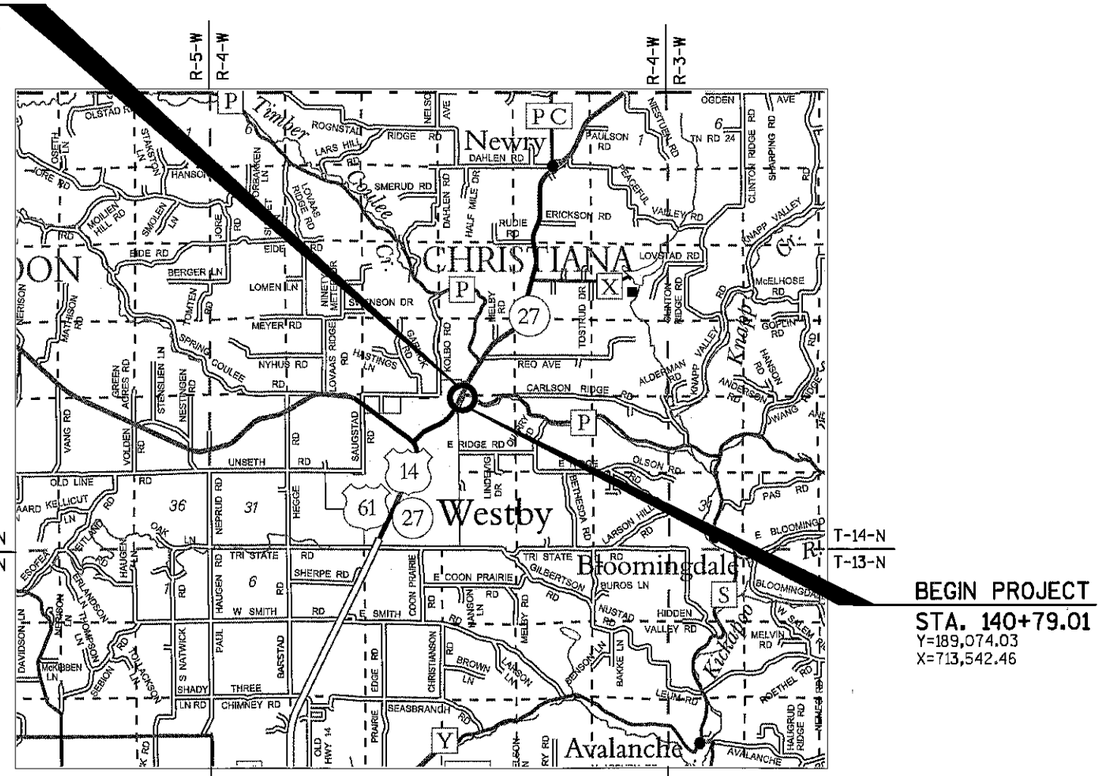


LAX

PROJECT ID: 5140-03-72

WITH: N/A

COUNTY: VERNON

~~03~~ 03

AUGUST 2020

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(Includes Erosion Control Plan)
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 = 82

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

WESTBY - CASHTON

SOUTH JUNCTION CTH P/SAUGSTAD ROAD

STH 27

VERNON COUNTY

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
5140-03-72	WISC 2020388	1

STATE PROJECT NUMBER
5140-03-72

END PROJECT
STA. 157+85.86

BEGIN PROJECT
STA. 140+79.01
Y=189,074.03
X=713,542.46

DESIGN DESIGNATION

A.A.D.T. (2021) = 7100
A.A.D.T. (2041) = 8600
D.H.V. (2041) = 547
D.D. = 60/40
T. = 9.1%
DESIGN SPEED = 60 MPH
ESALS = 1,700,000

CONVENTIONAL SYMBOLS

PLAN
- CORPORATE LIMITS
- PROPERTY LINE
- LOT LINE
- LIMITED HIGHWAY EASEMENT
- 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) — ROCK
- SPECIAL DITCH — LABEL
- 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	Ø

LAYOUT

SCALE 0 2 MILE

TOTAL NET LENGTH OF CENTERLINE = 0.323 MI

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COUNTY COORDINATES, VERNON COUNTY, NAD83 (2011), IN U.S. SURVEY FEET. VALUES ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES GRID DISTANCE MAY BE USED AS GROUND DISTANCES.

"ELEVATIONS SHOWN ON THE PLAN ARE REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 2012)."

ORIGINAL PLANS PREPARED BY

JEWELL associates engineers, inc.
Engineers - Architects - Surveyors

ELLERY A. SCHAFFER
E-41742-6
SPRING GREEN, WI

4/9/2020 (Date)
(Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	JEWELL ASSOCIATES ENGINEERS, INC.
Designer	JEWELL ASSOCIATES ENGINEERS, INC.
Project Manager	TIMOTHY MAEDKE, P.E.
Regional Examiner	SW REGION
Regional Supervisor	REINY YAHNKE, P.E.

APPROVED FOR THE DEPARTMENT

DATE: 4/15/2020 Timothy J Maedke (Signature)

E

FILE NAME : S:\PROJECTS\W11586 STH 27-CTH P INTERSECTION, VERNON CO\SHEETSPLAN\TITLE.DWG
LAYOUT NAME - TITLE SHEET

PLOT DATE : 4/9/2020 9:53 AM   PLOT BY : THEODORE HERBERS   PLOT NAME :

LIST OF STANDARD ABBREVIATIONS

ABUT	Abutment	INV	Invert	SALV	Salvaged
AC	Acre	IP	Iron Pipe or Pin	SAN S	Sanitary Sewer
AGG	Aggregate	IRS	Iron Rod Set	SEC	Section
AH	Ahead	JT	Joint	SHLDR	Shoulder
<	Angle	JCT	Junction	SHR	Shrinkage
ASPH	Asphaltic	LHF	Left–Hand Forward	SW	Sidewalk
AVG	Average	L	Length of Curve	S	South
ADT	Average Daily Traffic	LIN FT or LF	Linear Foot	SQ	Square
BAD	Base Aggregate Dense	LC	Long Chord of Curve	SF or SQ FT	Square Feet
BK	Back	MH	Manhole	SY or SQ YD	Square Yard
BF	Back Face	MB	Mailbox	STD	Standard
BM	Bench Mark	ML or M/L	Match Line	SDD	Standard Detail Drawings
BR	Bridge	N	North	STH	State Trunk Highways
C or C/L	Center Line	Y	North Grid Coordinate	STA	Station
CC	Center to Center	OD	Outside Diameter	SS	Storm Sewer
CTH	County Trunk Highway	PLE	Permanent Limited Easement	SG	Subgrade
CR	Creek			SE	Superelevation
CR	Crushed	PT	Point	SL or S/L	Survey Line
CY or CU YD	Cubic Yard	PC	Point of Curvature	SV	Septic Vent
CP	Culvert Pipe	PI	Point of Intersection	T	Tangent
C & G	Curb and Gutter	PRC	Point of Reverse Curvature	TEL	Telephone
D	Degree of Curve	PT	Point of Tangency	TEMP	Temporary
DHV	Design Hour Volume	POC	Point On Curve	TI	Temporary Interest
DIA	Diameter	POT	Point on Tangent	TLE	Temporary Limited Easement
E	East	PVC	Polyvinyl Chloride		
X	East Grid Coordinate	PCC	Portland Cement Concrete	t	Ton
ELEC	Electric (al)	LB	Pound	T or TN	Town
EL or ELEV	Elevation	PSI	Pounds Per Square Inch	TRANS	Transition
ESALS	Equivalent Single Axle Loads	PE	Private Entrance	TL or T/L	Transit Line
		R	Radius	T	Trucks (percent of)
EBS	Excavation Below Subgrade	RR	Railroad	TYP	Typical
FF	Face to Face	R	Range	UNCL	Unclassified
FE	Field Entrance	RL or R/L	Reference Line	UG	Underground Cable
F	Fill	RP	Reference Point	USH	United States Highway
FG	Finished Grade	RCCP	Reinforced Concrete Culvert Pipe	VAR	Variable
FL or F/L	Flow Line			V	Velocity or Design Speed
FT	Foot	REQ'D	Required	VERT	Vertical
FTG	Footing	RES	Residence or Residential	VC	Vertical Curve
GN	Grid North	RW	Retaining Wall	VOL	Volume
HT	Height	RT	Right	WM	Water Main
CWT	Hundredweight	RHF	Right–Hand Forward	WV	Water Valve
HYD	Hydrant	R/W	Right–of–Way	W	West
INL	Inlet	R	River	WB	Westbound
ID	Inside Diameter	RD	Road	YD	Yard
		RDWY	Roadway		

GENERAL NOTES

THE LOCATIONS OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLAN ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN.

NO TREES OR SHRUBS ARE TO BE REMOVED UNLESS SUCH TREES OR SHRUBS HAVE FIRST BEEN INDICATED FOR REMOVAL BY THE ENGINEER IN THE FIELD.

EXCAVATION BELOW SUBGRADE (EBS) IS NOT USED TO BALANCE YARDAGE, AND IS NOT SHOWN ON THE CROSS SECTIONS BUT IS MEASURED AND PAID FOR AS COMMON EXCAVATION. EXACT LOCATIONS OF EBS WILL BE DETERMINED BY THE ENGINEER.

DISTURBED AREAS SHOWN WITHIN THE RIGHT–OF–WAY, EXCEPT THE AREAS WITHIN THE FINISHED SHOULDER POINTS ARE TO BE FERTILIZED (TYPE B), SEEDED (USE SEED MIX NO. 20) AND MULCHED AS DIRECTED BY THE ENGINEER.

WHEN THE QUANTITY OF THE ITEM OF BASE AGGREGATE DENSE, SELECT CRUSHED MATERIAL, OR HMA PAVEMENT IS MEASURED FOR PAYMENT BY THE TON, THE DEPTH OR 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 IN THE FIELD.

SILT FENCE AND TEMPORARY DITCH CHECKS SHALL BE PLACED AS SHOWN ON THE PLAN OR AS DIRECTED BY THE ENGINEER IN THE FIELD. SILT FENCE SHALL BE PLACED PRIOR TO CONSTRUCTION.

MULCH ALL SLOPES AS DIRECTED BY THE ENGINEER IN THE FIELD.

FILL EXPANSION IS VARIABLE AND IS ESTIMATED AT 30%.

ADJUST DITCH GRADING AS NECESSARY TO FIT FIELD CONDITIONS AND AS DIRECTED BY THE ENGINEER IN THE FIELD.

REMOVAL OF ASPHALTIC SURFACES WHERE AN ABUTTING ASPHALTIC SURFACE IS TO REMAIN IN PLACE SHALL REQUIRE A SAWCUT MEETING THE APPROVAL OF THE ENGINEER IN THE FIELD.

THE LOCATION OF ALL PERMANENT SIGNING SHALL BE VERIFIED BY THE ENGINEER IN THE FIELD PRIOR TO PLACEMENT.

CURVE DATA IS BASED ON THE ARC DEFINITION.

INLET AND OUTLET ELEVATIONS FOR CULVERT PIPES AS SHOWN ON PLANS MAY BE ADJUSTED TO FIT FIELD CONDITIONS. ACCURACY OF INLET AND DISCHARGE ELEVATIONS FOR DRAINAGE STRUCTURES SHALL BE VERIFIED BY THE ENGINEER IN THE FIELD.

HMA PAVEMENT QUANTITIES WERE CALCULATED USING 112 LB/SY/IN. TACK COAT QUANTITIES WERE CALCULATED USING 0.05 GAL/SY.

CONTACTS

WISDOT
WISCONSIN DEPARTMENT OF TRANSPORTATION
3550 MORMON COULEE ROAD
LA CROSSE, WI 54601
ATTN: TIM MAEDKE, P.E.
PH: (608) 789–6317
EMAIL: Timothy.Maedke@dot.wi.gov

DESIGN CONSULTANT
JEWELL ASSOCIATES ENGINEERS, INC.
560 SUNRISE DRIVE
SPRING GREEN, WI 53588
ATTN: ELLERY SCHAFFER, P.E.
PHONE: (608) 459–6027
CELL: (608) 341–8159
EMAIL: ellery.schaffer@jewellassoc.com

DNR LIAISON
STATE OF WISCONSIN
DNR SERVICE CENTER
3550 MORMON COULEE ROAD
LA CROSSE, WI 54601
ATTN: KAREN KALVELAGE
PHONE: (608) 785–9115
EMAIL: karen.kalvelage@wisconsin.gov

VERNON COUNTY
VERNON COUNTY HIGHWAY DEPARTMENT
602 N. MAIN ST.
VIROQUA, WI 54665
ATTN: PHIL HEWITT
PH: (608) 637–5452
EMAIL: phil.hewitt@vernoncounty.org

TOWN OF CHRISTIANA
TOWN OF CHRISTIANA
505 SAUGSTAD ROAD
WESTBY, WI 54667
PHONE: (608) 634–4056

UTILITIES

COMMUNICATION LINE
MEDIACOM WISCONSIN LLC
ATTN: CRAIG EGGERT
1240 HIGHWAY 52 SOUTH
CHATFIELD, MN 55923
OFFICE: (563) 419–5160
EMAIL: ceggert@mediacomcc.com

VERNON COMMUNICATIONS COOPERATIVE
ATTN: SCOTT FREDERICK
103 N MAIN ST
WESTBY, WI 54667
OFFICE: (608) 634–3136
EMAIL: sfrederick@vernoncom.coop

CENTURYLINK
ATTN: TOM MURRAY
333 N FRONT STREET
LA CROSSE, WI 54601
OFFICE: (608) 796–7869
EMAIL: tom.l.murray@centurylink.com

ELECTRICITY
VERNON ELECTRIC COOPERATIVE
ATTN: MARK SEE
110 SAUGSTAD ROAD
WESTBY, WI 54667–1199
OFFICE: (608) 634–3121
EMAIL: msee@vernonelectric.org

GAS/PETROLEUM
MIDWEST NATURAL GAS, INC.
ATTN: RICK SCHERMERHORN
3600 STATE HIGHWAY 157
P.O. BOX 429
LA CROSSE, WI 54062–0429
OFFICE: (608) 781–1011
EMAIL: ricks@midwestnaturalgas.com

WATER
WESTBY CITY OF MUN ELEC &WTR UTY
ATTN: RON JANZEN
200 N MAIN ST
WESTBY, WI 54667
OFFICE: (608) 634–3416
EMAIL: rjanzen@wppienergy.org

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

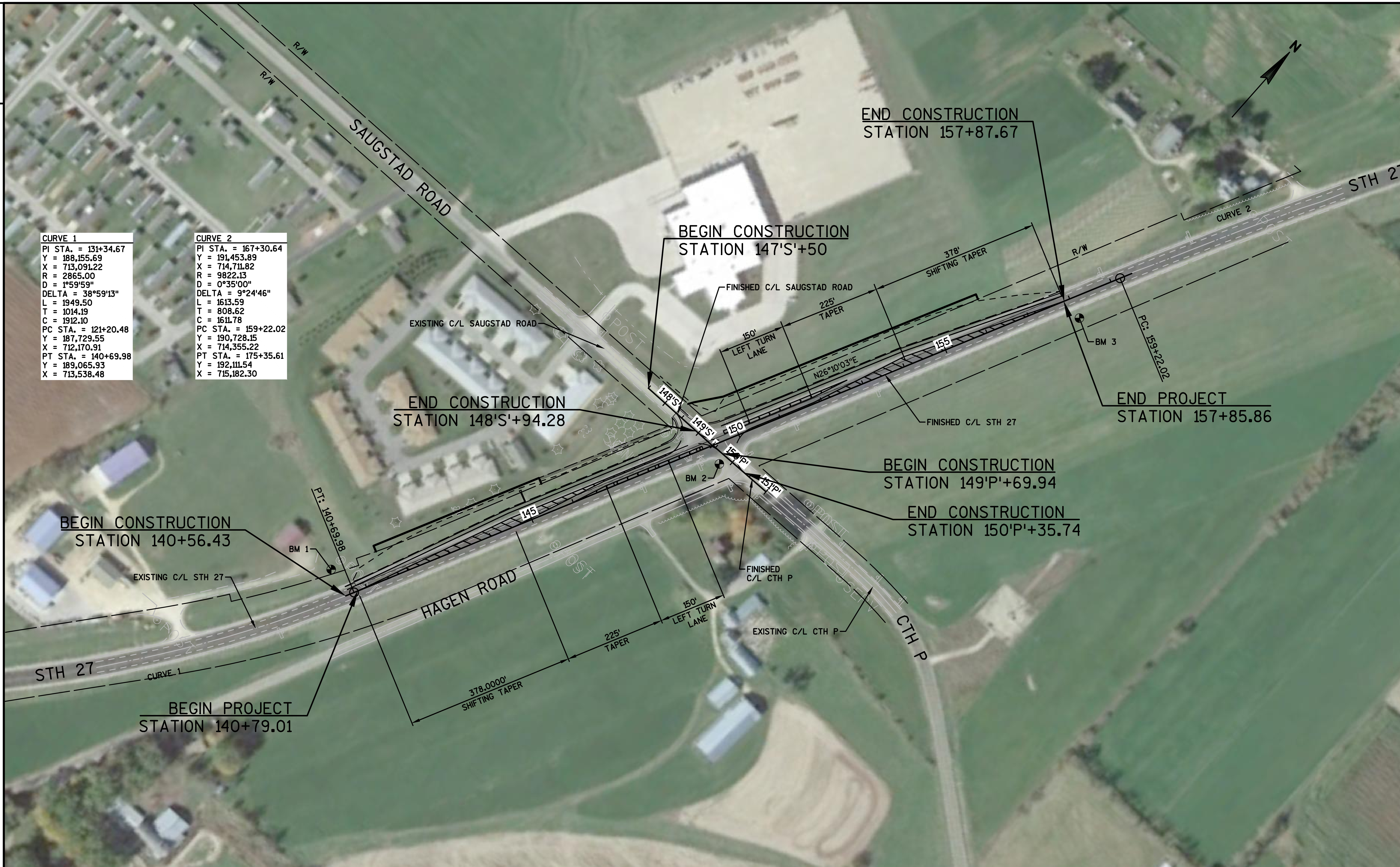
* DENOTES UTILITY IS NOT A MEMBER OF DIGGERS HOTLINE

	HYDROLOGIC SOIL GROUP											
	A			B			C			D		
	SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)			SLOPE RANGE (PERCENT)		
LAND USE	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER	0-2	2-6	6 & OVER
ROW CROPS	.08 .22	.16 .30	.22 .38	.12 .26	.20 .34	.27 .44	.15 .30	.24 .37	.33 .50	.19 .34	.28 .41	.38 .56
MEDIAN STRIP TURF	.19 .24	.20 .26	.24 .30	.19 .25	.22 .28	.26 .33	.20 .26	.23 .30	.30 .37	.20 .27	.25 .32	.30 .40
SIDE SLOPE TURF			.25 .32			.27 .34			.28 .36			.30 .38
PAVEMENT												
ASPHALT	.70 - .95											
CONCRETE	.80 - .95											
BRICK	.70 - .80											
DRIVES, WALKS	.75 - .85											
ROOFS	.75 - .95											
GRAVEL ROADS, SHOULDERS	.40 - .60											

TOTAL PROJECT AREA= 3.22 ACRES
TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 2.97 ACRES

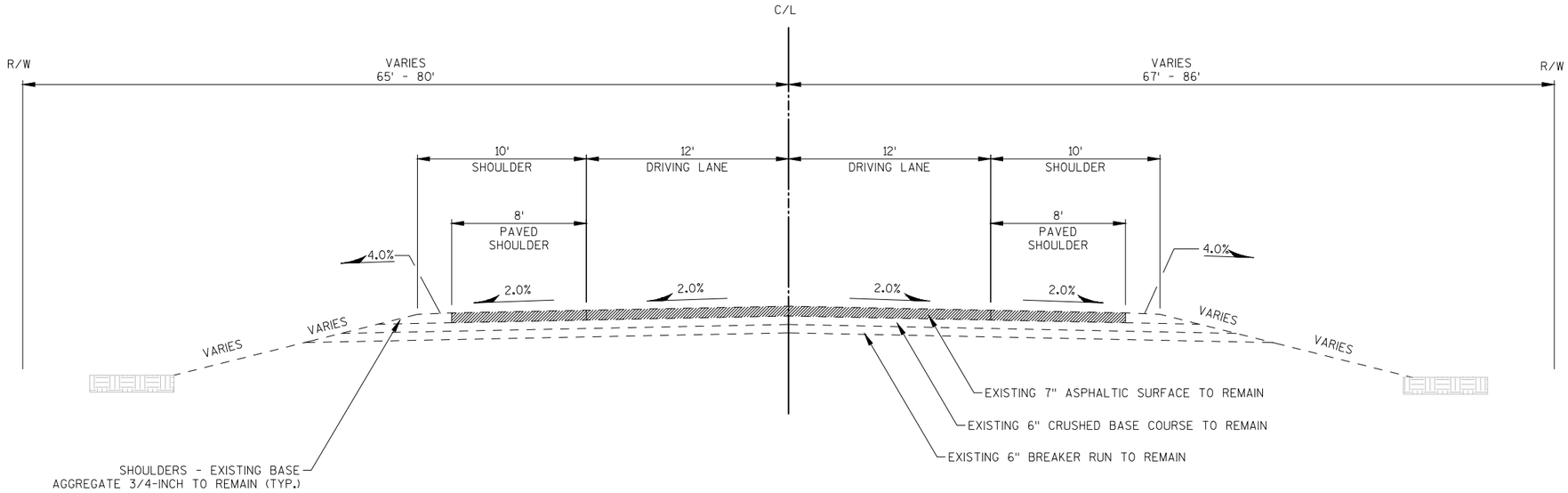
ORDER OF SECTION 2 SHEETS:

FILE NAME : S:\PROJECTS\W11586 STH 27–CTH P INTERSECTION, VERNON CO\SHEETSPLAN\DETAILS\GEN NOTES.DWG
LAYOUT : LAYOUT1
PLOT DATE : 5/28/2020
PLOT TIME : 11:34:33 AM
PLOT BY : JONAH DRAKE
PLOT SCALE : 1" = 1'


CURVE 1
PI STA. = 131+34.67
Y = 188,155.69
X = 713,091.22
R = 2865.00
D = 1°59'59"
DELTA = 38°59'13"
L = 1949.50
T = 1014.19
C = 1912.10
PC STA. = 121+20.48
Y = 187,729.55
X = 712,170.91
PT STA. = 140+69.98
Y = 189,065.93
X = 713,538.48
CURVE 2
PI STA. = 167+30.64
Y = 191,453.89
X = 714,711.82
R = 9822.13
D = 0°35'00"
DELTA = 9°24'46"
L = 1613.59
T = 808.62
C = 1611.78
PC STA. = 159+22.02
Y = 190,728.15
X = 714,355.22
PT STA. = 175+35.61
Y = 192,111.54
X = 715,182.30
SAUGSTAD ROAD
R/W
R/W
N
END CONSTRUCTION
STATION 157+87.67
STH 27
CURVE 2
BEGIN CONSTRUCTION
STATION 147'S'+50
378'
SHIFTING TAPER
FINISHED C/L SAUGSTAD ROAD
225'
TAPER
150'
LEFT TURN
LANE
EXISTING C/L SAUGSTAD ROAD
N26°10'03"E
155
BM 3
PC: 159+22.02
END PROJECT
STATION 157+85.86
END CONSTRUCTION
STATION 148'S'+94.28
148'S'
149'S'
150
FINISHED C/L STH 27
BEGIN CONSTRUCTION
STATION 149'P'+69.94
END CONSTRUCTION
STATION 150'P'+35.74
BM 2
151'P'
145
PT: 140+69.98
BEGIN CONSTRUCTION
STATION 140+56.43
BM 1
EXISTING C/L STH 27
FINISHED
C/L CTH P
HAGEN ROAD
150'
LEFT TURN
LANE
225'
TAPER
EXISTING C/L CTH P
CTH P
STH 27
CURVE 1
378.0000'
SHIFTING TAPER
BEGIN PROJECT
STATION 140+79.01

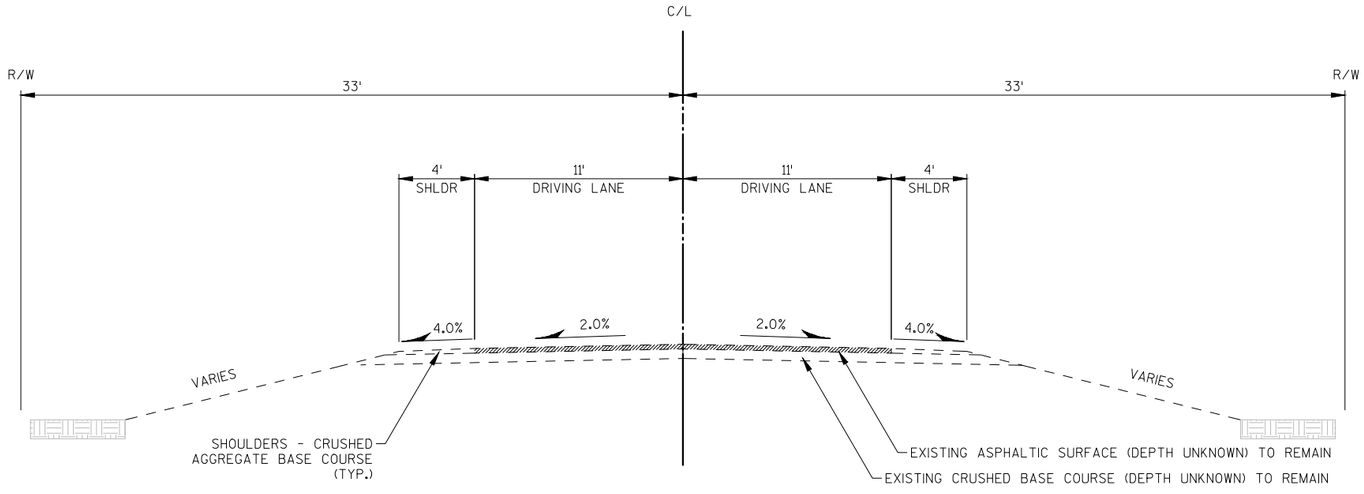
2

PROJECT NO:5140-03-72	HWY:STH 27	COUNTY:VERNON	PROJECT OVERVIEW	SHEET 3	E



TYPICAL EXISTING SECTION

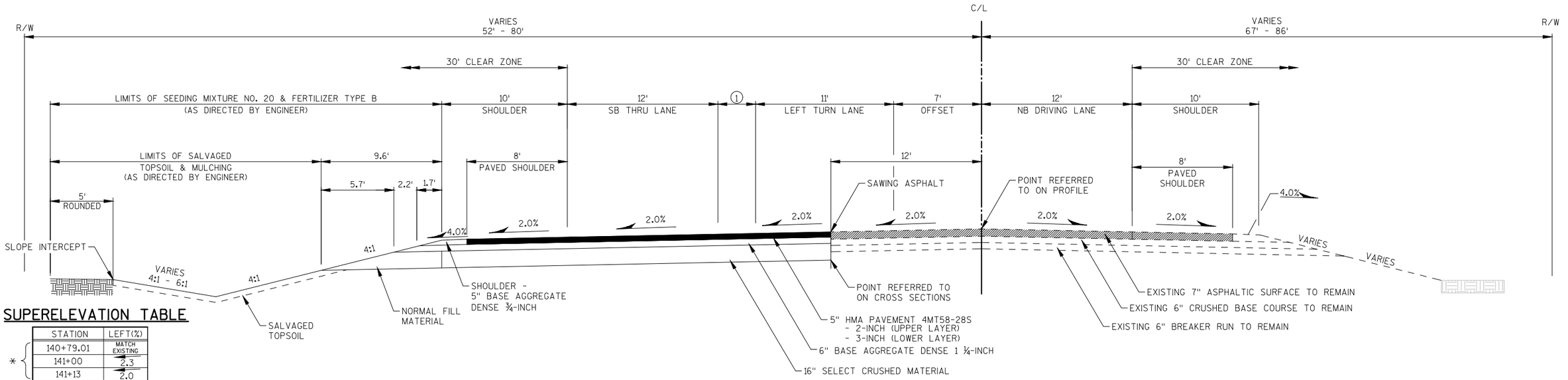
STH 27



TYPICAL EXISTING SECTION

SAUGSTAD ROAD

PROJECT NO: 5140-03-72	HWY: STH 27	COUNTY: VERNON	TYPICAL EXISTING SECTIONS	SHEET 4	E



SUPERELEVATION TABLE

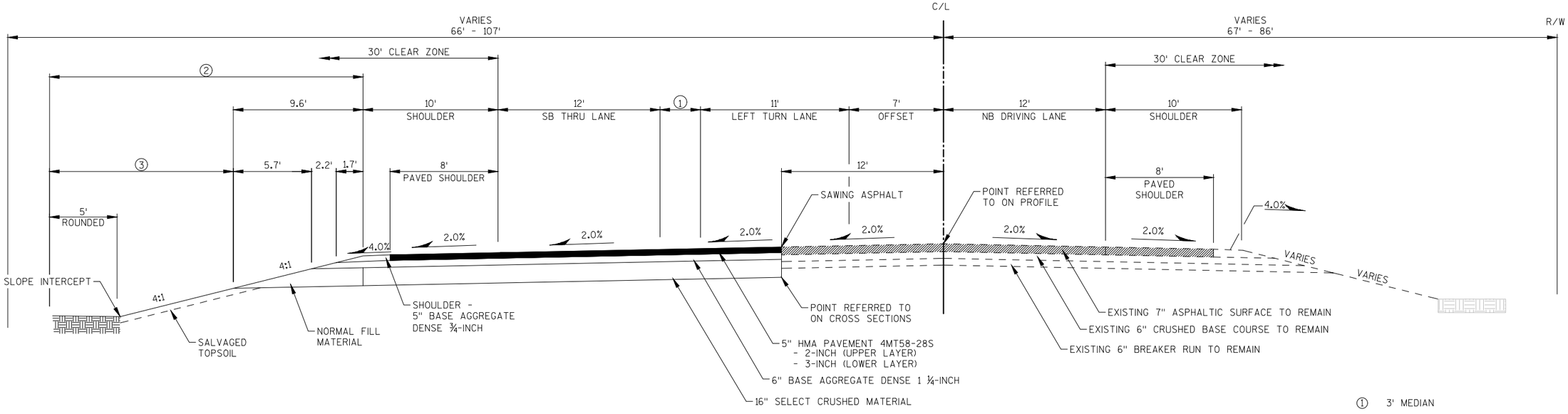
	STATION	LEFT(%)
*	140+79.01	MATCH EXISTING
*	141+00	2.3
*	141+13	2.0
	NORMAL CROWN	
*	157+00	2.0
*	157+56	0.0
*	157+85.86	MATCH EXISTING

* DISTANCE REQUIRED TO TRANSITION FROM EXISTING SUPERELEVATED ROADWAY (MATCH EXISTING) TO NORMAL CROWN.

TYPICAL FINISHED SECTION – SLOTTED LEFT TURN LANE WITH DITCH SECTION

STH 27
(STA. 140+79.01 - STA. 145+50.00)

① 3' MEDIAN



TYPICAL FINISHED SECTION – SLOTTED LEFT TURN LANE WITH FILL SECTION

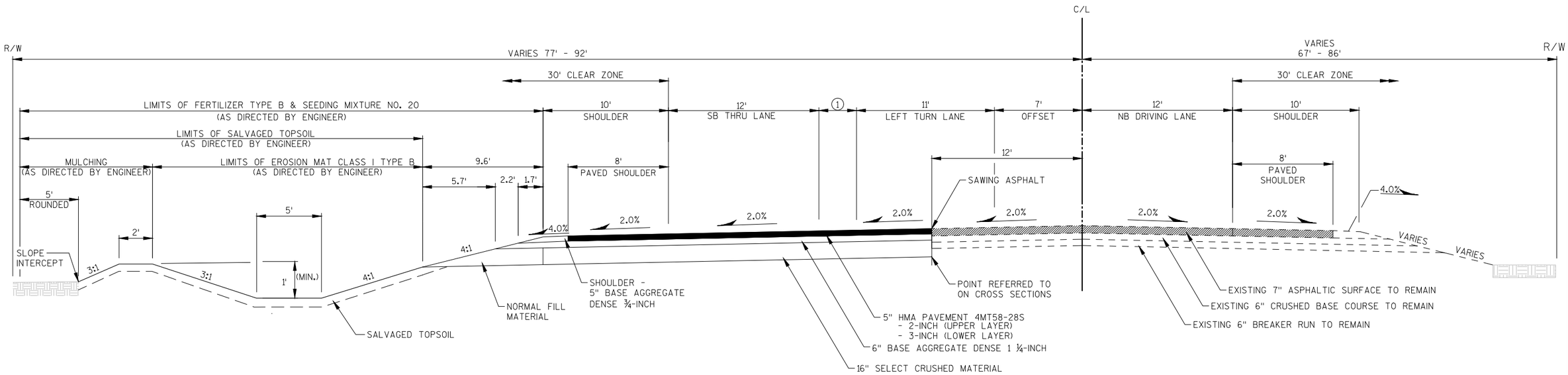
STH 27
(STA. 145+50.00 - STA. 149+35.99)
(STA. 156+50 - STA. 157+85.86)

① 3' MEDIAN

② LIMITS OF SEEDING MIXTURE NO. 20 & FERTILIZER TYPE B (AS DIRECTED BY THE ENGINEER)

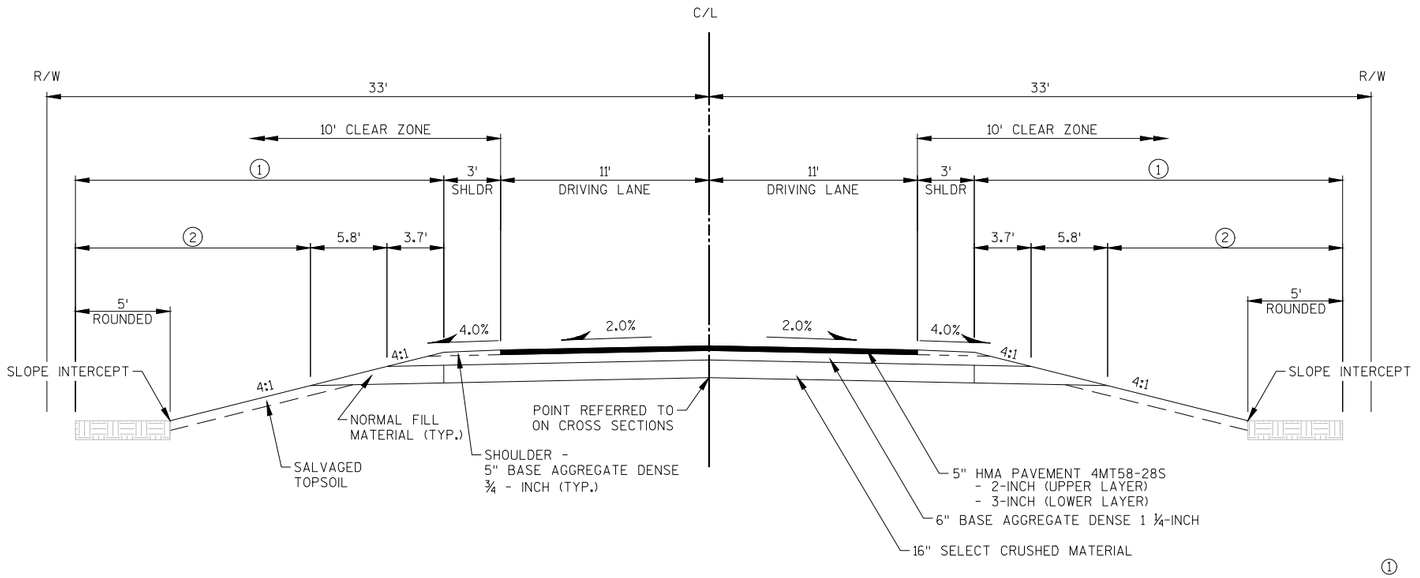
③ LIMITS OF SALVAGED TOPSOIL & MULCHING (AS DIRECTED BY THE ENGINEER)

PROJECT NO: 5140-03-72	HWY: STH 27	COUNTY: VERNON	TYPICAL FINISHED SECTIONS	SHEET 5	E



TYPICAL FINISHED HALF SECTION DRAINAGE DITCH DETAIL

(STA. 149+35.99 - STA. 156+50)



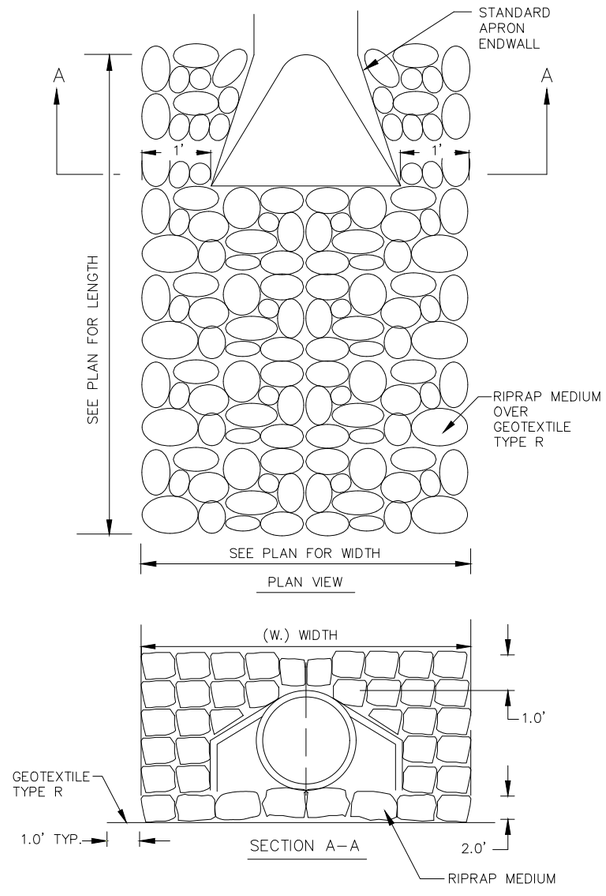
TYPICAL FINISHED SECTION

'S'-LINE
(SAUGSTAD ROAD)
(STA. 147'S'+50 - STA. 148'S'+94.28

① LIMITS OF SEEDING MIXTURE NO. 20 & FERTILIZER TYPE B (AS DIRECTED BY THE ENGINEER)

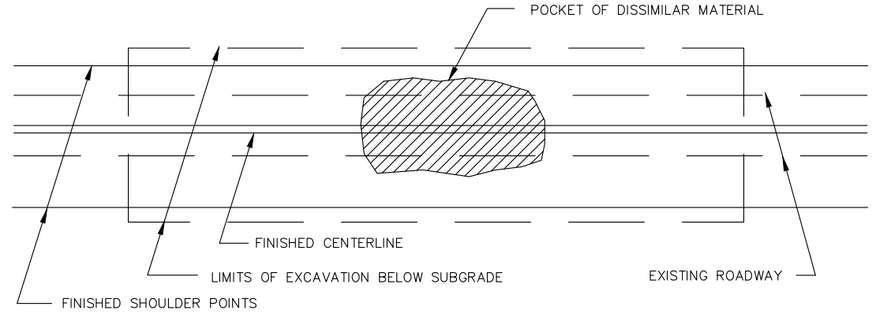
② LIMITS OF SALVAGED TOPSOIL & MULCHING (AS DIRECTED BY THE ENGINEER)

PROJECT NO: 5140-03-72	HWY: STH 27	COUNTY: VERNON	TYPICAL FINISHED SECTIONS	SHEET 6	E

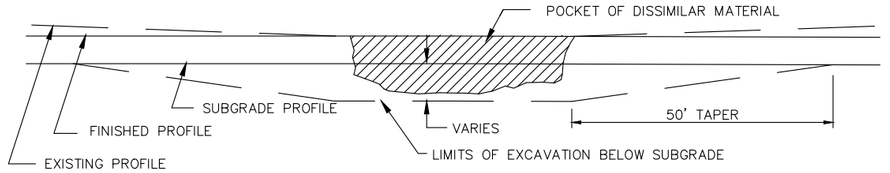


RIPRAP DISCHARGE APRON

(UNLESS NOTED OTHERWISE ON PLAN)

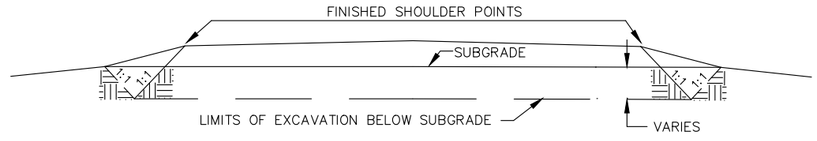


PLAN VIEW



PROFILE VIEW

RURAL EXCAVATION BELOW SUBGRADE (E.B.S.)

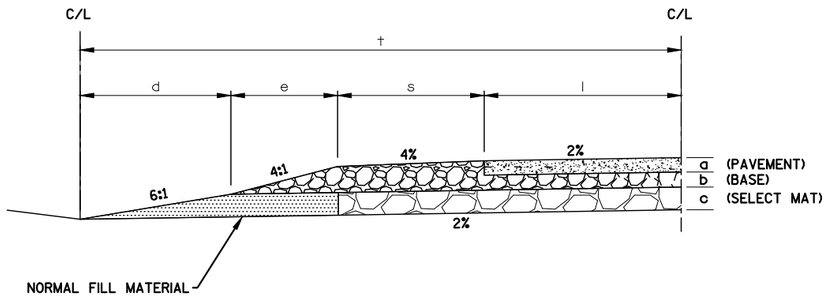


CROSS SECTION VIEW

1. EXACT LOCATION OF E.B.S. (EXCAVATION BELOW SUBGRADE) SHALL BE DETERMINED BY THE ENGINEER IN THE FIELD.
2. E.B.S. AREA TO BE BACKFILLED WITH MATERIAL ACCEPTABLE TO THE ENGINEER. BACKFILL MUST BE HOMOGENEOUS WITH ADJOINING FILL MATERIAL.
3. THE FILL SECTION WITHIN 100' OF THE MOUTH OF THE CUT MUST BE KEPT 2' BELOW SUBGRADE UNTIL E.B.S. IS COMPLETED. LATERAL LIMITS OF EXCAVATION SHALL BE THE SUBGRADE SHOULDER POINTS.

2

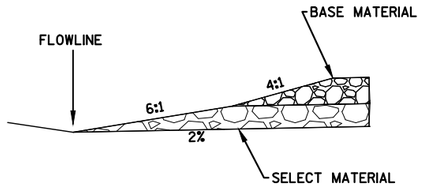
TYPICAL HALF SECTION WITH SELECT MATERIALS
(OUTSIDE DITCH)



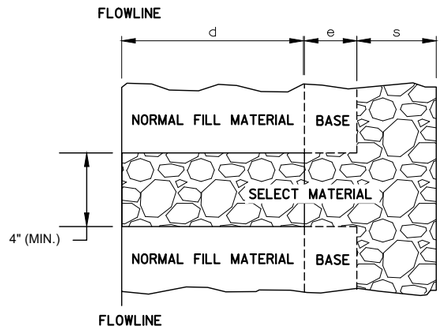
e = 4.35 (a + b-0.2s)

d = 6.82c @ 6:1

d = 4.35c @ 4:1



*RELIEF TRENCH DETAIL
PROFILE VIEW



RELIEF TRENCH DETAIL PLAN VIEW
THROUGH SELECT MATERIAL

*CONSTRUCT RELIEF TRENCH AT
SAG POINTS OR EVERY 250 FEET

PROJECT NO: 5140-03-72	HWY: STH 27	COUNTY: VERNON	CONSTRUCTION DETAILS	SHEET 8	E

FILE NAME : S:\PROJECTS\W11586 STH 27-CTH P INTERSECTION, VERNON CO\SHEETSPLAN\DETAILS\CONSTRUCTION DETAILS.DWG
LAYOUT : LAYOUT1
PLOT DATE : 4/9/2020
PLOT TIME : 5:19:10 PM
PLOT BY : THEODORE HERBERS
PLOT SCALE : 1" = 1'

LEGEND

XXXXXX SAWING ASPHALT

DIRECTION OF TRAFFIC

DIRECTION OF FLOW

N

STA. 145+02, LT.
REMOVE DELINEATOR (BID ITEM REMOVING DELINEATORS AND MARKERS)
REMOVE EXISTING APRON ENDWALL (BID ITEM REMOVING SMALL PIPE CULVERTS)
(1) CULVERT PIPE REINFORCED CONCRETE CLASS III 24-INCH
(1) APRON ENDWALL REQ'D.

VERNON COMMUNICATIONS COOP
STA. 144+57, 33.0' LT.
STA. 144+57, 21.0' LT.
STA. 144+57, 0.0' LT.

MIDWEST NATURAL GAS

VERNON ELECTRIC COOP

SLOPE INTERCEPTS

VERNON ELECTRIC COOP

BEGIN CONSTRUCTION
STATION 140+56.43

BM 1

R/W

R/W

R/W

EXISTING C/L STH 27

PT: 140+69.98

10' (8" PAVED)

12'

18:1

12.5:1

STH 27

(ASPHALT)

141 142 143 N26°10'03"E 144 145

STH 27

MATCHLINE STATION 146+00

BEGIN PROJECT
STATION 140+79.01

12'

10' (8" PAVED)

FINISHED C/L STH 27

378'
TAPER

225'
TAPER

R/W

HAGEN ROAD

(ASPHALT)

VERNON ELECTRIC COOP

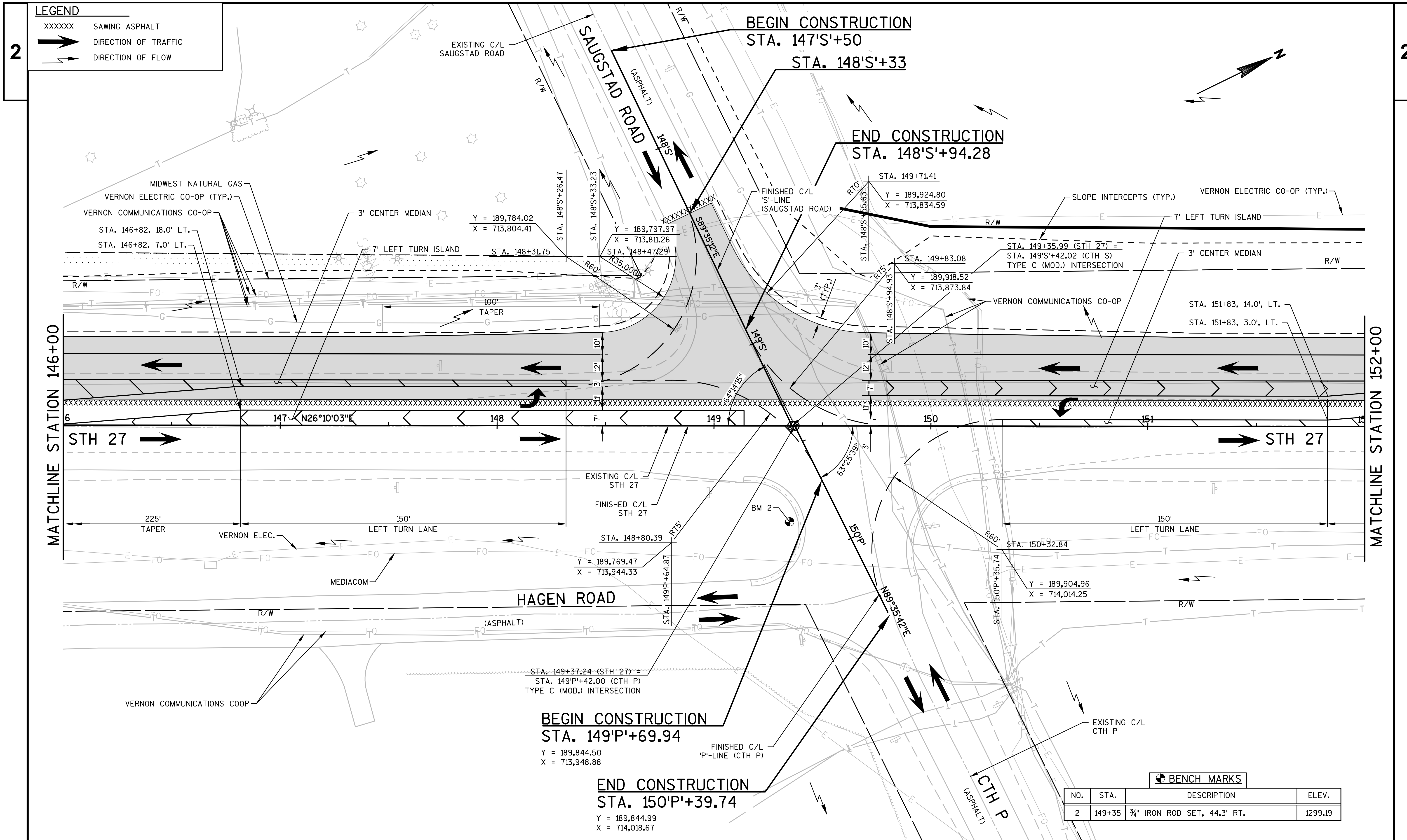
MEDIACOM

VERNON COMMUNICATIONS COOP

BENCH MARKS

NO.	STA.	DESCRIPTION	ELEV.
1	140+41	¾" IRON ROD SET, 67.0' LT.	1297.15

PROJECT NO: 5140-03-72	HWY: STH 27	COUNTY: VERNON	INTERSECTION DETAIL	SHEET 9	E



2
LEGEND
XXXXXX SAWING ASPHALT
DIRECTION OF TRAFFIC
DIRECTION OF FLOW
EXISTING C/L SAUGSTAD ROAD
SAUGSTAD ROAD
(ASPHALT)
R/W
BEGIN CONSTRUCTION
STA. 147'S'+50
STA. 148'S'+33
END CONSTRUCTION
STA. 148'S'+94.28
148'S'
149'S'
S89°35'12"E
MIDWEST NATURAL GAS
VERNON ELECTRIC CO-OP (TYP.)
VERNON COMMUNICATIONS CO-OP
STA. 146+82, 18.0' LT.
STA. 146+82, 7.0' LT.
3' CENTER MEDIAN
7' LEFT TURN ISLAND
Y = 189,784.02
X = 713,804.41
STA. 148+31.75
STA. 148'S'+26.47
STA. 148'S'+33.23
Y = 189,797.97
X = 713,811.26
STA. 148+47.29
R60'
R35.000'
FINISHED C/L 'S'-LINE (SAUGSTAD ROAD)
STA. 149+71.41
Y = 189,924.80
X = 713,834.59
R70'
STA. 148'S'+55.63
R75'
STA. 149+83.08
Y = 189,918.52
X = 713,873.84
STA. 148'S'+94.93
3' (TYP.)
SLOPE INTERCEPTS (TYP.)
VERNON ELECTRIC CO-OP (TYP.)
7' LEFT TURN ISLAND
STA. 149+35.99 (STH 27) =
STA. 149'S'+42.02 (CTH S)
TYPE C (MOD.) INTERSECTION
3' CENTER MEDIAN
VERNON COMMUNICATIONS CO-OP
STA. 151+83, 14.0', LT.
STA. 151+83, 3.0', LT.
100'
TAPER
10'
12'
3'
1'
7'
11'
64°14'15"
63°25'39"
MATCHLINE STATION 146+00
MATCHLINE STATION 152+00
147
N26°10'03"E
148
149
150
151
STH 27
EXISTING C/L STH 27
FINISHED C/L STH 27
225'
TAPER
150'
LEFT TURN LANE
BM 2
VERNON ELEC.
MEDIACOM
STA. 148+80.39
R75'
Y = 189,769.47
X = 713,944.33
STA. 149'P'+64.87
150'P'
N89°35'42"E
R60'
STA. 150+32.84
Y = 189,904.96
X = 714,014.25
STA. 150'P'+35.74
HAGEN ROAD
(ASPHALT)
VERNON COMMUNICATIONS COOP
STA. 149+37.24 (STH 27) =
STA. 149'P'+42.00 (CTH P)
TYPE C (MOD.) INTERSECTION
BEGIN CONSTRUCTION
STA. 149'P'+69.94
Y = 189,844.50
X = 713,948.88
FINISHED C/L 'P'-LINE (CTH P)
END CONSTRUCTION
STA. 150'P'+39.74
Y = 189,844.99
X = 714,018.67
EXISTING C/L CTH P
CTH P
(ASPHALT)
N

BENCH MARKS

NO.	STA.	DESCRIPTION	ELEV.
2	149+35	¾" IRON ROD SET, 44.3' RT.	1299.19

PROJECT NO:5140-03-72	HWY:STH 27	COUNTY:VERNON	INTERSECTION DETAIL	SHEET 10	E

FILE NAME : S:\PROJECTS\W11586 STH 27-CTH P INTERSECTION, VERNON CO\SHEETSPLAN\DETAILS\INT DET'L.DWG PLOT DATE : 4/14/2020 10:21 AM PLOT BY : THEODORE HERBERS PLOT NAME : PLOT SCALE : ==========

WISDOT/CADDS SHEET 42

LEGEND

XXXXXX SAWING ASPHALT

DIRECTION OF TRAFFIC

N

MATCHLINE STATION 152+00

STH 27

STA. 154+08, 33.0' LT.

