WIS

MAY 2021

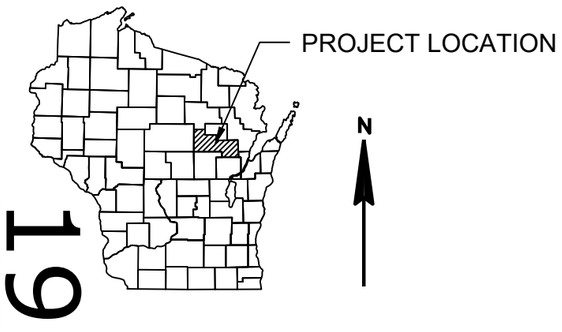
PROJECT ID: 1058-02-73

COUNTY: SHAWANO

ORDER OF SHEETS

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

TOTAL SHEETS = 372



19

DESIGN DESIGNATION

A.A.D.T. STH 29 (2018)	=	9100
A.A.D.T. CTH U (2009)	=	1500
D.H.V.	=	
D.D.	=	50/50
T.	=	22%
DESIGN SPEED	=	70 MPH
ESALS	=	11,000,000

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 (300'EB')
- 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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PLAN OF PROPOSED IMPROVEMENT

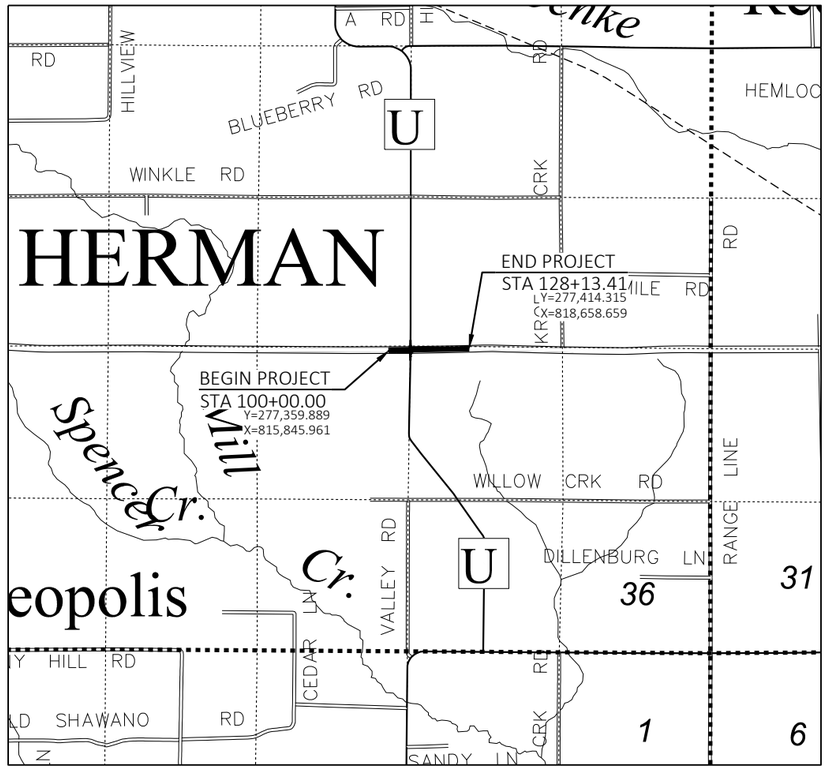
WITTENBERG - SHAWANO

CTH U INTERSECTION

STH 29

SHAWANO COUNTY

STATE PROJECT NUMBER
1058-02-73



LAYOUT

SCALE 0 1.0 MI

TOTAL NET LENGTH OF CENTERLINE = 0.533 MILES

HORIZONTAL POSITIONS SHOWN ON THIS PLAN ARE WISCONSIN COORDINATE REFERENCE SYSTEM (WISCRS), SHAWANO COUNTY NAD83 (2011), IN U.S. SURVEY FEET. POSITIONS SHOWN ARE GRID COORDINATES, GRID BEARINGS, AND GRID DISTANCES. GRID DISTANCES ARE THE SAME AS GROUND DISTANCES. ELEVATIONS ARE REFERENCED TO NAVD 88 (2012). GPS DERIVED ELEVATIONS ARE BASED ON GEOID 12A.

STATE PROJECT	FEDERAL PROJECT	
	PROJECT	CONTRACT
1058-02-73	WISC 2021309	1

ORIGINAL PLANS PREPARED BY

HNTB
250 E. WISCONSIN AVE
MILWAUKEE, WI 53202
(414) 359-2300

WISCONSIN PROFESSIONAL ENGINEER
DANIEL BAUMANN
E-45498
MILWAUKEE, WI

1/14/2021 (Date) (Signature)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

PREPARED BY

Surveyor	ONEIDA ENGINEERING SOLUTIONS (OES)
Designer	HNTB, CORP.
Project Manager	TIMOTHY HANLEY, PE
Regional Examiner	CHERYL SIMON, PE
Regional Supervisor	MICHAEL KRETSCHMER, PE

APPROVED FOR THE DEPARTMENT

DATE: 1-15-2021 (Signature)

E

GENERAL NOTES

BEARINGS SHOWN ON THE PLAN ARE TRUE BEARINGS TO THE NEAREST SECOND.

PURSUANT TO CHAPTER 59 OF THE WISCONSIN STATUTES, THE CONTRACTOR SHALL CAREFULLY MAKE A SEARCH FOR EVIDENCE OF A LANDMARK IN ALL AREAS WHERE SUCH A LANDMARK MAY EXIST.

ELEVATIONS SHOWN ON THE ROADWAY CROSS SECTIONS ARE SUBGRADE ELEVATIONS AT THE CONSTRUCTION REFERENCE LINES.

CURVE DATA IS BASED ON RADIUS DEFINITION

ALL RADII ARE MEASURED TO THE FLANGE (FLAG) LINE UNLESS OTHERWISE NOTED.

THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN IN THE PLANS, ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN..

THE CONTRACTOR SHALL NOTIFY DIGGERS HOTLINE AND AFFECTED UTILITIES PRIOR TO THE START OF WORK. ANY LOCAL MUNICIPAL UTILITY WHICH IS NOT A MEMBER OF THE DIGGERS HOTLINE MUST BE CONTACTED SEPARATELY.

ORDER OF SECTION 2 SHEETS

GENERAL NOTES
PROJECT OVERVIEW
TYPICAL SECTIONS
CONSTRUCTION DETAILS
REMOVAL PLAN
PLAN DETAILS
EROSION CONTROL
STORM SEWER
PIPE UNDERDRAIN
STREET LIGHTING PLAN
PAVEMENT MARKINGS & PERMANENT SIGNING
TRAFFIC CONTROL
ALIGNMENT PLAN

ALIGNMENT NAMING ABBREVIATIONS

STH 29 WB	WB
CTH U	U

UTILITY CONTACTS

ALLIANT ENERGY

ELECTRICITY
SETH SCHOUNARD
708 NE 7TH STREET
MARION, WI 54950
PHONE: (715) 754-4331
SETHSCHOUNARD@ALLIANTENERGY.COM

CHARTER COMMUNICATIONS

COMMUNICATIONS
RUDI RUDIGER
5024 HEFFROM STREET
STEVENS POINT, WI 54481
PHONE: (715) 204-5339
RUDI.RUDIGER@CHARTER.COM

FRONTIER COMMUNICATIONS OF WI LLC

COMMUNICATIONS
CALVIN KLADE
1851 N. 14TH AVENUE
WAUSAU, WI 54401
PHONE: (715) 847-1525
CALVIN.KLADE@FTR.COM

STATE AGENCIES

WISCONSIN DEPARTMENT OF NATURAL RESOURCES

JIM DOPERALSKI
2984 SHAWANO AVE.
GREEN BAY, WI 54313
(920) 412-0165
JAMES.DOPERALSKI@WISCONSIN.GOV

RUNOFF COEFFICIENT TABLE

	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, WALK	.75 - .85											
ROOFS	.75 - .95											
GRAVEL ROADS, SHOULDERS	.40 - .60											

TOTAL PROJECT AREA = 8.39 ACRES

TOTAL AREA EXPECTED TO BE DISTURBED BY CONSTRUCTION ACTIVITIES = 8.39 ACRES

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

2

2

N

TOWN OF HERMAN

END CONSTRUCTION
STA 205U+19.16
Y=277,583.845
X=816,614.253

BEGIN PROJECT
STA 100WB+00.00
Y=277,359.560
X=815,845.961

END PROJECT
STA 128WB+13.41
Y=277,414.315
X=818,658.659

R/L STH 29 WB

205U

CTH U

STH 29 WB

STH 29 EB

90WB 95WB 100WB 105WB 110WB 115WB 120WB 125WB 130WB 135WB

BEGIN CONSTRUCTION
STA 200U+00.00
Y=277,064.711
X=816,608.079

R/L CTH U

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	PROJECT OVERVIEW	SHEET 3	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\020201-PO.DWG
LAYOUT NAME - Plan 1 IN 300 FT

PLOT DATE : 1/24/2021 7:11 PM PLOT BY : DAN BAUMANN PLOT NAME : _____ PLOT SCALE : 1 IN:300 FT

WISDOT/CADDS SHEET 42

2

2

N

R/L STH 29 WB

STH 29 WB

STH 29 EB

205U

CTH U

200U

R/L CTH U

60WB 65WB 70WB 75WB 80WB 85WB 90WB 95WB 100WB 105WB 110WB 115WB 120WB 125WB 130WB 135WB 140WB 145WB 150WB

BEGIN CROSSOVER
STA. 59WB+24.78
Y=277,377.8328
X=817,770.8095

END CROSSOVER
STA. 78WB+47.40
Y=277,301.8820
X=813,692.8490

END CROSSOVER
STA. 129WB+13.41
Y=277,357.0671
X=818,760.2232

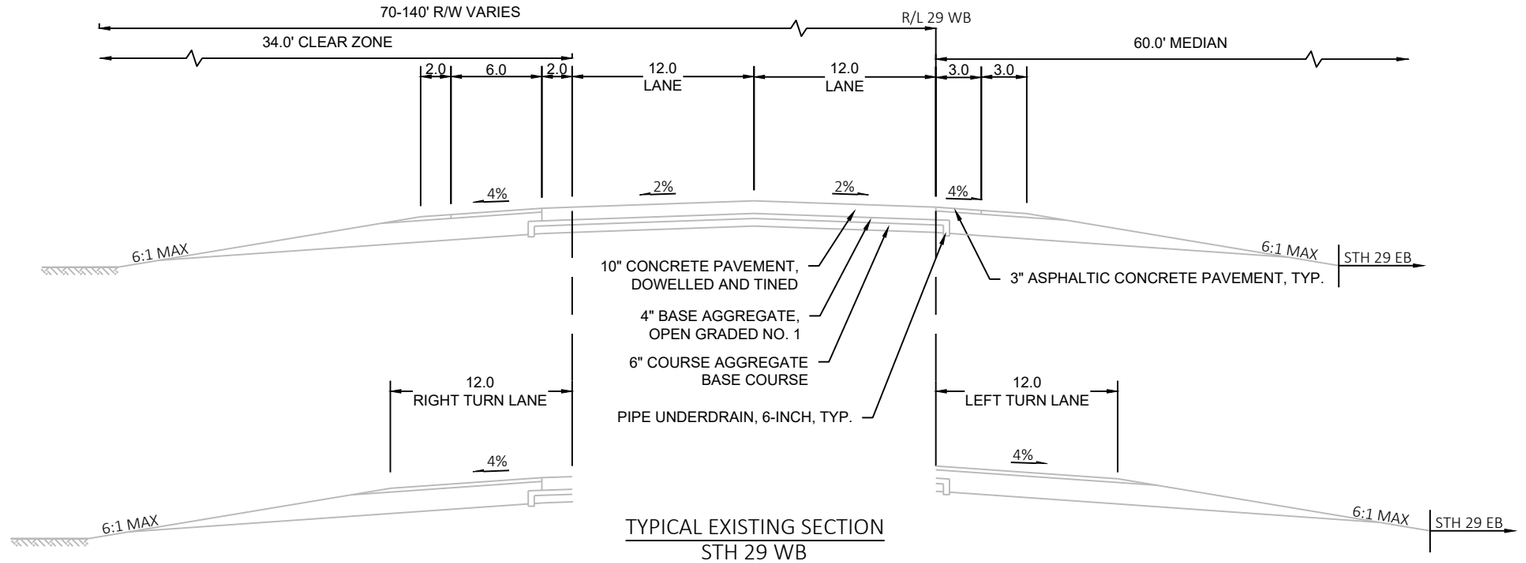
BEGIN CROSSOVER
STA. 147WB+32.38
Y=277,396.2238
X=820,557.0980

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	PROJECT OVERVIEW 2	SHEET 4	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\020201-PO2.DWG
LAYOUT NAME - Plan 1 IN 600 FT

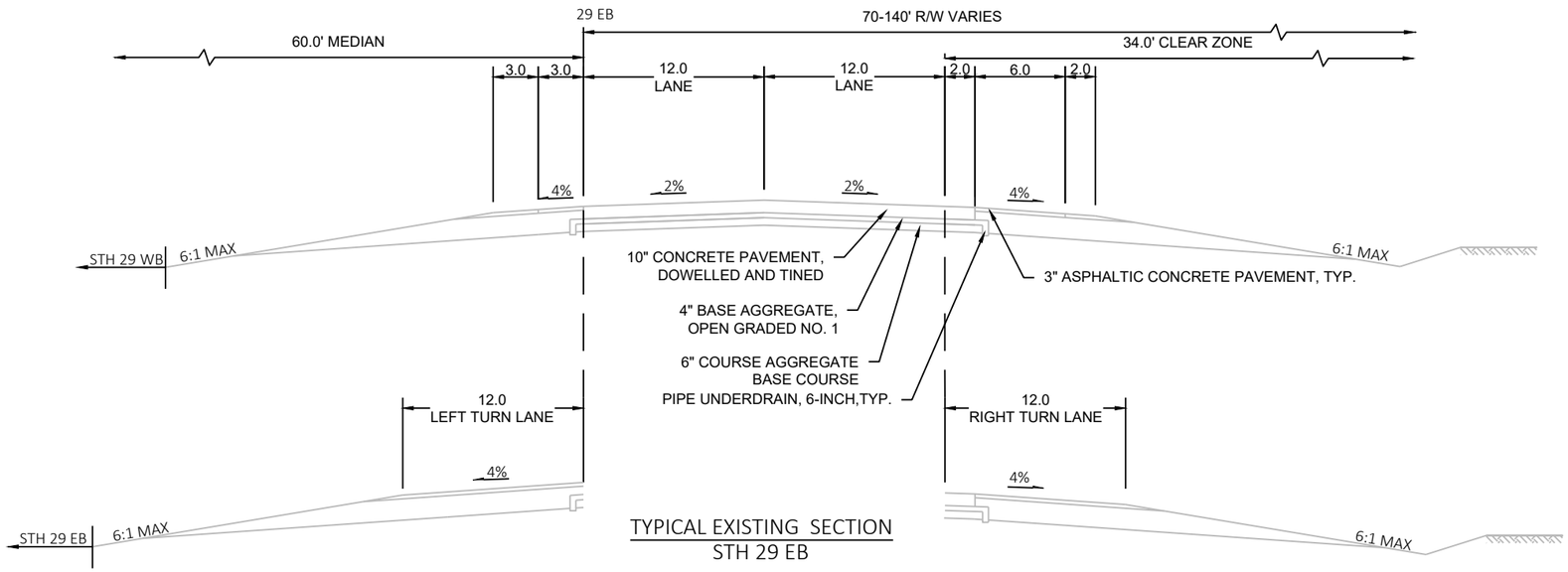
PLOT DATE : 1/24/2021 7:18 PM PLOT BY : DAN BAUMANN PLOT NAME : _____ PLOT SCALE : 1IN=600FT

