67.	731+00.	RT	44
736+80.	748+00.	RT	11
789+00.	980+63.	LT	192
789+00.	980+63.	RT	192
			1734

NOTE:
ALL ITEMS ON THIS SHEET ARE IN
CATEGORY 010 UNLESS OTHERWISE NOTED.

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		460.5224		455.0605	
		HMA PAVE. 4 LT 58-28 S		TACK COAT	
STA	STA	LOCATION	TON	GAL	
53+08.	78+50.	MAINLINE LT &RT	1177	424	
78+50.	109+00.	MAINLINE LT &RT	1412	508	
109+00.	138+00.	MAINLINE LT &RT	1343	483	
138+00.	167+00.	MAINLINE LT &RT	1343	483	
167+00.	197+00.	MAINLINE LT &RT	1389	500	
197+00.	222+00.	MAINLINE LT &RT	1157	417	
222+00.	225+00.	MAINLINE LT &RT	267	60	
225+00.	256+42.	MAINLINE LT &RT	1455	524	
256+42.	288+00.	MAINLINE LT &RT	1462	526	
288+00.	317+00.	MAINLINE LT &RT	1343	483	
317+00.	346+00.	MAINLINE LT &RT	1343	483	
346+00.	377+00.	MAINLINE LT &RT	1435	517	
377+00.	406+00.	MAINLINE LT &RT	1343	483	
406+00.	436+00.	MAINLINE LT &RT	1389	500	
436+00.	467+00.	MAINLINE LT &RT	1435	517	
467+00.	497+50.	MAINLINE LT &RT	1412	508	
497+50.	525+50.	MAINLINE LT &RT	1296	467	
525+50.	555+50.	MAINLINE LT &RT	1389	500	
555+50.	575+00.	MAINLINE LT &RT	903	325	
575+00.	606+25.	MAINLINE LT &RT	1447	521	
606+25.	636+00.	MAINLINE LT &RT	1377	496	
636+00.	667+00.	MAINLINE LT &RT	1435	517	
667+00.	697+00.	MAINLINE LT &RT	1389	500	
697+00.	718+00.	MAINLINE LT &RT	972	350	
718+00.	747+00.	MAINLINE LT &RT	1343	483	
747+00.	748+00.	MAINLINE LT &RT	46	17	
748+00.	758+72.	MAINLINE LT &RT	648	167	
748+00.	758+72.	MAINLINE LT &RT	278	71	
760+10.	768+25.	MAINLINE LT &RT	493	127	
760+10.	768+25.	MAINLINE LT &RT	211	54	
768+25.	784+00.	MAINLINE LT &RT	953	245	
768+25.	784+00.	MAINLINE LT &RT	408	105	
784+00.	789+00.	MAINLINE LT &RT	302	78	
784+00.	789+00.	MAINLINE LT &RT	136	33	
789+00.	811+00.	MAINLINE LT &RT	1019	367	
811+00.	838+25.	MAINLINE LT &RT	1262	454	
838+25.	868+25.	MAINLINE LT &RT	1389	500	
868+25.	898+50.	MAINLINE LT &RT	1400	536	
898+50.	929+00.	MAINLINE LT &RT	1426	508	
929+00.	958+75.	MAINLINE LT &RT	1377	496	
958+75.	980+63.	MAINLINE LT &RT	1013	365	
789+00.	980+63.	SHOULDERS	2574	0	
978+46.	978+56.	CULVERT PATCH	9	2	
			47200	15700	

		465.0120	
		ASPHALTIC SURFACE	
		DRIVEWAYS AND FIELD	
		ENTRANCES	
STA	STA	LOCATION	TON
94+77.	95+00.	LT	6
129+60.	129+80.	LT	4
131+30.	131+50.	LT	4
131+50.	131+80.	RT	6
142+30.	142+45.	RT	4
143+10.	143+35.	RT	5
241+55.	241+75.	LT	4
271+10.	271+20.	RT	4
276+00.	276+15.	LT	5
299+60.	299+80.	RT	4
304+20.	304+40.	LT	4
388+40.	388+60.	LT	4
395+10.	395+25.	RT	4
395+50.	395+70.	RT	4
450+60.	450+80.	LT	5
494+20.	494+40.	LT	4
500+40.	500+60.	LT	6
729+75.	729+95.	RT	5
736+75.	736+95.	RT	7
784+43.	784+61.	LT	2
785+78.	785+98.	LT	2
787+63.	787+88.	LT	2
789+35.	789+61.	LT	10
790+19.	790+51.	LT	21
791+92.	792+04.	LT	8
794+21.	794+44.	LT	15
820+20.	820+40.	LT	5
820+75.	821+00.	RT	5
824+50.	824+75.	RT	5
835+40.	835+60.	LT	5
959+00.	959+20.	LT	4
			173

		465.0475	
		ASPHALT CENTER LINE	
		RUMBLE STRIPS 2-LANE	
		RURAL	
STA	STA	LOCATION	LF
53+08.	748+00.	LT &RT	69492
789+00.	980+00.	LT &RT	19100
			88592

NOTE:
ALL ITEMS ON THIS SHEET ARE IN
CATEGORY 010 UNLESS OTHERWISE NOTED.

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512.1000 PILING STEEL SHEET TEMPORARY			
STA	STA	LOCATION	SF
20+00.	20+45.	B-23-176 TEMP BYPASS CHANNEL	450
			450
520.9700.S.01 CULVERT PIPE LINERS 24- INCH			
STA		DESCRIPTION	LF
120+46.		CROSS DRAIN	64
294+64.		CROSS DRAIN	72
304+10.		CROSS DRAIN	70
325+00.		CROSS DRAIN	60
388+70.		CROSS DRAIN	66
440+20.		CROSS DRAIN	80
482+75.		CROSS DRAIN	135
675+26.		CROSS DRAIN	64
			611
520.9700.S.02 CULVERT PIPE LINERS 30- INCH			
STA		DESCRIPTION	LF
374+55.		CROSS DRAIN	70
382+40.		CROSS DRAIN	80
382+55.		CROSS DRAIN	80
408+30.		CROSS DRAIN	60
408+75.		CROSS DRAIN	60
591+80.		CROSS DRAIN	88
			438
520.9700.S.03 CULVERT PIPE LINERS 36- INCH			
STA		DESCRIPTION	LF
524+00.		CROSS DRAIN	100
524+05.		CROSS DRAIN	100
			200

520.9700.S.04 CULVERT PIPE LINERS 42- INCH		
STA	DESCRIPTION	LF
233+65.	CROSS DRAIN	68
233+75.	CROSS DRAIN	68
		136
520.9700.S.05 CULVERT PIPE LINERS 48- INCH		
STA	DESCRIPTION	LF
283+45.	CROSS DRAIN	96
		96
520.9750.S CLEANING CULVERT PIPES FOR LINER VERIFICATION		
STA	STA	DESCRIPTION
408+70.	LT/RT	CROSS DRAIN
408+75.	LT/RT	CROSS DRAIN
		2
521.1024 APRON ENDWALLS FOR CULVERT PIPE STEEL 24- INCH		
STA	LOCATION	EACH
46+54.	LT & RT	2
93+64.	LT	1
120+46.	LT & RT	2
294+64.	LT	1
304+10.	LT	1
325+00.	LT	1
388+70.	RT	1
440+20.	LT & RT	2
482+75.	LT & RT	2
675+26.	LT & RT	2
		15
521.1030 APRON ENDWALLS FOR CULVERT PIPE STEEL 30- INCH		
STA	LOCATION	EACH
374+55.	LT & RT	2
591+80.	LT & RT	2
		4

NOTE:
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CATEGORY 010 UNLESS OTHERWISE NOTED.

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			521.1048 APRON ENDWALLS FOR CULVERT PIPE STEEL 48- INCH EACH
STA	LOCATION		
283+45.	LT & RT		2
			2
			522.1024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH
STA	STA	LOCATION	
801+50.	29' LT	SUGAR RIVER STATE TRAIL	1
802+07.	68' LT	SUGAR RIVER STATE TRAIL	1
			2
			523.0114 CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL CLASS HE-III 14x23-INCH LF
STA	LOCATION		
978+46.	CROSS DRAIN		54
			54
			523.0514 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE HORIZONTAL ELLIPTICAL 14x23-INCH EACH
STA	LOCATION		
978+46.	LT & RT		2
			2
			602.0405 CONCRETE SIDEWALK 4- INCH SF
STA	STA	LOCATION	
783+28.	802+20.	LT	9460
			9460

602.0415 CONCRETED SIDEWALK 6- INCH			
STA	STA	LOCATION	SF
784+40.	784+66.	DRIVEWAY	130
785+73.	786+03.	DRIVEWAY	150
787+59.	787+92.	DRIVEWAY	165
789+30.	789+58.	DRIVEWAY	140
790+16.	790+53.	DRIVEWAY	185
791+90.	792+13.	DRIVEWAY	115
794+16.	794+51.	DRIVEWAY	175
			1060
606.0200 RIPRAP MEDIUM			
STA	STA	LOCATION	CY
20+95.	21+10.	LT (TEMP BYPASS CHANNEL)	3
22+05.	22+20.	LT (TEMP BYPASS CHANNEL)	3
46+54.		DISCHARGE PIPE END	4
93+53.		DISCHARGE PIPE END	4
120+46.		DISCHARGE PIPE END	4
283+08.		DISCHARGE PIPE END	4
294+64.		DISCHARGE PIPE END	4
304+20.		DISCHARGE PIPE END	4
324+80.		DISCHARGE PIPE END	4
373+90.		DISCHARGE PIPE END	4
389+21.		DISCHARGE PIPE END	4
440+43.		DISCHARGE PIPE END	4
482+90.		DISCHARGE PIPE END	4
591+96.		DISCHARGE PIPE END	4
675+26.		DISCHARGE PIPE END	4
802+07.		DISCHARGE PIPE END	4
978+46.		DISCHARGE PIPE END	4
			66

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NOTE:
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CATEGORY 010 UNLESS OTHERWISE NOTED.

608.0324 STORM SEWER PIPE REINFORCED CONCRETE CLASS III 24-INCH			
STA	STA	LOCATION	LF
801+52.	801+78.	SUGAR RIVER STATE TRAIL	26
801+78.	802+07.	SUGAR RIVER STATE TRAIL	46
			72

			611.0530	611.2004
			MANHOLE COVERS TYPE J MANHOLES 4-FT DIAMETER	
STA	STA	LOCATION	EACH	EACH
801+78.	30' LT	SUGAR RIVER STATE TRAIL	1	1
			1	1

614.0010 BARRIER SYSTEM GRADING SHAPING AND FINISHING				THESE QUANTITIES ARE FOR INFORMATION ONLY. PAY AS PART OF "BARRIER SYSTEM GRADING SHAPING FINISHING"				
STA	STA	LOCATION	EACH	SALVAG. TOPSOIL SY	SEED LBS	FERT CWT	MULCH SY	
131+39.83	135+22.74	LT	1	87	2	0.05	87	
427+18.38	431+49.63	RT	1	434	12	0.27	434	
428+46.38	432+52.63	LT	1	346	9	0.21	346	
605+84.38	610+03.13	RT	1	370	10	0.23	370	
606+43.88	610+62.63	LT	1	313	9	0.19	313	
708+94.38	713+13.13	RT	1	236	5	0.15	236	
709+29.38	713+85.63	LT	1	224	6	0.14	224	
			7	2010	53	1.24	2010	

614.0305 STEEL PLATE BEAM GUARD CLASS A			
STA	STA	LOCATION	LF
131+60.24	134+72.74	LT	312.5
			312.5

614.0345 STEEL PLATE BEAM GUARD SHORT RADIUS			
STA	STA	LOCATION	LF
131+39.83	131+60.	LT	50
			50

614.0370 STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL			
STA	STA	LOCATION	EACH
134+72.74	135+22.74	LT	1
			1

NOTE:
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			614.0390
			STEEL PLATE BEAM
			GUARD SHORT RADIUS
			TERMINAL
STA	STA	LOCATION	EACH
131+39.83	131+41.	LT	1
			1
			614.2300
			MGS GUARDRAIL 3
STA	STA	LOCATION	LF
222+15.	224+90.	RT	275
222+15.	224+90.	LT	275
428+21.5	430+46.5	RT	225
429+49.5	431+49.5	LT	200
606+87.5	609+00.	RT	212.5
607+47.	609+59.5	LT	212.5
709+97.5	712+10.	RT	212.5
710+32.5	712+82.5	LT	250
			1863

			614.2610
			MGS GUARDRAIL TERMINAL
STA	STA	LOCATION	EAT EACH
221+61.88	222+15.	RT	1
221+61.88	222+15.	LT	1
224+90.	225+43.13	RT	1
224+90.	225+43.13	LT	1
427+68.38	428+21.5	RT	1
428+96.38	429+49.5	LT	1
430+46.5	430+99.63	RT	1
431+49.5	432+02.63	LT	1
606+34.38	606+87.5	RT	1
606+93.88	607+47.	LT	1
609+00.	609+53.13	RT	1
609+59.5	610+12.63	LT	1
709+44.38	709+97.5	RT	1
709+79.38	710+32.5	LT	1
712+10.	712+63.13	RT	1
712+82.5	713+35.63	LT	1
			16

	618.0100 MAINTENANCE AND REPAIR OF HAUL ROADS	619.1000 MOBILIZATION	642.5201 FIELD OFFICE TYPE C
LOCATION	EACH	EACH	EACH
ID 5660-00-63	1	1	1
	1	1	1

			625.0500	627.0200	629.0210	630.0120	630.0140	628.2008
			SALVAGED TOPSOIL	MULCHING	FERTILIZER TYPE B	SEEDING MIXTURE NO. 20	SEEDING MIXTURE NO. 40	EROSION MAT URBAN CLASS I TYPE B
STA	STA	LOCATION	SY	SY	CWT	LB	LB	SY
50+00.	55+00.	LT & RT	125	65	0.08	0	2	60
55+00.	60+00.	LT & RT	180	180	0.11	0	3	–
60+00.	65+00.	LT & RT	910	70	0.57	0	16	840
65+00.	68+90.	LT & RT	520	0	0.33	0	9	530
221+25.	223+25.	LT (B-23-176)	500	0	0.32	14	0	500
221+25.	223+50.	RT (B-23-176)	350	0	0.22	9	0	350
223+25.	224+15.	LT (BYPASS CHANNEL RESTORATION)	700	700	0.44	19	0	–
223+50.	224+30.	RT (BYPASS CHANNEL RESTORATION)	400	400	0.25	11	0	–
224+15.	226+00.	LT (B-23-176)	575	0	0.36	16	0	575
224+30.	226+00.	RT (B-23-176)	425	0	0.27	11	0	425
			4685	1415	3.0	80	30	3280

NOTE:
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CATEGORY 010 UNLESS OTHERWISE NOTED.

PROJECT NO: 5660-00-63	HWY: STH 59	COUNTY: GREEN	MISCELLANEOUS QUANTITIES	SHEET:	E
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			628.1504	628.1520	
			SILT FENCE	SILT FENCE MAINTENANCE	
STA	STA	LOCATION	LF	LF	
221+25.	223+16.	LT	222	222	New Bridge: B-23-176
221+35.	223+25.	RT	200	200	New Bridge: B-23-176
223+97.	226+00.	LT	215	215	New Bridge: B-23-176
224+50.	225+90.	RT	167	167	New Bridge: B-23-176
134+55.	135+48.	LT	96	96	GUARDRAIL REPLACEMENT
427+07.	428+54.	RT	148	148	GUARDRAIL REPLACEMENT
428+48.	429+85.	LT	138	138	GUARDRAIL REPLACEMENT
430+04.	431+43.	RT	140	140	GUARDRAIL REPLACEMENT
431+19.	432+42.	LT	124	124	GUARDRAIL REPLACEMENT
605+81.	607+20.	RT	142	142	GUARDRAIL REPLACEMENT
606+33.	607+72.	LT	145	145	GUARDRAIL REPLACEMENT
608+54.	609+97.	RT	143	143	GUARDRAIL REPLACEMENT
609+22.	610+51.	LT	132	132	GUARDRAIL REPLACEMENT
708+87.	710+24.	RT	138	138	GUARDRAIL REPLACEMENT
709+49.	710+54.	LT	108	108	GUARDRAIL REPLACEMENT
711+77.	712+98.	RT	131	131	GUARDRAIL REPLACEMENT
712+59.	713+81.	LT	119	119	GUARDRAIL REPLACEMENT
61+38.	64+71.	RT	338	338	SIDEWALK
65+38.	67+50.	RT	212	212	SIDEWALK
			3058	3058	

		628.1905	628.1910
		MOBILIZATIONS EROSION CONTROL	MOBILIZATIONS EMERGENCY EROSION CONTROL
STA	LOCATION	EACH	EACH
---	ID 5660-00-63	5	3
		5	3

			628.5505
			POLYETHYLENE SHEETING
STA	STA	LOCATION	SY
20+00.	23+00.	B-23-176 TEMP. BYPASS CHANNEL	933
			933

		628.7504
		TEMPORARY DITCH
		CHECKS
STA	LOCATION	LF
223+20.	RT	12
224+45.	LT	12
UNDISTRIBUTED	----	10
		34

			633.5200
			MARKERS CULVERT END EACH
STA	STA	LOCATION	
46+54.	LT/RT	STH 59	2
93+53.	LT/RT	STH 59	2
120+46.	LT/RT	STH 59	2
233+40.	LT/RT	STH 59	2
283+08.	LT/RT	STH 59	2
294+64.	LT/RT	STH 59	2
304+20.	LT/RT	STH 59	2
324+80.	LT/RT	STH 59	2
373+90.	LT/RT	STH 59	2
382+88.	LT/RT	STH 59	2
389+21.	LT/RT	STH 59	2
408+75.	LT/RT	STH 59	2
440+43.	LT/RT	STH 59	2
482+90.	LT/RT	STH 59	2
524+00.	LT/RT	STH 59	2
591+96.	LT/RT	STH 59	2
675+26.	LT/RT	STH 59	2
801+50.	29' LT	SUGAR RIVER STATE TRAIL	1
801+78.	30' LT	SUGAR RIVER STATE TRAIL	1
802+70.	68' LT	SUGAR RIVER STATE TRAIL	1
978+46.	LT/RT	STH 59	2
			39

NOTE:
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LOCATION	*ASSUMED STAGE DURATION	643.0100	643.0420		643.0705		643.0900		643.0910	643.0920
		TRAFFIC CONTROL	BARRICADES TYPE III		WARNING LIGHTS TYPE A		TRAFFIC CONTROL SIGNS		TRAFFIC CONTROL COVERING SIGNS TYPE I	TRAFFIC CONTROL COVERING SIGNS TYPE II
		EACH	EACH*	DAY	EACH*	DAY	EACH*	DAY	EACH	EACH
PROJECT	-	1	-	-	-	-	-	-	-	-
BRIDGE B-23-0176	45	-	9	405	18	810	15	675	-	-
STH 59 DETOUR	-	-	-	-	-	-	-	-	5	9
UNDISTRIBUTED	-	-	-	40	-	80	-	65	-	-
TOTALS		1		445		890		740	5	9

* FOR INFORMATION ONLY. ACTUAL NUMBER OF DEVICES TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

SIGN CODE	*ASSUMED STAGE DURATION	643.2000	643.3000	
		TRAFFIC CONTROL DETOUR	TRAFFIC CONTROL DETOUR SIGNS	
		EACH	EACH*	DAY
PROJECT	-	1.00	-	-
M1-6	25	-	41	1025
M3-2	25	-	26	650
M3-4	25	-	15	375
M4-8	25	-	32	800
M4-8A	25	-	0	0
MO5-1R	25	-	4	100
MO5-1L	25	-	3	75
MO6-1	25	-	9	225
W20-2	25	-	8	200
W20-3A	25	-	4	100
W20-3C	25	-	2	50
W20-3D	25	-	2	50
R11-2B	25	-	2	50
R11-3B	25	-	5	125
TOTALS		1		3825

645.0120 GEOTEXTILE FABRIC TYPE			
			HR SY
STA	STA	LOCATION	
223+40.	223+70.	B-23-176	214
46+54.		DISHARGE PIPE END	8
93+53.		DISHARGE PIPE END	8
120+46.		DISHARGE PIPE END	8
283+08.		DISHARGE PIPE END	8
294+64.		DISHARGE PIPE END	8
304+20.		DISHARGE PIPE END	8
324+80.		DISHARGE PIPE END	8
373+90.		DISHARGE PIPE END	8
389+21.		DISHARGE PIPE END	8
440+43.		DISHARGE PIPE END	8
482+90.		DISHARGE PIPE END	8
591+96.		DISHARGE PIPE END	8
675+26.		DISHARGE PIPE END	8
802+07.		DISHARGE PIPE END	8
978+46.		DISHARGE PIPE END	8
			334

NOTE:
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CATEGORY 010 UNLESS OTHERWISE NOTED.

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646.0106			
PAVEMENT MARKING			
EPOXY 4-INCH			
STA	STA	LOCATION	LF
53+08.	980+63.	5660-00-63	141290
53+08.	748+00.	5660-00-63	69492
53+08.	748+00.	5660-00-63	69492
789+00.	980+63.	5660-00-63	19163
789+00.	980+63.	5660-00-63	19163
97+00.	104+00.	RT	700
442+00.	446+00.	LT	400
660+00.	665+00.	RT	500
760+00.	764+00.	5660-00-63	800
			321000

647.0566			
PAVEMENT MARKING STOP			
LINE EPOXY 18-INCH			
STA	STA	LOCATION	LF
70+10.	RT	GREENBUSH ROAD	12
100+43.	LT	CTH DR	14
100+43.	RT	HANGER ROAD	12
108+05.	LT	MONROE SYLVESTER ROAD	12
152+95.	RT	FOREST PRAIRIE ROAD	12
189+00.	RT	MEYERS ROAD	12
229+55.	LT	BURKHALTER ROAD	12
248+65.	LT	LADWIG ROAD	12
274+75.	RT	CTH SS	14
337+40.	LT	SYLVESTER ROAD WEST	12
339+45.	RT	SYLVESTER ROAD EAST	12
356+60.	RT	BALLS MILL ROAD	12
357+00.	LT	BALLS MILL ROAD	12
400+20.	LT	RECHSTEINER ROAD	12
444+18.	RT	CTH S	14
462+00.	LT	CTH FF	14
462+00.	RT	CTH FF	14
502+95.	LT	TOWNS ROAD WEST	12
549+76.	RT	DECATUR SYLVESTER ROAD	12
570+42.	RT	TOWNS ROAD EAST	12
597+77.	LT	OLIVER ROAD	12
637+90.	LT	BROUGHTON ROAD	12
663+00.	LT	CTH F NORTH	14
687+20.	RT	TOWNS ROAD	12
715+00.	RT	CTH F SOUTH	14
724+50.	RT	BURT ROAD	12
740+62.	RT	WARREN STREET	12
748+40.	RT	SOUTH TAYLOR STREET	12
749+85.	LT	NORTH TAYLOR STREET	12
749+80.	LT	WEST MAIN STREET	12
753+00.	LT	NORTH JACKSON STREET	12
753+00.	RT	SOUTH JACKSON STREET	12
756+33.	RT	SOUTH MILL STREET	12
756+33.	LT	SUGAR RIVER PARKWAY	12

CONTINUED			
647.0566			
PAVEMENT MARKING STOP			
LINE EPOXY 18-INCH			
STA	STA	LOCATION	LF
761+10.	LT	WATER STREET	12
761+10.	RT	WATER STREET	12
764+41.	RT	MECHANIC STREET	12
764+41.	RT	MAIN STREET	12
764+50.	LT	STH 59	24
767+25.	LT	OAK STREET	12
769+22.	LT	MILWAUKEE STREET	12
769+22.	RT	MILWAUKEE STREET	12
774+00.	LT	MADISON STREET	12
798+75.	RT	CINCINNATI STREET	12
803+80.	LT	CTH E	14
805+05.	RT	OGDEN AVENUE	12
819+75.	LT	SUBURBAN DRIVE	12
875+48.	LT	EDMUNDS ROAD	12
915+12.	RT	PEEBLES ROAD	12
980+63.	CL	END PROJECT	14
			630

647.0766			
PAVEMENT MARKING			
CROSSWALK EPOXY 6-INCH			
STA	STA	LOCATION	LF
749+85.	LT	NORTH TAYLOR STREET	80
753+00.	LT	NORTH JACKSON STREET	80
753+00.	RT	SOUTH JACKSON STREET	80
756+33.	RT	SOUTH MILL STREET	80
756+33.	LT	SUGAR RIVER PARKWAY	80
761+10.	LT	WATER STREET	80
761+10.	RT	WATER STREET	80
761+10.	RT	STH 59	80
761+10.	RT	STH 59	90
764+41.	RT	MECHANIC STREET	80
764+41.	RT	MAIN STREET	80
764+41.	RT	STH 59	80
764+50.	LT	STH 59	80
			1050

648.0100			
LOCATING NO-PASSING			
ZONES			
STA	STA	LOCATION	MI
53+08.	980+63.	5660-00-63	17.6
			17.6

NOTE:
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CATEGORY 010 UNLESS OTHERWISE NOTED.

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649.0400 TEMPORARY PAVEMENT MARKING REMOVABLE TAPE 4-INCH			
STA	STA	LOCATION	LF
53+08.	980+63.	5660-00-63	46000
			46000

650.4000 CONSTRUCTION STAKING STORM SEWER			
STA		LOCATION	EACH
68+53.		LT & RT	1
			1

		650.4500 CONSTRUCTION STAKING SUBGRADE		650.9920 CONSTRUCTION STAKING SLOPE STAKES	
STA	STA	LOCATION	LF		LF
221+25.	226+00.	B-23-176	475		475
50+00.	68+90.	LT (ALBANY SIDEWALK)	1890		1890
			2365		2365

650.6000 CONSTRUCTION STAKING PIPE CULVERTS			
STA		LOCATION	EACH
978+46.		CROSS DRAIN	1
			1

		650.8000 CONSTRUCTION STAKING RESURFACING REFERENCE		650.9910 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL	
STA	STA	LOCATION	LF		LS
53+08.	980+63.	5660-00-63	92755		1
			92755		1

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CATEGORY 010 UNLESS OTHERWISE NOTED.

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690.0150			
SAWING ASPHALT			
STA	OFFSET	LOCATION	LF
53+08.	CL	BEGIN PROJECT	24
70+10.	RT	GREENBUSH ROAD	30
94+73.	LT	CHURCH PE	27
100+43.	LT	CTH DR	30
100+43.	RT	HANGER ROAD	31
108+05.	LT	MONROE SYLVESTER ROAD	22
129+65.	LT	PE	15
131+30.	LT	PE	15
131+56.	RT	AIRPORT CE	26
142+30.	RT	PE	12
143+15.	RT	CE - RUFER & SON EXCAV.	28
152+95.	RT	FOREST PRAIRIE ROAD	22
189+00.	RT	MEYERS ROAD	20
221+25.	CL	BRIDGE B-23-176	30
229+55.	LT	BURKHALTER ROAD	36
226+00.	CL	BRIDGE B-23-176	30
241+60.	LT	PE	24
248+65.	LT	LADWIG ROAD	24
271+00.	RT	PE - FARM	16
274+75.	RT	CTH SS	26
276+00.	LT	PE	18
299+56.	RT	PE	14
304+20.	LT	PE	12
337+40.	LT	SYLVESTER ROAD WEST	50
339+45.	RT	SYLVESTER ROAD EAST	22
356+60.	RT	BALLS MILL ROAD	34
357+00.	LT	BALLS MILL ROAD	44
388+45.	LT	PE	20
395+05.	RT	PE	12
395+65.	RT	PE	12
400+20.	LT	RECHSTEINER ROAD	42
444+18.	RT	CTH S	28
450+68.	LT	PE	19
462+00.	LT	CTH FF	26
462+00.	RT	CTH FF	30
494+30.	LT	PE	15
500+55.	LT	PE	36
502+95.	LT	TOWNS ROAD WEST	42
549+76.	RT	DECATUR SYLVESTER ROAD	22
570+42.	RT	TOWNS ROAD EAST	26
597+77.	LT	OLIVER ROAD	30
637+90.	LT	BROUGHTON ROAD	32
663+00.	LT	CTH F NORTH	30
687+20.	RT	TOWNS ROAD	24
715+00.	RT	CTH F SOUTH	30
724+50.	RT	BURT ROAD	14
729+85.	RT	PE - CEMETERY	18
737+00.	RT	PE - CEMETERY	18
740+62.	RT	WARREN STREET	22
748+40.	RT	SOUTH TAYLOR STREET	30
749+85.	LT	NORTH TAYLOR STREET	38

NOTE:
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CATEGORY 010 UNLESS OTHERWISE NOTED.

CONTINUED

690.0150			
SAWING ASPHALT			
STA	OFFSET	LOCATION	LF
749+80.	LT	WEST MAIN STREET	26
753+00.	LT	NORTH JACKSON STREET	32
753+00.	RT	SOUTH JACKSON STREET	35
756+33.	RT	SOUTH MILL STREET	32
756+33.	LT	SUGAR RIVER PARKWAY	30
761+10.	LT	WATER STREET	32
761+10.	RT	WATER STREET	50
764+41.	RT	MECHANIC STREET	42
764+41.	RT	MAIN STREET	37
767+25.	LT	OAK STREET	42
769+22.	LT	MILWAUKEE STREET	30
769+22.	RT	MILWAUKEE STREET	32
774+00.	LT	MADISON STREET	34
789+50.	LT	PE	55
790+42.	LT	PE	90
792+06.	LT	PE	32
798+75.	RT	CINCINNATI STREET	26
803+80.	LT	CTH E	62
805+05.	RT	OGDEN AVENUE	28
819+75.	LT	SUBURBAN DRIVE	82
820+42.	LT	PE	20
820+96.	RT	PE	17
824+75.	RT	PE	18
835+61.	LT	PE	20
875+48.	LT	EDMUNDS ROAD	18
915+12.	RT	PEEBLES ROAD	20
959+25.	LT	PE	17
978+46.	LT/RT	CULVERT REPLACEMENT	25
978+56.	LT/RT	CULVERT REPLACEMENT	25
980+63.	CL	STH 104	173
			2480

SPV.0060.01			
SAND BAGS			
STA	STA	LOCATION	EACH
20+00.	23+00.	B-23-176 TEMP. BYPASS CHANNEL	100
			100

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STA	LOCATION	SIGN CODE	SIGN SIZE	SIGN SIZE (IN)	634.0614	637.2210	637.2230	638.2102	638.2602	638.3000	SIGN MESSAGE
					POSTS WOOD 4X6- INCH X 14-FT EACH	SIGNS TYPE II REFLECTIVE H SF	SIGNS TYPE II REFLECTIVE F SF	MOVING SIGNS TYPE II EACH	REMOVING SIGNS TYPE II EACH	REMOVING SMALL SIGN SUPPORTS EACH	
SHEET 1											
55+90.	LT	W3-5	(2S)	36X36	1	-	9.00	-	1	1	SPEED REDUCTION AHEAD __ MPH SYMBOL
59+90.	RT	W1-2L	(2S)	30X30	1	-	6.25	-	1	1	CURVE LEFT
70+85.	RT	R1-1	(2S)	30X30	1	5.18	-	-	1	1	STOP
87+60.	RT	J1-1	(2S)	24x39	1	6.50	-	-	1	1	JCT DR
96+40.	LT	W1-2R	(2S)	30X30	1	-	6.25	-	1	1	CURVE RIGHT
96+60.	RT	W1-2R	(2S)	30X30	1	-	6.25	-	1	1	CURVE RIGHT
-	-	W13-1	(2S)	18X18	-	-	-	-	1	-	ADVISORY SPEED
99+30.	LT	J4-1	(2S)	24X36	1	6.00	-	-	1	1	REASSURANCE ASSEMBLY
99+40.	RT	J13-1	(2S)	24X45	1	7.50	-	-	1	1	ROUTE TURN W/O CARDINAL
101+00.	RT	R1-1	(2S)	30X30	1	5.18	-	-	1	1	STOP
101+50.	LT	J13-1	(2S)	24X45	1	7.50	-	-	1	1	ROUTE TURN W/O CARDINAL
101+60.	RT	J4-1	(2S)	24X36	1	6.00	-	-	1	1	REASSURANCE ASSEMBLY
103+00.	LT	W1-8	(2S)	18X24	1	-	3.00	-	-	-	CHEVRON
-	-	W1-8	(2S)	18X24	-	-	3.00	-	-	-	CHEVRON
104+50.	LT	W1-8	(2S)	18X24	1	-	3.00	-	-	-	CHEVRON
-	-	W1-8	(2S)	18X24	-	-	3.00	-	-	-	CHEVRON
105+90.	LT	W1-8	(2S)	18X24	1	-	3.00	-	-	-	CHEVRON
-	-	W1-8	(2S)	18X24	-	-	3.00	-	-	-	CHEVRON
107+00.	LT	J1-1	(2S)	24X39	1	6.50	-	-	1	1	JCT DR
107+30.	LT	W1-8	(2S)	18X24	1	-	3.00	-	-	-	CHEVRON
-	-	W1-8	(2S)	18X24	-	-	3.00	-	-	-	CHEVRON
107+85.	LT	R1-1	(2S)	30X30	1	5.18	-	-	1	1	STOP
108+80.	LT	W1-8	(2S)	18X24	1	-	3.00	-	-	-	CHEVRON
-	-	W1-8	(2S)	18X24	-	-	3.00	-	-	-	CHEVRON
SHEET 2											
110+20.	LT	W1-8	(2S)	18X24	1	-	3.00	-	-	-	CHEVRON
-	-	W1-8	(2S)	18X24	-	-	3.00	-	-	-	CHEVRON
111+60.	LT	W1-8	(2S)	18X24	1	-	3.00	-	-	-	CHEVRON
-	-	W1-8	(2S)	18X24	-	-	3.00	-	-	-	CHEVRON
113+10.	LT	W1-8	(2S)	18X24	1	-	3.00	-	-	-	CHEVRON
-	-	W1-8	(2S)	18X24	-	-	3.00	-	-	-	CHEVRON
114+50.	LT	W1-8	(2S)	18X24	1	-	3.00	-	-	-	CHEVRON
-	-	W1-8	(2S)	18X24	-	-	3.00	-	-	-	CHEVRON
116+00.	LT	W1-8	(2S)	18X24	1	-	3.00	-	-	-	CHEVRON
-	-	W1-8	(2S)	18X24	-	-	3.00	-	-	-	CHEVRON
123+00.	LT	W1-2L	(2S)	30X30	1	-	6.25	-	1	1	CURVE LEFT
-	-	W13-1	(2S)	18X18	-	-	2.25	-	1	-	ADVISORY SPEED
125+00.	RT	W14-3	(2S)	48X36	1	-	6.00	-	1	1	NO PASSING ZONE
125+50.	LT	I55-56	(2S)	30x36	1	7.50	-	-	1	1	ADOPT-A-HIGHWAY
130+70.	RT	D9-52R	(2S)	36X36	1	9.00	-	-	1	1	MONROE AIRPORT
132+00.	RT	R1-1	(2S)	30X30	1	5.18	-	-	1	1	STOP
134+60.	LT	D9-52L	(2S)	36X36	1	9.00	-	-	1	1	MONROE AIRPORT
136+60.	LT	W14-3	(2S)	48X36	1	-	6.00	-	1	1	NO PASSING ZONE
153+50.	RT	R1-1	(2S)	30X30	1	5.18	-	-	1	1	STOP
SHEET 3											
168+30.	RT	W1-2L	(2S)	30X30	1	-	6.25	-	1	1	CURVE LEFT
201+00.	LT	W1-2R	(2S)	30X30	1	-	6.25	-	1	1	CURVE RIGHT
204+30.	RT	W14-3	(2S)	48X36	1	-	6.00	-	1	1	NO PASSING ZONE
204+30.	-	I55-56	(2S)	30x36	-	7.50	-	-	1	-	ADOPT-A-HIGHWAY
209+80.	RT	W1-2R	(2S)	30X30	1	-	6.25	-	1	1	CURVE RIGHT
210+50.	LT	W14-3	(2S)	48X36	1	-	6.00	-	1	1	NO PASSING ZONE
210+50.	LT	I55-56	-	-	-	-	-	-	1	-	ADOPT-A-HIGHWAY
											NOTE: ALL ITEMS ON THIS CATEGORY 010

NOTE:
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CATEGORY 010 UNLESS OTHERWISE NOTED.

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		634.0614				637.2210		637.2230		638.2102		638.2602		638.3000	
		SIGN	SIGN	SIGN	POSTS WOOD 4X6-	SIGNS TYPE II	SIGNS TYPE II	SIGNS TYPE II	MOVING SIGNS	REMOVING SIGNS	REMOVING SMALL				
STA	LOCATION	CODE	SIZE	SIZE	INCH X 14-FT	REFLECTIVE H	REFLECTIVE F	REFLECTIVE F	TYPE II	TYPE II	SIGN SUPPORTS				
				(IN)	EACH	SF	SF	SF	EACH	EACH	EACH				SIGN MESSAGE
SHEET4															
229+30.	LT	R1-1	(2S)	30X30	1	5.18	-	-	-	1	1				STOP
240+10.	LT	W14-3	(2S)	48X36	1	-	6.00	-	-	1	1				NO PASSING ZONE
-	-	W1-2L	(2S)	30X30	1	-	6.25	-	-	1	-				CURVE LEFT
242+00.	RT	W14-3	(2S)	48X36	1	-	6.00	-	-	1	1				NO PASSING ZONE
248+25.	LT	R1-1	(2S)	30X30	1	5.18	-	-	-	1	1				STOP
255+00.	RT	W1-2L	(2S)	30X30	1	-	6.25	-	-	1	1				CURVE LEFT
265+10.	RT	J1-1	(2S)	24X39	1	6.50	-	-	-	1	1				JCT SS
267+10.	RT	W2-2	(2S)	30X30	1	-	6.25	-	-	1	1				SIDE ROAD
274+30.	RT	J13-1	(2S)	24X45	1	7.50	-	-	-	1	1				ROUTE TURN W/O CARDINAL
274+30.	LT	J4-1	(2S)	24X36	1	6.00	-	-	-	1	1				REASSURANCE ASSEMBLY
274+90.	LT	J13-1	(2S)	24X45	1	7.50	-	-	-	1	1				ROUTE TURN W/O CARDINAL
275+00.	LT	W1-7	(2S)	48X24	1	-	8.00	-	-	1	1				TWO-DIRECTION LARGE ARROW
275+30.	RT	J4-1	(2S)	24X36	1	6.00	-	-	-	1	1				REASSURANCE ASSEMBLY
275+40.	RT	J13-1	(2S)	24X45	1	7.50	-	-	-	1	1				ROUTE TURN W/O CARDINAL
286+40.	LT	J1-1	(2S)	24X39	1	6.50	-	-	-	1	1				JCT SS
SHEET5															
290+60.	RT	W11-3	-	-	-	-	-	-	-	1	1				DEER CROSSING
-	-	W57-51	-	-	-	-	-	-	-	1	-				NEXT _ MILES
305+20.	LT	W1-2R	(2S)	30X30	1	-	6.25	-	-	1	1				CURVE RIGHT
336+90.	LT	R1-1	(2S)	30X30	1	5.18	-	-	-	1	1				STOP
338+90.	-	W14-3	(2S)	48X36	-	-	6.00	-	-	1	-				NO PASSING ZONE
339+50.	LT	W11-3	-	-	-	-	-	-	-	1	1				DEER CROSSING
-	-	W57-51	-	-	-	-	-	-	-	1	-				NEXT _ MILES
SHEET6															
348+60.	LT	W14-3	(2S)	48X36	1	-	6.00	-	-	1	1				NO PASSING ZONE
348+60.	-	I55-56	(2S)	30x36	-	7.50	-	-	-	1	-				ADOPT-A-HIGHWAY
368+30.	RT	W1-2L	(2S)	30X30	1	-	6.25	-	-	1	1				CURVE LEFT
369+70.	LT	W1-2L	(2S)	30X30	1	-	6.25	-	-	1	1				CURVE LEFT
385+10.	LT	W14-3	(2S)	48X36	1	-	6.00	-	-	1	1				NO PASSING ZONE
387+80.	LT	W1-2R	(2S)	30X30	1	-	6.25	-	-	1	1				CURVE RIGHT
389+30.	RT	W14-3	(2S)	48X36	1	-	6.00	-	-	1	1				NO PASSING ZONE
392+30.	RT	W2-2	(2S)	30X30	1	-	6.25	-	-	1	1				SIDE ROAD

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NOTE:
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CATEGORY 010 UNLESS OTHERWISE NOTED.

STA	LOCATION	SIGN CODE	SIGN SIZE	SIGN SIZE (IN)	634.0614	637.2210	637.2230	638.2102	638.2602	638.3000	SIGN MESSAGE
					POSTS WOOD 4X6- INCH X 14-FT	SIGNS TYPE II REFLECTIVE H	SIGNS TYPE II REFLECTIVE F	MOVING SIGNS TYPE II	REMOVING SIGNS TYPE II	REMOVING SMALL SIGN SUPPORTS	
					EACH	SF	SF	EACH	EACH	EACH	
SHEET7											
407+30.	RT	W14-3	(2S)	48X36	1	-	6.00	-	1	1	NO PASSING ZONE
431+30.	LT	W14-3	(2S)	48X36	1	-	6.00	-	1	1	NO PASSING ZONE
431+60.	RT	W1-2L	(2S)	30X30	1	-	6.25	-	1	1	CURVE LEFT
-	-	W13-1	(2S)	18X18	-	-	-	-	1	-	ADVISORY SPEED
439+60.	RT	J1-1	(2S)	24X39	1	6.50	-	-	1	1	JCT S
441+30.	RT	W1-6	(2S)	48X24	1	-	8.00	-	1	1	ONE-DIRECTION LARGE ARROW
443+50.	LT	J4-1	(2S)	24X26	1	6.00	-	-	1	1	REASSURANCE ASSEMBLY
443+60.	RT	J13-1	(2S)	24X45	1	7.50	-	-	1	1	ROUTE TURN W/O CARDINAL
444+10.	LT	W1-7	(2S)	48X24	1	-	8.00	-	1	1	TWO-DIRECTION LARGE ARROW
444+70.	LT	J13-1	(2S)	24X45	1	7.50	-	-	1	1	ROUTE TURN W/O CARDINAL
444+70.	RT	J13-1	(2S)	24X45	1	7.50	-	-	1	1	ROUTE TURN W/O CARDINAL
445+30.	RT	J4-1	(2S)	24X36	1	6.00	-	-	1	1	REASSURANCE ASSEMBLY
447+90.	RT	W1-6	(2S)	48X24	1	-	8.00	-	1	1	ONE-DIRECTION LARGE ARROW
451+50.	RT	J1-1	(2S)	24X39	1	6.50	-	-	1	1	JCT FF
456+60.	LT	W1-2R	(2S)	30X30	1	-	6.25	-	1	1	CURVE RIGHT
458+50.	LT	J1-1	(2S)	24X39	1	6.50	-	-	1	1	JCT S
459+90.	LT	J4-1	(2S)	24X36	1	6.00	-	-	1	1	REASSURANCE ASSEMBLY
461+40.	RT	J13-1	(2S)	24X45	1	7.50	-	-	1	1	ROUTE TURN W/O CARDINAL
461+40.	LT	J13-1	(2S)	24X45	1	7.50	-	-	1	1	ROUTE TURN W/O CARDINAL
462+44.	RT	R1-1	(2S)	30X30	1	5.18	-	-	1	1	STOP
462+70.	LT	J13-1	(2S)	24X45	1	7.50	-	-	1	1	ROUTE TURN W/O CARDINAL
462+70.	RT	J13-1	(2S)	24X45	1	7.50	-	-	1	1	ROUTE TURN W/O CARDINAL
462+70.	RT	J4-1	(2S)	24X36	1	6.00	-	-	1	1	REASSURANCE ASSEMBLY
SHEET8											
469+00.	RT	W14-3	(2S)	48X36	1	-	6.00	-	1	1	NO PASSING ZONE
472+60.	LT	J1-1	(2S)	24X39	1	6.50	-	-	1	1	JCT FF
483+10.	LT	W14-3	(2S)	48X36	1	-	6.00	-	1	1	NO PASSING ZONE
485+20.	RT	W1-2R	(2S)	30X30	1	-	6.25	-	1	1	CURVE RIGHT
-	-	W13-1	(2S)	18X18	-	-	-	-	1	-	ADVISORY SPEED
513+60.	LT	W1-2L	(2S)	30X30	1	-	6.25	-	1	1	CURVE LEFT
-	-	W13-1	(2S)	18X18	-	-	-	-	1	-	ADVISORY SPEED
522+60.	RT	W14-3	(2S)	48X36	1	-	6.00	-	1	1	NO PASSING ZONE
SHEET9											
532+70.	LT	W14-3	(2S)	48X36	1	-	6.00	-	1	1	NO PASSING ZONE
558+30.	RT	W1-2L	(2S)	30X30	1	-	6.25	-	1	1	CURVE LEFT
-	-	W13-1	(2S)	18X18	-	-	2.25	-	1	-	ADVISORY SPEED
567+20.	RT	W1-6	(2S)	48X24	1	-	8.00	-	1	1	ONE-DIRECTION LARGE ARROW
SHEET10											
587+10.	LT	W1-2R	(2S)	30X30	1	-	6.25	-	1	1	CURVE RIGHT
591+30.	LT	W14-3	(2S)	48X36	1	-	6.00	-	1	1	NO PASSING ZONE
592+50.	RT	W14-3	(2S)	48X36	1	-	6.00	-	1	1	NO PASSING ZONE
597+40.	LT	R1-1	(2S)	30X30	1	5.18	-	-	1	1	STOP
613+40.	RT	W14-3	(2S)	48X36	1	-	6.00	-	1	1	NO PASSING ZONE
616+30.	LT	W14-3	(2S)	48X36	1	-	6.00	-	1	1	NO PASSING ZONE
623+10.	RT	W1-2R	(2S)	30X30	1	-	6.25	-	1	1	CURVE RIGHT
-	-	W13-1	(2S)	18X18	-	-	2.25	-	1	-	ADVISORY SPEED

NOTE:
ALL ITEMS ON THIS SHEET ARE IN
CATEGORY 010 UNLESS OTHERWISE NOTED.

STA	LOCATION	SIGN CODE	SIGN SIZE	SIGN SIZE (IN)	634.0614	637.2210	637.2230	638.2102	638.2602	638.3000	SIGN MESSAGE
					POSTS WOOD 4X6- INCH X 14-FT EACH	SIGNS TYPE II REFLECTIVE H SF	SIGNS TYPE II REFLECTIVE F SF	MOVING SIGNS TYPE II EACH	REMOVING SIGNS TYPE II EACH	REMOVING SMALL SIGN SUPPORTS EACH	
SHEET11											
637+40.	LT	R1-1	(2S)	30X30	1	5.18	-	-	1	1	STOP
641+10.	LT	W1-6	(2S)	48X24	1	-	8.00	-	1	1	ONE-DIRECTION LARGE ARROW
645+50.	LT	W1-2L	(2S)	30X30	1	-	6.25	-	1	-	CURVE LEFT
-	-	W13-1	(2S)	18X18	-	-	-	-	1	-	ADVISORY SPEED
647+30.	RT	J1-1	(2S)	24X39	1	6.50	-	-	1	1	JCT F
648+70.	LT	W14-3	(2S)	48X36	1	-	6.00	-	1	1	NO PASSING ZONE
650+60.	RT	W14-3	(2S)	48X36	1	-	6.00	-	1	1	NO PASSING ZONE
660+70.	LT	J4-1	(2S)	24X36	1	6.00	-	-	1	1	REASSURANCE ASSEMBLY
662+20.	LT	R1-1	(2S)	30X30	1	-	-	-	1	1	STOP
662+45.	LT	R1-1	(2S)	30X30	1	5.18	-	-	1	1	STOP
662+50.	LT	J13-2	(2S)	48X45	1	15	-	-	1	1	DIRECTIONAL WITHOUT CARDINAL
662+80.	RT	J13-1	(2S)	24X45	1	7.50	-	-	1	1	ROUTE TURN W/O CARDINAL
663+00.	RT	W1-7	(2S)	48X24	1	-	8.00	-	1	1	TWO-DIRECTION LARGE ARROW
663+50.	RT	J4-2	(2S)	48X36	1	12.00	-	-	1	1	REASSURANCE ASSEMBLY
663+70.	LT	J13-1	(2S)	24X45	1	7.50	-	-	1	1	ROUTE TURN W/O CARDINAL
666+50.	RT	D2-2	(2S)	78X24	2	13.00	-	-	1	2	ALBANY/EVANSVILLE
670+10.	RT	W14-3	(2S)	48X36	1	-	6.00	-	1	1	NO PASSING ZONE
672+80.	LT	J12-1	(2S)	24X45	1	7.50	-	-	1	1	ROUTE TURN W/O CARDINAL
680+00.	RT	W2-2	(2S)	30X30	1	-	6.25	-	1	1	SIDE ROAD
687+40.	RT	R1-1	(2S)	30X30	1	5.18	-	-	1	1	STOP
693+80.	RT	I55-56	(2S)	30x36	1	7.50	-	-	1	1	ADOPT-A-HIGHWAY
-	-	W14-3	(2S)	48X36	-	-	6.00	-	1	-	NO PASSING ZONE
694+10.	LT	W14-3	(2S)	48X36	1	-	6.00	-	1	1	NO PASSING ZONE
SHEET12											
703+10.	RT	W1-2L	(2S)	30X30	1	-	6.25	-	1	1	CURVE LEFT
-	-	W13-1	(2S)	18X18	-	-	2.25	-	1	-	ADVISORY SPEED
707+10.	RT	J12-1	(2S)	24X45	1	7.50	-	-	1	1	ROUTE TURN W/O CARDINAL
710+00.	LT	D2-1	(2S)	66X15	2	6.88	-	-	-	-	MONROE 15
710+00.	RT	-	-	60X24	2	10.00	-	-	1	2	ALBANY
-	-	-	-	-	-	-	-	1	-	-	TREE CITY USA
714+10.	RT	J13-1	(2S)	24X45	1	7.50	-	-	1	1	ROUTE TURN W/O CARDINAL
714+20.	LT	J4-2	(2S)	48X36	1	12.00	-	-	1	1	REASSURANCE ASSEMBLY
-	LT	J4-1	(2S)	24X36	-	-	-	-	1	1	59 WEST REASSURANCE ASSEMBLY
714+60.	LT	W1-7	(2S)	48X24	1	-	8.00	-	1	1	TWO-DIRECTION LARGE ARROW
715+00.	LT	J13-1	(2S)	24X45	1	7.50	-	-	1	1	ROUTE TURN W/O CARDINAL
715+20.	RT	R1-1	(2S)	30X30	1	5.18	-	-	1	1	STOP
715+20.	RT	J13-2	(2S)	48X45	1	15	-	-	1	1	DIRECTIONAL WITHOUT CARDINAL
715+80.	RT	J4-1	(2S)	24X36	1	6.00	-	-	1	1	REASSURANCE ASSEMBLY
720+10.	RT	W3-5	(2S)	36X36	1	-	9.00	-	1	1	SPEED REDUCTION AHEAD __ MPH SYMBOL
723+00.	LT	W1-2R	(2S)	30X30	1	-	6.25	-	1	1	CURVE RIGHT
-	-	W13-1	(2S)	18X18	-	-	2.25	-	1	-	ADVISORY SPEED
723+10.	RT	R2-1	(2S)	24x30	1	-	-	1	1	1	SPEED LIMIT _ MPH
724+90.	RT	R1-1	(2S)	30X30	1	5.18	-	-	1	1	STOP
725+90.	LT	R2-1	(2S)	24x30	1	5.00	-	-	1	1	SPEED LIMIT _ MPH
727+80.	LT	J1-1	(2S)	24X39	1	6.50	-	-	1	1	JCT F
735+20.	LT	R2-1	(2S)	24X30	1	5.00	-	-	1	1	SPEED LIMIT _ MPH
738+50.	LT	-	-	66X15	-	-	-	-	1	2	MONROE 15
740+00.	LT	J4-1	(2S)	24X36	1	6.00	-	-	1	-	REASSURANCE ASSEMBLY
740+90.	RT	W3-5	(2S)	36X36	1	-	9.00	-	1	1	SPEED REDUCTION AHEAD __ MPH SYMBOL
741+80.	LT	W1-2R	(2S)	30X30	1	-	6.25	-	1	1	CURVE RIGHT
745+10.	RT	R2-1	(2S)	24X30	1	5.00	-	-	1	1	SPEED LIMIT _ MPH
											NOTE: ALL ITEMS ON THIS SHEET ARE TO BE INSTALLED

NOTE:
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STA	LOCATION	SIGN CODE	SIGN SIZE	SIGN SIZE (IN)	634.0614	637.2210	637.2230	638.2102	638.2602	638.3000	SIGN MESSAGE
					POSTS WOOD 4X6- INCH X 14-FT EACH	SIGNS TYPE II REFLECTIVE H SF	SIGNS TYPE II REFLECTIVE F SF	MOVING SIGNS TYPE II EACH	REMOVING SIGNS TYPE II EACH	REMOVING SMALL SIGN SUPPORTS EACH	
SHEET13											
747+22.	RT	W1-1R	(2S)	36x36	1	-	9.00	-	1	1	RIGHT TURN
-	RT	W13-1	(2S)	18x18	1	-	2.25	-	1	-	ADVISORY SPEED PLATE
749+30.	LT	J3-1	(2S)	24x57	1	9.50	-	-	1	1	DIRECTIONAL ASSEMBLY
750+30.	LT	J3-1	(2S)	24x57	1	9.50	-	-	1	1	DIRECTIONAL ASSEMBLY
752+47.	LT	W1-1L	(2S)	36x36	1	-	9.00	-	1	1	LEFT TURN
-	LT	W13-1	(2S)	18x18	1	-	2.25	-	1	-	ADVISORY SPEED PLATE
754+48.	LT	R2-1	(2S)	24x30	1	5.00	-	-	1	1	SPEED LIMIT _ MPH
757+16.	RT	J1-1	(2S)	24x39	1	6.50	-	-	1	1	JUNCTION OR END ASSEMBLY
757+83.	RT	S1-1	(2S)	36x36	1	-	9.00	-	1	1	SCHOOL ADVANCE
-	RT	S16-9P	(2S)	30x18	-	-	3.75	-	1	-	AHEAD PLAQUE
-	RT	R2-6P	(2S)	24x18	-	3.00	-	-	1	-	FINES HIGHER PLAQUE
760+61.	LT	R6-2L	(2S)	24x30	1	5.00	-	-	1	1	ONE WAY LEFT ARROW
-	LT	R6-2R	(2S)	24x30	-	5.00	-	-	1	-	ONE WAY RIGHT ARROW
761+89.	RT	J2-1	(2S)	24x57	1	9.50	-	-	1	1	ROUTE TURN ASSEMBLY
762+84.	LT	R2-1	(2S)	24x30	1	5.00	-	-	1	1	SPEED LIMIT _ MPH
-	LT	S5-2	(2S)	24x30	-	5.00	-	-	1	-	END SCHOOL ZONE
763+64.	LT	J4-1	(2S)	24x36	1	6.00	-	-	1	1	REASSURANCE ASSEMBLY
763+98.	RT	S1-1	(2S)	36x36	1	-	9.00	-	1	1	SCHOOL ADVANCE
-	RT	S16-7L	(2S)	30x18	-	-	3.75	-	1	-	LEFT DIAGONAL DOWNWARD POINTING ARROW
764+17.	RT	S1-1	(2S)	36x36	1	-	9.00	-	1	1	SCHOOL ADVANCE
-	RT	S16-7R	(2S)	30x18	-	-	3.75	-	1	-	RIGHT DIAGONAL DOWNWARD POINTING ARROW
-	RT	S1-1	(2S)	36x36	-	-	9.00	-	1	-	SCHOOL ADVANCE
-	RT	S16-7L	(2S)	30x18	-	-	3.75	-	1	-	LEFT DIAGONAL DOWNWARD POINTING ARROW
764+18.	RT	J3-1	(2S)	24x57	1	9.50	-	-	1	1	DIRECTIONAL ASSEMBLY
764+42.	RT	R1-1	(2S)	30x30	1	6.25	-	-	1	1	STOP
-	RT	W4-4AL	(2S)	30x12	-	-	2.50	-	1	-	TRAFFIC FROM LEFT DOES NOT STOP
764+42.	RT	J3-2	(2S)	48x57	1	19.00	-	-	1	1	DIRECTIONAL ASSEMBLY
764+65.	RT	J13-1	(2S)	24x45	1	7.50	-	-	1	1	DIRECTIONAL WITHOUT CARDINAL
764+67.	RT	R1-1	(2S)	30x30	1	6.25	-	-	1	1	STOP
-	RT	W4-4B	(2S)	30x12	-	-	2.50	-	1	-	ONCOMING TRAFFIC DOES NOT STOP
76500	LT	R1-1	(2S)	30x30	1	6.25	-	-	1	1	STOP
-	LT	W4-4AR	(2S)	30x12	-	-	2.50	-	1	-	TRAFFIC FROM RIGHT DOES NOT STOP
765+31.	RT	S5-2	(2S)	-	-	-	-	-	1	1	END SCHOOL ZONE
-	RT	J4-2	(2S)	48x36	1	12.00	-	-	-	-	REASSURANCE ASSEMBLY
766+13.	LT	J12-2	(2S)	48x45	1	15.00	-	-	1	1	ROUTE TURN WITHOUT CARDINAL
766+83.	LT	S4-51	(2S)	24x48	1	-	8.00	-	1	1	SCHOOL SPEED LIMIT
767+52.	LT	W3-1	(2S)	36x36	1	-	9.00	-	1	1	STOP AHEAD
769+60.	LT	S1-1	(2S)	36x36	1	-	9.00	-	1	1	SCHOOL ADVANCE
-	LT	R2-1	(2S)	24X30	-	5.00	-	-	1	-	SPEED LIMIT _ MPH
-	LT	S16-9P	(2S)	30x18	-	-	3.75	-	1	-	AHEAD PLAQUE
-	LT	R2-6P	(2S)	24x18	-	3.00	-	-	1	-	FINES HIGHER PLAQUE
771+20.	RT	W1-2R	(2S)	30X30	1	-	6.25	-	1	1	CURVE RIGHT
-	RT	W13-1	(2S)	18x18	-	-	2.25	-	1	-	ADVISORY SPEED PLATE

NOTE:
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STA	LOCATION	SIGN CODE	SIGN SIZE	SIGN SIZE (IN)	634.0614	637.2210	637.2230	638.2102	638.2602	638.3000	SIGN MESSAGE
					POSTS WOOD 4X6-	SIGNS TYPE II	SIGNS TYPE II	MOVING SIGNS	REMOVING SIGNS	REMOVING SMALL	
					INCH X 14-FT	REFLECTIVE H	REFLECTIVE F	TYPE II	TYPE II	SIGN SUPPORTS	
SHEET14											
790+47	LT	W1-2L	(2S)	30X30	1	-	6.25	-	1	1	CURVE LEFT
-	LT	W13-1	(2S)	18X18	-	-	2.25	-	1	-	ADVISORY SPEED PLATE
792+93	LT	W3-5	(2S)	36X36	1	-	9	-	1	1	SPEED REDUCTION AHEAD __ MPH
794+67	RT	W11-15A	(2S)	30X30	1	-	6.25	-	1	1	TRAIL CROSSING
-	RT	W16-9P	(2S)	24X12	-	-	2	-	1	-	AHEAD PLAQUE
795+39	RT	J12-1	(2S)	24X45	1	7.5	-	-	1	1	ROUTE TURN WITHOUT CARDNIAL
799+07	RT	R1-1	(2S)	30X30	1	6.25	-	-	1	1	STOP
799+21	LT	I2-3	(2S)	60X24	2	10	-	-	1	1	ALBANY
800+93	LT	J4-2	(2S)	48X36	1	12	-	-	1	1	REASSURANCE ASSEMBLY
801+49	RT	W11-15A	(2S)	30X30	1	-	6.25	-	1	1	TRAIL CROSSING
-	RT	W16-7L	(2S)	24X12	-	-	2	-	1	-	YELLOW DIAGONAL ARROW
802+27	LT	W11-15A	(2S)	30X30	1	-	6.25	-	1	1	TRAIL CROSSING
-	LT	W16-7L	(2S)	24X12	-	-	2	-	1	-	YELLOW DIAGONAL ARROW
802+91	RT	J13-1	(2S)	24X45	1	7.5	-	-	1	1	DIRECTIONAL WITHOUT CARDINAL
803+12	LT	J13-2	(2S)	48X45	2	15	-	-	1	1	DIRECTIONAL WITHOUT CARDINAL
803+30	RT	W1-7	(2S)	48X24	1	-	8	-	1	1	TWO-DIRECTION LARGE ARROW
803+39	LT	R1-1	(2S)	30X30	1	6.25	-	-	1	1	STOP
803+95	RT	J4-1	(2S)	24X36	1	6	-	-	1	1	REASSURANCE ASSEMBLY
804+47	LT	J13-1	(2S)	24X45	1	7.5	-	-	1	1	DIRECTIONAL WITHOUT CARDINAL
805+09	LT	R2-1	(2S)	24X30	1	5	-	-	1	1	SPEED LIMIT _ MPH
805+61	RT	R2-1	(2S)	24X30	1	5	-	-	1	1	SPEED LIMIT _ MPH
806+14	RT	W1-2R	(2S)	30X30	1	-	6.25	-	1	1	CURVE RIGHT
807+93	LT	W1-2R	(2S)	30X30	1	-	6.25	-	1	1	CURVE RIGHT
808+09	RT	D2-1	(2S)	78X15	2	8.125	-	-	1	2	EVANSVILLE 12
808+93	LT	W3-5	(2S)	36X36	1	-	9	-	1	1	SPEED REDUCTION AHEAD __ MPH
810+12	LT	W11-15A	(2S)	30X30	1	-	6.25	-	1	1	TRAIL CROSSING
-	LT	W16-9P	(2S)	24X12	-	-	2	-	1	-	AHEAD PLAQUE
815+68	LT	J1-1	(2S)	24X39	1	6.5	-	-	1	1	JUNCTION OR END ASSEMBLY
829+64	LT	W1-2L	(2S)	30X30	1	-	6.25	-	1	1	CURVE LEFT
-	LT		(2S)		-	-	-	-	1	-	ADVISORY SPEED PLATE
830+52	RT	W14-3	(2S)	48X36	1	-	12	-	1	1	NO PASSING ZONE
SHEET15											
874+70.	RT	I55-56	(2S)	30x36	1	7.50	-	-	1	1	ADOPT-A-HIGHWAY
874+95.	LT	R1-1	(2S)	30X30	1	5.18	-	-	1	1	STOP
876+10.	LT	I55-56	(2S)	30x36	1	7.50	-	-	1	1	ADOPT-A-HIGHWAY
881+50.	LT	W14-3	(2S)	48X36	1	-	6.00	-	1	1	NO PASSING ZONE
895+90.	LT	S3-1	(2S)	36X36	1	-	9.00	-	1	1	SCHOOL BUS STOP AHEAD

NOTE:
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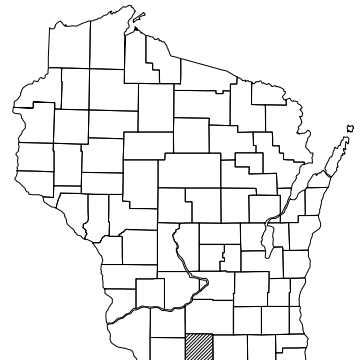
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STA	LOCATION	SIGN CODE	SIGN SIZE	SIGN SIZE (IN)	634.0614	637.2210	637.2230	638.2102	638.2602	638.3000	SIGN MESSAGE
					POSTS WOOD 4X6- INCH X 14-FT	SIGNS TYPE II REFLECTIVE H	SIGNS TYPE II REFLECTIVE F	MOVING SIGNS TYPE II	REMOVING SIGNS TYPE II	REMOVING SMALL SIGN SUPPORTS	
					EACH	SF	SF	EACH	EACH	EACH	
SHEET16											
915+30.	RT	R1-1	(2S)	30X30	1	5.18	-	-	1	1	STOP
921+00.	LT	W2-2	(2S)	30X30	1	-	6.25	-	1	1	SIDE ROAD
932+00.	LT	W14-3	(2S)	48X36	1	-	6.00	-	1	1	NO PASSING ZONE
935+70.	RT	W14-3	(2S)	48X36	1	-	6.00	-	1	1	NO PASSING ZONE
952+10.	LT	W14-3	(2S)	48X36	1	-	6.00	-	1	1	NO PASSING ZONE
954+20.	RT	W14-3	(2S)	48X36	1	-	6.00	-	1	1	NO PASSING ZONE
SHEET17											
968+00.	RT	J1-1	(2S)	24X39	1	6.50	-	-	1	1	JCT 104
970+00.	LT	W3-1	(2S)	36X36	1	-	9.00	-	1	1	STOP AHEAD
970+00.	RT	W3-1	(2S)	36X36	1	-	9.00	-	1	1	STOP AHEAD
974+00.	RT	J2-3	(2S)	72X57	2	28.50	-	-	1	2	(THREE HEADED) ROUTE TURN W/O CARDINAL
974+00.	LT	D2-2	(2S)	66X24	2	11.00	-	-	1	2	ALBANY MONROE
975+30.	RT	D1-2	(2S)	72X30	2	15.00	-	-	1	2	EVANSVILLE/BRODHEAD
975+90.	LT	R2-1	(2S)	24X30	1	5.00	-	-	-	-	SPEED LIMIT _ MPH
977+80.	LT	I55-56	(2S)	30x36	1	7.50	-	-	1	1	ADOPT-A-HIGHWAY
978+40.	LT	J4-1	(2S)	24X36	1	6.00	-	-	1	-	REASSURANCE ASSEMBLY
980+00.	RT	J3-3	(2S)	72X57	2	28.50	-	-	1	2	(THREE HEADED) ROUTE TURN W/O CARDINAL
980+00.	RT	R1-1	(2S)	36x36	1	7.46	-	-	1	1	STOP
980+00.	LT	R1-1	(2S)	36x36	1	7.46	-	-	1	1	STOP
980+00.	LT	I2-2	(2S)	54X15	1	5.62	-	-	1	1	GREEN COUNTY
					227	905.85	761.75	2	247	211	

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NOTE:
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STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
TRANSPORTATION PROJECT PLAT TITLE SHEET
PROJECT 5660-00-23
MONROE - EVANSVILLE
WEISS LANE - S. JUNCTION STH 104
S.T.H. 59
GREEN COUNTY



CONVENTIONAL SYMBOLS

SECTION LINE	-----	SECTION CORNER		R/W MONUMENT (TO BE SET)	●
QUARTER LINE	-----			NON-MONUMENTED R/W POINT	○
SIXTEENTH LINE	-----	NOTATION FOR COMBUSTIBLE FLUIDS		FOUND IRON PIN	IP
NEW REFERENCE LINE	-----			VALVE (GAS, WATER, ETC.)	⊙ (TYPE)
NEW R/W LINE	-----	NOTATION FOR HIGH VOLTAGE TRANSMISSION LINES		SIGN	⊞ SIGN
EXISTING R/W LINE	-----			OFF-PREMISE SIGN	
PROPERTY LINE	-----				
LOT, TIE & OTHER MINOR LINES	-----				
CORPORATE LIMITS	-----				
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC.)	-----	ELECTRIC POLE		COMPENSABLE	
FEE ACQUISITION AREA (HATCHING VARIES BY OWNER)	-----	TELEPHONE POLE		NON-COMPENSABLE	
TEMPORARY LIMITED EASEMENT AREA	-----	PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)			
EASEMENT AREA (HIGHWAY, PERMANENT LIMITED, OR RESTRICTED DEVELOPMENT)	-----				
TRANSMISSION STRUCTURES	-----	ACCESS CONTROLLED BY ACQUISITION			
BUILDING	-----	NO ACCESS (BY STATUTORY AUTHORITY)			
NATIONAL GEODETIC SURVEY MONUMENT	-----	ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)			
SIXTEENTH CORNER MONUMENT	-----				

CONVENTIONAL ABBREVIATIONS

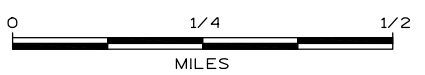
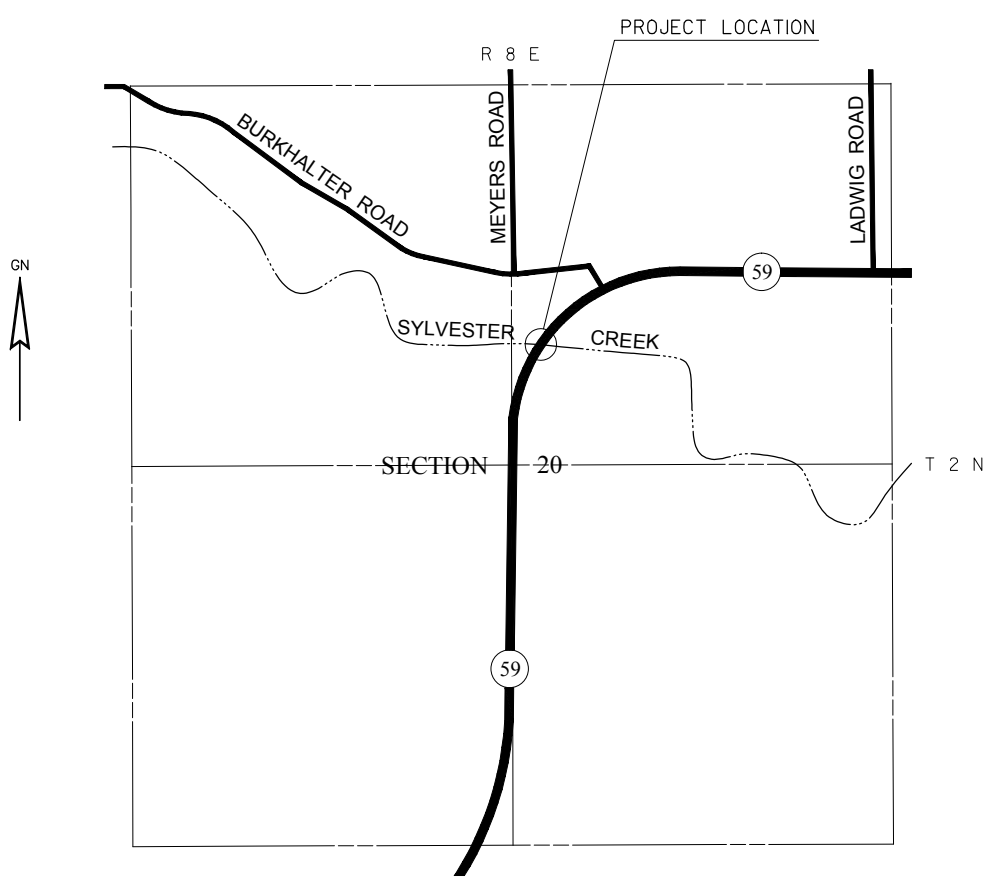
ACCESS RIGHTS	AR	POINT OF COMPOUND CURVE	PCC
ACRES	AC	POINT OF INTERSECTION	PI
AHEAD	AH	PROPERTY LINE	PL
ALUMINUM	ALUM	RECORDED AS	(100')
AND OTHERS	ET AL	REFERENCE LINE	R/L
BACK	BK	REMAINING	REM
BLOCK	BLK	RIGHT	RT
CENTERLINE	C/L	RIGHT OF WAY	R/W
CERTIFIED SURVEY MAP	CSM	SECTION	SEC
CONCRETE	CONC	SEPTIC VENT	SEPV
COUNTY	CO	SQUARE FEET	SF
COUNTY TRUNK HIGHWAY	CTH	STATE TRUNK HIGHWAY	STH
DISTANCE	DIST	STATION	STA
CORNER	COR	SUBDIVISION	SUBD
DOCUMENT NUMBER	DOC	TANGENT	TAN
EASEMENT	EASE	TELEPHONE PEDESTAL	TP
EXISTING	EX	TEMPORARY LIMITED EASEMENT	TLE
GAS VALVE	GV		
GRID NORTH	GN	TRANSPORTATION PROJECT PLAT	TPP
HIGHWAY EASEMENT	HE		
IDENTIFICATION	ID	UNITED STATES HIGHWAY	USH
LAND CONTRACT	LC	VOLUME	V
LEFT	LT		
MONUMENT	MON		
NATIONAL GEODETIC SURVEY NUMBER	NGS		
OUTLOT	OL		
PAGE	P		
POINT OF TANGENCY	PT		
PERMANENT LIMITED EASEMENT	PLE		
POINT OF BEGINNING	POB		
POINT OF CURVATURE	PC		

CURVE DATA

LONG CHORD	LC
LONG CHORD BEARING	LCB
RADIUS	R
DEGREE OF CURVE	D
CENTRAL ANGLE OR DELTA	Δ
LENGTH OF CURVE	L
TANGENT	T
DIRECTION AHEAD	DA
DIRECTION BACK	DB

CONVENTIONAL UTILITY SYMBOLS

WATER	—W—
GAS	—G—
TELEPHONE	—T—
OVERHEAD	—OH—
TRANSMISSION LINES	—E—
ELECTRIC	—TV—
CABLE TELEVISION	—FO—
FIBER OPTIC	—SAN—
SANITARY SEWER	—SS—
STORM SEWER	—SS—



THE NOTES, CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 5660-00-23

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, GREEN COUNTY, NAD83 (97), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

ALL NEW RIGHT-OF-WAY MONUMENTS WILL BE TYPE 2 (TYPICALLY 3/4" X 24" IRON REBARS), UNLESS OTHERWISE NOTED, AND WILL BE PLACED PRIOR TO THE COMPLETION OF THE PROJECT.

ALL RIGHT-OF-WAY LINES DEPICTED IN THE NON-ACQUISITION AREAS ARE INTENDED TO RE-ESTABLISH EXISTING RIGHT-OF-WAY LINES AS DETERMINED FROM PREVIOUS PROJECTS, OTHER RECORDED DOCUMENTS, OR FROM CENTERLINE OF EXISTING PAVEMENTS.

RIGHT-OF-WAY BOUNDARIES ARE DEFINED WITH COURSES OF THE PERIMETER OF THE HIGHWAY LANDS REFERENCED TO THE U.S. PUBLIC LAND SURVEY SYSTEM OR OTHER "SURVEYS" OF PUBLIC RECORD.

DIMENSIONING FOR THE NEW RIGHT-OF-WAY IS MEASURED ALONG AND PERPENDICULAR TO THE NEW REFERENCE LINES.

A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON, THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE, ALL (TLEs) ON THIS PLAT EXPIRE AT THE COMPLETION OF THE CONSTRUCTION PROJECT FOR WHICH THIS INSTRUMENT IS GIVEN.

A PERMANENT LIMITED EASEMENT (PLE) IS A RIGHT FOR CONSTRUCTION AND MAINTENANCE PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE, BUT WITHOUT PREJUDICE TO THE OWNER'S RIGHTS TO MAKE OR CONSTRUCT IMPROVEMENTS ON SAID LANDS OR TO FLATTEN THE SLOPES, PROVIDING SAID ACTIVITIES WILL NOT IMPAIR OR OTHERWISE ADVERSELY AFFECT THE HIGHWAY FACILITIES.

AN EASEMENT FOR HIGHWAY PURPOSES (HE), AS LONG AS SO USED, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY VEGETATION THAT THE HIGHWAY AUTHORITIES MAY DEEM DESIRABLE.

PROPERTY LINES SHOWN ON THIS PLAT ARE DRAWN FROM DATA DERIVED FROM MAPS AND DOCUMENTS OF PUBLIC RECORD AND/OR EXISTING OCCUPATIONAL LINES. THIS PLAT MAY NOT BE A TRUE REPRESENTATION OF EXISTING PROPERTY LINES, EXCLUDING RIGHT-OF-WAY, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

FOR THE LATEST ACCESS/DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN MADISON.

PARCEL IDENTIFICATION NUMBERS MAY NOT POINT TO ALL AREAS OF ACQUISITION, AS NOTED ON THE SCHEDULE OF LANDS & INTERESTS REQUIRED.

EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 59 AND MEYERS ROAD ESTABLISHED FROM PREVIOUS PROJECT NO. 5660-02-21 AND PROJECT 560-A.

RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 5660-00-23- 4. 01
SHEET 2 OF 2
AMENDMENT NO:

TRANSPORTATION PROJECT PLAT NO: 5660-00-23 - 4.01

THAT PART OF THE SW 1/4 OF THE NE 1/4 OF SECTION 20,
TOWN 2 NORTH, RANGE 8 EAST, TOWN OF SYLVESTER,
GREEN COUNTY, WISCONSIN

RELOCATION ORDER STH 59, MONROE - EVANSVILLE, WEISS LANE - S. JUNCTION STH 104

TO PROPERLY ESTABLISH, LAY OUT, WIDEN, ENLARGE, EXTEND, CONSTRUCT, RECONSTRUCT, IMPROVE,
OR MAINTAIN A PORTION OF THE HIGHWAY DESIGNATED ABOVE, THE STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION DEEMS IT NECESSARY TO RELOCATE OR CHANGE SAID HIGHWAY
AND ACQUIRE CERTAIN LANDS AND INTERESTS OR RIGHTS IN LANDS FOR THE ABOVE PROJECT.

TO EFFECT THIS CHANGE, PURSUANT TO AUTHORITY GRANTED UNDER SECTION 84.02 (3), 84.09, AND
84.30 WISCONSIN STATUTES, THE DEPARTMENT OF TRANSPORTATION HEREBY ORDERS THAT:
1. THAT PORTION OF SAID HIGHWAY SHOWN ON THIS PLAT IS LAID OUT AND ESTABLISHED TO THE
LINES AND WIDTHS AS SO SHOWN FOR THE ABOVE PROJECT.
2. THE LANDS OR INTERESTS OR RIGHTS IN LANDS AS SHOWN ON THIS PLAT ARE REQUIRED BY
THE DEPARTMENT FOR THE ABOVE PROJECT AND SHALL BE ACQUIRED IN THE NAME OF THE STATE
OF WISCONSIN, PURSUANT TO THE PROVISIONS OF SECTION 84.09 (1) OR (2), WISCONSIN STATUTES.

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COUNTY COORDINATES, GREEN COUNTY, NAD83(97),
IN U.S. SURVEY FEET, VALUES ARE GRID COORDINATES, GRID BEARINGS AND GRID DISTANCES,
GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

EXISTING HIGHWAY RIGHT-OF-WAY FOR STH 59 AND MEYERS ROAD ESTABLISHED FROM PREVIOUS
PROJECT NO. 5660-02-21 AND PROJECT 560-A.

FOR THE LATEST ACCESS / DRIVEWAY INFORMATION, CONTACT THE PLANNING UNIT OF THE
WISCONSIN DEPARTMENT OF TRANSPORTATION OFFICE IN MADISON.

FOR ADDITIONAL INFORMATION SEE TITLE SHEET, NUMBERED SHEET 2 OF 2.

SCHEDULE OF LANDS & INTERESTS REQUIRED

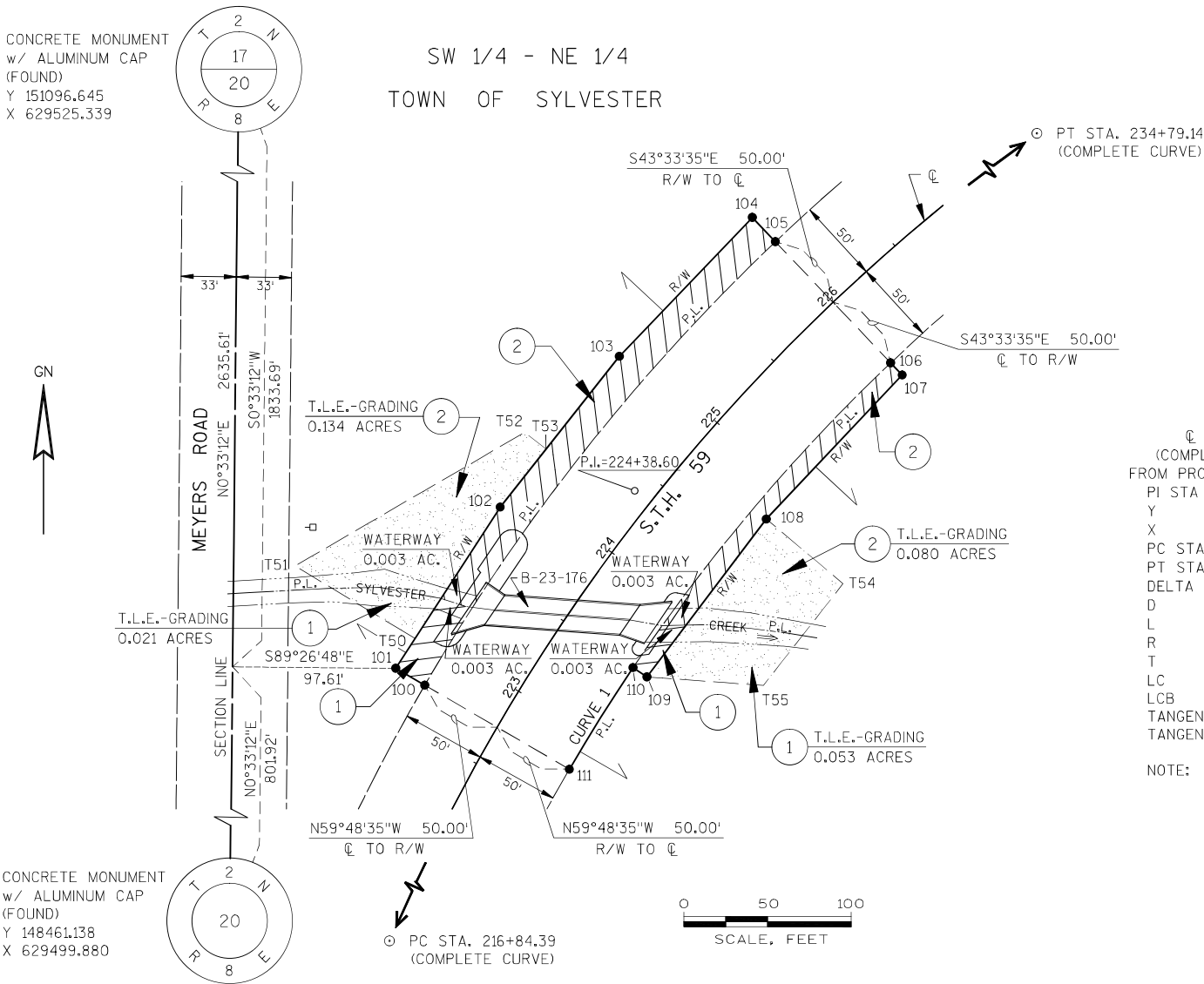
OWNER'S NAMES ARE SHOWN FOR REFERENCE PURPOSES
ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE
TRANSFER OF LAND INTERESTS TO THE DEPARTMENT.

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	R/W REQUIRED (ACRES)			T.L.E. ACRES
			NEW	EXISTING	TOTAL	
1	JACOB DISCH, JOSHUA DISCH, JUSTIN DISCH	FEE, TLE	0.031	0.000	0.031	0.074
2	DOUGLAS PRIEN	FEE, TLE	0.179	0.000	0.179	0.214

ACCEPTED FOR RECORDING AND FILING
IN THE OFFICE OF THE REGISTER OF
DEEDS IN GREEN COUNTY, WISCONSIN AT
____:____ M ON _____
AS DOCUMENT NO. _____
AND FILED IN _____

SIGNATURE OF REGISTER OF DEEDS _____

RESERVED FOR REGISTER OF DEEDS
PROJECT NO. 5660-00-23-4.01
SHEET 1 OF 2
AMENDMENT NO. _____



CL STH 59 (COMPLETE CURVE FROM PROJ. 5660-02-21)		CL STH 59 (THIS PROJECT)	
PI STA	228+25.07	PI STA	224+38.60
Y	149804.423	Y	149368.283
X	629523.510	X	629748.001
PC STA	216+84.39	PC STA	222+75.00
PT STA	234+79.14	PT STA	226+00.00
DELTA	89°44'15\" RT	DELTA	16°15'00\" RT
D	5°00'00\"	D	5°00'00\"
L	1794.75'	L	325.00'
R	1145.92'	R	1145.92'
T	1140.68'	T	163.60'
LC	1616.86'	LC	323.91'
LCB	N45°31'42\"E	LCB	N38°18'54\"E
TANGENT BACK	S00°39'35\"W	TANGENT BACK	S30°11'25\"W
TANGENT AHEAD	S89°36'10\"E	TANGENT AHEAD	N46°26'25\"E

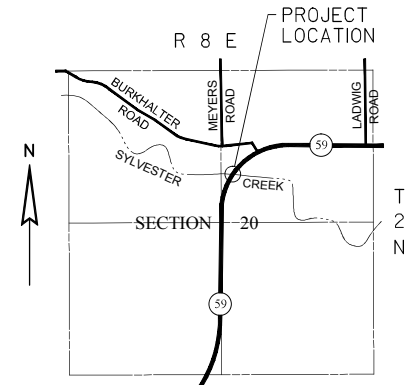
NOTE: CURVE SHOWN ON THIS SHEET IS A SEGMENT
OF THE COMPLETE CURVE.

COURSE TABLE			
FROM	TO	BEARING	DIST.
100	101	N 59° 48' 35\" W	20.00'
101	102	N 32° 53' 55\" E	114.91'
102	103	N 38° 18' 55\" E	114.32'
103	104	N 43° 43' 54\" E	114.91'
104	105	S 43° 33' 35\" E	20.00'
105	106	S 43° 33' 35\" E	100.00'
106	107	S 43° 33' 35\" E	10.00'
107	108	S 43° 18' 54\" W	118.40'
108	109	S 37° 03' 55\" W	118.40'
109	110	N 56° 03' 35\" W	10.00'
110	111	SEE CURVE NOTE	-
111	100	N 59° 48' 35\" W	100.00'

CURVE 1 DATA (110-111)			
DELTA	3°45'00\" (LT)		
D	5°13'41\"		
L	71.73'		
R	1095.92'		
LC	71.72'		
LCB	S32°03'55\"W		
TANGENT BACK	N33°56'25\"E		
TANGENT AHEAD	S30°11'25\"W		

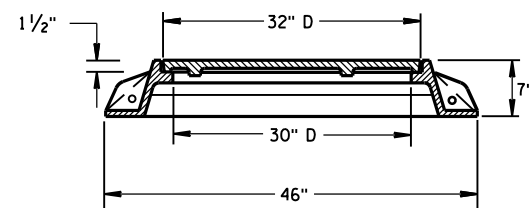
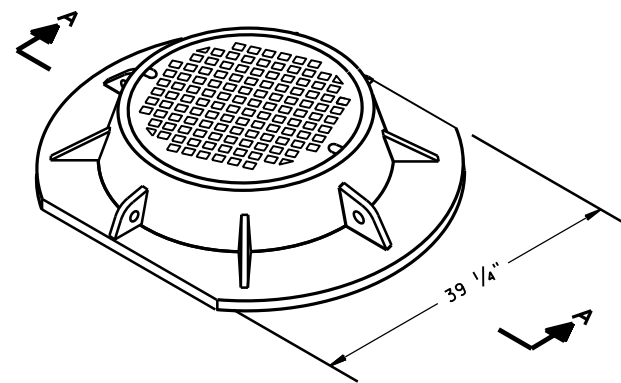
R/W POINT TABLE		
POINT #	STA	OFFSET
100	222+75.00	50.00'
101	222+75.00	70.00'
102	223+83.33	70.00'
103	224+91.67	70.00'
104	226+00.00	70.00'
105	226+00.00	50.00'
106	226+00.00	50.00'
107	226+00.00	60.00'
108	224+75.00	60.00'
109	223+50.00	60.00'
110	223+50.00	50.00'
111	222+75.00	50.00'

TLE POINT TABLE		
POINT #	STA	OFFSET
T50	222+95.00	69.18'
T51	222+95.00	153.07'
T52	224+50.00	85.00'
T53	224+50.00	68.71'
T54	224+75.00	120.00'
T55	223+88.76	120.00'

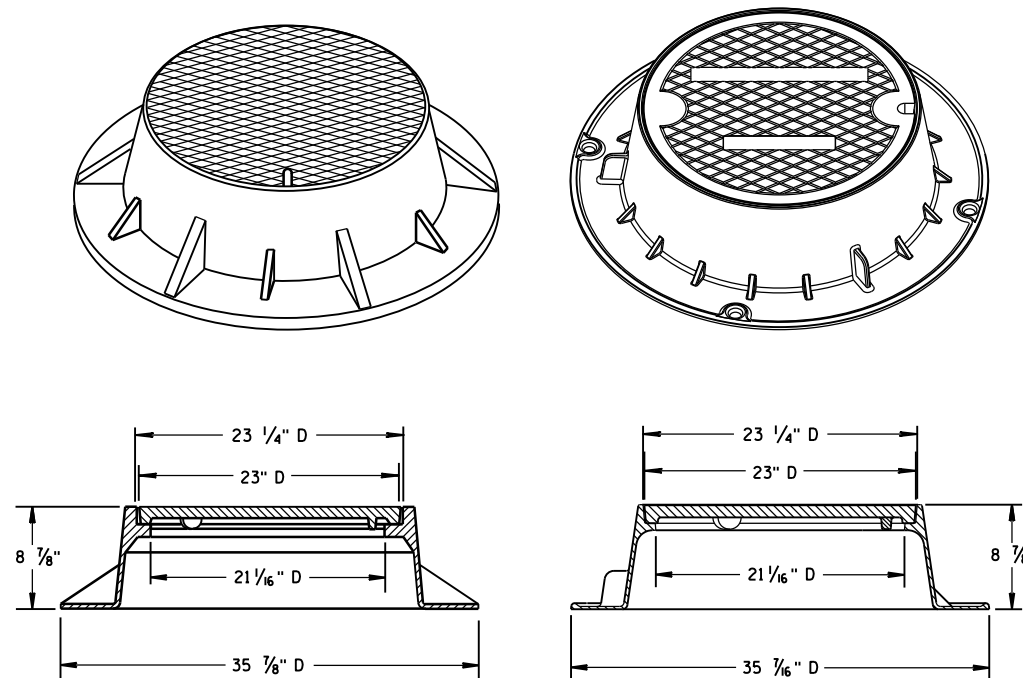


Standard Detail Drawing List

08A05-19D	INLET COVER TYPE BW, MANHOLE COVERS, TYPE K, J, J-S, L & M
08B09-01	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F02-01	APRON ENDWALLS FOR PIPE ARCH AND ELLIPTICAL PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
12A03-10	NAME PLATE (STRUCTURES)
13A11-02A	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
13A11-02B	2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING
14B15-08A	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-08B	STEEL PLATE BEAM GUARD, CLASS "A" INSTALLATION & ELEMENTS
14B15-08C	STEEL PLATE BEAM GUARD, CLASS "A", INSTALLATION & ELEMENTS
14B24-08A	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-08B	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B24-08C	STEEL PLATE BEAM GUARD ENERGY ABSORBING TERMINAL
14B27-01A	STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL
14B27-01B	STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL
14B27-01C	STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL
14B29-01	SAFETY EDGE
14B42-03A	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-03B	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B42-03C	MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL
14B44-02A	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-02B	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
14B44-02C	MIDWEST GUARDRAIL SYSTEM ENERGY ABSORBING TERMINAL (MGS)
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-06A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06B	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-06C	DETOUR SIGNING FOR MAINLINE CLOSURES
15C04-03	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C05-03	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 40 M.P.H. OR LESS
15C08-16A	PAVEMENT MARKING (MAINLINE)
15C08-16B	PAVEMENT MARKING (INTERSECTIONS)
15C12-04	TRAFFIC CONTROL FOR LANE CLOSURE (SUITABLE FOR MOVING OPERATIONS)
15C33-01	STOP LINE AND CROSSWALK PAVEMENT MARKING

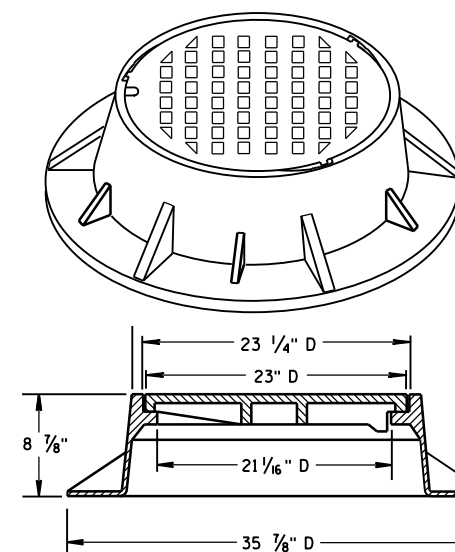
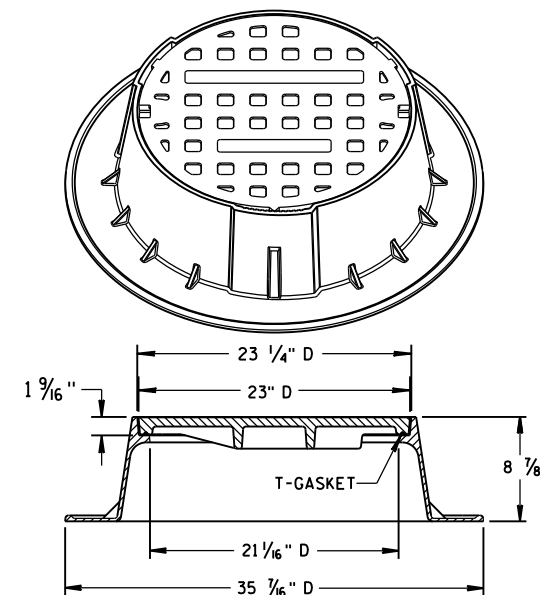


SECTION A-A
TYPE "K"



TYPE "J"

NOTE: EITHER CASTING IS ACCEPTABLE

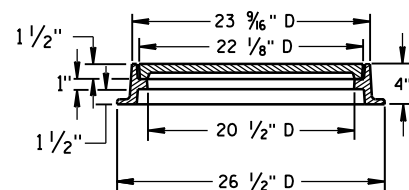
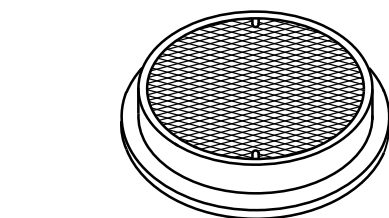


TYPE "J" SPECIAL

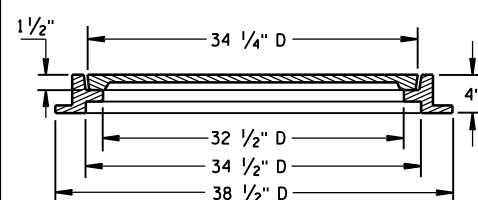
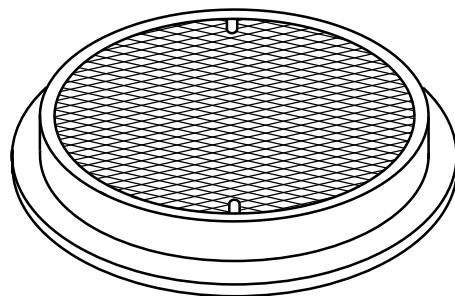
TYPE "B" NON-ROCKING SELF-SEAL LID

(NOTED AS TYPE J-S ON THE DRAINAGE TABLE)

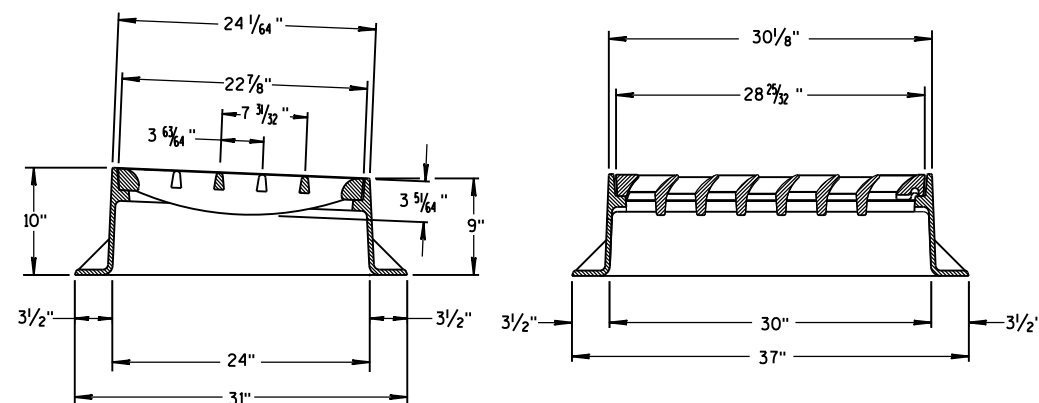
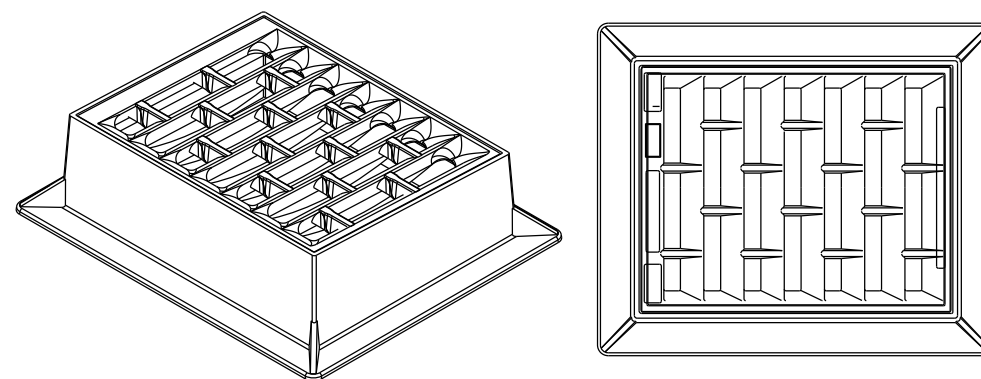
NOTE: EITHER CASTING IS ACCEPTABLE



TYPE "L"



TYPE "M"



INLET COVER TYPE "BW"

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR MANHOLE COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ROUND FRAMES AND COVERS SHALL HAVE CONTINUOUSLY MACHINED BEARING SURFACES TO PREVENT ROCKING AND RATTLING.