STA. 154+08, 240' LT.

VERNON ELECTRIC CO-OP (TYP.)

END CONSTRUCTION
STATION 157+87.67

R/W

SLOPE INTERCEPT

12.5:1

18:1

10' (8' PAVED)

12'

12'

10' (8' PAVED)

XXXXXX

STH 27

(ASPHALT)

153 154 155 156 157

N26°10'03"E

EXISTING C/L
STH 27

FINISHED C/L
STH 27

MEDIACOM

BM 3

END PROJECT
STATION 157+85.86

VERNON COMMUNICATIONS CO-OP

225'
TAPER

378'
TAPER

BENCH MARKS

NO.	STA.	DESCRIPTION	ELEV.
3	158+04	¾" IRON ROD SET, 48.0' RT.	1300.24

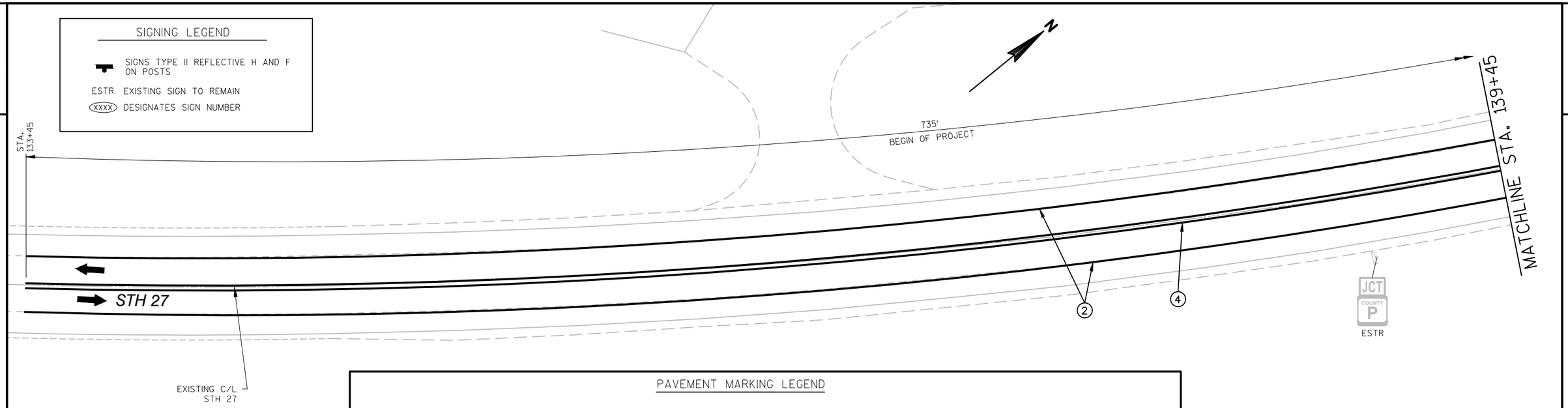
PROJECT NO: 5140-03-72	HWY: STH 27	COUNTY: VERNON	INTERSECTION DETAIL	SHEET 11	E

SIGNING LEGEND

SIGNS TYPE II REFLECTIVE H AND F ON POSTS

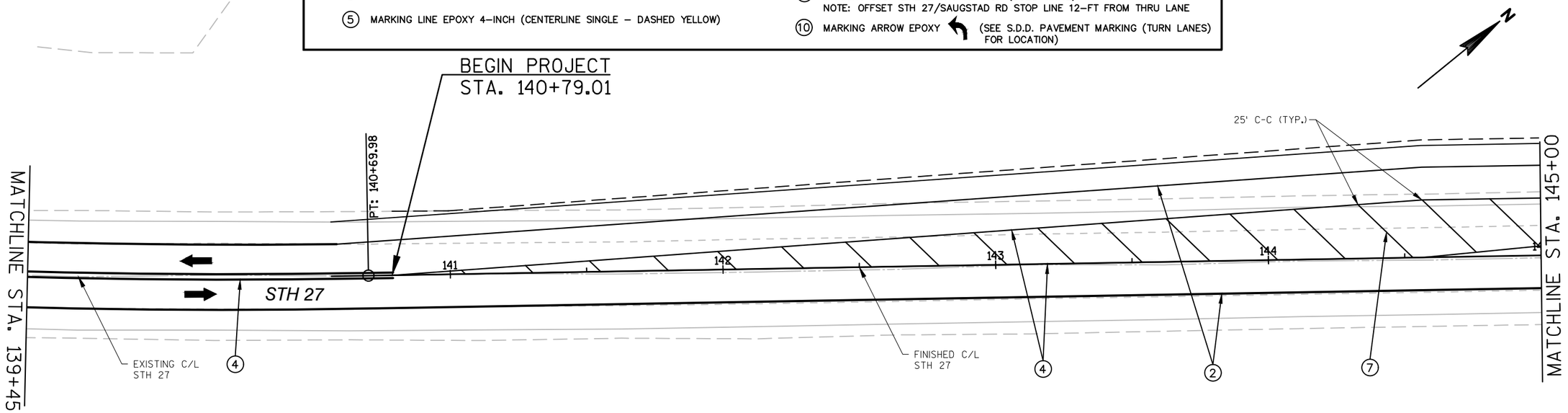
ESTR EXISTING SIGN TO REMAIN

(XXXX) DESIGNATES SIGN NUMBER



PAVEMENT MARKING LEGEND

1. MARKING LINE EPOXY 4–INCH (LANE LINE MARKING–DASHED WHITE)
2. MARKING LINE EPOXY 4–INCH (LANE LINE MARKING–SOLID WHITE)
3. MARKING LINE EPOXY 4–INCH (CENTERLINE SINGLE – SOLID YELLOW)
4. MARKING LINE EPOXY 4–INCH (CENTERLINE DOUBLE – SOLID YELLOW)
5. MARKING LINE EPOXY 4–INCH (CENTERLINE SINGLE – DASHED YELLOW)
6. MARKING LINE EPOXY 8–INCH (SOLID WHITE)
7. MARKING DIAGONAL 12–INCH (SOLID YELLOW)
8. MARKING CHEVRON EPOXY 12–INCH (SOLID WHITE)
9. MARKING STOP LINE EPOXY 18–INCH (SOLID WHITE)
   NOTE: OFFSET STH 27/SAUGSTAD RD STOP LINE 12–FT FROM THRU LANE
10. MARKING ARROW EPOXY (SEE S.D.D. PAVEMENT MARKING (TURN LANES) FOR LOCATION)



PROJECT NO: 5140-03-72	HWY: STH 27	COUNTY: VERNON	SIGNING & PAVEMENT MARKING	SHEET 12	E

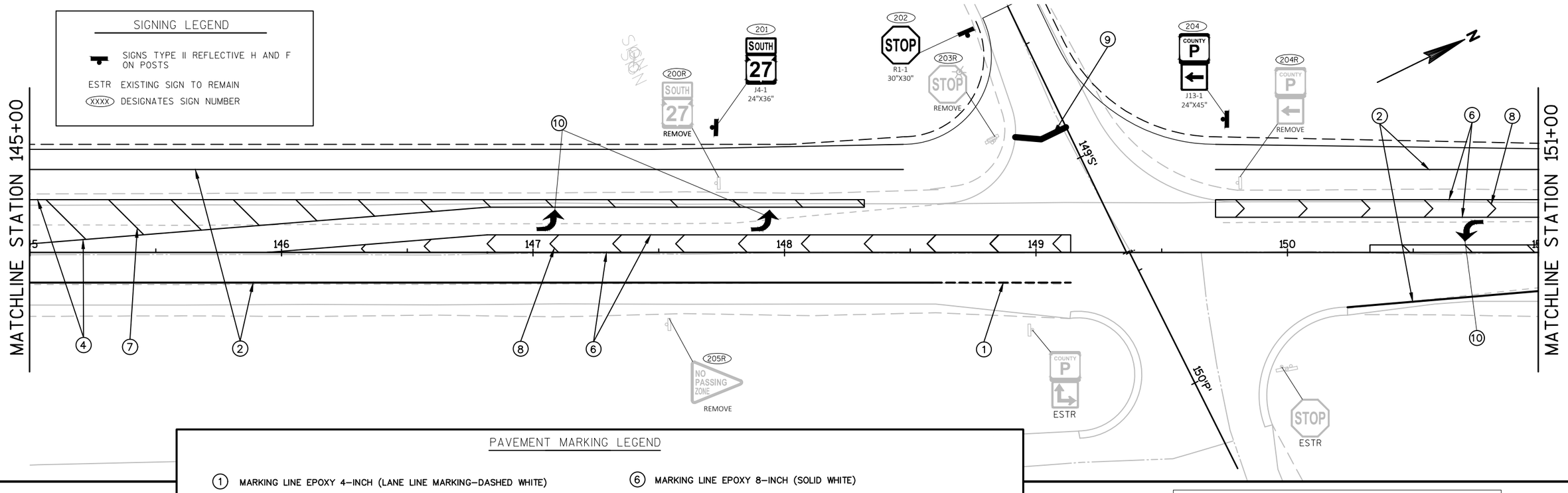
2

SIGNING LEGEND

SIGNS TYPE II REFLECTIVE H AND F ON POSTS

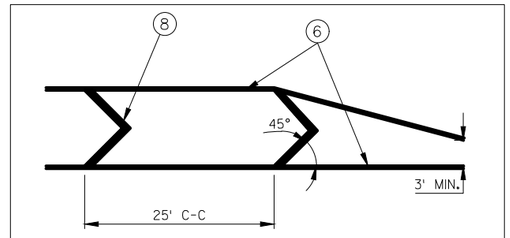
ESTR EXISTING SIGN TO REMAIN

(XXXX) DESIGNATES SIGN NUMBER

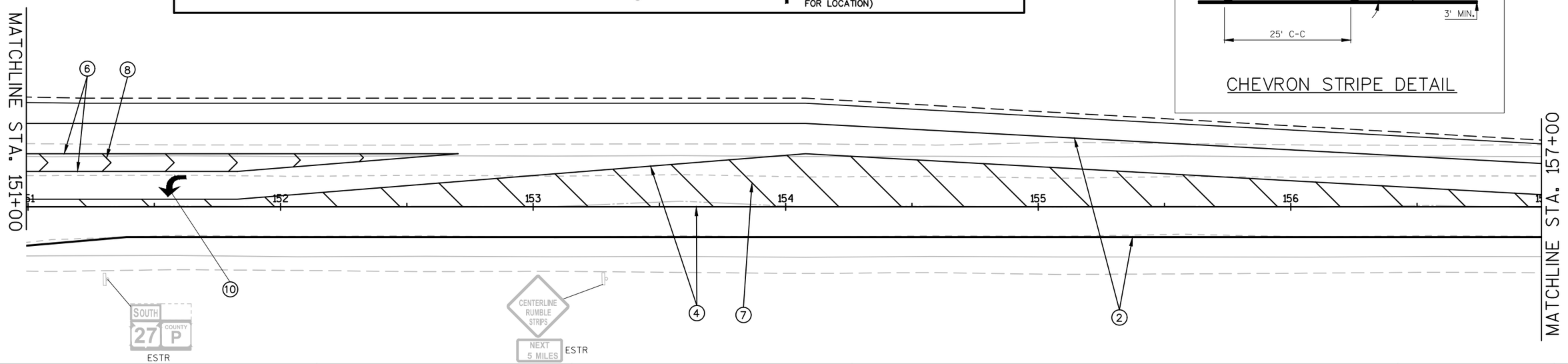


PAVEMENT MARKING LEGEND

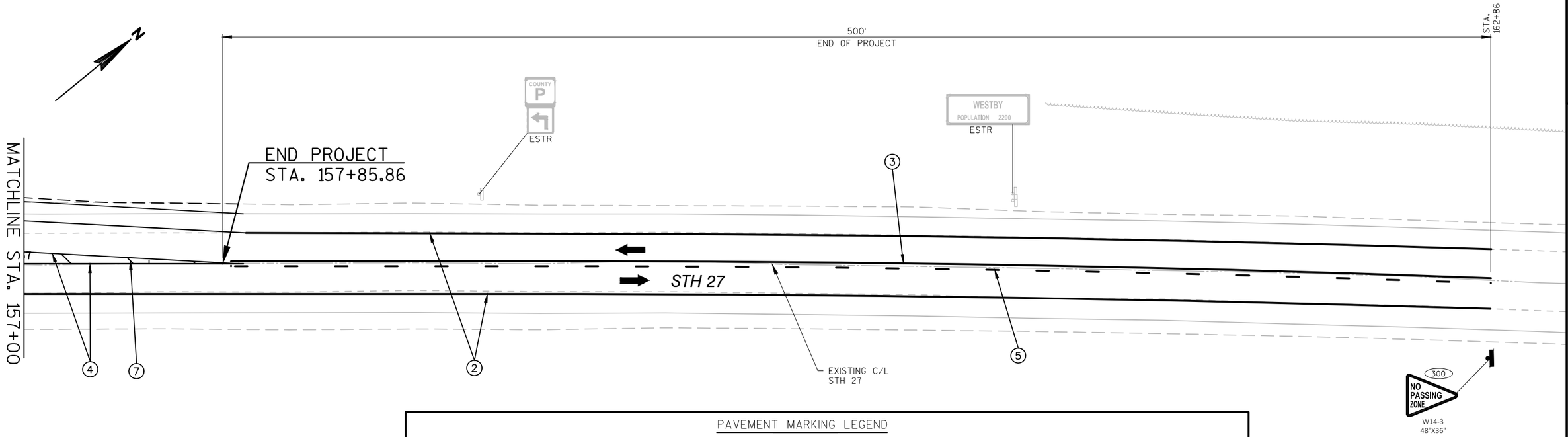
1. MARKING LINE EPOXY 4–INCH (LANE LINE MARKING–DASHED WHITE)
2. MARKING LINE EPOXY 4–INCH (LANE LINE MARKING–SOLID WHITE)
3. MARKING LINE EPOXY 4–INCH (CENTERLINE SINGLE – SOLID YELLOW)
4. MARKING LINE EPOXY 4–INCH (CENTERLINE DOUBLE – SOLID YELLOW)
5. MARKING LINE EPOXY 4–INCH (CENTERLINE SINGLE – DASHED YELLOW)
6. MARKING LINE EPOXY 8–INCH (SOLID WHITE)
7. MARKING DIAGONAL 12–INCH (SOLID YELLOW)
8. MARKING CHEVRON EPOXY 12–INCH (SOLID WHITE)
9. MARKING STOP LINE EPOXY 18–INCH (SOLID WHITE)
   NOTE: OFFSET STH 27/SAUGSTAD RD STOP LINE 12–FT FROM THRU LANE
10. MARKING ARROW EPOXY (SEE S.D.D. PAVEMENT MARKING (TURN LANES) FOR LOCATION)



CHEVRON STRIPE DETAIL



PROJECT NO: 5140-03-72	HWY: STH 27	COUNTY: VERNON	SIGNING & PAVEMENT MARKING	SHEET 13	E



PAVEMENT MARKING LEGEND

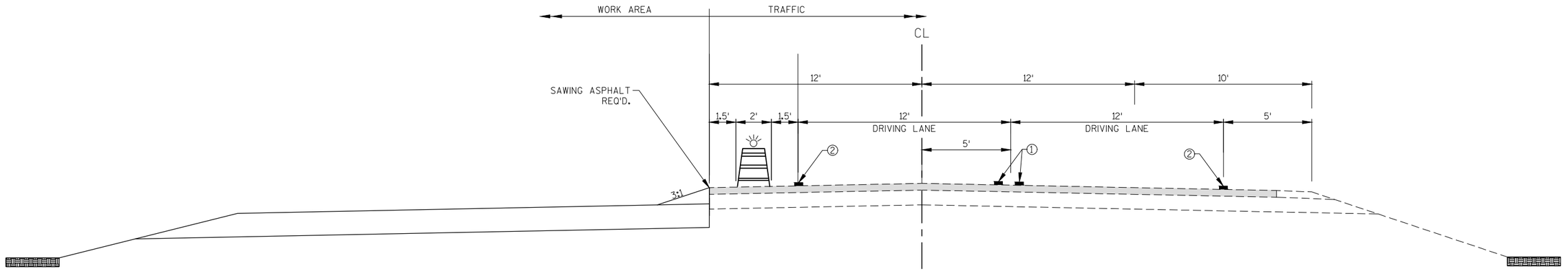
1. MARKING LINE EPOXY 4–INCH (LANE LINE MARKING–DASHED WHITE)
2. MARKING LINE EPOXY 4–INCH (LANE LINE MARKING–SOLID WHITE)
3. MARKING LINE EPOXY 4–INCH (CENTERLINE SINGLE – SOLID YELLOW)
4. MARKING LINE EPOXY 4–INCH (CENTERLINE DOUBLE – SOLID YELLOW)
5. MARKING LINE EPOXY 4–INCH (CENTERLINE SINGLE – DASHED YELLOW)
6. MARKING LINE EPOXY 8–INCH (SOLID WHITE)
7. MARKING DIAGONAL 12–INCH (SOLID YELLOW)
8. MARKING CHEVRON EPOXY 12–INCH (SOLID WHITE)
9. MARKING STOP LINE EPOXY 18–INCH (SOLID WHITE)
   NOTE: OFFSET STH 27/SAUGSTAD RD STOP LINE 12–FT FROM THRU LANE
10. MARKING ARROW EPOXY (SEE S.D.D. PAVEMENT MARKING (TURN LANES) FOR LOCATION)

SIGNING LEGEND

SIGNS TYPE II REFLECTIVE H AND F ON POSTS

ESTR EXISTING SIGN TO REMAIN

(XXXX) DESIGNATES SIGN NUMBER



TRAFFIC CONTROL TYPICAL SECTION

LEGEND

- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- WORK AREA
- ~~XXXX~~ MARKING REMOVAL LINE 4-INCH

Ⓐ ROAD WORK AHEAD W20-1-A

Ⓑ END ROAD WORK G20-2A 48"X24"

TRAFFIC NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 DESIRABLE) CLEARANCE TO EXISTING SIGNS.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

PROVIDE AND MAINTAIN ALL NECESSARY BARRICADES, SIGNS, LIGHTS, TEMPORARY MARKINGS, FLAGGERS, AND SUCH OTHER SAFETY DEVICES AS CALLED FOR ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

ALL SIGN LAYOUT SHALL BE IN ACCORDANCE WITH FEDERAL HIGHWAY ADMINISTRATION MANUAL OF STANDARD HIGHWAY SIGNS.

ADDITIONAL DRUMS OR TYPE III BARRICADES MAY BE REQUIRED ADJACENT TO DROP-OFFS, OPEN TRENCHES, OR PROTRUSIONS. COST TO BE INCLUDED WITH OPERATION WHICH CREATES THE HAZARD.

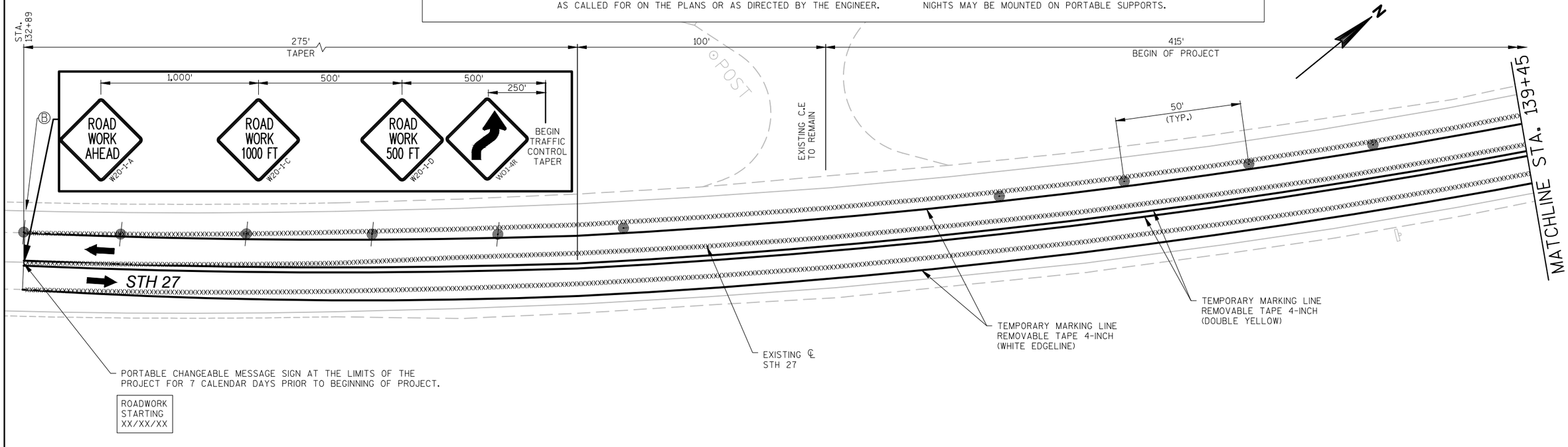
DRUMS PLACED ADJACENT TO WORK AREAS SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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

① TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DOUBLE YELLOW)

② TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE EDGELINE)



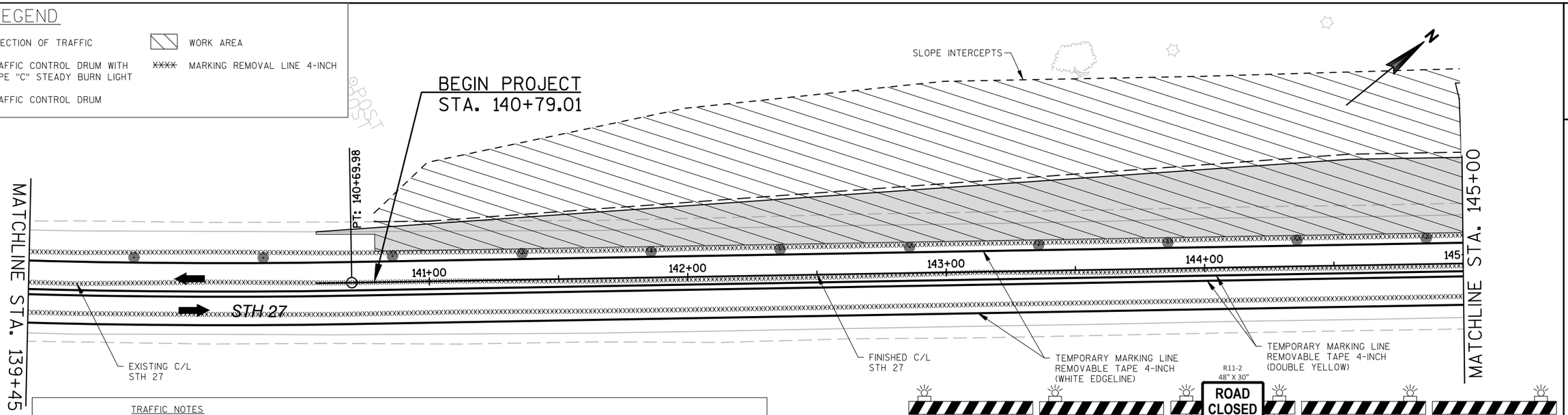
PROJECT NO: 5140-03-72	HWY: STH 27	COUNTY: VERNON	TRAFFIC CONTROL	SHEET 15	E

FILE NAME : S:\PROJECTS\W11586 STH 27-CTH P INTERSECTION, VERNON CO\SHEETSPLAN\DETAILS\TRAFFIC CONTROL.DWG
LAYOUT : TRAFFIC
PLOT DATE : 4/14/2020
PLOT TIME : 2:02:18 PM
PLOT BY : THEODORE HERBERS
PLOT SCALE : 1" = 1'

2

LEGEND

- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- WORK AREA
- ~~XXXX~~ MARKING REMOVAL LINE 4-INCH



TRAFFIC NOTES

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 DESIRABLE) CLEARANCE TO EXISTING SIGNS.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

PROVIDE AND MAINTAIN ALL NECESSARY BARRICADES, SIGNS, LIGHTS, TEMPORARY MARKINGS, FLAGGERS, AND SUCH OTHER SAFETY DEVICES AS CALLED FOR ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

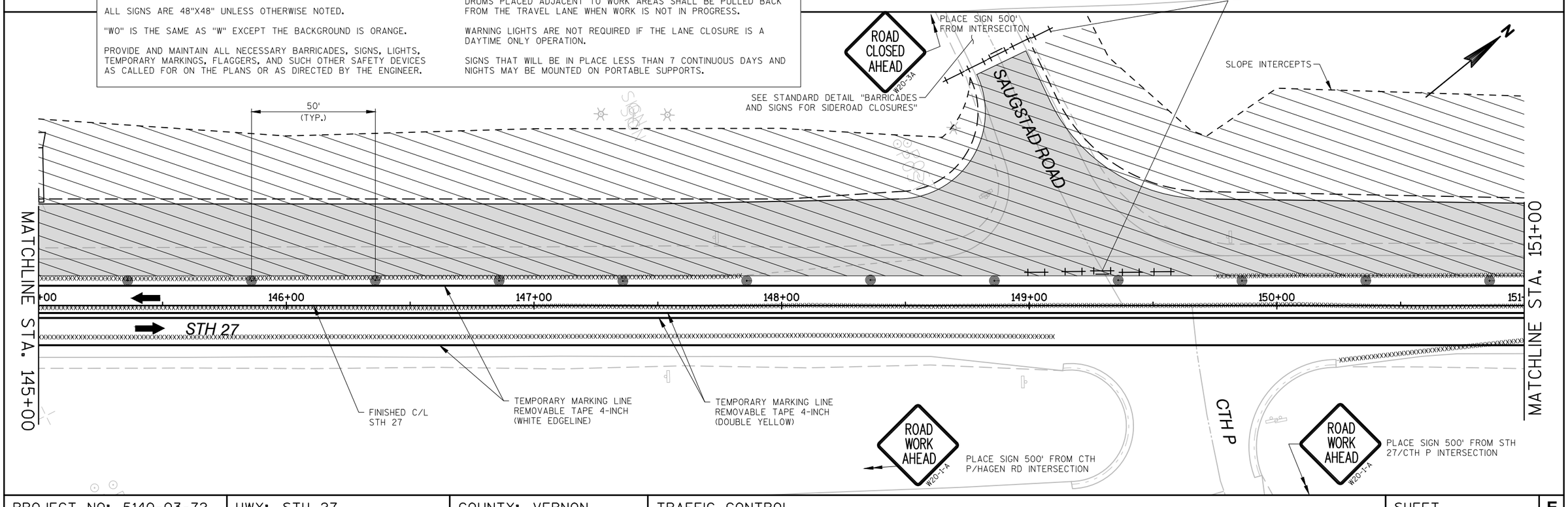
ALL SIGN LAYOUT SHALL BE IN ACCORDANCE WITH FEDERAL HIGHWAY ADMINISTRATION MANUAL OF STANDARD HIGHWAY SIGNS.

ADDITIONAL DRUMS OR TYPE III BARRICADES MAY BE REQUIRED ADJACENT TO DROP-OFFS, OPEN TRENCHES, OR PROTRUSIONS. COST TO BE INCLUDED WITH OPERATION WHICH CREATES THE HAZARD.

DRUMS PLACED ADJACENT TO WORK AREAS SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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



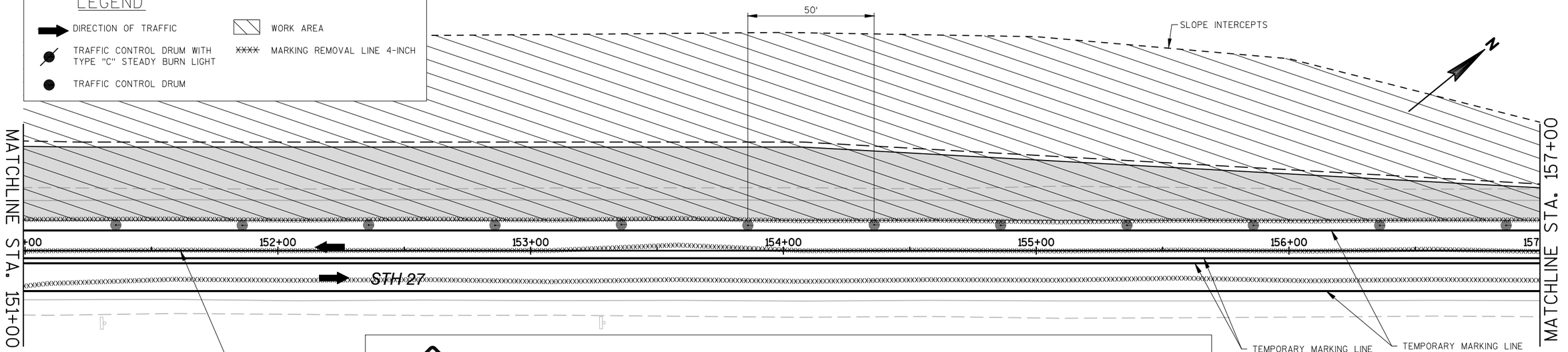
PROJECT NO: 5140-03-72	HWY: STH 27	COUNTY: VERNON	TRAFFIC CONTROL	SHEET 16	E

FILE NAME : S:\PROJECTS\W11586 STH 27-CTH P INTERSECTION, VERNON CO\SHEETSPLAN\DETAILS\TRAFFIC CONTROL.DWG
LAYOUT : CONTROL.DWG
PLOT DATE : 4/14/2020
PLOT TIME : 10:22:03 AM
PLOT BY : THEODORE HERBERS
PLOT SCALE : 1" = 1'

2

LEGEND

- DIRECTION OF TRAFFIC
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TRAFFIC CONTROL DRUM
- WORK AREA
- ~~XXXX~~ MARKING REMOVAL LINE 4-INCH



Ⓐ ROAD WORK AHEAD W20-1-A

Ⓑ END ROAD WORK G20-2A 48"X24"

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

THE SPACING BETWEEN SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500 DESIRABLE) CLEARANCE TO EXISTING SIGNS.

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

"WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

PROVIDE AND MAINTAIN ALL NECESSARY BARRICADES, SIGNS, LIGHTS, TEMPORARY MARKINGS, FLAGGERS, AND SUCH OTHER SAFETY DEVICES AS CALLED FOR ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

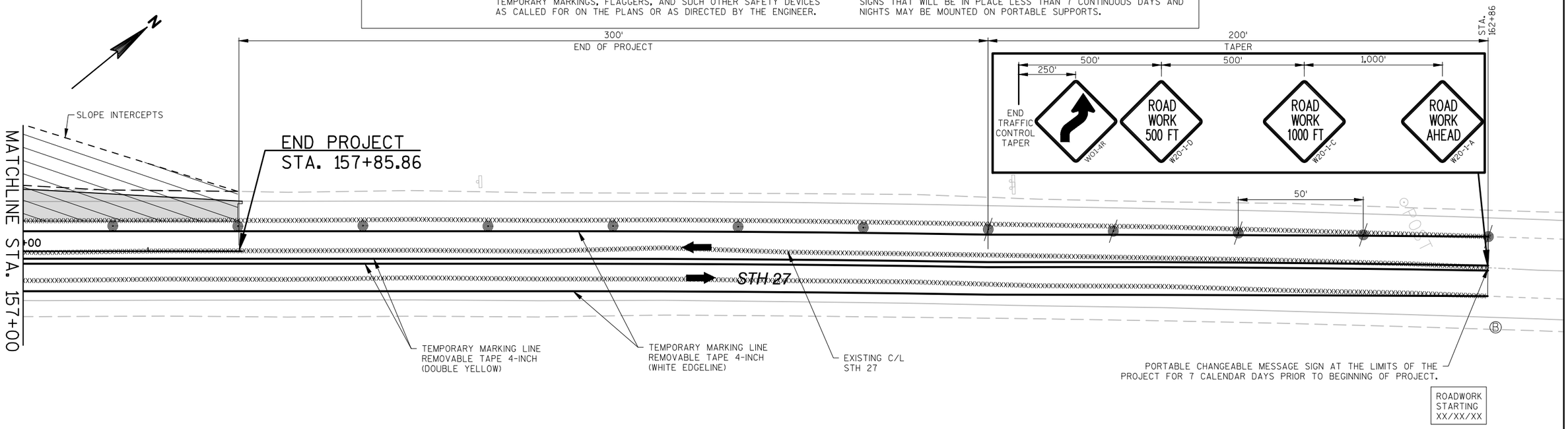
ALL SIGN LAYOUT SHALL BE IN ACCORDANCE WITH FEDERAL HIGHWAY ADMINISTRATION MANUAL OF STANDARD HIGHWAY SIGNS.

ADDITIONAL DRUMS OR TYPE III BARRICADES MAY BE REQUIRED ADJACENT TO DROP-OFFS, OPEN TRENCHES, OR PROTRUSIONS. COST TO BE INCLUDED WITH OPERATION WHICH CREATES THE HAZARD.

DRUMS PLACED ADJACENT TO WORK AREAS SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

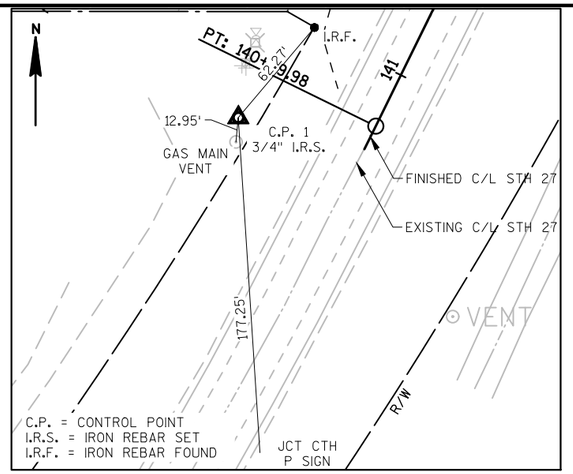
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

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



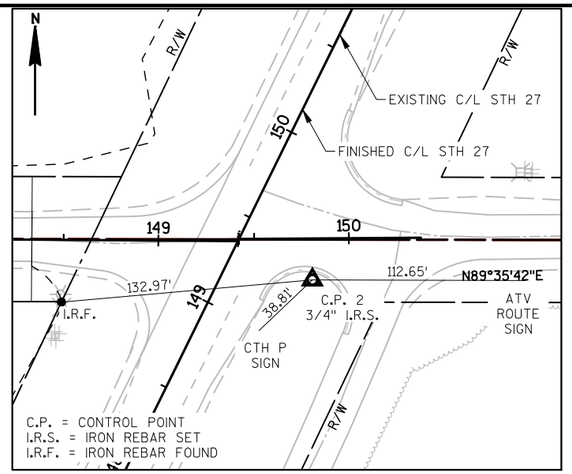
PROJECT NO: 5140-03-72	HWY: STH 27	COUNTY: VERNON	TRAFFIC CONTROL	SHEET 17	E

FILE NAME : S:\PROJECTS\W11586 STH 27-CTH P INTERSECTION, VERNON CO\SHEETSPLAN\DETAILS\TRAFFIC CONTROL.DWG
LAYOUT : CONTROL
PLOT DATE : 4/14/2020
PLOT TIME : 10:22:06 AM
PLOT BY : THEODORE HERBERS
PLOT SCALE : 1" = 1'



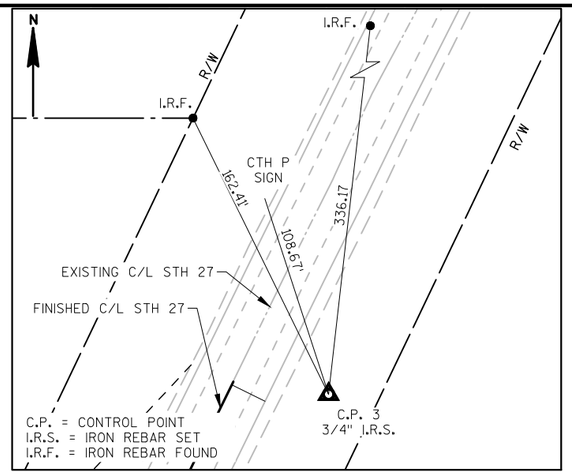
TIES TO C.P.#1

STA. 140+41.38; 67.0' LT.
Y = 189,070.44
X = 713,465.94



TIES TO C.P.#2

STA. 149+34.93; 44.3' RT.
Y = 189,822.71
X = 713,959.64



TIES TO C.P.#3

STA. 158+03.86; 48.0' RT.
Y = 190,600.92
X = 714,346.22

▲ CONTROL POINTS

No.	STATION	DESCRIPTION	Y	X
1	140+41.38	3/4" IRON REBAR FOUND 67.0' LT.	189,070.44	713,465.94
2	149+34.93	3/4" IRON REBAR FOUND 44.3' RT.	189,822.71	713,959.64
3	158+03.86	3/4" IRON REBAR SET 48.0' RT.	190,600.92	714,346.22

CTH P STATION LAYOUT

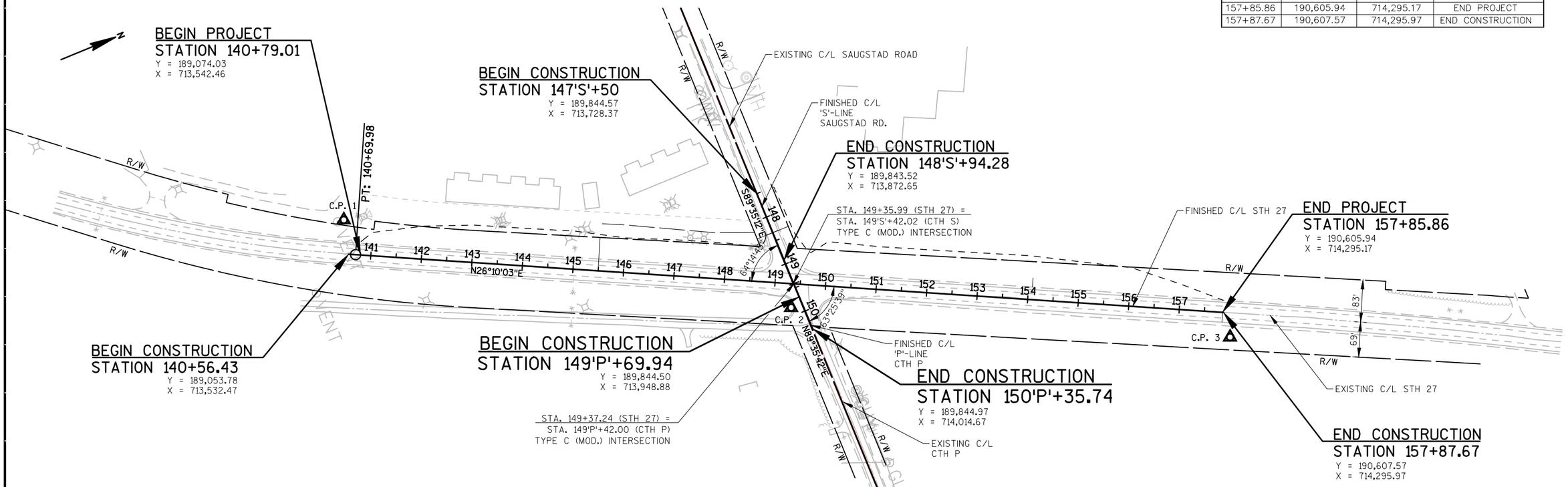
STATION	Y	X	COMMENTS
149'P'+69.94	189,844.50	713,948.88	BEGIN CONSTRUCTION
150'P'+00.00	189,844.71	713,978.94	–
150'P'+35.74	189,844.97	714,014.67	END CONSTRUCTION

SAUGSTAD RD STATION LAYOUT

STATION	Y	X	COMMENTS
147'S'+50.00	189,844.57	713,728.37	BEGIN CONSTRUCTION
148'S'+00.00	189,844.20	713,778.37	–
148'S'+50.00	189,843.84	713,828.37	–
148'S'+94.28	189,843.52	713,872.65	END CONSTRUCTION

STH 27 STATION LAYOUT

STATION	Y	X	COMMENTS
140+56.43	189,053.78	713,532.47	BEGIN CONSTRUCTION
140+79.01	189,074.03	713,542.46	BEGIN PROJECT
140+50	189,048.02	713,529.60	–
141+00	189,092.87	713,551.72	–
141+50	189,137.74	713,573.77	–
142+00	189,182.62	713,595.82	–
142+50	189,227.50	713,617.86	–
143+00	189,272.37	713,639.91	–
143+50	189,317.25	713,661.96	–
144+00	189,362.12	713,684.01	–
144+50	189,407.00	713,706.06	–
145+00	189,451.87	713,728.11	–
145+50	189,496.75	713,750.15	–
146+00	189,541.62	713,772.21	–
146+50	189,586.50	713,794.26	–
147+00	189,631.37	713,816.31	–
147+50	189,676.25	713,838.36	–
148+00	189,721.13	713,860.41	–
148+50	189,766.00	713,882.46	–
149+00	189,810.88	713,904.51	–
149+50	189,855.75	713,926.56	–
150+00	189,900.63	713,948.61	–
150+50	189,945.50	713,970.66	–
151+00	189,990.38	713,992.71	–
151+50	190,035.25	714,014.76	–
152+00	190,080.13	714,036.81	–
152+50	190,125.00	714,058.86	–
153+00	190,169.88	714,080.91	–
153+50	190,214.75	714,102.96	–
154+00	190,259.63	714,125.01	–
154+50	190,304.51	714,147.06	–
155+00	190,349.38	714,169.11	–
155+50	190,394.26	714,191.16	–
156+00	190,439.13	714,213.21	–
156+50	190,484.01	714,235.26	–
157+00	190,528.88	714,257.31	–
157+50	190,573.76	714,279.36	–
157+85.86	190,605.94	714,295.17	END PROJECT
157+87.67	190,607.57	714,295.97	END CONSTRUCTION



PROJECT NO: 5140-03-72	HWY: STH 27	COUNTY: VERNON	ALIGNMENT AND TIES	SHEET 18	E

5140-03-72

Line	Item	Item Description	Unit	Total	Qty
0002	203.0100	Removing Small Pipe Culverts	EACH	1.000	1.000
0004	204.0180	Removing Delineators and Markers	EACH	1.000	1.000
0006	205.0100	Excavation Common	CY	2,575.000	2,575.000
0008	208.0100	Borrow	CY	3,680.000	3,680.000
0010	213.0100	Finishing Roadway (project) 01. 5140-03-72	EACH	1.000	1.000
0012	305.0110	Base Aggregate Dense 3/4-Inch	TON	170.000	170.000
0014	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	2,090.000	2,090.000
0016	312.0110	Select Crushed Material	TON	4,800.000	4,800.000
0018	455.0505	Asphaltic Material Seal Coat	GAL	4,300.000	4,300.000
0020	455.0605	Tack Coat	GAL	270.000	270.000
0022	460.2000	Incentive Density HMA Pavement	DOL	950.000	950.000
0024	460.6224	HMA Pavement 4 MT 58-28 S	TON	1,480.000	1,480.000
0026	475.0105	Seal Coat	TON	250.000	250.000
0028	522.0124	Culvert Pipe Reinforced Concrete Class III 24-Inch	LF	22.000	22.000
0030	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	1.000	1.000
0032	606.0200	Riprap Medium	CY	8.000	8.000
0034	618.0100	Maintenance And Repair of Haul Roads (project) 01. 5140-03-72	EACH	1.000	1.000
0036	619.1000	Mobilization	EACH	1.000	1.000
0038	624.0100	Water	MGAL	34.000	34.000
0040	625.0500	Salvaged Topsoil	SY	7,400.000	7,400.000
0042	627.0200	Mulching	SY	4,590.000	4,590.000
0044	628.1504	Silt Fence	LF	1,260.000	1,260.000
0046	628.1520	Silt Fence Maintenance	LF	1,260.000	1,260.000
0048	628.1905	Mobilizations Erosion Control	EACH	4.000	4.000
0050	628.1910	Mobilizations Emergency Erosion Control	EACH	2.000	2.000
0052	628.2004	Erosion Mat Class I Type B	SY	2,800.000	2,800.000
0054	628.7504	Temporary Ditch Checks	LF	72.000	72.000
0056	629.0210	Fertilizer Type B	CWT	63.000	63.000
0058	630.0120	Seeding Mixture No. 20	LB	267.000	267.000
0060	630.0200	Seeding Temporary	LB	267.000	267.000
0062	630.0300	Seeding Borrow Pit	LB	55.000	55.000
0064	630.0500	Seed Water	MGAL	470.000	470.000
0066	633.5100	Markers Row	EACH	13.000	13.000
0068	633.5200	Markers Culvert End	EACH	1.000	1.000
0070	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	4.000	4.000
0072	637.2210	Signs Type II Reflective H	SF	19.750	19.750
0074	637.2230	Signs Type II Reflective F	SF	5.560	5.560
0076	638.2602	Removing Signs Type II	EACH	4.000	4.000

5140-03-72

Line	Item	Item Description	Unit	Total	Qty
0078	638.3000	Removing Small Sign Supports	EACH	4.000	4.000
0080	642.5001	Field Office Type B	EACH	1.000	1.000
0082	643.0300	Traffic Control Drums	DAY	2,684.000	2,684.000
0084	643.0420	Traffic Control Barricades Type III	DAY	440.000	440.000
0086	643.0705	Traffic Control Warning Lights Type A	DAY	528.000	528.000
0088	643.0715	Traffic Control Warning Lights Type C	DAY	440.000	440.000
0090	643.0900	Traffic Control Signs	DAY	660.000	660.000
0092	643.1050	Traffic Control Signs PCMS	DAY	14.000	14.000
0094	643.5000	Traffic Control	EACH	1.000	1.000
0096	645.0130	Geotextile Type R	SY	19.000	19.000
0098	646.1020	Marking Line Epoxy 4-Inch	LF	13,767.000	13,767.000
0100	646.3020	Marking Line Epoxy 8-Inch	LF	1,255.000	1,255.000
0102	646.5020	Marking Arrow Epoxy	EACH	4.000	4.000
0104	646.6120	Marking Stop Line Epoxy 18-Inch	LF	23.000	23.000
0106	646.7120	Marking Diagonal Epoxy 12-Inch	LF	878.000	878.000
0108	646.9000	Marking Removal Line 4-Inch	LF	8,150.000	8,150.000
0110	649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	11,988.000	11,988.000
0112	650.4500	Construction Staking Subgrade	LF	1,792.000	1,792.000
0114	650.5000	Construction Staking Base	LF	1,792.000	1,792.000
0116	650.6000	Construction Staking Pipe Culverts	EACH	1.000	1.000
0118	650.9910	Construction Staking Supplemental Control (project) 01. 5140-03-72	LS	1.000	1.000
0120	650.9920	Construction Staking Slope Stakes	LF	1,792.000	1,792.000
0122	690.0150	Sawing Asphalt	LF	1,772.000	1,772.000
0124	740.0440	Incentive IRI Ride	DOL	646.000	646.000
0126	SPV.0090	Special 01. Marking Chevron Epoxy 12-Inch	LF	260.000	260.000

ALL ITEMS ARE CATEGORY 010 UNLESS OTHERWISE NOTED

3

REMOVALS

STATION	LOCATION	DESCRIPTION	203.0100 REMOVING SMALL PIPE CULVERTS (EACH)	204.0180 REMOVING DELINEATORS AND MARKERS (EACH)
145+02	MAINLINE, LT.	APRON ENDWALL FOR 24-INCH RCCP	1	-
145+02	MAINLINE, LT.	MARKER FOR RCCP	-	1
		TOTAL=	1	1

EARTHWORK SUMMARY

STATION - STATION	LOCATION	205.0100 COMMON EXCAVATION CUT (CY)	AVAILABLE MATERIAL (CY) (1)	UNEXPANDED FILL (CY)	EXPANDED FILL (CY) FACTOR 1.30 (2)	MASS ORDINATE +/- (CY) (3)	208.0100 BORROW (CY)
140+56 - 157+88	MAINLINE	2395	2395	4681	6085	-3690	3690
148'S'+33 - 148'S'+94	SAUGSTAD ROAD	180	180	139	170	10	-10
	TOTALS =	2575	2575	4820	6255	-3680	3680

NOTES:
1.) AVAILABLE MATERIAL = CUT
2.) EXPANDED FILL FACTOR 1.30: EXPANDED FILL = (UNEXPANDED FILL)*1.30
3.) THE MASS ORDINATE+ OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE CATEGORY MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE CATEGORY.