WISDOT/CADDS SHEET 42



TYPICAL EXISTING SECTION
STH 29 WB

STA 107WB+67.66 TO 111WB+75.20 | STA 100WB+00 TO 128WB+13.41 | STA 107WB+67.66 TO 111WB+78.45

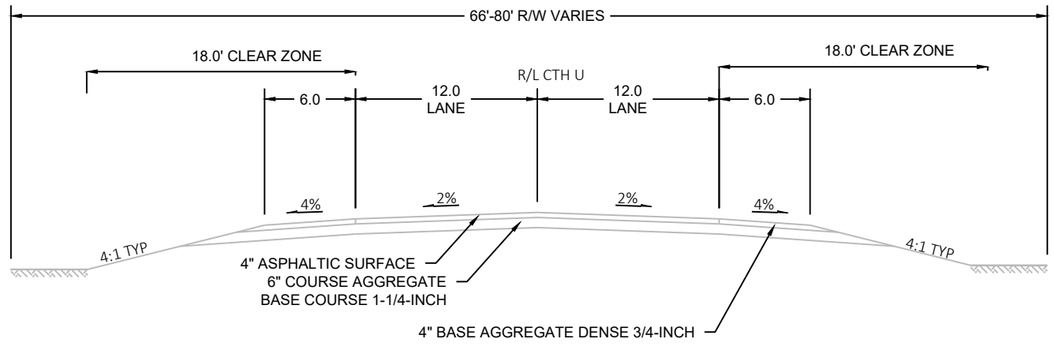


TYPICAL EXISTING SECTION
STH 29 EB

STA 103WB+48.07 TO 107WB+67.66 | STA 100WB+00 TO 128WB+13.41 | STA 103WB+58.84 TO 107WB+67.66

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TYPICAL SECTIONS	SHEET 5	E

2

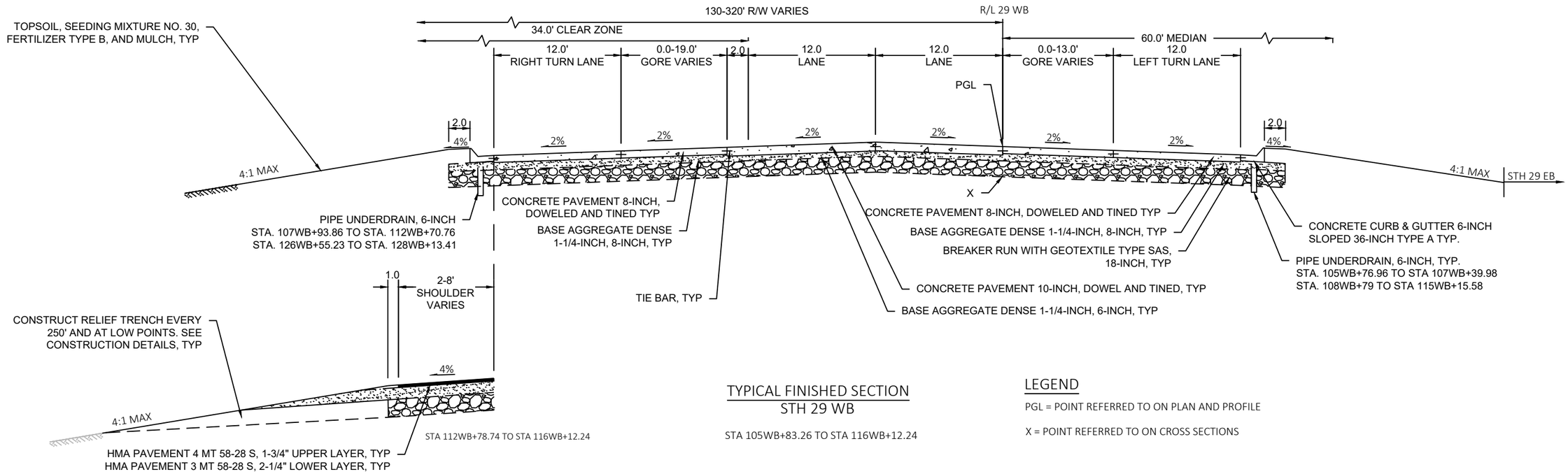


TYPICAL EXISTING SECTION
CTH U

STA 200U+00.00 TO STA 205U+19.16

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TYPICAL SECTIONS	SHEET 6	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\020301-TS.DWG
LAYOUT NAME - 020302-ts
PLOT DATE : 1/26/2021 12:48 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42



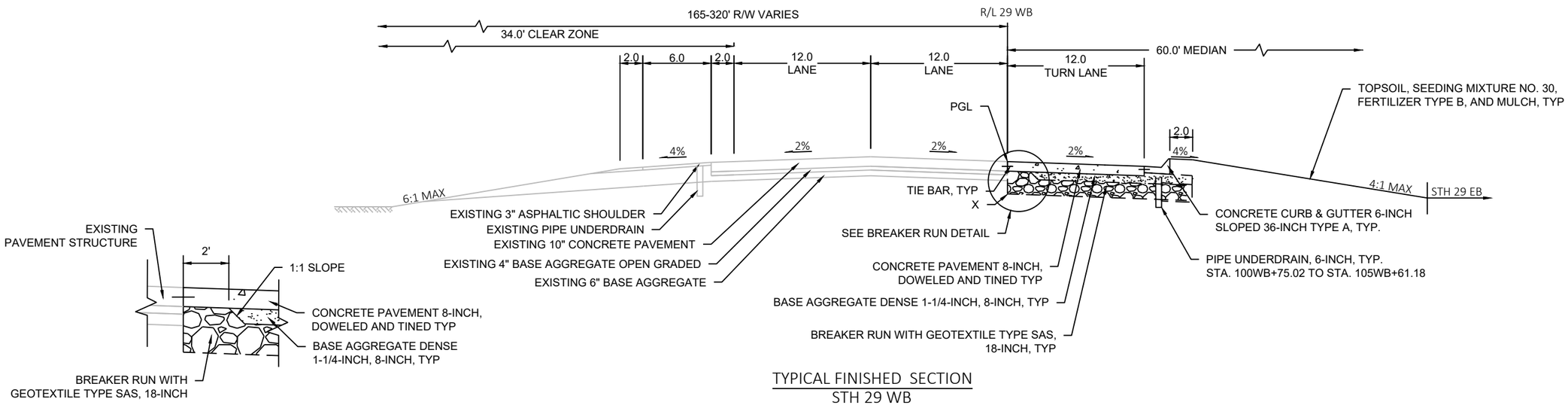
TYPICAL FINISHED SECTION
STH 29 WB

STA 105WB+83.26 TO STA 116WB+12.24

LEGEND

PGL = POINT REFERRED TO ON PLAN AND PROFILE

X = POINT REFERRED TO ON CROSS SECTIONS



TYPICAL FINISHED SECTION
STH 29 WB

STA 100WB+21.87 TO STA 105WB+83.26

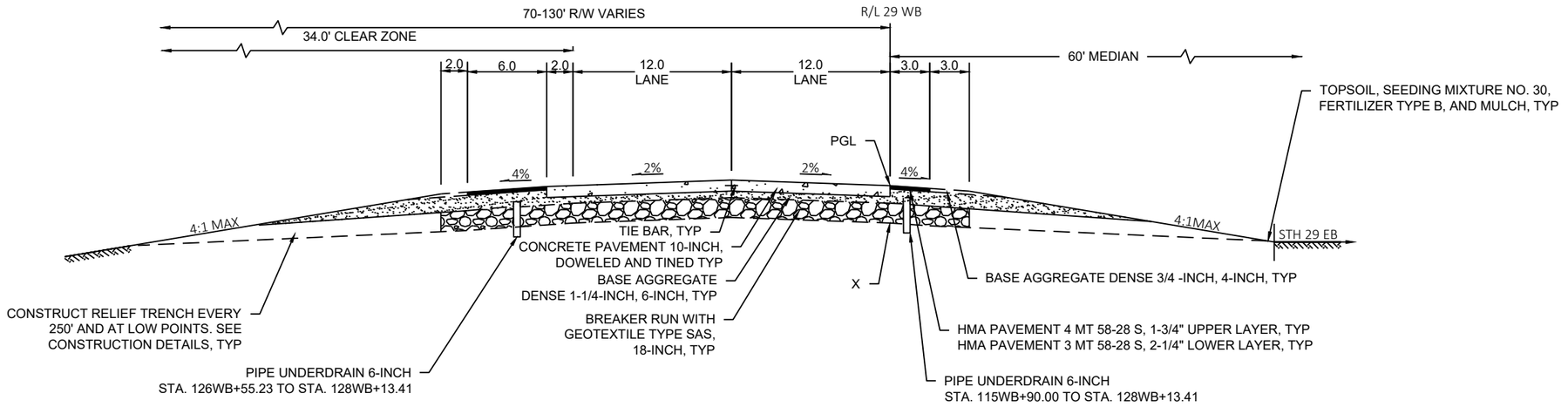
BREAKER RUN DETAIL
(NOT TO SCALE)

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TYPICAL SECTIONS	SHEET 7	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\020301-TS.DWG
LAYOUT NAME - 020303-ts

PLOT DATE : 1/27/2021 3:24 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:10 FT

2



TYPICAL FINISHED SECTION
STH 29 WB

STA 116WB+12.24 TO STA 128WB+13.41

LEGEND

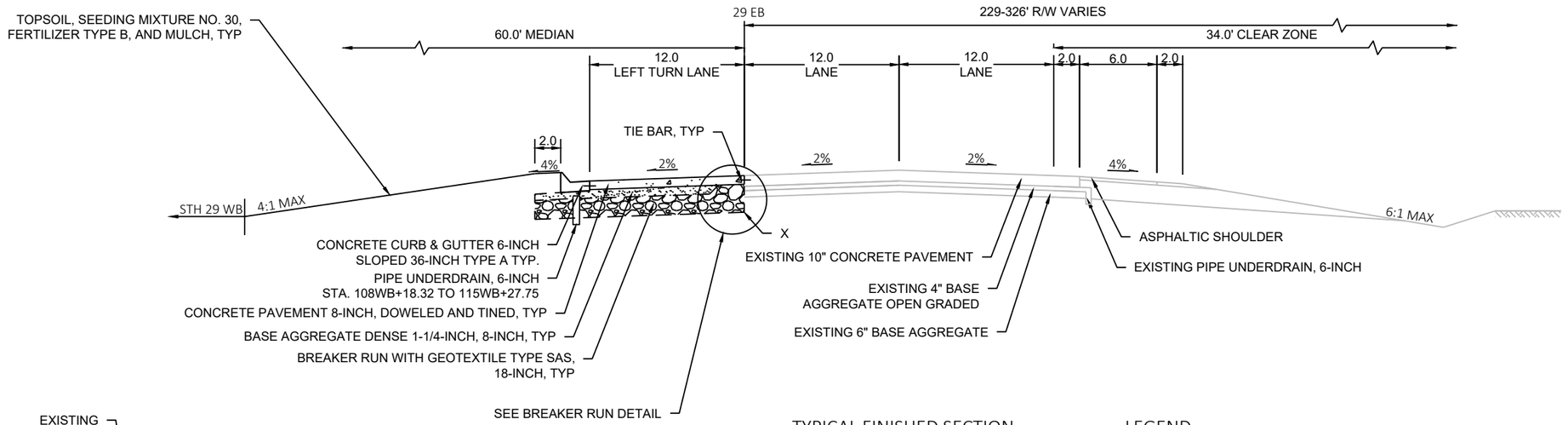
PGL = POINT REFERRED TO ON PLAN AND PROFILE

X = POINT REFERRED TO ON CROSS SECTIONS

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TYPICAL SECTIONS	SHEET 8	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\020301-TS.DWG
LAYOUT NAME - 020304-ts
PLOT DATE : 1/27/2021 3:24 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:10 FT
WISDOT/CADDS SHEET 42