INLET COVER TYPE BW
MANHOLE COVERS, TYPE K,
J, J-S, L & M

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

11/27/2013

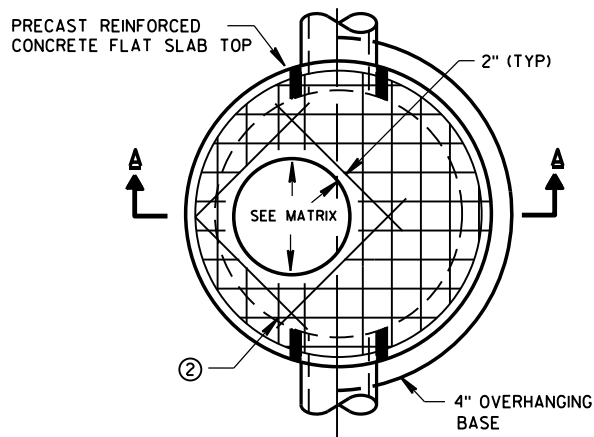
DATE

FHWA

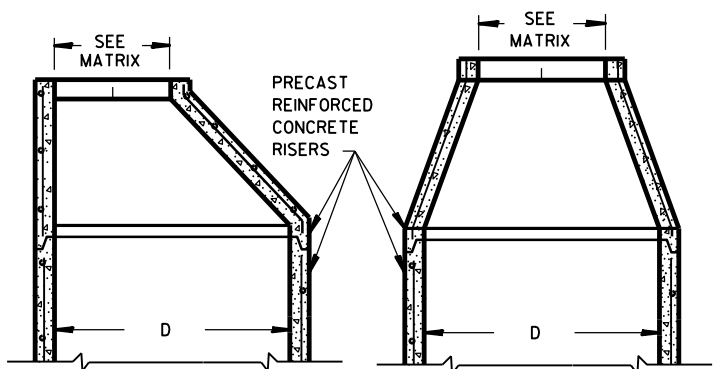
/S/ Jerry H. Zogg

ROADWAY STANDARDS 88

ENGINEER

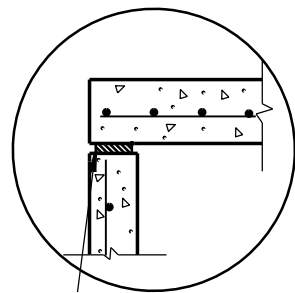


PLAN VIEW CIRCULAR OPENING

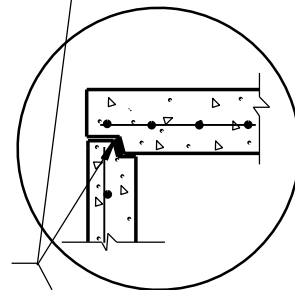


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

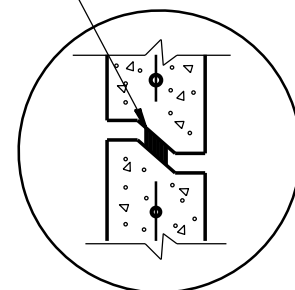
OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP



TOP WITH PLAIN END JOINT



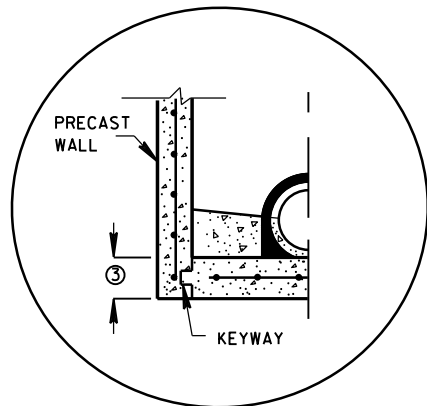
TOP WITH TONGUE AND GROOVE JOINT



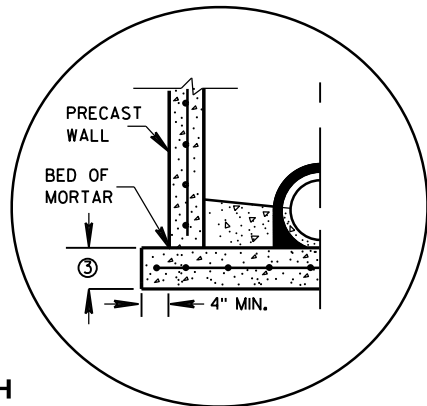
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

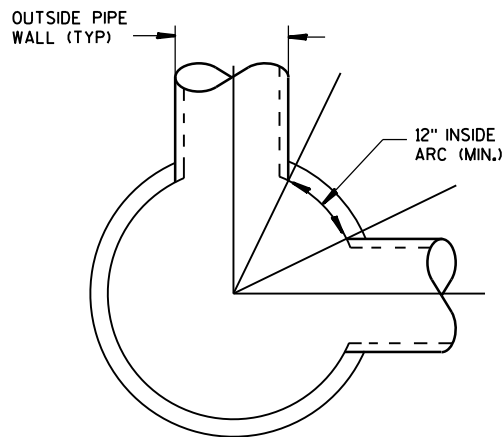


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION

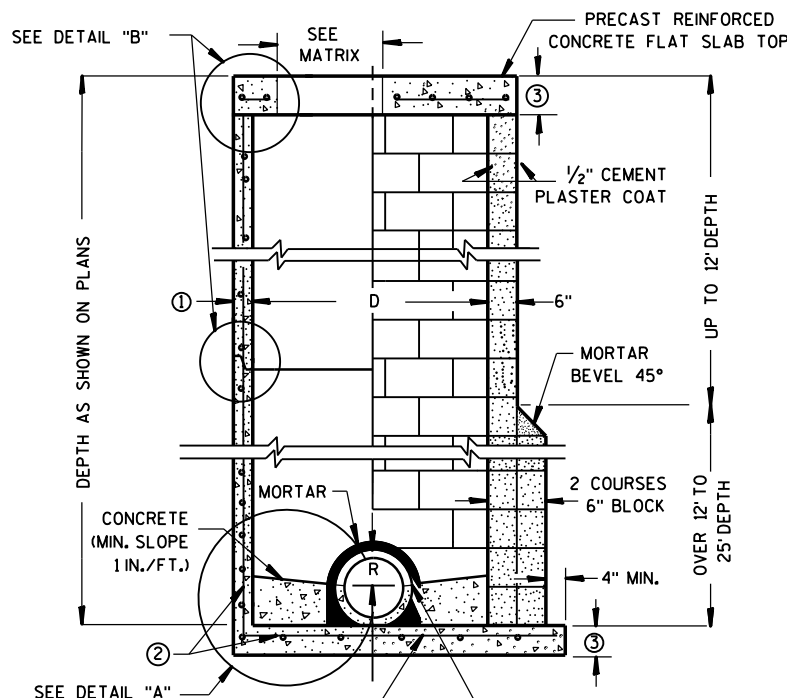


SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"



CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES

PRECAST REINFORCED CONCRETE BLOCK WITH CONCRETE WITH MONOLITHIC BASE CAST-IN-PLACE OR PRECAST REINFORCED CONCRETE BASE ②

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS. UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST MANHOLE UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR UNDERGROUND DRAINAGE STRUCTURES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL DRAINAGE STRUCTURES ARE DESIGNATED ON THE PLANS AS "MANHOLES 3X3-L", "CATCH BASINS 4-B", "INLETS 2X3-H", ETC. THE FIRST NUMBERS DESIGNATE THE SIZE OF THE STRUCTURE, AND THE FOLLOWING LETTER DESIGNATES THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

BASES SHALL BE PLACED ON A BED OF MATERIAL AT LEAST 6 INCHES IN DEPTH, WHICH MEETS THE REQUIREMENTS OF GRANULAR BACKFILL. THIS BEDDING SHALL BE COMPACTED AND PROVIDE UNIFORM SUPPORT FOR THE ENTIRE AREA OF THE BASE.

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES. THE CONE TOPS SHALL BE INSTALLED ON A BED OF MORTAR.

ECCENTRIC CONE TOPS MAY BE USED ON ALL STRUCTURES, AND CONCENTRIC CONE TOPS SHALL BE USED ONLY ON STRUCTURES 5 FEET OR LESS IN DEPTH, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.

STEPS MEETING AASHTO M199 AND THE FOLLOWING REQUIREMENTS SHALL BE INSTALLED IN ALL STRUCTURES OVER 5 FEET IN DEPTH: 16 INCH C-C MAXIMUM SPACING; PROJECT A MINIMUM CLEAR DISTANCE OF 4 INCHES FROM THE WALL AT THE POINT OF EMBEDMENT; MINIMUM LENGTH OF 10 INCHES; MINIMUM WALL EMBEDMENT OF 3 INCHES. FERROUS METAL STEPS NOT PAINTED OR TREATED TO RESIST CORROSION SHALL HAVE A MINIMUM CROSS SECTIONAL DIMENSION OF 1 INCH.

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF 1/2" AND MEET THE REQUIREMENTS OF ASTM A615.

CERTIFICATION SHALL BE PROVIDED THAT INSTALLED STEPS WHEN TESTED IN ACCORDANCE WITH SECTION 10 OF AASHTO T280 CAN WITHSTAND A VERTICAL LOAD OF 800 LBS. AND A HORIZONTAL LOAD OF 400 LBS.

ALL BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2 INCHES CLEAR UNLESS OTHERWISE SHOWN OR NOTED.

CONCRETE BLOCK WILL NOT BE PERMITTED FOR STRUCTURES GREATER THAN 4 FEET IN DIAMETER.

PRECAST REINFORCED RISERS SHALL HAVE A TONGUE AND GROOVE JOINT WITH TONGUE UP OR DOWN.

ALL PRECAST MANHOLE UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M 199.

4" OVERHANGING BASES ARE REQUIRED FOR ALL CONCRETE BLOCK INSTALLATIONS. 4" OVERHANG IS REQUIRED WHEN SEPARATE PRECAST BASE IS PROVIDED. OVERHANG IS NOT REQUIRED ON PRECAST STRUCTURES WITH AN INTEGRAL OR MONOLITHIC BASE.

FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4 INCHES FOR 3-FT, 5 INCHES FOR 4-FT, 6 INCHES FOR 5-FT, 7 INCHES FOR 6-FT, 8 INCHES FOR 7-FT AND 9 INCHES FOR 8-FT DIAMETER PRECAST MANHOLES.

② FOR PRECAST MANHOLES PROVIDE REINFORCING STEEL IN ACCORDANCE TO AASHTO M199.

③ PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER OF 48" AND LESS SHALL HAVE A MINIMUM THICKNESS OF 6". PRECAST FLAT SLAB TOPS AND BASES WITH A DIAMETER LARGER THAN 48" SHALL HAVE A MINIMUM THICKNESS OF 8".

MANHOLE COVER OPENING MATRIX

MANHOLE COVER TYPE	C	ALL J'S	K	L	M
OPENING SIZE (FT)					
2 DIA.	X	X		X	
3 DIA.			X		X

PIPE MATRIX

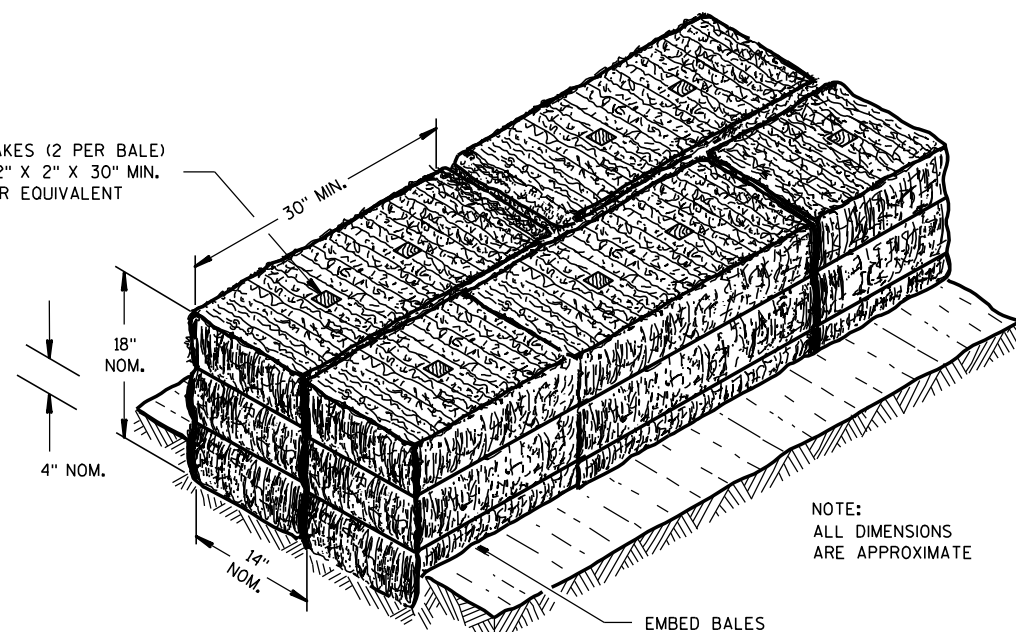
MANHOLE SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18
5-FT	36	24
6-FT	42	36
7-FT	48	36
8-FT	60	42

MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/5/2012 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS DEVELOPMENT ENGINEER 89
FHWA

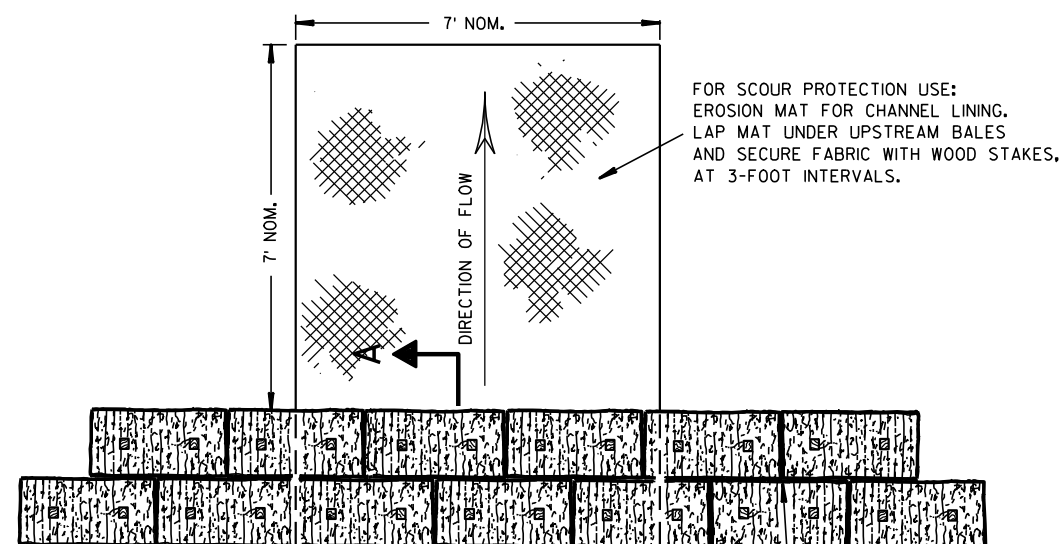
WOOD STAKES (2 PER BALE)
NOMINAL 2" X 2" X 30" MIN.
LENGTH OR EQUIVALENT



NOTE:
ALL DIMENSIONS
ARE APPROXIMATE

EMBED BALES

SECTION A-A

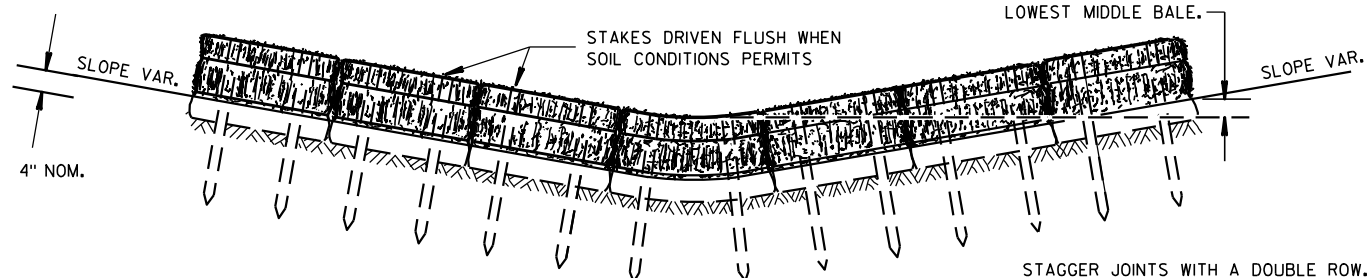


FOR SCOUR PROTECTION USE:
EROSION MAT FOR CHANNEL LINING.
LAP MAT UNDER UPSTREAM BALES
AND SECURE FABRIC WITH WOOD STAKES,
AT 3-FOOT INTERVALS.

PLAN VIEW

STAGGER JOINTS BETWEEN ADJACENT
ROWS OF BALES.

BOTTOM ELEVATION OF END BALE SHALL
BE EQUAL TO OR GREATER THAN TOP OF
LOWEST MIDDLE BALE.



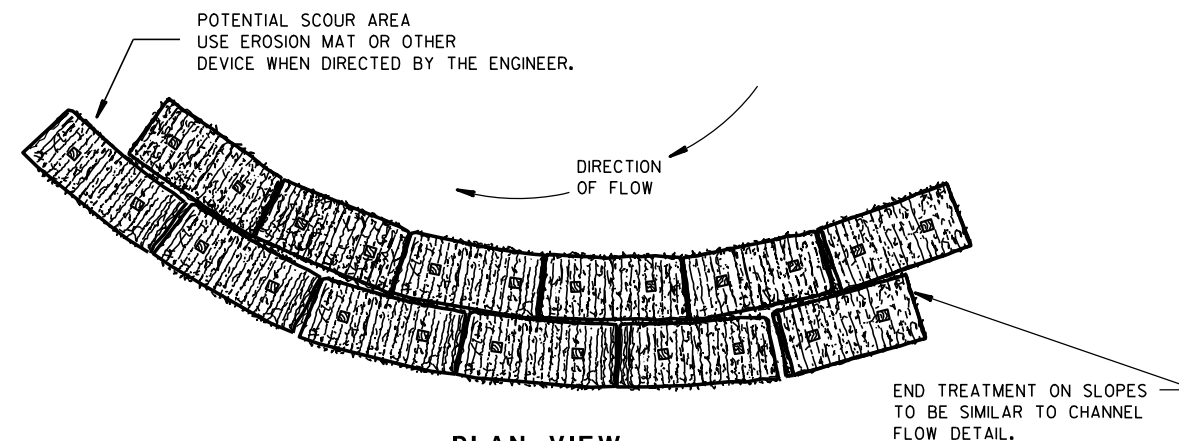
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

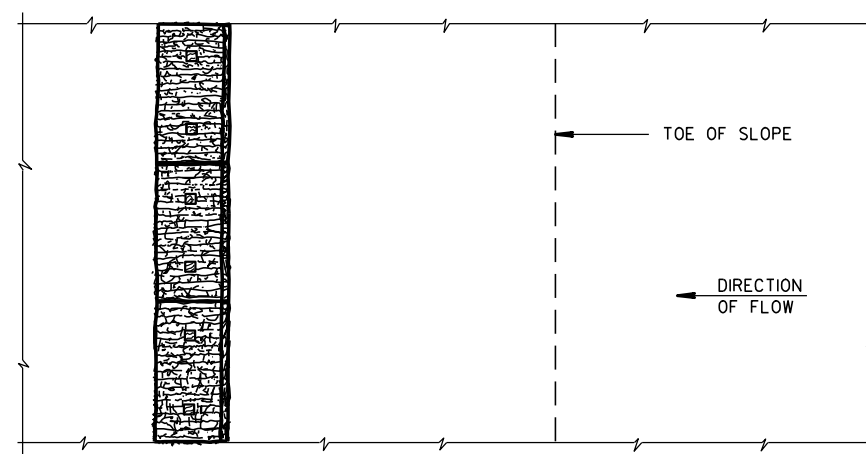
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

- ① TEMPORARY DITCH CHECKS EITHER EROSION BALES OR MANUFACTURED SHALL BE PAID FOR UNDER THE BID ITEM OF TEMPORARY DITCH CHECK. THE DEPARTMENT WILL NOT PAY FOR TEMPORARY DITCH CHECKS CONSTRUCTED OF A SINGLE ROW OF EROSION BALES.

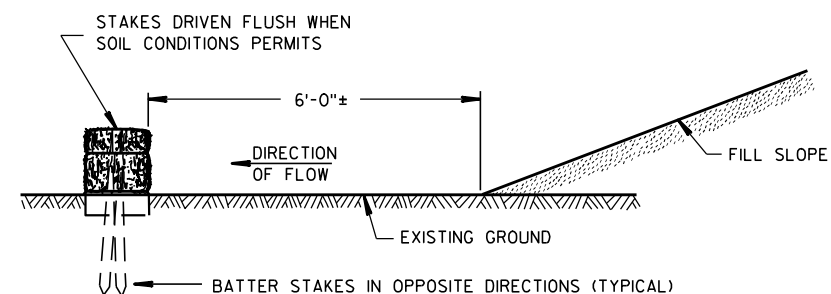


PLAN VIEW

WHEN ALTERING THE DIRECTION OF FLOW



PLAN VIEW



FRONT ELEVATION

WHEN EXISTING GROUND SLOPES AWAY FROM FILL SLOPE

EROSION BALES FOR SHEET FLOW

TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02
DATE

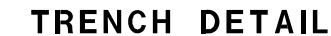
/S/ Beth Connors
CHIEF ROADWAY DEVELOPER

ENGINEER

FHWA



- ① HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
- ② FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
- ③ WOOD POSTS SHALL BE A MINIMUM SIZE OF 1½" X 1½" OF OAK OR HICKORY.
- ④ SILT FENCE TO EXTEND ACROSS THE TOP OF THE PIPE.
- ⑤ CONSTRUCT SILT FENCE FROM A CONTINUOUS ROLL IF POSSIBLE BY CUTTING LENGTHS TO AVOID JOINTS. IF A JOINT IS NECESSARY USE ONE OF THE FOLLOWING TWO METHODS; A) OVERLAP THE END POSTS AND TWIST, OR ROTATE, AT LEAST 180 DEGREES, B) HOOK THE END OF EACH SILT FENCE LENGTH.



SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-29-05
DATE

/S/ Beth Connolly
CHIEF ROADWAY DEVELOPMENT

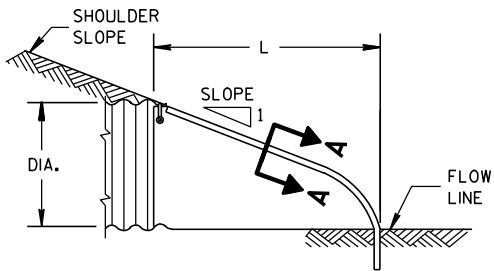
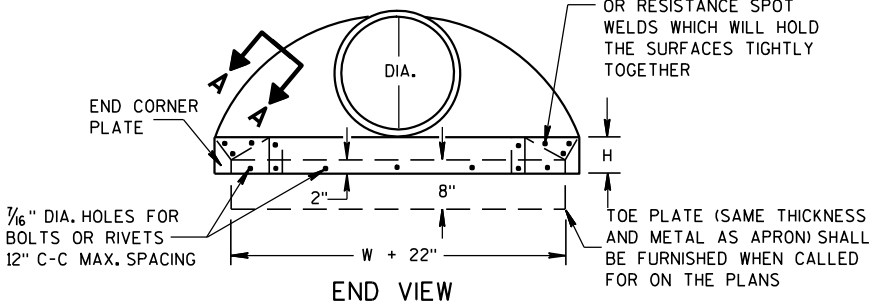
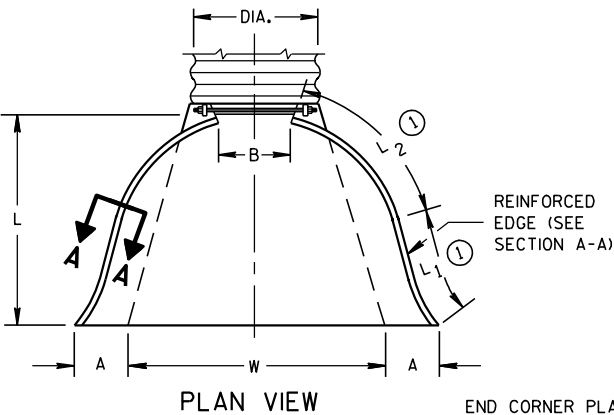
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ENGINEER

FHWA

METAL APRON ENDWALLS												
PIPE DIA. (IN.)	MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY	
	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L ₁ ①	L ₂ ①	W (±2")			
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.	
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.	
18	.064	.060	8	10	6	31	15	28 1/4	36	2 1/2 to 1	1 Pc.	
21	.064	.060	9	12	6	36	18	29 5/8	42	2 1/2 to 1	1 Pc.	
24	.064	.075	10	13	6	41	18	37 1/4	48	2 1/2 to 1	1 Pc.	
30	.079	.075	12	16	8	51	18	52 1/4	60	2 1/2 to 1	1 Pc.	
36	.079	.105	14	19	9	60	24	59 3/4	72	2 1/2 to 1	2 Pc.	
42	.109	.105	16	22	11	69	24	75 5/8	84	2 1/2 to 1	2 Pc.	
48	.109	.105	18	27	12	78	24	81	90	2 1/4 to 1	3 Pc.	
54	.109	.105	18	30	12	84	30	85 1/2	102	2 1/4 to 1	3 Pc.	
60	.109x	.105x	18	33	12	87	—	—	114	2 to 1	3 Pc.	
66	.109x	.105x	18	36	12	87	—	—	120	2 to 1	3 Pc.	
72	.109x	.105x	18	39	12	87	—	—	126	2 to 1	3 Pc.	
78	.109x	.105x	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.	
84	.109x	.105x	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.	
90	.109x	.105x	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.	
96	.109x	.105x	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.	

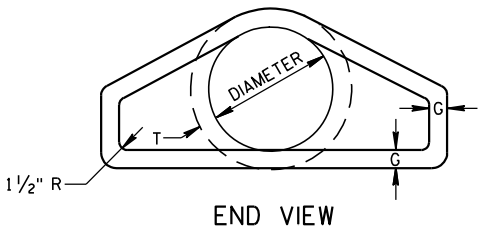
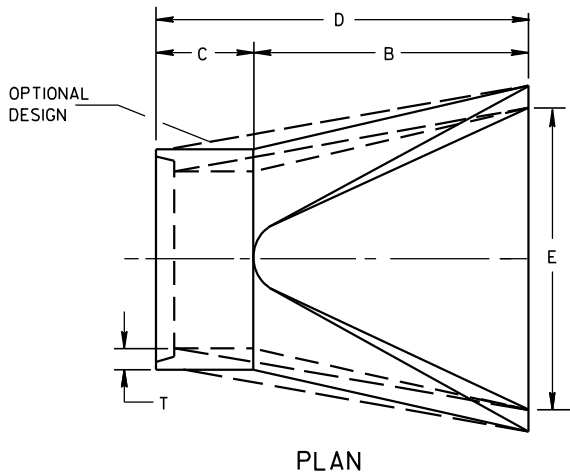
* EXCEPT CENTER PANEL
SEE GENERAL NOTES



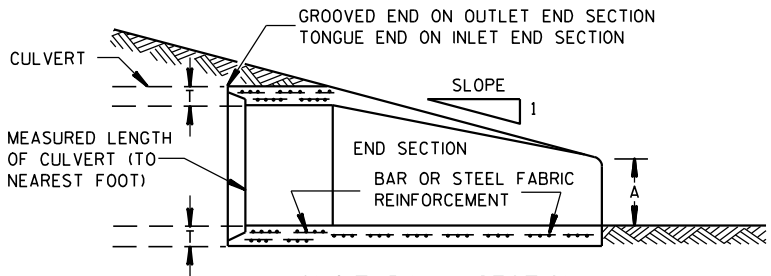
SIDE ELEVATION
METAL ENDWALLS

REINFORCED CONCRETE APRON ENDWALLS								
PIPE DIA. (IN.)	DIMENSIONS (Inches)							APPROX. SLOPE
	T	A	B	C	D	E	G	
12	2	4	24	48 ⁷ / ₈	72 ⁷ / ₈	24	2	3 to 1
15	2 ¹ / ₄	6	27	46	73	30	2 ¹ / ₄	3 to 1
18	2 ¹ / ₂	9	27	46	73	36	2 ¹ / ₂	3 to 1
21	2 ³ / ₄	9	36	37 ¹ / ₂	73 ¹ / ₂	42	2 ³ / ₄	3 to 1
24	3	9 ¹ / ₂	43 ¹ / ₂	30	73 ¹ / ₂	48	3	3 to 1
27	3 ¹ / ₄	10 ¹ / ₂	49 ¹ / ₂	24	73 ¹ / ₂	54	3 ¹ / ₄	3 to 1
30	3 ¹ / ₂	12	54	19 ³ / ₄	73 ¹ / ₂	60	3 ¹ / ₂	3 to 1
36	4	15	63	34 ³ / ₄	97 ³ / ₄	72	4	3 to 1
42	4 ¹ / ₂	21	63	35	98	78	4 ¹ / ₂	3 to 1
48	5	24	72	26	98	84	5	3 to 1
54	5 ¹ / ₂	27	65	33 ¹ / ₄ -35	98 ¹ / ₄ -100	90	5 ¹ / ₂	2 ¹ / ₂ to 1
60	6	30-35	60	39	99	96	5	2 to 1
66	6 ¹ / ₂	24-30	72-78	21-27	99	102	5 ¹ / ₂	2 to 1
72	7	24-36	78	21	99	108	6	2 to 1
78	7 ¹ / ₂	24-36	78	21	99	114	6 ¹ / ₂	2 to 1
84	8	36	90 ¹ / ₂	21	111 ¹ / ₂	120	6 ¹ / ₂	1 ¹ / ₂ to 1
90	8 ¹ / ₂	41	87 ¹ / ₂	24	111 ¹ / ₂	132	6 ¹ / ₂	1 ¹ / ₂ to 1

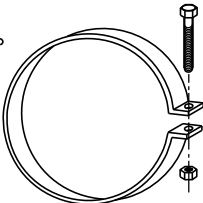
* MINIMUM
** MAXIMUM



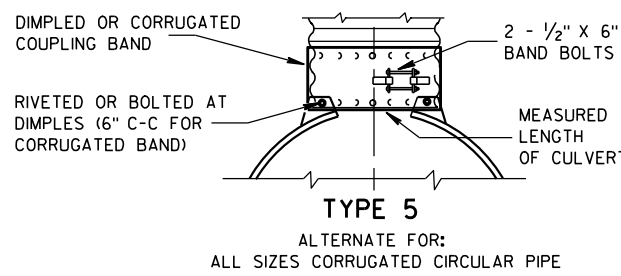
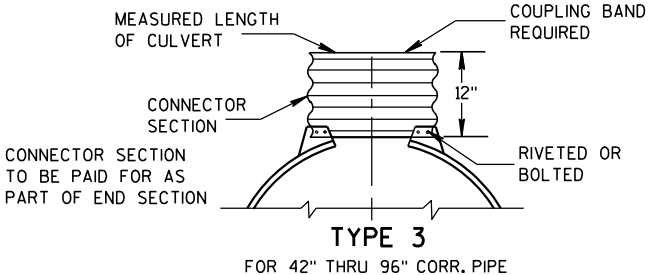
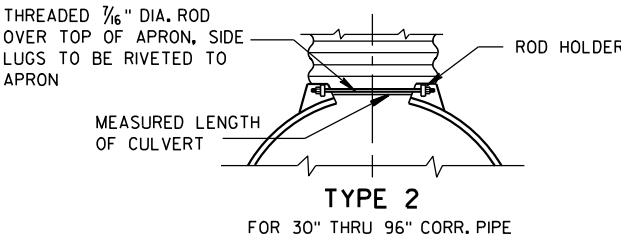
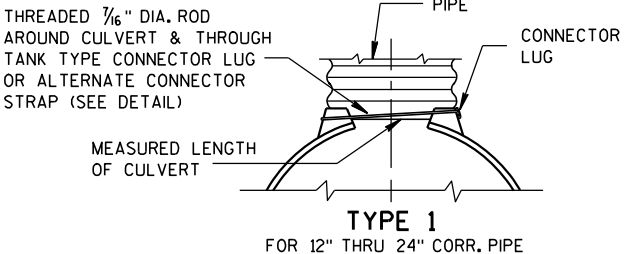
LONGITUDINAL SECTION
CONCRETE ENDWALLS



1" WIDE, 12 GA. (0.109" THICK) GALVANIZED STRAP WITH STANDARD 6" X 1/2" BAND BOLT AND NUT



ALTERNATE FOR TYPE 1 CONNECTION
END SECTION CONNECTOR STRAP



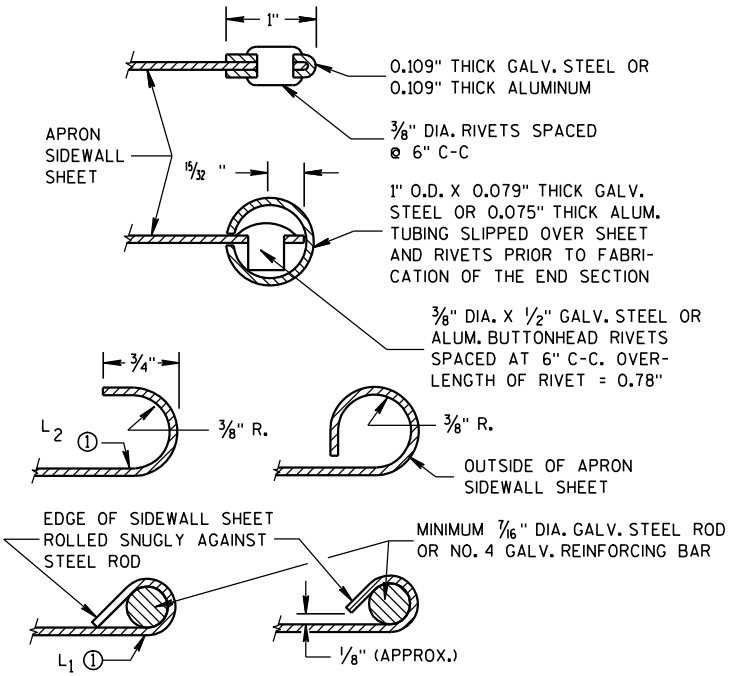
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL, AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

FOR CIRCUMFERENTIALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2, 3 OR 5 AS APPLICABLE.

FOR HELICALLY CORRUGATED PIPE USE ENDWALL CONNECTION DETAILS 1, 2 OR 5.

FOR HELICALLY CORRUGATED PIPES WITH TWO CIRCUMFERENTIAL CORRUGATIONS AT EACH END USE ENDWALL CONNECTION DETAILS 1, 2 OR 3.

CONNECTION DETAILS



SECTION A-A

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

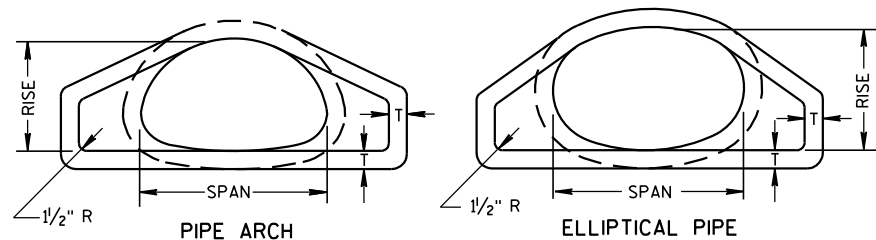
ALL THREE PIECE STEEL APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 60" DIAMETER PIPE AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 60" THROUGH 96" DIAMETER APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

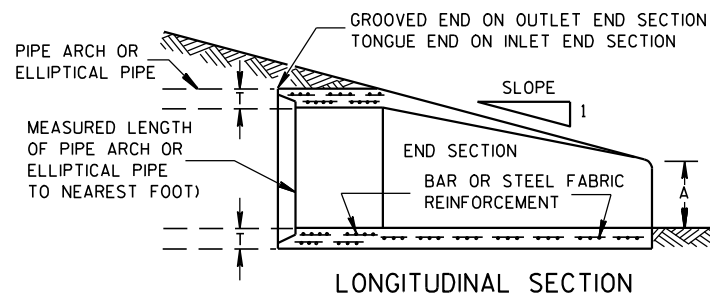
WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
APPROVED 11/30/94 DATE	/S/ Rory L. Rhinehart CHIEF ROADWAY DEVELOP	92	NEER
FHWA			

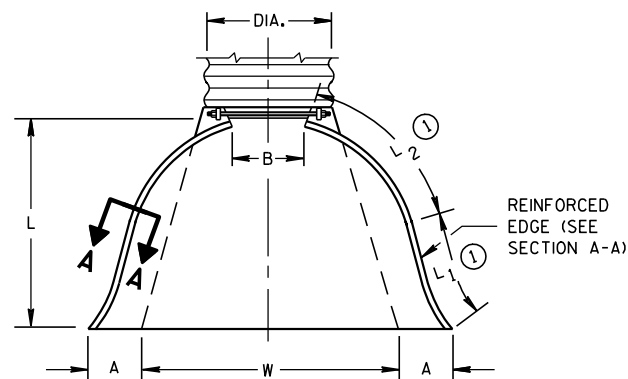


END VIEW



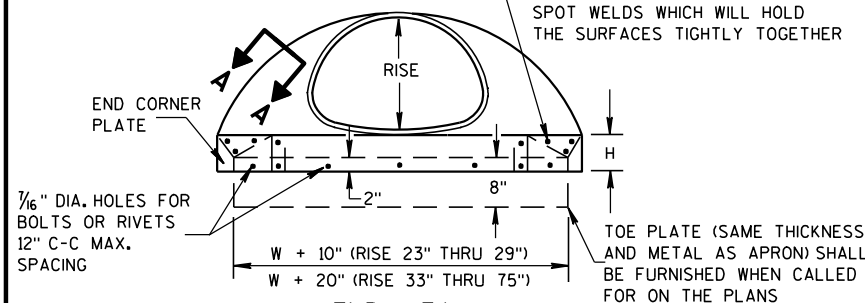
LONGITUDINAL SECTION

CONCRETE ENDWALLS

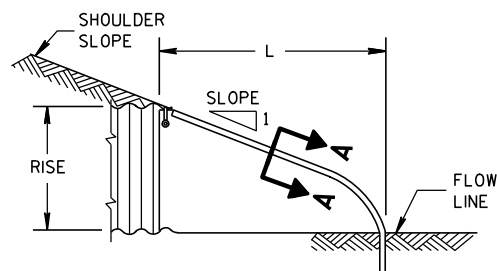
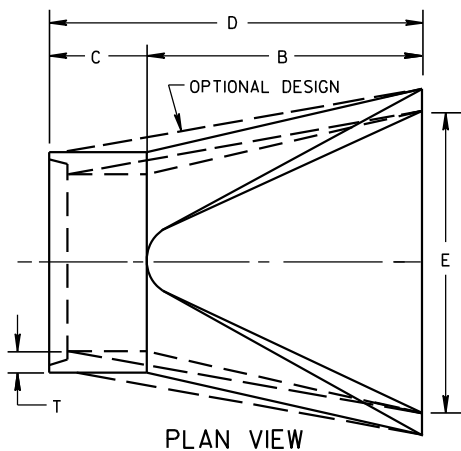


PLAN VIEW

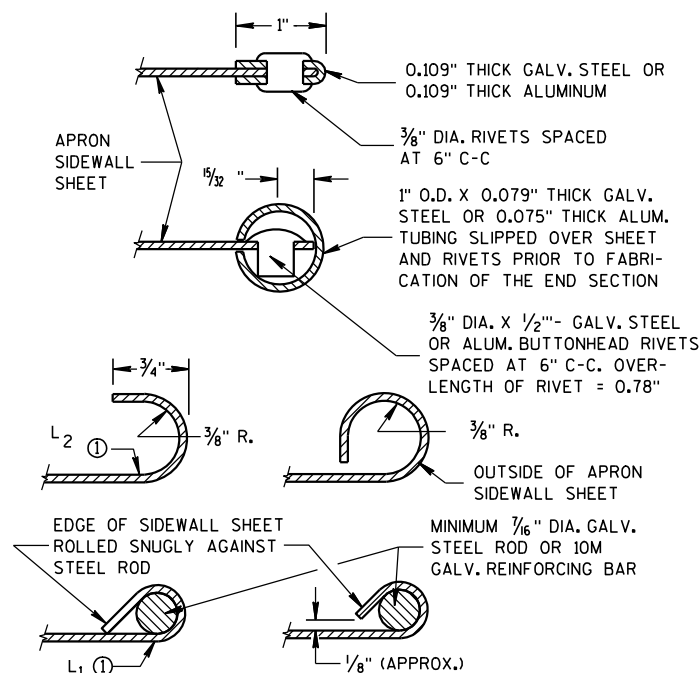
END CORNER PLATES MAY BE FASTENED TO APRON PROPER BY BOLTS, RIVETS, OR RESISTANCE SPOT WELDS WHICH WILL HOLD THE SURFACES TIGHTLY TOGETHER



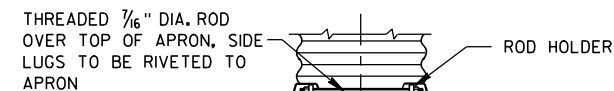
END VIEW

SIDE ELEVATION
METAL ENDWALLS

PLAN VIEW

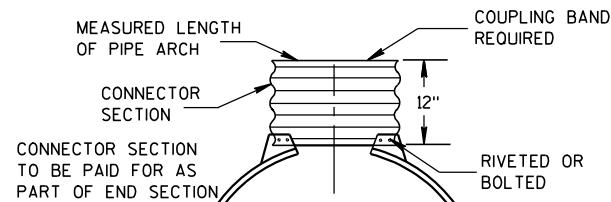


SECTION A-A



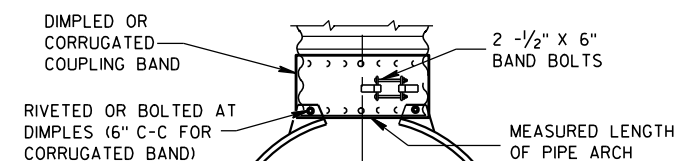
TYPE 2

FOR 17" X 13" THRU 112" X 75" PIPE ARCH



TYPE 3

FOR 64" X 43" THRU 112" X 75" PIPE ARCH



TYPE 5

ALTERNATE FOR:
ALL SIZES CORRUGATED PIPE ARCHESNOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL,
AND CORRUGATED BAND FITS INSIDE ENDWALL.

CONNECTION DETAILS

2- 2/3" X 1/2" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches)		MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	SPAN	RISE	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")		
15	17	13	.064	.060	7	9	6	19	14	16	30	2 1/2 to 1	1 Pc.
18	21	15	.064	.060	7	10	6	23	14	19 3/8	36	2 1/2 to 1	1 Pc.
21	24	18	.064	.060	8	12	6	28	18	21 3/4	42	2 1/2 to 1	1 Pc.
24	28	20	.064	.060	9	14	6	32	18	27 1/2	48	2 1/2 to 1	1 Pc.
30	35	24	.079	.075	10	16	6	39	18	37 5/8	60	2 1/2 to 1	1 Pc.
36	42	29	.079	.075	12	18	8	46	24	45 3/8	75	2 1/2 to 1	1 Pc.
42	49	33	.109	.105	13	21	9	53	24	54 3/4	85	2 1/2 to 1	2 Pc.
48	57	38	.109	.105	18	26	12	63	24	68	90	2 1/2 to 1	3 Pc.
54	64	43	.109	.105	18	30	12	70	24	72 3/4	102	2 1/4 to 1	3 Pc.
60	71	47	.109*	.105*	18	33	12	77	30	82 1/4	114	2 1/4 to 1	3 Pc.
66	77	52	.109*	.105*	18	36	12	77	—	—	126	2 to 1	3 Pc.
72	83	57	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.

3" X 1" CORRUGATIONS

EQUIV. DIA. (Inches)	(Inches)		MIN. THICK. (Inches)		DIMENSIONS (Inches)							APPROX. SLOPE	BODY
	SPAN	RISE	STEEL	ALUM.	A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")		
48	53	41	.109	.105	18	26	12	63	24	72 3/4	90	2 1/2 to 1	2 Pc.
54	60	46	.109	.105	18	30	12	70	30	82 1/4	102	2 to 1	2 Pc.
60	66	51	.109*	.105*	18	33	12	77	—	—	114	1 1/2 to 1	3 Pc.
66	73	55	.109*	.105*	18	36	12	77	—	—	126	1 1/2 to 1	3 Pc.
72	81	59	.109*	.105*	18	39	12	77	—	—	138	2 to 1	3 Pc.
78	87	63	.109*	.105*	22	38	12	77	—	—	148	1 1/2 to 1	3 Pc.
84	95	67	.109*	.105*	22	34	12	77	—	—	162	1 1/2 to 1	3 Pc.
90	103	71	.109*	.105*	22	38	12	77	—	—	174	1 1/2 to 1	3 Pc.
96	112	75	.109*	.105*	24	40	12	77	—	—	174	1 1/2 to 1	3 Pc.

NOTE: ALL SPLICES TO BE LAP RIVETED OR BOLTED.

* EXCEPT CENTER PANEL
SEE GENERAL NOTES

REINFORCED CONCRETE PIPE ARCH

EQUIV. DIA. (Inches)	DIMENSIONS (Inches)								APPROX. SLOPE
	** SPAN	** RISE	T	A	B	C	D	E	
24	29	18	3	8 1/2	39	33	72	48	3 to 1
30	36	22	3 1/2	9 1/2	50	46	96	60	3 to 1
36	44	27	4	11 1/8	60	36	96	72	3 to 1
42	51	31	4 1/2	15 1/8	60	36	96	78	3 to 1
48	58	36	5	21	60	36	96	84	3 to 1
54	65	40	5 1/2	25 1/2	60	36	96	90	3 to 1
60	73	45	6	31	60	36	96	96	3 to 1
72	88	54	7	31	60	39	99	120	2 to 1
84	102	62	8	28 1/2	83	19	102	144	2 to 1

REINFORCED CONCRETE ELLIPTICAL PIPE

EQUIV. DIA. (Inches)	DIMENSIONS (Inches)								APPROX. SLOPE
	** SPAN	** RISE	T	A	B	C	D	E	
24	30	19	3 1/4	8 1/2	39	33	72	48	3 to 1
30	38	24	3 3/4	9 1/2	54	18	72	60	3 to 1
36	45	29	4 1/2	11 1/8	60	24	84	72	2 1/2 to 1
42	53	34	5	15 1/8	60	36	96	78	2 1/2 to 1
48	60	38	5 1/2	21	60	36	96	84	2 1/2 to 1
54	68	43	6	25 1/2	60	36	96	90	2 1/2 to 1
60	76	48	6 1/2	30	60	36	96	96	2 1/2 to 1

**NOMINAL SIZE

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

CONCRETE APRON ENDWALLS MAY NOT BE USED WITH GALVANIZED STEEL OR ALUMINUM CULVERT PIPE OR VISE VERSA. GALVANIZED STEEL OR ALUMINUM APRON ENDWALLS SHALL NORMALLY BE INSTALLED ON CULVERT PIPE OF THE SAME METAL.

ALL THREE PIECE STEEL APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.109" SIDES AND 0.138" CENTER PANELS. ALL THREE PIECE ALUMINUM APRON ENDWALLS FOR 66" X 51" PIPE ARCH AND LARGER SHALL HAVE 0.105" SIDES AND 0.134" CENTER PANELS. THE WIDTH OF CENTER PANELS SHALL BE GREATER THAN 20 PERCENT OF THE PIPE ARCH PERIMETER.

LAP SEAMS SHALL BE TIGHTLY JOINED BY GALVANIZED RIVETS OR BOLTS FOR STEEL UNITS AND ALUMINUM RIVETS AND BOLTS FOR ALUMINUM UNITS. FOR THE 77" X 52" THROUGH 112" X 75" APRON ENDWALL SIZES, THE REINFORCED EDGES AND CENTER PANEL SEAMS SHALL BE FURTHER REINFORCED WITH GALVANIZED STEEL OR ALUMINUM STIFFENER ANGLES. THE ANGLES SHALL BE ATTACHED BY GALVANIZED NUTS AND BOLTS FOR STEEL UNITS AND ALUMINUM NUTS AND BOLTS FOR ALUMINUM UNITS.

WHERE TWO OR MORE PIPES WITH APRON ENDWALLS ARE LAID ADJACENT TO EACH OTHER, THEY SHALL BE SEPARATED BY A DISTANCE SUFFICIENT TO PROVIDE A MINIMUM CLEARANCE OF 6 INCHES BETWEEN APRON ENDWALLS.

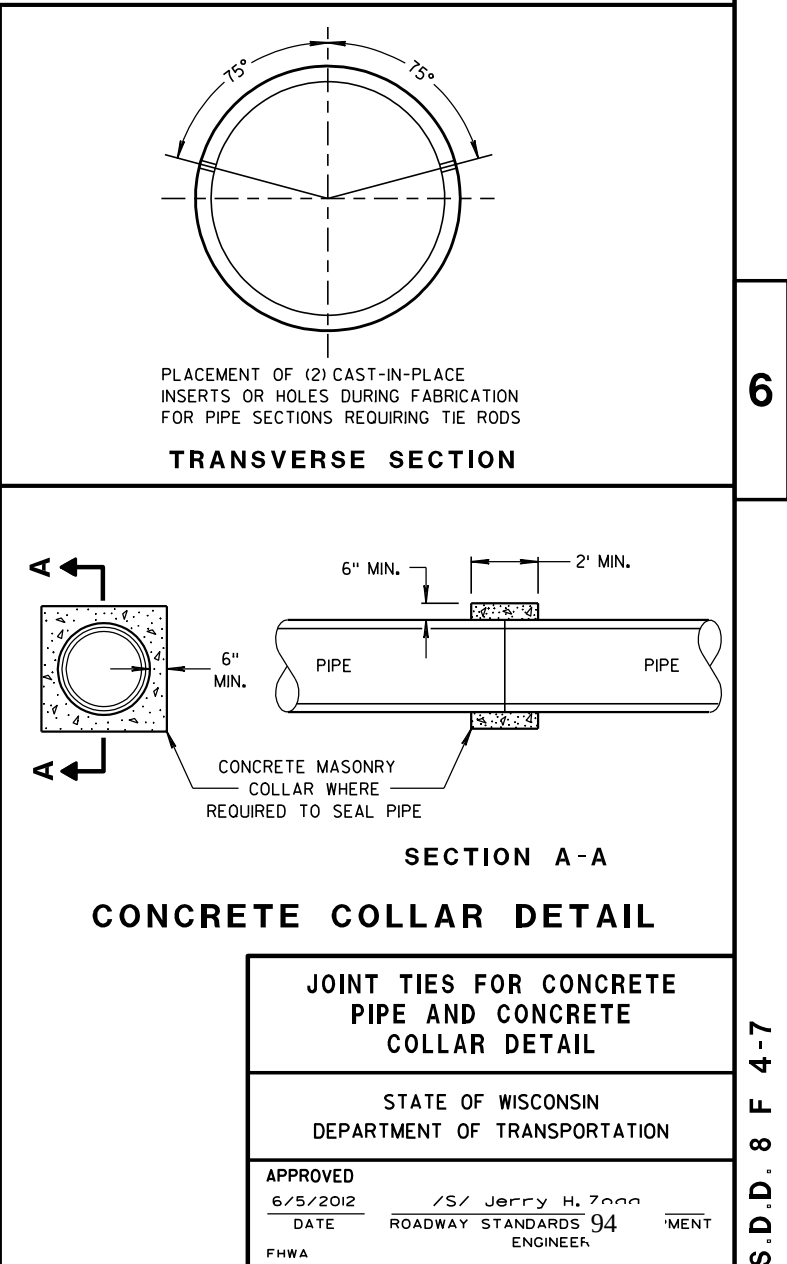
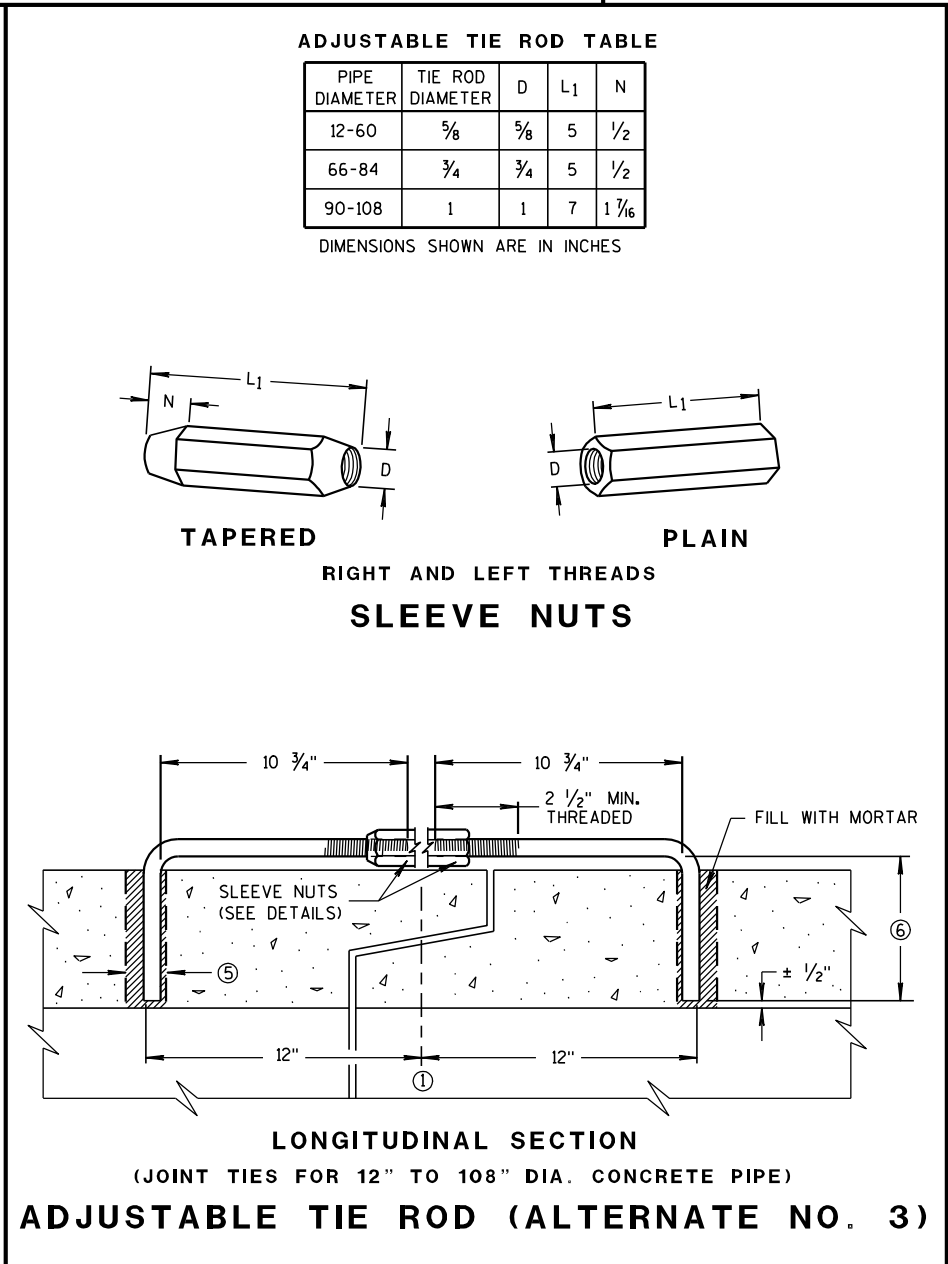
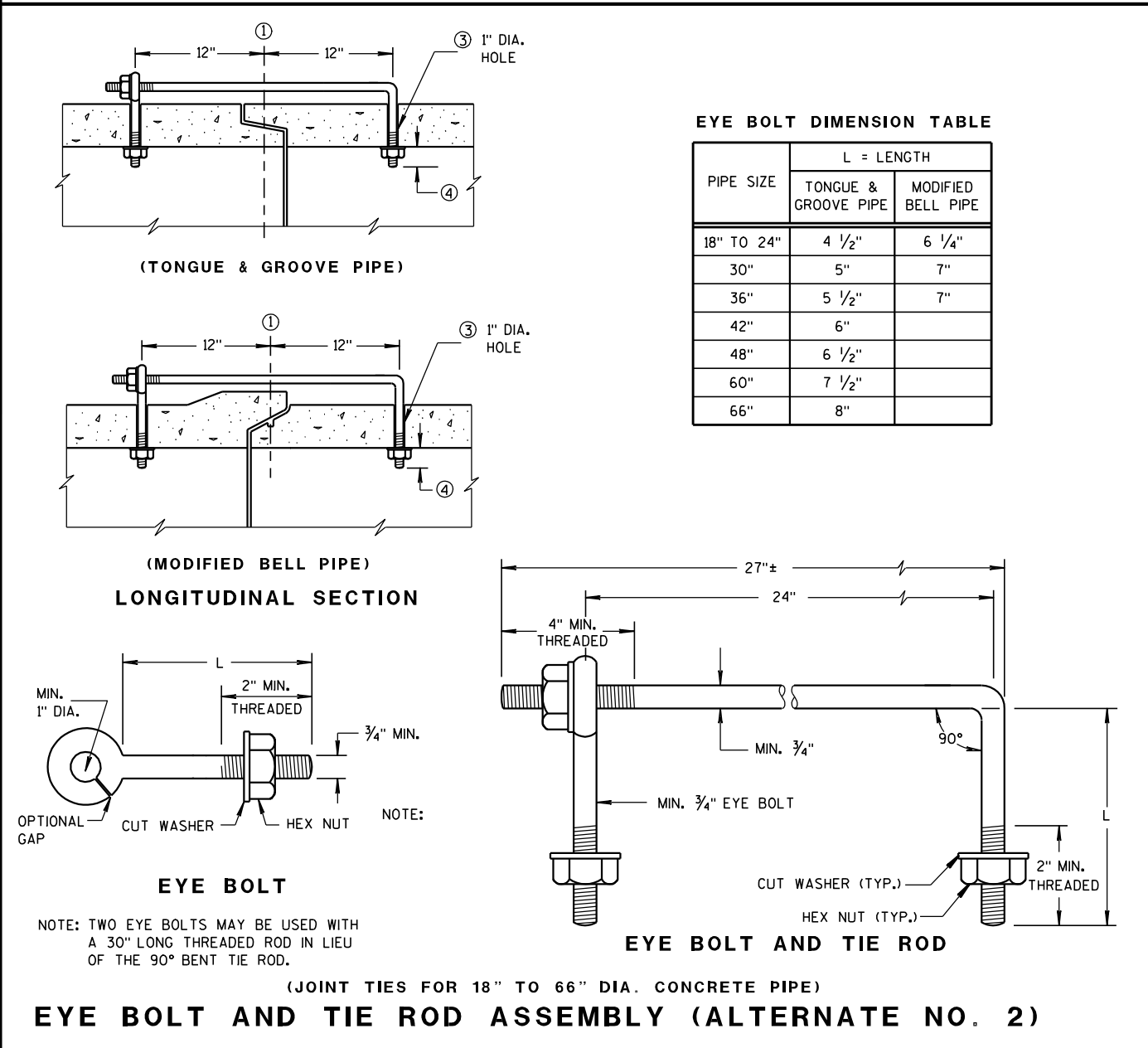
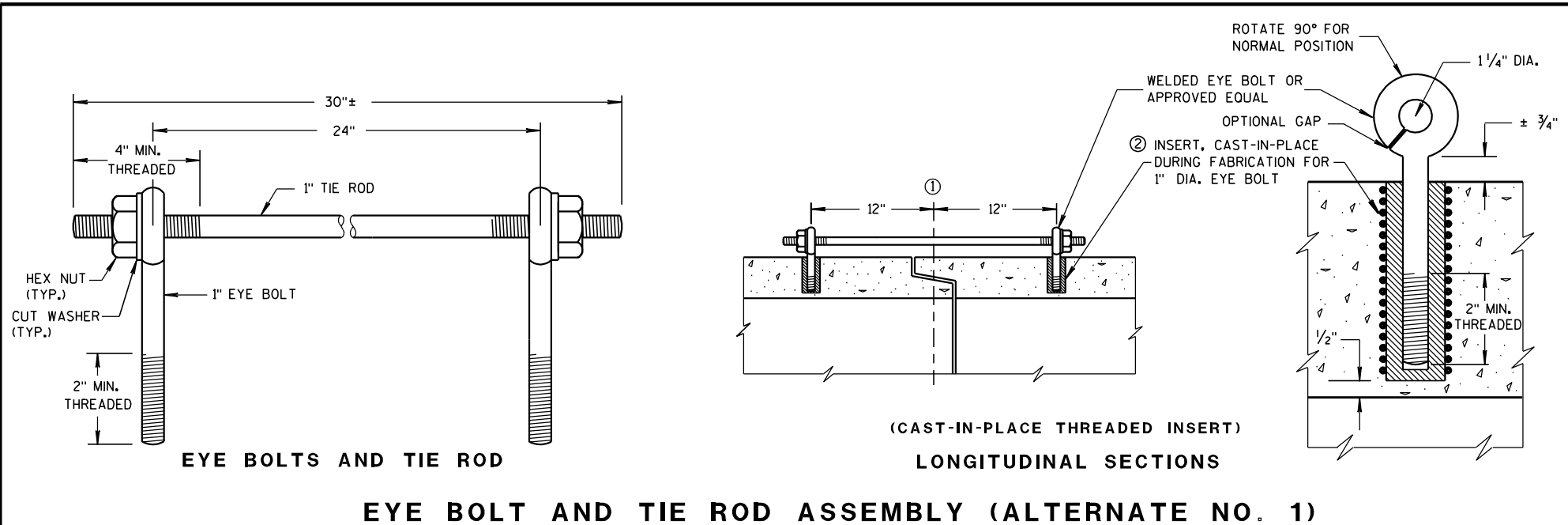
① FOR PIPE ARCH SIZES UP TO 73" X 55" A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

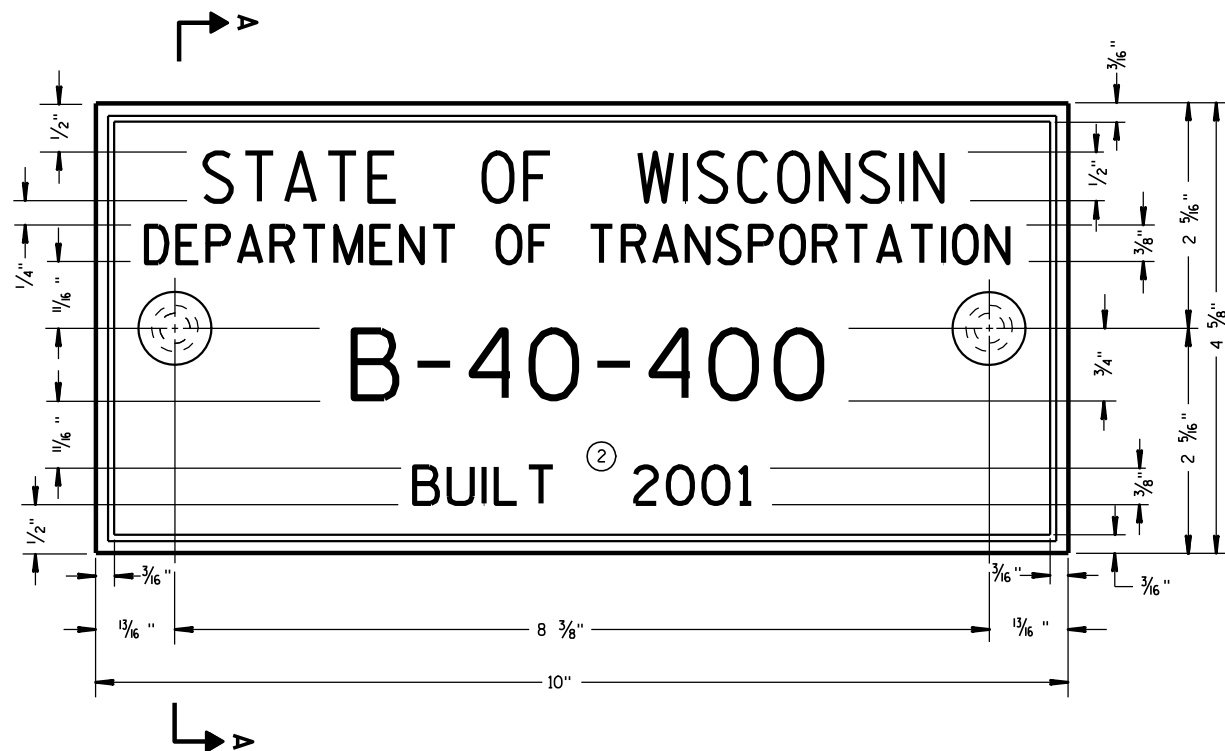
APRON ENDWALLS FOR
PIPE ARCH AND
ELLIPTICAL PIPESTATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

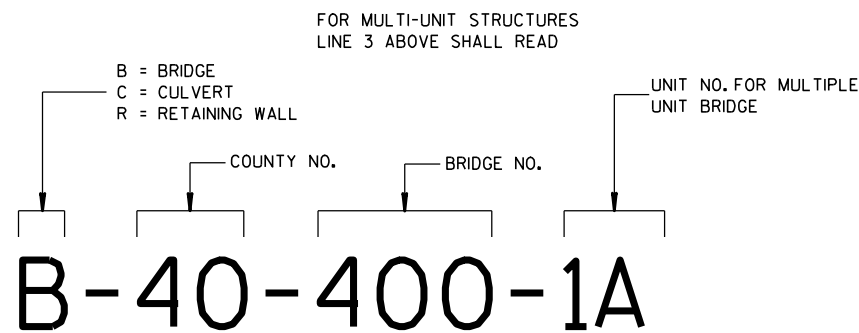
11/30/94
DATE/S/ Rory L. Rhin...
CHIEF ROADWAY DEVELOPER

FHWA





TYPICAL NAME PLATE
(BRIDGES, CULVERTS, AND RETAINING WALLS)



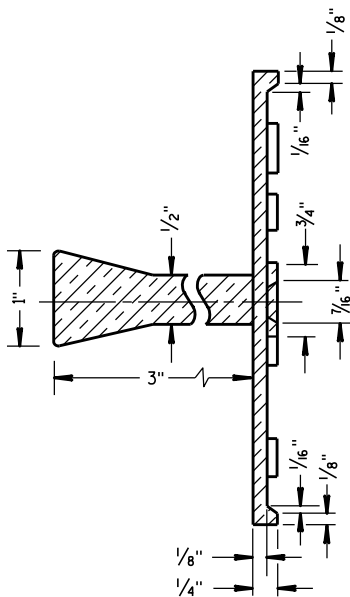
NUMBERING DESIGNATION
MULTI-UNIT STRUCTURES

GENERAL NOTES

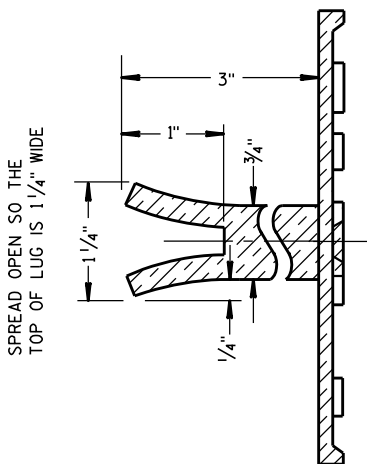
NAME PLATES TO BE INSTALLED ON BRIDGES, CULVERTS, AND RETAINING WALLS SHALL CONFORM TO THE REQUIREMENTS OF SECTION 502.3.11 OF THE STANDARD SPECIFICATIONS.

THE BRIDGE NUMBER AND YEAR BUILT SHOWN ON THIS DRAWING ARE EXAMPLES ONLY. SEE CONSTRUCTION PLANS FOR INDIVIDUAL NUMBERING AND YEAR BUILT.

- ① EPOXY RESIN SHALL BE FROM AN APPROVED MANUFACTURER AND USED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- ② REHABILITATION OF AN EXISTING STRUCTURE SHOULD USE THE DATE OF ORIGINAL STRUCTURE CONSTRUCTION.

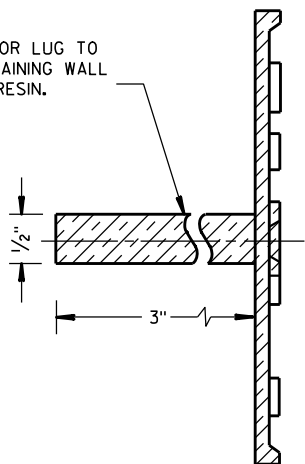


SECTION A-A



ALTERNATE LUG

- ① ADHERE ANCHOR LUG TO PRECAST RETAINING WALL WITH EPOXY RESIN.



ALTERNATE LUG
(FOR ATTACHMENT TO PRECAST STRUCTURES)

NAME PLATE (STRUCTURES)		
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION		
APPROVED DATE 3/26/10	CHIEF STRUCTURAL DEVELOPER /S/ Scot Beck 95	JEER

GENERAL NOTES

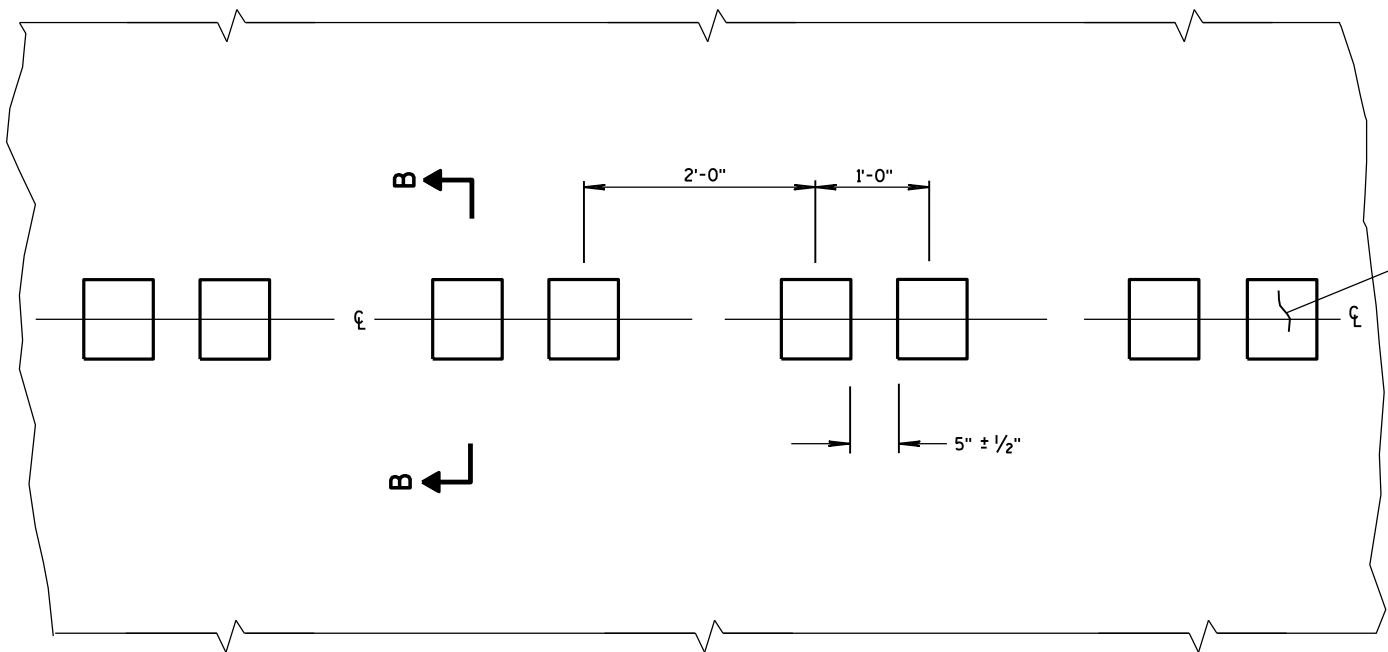
DETAILS OF CONSTRUCTION SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.

DO NOT MILL CENTER LINE GROOVES THROUGH ANY INTERSECTION, MARKED CROSSWALK, NON-MOTORIZED PATH CROSSING, OR SNOWMOBILE CROSSING.

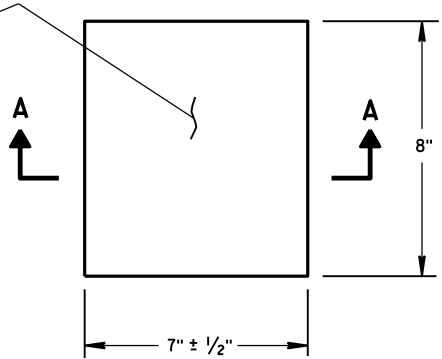
INSTALL PAVEMENT MARKING AFTER THE GROOVES ARE INSTALLED.

SEE SIGNING PLAN FOR SIGN REQUIREMENTS THAT MAY BE NEEDED.

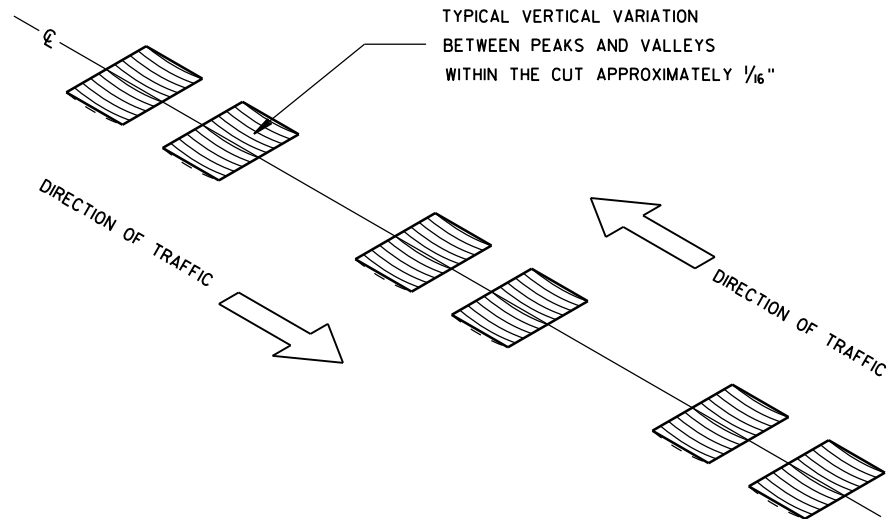
- ① CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



PLAN VIEW
CENTER LINE WITH GROOVES

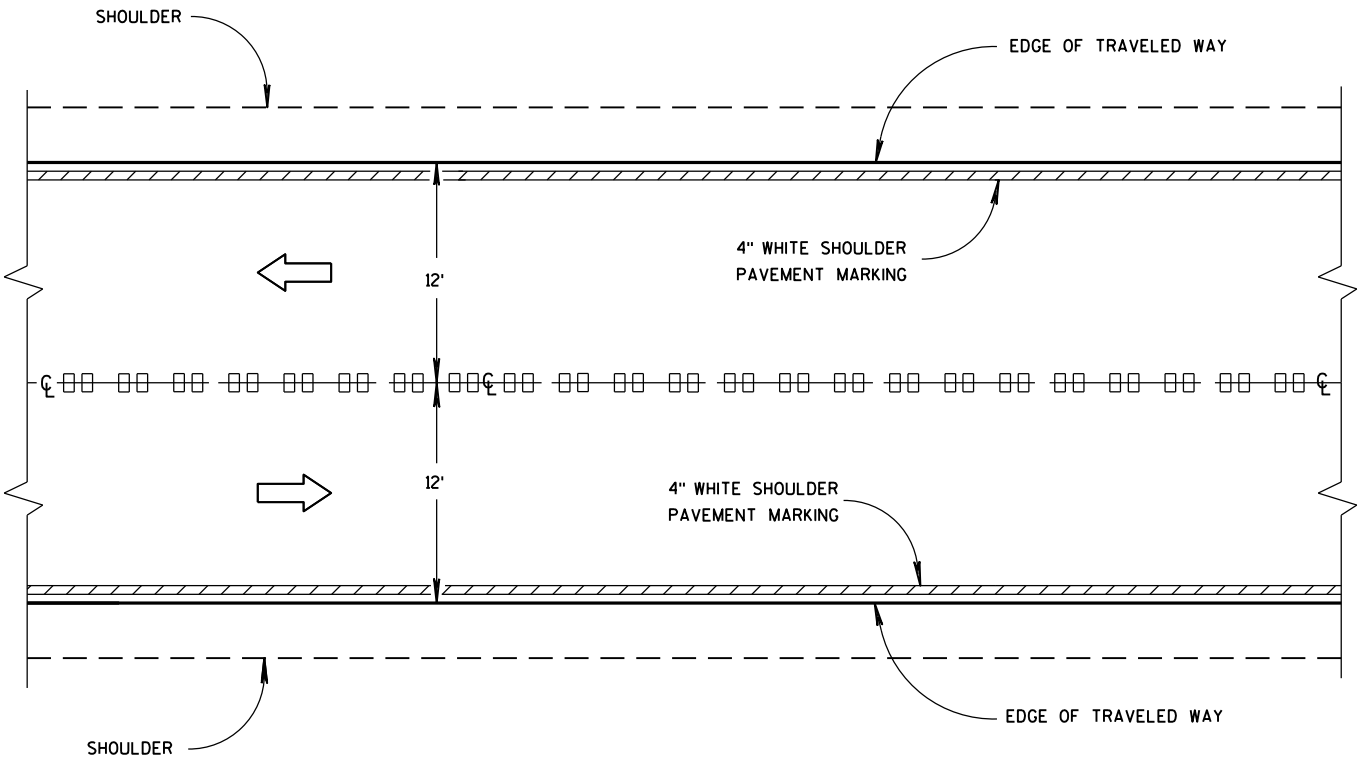


PLAN VIEW
(SINGLE GROOVE)

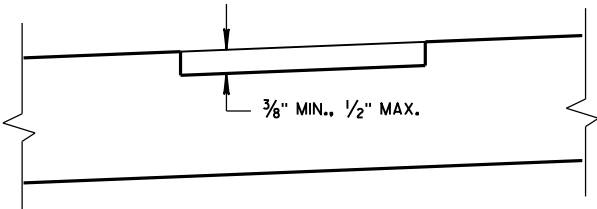


ISOMETRIC

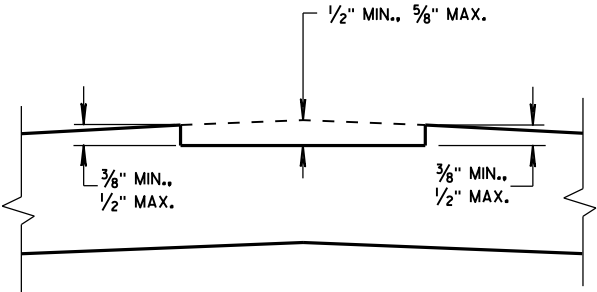
PLACEMENT DETAIL FOR MILLED RUMBLE STRIP



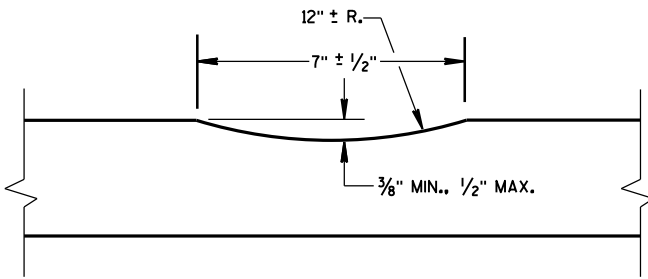
CENTER LINE GROOVES ON TWO-WAY ROADWAYS



SECTION B-B
SUPERELEVATED ROADWAY



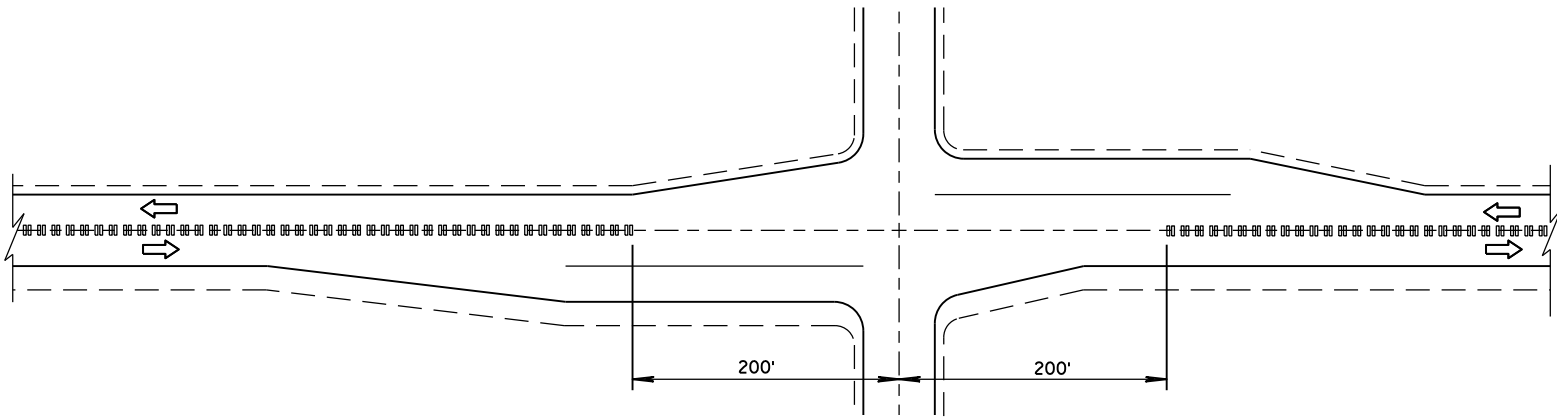
SECTION B-B
CROWNED ROADWAY



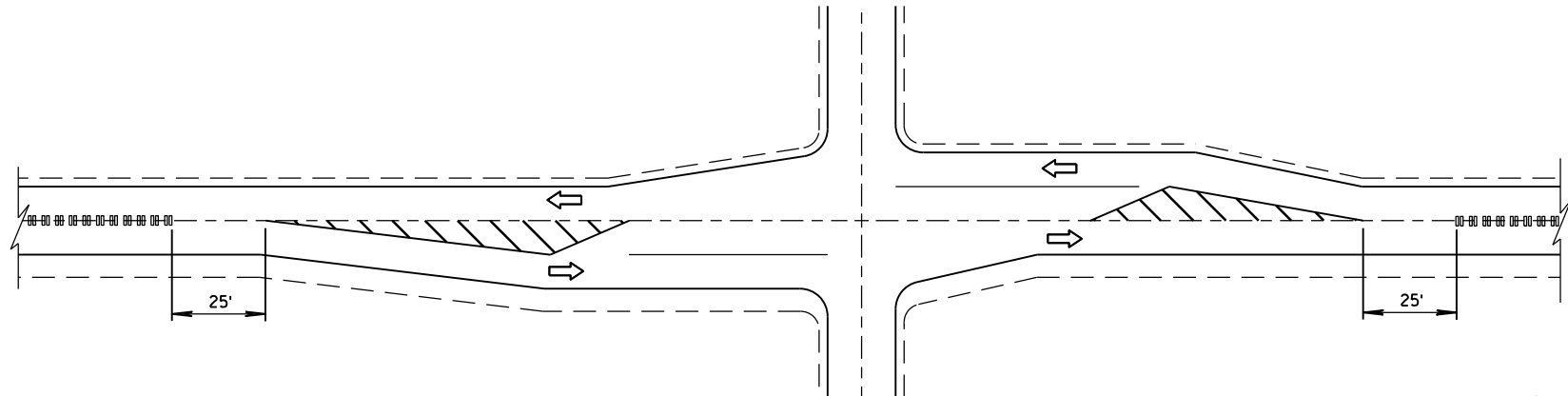
SECTION A-A

2-LANE RURAL
CENTER LINE RUMBLE STRIP,
MILLING

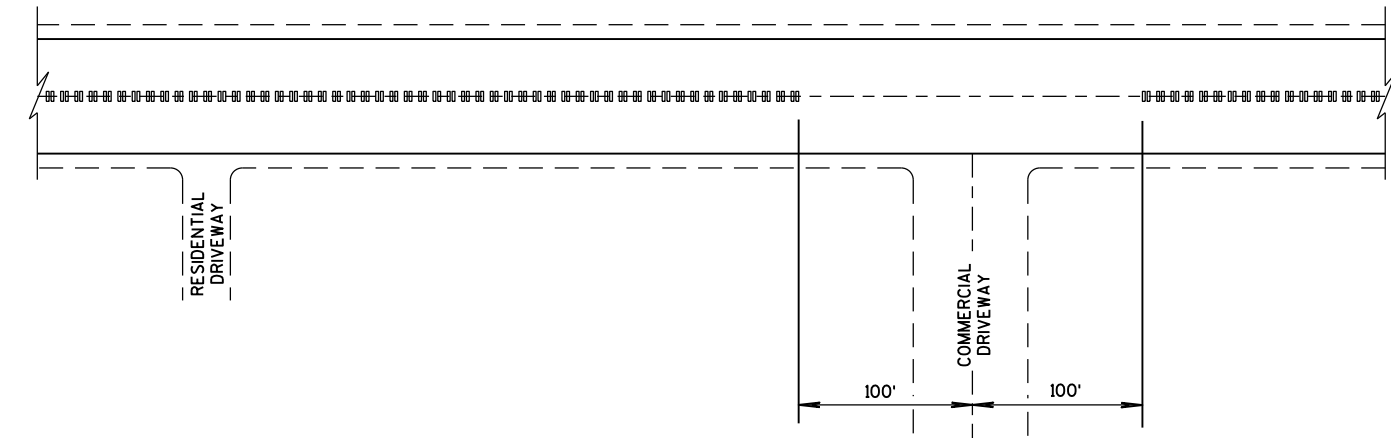
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



CENTER LINE GROOVES AT INTERSECTIONS

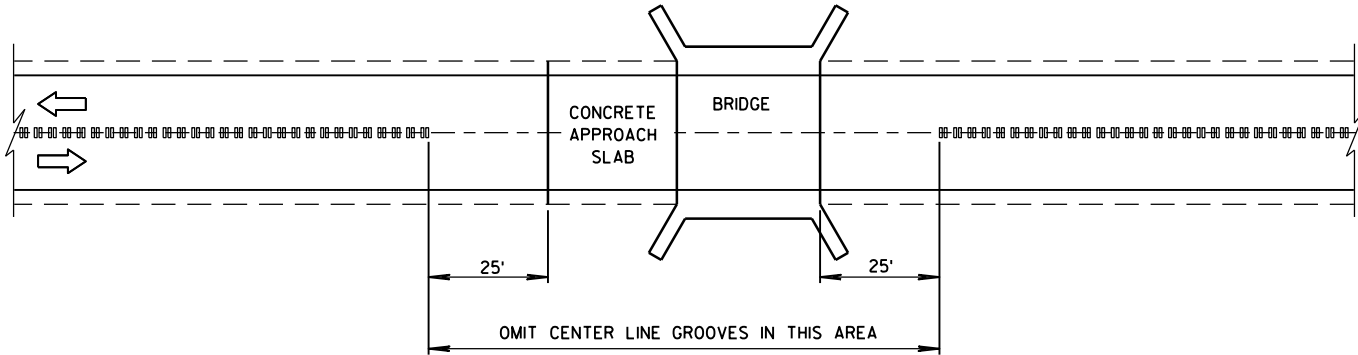


CENTER LINE GROOVES AT INTERSECTIONS
(WITH LEFT TURN LANES)

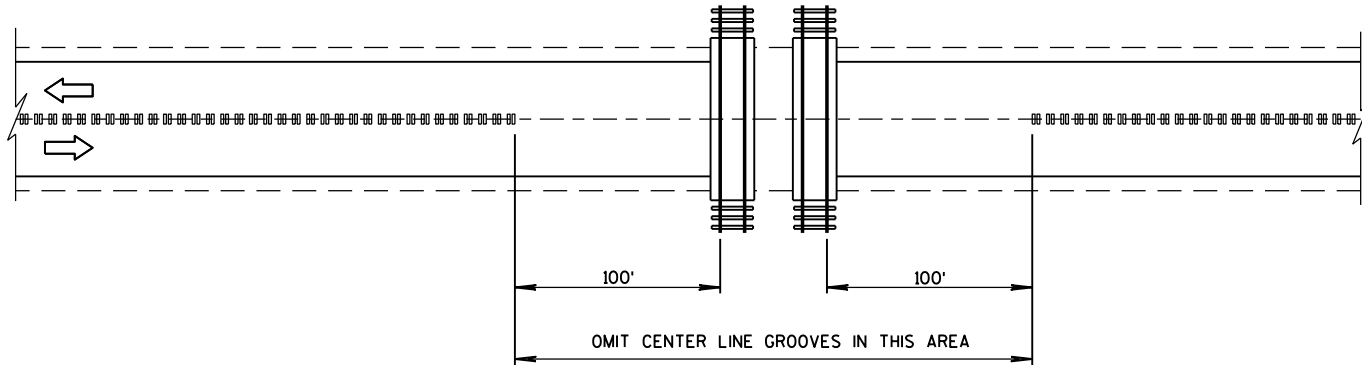


CENTER LINE GROOVES AT DRIVEWAYS^①

① CENTERLINE GROOVES MAY BE OMITTED IN AREAS WITH HIGH CONCENTRATIONS OF DRIVEWAYS, WHEN DIRECTED BY THE ENGINEER.