3

BASE AGGREGATE DENSE

STATION - STATION	LOCATION	305.0110 3/4 - INCH (TON)	305.0120 1 1/4 - INCH (TON)
140+56 - 148+82	MAINLINE	74	-
148+99 - 157+88	MAINLINE	87	-
140+56 - 157+88	MAINLINE	-	1980
148'S'+33 - 148'S'+94	SAUGSTAD RD	9	110
	TOTAL =	170	2090

SELECT CRUSHED MATERIAL

STATION - STATION	LOCATION	312.0110 (TON)
140+56 - 157+88	MAINLINE	4580
148'S'+33 - 148'S'+94	SAUGSTAD RD	220
	TOTAL =	4800

HMA PAVEMENT

STATION - STATION	LOCATION	455.0605 TACK COAT (GAL)	460.6224 HMA PAVEMENT 4 MT 58-28 S (TON)
140+56 - 157+88	MAINLINE	250	1400
148'S'+33 - 148'S'+94	SAUGSTAD RD	20	80
	TOTALS =	270	1480

CULVERT PIPE REINFORCED CONCRETE AND MARKERS END RIPRAP MEDIUM AND GEOTEXTILE TYPE R

STATION - STATION	LOCATION	522.0124 CLASS III 24 -INCH (LF)	522.1024 APRON ENDWALLS 24-INCH (EACH)	633.5200 MARKERS CULVERT END (EACH)	606.0200 RIPRAP MEDIUM (CY)	645.0130 GEOTEXTILE TYPE R (SY)
145+02	MAINLINE, LT.	*22	1	1	6	15
	UNDISTRIBUTED	--	--	--	2	4
	TOTALS =	22	1	1	8	19

* 2 JOINT TIES REQUIRED

WATER

LOCATION	624.0100 (MGAL)
PROJECT	34
TOTAL =	34

FINISHING ITEMS

STATION - STATION	LOCATION	625.0500 SALVAGED TOPSOIL (SY)	627.0200 MULCHING (SY)	628.2004 EROSION MAT CLASS I TYPE B (SY)	629.0210 FERTILIZER TYPE B (CWT)	630.0120 SEEDING MIXTURE NO. 20 (LB)	630.0200 SEEDING TEMPORARY (LB)	630.0300 SEEDING BORROW PIT (LB)	630.0500 SEED WATER (MGAL)
140+56 - 157+88	MAINLINE	5700	3450	-	48	204	-	-	295
148'S'+33 - 148'S'+94	MAINLINE	220	220	-	2	9	-	-	15
149+36 - 156+50	MAINLINE, LT.	-	-	2250	-	-	-	-	-
-	BORROW PIT	-	-	-	-	-	-	45	65
-	UNDISTRIBUTED	1480	920	550	13	54	267	10	95
	TOTALS=	7400	4590	2800	63	267	267	55	470

SILT FENCE

STATION - STATION	LOCATION	628.1504 SILT FENCE (LF)	628.1520 SILT FENCE MAINTENANCE (LF)
145+50 - 148+73	MAINLINE, LT.	340	340
149+70 - 157+86	MAINLINE, LT.	670	670
	UNDISTRIBUTED	250	250
	TOTALS =	1260	1260

MOBILIZATION EROSION CONTROL

PROJECT	628.1905 MOBILIZATION EROSION CONTROL (EACH)	628.1910 MOBILIZATION EMERGENCY EROSION CONTROL (EACH)
5140-03-72	4	2
TOTALS =	4	2

TEMPORARY DITCH CHECKS

STATION	LOCATION	628.7504 (LF)
142+01	MAINLINE, LT.	8
144+01	MAINLINE, LT.	8
145+07	MAINLINE, LT.	8
149+27	MAINLINE, LT.	8
150+99	MAINLINE, LT.	8
152+99	MAINLINE, LT.	8
154+98	MAINLINE, LT.	8
-	UNDISTIBUTED	16
	TOTAL =	72

MARKERS ROW

PT NO.	STATION	OFFSET FROM FINISHED C/L	633.5100 (EACH)
100	141+50.00	66.12' LT.	1
101	141+50.00	80.00' LT.	1
103	145+50.00	80.00' LT.	1
104	145+50.00	66.02' LT.	1
108	149+21.56	106.59' LT.	1
110	150+00.00	92.00' LT.	1
111	156+10.00	89.00' LT.	1
112	156+10.00	77.35' LT.	1
113	156+10.00	75.15' RT.	1
114	150+13.59	81.53' RT'	1
115	149+40.50	82.31' RT	1
116	143+02.14	89.13' RT.	1
118	141+02.64	84.43' RT.	1
		TOTAL=	13

TRAFFIC CONTROL

LOCATION	643.0300 DRUMS (DAYS)	643.0420 BARRICADES TYPE III (DAYS)	643.0705 WARNING LIGHTS TYPE A (DAY)	643.0715 WARNING LIGHTS TYPE C (DAY)	643.0900 SIGNS (DAYS)	643.1050 SIGNS PCMS (DAYS)	643.5000 TRAFFIC CONTROL (EACH)
PROJECT	2,684	440	528	440	660	14	1.0
TOTALS =	2,684	440	528	440	660	14	1.0

FILE NAME : S:\PROJECTS\W11586 STH 27-CTH P INTERSECTION, VERNON CO\SHEETSPLAN\DETAILS\MISC QUANTITIES.DWG
LAYOUT :
PLOT DATE : 5/22/2020
PLOT TIME : 9:26:23 AM
PLOT BY : JONAH DRAKE
PLOT SCALE : 1" = 1'

ALL ITEMS ARE CATEGORY 010 UNLESS OTHERWISE NOTED

3

PERMANENT SIGNING

SIGN NUMBER	APPROX. STATION	POSITIION	SITE ID	SIGN CODE	SIGN DESCRIPTION	ORDER LINES	SIGN SIZE (IN X IN)	634.0616 POSTS WOOD 4X6 INCH 16 FT (EACH)	637.2210 SIGNS TYPE II REFLECTIVE H (S.F.)	637.2230 SIGNS TYPE II REFLECTIVE F (S.F.)	638.2602 REMOVING SIGNS TYPE II (EACH)	638.3000 REMOVING SMALL SIGN SUPPORTS (EACH)
200-R	147+73	LEFT	MAINLINE	J4-1	REASSURANCE ASSEMBLY (1 HEADED ROUTE PANEL)	-	-	---	---	---	1	1
201	147+71	LEFT	MAINLINE	J4-1	REASSURANCE ASSEMBLY (1 HEADED ROUTE PANEL)	SOUTH / 27	24X36	1	6.00	---	---	---
203-R	148'S'+83	RIGHT	SAUGSTAD ROAD	R1-1	STOP	-	-	---	---	---	1	1
202	148'S'+37	RIGHT	SAUGSTAD ROAD	R1-1	STOP	-	30X30	1	6.25	---	---	---
204	149+74	LEFT	MAINLINE	J13-1	DIRECTIONAL ASSEMBLY (1 HEADED ROUTE PANEL)	P/LEFT	24X45	1	7.50	---	---	---
204-R	149+80	LEFT	MAINLINE	J13-1	DIRECTIONAL ASSEMBLY (1 HEADED ROUTE PANEL)	-	-	---	---	---	1	1
205-R	147+53	RIGHT	MAINLINE	W14-3	NO PASSING ZONE	-	-	---	---	---	1	1
300	162+86	RIGHT	MAINLINE	W14-3	NO PASSING ZONE	-	48X36	1	---	5.56	---	---
					PROJECT TOTALS			4	19.75	5.56	4	4

ASPHALTIC MATERIAL SEAL COAT & SEAL COAT

STATION - STATION	LOCATION	455.0505 ASPHALTIC MATERIAL SEAL COAT (GAL)	475.0105 SEAL COAT (TON)
140+56 - 157+88	MAINLINE	4300	250
	TOTALS =	4300	250

TEMPORARY MARKING LINE REMOVABLE TAPE

STATION - STATION	LOCATION	DESCRIPTION	644.0150 4-INCH (LF)
132+89 - 162+86	MAINLINE	LANE LINE MARKING - SOLID WHITE	5994
132+89 - 162+86	MAINLINE	C/L DOUBLE - SOLID YELLOW	5994
		TOTAL=	11988

PAVEMENT MARKING

STATION - STATION	LOCATION	DESCRIPTION	646.1020 LINE EPOXY 4-INCH (LF)	646.3020 LINE EPOXY 8-INCH (LF)	646.5020 ARROW EPOXY (EACH)	646.6120 STOP LINE EPOXY 18-INCH (LF)	646.7120 DIAGONAL EPOXY 12-INCH (LF)	646.9000 REMOVAL LINE 4-INCH (LF)	SPV.0090 CHEVRON EPOXY 12-INCH (LF)
133+45 - 140+79	MAINLINE	C/L DOUBLE - SOLID YELLOW	1470	-	-	-	-	-	-
140+79 - 148+32	MAINLINE	C/L DOUBLE - SOLID YELLOW	3020	-	-	-	449	-	-
140+79 - 148+32	MAINLINE	DIAGONAL	-	-	-	-	-	-	-
133+45 - 148+47	MAINLINE, LT.	LANE LINE MARKING - SOLID WHITE	1502	-	-	-	-	-	-
133+45 - 148+60	MAINLINE, RT.	LANE LINE MARKING - SOLID WHITE	1520	-	-	-	-	-	-
145+94 - 149+14	MAINLINE	SOLID WHITE	-	650	-	-	-	-	-
145+94 - 149+14	MAINLINE	CHEVRON	-	-	-	-	-	-	135
147+06	MAINLINE	LEFT	-	-	1	-	-		-
147+94	MAINLINE	LEFT	-	-	1	-	-		-
149+71 - 152+70	MAINLINE	SOLID WHITE	-	605	-	-	-	-	-
149+71 - 152+70	MAINLINE	CHEVRON	-	-	-	-	-	-	125
148+60 - 149+14	MAINLINE, RT.	LANE LINE MARKING - DASHED WHITE	15	-	-	-	-	-	-
148'S'+87	SAUGSTAD ROAD	STOP LINE	-	-	-	23	-	-	-
149+71 - 162+86	MAINLINE, LT.	LANE LINE MARKING - SOLID WHITE	1320	-	-	-	-	-	-
150+24 - 162+86	MAINLINE, RT.	LANE LINE MARKING - SOLID WHITE	1265	-	-	-	-	-	-
150+33 - 157+85	MAINLINE	C/L DOUBLE - SOLID YELLOW	3020	-	-	-	429	-	-
150+33 - 157+83	MAINLINE	DIAGONAL	-	-	-	-	-	-	-
150+71	MAINLINE	LEFT	-	-	1	-	-		-
151+59	MAINLINE	LEFT	-	-	1	-	-		-
157+85 - 162+86	MAINLINE	C/L SINGLE - SOLID YELLOW	505	-	-	-	-	-	-
157+85 - 162+86	MAINLINE	C/L SINGLE - DASHED YELLOW	130	-	-	-	-	-	-
132+89 - 162+86	MAINLINE	LANE LINE MARKING - SOLID WHITE	-	-	-	-	-	5890	-
132+89 - 162+86	MAINLINE	C/L SINGLE - SOLID YELLOW	-	-	-	-	-	1510	-
132+89 - 147+99	MAINLINE	C/L SINGLE - DASHED YELLOW	-	-	-	-	-	750	-
		TOTALS =	13767	1255	4	23	878	8150	260

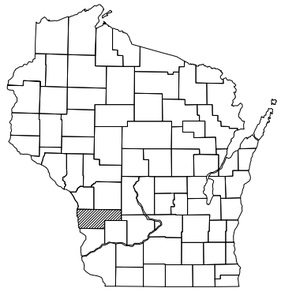
CONSTRUCTION STAKING

STATION - STATION	LOCATION	650.4500 SUBGRADE (LF)	650.5000 BASE (LF)	650.6000 PIPE CULVERTS (EACH)	650.9910 SUPPLEMENTAL CONTROL 01. 5140-03-72 (LS)	650.9920 SLOPE STAKES (LF)
140+56 - 157+87	MAINLINE	1731	1731	-	-	1731
148'S'+33 - 148'S'+94	SAUGSTAD ROAD	61	61	-	-	61
145+02	MAINLINE, LT.	-	-	1	-	-
-	PROJECT	-	-	-	1	-
	TOTALS =	1792	1792	1	1	1792

SAWING ASPHALT

STATION	LOCATION	690.0150 (LF)
140+79 - 157+88	MAINLINE	1749
148'S'+33.23	SAUGSTAD ROAD	23
	TOTAL =	1772

FILE NAME : S:\PROJECTS\W11586 STH 27-CTH P INTERSECTION, VERNON CO\SHEETSPLAN\DETAILS\MISC QUANTITIES.DWG
LAYOUT :
PLOT DATE : 4/21/2020
PLOT TIME : 5:23:12 AM
PLOT BY : THEODORE HERBERS
PLOT SCALE : 1" = 1'



STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

TRANSPORTATION PROJECT PLAT TITLE SHEET

PROJECT NO. 5140-03-22

WESTBY - CASHTON

SOUTH JUNCTION CTH P/SAUGSTAD ROAD

STH 27

VERNON COUNTY

THE NOTES, CONVENTIONAL SIGNS, AND ABBREVIATIONS ARE ASSOCIATED WITH EACH TRANSPORTATION PROJECT PLAT FOR PROJECT 5140-03-22

NOTES:

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), VERNON COUNTY, NAD 83 (2011), IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES. BASED ON HORIZONTAL CALIBRATION TO NGS PID DH5085 AND NGS PID DH8443.

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".

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 LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

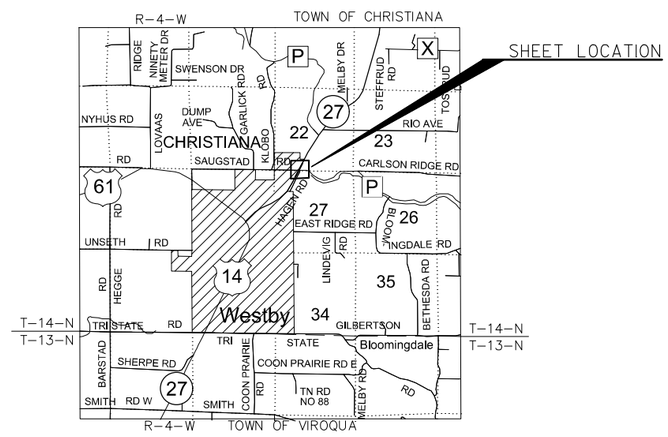
A TEMPORARY LIMITED EASEMENT (TLE) IS A RIGHT FOR CONSTRUCTION PURPOSES, AS DEFINED HEREIN, INCLUDING THE RIGHT TO OPERATE NECESSARY EQUIPMENT THEREON AND THE RIGHT OF INGRESS AND EGRESS, AS LONG AS REQUIRED FOR SUCH PUBLIC PURPOSE, INCLUDING THE RIGHT TO PRESERVE, PROTECT, REMOVE, OR PLANT THEREON ANY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

FOR EXISTING HIGHWAY RIGHT-OF-WAY AND ACCESS CONTROL POINTS OF REFERENCE SEE INDIVIDUAL TPP DETAIL PAGES.

FOR CURRENT ACCESS/DRIVEWAY INFORMATION CONTACT THE WISCONSIN DEPARTMENT OF TRANSPORTATION REGIONAL OFFICE IN LA CROSSE.

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



CONVENTIONAL SYMBOLS

SECTION LINE
QUARTER LINE
SIXTEENTH LINE
NEW REFERENCE LINE
NEW R/W LINE
EXISTING R/W OR HE LINE
PROPERTY LINE
LOT, TIE & OTHER MINOR LINES
SLOPE INTERCEPT
CORPORATE LIMITS
UNDERGROUND FACILITY (COMMUNICATIONS, ELECTRIC, ETC)
NEW R/W (FEE OR HE) (HATCHING VARIES BY OWNER)
TEMPORARY LIMITED EASEMENT AREA
EASEMENT AREA (PERMANENT LIMITED OR RESTRICTED DEVELOPMENT)
TRANSMISSION STRUCTURES
BUILDING
TO BE REMOVED
BRIDGE
119 R/W POINT NUMBER
3017 0.24' S IP ¾" 0.05' E 119 R/W POINT NUMBER WITH FOUND IP 0.24' SOUTH AND 0.05' EAST OF R/W POINT

SECTION CORNER SYMBOL
SECTION CORNER MONUMENT
R/W MONUMENT (TO BE SET)
NON-MONUMENTED R/W POINT
FOUND IRON PIN (1-INCH UNLESS NOTED) IP
GEODETIC SURVEY MONUMENT
SIXTEENTH CORNER MONUMENT
SIGN
OFF-PREMISE SIGN

	COMPENSABLE	NON-COMPENSABLE
ELECTRIC POLE	■	□
TELEPHONE POLE	●	○
PEDESTAL (LABEL TYPE) (TV, TEL, ELEC, ETC.)	✖	✖

ACCESS RESTRICTED BY ACQUISITION
NO ACCESS (BY STATUTORY AUTHORITY)
ACCESS RESTRICTED (BY PREVIOUS PROJECT OR CONTROL)
NO ACCESS (NEW HIGHWAY)
PARCEL NUMBER 25
UTILITY NUMBER 40
PARALLEL OFFSETS

CONVENTIONAL ABBREVIATIONS

ACCESS RIGHTS	AR	POINT OF INTERSECTION	PI
ACRES	AC	PROPERTY LINE	PL
AHEAD	AH	RECORDED AS	(100')
ALUMINUM	ALUM	REEL / IMAGE	R/I
AND OTHERS	ET AL	REFERENCE LINE	R/L
BACK	BK	REMAINING	REM
BLOCK	BLK	RESTICTIVE DEVELOPMENT EASEMENT	RDE
CENTERLINE	C/L	RIGHT	RT
CERTIFIED SURVEY MAP	CSM	RIGHT OF WAY	R/W
CONCRETE	CONC	SECTION	SEC
COUNTY	CO	SEPTIC VENT	SEPV
COUNTY TRUNK HIGHWAY	CTH	SQUARE FEET	SF
DISTANCE	DIST	STATE TRUNK HIGHWAY	STH
CORNER	COR	STATION	STA
DOCUMENT NUMBER	DOC	TELEPHONE PEDESTAL	TP
EASEMENT	EASE	TEMPORARY LIMITED EASEMENT	TLE
EXISTING	EX	TRANSPORTATION PROJECT PLAT	TPP
GAS VALVE	GV	UNITED STATES HIGHWAY	USH
GRID NORTH	GN	VOLUME	V
HIGHWAY EASEMENT	HE		
IDENTIFICATION	ID		
LAND CONTRACT	LC		
LEFT	LT		
MONUMENT	MON		
NATIONAL GEODETIC SURVEY	NGS		
NUMBER	NO		
OUTLOT	OL		
PAGE	P		
POINT OF TANGENCY	PT		
PERMANENT LIMITED EASEMENT	PLE		
POINT OF BEGINNING	POB		
POINT OF CURVATURE	PC		
POINT OF COMPOUND CURVE	PCC		

CURVE DATA

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

CONVENTIONAL UTILITY SYMBOLS

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

PROJECT NUMBER: 5140-03-22 - 4.01
SHEET 2 OF 2

APPRAISAL PLAT DATE: 05-29-2019
FILENAME: S:\Projects\W11586 STH 27-CTH P Intersection, Vernon Co\RW\TPP Title.dwg
PLOT DATE: May 29, 2019
PLOT BY: Scott Warner

TITLE

TRANSPORTATION PROJECT PLAT NO: 5140-03-22 - 4.01

PART OF LOT 1 OF CSM 420, PART OF THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER (NE¼-NW¼) AND PART OF THE NORTHWEST QUARTER OF THE NORTHWEST QUARTER (NW¼-NW¼) OF SECTION 27, AND PART OF THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER (SE¼-SW¼) OF SECTION 22, TOWNSHIP 14 NORTH, RANGE 4 WEST, CITY OF WESTBY, VERNON COUNTY, WISCONSIN.

RELOCATION ORDER STH 27, WESTBY - CASHTON, SOUTH JUNCTION CTH P/SAUGSTAD ROAD, VERNON COUNTY

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 AS 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.

EXISTING ACCESS CONTROL AS SHOWN ALONG STH 27 IS BASED ON CERTIFIED SURVEY MAP 420.

FOR CURRENT ACCESS/DRIVEWAY INFORMATION, CONTACT THE WISCONSIN DEPARTMENT OF TRANSPORTATION REGIONAL OFFICE IN LACROSSE.

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.

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 LINES, AND SHOULD NOT BE USED AS A SUBSTITUTE FOR AN ACCURATE FIELD SURVEY.

POSITIONS SHOWN ON THIS PLAT ARE WISCONSIN COORDINATE REFERENCE SYSTEM COORDINATES (WISCRS), VERNON COUNTY, NAD 83 (2011), IN US SURVEY FEET. VALUES SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES MAY BE USED AS GROUND DISTANCES.

EXISTING STH 27 RIGHT-OF-WAY SHOWN HEREIN IS BASED ON THE FOLLOWING PREVIOUSLY COMPLETED RIGHT-OF-WAY PROJECTS, AND VARIOUS HIGHWAY CONVEYANCE DOCUMENTS ASSOCIATED WITH THEM: PROJECT 5140-03-21 AND FEDERAL AID PROJECT 398A. ALSO, CERTIFIED SURVEY MAP 420 AND ASSOCIATED FOUND MONUMENTATION. ALSO, PLAT OF SURVEY BY JESSICA A. ZAMOR DATED 12/07/2006, ALTA/NSPS LAND TITLE SURVEY BY CHRISTOPHER W. FECHNER DATED 10/25/2016, AND FOUND MONUMENTATION ASSOCIATED WITH THEM.

EXISTING SAUGSTAD ROAD RIGHT-OF-WAY IS BASED ON CERTIFIED SURVEY MAP 420, AND ASSOCIATED FOUND MONUMENTATION. ALSO, PLAT OF SURVEY BY JESSICA A. ZAMOR DATED 12/07/2006, ALTA/NSPS LAND TITLE SURVEY BY CHRISTOPHER W. FECHNER DATED 10/25/2016, AND FOUND MONUMENTATION ASSOCIATED WITH THEM. ALSO A 33 FOOT OFFSET OF THE SOUTH LINE OF THE SW¼ OF SEC.22, T14N-R4W.

EXISTING COUNTY TRUNK HIGHWAY P RIGHT-OF-WAY IS BASED ON A 33 FOOT OFFSET FROM THE CENTERLINE OF EXISTING PAVEMENT PER SECTION 82.31(1) WISCONSIN STATUTES.

FOR ADDITIONAL INFORMATION REFER TO THE TITLE SHEET, RECORDED AS SHEET 2 OF 2.

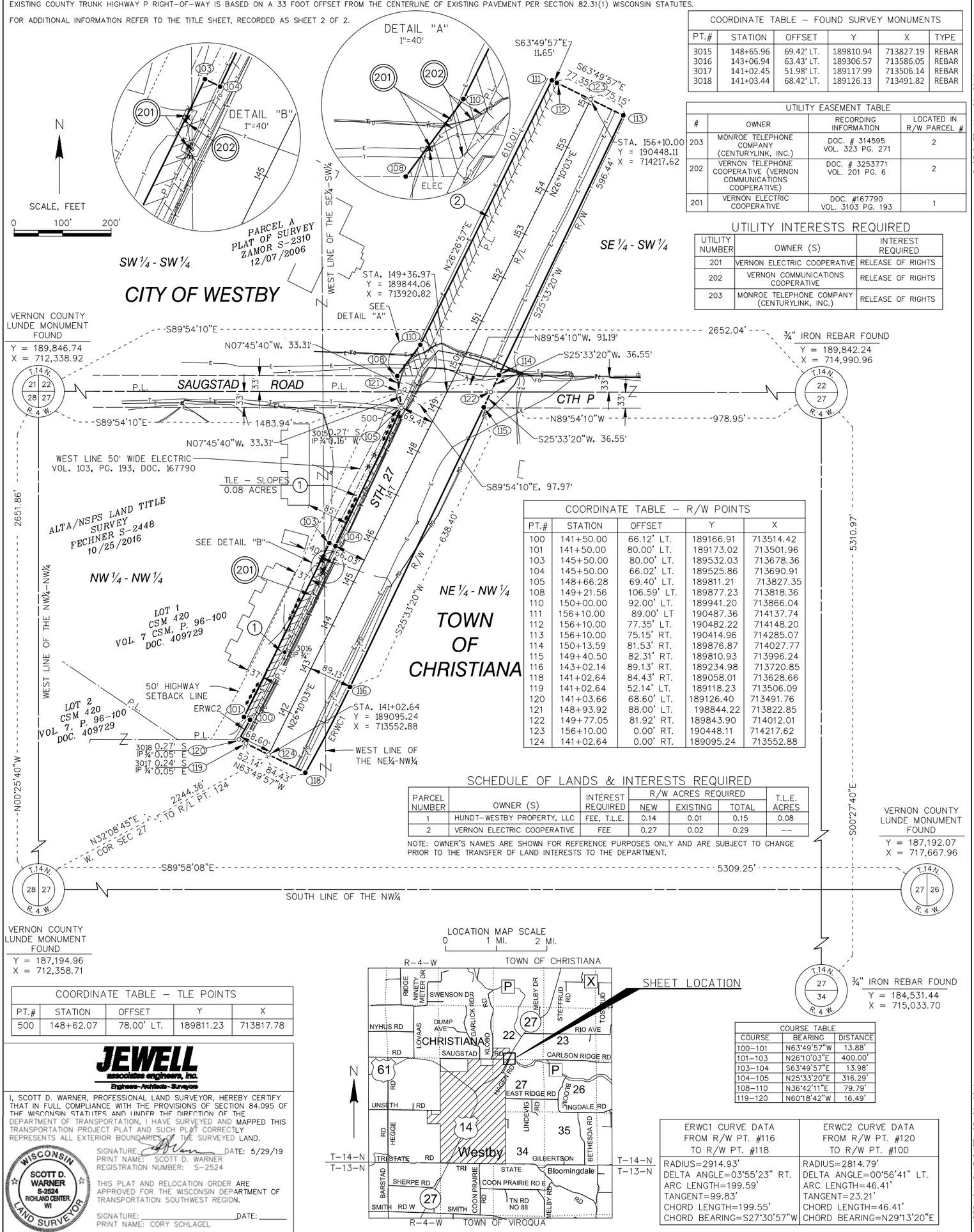
RESERVED FOR REGISTER OF DEEDS
PROJECT NUMBER 5140-03-22-4.01
SHEET 1 OF 2

4.01

24

PLOT BY: Scott Warner

PLOT DATE: May 29, 2019



COORDINATE TABLE - FOUND SURVEY MONUMENTS					
PT.#	STATION	OFFSET	Y	X	TYPE
3015	148+65.96	69.42' LT.	189810.94	713827.19	REBAR
3016	143+06.94	63.43' LT.	189306.57	713586.05	REBAR
3017	141+02.45	51.98' LT.	189117.99	713506.14	REBAR
3018	141+03.44	68.42' LT.	189126.13	713491.82	REBAR

UTILITY EASEMENT TABLE			
#	OWNER	RECORDING INFORMATION	LOCATED IN R/W PARCEL #
203	MONROE TELEPHONE COMPANY (CENTURYLINK, INC.)	DOC. # 314595 VOL. 323 PG. 271	2
202	VERNON TELEPHONE COOPERATIVE (VERNON COMMUNICATIONS COOPERATIVE)	DOC. # 3253771 VOL. 201 PG. 6	2
201	VERNON ELECTRIC COOPERATIVE	DOC. #167790 VOL. 3103 PG. 193	1

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	OWNER (S)	INTEREST REQUIRED
201	VERNON ELECTRIC COOPERATIVE	RELEASE OF RIGHTS
202	VERNON COMMUNICATIONS COOPERATIVE	RELEASE OF RIGHTS
203	MONROE TELEPHONE COMPANY (CENTURYLINK, INC.)	RELEASE OF RIGHTS

COORDINATE TABLE - R/W POINTS				
PT.#	STATION	OFFSET	Y	X
100	141+50.00	66.12' LT.	189166.91	713514.42
101	141+50.00	80.00' LT.	189173.02	713501.96
103	145+50.00	80.00' LT.	189532.03	713678.36
104	145+50.00	66.02' LT.	189525.86	713690.91
105	148+66.28	69.40' LT.	189811.21	713827.35
108	149+21.56	106.59' LT.	189877.23	713818.36
110	150+00.00	92.00' LT.	189941.20	713866.04
111	156+10.00	89.00' LT	190487.36	714137.74
112	156+10.00	77.35' LT.	190482.22	714148.20
113	156+10.00	75.15' RT.	190414.96	714285.07
114	150+13.59	81.53' RT.	189876.87	714027.77
115	149+40.50	82.31' RT.	189810.93	713996.24
116	143+02.14	89.13' RT.	189234.98	713720.85
118	141+02.64	84.43' RT.	189058.01	713628.66
119	141+02.64	52.14' LT.	189118.23	713506.09
120	141+03.66	68.60' LT.	189126.40	713491.76
121	148+93.92	88.00' LT.	198844.22	713822.85
122	149+77.05	81.92' RT.	189843.90	714012.01
123	156+10.00	0.00' RT.	190448.11	714217.62
124	141+02.64	0.00' RT.	189095.24	713552.88

SCHEDULE OF LANDS & INTERESTS REQUIRED

PARCEL NUMBER	OWNER (S)	INTEREST REQUIRED	R/W ACRES REQUIRED NEW	EXISTING	TOTAL	T.L.E. ACRES
1	HUNDT-WESTBY PROPERTY, LLC	FEE, T.L.E.	0.14	0.01	0.15	0.08
2	VERNON ELECTRIC COOPERATIVE	FEE	0.27	0.02	0.29	--

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

COURSE TABLE		
COURSE	BEARING	DISTANCE
100-101	N63°49'57"W	13.88'
101-103	N26°10'03"E	400.00'
103-104	S63°49'57"E	13.98'
104-105	N25°33'20"E	316.29'
108-110	N36°42'11"E	79.79'
119-120	N60°18'42"W	16.49'

ERWC1 CURVE DATA FROM R/W PT. #116 TO R/W PT. #118	ERWC2 CURVE DATA FROM R/W PT. #120 TO R/W PT. #100
RADIUS=2914.93'	RADIUS=2814.79'
DELTA ANGLE=03°55'23" RT.	DELTA ANGLE=00°56'41" LT.
ARC LENGTH=199.59'	ARC LENGTH=46.41'
TANGENT=99.83'	TANGENT=23.21'
CHORD LENGTH=199.55'	CHORD LENGTH=46.41'
CHORD BEARING=S27°30'57"W	CHORD BEARING=N29°13'20"E

COORDINATE TABLE - TLE POINTS				
PT.#	STATION	OFFSET	Y	X
500	148+62.07	78.00' LT.	189811.23	713817.78

JEWELL associates engineers, inc.
Engineers - Architects - Surveyors

I, SCOTT D. WARNER, PROFESSIONAL LAND SURVEYOR, HEREBY CERTIFY THAT IN FULL COMPLIANCE WITH THE PROVISIONS OF SECTION 84.095 OF THE WISCONSIN STATUTES AND UNDER THE DIRECTION OF THE DEPARTMENT OF TRANSPORTATION, I HAVE SURVEYED AND MAPPED THIS TRANSPORTATION PROJECT PLAT AND SUCH PLAT CORRECTLY REPRESENTS ALL EXTERIOR BOUNDARIES OF THE SURVEYED LAND.

SIGNATURE: _____ DATE: 5/29/19
PRINT NAME: SCOTT D. WARNER
REGISTRATION NUMBER: S-2524

WISCONSIN SCOTT D. WARNER S-2524 RICHLAND CENTER, WI LAND SURVEYOR

THIS PLAT AND RELOCATION ORDER ARE APPROVED FOR THE WISCONSIN DEPARTMENT OF TRANSPORTATION SOUTHWEST REGION.

SIGNATURE: _____ DATE: _____
PRINT NAME: CORY SCHLAGEL

APPRAISAL PLAT DATE: 05-29-2019

FILENAME: S:\Projects\W11586 STH 27-CTH P Intersection, Vernon Co\RW\51400372_TPP Sheets.dwg

LEGEND

- DIRECTION OF FLOW
- XXXXXXXXX SAWING ASPHALT
- SILT FENCE
- TEMPORARY DITCH CHECK
- RIPRAP MEDIUM OVER GEOTEXTILE TYPE R

NOTE: SEE TYPICAL FINISHED SECTIONS FOR LIMITS OF SEEDING, FERTILIZER, MULCHING AND SALVAGED TOPSOIL.

HUNT-WESTBY PROPERTY LLC

STA. 145+02, LT.
REMOVE DELINEATOR (BID ITEM REMOVING DELINEATORS AND MARKERS)
REMOVE EXISTING APRON ENDWALL (BID ITEM REMOVING SMALL PIPE CULVERTS)

STA. 145+02, LT.
(1) CULVERT PIPE REINFORCED CONCRETE CLASS III 24-INCH
(1) APRON ENDWALL REQ'D

VERNON COMMUNICATIONS CO-OP
VERNON ELECTRIC CO-OP
MIDWEST NATURAL GAS
NORTHERN NATURAL GAS
SLOPE INTERCEPTS
7'X10'
R/W
PT: 140+69.98
18:1
66'
STH 27
(ASPHALT)
CURVE 1
N26°10'03"E
MATCHLINE STATION 146+00

BEGIN CONSTRUCTION
STATION 140+56.43

BEGIN PROJECT
STATION 140+79.01
Y = 189,074.03
X = 713,542.46

CURVE 1
PI STA. = 131+34.67
Y = 188,155.69
X = 713,091.22
R = 2865.00
D = 1°59'59"
DELTA = 38°59'13"
L = 1949.50
T = 1014.19
C = 1912.10
PC STA. = 121+20.48
Y = 187,729.55
X = 712,170.91
PT STA. = 140+69.98
Y = 189,065.93
X = 713,538.48

MEDIACOM
VERNON COMMUNICATIONS CO-OP
VERNON ELECTRIC CO-OP
HAGEN ROAD
(ASPHALT)

EARTHWORK SUMMARY
SEE MISCELLANEOUS QUANTITIES SHEET FOR QUANTITIES.

BENCH MARKS

NO.	STA.	DESCRIPTION	ELEV.
1	140+41	¾" IRON ROD SET, 67.0' LT.	1297.15

EXISTING C/L PROFILE STH 27
EXISTING C/L ELEVATION

1306 1304 1302 1300 1298 1296 1294

1298.00 1297.98 1297.96 1297.92 1297.88 1297.85 1297.81 1297.77 1297.76 1297.75 1297.74 1297.74 1297.74 1297.75 1297.77 1297.77 1297.74 1297.72 1297.76 1297.81 1297.87 1297.94 1298.02 1298.13 1298.24 1298.33 1298.40 1298.47 1298.55

140+20 140+40 140+60 140+80 141+00 141+20 141+40 141+60 141+80 142+00 142+20 142+40 142+60 142+80 143+00 143+20 143+40 143+60 143+80 144+00 144+20 144+40 144+60 144+80 145+00 145+20 145+40 145+60 145+80

PROJECT NO: 5140-03-72	HWY: STH 27	COUNTY: VERNON	PLAN AND PROFILE: MAINLINE	SHEET 25	E

FILE NAME : S:\PROJECTS\W11586 STH 27-CTH P INTERSECTION, VERNON CO\SHEETSPLAN\PLAN & PROFILE SHEETS\STH 27 P & P.DWG PLOT DATE : 4/14/2020 2:39 PM PLOT BY : THEODORE HERBERS PLOT NAME : PLOT SCALE : **********

WISDOT/CADDS SHEET 42

HUNT-WESTBY PROPERTY LLC

MIDWEST NATURAL GAS
VERNON ELECTRIC CO-OP (TYP.)
VERNON COMMUNICATIONS CO-OP
TLE REQ'D

BEGIN CONSTRUCTION
STATION 147'S'+50
Y = 189,843.97
X = 713,811.60

WESTBY ELECTRIC

(ASPHALT)

FINISHED C/L
'S'-LINE
SAUGSTAD RD.

END CONSTRUCTION
STATION 148'S'+94.28
Y = 189,843.52
X = 713,872.65

VERNON ELECTRIC COOPERATIVE
VERNON ELECTRIC CO-OP (TYP.)
SLOPE INTERCEPTS
VERNON COMMUNICATIONS CO-OP

R/W
66'

MATCHLINE STATION 146+00

MATCHLINE STATION 152+00

149'S'
S89°35'12"E
64°14'45"
N26°10'03"E

STH 27

STH 27

NOTE: SEE TYPICAL FINISHED SECTIONS FOR LIMITS OF SEEDING, FERTILIZER, MULCHING AND SALVAGED TOPSOIL.

STA. 149+37.24 (STH 27)=
STA. 149'P'+42.00 (CTH P)
TYPE C INTERSECTION (MODIFIED) REQ'D
(SEE INTERSECTION DETAILS)

STA. 149+35.99 (STH 27)
STA. 149+42.02 (SAUGSTAD RD)
TYPE C INTERSECTION (MODIFIED) REQ'D
(SEE INTERSECTION DETAILS)

EXISTING C/L STH 27
FINISHED C/L STH 27
EXISTING C/L CTH P

N89°35'42"E
62°25'39"
150'P'

MEDIACOM
VERNON ELECTRIC CO-OP (TYP.)

BEGIN CONSTRUCTION
STATION 149'P'+69.94
Y = 189,844.50
X = 713,948.88

BM 2

HAGEN ROAD
(ASPHALT)
R/W
VERNON COMMUNICATIONS CO-OP
FINISHED C/L
'P'-LINE
CTH P
(ASPHALT)
CTH P

END CONSTRUCTION
STATION 150'P'+35.74
Y = 189,844.97
X = 714,014.67

LEGEND
- DIRECTION OF FLOW
- XXXXXXXXX SAWING ASPHALT
- SILT FENCE
- TEMPORARY DITCH CHECK
- EROSION MAT CLASS I, TYPE B

EARTHWORK SUMMARY
SEE MISCELLANEOUS QUANTITIES SHEET FOR QUANTITIES.

BENCH MARKS

NO.	STA.	DESCRIPTION	ELEV.
2	149+35	¾" IRON ROD SET, 44.3' RT.	1299.19

EXISTING C/L PROFILE STH 27
EXISTING C/L ELEVATION

1306 1304 1302 1300 1298 1296 1294

1298.72 1298.82 1298.91 1299.03 1299.14 1299.24 1299.34 1299.43 1299.51 1299.59 1299.67 1299.77 1299.86 1299.96 1300.06 1300.16 1300.24 1300.31 1300.34 1300.40 1300.50 1300.63 1300.74 1300.85 1300.96 1301.05 1301.14 1301.23 1301.40

146+20 146+40 146+60 146+80 147+00 147+20 147+40 147+60 147+80 148+00 148+20 148+40 148+60 148+80 149+00 149+20 149+40 149+60 149+80 150+00 150+20 150+40 150+60 150+80 151+00 151+20 151+40 151+60 151+80

PROJECT NO: 5140-03-72	HWY: STH 27	COUNTY: VERNON	PLAN AND PROFILE: MAINLINE	SHEET 26	E

FILE NAME : S:\PROJECTS\W11586 STH 27-CTH P INTERSECTION, VERNON CO\SHEETSPLAN\PLAN & PROFILE SHEETS\STH 27 P & P.DWG PLOT DATE : 5/22/2020 9:29 AM PLOT BY : JONAH DRAKE PLOT NAME : PLOT SCALE : **********

WISDOT/CADDS SHEET 42

LEGEND

- DIRECTION OF FLOW
- XXXXXXXXX SAWING ASPHALT
- SILT FENCE
- TEMPORARY DITCH CHECK
- EROSION MAT CLASS I, TYPE B

NOTE: SEE TYPICAL FINISHED SECTIONS FOR LIMITS OF SEEDING, FERTILIZER, MULCHING AND SALVAGED TOPSOIL.

VERNON ELECTRIC COOPERATIVE

VERNON ELECTRIC CO-OP

SLOPE INTERCEPTS

END CONSTRUCTION
STATION 157+87.67
Y = 190,607.57
X = 714,295.97

R/W

MATCHLINE STATION 152+00

18:1

78'

STH 27

(ASPHALT)

FINISHED C/L STH 27

EXISTING C/L STH 27

MEDIACOM

END PROJECT
STATION 157+85.86
Y = 190,605.94
X = 714,295.17

BM 3

VERNON ELECTRIC CO-OP

VERNON COMMUNICATIONS CO-OP

EARTHWORK SUMMARY
SEE MISCELLANEOUS QUANTITIES SHEET FOR QUANTITIES.

EXISTING C/L PROFILE STH 27

EXISTING C/L ELEVATION

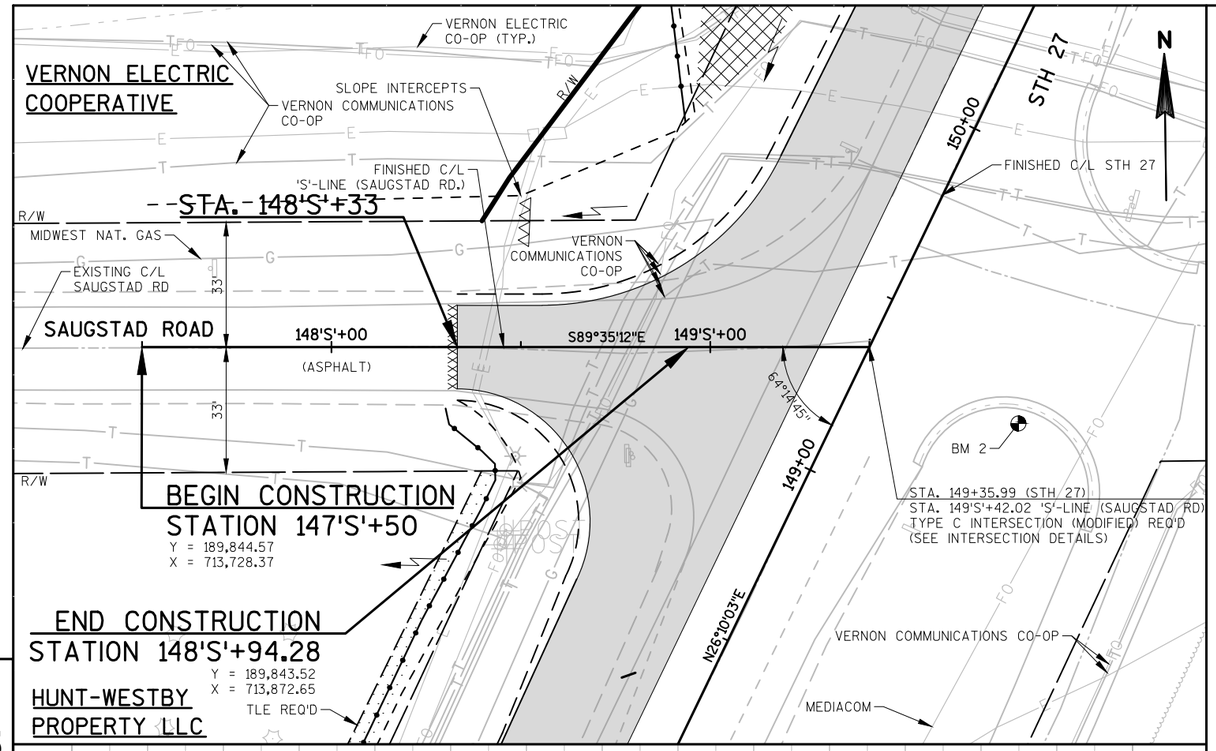
BENCH MARKS

NO.	STA.	DESCRIPTION	ELEV.
3	158+04	¾" IRON ROD SET, 48.0' RT.	1300.24

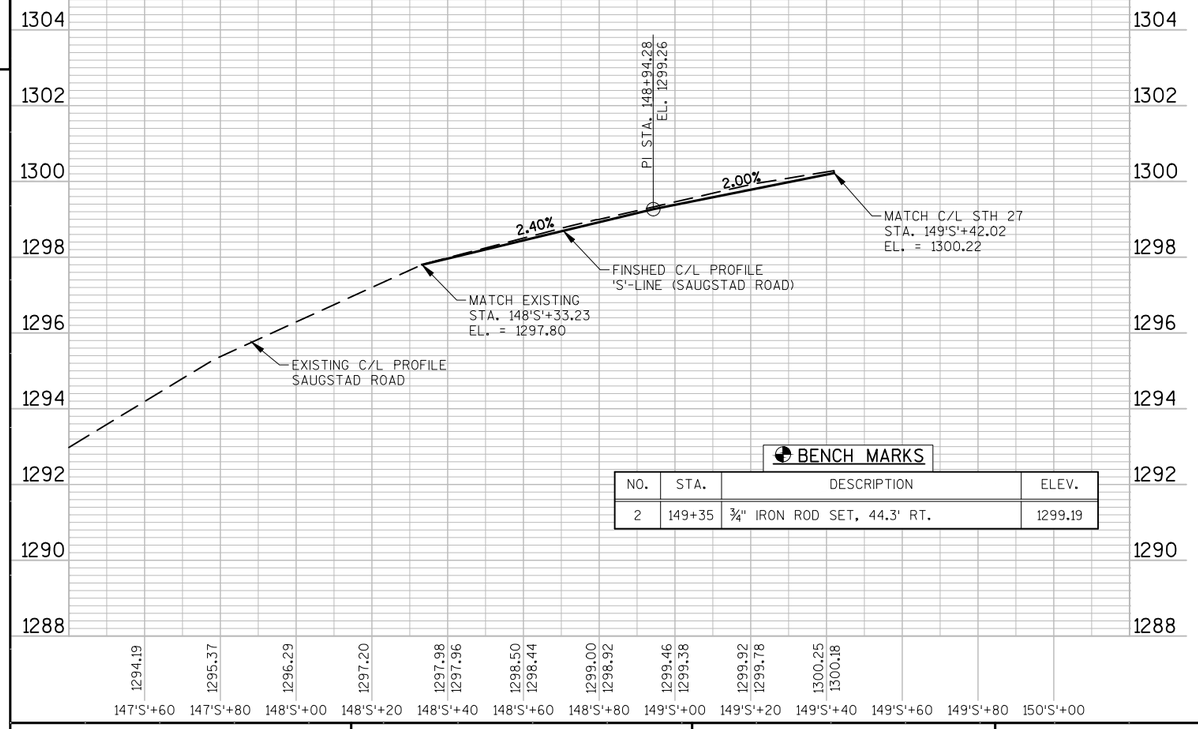
PROJECT NO: 5140-03-72	HWY: STH 27	COUNTY: VERNON	PLAN AND PROFILE: MAINLINE	SHEET 27	E

FILE NAME : S:\PROJECTS\W11586 STH 27-CTH P INTERSECTION, VERNON CO\SHEETSPLAN\PLAN & PROFILE SHEETS\STH 27 P & P.DWG PLOT DATE : 5/22/2020 9:30 AM PLOT BY : JONAH DRAKE PLOT NAME : PLOT SCALE : **********

WISDOT/CADDS SHEET 42



NOTE: SEE TYPICAL FINISHED SECTIONS FOR LIMITS OF SEEDING, FERTILIZER, MULCHING AND SALVAGED TOPSOIL.