2



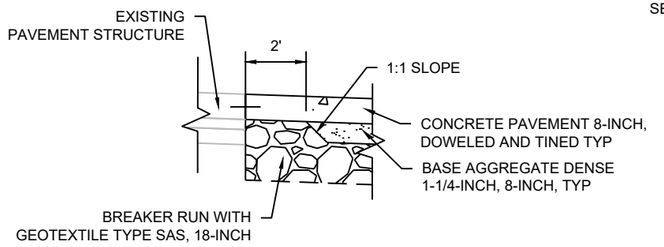
TYPICAL FINISHED SECTION
STH 29 EB

STA 109WB+49.75 TO STA 115WB+64.95

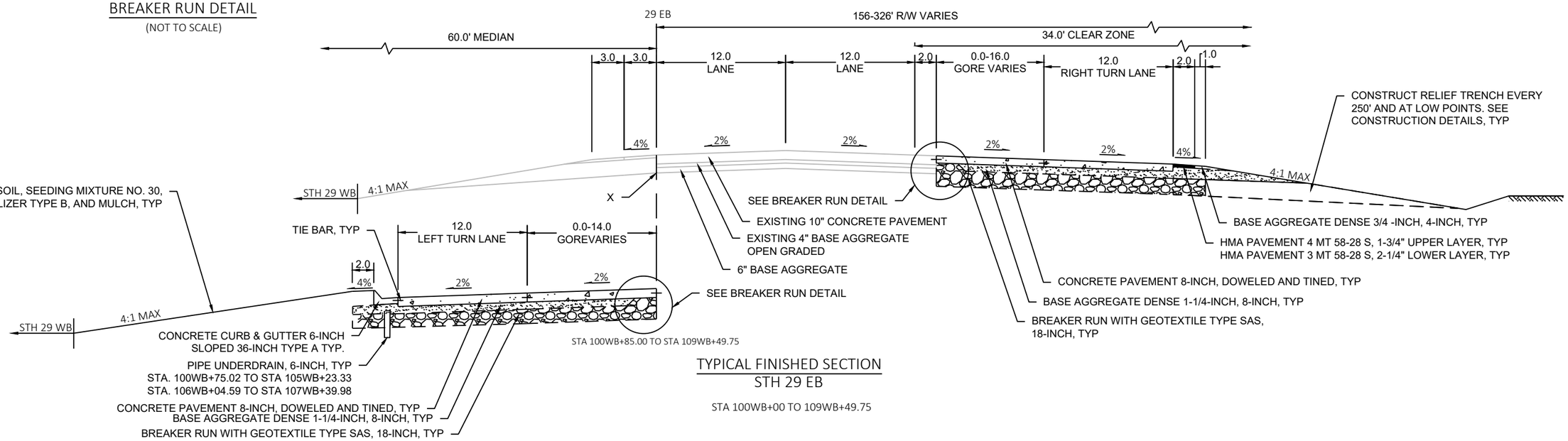
LEGEND

PGL = POINT REFERRED TO ON PLAN AND PROFILE

X = POINT REFERRED TO ON CROSS SECTIONS



BREAKER RUN DETAIL
(NOT TO SCALE)



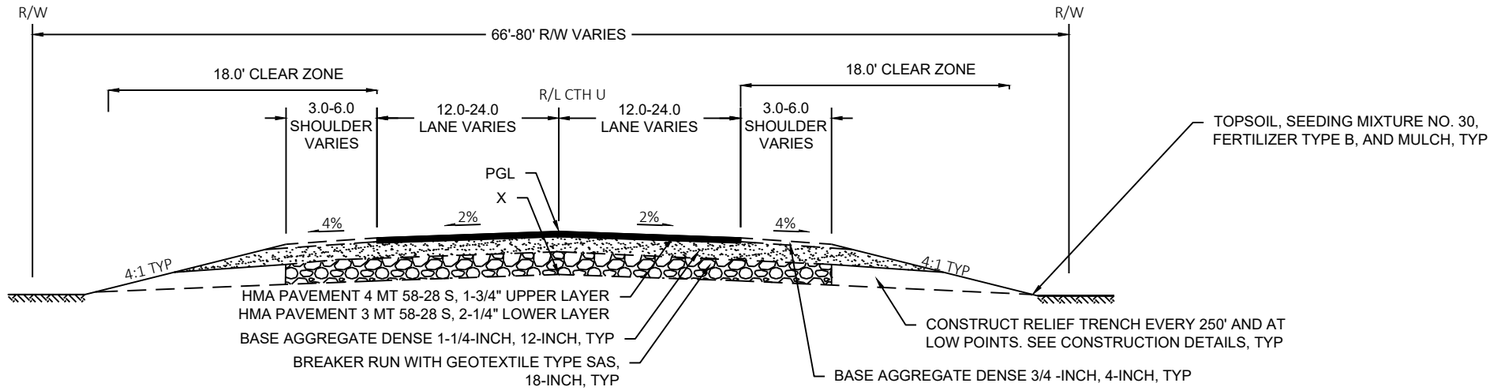
STA 100WB+85.00 TO STA 109WB+49.75

TYPICAL FINISHED SECTION
STH 29 EB

STA 100WB+00 TO 109WB+49.75

PROJECT NO: 1058-02-73	HWY: CTH U	COUNTY: SHAWANO	TYPICAL SECTIONS	SHEET 9	E

2



TYPICAL FINISHED SECTION
CTH U

STA 200U+00.00 TO STA 201U+10.75
STA 204U+05.73 TO STA 205U+19.16

LEGEND

PGL = POINT REFERRED TO ON PLAN AND PROFILE

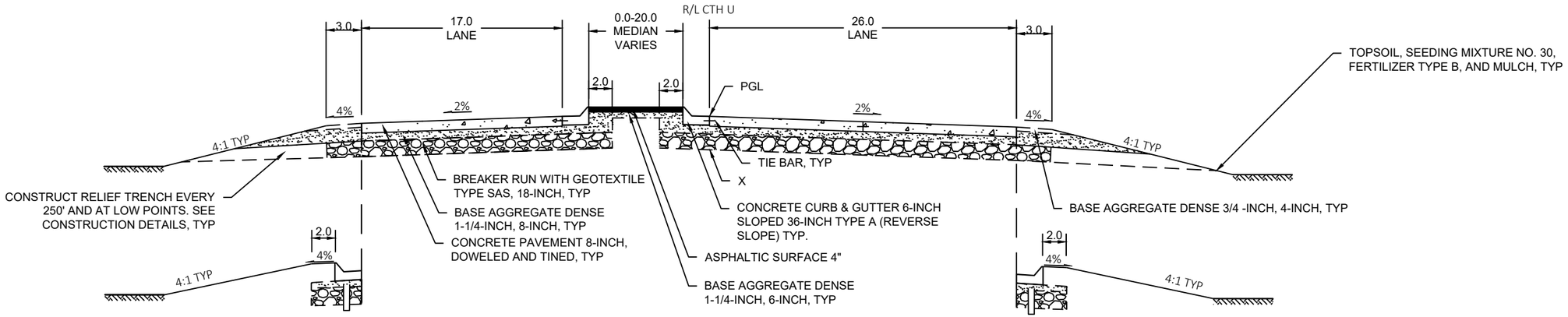
X = POINT REFERRED TO ON CROSS SECTIONS

PROJECT NO: 1058-02-73	HWY: CTH U	COUNTY: SHAWANO	TYPICAL SECTIONS	SHEET 10	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\020301-TS.DWG
LAYOUT NAME - 020306-ts

PLOT DATE : 1/27/2021 3:24 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:10 FT

2



STA 203U+31.03 TO STA 203U+71.18

STA 203U+54.34 TO STA 204U+04.33

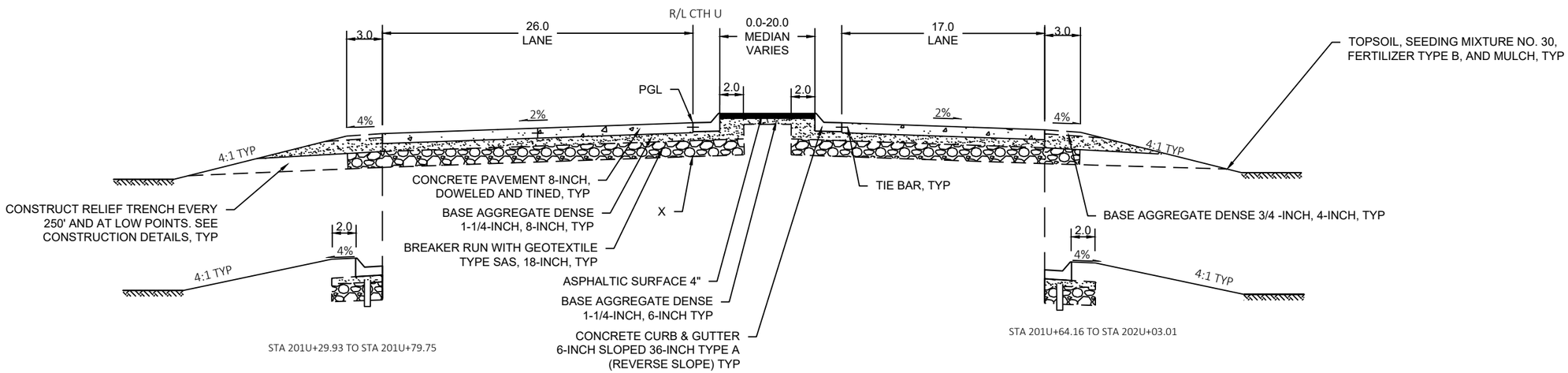
TYPICAL FINISHED SECTION
CTH U

STA 203U+21.97TO STA 204U+05.73

LEGEND

PGL = POINT REFERRED TO ON PLAN AND PROFILE

X = POINT REFERRED TO ON CROSS SECTIONS



STA 201U+29.93 TO STA 201U+79.75

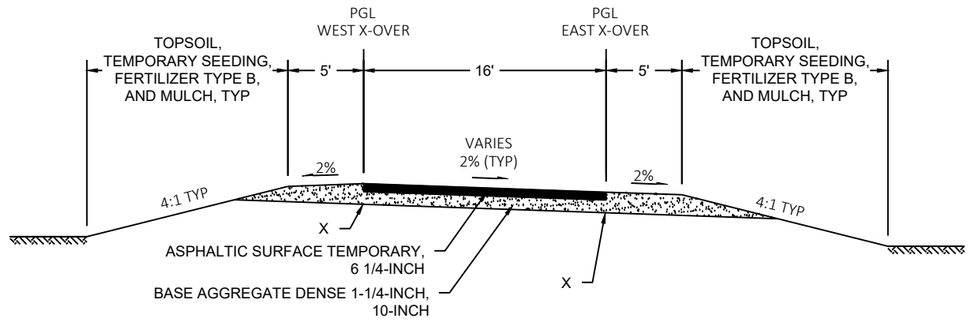
STA 201U+64.16 TO STA 202U+03.01

TYPICAL FINISHED SECTION
CTH U

STA 201U+10.75 TO STA 202U+09.74

PROJECT NO: 1058-02-73	HWY: CTH U	COUNTY: SHAWANO	TYPICAL SECTIONS	SHEET 11	E

2



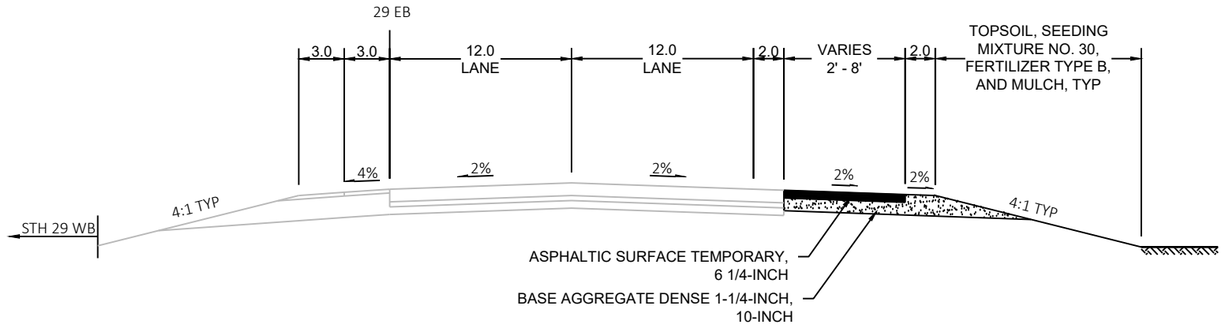
TYPICAL FINISHED SECTION
TEMPORARY CROSSOVER

STA 59+12 TO 78+36
STA 135+05 TO 153+23

LEGEND

PGL = POINT REFERRED TO ON PLAN AND PROFILE

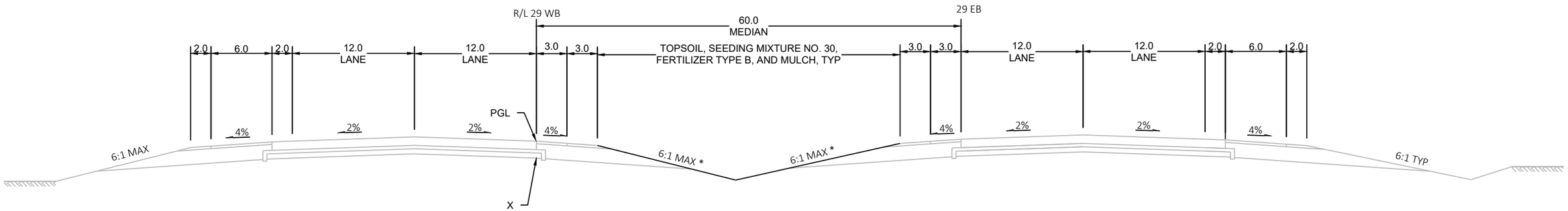
X = POINT REFERRED TO ON CROSS SECTIONS



TYPICAL FINISHED SECTION
TEMPORARY WIDENING

STA 92WB+57 TO STA 100WB+00
STA 109WB+50 TO STA 119WB+26

PROJECT NO: 1058-02-73	HWY: CTH U	COUNTY: SHAWANO	TYPICAL SECTIONS	SHEET 12	E



TYPICAL FINISHED SECTION
MEDIAN DITCH RESTORATION
(AT CROSSOVER REMOVAL LOCATIONS)

STA 59WB+25 TO STA 78WB+47
STA 129WB+13 TO STA 147WB+32

LEGEND

PGL = POINT REFERRED TO ON PLAN AND PROFILE

X = POINT REFERRED TO ON CROSS SECTIONS

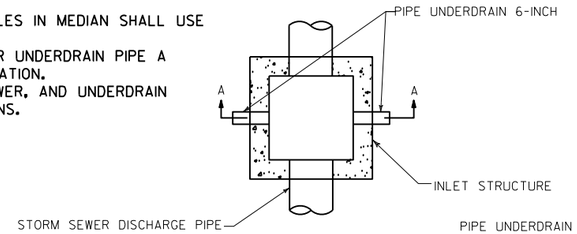
* RESTORE MEDIAN DRAINAGE TO EXISTING CONDITION

PROJECT NO: 1058-02-73	HWY: CTH U	COUNTY: SHAWANO	TYPICAL SECTIONS	SHEET 13	E

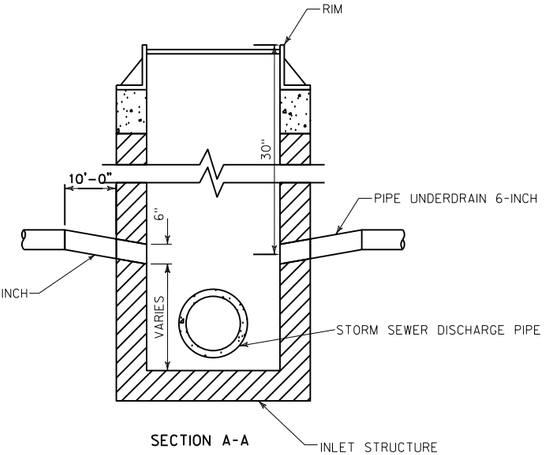
2

NOTES

1. CONNECTIONS TO INLETS OR MANHOLES IN MEDIAN SHALL USE PIPE UNDERDRAIN 6-INCH.
2. PROVIDE TWO 6" DIA. OPENINGS FOR UNDERDRAIN PIPE A MINIMUM OF 30" BELOW THE RIM ELEVATION.
3. SEE TYPICAL SECTIONS, STORM SEWER, AND UNDERDRAIN PLANS FOR PIPE UNDERDRAIN LOCATIONS.