CENTER LINE GROOVES AT BRIDGES



CENTER LINE GROOVES AT RAILROADS

2-LANE RURAL CENTER LINE RUMBLE STRIP, MILLING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED DATE 5/15/2013	/S/ Jerry H. Zoega ROADWAY STANDARDS ENGINEER 97 NT
FHWA	

6

S.D.D. 14 B 15-8a

- 6

S.D.D. 14 B 15-8a



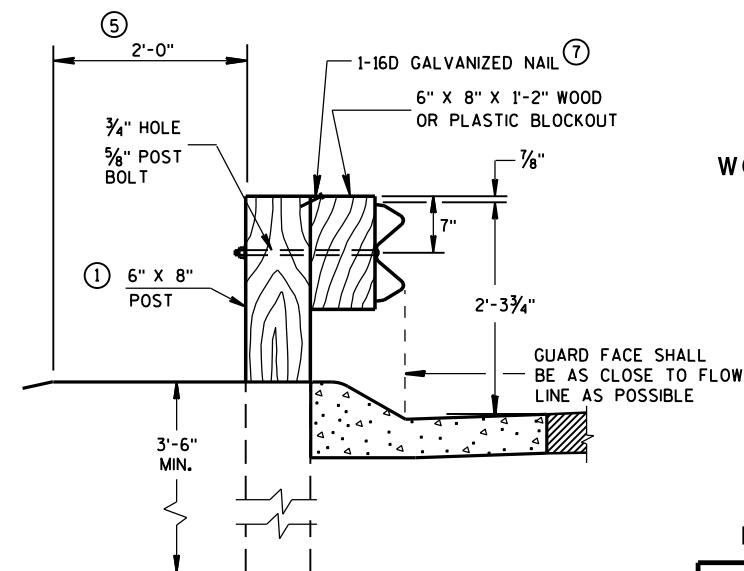
PLAN VIEW
STEEL POST, NOTCHED
PLASTIC BLOCKOUT & BEAM



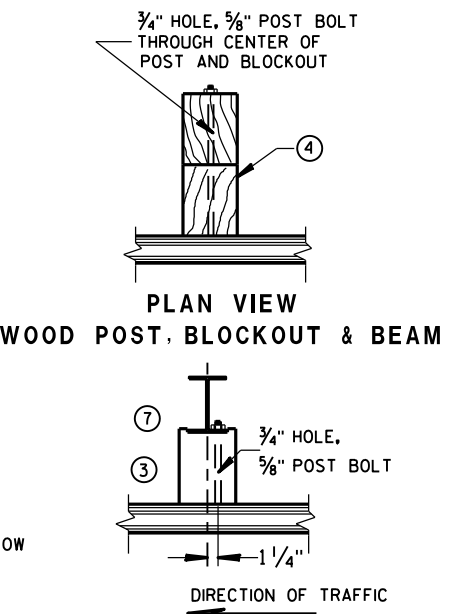
PLAN VIEW
STEEL POST, NOTCHED
PLASTIC BLOCKOUT & BEAM



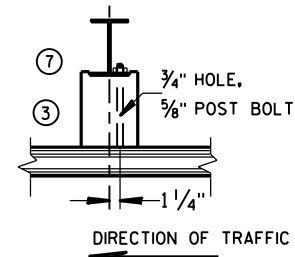
END VIEW
LONGER POST AT HALF
POST SPACING W BEAM
(LHW)



LOCATED ALONG A
MOUNTABLE CURBED ROADWAY



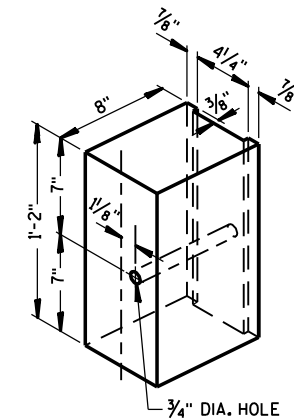
PLAN VIEW
POST, BLOCKOUT & BEAM

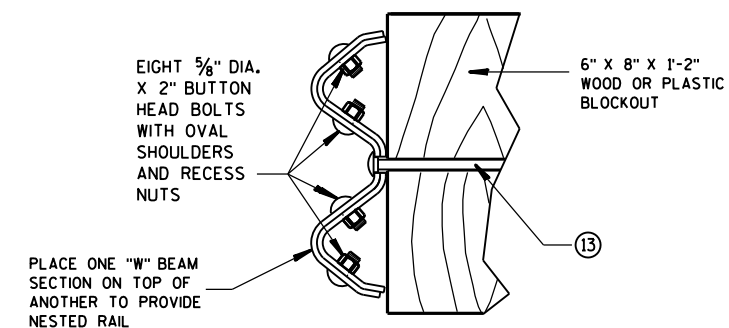
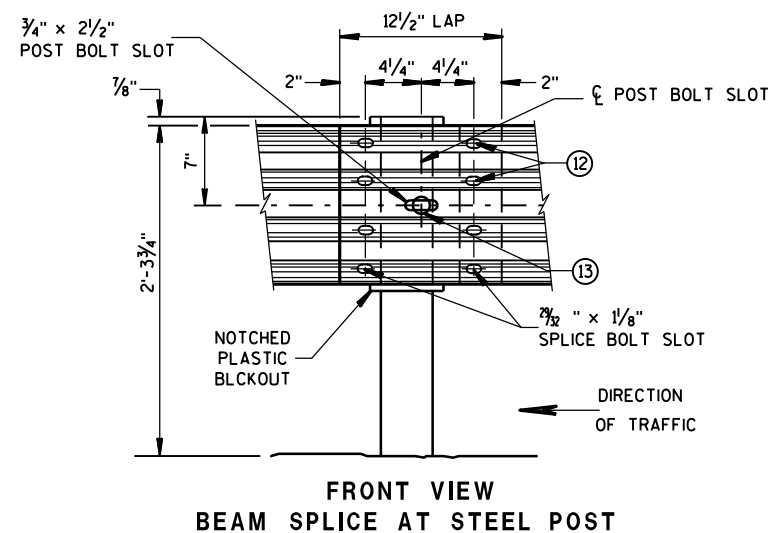
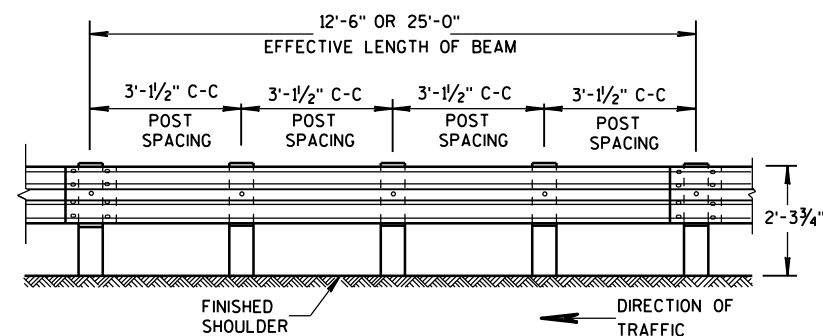
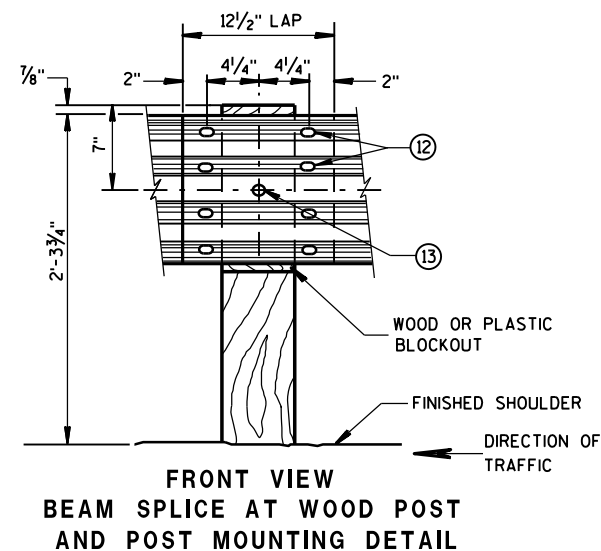
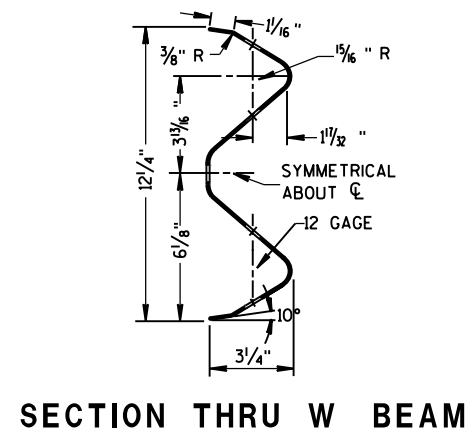
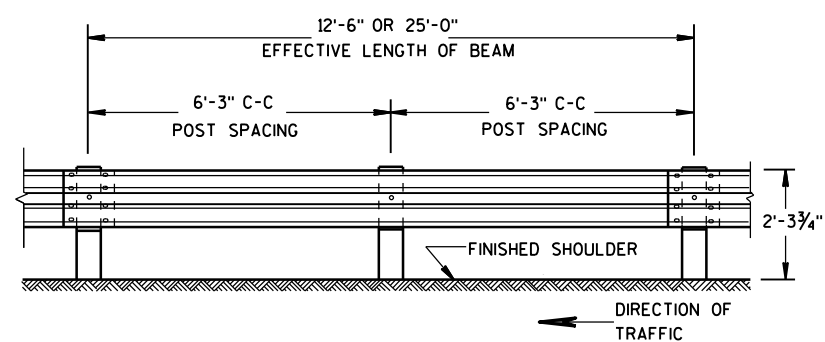


PLAN VIEW
STEEL POST, NOTCHED
PLASTIC BLOCKOUT & BEAM

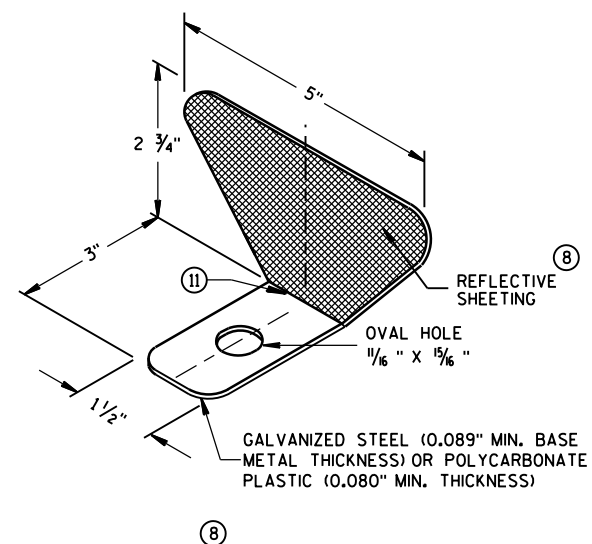
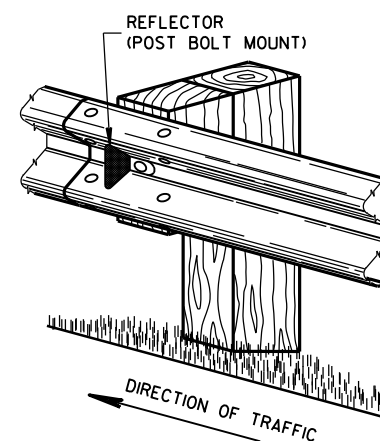


PLAN VIEW
STEEL POST, NOTCHED
PLASTIC BLOCKOUT & BEAM

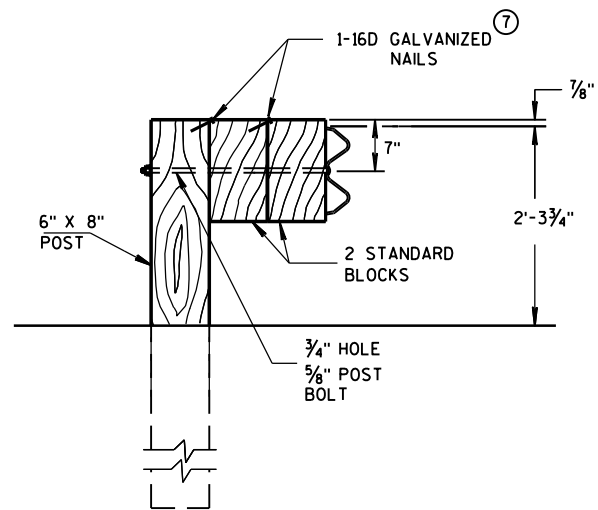




	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	1 1	3
TWO WAY TRAFFIC	< 200' > 200'	25' C-C 50' C-C	1 1 ⁽¹⁰⁾	6
TWO WAY TRAFFIC	< 200' > 200'	50' C-C 100' C-C	2 2 ⁽¹¹⁾	3

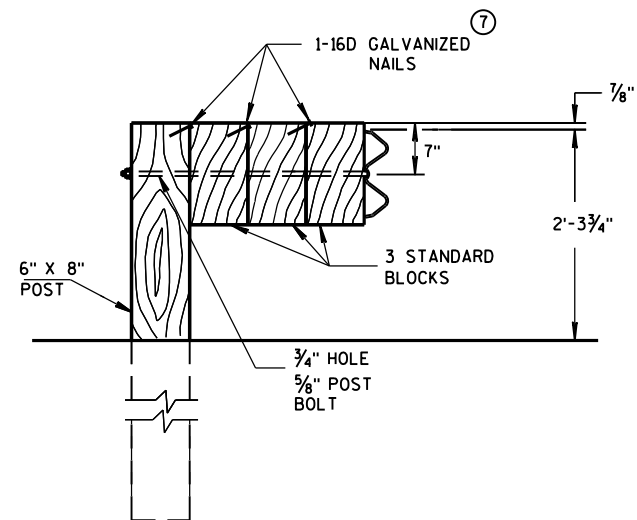


- ## GENERAL NOTES
- ⑧ PROVIDE SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH YELLOW REFLECTIVE SHEETING. SHEETING IS TYPE H. SEE STANDARD SPECIFICATION 637.
 - ⑨ DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.
 - ⑩ REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.
 - ⑪ PROVIDE AN ANGLE OF BEND OF $90^{\circ} \pm 1^{\circ}$ FOR TWO-SIDED REFLECTORS.
 - ⑫ 8 - $\frac{5}{8}$ " ϕ X 2" BUTTON HEAD BOLTS WITH OVAL SHOULDERS & RECESS NUTS.
 - ⑬ $\frac{5}{8}$ " DIA. BUTTON HEAD BOLT AND RECESS NUT WITH $\frac{5}{8}$ " DIA. F844 FLAT WASHER UNDER NUT.



DETAIL FOR DOUBLE BLOCKS

THE NUMBER OF DOUBLE BLOCK POSTS
WITHIN A BARRIER RUN IS UNLIMITED

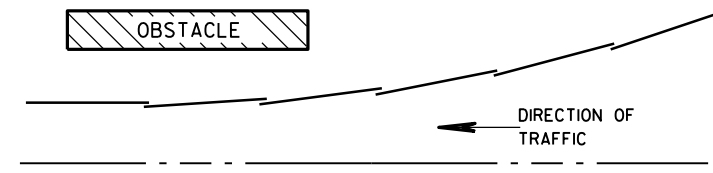


DETAIL FOR TRIPLE BLOCKS

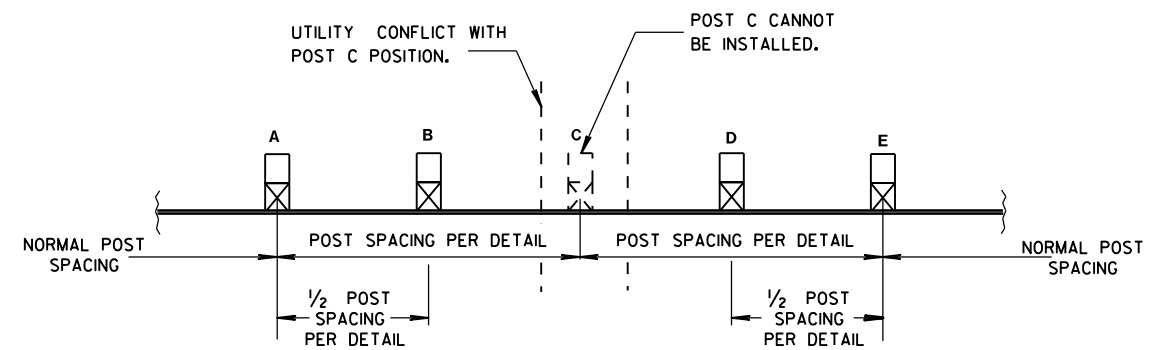
TRIPLE BLOCK DETAIL IS LIMITED TO ONE
LOCATION WITHIN A BEAM GUARD RUN.

NOTES: USE DOUBLE OR TRIPLE BLOCKS WHEN UNDERGROUND OBSTACLES
PREVENT THE POST FROM BEING INSTALLED.

DO NOT USE EXTRA BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND
SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION
DISTANCE OF THE BARRIER.



PLAN VIEW BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS UNDERGROUND OBSTRUCTION

STEEL PLATE BEAM GUARD,
CLASS "A",
INSTALLATION & ELEMENTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

June 2014
DATE

FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

100

INT

BILL OF MATERIALS

NOTE NO.	QTY.	DESCRIPTION
①	4	WOOD BREAKAWAY TERMINAL POST: 5 1/2" X 7 1/2" X 3'-9"
②	**	STEEL TUBE: OPTION 1 - QUANTITY OF 4 TS 8" X 6" X 0.188", 4'-6" LONG OR OPTION 2 - QUANTITY OF 2 TS 8" X 6" X 0.188", 6'-0" AND 2 TS 8" X 6" X 0.188", 4'-6" LONG
③	2	SOIL PLATE: 2'-0" X 1'-6" X 1/4" **
④	4	WOOD BREAKAWAY CRT POST: 6" X 8" X 6'-0"
⑤	6	WOOD OFFSET BLOCKS: 6' X 8" X 1'-2"
⑥	1	PIPE SLEEVE: 2" X 5 1/2" STANDARD PIPE
⑦	1	BEARING PLATE
⑧	1	BCT CABLE ASSEMBLY
⑨	1	CABLE ANCHOR BOX
⑩	1	STRUT & YOKE
⑪	1	STEEL PLATE BEAM, END PANEL 12 GA. 13'-6 1/2" LONG FOR SKT-350, ET-2000 AND ET-2000 PLUS
⑫	3	STEEL PLATE BEAM: 12 GA. 13'-6 1/2"
⑬	1	ET-2000/ET-2000 PLUS GUARDRAIL EXTRUDER OR SKT-350 IMPACT HEAD: AS FURNISHED BY MANUFACTURER
⑭	1	0.040" ALUMINUM SHEET WITH REFLECTIVE SHEETING TYPE F PER SECTION 637 OF THE STANDARD SPECIFICATIONS
⑮	1	E.A.T. MARKER POST

GENERAL NOTES

FOLLOW MANUFACTURE'S BOLTING RECOMMENDATIONS, IF NONE ARE AVAILABLE, INSTALL 3/8" ϕ X 1'-6" BUTTON HEAD BOLTS AT ALL POSTS EXCEPT FOR POST 1.

(A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL), AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.

(B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED.

(C) THE 13 SLOT FIRST RAIL PANEL MAY BE USED IN LIEU OF THE 3 SLOT RAIL PANEL ON SKT-350 ONLY.

(D) THE TOP OF THE STEEL TUBE ON POSTS 1 THROUGH 4 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.

(E) THE CENTER OF THE UPPER 3/2" DIAMETER HOLE ON POST 5 THROUGH 8 SHALL BE 3/4" ABOVE THE FINISHED GROUND LINE.

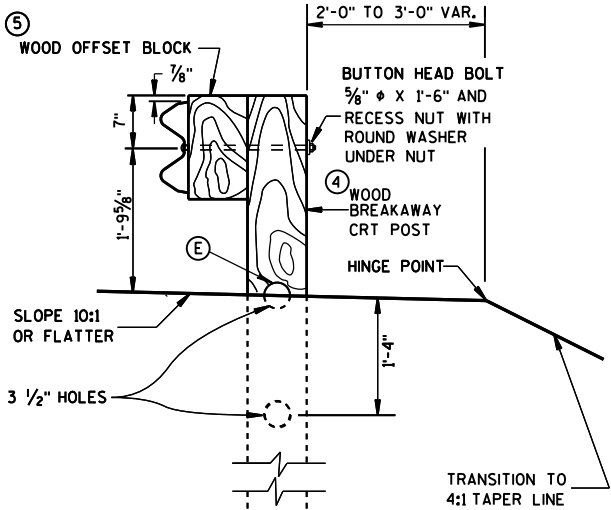
(F) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS, ONE SCREW PER CORNER.

STEEL POSTS SHALL NOT BE ALLOWED FOR USE WITH ENERGY ABSORBING TERMINALS.

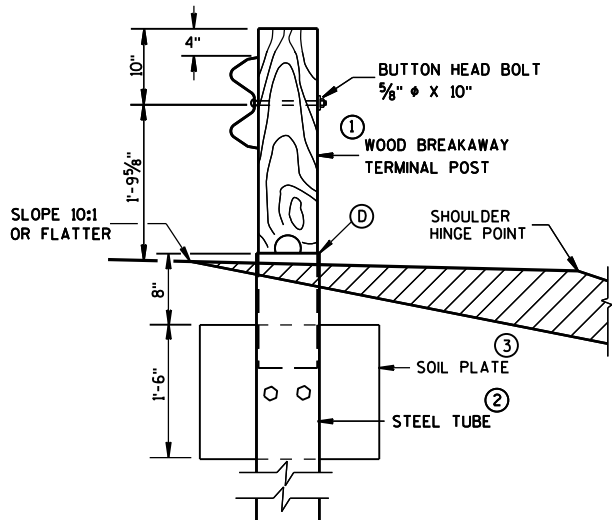
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

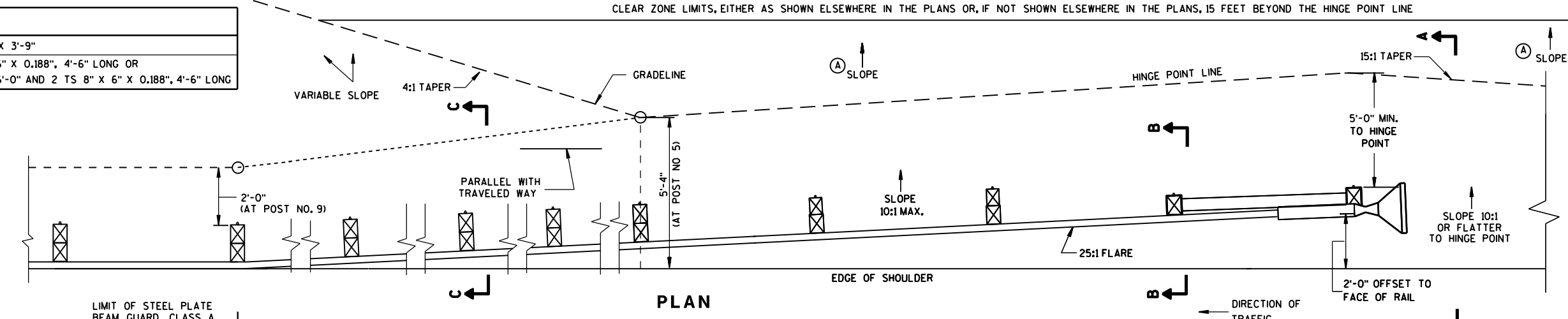
** SDD SHOWS 4 - 54 INCH STEEL TUBES WITH SOIL PLATES INSTALLED ON POST 1 AND POST 2. POST 3 AND 4 DO NOT NEED SOIL PLATES. AN ALTERNATIVE INSTALLATION WOULD CONSIST OF 2 - 72 INCH STEEL TUBES ON POST 1 AND POST 2 AND 54 INCH SOIL TUBES ON POSTS 3 AND 4. THE ALTERNATIVE INSTALLATION DOES NOT REQUIRE SOIL PLATES.



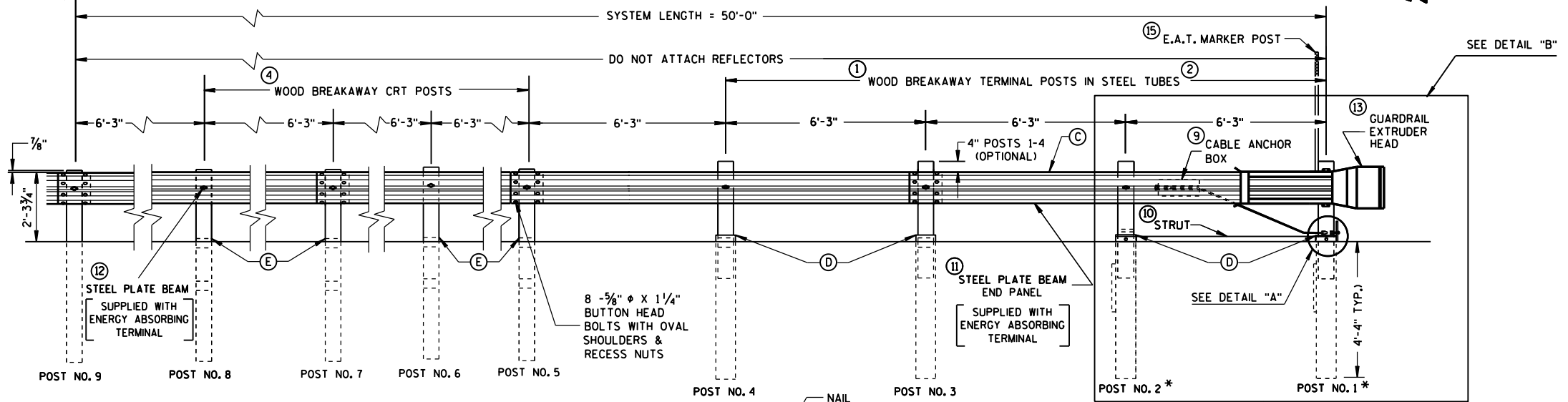
SECTION C-C
TYPICAL AT POST NOS. 6, 8



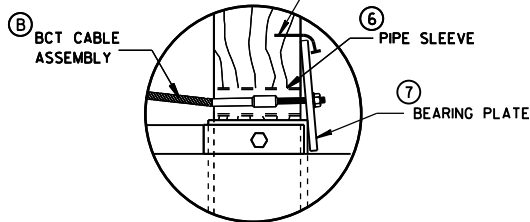
SECTION B-B
TYPICAL AT POST NO. 2 *



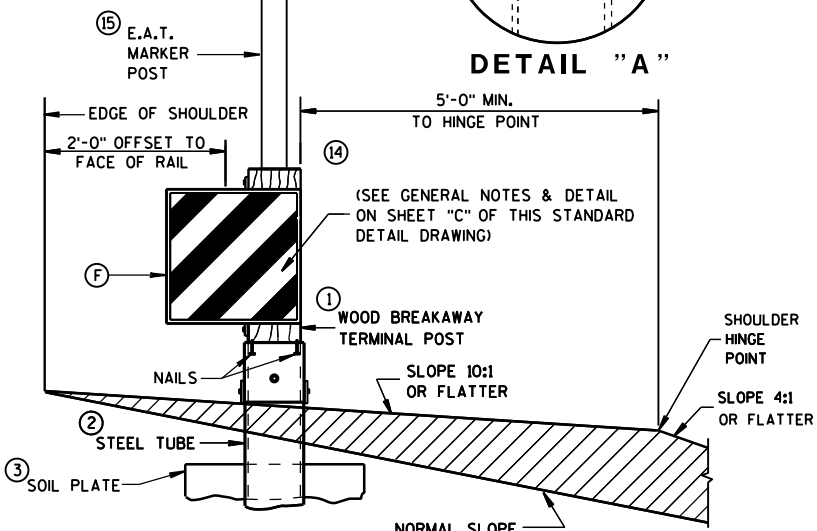
PLAN



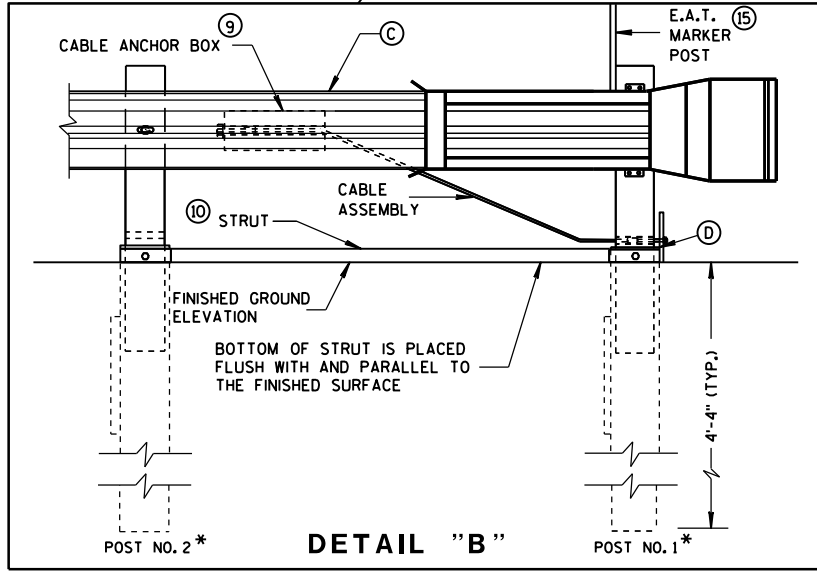
ELEVATION



DETAIL "A"



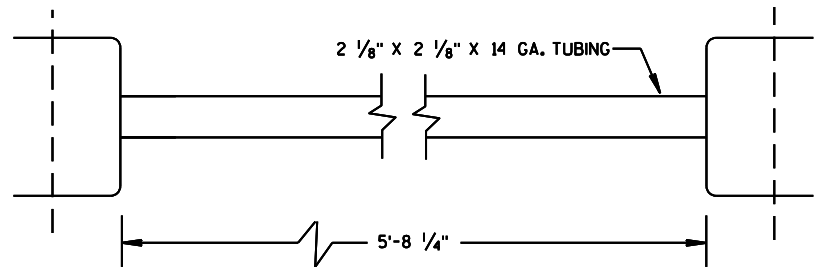
SECTION A-A
TYPICAL AT POST NO. 1 *



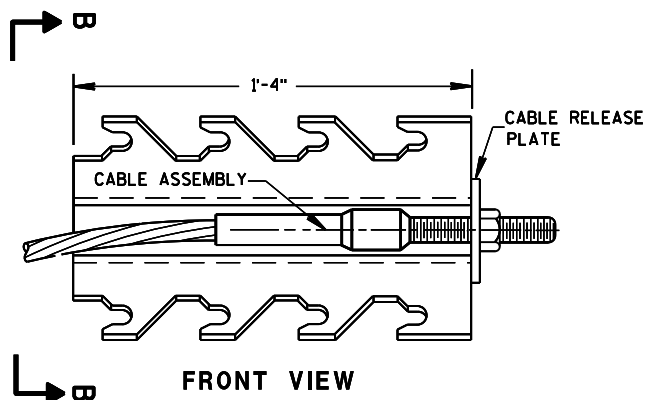
DETAIL "B"

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

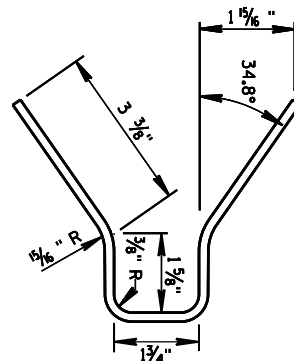
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



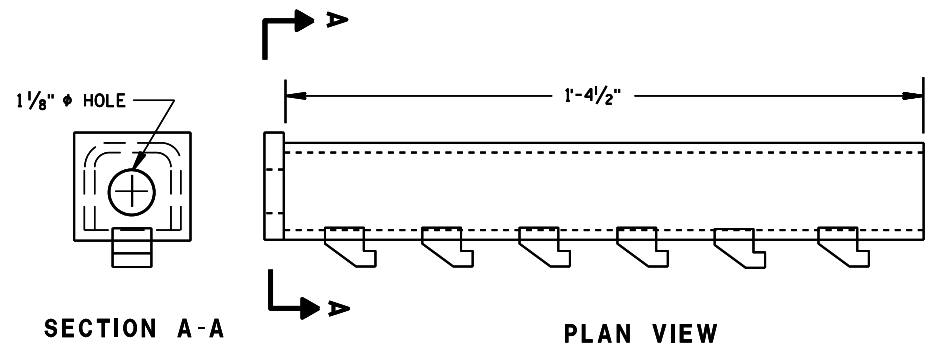
⑩ STRUT DETAIL (SKT-350)



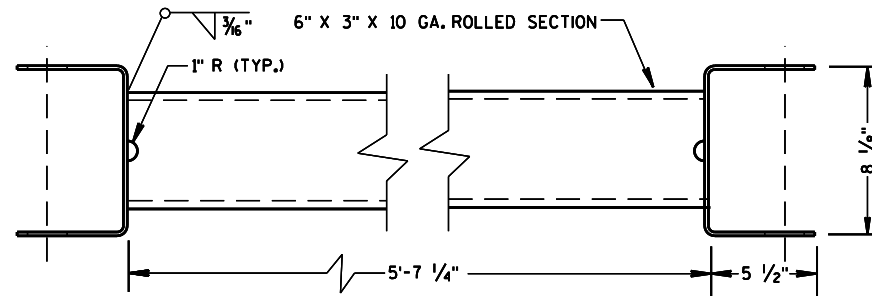
⑨ CABLE ANCHOR BOX (SKT-350)
(SKT-350)



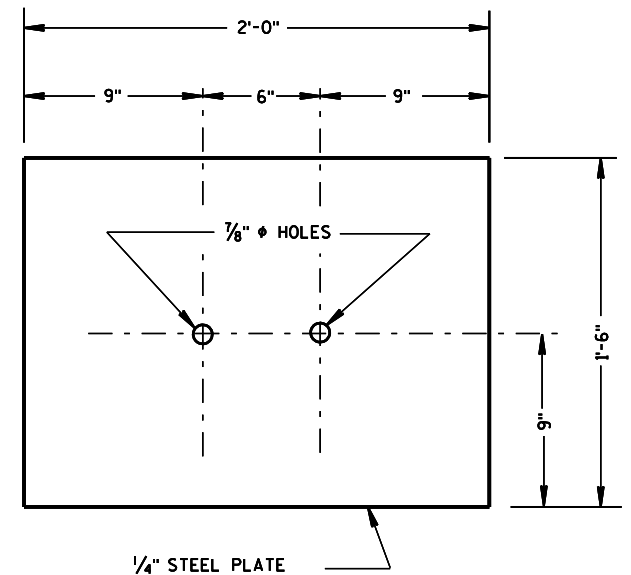
SECTION B-B



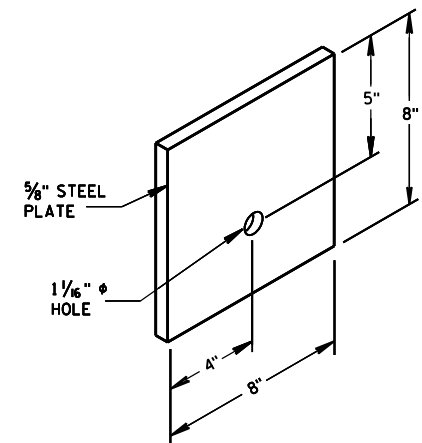
⑨ CABLE ANCHOR BOX (ET-2000/ET-2000 PLUS)



⑩ STRUT DETAIL (ET-2000/ET-2000 PLUS)
(ET-2000/ET-2000 PLUS)



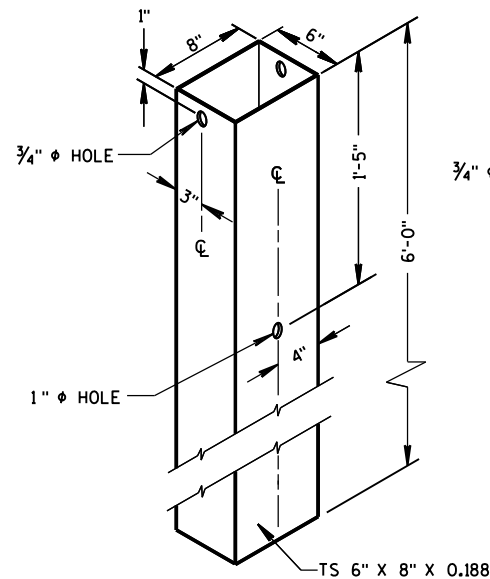
③ SOIL PLATE
(SKT-350, ET-2000/ET-2000 PLUS)



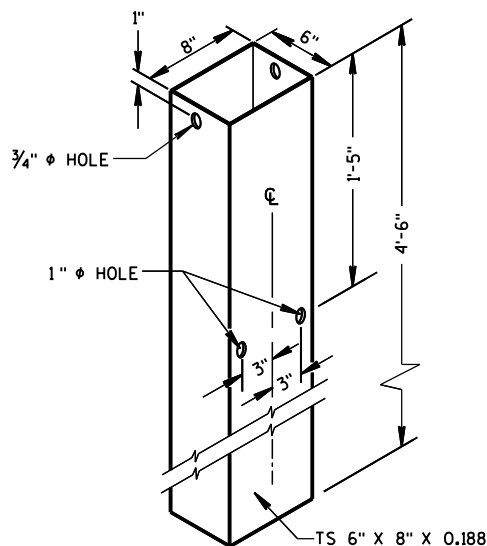
⑦ STEEL BEARING PLATE
(SKT-350, ET-2000/ET-2000 PLUS)

STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL

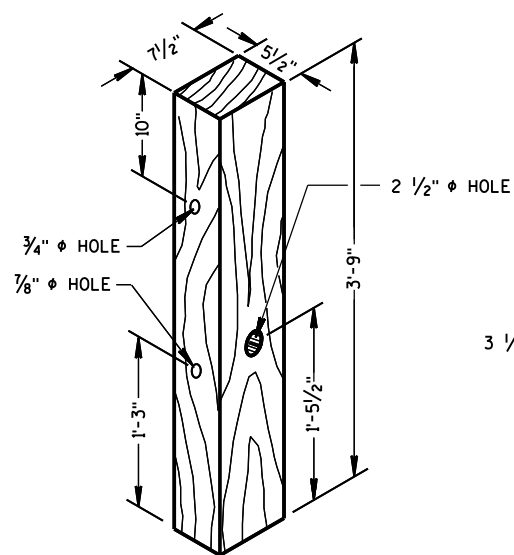
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 102



② **72" STEEL TUBE**
(POSTS NO. 1-4)

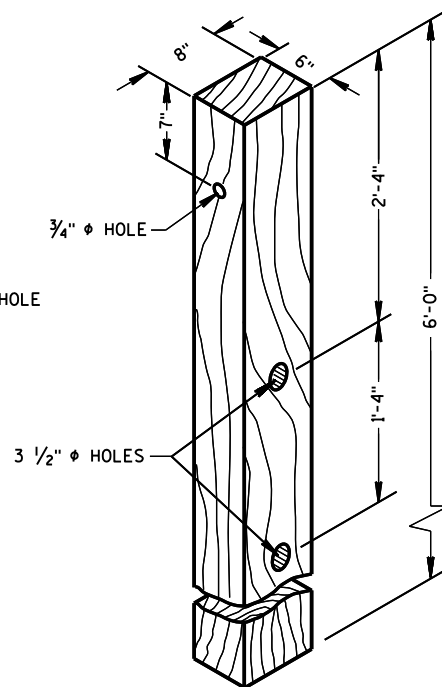


② **54" STEEL TUBE**
(POSTS NO. 1-4)



① **TERMINAL POST**
(POSTS NO. 1-4)

WOOD BREAKAWAY POSTS



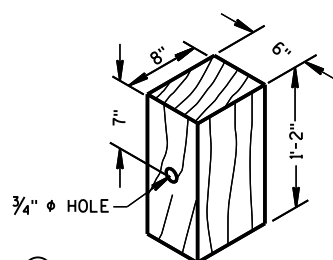
④ **CRT POST**
(POSTS NO'S 5-8)

GENERAL NOTES

WHEN ROCK IS ENCOUNTERED DURING EXCAVATION, A 12 INCH DIA. POST HOLE EXTENDING 20 INCHES DEEP INTO THE ROCK MAY BE USED IF APPROVED BY THE ENGINEER. GRANULAR MATERIAL SHALL BE PLACED IN THE BOTTOM OF THE HOLE APPROXIMATELY 2 1/2" INCHES DEEP TO PROVIDE DRAINAGE. THE SOIL TUBES SHALL BE FIELD CUT TO LENGTH, PLACED IN THE HOLE AND BACKFILLED WITH ADEQUATELY COMPACTED MATERIAL EXCAVATED FROM THE HOLE.

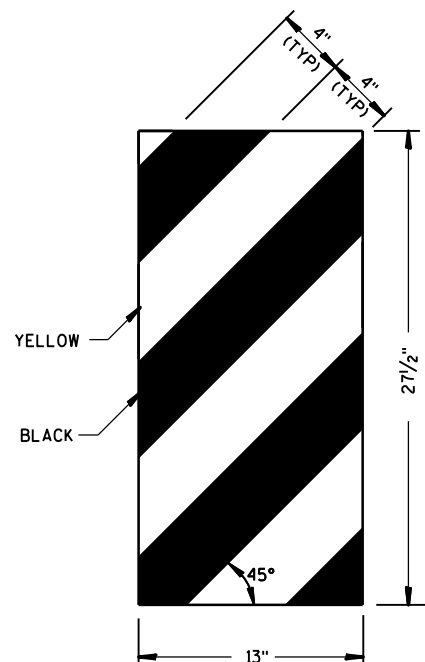
SEE APPROVED PRODUCTS LIST FOR ACCEPTABLE E. A. T. MARKER POST.

⑥ 1/2" DIA. X 3" LAG BOLT WITH WASHER.

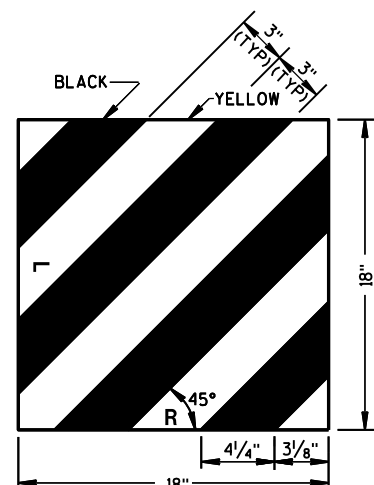


⑤ **WOOD OFFSET BLOCK**
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2

TYPE H
YELLOW REFLECTIVE
SHEETING 3" X 9"
SEE STANDARD
SPECIFICATION 637

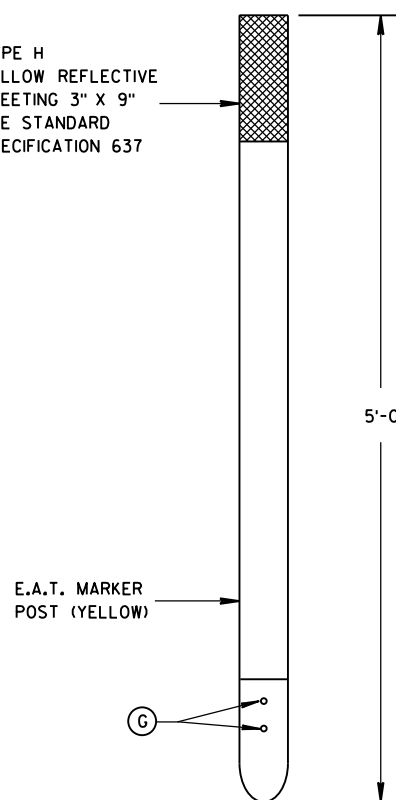


ET-2000 PLUS ONLY

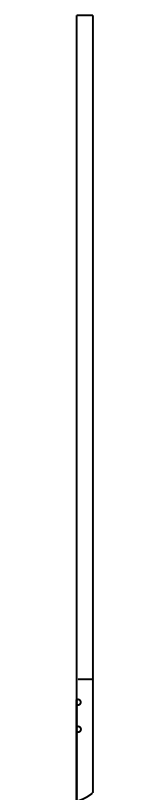


ET-2000 AND SKT-350

⑭ **REFLECTIVE SHEETING DETAILS**

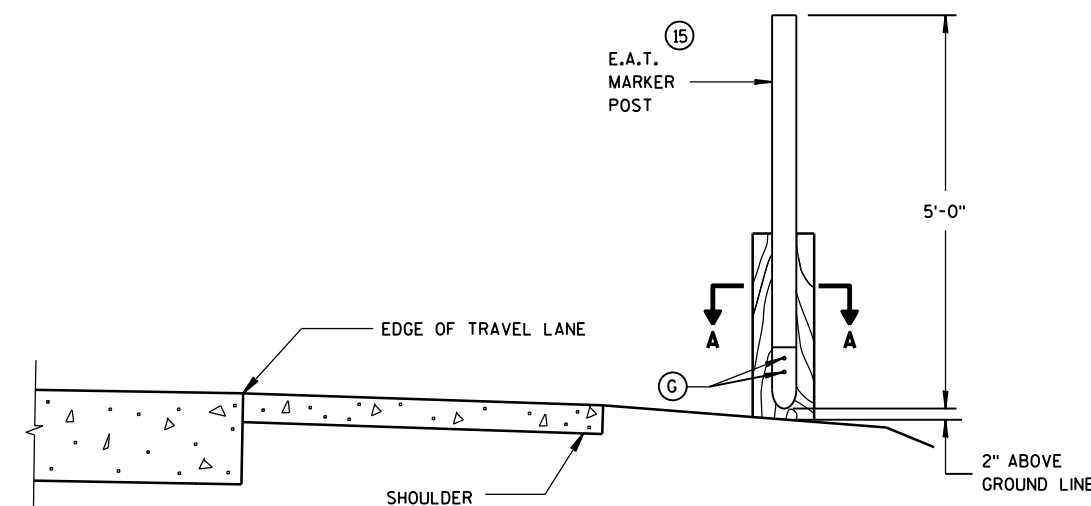


FRONT VIEW

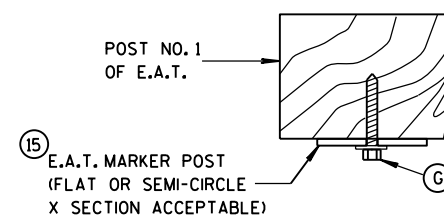


SIDE VIEW

⑮ **E.A.T. MARKER POST**



TYPICAL INSTALLATION OF E.A.T. MARKER POST BACKSIDE OF POST NO. 1
(E.A.T. AND RAIL REMOVED FOR CLARITY)



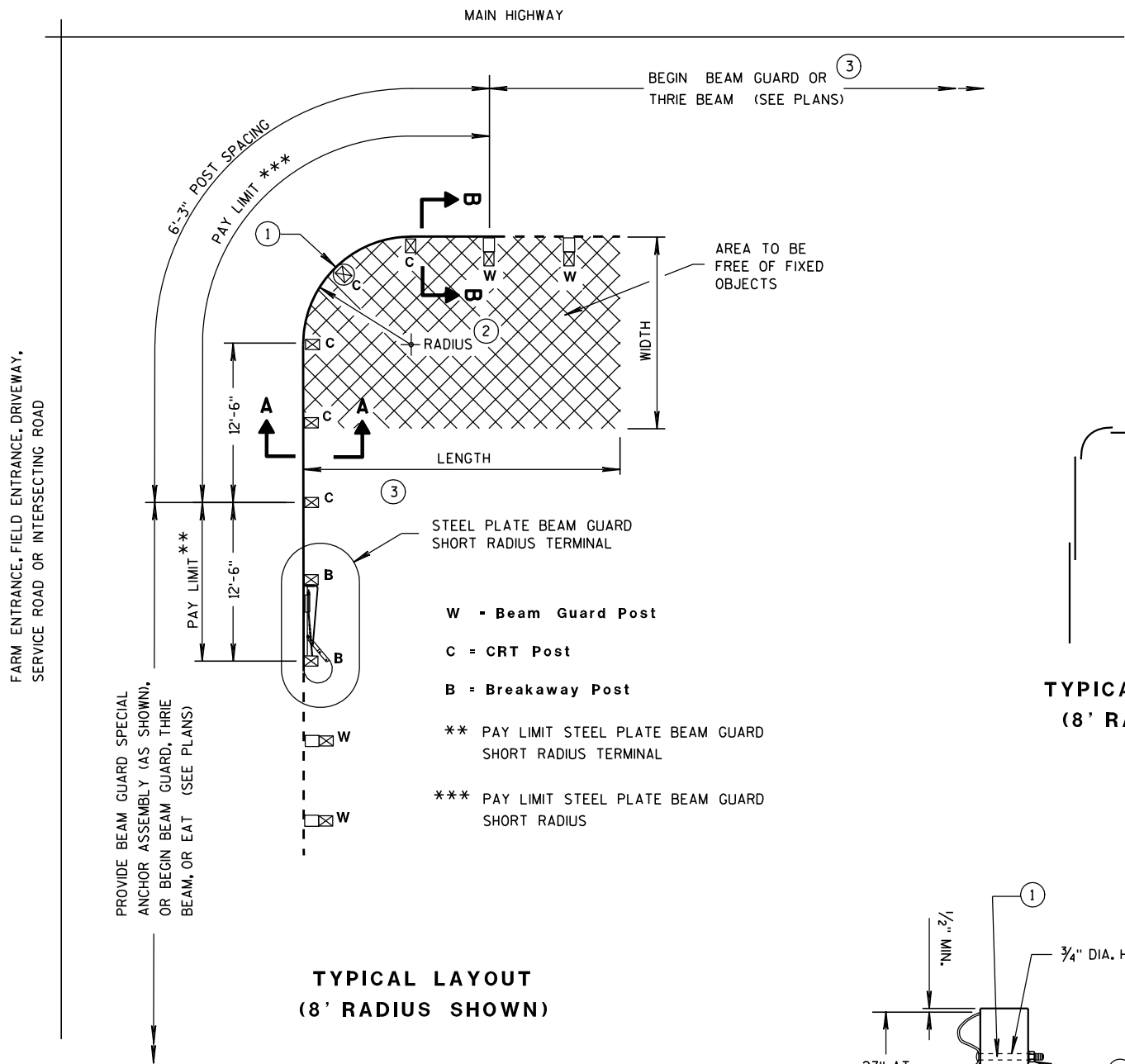
SECTION A-A

**STEEL PLATE BEAM GUARD
ENERGY ABSORBING TERMINAL**

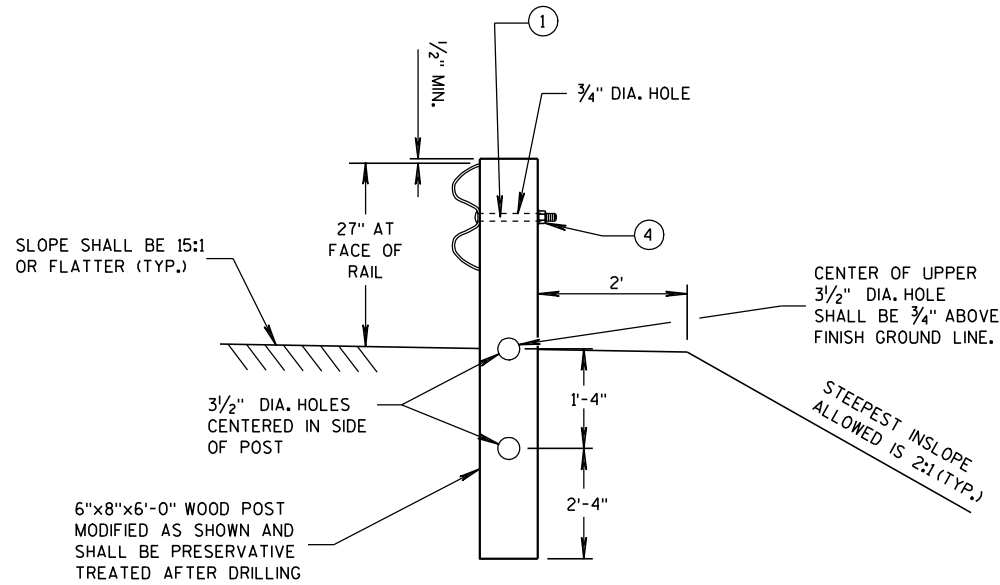
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014
DATE
FHWA

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
103



TYPICAL LAYOUT
(8' RADIUS SHOWN)



SECTION A-A
(CRT POST)

TYPICAL LAP SPLICES
(8' RADIUS SHOWN)

GENERAL NOTES

ALL ANGLES, CHANNELS, AND PLATES SHALL CONFORM TO THE REQUIREMENTS OF ASTM A36 AND THE STRUCTURAL TUBING SHALL CONFORM TO ASTM A 500. WELDING SHALL MEET THE CURRENT REQUIREMENTS OF THE AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE ANSI/AWS D1.1. ALL STRUCTURAL STEEL SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A 123. PUNCHING, DRILLING, CUTTING, OR WELDING WILL NOT BE PERMITTED AFTER GALVANIZING. FURNISH AND INSTALL HARDWARE PER STANDARD SPECIFICATION 614.2, UNLESS NOTED OTHERWISE.

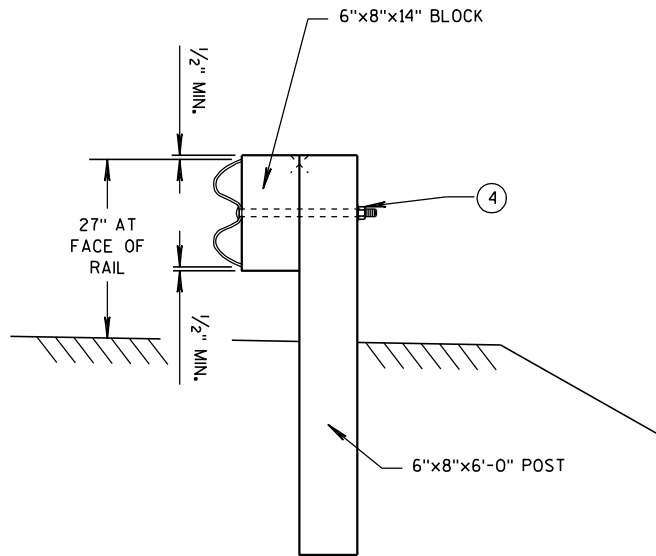
SHOP BEND CURVED RAIL SECTIONS.

SEE STANDARD DETAIL DRAWING 14 B 15 FOR OTHER DETAIL.

- ① ON THE 8 FOOT RADIUS INSTALLATION, DO NOT INSTALL BUTTON HEAD BOLT AT CENTER CRT POST.
- ② RADIUS FROM 8' - 36'. SEE PLAN.
- ③ HEIGHT TRANSITION MAY BE REQUIRED. SEE PLAN OR PROJECT ENGINEER.
- ④ 5/8" Ø X 1'-6" BUTTON HEAD BOLT AND RECESS NUT WITH ROUND WASHER UNDER NUT.

RADIUS	NUMBER OF CRT POSTS	*NUMBER AND LENGTH OF CURVED RAILS	REQUIRED AREA FREE OF FIXED OBJECTS (LENGTH x WIDTH)
8'	5	1 at 12.5'	25' x 15'
16'	7	1 at 25'	30' x 15'
24'	9	1 at 25' and 1 at 12.5'	40' x 20'
32'	11	2 at 25'	50' x 20'

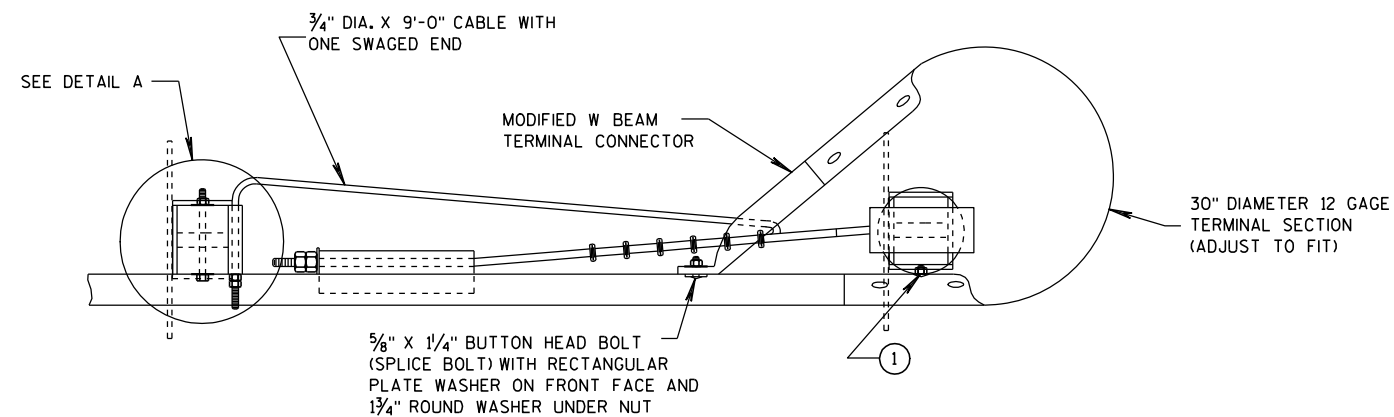
* THE NUMBER OF RAILS IS BASED ON A 90° INTERSECTION. SEE PLAN FOR NON 90° INSTALLATIONS.



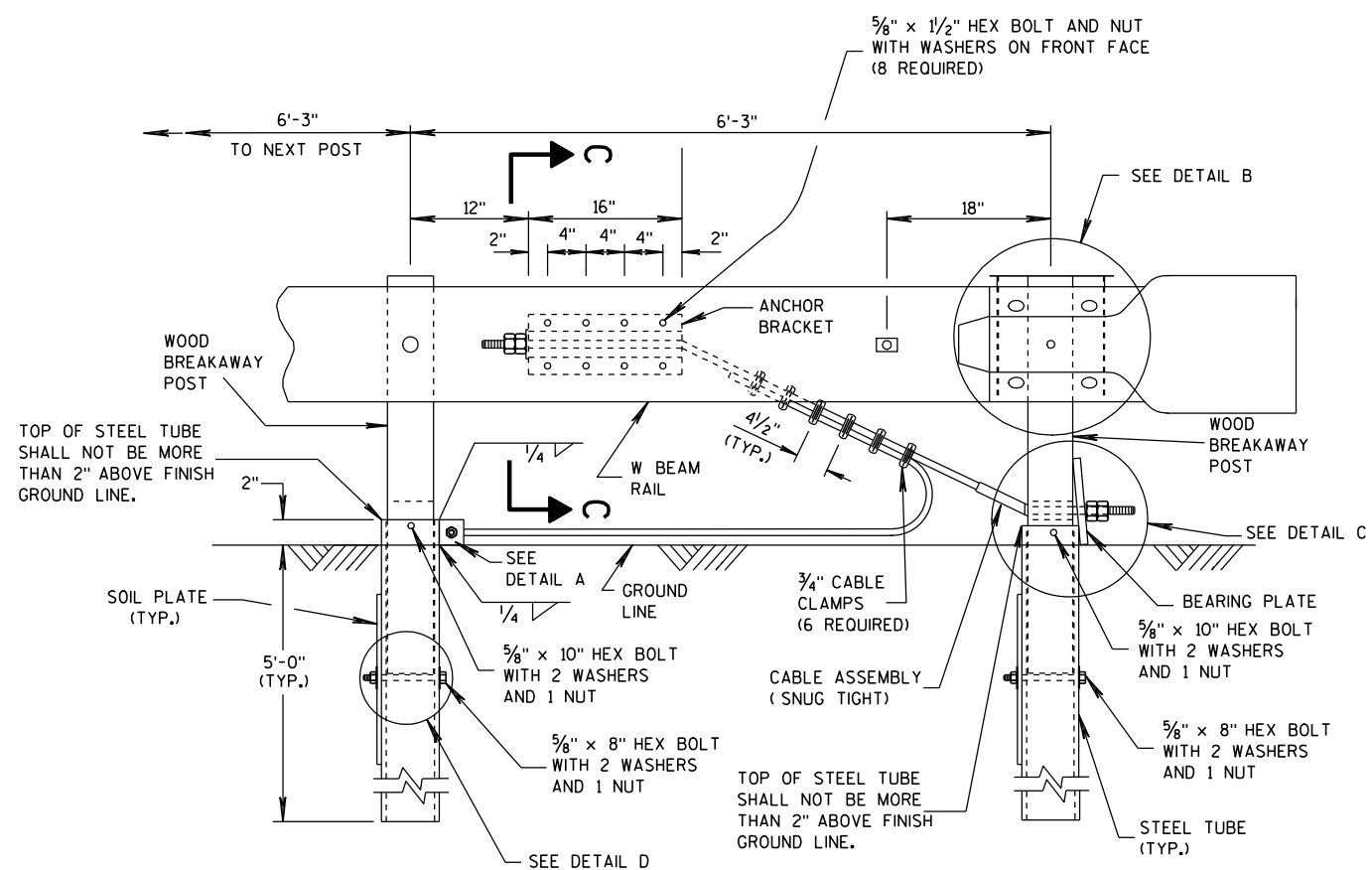
SECTION B-B
(BEAM GUARD POST)

STEEL PLATE BEAM GUARD
SHORT RADIUS TERMINAL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



PLAN VIEW

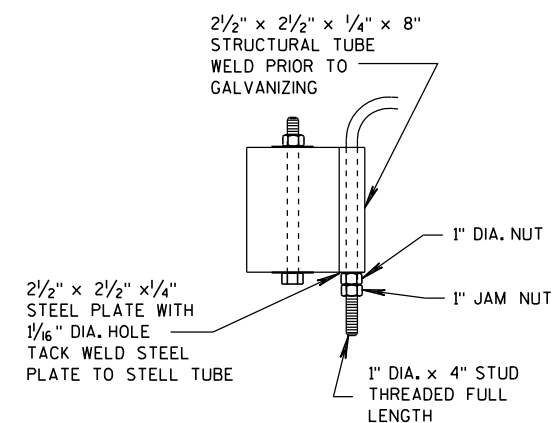


ELEVATION VIEW

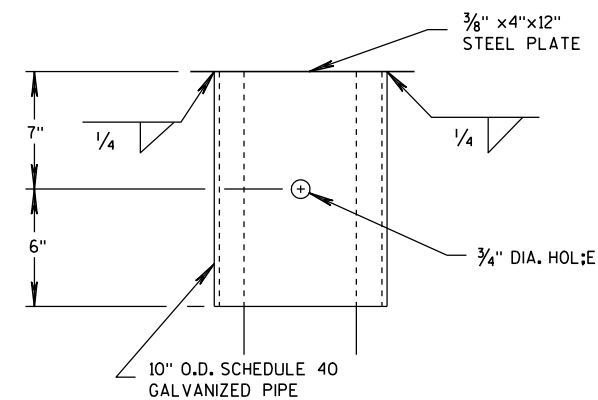
STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL

GENERAL NOTES

- 1 ATTACH W BEAM RAIL TO THE STEEL PIPE WITH A 5/8" X 2" BUTTON HEAD BOLT WITH NO WASHER. CONNECTION TO THE POST IS NOT REQUIRED.
- INSTALL GALVANIZED 3/4" (6X19) PREFORMED WIRE OR INDEPENDENT WIRE ROPE CORE CONFORMING TO AASHTO M 30. MANUFACTURE WIRE ROPE OUT OF IMPROVED PLOW STEEL WITH A MINIMUM BREAKING STRENGTH OF 42,800 PSI.



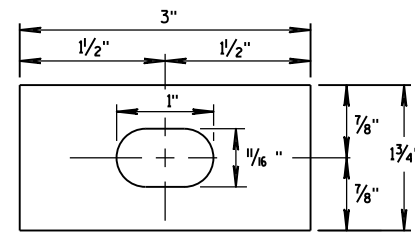
DETAIL A



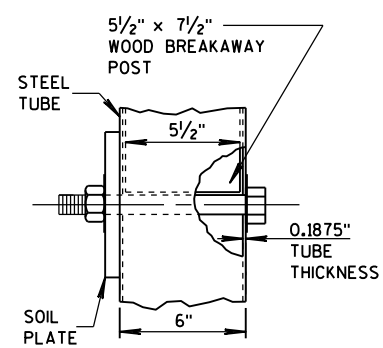
DETAIL B

(BEAM GUARD AND TERMINAL SECTION NOT SHOWN)

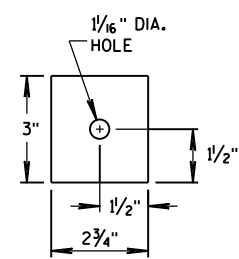
STEEL PLATE BEAM GUARD
SHORT RADIUS TERMINALSTATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
105



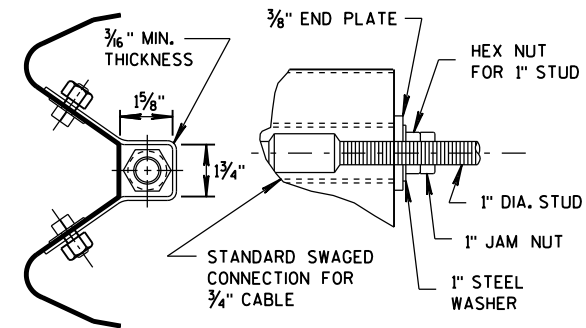
RECTANGULAR PLATE WASHER



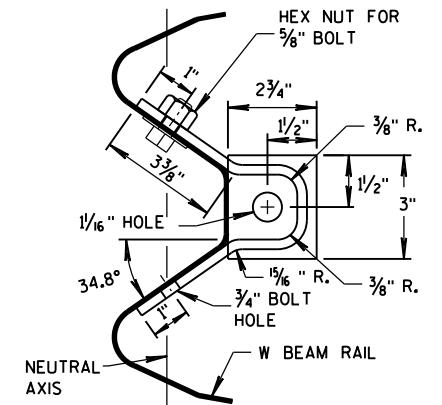
DETAIL D



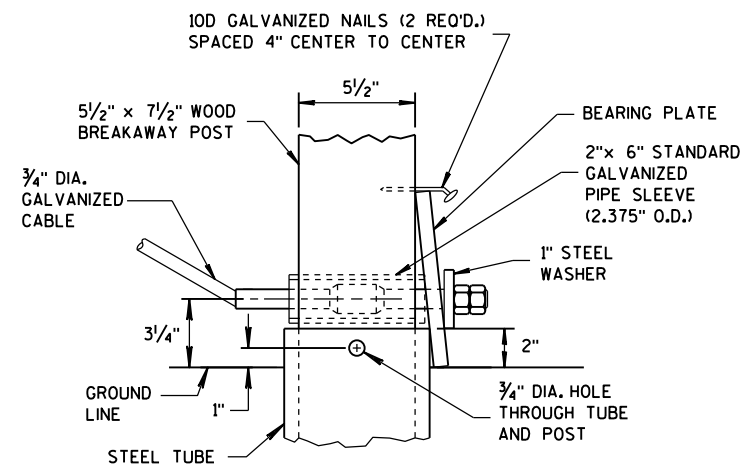
END PLATE



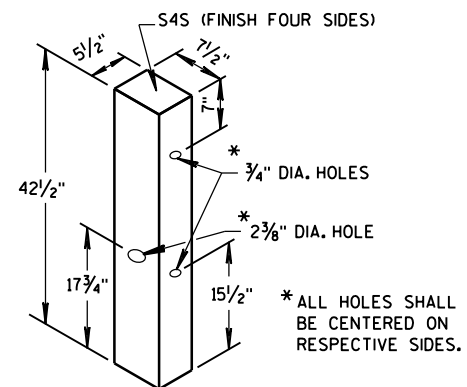
SECTION C-C
(END PLATE REMOVED)



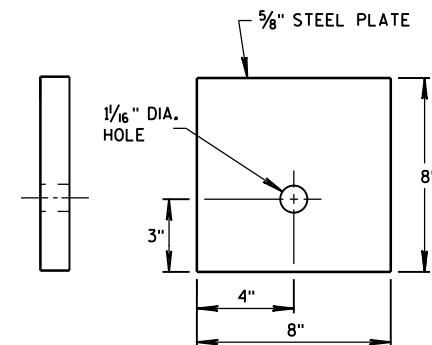
ANCHOR BRACKET



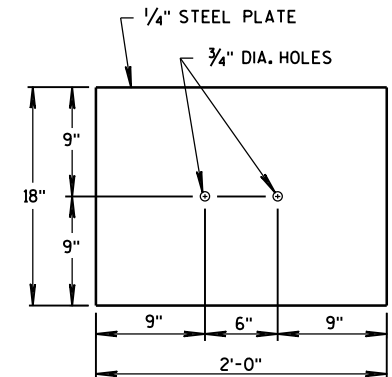
DETAIL C



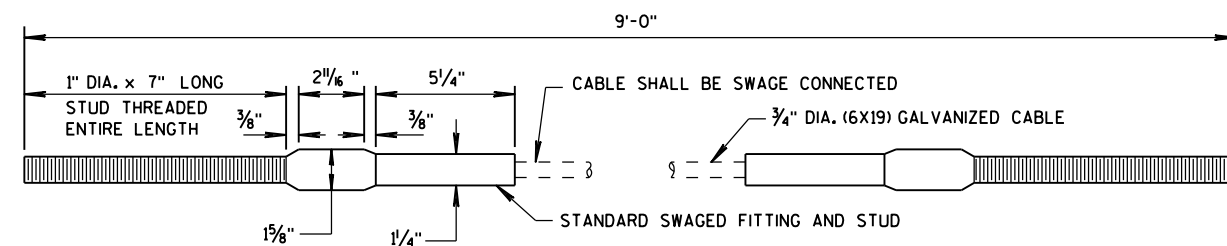
WOOD BREAKAWAY POST



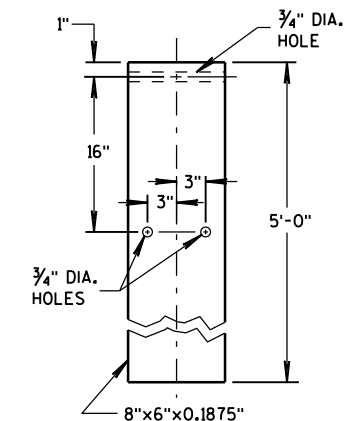
BEARING PLATE



SOIL PLATE

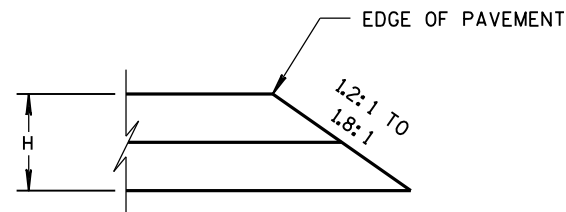


CABLE ASSEMBLY

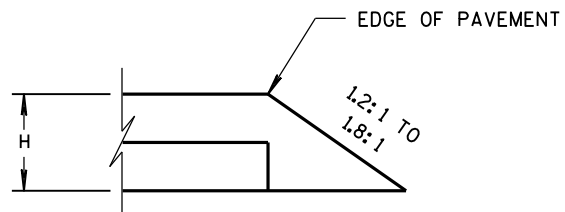


STEEL TUBE

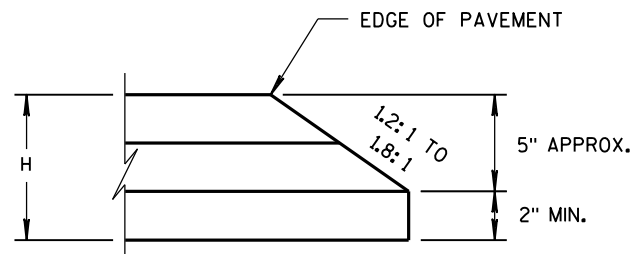
STEEL PLATE BEAM GUARD SHORT RADIUS TERMINAL	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED 12/18/08 DATE	/S/ Jerry H. Zogg ROADWAY STANDARDS ENGINEER 106



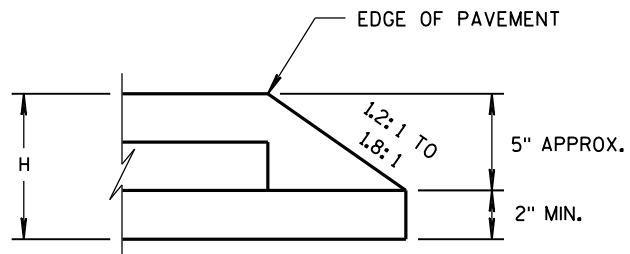
CONSTRUCTED WITH FINAL TWO LAYERS
FOR H 5" OR LESS



CONSTRUCTED WITH FINAL LAYER
FOR H 5" OR LESS

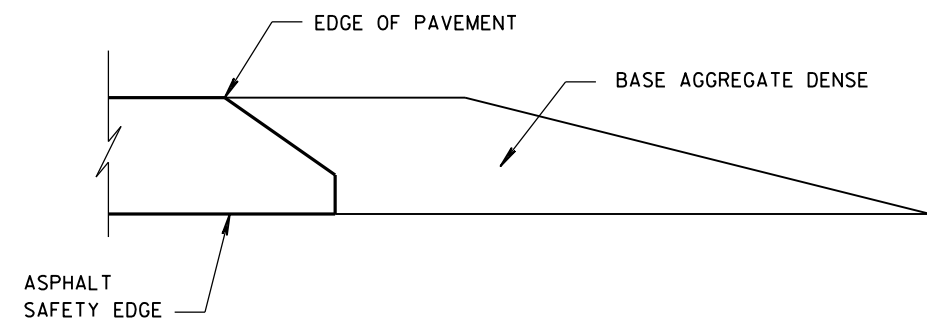


CONSTRUCTED WITH FINAL TWO LAYERS
FOR H GREATER THAN 5"



CONSTRUCTED WITH FINAL LAYER
FOR H GREATER THAN 5"

HMA PAVEMENT AND HMA OVERLAYS



FINISHED SHOULDER AGGREGATE PLACEMENT

SAFETY EDGE_{SM}

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
DATE 11/30/2012

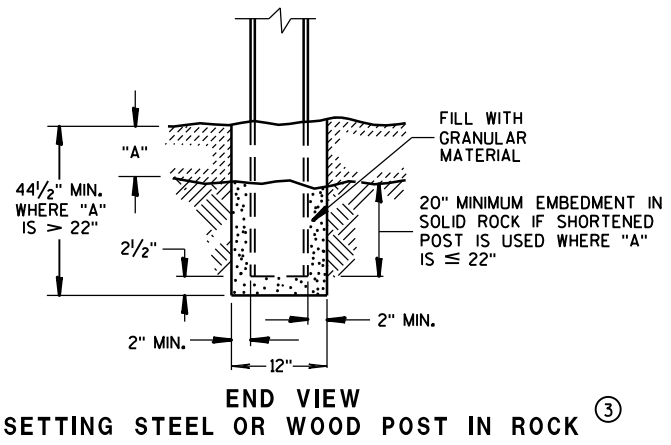
/s/ Jerry H. Zoga
ROADWAY STANDARDS
ENGINEER

ENT

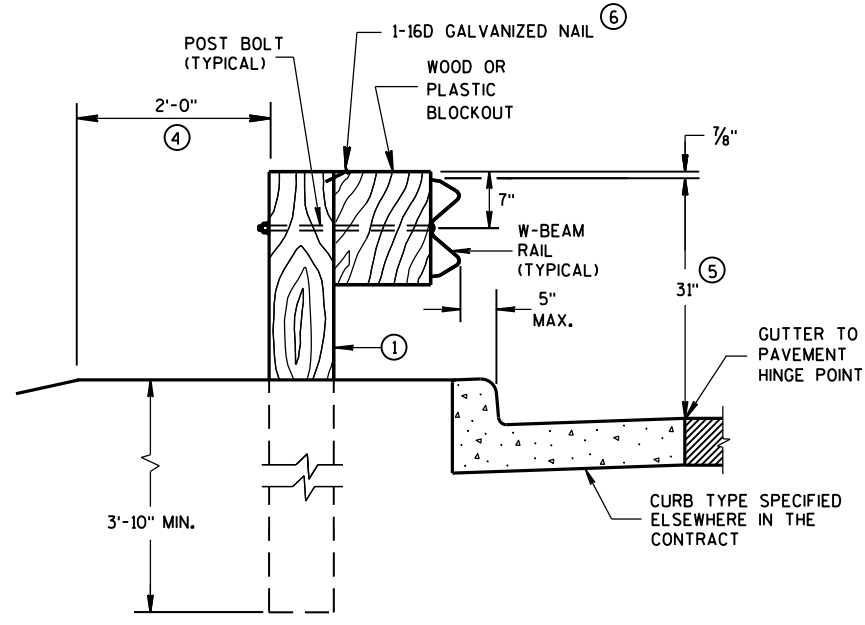
FHWA

GENERAL NOTES

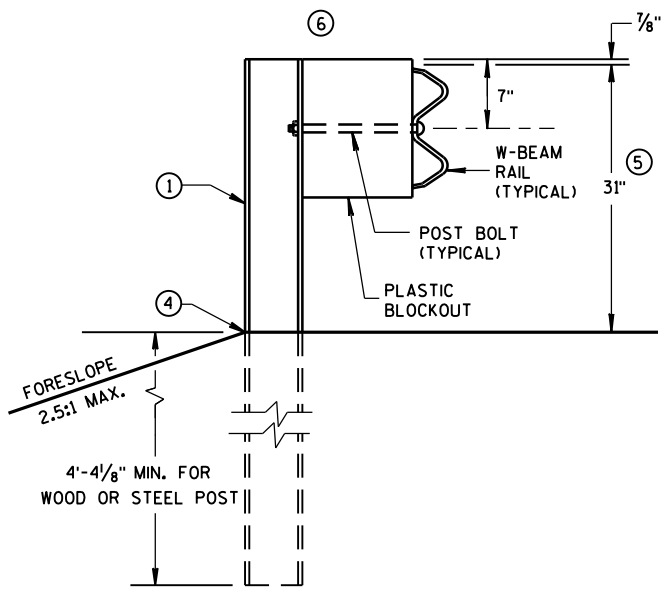
- ① WOOD OR STEEL POSTS (w6X9 OR w6X8.5) MAY BE USED. DO NOT INTERMIX WOOD AND STEEL POSTS. INSTALL STEEL POSTS WITH HOLES ON APPROACHING TRAFFIC SIDE.
- ② USE WOOD OR APPROVED PLASTIC BLOCKOUTS. WOOD BLOCKOUTS MAY BE CONSTRUCTED OUT OF TWO OR MORE WOOD BLOCKOUTS. SEE ALTERNATE WOOD BLOCKOUT DETAIL. DIMENSIONS OF APPROVED PLASTIC BLOCKOUTS MAY VARY.
- ③ IF ROCK IS ENCOUNTERED DURING EXCAVATION, PROVIDE A HOLE 12 INCHES IN DIAMETER EXTENDING 20 INCHES DEEP INTO THE ROCK. PLACE APPROXIMATELY 2 1/2 INCHES OF GRANULAR MATERIAL IN THE BOTTOM OF THE HOLE. CUT THE POSTS THE TO LENGTH AND AMD INSTALL. BACKFILL WITH EXCAVATED MATERIAL AND COMPACT. BACKFILL IS TO BE FREE OF LARGE ROCKS.
- ④ WHEN THE DISTANCE FROM BACK OF POST TO SHOULDER HINGE POINT IS LESS THAN 2 FEET INSTALL LONGER POST AT HALF POST SPACING (K).
- ⑤ FOR NEW MGS INSTALLATION TOP OF W-BEAM RAIL TOLERANCE IS ± 1". FOR EXISTING MGS INSTALLATION TOP OF W-BEAM IS BETWEEN 27 3/4" TO 32".
- ⑥ WHEN USING STEEL POST AND WOOD BLOCKOUTS INSTALL FOUR 16D GALVANIZED NAILS. INSTALL NAILS AT THE BACK CORNERS OF THE BLOCK AND BEND THE NAILS OVER THE FLANGE OF THE STEEL POST.



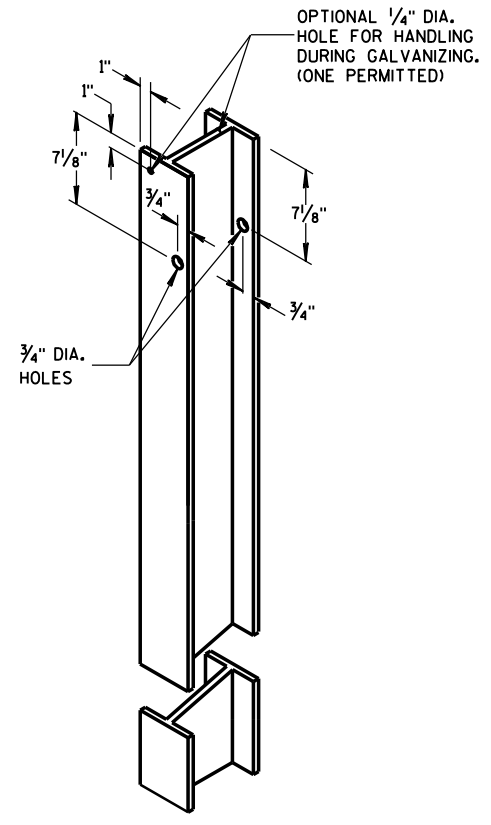
END VIEW
SETTING STEEL OR WOOD POST IN ROCK ③



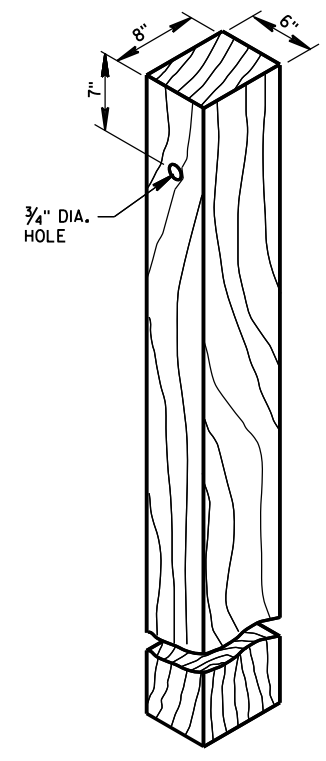
END VIEW
LOCATED ALONG A CURBED ROADWAY



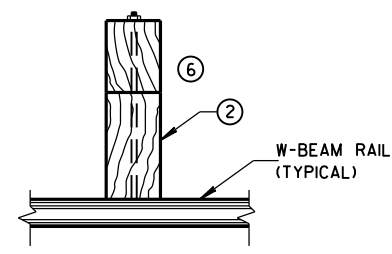
END VIEW
MGS LONGER POST AT HALFPST SPACING W BEAM (K)



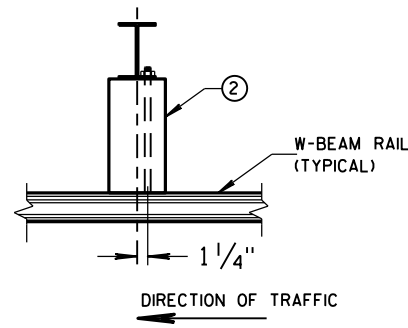
STEEL POST &
HOLE PUNCHING DETAIL
(w6X9) ①



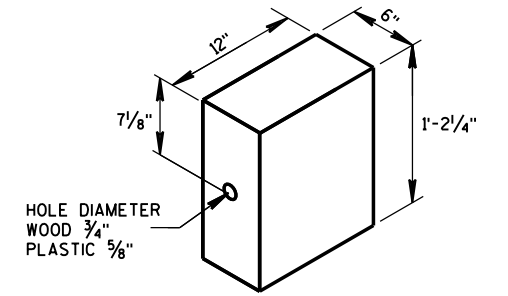
WOOD POST
(6" X 8") NOMINAL ①



PLAN VIEW
WOOD POST,
BLOCKOUT & BEAM



PLAN VIEW
STEEL POST,
PLASTIC BLOCKOUT & BEAM



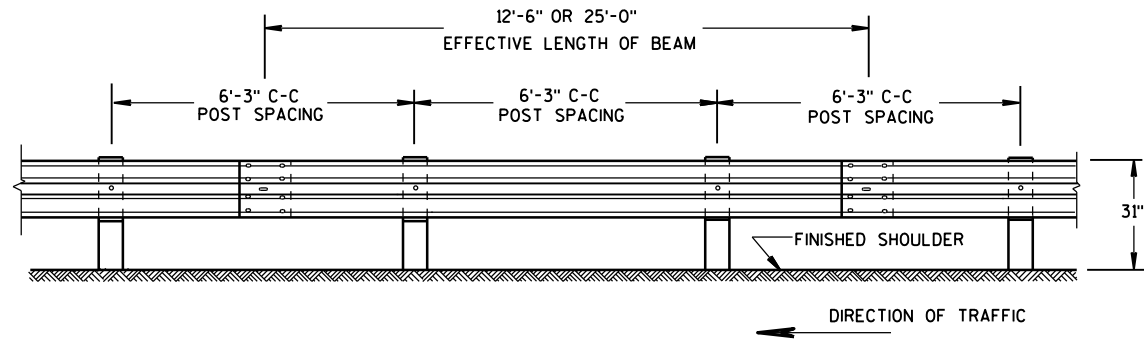
WOOD OR
PLASTIC BLOCKOUT ②

6

6

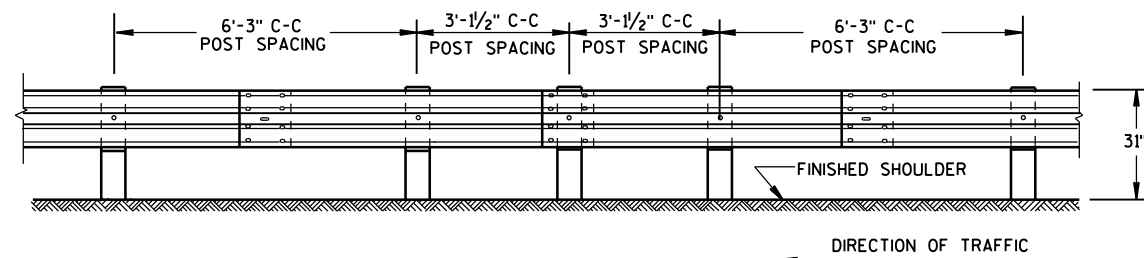
MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 108



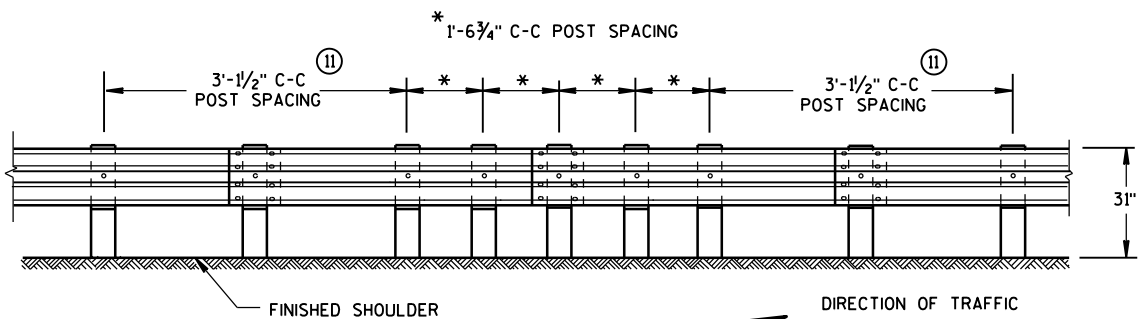
FRONT VIEW

POST SPACING STANDARD INSTALLATION



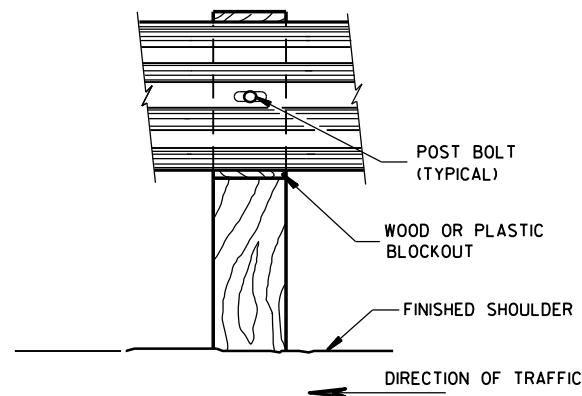
FRONT VIEW

HALF POST SPACING (HS) AND HALF POST SPACING WITH LONGER POSTS (K)

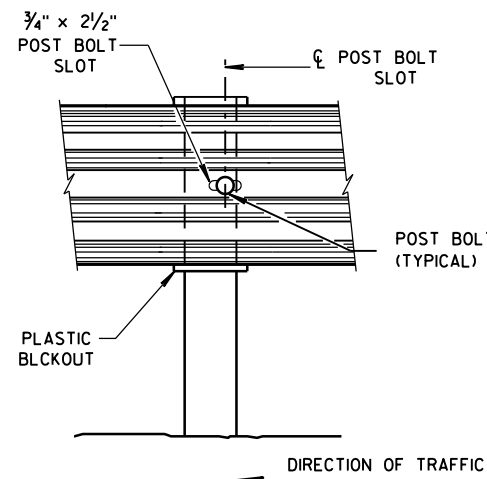


FRONT VIEW

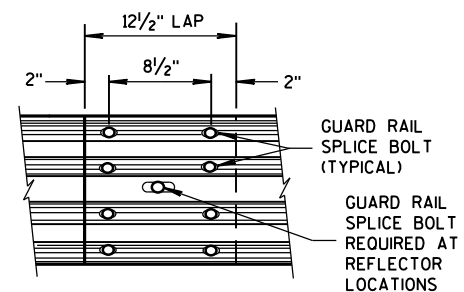
QUARTER POST SPACING (QS)



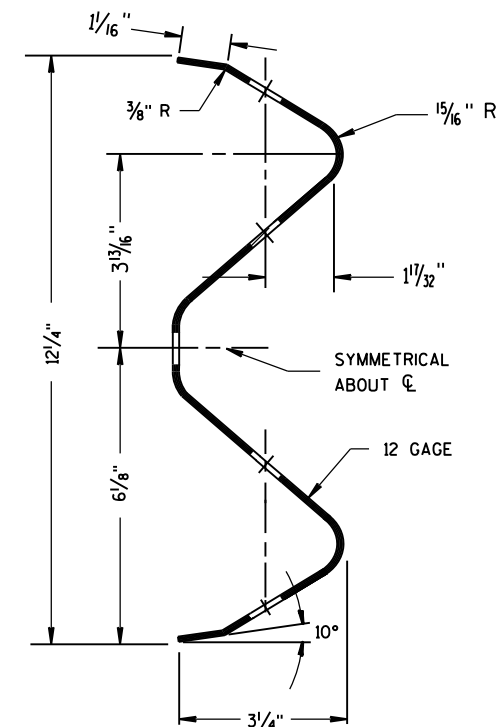
FRONT VIEW AT WOOD POST



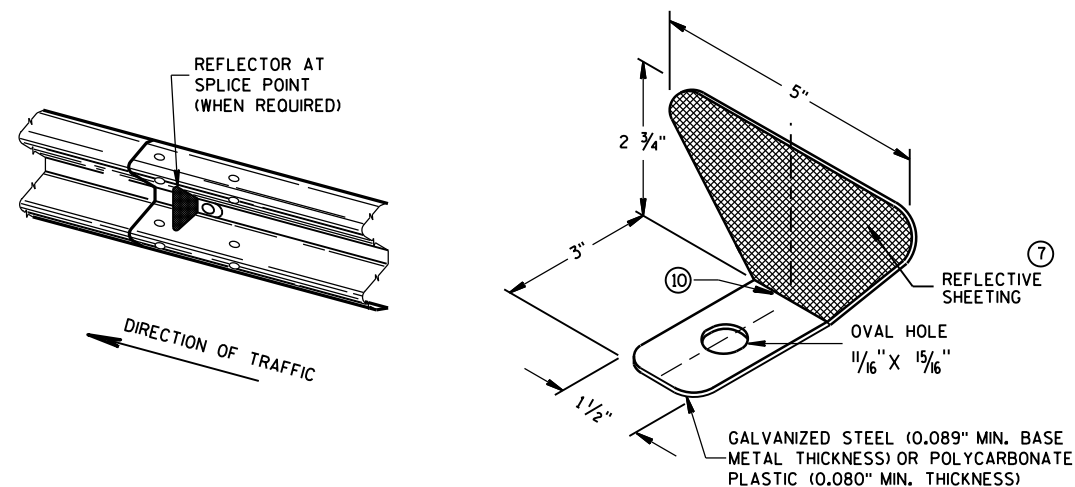
FRONT VIEW AT STEEL POST



FRONT VIEW
MID-SPAN BEAM SPLICE



SECTION THRU W-BEAM RAIL



ONE SIDED REFLECTOR DETAIL AND TYPICAL INSTALLATION

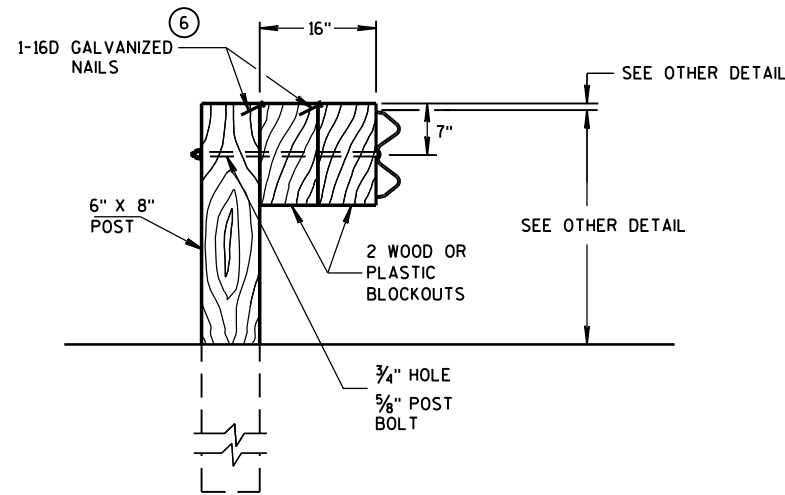
GENERAL NOTES

- ⑦ PROVIDE SILVER REFLECTIVE SHEETING ON ALL REFLECTORS EXCEPT THOSE LOCATED ALONG THE LEFT EDGE OF ONE-WAY ROADWAYS, WHICH SHALL BE PROVIDED WITH YELLOW REFLECTIVE SHEETING. SHEETING IS TYPE H. SEE STANDARD SPECIFICATION 637.
 - ⑧ DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL. RAIL SPLICE LOCATIONS ARE THE ONLY ACCEPTABLE LOCATIONS FOR REFLECTORS.
 - ⑨ REVERSE EVERY OTHER REFLECTOR FOR 2-WAY VISIBILITY. THE CONTRACTOR MAY FURNISH TWO-SIDED REFLECTORS IN LIEU OF ONE-SIDED REFLECTORS.
 - ⑩ PROVIDE AN ANGLE OF BEND OF $90^\circ \pm 1^\circ$ FOR TWO-SIDED REFLECTORS.
 - ⑪ 25 FEET OF HALF POST SPACING IS REQUIRED ON APPROACH AND DEPARTURE ENDS OF QUARTER POST SPACING.
- POST BOLTS ARE A $\frac{5}{8}$ " DIAMETER ASTM A307 GUARDRAIL BOLT. A POST BOLT REQUIRES $\frac{5}{8}$ " DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT AND $\frac{5}{8}$ " DIAMETER F844 FLAT WASHER. POST BOLTS MAY BE LONGER IF MULTIPLE BLOCKOUTS ARE BEING USED.
- GUARD RAIL SPLICE BOLTS ARE A $\frac{5}{8}$ " DIAMETER ASTM A307 GUARDRAIL HEAD BOLT. A GUARDRAIL SPLICE BOLT REQUIRES $\frac{5}{8}$ " DIAMETER A563A DOUBLE RECESSED (DR) HEAVY HEX NUT.