BENCH MARKS

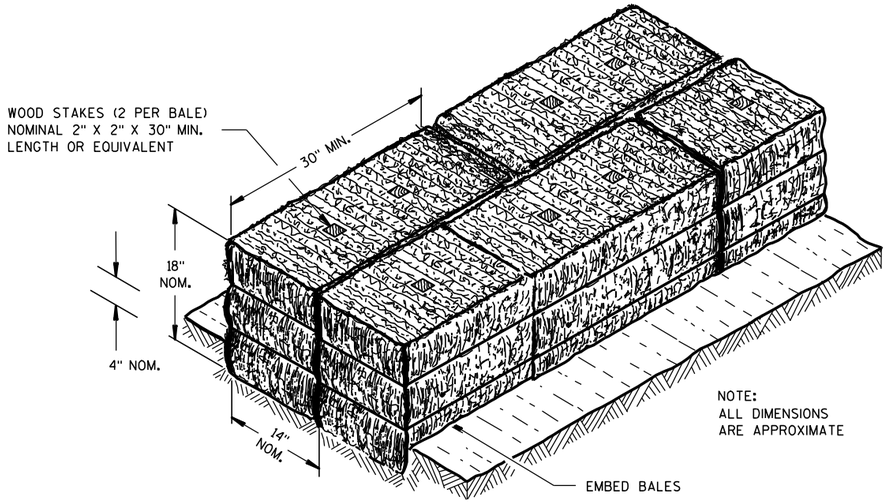
NO.	STA.	DESCRIPTION	ELEV.
2	149+35	¾" IRON ROD SET, 44.3' RT.	1299.19

PROJECT NO: 5140-03-72	HWY: STH 27	COUNTY: VERNON	PLAN AND PROFILE: SAUGSTAD ROAD	SHEET 28	E

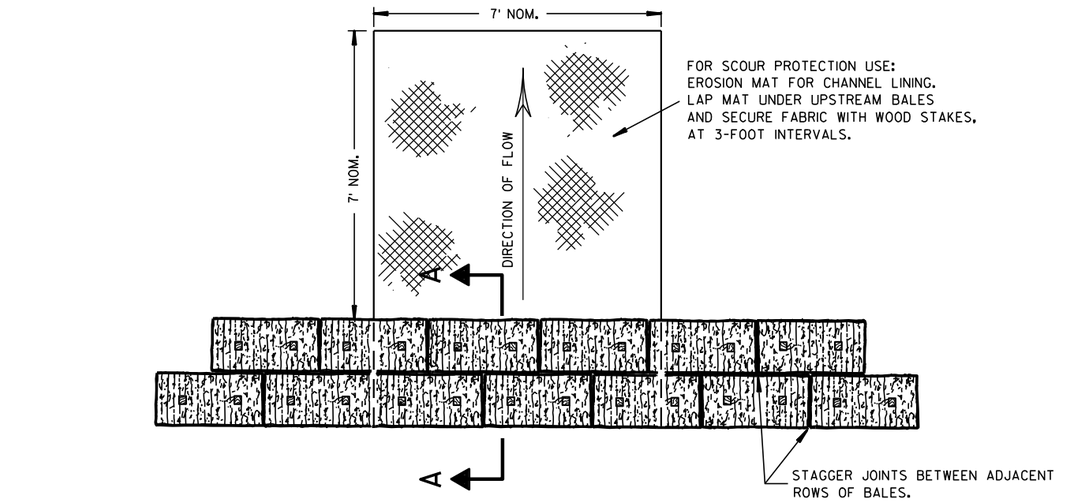
FILE NAME : S:\PROJECTS\W11586 STH 27-CTH P INTERSECTION, VERNON CO\SHEETSPLAN\PLAN & PROFILE SHEETS\SAUGSTAD ROAD P&P.DWG
LAYOUT :
PLOT DATE : 4/9/2020
PLOT TIME : 5:21:58 PM
PLOT BY : THEODORE HERBERS
PLOT SCALE : 1" = 1'

Standard Detail Drawing List

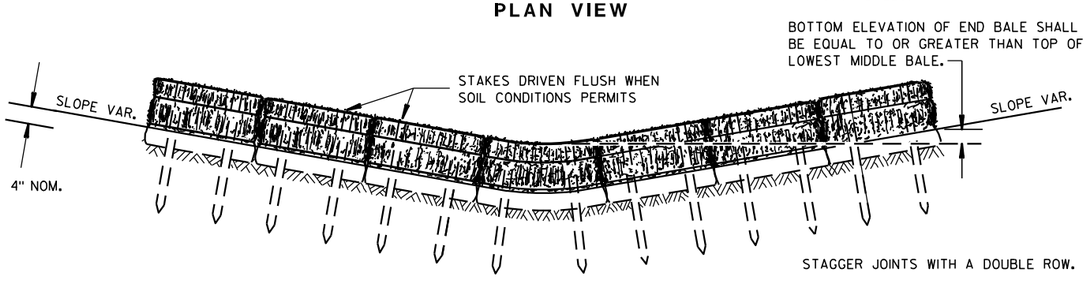
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
15A01-13A	MARKER POST FOR RIGHT-OF-WAY
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
15C02-08A	BARRICADES AND SIGNS FOR MAINLINE CLOSURES
15C02-08B	BARRICADES AND SIGNS FOR VARIOUS CLOSURES
15C03-05	BARRICADES AND SIGNS FOR SIDEROAD CLOSURES
15C04-05	TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 M.P.H. OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFIC
15C07-15C	PAVEMENT MARKING ARROWS
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C08-20C	PAVEMENT MARKING (TURN LANES)
15C12-07	TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION
15C18-04	MEDIAN ISLAND MARKING
15C35-04A	PAVEMENT MARKING (INTERSECTIONS)
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS
15D39-02	TRAFFIC CONTROL, DROP-OFF SIGNING



SECTION A-A



PLAN VIEW



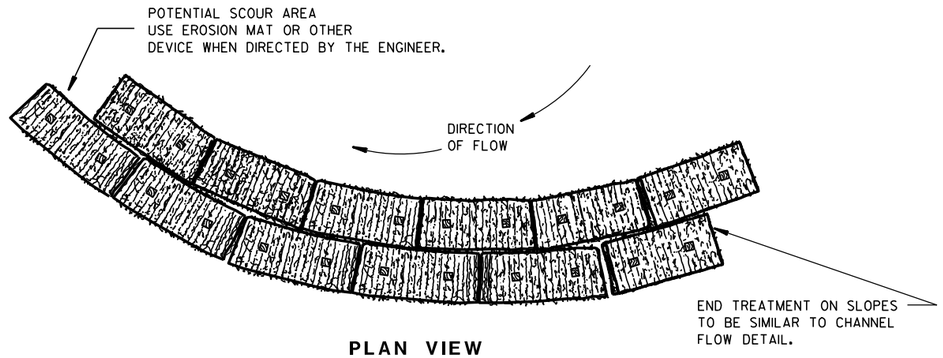
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES (1)

GENERAL NOTES

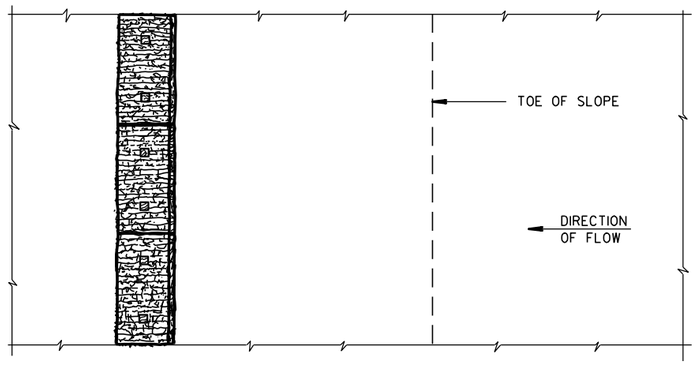
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

(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.

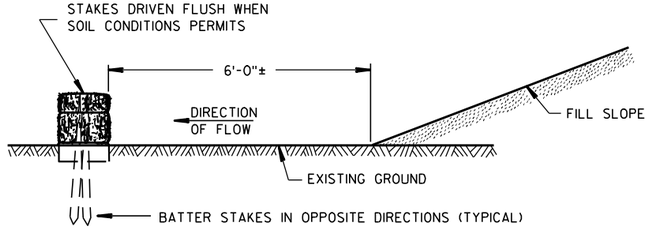


PLAN VIEW

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

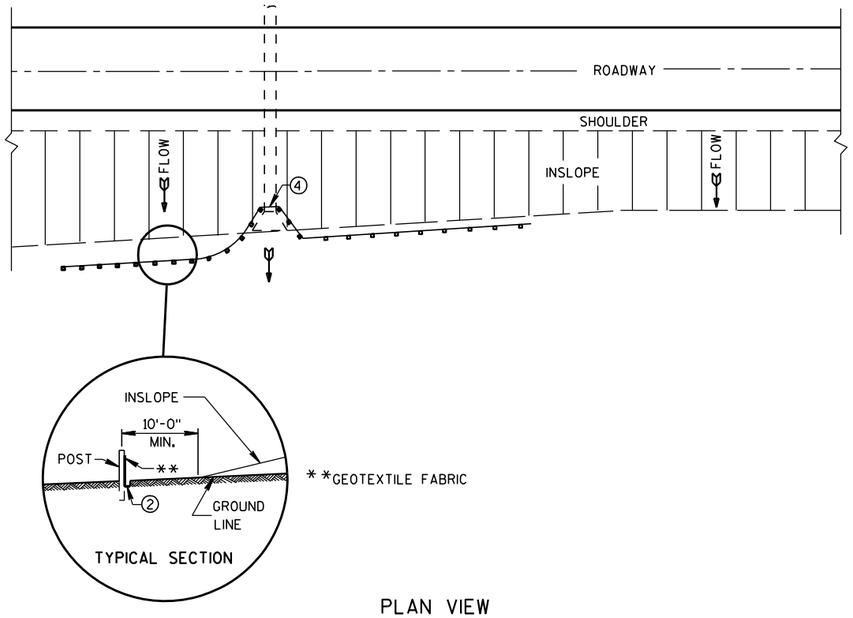
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

6/04/02 DATE — /S/ Beth Cannestra CHIEF ROADWAY DEVELOPMENT ENGINEER

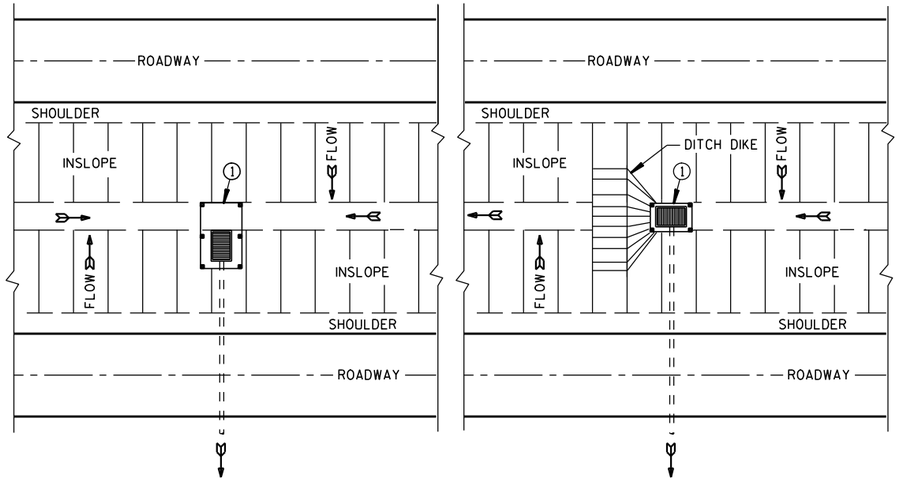
FHWA

6
S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



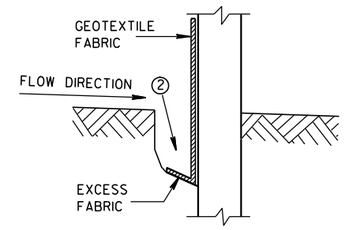
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

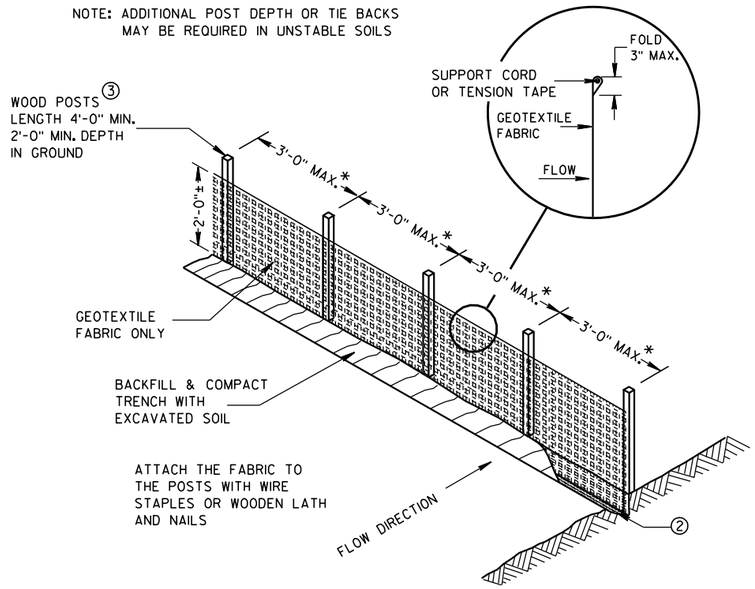
GENERAL NOTES

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

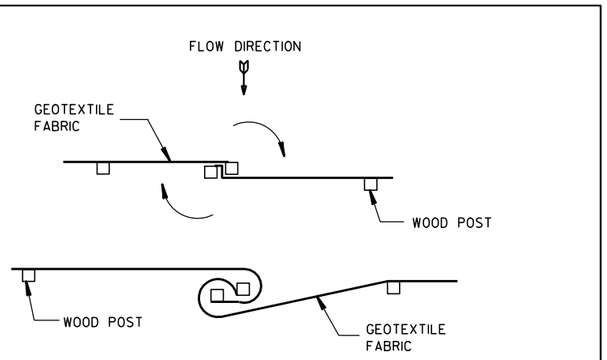
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL BE A MINIMUM SIZE OF 1⅛" X 1⅛" 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.



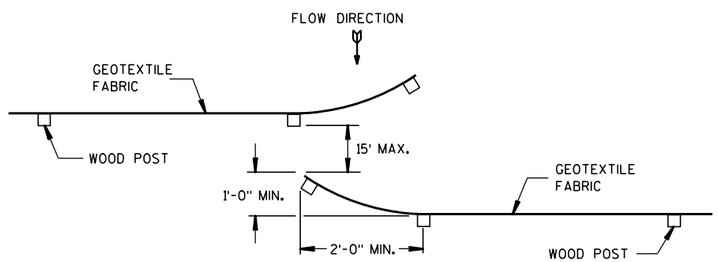
TRENCH DETAIL



SILT FENCE

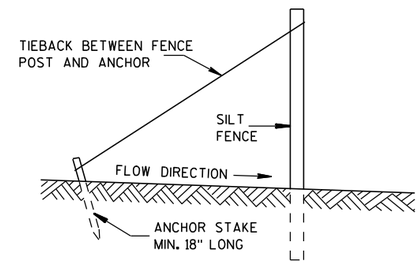


TWIST METHOD



HOOK METHOD

JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

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S.D.D. 8 E 9-6

METAL APRON ENDWALLS

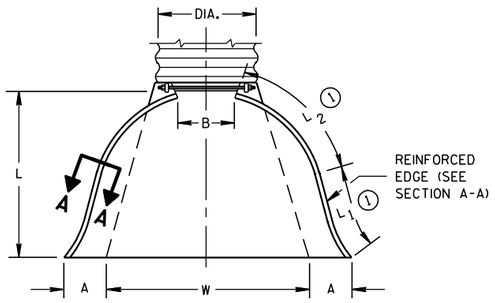
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	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	.109×	.105×	18	33	12	87	—	—	114	2 to 1	3 Pc.
66	.109×	.105×	18	36	12	87	—	—	120	2 to 1	3 Pc.
72	.109×	.105×	18	39	12	87	—	—	126	2 to 1	3 Pc.
78	.109×	.105×	18	42	12	87	—	—	132	1 1/2 to 1	3 Pc.
84	.109×	.105×	18	45	12	87	—	—	138	1 1/2 to 1	3 Pc.
90	.109×	.105×	18	37	12	87	—	—	144	1 1/2 to 1	3 Pc.
96	.109×	.105×	18	35	12	87	—	—	150	1 1/2 to 1	3 Pc.

× EXCEPT CENTER PANEL SEE GENERAL NOTES

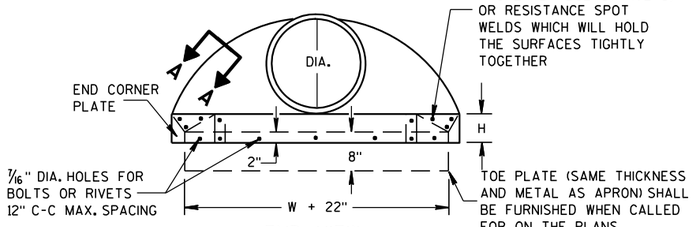
REINFORCED CONCRETE APRON ENDWALLS

PIPE DIA. (IN.)	DIMENSIONS (Inches) T	A	B	C	D	E	G	APPROX. SLOPE
12	2	4	24	48 7/8	72 1/8	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 2/5 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

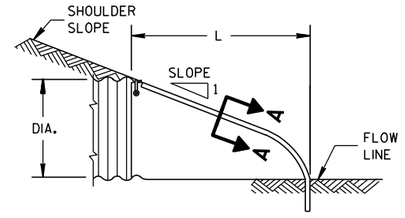
*MINIMUM
**MAXIMUM



PLAN VIEW

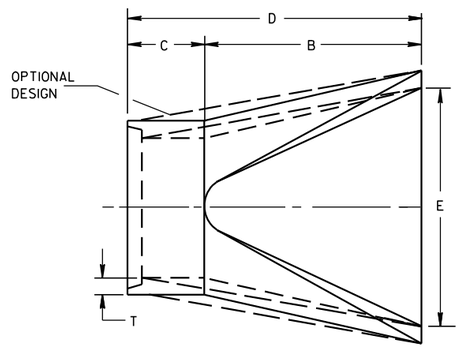


END VIEW

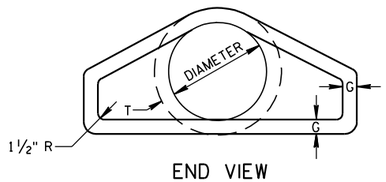


SIDE ELEVATION

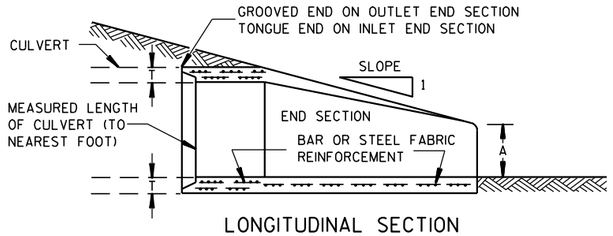
METAL ENDWALLS



PLAN

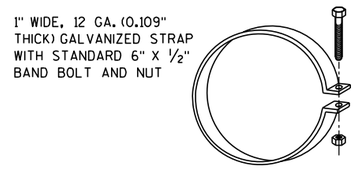


END VIEW



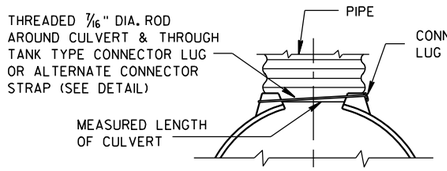
LONGITUDINAL SECTION

CONCRETE ENDWALLS

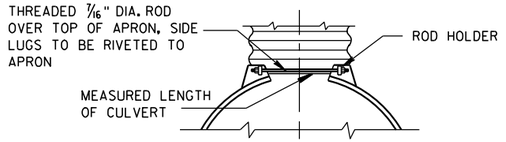


ALTERNATE FOR TYPE 1 CONNECTION

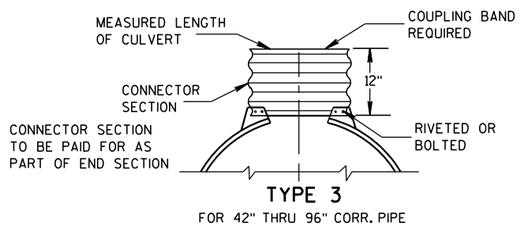
END SECTION CONNECTOR STRAP



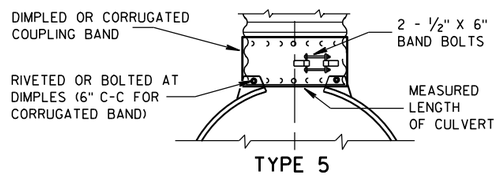
TYPE 1
FOR 12" THRU 24" CORR. PIPE



TYPE 2
FOR 30" THRU 96" CORR. PIPE



TYPE 3
FOR 42" THRU 96" CORR. PIPE



TYPE 5
ALTERNATE FOR:
ALL SIZES CORRUGATED CIRCULAR PIPE

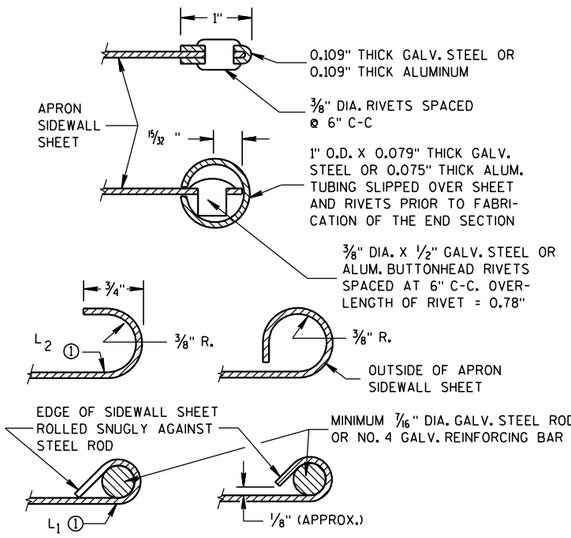
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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. Rhinesmith — CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

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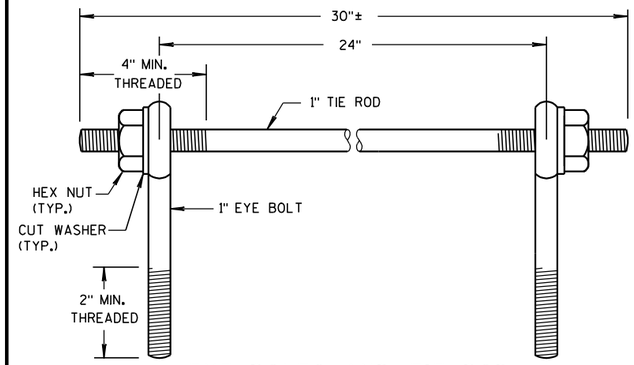
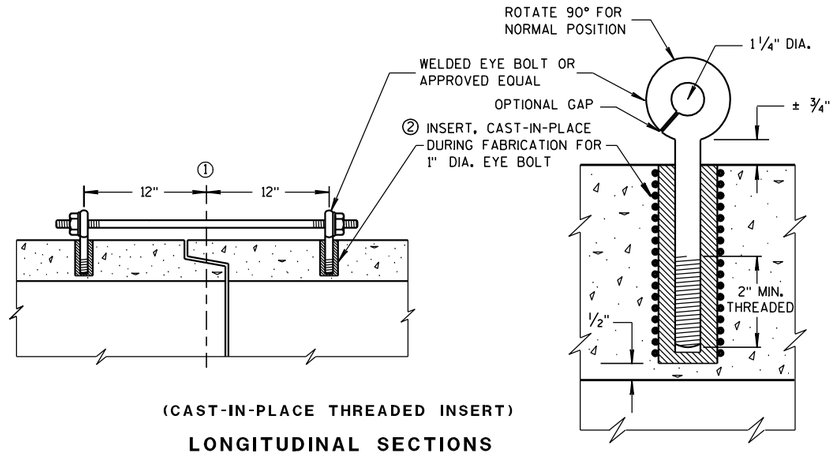


EYE BOLTS AND TIE ROD



(CAST-IN-PLACE THREADED INSERT)

LONGITUDINAL SECTIONS

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 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 APPLICABLE SPECIAL PROVISIONS.

CONCRETE CULVERT AND STORM SEWER PIPE SHALL BE TIED TOGETHER IN THE MANNER ILLUSTRATED BY THIS DETAIL AT LOCATIONS DESIGNATED IN THE STANDARD SPECIFICATIONS AND THE PLAN. THE CONTRACTOR MAY USE EITHER ALTERNATE 1, 2 OR 3 FOR DRAINAGE STRUCTURES. ONLY ALTERNATE 1 AND 3 MAY BE USED FOR CATTLE PASSES, UNLESS OTHERWISE STATED IN THE CONTRACT. THE MATERIALS, FABRICATION AND WORK NECESSARY TO TIE THE PIPE BY THIS DETAIL WILL BE CONSIDERED INCIDENTAL TO THE PIPE AND APRON ENDWALLS IF REQUIRED.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR JOINT TIES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL.

JOINT TIES TO BE HOT-DIP GALVANIZED PER ASTM A 153.

① ℄ OF TONGUE AND GROOVE OR BELL AND SPIGOT JOINTS.

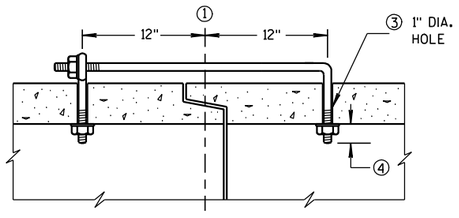
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

③ HOLES SHALL BE CAST-IN-PLACE OR DRILLED 12 INCHES FROM ℄ OF TONGUE AND GROOVE.

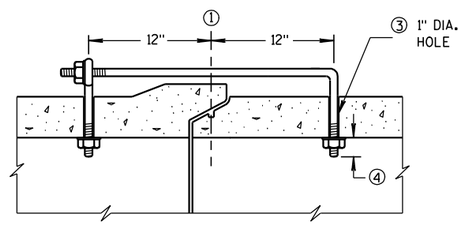
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

⑤ OPENING TO BE ROD DIAMETER PLUS 1 INCH.

⑥ LENGTH ADEQUATE TO EXTEND TO WITHIN 1/2 INCH OF THE INNER SURFACE OF THE PIPE.



(TONGUE & GROOVE PIPE)

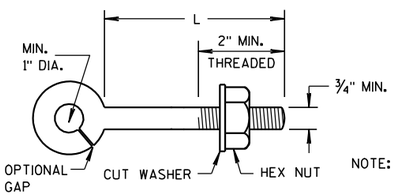


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

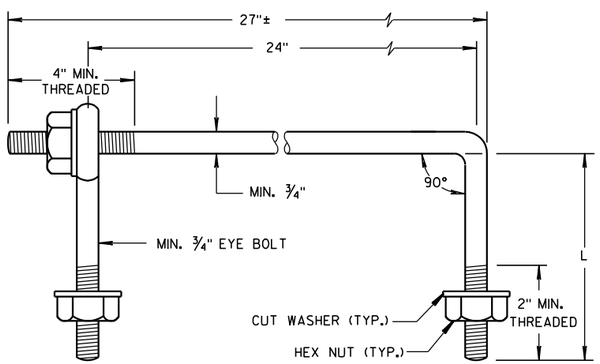
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



NOTE:

EYE BOLT

NOTE: TWO EYE BOLTS MAY BE USED WITH A 30" LONG THREADED ROD IN LIEU OF THE 90° BENT TIE ROD.



EYE BOLT AND TIE ROD

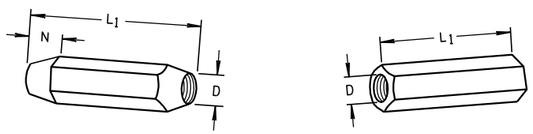
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

EYE BOLT AND TIE ROD ASSEMBLY (ALTERNATE NO. 2)

ADJUSTABLE TIE ROD TABLE

PIPE DIAMETER	TIE ROD DIAMETER	D	L_1	N
12-60	5/8	5/8	5	1/2
66-84	3/4	3/4	5	1/2
90-108	1	1	7	1 1/16

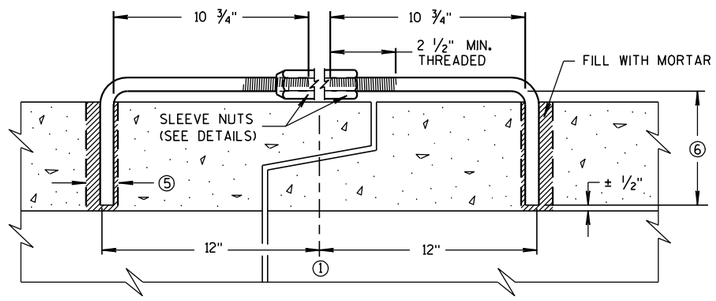
DIMENSIONS SHOWN ARE IN INCHES



TAPERED PLAIN

RIGHT AND LEFT THREADS

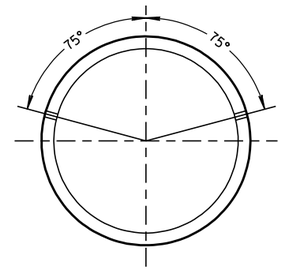
SLEEVE NUTS



LONGITUDINAL SECTION

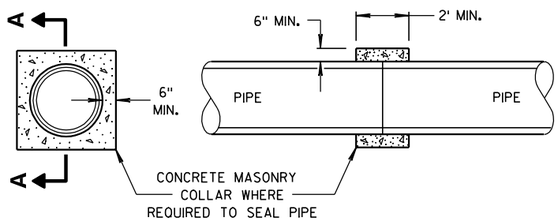
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

ADJUSTABLE TIE ROD (ALTERNATE NO. 3)



PLACEMENT OF (2) CAST-IN-PLACE INSERTS OR HOLES DURING FABRICATION FOR PIPE SECTIONS REQUIRING TIE RODS

TRANSVERSE SECTION



SECTION A-A

CONCRETE COLLAR DETAIL

JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

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S.D.D. 8 F 4-7

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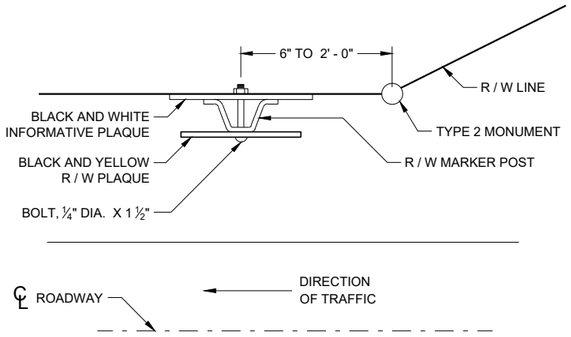
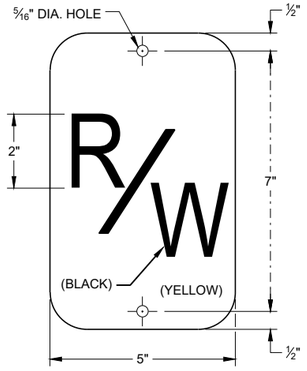
S.D.D. 8 F 4-7

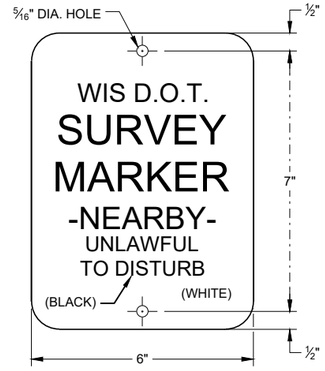


PLAN VIEW
STEEL MARKER POST



R / W PLAQUE

THE RIGHT-OF-WAY PLAQUE AND INFORMATIVE PLAQUE WILL BE FURNISHED BY THE WISCONSIN DEPARTMENT OF TRANSPORTATION.



INFORMATIVE PLAQUE

GENERAL NOTES

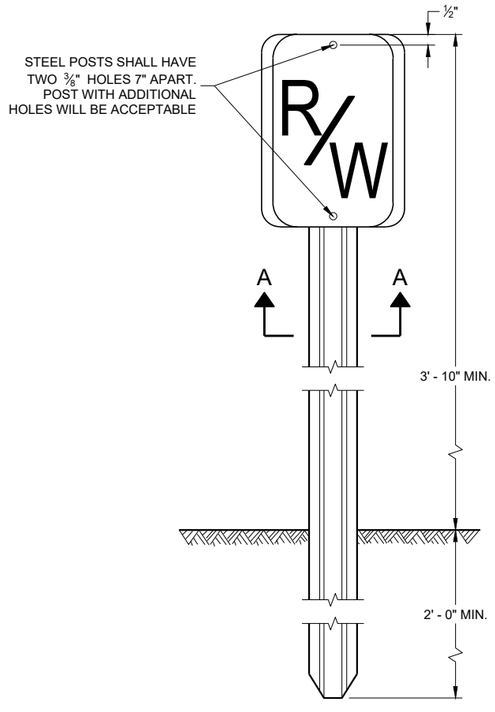
DETAILS OF CONSTRUCTION NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

A STEEL MARKER POST FOR RIGHT -OF-WAY SHALL BE PLACED IN THE RIGHT-OF-WAY WITH THE BACK OF THE POST ON THE LONGER RIGHT-OF-WAY TANGENT, 6 INCHES TO 24 INCHES FROM EACH TYPE 2 MONUMENT TO SERVE AS A GUARD POST, AND AT OTHER LOCATIONS AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

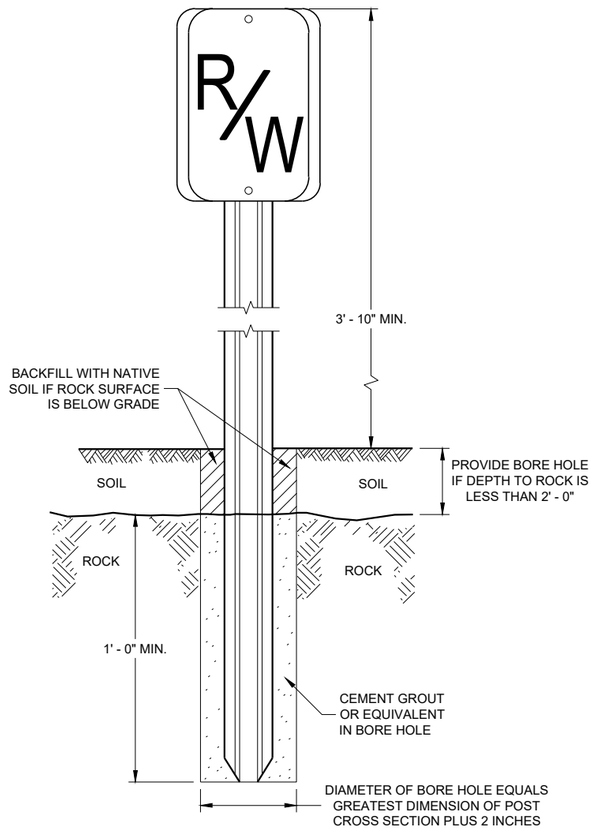
THE "R/W" PLAQUE SHALL FACE THE ROADWAY AND THE INFROMATIVE PLAQUE SHALL FACE AWAY FROM THE ROADWAY. "R/W" AND INFORMATIVE PLAQUES WILL BE FURNISHED BY THE WISCONSIN DEPARTMENT OF TRANSPORTATION.

STEEL MARKER POSTS SHALL MEET THE MINIMUM MATERIAL REQUIREMENTS FOR STEEL DELINEATOR POSTS; EXCEPT POSTS PAINTED WITH FEDERAL YELLOW ENAMEL NEED NOT BE ZINC COATED.

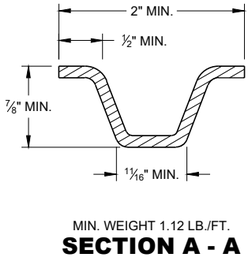
(1) IN AREAS OF SOLID ROCK, DRILL A BORE HOLE 2" GREATER THAN THE WIDEST DIMENSION OF THE POST CROSS SECTION INTO THE ROCK A MINIMUM DEPTH OF 12 INCHES. CUT OR SPLICE THE POST SO THAT A MINIMUM LENGTH OF 3' - 10" PROTRUDES ABOVE THE GROUND. BLOW OUT THE BORE HOLE IN THE ROCK USING COMPRESSED AIR. FILL THE BORE HOLE WITH CEMENT GROUT OR EQUIVALENT, DEPENDING ON THE STABILITY OF THE ROCK.



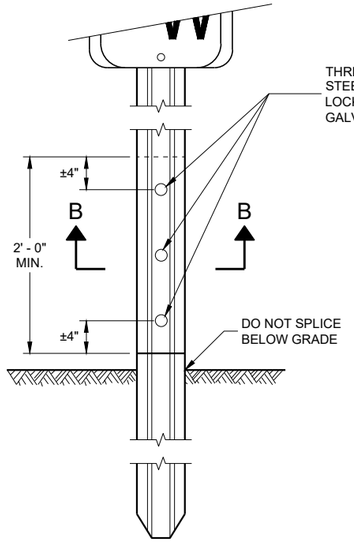
FRONT VIEW
STEEL MARKER POST



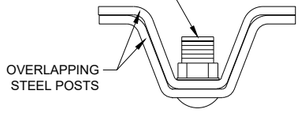
FRONT VIEW
ROCK INSTALLATION (1)



MIN. WEIGHT 1.12 LB./FT.
SECTION A - A



FRONT VIEW
SPLICE DETAIL



SECTION B - B

MARKER POST FOR RIGHT - OF - WAY

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
2/18/2016 — DATE
/S/ Ray Kumapayi — CHIEF SURVEYING AND MAPPING ENGINEER

FHWA

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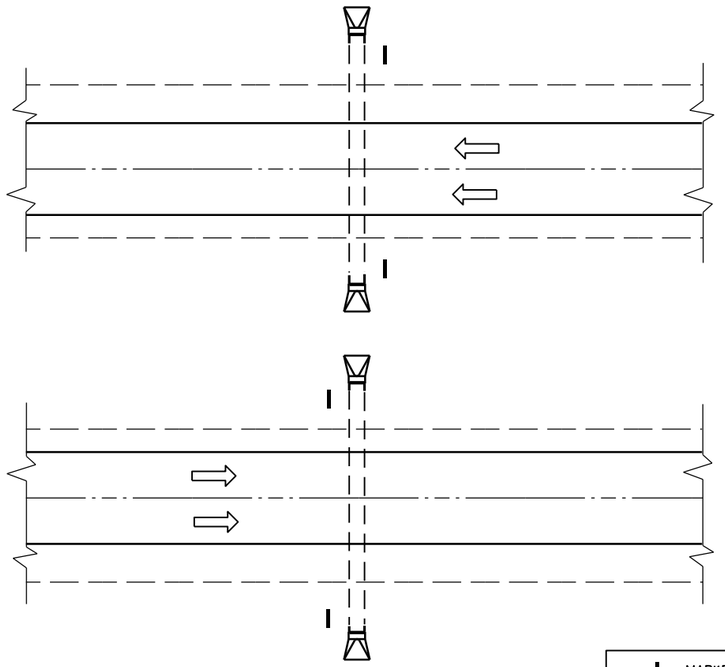
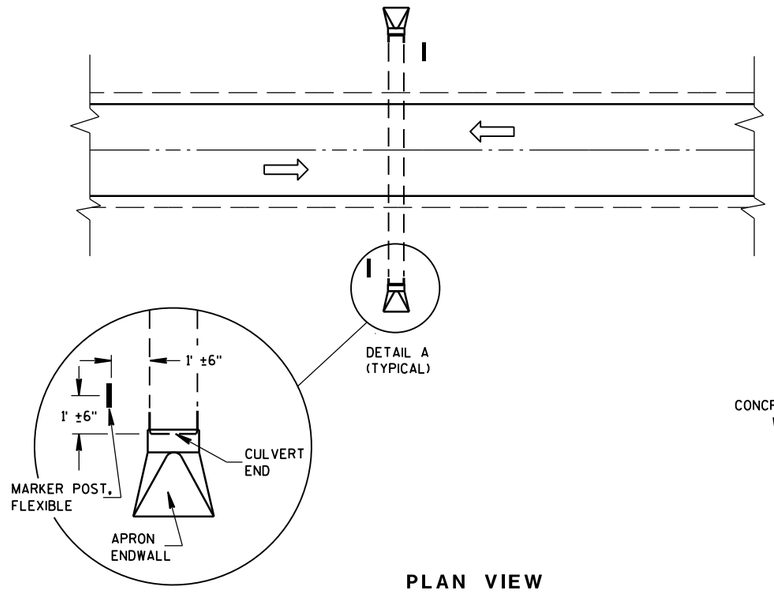
SDD15A01 - 13a



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

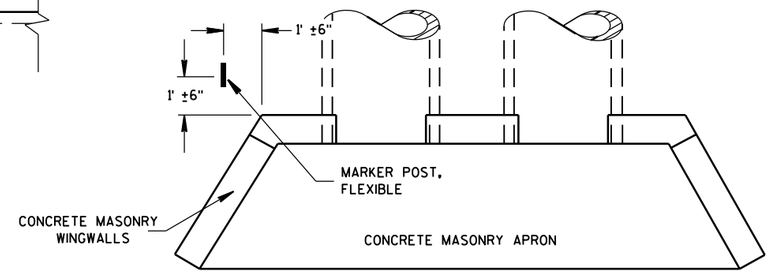
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

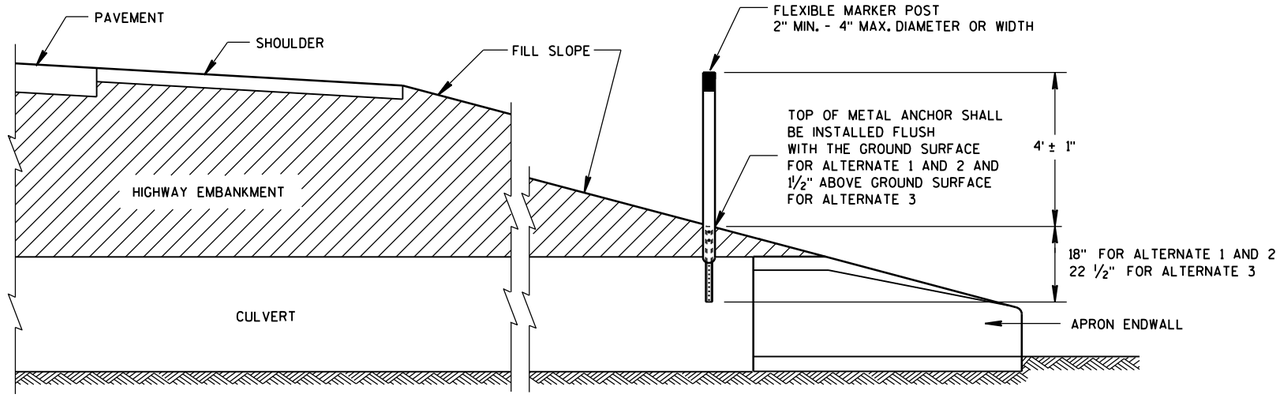
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



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 TRANSPOI

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S.D.D. 15 A 3-2a

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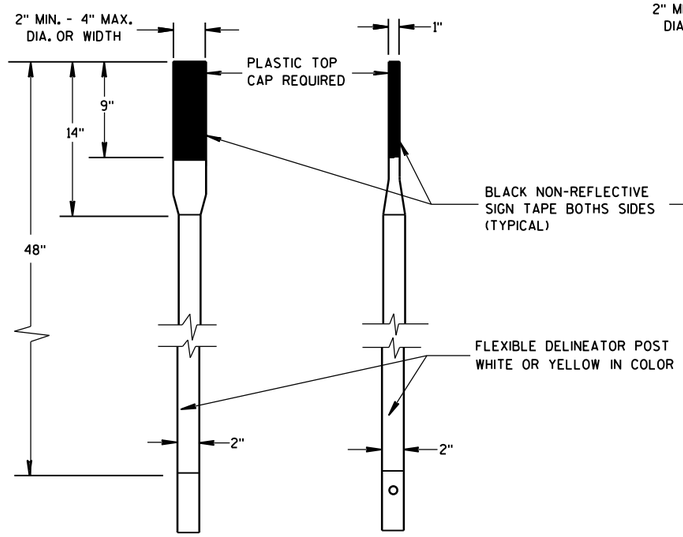
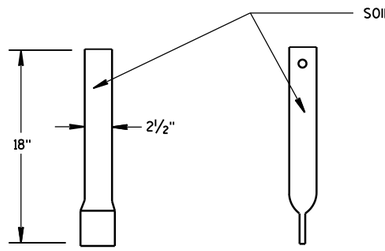
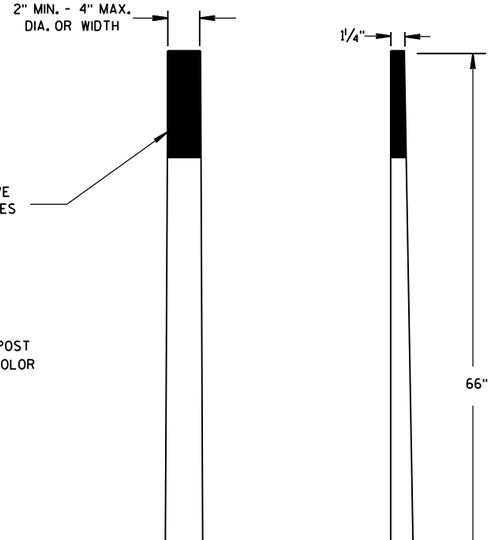
S.D.D. 15 A 3-2a





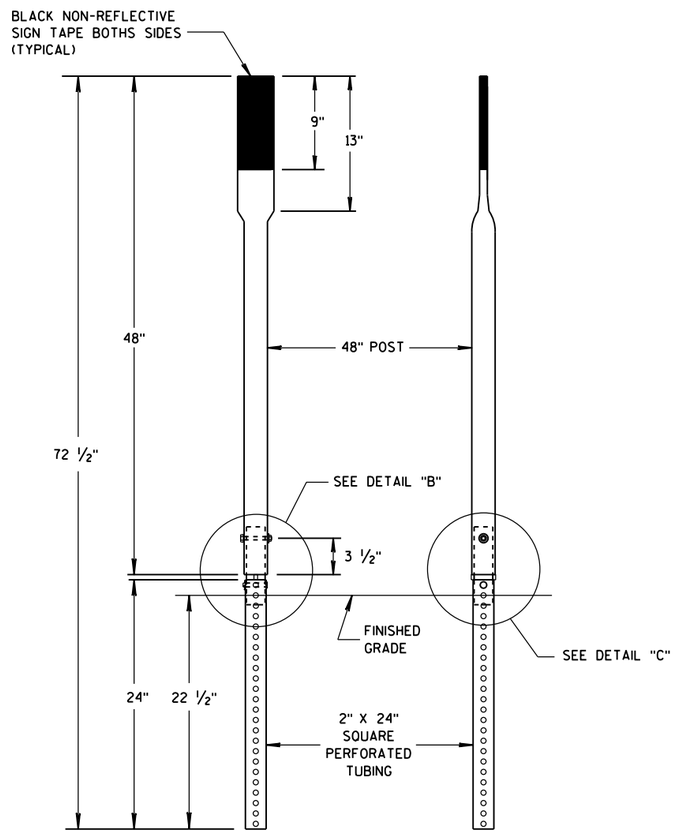
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

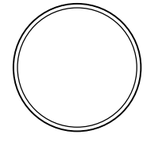
ALTERNATE 2



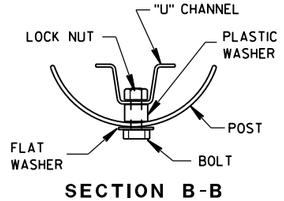
FRONT VIEW SIDE VIEW

ALTERNATE 3

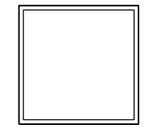
FLEXIBLE MARKER POSTS



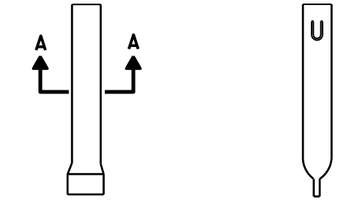
SECTION A-A



SECTION B-B

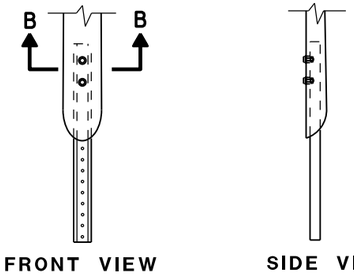


SECTION C-C



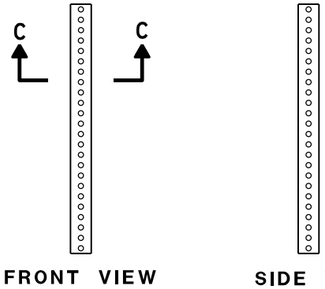
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

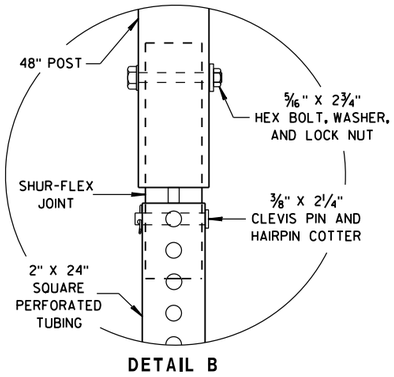
ALTERNATE 2



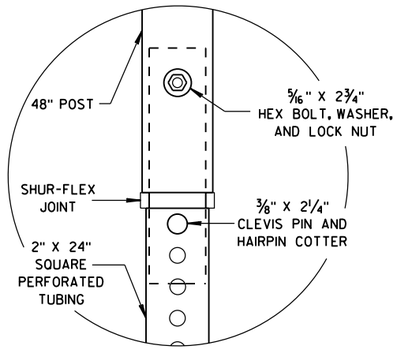
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



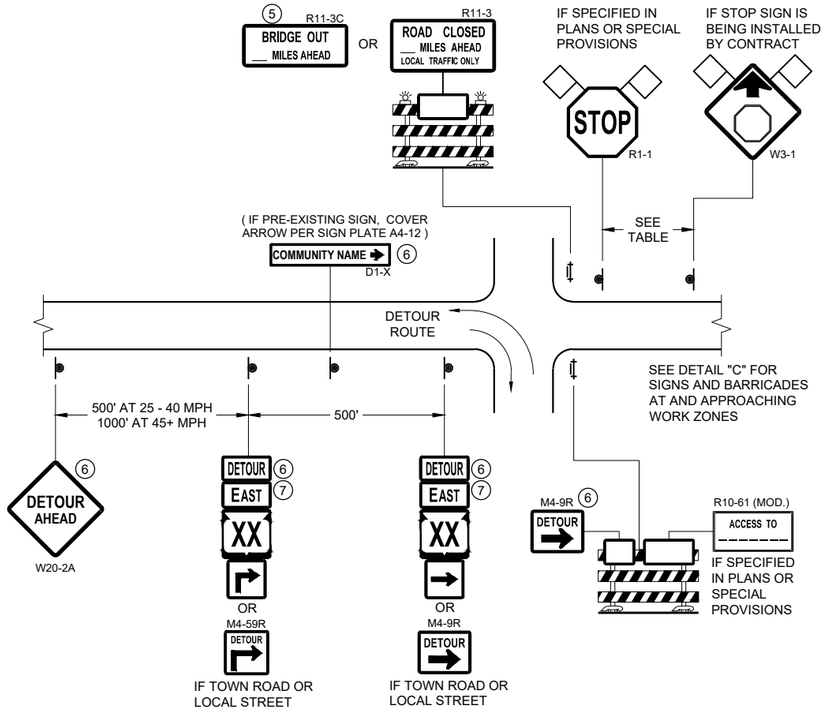
DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