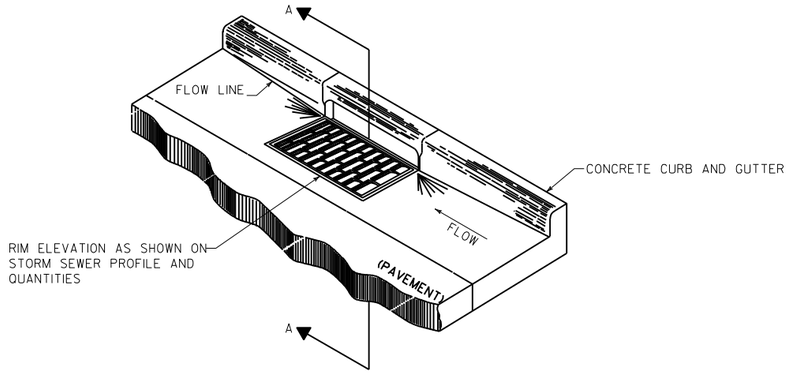


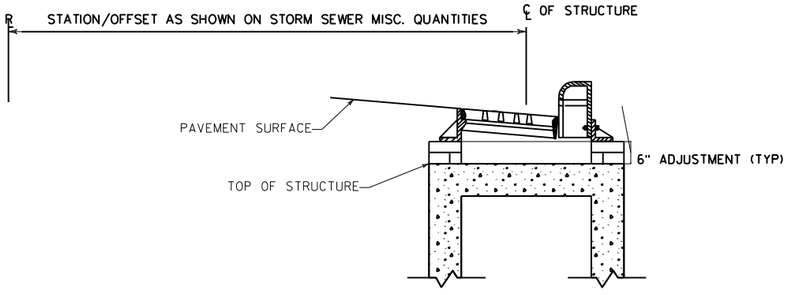
PLAN VIEW



SECTION A-A

UNDERDRAIN OUTFALL AT INLET



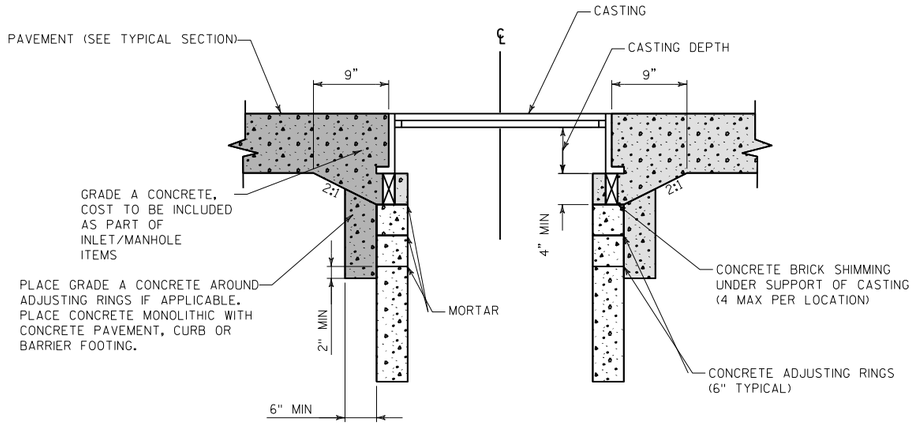


SECTION A-A

STORM SEWER STRUCTURES

STATION/OFFSET LOCATION AND RIM ELEV

REPLACES STANDARD DETAIL 08D01-21B - DETAIL OF CURB AND GUTTER AT INLETS

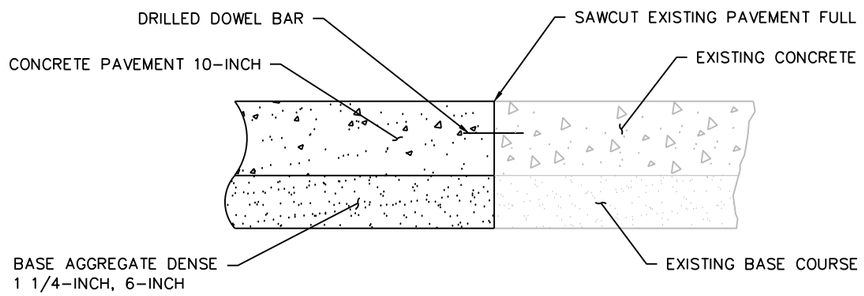


MONOLITHIC CONCRETE SHIMMING DETAIL

FOR FINAL ADJUSTMENT OF PAVEMENT STRUCTURES LOCATED WITHIN THE ROADWAY

NOTES

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

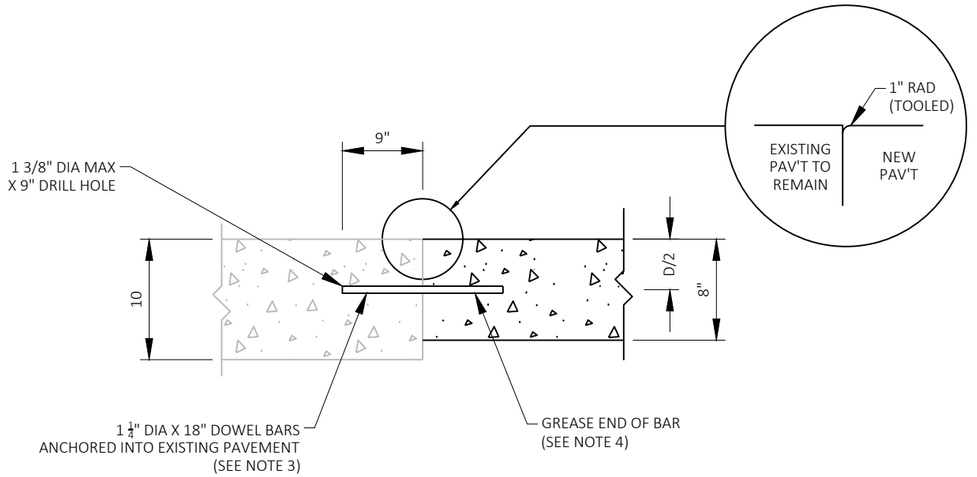


MATCH AT EXISTING CONCRETE PAVEMENT

TRANSVERSE JOINTS

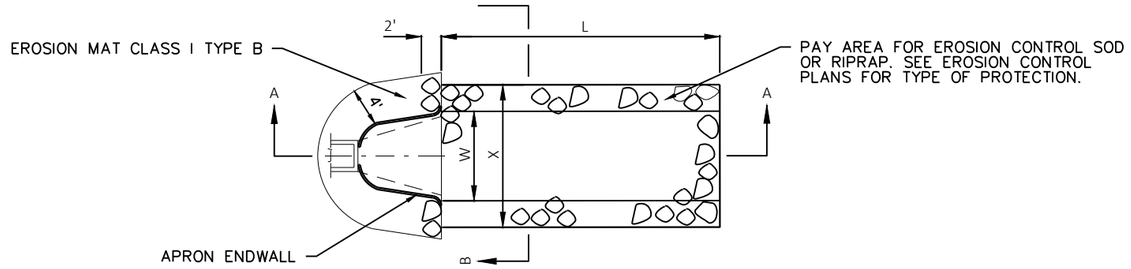
GENERAL NOTES

1. THE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.4 OF THE STANDARD SPECIFICATIONS. DOWEL BARS SHALL BE COATED IN CONFORMANCE WITH SUBSECTION 505.2.6 OF THE STANDARD SPECIFICATIONS
2. DOWEL BARS SHALL BE INSTALLED PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE
3. DOWEL BARS SHALL BE ANCHORED INTO DRILL HOLES WITH AN APPROVED EPOXY GROUT
4. THE FREE END OF DOWEL BARS SHALL RECEIVE A THIN UNIFORM COATING OF BOND GREASE
5. JOINTS SHALL NOT BE SEALED OR FILLED
6. DOWEL BARS SHALL BE SPACED 1'-3" ON CENTER

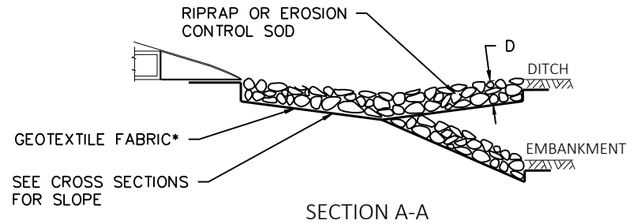


TIE BAR

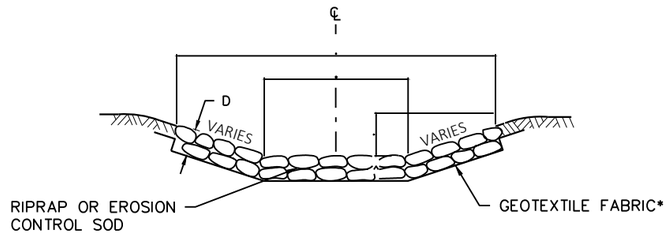
LONGITUDINAL JOINTS ABUTTING EXISTING PAVEMENT



PLAN VIEW



SECTION A-A



SECTION B-B

L = 3 x W (NOR) OR 10' MIN
OR AS INDICATED IN THE PLANS
OR AS DIRECTED BY THE ENGINEER

D = 12" FOR RIPRAP LIGHT
18" FOR RIPRAP MEDIUM
24" FOR RIPRAP HEAVY

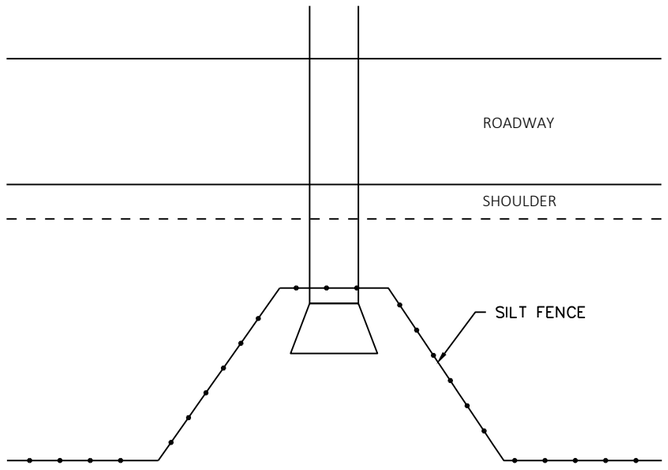
X = W+2' FOR TYPICAL CULVERT
DISCHARGE INTO DITCH
W+5' FOR CULVERT DISCHARGE
DOWN EMBANKMENT SLOPE

Y = 0' FOR TYPICAL CULVERT
DISCHARGE INTO DITCH
12" FOR CULVERT DISCHARGE
DOWN EMBANKMENT SLOPE

* TYPE R (FOR RIPRAP LIGHT ONLY)
TYPE HR (FOR RIPRAP HEAVY AND MEDIUM ONLY)

SOD, RIPRAP AND GEOTEXTILE FABRIC DETAIL AT APRON ENDWALLS

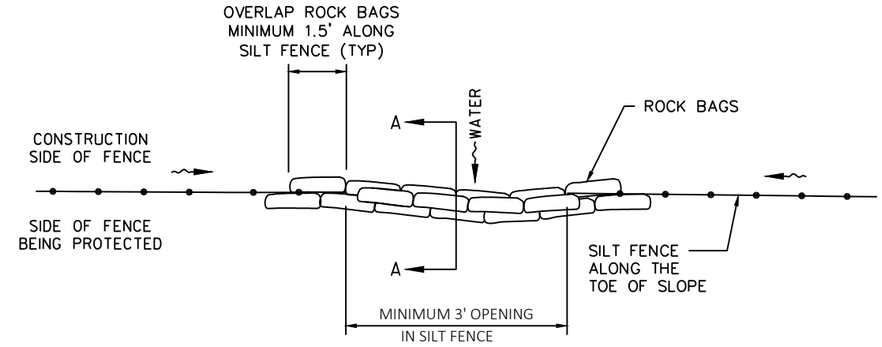
SEE EROSION CONTROL PLAN FOR LOCATIONS



NOTE

SEE SILT FENCE SDD FOR ADDITIONAL INFORMATION.