REFLECTOR SPACING ^⑧				
	BEAM GUARD LENGTH	REFLECTOR SPACING	NO. SURFACES REFLECTORIZED	MIN. NO. REFLECTORS
ONE WAY TRAFFIC	< 200'	50' C-C	1	3
	> 200'	100' C-C	1	
TWO WAY TRAFFIC	< 200'	25' C-C	1 ^⑨	6
	> 200'	50' C-C	1	
TWO WAY TRAFFIC	< 200'	50' C-C	2 ^⑩	3
	> 200'	100' C-C	2	

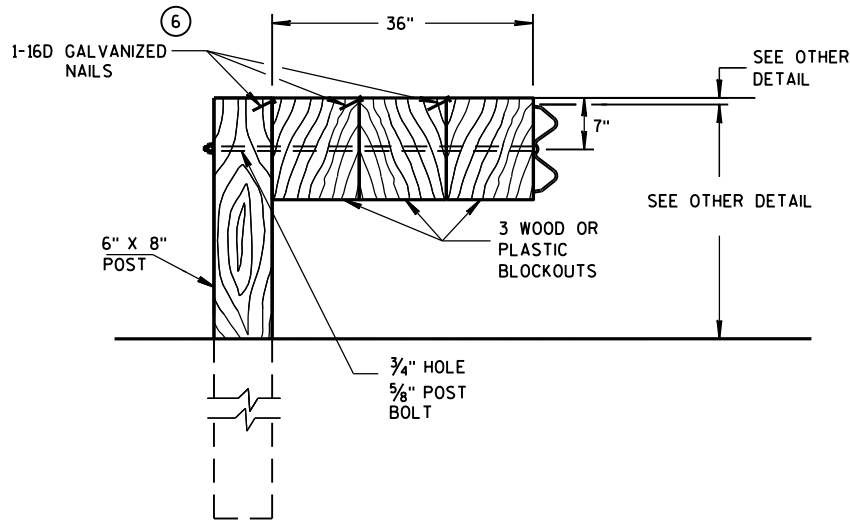
MIDWEST GUARDRAIL SYSTEM (MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION¹⁰⁹



DETAIL FOR 16" BLOCKOUT DEPTH

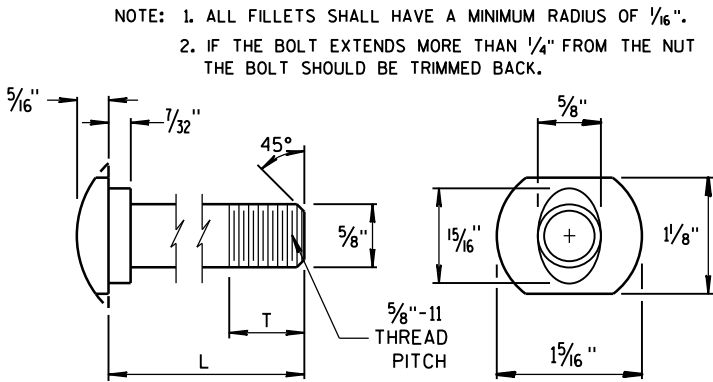
IT IS ACCEPTABLE TO USE BLOCKOUTS UP TO 16" DEEP TO INCREASE THE POST OFFSET TO AVOID UNDERGROUND OBSTACLES. THERE IS NO LIMIT TO THE NUMBER OF POSTS THAT CAN HAVE ADDITIONAL BLOCKOUTS UP TO 16" DEEP.



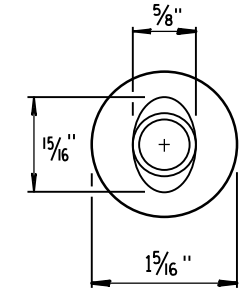
DETAIL FOR 36" BLOCKOUT DEPTH

NOTES: UNDER SPECIAL CIRCUMSTANCES, SUCH AS AVOIDING OBSTACLES THAT ARE NOT RELOCATED, IT IS ACCEPTABLE TO INSTALL ADDITIONAL BLOCKOUTS TO OBTAIN UP TO 36" DEPTH FOR ONE OR TWO POSTS IN A SECTION OF GUARDRAIL.

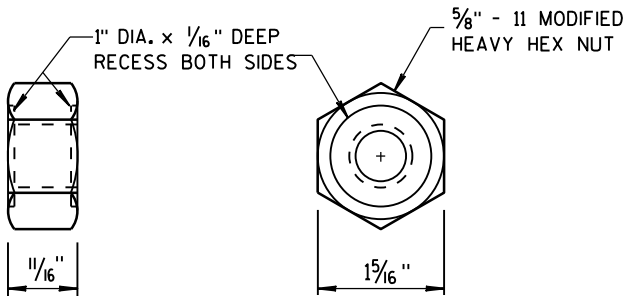
DO NOT USE 16" OR 36" BLOCKOUTS IF IT CAUSES THE POST TO BE DRIVEN BEYOND SHOULDER HINGE POINT OR CAUSES A FIXED OBJECT TO BE WITHIN THE DEFLECTION DISTANCE OF THE BARRIER.



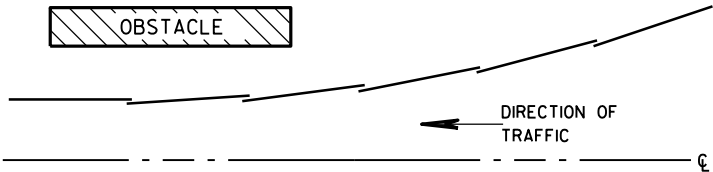
POST BOLT TABLE



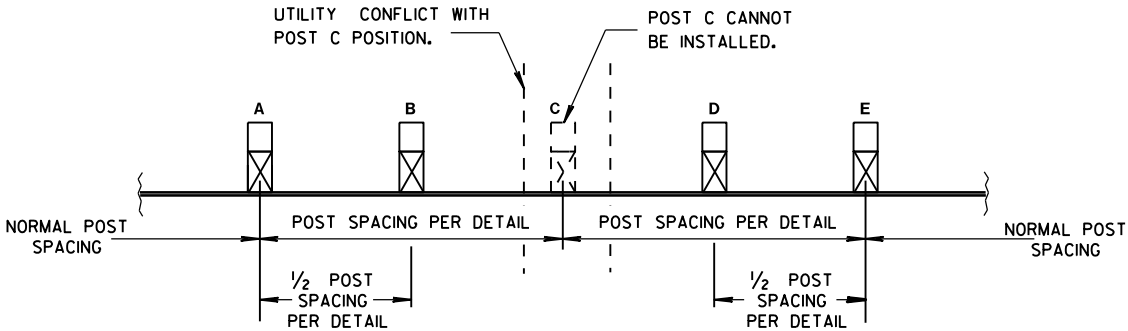
ALTERNATE BOLT HEAD



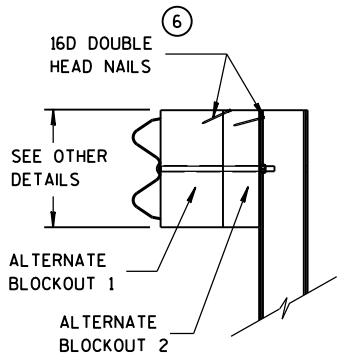
POST BOLT
AND RECESS NUT



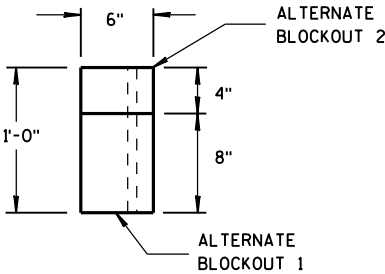
PLAN VIEW
BEAM LAPPING DETAIL



POST DRIVING FOR CONTINUOUS
UNDERGROUND OBSTRUCTION



SIDE VIEW



TOP VIEW

ALTERNATE WOOD
BLOCKOUT DETAIL

MIDWEST GUARDRAIL SYSTEM
(MGS) GUARDRAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
June 2014 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS (110) ENT
FHWA ENGINEER

GENERAL NOTES

- (A) THE SLOPE IN THE AREA BOUNDED BY THE GRADELINE, THE HINGE POINT LINE (HPL), AND THE CLEAR ZONE LIMITS (CZL) SHALL BE 4:1 OR FLATTER.
- (B) AFTER FINAL ASSEMBLY, RECHECK CABLE TO BE SURE IT IS TAUT AND HAS NOT RELAXED.
- (C) DIFFERENT MANUFACTURES REQUIRE DIFFERENT PERFORATED W-BEAM RAIL END PANELS. SEE MANUFACTURES INFORMATION.
- (D) THE TOP OF THE STEEL TUBE ON POST 1 AND POST 2 SHALL NOT BE MORE THAN 3" ABOVE THE FINISH GROUND ELEVATION.
- (E) ATTACH ALUMINUM SHEET TO E.A.T. HEAD USING 4 STAINLESS STEEL SELF-TAPPING SCREWS, ONE SCREW PER CORNER.
- (G) 1/2" DIAMETER X 3" LONG LAG BOLT AND WASHER.
- (H) HARDWARE VARIES BETWEEN DIFFERENT MANUFACTURES. SEE MANUFACTURE'S DRAWING FOR INFORMATION.
- (I) DIMENSIONS MAY VARY. SEE MANUFACTURE'S INFORMATION.

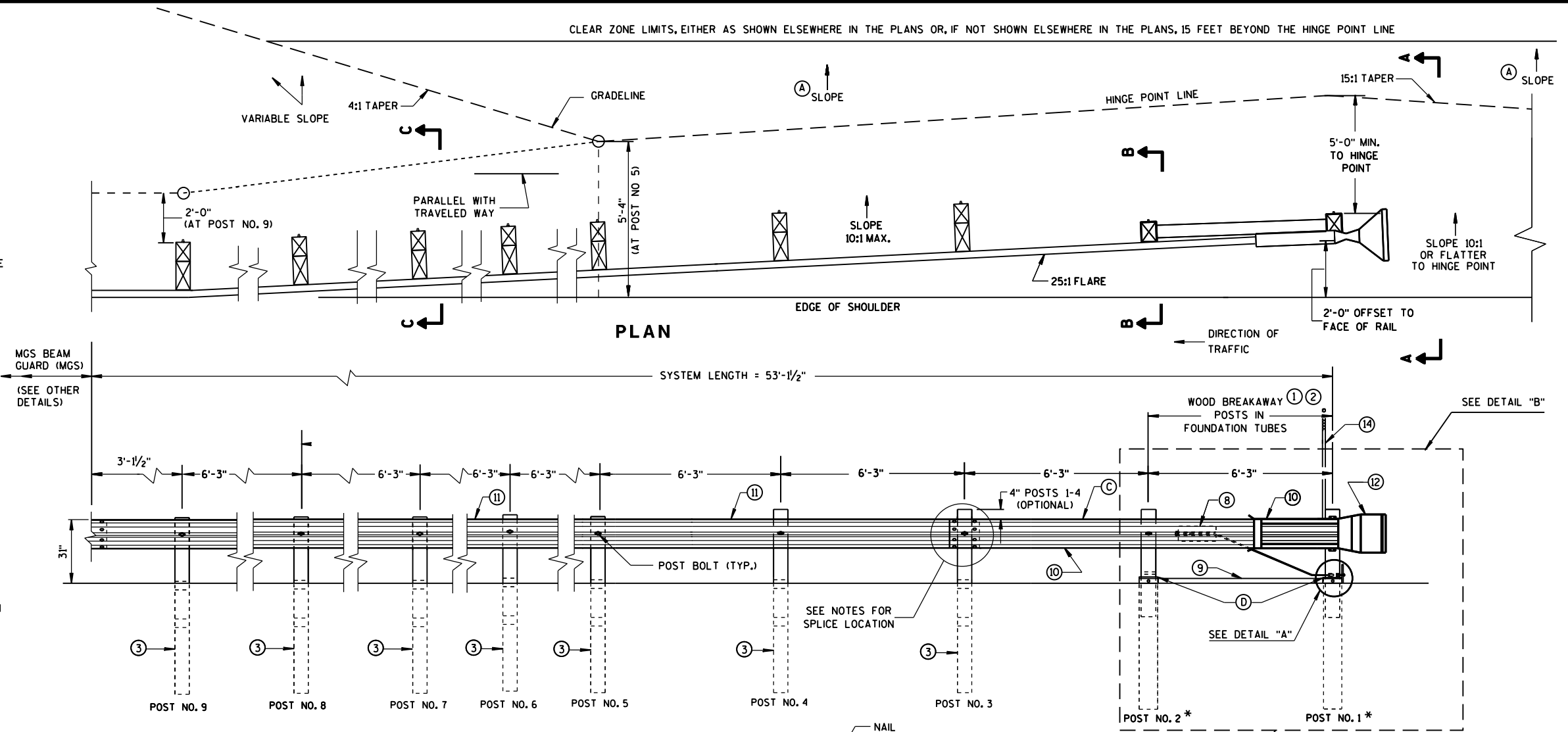
SEE SDD 14B42 FOR MORE INFORMATION.

* DO NOT ATTACH BLOCKOUTS TO POSTS 1 AND 2.

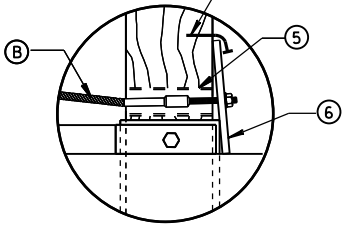
DO NOT INSTALL REFLECTORS ON THE FIRST 50 FEET OF THE APPROACH END OF THE ENERGY ABSORBING TERMINAL.

W-BEAM RAIL SPLICES ARE LOCATED AT POST NUMBER 3, AND BETWEEN POST 5 AND 6, BETWEEN POSTS 7 AND 8, AND MIDDLE OF THE SPAN AFTER POST 9.

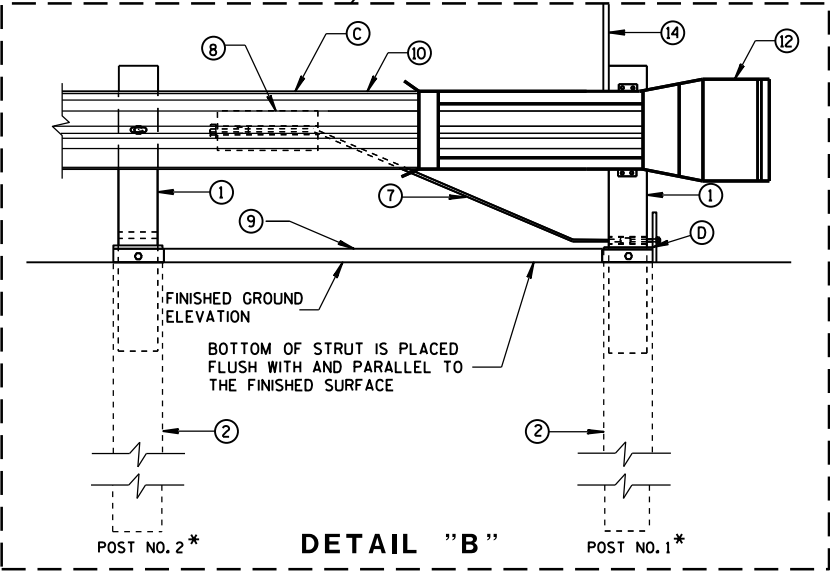
THE CENTER OF THE UPPER 3/2" DIAMETER HOLE ON POST NUMBER 3 THROUGH POST 9 IS TO BE FLUSH WITH THE GROUND LINE UP TO A MAXIMUM OF 2" ABOVE GROUND LINE.



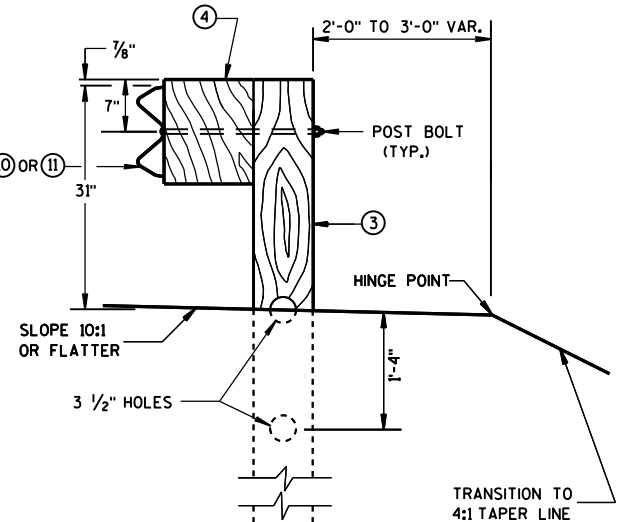
ELEVATION



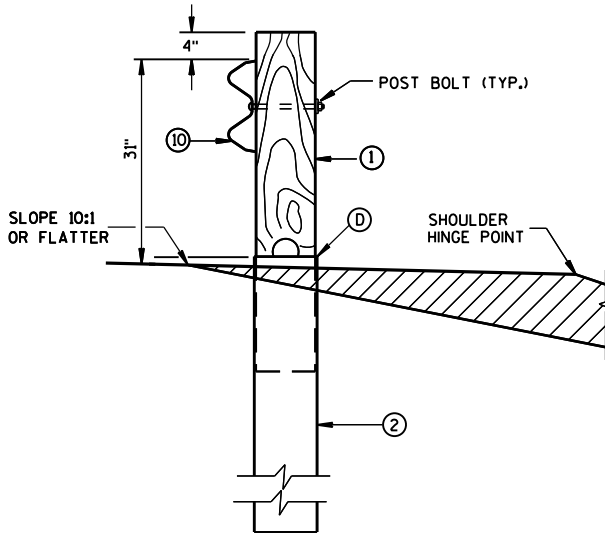
DETAIL "A"



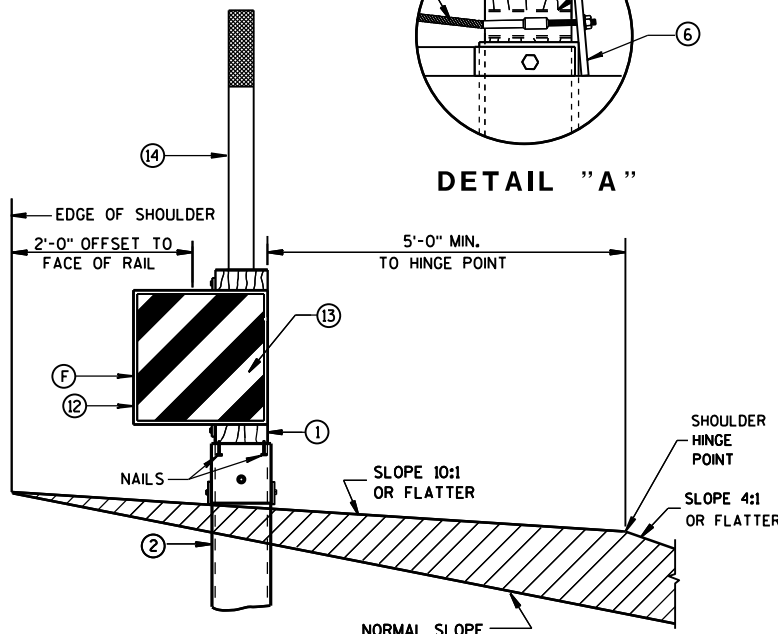
DETAIL "B"



SECTION C-C
TYPICAL AT POST NOS. 3-9



SECTION B-B
TYPICAL AT POST NO. 2*

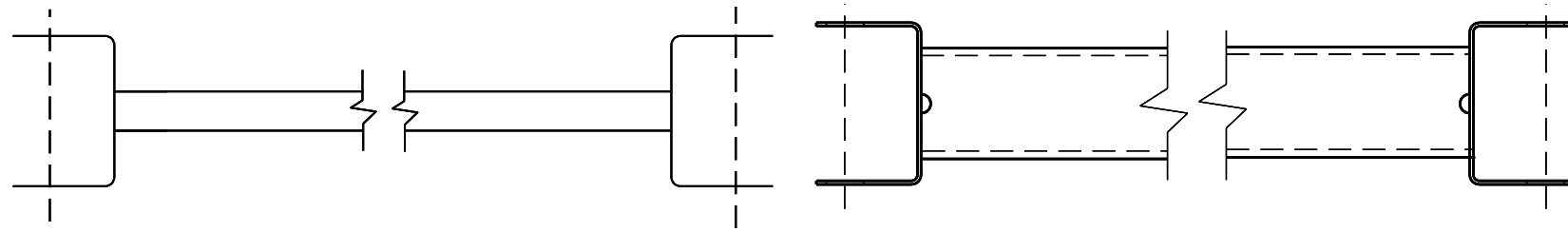


SECTION A-A
TYPICAL AT POST NO. 1*

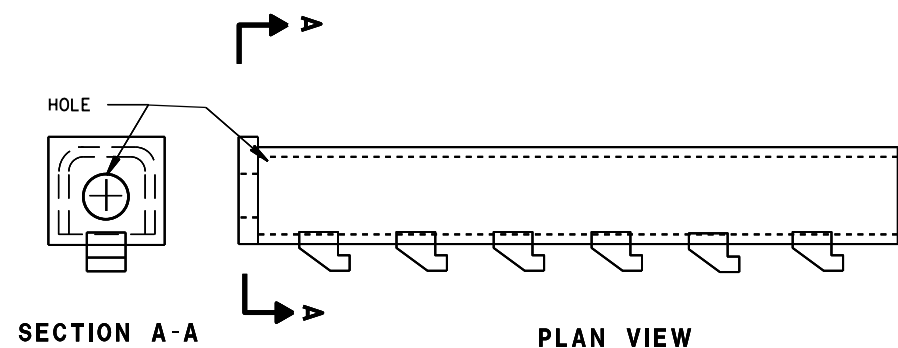
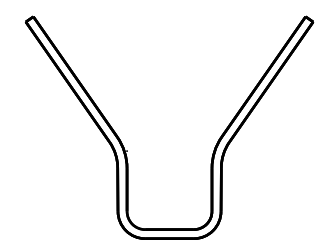
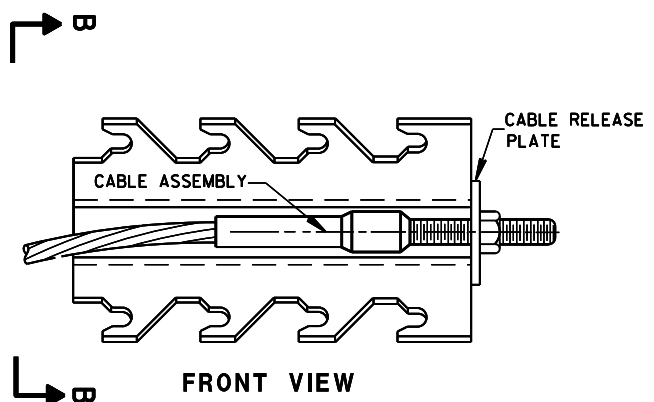
MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

111



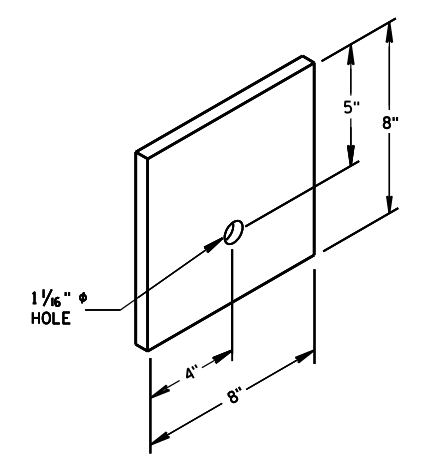
9 H
GENERIC GROUND STRUT



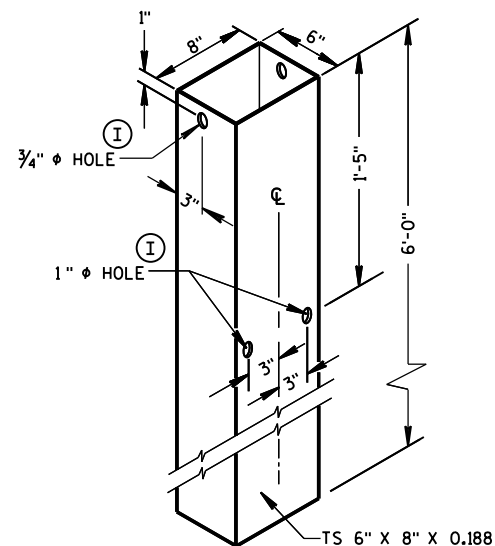
8 H
GENERIC ANCHOR CABLE BOX

BILL OF MATERIALS

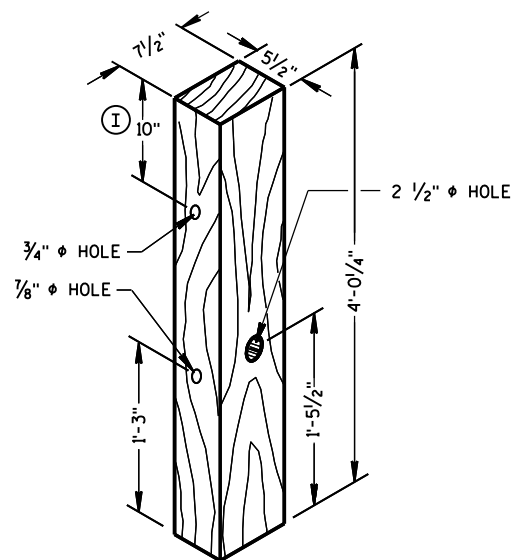
PART NO.	DESCRIPTION
MATERIALS PROVIDED BY MGS EAT MANUFACTURER. SEE MANUFACTURER'S DETAILS FOR MORE INFORMATION.	
①	WOOD BREAKAWAY POST
②	6" X 8" X 0.188", 6'-0" LONG FOUNDATION TUBE AT POSTS 1 AND 2
③	WOOD CRT
④	WOOD BLOCKOUT
⑤	PIPE SLEEVE
⑥	BEARING PLATE
⑦	BCT CABLE ASSEMBLY
⑧	ANCHOR CABLE BOX
⑨	GROUND STRUT
⑩	PERFORATED W-BEAM RAIL END PANEL, 12'-6" LONG.
⑪	STANDARD W-BEAM RAIL. MULTIPLE SECTIONS REQUIRED. SECTIONS VARY IN LENGTH.
⑫	END SECTION EAT
⑬	0.040" ALUMINUM SHEET WITH REFLECTIVE SHEETING TYPE F PER SECTION 637 OF THE STANDARD SPECIFICATIONS
⑭	EAT MARKER POST - YELLOW (SEE APPROVED PRODUCTS LIST)



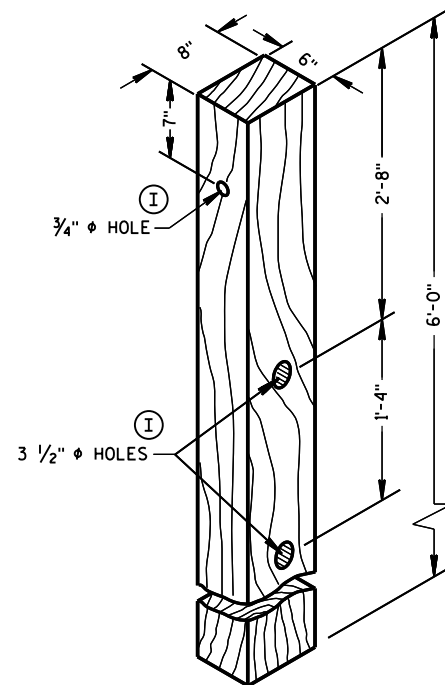
⑥
BEARING PLATE



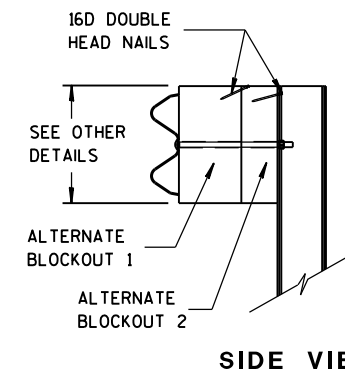
FOUNDATION TUBE ②



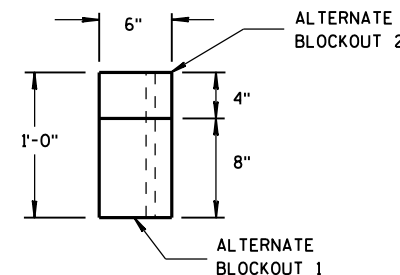
WOOD BREAKAWAY POST ①



WOOD CRT POST ③

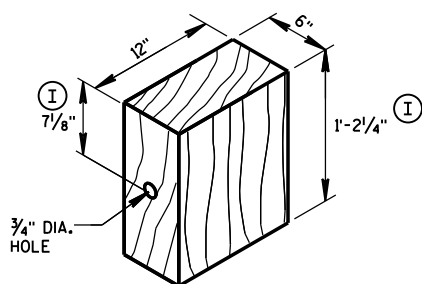


SIDE VIEW



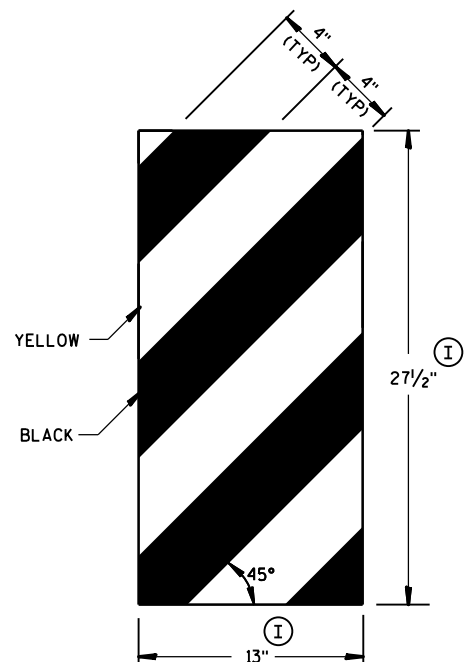
TOP VIEW

**ALTERNATE WOOD
BLOCKOUT DETAIL**

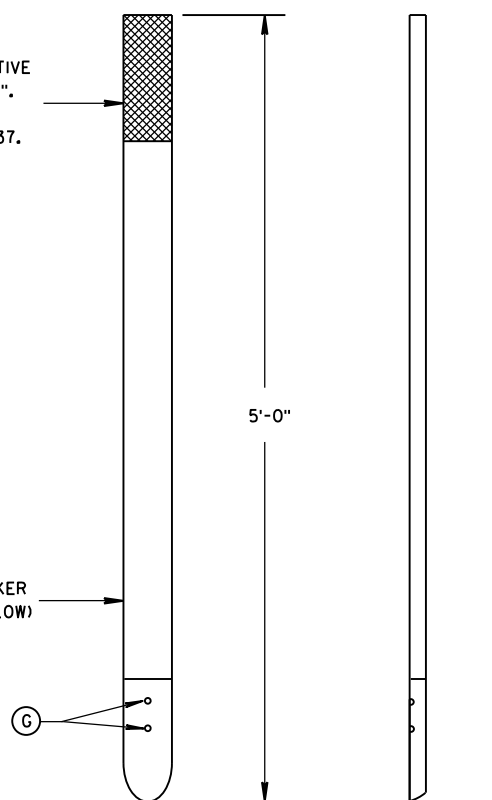
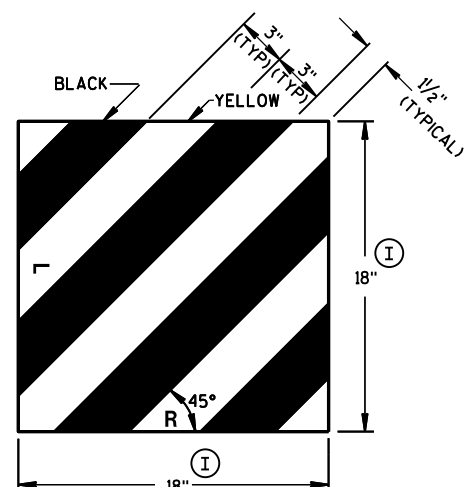


WOOD BLOCKOUT ④
REQ'D. AT ALL POSTS EXCEPT POST NO'S 1 & 2

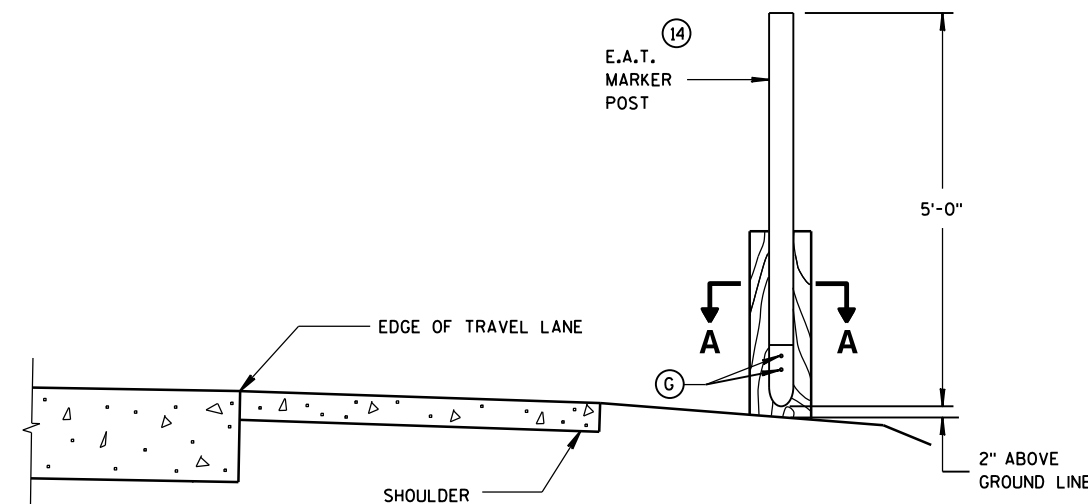
TYPE H
YELLOW REFLECTIVE
SHEETING 3" X 9".
SEE STANDARD
SPECIFICATION 637.



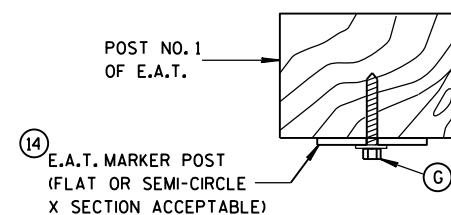
GENERIC REFLECTIVE SHEETING ⑬ ①



E.A.T. MARKER POST ⑭



**TYPICAL INSTALLATION OF E.A.T.
MARKER POST BACKSIDE OF POST NO. 1**
(E.A.T. AND RAIL REMOVED FOR CLARITY)



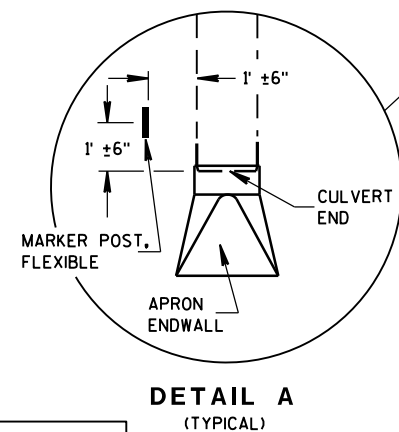
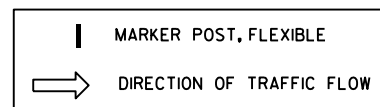
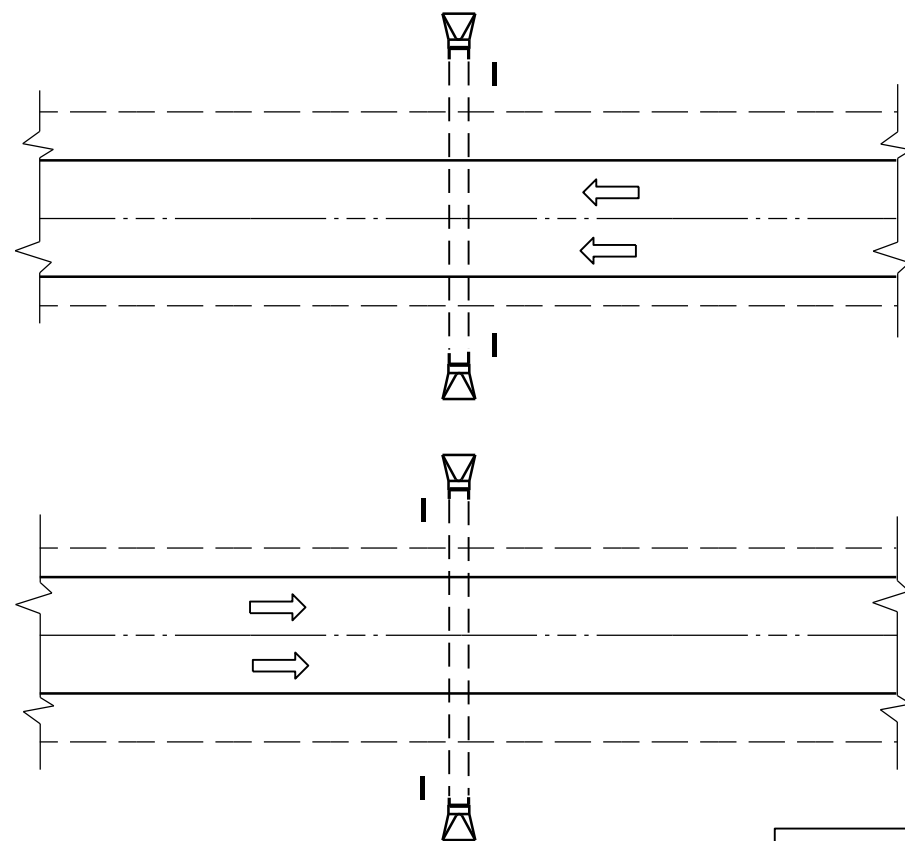
SECTION A-A

**MIDWEST GUARDRAIL SYSTEM
ENERGY ABSORBING TERMINAL
(MGS)**

**STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION**

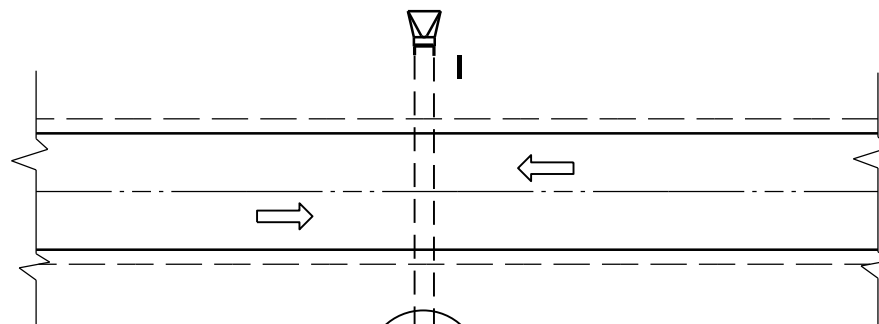
APPROVED
June 2014 /S/ Jerry H. Zogg
DATE ROADWAY STANDARDS 113 ENT
FHWA ENGINEER

PLAN VIEW
DIVIDED HIGHWAY



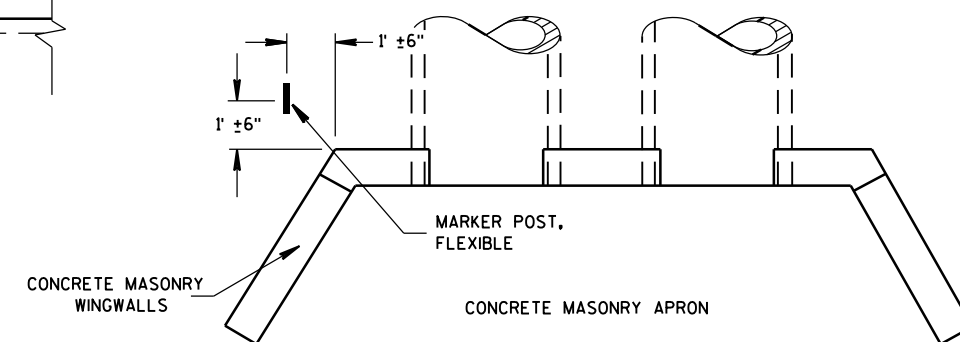
DETAIL A
(TYPICAL)

PLAN VIEW
UNDIVIDED HIGHWAY



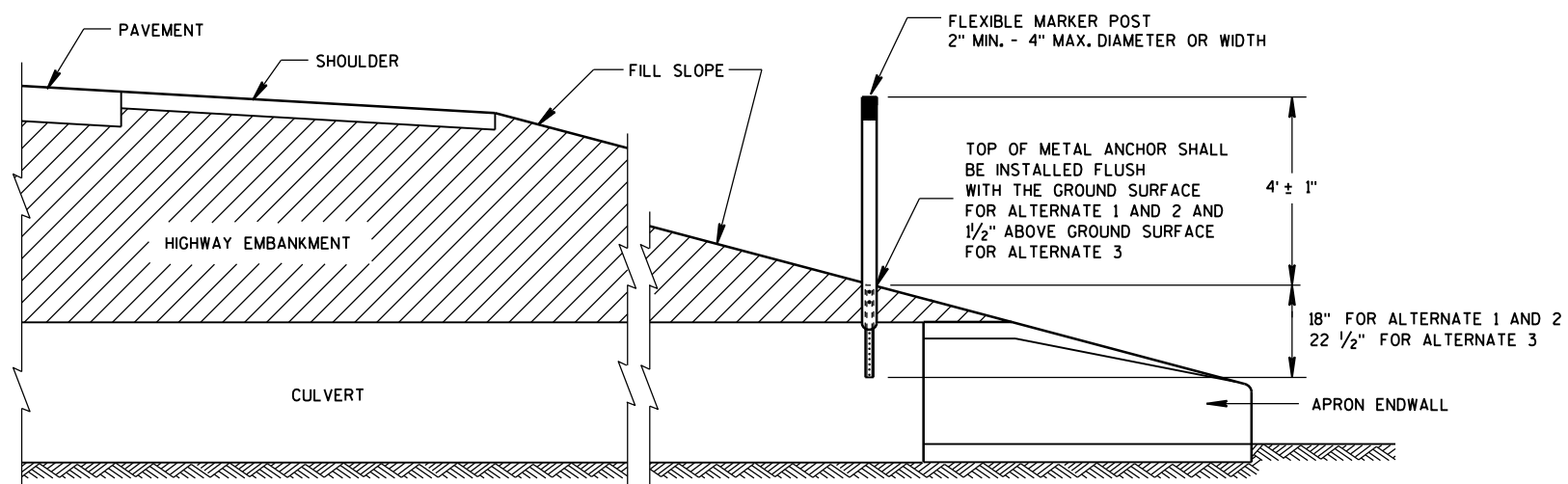
GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



PLAN VIEW
CONCRETE MASONRY ENDWALLS FOR
CULVERT PIPE AND PIPE ARCH

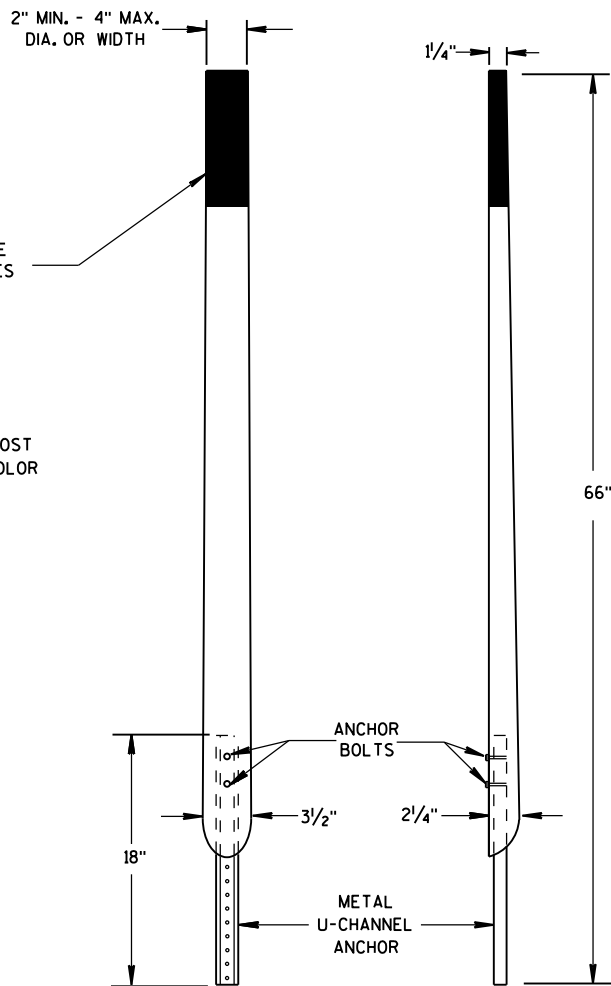
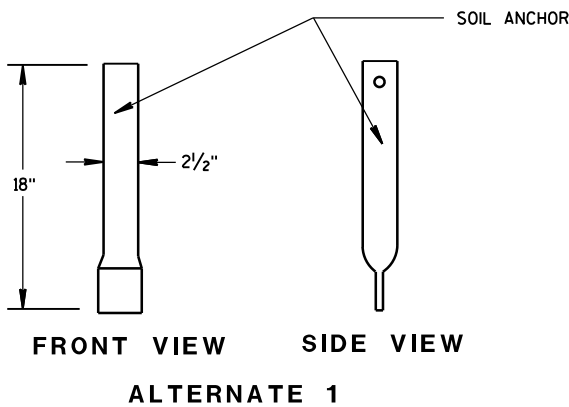
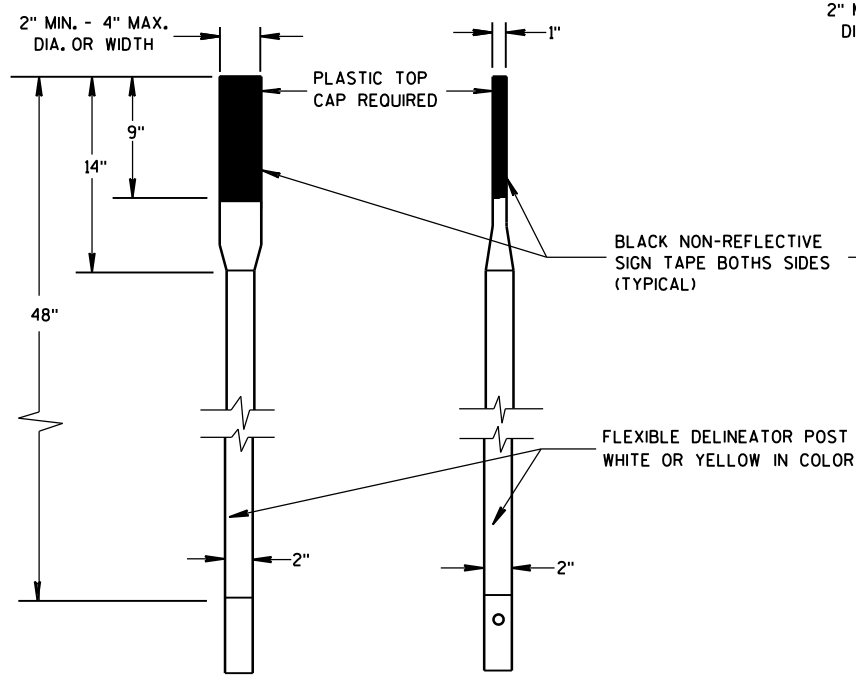
FLEXIBLE MARKER POST LOCATION



CROSS SECTION
FLEXIBLE MARKER POST

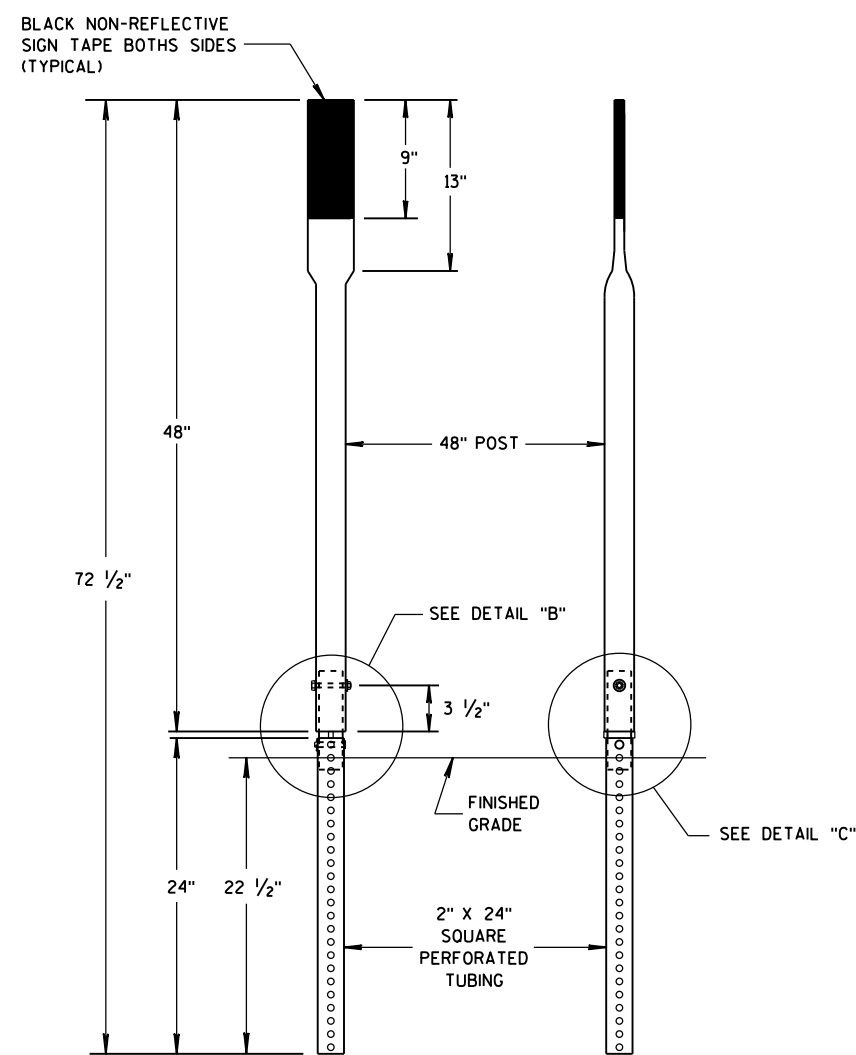
FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION 114

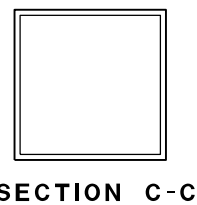


FRONT VIEW SIDE VIEW
ALTERNATE 2

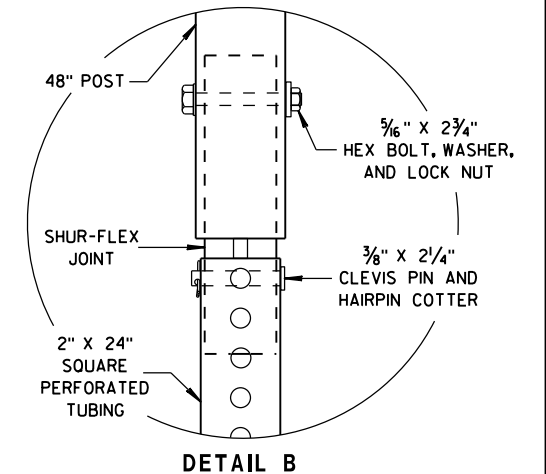
FLEXIBLE MARKER POSTS



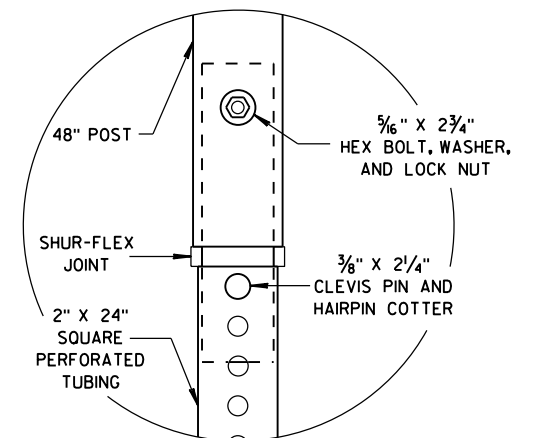
FRONT VIEW SIDE VIEW
ALTERNATE 3



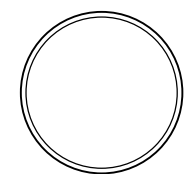
SECTION C-C



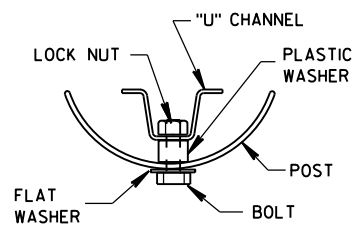
DETAIL B



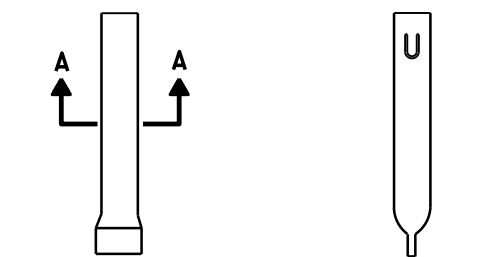
DETAIL C



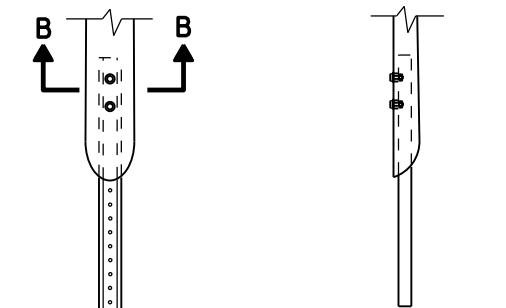
SECTION A-A



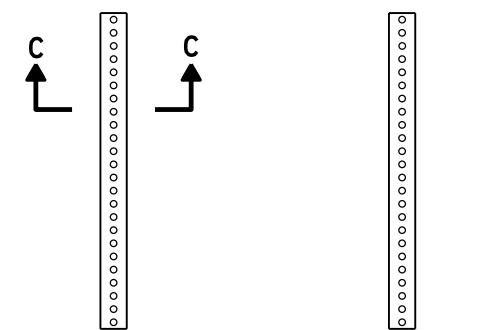
SECTION B-B



FRONT VIEW SIDE VIEW
ALTERNATE 1



FRONT VIEW SIDE VIEW
ALTERNATE 2



FRONT VIEW SIDE VIEW
ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

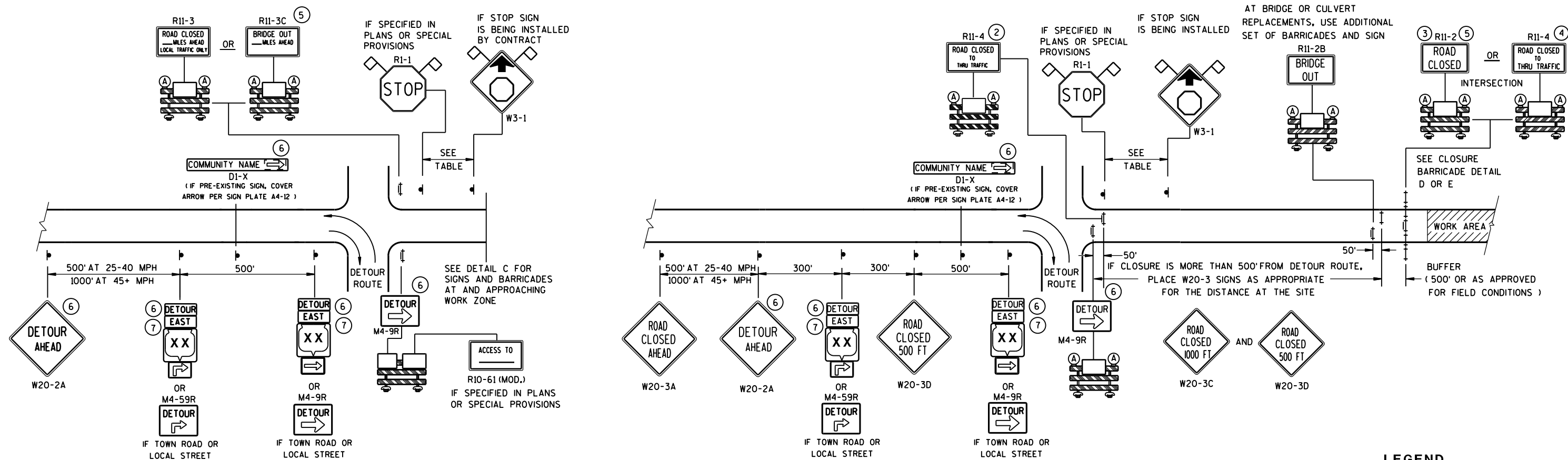
10/1/2012

DATE

FHWA

/S/ Travis Feltes
STATE TRAFFIC ENGINEER 115

IGN



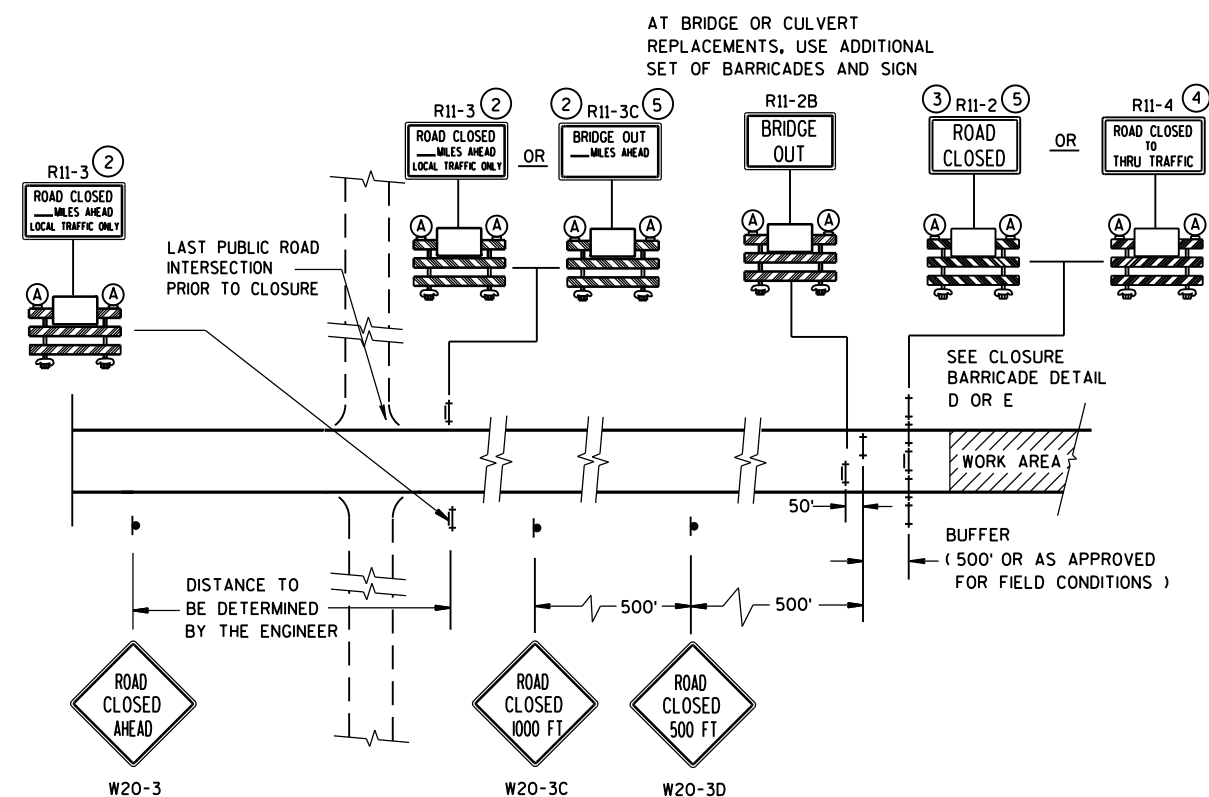
DETAIL A

MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN 1/2 MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



WORK ZONE LESS THAN 1/2 MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



DETAIL C
MAINLINE CLOSURE, NO POSTED DETOUR

SPEED LIMIT (MPH)	"STOP AHEAD" ADVANCE WARNING DISTANCE (FT)
25	200
30	200
35	350
40	350
45	500
50	550
55	750

SEE SDD 15C2-SHEET "b"
FOR GENERAL NOTES
AND FOOTNOTES (1) THROUGH (7)

LEGEND

- | | |
|---|--|
|  | SIGN ON PERMANENT SUPPORT |
|  | TYPE III BARRICADE |
|  | TYPE III BARRICADE WITH
ATTACHED SIGN |
|  | TYPE "A" WARNING LIGHT (FLASHING) |

 WORK AREA

 M4-8
 M3-X
 M1-4
OR
 M1-5A
OR
 M1-6

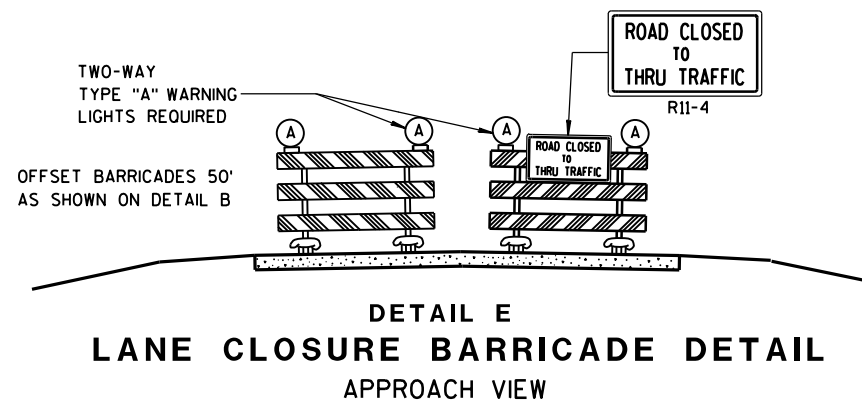
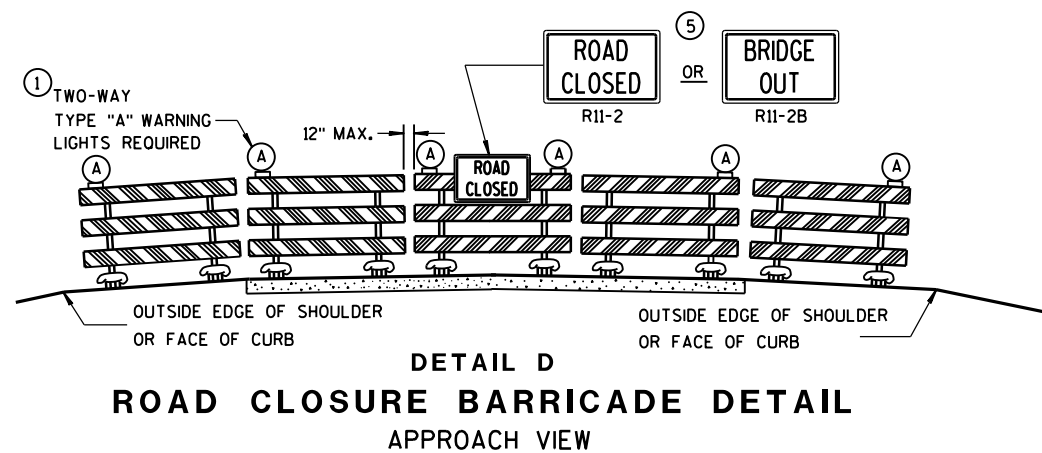
 OR 
M05-1 M06-1

 FLAGS, 16" X 16" MIN., (ORANGE)

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Sept. 2015 /S/ Peter Amakobe Atepe
DATE STATEWIDE WORK ZO 116 FIC
FHWA SAFETY ENGINEER



SEE SDD 15C2-SHEET "a" FOR LEGEND

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND BARRICADES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

BARRICADES THAT MUST BE MOVED FOR A WORK OPERATION SHALL BE IMMEDIATELY RE-ESTABLISHED UPON COMPLETION OF THE OPERATION OR, FOR CONTINUING OPERATIONS, AT THE END OF EACH WORKING DAY.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

ALL TYPE III BARRICADES SHALL HAVE RAILS REFLECTORIZED ON BOTH FACES. STRIPES SHALL BE PROPERLY SLOPED DOWN TOWARD THE TRAFFIC SIDE OR AS SHOWN IN THE ROAD CLOSURE BARRICADE DETAIL D FOR FULL ROAD CLOSURES.

TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

THE R11-2, R11-3, M4-9, R11-4 AND R10-61 SIGNS PLACED ON BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE OR BOTTOM RAILS.

"WO AND "MO" SIGNS ARE THE SAME AS "W" AND "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:

R11-2 SHALL BE 48" X 30".

R11-3, R11-4 AND R10-61 SHALL BE 60" X 30".

M4-9 SHALL BE 30" X 24".

M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)

M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)

M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)

M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)

D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.

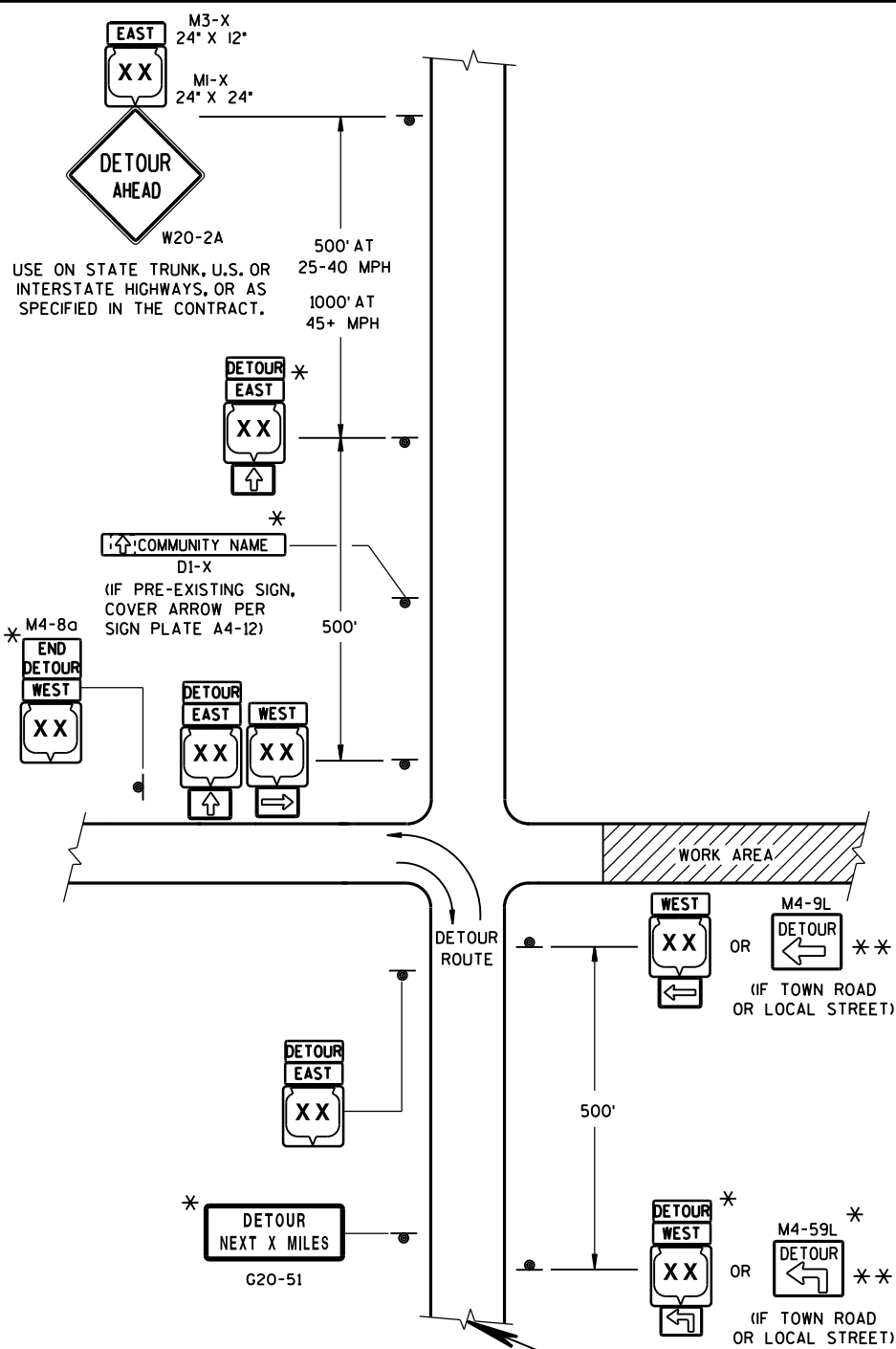
R1-1 SHALL BE 36" X 36".

- ① TWO WARNING LIGHTS SHALL BE PROVIDED ON THE CENTER BARRICADE AND A MINIMUM OF ONE WARNING LIGHT SHALL BE PROVIDED ON EACH OF THE OTHER BARRICADES WITHIN THE ROADWAY LIMITS. SPACING OF THE WARNING LIGHTS SHALL BE UNIFORM TO THE EDGE OF ROADWAY AS SHOWN (APPROX. 8-FOOT LIGHT SPACING).
- ② THESE SIGNS AND BARRICADES ARE NOT REQUIRED IF ROAD CLOSURE BEGINS AT INTERSECTION.
- ③ FOR ROAD CLOSURE WITHOUT LOCAL ACCESS TO PROJECT, SEE ROAD CLOSURE BARRICADE DETAIL D.
- ④ FOR ROAD CLOSURE WITH LOCAL ACCESS TO PROJECT, SEE LANE CLOSURE BARRICADE DETAIL E.
- ⑤ FOR BRIDGE OR CULVERT REPLACEMENTS, SUBSTITUTE "BRIDGE OUT" INSTEAD OF "ROAD CLOSED" ON R11-2 AND R11-3 SIGNS.
- ⑥ INSTALL DETOUR AND COMMUNITY GUIDE SIGNS AND ARROWS ONLY IF SPECIFIED IN THE CONTRACT. IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. MODIFY EXISTING SIGNS WHERE POSSIBLE. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS. IF DETOUR SIGNS ARE BEING INSTALLED BY OTHERS, PLACE THE CONTRACTED TRAFFIC CONTROL SIGNS TO ALLOW FOR PLACEMENT OF ALL WARNING, DETOUR AND GUIDE SIGNS AS SHOWN.
- ⑦ "EAST" CARDINAL DIRECTION MARKERS AND RIGHT TURN ARROWS ARE SHOWN. USE OTHER CARDINAL DIRECTIONS AND ARROWS AS APPROPRIATE.

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

Sept. 2015 /S/ Peter Amokobe Atepe
DATE STATEWIDE WORK ZO 117 FIC
FHWA SAFETY ENGI



LEGEND

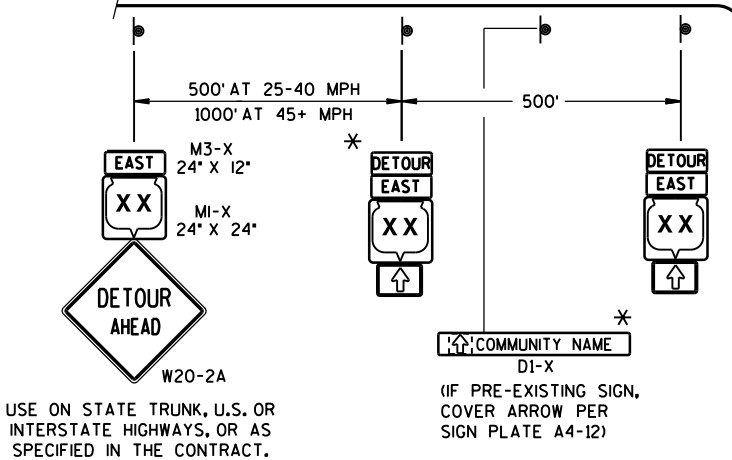
- SIGN ON PERMANENT SUPPORT
- WORK AREA
- DETOUR EAST M4-8 M3-X
- M1-4 OR COUNTY M1-5A OR M1-6
- M05-1 OR M06-1 OR M06-1

SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS AND DETAIL A OR B ON SDD 15C2-SHEET "a"

THIS DRAWING PROVIDES GENERAL GUIDANCE ON TYPICAL DETOUR SIGN LAYOUT AND SPACING. SEE PROJECT DETOUR SIGNING SHEETS FOR SPECIFIC DETAILS FOR EACH PROJECT.

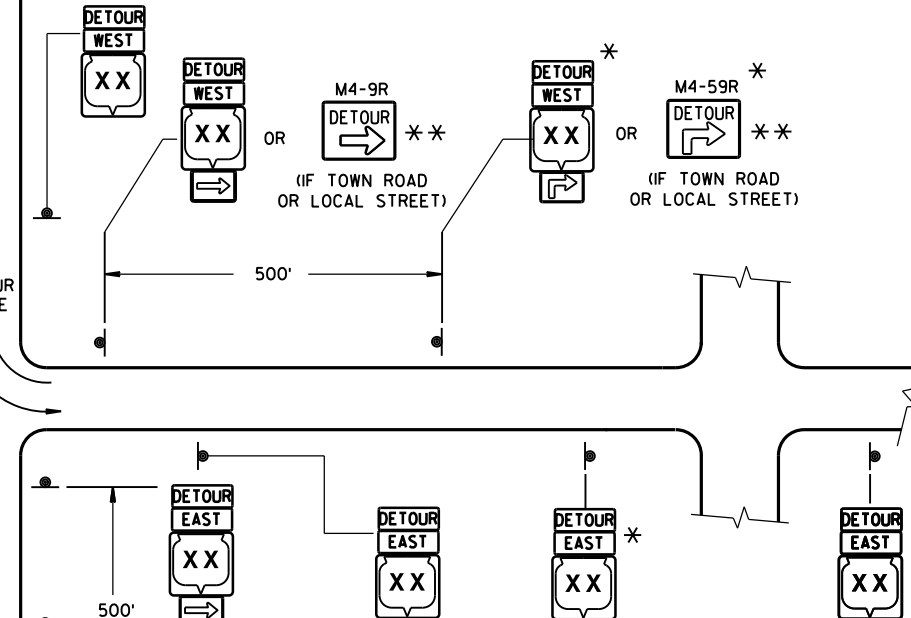
MATCH POINT

DETAIL F
DETOUR SIGNING



GENERAL NOTES

- THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.
- IF THERE ARE EXISTING ROUTE MARKER ASSEMBLIES THAT WILL REMAIN IN PLACE, ADJUST THE LOCATION OF THE DETOUR ROUTE SIGNS TO CORRESPOND WITH THE EXISTING ASSEMBLIES. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS, MODIFY EXISTING SIGNS WHERE POSSIBLE.
- THE SPACING BETWEEN TRAFFIC CONTROL AND DETOUR SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.
- ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE", SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER.
- SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.
- "MO" SIGNS ARE THE SAME AS "M" SIGNS EXCEPT THE BACKGROUND IS ORANGE.
- SIGN SIZES SHALL BE AS FOLLOWS:
 - M3-X SHALL BE 24" X 12". (36" X 18" IF NEEDED TO MATCH EXISTING SIGNS.)
 - M4-8 SHALL BE 24" X 12". (30" X 15" IF NEEDED TO MATCH EXISTING SIGNS.)
 - M1-4, M1-5A, AND M1-6 SHALL BE 24" X 24". (36" X 36" IF NEEDED TO MATCH EXISTING SIGNS.)
 - M05-1 AND M06-1 SHALL BE 21" X 21". (30" X 30" IF NEEDED TO MATCH EXISTING SIGNS.)
 - M4-9 SHALL BE 30" X 24".
 - M4-8a SHALL BE 24" X 18".
 - G20-51 SHALL BE 60" X 24".
 - W20-2 SHALL BE 48" X 48".
 - D1-X SHALL BE AS SHOWN ON SPECIFIC PROJECT SIGNING DETAIL SHEETS.
- * OPTIONAL SIGNS. SEE SPECIFIC PROJECT DETOUR SIGNING DETAIL SHEETS.
- ** FOR A TOWN ROAD OR LOCAL STREET DETOURED ONTO A STATE TRUNK HIGHWAY, PLACE A ROAD NAME PLAQUE ABOVE THE M4-9 SIGN AS SPECIFIED IN THE CONTRACT.

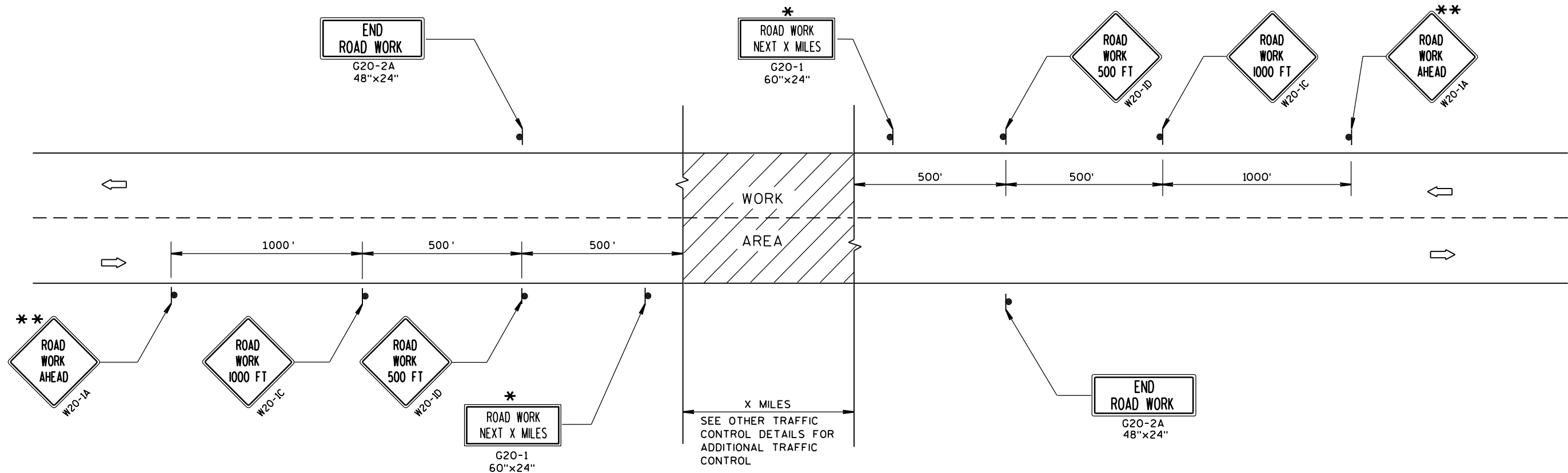


PLACE SIGNS BEYOND INTERSECTIONS WITH STATE OR COUNTY TRUNK HIGHWAYS OR AT 4 MILE MAXIMUM SPACING (4 BLOCKS IF URBAN AREA.)

DETOUR SIGNING FOR
MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2015 /S/ Peter Amakobe Atepe
DATE STATEWIDE WORK ZONE SAFETY ENGINEER
FHWA



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A MINIMUM OF 200 FEET (500 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

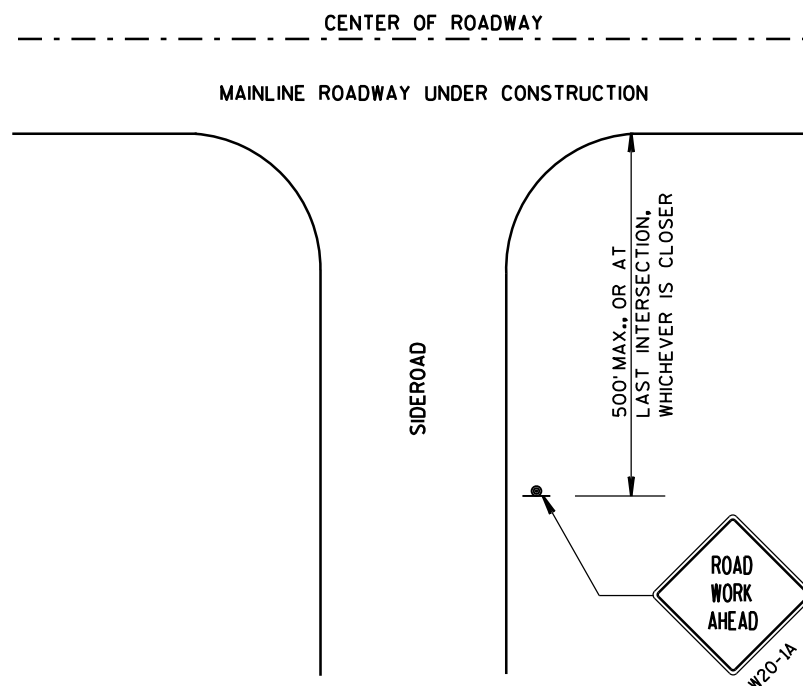
ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

* OMIT G20-1 SIGNS IF LENGTH OF WORK AREA IS 2 MILES OR LESS.

** PLACE ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



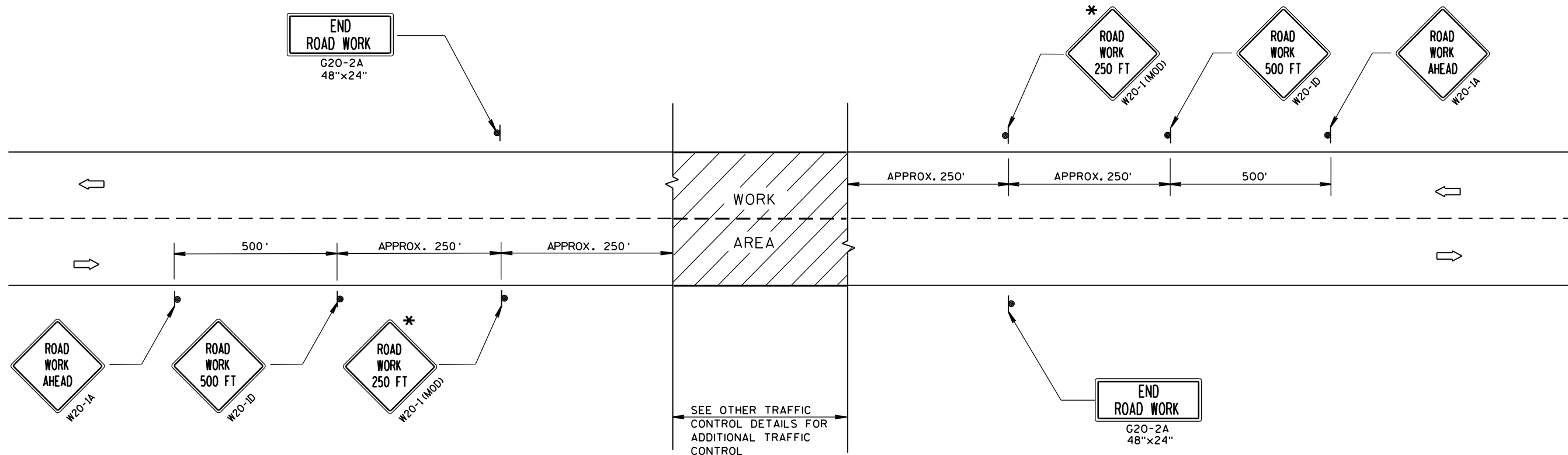
LEGEND

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

TRAFFIC CONTROL, ADVANCE
WARNING SIGNS 45 M.P.H.
OR GREATER TWO-WAY
UNDIVIDED ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
DATE Sept. 2015 /S/ Peter Amokobe Atepe
STATEWIDE WORK ZONE SAFETY ENGINEER
FHWA



TYPICAL SIDEROAD APPROACH WARNING SIGN DETAIL

GENERAL NOTES

THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS.

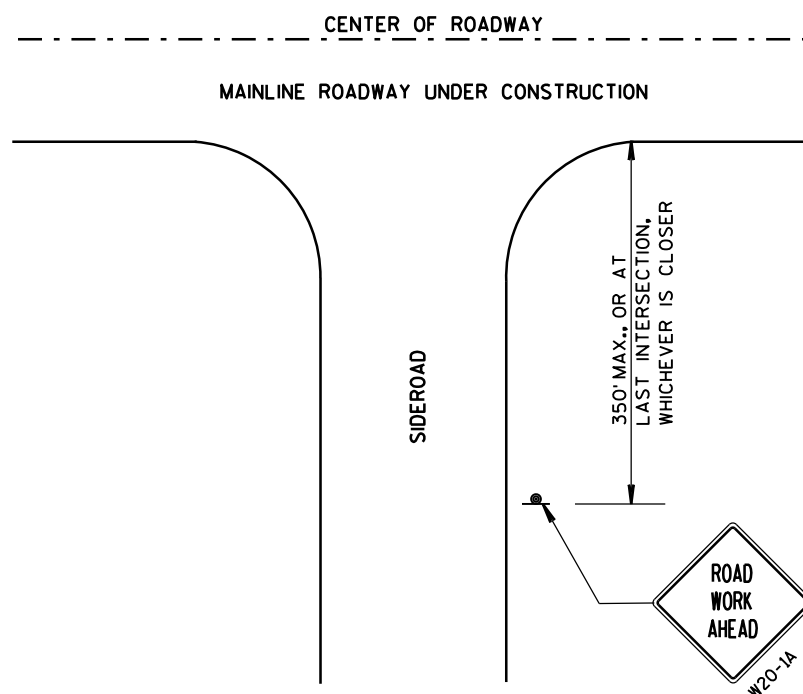
THE SPACING BETWEEN TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND SHOULD PROVIDE A DESIRABLE MINIMUM OF 200 FEET CLEARANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS, 36"x36" SIGNS MAY BE USED INSTEAD OF 48"x48" SIGNS.

SIGNS THAT WILL BE IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS MAY BE MOUNTED ON PORTABLE SUPPORTS.

IF A "STOP" SIGN MUST BE REMOVED FOR A WORK OPERATION, A TEMPORARY "STOP" SIGN SHALL BE PLACED PRIOR TO THE SIGN REMOVAL, OR A FLAGGER SHALL BE PROVIDED UNTIL THE SIGN IS RE-ESTABLISHED.

* THE THIRD W20-1 SIGN IS REQUIRED ONLY IF THERE IS AN INTERSECTION BETWEEN THE "ROAD WORK 500 FT" SIGN AND THE WORK ZONE. ADJUST THE PLACEMENT OF THIS SIGN BASED ON INTERSECTION LOCATION AND OTHER FIELD CONDITIONS.