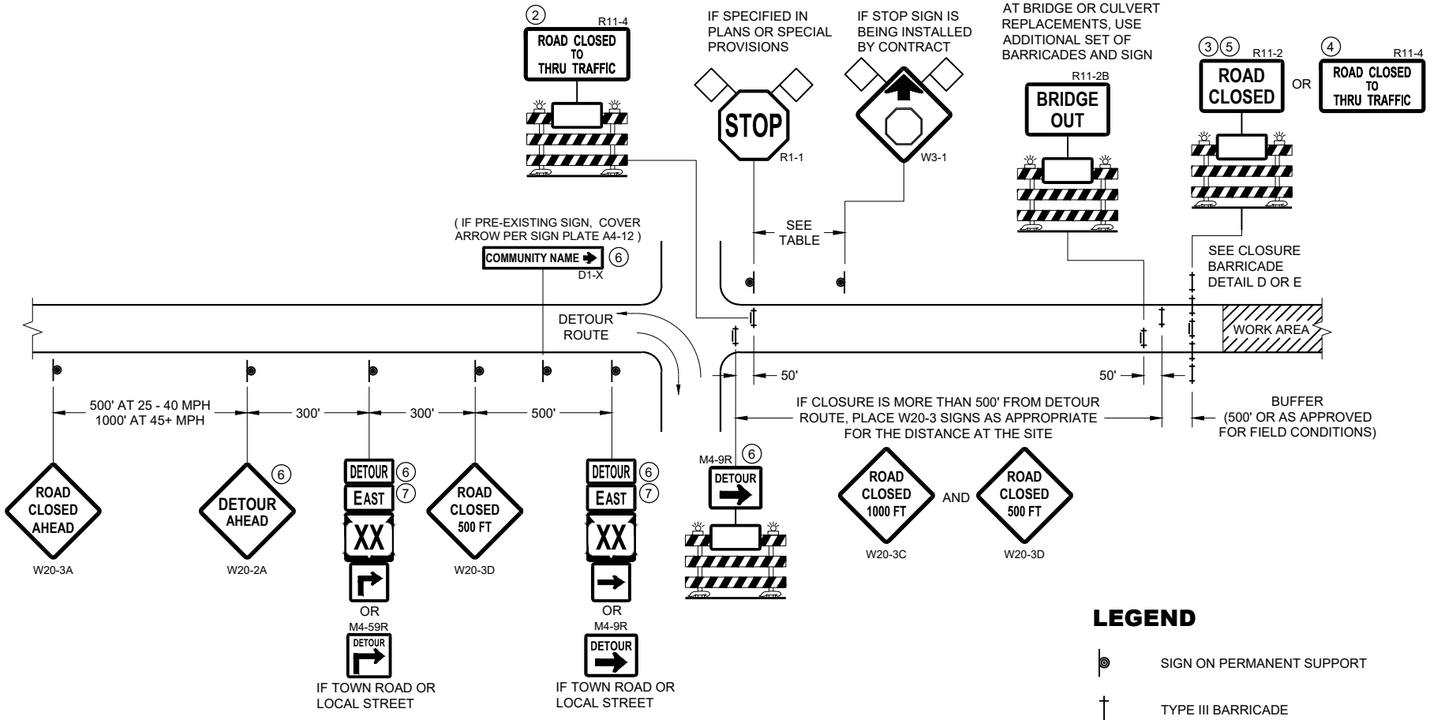
APPROVED
10/1/2012
DATE
/S/ Travis Feltes
STATE TRAFFIC ENGINEER
IGN
FHWA

6
S.D.D. 15 A 3-2b



DETAIL A
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE GREATER THAN OR EQUAL TO ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)



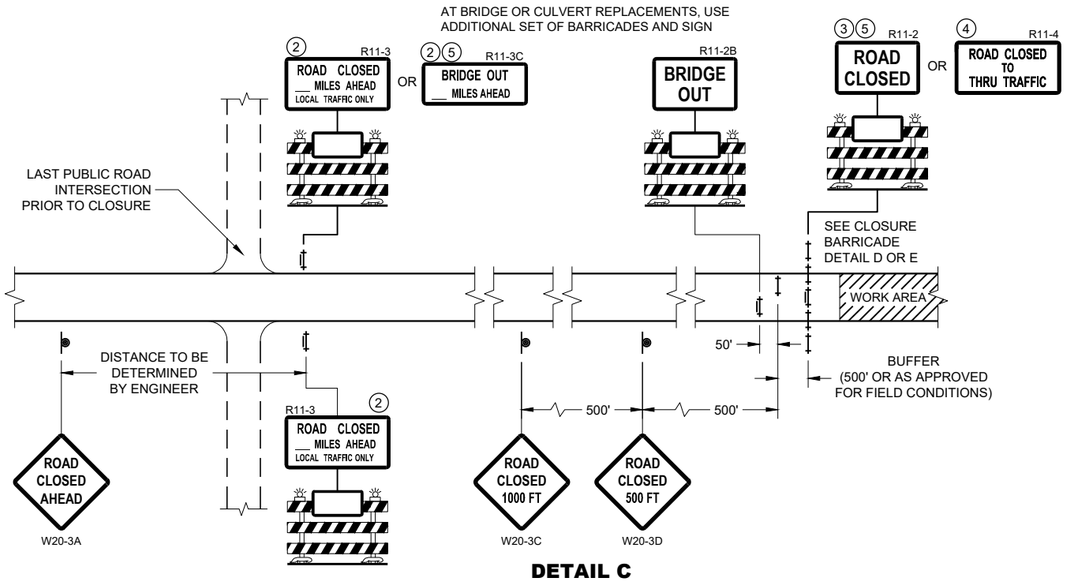
DETAIL B
MAINLINE CLOSURE WITH POSTED DETOUR

WORK ZONE LESS THAN ½ MILE FROM DETOUR ROUTE (1000 FEET IF URBAN)

LEGEND

- SIGN ON PERMANENT SUPPORT
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- WORK AREA
- FLAGS, 16" X 16" MIN. (ORANGE)

DETOUR M4 - 8
EAST M3 - X
XX M1 - 4 OR XX M1 - 6 OR COUNTY X M1 - 5A
M05 - 1 OR M06 - 1



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

BARRICADES AND SIGNS FOR MAINLINE CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

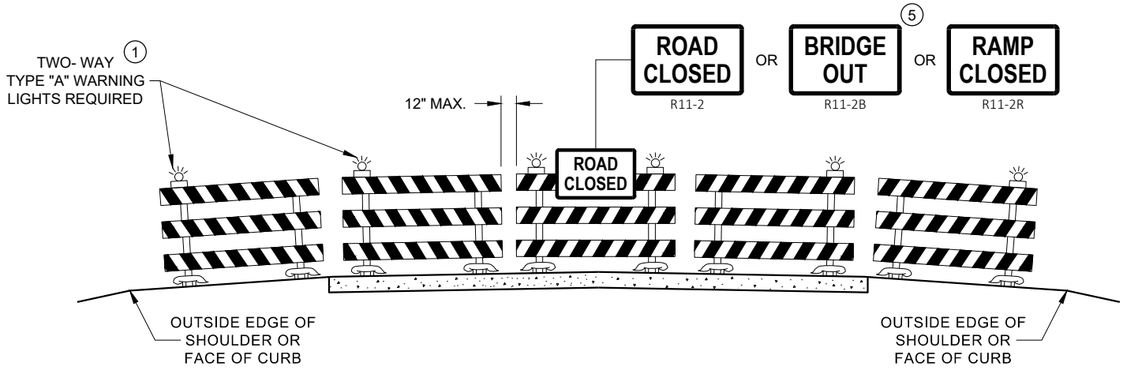
APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

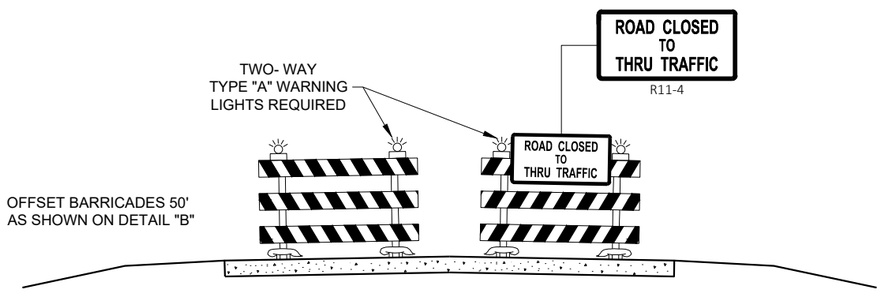
6

SDD 15C02 - 08a

SDD 15C02 - 08a



DETAIL D
ROAD CLOSURE BARRICADE DETAIL
APPROACH VIEW



DETAIL E
LANE CLOSURE BARRICADE DETAIL
APPROACH VIEW

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 THE BARRICADES SHALL COVER NO MORE THAN THE TOP RAIL. THE SIGNS SHALL NOT COVER ANY PORTION OF THE MIDDLE RAIL 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 SHALL, 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" (36" X 18" 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)
- MO5 - 1 AND MO6 - 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 AN 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 ROAD 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 VARIOUS CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

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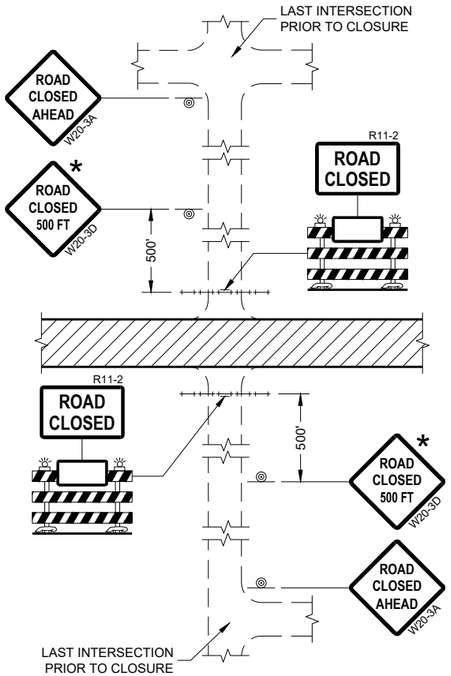
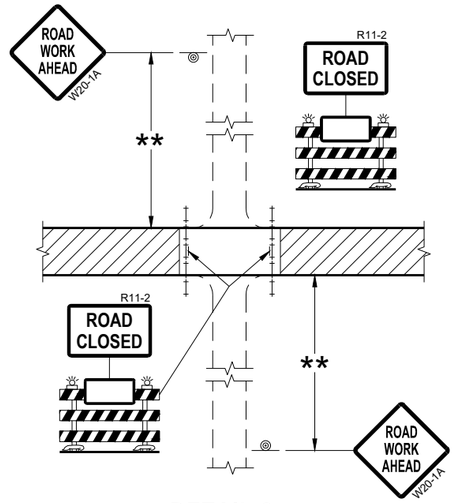
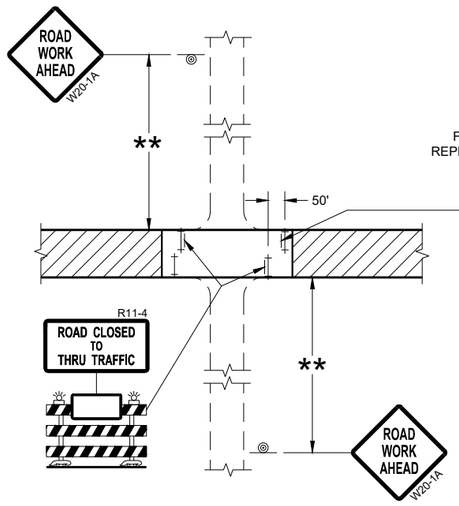
SDD 15C02 - 08b



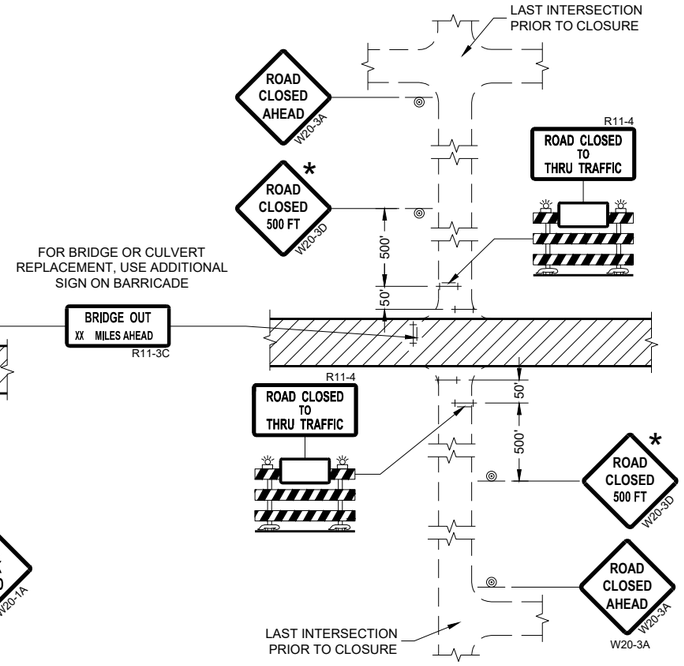
DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO ACCESS TO PROJECT)



DETAIL 3
(PUBLIC CROSS-TRAFFIC MAINTAINED.
CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)



DETAIL 4
(CONTRACTOR, LOCAL BUSINESS AND
RESIDENT ACCESS TO PROJECT)

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 (500 FEET DESIRABLE) TO EXISTING SIGNS THAT WILL REMAIN IN PLACE.

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 REESTABLISHED.

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

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN 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, AND R11-4 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.

ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

* OMIT THE "ROAD CLOSED 500 FT." SIGN IF THE LAST INTERSECTION IS 500 FEET OR LESS FROM THE WORK ZONE.

** 500' MAX. OR AT LAST INTERSECTION, WHICHEVER IS CLOSEST.

LEGEND

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

BARRICADES AND SIGNS FOR SIDEROAD CLOSURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

FHWA

6

SDD 15C03 - 05

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.

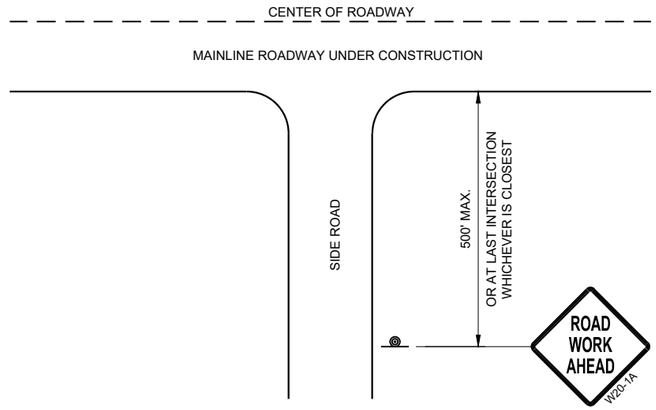
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

SIGNS THAT WILL BE IN PLACE LESS THAN SEVEN 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 REESTABLISHED.

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

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



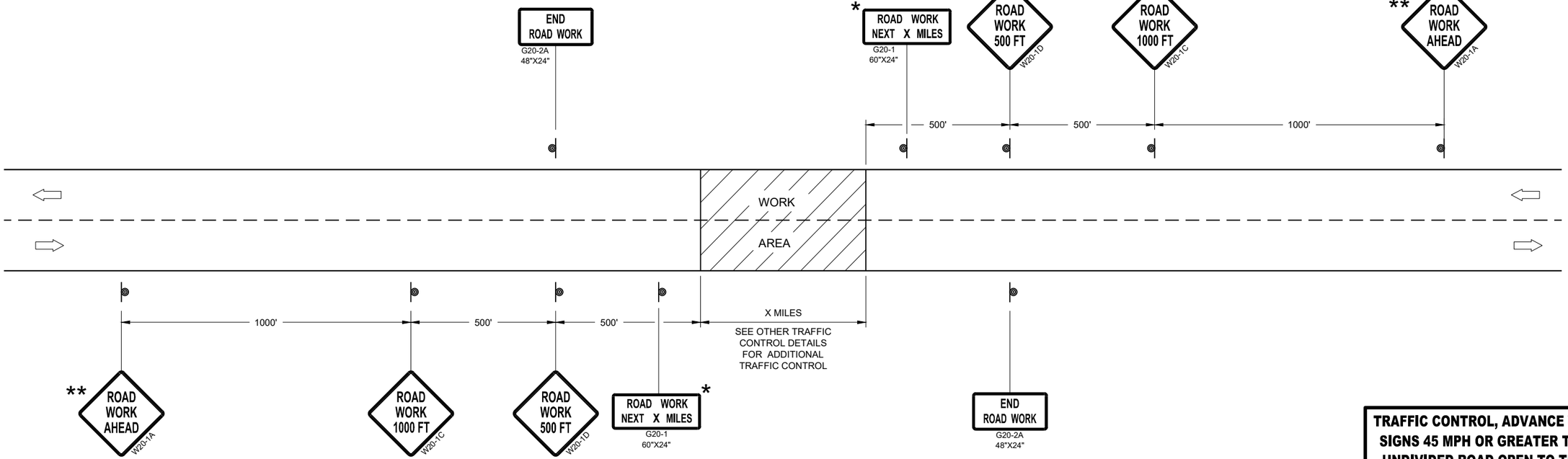
TYPICAL SIDE ROAD APPROACH WARNING SIGN DETAIL

LEGEND

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC

WORK AREA



TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45MPH OR GREATER

TRAFFIC CONTROL, ADVANCE WARNING SIGNS 45 MPH OR GREATER TWO-WAY UNDIVIDED ROAD OPEN TO TRAFFICE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

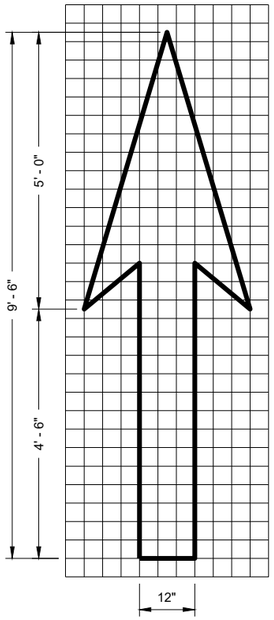
APPROVED
July 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

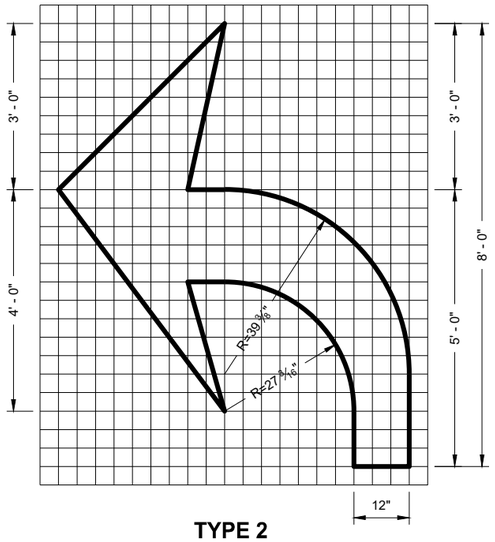
FHWA

6

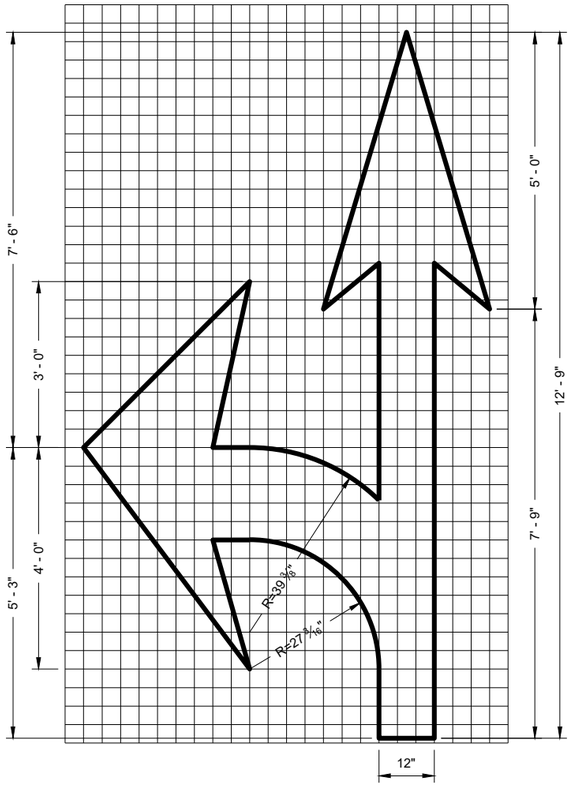
SDD 15C04 - 05



TYPE 1



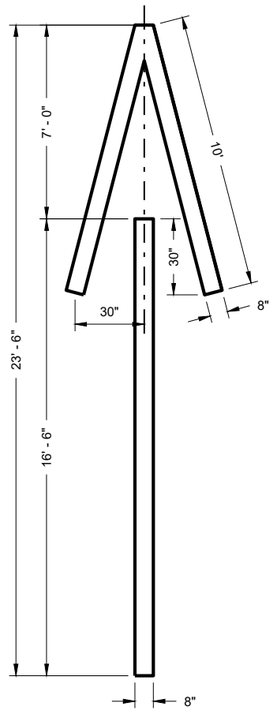
TYPE 2



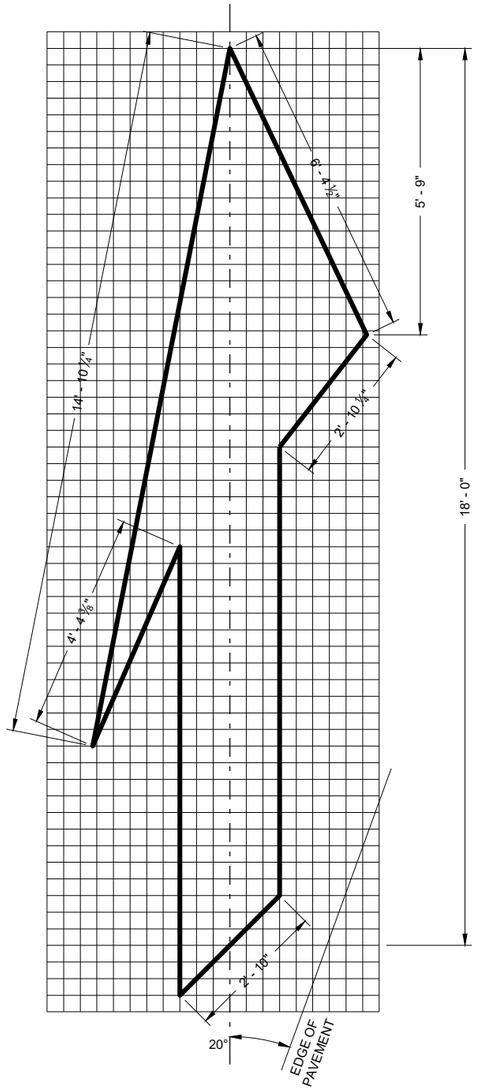
TYPE 3

GENERAL NOTES

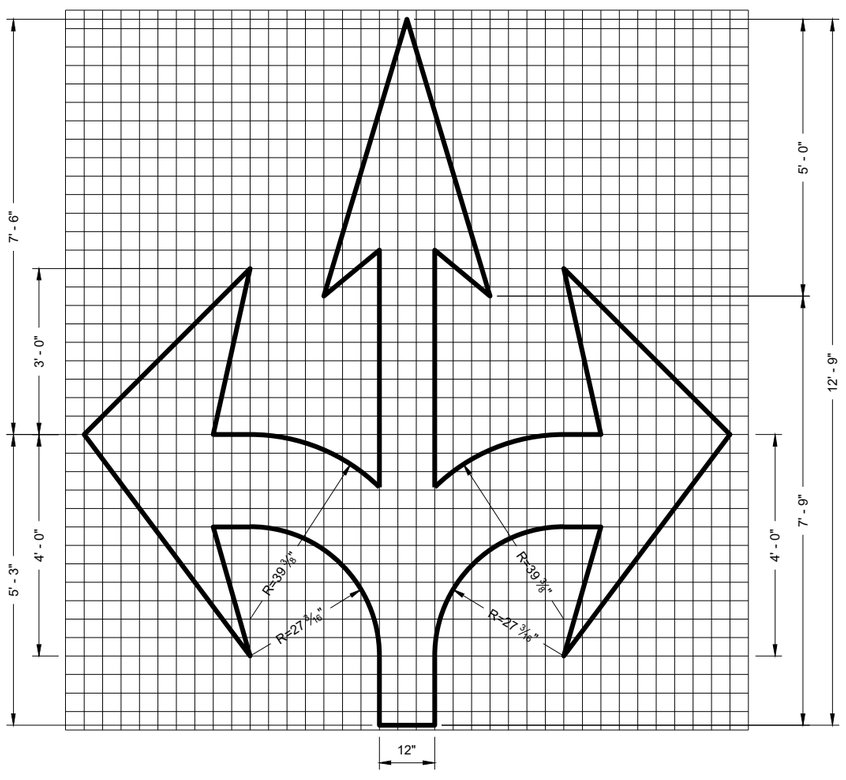
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



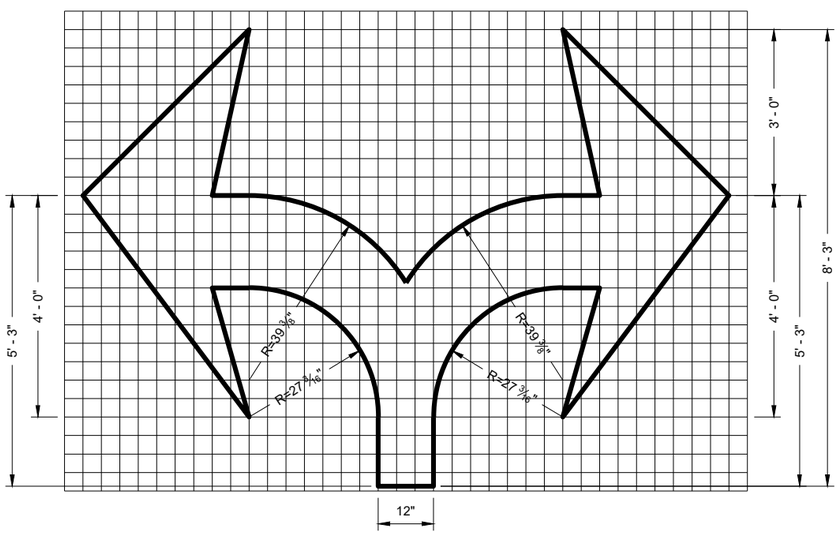
TYPE 4



TYPE 5 LANE DROP ARROW



TYPE 6



TYPE 7

PAVEMENT MARKING ARROWS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

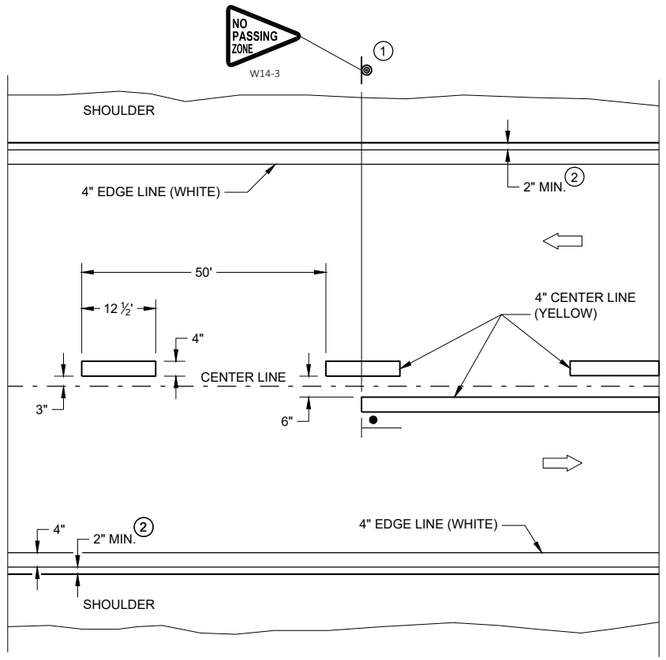
FHWA

6

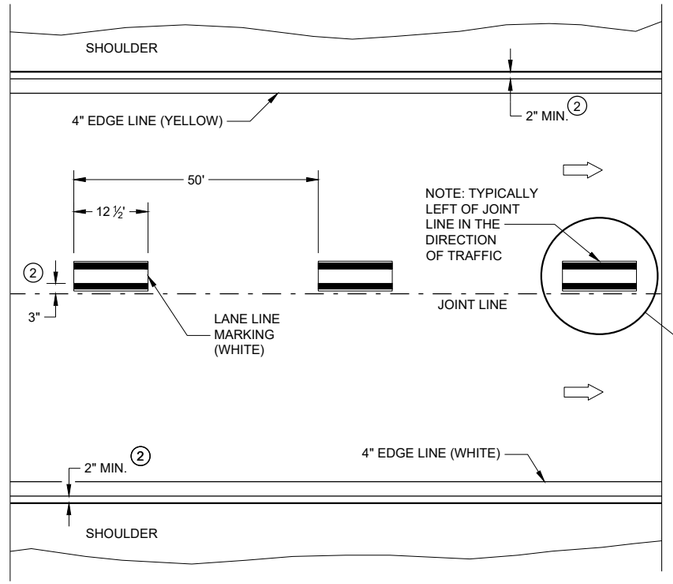
SDD 15C07 - 15c

6

SDD 15C07 - 15c

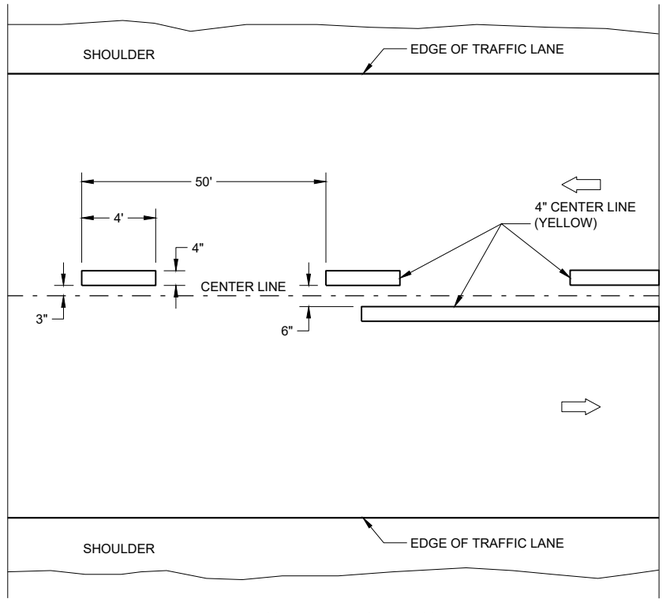


TWO WAY TRAFFIC

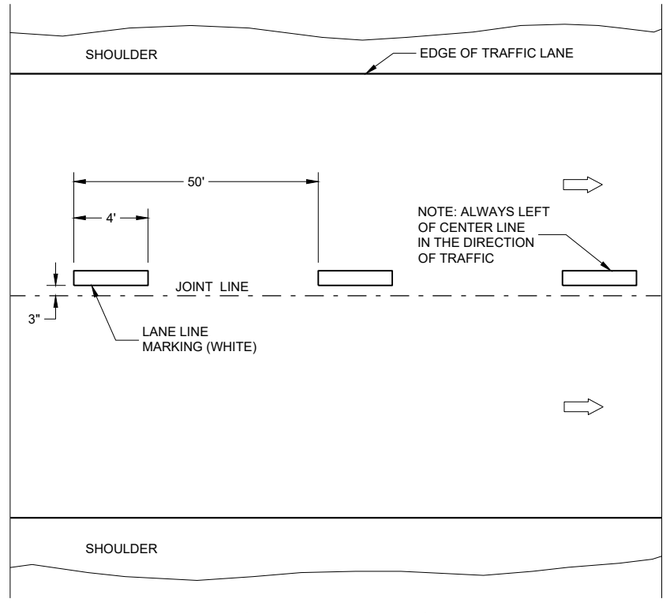


ONE WAY TRAFFIC

PERMANENT PAVEMENT MARKING



TWO WAY TRAFFIC



ONE WAY TRAFFIC

TEMPORARY PAVEMENT MARKING

GENERAL NOTES

DETAILS OF CONSTRUCTION NO SHOWN ON THIS DRAWING SHALL CONFORM TO STANDARD SPECIFICATIONS AND SPECIAL PROVISIONS.

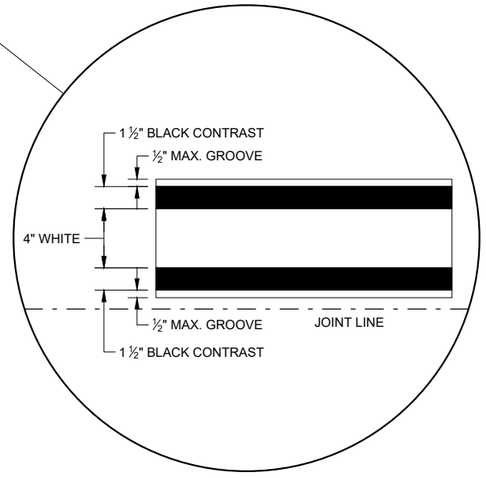
1. LOCATE THE NO PASSING ZONE W14-3 SIGN WITH 50 FEET OF THE "T" MARKING
2. MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

LEGEND

"T" MARKING

SIGN ON PERMANENT SUPPORT

DIRECTION OF TRAFFIC



LONGITUDINAL MARKING (MAINLINE)

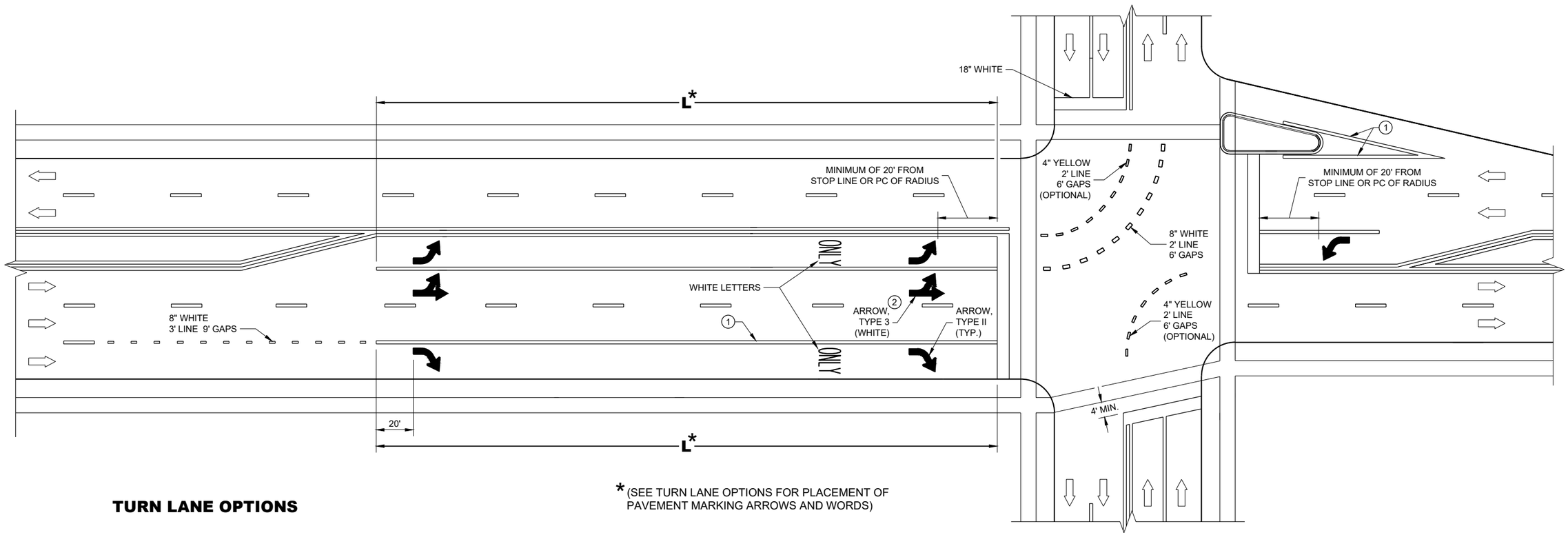
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE
/S/ Matthew Rauch
STATEWIDE SIGNING AND M ENGINEER

FHWA

SDD 15C08 - 20a

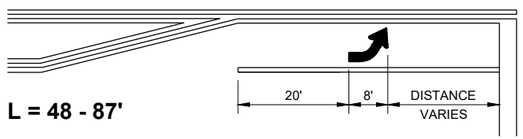
SDD 15C08 - 20a



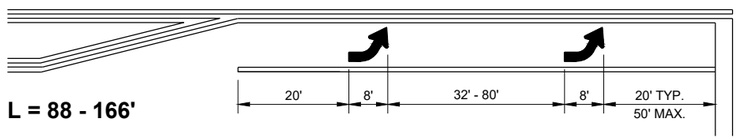
* (SEE TURN LANE OPTIONS FOR PLACEMENT OF PAVEMENT MARKING ARROWS AND WORDS)

TURN LANE OPTIONS

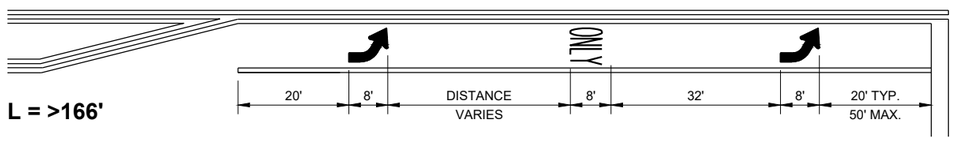
LENGTH OF TURN BAY (**L**) OF 0 - 47' DOES NOT REQUIRE PAVEMENT MARKING ARROWS OR WORDS



L = 48 - 87'



L = 88 - 166'



L = >166'

GENERAL NOTES

1. 8" WHITE
2. QUANTITY AND LOCATION OF TYPE 3 ARROWS ARE THE SAME AS THE TYPE II ARROWS IN THE ADJACENT TURN LANE. FOR TURN LANES WITH A PHYSICAL SEPARATION IN THE SAME DIRECTION OF TRAVEL, THE ARROWS AND "ONLY" MARKING MAY BE ELIMINATED.

DIRECTION OF TRAFFIC

L = LENGTH OF TURN BAY

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15C08 - 20c

LEGEND

SIGN ON PORTABLE OR PERMANENT SUPPORT

TEMPORARY PORTABLE RUMBLE STRIP ARRAY

DIRECTION OF TRAFFIC

WORK AREA

FLAGGER, EQUIPPED WITH STOP/SLOW PADDLE FASTENED ON SUPPORT STAFF

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.

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

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

THE EXACT NUMBER, LOCATION AND SPACING OF ALL SIGNS, DEVICES, AND 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.

FLAGGING

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 REMOVE TEMPORARY PORTABLE RUMBLE STRIPS PRIOR TO COVERING OR REMOVING ALL ADVANCE SIGNING.

(1) FOR MOVING WORK OPERATIONS, POST ADDITIONAL W20-7A FLAGGER SIGNS AT APPROXIMATELY 3,500' 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.

WHEN THE DISTANCE BETWEEN FLAGGERS EXCEEDS 2 MILES, A PILOT CAR IS REQUIRED. WHEN CURVES REDUCE SIGHT DISTANCE BELOW 400', A PILOT CAR IS REQUIRED.

TEMPORARY PORTABLE RUMBLE STRIPS

UTILIZE TEMPORARY PORTABLE RUMBLE STRIPS ON ALL FLAGGING OPERATIONS.

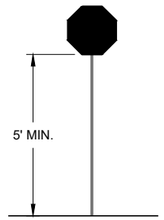
(3) EACH TEMPORARY PORTABLE RUMBLE STRIP ARRAY CONSISTS OF THREE RUMBLE STRIPS SPACED ACCORDING TO MANUFACTURER'S RECOMMENDATION, PLACED TRANSVERSE ACROSS THE LANE AT LOCATIONS SHOWN.

ONLY USE TEMPORARY PORTABLE RUMBLE STRIPS FOR THE APPROVED PRODUCTS LIST.

INSTALL TEMPORARY RUMBLE STRIPS PER MANUFACTURER'S RECOMMENDATIONS.

PLACE ADVANCE SIGNING PRIOR TO INSTALLING TEMPORARY RUMBLE STRIPS.

DO NOT INSTALL TEMPORARY PORTABLE RUMBLE STRIPS ON GRAVEL, MILLED SURFACES, OR ASPHALT THAT HAS BEEN PAVED LESS THAN 12 HOURS.



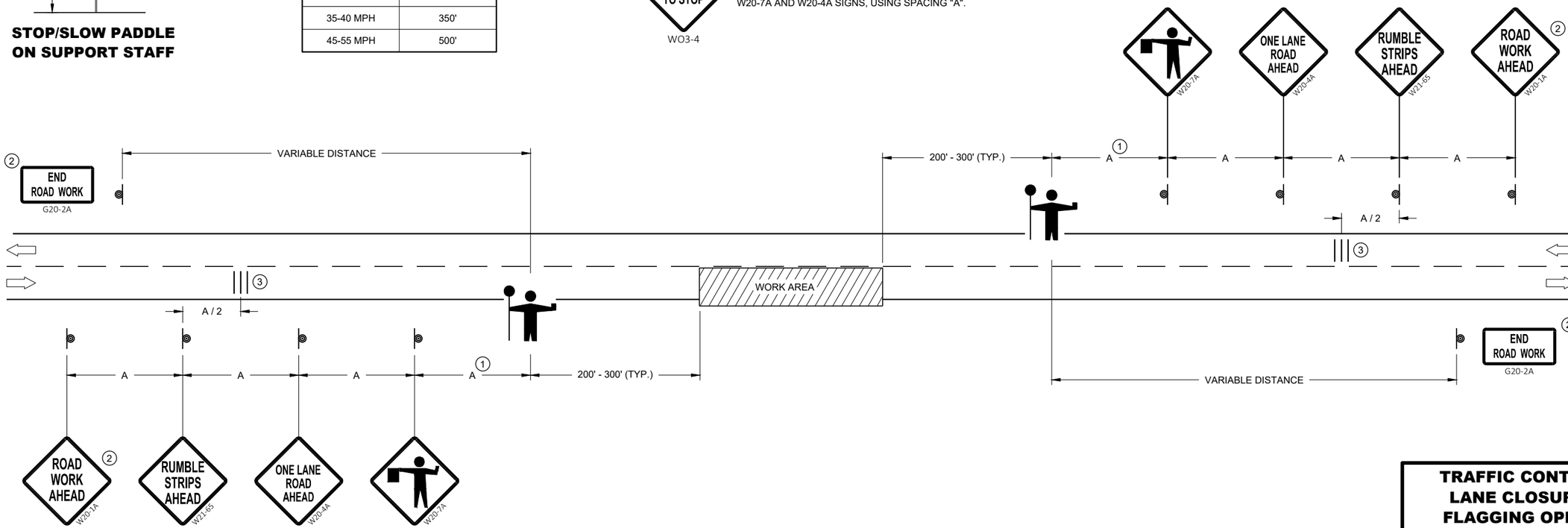
STOP/SLOW PADDLE ON SUPPORT STAFF

SIGN AND TEMPORARY RUMBLE STRIP ARRAY SPACING TABLE

SPEED LIMIT	SPACING "A"
25-30 MPH	200'
35-40 MPH	350'
45-55 MPH	500'

WO3-4

USE OF WO3-4 SIGN IS OPTIONAL. WHEN USED, THIS SIGN SHALL BE LOCATED BETWEEN THE W20-7A AND W20-4A SIGNS, USING SPACING "A".



TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

TRAFFIC CONTROL FOR LANE CLOSURE WITH FLAGGING OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

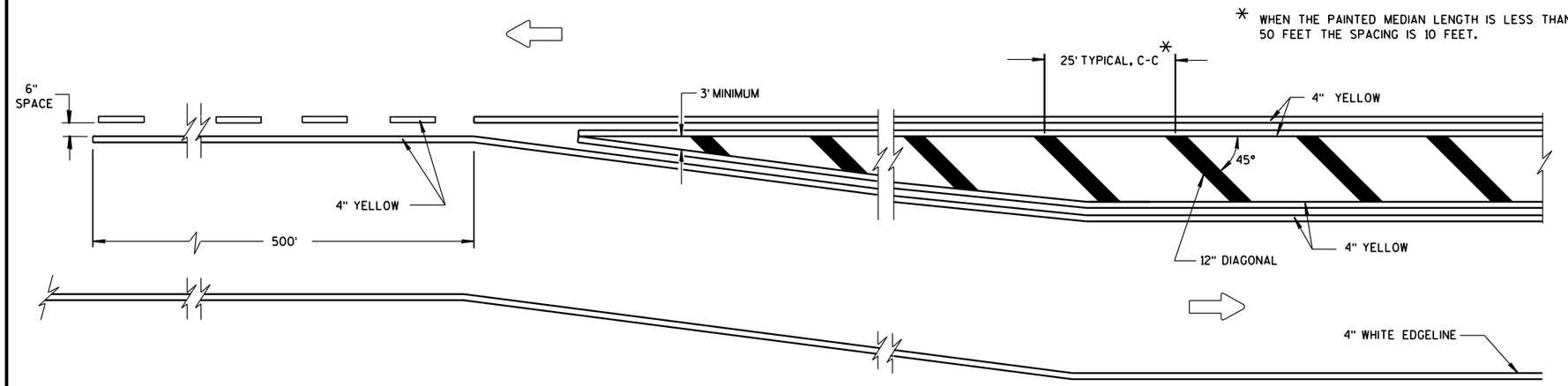
APPROVED
May 2019
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

6

SDD 15C12 - 07

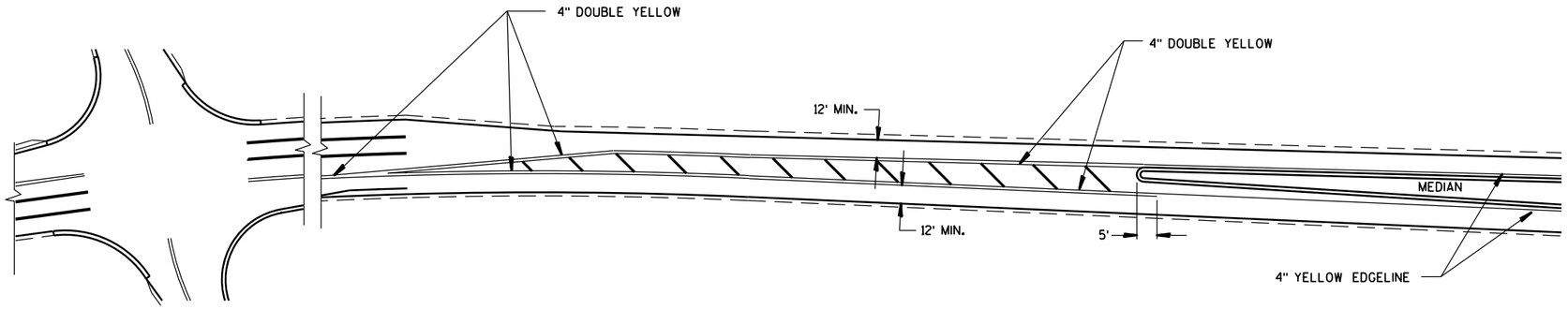


MEDIAN ISLAND DETAIL

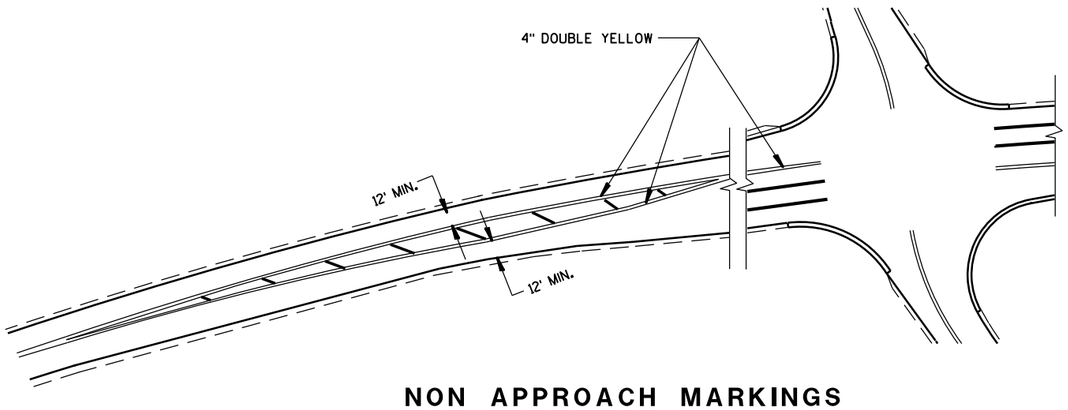
GENERAL NOTE

DIAGONALS ARE OPTIONAL WHEN PAINTED ISLAND IS LESS THAN 6 FEET AT WIDEST POINT.