TYPICAL SILT FENCE DETAIL AT PIPE INLET

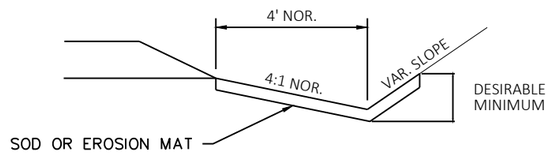


PLAN VIEW



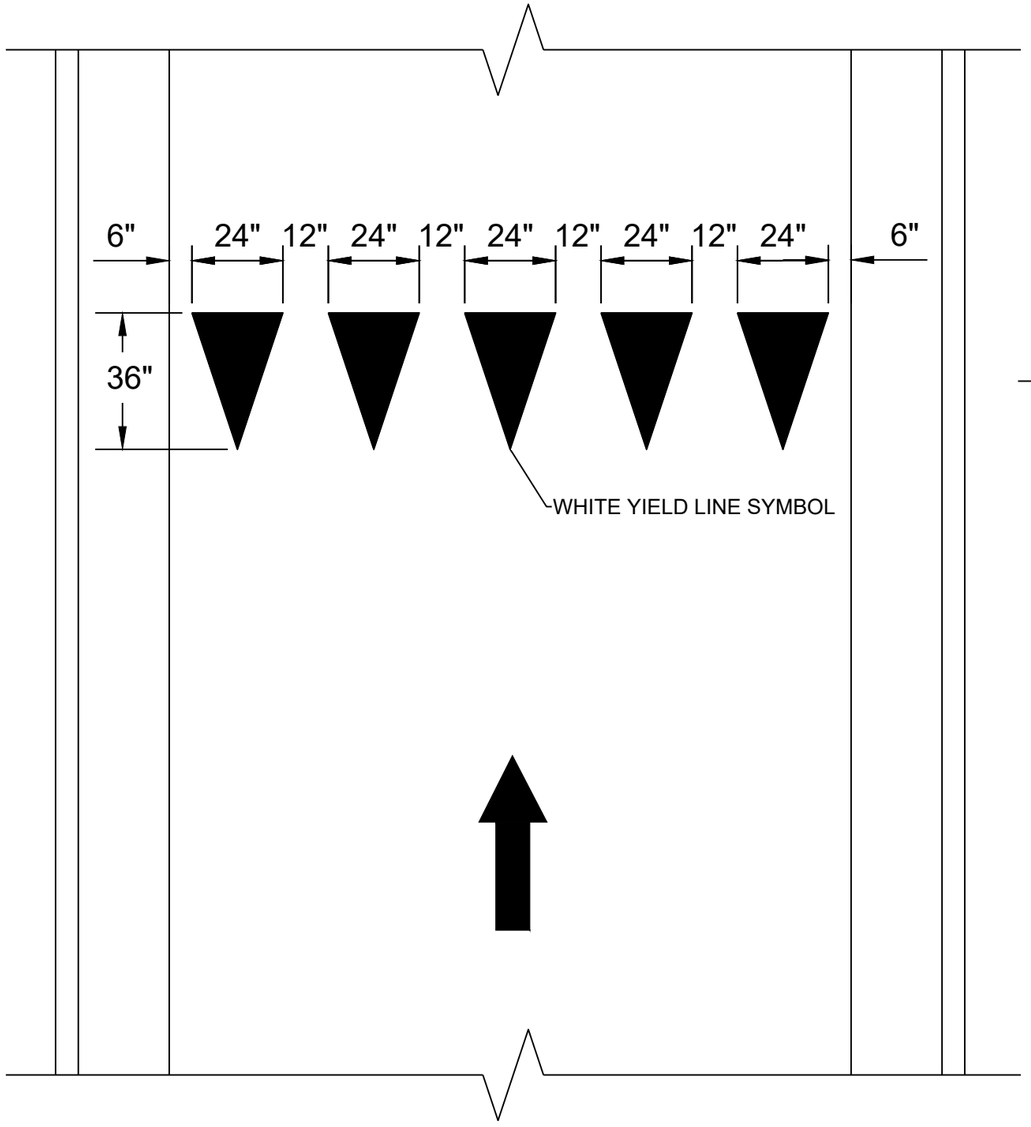
SECTION A-A

SILT FENCE DRAINAGE OUTLET, ROCK BAGS



SOD OR EROSION MAT DETAIL FOR DITCHES

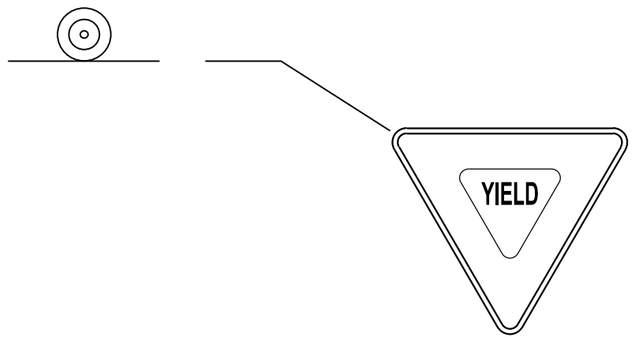
2



LEGEND

SIGN ON PERMANENT SUPPORT

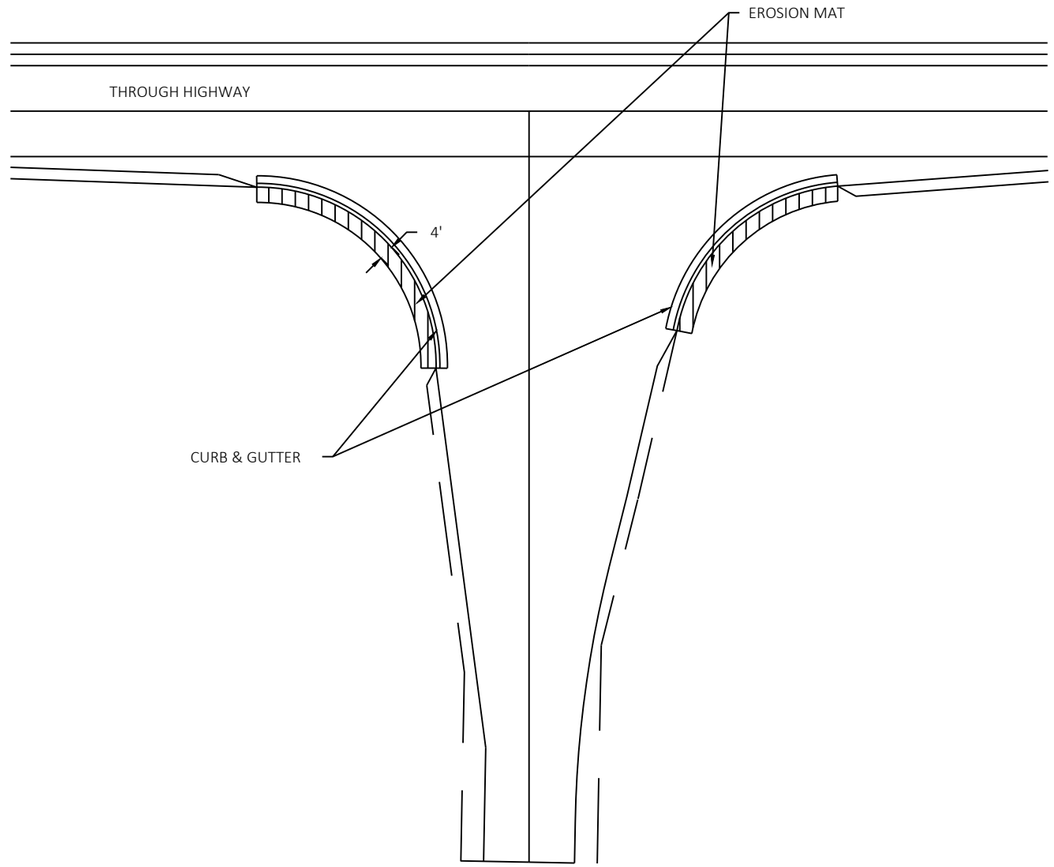
DIRECTION OF TRAVEL



R1-2

MARKING YIELD LINE EPOXY 36-INCH

2



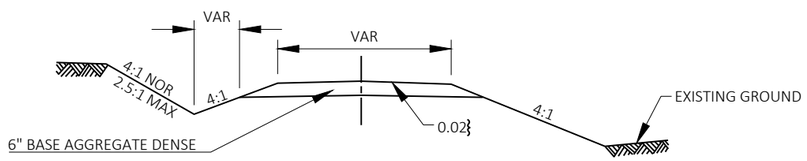
EROSION MAT DETAIL AT RURAL INTERSECTIONS

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CONSTRUCTION DETAILS	SHEET 19	E

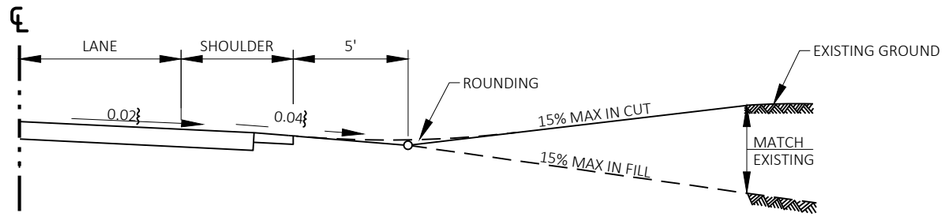
FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\021001-CD.DWG
LAYOUT NAME - 08

PLOT DATE : 1/26/2021 12:56 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:10 FT

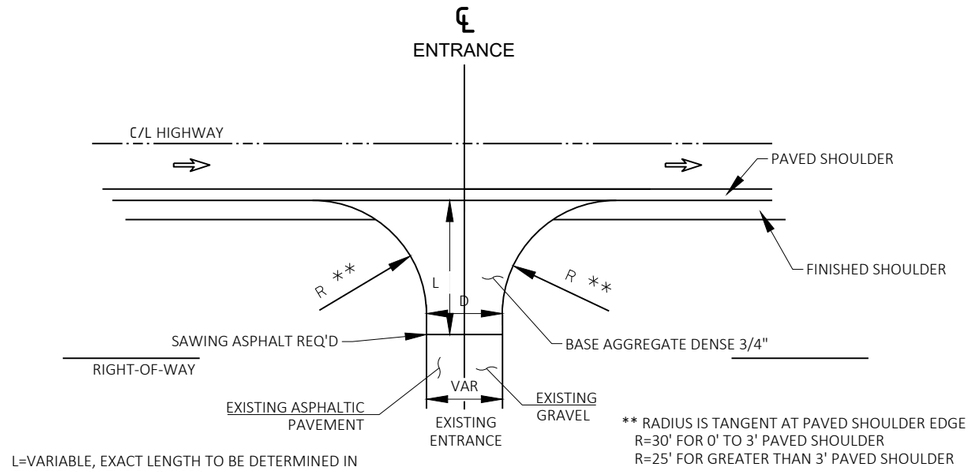
2



TYPICAL CROSS SECTION



TYPICAL PROFILE VIEW



** RADIUS IS TANGENT AT PAVED SHOULDER EDGE
R=30' FOR 0' TO 3' PAVED SHOULDER
R=25' FOR GREATER THAN 3' PAVED SHOULDER

L=VARIABLE, EXACT LENGTH TO BE DETERMINED IN THE FIELD BY THE ENGINEER

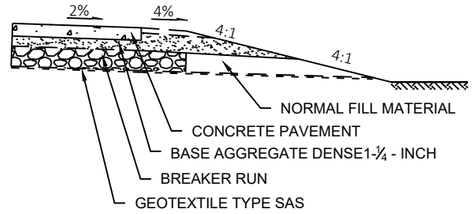
D=DRIVEWAY WIDTH
D=20'TYP(PE & FE) (16'MIN-24'MAX)
D=28'TYP(CE & FARM ENT) (24'MIN-35'MAX)

PLAN VIEW

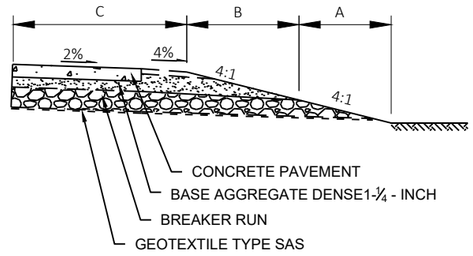
RURAL DRIVEWAY INTERSECTION (PE, FE & CE)

(FOR NEW CONSTRUCTION)

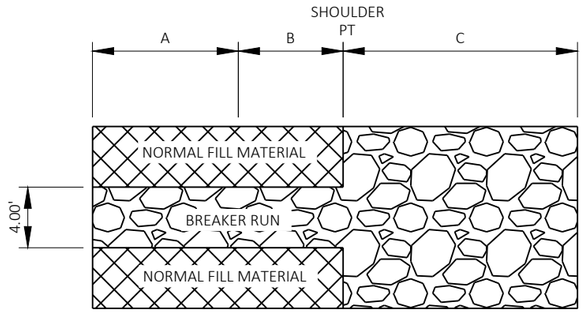
2



TYPICAL HALF SECTION WITHOUT RELIEF TRENCH



TYPICAL HALF SECTION WITH RELIEF TRENCH



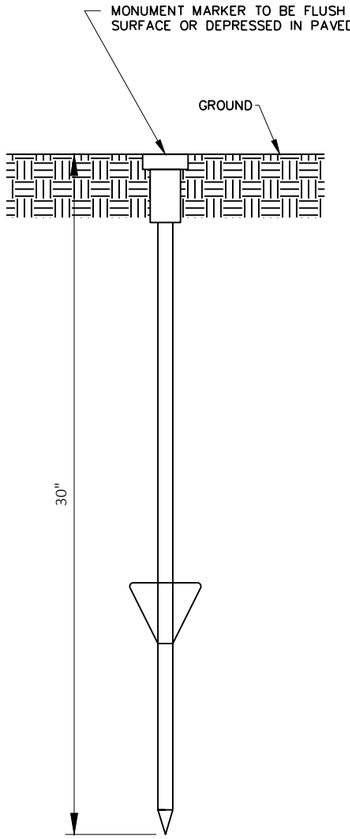
RELIEF TRENCH PLAN VIEW

STH 29 WB	STH 29 EB
115+00, LT	101+00, RT
118+00, RT	103+30, RT
118+00, LT	105+80, RT
120+50, RT	
120+50, LT	
123+00, RT	
123+00, LT	
125+50, RT	
125+50, LT	
128+00, RT	
128+00, LT	



WIS DOT MONUMENT CAP MARKER LOGO (SSDR130)

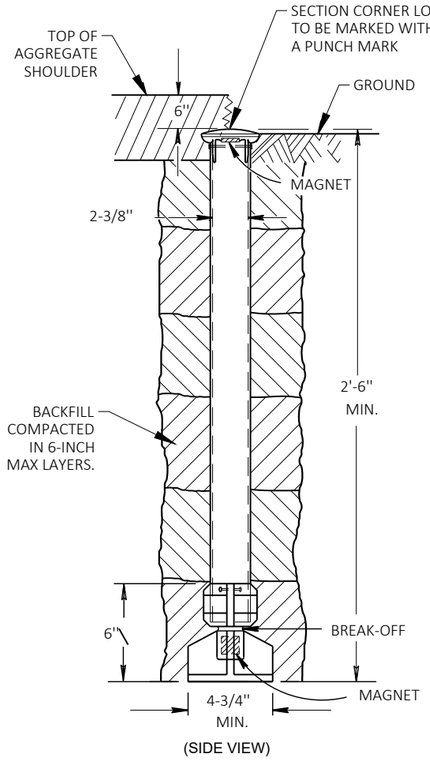
CONTRACTOR TO ORDER LANDMARK REFERENCE MONUMENTS WITH THE ABOVE STAMPING



(FRONT VIEW)