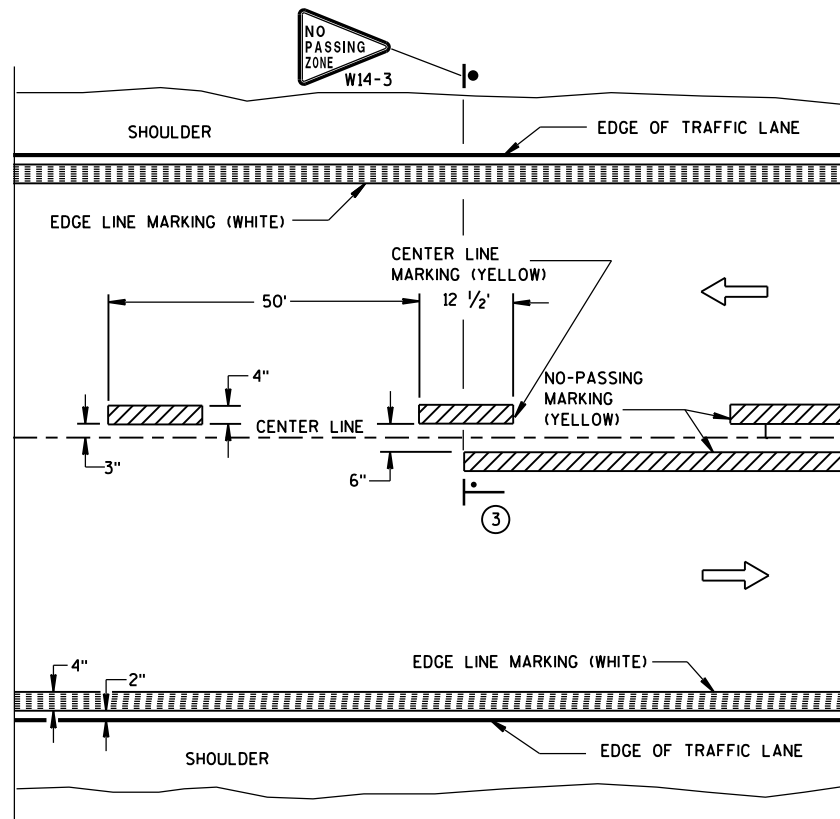
LEGEND

- SIGN ON PERMANENT SUPPORT
- DIRECTION OF TRAFFIC
- WORK AREA

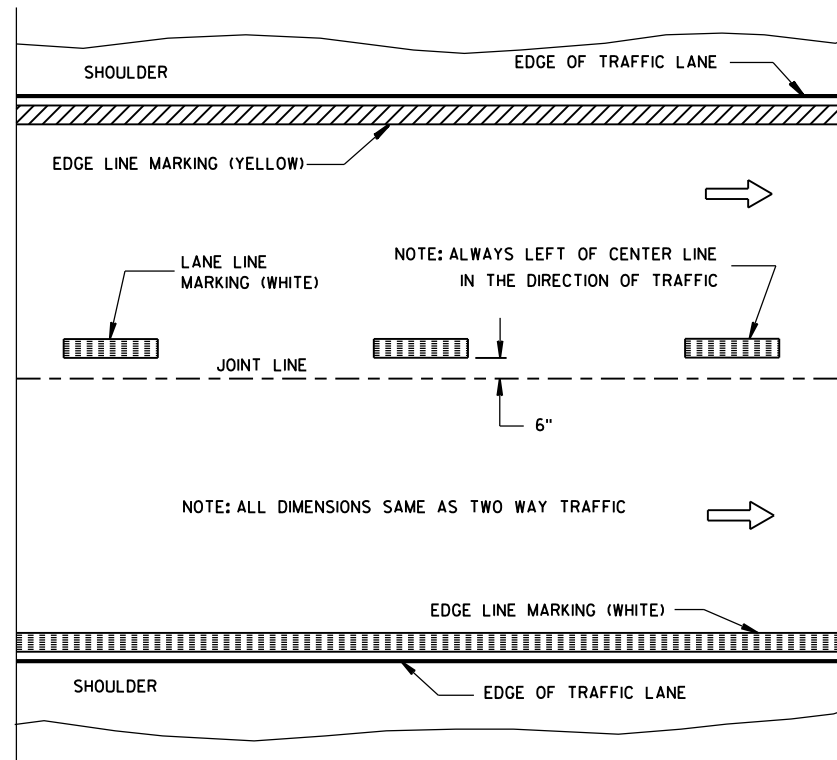
TRAFFIC CONTROL, ADVANCE
WARNING SIGNS 40 M.P.H.
OR LESS TWO-WAY UNDIVIDED
ROAD OPEN TO TRAFFIC

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept. 2015 /S/ Peter Amakobe Atepe
DATE STATEWIDE WORK ZONE IC
FHWA SAFETY ENGINEER

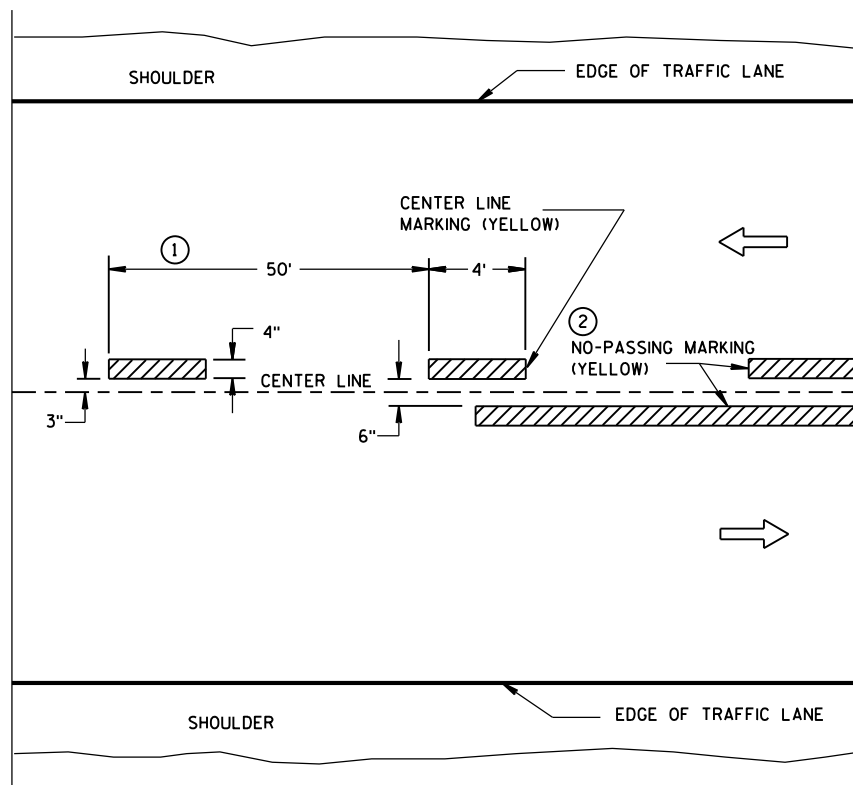


TWO WAY TRAFFIC

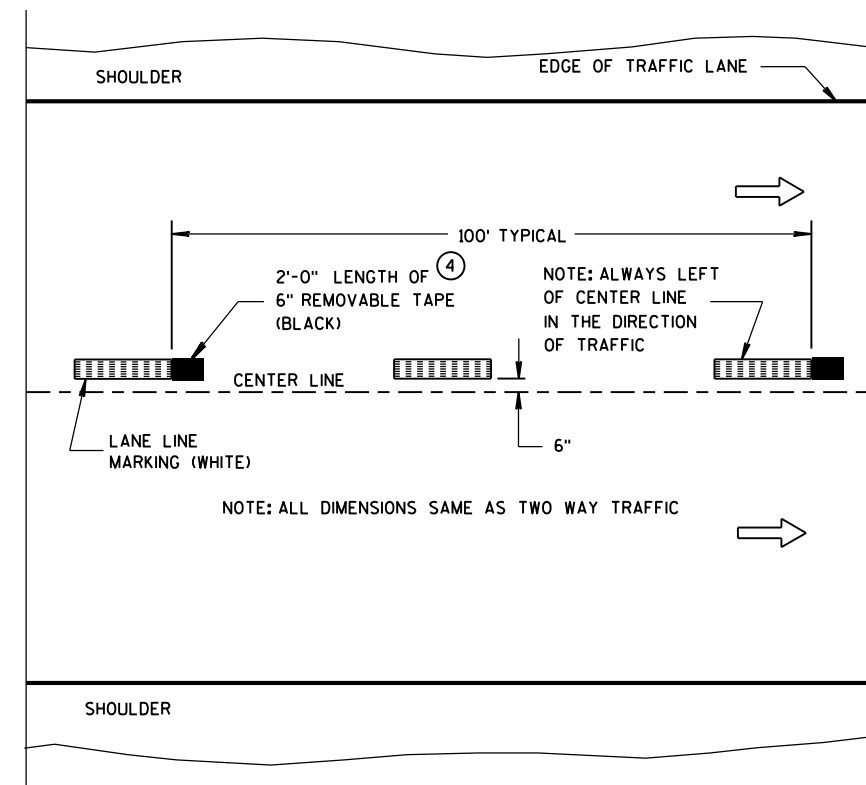


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY (INTERMEDIATE) PAVEMENT MARKING
(SHOWS CYCLE FOR TEMPORARY CENTER LINE OR TEMPORARY LANE LINE MARKING)

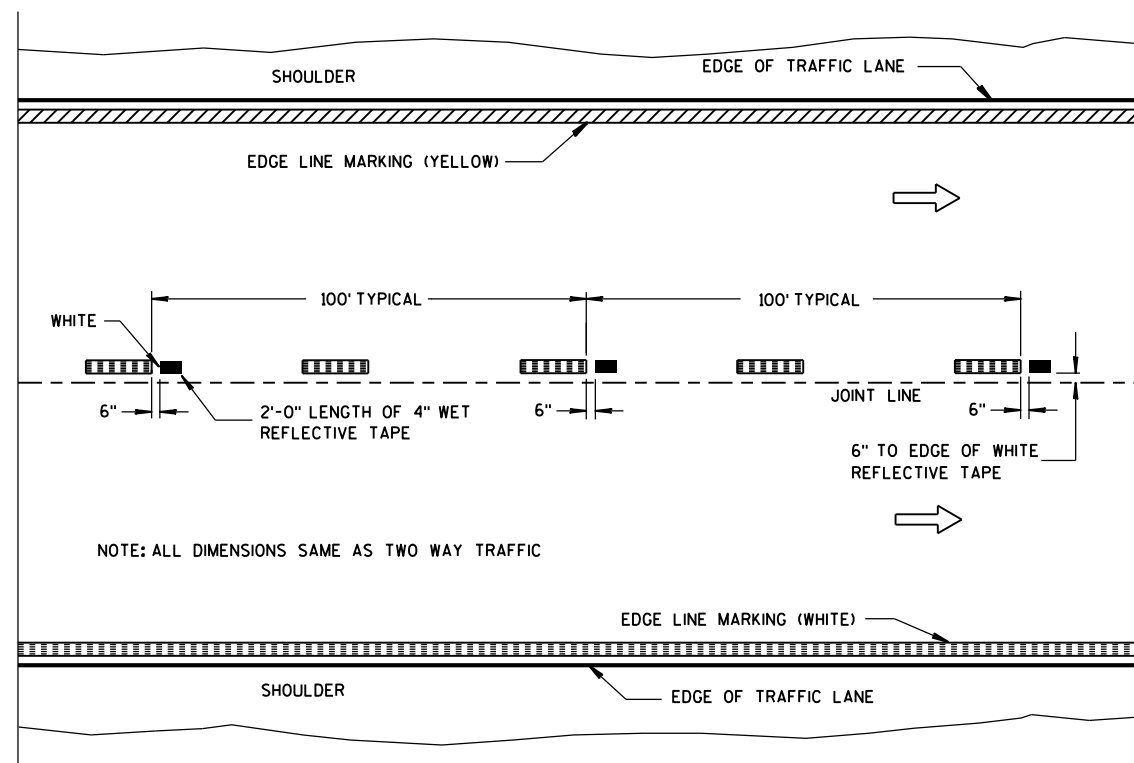
GENERAL NOTES

DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

- ① HALF CYCLE LENGTHS (25'±) WITH 2' MINIMUM STRIPE LENGTHS SHALL BE PROVIDED ON ROADWAYS (INCLUDING TEMPORARY TRAVELED WAYS) WITH REVERSE CURVATURE, CURVATURE OF OVER 5 DEGREES OR WHEN DIRECTED BY THE ENGINEER TO MARK UNUSUAL ALIGNMENT OF THE TRAVELED WAY.
- ② NO PASSING ZONE TEMPORARY PAVEMENT MARKING IS REQUIRED TO BE PLACED, WHERE APPROPRIATE, ALONG WITH CENTERLINE TEMPORARY PAVEMENT MARKING WHEN A SAME DAY PERMANENT PAVEMENT MARKING ITEM IS INCLUDED IN THE CONTRACT.
- ③ NO PASSING ZONE MARKINGS ARE PLACED ACCORDING TO "T" MARKINGS. IF EXISTING NO PASSING ZONE W14-3 SIGNS ARE BEYOND 50 FEET IN EITHER DIRECTION, THE SIGNS SHALL BE MOVED TO THE "T" MARKINGS.
- ④ CONCRETE ONLY.

NOTE

ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL



WET REFLECTIVE TAPE SUPPLEMENT TO
SPRAYED OR NON WET REFLECTIVE TAPE LANE LINE

LEGEND

- "T" MARKING
- POST MOUNTED SIGN

PAVEMENT MARKING
(MAINLINE)

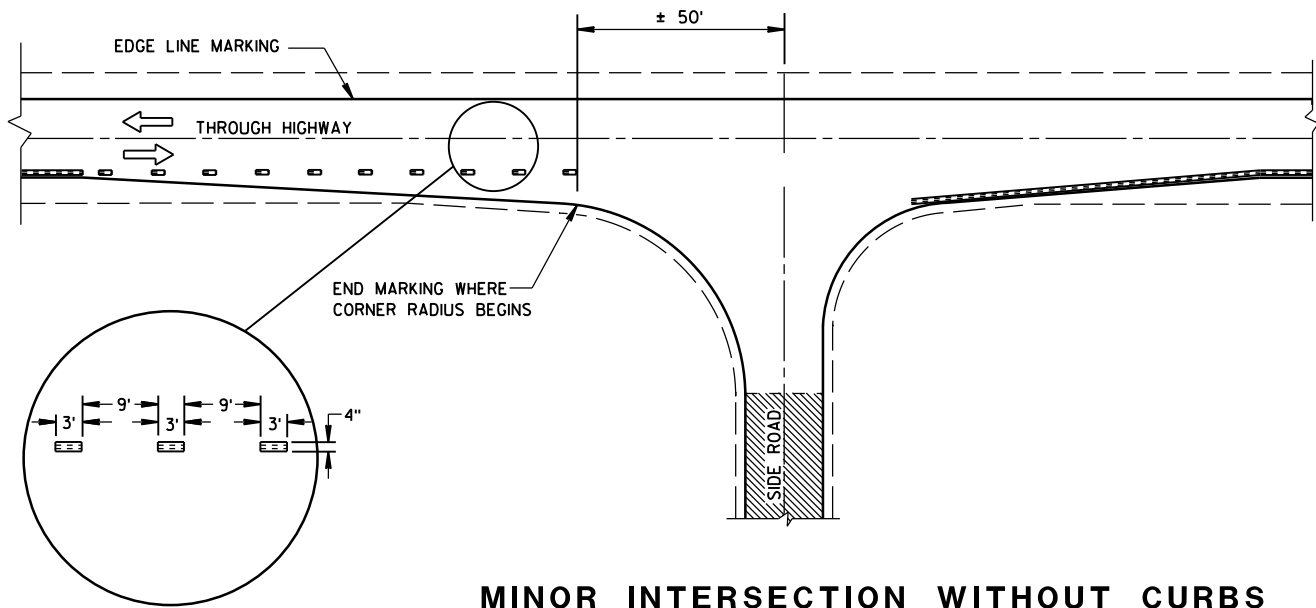
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

5-13-2013
DATE

FHWA

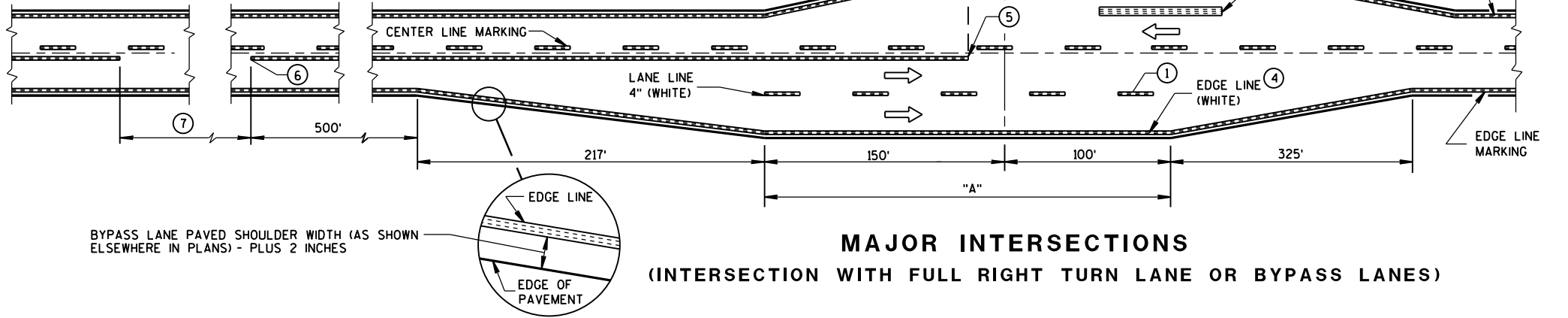
/S/ Travis Feltes
STATE TRAFFIC E 121



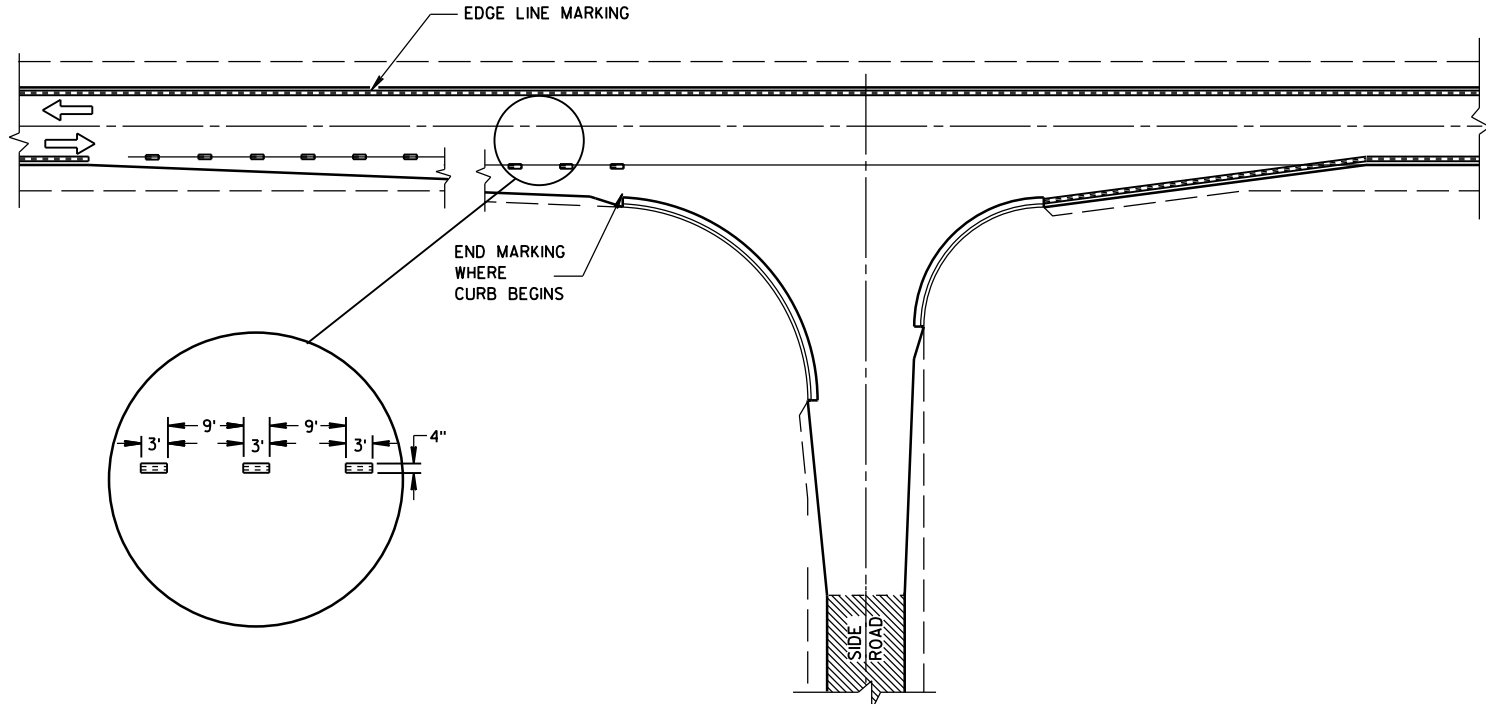
MINOR INTERSECTION WITHOUT CURBS

⑦

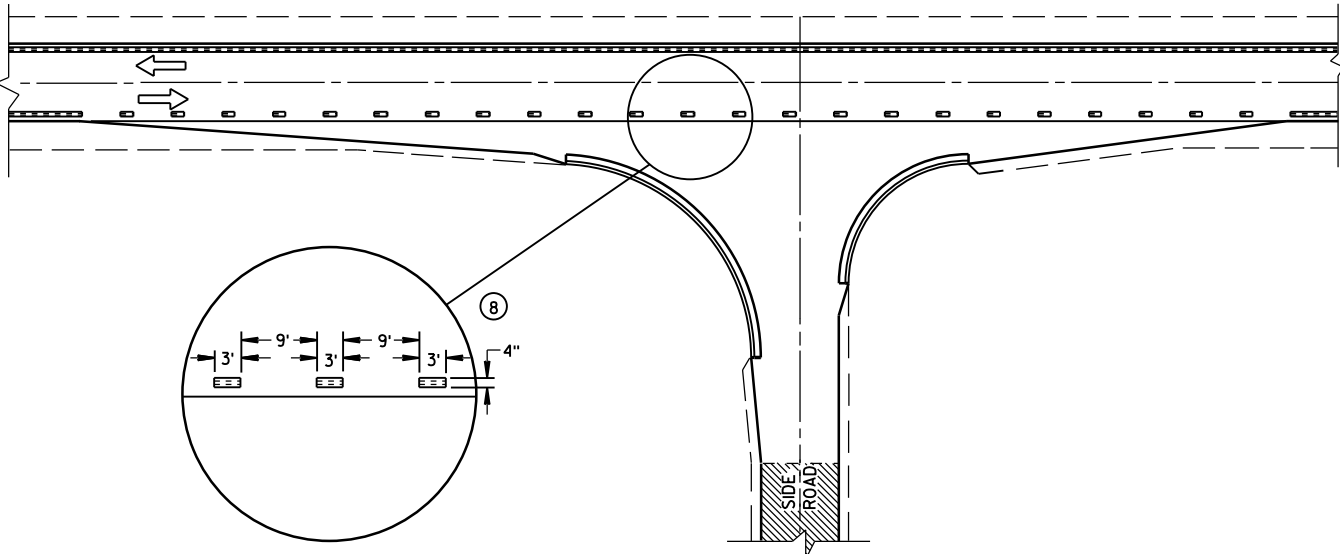
POSTED SPEED (MPH)	MINIMUM DISTANCE BETWEEN ZONES (FEET)
25 - 30	528
35 - 40	528
45 - 50	686
55	792



MAJOR INTERSECTIONS
(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANES)



MINOR INTERSECTION WITH CURBS
(TYPICAL MARKING)

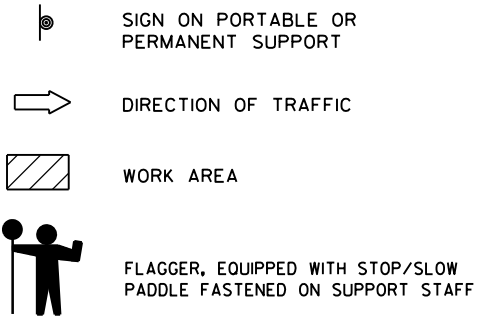


MINOR INTERSECTION WITH CURBS
③ (FOR SPECIAL CONDITIONS AS SPECIFIED)

GENERAL NOTES

- EDGE LINES SHALL BE OMITTED THROUGH INTERSECTIONS. EDGE LINES SHALL BE CONTINUED THROUGH DRIVEWAYS.
- ① WHEN DISTANCE "A" IS LESS THAN 250 FEET, OMIT LANE LINE.
 - ② WHEN DISTANCE "B" IS LESS THAN 100 FEET, OMIT CHANNELIZING LANE LINE.
 - ③ ALTERNATIVE MARKING SHALL BE PROVIDED WHEN SPECIFIED IN THE CONTRACT. TYPICAL SITUATIONS WHERE THIS MARKING MAY BE REQUIRED ARE WHERE THE INTERSECTION IS ON A SHARP HORIZONTAL CURVE OR CREST VERTICAL CURVE IN AN UNLIGHTED AREA SUCH THAT THE EDGE LINE MAY BE MISLEADING TO THE MOTORIST OR DISAPPEAR FROM SIGHT.
 - ④ THE EDGE LINE IN THE TAPER AREAS OF THE BYPASS LANE AND THE BYPASS LANE SHALL BE LOCATED 1-FOOT FROM EDGE OF PAVEMENT TO THE OUTSIDE EDGE OF EDGE LINE.
 - ⑤ BARRIER LINE ENDS AT SIDE ROAD PAVEMENT/SURFACE EDGE EXTENSION.
 - ⑥ BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.
 - ⑦ IF THE DISTANCE BETWEEN 2 SUCCESSIVE NO-PASSING ZONES IS LESS THAN THE MINIMUM DISTANCE BETWEEN ZONES, CONNECT THE 2 ZONES.
 - ⑧ 3' LINE 9' GAP, EXCEPT RETRACE THE EXISTING LINE - GAP PATTERN WHERE EXISTING MARKINGS ARE IN PLACE.
- ARROW SYMBOL (→) SHOWS DIRECTION OF TRAVEL

LEGEND

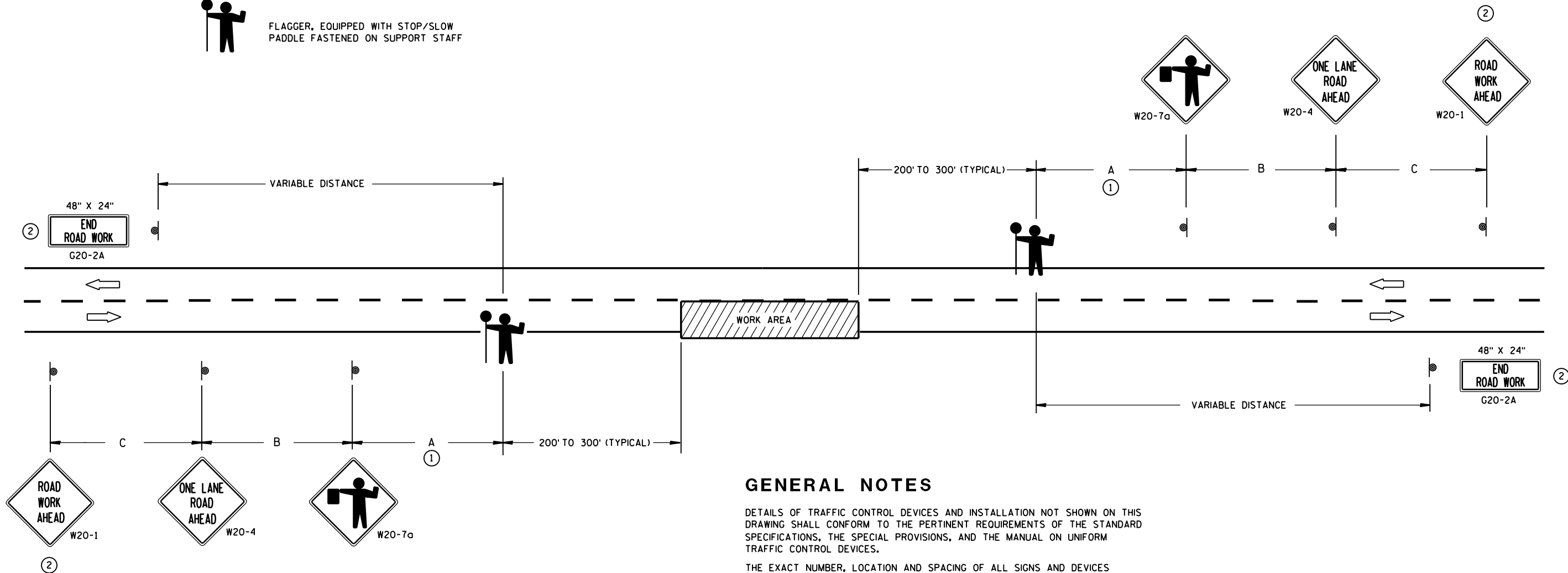


SIGN SPACING TABLE

SPEED LIMIT	SIGN SPACING A,B,C
25-35 MPH	200'
35-40 MPH	350'
45-55 MPH	500'



USE OF THE "BE PREPARED TO STOP" SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7a AND W20-4 SIGNS. A 500' TYPICAL SPACING SHALL BE PROVIDED BETWEEN THE SIGNS.



GENERAL NOTES

DETAILS OF TRAFFIC CONTROL DEVICES AND INSTALLATION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS, THE SPECIAL PROVISIONS, AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS AND DEVICES (AND THE LOCATION OF ALL FLAGGERS) SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

THE FIRST ADVANCE WARNING SIGN SHOULD TYPICALLY BE LOCATED IN ADVANCE OF THE ANTICIPATED TRAFFIC BACKUP OR QUEUE.

WHEN A SIDE ROAD OR RAMP INTERSECTS THE FACILITY ON WHICH THE WORK IS BEING PERFORMED, ADDITIONAL TRAFFIC CONTROLS SHALL BE PROVIDED AS SPECIFIED IN THE PLANS AND/OR THE SPECIAL PROVISIONS OR AS APPROVED BY THE ENGINEER.

FLAGGERS SHALL BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES. THEY SHALL BE EQUIPPED WITH STOP/SLOW PADDLES FASTENED ON SUPPORT STAFFS. WHEN THE FLAGGING OPERATION IS NOT IN EFFECT, COVER OR REMOVE ALL TEMPORARY TRAFFIC CONTROL SIGNS.

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

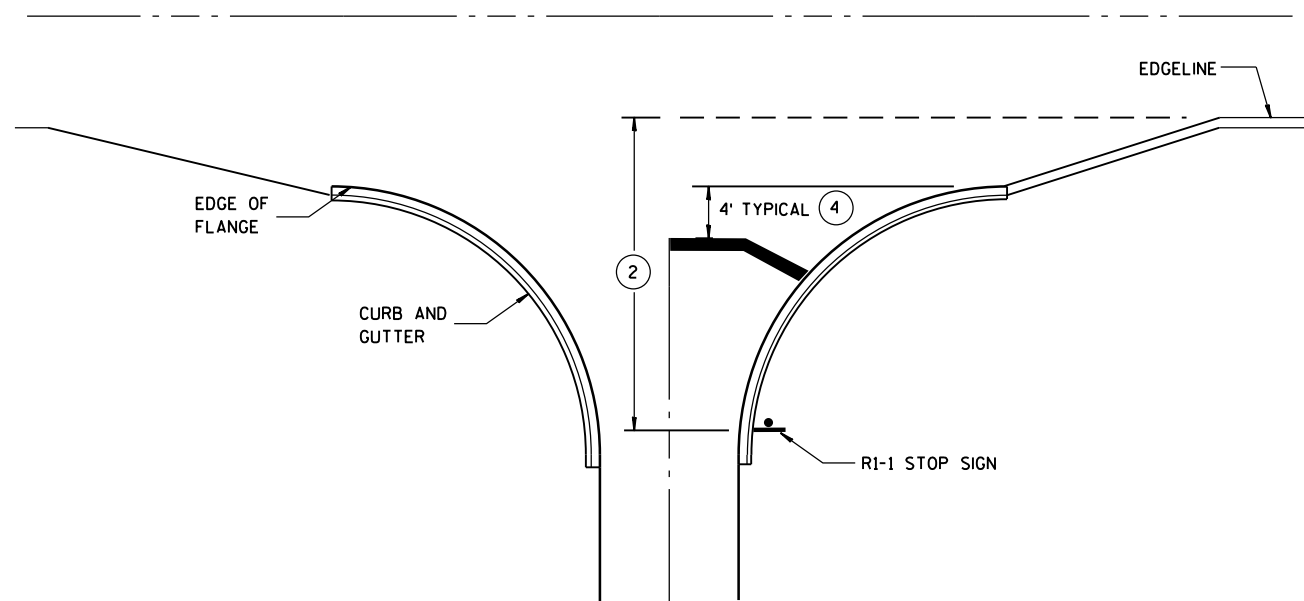
- ① FOR A MOVING WORK OPERATION, SIGNING FOR BOTH DIRECTIONS SHALL BE REESTABLISHED (AS SIMULTANEOUSLY AS PRACTICAL) AT APPROXIMATELY 3500 FOOT INTERVALS IN THE MOVING WORK OPERATION OR AS APPROVED BY THE ENGINEER.
- ② SIGN NOT REQUIRED IF FLAGGING OPERATION OCCURS WITHIN A SIGNED ROAD WORK ZONE AREA.

TRAFFIC CONTROL FOR LANE
CLOSURE (SUITABLE FOR
MOVING OPERATIONS)

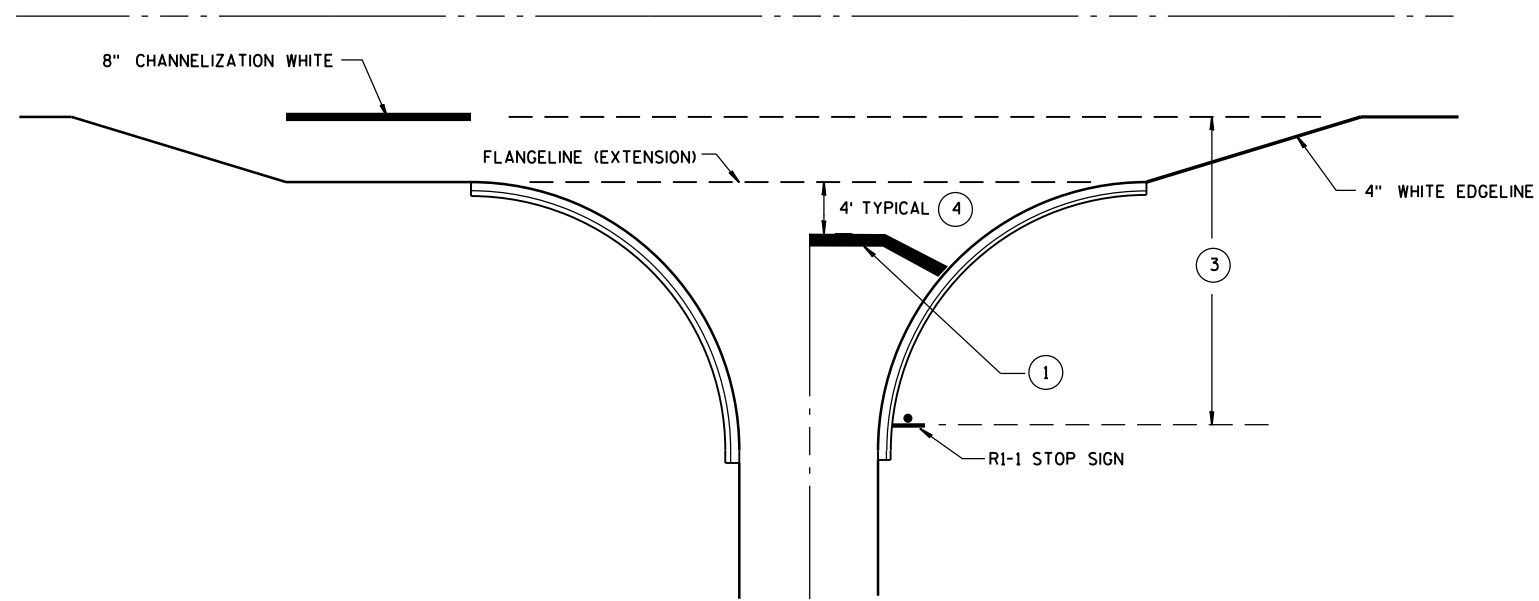
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

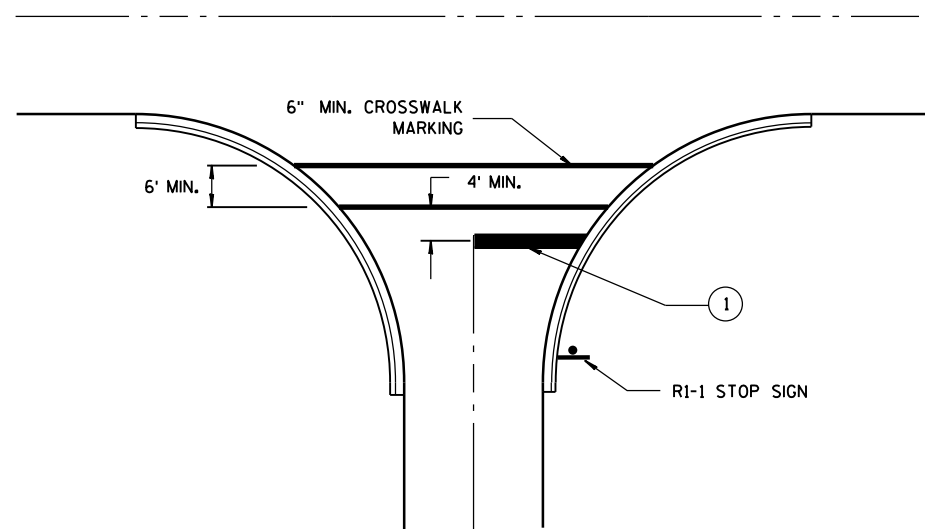
8/2013 /S/ Travis Feltes
DATE STATE TRAFFIC ENGINE 123 SIGN
FHWA



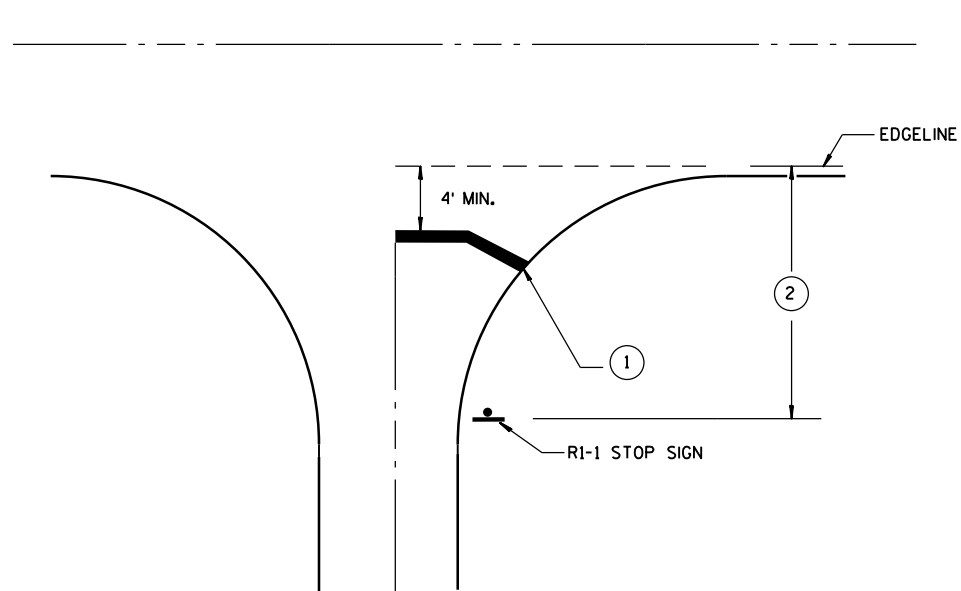
**TYPICAL STOP LINE PAVEMENT MARKING
WITH CURB AND GUTTER**



**TYPICAL STOP LINE PAVEMENT MARKING
FOR SIDEROADS WITH RIGHT TURN LANE**



**TYPICAL STOP LINE PAVEMENT MARKING
FOR SIDEROADS WITH CROSSWALK MARKING**



**TYPICAL STOP LINE PAVEMENT MARKING
WITHOUT CURB AND GUTTER**

GENERAL NOTES

- ① 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE PROJECT ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
- ② IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGE LINE THAN NO STOP LINE IS REQUIRED.
- ③ IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION THAN NO STOP LINE IS REQUIRED.
- ④ MOVE CLOSER TO EDGE OF TRAVEL LANE AS NEEDED FOR VISIBILITY AND SIGHT LINES.

STOP LINE AND CROSSWALK PAVEMENT MARKING

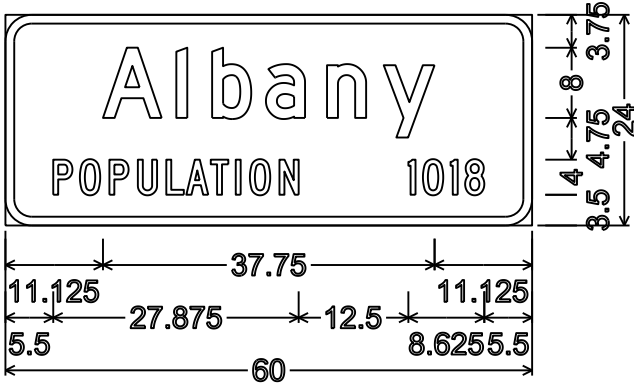
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

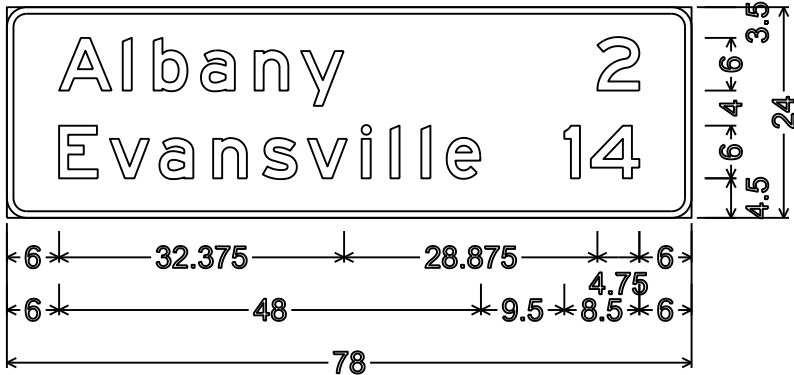
4/30/2013
DATE

FHWA

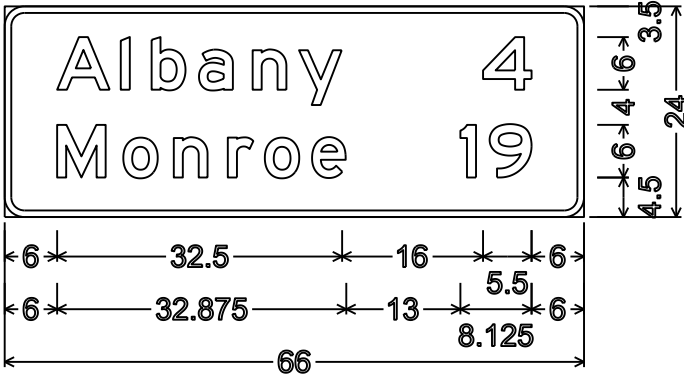
/S/ Travis Feltes
STATE TRAFFIC ENGINEER 124



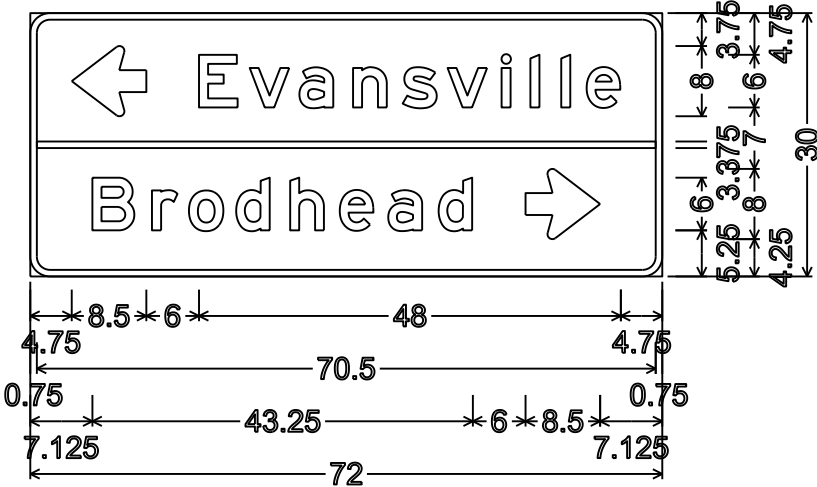
I2-3;
3.000" Radius, 1.000" Border,
"Albany" D; "POPULATION" C ; "1018" C



D2-2;
2.250" Radius, 0.750" Border



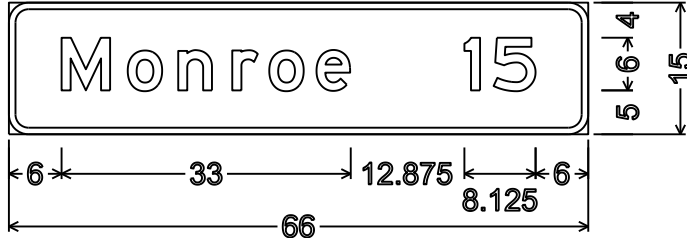
D2-2;
2.250" Radius, 0.750" Border



D1-2;
2.250" Radius, 0.750" Border



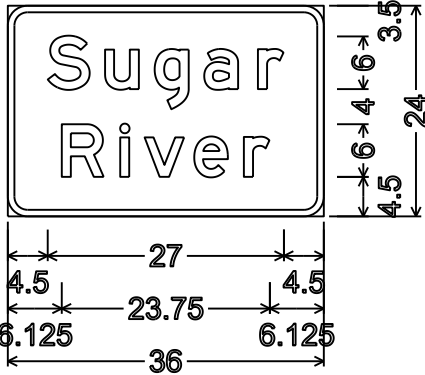
D2-1;
2.250" Radius, 0.750" Border



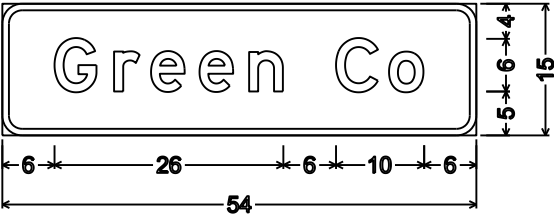
D2-1;
2.250" Radius, 0.750" Border

NOTES

- 1. All Signs Type II - Type H Reflective
- 2. Color:
Background - Green
Message - White
- 3. Message Series - E except as noted

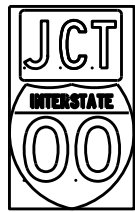


2.250" Radius, 0.750" Border

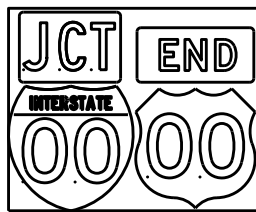


I2-2;
2.250" Radius, 0.750" Border

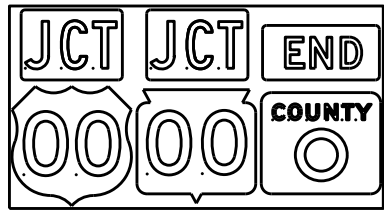
TYPICAL ASSEMBLIES



J1-1



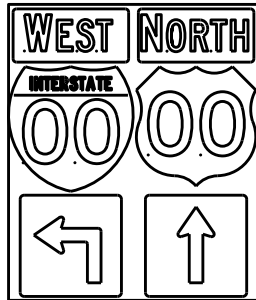
J1-2



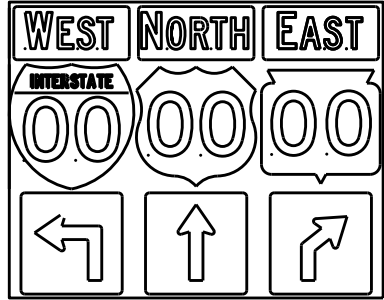
J1-3



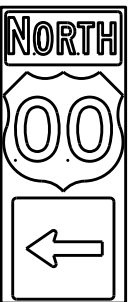
J2-1



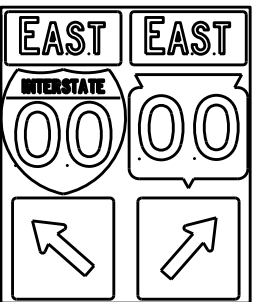
J2-2



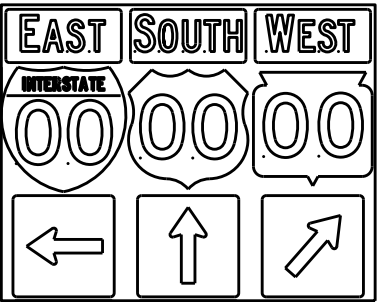
J2-3



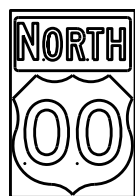
J3-1



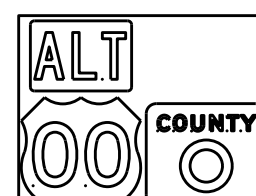
J3-2



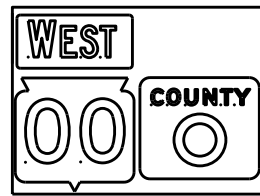
J3-3



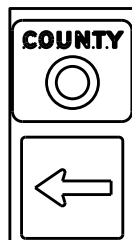
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1



J23-1

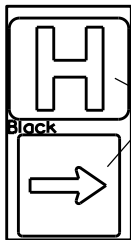


J22-1



JV

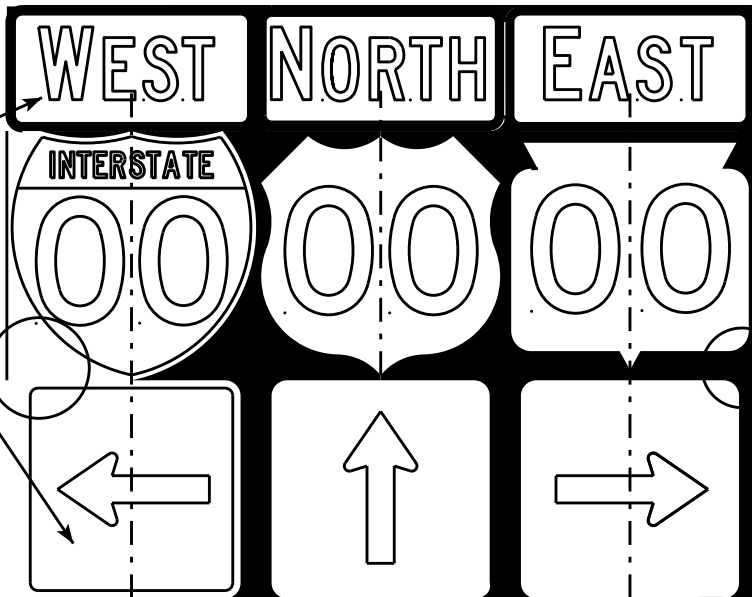
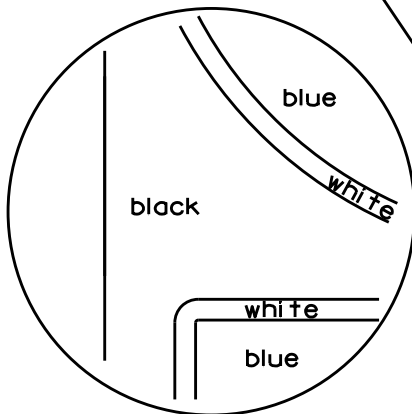
(Typical Vertical J-Assembly
See Note 10 and 11)



JH-1

Blue Background

[blue background
with interstate]



[black background]

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

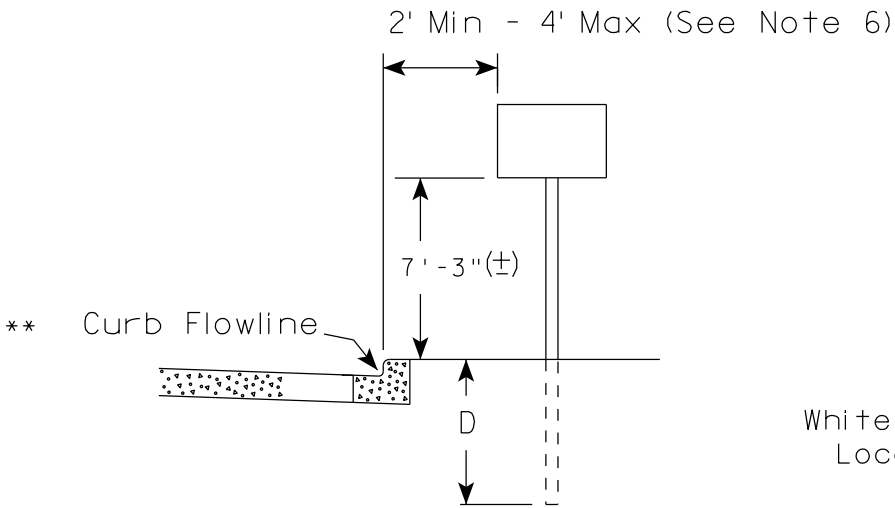
DATE 2/06/14 PL 126 A2-1S.8

SHEET NO: E

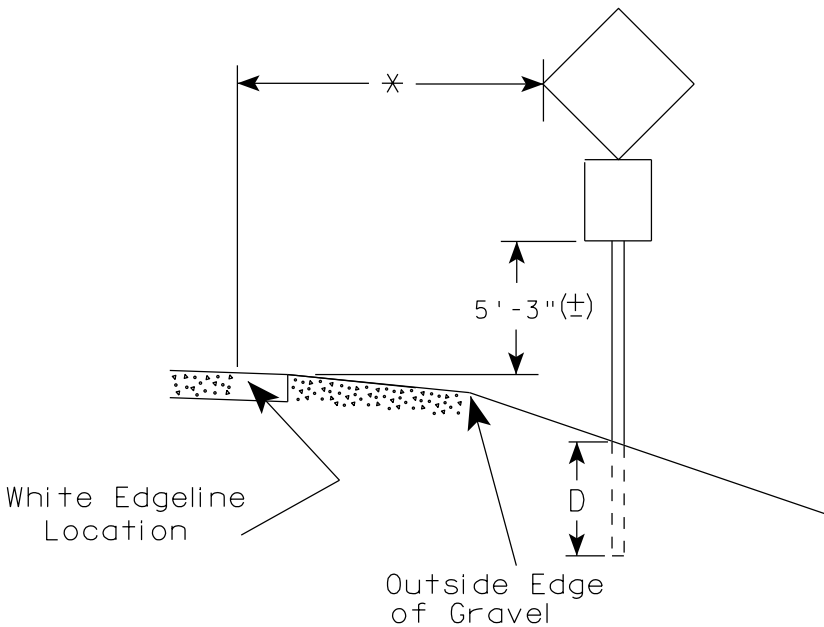
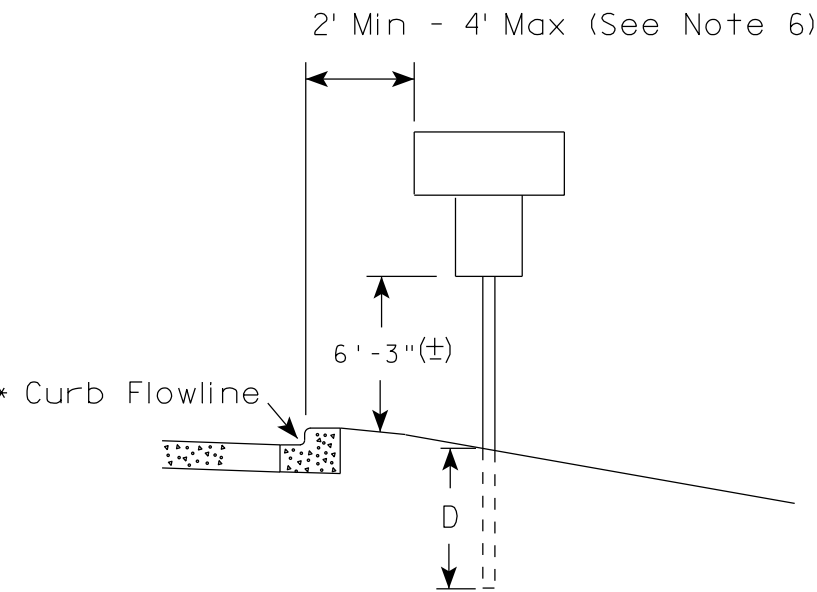
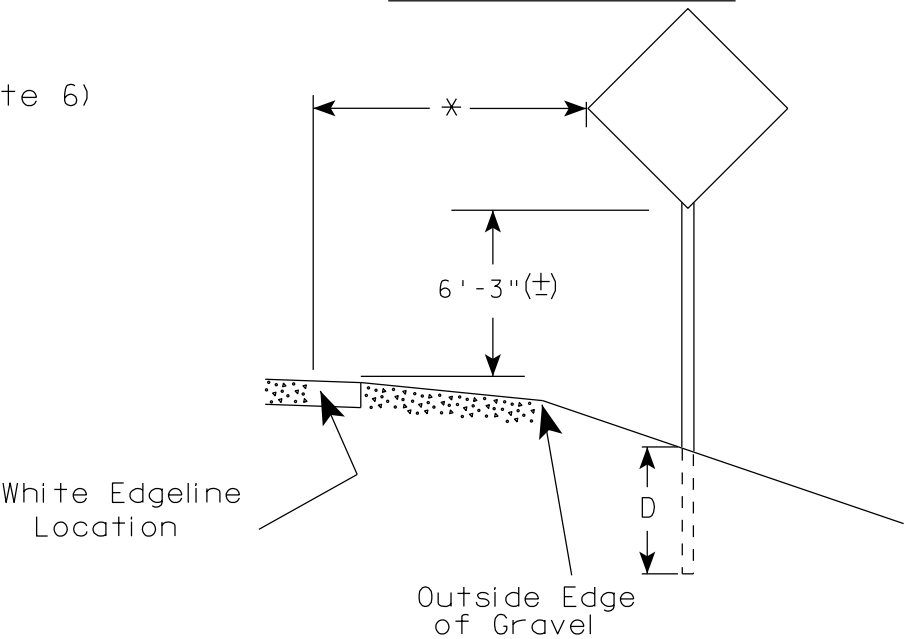
NOTES

1. Signs are Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Black Non-reflective
Message - see Note 5
3. Message Series - See Note 5
4. Corners shall be square or rounded if base material is plywood. If base material is metal the corners shall be rounded.
5. The colors and message spacing on each marker shall be according to the applicable route marker panel specifications.
6. Certain marker heads require the component pieces to be the same color. As an example, all the components used with an M1-1 Interstate marker shall be blue.
7. Single panel j-assemblies shall only be used with route marker shields that are same size. If the route marker shields are different size use multiple piece component.
8. Route assemblies that have 24 inch route shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have one horizontal splice between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 inches or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
9. Route assemblies that have 36 inch shields and have dimensions greater than 48 inches (both vertical and horizontal) shall have two horizontal splices. One horizontal splice shall be between the cardinal direction and route shields and the other horizontal splice shall be between the arrows and route shields. Vertical splices shall not be used on route assemblies with a horizontal dimension of 144 or less. The contractor shall not use more than one vertical joint per sign and the joint shall be between route shields.
10. All Vertical J Assemblies are given a Sign Code of JV
11. For JV Assemblies that have a mixture of Interstate and non Interstate shields, arrows and cardinals shall be white on blue.

URBAN AREA



RURAL AREA (See Note 2)



POST EMBEDMENT DEPTH

Area of Sign Installation (Sq.Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

GENERAL NOTES

1. Signs wider than 4 feet or 20 sq.ft or larger, shall be mounted on multiple posts. Refer to plate A4-4.
2. If signs are mounted on barrier wall, see A4-10 sign plate.
3. For expressways and freeways, mounting height is 7'- 3" (±) or 6'-3" (±) depending upon existence of a sub-sign.
4. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
5. Minimum mounting height for signs mounted on traffic signal poles is 5'- 3" (±).
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. The (±) tolerance for mounting height is 3 inches.
8. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the Engineer.
9. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Enhanced Reference Markers, Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

×× The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

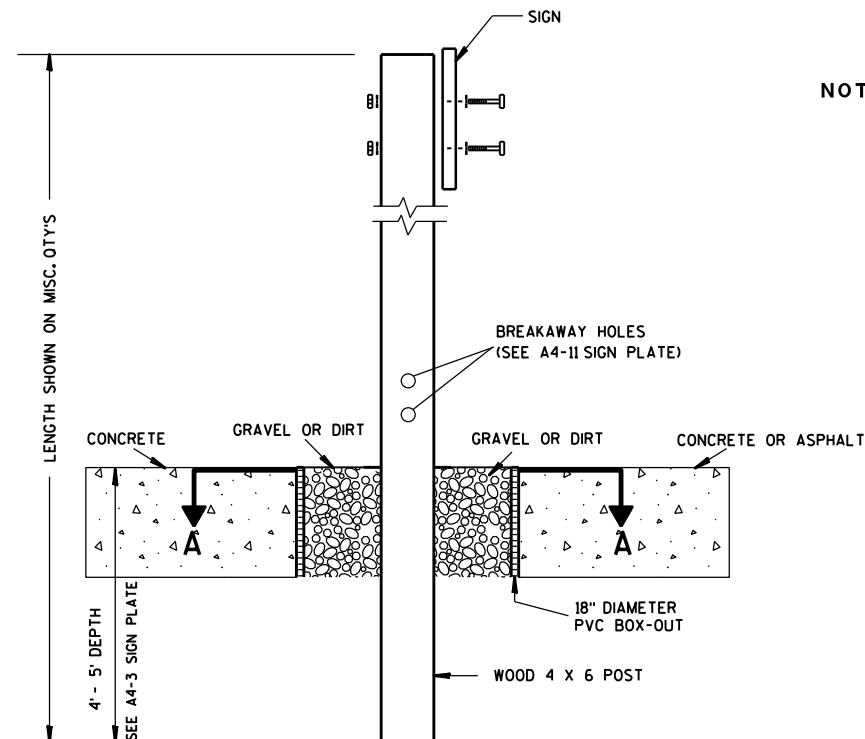
TYPICAL INSTALLATION
OF PERMANENT TYPE II
SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 7/23/15 PLATE NO. A4-3.20

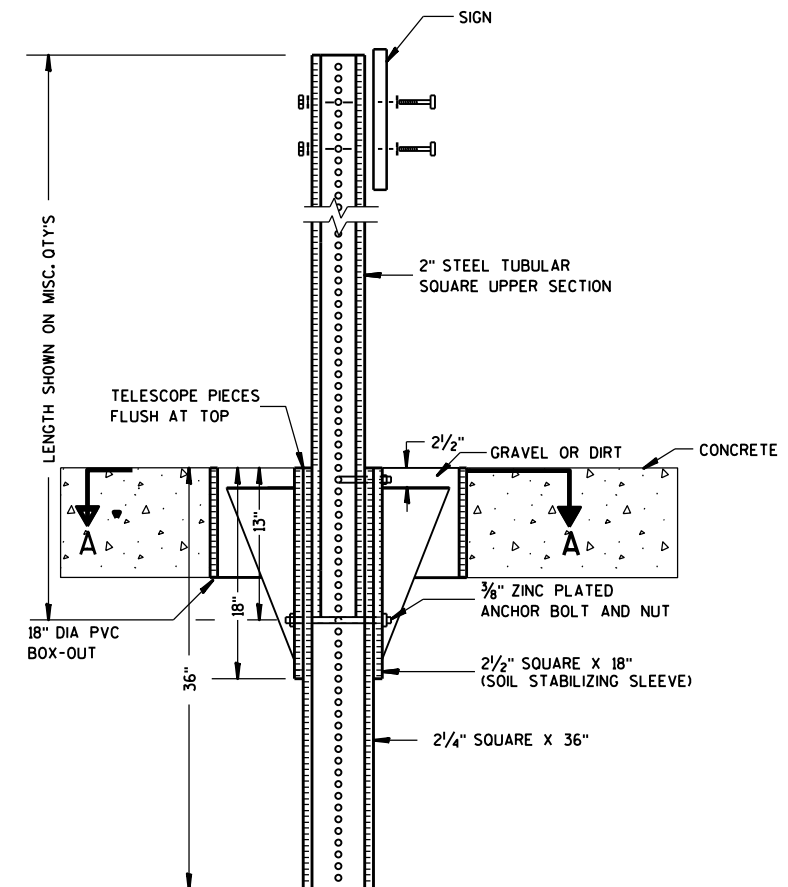
127



ELEVATION VIEW

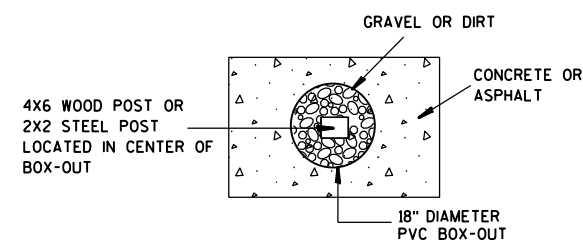
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

- NOTES:**
1. ALL MATERIAL TO BE APPROVED BY ENGINEER PRIOR TO INSTALLATION
 2. SEE SIGN PLATE A4-8 FOR SIGN HARDWARE REQUIREMENTS
 3. 18 INCH X 18 INCH SQUARE BOX-OUTS MAY BE USED FOR INSTALLATIONS IN EXISTING CONCRETE OR ASPHALT LOCATIONS.



ELEVATION VIEW

DETAIL OF STEEL 2 X 2 SIGN POST IN BOX-OUT



PLAN VIEW

FOR NEW CONCRETE/ASPHALT INSTALLATIONS

**SIGN POST
BOX-OUTS
A4-3B**

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 1/27/14 PLAT 128 A4-3B.1

PROJECT NO:

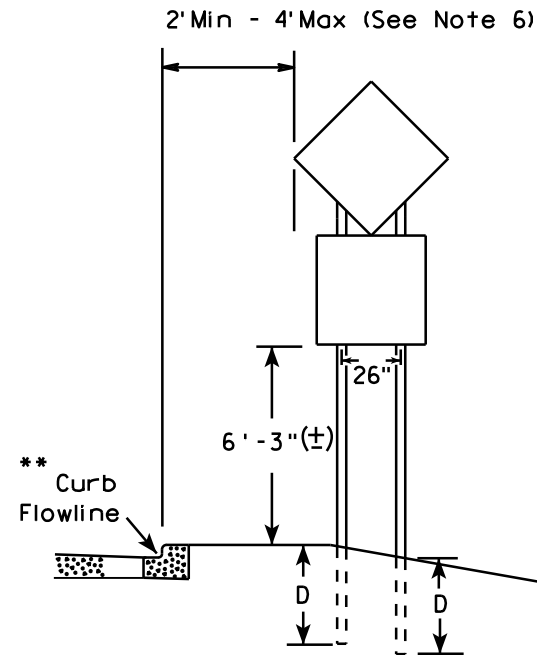
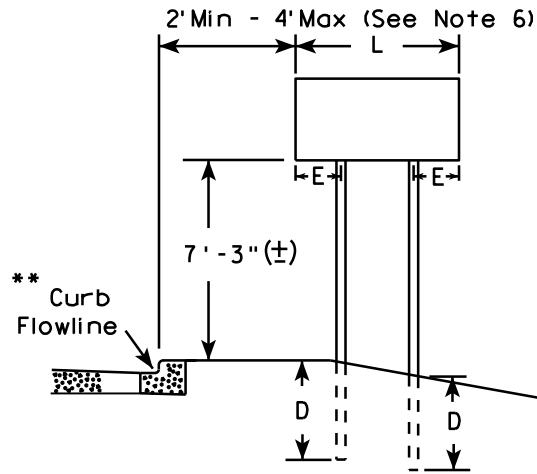
HWY:

COUNTY:

SHEET NO:

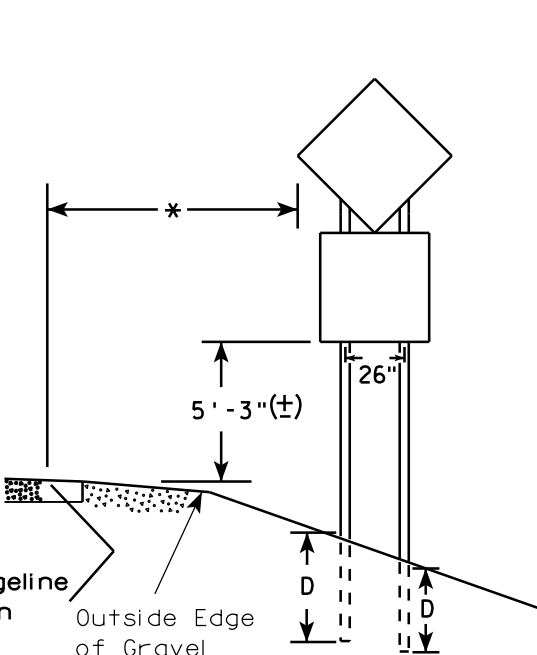
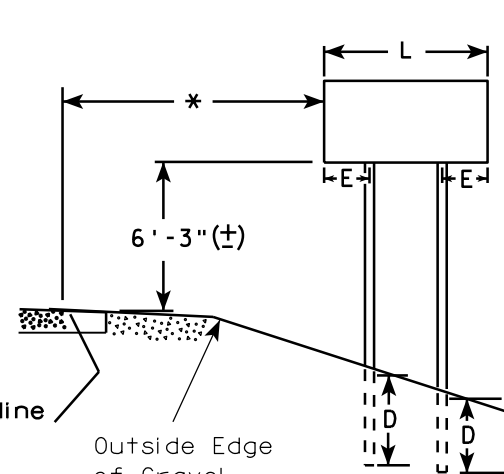
E

URBAN AREA



48" DIAMOND WARNING SIGN

RURAL AREA (See Note 3)



48" DIAMOND WARNING SIGN

GENERAL NOTES

1. For 3 or 4 post installations, individual post spacing shall be greater than 3'-6".
2. See tables below for required number of posts.
3. For expressways and freeways, mounting height is 7'-3" (±) or 6'-3" (±) depending upon existence of sub-sign.
4. The (±) tolerance for mounting height is 3 inches.
5. Minimum mounting height for J assemblies (A2-1S) is 7'-3" (±) or 6'-3" (±) per urban or rural detail respectively.
6. Offset distance shall be consistent with existing signs or consistent throughout length of project.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directed by the engineer.
8. The Double Arrow sign (W12-1) shall be mounted at a height of 2'-3" (±). The Chevron sign (W1-8), Roundabout Chevron panel (R6-4B), Clearance Markers (W5-52), Mile Markers (D10 series), In Road Object Markers (W5-54) & End of Road Markers (W5-56) shall be mounted at a height of 4'-3" (±).

* 6 feet from edge of a paved shoulder or 12 feet from the edge of pavement (edge line location) or 2 feet from outside edge of gravel, whichever is greater unless directed by project engineer.

** The existence of curb and gutter does not in itself mandate the vertical clearance illustrated. That height is typically measured where there is sidewalk adjacent to the roadway or parking is permitted. In the absence of sidewalk vertical clearance is measured from the top of the curb. Offset of signs is measured from the flow line.

*** See A4-3 sign plate for signs 4' or less in width and less than 20 S.F. in area.

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 120"	L/5

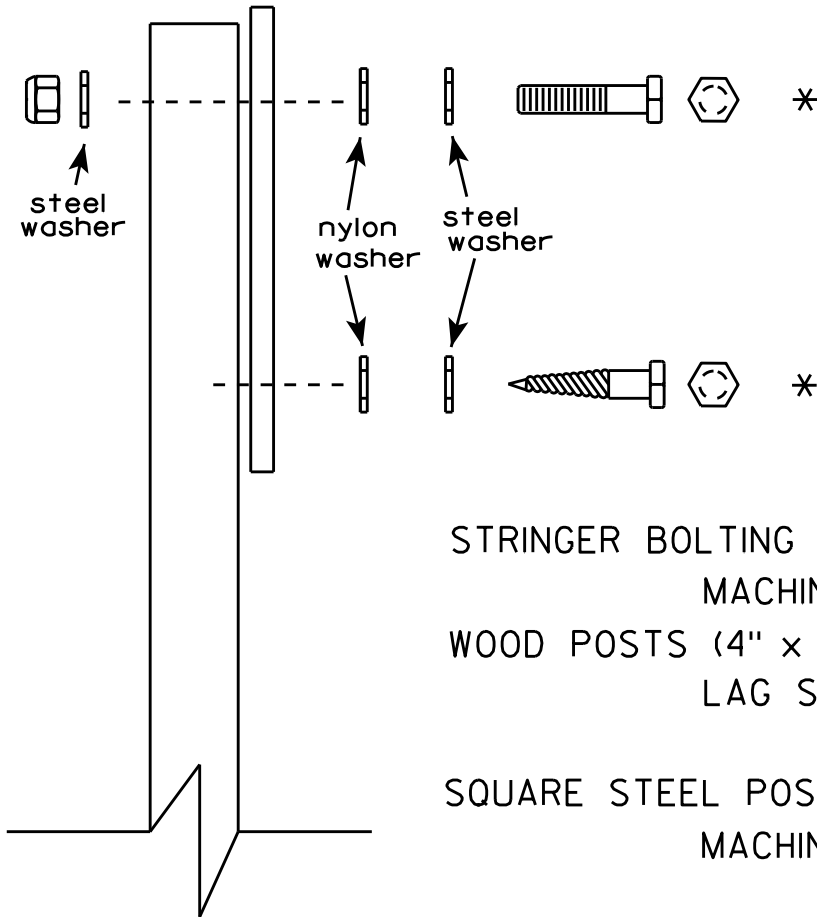
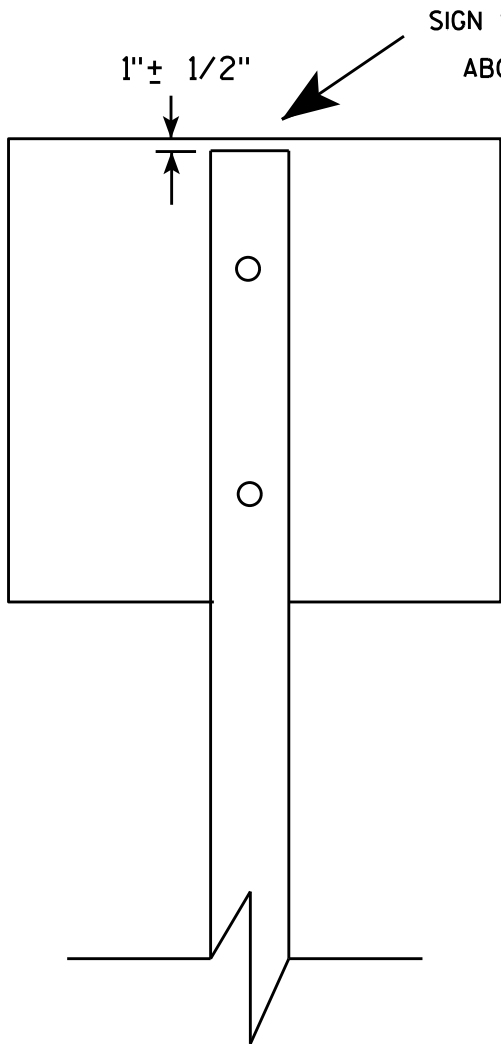
SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 120" less than 168"	12"

SIGN SHAPE OTHER THAN DIAMOND (FOUR POSTS REQUIRED)	
L	E
168" and greater	12"

POST EMBEDMENT DEPTH

Area of Sign Installation (Sq. Ft.)	D (Min)
20 or Less	4'
Greater than 20	5'

TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 7/23/15	PLATE NO. ^{A4-A} 129 14



Nuts, bolts and lags used for mounting signs shall have hexagonal heads and shall be either :

- a. Hot dip galvanized in accordance with ASTM Designation: A 153, Class D, or SC 3
- b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3.

Threads on bolts and nuts shall be manufactured with sufficient allowance for the cadmium plate or galvanized coating to permit the nuts to run freely on the bolts.

- STRINGER BOLTING TO ALUMINUM SIGNS (SEE SIGN PLATE A4-18)
- MACHINE BOLTS - $\frac{5}{16}$ " X 1-3/4" Length w/ nuts
- WOOD POSTS (4" x 4" or 4" x 6")
- LAG SCREWS - $\frac{3}{8}$ " X 3" (NO STRINGERS ON BACK OF SIGN)
 - $\frac{3}{8}$ " X 4" (STRINGERS ON BACK OF SIGN)
- SQUARE STEEL POSTS (2" x 2")
- MACHINE BOLTS - $\frac{3}{8}$ " X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
 - $\frac{3}{8}$ " X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)
- RIVETS - $\frac{9}{32}$ " (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL
- O.D. FLANGE .720-.765 INCH, GRIP RANGE .042-.375 INCH
- WASHERS (ALL POSTS) -
- 1-1/4" O.D. X $\frac{3}{8}$ " I.D. X $\frac{1}{16}$ " STEEL
 - 1-1/4" O.D. X $\frac{3}{8}$ " I.D. X .080 NYLON

* Two different fastening systems are shown for illustration purposes. On any individual sign, either one or the other system shall be used. Actual number of fasteners per sign varies with the sign area, but normally there are two. For a single post installation, all signs greater than 9 sq. ft. require the use of 3 fasteners.

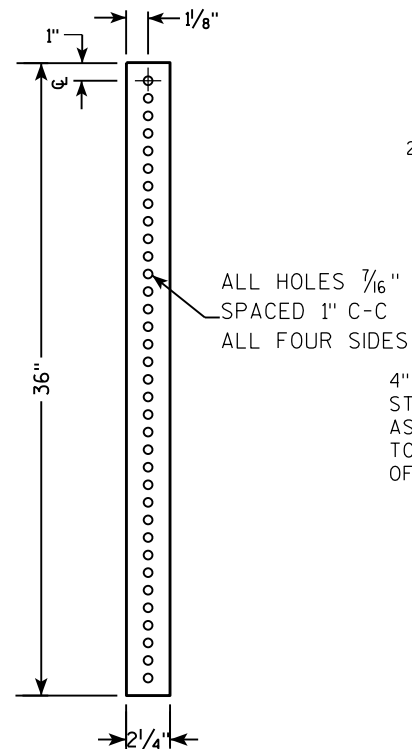
ATTACHMENT OF SIGNS
TO POSTS

WISCONSIN DEPT OF TRANSPORTATION

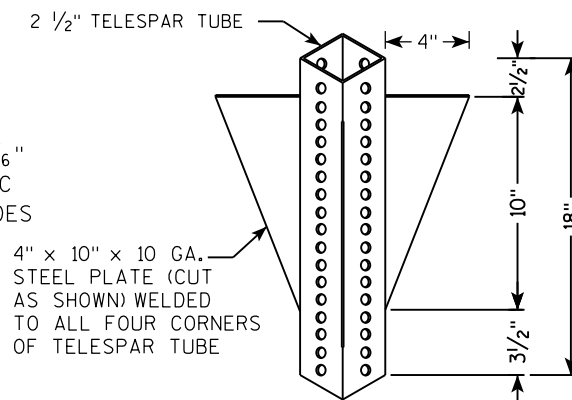
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 4/27/16 PLATE NO. A4-8.8
130

**2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH**



**2 1/2" SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH**



LENGTH SHOWN ON MISC. QTY'S
 18" DIA SCHEDULE 40 PVC BOX-OUT
 TELESCOPE PIECES FLUSH AT TOP
 2" STEEL TUBULAR SQUARE UPPER SECTION
 ALL HOLES $\frac{7}{16}$ " SPACED 1" C-C ALL FOUR SIDES
 $\frac{3}{8}$ " ZINC PLATED CORNER ANCHOR BOLT AND NUT
 2" GRAVEL OR DIRT
 $\frac{3}{8}$ " ZINC PLATED ANCHOR BOLT AND NUT
 2" SQUARE X 18" (SOIL STABILIZING SLEEVE)
 2" SQUARE X 36"
 SEE SIGN PLATE A4-8 FOR BOLT WASHER, & NUT MATERIAL
 SIGN

LENGTH SHOWN ON MISC. QTY'S

TELESCOPE PIECES FLUSH AT TOP

2" STEEL TUBULAR SQUARE UPPER SECTION

ALL HOLES $\frac{7}{16}$ " SPACED 1" C-C ALL FOUR SIDES

$\frac{3}{8}$ " ZINC PLATED CORNER ANCHOR BOLT AND NUT

1"

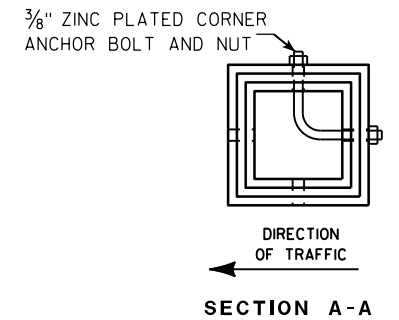
$\frac{3}{8}$ " ZINC PLATED ANCHOR BOLT AND NUT

2 1/2" SQUARE X 18" (SOIL STABILIZING SLEEVE)

2 1/4" SQUARE X 36"

SIGN

SEE SIGN PLATE A4-8 FOR BOLT WASHER, & NUT MATERIAL



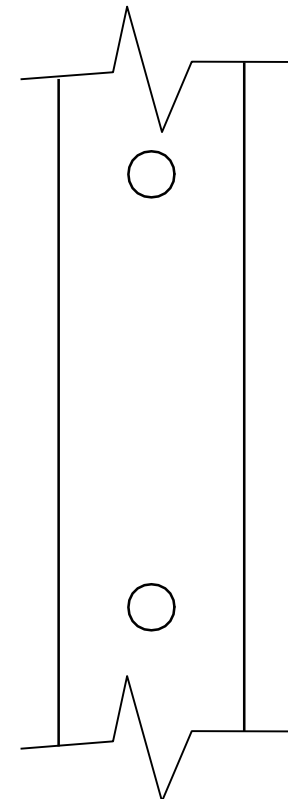
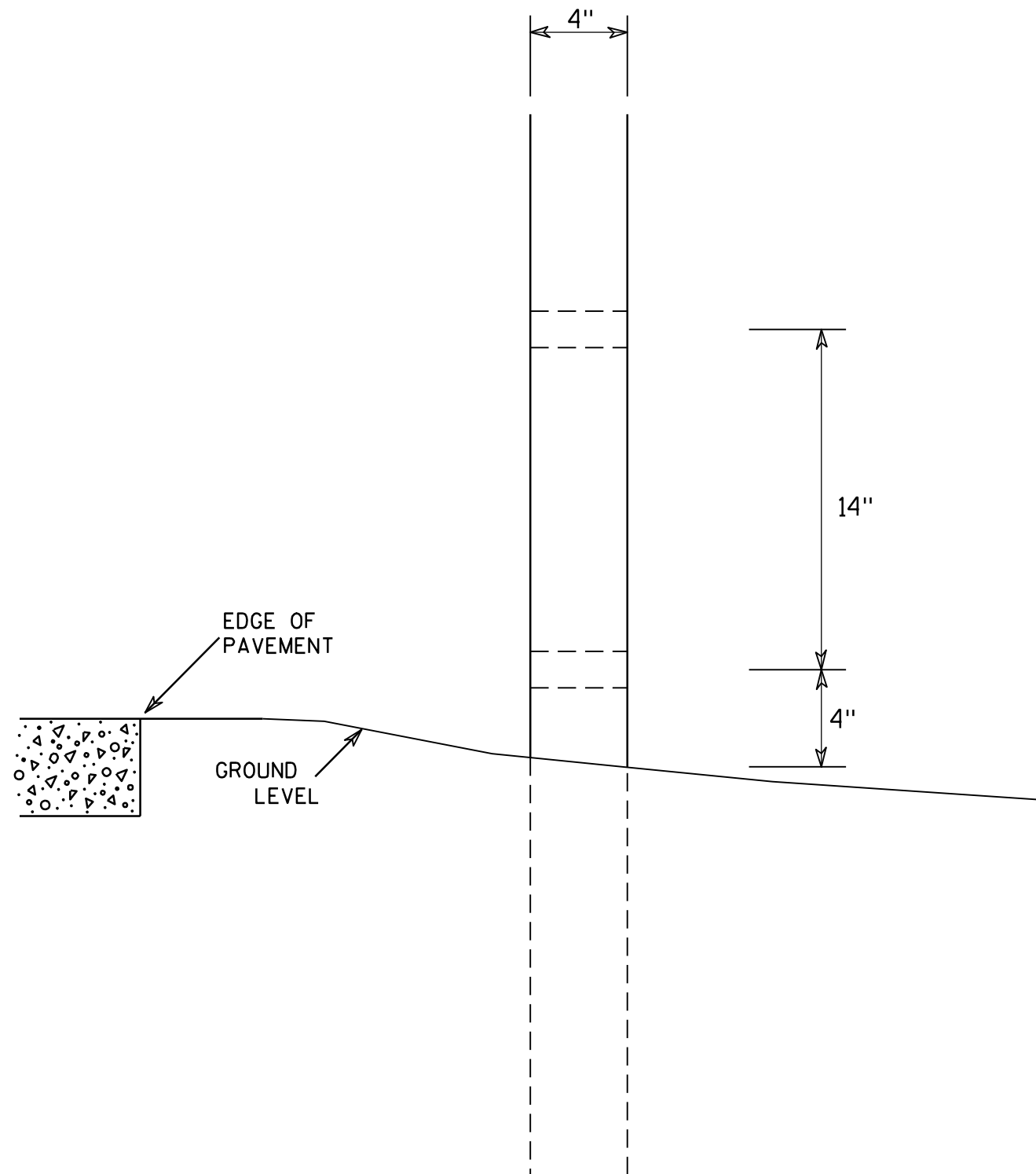
Area of Sign Installation (Sq. Ft.)	Number of Required Posts
9 or less	1
Greater than 9 less than or equal to 18	2
Greater than 18 less than or equal to 27	3

TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 2/05/15 PLAT 131 14-9.9



SIDE VIEW

GENERAL NOTES

1. All 4 x 6 Wood Posts shall be modified by having two 1½" diameter holes drilled perpendicular to the roadway centerline.

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

Chester J. Spang
for State Traffic Engineer

DATE 3/27/97

PLATE NO. A4-11.2

PROJECT NO:

HWY:

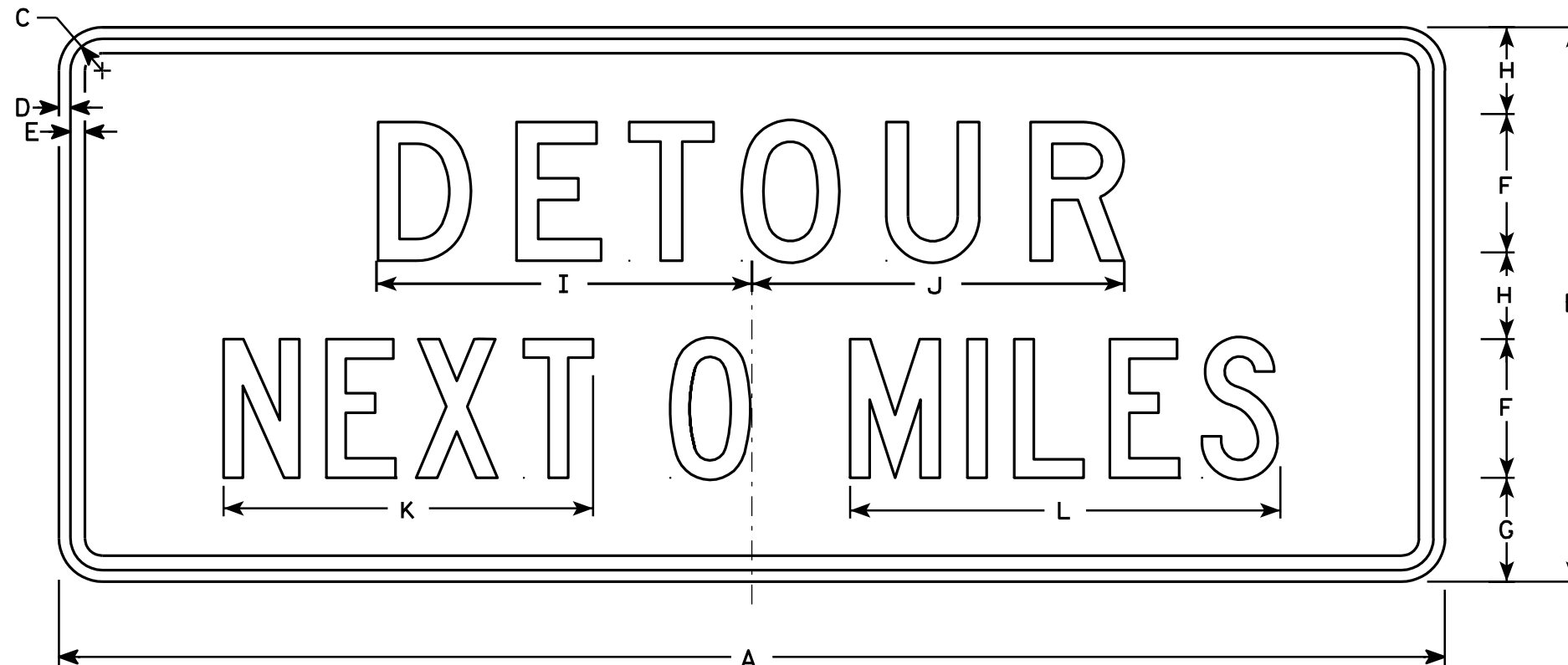
COUNTY:

SHEET NO: 132

E

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Message Series - Line 1 is D and Line 2 is C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance



G20-51

Metric equivalent
for this sign is:

SIZE	
1	
2	1500 mm X 600 mm
3	
4	1500 mm X 600 mm
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1																												
2	60	24	1 3⁄8	1⁄2	5⁄8	6	4 1⁄2	3 3⁄4	16 1⁄4	16 1⁄8	16	18 5⁄8															10	.90
3																												
4	60	24	1 3⁄8	1⁄2	5⁄8	6	4 1⁄2	3 3⁄4	16 1⁄4	16 1⁄8	16	18 5⁄8															10	.90
5																												

STANDARD SIGN
G20-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

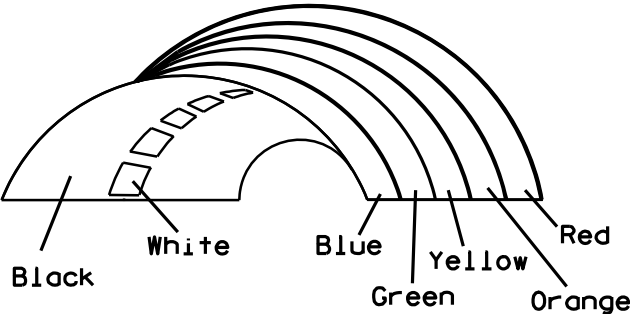
DATE 12/20/02 PLATE NO. G20-51.1

PROJECT NO: HWY: COUNTY: SHEET NO: 133 E



* VARIES

Background Colors of Symbol*



*1/4" Black Border between each color of rainbow and border of rainbow

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - (See Note 5)
3. Message Series - (See Note 6)
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Border - Blue
Line 1 - Red
Line 2 - Black
Line 3-5 - Blue
6. Line 1 - Dutch 8011L
Line 2 - Series E
Line 3-5 - Series C
7. Contractor shall provide and install a new post bracket in accordance with the I55-56B sign detail.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	30	36	1 1/2	1/2	5/8	3	2	3 1/2	2 7/8	1	8	2 1/8	11 1/4	11 1/8	9 3/8	1 1/4		3/4	12 5/8	7 1/2							7.5
3																											
4																											
5																											

PROJECT NO:

HWY:

COUNTY:

SHEET NO: 134

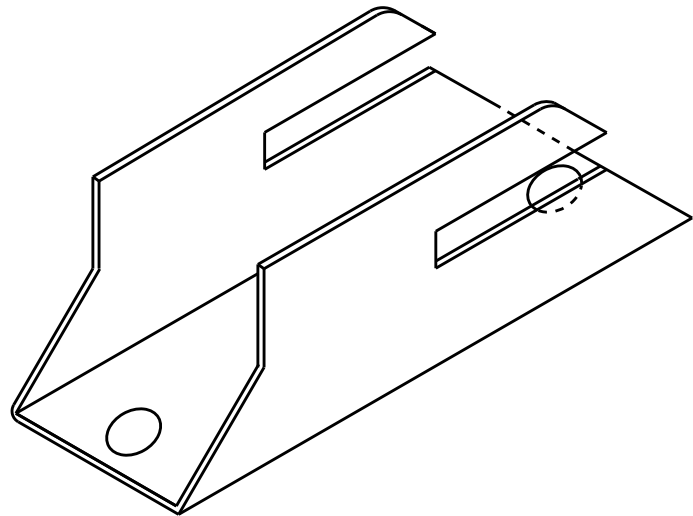
STANDARD SIGN
I55-56

WISCONSIN DEPT OF TRANSPORTATION

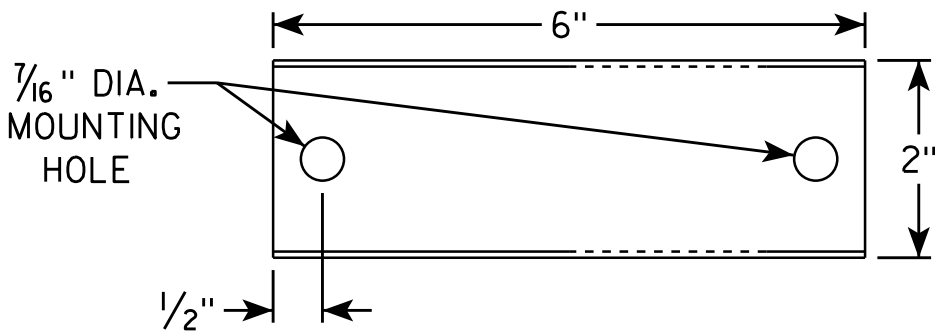
APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 4/27/11 PLATE NO. I55-56.3

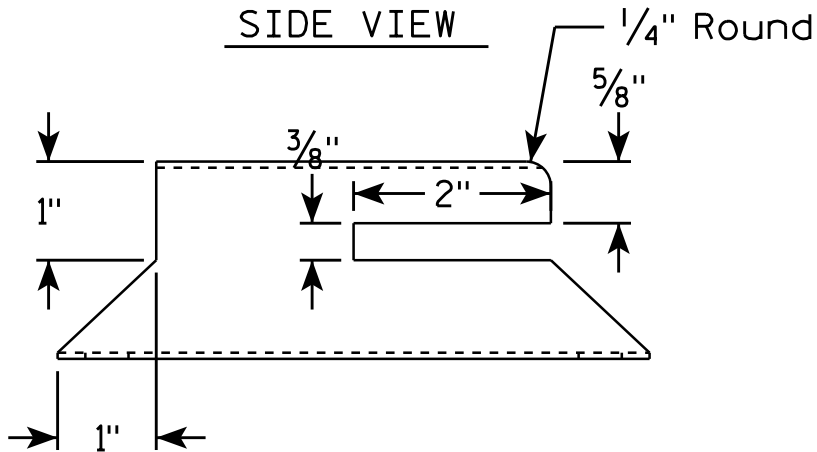
ISOMETRIC VIEW



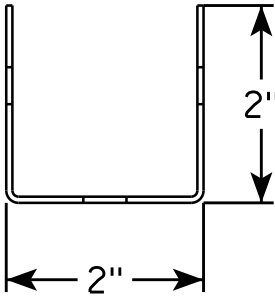
TOP VIEW



SIDE VIEW



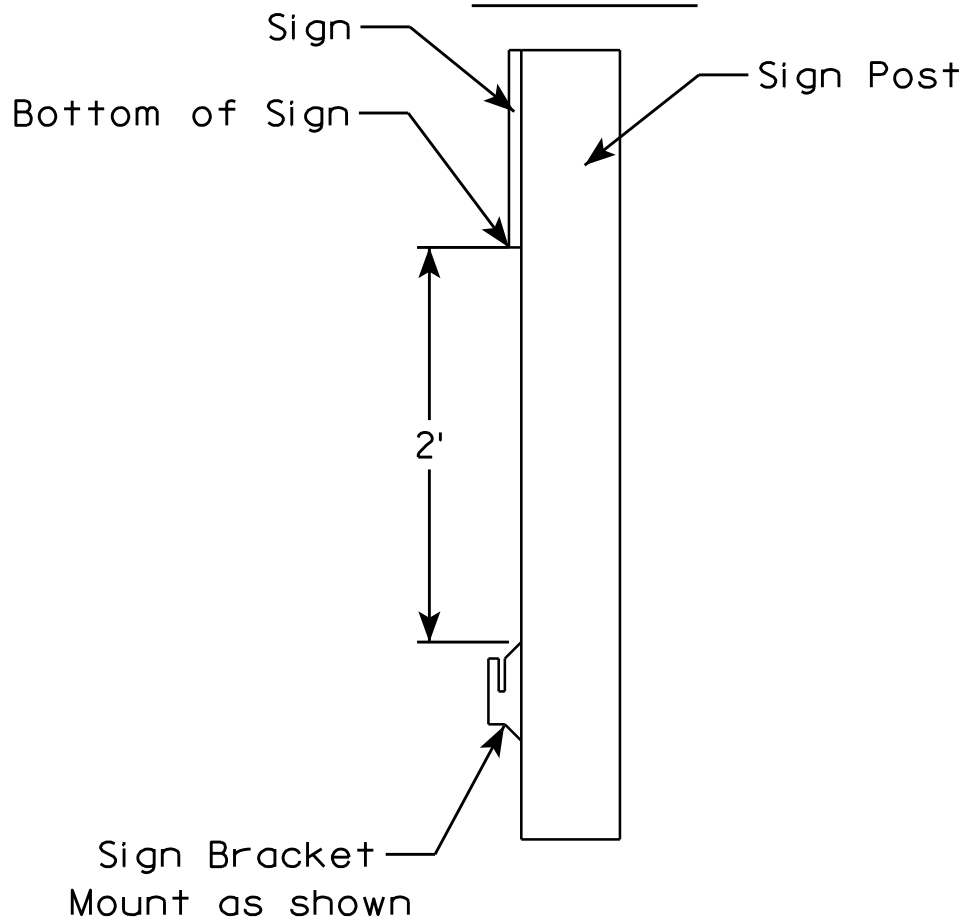
END VIEW



NOTES

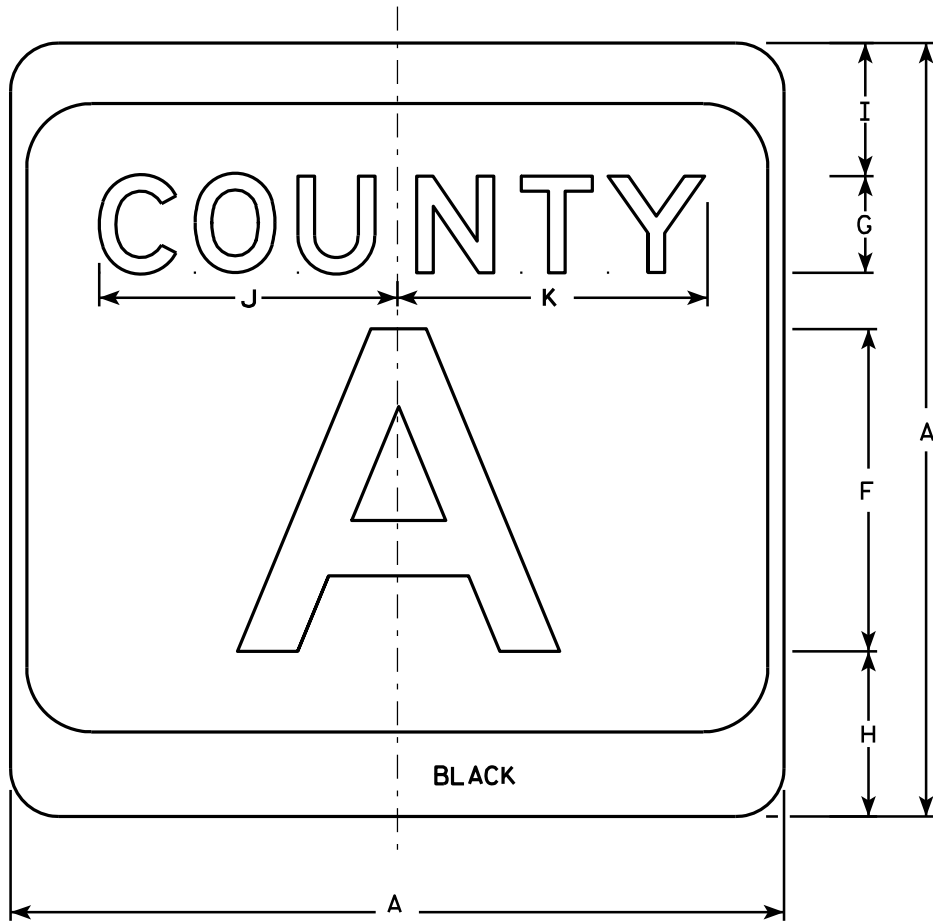
1. Must be capable of permanent attachment to a wood or steel channel sign post utilizing the fastening hardware specified on the A4-8 sign plate.
2. Shall be entirely primed and painted with two coats of a black powder coated enamel paint.
3. Shall be made with 12 gauge steel, and incorporate no welds, no hinged components, no threaded lock-type components, and no parts which are loose or can be separated from the main body.
4. Shall have rounded edges with at least 1/8" radii.
5. Shall not have unrounded and uncoated metal edges which can contact the back surface of the roll-up sign.
6. Top of bracket shall be mounted 2' below the bottom of the I55-56 sign.
7. Cost of bracket and fastening hardware shall be incidental to the I55-56 sign.