DIRECTION OF TRAVEL



APPROACH MARKINGS FOR OTHER MEDIAN TYPES



NON APPROACH MARKINGS

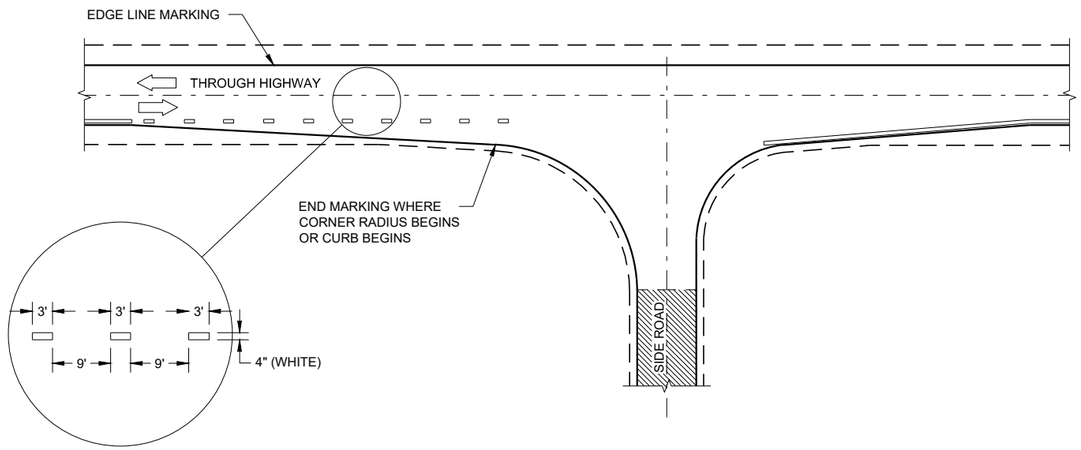
MEDIAN ISLAND MARKING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED June 2017 DATE	/S/ Matthew Rauch STATE SIGNING AND MARK 45 EER
FHWA	

6

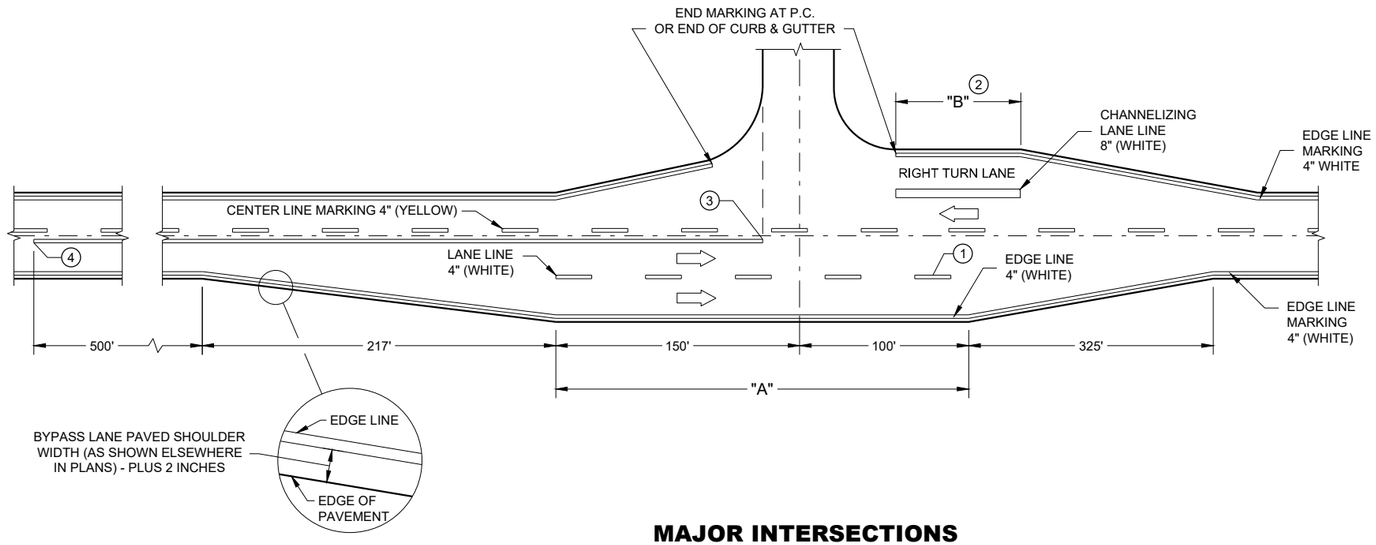
S.D.D. 15 C 18-4

6

S.D.D. 15 C 18-4



MINOR INTERSECTION



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

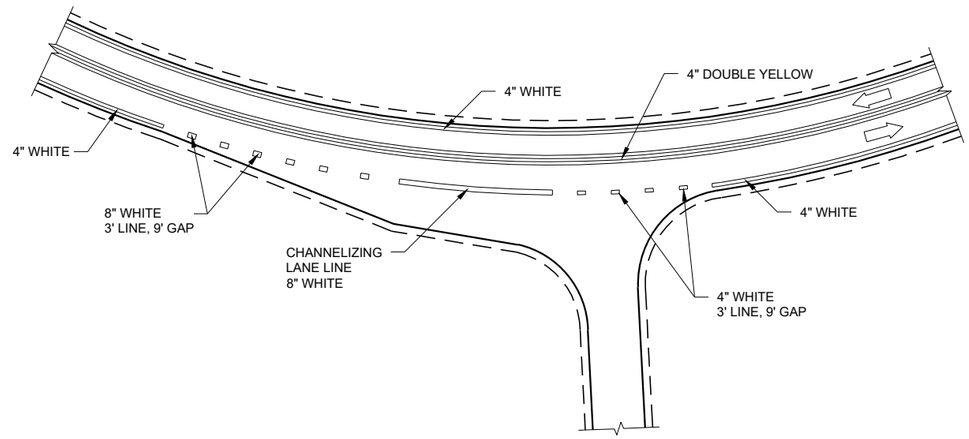
GENERAL NOTES

OMIT EDGE LINES THROUGH INTERSECTIONS. CONTINUE EDGE LINES 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. BARRIER LINE ENDS AT SIDE ROAD PAVEMENT / SURFACE EDGE EXTENSION.
4. BARRIER LINE STARTS 500 FEET PRIOR TO THE BYPASS TAPER.

LEGEND

DIRECTION OF TRAVEL



INTERSECTION ON OUTSIDE OF CURVE

PAVEMENT MARKING (INTERSECTIONS)

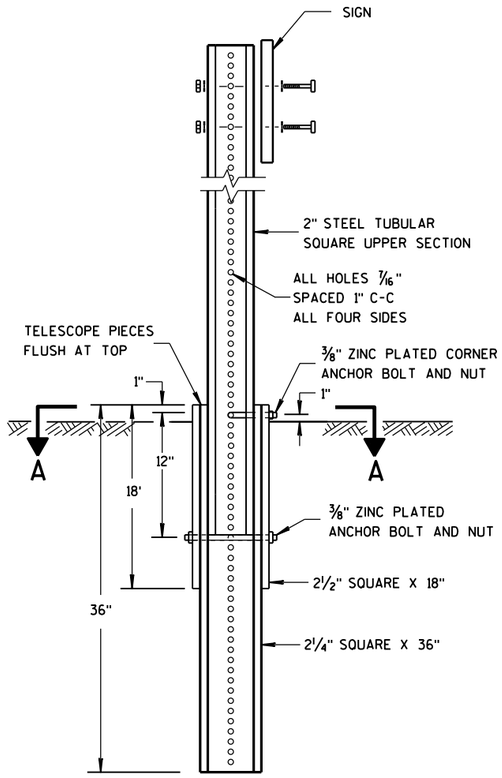
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

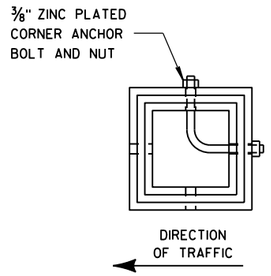
SDD 15C35 - 04a

6

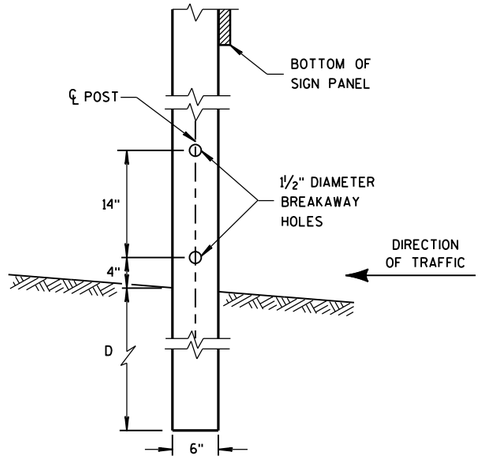
SDD 15C35 - 04a



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



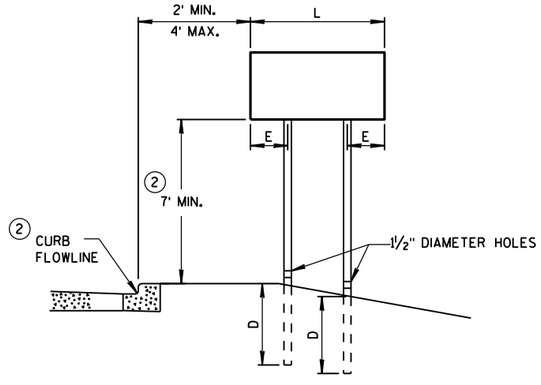
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

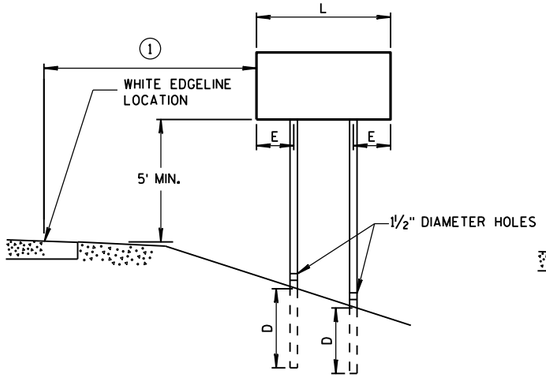
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

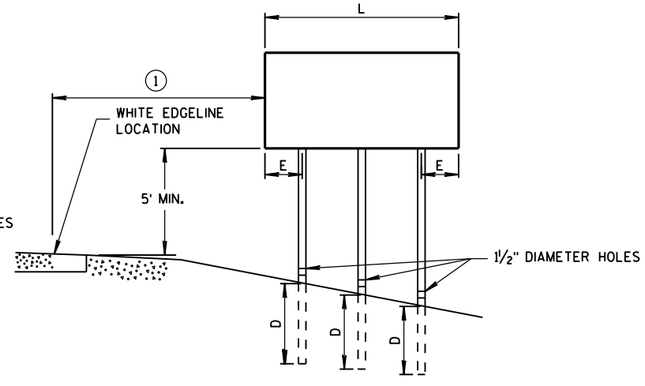
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK AND NO PARKING, VERTICAL CLEARANCE MAY BE REDUCED TO 5 FOOT MINIMUM. OFFSET OF SIGNS IS MEASURED FROM THE CURB FLOWLINE.

(3) FOR SIGNS REQUIRING 4 POSTS, SPACE INTERMEDIATE POSTS EVENLY.



URBAN AREA





RURAL AREA

POST MOUNTING DETAIL FOR TEMPORARY TRAFFIC CONTROL FIXED MESSAGE SIGNS

TUBULAR STEEL POSTS

AREA OF SIGN INSTALLATION (SQ. FT.)	NUMBER OF REQUIRED TUBULAR STEEL 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

SIGNS WIDER THAN 3 FEET OR LARGER THAN 9 SQ. FT. SHALL BE MOUNTED ON MULTIPLE POSTS (SEE ABOVE TABLE).

SIGNS LARGER THAN 27 SQ. FT. SHALL NOT BE MOUNTED ON TUBULAR STEEL POSTS.

WOOD POST EMBEDMENT DEPTH

AREA OF SIGN INSTALLATION (SQ. FT.)	D (MIN)
20 OR LESS	4'
GREATER THAN 20	5'

4" X 6" WOOD POST

POST SPACING REQUIREMENTS		NUMBER OF WOOD POSTS REQUIRED
L	E	
48" OR LESS AND LESS THAN 20 SQ. FT.	-	1
LESS THAN 60"	12"	2
60" TO 120"	L/5	2
GREATER THAN 120" LESS THAN 168"	12"	3
168" AND GREATER	12"	4

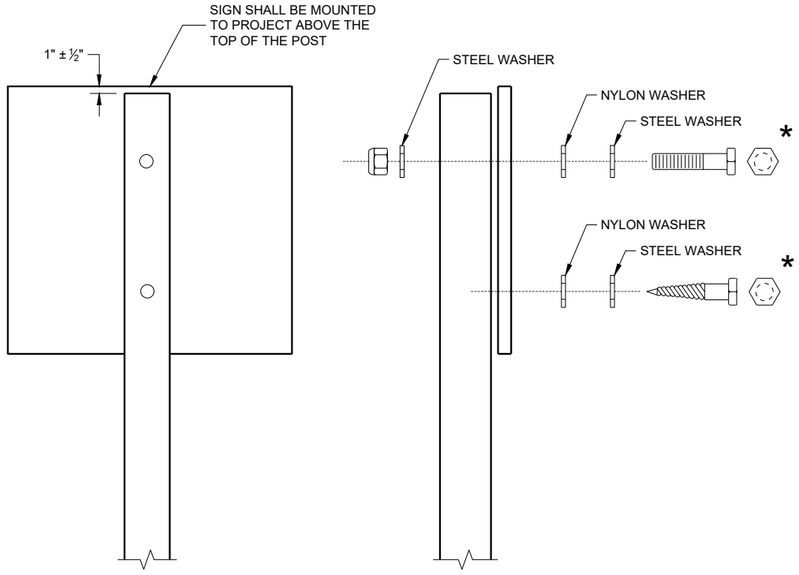
SEE NOTE (3)

TEMPORARY TRAFFIC CONTROL SIGN MOUNTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 15 D 38-2a



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.

WOOD POST (4" x 6")
LAG SCREWS - ⅜" x 3"
MACHINE BOLTS - 5/16" x 6 ½" OR 7" LENGTH W/NUTS

SQUARE STEEL POST (2" x 2")
MACHINE BOLTS - ⅜" x 3 ¼" LENGTH W/NUTS
RIVETS - 9/32" (6605-9-6) BULB-TITE, TRI-FOLD, ALUMINUM BODY/MANDREL O.D. FLANGE 0.720 - 0.765 INCH, GRIP RANGE 0.042 - 0.375 INCH

WASHERS (ALL POSTS) -
1 ¼" O.D. x ⅜" I.D. x 1/16" STEEL
1 ¼" O.D. x ⅜" I.D. x 0.080 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. FOR A SINGLE POST INSTALLATION, ALL SIGNS GREATER THAN 9 SQ. FT. REQUIRE THE USE OF 3 FASTENERS.

6

6

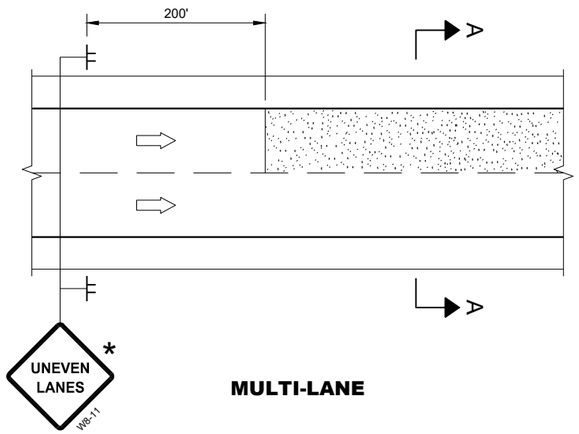
SDD 15D38 - 02b

SDD 15D38 - 02b

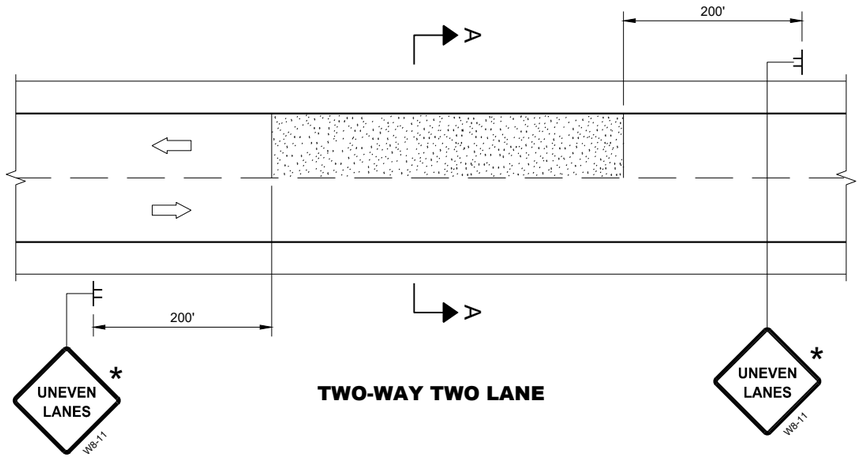
ATTACHMENT OF SIGNS TO POSTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

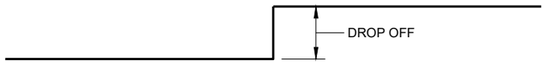
APPROVED
June 2017
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA



MULTI-LANE

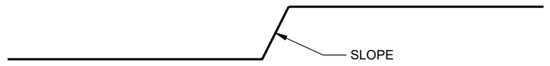


TWO-WAY TWO LANE

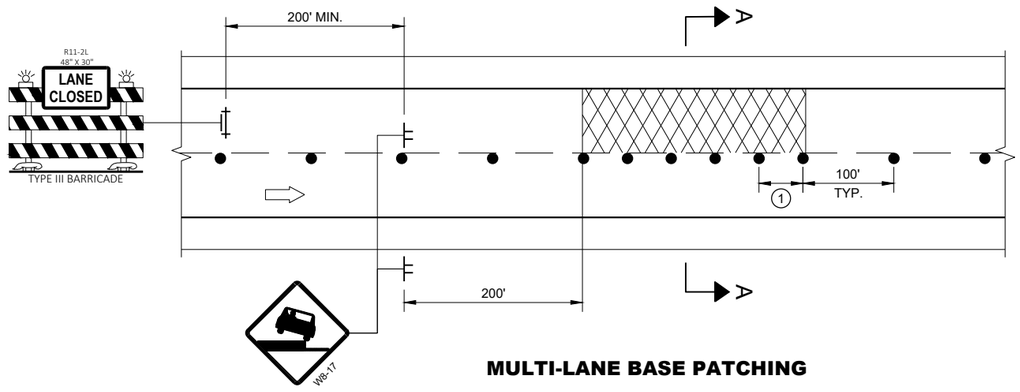


SECTION A - A

OR



SECTION A - A



MULTI-LANE BASE PATCHING

ADJACENT LANE DROP-OFFS

GENERAL NOTES

FOR SPOT LOCATIONS USE ENGINEERING JUDGEMENT WHEN PLACING ADDITIONAL SIGNS.

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

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

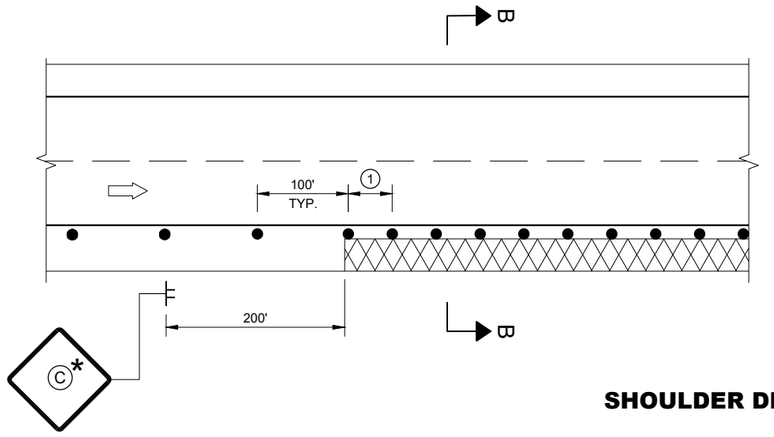
WARNING LIGHTS ARE NOT REQUIRED IF THE LANE CLOSURE IS A DAYTIME ONLY OPERATION.

* IF THE DROP-OFF IS CONTINUOUS ALONG THE PROJECT, PLACE ADDITIONAL SIGNS EVERY 1 MILE AND AFTER EVERY ENTRANCE RAMP.

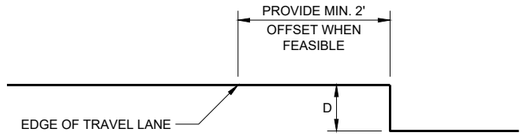
(1) USE CLOSER SPACING WHEN DELINEATING DROP-OFF.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA WITH DROP-OFF
- MILLED SURFACE



SHOULDER DROP-OFFS



SECTION B - B

D	SIGN (C)
< 2" WITH A SLOPE STEEPER THAN 3:1	LOW SHOULDER WO8-9
2" < 6" WITH A SLOPE STEEPER THAN 3:1	SHOULDER DROP - OFF W8-9A PROVIDE A 3:1 OR FLATTER SLOPE OF MATERIAL ADJACENT TO THE PAVEMENT

TRAFFIC CONTROL, DROP-OFF SIGNING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

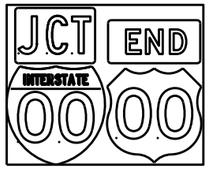
6

SDD 15D39 - 02

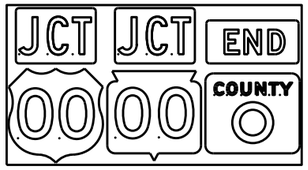
SDD 15D39 - 02

TYPICAL ASSEMBLIES

J1-1

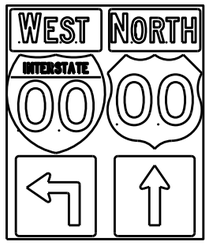


J1-2

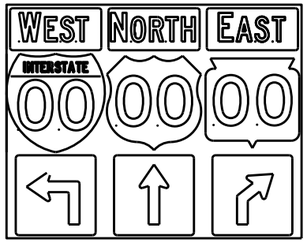


J1-3

J2-1



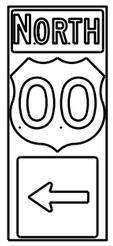
J2-2



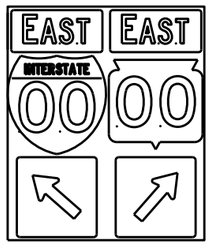
J2-3

JV

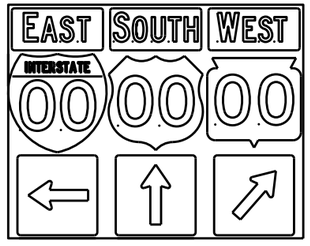
(Typical Vertical J-Assembly
See Note 10 and 11)



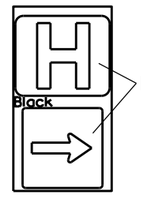
J3-1



J3-2



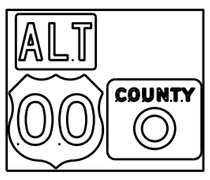
J3-3



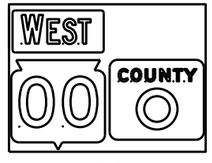
Blue Background

JH-1

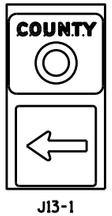
J4-1



J4-2



J4-2



J13-1

J12-1

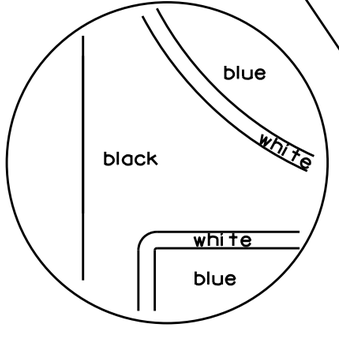
J32-1

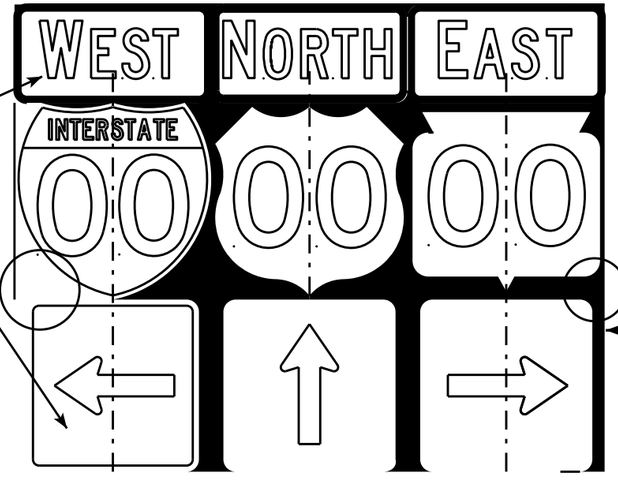
J33-1

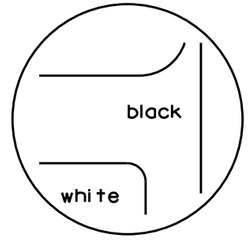
J23-1

J22-1

[blue background with interstate]







[black background]

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 inchs (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.

ROUTE MARKERS & COMPONENTS
IN TYPICAL ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

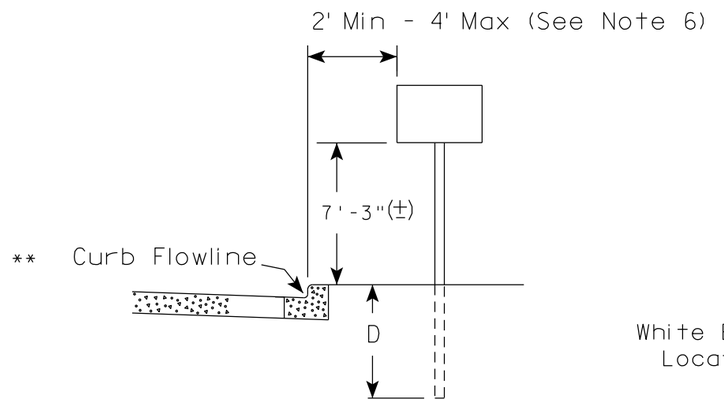
DATE 2/06/14 PL... A2-1S.8

PROJECT NO: | SHEET NO: E

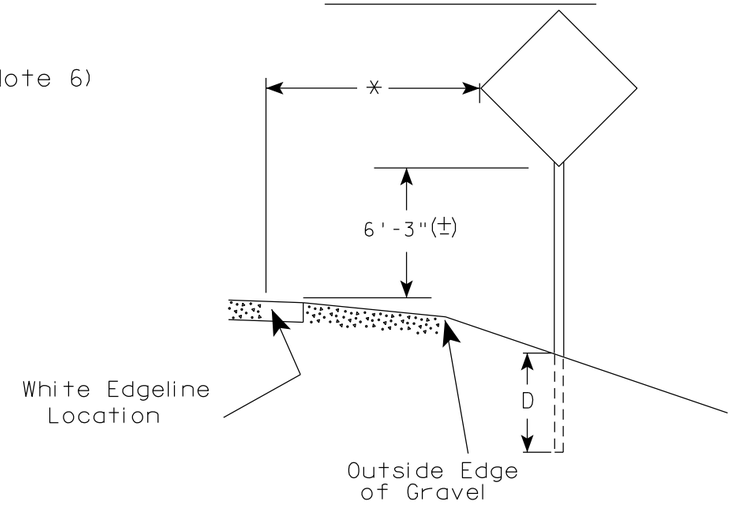
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A21S.DGN PLOT DATE : 06-FEB-2014 14:10 PLOT BY : mscsja PLOT NAME :

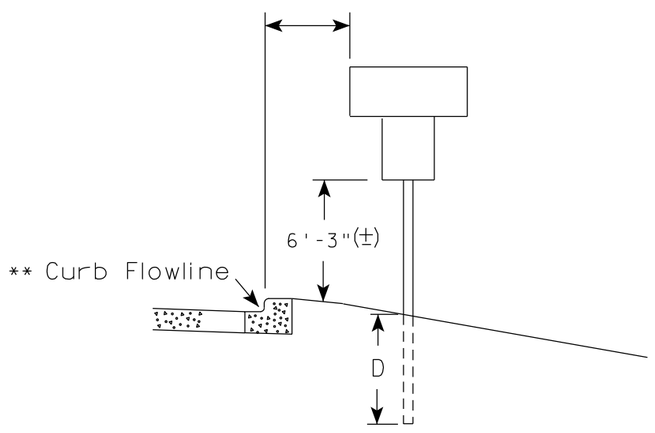
WISDOT/CADDS SHEET 42

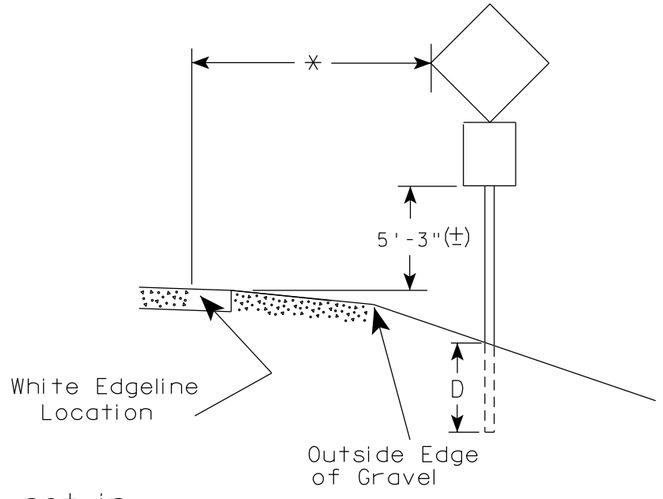
URBAN AREA



RURAL AREA (See Note 2)







** 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.

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 or behind barrier wall, see A4-10 sign plate.
   The Double Arrow sign (W12-1D) 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" (±).
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 signs mounted on traffic signal poles is 5'- 3" (±).
5. Offset distance shall be consistent with existing signs or consistent throughout length of project.
6. The (±) tolerance for mounting height is 3 inches.
7. Folding signs shall be mounted at a height of 5'-3" (±) or as directd by the Engineer.

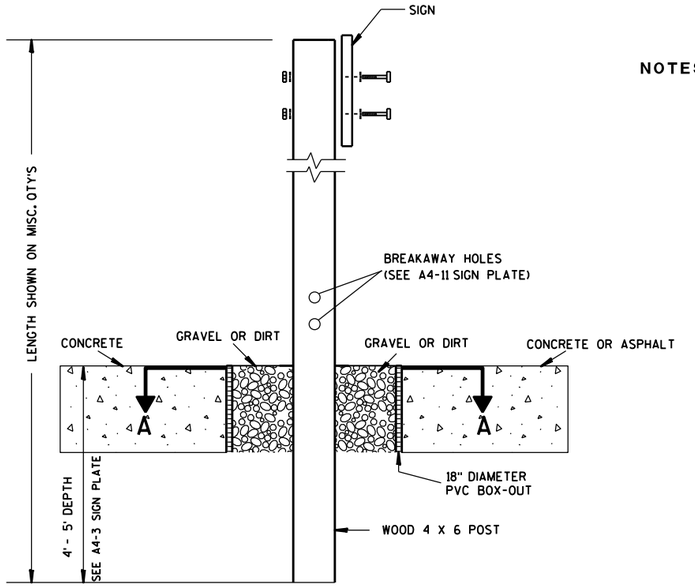
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/13/2020 PLATE NO. A4-3.22

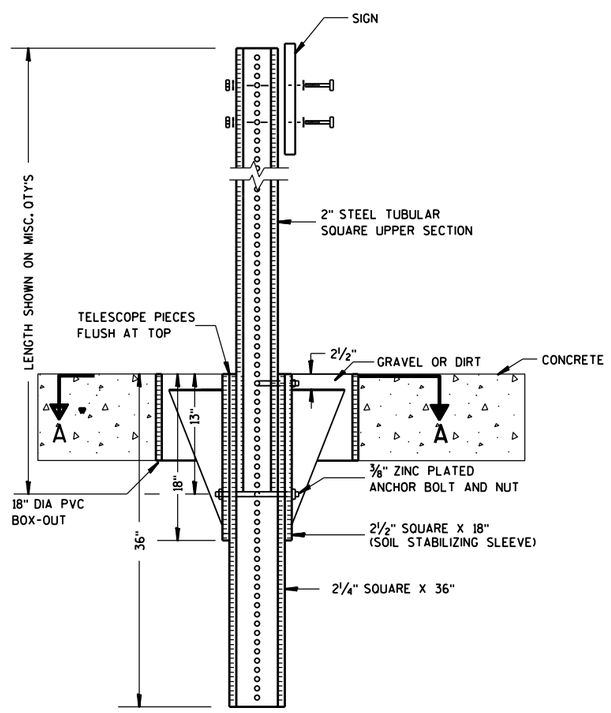
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 51	E



ELEVATION VIEW

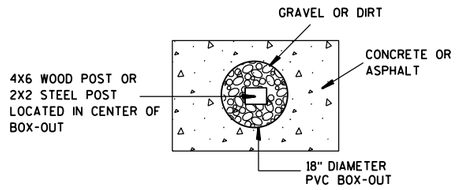
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

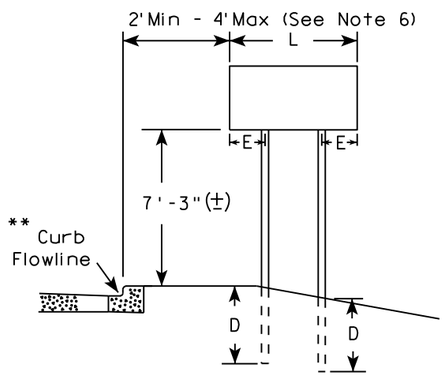
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 1/27/14 PLATE NO. A4-3B.1

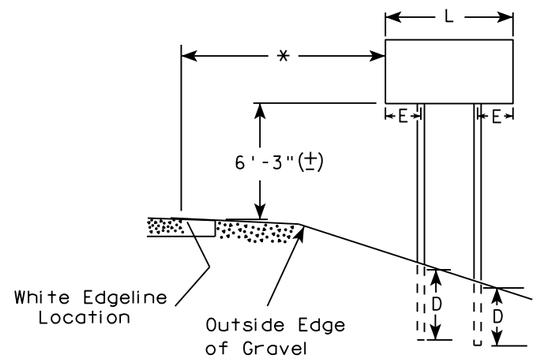
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

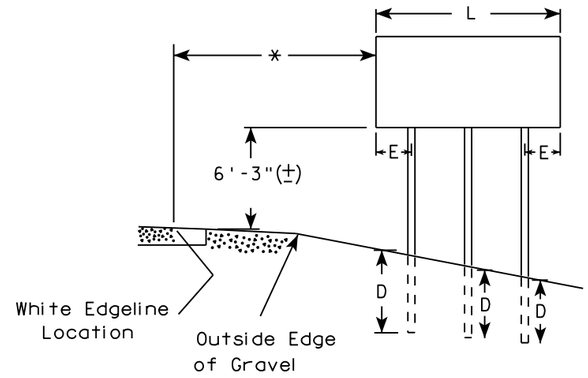
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A43B.DGN PLOT DATE : 27-JAN-2014 09:48 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000 WISDOT/CADDS SHEET 42

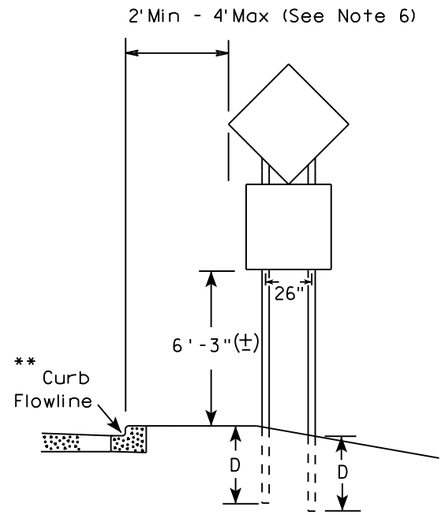
URBAN AREA



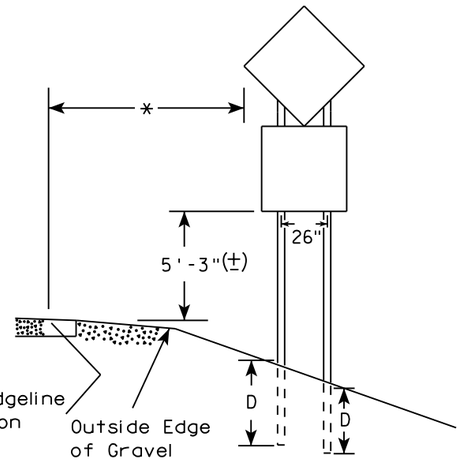
RURAL AREA (See Note 3)







48" DIAMOND WARNING SIGN



48" DIAMOND WARNING SIGN

SIGN SHAPE OTHER THAN DIAMOND (TWO POSTS REQUIRED)	
L	E
Greater than 48" Less than 60"	12"
60" to 108"	L/5

***

SIGN SHAPE OTHER THAN DIAMOND (THREE POSTS REQUIRED)	
L	E
Greater than 108" to 144"	12"

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. J-Assemblies are considered to be one sign for mounting height.
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.

POST EMBEDMENT DEPTH

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

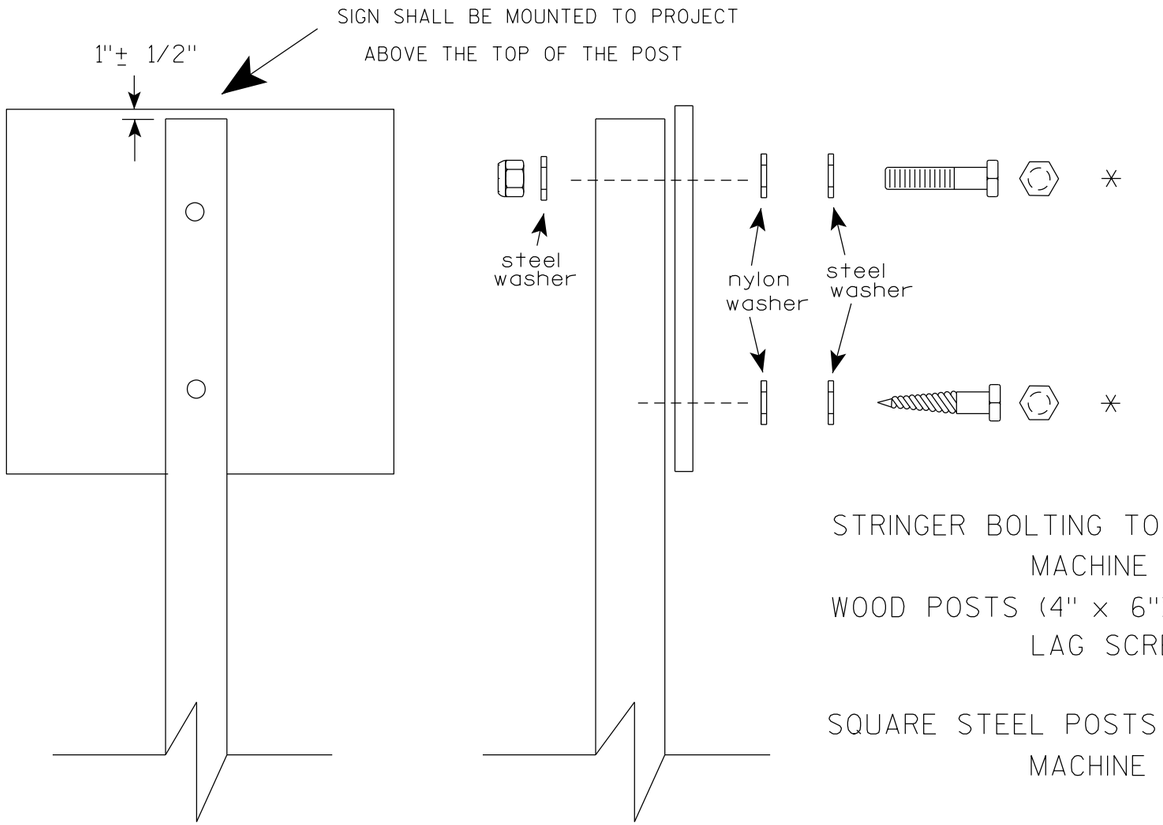
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 8/21/17 PLATE NO. A4-4.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 53	E



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 - 5/16" X 1-3/4" Length w/ lock nuts

WOOD POSTS (4" x 6")

LAG SCREWS - 3/8" X 3" (NO STRINGERS ON BACK OF SIGN)
3/8" X 4" (STRINGERS ON BACK OF SIGN)

SQUARE STEEL POSTS (2" x 2")

MACHINE BOLTS - 3/8" X 3-1/4" Length w/ nuts (NO STRINGER ON BACK OF SIGN)
3/8" X 5" Length w/ nuts (STRINGERS ON BACK OF SIGN)

RIVETS - 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 3/8" I.D. X 1/16" STEEL

1-1/4" O.D. X 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

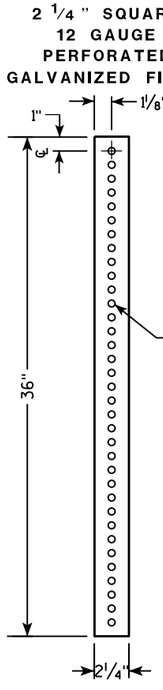
DATE 4/1/2020 PLATE NO. A4-8.9

PROJECT NO:

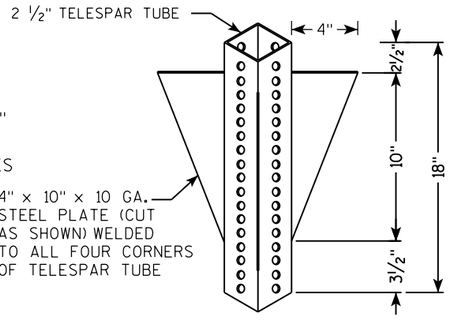
SHEET NO: 54 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

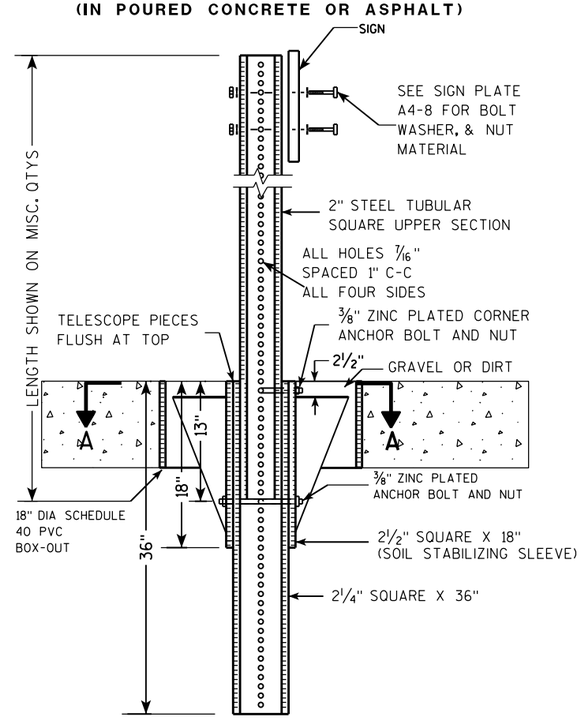
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



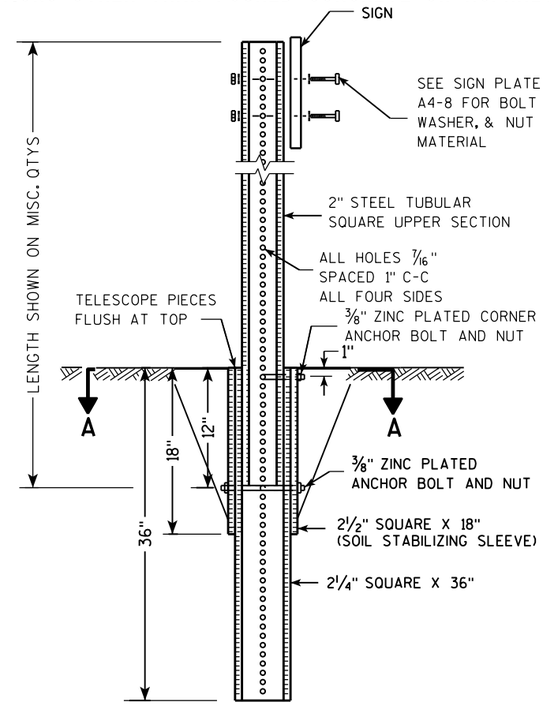
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

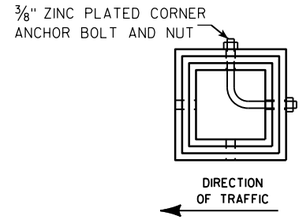


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



DETAIL OF TUBULAR STEEL SIGN POST
(IN LOCATIONS OTHER THAN POURED CONCRETE OR ASPHALT)





SECTION A-A

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

Signs wider than 3 feet or larger than 9 sq. ft shall be mounted on multiple posts (see above table).

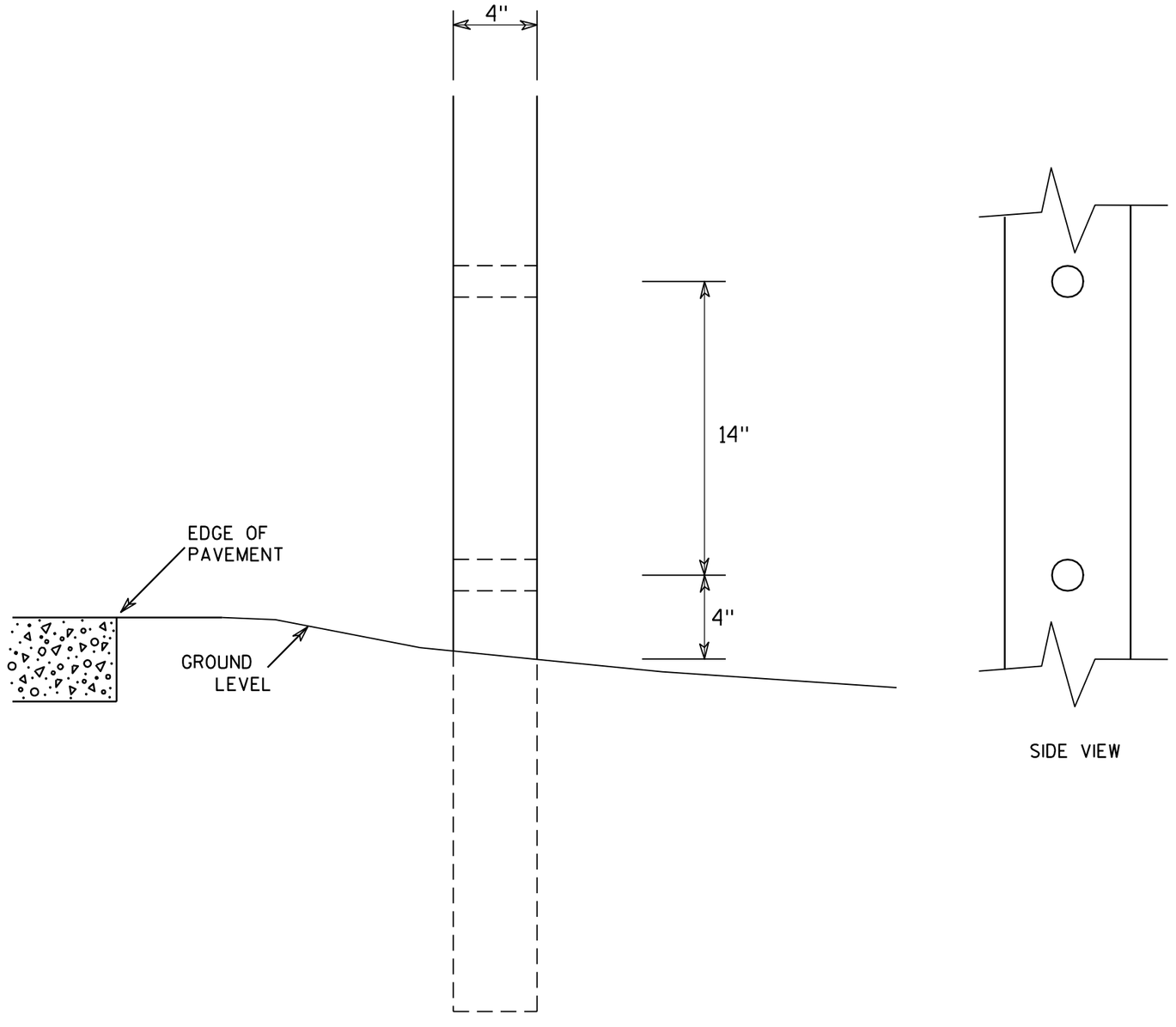
TUBULAR STEEL
SIGN POST
A4-9

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 55 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



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.