BERNSTEN DRIVABLE MONUMENT SSDR130

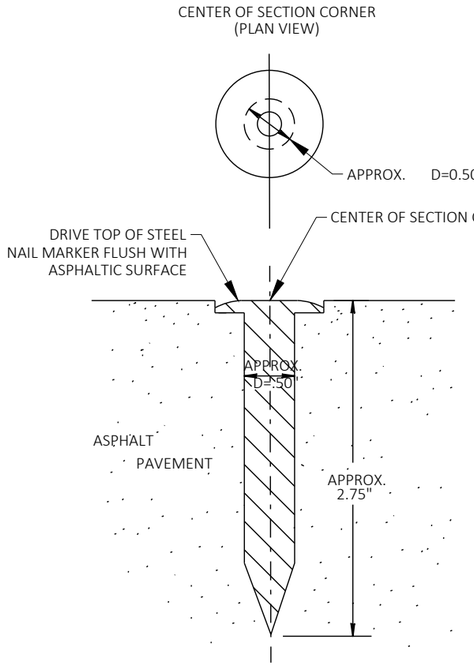
LANDMARK REFERENCE MONUMENT (TIES ONLY)



(SIDE VIEW)

OUTSIDE OF PAVEMENT

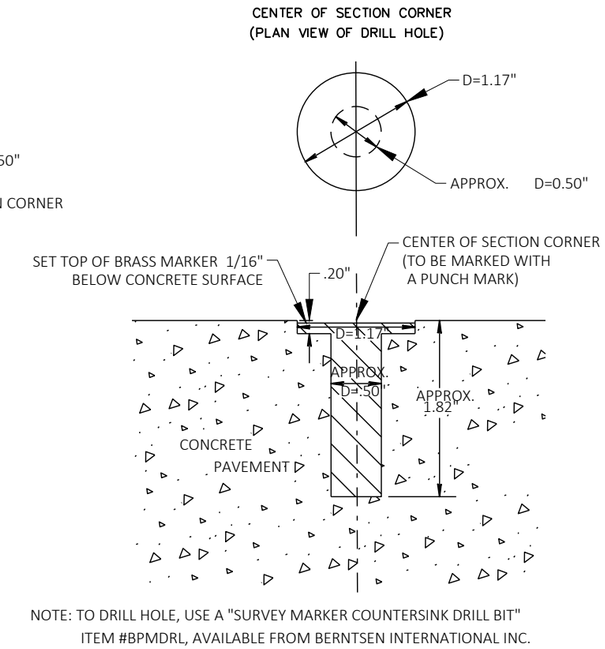
BERNTSEN A1BR30 ALUMINUM BREAK-OFF MONUMENT



(SIDE VIEW)

IN ASPHALTIC PAVEMENT

BERNTSEN SNM1 STEEL NAIL MARKER



NOTE: TO DRILL HOLE, USE A "SURVEY MARKER COUNTERSINK DRILL BIT" ITEM #BPMDRL, AVAILABLE FROM BERNTSEN INTERNATIONAL INC.

(SIDE VIEW OF DRILL HOLE)

IN CONCRETE PAVEMENT

BERNTSEN BP - 1 BRASS MARKER WITH ANCHOR PLUG

SECTION CORNER MONUMENTS

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.

LOCATE LANDMARK REFERENCE MONUMENTS OUTSIDE THE CONSTRUCTION LIMITS AND WITHIN WISDOT RIGHT OF WAY. LOCATION TO BE APPROVED BY THE ENGINEER.

CONTRACTOR WILL SUPPLY ALL REQUIRED SURVEY MONUMENTS.

SECTION CORNER MONUMENT AND LANDMARK REFERENCE MONUMENT DETAIL

2

2

N

001 SPEED LIMIT 65

002 MILE 216

003 WEST 29

EXISTING R/W

561 LF SAWING CONCRETE
(STAGE 2)

R/L STH 29 WB

STH 29 WB

98WB

100WB

102WB

104WB

BEGIN CONSTRUCTION
STA 100+00.00

004 WRONG WAY
REMOVE

1,567 LF SAWING CONCRETE
(STAGE 2)

STH 29 EB

964 LF SAWING CONCRETE
(STAGE 1)

002 MILE 216
REMOVE

003 COUNTY U
REMOVE

001 GRESHAM NEOPIT
REMOVE

SLOPE INTERCEPT (TYP.)

EXISTING R/W

105+34.00

REMOVAL LEGEND

- REMOVING CONCRETE PAVEMENT
- REMOVING CURB AND GUTTER
- CLEARING AND GRUBBING
- SAWCUT
- REMOVE CULVERT PIPE AND STORM SEWER
- EXISTING SIGN MOUNTED ON POST(S)
- XXX — SIGN - EXISTING TO REMAIN
- XXX — SIGN - REMOVE

NOTE

ALL EXISTING ASPHALT REMOVAL WILL
BE PAID FOR AS COMMON EXCAVATION.

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	REMOVAL PLAN - STH 29	SHEET 23	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\023201-RM.DWG
LAYOUT NAME - 023201

PLOT DATE : 1/29/2021 1:48 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

N

REMOVE SMALL PIPE CULVERT
(STAGE 2)

EXISTING R/W

CTH U

017 ONE WAY REMOVE

018 STOP REMOVE

019 DIVIDED HIGHWAY REMOVE

015 29 REMOVE

016 ONE WAY REMOVE

32 LF SAWING CONCRETE
(STAGE 2)

204U

020 STOP REMOVE

021 REMOVE

022 COUNTY U REMOVE

023 DO NOT ENTER REMOVE

EXISTING R/W

SLOPE INTERCEPT (TYP.)

024 WRONG WAY REMOVE

025 GRESHAM NEOPIT REMOVE

STH 29 WB

106WB

108WB

110WB

112WB

R/L STH 29 WB

105+34.00

1,567 LF SAWING CONCRETE
(STAGE 2)

STH 29 EB

R/L CTH U

202U

013 ONE WAY REMOVE

964 LF SAWING CONCRETE
(STAGE 1)

005 DO NOT ENTER REMOVE

006 REMOVE

007 STOP REMOVE

012 EAST 29 REMOVE

011 JCT 29 REMOVE

014 EAST 29

EXISTING R/W

REMOVE SMALL PIPE CULVERT
(STAGE 1)

EXISTING R/W

008 ONE WAY

009 STOP

010 DIVIDED HIGHWAY REMOVE

280U

112+99.37

REMOVAL LEGEND

- REMOVING CONCRETE PAVEMENT
- REMOVING CURB AND GUTTER
- CLEARING AND GRUBBING
- SAWCUT
- REMOVE CULVERT PIPE AND STORM SEWER
- EXISTING SIGN MOUNTED ON POST(S)
- XXX — SIGN - EXISTING TO REMAIN
- XXX — SIGN - REMOVE

NOTE

ALL EXISTING ASPHALT REMOVAL WILL
BE PAID FOR AS EXCAVATION COMMON

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	REMOVAL PLAN - STH 29	SHEET 24	E

2

2

N

EXISTING R/W

SLOPE INTERCEPT (TYP.)

026 NORTH STAR MOHICAN CASINO RESORT REMOVE

027 029

55 M.P.H. REMOVE

028 030

031 JCT COUNTY U REMOVE

STH 29 WB

114WB

116WB

118WB

120WB

R/L STH 29 WB

112+99.37

22 LF REMOVING STORM SEWER (18-INCH) (STAGE 2)

STH 29 EB

1,567 LF SAWING CONCRETE (STAGE 2)

004 SPEED LIMIT 65

EXISTING R/W

120+66.37

REMOVAL LEGEND

- REMOVE CONCRETE PAVEMENT
- REMOVING CURB AND GUTTER
- CLEARING AND GRUBBING
- SAWCUT
- REMOVE CULVERT PIPE AND STORM SEWER
- EXISTING SIGN MOUNTED ON POST(S)
- XXX SIGN - EXISTING TO REMAIN
- XXX SIGN - REMOVE

NOTE

ALL EXISTING ASPHALT REMOVAL WILL BE PAID FOR AS EXCAVATION COMMON

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	REMOVAL PLAN - STH 29	SHEET 25	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\023201-RM.DWG
LAYOUT NAME - 023203

PLOT DATE : 1/29/2021 1:50 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

EXISTING WETLAND BOUNDRY

N

REMOVE SMALL PIPE CULVERT
(STAGE 2)

EXISTING R/W

REMOVE SMALL PIPE CULVERT
(STAGE 2)

32 LF SAWING CONCRETE
(STAGE 2)

STH 29 WB

122WB

124WB

126WB

128WB

120+66.37

REMOVE SMALL PIPE CULVERT
(STAGE 2)

R/L STH 29 WB

SLOPE INTERCEPT (TYP.)

END CONSTRUCTION
STA 128+13.41
MATCH EXISTING
SAW CUT REQ'D

STH 29 EB

80 LF SAWING CONCRETE
(STAGE 2)

EXISTING R/W

REMOVAL LEGEND

- REMOVING CONCRETE PAVEMENT
- REMOVING CURB AND GUTTER
- CLEARING AND GRUBBING
- SAWCUT
- REMOVE CULVERT PIPE AND STORM SEWER
- EXISTING SIGN MOUNTED ON POST(S)
- XXX — SIGN - EXISTING TO REMAIN
- XXX — SIGN - REMOVE

NOTE

ALL EXISTING ASPHALT REMOVAL WILL
BE PAID FOR AS EXCAVATION COMMON

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	REMOVAL PLAN - STH 29	SHEET 26	E

2

N

EXISTING R/W

32 LF SAWING CONCRETE
(STAGE 2)

106WB

EXISTING R/W

005 DO NOT ENTER REMOVE

006 REMOVE

007 STOP REMOVE

015 29 REMOVE

016 ONE WAY

017 ONE WAY

018 STOP

019 DIVIDED HIGHWAY REMOVE

SLOPE INTERCEPT (TYP.)

STH 29 WB

R/L CTH U

CTH U

200U

202U

204U

206U

R/L STH 29 WB

013 ONE WAY

008 ONE WAY

009 STOP

010 DIVIDED HIGHWAY REMOVE

012 EAST 29 REMOVE

011 JCT 29 REMOVE

STH 29 EB

108WB

020 STOP REMOVE

021 REMOVE

24 LF SAWING ASPHALT
(STAGE 1)

REMOVE SMALL PIPE CULVERT
(STAGE 1)

24 LF SAWING ASPHALT
(STAGE 2)

REMOVE SMALL PIPE CULVERT
(STAGE 2)

022 COUNTY U REMOVE

023 DO NOT ENTER REMOVE

EXISTING R/W

EXISTING R/W

110WB

REMOVAL LEGEND

- REMOVING CONCRETE PAVEMENT
- REMOVING CURB AND GUTTER
- CLEARING AND GRUBBING
- SAWCUT
- REMOVE CULVERT PIPE AND STORM SEWER
- EXISTING SIGN MOUNTED ON POST(S)
- XXX — SIGN - EXISTING TO REMAIN
- XXX — SIGN - REMOVE

NOTE

ALL EXISTING ASPHALT REMOVAL WILL BE PAID FOR AS EXCAVATION COMMON

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	REMOVAL PLAN - CTH U	SHEET 27	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\023201-RM.DWG
LAYOUT NAME - 023205

PLOT DATE : 1/29/2021 1:52 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

PLAN DETAIL LEGEND

- CP08 — CONCRETE PAVEMENT 8-INCH (DOWELED AND TINED)
- CP10 — CONCRETE PAVEMENT 10-INCH (DOWELED AND TINED)
- AG01 — AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 1-1/4 - INCH, 6-INCH
- AP04 — HMA PAVEMENT 4 MT 58-28 S, 1-3/4" UPPER LAYER, TYP
HMA PAVEMENT 3 MT 58-28 S, 2-1/4" LOWER LAYER, TYP
- CM01 — CONCRETE MEDIAN SLOPED NOSE, TYPE 1

N

STH 29 WB

98WB

100WB

R/L STH 29 WB

101 25.84' 102

942.15 941.42 940.73

103

104

109

CULVERT PIPE CLASS III-A 18-INCH

941.55

R=45'

CP08

106

941.84

105

108

940.57

110

EXISTING JOINT LINE (TYP.)

CM01

50.00'

940.54

942.18 941.41 940.67

107

112

EDGE OF CONCRETE PAVEMENT
SAWING CONCRETE
MATCH EXISTING PAVEMENT

STH 29 EB

100+85.00

BEGIN ASPHALT PAVEMENT
STA 100+00.00
SAWING ASPHALT REQUIRED

113

942.97

118

CP08

942.19

941.41
941.32

940.62
940.54

2.00'

AP04 16.00'

115

114

942.73

117

941.55

940.77

939.98

25.00'

1.00'

116

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	PLAN DETAILS - WIS 29	SHEET 28	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\021201-PD.DWG
LAYOUT NAME - 021203

PLOT DATE : 2/25/2021 2:30 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT

2

N

EDGE OF CONCRETE PAVEMENT
SAWING CONCRETE
MATCH EXISTING PAVEMENT

R/L STH 29 WB

STH 29 WB

102WB

940.08 939.45 938.86 938.30 937.78 937.29 936.83 936.41 936.01 935.66 935.33 935.04

12.00'

CP08

202

939.21 938.62 938.06 937.54 937.05 936.59 936.17 935.77 935.42 935.09 934.80

939.68

CONCRETE CURB AND GUTTER
6-INCH SLOPED 36-INCH TYPE A

215 214 213 212 211 204 209 210

CONCRETE
SURFACE DRAIN

100+85.00

R=60'

203

150.00' TAPER

939.97 939.31 938.69 938.04 937.46 936.91 936.40 935.92 935.50 935.13 934.79 934.49

938.11 937.56 937.05 936.58 936.15 935.75 935.40 935.08 934.79

205

935.37 935.03 934.73

CP08

12.00'

STH 29 EB

12.00'

EDGE OF CONCRETE PAVEMENT
SAWING CONCRETE
MATCH EXISTING PAVEMENT

201

EXISTING JOINT LINE (TYP.)