SIDE VIEW

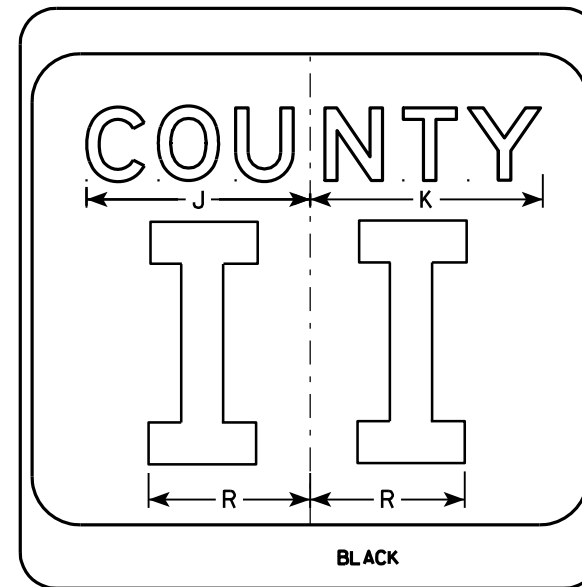
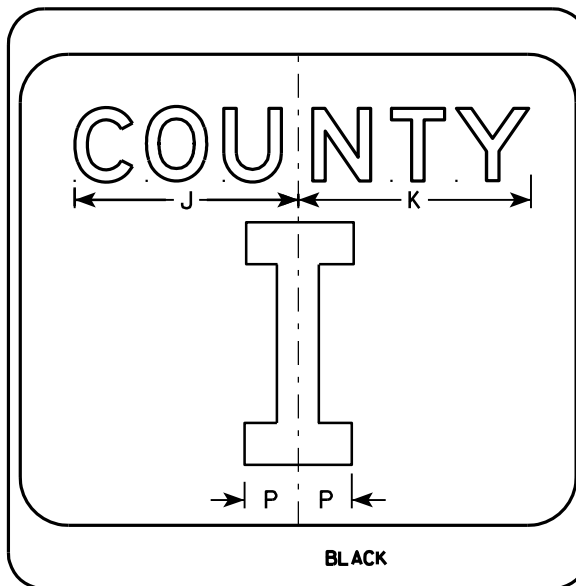
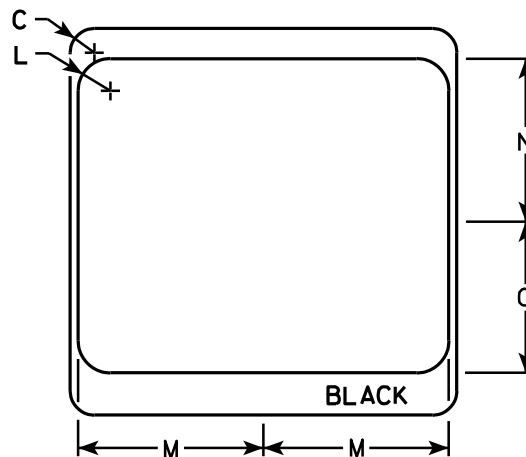


ROLLUP SIGN BRACKET I55-56B	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 4/26/16	PLA 135 I55-56B.2

7



M1-5A



NOTES

1. Sign is Type II - see Note 7 - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White & Black - See Note 7
Message - Black
3. Message Series - see Note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Message Series E for 1 letter.
Message Series D for 2 letters unless message is too big then Series C.
Message Series C for 3 letters unless message is too big then Series B.
6. Substitute appropriate letters & optically center to achieve proper balance.
7. Permanent Signs
Background - Type H Reflective
Detour or temporary Signs
Background - Reflective

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24		1 1/2			10	3	5 1/8	4 1/8	9 1/4	9 5/8	2	11 1/2	10 1/8	9 3/8	2 1/4		6 5/8									4.0
3	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
4	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0
5	36		2 1/4			16	4	7 5/8	5 5/8	12 1/4	12 7/8	3	17 1/8	15 1/4	14	3 3/8		10									9.0

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 136	E
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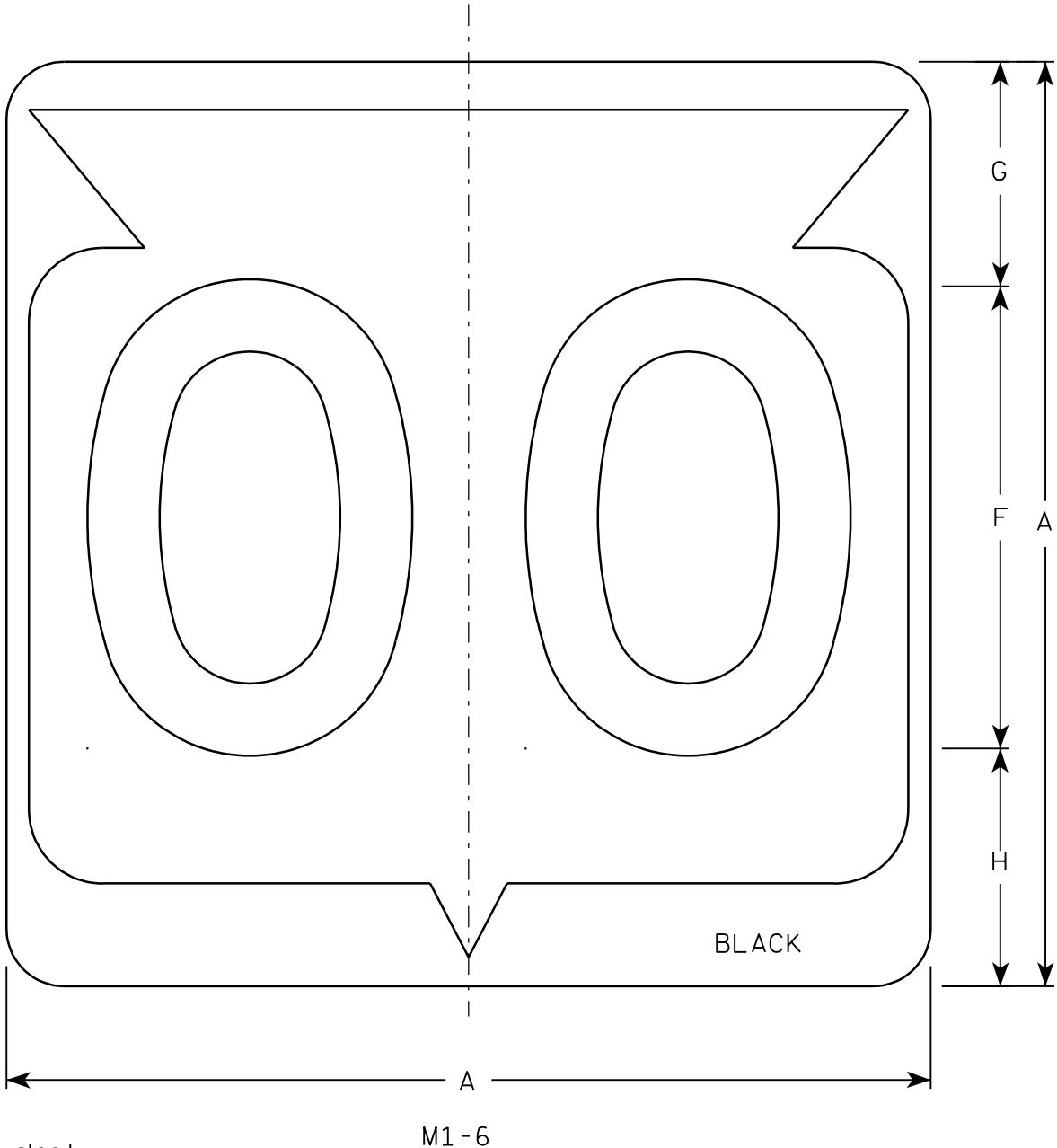
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 9/27/11 PLATE NO. M1-5A.8

7



Metric equivalent
for this sign is:

SIZE	
1	
2	600 mm X 600 mm
3	900 mm X 900 mm
4	900 mm X 900 mm
5	900 mm X 900 mm

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1																												
2	24		1 1/2			12	5 1/2	6 1/2	10 1/4	2 1/2	8 7/8	11 1/2	1	1 7/8	11 1/4	21 7/8											4.0	.36
3	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
4	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81
5	36		2 1/4			18	8 3/4	9 1/4	15 3/8	5 3/8	12 5/8	17 1/8	1 1/2	2 7/8	16 7/8	33											9.0	.81

PROJECT NO:

HWY:

COUNTY:

SHEET NO: 137

E

FILE NAME : C:\Users\Projects\tr_stdp\late\M16.DGN

PLOT DATE : 13-OCT-2005 14:55

PLOT BY : DITJPH

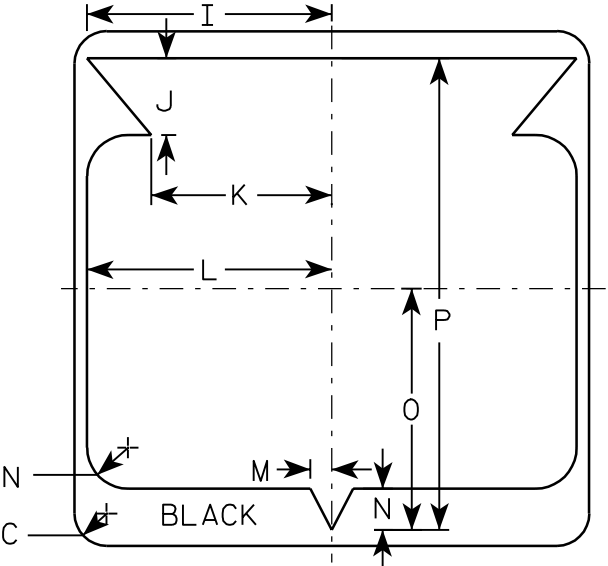
PLOT NAME :

PLOT SCALE : 6.715871:1.000000

WISDOT/CADDS SHEET 42

NOTES

1. Sign is Type II - See Note 6 - reference
WIS DOT Standard Specification for HIGHWAY
and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White & Black - See Note 6
Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base
material is plywood but borders shall be rounded
as shown. When base material is metal, the
corners and borders shall be rounded.
5. Substitute appropriate Series numerals and
adjust spacing as per plate A10-1.
6. Permanent Signs
Background - Type H Reflective
Detour or temporary Signs
Background - Reflective



STATE ROUTE MARKER
M1-6 FOR ASSEMBLIES

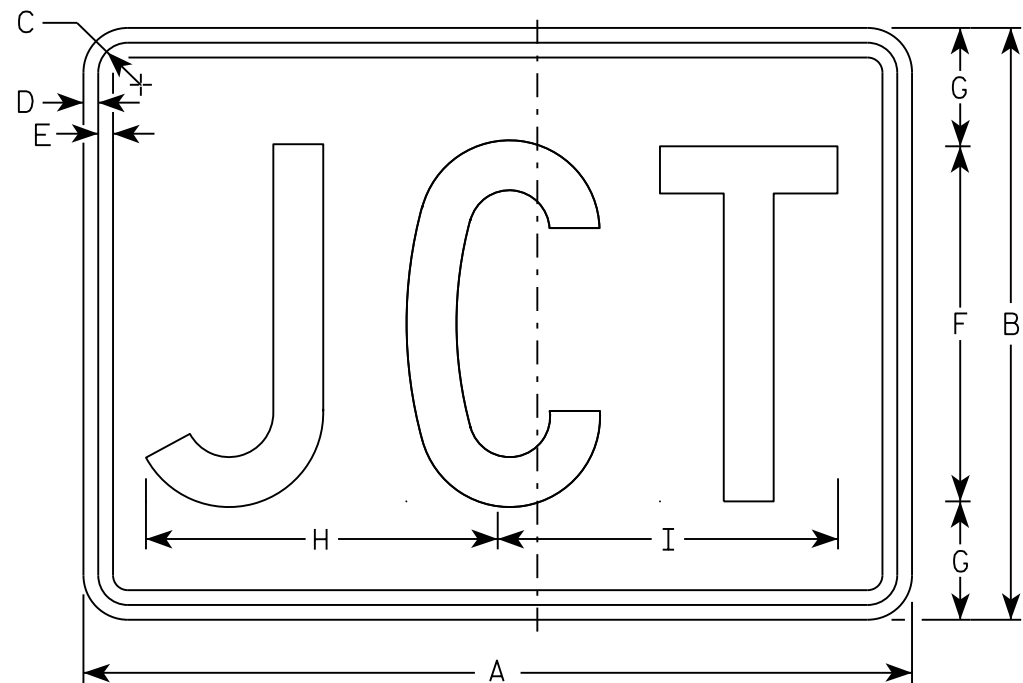
WISCONSIN DEPT OF TRANSPORTATION

APPROVED

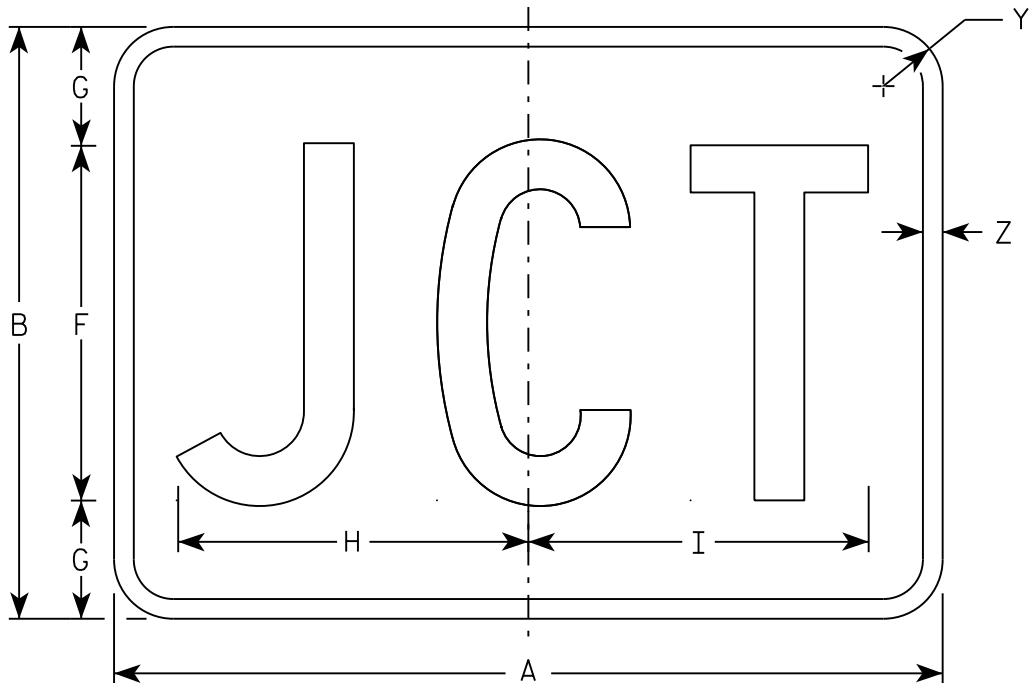
Chester J. Spang
for State Traffic Engineer

DATE 3/20/02

PLATE NO. M1-6.9



M2-1
MM2-1
MP2-1



MB2-1
MK2-1
MN2-1
MR2-1

NOTES

- 1. Sign is Type II - Type H
- 2. Color:
 - Background - See note 5
 - Message - See note 5
- 3. Message Series - C
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- 5. M2-1 Background - White
Message - Black
MB2-1 Background - Blue
Message - White
MK2-1 Background - Green
Message - White
MM2-1 Background - White
Message - Green
MN2-1 Background - Brown
Message - White
MP2-1 Background - White
Message - Blue
MR2-1 Background - Brown
Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21	15	1 1/8	3/8	3/8	9	3	8 7/8	8 5/8																1 1/2	1/2	2.20
3	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
4	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40
5	30	21	1 1/8	3/8	3/8	13	4	12 7/8	12 3/8																1 1/2	1/2	4.40

STANDARD SIGN

M2 - 1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED

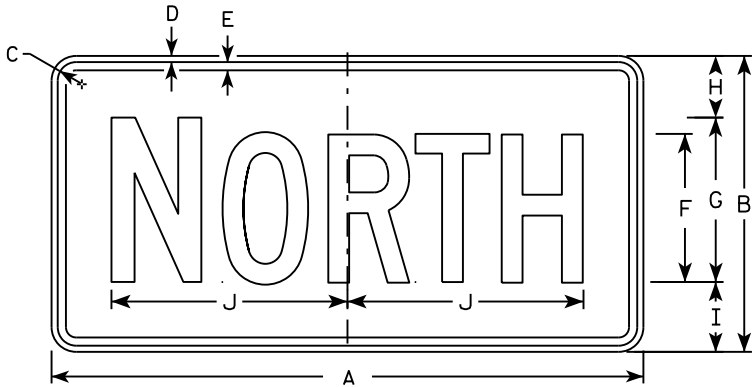
Matthew R. Rauch

For State Traffic Engineer

DATE 10/15/15

PLATE 138

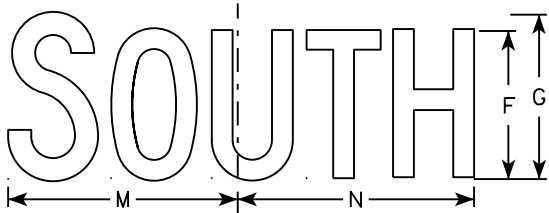
'2-1.12



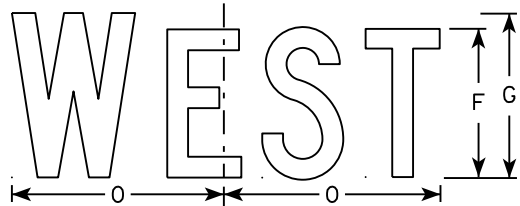
M3-1
MM3-1
MP3-1



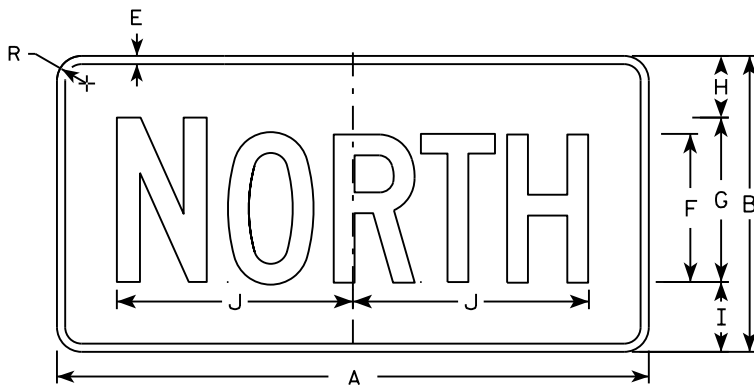
M3-2
MM3-2
MP3-2



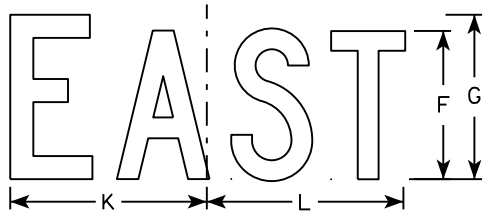
M3-3
MM3-3
MP3-3



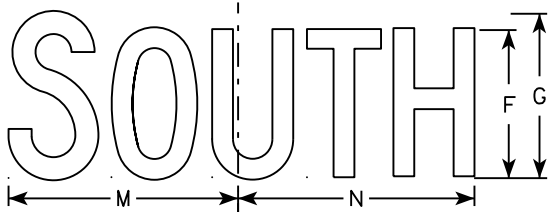
M3-4
MM3-4
MP3-4



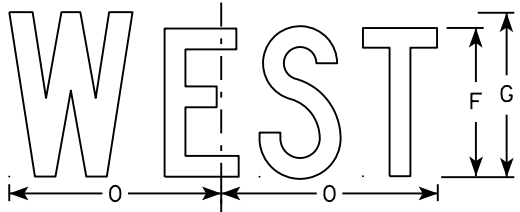
MB3-1
MK3-1
MN3-1



MB3-2
MK3-2
MN3-2



MB3-3
MK3-3
MN3-3



MB3-4
MK3-4
MN3-4

NOTES

1. All Signs Type II - Type H
2. Color:
Background - See note 5
Message - See note 5
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. M3-1 thru M3-4 Background - White
Message - Black
MB3-1 thru MB3-4 Background - Blue
Message - White
MK3-1 thru MK3-4 Background - Green
Message - White
MM3-1 thru MM3-4 Background - White
Message - Green
MN3-1 thru MN3-4 Background - Brown
Message - White
MP3-1 thru MP3-4 Background - White
Message - Blue
6. Note the first letter of each direction is larger than the remainder of the message.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	7	2 1/4	2 3/4	10 1/4	7 7/8	8 3/8	10 1/4	9 3/4	8 3/4			1 1/2									2.00
3	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
4	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5
5	36	18	1 1/8	3/8	1/2	9	10	3 3/4	4 1/4	14 3/8	12	12 1/8	14	14 1/8	13			1 1/2									4.5

STANDARD SIGNS
M3-1 thru M3-4
SERIES

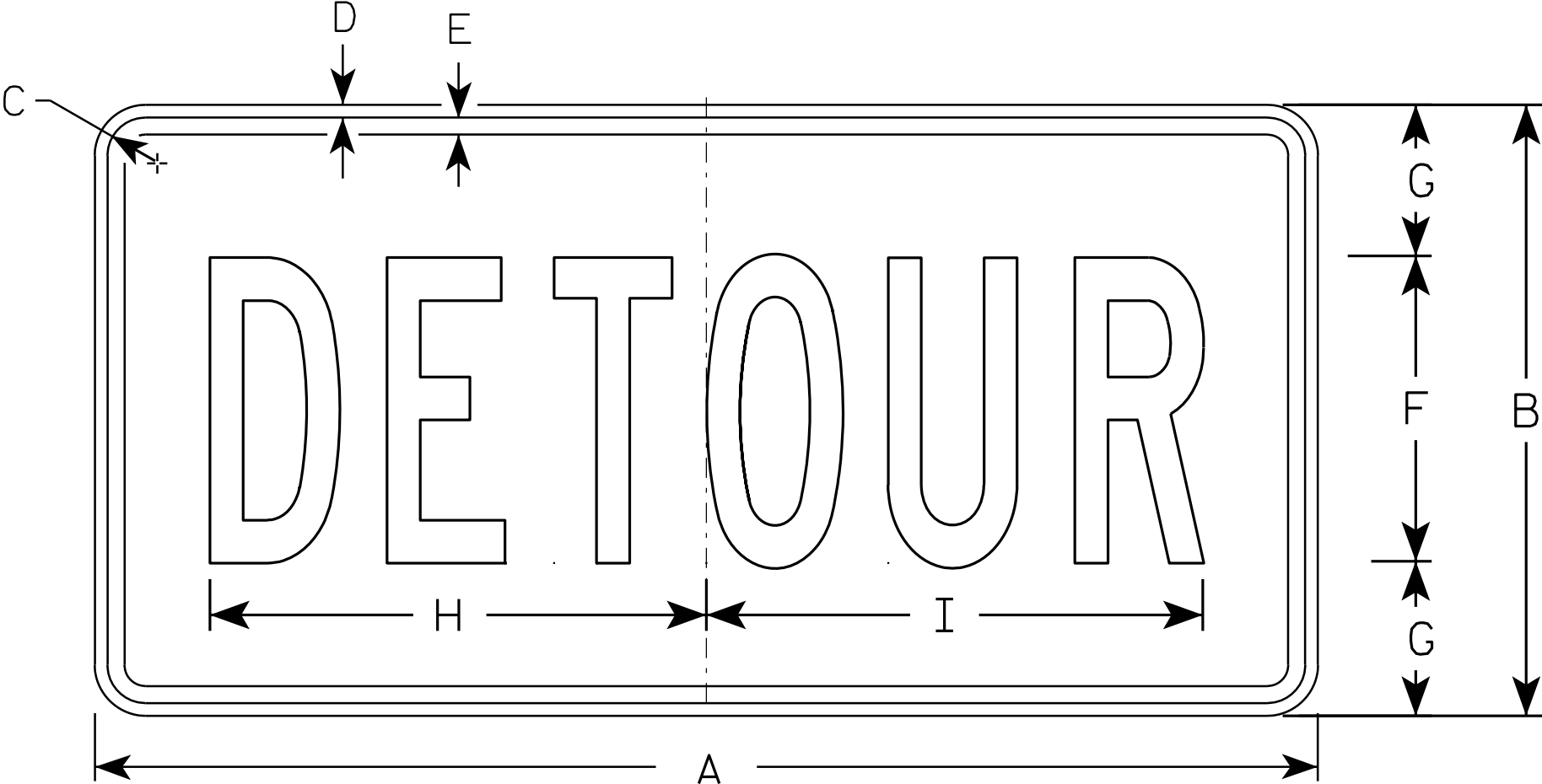
WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE NO. 139 M3-1.14

NOTES

- 1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
 - Background - Orange
 - Message - Black
- 3. Message Series - B
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



M4 - 8

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	12	1 1/8	3/8	3/8	6	3	10	10 1/4																		2.0
3	36	18	1 1/8	3/8	1/2	9	4 1/2	14 5/8	14 1/2																		4.5
4																											
5																											

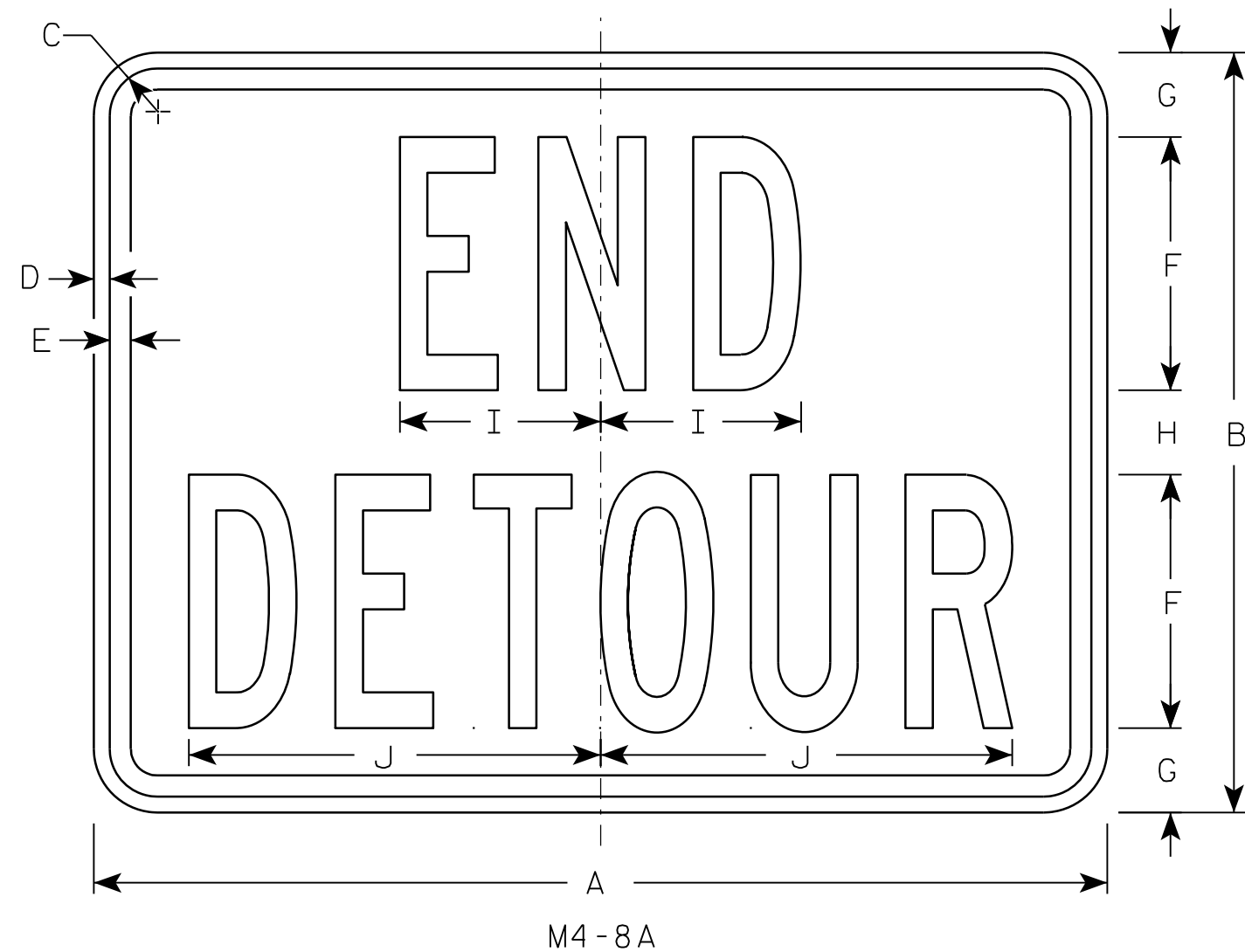
STANDARD SIGN
M4 - 8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 11/10/10 PLATE NO. M4-8.2

7



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	24	18	1 1/8	3/8	1/2	6	2	2	4 3/4	9 3/4																	3.0
3	30	24	1 1/8	3/8	1/2	8	2 1/2	3	6 3/4	13																	5.0
4																											
5																											

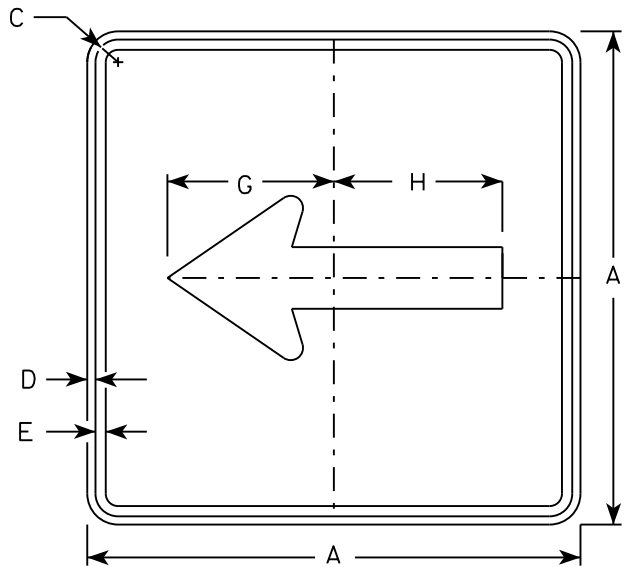
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 141	E
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STANDARD SIGN
M4-8A

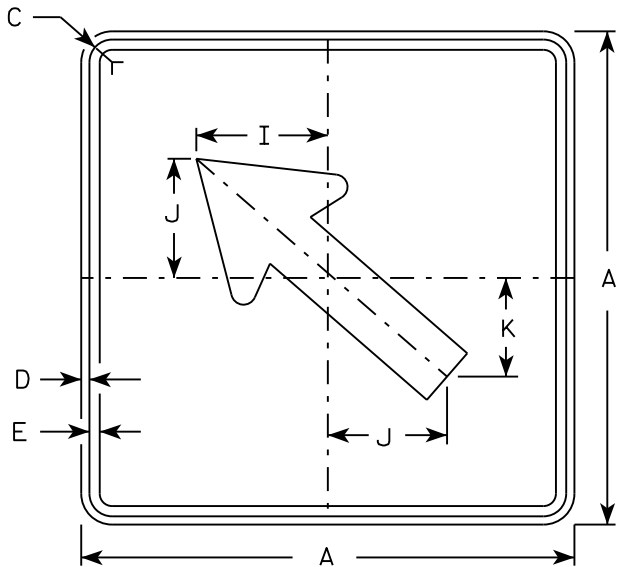
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

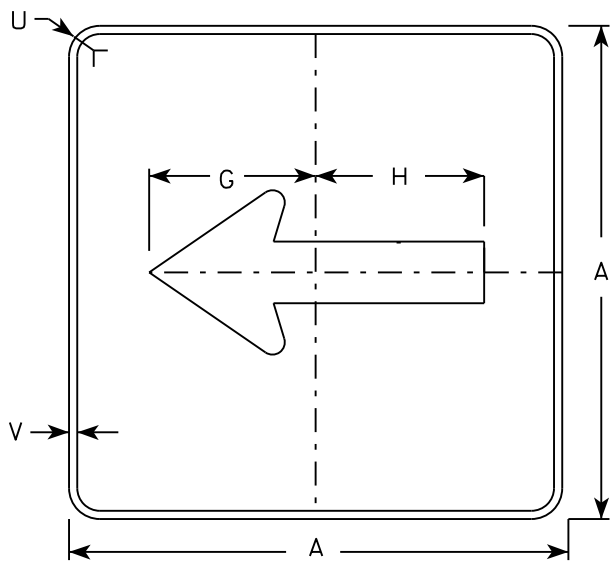
DATE 3/9/11 PLATE NO. M4-8A.2



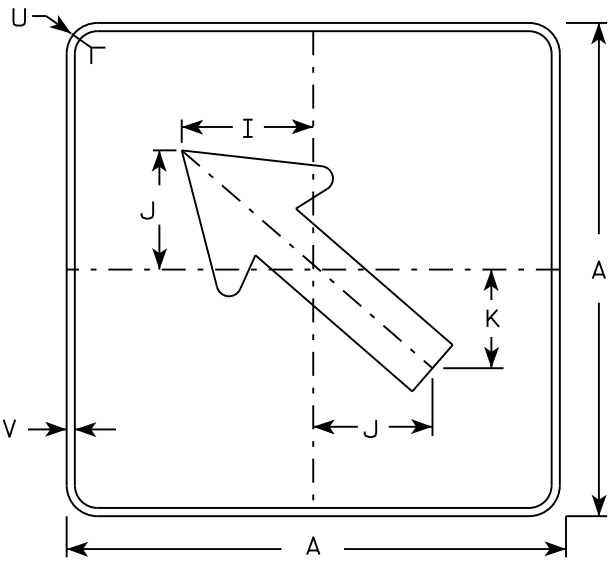
M6 - 1
MM6 - 1
M06 - 1
MP6 - 1



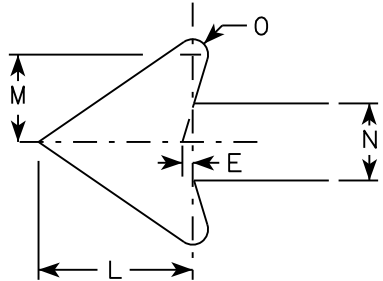
M6 - 2
MM6 - 2
M06 - 2
MP6 - 2



MB6 - 1
MK6 - 1
MN6 - 1
MR6 - 1



MB6 - 2
MK6 - 2
MN6 - 2
MR6 - 2



NOTES

- Signs are Type II - Type H except as Shown
- Color:
Background - See note 4
Message - See note 4
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- M6-1 and M6-2 Background - White
Message - Black
MB6-1 and MB6-2 Background - Blue
Message - White
MK6-1 and MK6-2 Background - Green
Message - White
MM6-1 and MM6-2 Background - White
Message - Green
MN6-1 and MN6-2 Background - Brown
Message - White
M06-1 and M06-2 Background - Orange - Type F Reflective
Message - Black
MP6-1 and MP6-2 Background - White
Message - Blue
MR6-1 and MR6-2 Background - Brown
Message - Yellow

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	7 1/8	5 5/8	5	4 1/4	5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 3/4	10 1/4	8	7 1/4	6	7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

PROJECT NO:

HWY:

COUNTY:

SHEET NO:

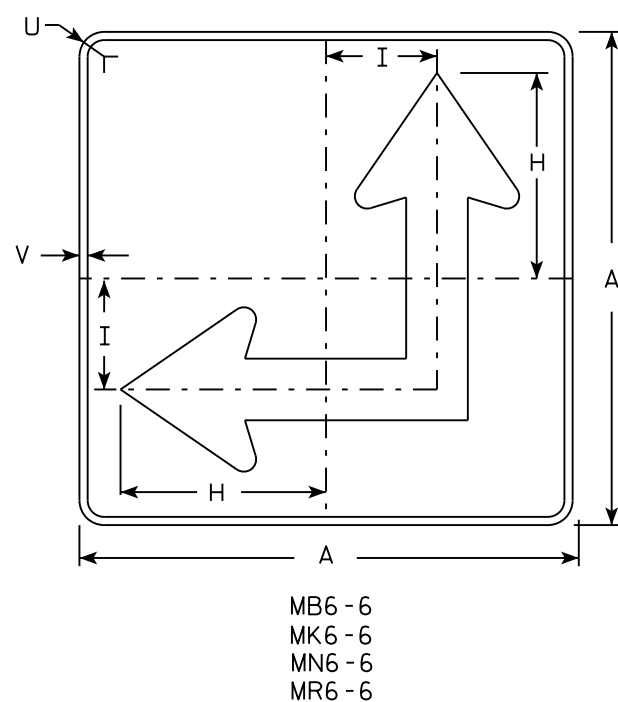
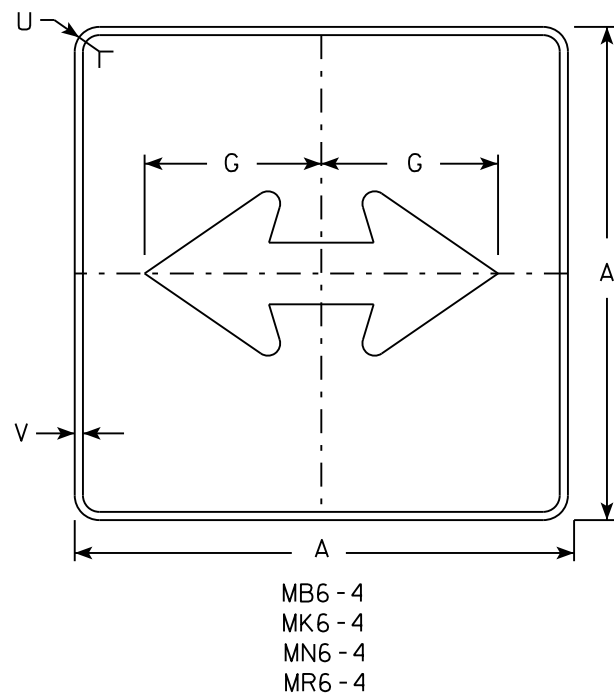
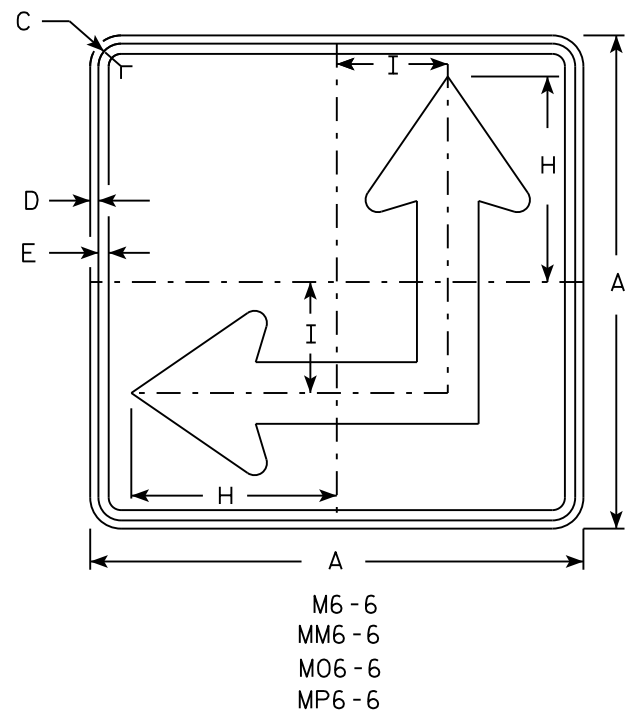
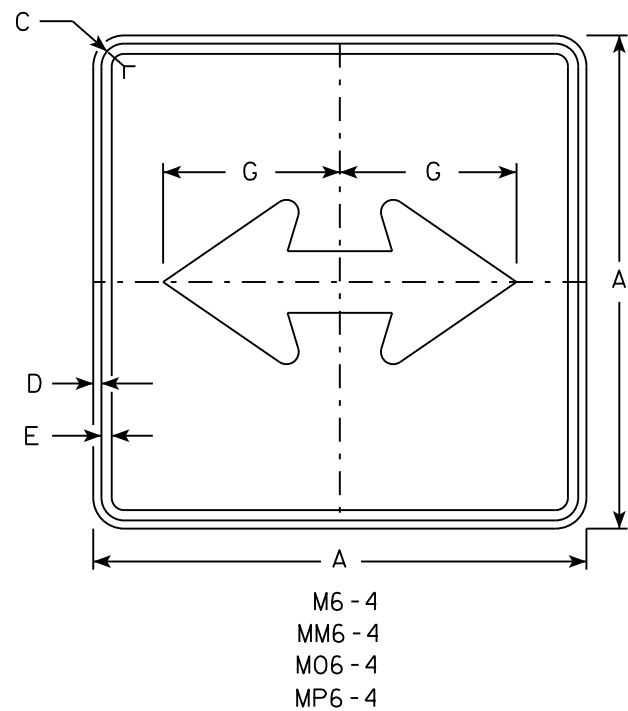
E

STANDARD SIGN
M6 - 1 & M6 - 2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

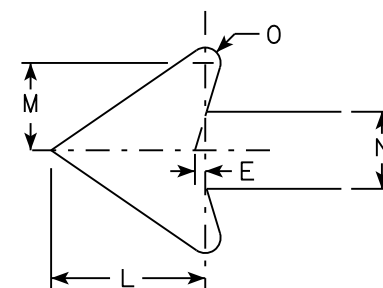
APPROVED
Matthew R. Rauch
for State Traffic Engineer

DATE 10/15/15 PLAT 142 M6-1.15



NOTES

- Signs are Type II - Type H except as Shown
- Color:
Background - See Note 4
Message - See Note 4
- Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
- M6-4 and M6-6 Background - White
Message - Black
MB6-4 and MB6-6 Background - Blue
Message - White
MK6-4 and MK6-6 Background - Green
Message - White
MM6-4 and MM6-6 Background - White
Message - Green
MN6-4 and MN6-6 Background - Brown
Message - White
M06-4 and M06-6 Background - Orange - Type F Reflective
Message - Black
MP6-4 and MP6-6 Background - White
Message - Blue
MR6-4 and MR6-6 Background - Brown
Message - Yellow
- M6-6R same as M6-6L except arrow points ahead and right.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		7 1/2	8 3/4	4 1/4			5 1/4	3	2 5/8	1/2						1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
4	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25
5	30		1 3/8	1/2	5/8		10 3/4	12 1/2	6 3/4			7 1/2	4 1/4	3 3/4	3/4						1 7/8	1/2					6.25

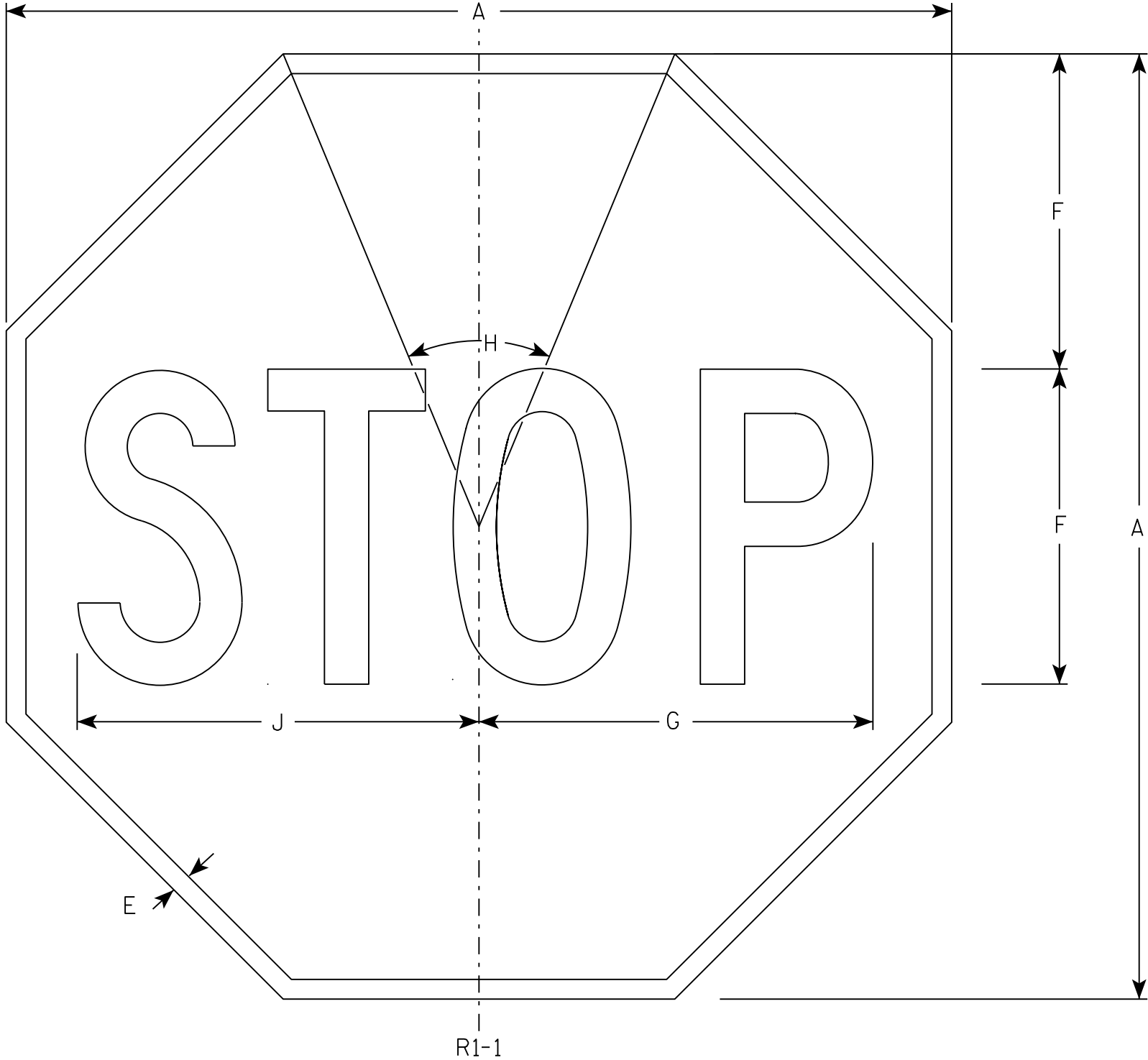
PROJECT NO:	HWY:	COUNTY:	PLAT 143	SHEET NO:	E
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STANDARD SIGN
M6 - 4 & M6 - 6
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 10/15/15 PLAT 143 M6-4.10



NOTES

- 1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - Red
Message - White
- 3. Message Series - C

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2S	30				5/8	10	12 1/2	45°		12 3/4																	5.18
2M	36				3/4	12	15	45°		15 3/8																	7.46
3	36				3/4	12	15	45°		15 3/8																	7.46
4	48				1	16	20	45°		20 1/2																	13.25
5	48				1	16	20	45°		20 1/2																	13.25
6	18				3/8	6	7 3/4	45°		7 3/4																	1.86
7	12				1/4	4	5	45°		5 1/8																	0.78

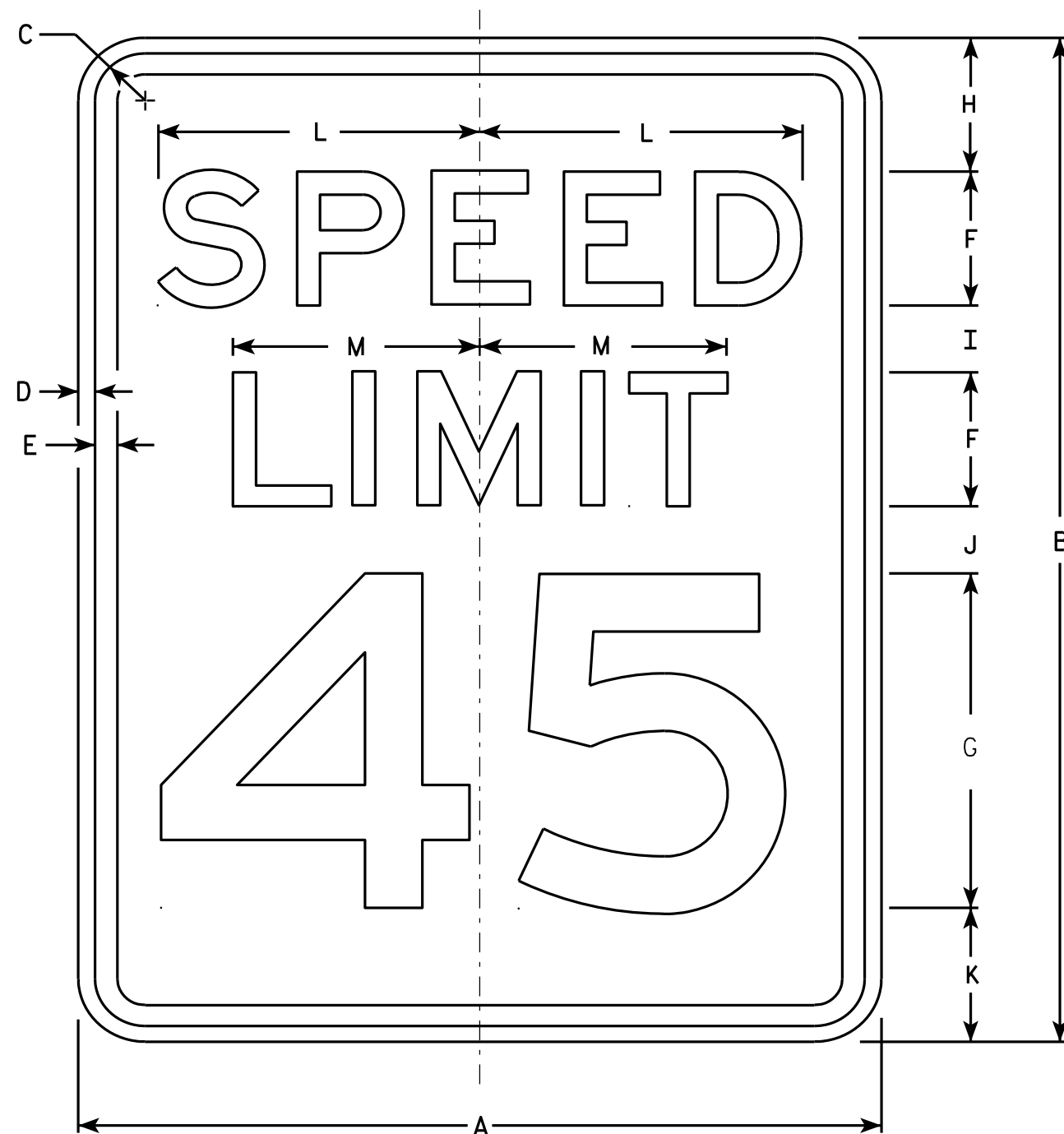
STANDARD SIGN

R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/12/15 PLATE 144 R1-1.13



R2-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - E
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3	8	3	2	2	3	7 1/4	5 1/2														3.0
2S	24	30	1 1/8	3/8	1/2	4	10	3	2 1/4	3 3/8	3 3/8	9 5/8	7 3/8														5.0
2M	30	36	1 3/8	1/2	5/8	5	12	5	2 1/2	2 1/2	4	12	9 1/4														7.5
3	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
4	36	48	1 3/8	1/2	5/8	6	14	6	5	5	6	14 3/8	11														12.0
5	48	60	2 1/4	3/4	1	8	20	6	4 1/2	6 3/4	6 3/4	19 1/4	14 5/8														20.0

STANDARD SIGN R2-1

WISCONSIN DEPT OF TRANSPORTATION
APPROVED *Matthew R. Rauch*
For State Traffic Engineer
DATE 5/26/10 PLATE NO. R2-1.13

PROJECT NO: HWY: COUNTY: SHEET NO: 145 E



R2-6P

NOTES

- 1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - White
Message - Black
- 3. Message Series - D
- 4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	18	1 1/8	3/8	3/8	4	3 1/2	3	7 5/8	9 1/4																	3.0
2M	24	18	1 1/8	3/8	3/8	4	3 1/2	3	7 5/8	9 1/4																	3.0
3	36	24	1 1/8	3/8	1/2	6	4 1/8	3 3/4	12	14																	6.0
4	36	24	1 1/8	3/8	1/2	6	4 1/8	3 3/4	12	14																	6.0
5	48	36	1 3/8	1/2	5/8	8	7	6	15 1/8	19																	12.0

STANDARD SIGN
R2-6P

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 12/20/10 PLATE NO. R2-6P.2

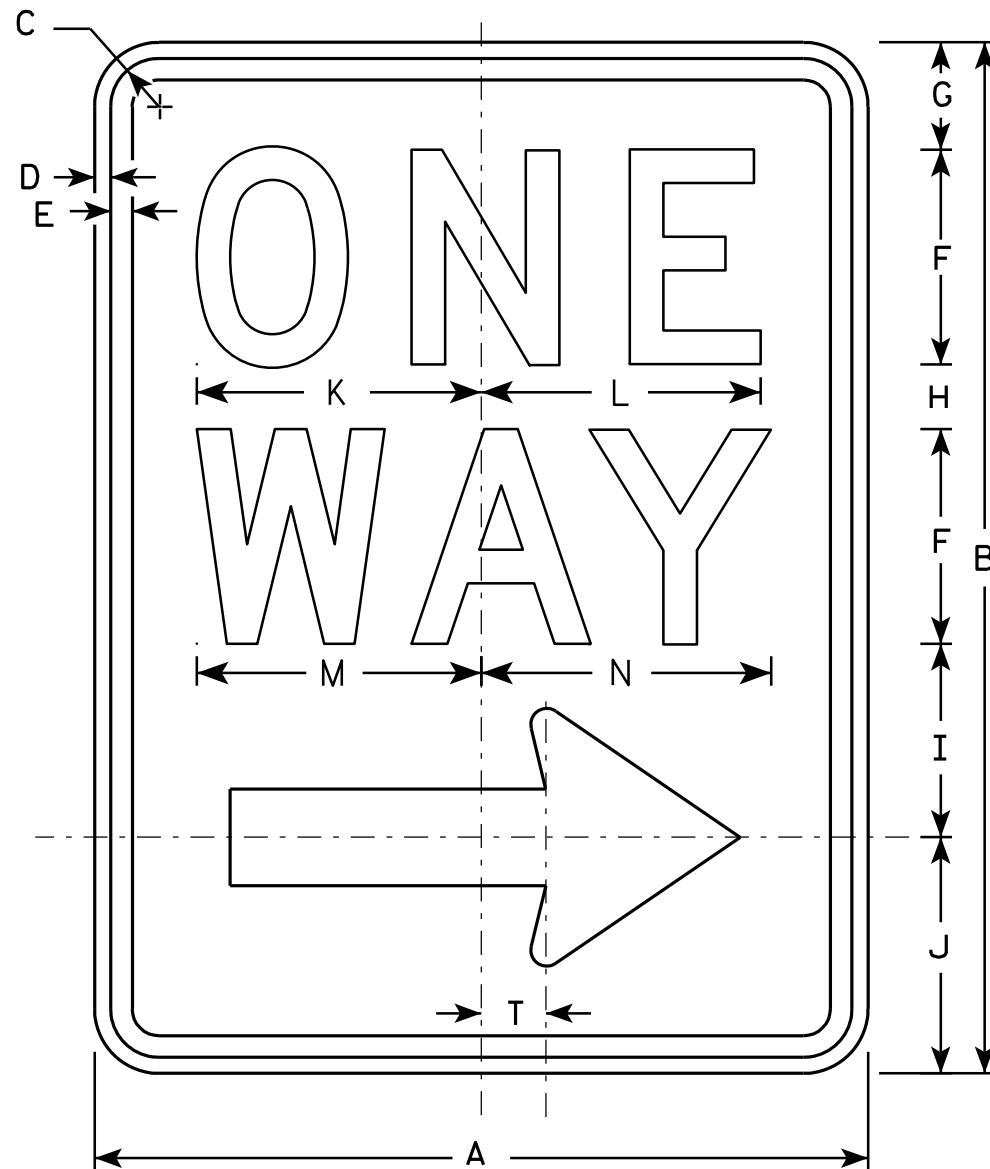
PROJECT NO:

HWY:

COUNTY:

SHEET NO: 146

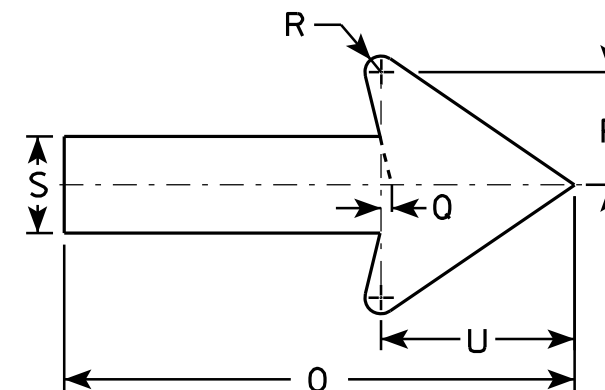
E



R6-2R

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - D
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. R6-2L same as R6-2R except arrow points to the left.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z
1	18	24	1 1/8	3/8	1/2	5	2 1/2	1 1/2	4 1/2	5 1/2	6 5/8	6 1/2	6 5/8	6 3/4	11 7/8	2 5/8	1/4	3/8	2 1/4	1 1/2	4 1/2					
2S	24	30	1 1/8	3/8	1/2	6	3	2 1/2	5 1/2	7	8 1/8	8 1/8	8 1/2	8 5/8	16	3 1/2	3/8	1/2	3	2	6					
2M	30	36	1 3/8	1/2	5/8	8	2 1/2	2 5/8	6 7/8	8	10 1/2	10 1/2	11 1/4	11 1/4	20	4 3/8	1/2	5/8	3 3/4	2 1/2	7 1/2					
3	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
4	36	48	1 7/8	1/2	5/8	10	5 1/4	3 1/4	9	10 1/2	12 3/4	12 3/4	13 1/4	13 1/2	24	5 5/8	1/2	3/4	4 3/4	3	9					
5																										

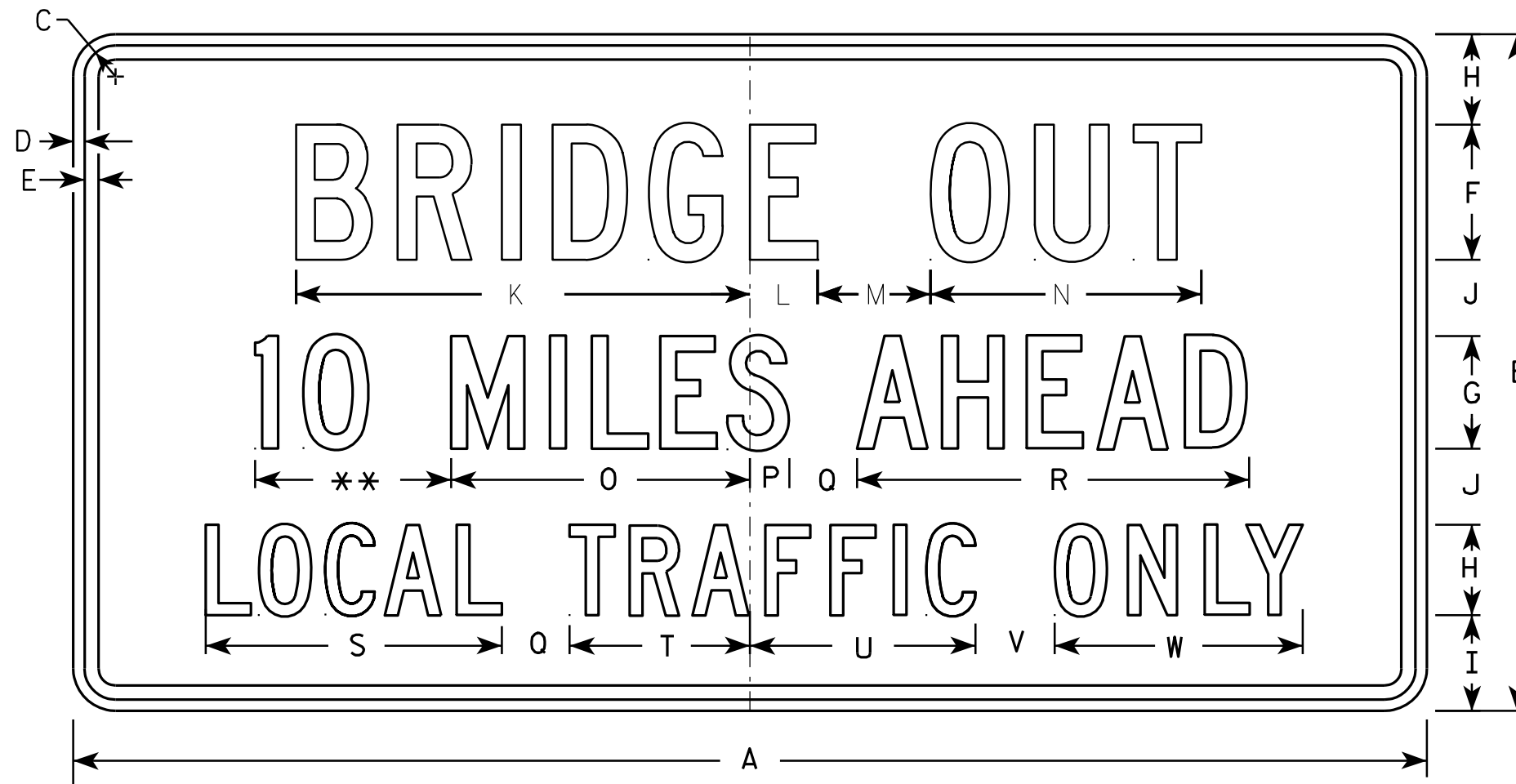
STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 11/2/10 PLATE NO. R6-2.8

PROJECT NO: HWY: COUNTY: SHEET NO: 147 E



R11-3B

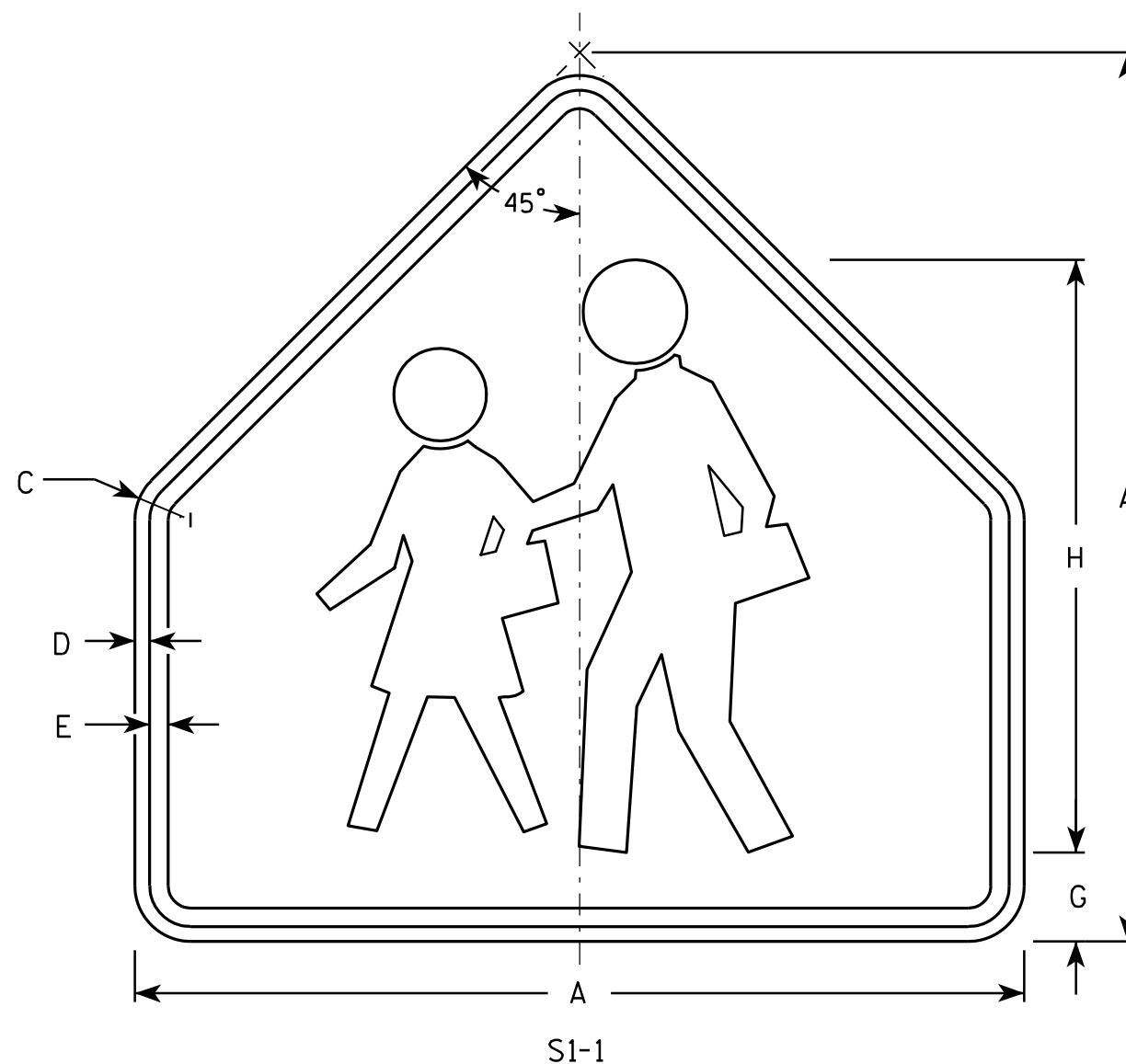
NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - White
Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically adjust spacing to achieve proper balance.

** See Note 5

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 3/8	1/2	5/8	4	3	2 1/2	2	2	13 1/4	2 1/4	3	8	8	1 1/2	2	10 3/4	8 3/8	4 3/4	6 1/2	2	6 3/4				4.5
2S	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	20 1/8	3	5	12	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11				12.5
2M	60	30	1 3/8	1/2	5/8	6	5	4	4 1/4	3 3/8	20 1/8	3	5	12	13 1/4	1 3/4	3	17 3/8	13 1/8	8	10	3 1/2	11				12.5
3																											
4																											
5																											

STANDARD SIGN R11-3B	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 4/1/11	PLATE NO. R11-3B.2



- NOTES**
1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
 2. Color:
Background - Yellow-Green
Message - Black
 3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

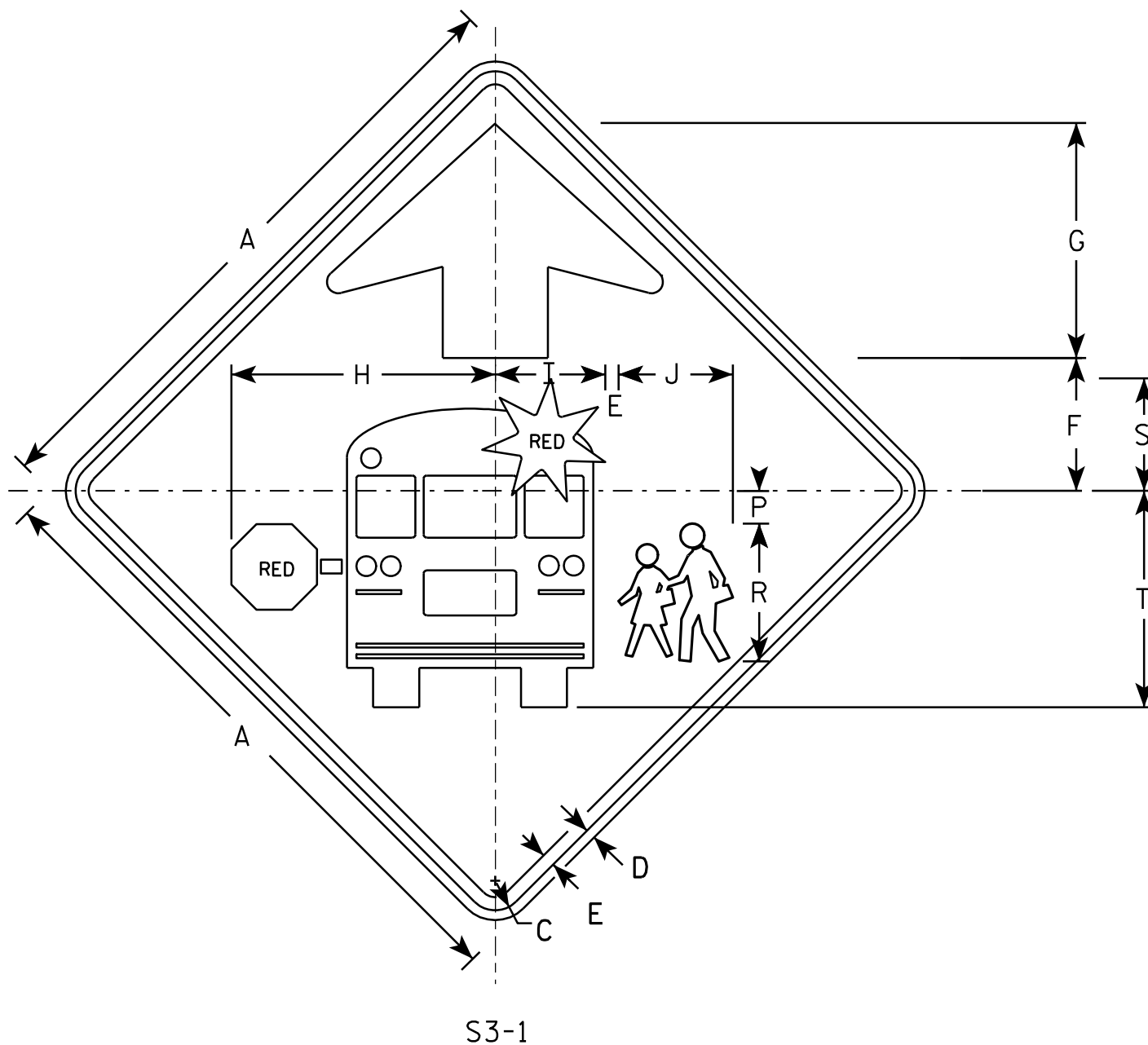
SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	30		1 3/8	1/2	5/8		3	20																			4.69
2	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
3	36		1 5/8	5/8	3/4		3 1/2	24																			6.75
4	48		2 1/4	3/4	1		4 3/4	32																			12
5																											

STANDARD SIGN
S1-1

WISCONSIN DEPT OF TRANSPORTATION

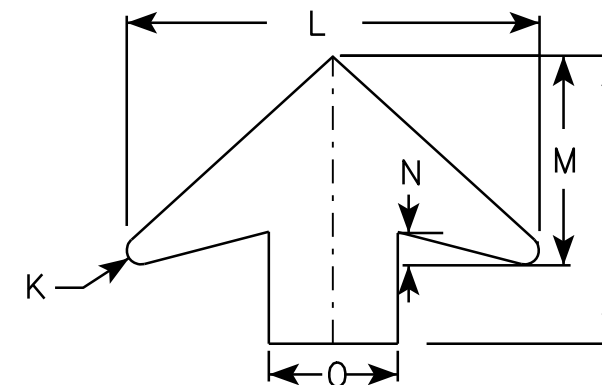
APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 6/30/05 PLATE NO. S1-1.8

PROJECT NO: HWY: COUNTY: SHEET NO: 149 E



NOTES

1. All Signs Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
 - Background - YELLOW-GREEN
 - Message - BLACK except as noted
 - Circles except PEDS- RED BACKGROUND
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

[illegible]

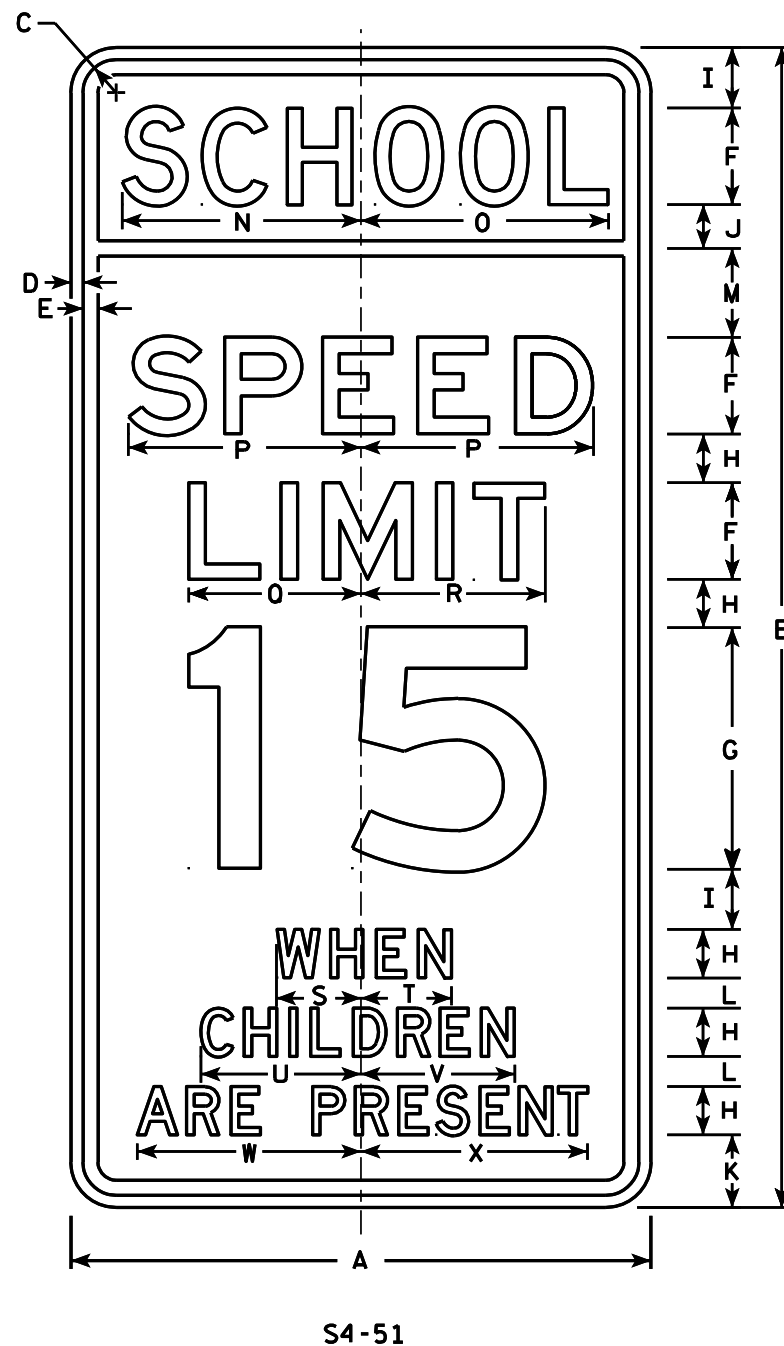
STANDARD SIGN	
S3-1	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<u>Matthew R. Rauch</u> for State Traffic Engineer
DATE <u>6/8/10</u>	PLATE NO. <u>S3-16</u>

Metric equivalent
for this sign is:

SIZE	
1	
2	600 mm X 1200 mm
3	900 mm X 1800 mm
4	
5	

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.	Area m ²
1																												
2	24	48	1 ⅜	½	⅝	4	10	2	2 ½	1 ¾	3	1 ¼	3 ¾	9 ⅞	10 ¼	9 ⅝	7 ⅛	7 ⅝	3 ½	3 ⅜	6 ⅝	6 ⅜	9 ¼	9 ⅜			8.00	0.72
3	36	72	2 ¼	¾	1	6	15	3	3 ¾	2 ¾	4 ½	1 ⅞	5 ½	15	15 ¼	14 ½	11 ¼	11 ½	5 ½	5 ¾	10	9 ¾	14	14 ⅛			18.00	1.62
4																												
5																												

PROJECT NO:			HWY:			COUNTY:			SHEET NO: 151			E
-------------	--	--	------	--	--	---------	--	--	---------------	--	--	---



NOTES

- Sign is Type II - reference
WIS DOT Standard Specification for HIGHWAY
and STRUCTURE CONSTRUCTION latest edition. (See note 5).
- Color:
Background - See note 5
Message - Black
- Message Series - See note 6
- Corners may be square or rounded when base
material is plywood but borders shall be rounded
as shown. When base material is metal, the
corners and borders shall be rounded.
- Top panel (SCH00L) background - Yellow Green -Type F Reflective.
Lower panel background - White -Type H Reflective.
- From top to bottom:
Lines 1, 5, 6 & 7 are series D
Lines 2, 3 & 4 are series E
- Line 4 substitute appropriate numerals and
adjust spacing to achieve proper balance.

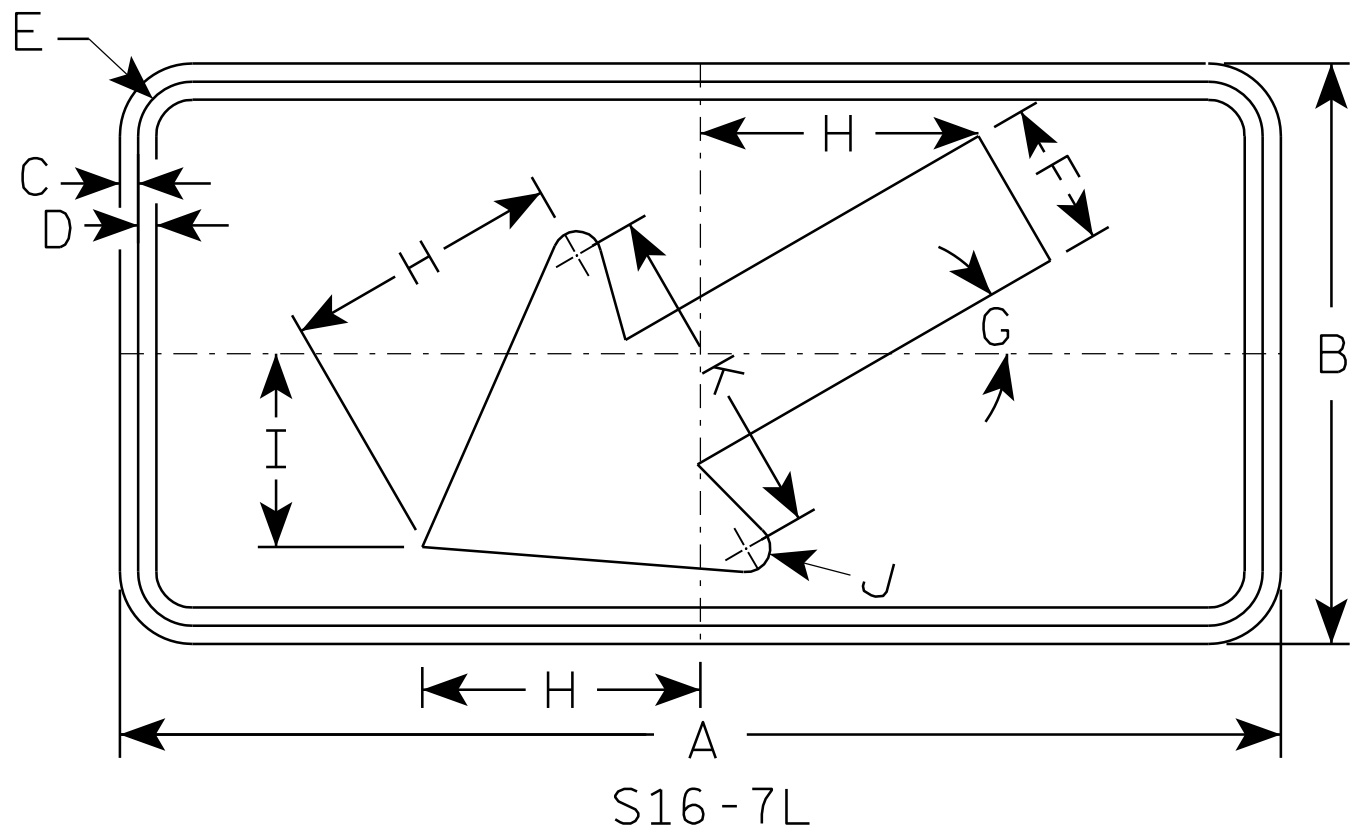
STANDARD SIGN S4-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer
DATE 4/26/10 PLATE NO. S4-51.9

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow-Green
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. S16-7R are the same as S16-7L except the arrow is reversed along the vertical centerline.



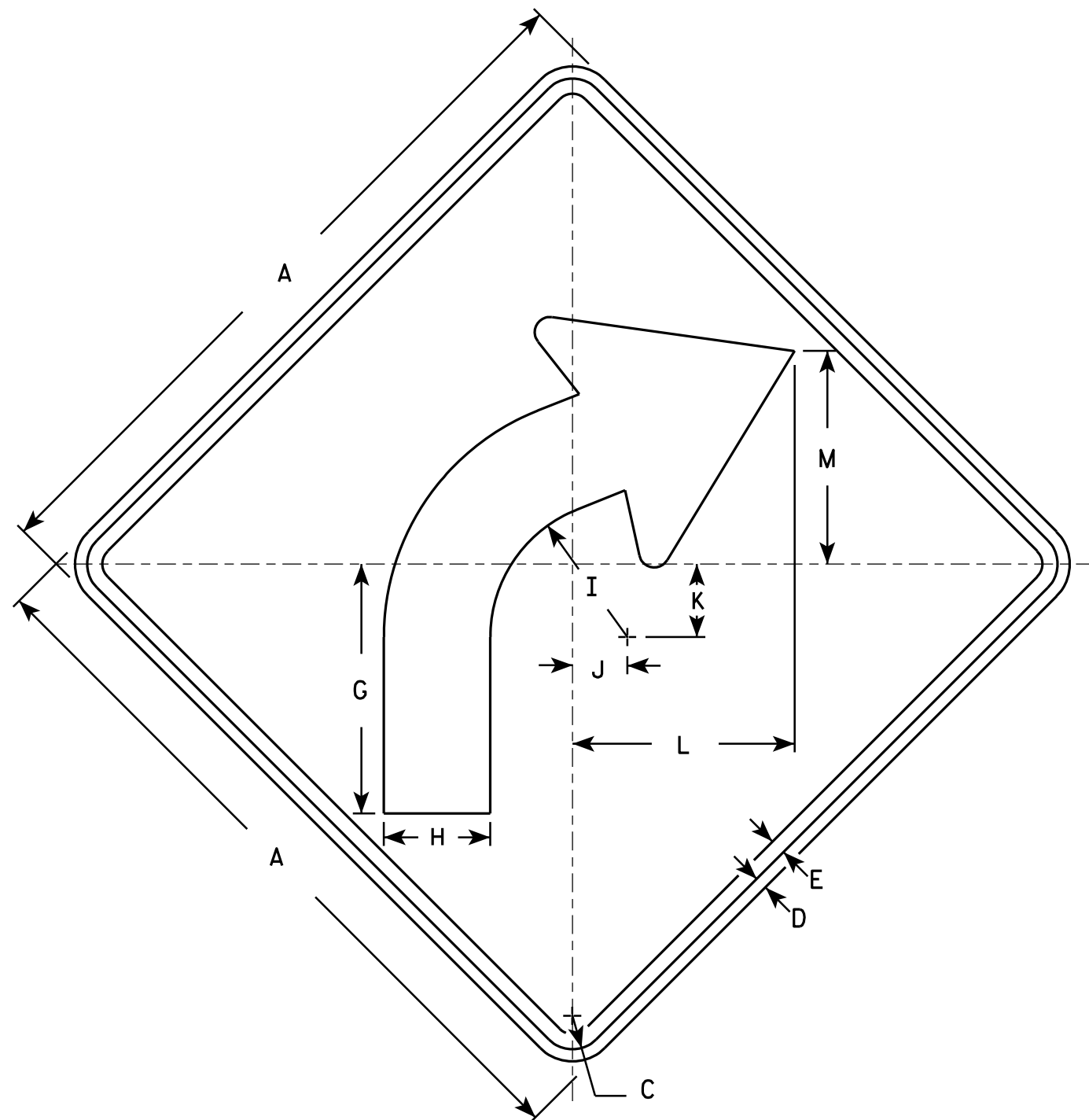
S16 - 7L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24	12	3/8	3/8	1 1/8	3	30°	5 3/4	4	1/2	7																2.0
2S	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
2M	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
3	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
4	48	24	1/2	5/8	1 3/8	6	30°	11 1/2	8	1	14																8.0
5																											

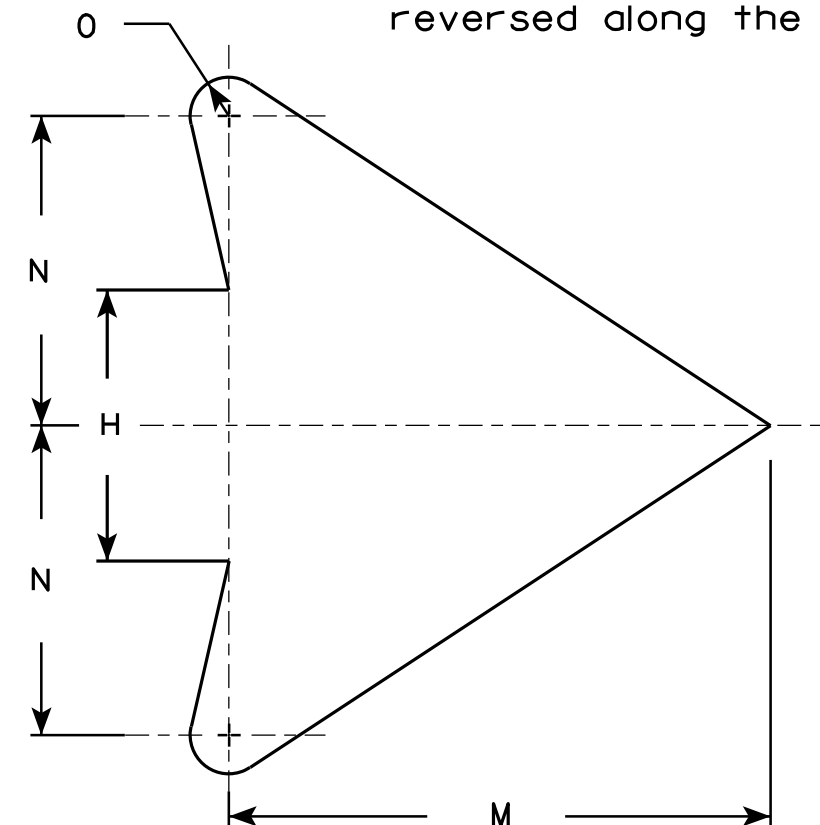
STANDARD SIGN	
S16-7	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 7/22/13	PLATE NO. S16-7.1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. W1-2L is the same as W1-2R except the arrow is reversed along the vertical centerline.