7

7

4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

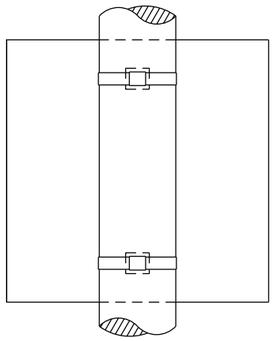
APPROVED Chester J Spang for State Traffic Engineer

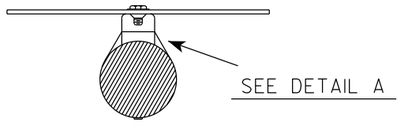
DATE 3/27/97 PLATE NO. A4-11.2

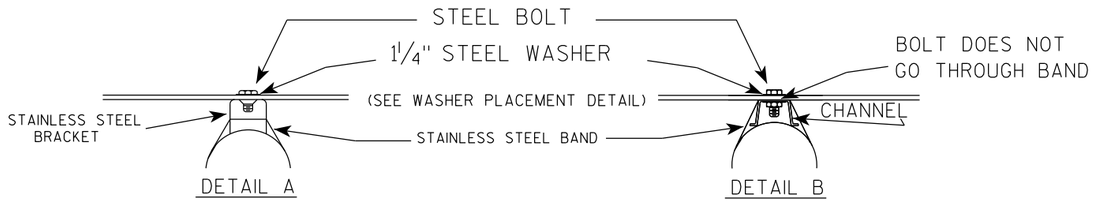
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 56	E

BANDING

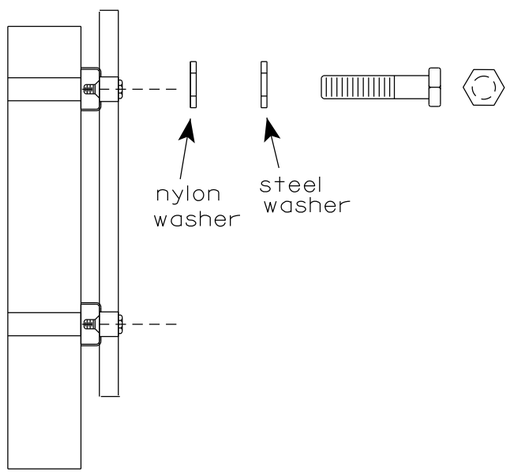
SINGLE SIGN







WASHER PLACEMENT

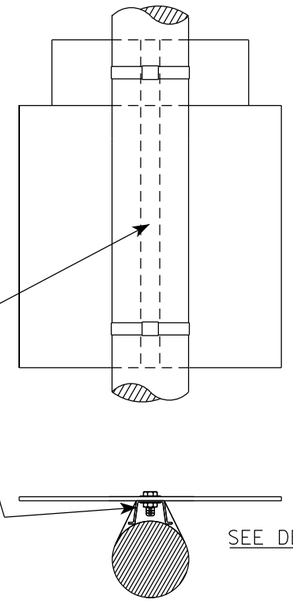


WASHERS (ALL POSTS) -
1-1/4" O.D. X 3/8" I.D. X 1/16" STEEL
1-1/4" O.D. X 3/8" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

GENERAL NOTES

1. Any sign over 3 feet in width shall use the V-Block banding method. See A5-10 standard plate.
2. Signs 3 feet or greater in height shall have three bracket bands installed. Signs less than 3 feet in height shall have two bracket bands installed.
3. Banding and assembly bracket shall be stainless steel. All bands shall be ¾" in width and 0.025" thickness.
4. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM designation: B 633, Type III, SC 3

"J" ASSEMBLY



STANDARD SIGN
SIGN BANDING DETAILS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

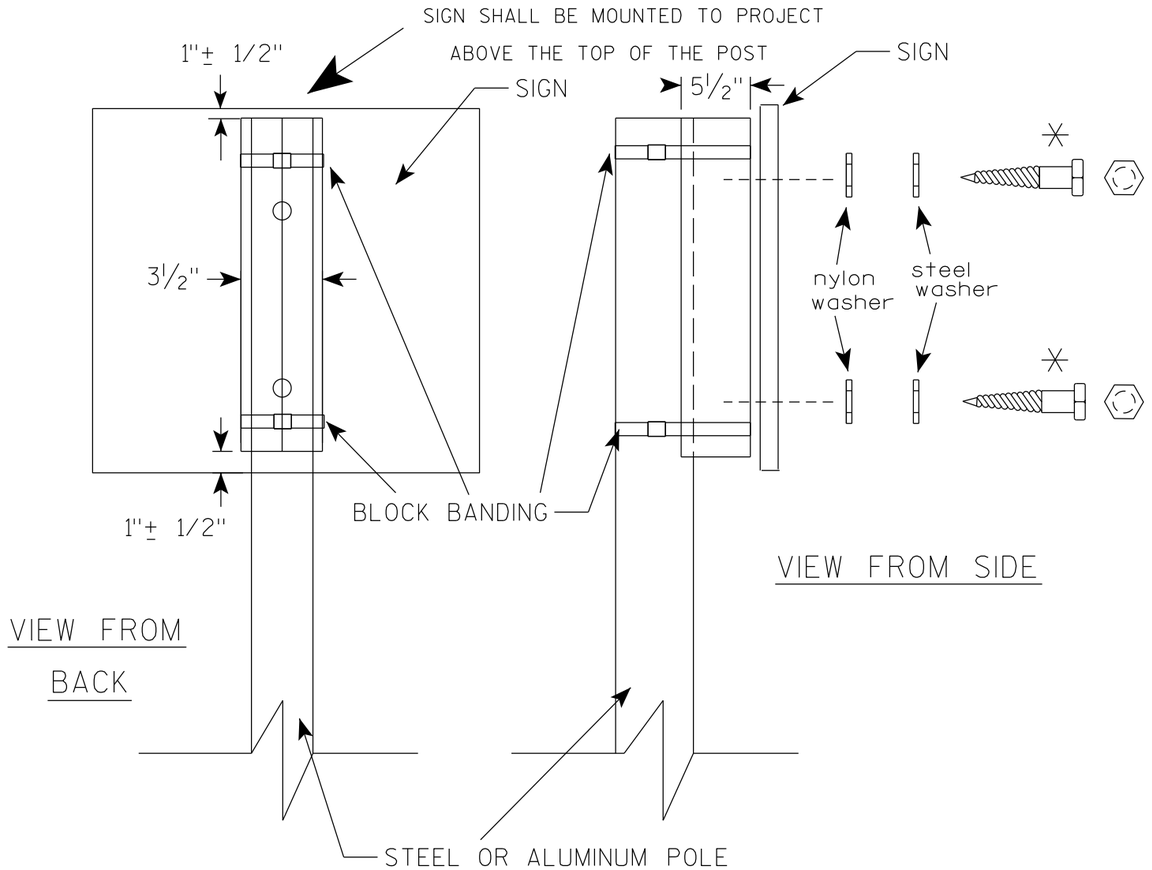
DATE 6/10/19 PLATE NO. A5-9.4

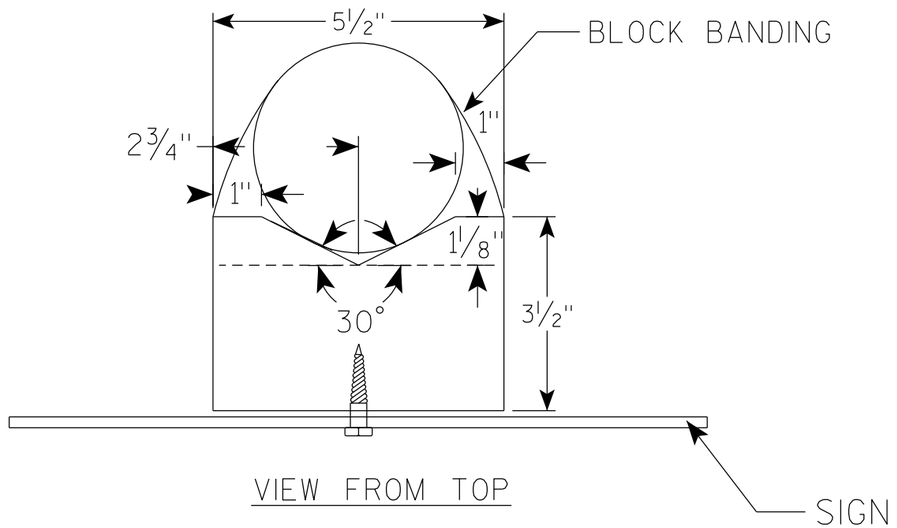
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 57	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A59.dgn PLOT DATE : 10-JUN 2019 4:10 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : $$.....plotscale.....$$ WISDOT/CADDS SHEET 42

7

7





GENERAL NOTES

1. WOOD 4"X6" POST MATERIAL SHALL CONFORM TO 507.2.2 OF THE WisDOT STANDARD SPECIFICATIONS
2. BLOCK BANDING AND CLIPS SHALL BE STAINLESS STEEL, ¾" WIDTH AND 0.025" THICKNESS
3. SIGNS 3' OR GREATER IN HEIGHT SHALL UTILIZE 3 BLOCK BANDS. SIGNS UNDER 3' IN HEIGHT SHALL UTILIZE 2 BLOCK BANDS
4. ACTUAL NUMBER OF FASTENERS PER SIGN VARIES WITH THE SIGN AREA, BUT NORNALLY THERE ARE TWO. FOR SIGNS GREATER THAN 9 S.F. 3 FASTENERS SHALL BE USED.
5. ALL SIGN MOUNTING BOLTS AND WASHERS SHALL BE EITHER:
   a. Hot dip or mechanically galvanized in accordance with ASTM Designation: A 153, Class D
   b. Electro-galvanized in accordance with ASTM Designation : B 633, TYPE III, SC 3
6. ALL BOLTS SHALL HAVE HEXAGONAL HEADS.
7. STEEL WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X 1/16"
8. NYLON WASHERS SHALL BE 1¼" O.D. X ⅜" I.D. X .080 FOR TYPE H OR TYPE F FACE SIGN

✳ LAG BOLTS SHALL BE ⅜" X 2½"

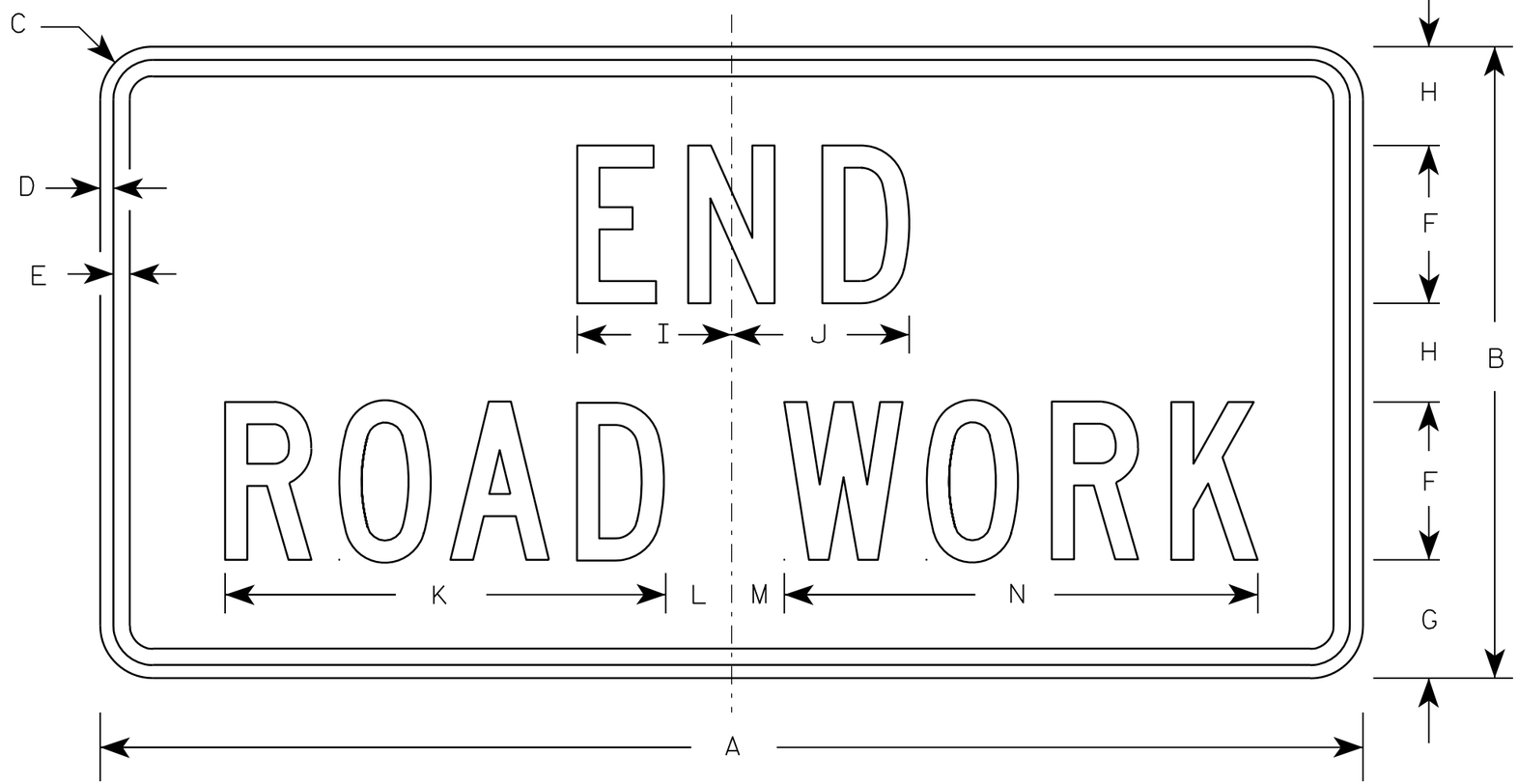
BLOCK BANDING DETAIL (V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
For State Traffic Engineer

DATE 6/10/19 PLATE NO. A5-10.2

PROJECT NO: | SHEET NO: 58 | E



G20-2A

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 - 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.

Metric equivalent for this sign is:

SIZE	
1	900 mm X 450 mm
2	1200 mm X 600 mm
3	1200 mm X 600 mm
4	1200 mm X 600 mm
5	1200 mm X 600 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 m2
1	36	18	1 1/8	3/8	1/2	4	3 3/4	2 1/2	4 1/8	4 1/8	11 1/8	2	1	12 1/8													4.5	0.41
2	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
3	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
4	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72
5	48	24	1 1/2	1/2	5/8	6	4 1/2	3 3/4	5 7/8	6 3/4	16 3/4	2 1/2	1 3/4	18 1/2													8.0	0.72

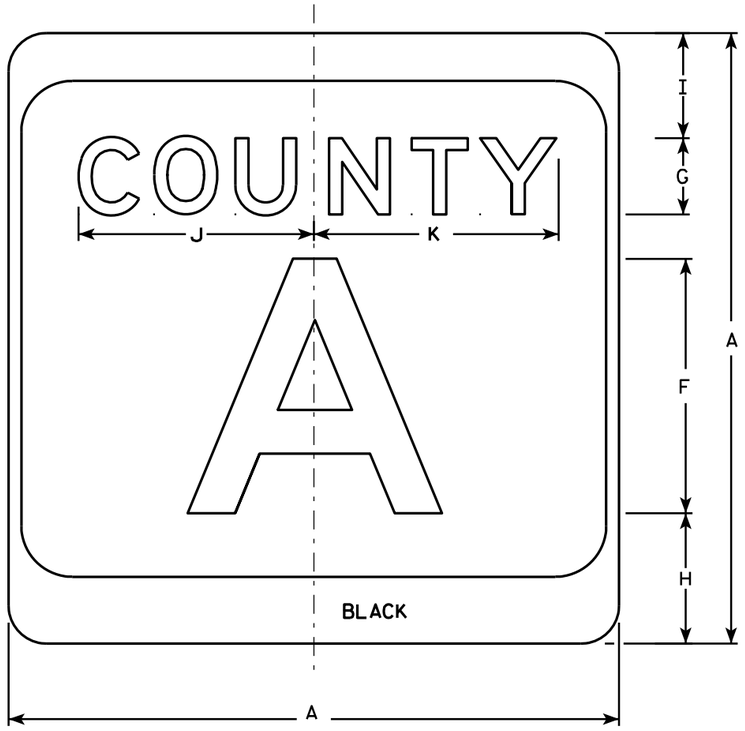
STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

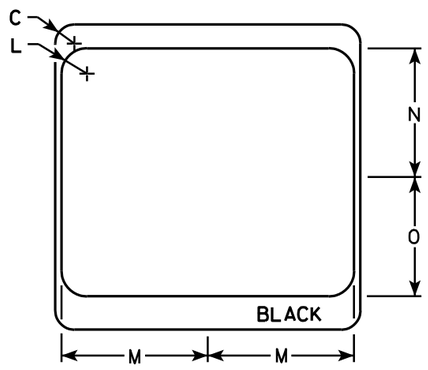
APPROVED Matthew R Rauch
for State Traffic Engineer

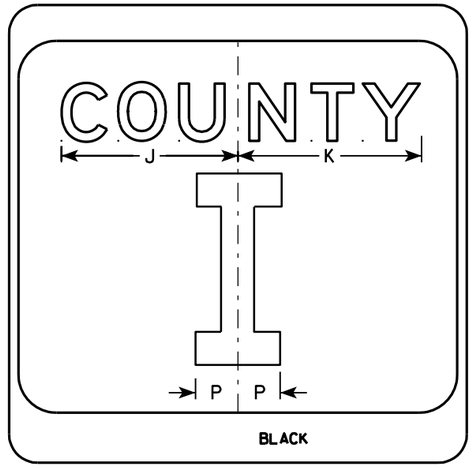
DATE 9/30/09 PLATE NO. G20-2A.8

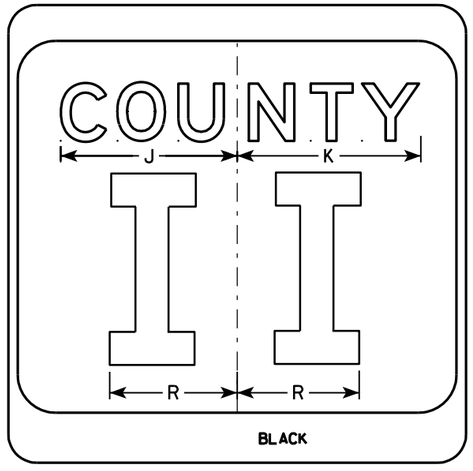
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 59	E



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

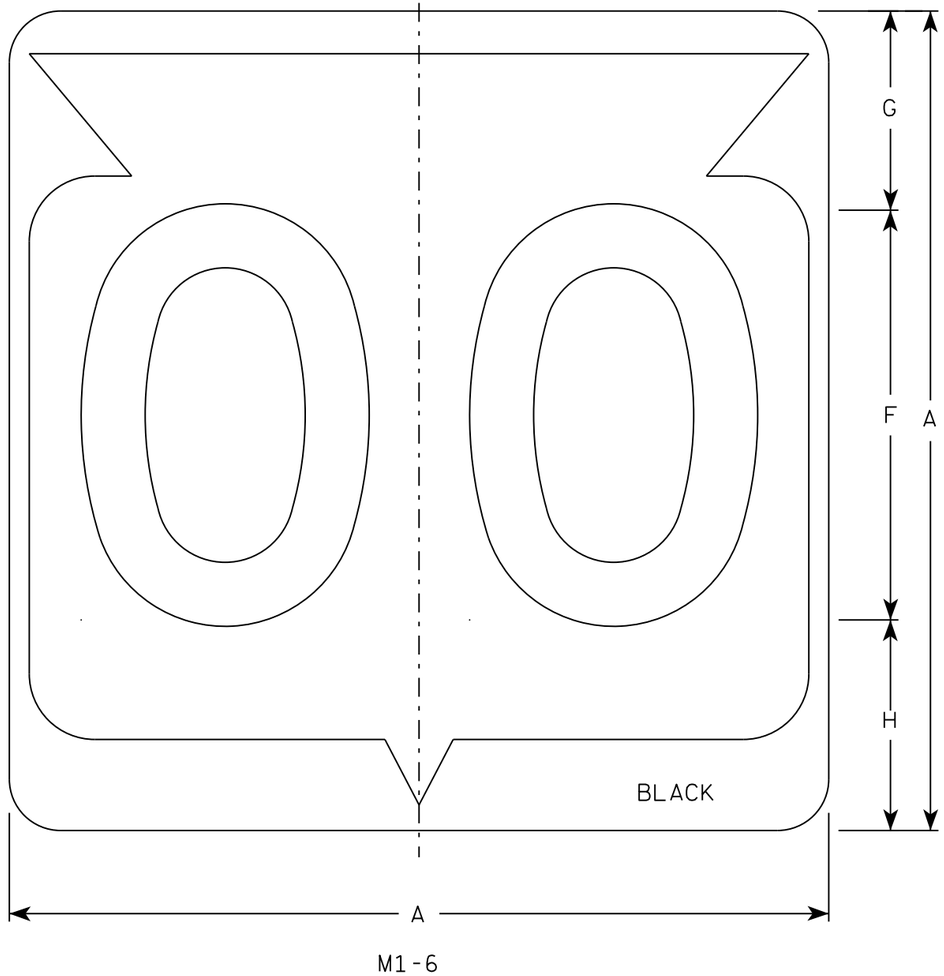
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

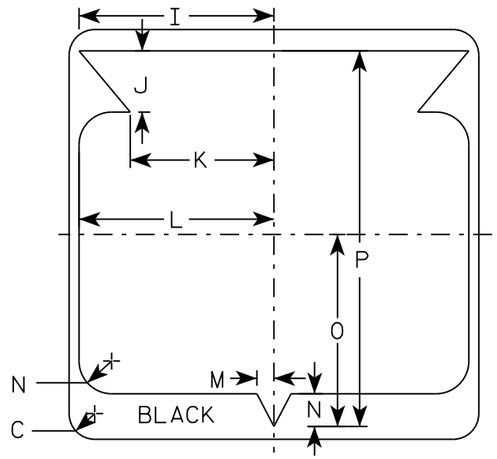
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 60	E



M1-6

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - White
   Message - Black
3. Message Series - D except 3 number signs 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.



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			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
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
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
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

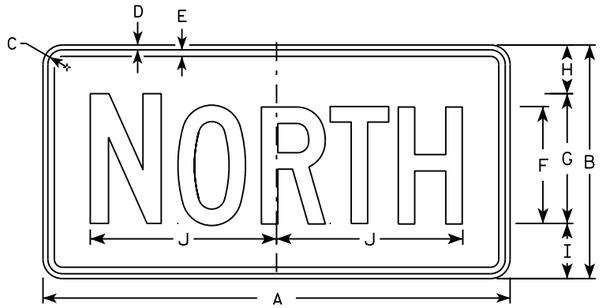
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

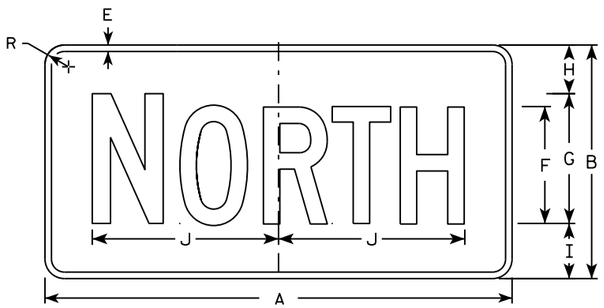
APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/16/18 PLATE NO. M1-6.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 61	E



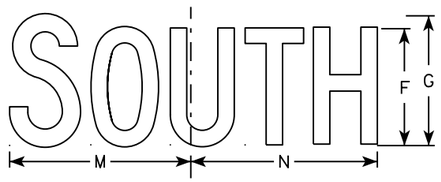
M3-1
MM3-1
MP3-1



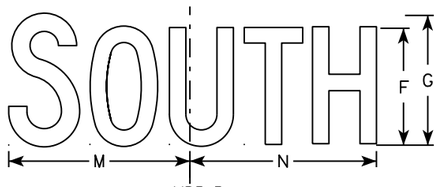
MB3-1
MK3-1
MN3-1

M3-2
MM3-2
MP3-2

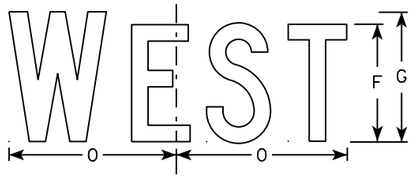
MB3-2
MK3-2
MN3-2



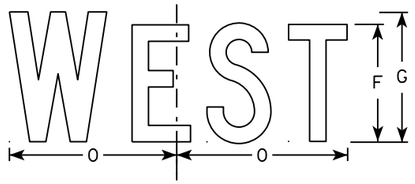
M3-3
MM3-3
MP3-3



MB3-3
MK3-3
MN3-3



M3-4
MM3-4
MP3-4



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 thur M3-4
SERIES

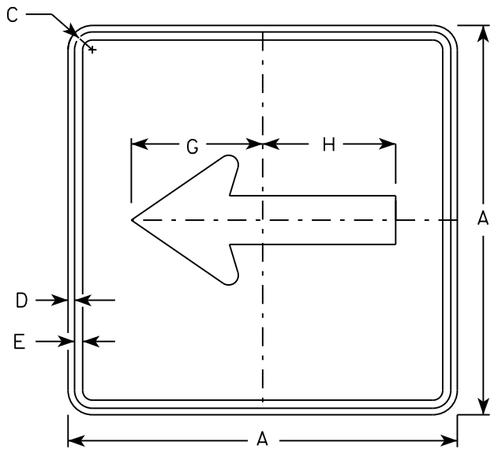
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew P Rauch for State Traffic Engineer

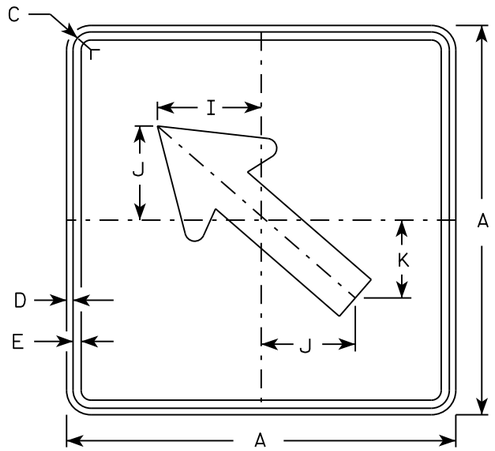
DATE 10/15/15 PLATE NO M3-1.14

PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M31.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



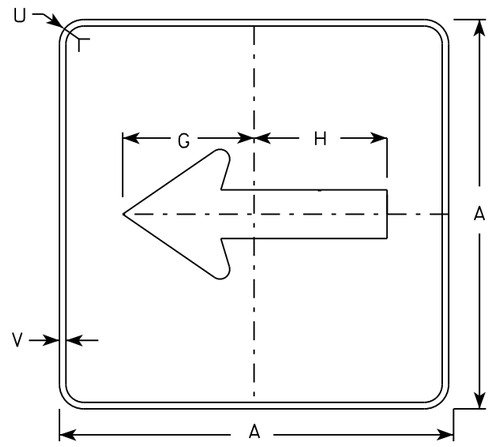
M6-1
MM6-1
MO6-1
MP6-1



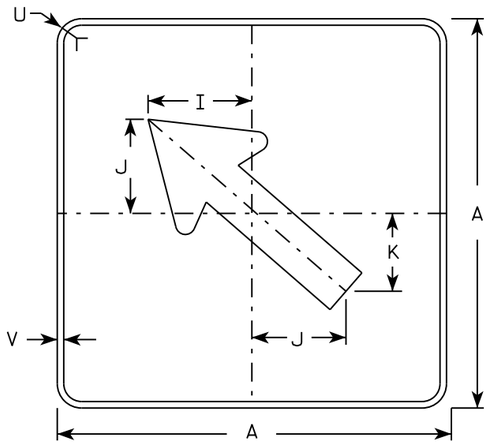
M6-2
MM6-2
MO6-2
MP6-2

NOTES

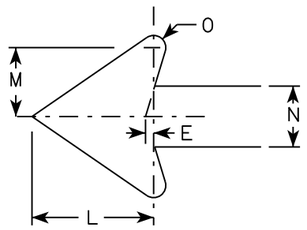
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background - 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
   MO6-1 and MO6-2 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



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



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



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

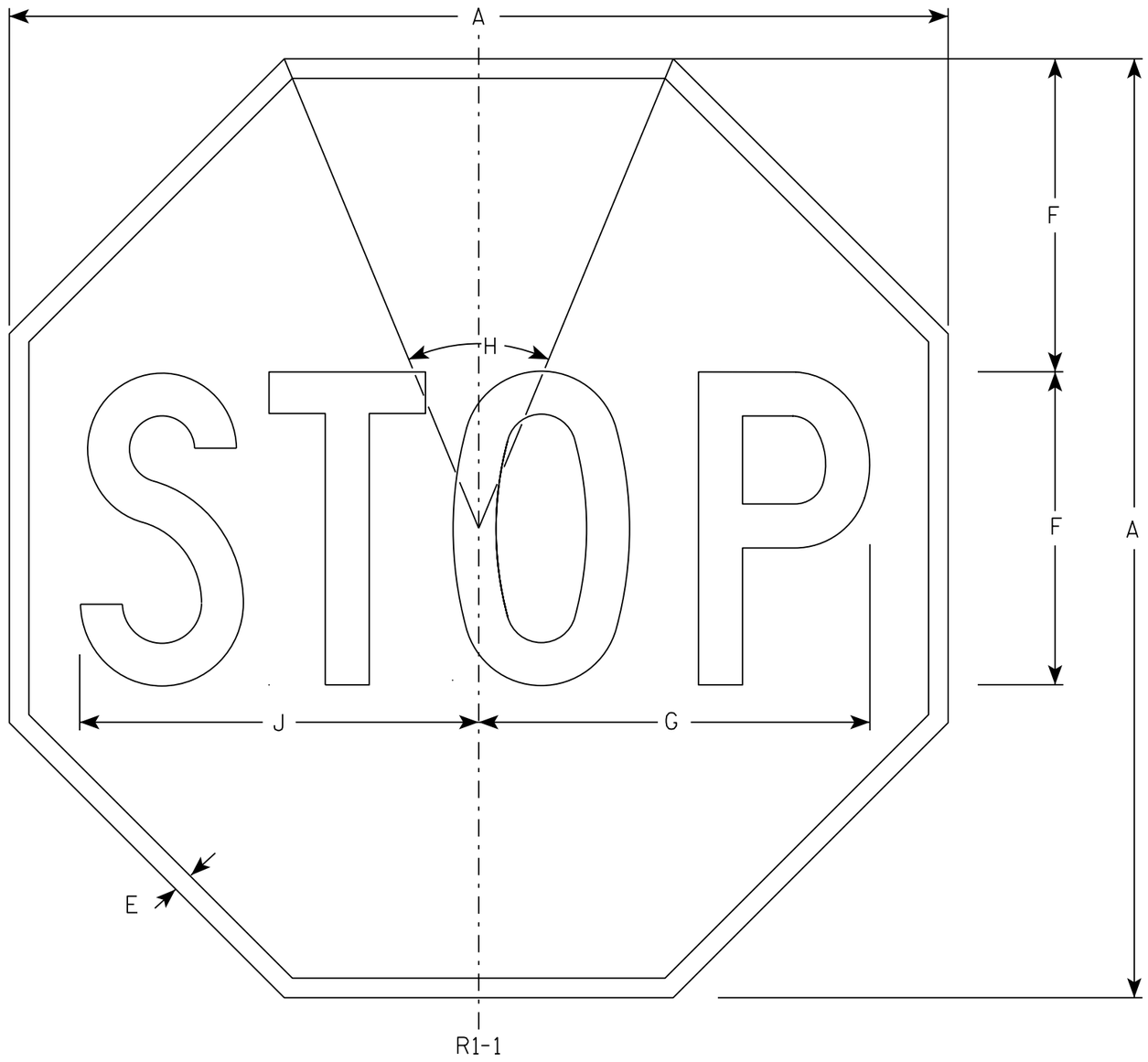
STANDARD SIGN
M6-1 & M6-2
SERIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 63 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E



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

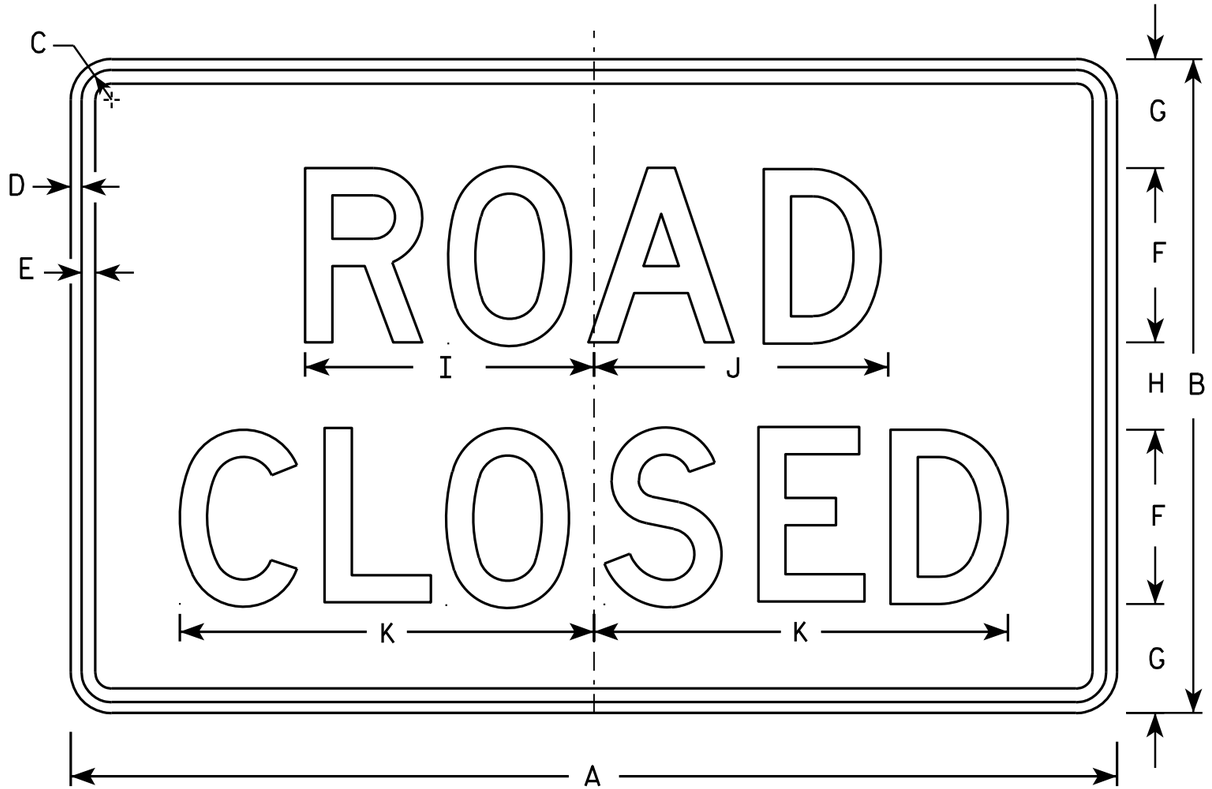
STANDARD SIGN
R1-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/12/15 PLATE NO. R1-1.13

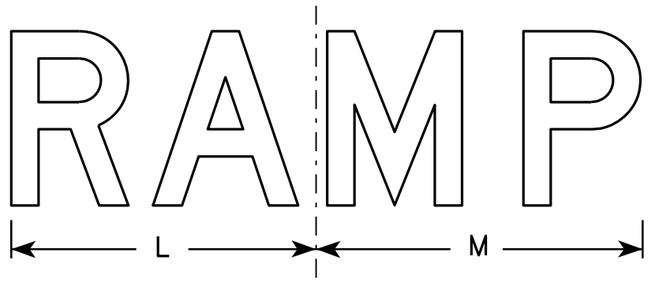
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 64	E



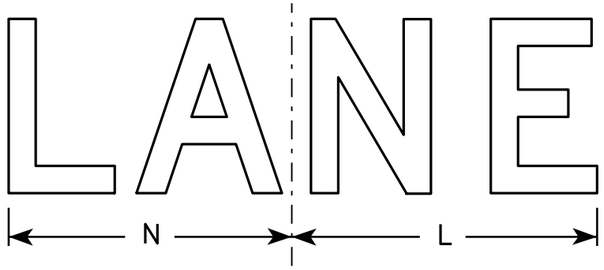
R11-2

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. Modify the message as required.



R11-2R



R11-2L

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	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
2M	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
3	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
4	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0
5	48	30	1 3/8	1/2	5/8	8	5	4	13 1/4	13 1/2	19	14	15	13													10.0

STANDARD SIGN
R11-2

WISCONSIN DEPT OF TRANSPORTATION

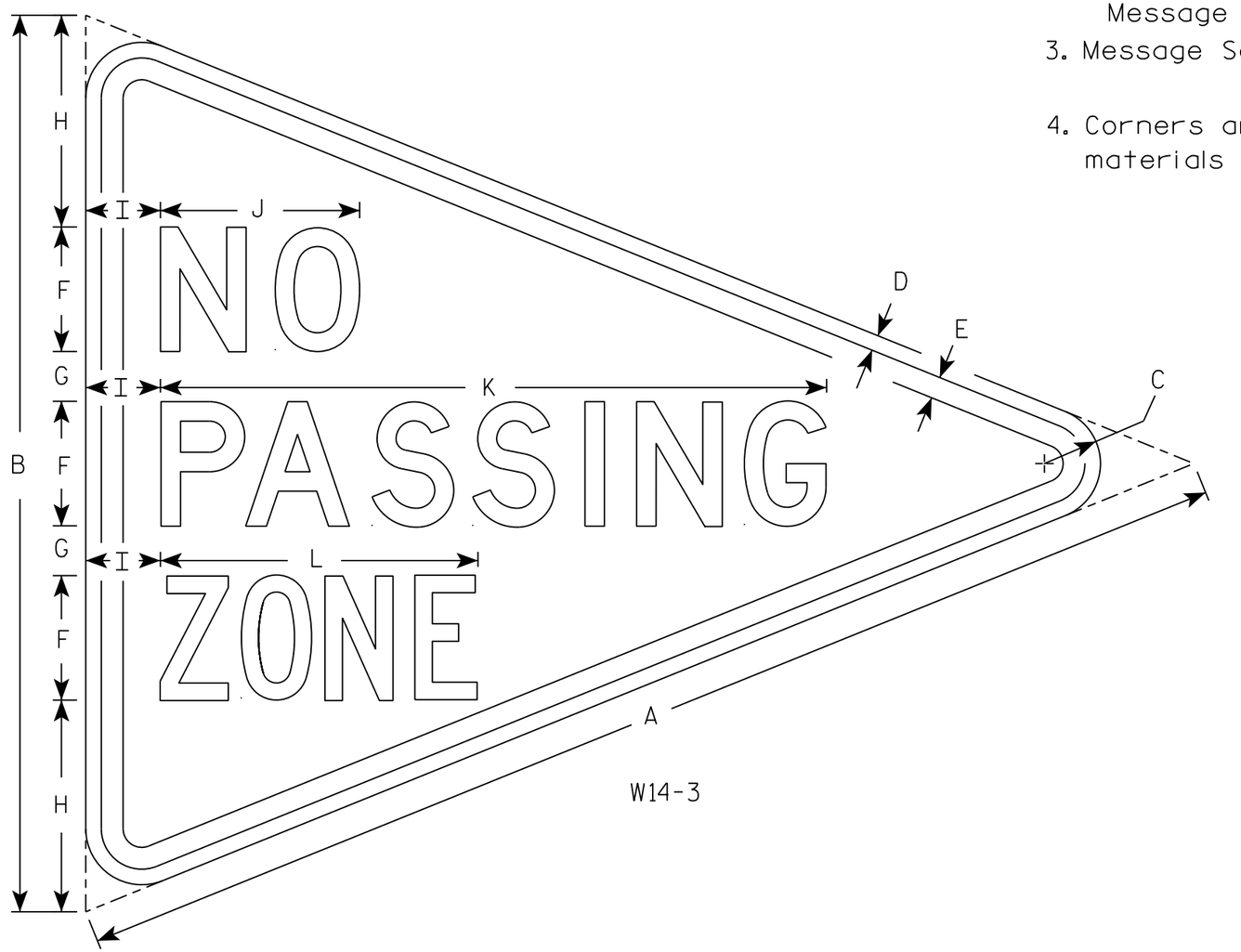
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 4/1/11 PLATE NO. R11-2.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 65	E

NOTES

1. Sign is Type II- Type F Reflective
2. Color:
   Background - Yellow
   Message - Black
3. Message Series - Lines 1 and 2 are Series D.
   Line 3 is series C.
4. Corners and borders shall be rounded on all base materials for this sign.



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															5.56
2M																											
3																											
4																											
5																											

STANDARD SIGN
W14-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

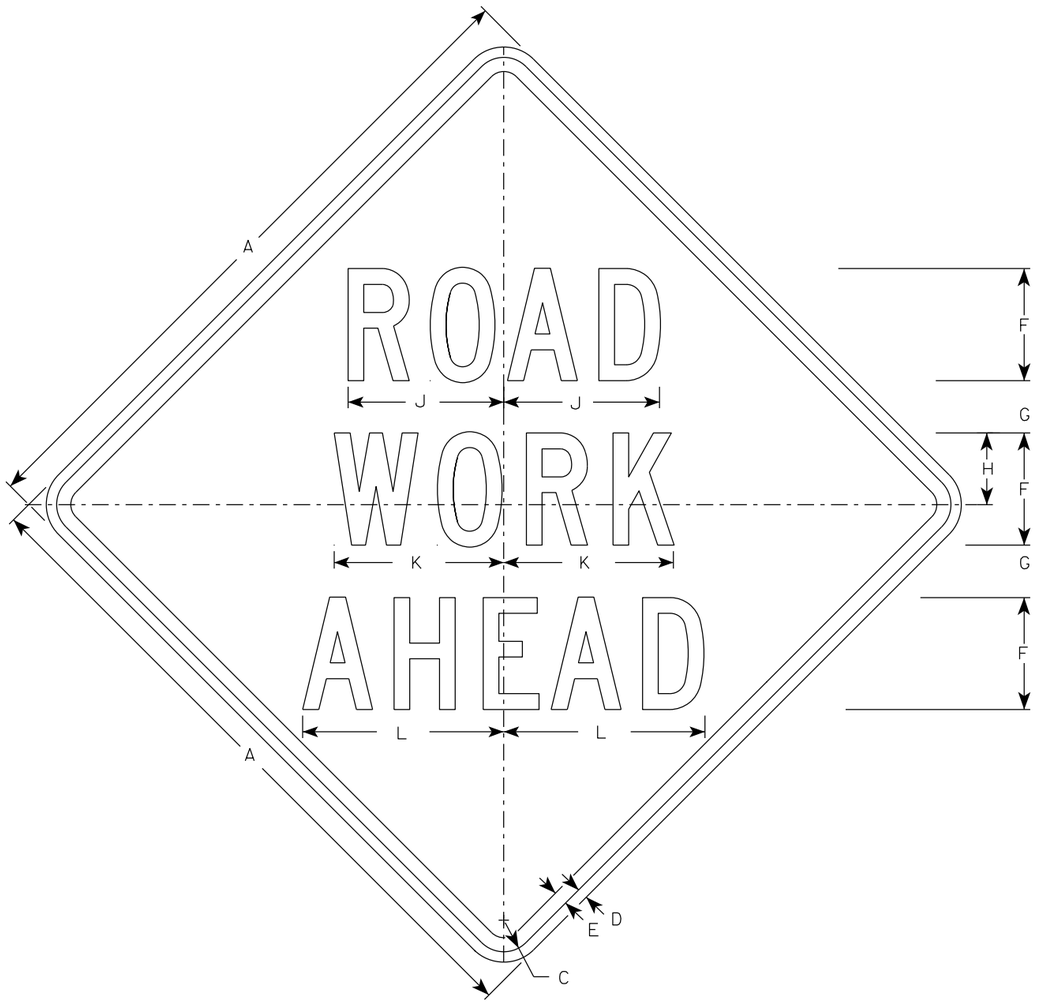
DATE 3/21/17 PLATE NO. W14-3.10

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 66	E

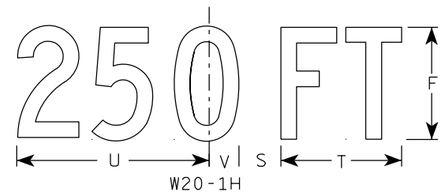
7

NOTES

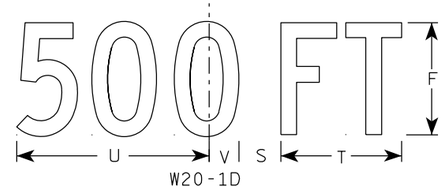
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



W20-1A

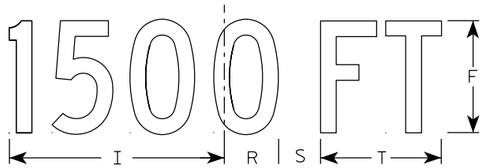


W20-1H

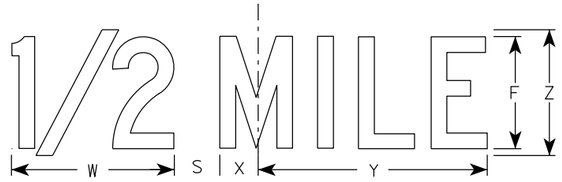


W20-1D

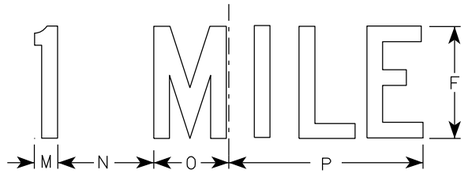
W20-1C



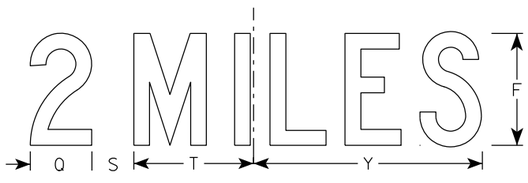
W20-1B



W20-1G



W20-1F



W20-1E

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	2 5/8	3 1/4	10 1/8	7	7 5/8	8 7/8	1 1/8	4 1/2	3 1/2	9	3 1/4	2 1/2	2 1/4	5 5/8	9	1 3/8	8	1 3/4	10 3/4	6	9.0
2S	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
2M	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
3	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
4	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0
5	48		2 1/4	3/4	1	8	3 3/4	5 1/8	15 3/8	11 1/8	12 1/8	14 3/8	1 5/8	6 7/8	5 3/8	13 7/8	4 3/8	3 7/8	3	8 5/8	13 3/4	2 1/8	11 7/8	2 3/4	16 3/8	9	16.0

STANDARD SIGN
W20-1A, B, C, D, E, F, G & H

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/25/2020 PLATE NO. W20-1.11

PROJECT NO:

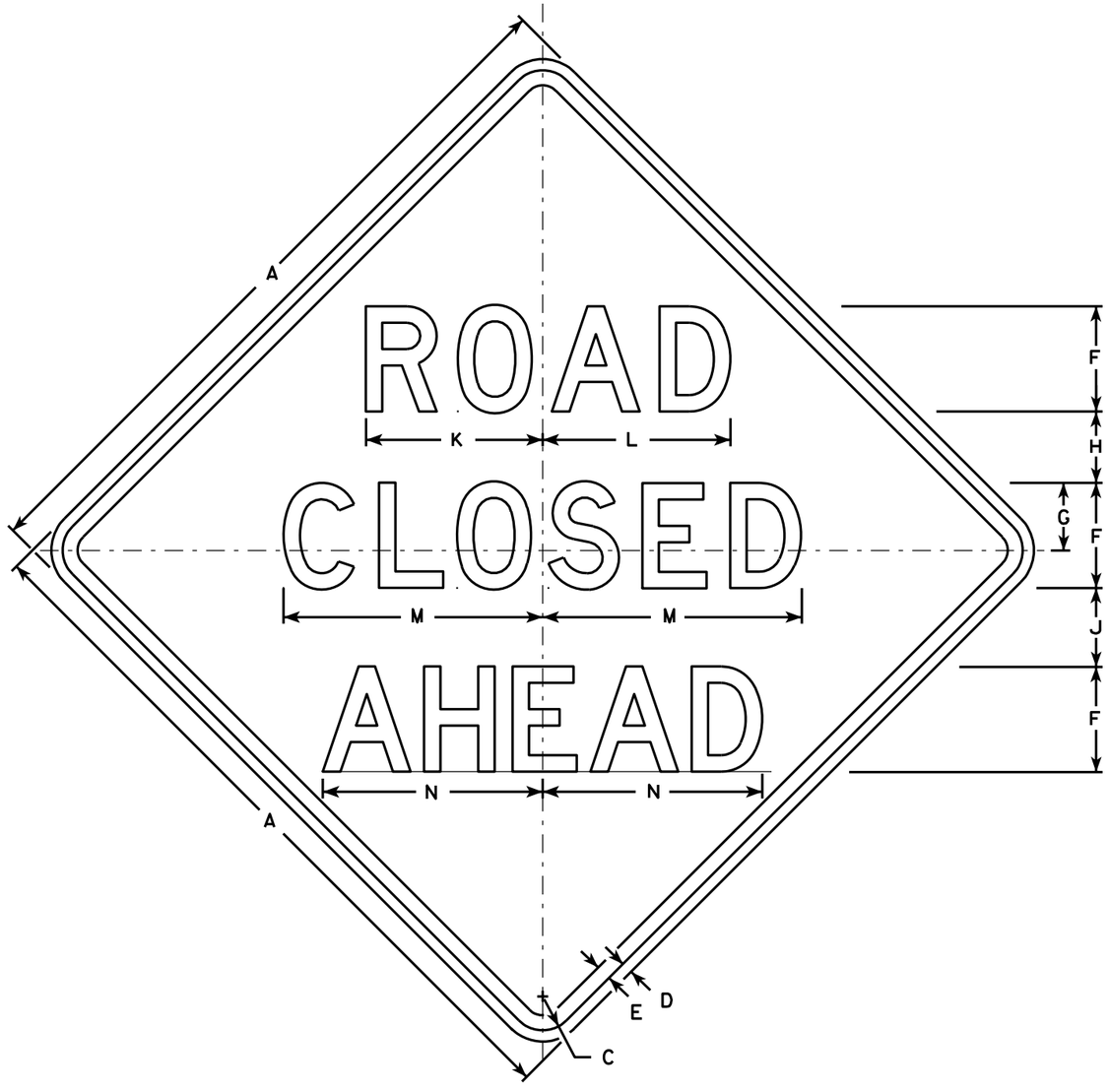
SHEET NO: 67 E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W201.DGN PLOT DATE : 25-MARCH-2020 PLOT BY : dotc4c