206

14.00'

100.00' TAPER

939.94 939.29 938.67 937.98 937.12 936.88 936.35 935.90 935.30 934.94 934.97 934.70

935.87 935.26 934.87 934.89 934.61

207

939.78 939.05 938.35 937.58 936.68 936.42 935.85 935.39 934.78 934.39 934.41 934.13

936.24 936.48 936.24

CP08

AP04

208

12.00'

939.30 938.65 938.03 937.34 936.48 936.24 935.85 935.39

2.00'

1.00'

1.00'

103+80.00

EDGE OF LANE

EDGE OF PAVED SHOULDER

EDGE OF BASE AGGREGATE

PLAN DETAIL LEGEND

- CP08 — CONCRETE PAVEMENT 8-INCH (DOWELED AND TINED)
- CP10 — CONCRETE PAVEMENT 10-INCH (DOWELED AND TINED)
- AG01 — AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 1-1/4 - INCH, 6-INCH
- AP04 — HMA PAVEMENT 4 MT 58-28 S, 1-3/4" UPPER LAYER, TYP
  HMA PAVEMENT 3 MT 58-28 S, 2-1/4" LOWER LAYER, TYP
- CM01 — CONCRETE MEDIAN SLOPED NOSE, TYPE 1

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	PLAN DETAILS - WIS 29	SHEET 29	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\021201-PD.DWG
LAYOUT NAME - 021204

PLOT DATE : 2/25/2021 2:30 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT

WISDOT/CADDS SHEET 42

2

2

N

STH 29 WB

STH 29 EB

104WB

106WB

103+80.00

106+75.00

BEGIN CONCRETE PAVEMENT
STA 105+83.26
SAWING CONCRETE REQUIRED

EDGE OF CONCRETE PAVEMENT
SAWING CONCRETE
MATCH EXISTING PAVEMENT

R/L STH 29 WB

CONCRETE CURB AND GUTTER
6-INCH SLOPED 36-INCH TYPE A

ASPHALTIC SURFACE,
4-INCH

EXISTING JOINT LINE (TYP.)

EDGE OF LANE

EDGE OF PAVED SHOULDER

EDGE OF BASE AGGREGATE

CONCRETE CURB AND GUTTER
6-INCH SLOPED 36-INCH TYPE A

ASPHALTIC SURFACE, 4-INCH

2.00'
6.00'
14.00'
12.00'
3.00
2.00'
12.00'
12.00'
12.00'
14.00'
12.00'
2.00'
1.00'

PLAN DETAIL LEGEND

- CP08 — CONCRETE PAVEMENT 8-INCH (DOWELED AND TINED)
- CP10 — CONCRETE PAVEMENT 10-INCH (DOWELED AND TINED)
- AG01 — AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 1-1/4 - INCH, 6-INCH
- AP04 — HMA PAVEMENT 4 MT 58-28 S, 1-3/4" UPPER LAYER, TYP
  HMA PAVEMENT 3 MT 58-28 S, 2-1/4" LOWER LAYER, TYP
- CM01 — CONCRETE MEDIAN SLOPED NOSE, TYPE 1

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	PLAN DETAILS - WIS 29	SHEET 30	E

2

2

CTH U

STH 29 WB

STH 29 EB

N

CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE A

CONCRETE CURB AND GUTTER 6-INCH SLOPED 36-INCH TYPE A (REVERSE SLOPE)

CONCRETE SIDEWALK, 5-INCH

ASPHALTIC SURFACE, 4-INCH

63' TAPER

65' TAPER

R/L CTH U

R/L STH 29 WB

108WB

CONCRETE SIDEWALK 5-INCH (TYP) CURB RAMP DETECTABLE WARNING FIELD YELLOW (TYP)

EDGE OF CONCRETE PAVEMENT SAWING CONCRETE MATCH EXISTING PAVEMENT

EXISTING JOINT LINE (TYP.)

12.00'

14.00'

2.00'

R=100'

R=20'

106+75.00

109+70.00

202U

SURFACE 4"

PLAN DETAIL LEGEND

CP08	CONCRETE PAVEMENT 8-INCH (DOWELED AND TINED)
CP10	CONCRETE PAVEMENT 10-INCH (DOWELED AND TINED)
CM01	CONCRETE MEDIAN, SLOPED NOSE, TYPE 1
AG01	AGGREGATE DRIVEWAY, BASE AGGREGATEDENSE 1-1/4-INCH, 6-INCHES
AP04	HMA PAVEMENT 4 MT 58-28S, 1-3/4" UPPER LAYER, TYP HMA PAVEMENT 3 MT 58-28S,2-1/4" LOWER LAYER, TYP

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	PLAN DETAILS - WIS 29	SHEET 31 E

2

PROPOSED TLE

EXISTING R/W

N

CONCRETE SURFACE DRAIN

CONCRETE SURFACE DRAIN

CONCRETE CURB AND GUTTER
6-INCH SLOPED 36-INCH TYPE A

CONCRETE SURFACE DRAIN

CONCRETE SURFACE DRAIN

CONCRETE CURB AND GUTTER
6-INCH SLOPED 36-INCH TYPE A

450 451 452 453 454 455 456 457 458 459 460 461 462

934.38 934.40 934.41 934.41 934.40 934.37 934.33 934.27 934.21 934.12 934.03 933.92
934.62 934.64 934.65 934.65 934.64 934.61 934.57 934.51 934.45 934.36 934.27 934.16
934.91 934.91 934.91 934.89 934.86 934.81 934.75 934.68 934.59 934.49 934.38 934.26
935.19 935.19 935.19 935.17 935.14 935.09 935.03 934.96 934.87 934.77 934.66 934.54
934.95 934.95 934.95 934.93 934.90 934.85 934.79 934.72 934.63 934.53 934.42 934.30
934.73 934.75 934.76 934.76 934.74 934.71 934.67 934.61 934.54 934.46 934.36 934.25
934.49 934.51 934.52 934.52 934.50 934.47 934.43 934.37 934.30 934.22 934.12 934.01
935.95 935.99 936.00 936.00 935.98 935.94 935.88 935.81 935.71 935.60 935.46 935.31
936.19 936.23 936.24 936.24 936.22 936.18 936.12 936.05 935.95 935.84 935.70 935.55

CP08 CP10 AG01 AP04 CM01

12.00' 14.00' 12.00' 12.00' 12.00'

110WB 112WB

STH 29 WB

STH 29 EB

R/L STH 29 WB

109+70.00

112+65.00

EDGE OF CONCRETE PAVEMENT
SAWING CONCRETE
MATCH EXISTING PAVEMENT

EXISTING JOINT LINE (TYP.)

PLAN DETAIL LEGEND

CP08	CONCRETE PAVEMENT 8-INCH (DOWELED AND TINED)
CP10	CONCRETE PAVEMENT 10-INCH (DOWELED AND TINED)
AG01	AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 1-1/4 - INCH, 6-INCH
AP04	HMA PAVEMENT 4 MT 58-28 S, 1-3/4" UPPER LAYER, TYP HMA PAVEMENT 3 MT 58-28 S, 2-1/4" LOWER LAYER, TYP
CM01	CONCRETE MEDIAN SLOPED NOSE, TYPE 1

CONCRETE PAVEMENT 8-INCH

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	PLAN DETAILS - WIS 29	SHEET 32	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\021201-PD.DWG
LAYOUT NAME - 021207
PLOT DATE : 2/25/2021 2:30 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT
WISDOT/CADDS SHEET 42

2

PROPOSED TLE

EXISTING R/W

N

511 512 12.00' R = 30' AG01 R = 30'

ASPHALTIC FLUME

EDGE OF BASE AGGREGATE

EDGE OF PAVED SHOULDER

EDGE OF LANE

501 502 505 506 509 AP04 2.00'

933.80 933.59 933.67 933.44 933.52 933.25 933.36 933.04 933.19 932.82 933.00 932.58 932.81 932.32 932.60 932.04 932.40 931.74 932.18 931.43 931.95 931.13 931.71

934.04 934.12 933.91 933.97 933.76 933.80 933.60 933.63 933.44 933.23 933.01 932.78 932.54 932.28 932.01 931.73

CP08 CP08 CP10 CP10 CP08 CP08

12.00' 14.00' 12.00' 12.00'

100' TAPER

STH 29 WB

934.40 934.25 934.08 933.91 933.72 933.51 933.29 933.06 932.82 932.56 932.29 932.01

511

150.00' TAPER

934.16 934.13 934.01 933.99 933.84 933.67 933.48 933.27 933.05 932.78 932.58 932.32 932.05 931.97 931.77

114WB

503 507 508

R/L STH 29 WB

933.89 933.75 933.60 933.46 933.31 933.15 932.97

CM01 510 50.00' 931.57

504

R=60'

CONCRETE CURB AND GUTTER
6-INCH SLOPED 36-INCH TYPE A

932.05 932.39 932.71 933.01

112+65.00

935.14 934.95 934.74 934.52 934.27 934.01 933.73 933.43 933.11

12.00' CP08 512

935.38 935.19 934.98 934.76 934.51 934.25 933.97 933.67 933.35 933.01 932.65 932.28

STH 29 EB

EXISTING JOINT LINE (TYP.)

EDGE OF CONCRETE PAVEMENT
SAWING CONCRETE
MATCH EXISTING PAVEMENT

115+60.00

PLAN DETAIL LEGEND

- CP08 — CONCRETE PAVEMENT 8-INCH (DOWELED AND TINED)
- CP10 — CONCRETE PAVEMENT 10-INCH (DOWELED AND TINED)
- AG01 — AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 1-1/4 - INCH, 6-INCH
- AP04 — HMA PAVEMENT 4 MT 58-28 S, 1-3/4" UPPER LAYER, TYP
  HMA PAVEMENT 3 MT 58-28 S, 2-1/4" LOWER LAYER, TYP
- CM01 — CONCRETE MEDIAN SLOPED NOSE, TYPE 1

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	PLAN DETAILS - WIS 29	SHEET 33	E

2

N

601
25.00'
930.79
AP04
930.69
600
602
930.56
930.22
929.88
929.51
929.14
928.75
928.35
927.93
927.50
927.06
931.43
931.12
930.80
930.46
930.12
929.75
929.38
928.99
928.59
928.17
927.74
927.30
CP10
931.71
931.40
931.08
930.74
930.40
930.03
929.66
929.27
928.87
928.45
928.02
927.58
CP10
604
931.47
116WB
931.16
930.84
930.50
930.16
929.79
929.42
929.03
928.63
118WB
928.21
927.78
927.34
605
613
50'
931.23
606
607
CP08
931.36
R=45'
931.62
608
612
931.93
609
931.82
931.88
25'
611
610
115+60.00
118+55.00

EDGE OF BASE AGGREGATE
EDGE OF PAVED SHOULDER
EDGE OF LANE
2.00'
6.00'
14.00'
12.00'
3.00'
3.00'
AP04
R/L STH 29 WB
EDGE OF LANE
EDGE OF PAVED SHOULDER
EDGE OF BASE AGGREGATE

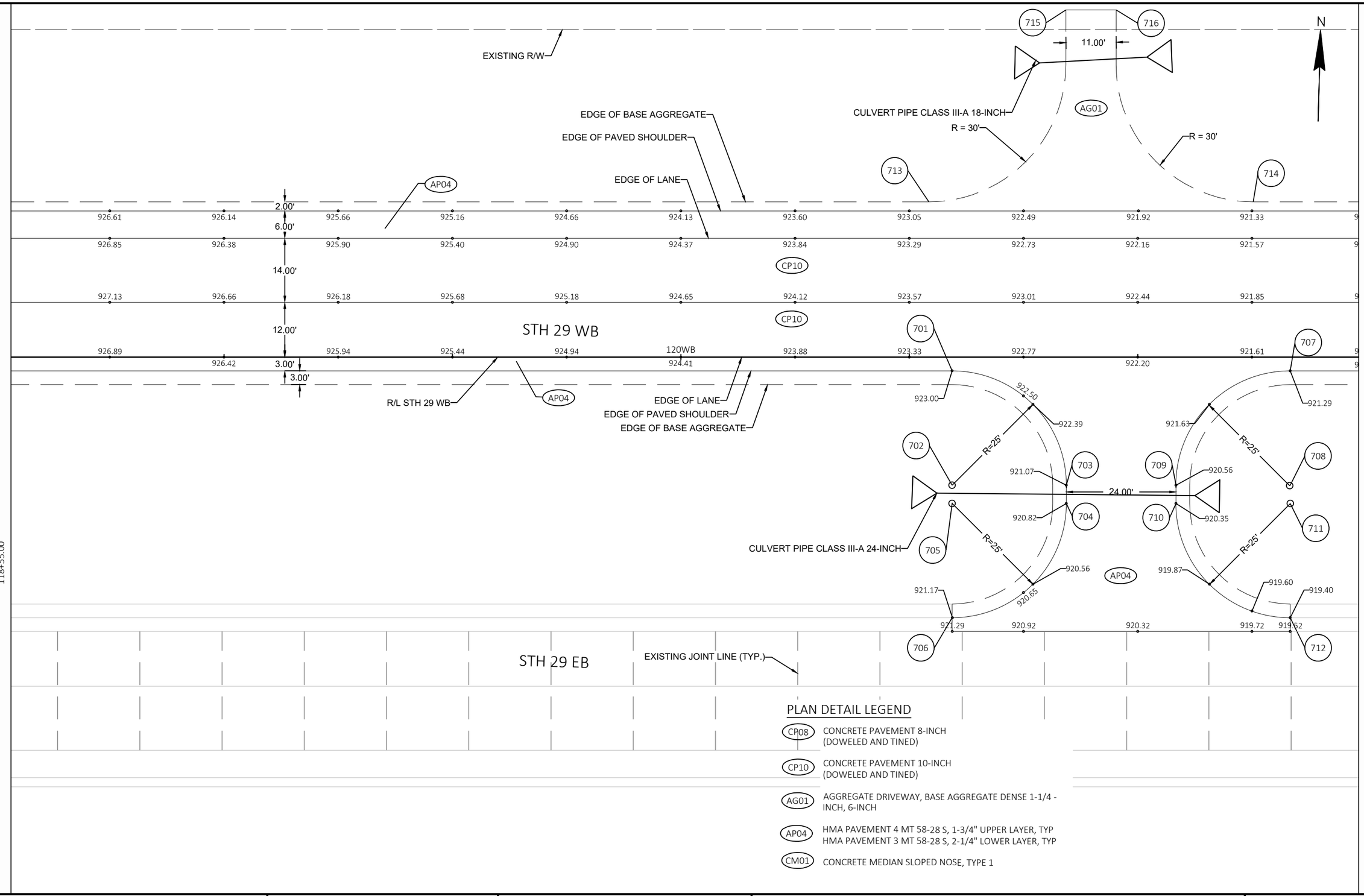
STH 29 WB

STH 29 EB

EXISTING JOINT LINE (TYP.)