W1-2R



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2		8 1/4	3 1/2	4 1/2	1 3/4	2 3/8	7 1/4	7	4	1/2												4.0
2S	30		1 3/8	1/2	5/8		10 1/4	4 3/8	5 5/8	2 1/4	3	9 1/8	8 3/4	5	5/8												6.25
2M	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
3	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
4	36		1 5/8	5/8	3/4		12 3/8	5 1/4	6 3/4	2 5/8	3 1/2	10 7/8	10 1/2	6	3/4												9.0
5	48		2 1/4	3/4	1		16 1/2	7	9	3 1/2	4 5/8	14 1/2	14	8	1												16.0

STANDARD SIGN

W1-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/15/12 PLATE NO. W1-2.10

PROJECT NO:

HWY:

COUNTY:

SHEET NO: 153

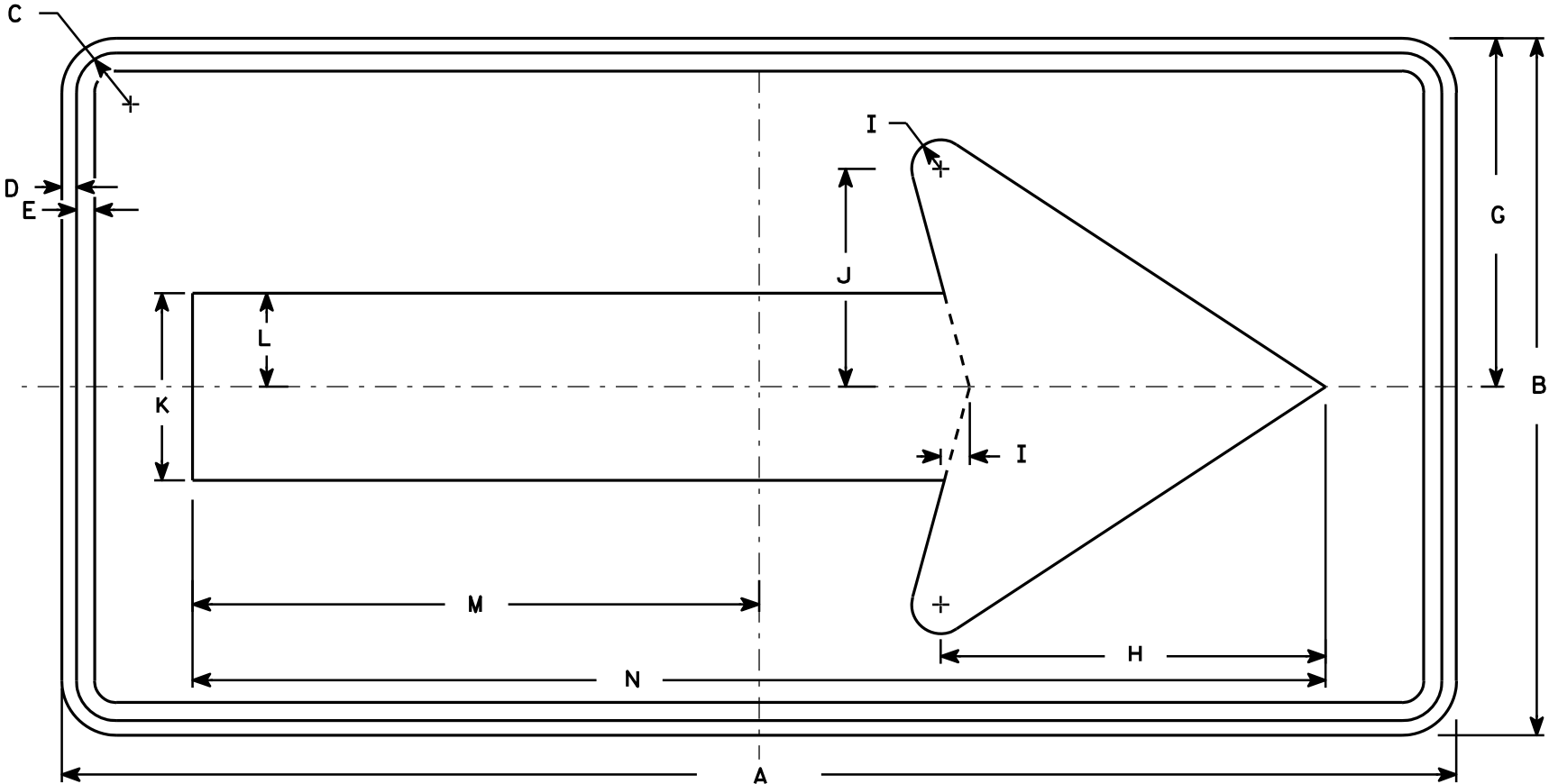
E

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:

Background - Yellow

Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



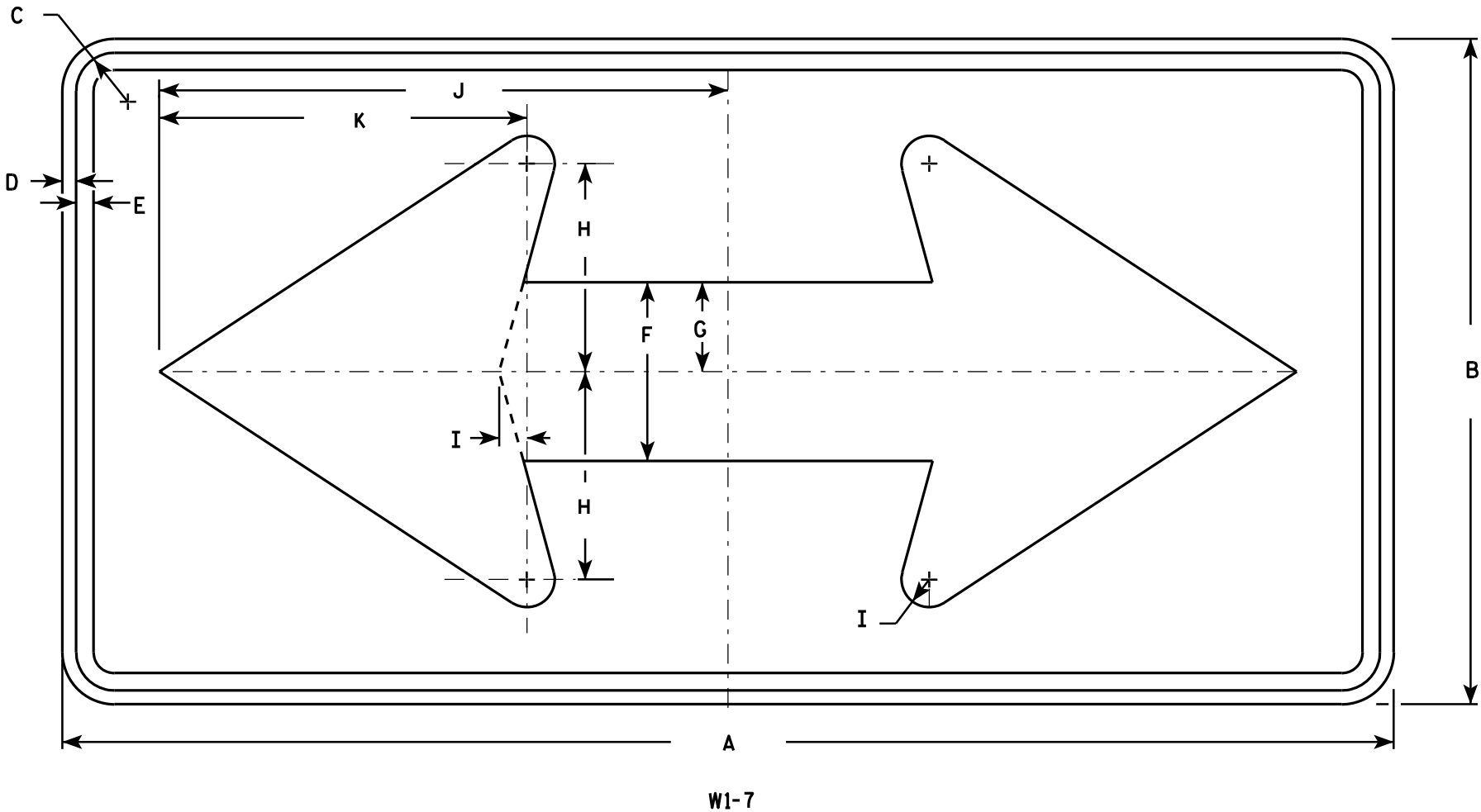
W1-6

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/8	3/8	3/8		9	10	3/4	5 5/8	4 3/4	2 3/8	14 5/8	29 1/4													4.5
2S	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	96	48	2 1/4	3/4	1		24	26 1/2	2	15	13	6 1/2	39	78													32.0

STANDARD SIGN
W1-6

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer
DATE 6/7/10 PLATE NO. W1-6.8



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/8	3/8	1/2	5	2 1/2	5 3/4	3/4	15 5/8	10 1/8																4.5
2S	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
2M	48	24	1 3/8	1/2	5/8	6 1/2	3 1/4	7 1/2	1	20 1/2	13 1/4																8.0
3	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
4	60	30	1 3/8	1/2	5/8	8	4	9 1/4	1 1/4	25 3/8	16 1/4																12.5
5	96	48	2 1/4	3/4	1	13	6 1/2	15	2	41	26 1/2																32.0

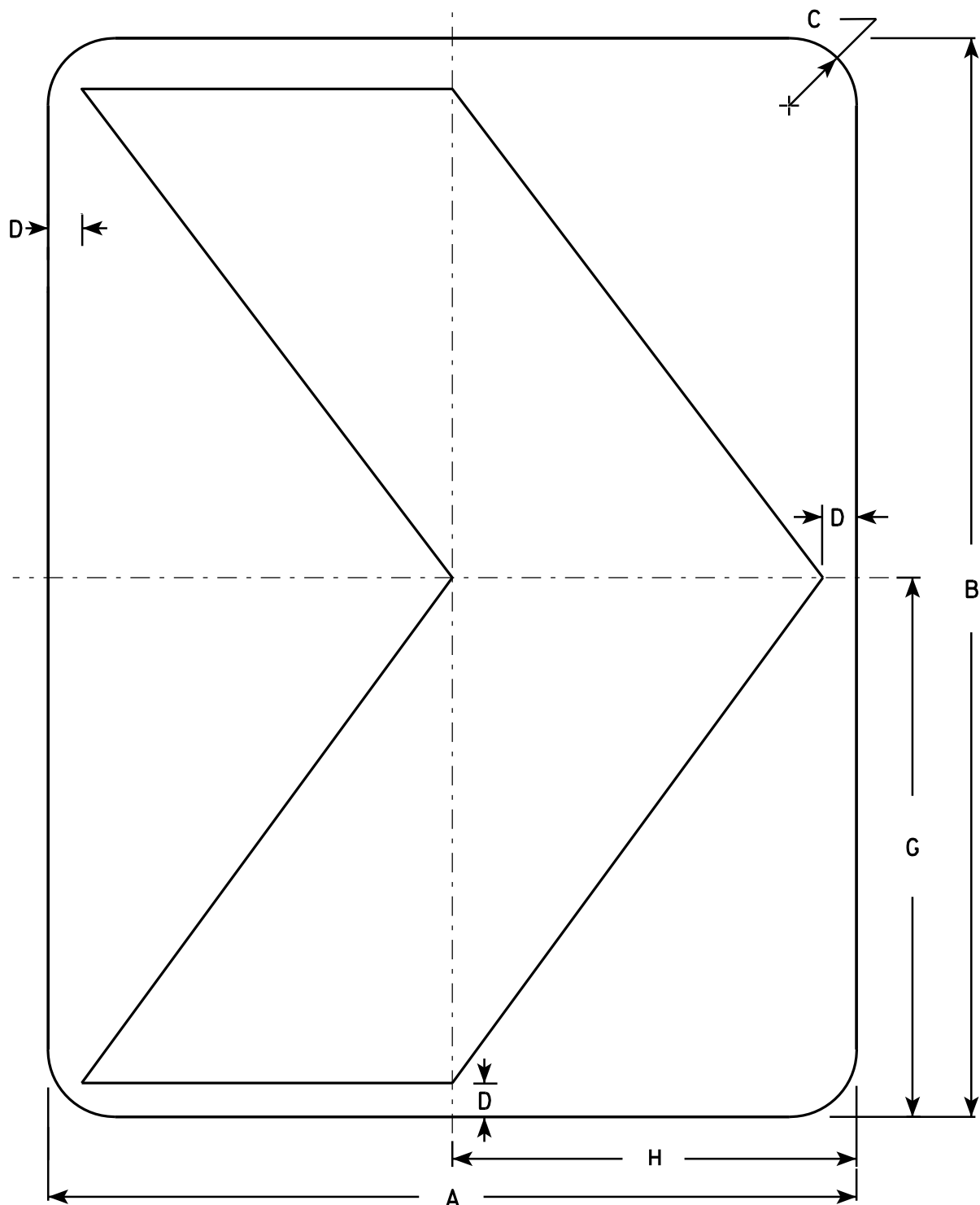
STANDARD SIGN

W1 - 7

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-7.7



W1-8

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	12	18	1 1/2	1/2			9	6																			1.5
2S	18	24	1 1/2	3/4			12	9																			3.0
2M	18	24	1 1/2	3/4			12	9																			3.0
3	24	30	1 1/2	1			15	12																			5.0
4	30	36	1 7/8	1 1/4			18	15																			7.5
5	36	48	2 1/4	1 1/2			24	18																			12.0

STANDARD SIGN

W1-8

WISCONSIN DEPT OF TRANSPORTATION

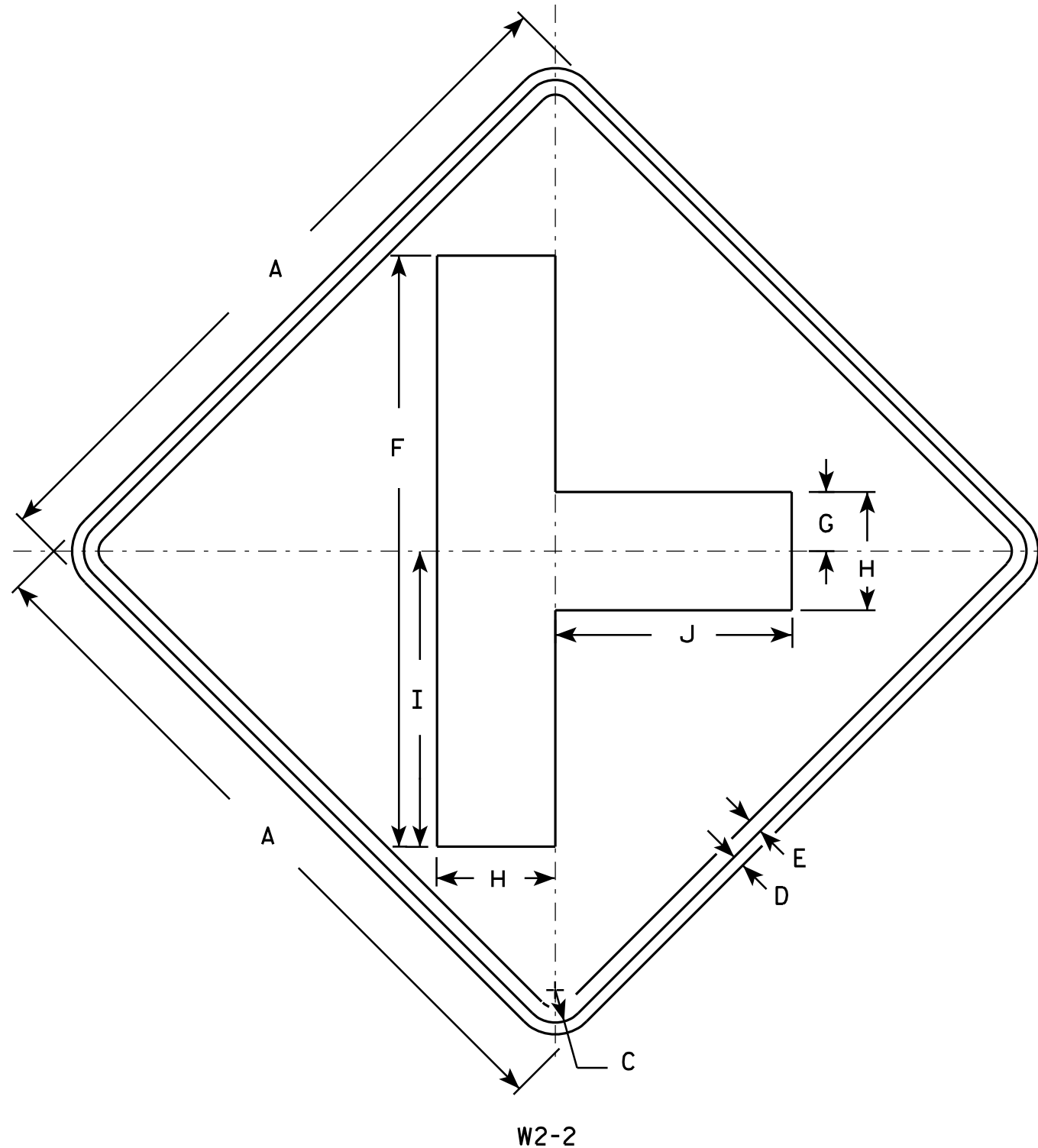
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 6/7/10 PLATE NO. W1-8.6

PROJECT NO:

SHEET NO: 156

E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	20	2	4	10	8																	4.0
2S	30		1 3/8	1/2	5/8	25	2 1/2	5	12 1/2	10																	6.25
2M	30		1 3/8	1/2	5/8	25	2 1/2	5	12 1/2	10																	6.25
3	36		1 5/8	5/8	3/4	30	3	6	15	12																	9.0
4	48		2 1/4	3/4	1	40	4	8	20	16																	16.0
5																											

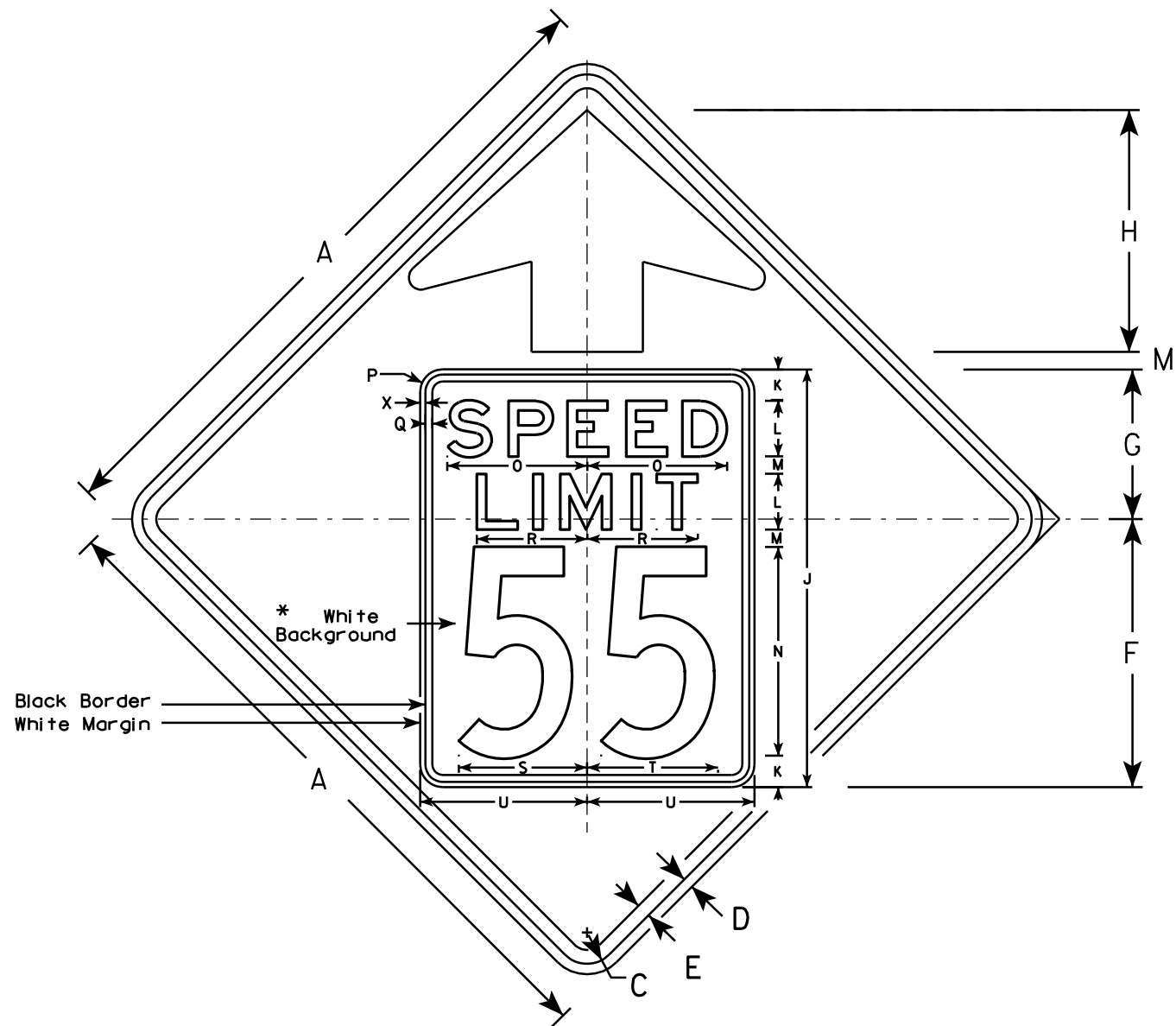
STANDARD SIGN W2-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W2-2.6

PROJECT NO: HWY: COUNTY: SHEET NO: 157 E

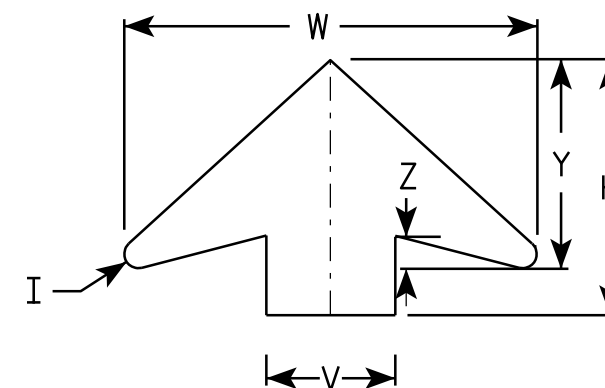


W3-5

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color: *
Background - YELLOW*
Message - BLACK
3. Message Series - C for numbers Series E for wording
4. Substitute appropriate numerals and optically adjust spacing to achieve proper balance

*Speed Limit Sign shall have a White Background



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36		1 5⁄8	5⁄8	3⁄4	14 1⁄2	9 1⁄2	11 1⁄2	5⁄8	24	2	3	1	12	7 1⁄8	1 1⁄2	3⁄8	5 3⁄4	7 1⁄4	7 1⁄8	9	6	19 1⁄4	3⁄8	9 3⁄4	1 5⁄8	9.0
2M	36		1 5⁄8	5⁄8	3⁄4	14 1⁄2	9 1⁄2	11 1⁄2	5⁄8	24	2	3	1	12	7 1⁄8	1 1⁄2	3⁄8	5 3⁄4	7 1⁄4	7 1⁄8	9	6	19 1⁄4	3⁄8	9 3⁄4	1 5⁄8	9.0
3	36		1 5⁄8	5⁄8	3⁄4	14 1⁄2	9 1⁄2	11 1⁄2	5⁄8	24	2	3	1	12	7 1⁄8	1 1⁄2	3⁄8	5 3⁄4	7 1⁄4	7 1⁄8	9	6	19 1⁄4	3⁄8	9 3⁄4	1 5⁄8	9.0
4	48		2 1⁄4	3⁄4	1	19 1⁄4	10 3⁄4	17 3⁄8	7⁄8	30	2 1⁄4	4	1 1⁄4	15	10	1 5⁄8	1⁄2	8	9 1⁄4	9 3⁄8	12	8	25 5⁄8	3⁄8	13	2	16.0
5	48		2 1⁄4	3⁄4	1	19 1⁄4	10 3⁄4	17 3⁄8	7⁄8	30	2 1⁄4	4	1 1⁄4	15	10	1 5⁄8	1⁄2	8	9 1⁄4	9 3⁄8	12	8	25 5⁄8	3⁄8	13	2	16.0

STANDARD SIGN

W3-5

WISCONSIN DEPT OF TRANSPORTATION

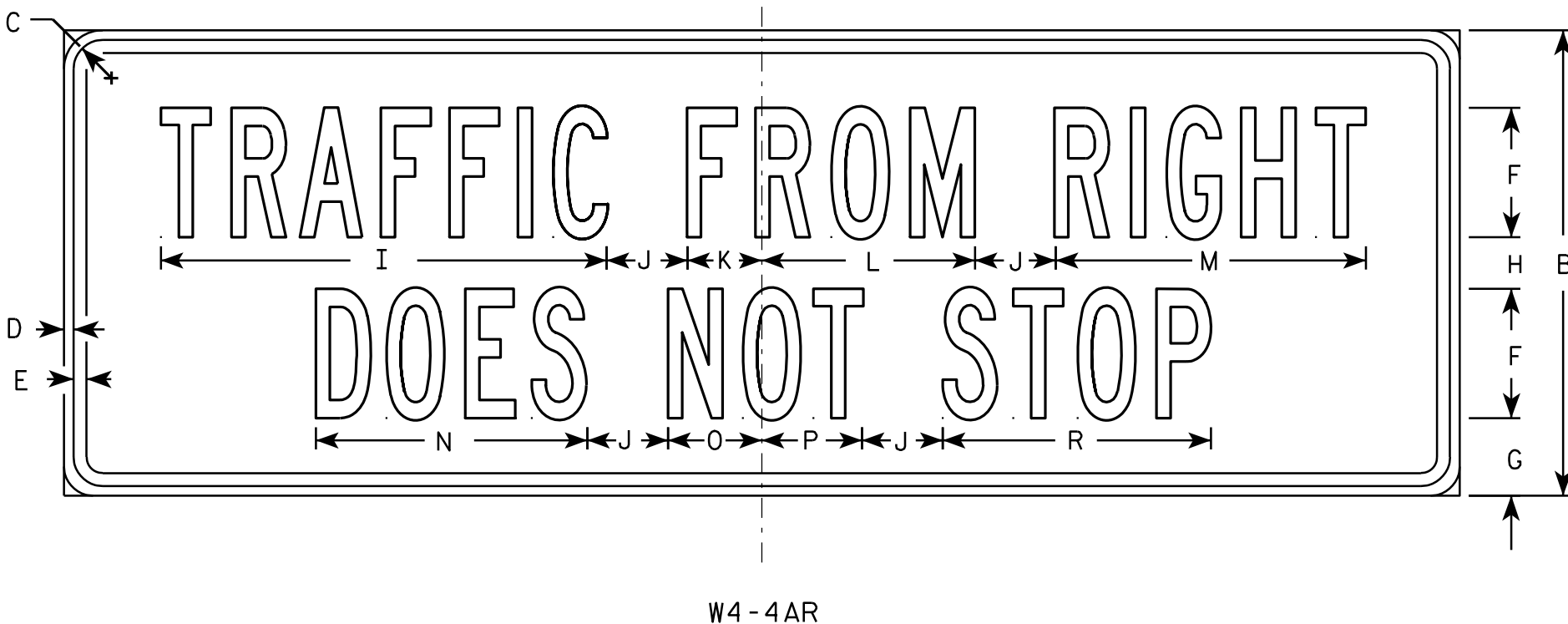
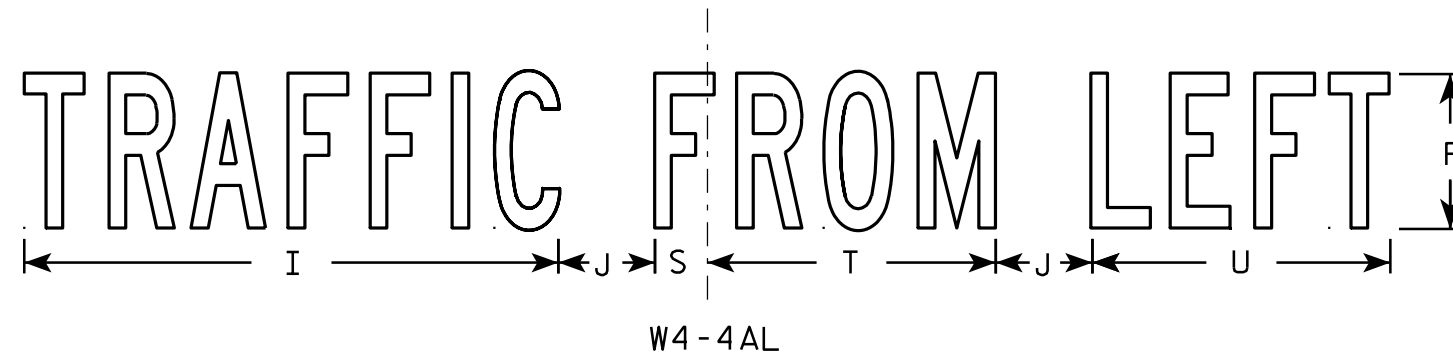
APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W3-5.5

PROJECT NO:

SHEET NO: 158

E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

7

7

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	O	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	12	1 1/8	3/8	3/8	3	2 1/4	1 1/2	10 3/8	1 1/2	1 3/4	4 7/8	7 1/4	6 1/4	2 1/4	2 1/4		6 1/4	1	5 5/8	5 3/4						2.5
2M	30	12	1 1/8	3/8	3/8	3	2 1/4	1 1/2	10 3/8	1 1/2	1 3/4	4 7/8	7 1/4	6 1/4	2 1/4	2 1/4		6 1/4	1	5 5/8	5 3/4						2.5
3	42	15	1 1/8	3/8	1/2	4	2 5/8	1 3/4	13 7/8	2 3/8	2 1/8	6 3/4	9 3/4	8 3/8	2 3/4	3 3/8		8 3/8	1 1/8	7 3/4	7 3/4						4.4
4	54	18	1 1/8	3/8	1/2	5	3	2	17 1/4	3 1/8	2 7/8	8 1/4	12	10 1/2	3 5/8	3 7/8		10 3/8	1 3/4	9 3/8	9 5/8						6.8
5																											

STANDARD SIGN
W4-4AL & W4-4AR

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W4-4A.2

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Message Series - B
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W4-4B

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30	12	1 1/8	3/8	1/2	3	2 1/4	1 1/2	12 3/8	5/8	1 1/2	10 3/8	6 1/4	2 1/4	2 1/4	6 1/4											2.5
2M	30	12	1 1/8	3/8	1/2	3	2 1/4	1 1/2	12 3/8	5/8	1 1/2	10 3/8	6 1/4	2 1/4	2 1/4	6 1/4											2.5
3	42	15	1 1/8	3/8	1/2	4	2 5/8	1 3/4	16 7/8	5/8	2 3/8	13 7/8	8 3/8	3	3 1/8	8 3/8											4.17
4	48	18	1 1/8	3/8	1/2	5	3	2	21	5/8	3 1/8	17 1/4	10 1/2	3 5/8	3 7/8	10 3/8											6.0
5																											

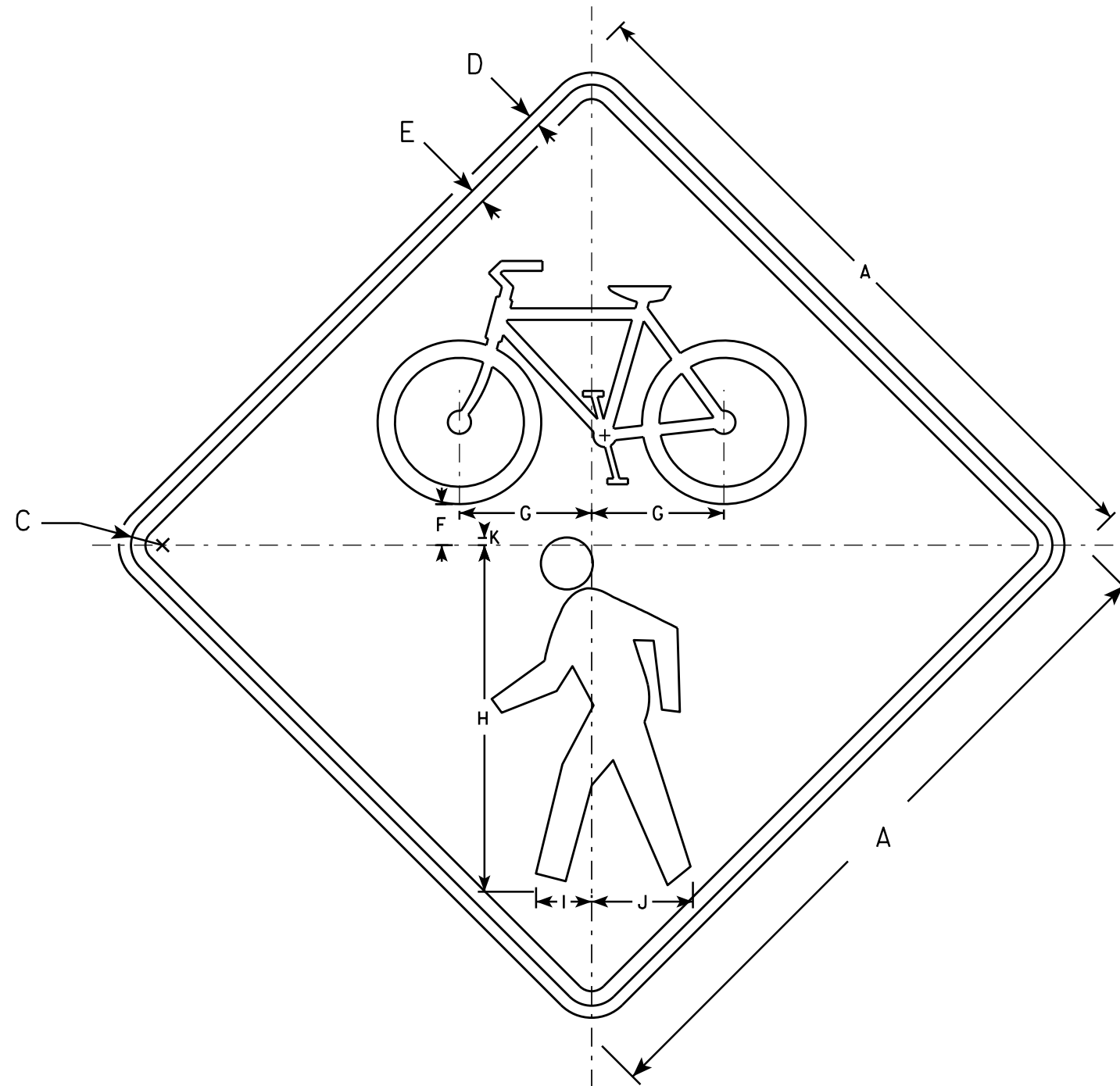
STANDARD SIGN
W4-4B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 03/12/13 PLATE NO. W4-4B.2

PROJECT NO: HWY: COUNTY: SHEET NO: 160 E



W11-15

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
Background - Yellow
Message - Black
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	1 3/8	4 5/8	12	1 7/8	3 1/2	1/4																4.0
2S	30		1 3/8	1/2	5/8	1 3/4	5 3/4	15	2 3/8	4 3/8	3/8																6.25
2M	36		1 5/8	5/8	3/4	2 1/8	6 7/8	18	2 7/8	5 1/4	3/8																9.0
3	36		1 5/8	5/8	3/4	2 1/8	6 7/8	18	2 7/8	5 1/4	3/8																16.0
4	48		2 1/4	3/4	1	2 7/8	9 1/8	24	3 7/8	7	1/2																16.0
5																											

STANDARD SIGN

W11-15

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 2/13/14 PLATE NO. W11-15.4
161

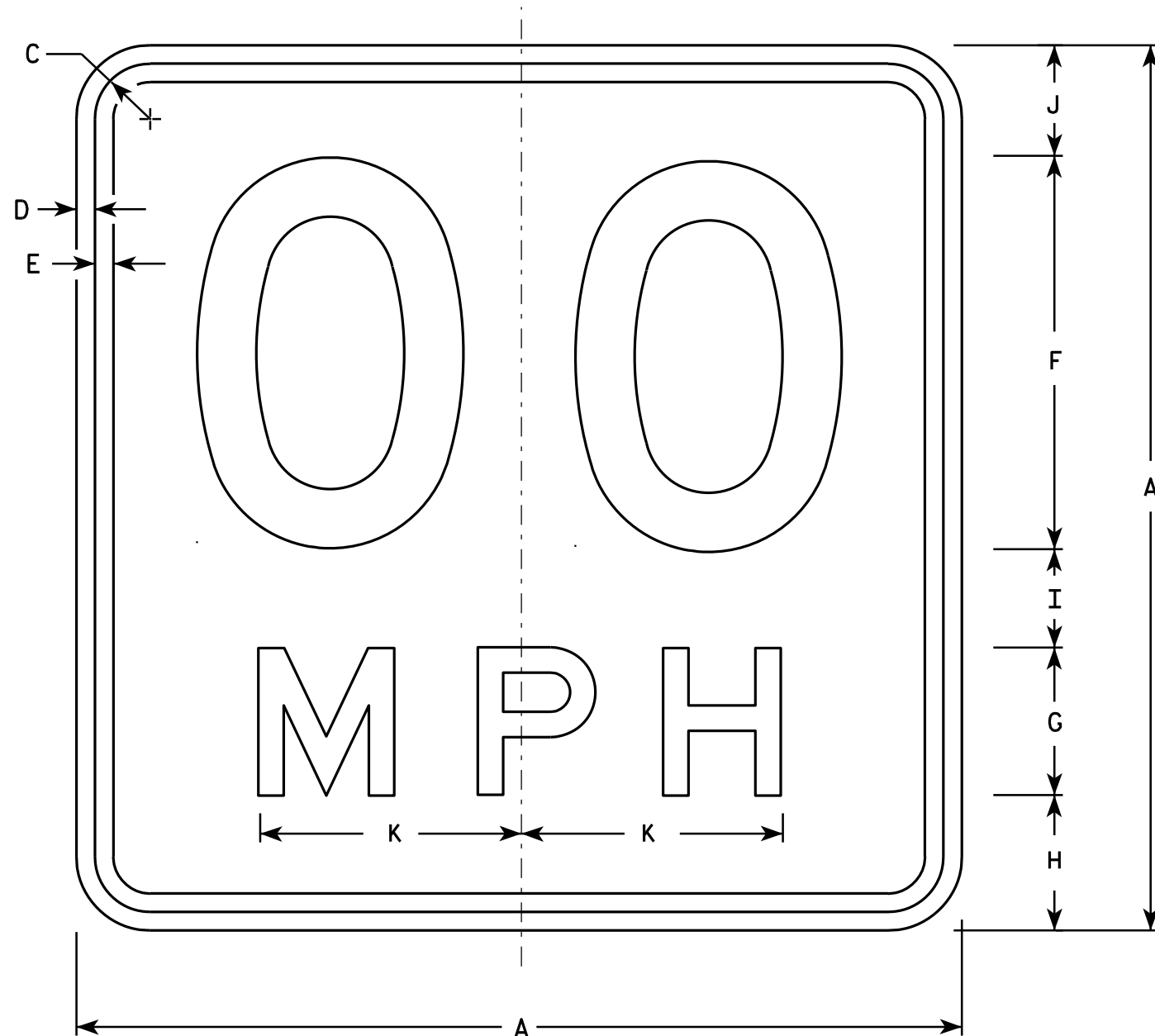
PROJECT NO:

HWY:

COUNTY:

SHEET NO:

E



NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Message Series - See Note 6
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Substitute appropriate numerals and optically space about centerline to achieve proper balance.
6. Line 1 is Series D
Line 2 is Series E

W13-1

- * For 30" x 30" Warning Signs, use 18" x 18" W13-1 signs.
For 36" x 36" Warning Signs, use 24" x 24" W13-1 signs.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area Sq. Ft.
1	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
* 2S	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
* 2M	18		1 1/8	3/8	3/8	8	3	2 3/4	2	2 1/4	5 3/8																2.25
3	24		1 1/8	3/8	1/2	10	4	4	2 3/4	3 1/4	6 5/8																4.00
4	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00
5	36		1 5/8	5/8	3/4	16	6	5 1/2	4	4 1/2	10 5/8																9.00

STANDARD SIGN

W13-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 5/31/12 PLATE NO. W13-1.16

PROJECT NO:

HWY:

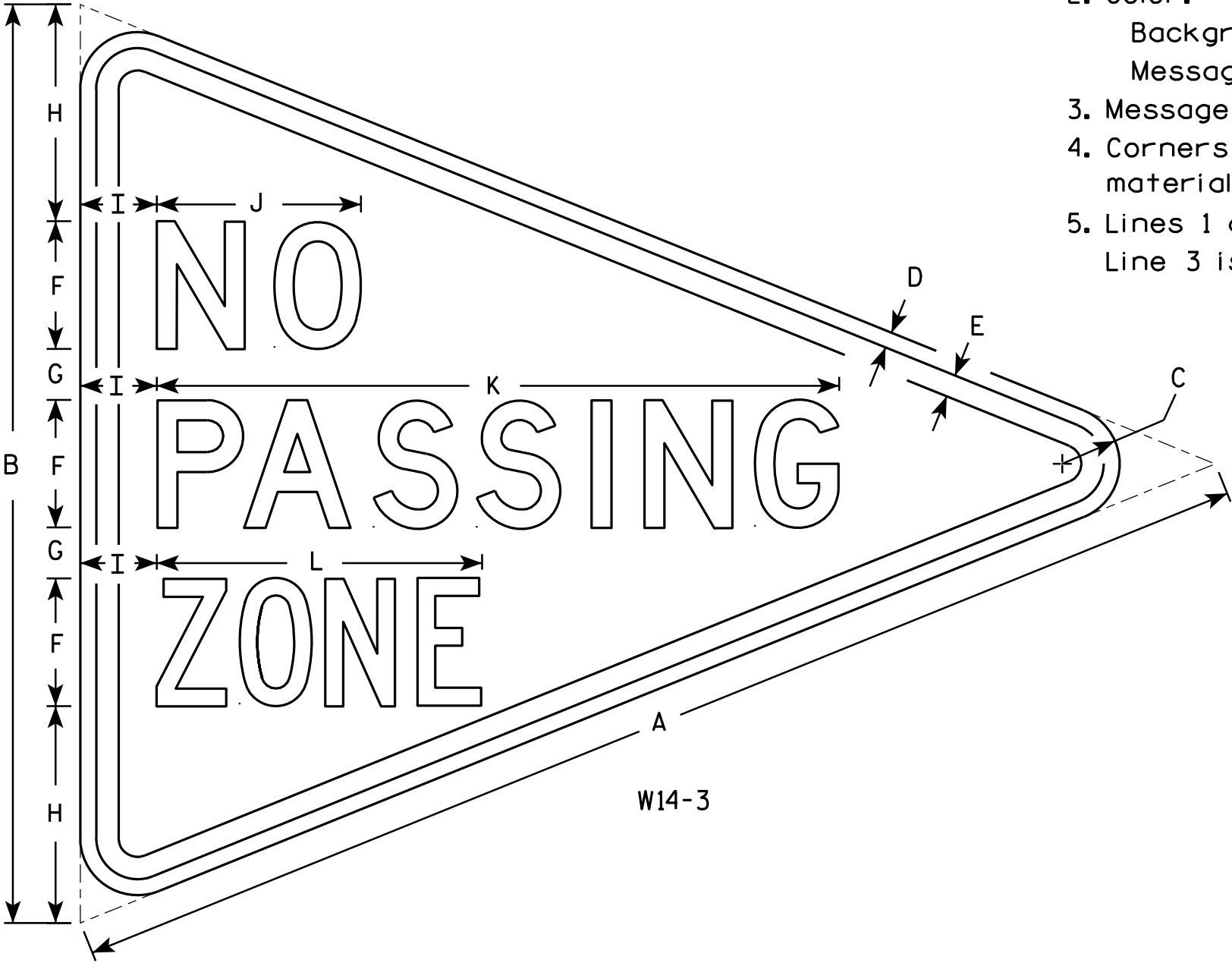
COUNTY:

SHEET NO: 162

E

NOTES

- 1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
- 2. Color:
Background - Yellow
Message - Black
- 3. Message Series - See note 5
- 4. Corners and borders shall be rounded on all base materials for this sign.
- 5. Lines 1 and 2 are Series D.
Line 3 is series C.



W14-3

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
2M	48	36	2 1/4	5/8	7/8	5	2	8 1/2	3	8	26 3/4	12 3/4															6.0
3	64	48	3	3/4	1 1/4	6	3	12	4	10 3/4	33 5/8	16 1/2															10.7
4																											
5																											

STANDARD SIGN
W14-3

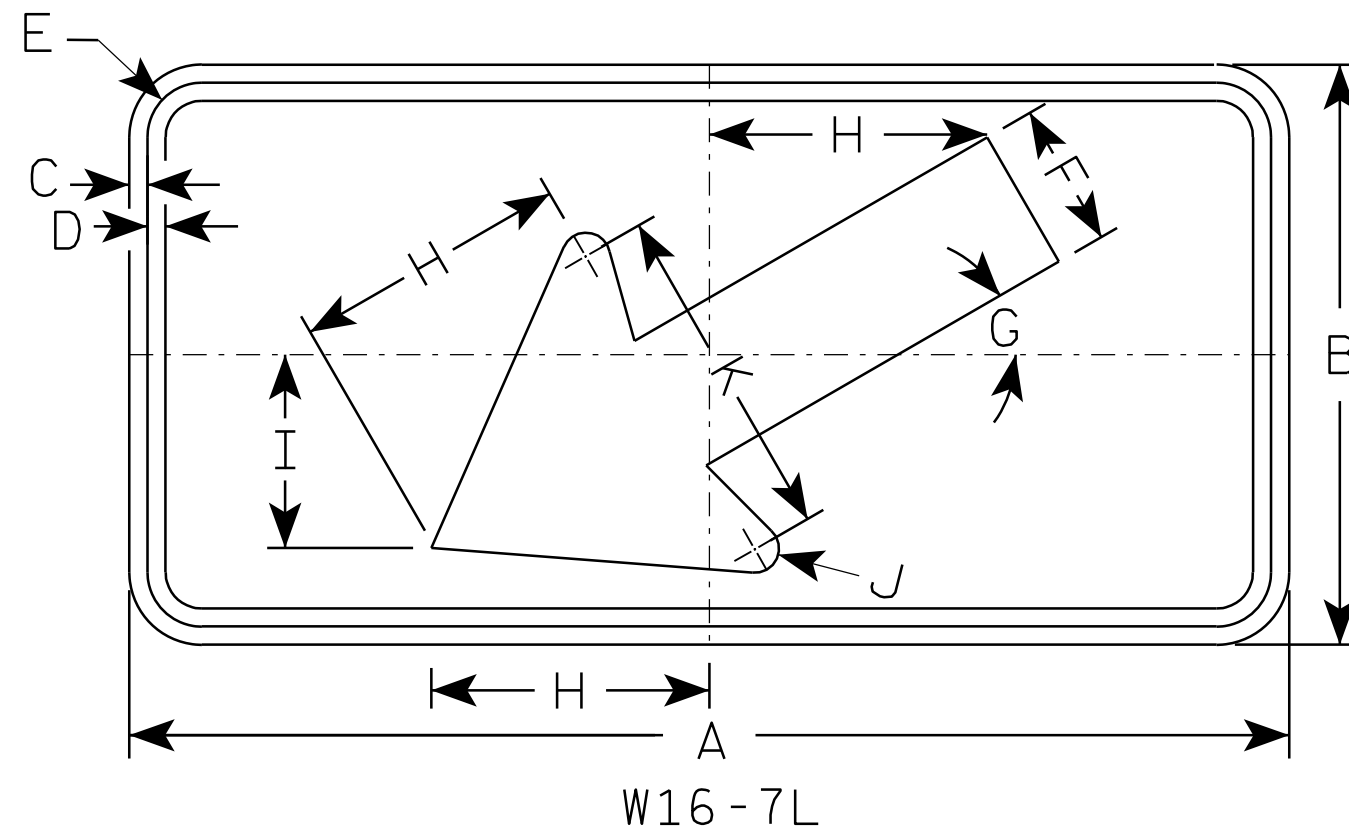
WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 6/7/10 PLATE NO. W14-3.9

NOTES

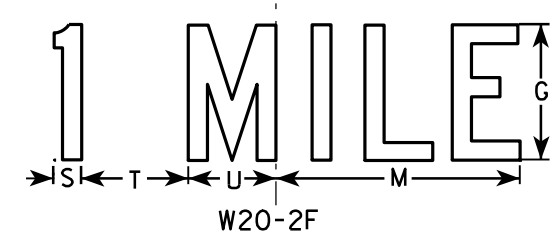
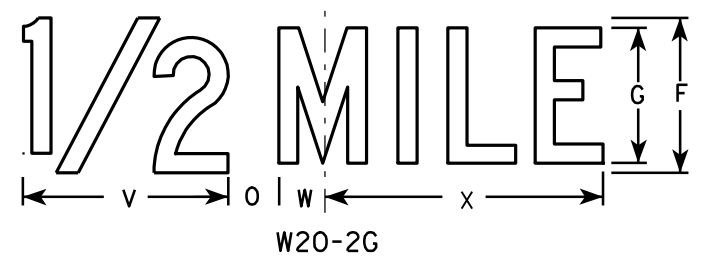
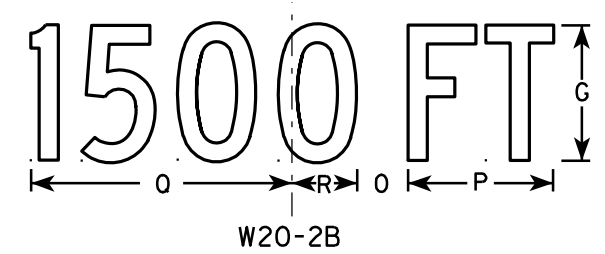
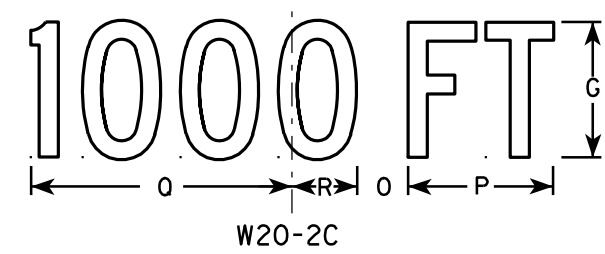
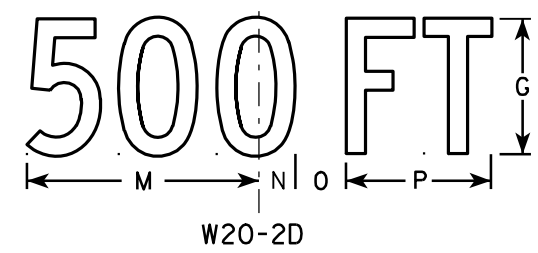
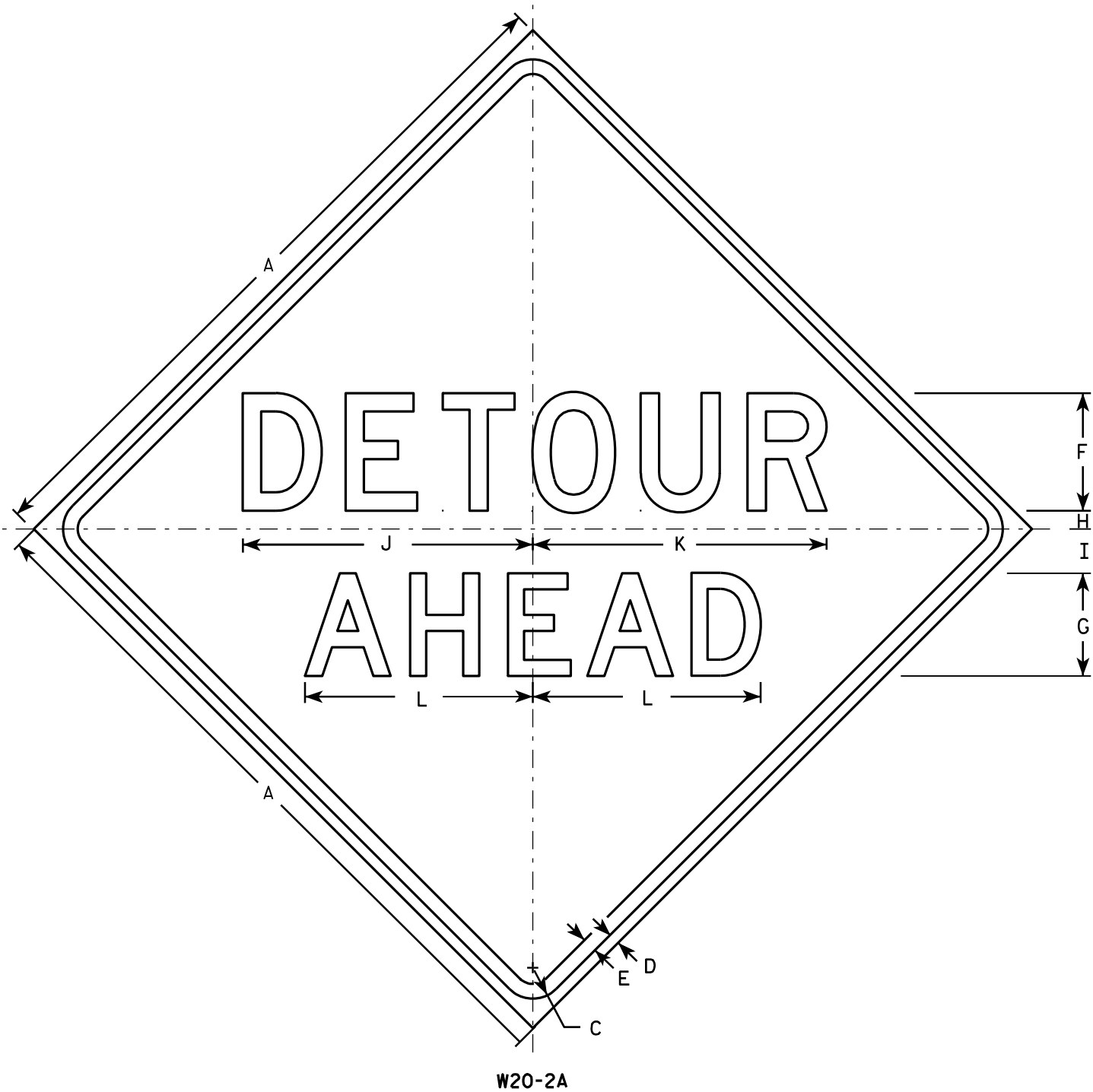
1. Sign is Type II - Type F Reflective -
reference WIS DOT Standard Specification for
HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Yellow
Message - Black
3. Corners may be square or rounded when base
material is plywood but borders shall be rounded
as shown. When base material is metal, the
corners and borders shall be rounded.
4. W16-7R is the same as W16-L
except the arrow is reversed along
the vertical centerline.



SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	12	3/8	3/8	1 1/8	3	30°	5 3/4	4	1/2	7																2.0
2M	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
3	30	18	3/8	1/2	1 1/8	4 1/2	30°	8 1/2	6	5/8	10 1/4																3.75
4																											8
5																											8

STANDARD SIGN	
W16-7	
WISCONSIN DEPT OF TRANSPORTATION	
APPROVED	<i>Matthew R. Rauch</i> for State Traffic Engineer
DATE 11/02/10	PLATE NO. W16-7.5

PROJECT NO:	HWY:	COUNTY:	SHEET NO: 164	E
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NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Message Series - See note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Line 1 is Series D.
Line 2 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	6	5	1	2 1/4	14 3/4	15	11 5/8	9	1 3/8	1 7/8	5 5/8	10 1/8	2 1/2	1 1/8	4 1/2	3 1/2	8	1 3/4	10 3/4			9.0
2S	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
2M	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
3	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
4	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0
5	48		2 1/4	3/4	1	8	7	1 1/4	3	19 3/4	20	15 1/2	12	1 7/8	2 5/8	7 1/2	13 1/2	3 3/8	1 1/2	6	4 5/8	10 5/8	2 3/8	14 3/8			16.0

STANDARD SIGN
W20-2A,B,C,D,F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-2.6

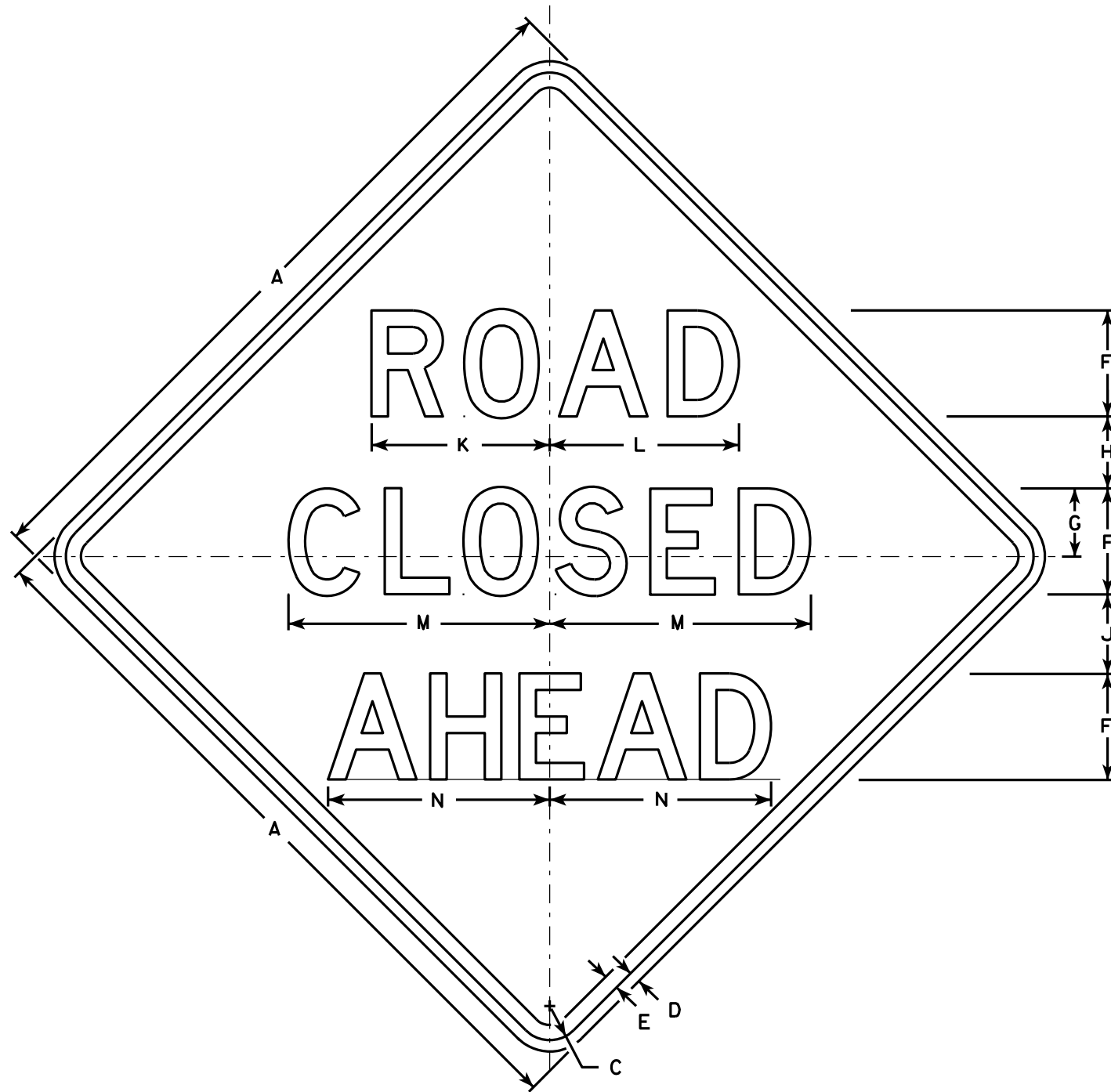
PROJECT NO:

HWY:

COUNTY:

SHEET NO: 165

E



W20-3A

500 FT

W20-3D

1000 FT

W20-3C

1500 FT

W20-3B

1/2 MILE

W20-3G

1 MILE

W20-3F

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
Background - Orange
Message - Black
3. Message Series - see note 5
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
5. Lines 1 and 2 are Series D.
Line 3 is Series D for AHEAD and Series C for all other distances.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4	5	3 3/8	3 1/2	1 1/8	4	8 3/8	8 7/8	12 1/2	11	9	6	10 1/8	2 1/2	1 7/8	5 5/8	8	1 3/8	4 1/2	3 1/2	10 3/4	1 3/4	9.0
2S	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
2M	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
3	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
4	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0
5	48		2 1/4	3/4	1	7	4 1/2	4 3/4	1 1/2	5 1/4	11 3/4	12 1/2	17 1/4	14 5/8	12	8	13 1/2	3 3/8	2 5/8	7 1/2	10 5/8	1 7/8	6	4 5/8	14 3/8	2 3/8	16.0

STANDARD SIGN
W20-3A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED *Matthew R. Rauch*
For State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-3.7

PROJECT NO:

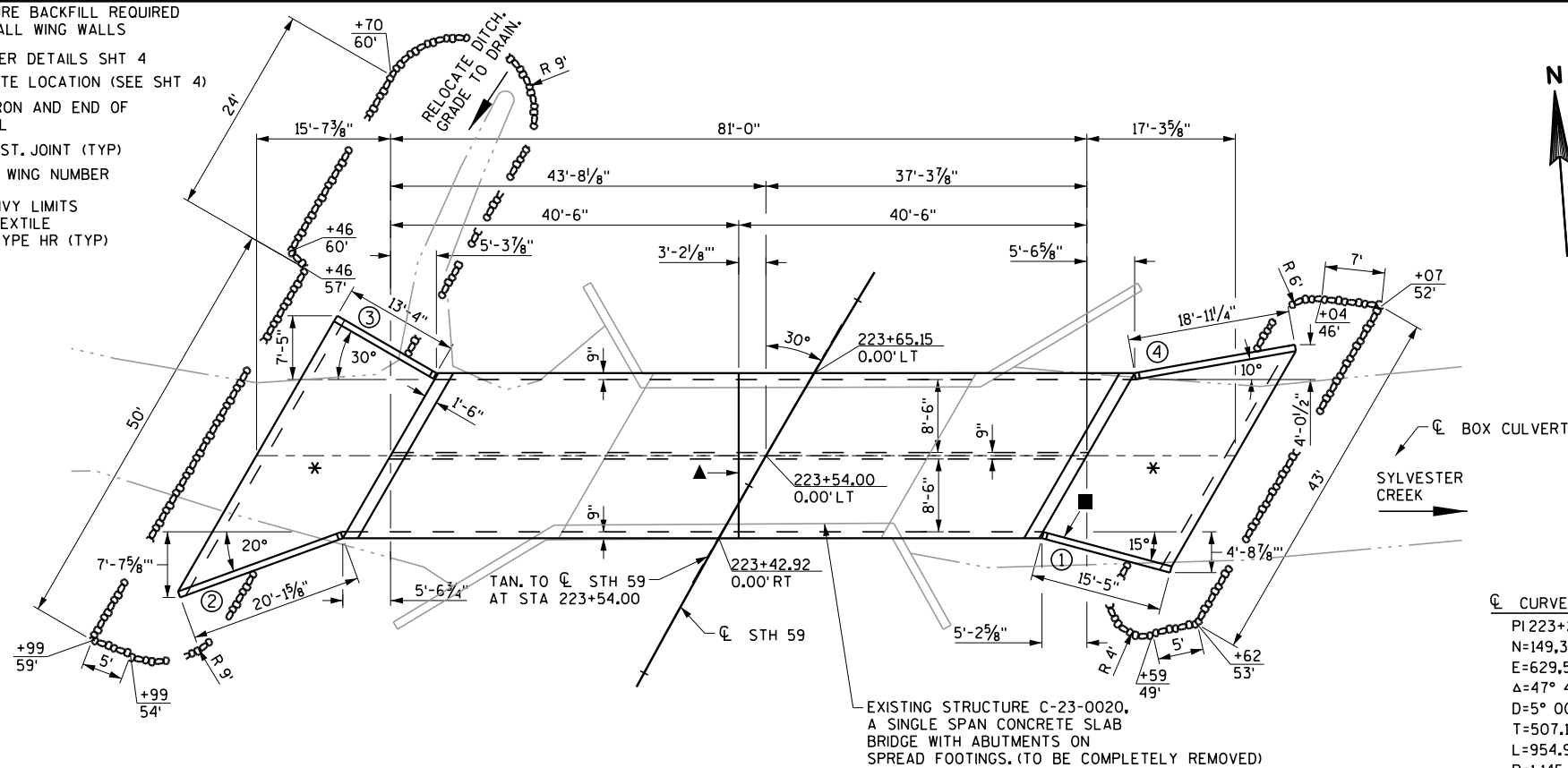
HWY:

COUNTY:

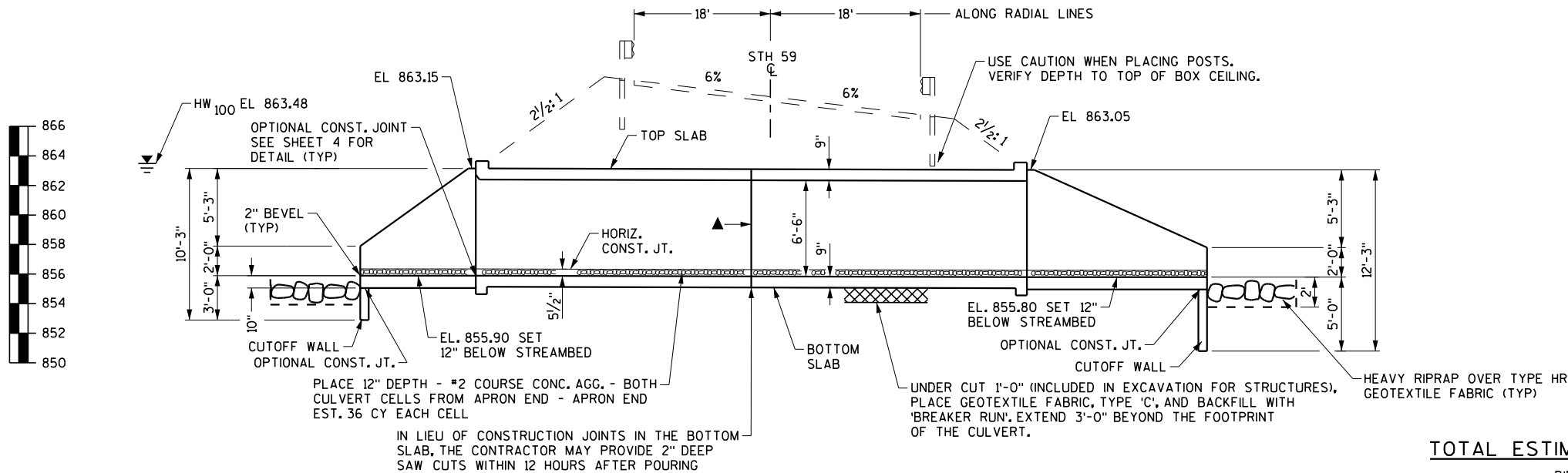
SHEET NO: 166

E

- NOTE: STRUCTURE BACKFILL REQUIRED
BEHIND ALL WING WALLS
- ▲ SEE CORNER DETAILS SHT 4
 - NAME PLATE LOCATION (SEE SHT 4)
 - * BUILD APRON AND END OF
BOX LEVEL
 - ▲ VERT. CONST. JOINT (TYP)
 - INDICATES WING NUMBER
 - RIPRAP, Hvy LIMITS
W/ GEOTEXTILE
FABRIC TYPE HR (TYP)



PLAN
(2-CELL REINFORCED CONCRETE BOX CULVERT)



INLET

OUTLET

ELEVATION

TRAFFIC VOLUME

STH 59
ADT = 2800 (2036)
RDS = 50 MPH

HYDRAULIC DATA

100 YEAR FREQUENCY
Q₁₀₀ = 720 CFS
VEL. = 11.1 FPS
HW = EL. 863.48
DRAINAGE AREA = 6.0 SQ MI
OVERTOPPING RDWY. = NA
SCOUR CRITICAL CODE = 8

2 YEAR FREQUENCY
Q₂ = 150 CFS
HW = EL. 859.37

GENERAL NOTES

- DRAWINGS SHALL NOT BE SCALED.
- BAR STEEL REINFORCEMENT SHALL BE EMBEDDED 2" CLEAR UNLESS OTHERWISE SHOWN OR NOTED.
- THE EXISTING GROUND LINE SHALL BE USED AS THE UPPER LIMITS OF EXCAVATION FOR STRUCTURES.
- WITHIN THE LENGTH OF THE BOX ALL SPACES EXCAVATED AND NOT OCCUPIED BY THE NEW STRUCTURE SHALL BE BACKFILLED WITH STRUCTURE BACKFILL TO THE TOP OF THE BOX WITHIN THE LENGTH OF THE CULVERT.
- THE CONCRETE IN THE CUTOFF WALLS MAY BE PLACED UNDERWATER IF THE EXCAVATION CANNOT BE DEWATERED.
- PLACE AN 18" (MIN) WIDE SHEET OF 'RUBBERIZED MEMBRANE WATERPROOFING' ON TOP SLAB OVER ALL CONSTRUCTION JOINTS AND EXTEND DOWN TO BOTTOM OF OUTSIDE WALLS.
- THE CONTRACTOR MAY FURNISH A PRECAST CONCRETE BOX CULVERT IN LIEU OF THE CAST-IN-PLACE BOX CULVERT WITH THE ACCEPTANCE OF THE SHOP DRAWINGS BY THE STRUCTURES DEVELOPMENT SECTION. THE PRECAST CONCRETE BOX CULVERT SHALL CONFORM TO PRECAST DETAILS ON CHAPTER 36 STANDARDS OF THE CURRENT WISC.DOT BRIDGE MANUAL. PAYMENT FOR THE PRECAST CULVERT SHALL BE BASED ON THE QUANTITIES AND PRICES BID FOR THE ITEMS LISTED IN THE 'TOTAL ESTIMATED QUANTITIES'.

LIVE LOAD
DESIGN LOADING: HL-93
INVENTORY RATING FACTOR: RF=1.05
OPERATING RATING FACTOR: RF=1.35
WISCONSIN STANDARD PERMIT VEHICLE (WIS.-SPV): 225 (KIPS)

EARTHLOAD: DESIGNED FOR 6 FT OF FILL.

ULTIMATE DESIGN STRESSES:
CONCRETE MASONRY, GRADE A-FA $f'_c = 3500$ PSI
HIGH STRENGTH BAR STEEL REINFORCEMENT $f_y = 60,000$ PSI

BENCH MARK

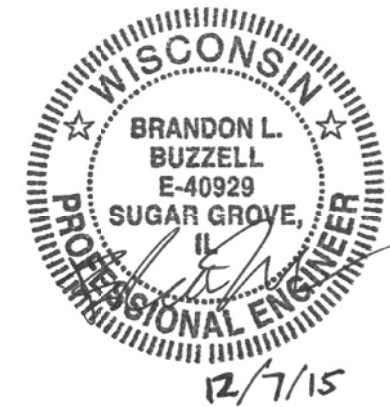
NO.	STATION	DESCRIPTION	OFFSET	ELEV.
202	223+55	CH. SQUARE ON WINGWALL	16' LT	868.44

BRIDGE OFFICE CONTACT:
WILLIAM DREHER
(608) 266-8489

CONSULTANT CONTACT
DANIEL DURIG
(608) 241-5481

LIST OF DRAWINGS

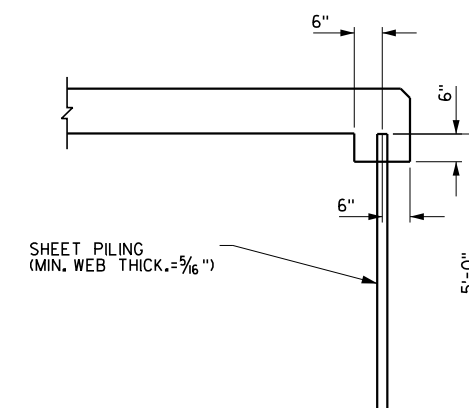
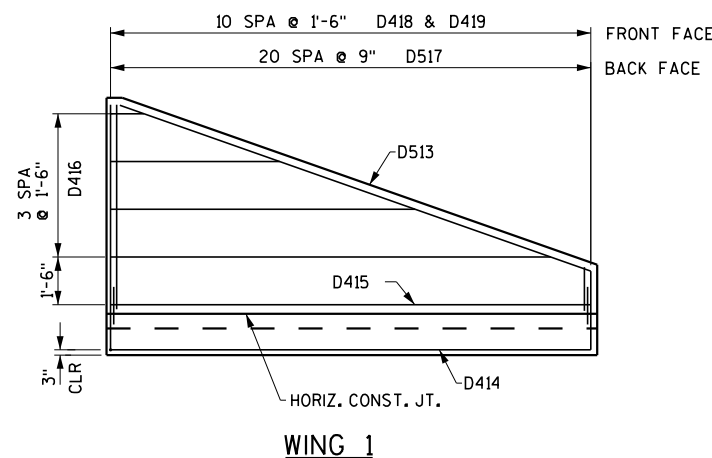
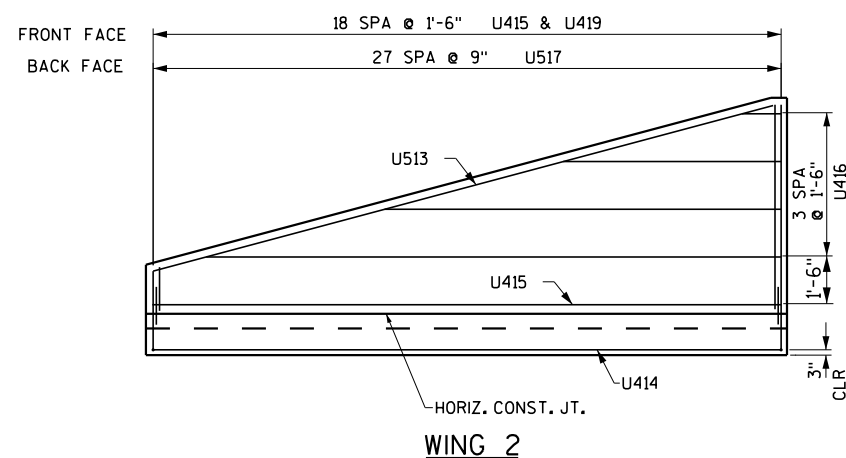
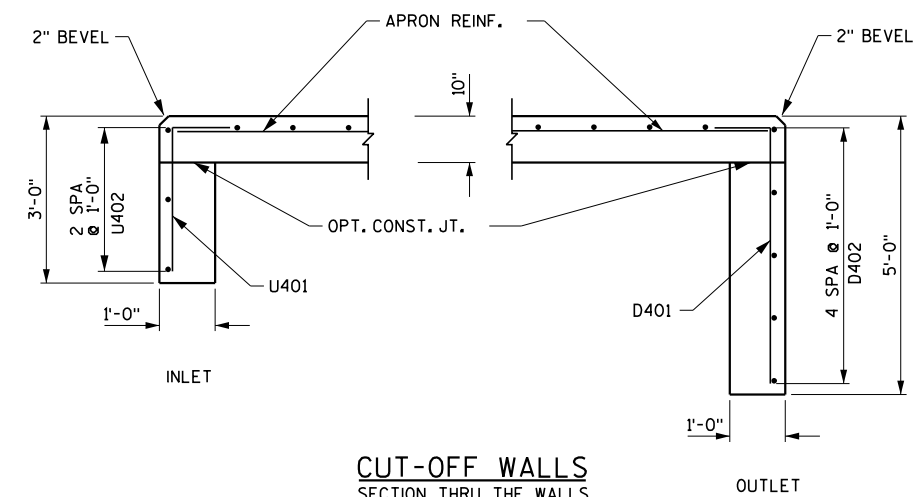
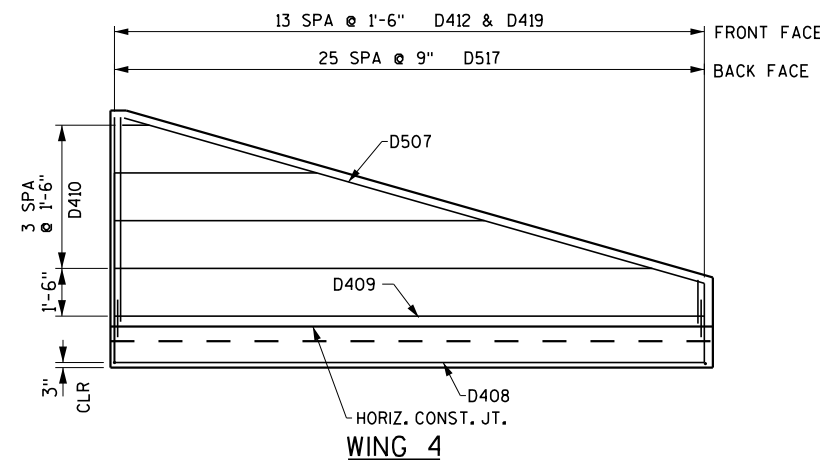
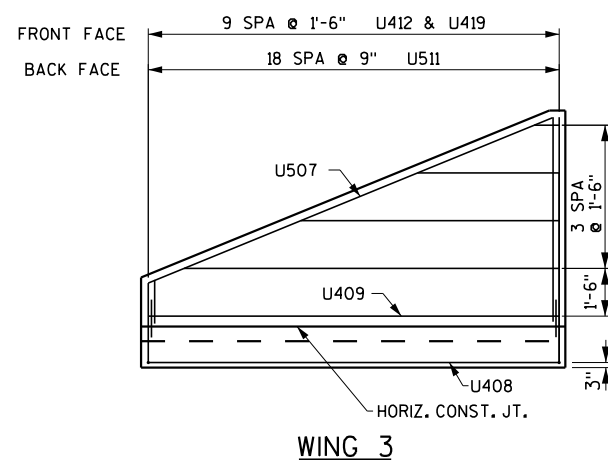
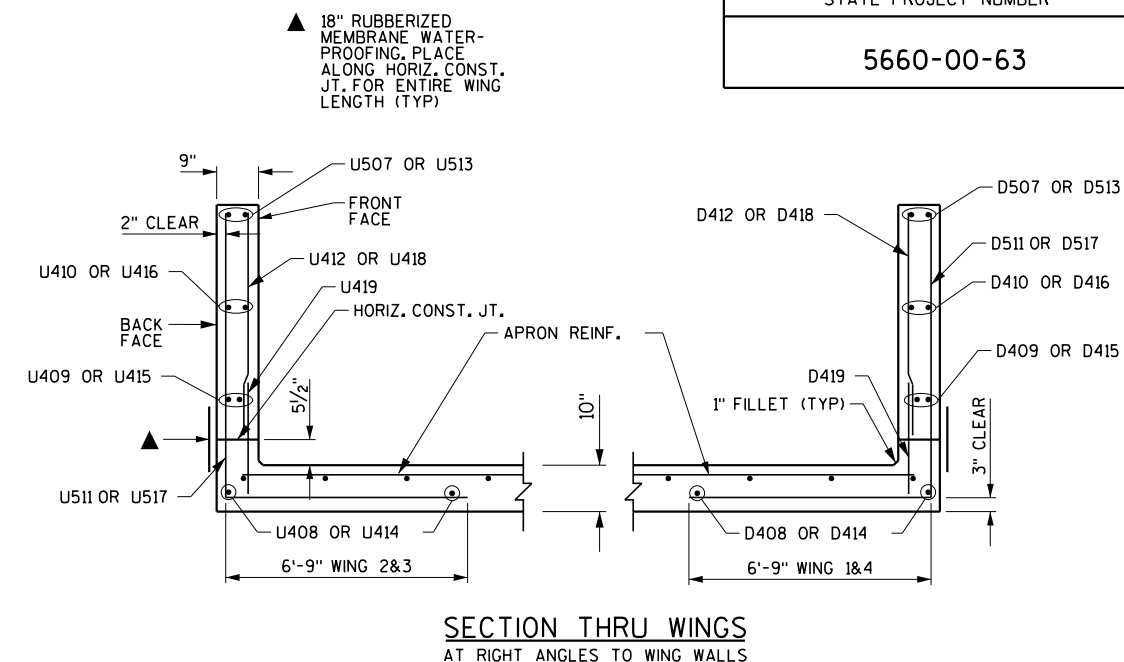
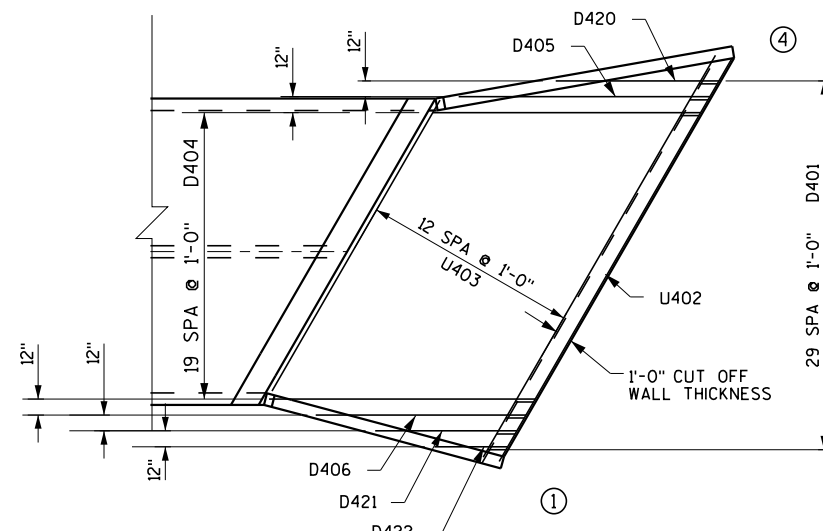
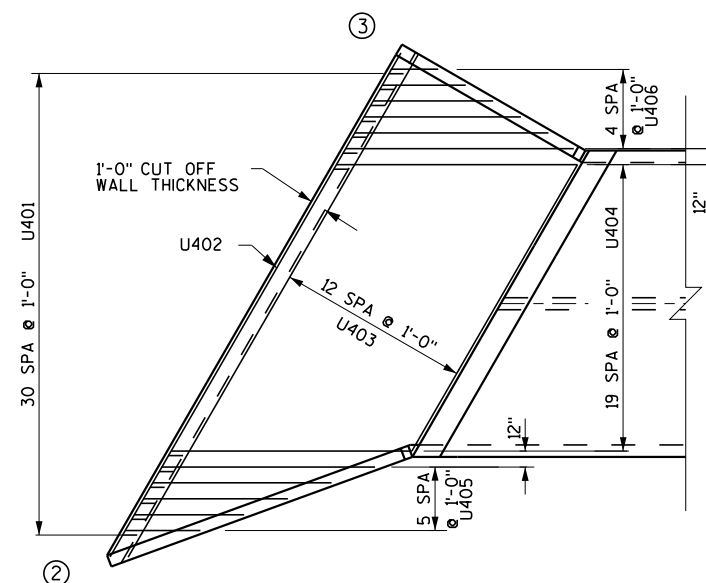
1. LAYOUT
2. BOX DETAILS
3. APRON DETAILS
4. DETAILS
5. SUBSURFACE EXPLORATION



TOTAL ESTIMATED QUANTITIES

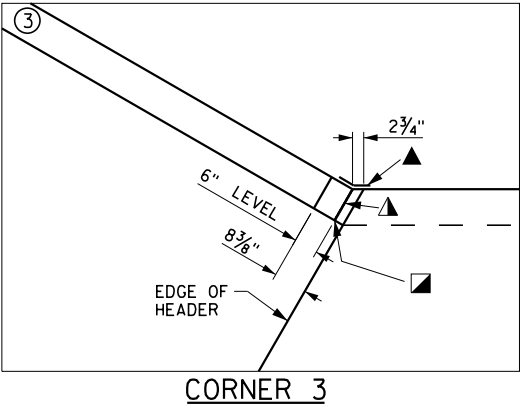
BID ITEMS			
203.0500.S	REMOVING OLD STRUCTURE OVER WATERWAY, STA 223+54	1	LS
206.2000	EXCAVATION FOR STRUCTURES CULVERTS, B-23-176	1	LS
209.0300.S.001	BACKFILL COARSE AGGREGATE SIZE NO. 2	72	CY
210.0100	BACKFILL STRUCTURE	730	CY
311.0115	BREAKER RUN	111	CY
504.0100	CONCRETE MASONRY CULVERTS	175	CY
505.0400	BAR STEEL REINFORCEMENT HS STRUCTURES	23150	LB
505.0600	BAR STEEL REINFORCEMENT HS COATED STRUCTURES	1240	LB
516.0500	RUBBERIZED MEMBRANE WATERPROOFING	23	SY
606.0300	RIPRAP HEAVY	94	CY
645.0105	GEOTEXTILE FABRIC TYPE C	359	SY
645.0120	GEOTEXTILE FABRIC TYPE HR	214	SY
NON-BID ITEMS			
FILLER		3/4"	SIZE

NO.	DATE	REVISION	BY
BAXTER & WOODMAN Consulting Engineers 2801 Coho St., Suite 204 Madison, WI 53713			
ACCEPTED	<i>William C. Dreher</i> SDR	02/08/16	DATE
CHIEF STRUCTURES DESIGN ENGINEER			
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION			
STRUCTURE B-23-176			
STH 59 OVER SYLVESTER CREEK			
COUNTY	GREEN	TOWN/CITY/VILLAGE	SYLVESTER
DESIGN SPEC. AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS			
DESIGNED BY	DCD	DESIGN CK'D.	BLB
DRAWN BY	DCD	PLANS CK'D.	BLB
LAYOUT			SHEET 1 OF 5
			167



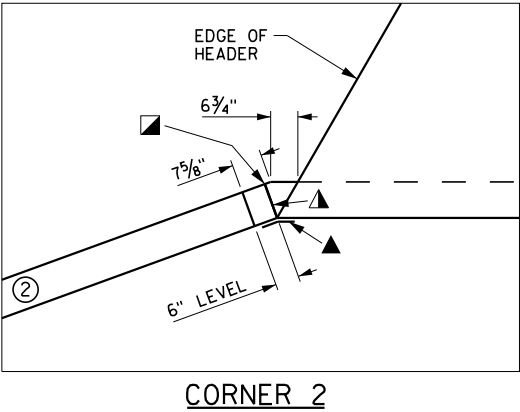
THE ABOVE ALT. MAY BE USED IN LIEU OF THE CAST-IN-PLACE CONC. CUT-OFF WALLS. PAYMENT WILL BE BASED ON THE CONC. CUT-OFF WALLS.

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-23-176			
DRAWN BY CJC		PLANS CK'D. BLB	
APRON DETAILS			SHEET 3 OF 5
169			

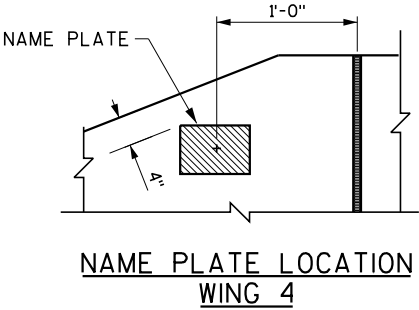
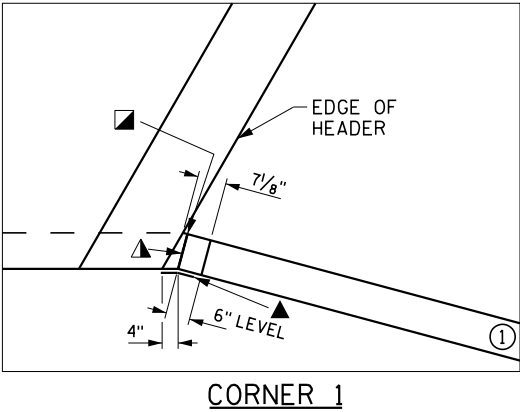
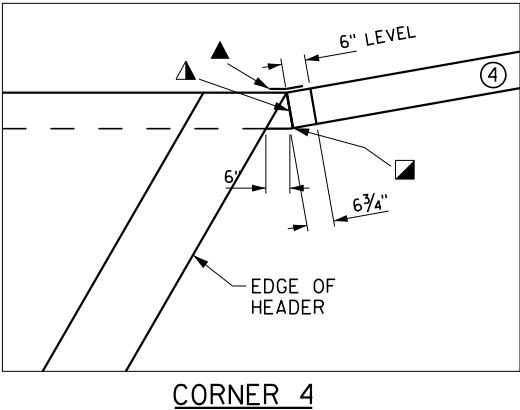


1" BEVEL (TYP)

18" RUBBERIZED MEMBRANE WATER-PROOFING, EXTND FROM HORIZ. CONST. JT. TO TOP OF WALL.



3/4" FILLER TYP. EXTEND FROM HORIZ. CONST. JT. TO TOP OF WING.



BILL OF BARS

THE FIRST DIGIT OF THE MARK SIGNIFIES THE BAR SIZE.
THE DIMENSION IN THE BENT COLUMN IS THE OUT TO OUT HORIZONTAL LEG OF A "L" SHAPED BAR. LONGER BARS OF THE SAME SIZE MAY BE SUBSTITUTED FOR SHORTER BARS. PAYMENT BASED ON BAR LENGTHS AS DETAILED.

MARK	COAT	NO. REQ'D.	LENGTH	BENT	BAR SERIES	LOCATION
U401		31	3-6	1-0		INLET APRON AND CUTOFF WALL
U402		3	36-9			INLET APRON AND CUTOFF WALL
U403		13	29-1		*	INLET APRON
U404		20	15-2			INLET APRON
U405		6	7-7		*	INLET APRON
U406		5	8-2		*	INLET APRON
U507		2	13-8			WING 3 - HORIZONTAL - BOTH FACES
U408		2	13-0			WING 3 - HORIZONTAL - APRON BOTTOM SLAB
U409		2	13-0			WING 3 - HORIZONTAL - BOTH FACES
U410		8	6-11		*	WING 3 - HORIZONTAL - BOTH FACES
U511	X	19	11-9	6-9	*	WING 3 - VERTICAL - BACK FACE DOWEL
U412		10	4-0		*	WING 3 - VERTICAL - FRONT FACE
U513		2	20-2			WING 2 - HORIZONTAL - BOTH FACES
U414		2	19-9			WING 2 - HORIZONTAL - APRON BOTTOM SLAB
U415		2	19-9			WING 2 - HORIZONTAL - BOTH FACES
U416		8	10-5		*	WING 2 - HORIZONTAL - BOTH FACES
U517	X	28	11-9	6-9	*	WING 2 - VERTICAL - BACK FACE DOWEL
U418		19	4-0		*	WING 2 - VERTICAL - FRONT FACE
U419	X	29	2-2			WING 2 & WING 3 - VERTICAL - FRONT FACE DOWEL
D401		25	3-6	1-0		OUTLET APRON AND CUTOFF WALL
D402		5	29-6			OUTLET APRON AND CUTOFF WALL
D403		15	25-8		*	OUTLET APRON
D404		20	16-11			OUTLET APRON
D405		1	11-8			OUTLET APRON
D406		1	12-4			OUTLET APRON
D507		2	19-0			WING 4 - HORIZONTAL - BOTH FACES
D408		2	18-7			WING 4 - HORIZONTAL - APRON BOTTOM SLAB
D409		2	18-7			WING 4 - HORIZONTAL - BOTH FACES
D410		8	9-9		*	WING 4 - HORIZONTAL - BOTH FACES
D511	X	26	11-9	6-9	*	WING 4 - VERTICAL - BACK FACE DOWEL
D412		14	4-0		*	WING 4 - VERTICAL - FRONT FACE
D513		2	15-8			WING 1 - HORIZONTAL - BOTH FACES
D414		2	15-1			WING 1 - HORIZONTAL - APRON BOTTOM SLAB
D415		2	15-1			WING 1 - HORIZONTAL - BOTH FACES
D416		8	8-5		*	WING 1 - HORIZONTAL - BOTH FACES
D517	X	21	11-9	6-9	*	WING 1 - VERTICAL - BACK FACE DOWEL
D418		11	4-0		*	WING 1 - VERTICAL - FRONT FACE
D419	X	25	2-2			WING 1 & WING 4 - VERTICAL - FRONT FACE DOWEL
D420		1	6-7			OUTLET APRON
D421		1	8-0			OUTLET APRON
D422		1	3-4			OUTLET APRON

* LENGTH SHOWN FOR BAR IS AN AVERAGE AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

BUNDLE AND BAG EACH SERIES SEPARATELY

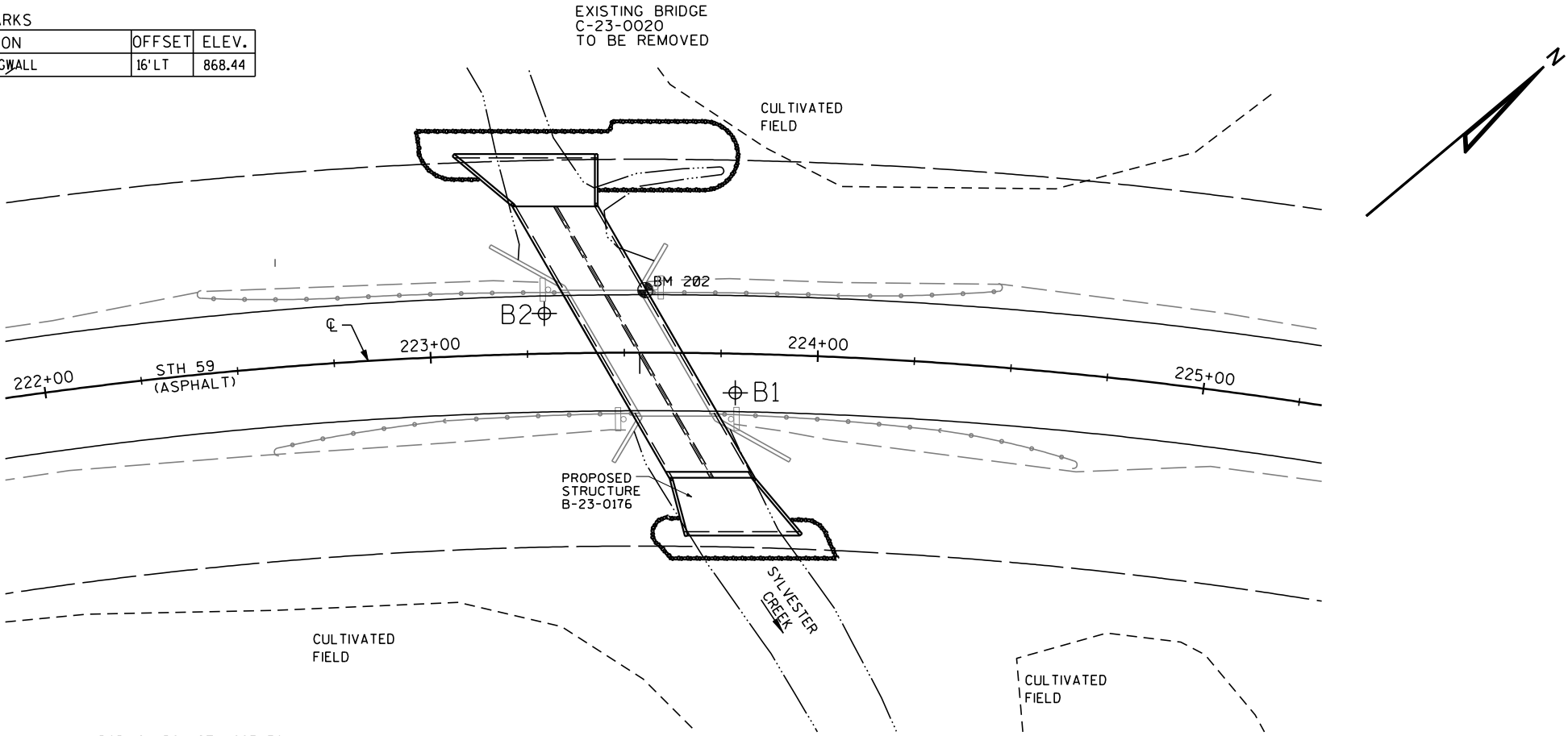
BAR MARK	NO. REQ'D.	LENGTHS FOR EACH SERIES
U403	1 SERIES OF 13	21-11 TO 36-3
U405	1 SERIES OF 6	2-2 TO 13-0
U406	1 SERIES OF 5	3-7 TO 12-10
U410	2 SERIES OF 4	1-5 TO 12-5
U511	1 SERIES OF 19	9-2 TO 14-5
U412	1 SERIES OF 10	1-5 TO 6-7
U416	2 SERIES OF 4	2-0 TO 18-10
U517	1 SERIES OF 28	9-2 TO 14-5
U418	1 SERIES OF 19	1-5 TO 6-7
D403	1 SERIES OF 15	21-10 TO 29-7
D410	2 SERIES OF 4	1-11 TO 17-8
D511	1 SERIES OF 26	9-2 TO 14-5
D412	1 SERIES OF 14	1-5 TO 6-7
D416	2 SERIES OF 4	2-0 TO 14-10
D517	1 SERIES OF 21	9-2 TO 14-5
D418	1 SERIES OF 11	1-5 TO 6-7

STATE PROJECT NUMBER

5660-00-63

NO.	DATE	REVISION	BY
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION STRUCTURES DESIGN SECTION			
STRUCTURE B-23-176			
DRAWN BY CJC		PLANS CK'D. BLB	
DETAILS			SHEET 4 OF 5
			170

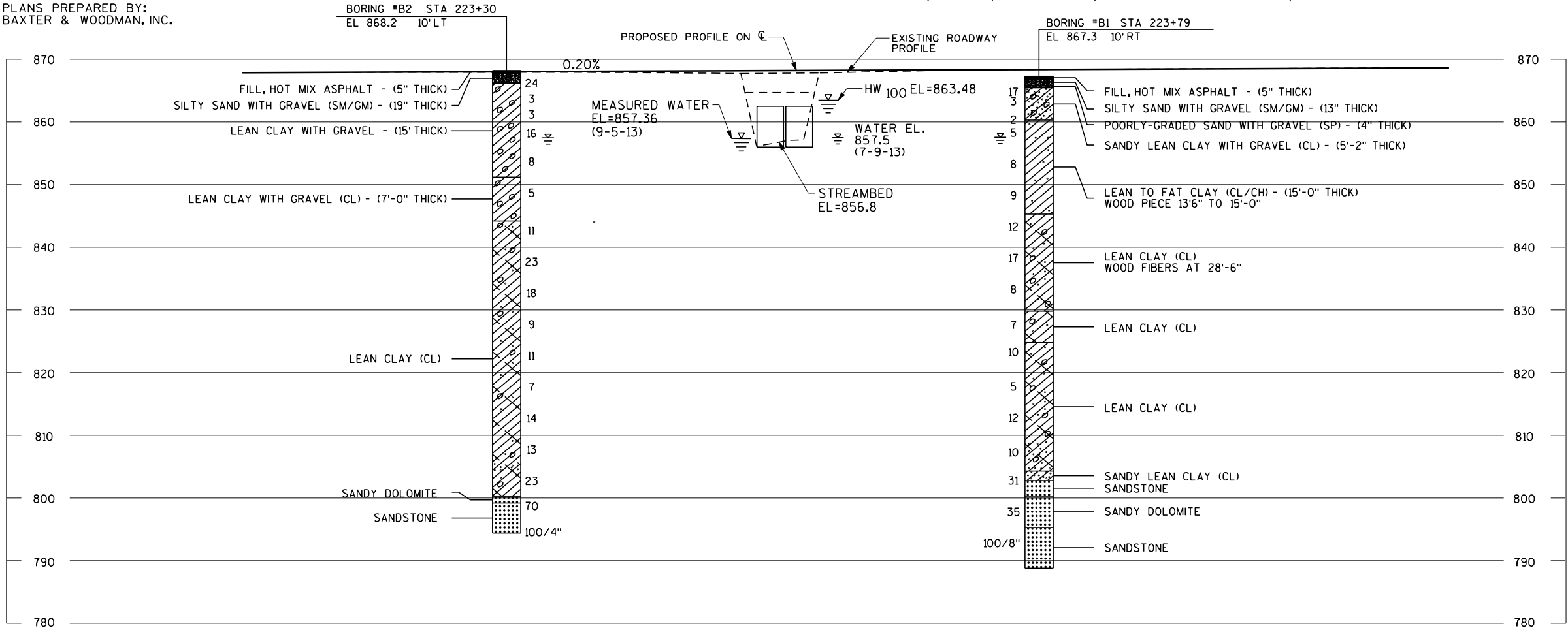
BENCH MARKS				
NO.	STATION	DESCRIPTION	OFFSET	ELEV.
202	223+55	CHISELED SQUARE ON WINGWALL	16' LT	868.44



BORINGS PERFORMED BY:
SOILS & ENGINEERING SERVICES, INC.
MADISON, WISCONSIN

BORINGS COMPLETED ON:
7-9-13 AND 7-11-13

PLANS PREPARED BY:
BAXTER & WOODMAN, INC.