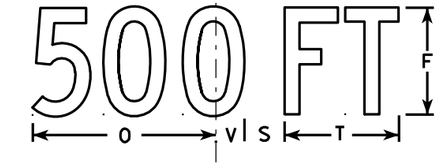
WISDOT/CADDS SHEET 42

7

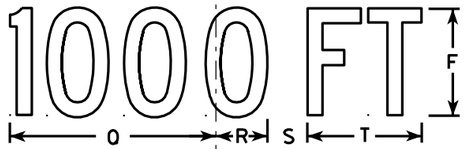
7



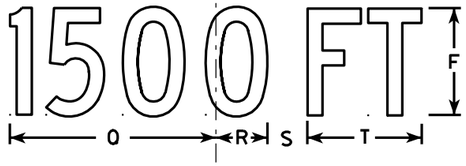
W20-3A



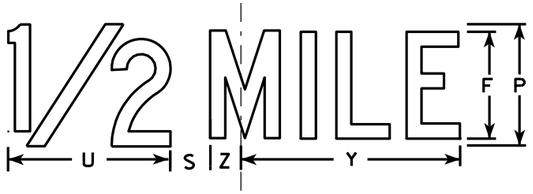
W20-3D



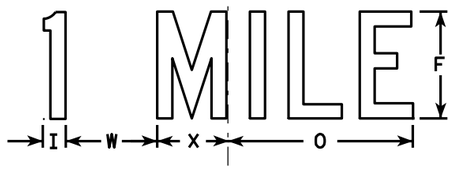
W20-3C



W20-3B



W20-3G



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

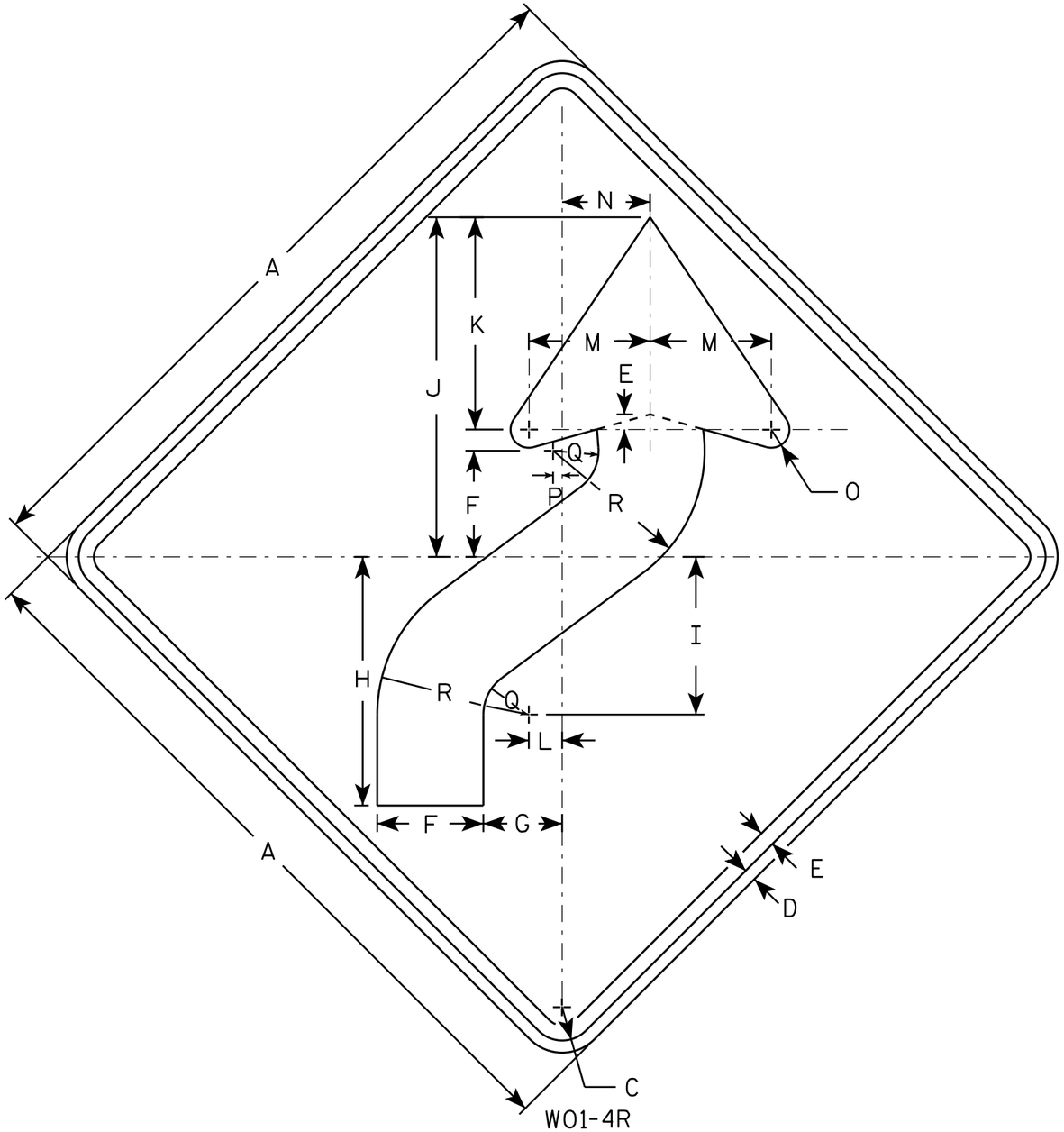
STANDARD SIGN
W20-3A, B, C, D, F & G

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: 68 | E

FILE NAME : C:\Users\PROJECTS\tr_stdplate\W203.DGN PLOT DATE : 18-MAR-2011 12:08 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 9.931739:1.000000
WISDOT/CADDS SHEET 42



WO1-4R

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. 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. WO1-4L is the same as WO1-4R 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	36		1 5/8	5/8	3/4	5 1/4	4	12 3/8	7 7/8	16 7/8	10 1/2	1 5/8	6	4 1/2	1	1/2	2 1/4	7 1/2									9.0
2S	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
2M	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
3	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
4	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0
5	48		2 1/4	3/4	1	7	5 1/4	16 1/2	10 1/2	22 1/2	14	2 1/4	8	6	1 1/4	5/8	3	10									16.0

STANDARD SIGN
WO1-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO WO1-4.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

EARTHWORK-STH 27

STATION	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) CUT NOTE 1	INCREMENTAL VOL (CY) FILL NOTE 2	INCREMENTAL VOL (CY) EXPANDED FILL FACTOR 1.30 NOTE 3	CUMMULATIVE VOLUME (CY) CUT 1.00 NOTE 1	CUMMULATIVE VOLUME (CY) FILL NOTE 2	CUMMULATIVE VOLUME (CY) EXPANDED FILL FACTOR 1.30 NOTE 3	CUMMULATIVE VOLUME (CY) MASS ORDINATE NOTE 4
140+56	0	0	0	0	0	0	0	0	0
141+00	33	3	26	14	18	26	14	18	8
142+00	50	14	153	62	81	179	76	99	80
143+00	52	22	189	96	125	368	172	224	144
144+00	38	46	168	155	202	536	327	425	111
145+00	30	126	127	349	454	663	676	879	-216
146+00	33	105	117	461	599	780	1137	1478	-698
147+00	33	89	122	390	507	902	1527	1985	-1083
148+00	32	90	121	363	472	1023	1890	2457	-1434
149+00	52	0	156	198	257	1179	2088	2714	-1535
150+00	40	107	170	229	298	1349	2317	3012	-1663
151+00	41	87	149	390	507	1498	2707	3519	-2021
152+00	40	89	150	357	464	1648	3064	3983	-2335
153+00	38	95	145	372	484	1793	3436	4467	-2674
154+00	36	107	138	405	527	1931	3841	4993	-3062
155+00	36	82	135	380	494	2066	4221	5487	-3421
156+00	37	51	135	278	361	2201	4499	5849	-3648
157+00	36	4	135	133	173	2336	4632	6022	-3686
157+88	0	0	59	49	64	2395	4681	6085	-3690
COLUMN SUBTOTALS =			2395	4681	6085				

EARTHWORK-'S' LINE (SAUGSTAD ROAD)

STATION	AREA (SF) CUT	AREA (SF) FILL	INCREMENTAL VOL (CY) CUT NOTE 1	INCREMENTAL VOL (CY) FILL NOTE 2	INCREMENTAL VOL (CY) EXPANDED FILL FACTOR 1.30 NOTE 3	CUMMULATIVE VOLUME (CY) CUT 1.00 NOTE 1	CUMMULATIVE VOLUME (CY) FILL NOTE 2	CUMMULATIVE VOLUME (CY) EXPANDED FILL FACTOR 1.30 NOTE 3	CUMMULATIVE VOLUME (CY) MASS ORDINATE NOTE 4
147'S'+50	0	0	0	0	0	0	0	0	0
148'S'+00	0	9	0	17	22	0	17	22	-22
148'S'+33	0	23	0	26	34	0	43	56	-56
148'S'+50	89	38	27	23	30	27	66	86	-59
148'S'+94	98	42	153	73	84	180	139	170	10
COLUMN SUBTOTALS =			180	139	170				
PROJECT TOTALS=			2575	4820	6255	2575	4820	6255	-3680

NOTES:	
1 - CUT	CUT INCLUDES SALVAGED/UNUSABLE MATERIAL
2 - FILL	DOES NOT INCLUDE UNUSABLE PAVEMENT EXC VOLUME
3 - EXPANDED FILL FACTOR	EXPANDED FILL FACTOR = 1.30 : EXPANDED FILL = (UNEXPANDED FILL * 1.30)
4 - MASS ORDINATE	MASS ORDINATE = (CUT - EXPANDED FILL)

9

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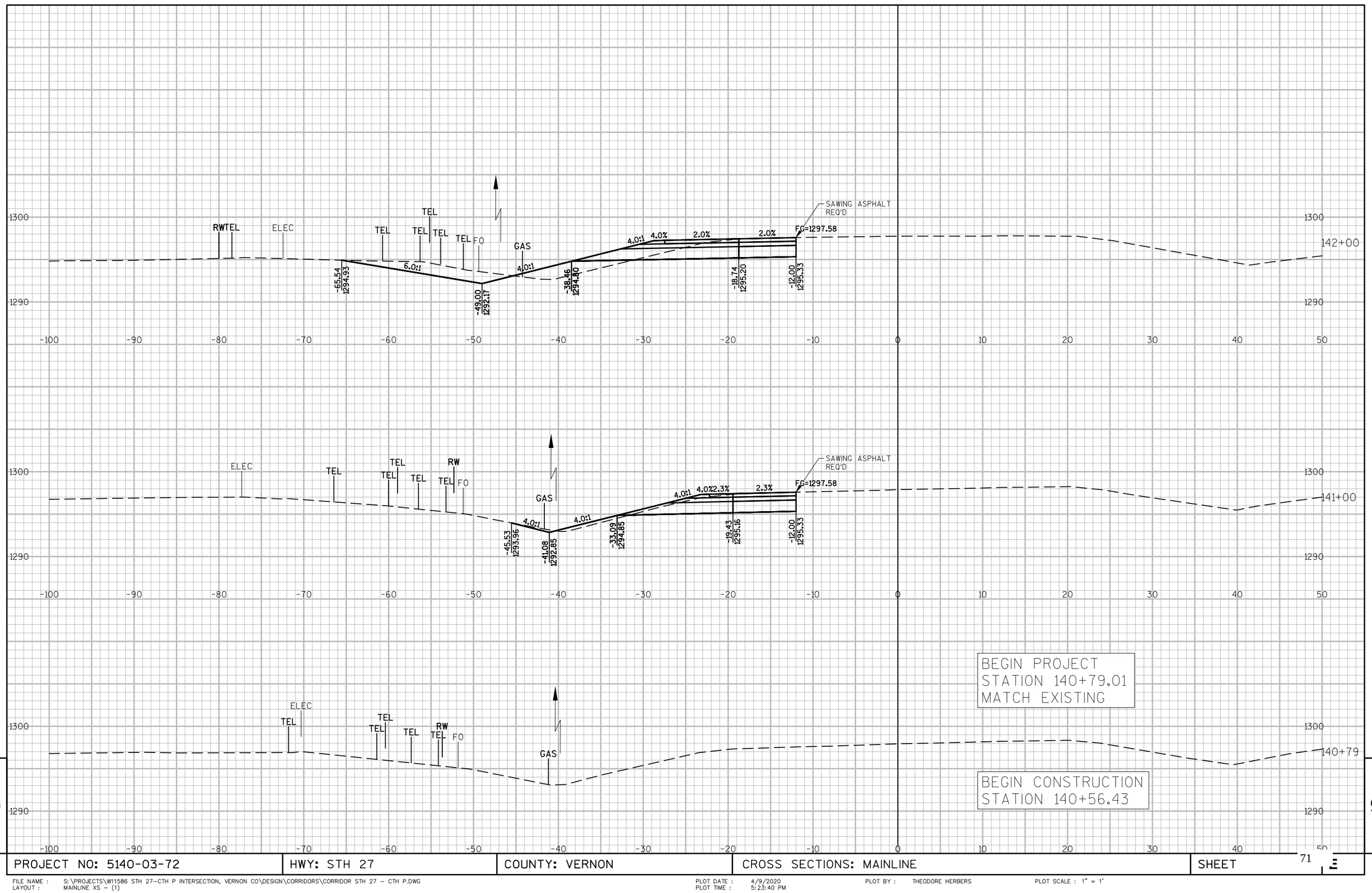
PROJECT NO: 5140-03-72 | HWY: STH 27 | COUNTY: VERNON | EARTHWORK | SHEET 70 | E

FILE NAME : S:\PROJECTS\W11586 STH 27-CTH P INTERSECTION, VERNON
LAYOUT : C9\SHEETSPLAN\DETAILS\EARTHWORK.DWG

PLOT DATE : 4/14/2020
PLOT TIME : 10:22:55 AM

PLOT BY : THEODORE HERBERS

PLOT SCALE : 1" = 1'



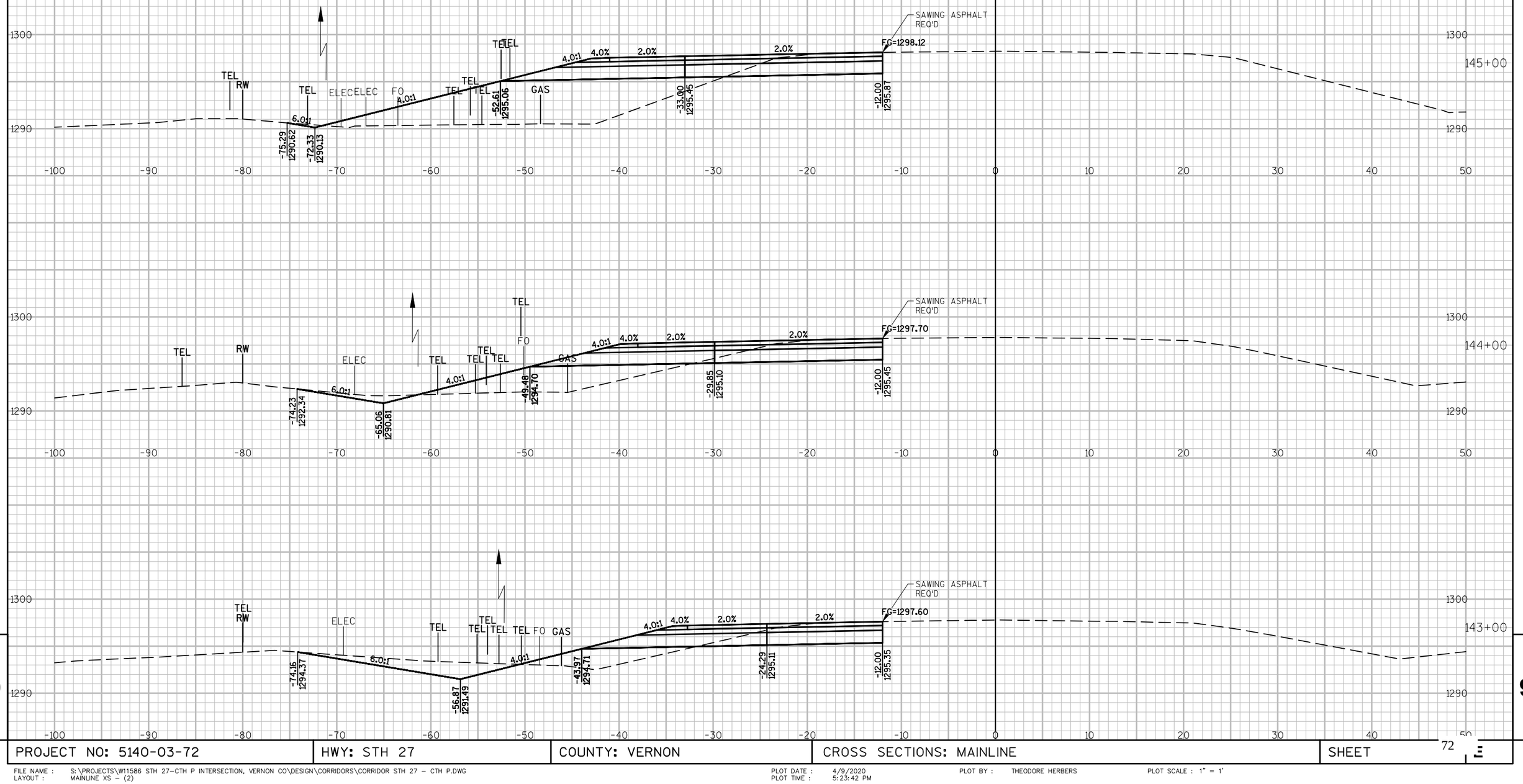
PROJECT NO: 5140-03-72	HWY: STH 27	COUNTY: VERNON	CROSS SECTIONS: MAINLINE	SHEET

FILE NAME : S:\PROJECTS\W11586 STH 27-CTH P INTERSECTION, VERNON CO\DESIGN\CORRIDORS\CORRIDOR STH 27 - CTH P.DWG
LAYOUT : MAINLINE XS - (1)

PLOT DATE : 4/9/2020
PLOT TIME : 5:23:40 PM

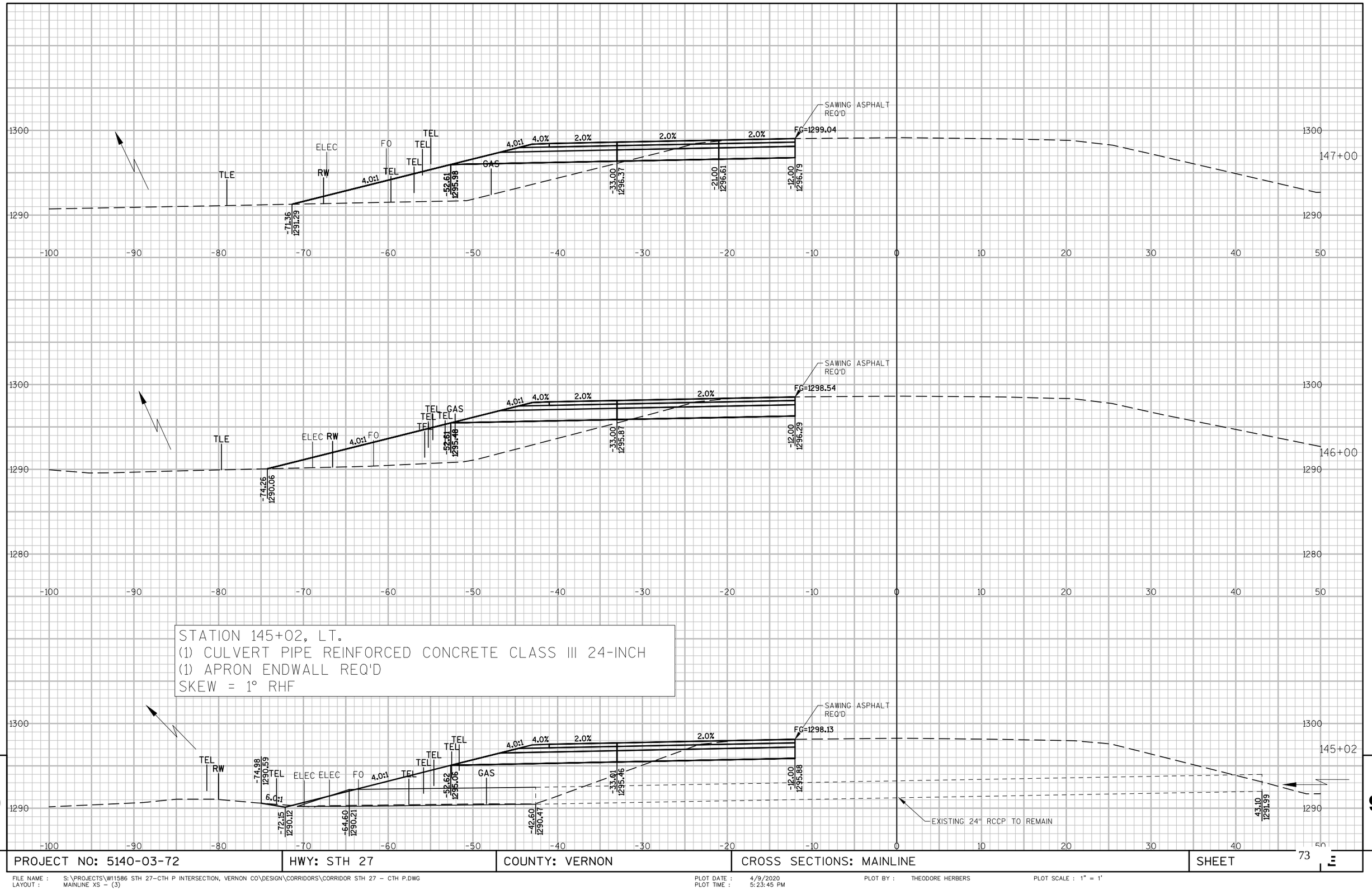
PLOT BY : THEODORE HERBERS

PLOT SCALE : 1" = 1'



PROJECT NO: 5140-03-72	HWY: STH 27	COUNTY: VERNON	CROSS SECTIONS: MAINLINE	SHEET

FILE NAME : S:\PROJECTS\W11586 STH 27-CTH P INTERSECTION, VERNON CO\DESIGN\CORRIDORS\CORRIDOR STH 27 - CTH P.DWG
LAYOUT : MAINLINE XS - (2)
PLOT DATE : 4/9/2020
PLOT TIME : 5:23:42 PM
PLOT BY : THEODORE HERBERS
PLOT SCALE : 1" = 1'



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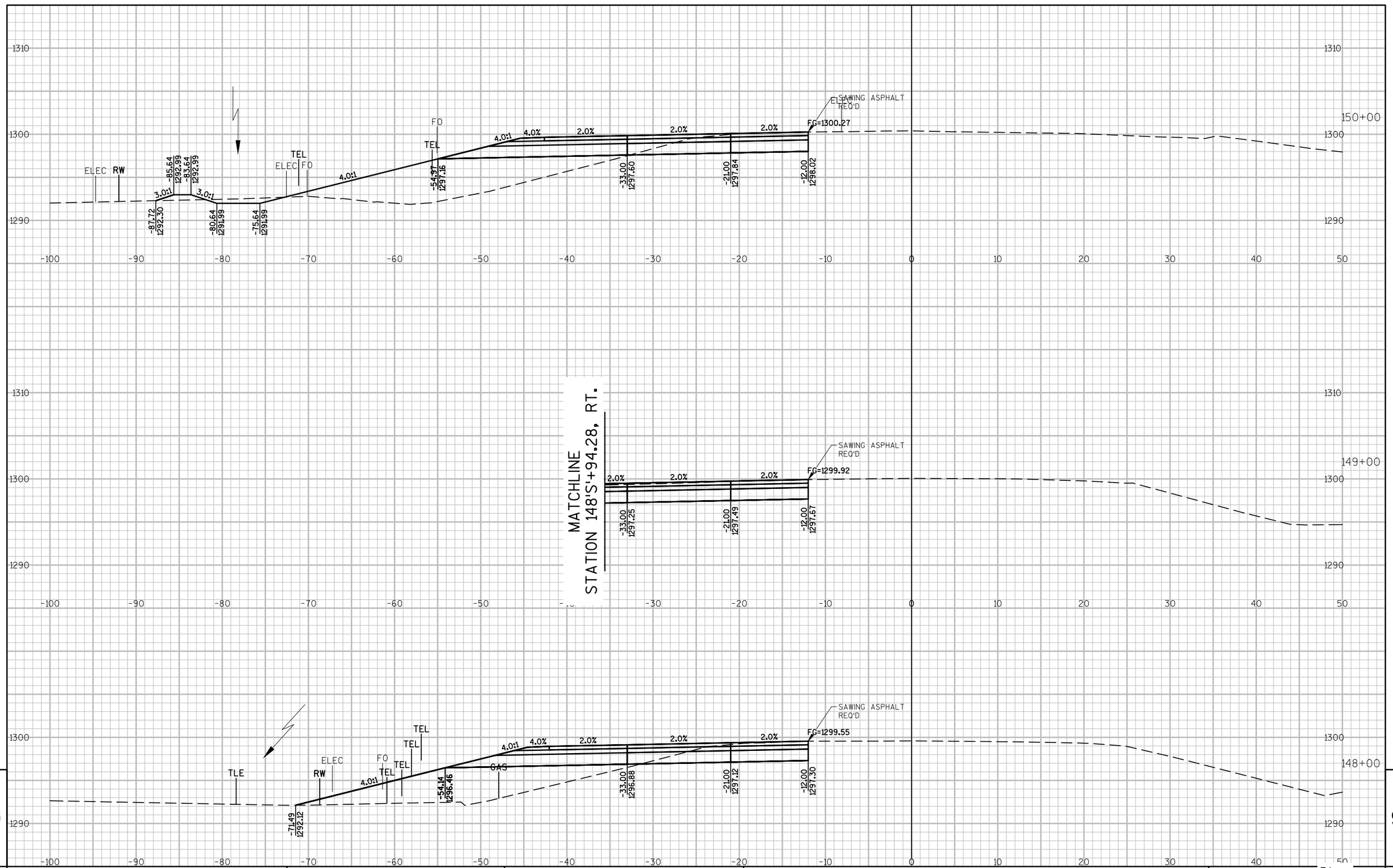
PROJECT NO: 5140-03-72	HWY: STH 27	COUNTY: VERNON	CROSS SECTIONS: MAINLINE	SHEET

FILE NAME : S:\PROJECTS\W11586 STH 27-CTH P INTERSECTION, VERNON CO\DESIGN\CORRIDORS\CORRIDOR STH 27 - CTH P.DWG
LAYOUT : MAINLINE XS - (3)

PLOT DATE : 4/9/2020
PLOT TIME : 5:23:45 PM

PLOT BY : THEODORE HERBERS

PLOT SCALE : 1" = 1'



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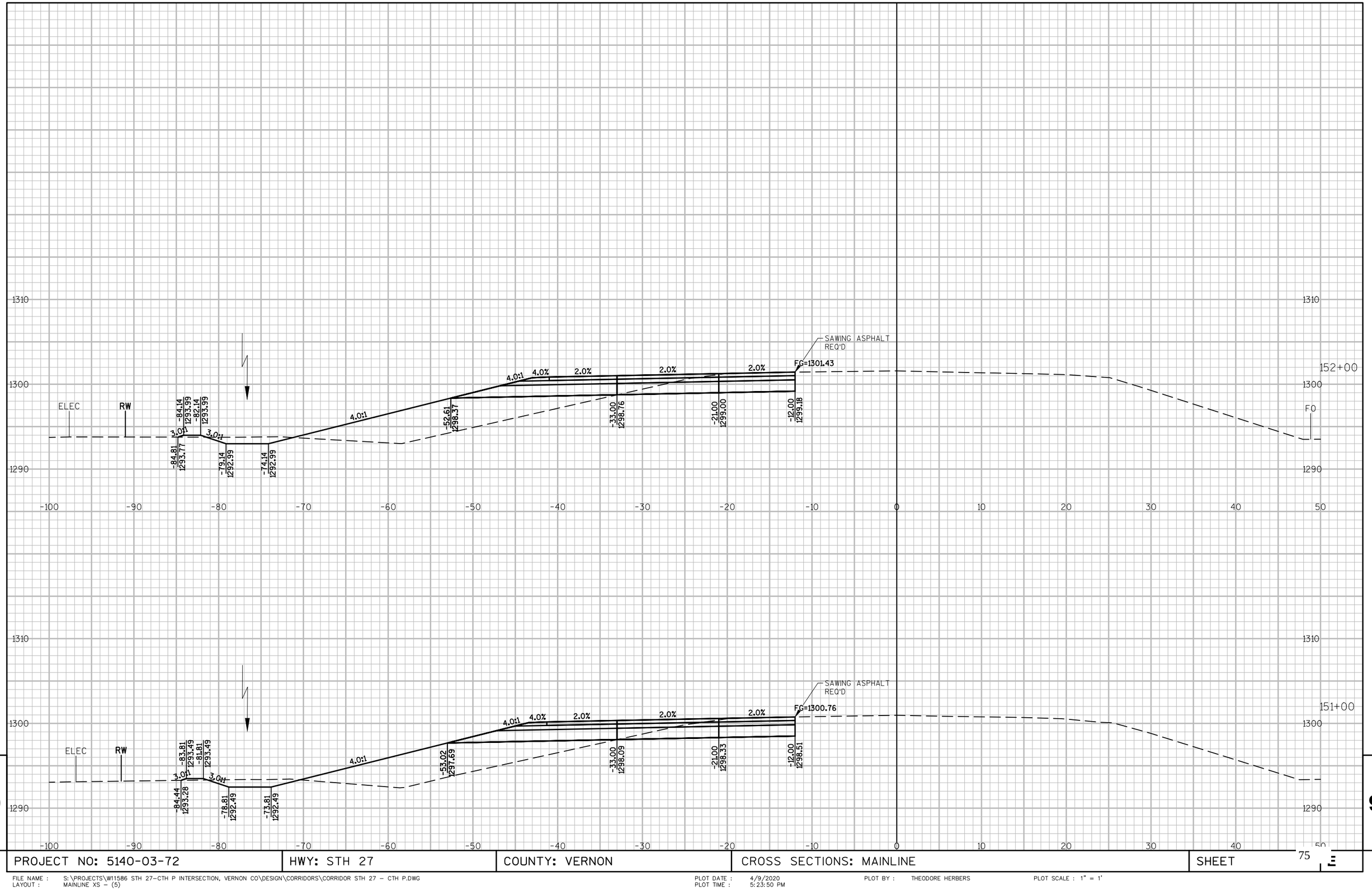
PROJECT NO: 5140-03-72	HWY: STH 27	COUNTY: VERNON	CROSS SECTIONS: MAINLINE	SHEET

FILE NAME : S:\PROJECTS\W11586 STH 27-CTH P INTERSECTION, VERNON CO\DESIGN\CORRIDORS\CORRIDOR STH 27 - CTH P.DWG
LAYOUT : MAINLINE XS - (4)

PLOT DATE : 4/9/2020
PLOT TIME : 5:23:47 PM

PLOT BY : THEODORE HERBERS

PLOT SCALE : 1" = 1'



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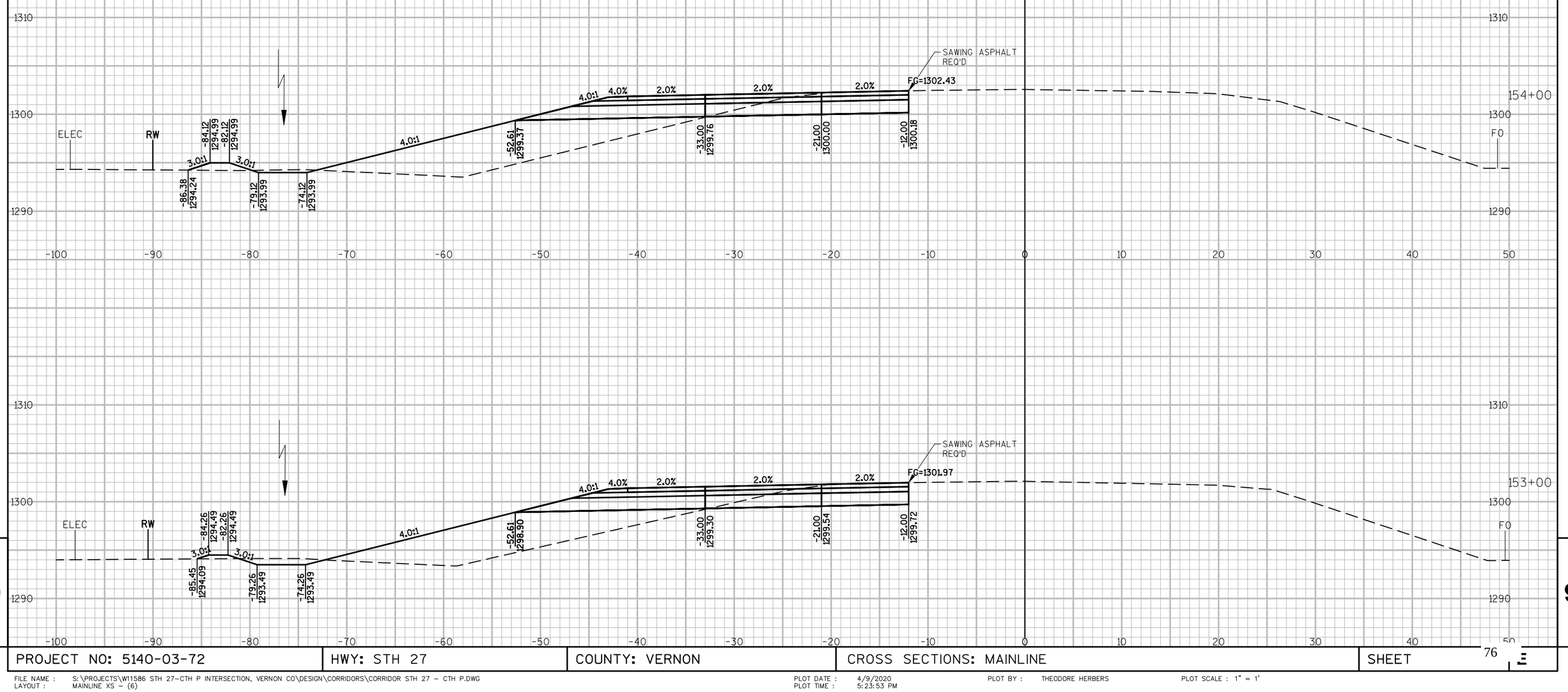
PROJECT NO: 5140-03-72	HWY: STH 27	COUNTY: VERNON	CROSS SECTIONS: MAINLINE	SHEET 75

FILE NAME : S:\PROJECTS\W11586 STH 27-CTH P INTERSECTION, VERNON CO\DESIGN\CORRIDORS\CORRIDOR STH 27 - CTH P.DWG
LAYOUT : MAINLINE XS - (5)

PLOT DATE : 4/9/2020
PLOT TIME : 5:23:50 PM

PLOT BY : THEODORE HERBERS

PLOT SCALE : 1" = 1'



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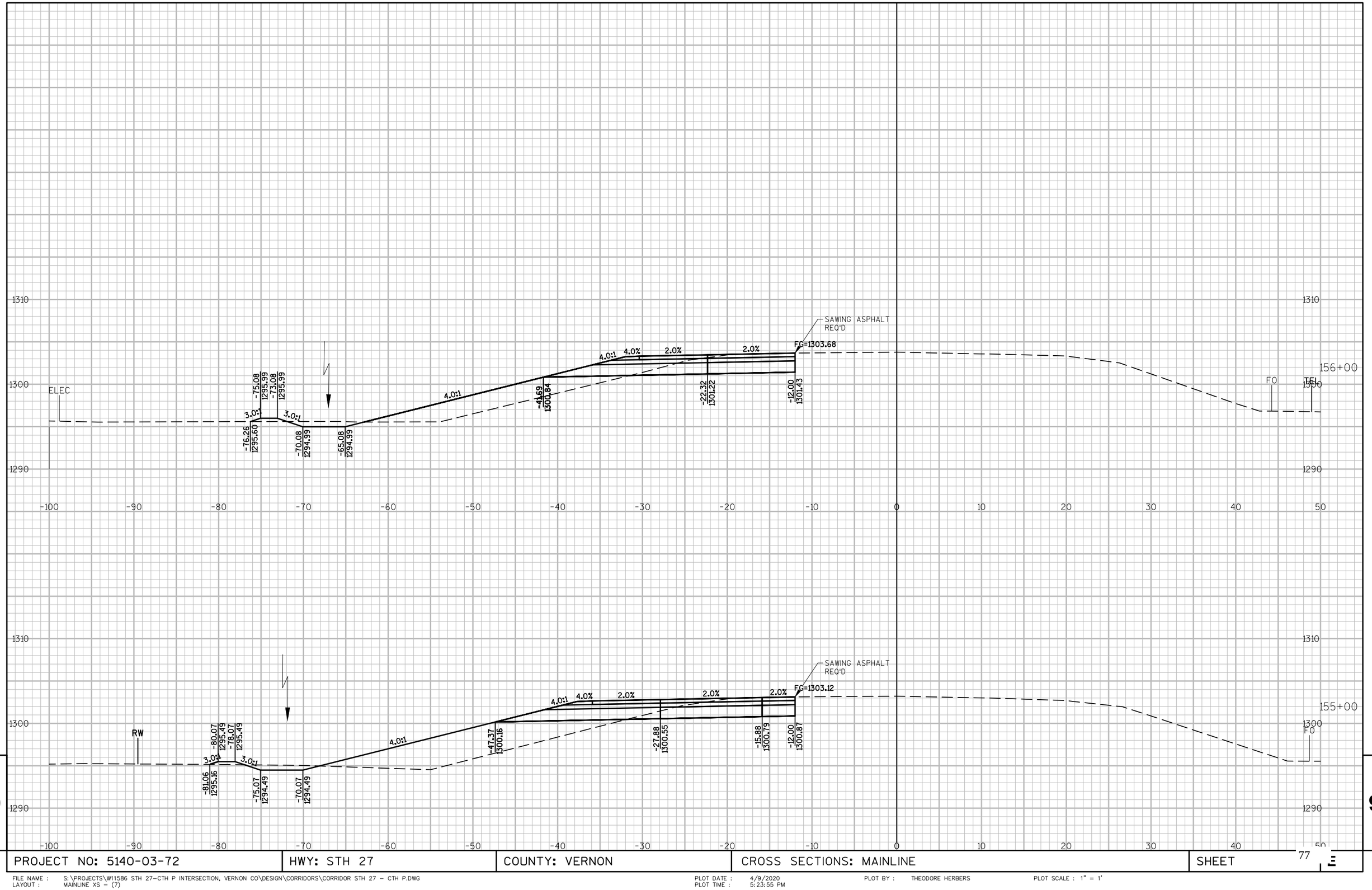
PROJECT NO: 5140-03-72	HWY: STH 27	COUNTY: VERNON	CROSS SECTIONS: MAINLINE	SHEET

FILE NAME : S:\PROJECTS\W11586 STH 27-CTH P INTERSECTION, VERNON CO\DESIGN\CORRIDORS\CORRIDOR STH 27 - CTH P.DWG
LAYOUT : MAINLINE XS - (6)

PLOT DATE : 4/9/2020
PLOT TIME : 5:23:53 PM

PLOT BY : THEODORE HERBERS

PLOT SCALE : 1" = 1'



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PROJECT NO: 5140-03-72	HWY: STH 27	COUNTY: VERNON	CROSS SECTIONS: MAINLINE	SHEET 77

FILE NAME : S:\PROJECTS\W11586 STH 27-CTH P INTERSECTION, VERNON CO\DESIGN\CORRIDORS\CORRIDOR STH 27 - CTH P.DWG
LAYOUT : MAINLINE XS - (7)

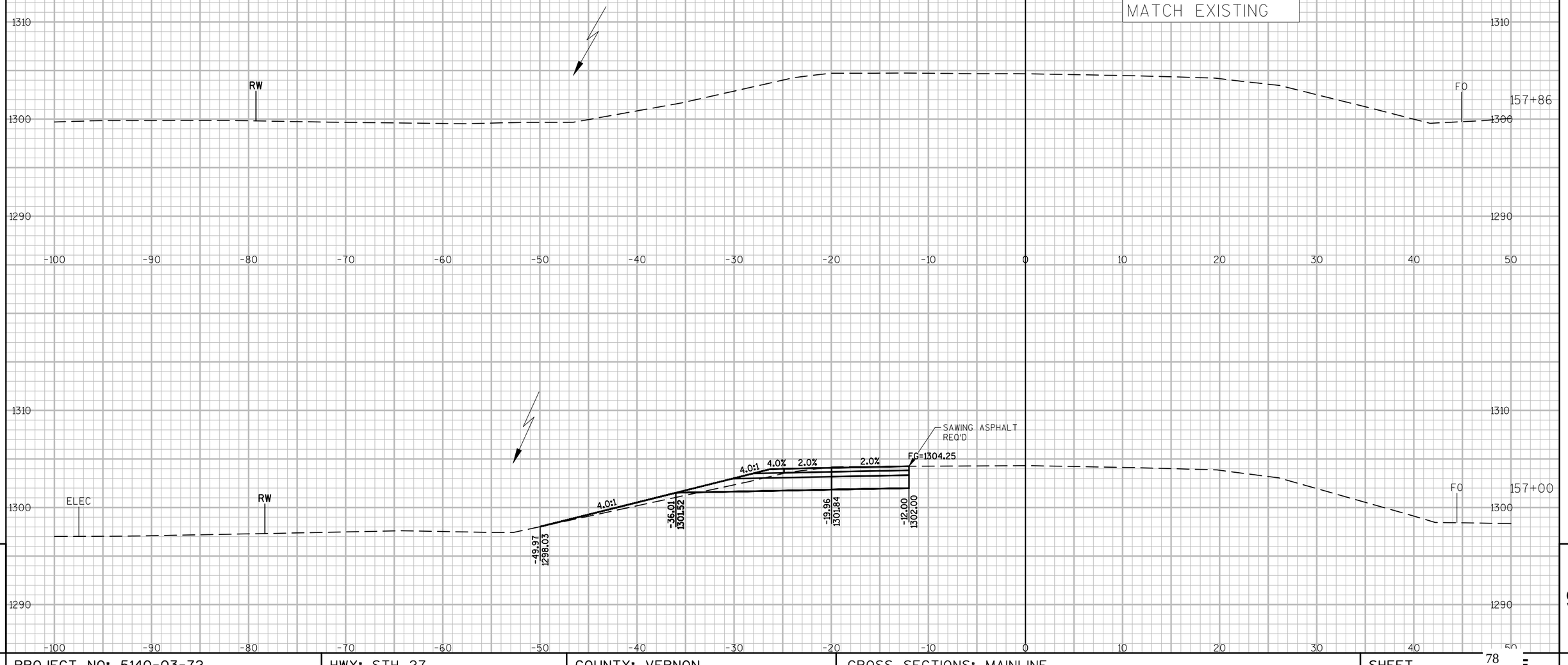
PLOT DATE : 4/9/2020
PLOT TIME : 5:23:55 PM

PLOT BY : THEODORE HERBERS

PLOT SCALE : 1" = 1'

END CONSTRUCTION
157+87.67

END PROJECT
STATION 157+85.86
MATCH EXISTING



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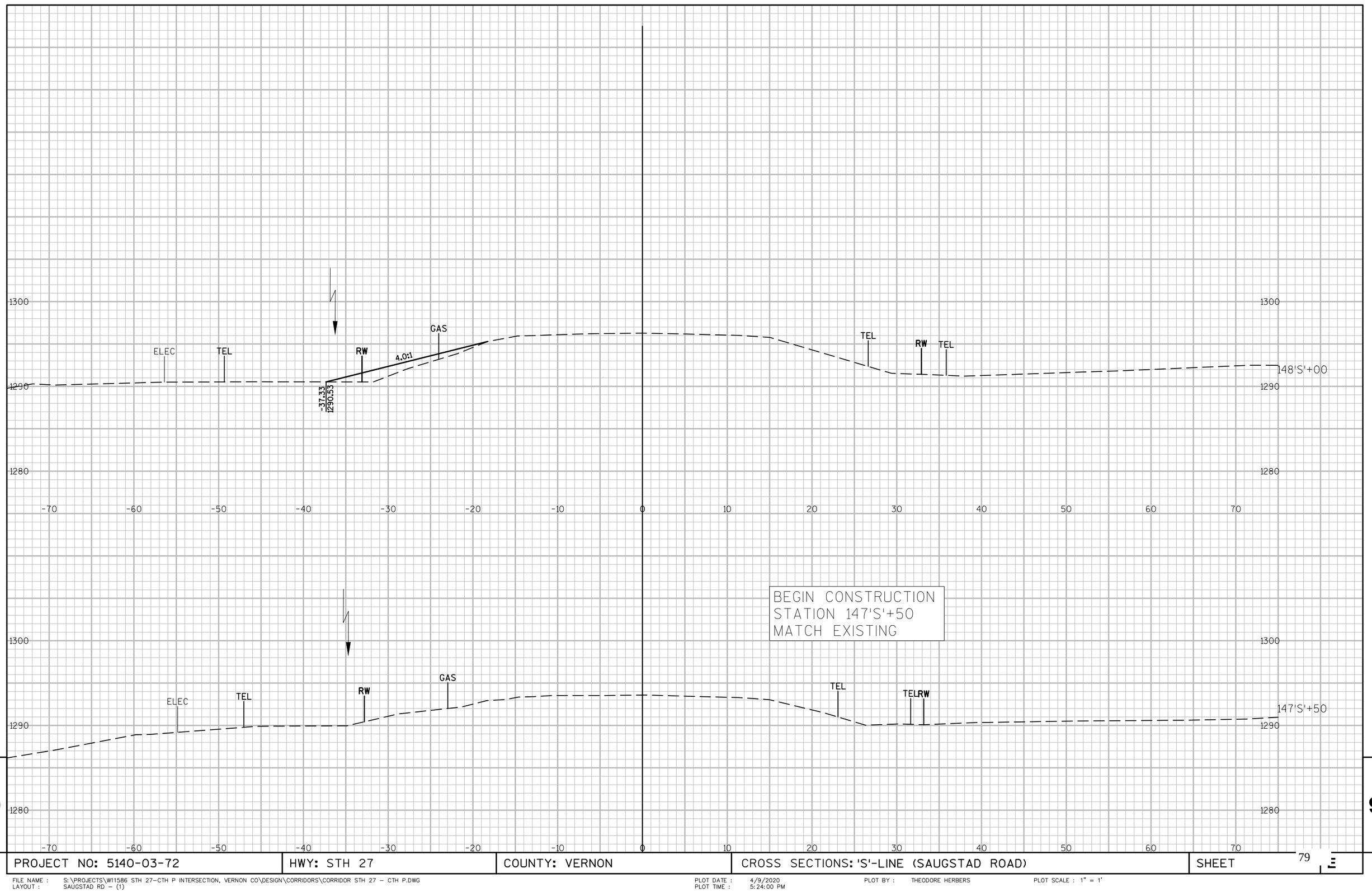
PROJECT NO: 5140-03-72	HWY: STH 27	COUNTY: VERNON	CROSS SECTIONS: MAINLINE	SHEET

FILE NAME : S:\PROJECTS\W11586 STH 27-CTH P INTERSECTION, VERNON CO\DESIGN\CORRIDORS\CORRIDOR STH 27 - CTH P.DWG
LAYOUT : MAINLINE XS - (8)

PLOT DATE : 4/9/2020
PLOT TIME : 5:23:58 PM

PLOT BY : THEODORE HERBERS

PLOT SCALE : 1" = 1'



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PROJECT NO: 5140-03-72	HWY: STH 27	COUNTY: VERNON	CROSS SECTIONS: 'S'-LINE (SAUGSTAD ROAD)	SHEET

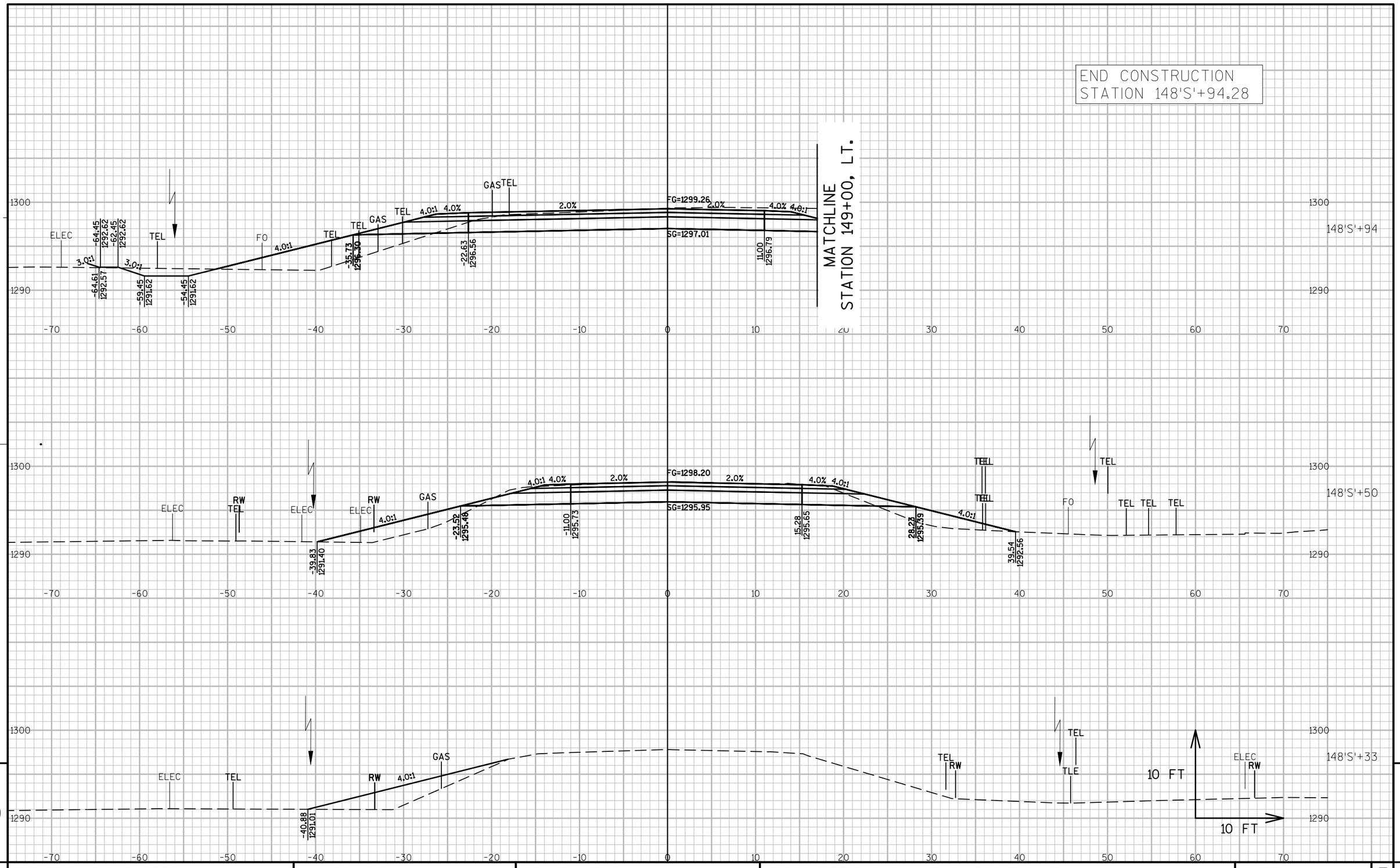
FILE NAME : S:\PROJECTS\W11586 STH 27-CTH P INTERSECTION, VERNON CO\DESIGN\CORRIDORS\CORRIDOR STH 27 - CTH P.DWG
LAYOUT : SAUGSTAD RD - (1)

PLOT DATE : 4/9/2020
PLOT TIME : 5:24:00 PM

PLOT BY : THEODORE HERBERS

PLOT SCALE : 1" = 1'

END CONSTRUCTION
STATION 148'S'+94.28



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PROJECT NO: 5140-03-72	HWY: STH 27	COUNTY: VERNON	CROSS SECTIONS: 'S'-LINE (SAUGSTAD ROAD)	SHEET ----	E

FILE NAME : S:\PROJECTS\W11586 STH 27-CTH P INTERSECTION, VERNON CO\DESIGN\CORRIDORS\CORRIDOR STH 27 - CTH P.DWG PLOT DATE : 4/9/2020 5:24 PM PLOT BY : THEODORE HERBERS PLOT NAME : PLOT SCALE : 1" = 10'
WISDOT/CADDS SHEET 49

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
through innovation and exceptional service.

http://www.dot.wisconsin.gov