STATE PROJECT NUMBER

5660-00-63

ABBREVIATIONS

F — FINE M — MEDIUM C — COARSE
WS — WEATHERED SO — SOUND

MATERIAL SYMBOLS

TOPSOIL

SAND

GRAVEL

SILT

PEAT

CLAY

SANDSTONE

LIMESTONE

IGNEOUS ROCK

LEGEND OF PROBING

PROBING NO.
STA.
ELEVATION
7 AVERAGE BLOWS PER FOOT
REFUSAL 95/6

95/6=95 BLOWS FOR 6" PENETRATION
PROBING TAKEN WITH A 350# WT. FALLING 18" ON A 2" O.D. POINT.

LEGEND OF BORING

ELEV.
BORING NO.
STA.

UNCONFINED STRENGTH
BLOWS PER FT. USING 140# WT. FALLING 30"
WASH SAMPLE
SHELBY TUBE — S.T.
GROUND WATER ELEVATION
NO GROUND WATER OBSERVED ABOVE THIS ELEVATION

SANDY GRAVEL
F. BOULDERS OR COBBLES
SAND
SILTY CLAY
SO
LIMESTONE

UNLESS OTHERWISE SPECIFIED, THE BLOWS PER FOOT AT THE LOCATIONS INDICATED ARE BASED ON DRIVING A 2" O.D. X 1.4" I.D. SPLIT SPOON SAMPLER WITH A 140# HAMMER HAVING A FREE FALL OF 30". THE BLOW COUNT IS TAKEN IN UNDISTURBED SOIL IMMEDIATELY BELOW A CASED OR OPEN HOLE ELIMINATING SIDE FRICTION ON THE DRIVE PIPE.

SUBSURFACE EXPLORATION FOR FOUNDATION DESIGN AND BIDDERS INFORMATION

TO OBTAIN RELATIVE DATA CONCERNING THE CHARACTER OF MATERIAL IN AND UPON WHICH THE FOUNDATION MIGHT BE BUILT, BORINGS AND/OR SOUNDINGS WERE MADE AT POINTS APPROXIMATELY AS INDICATED ON THIS DRAWING. THE DATA PRESENTED HEREIN REPRESENTS THE FINDINGS OF THE SUBSURFACE EXPLORATIONS MADE. HOWEVER, BECAUSE THE DEPTHS INVESTIGATED ARE LIMITED AND THE AREA OF THE BORINGS AND/OR SOUNDINGS IS VERY SMALL IN RELATION TO THE ENTIRE AREA, THE WISCONSIN DEPARTMENT OF TRANSPORTATION DOES NOT WARRANT CONDITIONS BELOW THE DEPTHS INVESTIGATED OR THAT THE CLASSIFICATION OF MATERIAL ENCOUNTERED IN THESE INVESTIGATIONS IS NECESSARILY TYPICAL OF THE ENTIRE SITE.

NO.	DATE	REVISION	BY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE B-23-0176

DRAWN BY
MEL

PLANS CK'D.
DCD

SUBSURFACE EXPLORATION

SHEET 5 OF 5

171

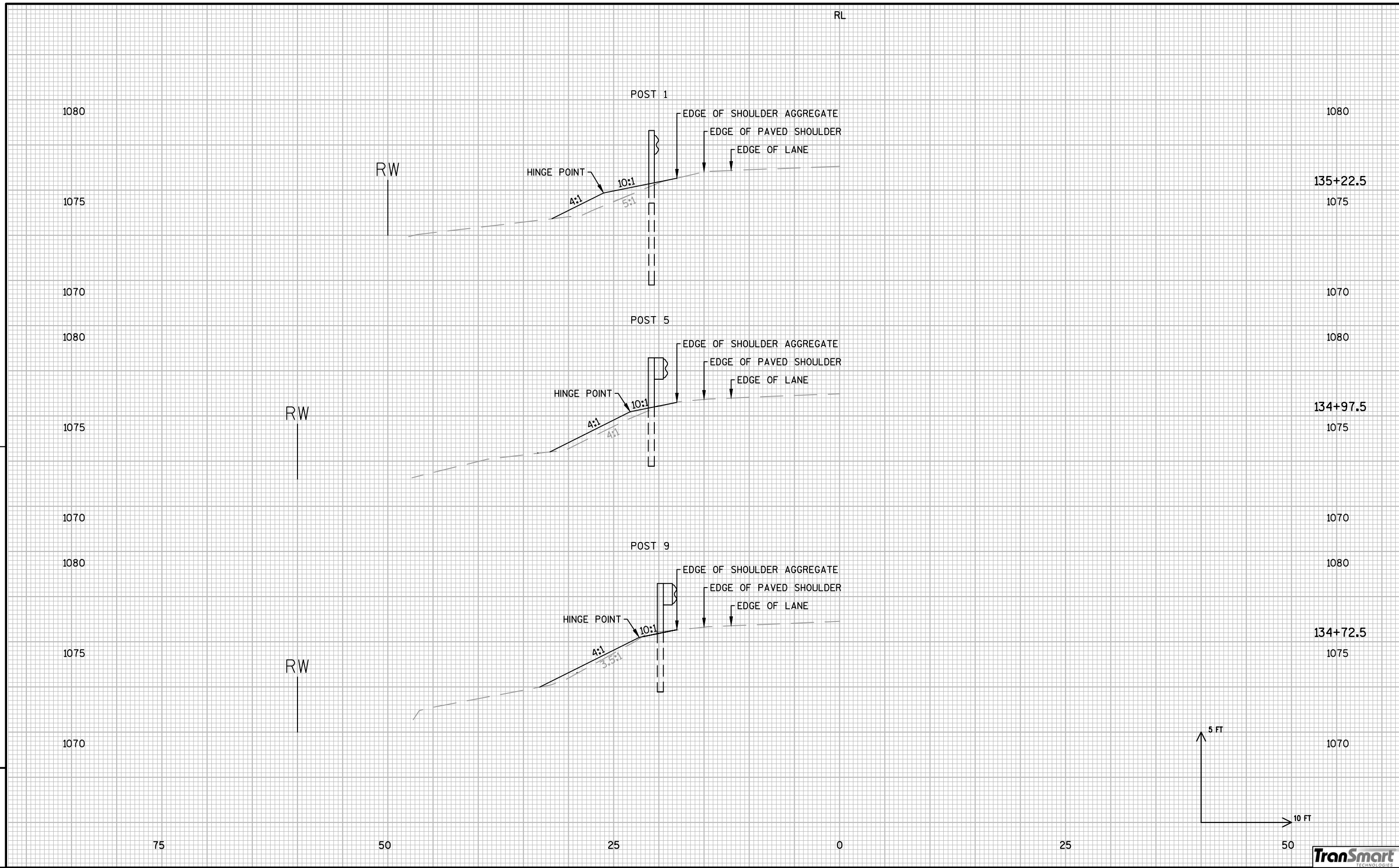
MAINLINE (STH 59) STA 221+25 - 226+00									
STATION	Real Station	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
			Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.2	
221+25	22125		0	0	0	0	0	0	0
221+62	22162	37	1	120	1	82	1	99	-98
221+86	22186	24	0	58	0	79	1	194	-192
222+00	22200	14	0	40	0	25	1	224	-223
222+14	22214	14	0	36	0	20	1	248	-247
222+50	22250	36	2	38	1	49	2	307	-304
223+00	22300	50	0	71	2	101	4	428	-424
223+35	22335	35	0	71	0	92	4	538	-534
223+40	22340	5	0	0	0	7	4	546	-542
B-23-176									
223+65	22365	25	0	0	0	0	4	546	-542
223+70	22370	5	0	94	0	9	4	557	-553
224+00	22400	30	0	94	0	104	4	682	-678
224+50	22450	50	6	51	6	134	10	843	-833
224+96	22496	46	2	70	7	103	17	967	-950
225+00	22500	4	2	70	0	10	17	979	-962
225+25	22525	25	7	141	4	98	21	1097	-1075
225+50	22550	25	30	213	17	164	38	1293	-1255
226+00	22600	50	0	0	28	197	66	1530	-1464
TOTALS					66	1275	BORROW: 1464 CY		
SYLVESTER CREEK TEMP. BYPASS CHANNEL									
STATION	Real Station	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
			Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.25	
20+00	2000		0	0	0	0	0	0	0
20+50	2050	50	56	0	52	0	52	0	52
21+00	2100	50	72	0	119	0	170	0	170
21+50	2150	50	243	0	292	0	462	0	462
22+00	2200	50	347	0	546	0	1008	0	1008
22+50	2250	50	72	0	388	0	1396	0	1396
23+00	2300	50	0	0	67	0	1463	0	1463
Totals			TOTALS		1463	0			
BYPASS CHANNEL NOTES									
THE TEMPORARY BYPASS CHANNEL SHALL BE BACKFILLED WITH GRANULAR BACKFILL WITHIN THE ROADWAY LIMITS ESTABLISHED BY 1:1 SLOPES EXTENDING FROM THE ROADWAY SUBGRADE SHOULDER POINTS. GRANULAR BACKFILL SHALL BE MEASURED AND PAID SEPARATELY FROM OTHER ITEMS.					CUT MATERIAL GENERATED FROM EXCAVATION OF THE TEMP. BYPASS CHANNEL TO BE SALVAGED AND USED FOR BACKFILL OF THE TEMPORARY BYPASS CHANNEL OUTSIDE OF THE ROADWAY LIMITS. PLACEMENT OF THIS BACKFILL MATERIAL TO BE PAID UNDER THE ITEM "BORROW"				
• ESTIMATED GRANULAR BACKFILL: 934 CY					• ESTIMATE BORROW: 660 CY • WASTE: 800 CY				
PROJECT NO: 5660-00-63		HWY: STH 59		COUNTY: GREEN		EARTHWORK SUMMARY		SHEET: 172	
E									

ALBANY SIDEWALK - STA 50+00 TO 68+89									
STATION	Real Station	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
			Cut	Fill	Cut	Fill	Cut 1.00	Expanded Fill 1.2	
50+00	5000		3	0	0	0	0	0	0
50+50	5050	50	1	0	4	0	4	0	4
51+00	5100	50	3	0	4	0	7	0	7
51+50	5150	50	3	0	6	0	13	0	13
52+00	5200	50	3	0	6	0	19	0	19
52+50	5250	50	3	0	6	0	24	0	24
53+00	5300	50	3	0	6	0	30	0	30
53+50	5350	50	3	0	6	0	35	0	35
54+00	5400	50	3	0	6	0	41	0	41
54+50	5450	50	3	0	6	0	46	0	46
55+00	5500	50	3	0	6	0	52	0	52
55+50	5550	50	3	0	6	0	57	0	57
56+00	5600	50	2	0	5	0	62	0	62
56+50	5650	50	2	0	4	0	66	0	66
57+00	5700	50	2	0	4	0	69	0	69
57+50	5750	50	3	0	5	0	74	0	74
58+00	5800	50	3	0	6	0	80	0	80
58+50	5850	50	2	0	5	0	84	0	84
59+00	5900	50	3	0	5	0	89	0	89
59+50	5950	50	2	1	5	1	94	1	93
60+00	6000	50	3	1	5	2	98	3	95
60+50	6050	50	2	1	5	2	103	5	97
61+00	6100	50	2	0	4	1	106	7	100
61+50	6150	50	0	19	2	18	108	28	81
62+00	6200	50	0	31	0	46	108	83	25
62+50	6250	50	0	38	0	64	108	160	-52
63+00	6300	50	0	41	0	73	108	248	-139
63+50	6350	50	0	43	0	78	108	341	-233
64+00	6400	50	0	48	0	84	108	442	-334
64+50	6450	50	0	15	0	58	108	512	-404
65+00	6500	50	6	0	6	14	114	529	-415
65+50	6550	50	5	0	10	0	124	529	-405
66+00	6600	50	1	3	6	3	130	532	-402
66+50	6650	50	2	4	3	6	132	540	-407
67+00	6700	50	1	9	3	12	135	554	-419
67+50	6750	50	0	11	1	19	136	577	-440
68+00	6800	50	1	13	1	22	137	603	-466
68+50	6850	50	0	59	1	67	138	683	-545
68+89	6889	39	0	59	0	85	138	785	-648
TOTALS					138	655			

9

9

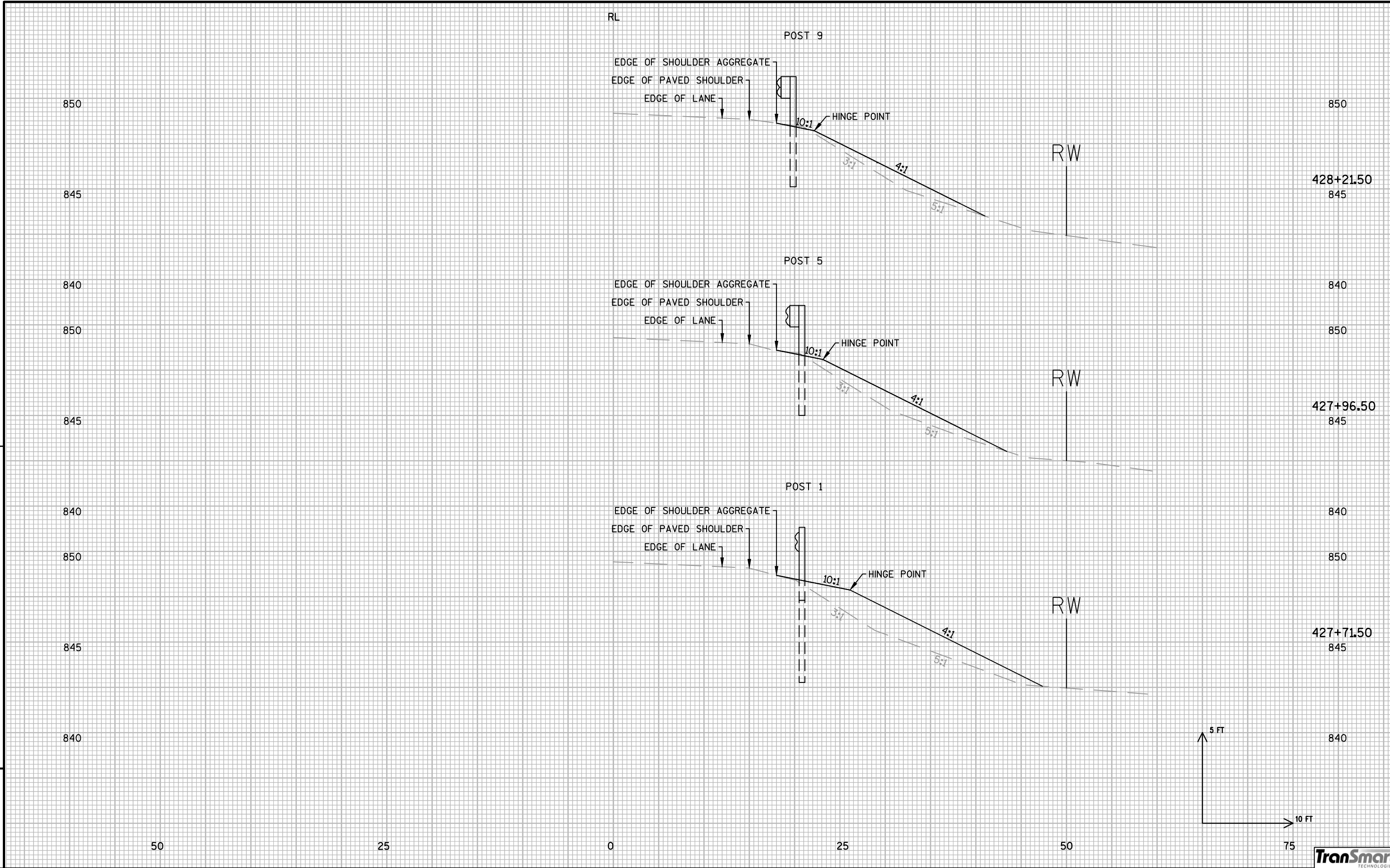
PROJECT NO: 5660-00-63	HWY: STH 59	COUNTY: GREEN	EARTHWORK SUMMARY	SHEET: 173	E
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9

9

9



9

RL

POST 1

EDGE OF SHOULDER AGGREGATE
EDGE OF PAVED SHOULDER
EDGE OF LANE

HINGE POINT

RW

430+96.50
845

POST 5

EDGE OF SHOULDER AGGREGATE
EDGE OF PAVED SHOULDER
EDGE OF LANE

HINGE POINT

RW

430+71.50
845

POST 9

EDGE OF SHOULDER AGGREGATE
EDGE OF PAVED SHOULDER
EDGE OF LANE

HINGE POINT

RW

430+46.50
845

5 FT
10 FT

9

9

PROJECT NO: 5660-00-63

HWY: STH 59

COUNTY: GREEN

CROSS SECTIONS:

MGS GUARDRAIL 3 STA 427+00 - 433+00

SHEET 176

E

FILE NAME : Site_3.dwg

PLOT DATE : 12-1-15

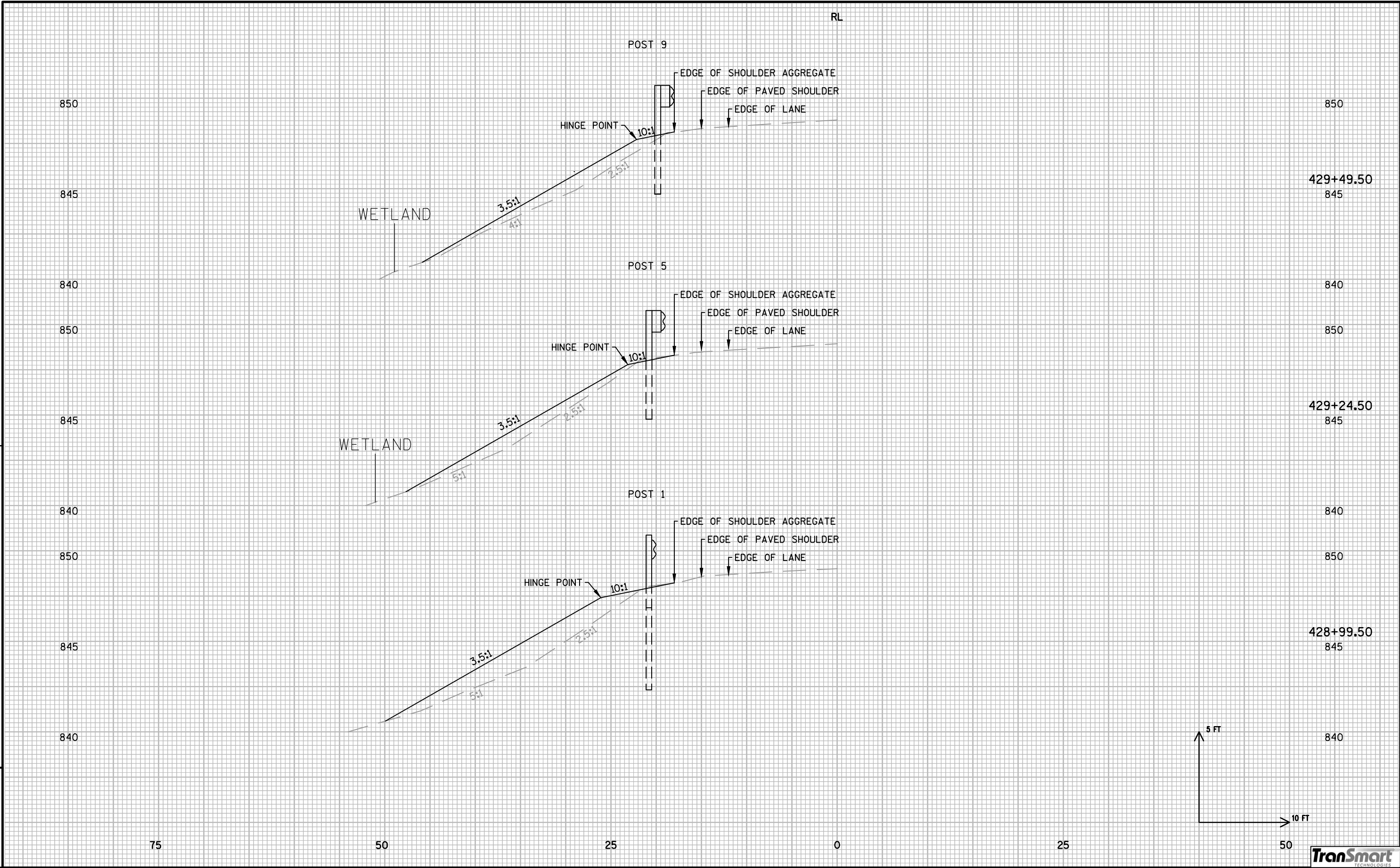
PLOT BY : jweiss

PLOT NAME : .

PLOT SCALE : 10.0000 sf / in.

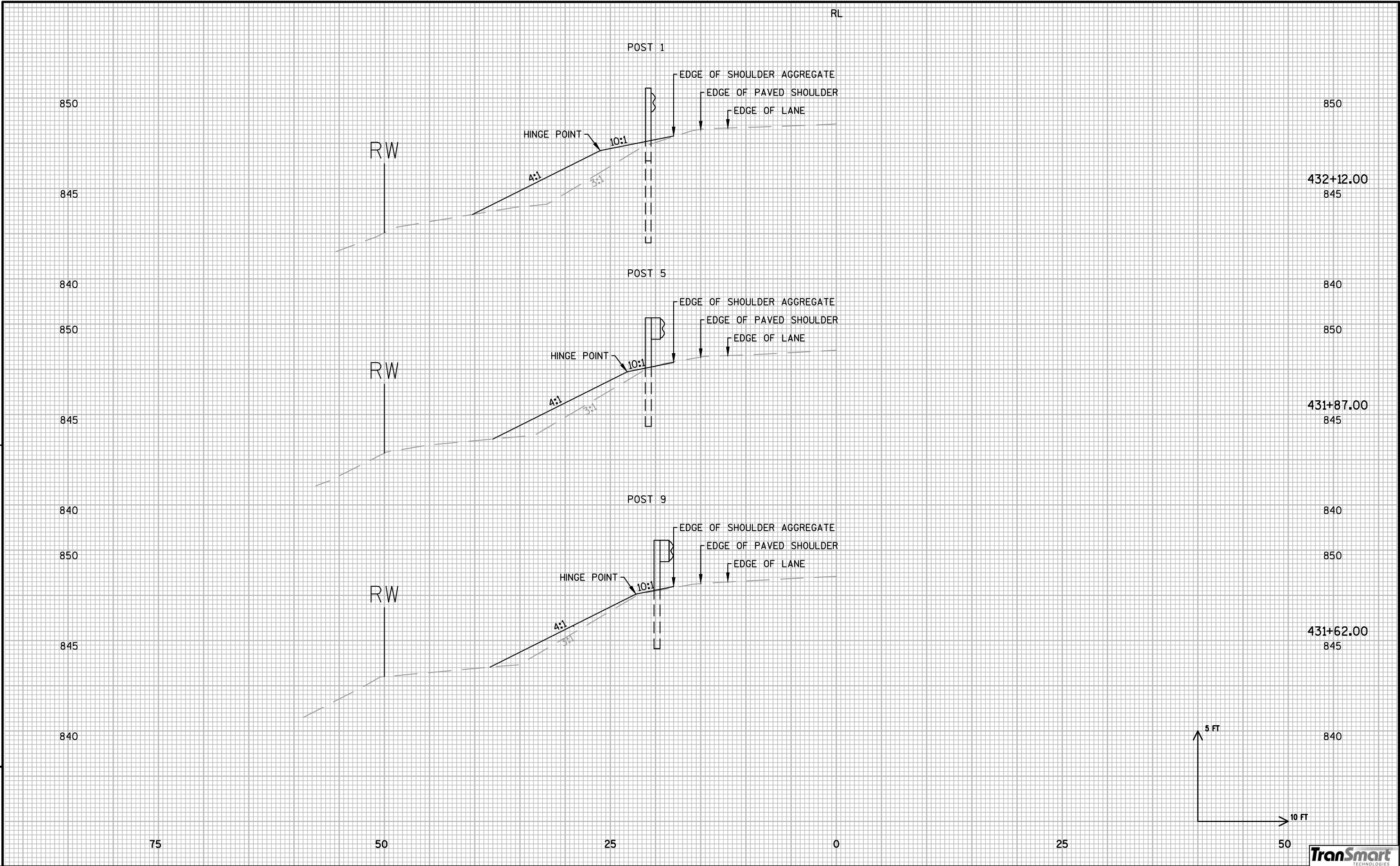
WSDOT/CADDS SHEET 21

9



9

9



9

RL

855

850

845

855

850

845

855

850

845

855

606+87.50

850

845

855

606+62.50

850

845

855

606+37.50

850

845

POST 9

EDGE OF SHOULDER AGGREGATE
EDGE OF PAVED SHOULDER
EDGE OF LANE

HINGE POINT

10:1

4:1

RW

POST 5

EDGE OF SHOULDER AGGREGATE
EDGE OF PAVED SHOULDER
EDGE OF LANE

HINGE POINT

10:1

4:1

RW

POST 1

EDGE OF SHOULDER AGGREGATE
EDGE OF PAVED SHOULDER
EDGE OF LANE

HINGE POINT

10:1

4:1

RW

5 FT

10 FT

75

9

9

PROJECT NO: 5660-00-63

HWY: STH 59

COUNTY: GREEN

CROSS SECTIONS:

MGS GUARDRAIL 3 STA 605+00 - 612+00

SHEET 179

E

FILE NAME : Site_4.dwg

PLOT DATE : 12-1-15

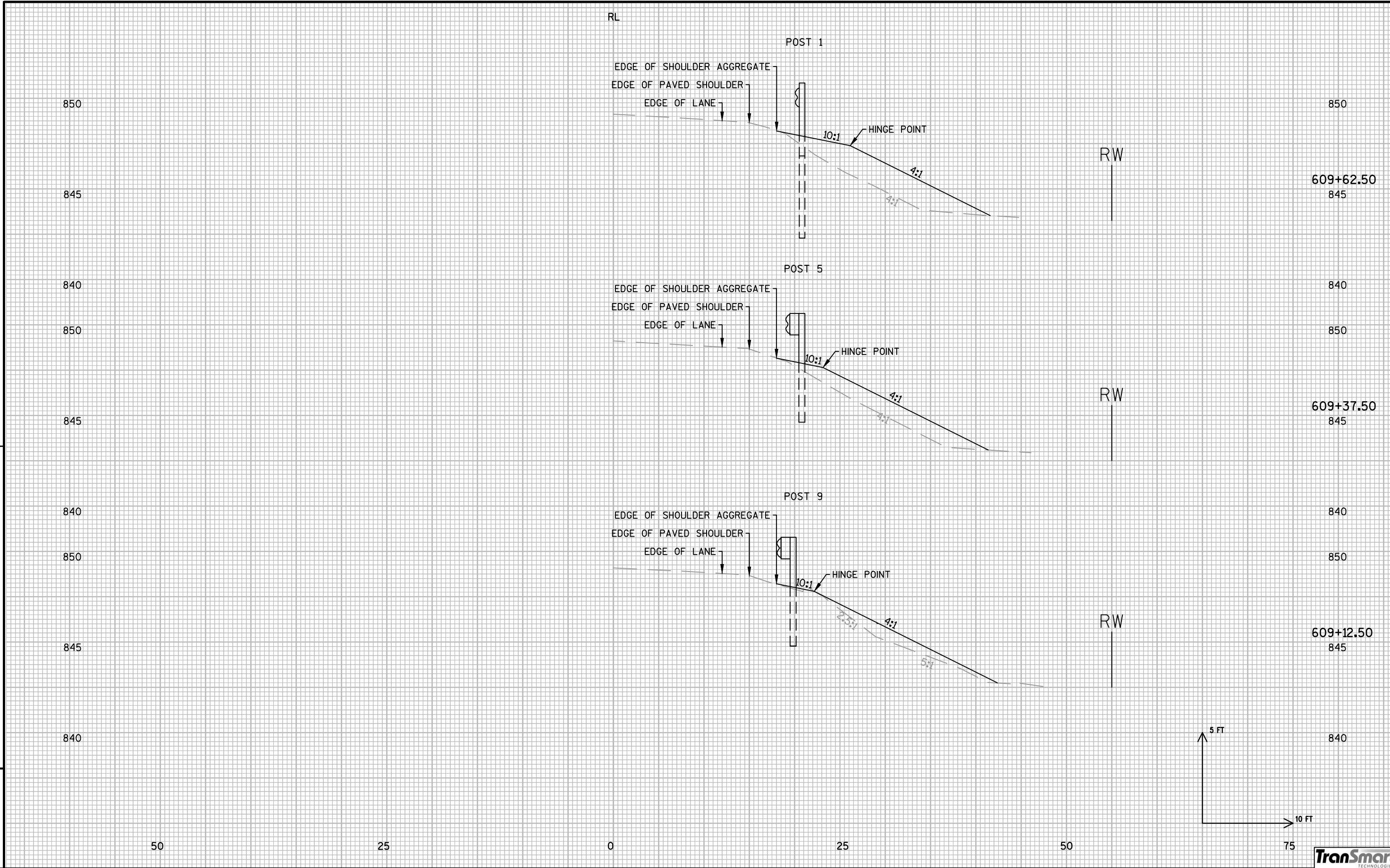
PLOT BY : jweiss

PLOT NAME : .

PLOT SCALE : 10.0000 sf / in.

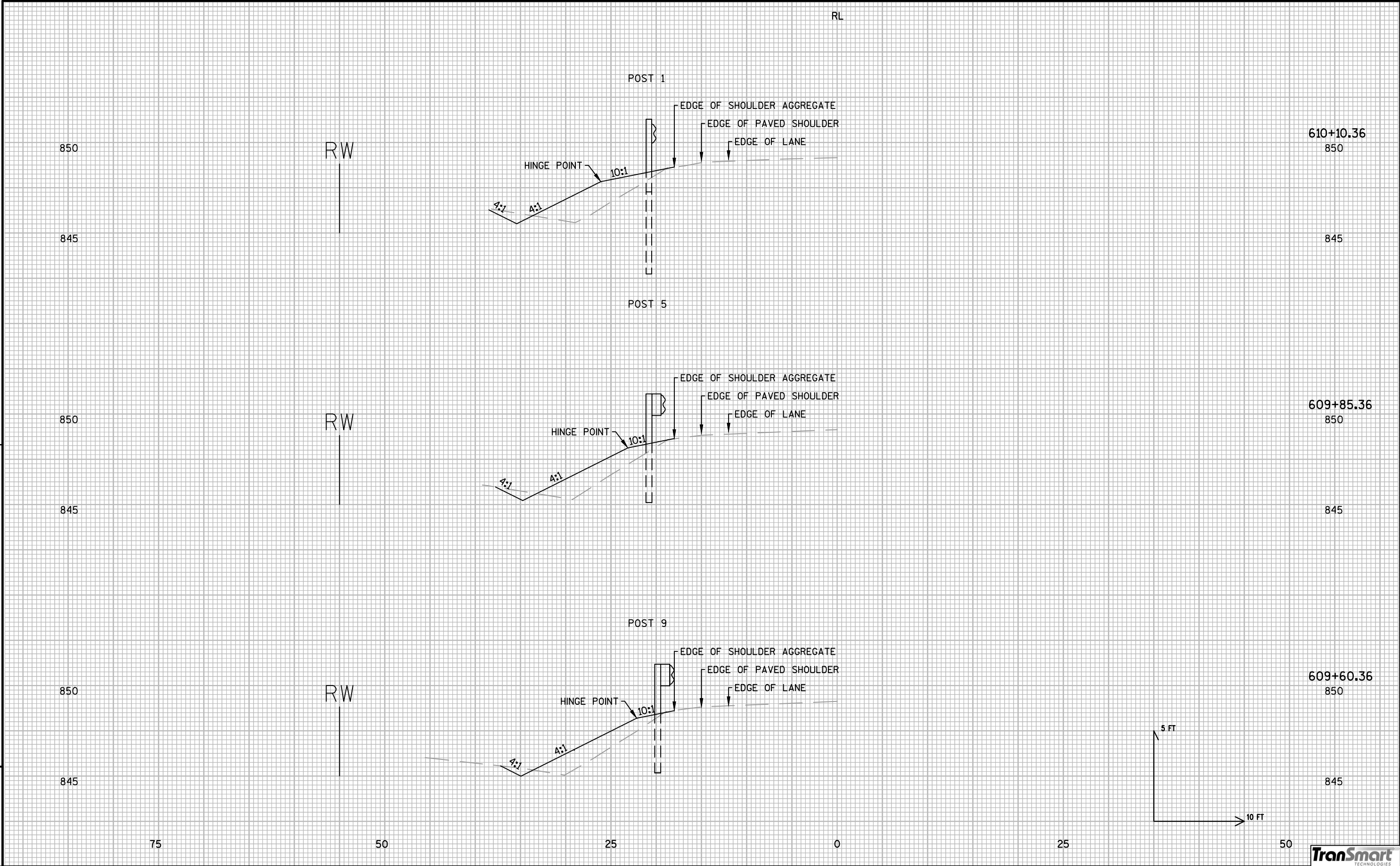
WSDOT/CADDS SHEET 21

9



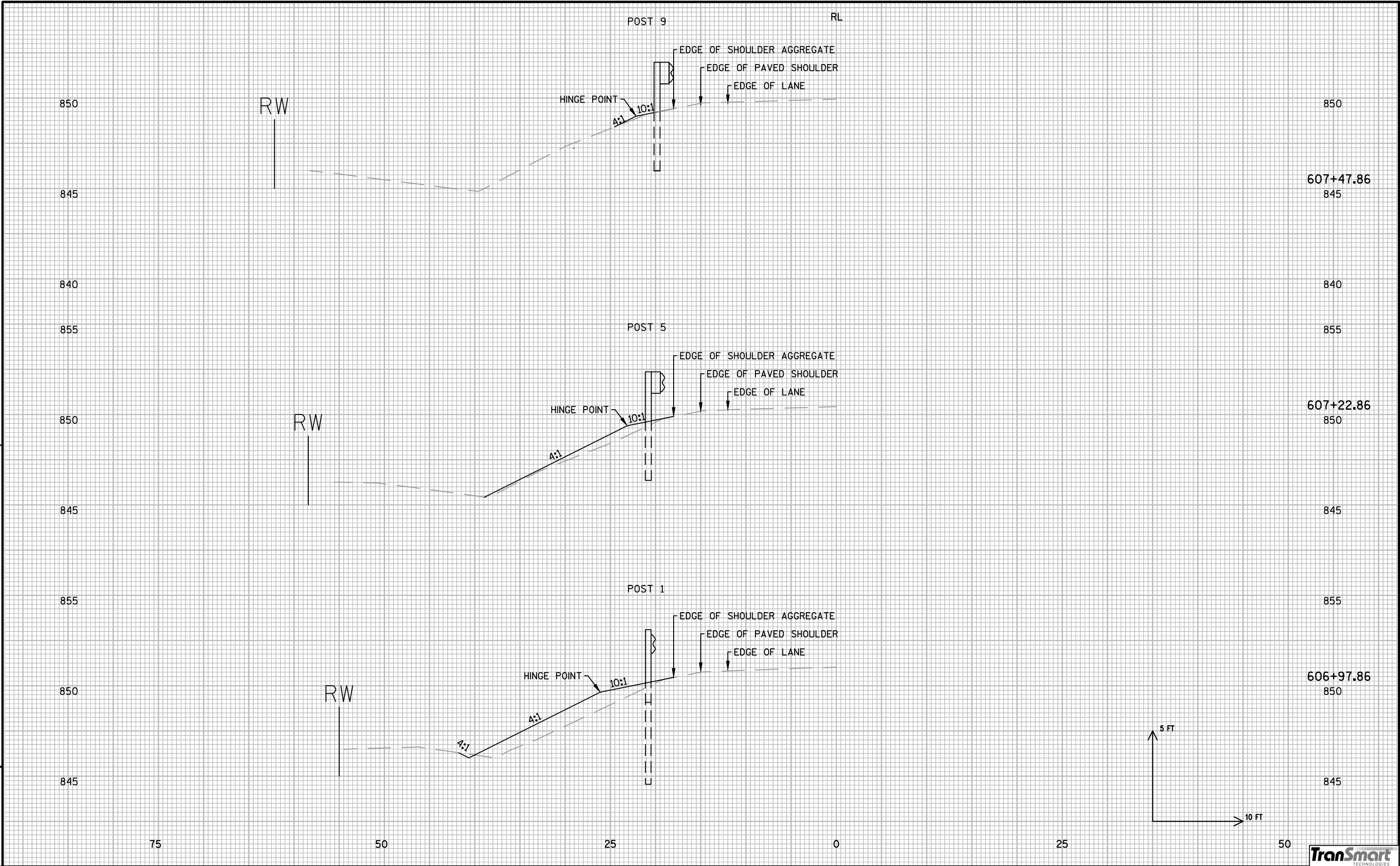
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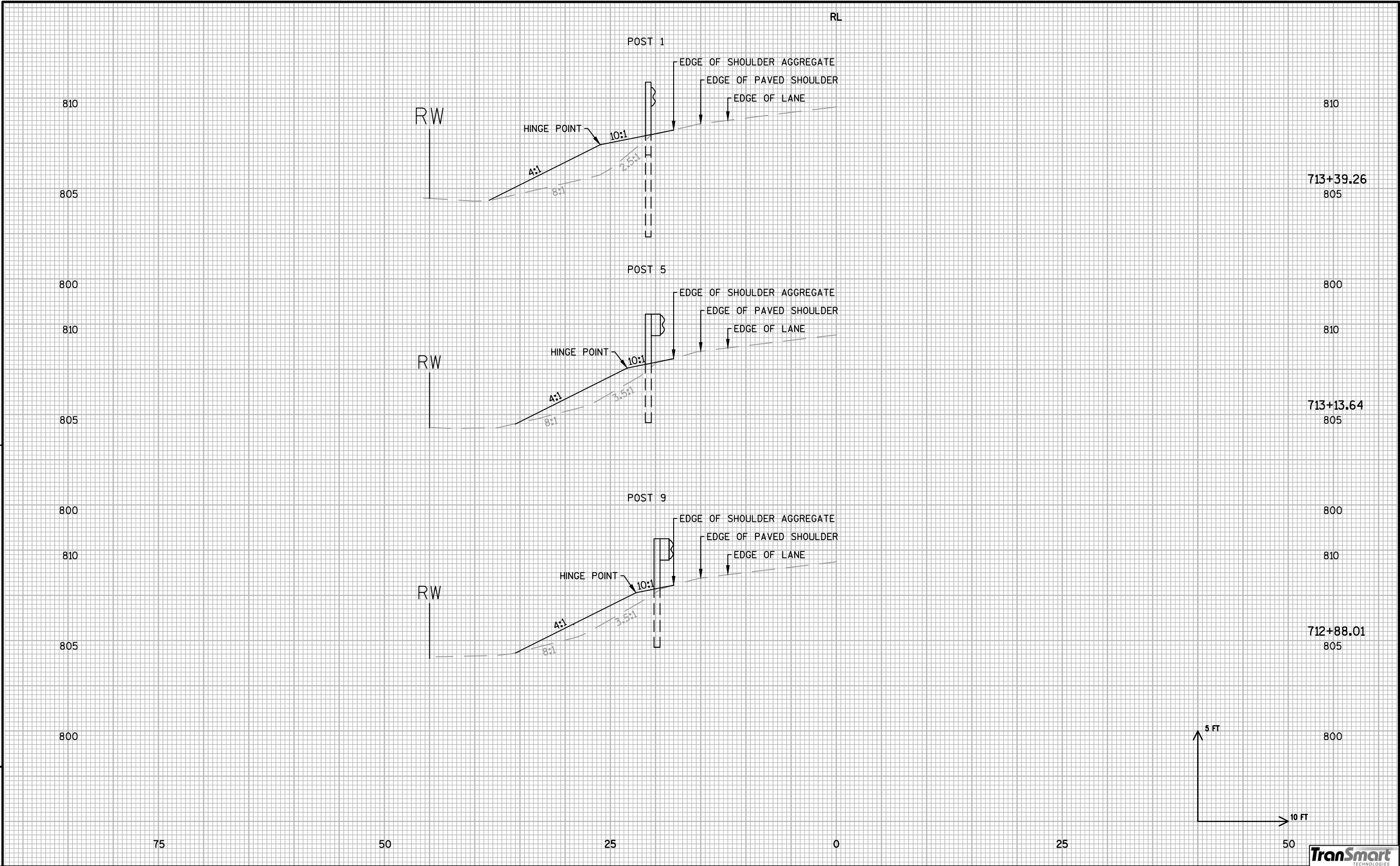
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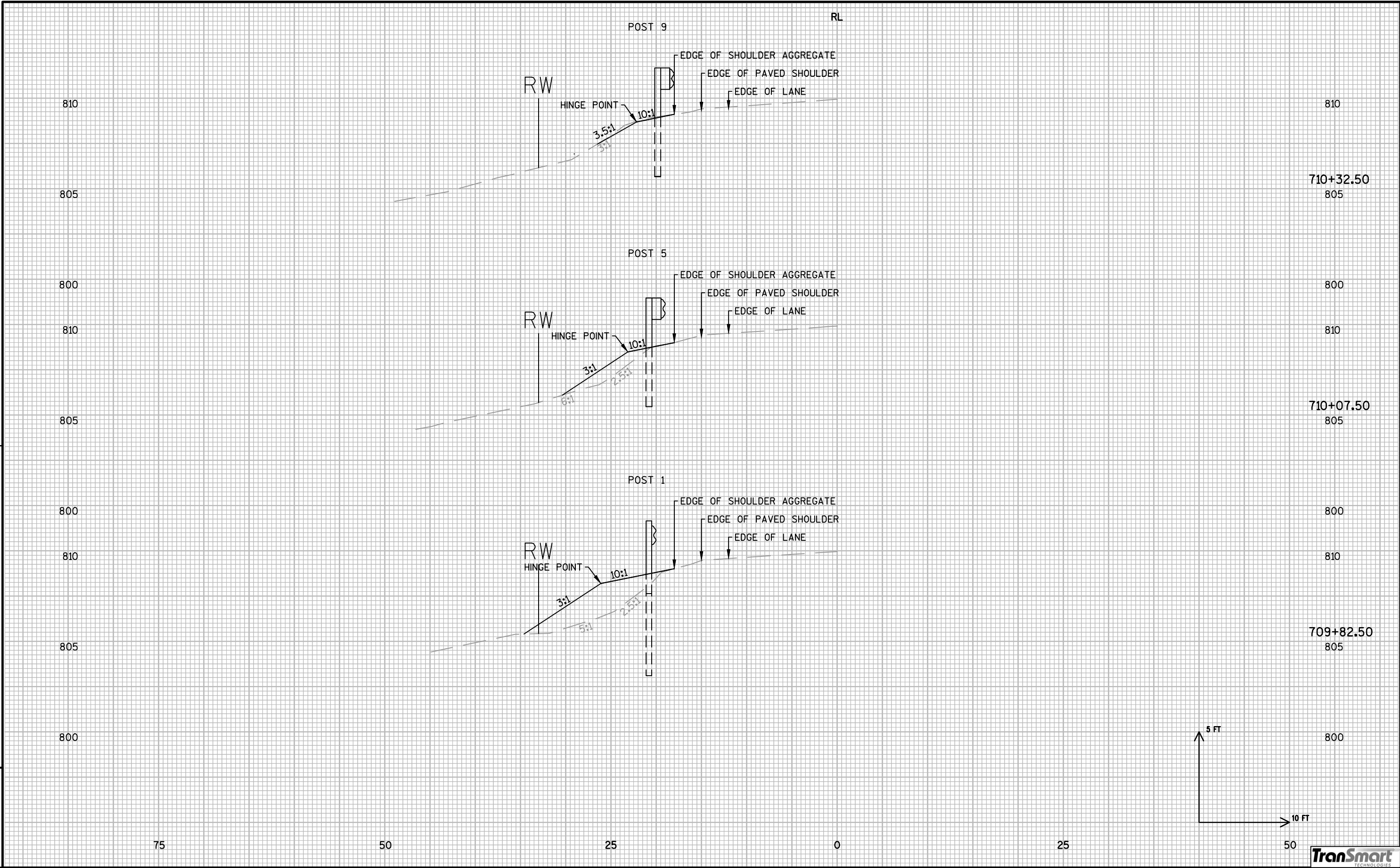
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9



9

9



9

RL

815

POST 9

815

EDGE OF SHOULDER AGGREGATE
EDGE OF PAVED SHOULDER
EDGE OF LANE

810

HINGE POINT

RW

709+90.28
810

805

805

815

POST 5

815

EDGE OF SHOULDER AGGREGATE
EDGE OF PAVED SHOULDER
EDGE OF LANE

810

HINGE POINT

RW

709+65.28
810

805

805

815

POST 1

815

EDGE OF SHOULDER AGGREGATE
EDGE OF PAVED SHOULDER
EDGE OF LANE

810

HINGE POINT

RW

709+40.28
810

805

805

5 FT

10 FT

9

9

PROJECT NO: 5660-00-63

HWY: STH 59

COUNTY: GREEN

CROSS SECTIONS:

MGS GUARDRAIL 3 STA 708+50 - 714+00

SHEET 185

E

FILE NAME : Site_5.dwg

PLOT DATE : 12-1-15

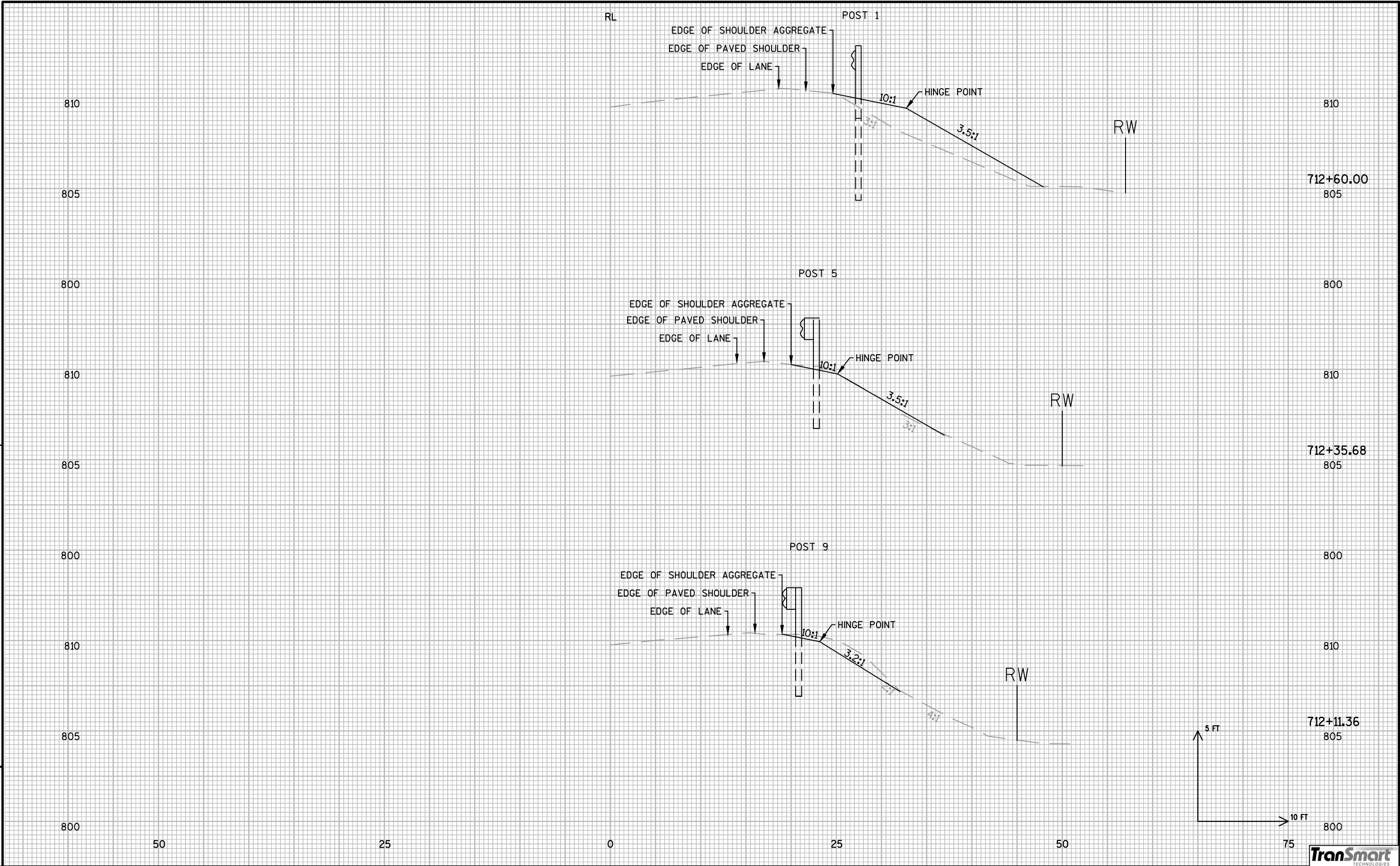
PLOT BY : jweiss

PLOT NAME :

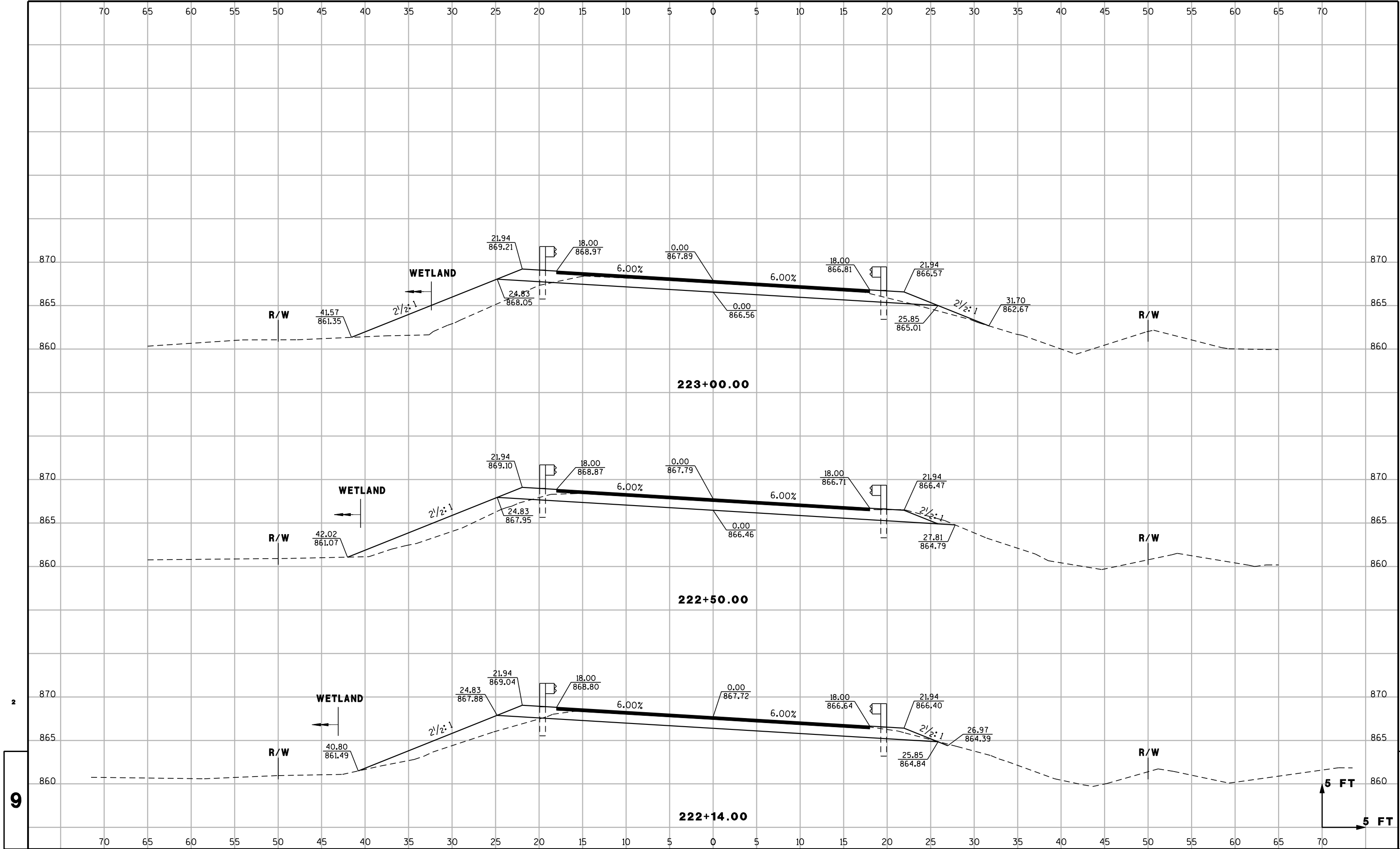
PLOT SCALE : 10.0000 sf / in.

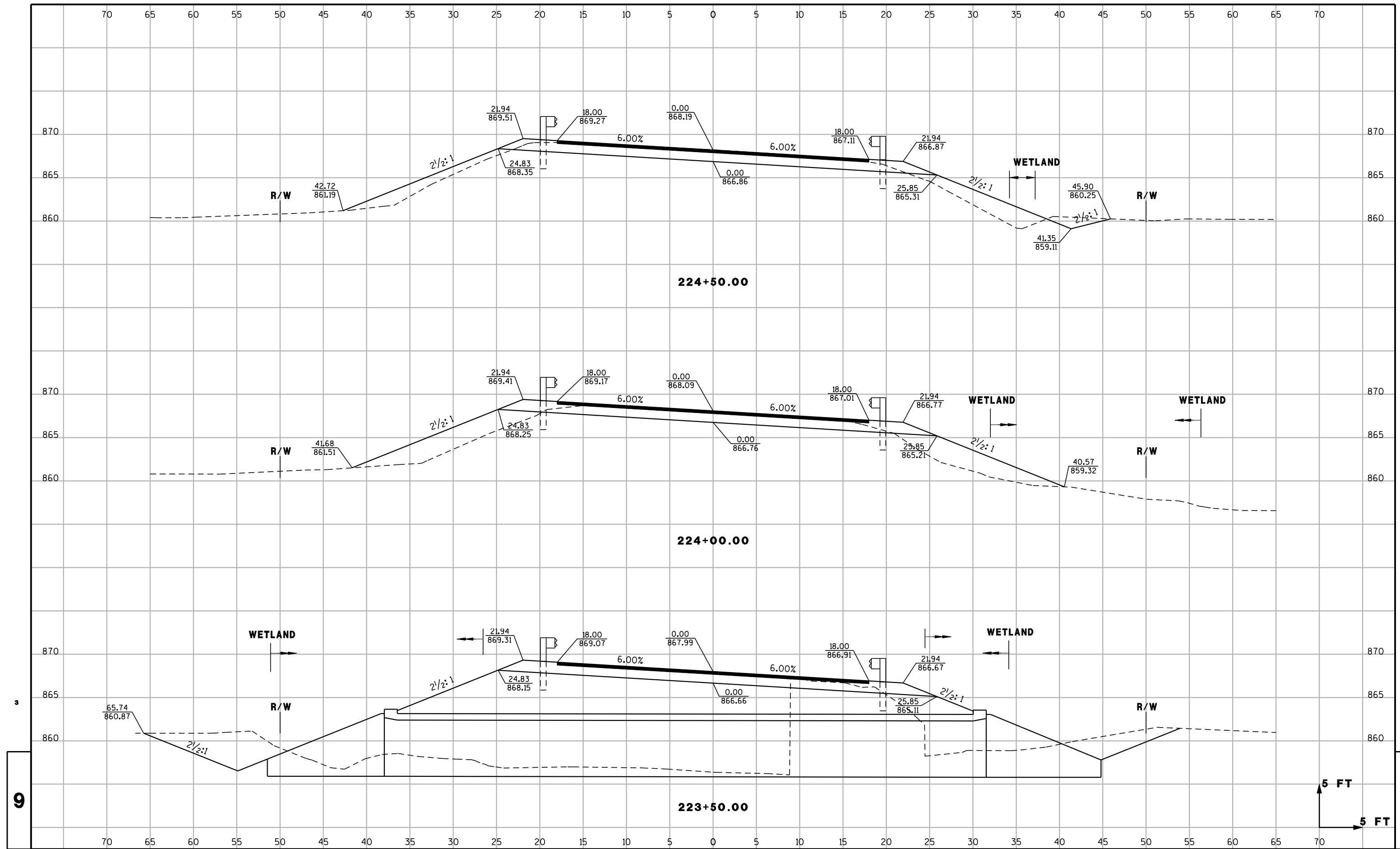
WSDOT/CADDS SHEET 21

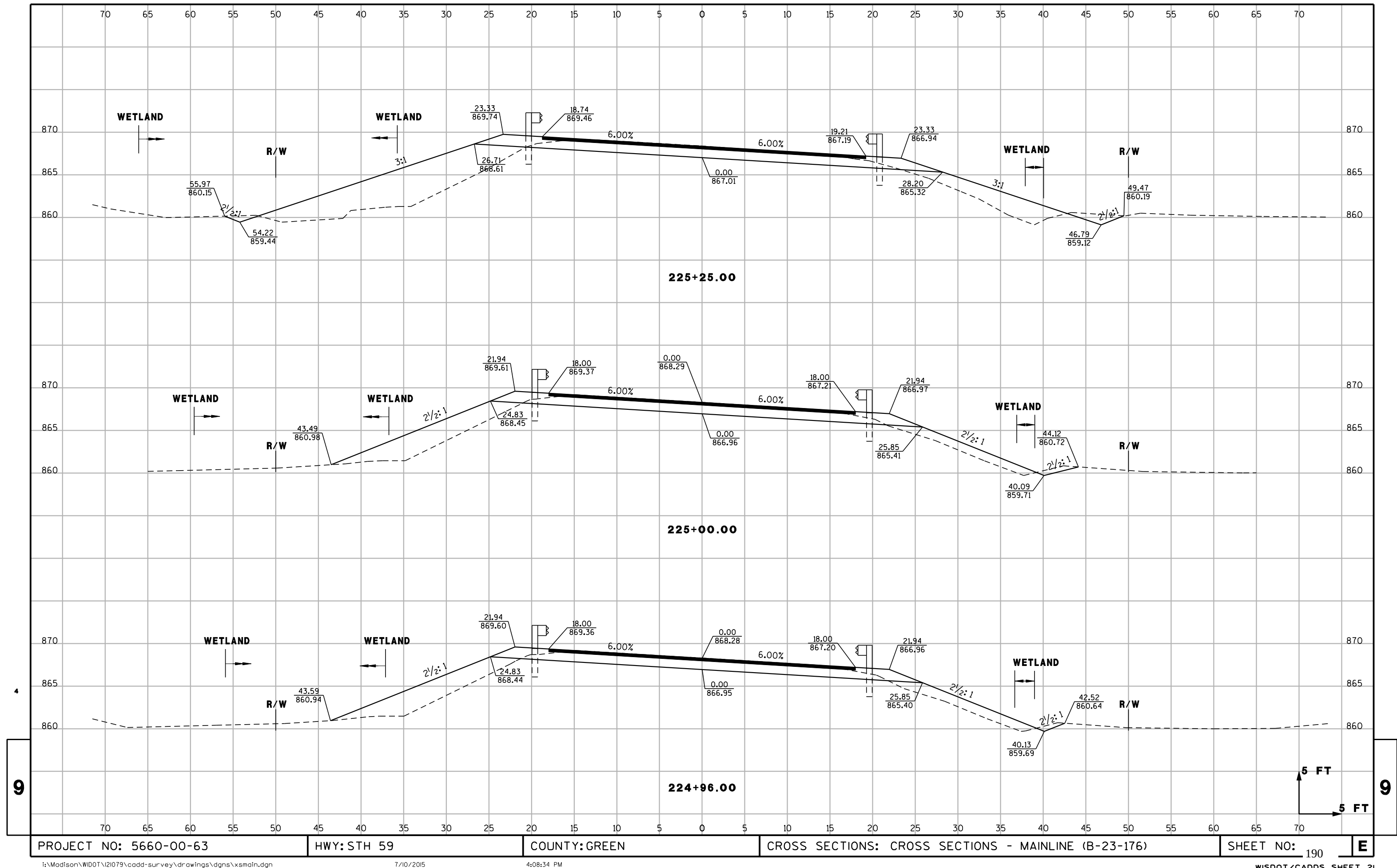
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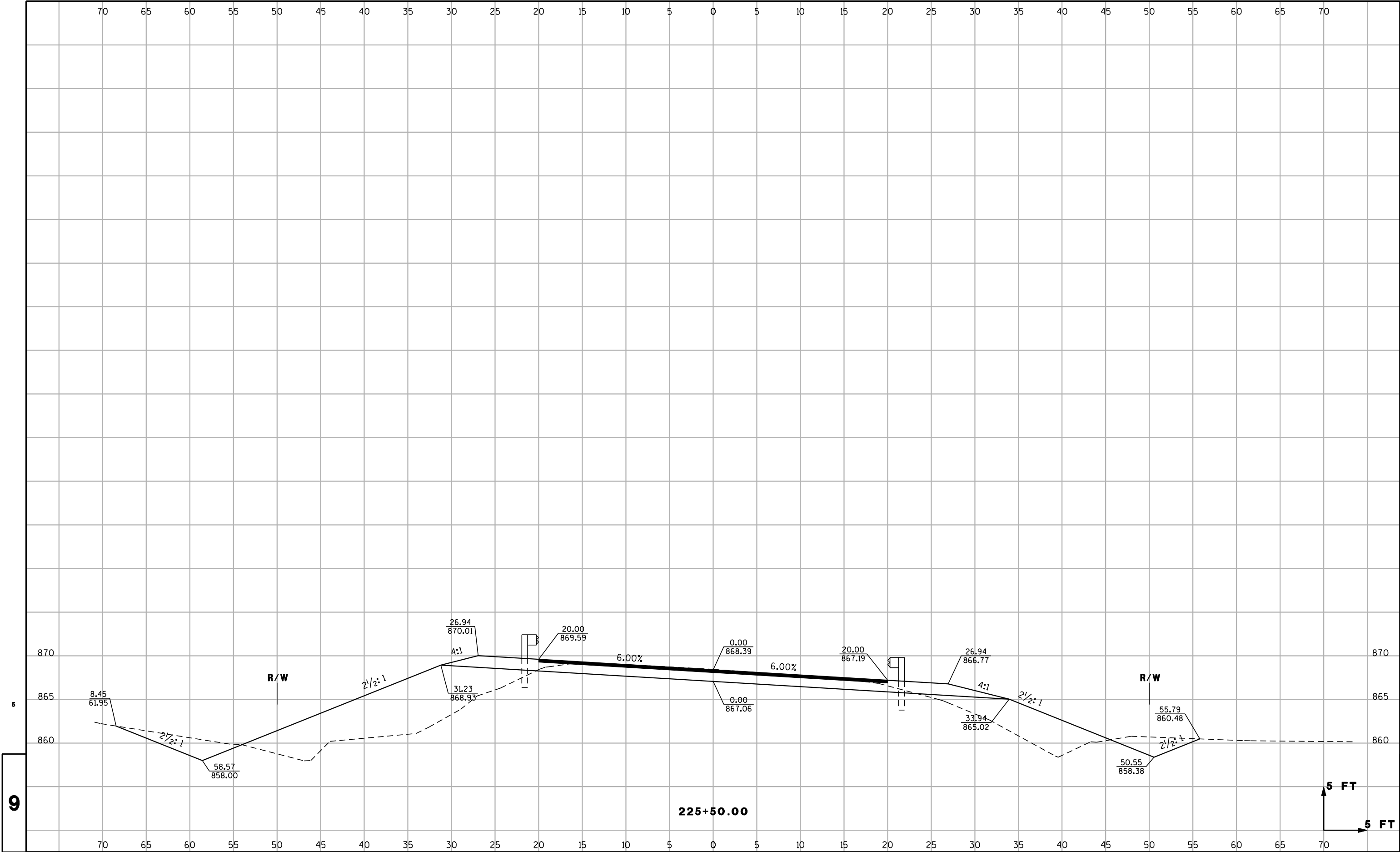


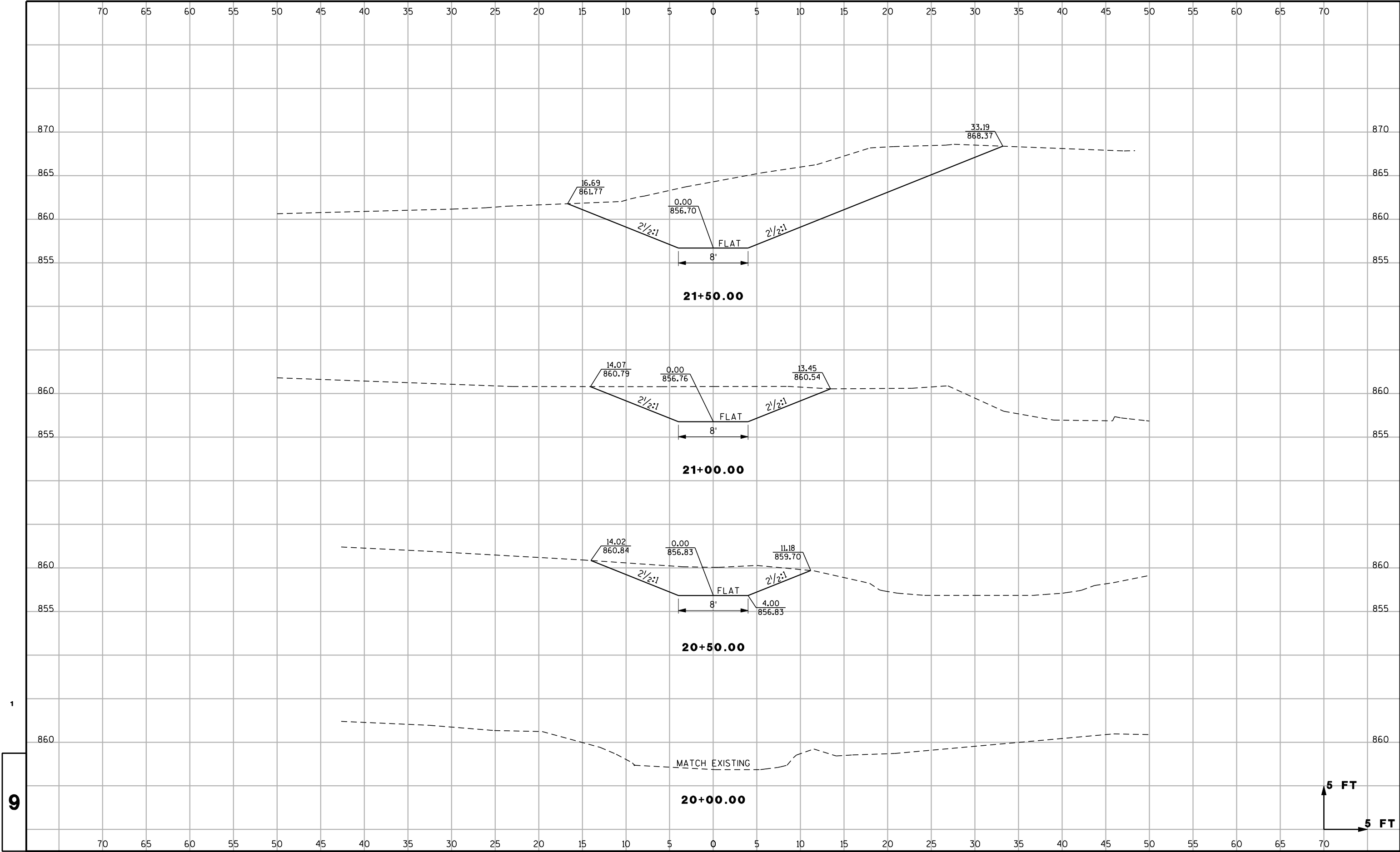
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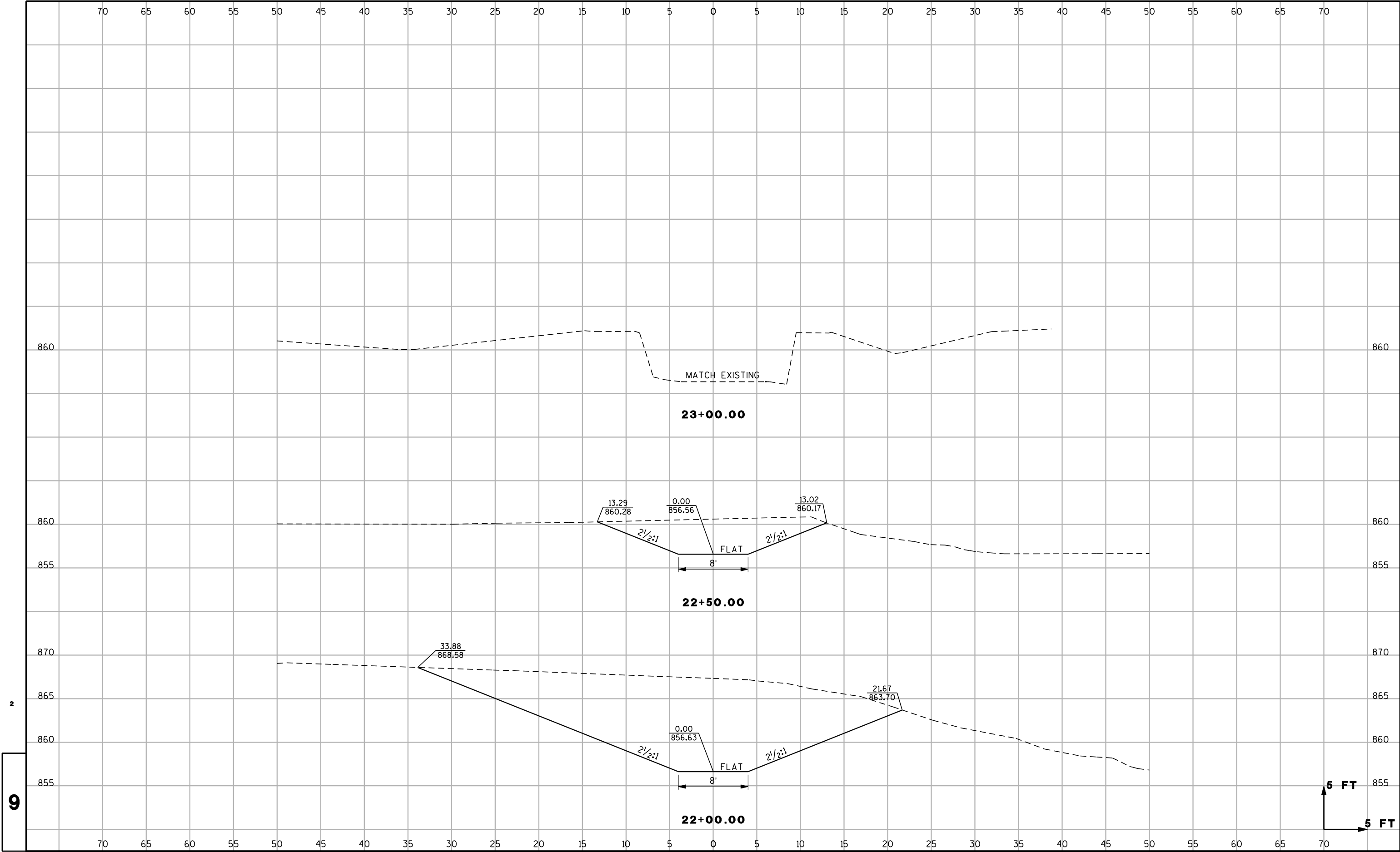


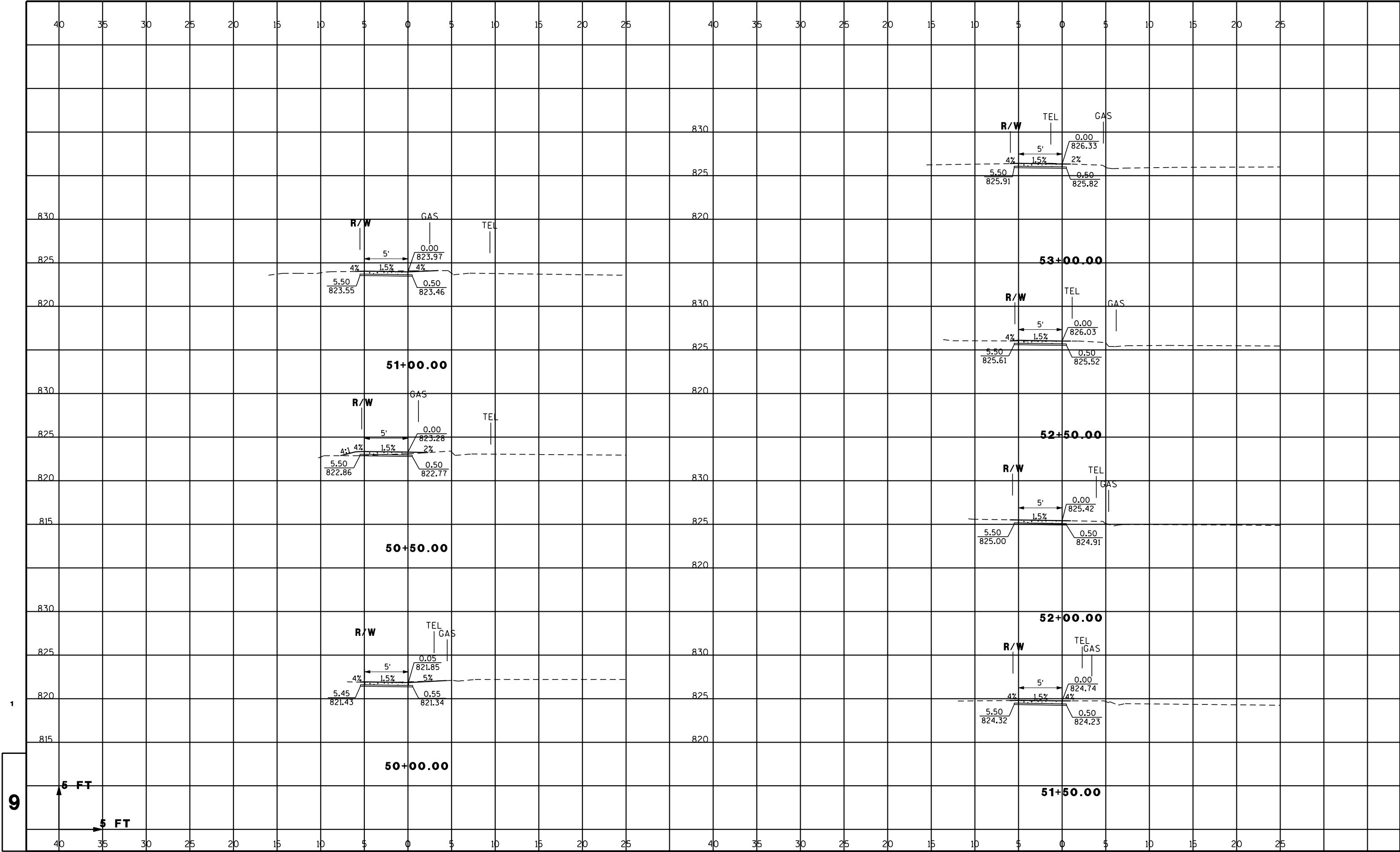












PROJECT NO: 5660-00-63

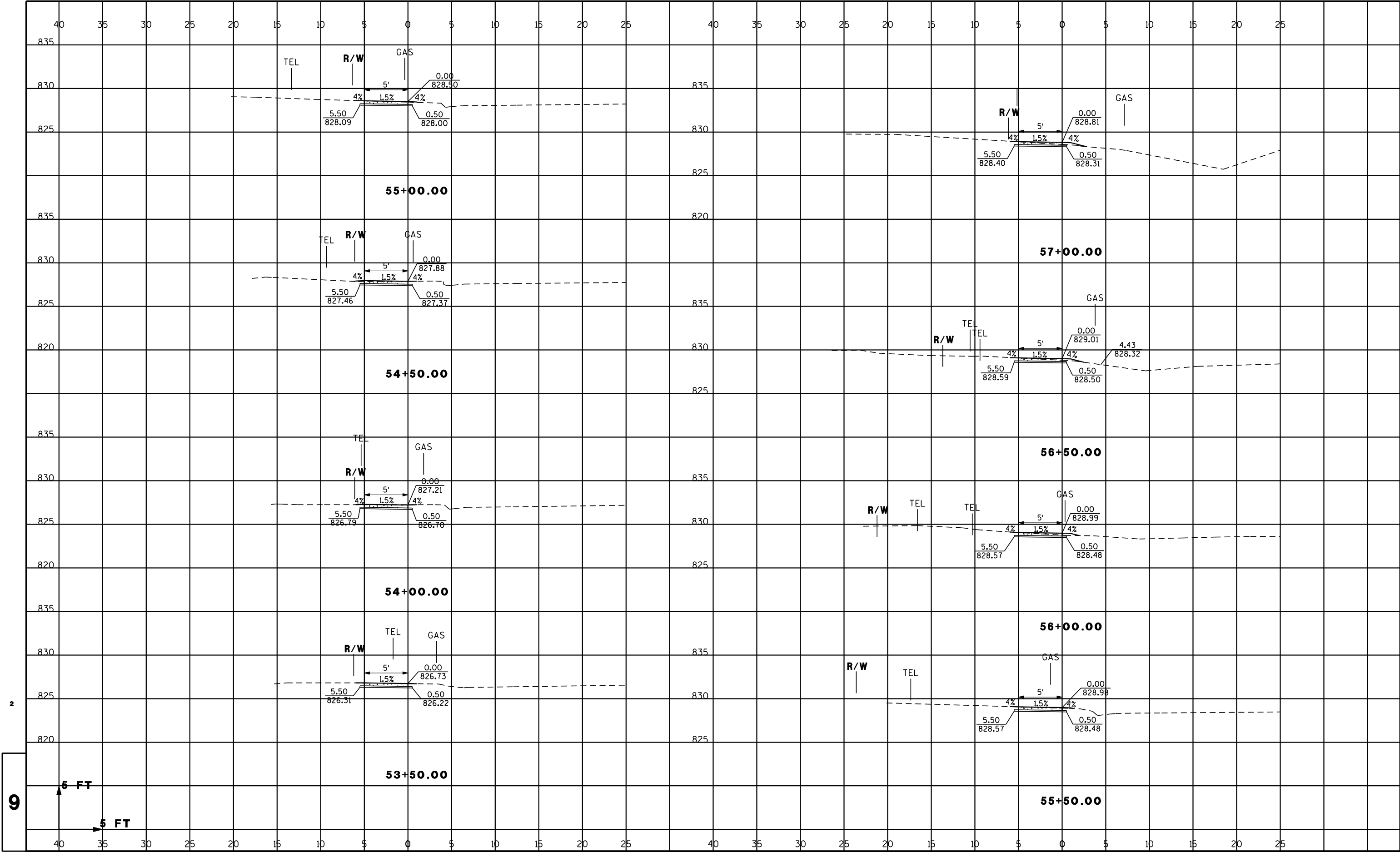
HWY: STH 59

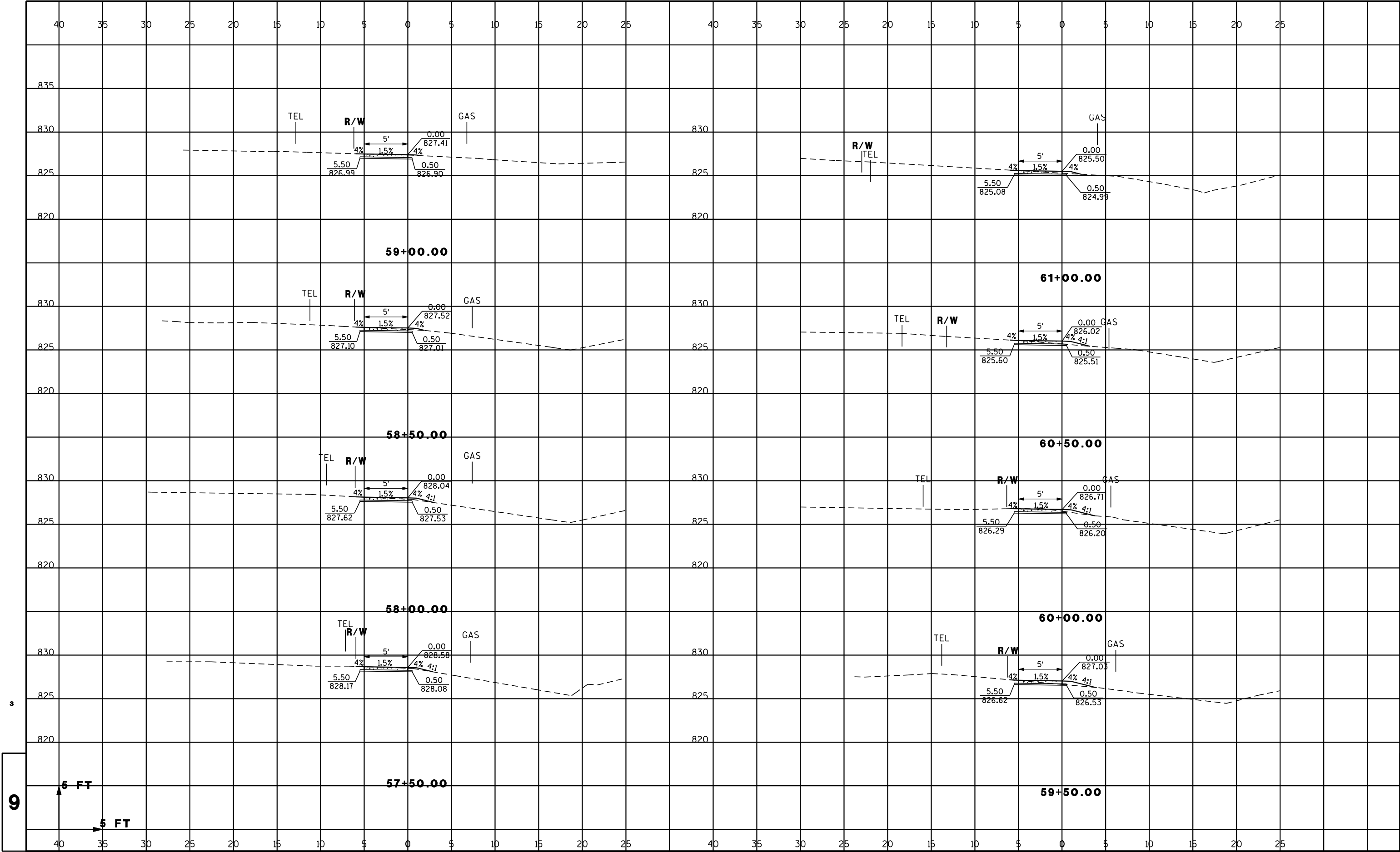
COUNTY: GREEN

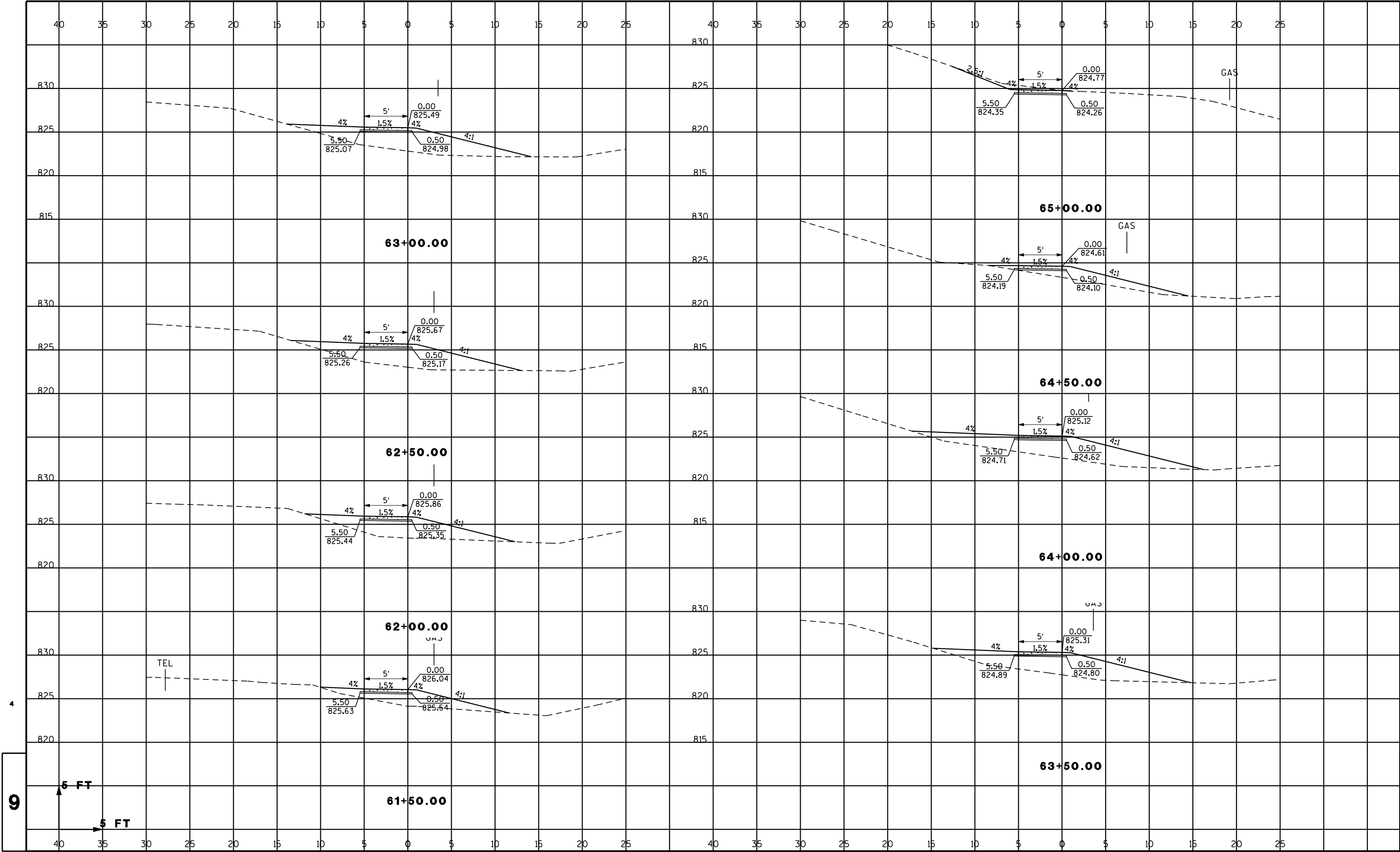
CROSS SECTIONS: SIDEWALKS

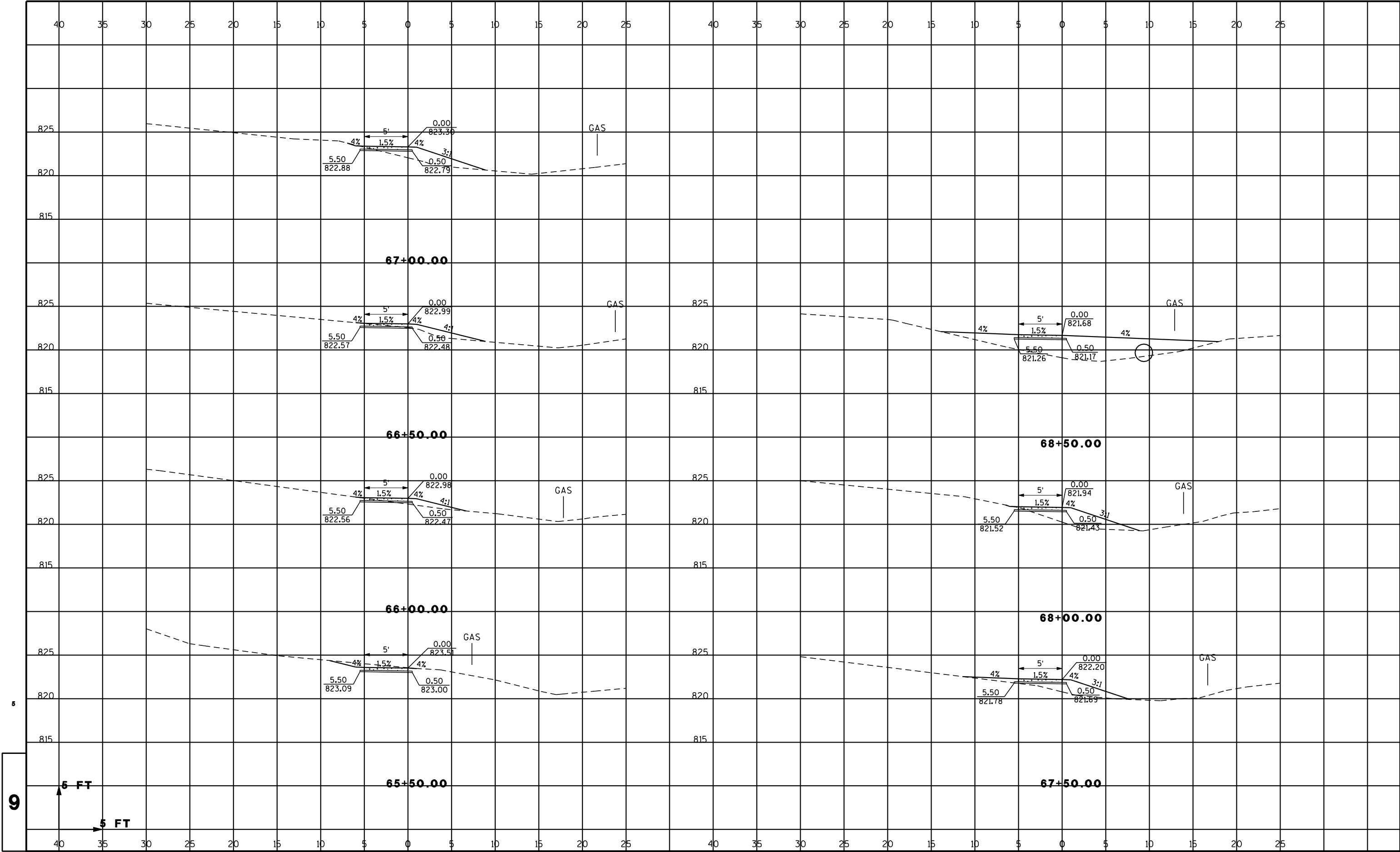
SHEET NO: 194

E

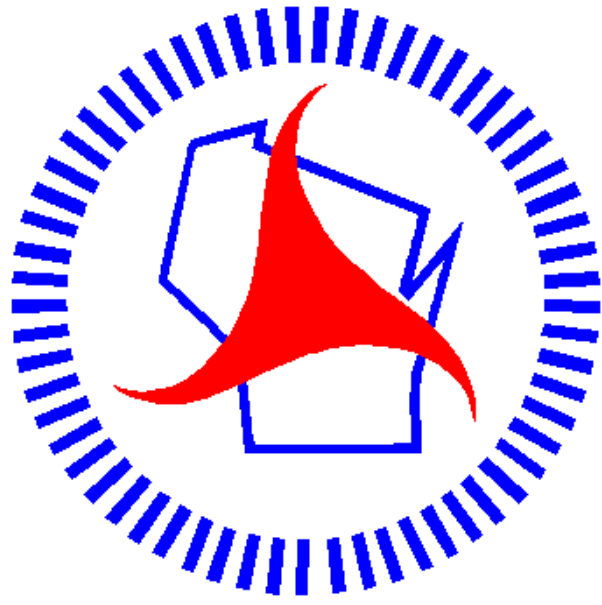








Notes



Wisconsin Department of Transportation

Dedicated people creating transportation solutions through innovation and exceptional service.

<http://www.dot.wisconsin.gov>