PLAN DETAIL LEGEND

CP08	CONCRETE PAVEMENT 8-INCH (DOWELED AND TINED)
CP10	CONCRETE PAVEMENT 10-INCH (DOWELED AND TINED)
AG01	AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 1-1/4 - INCH, 6-INCH
AP04	HMA PAVEMENT 4 MT 58-28 S, 1-3/4" UPPER LAYER, TYP HMA PAVEMENT 3 MT 58-28 S, 2-1/4" LOWER LAYER, TYP
CM01	CONCRETE MEDIAN SLOPED NOSE, TYPE 1



PLAN DETAIL LEGEND

CP08	CONCRETE PAVEMENT 8-INCH (DOWELED AND TINED)
CP10	CONCRETE PAVEMENT 10-INCH (DOWELED AND TINED)
AG01	AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 1-1/4 - INCH, 6-INCH
AP04	HMA PAVEMENT 4 MT 58-28 S, 1-3/4" UPPER LAYER, TYP HMA PAVEMENT 3 MT 58-28 S, 2-1/4" LOWER LAYER, TYP
CM01	CONCRETE MEDIAN SLOPED NOSE, TYPE 1

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	PLAN DETAILS - WIS 29	SHEET 35 E

2

EXISTING R/W

EDGE OF BASE AGGREGATE

EDGE OF PAVED SHOULDER

EDGE OF LANE

N

AP04

2.00'

6.00'

14.00'

12.00'

3.00'

3.00'

20.73	920.12	919.49	918.85	918.20	917.53	916.86	916.23	915.58	914.98	914.40	913.84
20.97	920.36	919.73	919.09	918.44	917.77	917.10	916.45	915.82	915.22	914.64	914.08
21.25	920.64	920.01	919.37	918.72	918.05	917.38	916.73	916.10	915.51	914.92	914.36
21.01	920.40	122WB	919.13	918.48	917.81		916.49	915.86	915.26	124WB	914.12
20.89	920.28	919.65	919.01	918.36	917.69	917.14	916.37	915.74	915.14	914.68	914.00
						917.02				914.56	

CP10

CP10

STH 29 WB

AP04

R/L STH 29 WB

EDGE OF LANE

EDGE OF PAVED SHOULDER

EDGE OF BASE AGGREGATE

121+50.00

124+45.00

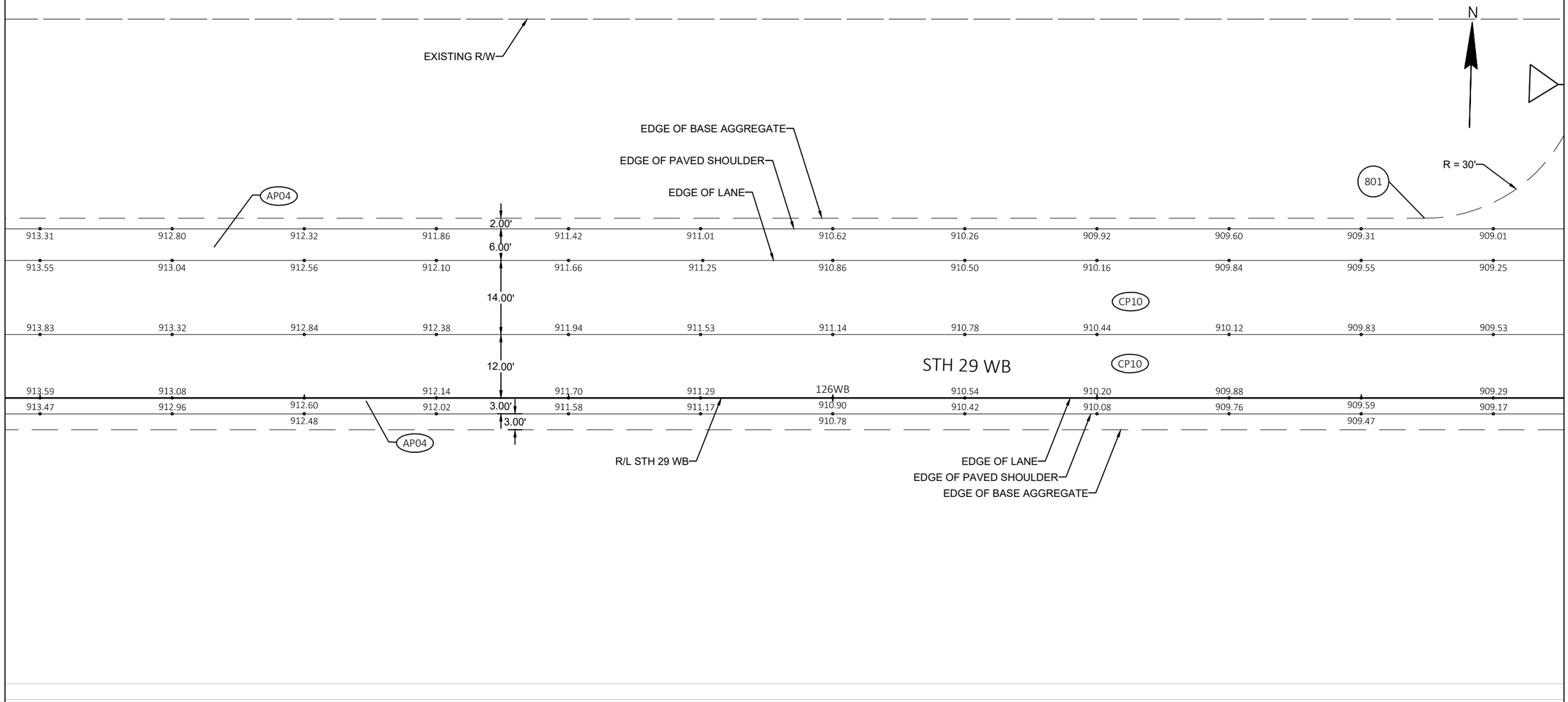
STH 29 EB

EXISTING JOINT LINE (TYP.)

PLAN DETAIL LEGEND

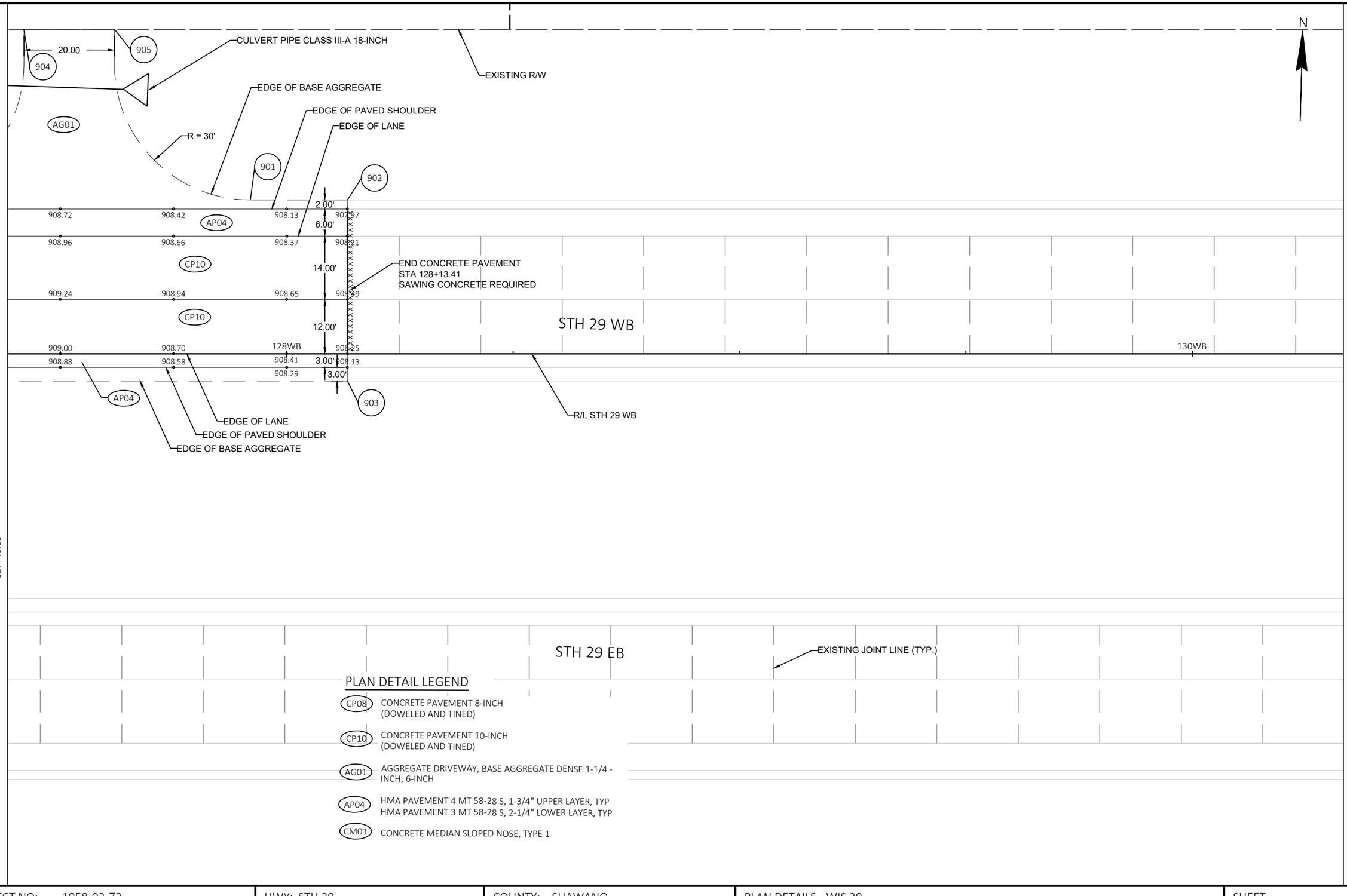
- CP08 — CONCRETE PAVEMENT 8-INCH (DOWELED AND TINED)
- CP10 — CONCRETE PAVEMENT 10-INCH (DOWELED AND TINED)
- AG01 — AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 1-1/4 - INCH, 6-INCH
- AP04 — HMA PAVEMENT 4 MT 58-28 S, 1-3/4" UPPER LAYER, TYP
  HMA PAVEMENT 3 MT 58-28 S, 2-1/4" LOWER LAYER, TYP
- CM01 — CONCRETE MEDIAN SLOPED NOSE, TYPE 1

2



PLAN DETAIL LEGEND

- CP08 — CONCRETE PAVEMENT 8-INCH (DOWELED AND TINED)
- CP10 — CONCRETE PAVEMENT 10-INCH (DOWELED AND TINED)
- AG01 — AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 1-1/4 - INCH, 6-INCH
- AP04 — HMA PAVEMENT 4 MT 58-28 S, 1-3/4" UPPER LAYER, TYP
  HMA PAVEMENT 3 MT 58-28 S, 2-1/4" LOWER LAYER, TYP
- CM01 — CONCRETE MEDIAN SLOPED NOSE, TYPE 1



PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	PLAN DETAILS - WIS 29	SHEET 38	E

2

2

N

1101

1123

1103

1122

1102

934.07

ASPHALTIC FLUME

R=50'

934.73

EXISTING R/W

END CONCRETE PAVEMENT
STA 201U+10.75

EDGE OF BASE AGGREGATE

EDGE OF LANE

1107

3.00'

934.77

934.72

1104

934.84

CONCRETE CURB AND GUTTER
6-INCH SLOPED 36-INCH TYPE A

934.65

6.00'

934.48

12.00'

CP08

CONCRETE CURB AND GUTTER
6-INCH SLOPED 36-INCH TYPE A
(REVERSE SLOPE)

MATCH EXISTING
STA 200+00.00
SAWING ASPHALT REQUIRED

1106

AP04

CTH U

935.22

1116

1117

199U

200U

934.72

935.28

935.39

935.51

12.00'

934.95

935.17

AP04

1109

R/L CTH U

CM01

934.48

6.00'

934.66

1111

1114

935.00

ASPHALTIC SURFACE 4"

935.10

1119

16.39'

935.26

934.68

CP08

935.42

1108

1118

R = 20'

AG01

EDGE OF LANE

934.71

1112

EDGE OF BASE AGGREGATE

3.00'

935.16

1113

934.93

R = 20'

1125

R=300'

1124

ASPHALTIC FLUME

EXISTING R/W

1120

1121

R=50'

1110

1208

201+85.00

PLAN DETAIL LEGEND

- CP08 — CONCRETE PAVEMENT 8-INCH (DOWELED AND TINED)
- CP10 — CONCRETE PAVEMENT 10-INCH (DOWELED AND TINED)
- AG01 — AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 1-1/4 - INCH, 6-INCH
- AP04 — HMA PAVEMENT 4 MT 58-28 S, 1-3/4" UPPER LAYER, TYP
  HMA PAVEMENT 3 MT 58-28 S, 2-1/4" LOWER LAYER, TYP
- CM01 — CONCRETE MEDIAN SLOPED NOSE, TYPE 1

PROJECT NO: 1058-02-73	HWY: CTH U	COUNTY: SHAWANO	PLAN DETAILS - CTH U	SHEET 39	E

2

N

63' TAPER

R=50'

CONCRETE CURB AND GUTTER
6-INCH SLOPED 36-INCH TYPE A

ASPHALTIC FLUME

EDGE OF BASE AGGREGATE

EDGE OF LANE

CULVERT PIPE
CLASS III-A 24-INCH

3.00'

EXISTING JOINT LINE (TYP.)

R/L STH 29 WB

CONCRETE MEDIAN NOSE
TYPE 2

ASPHALTIC SURFACE,
4-INCH

R=5'

CTH U

END CONCRETE PAVEMENT
STA 204U+05.73

CONCRETE CURB AND GUTTER
6-INCH SLOPE 36-INCH TYPE A
(REVERSE SLOPE)

R/L CTH U

CONCRETE MEDIAN NOSE
TYPE 2

CONCRETE CURB AND GUTTER
6-INCH SLOPED 36-INCH TYPE A

R=100'

R=5'

STH 29 WB

STH 29 EB

CONCRETE CURB AND GUTTER
6-INCH SLOPED 36-INCH TYPE A

EDGE OF BASE AGGREGATE

ASPHALTIC FLUME

EDGE OF LANE

EXISTING R/W

R=50'

202U

204U

201+85.00

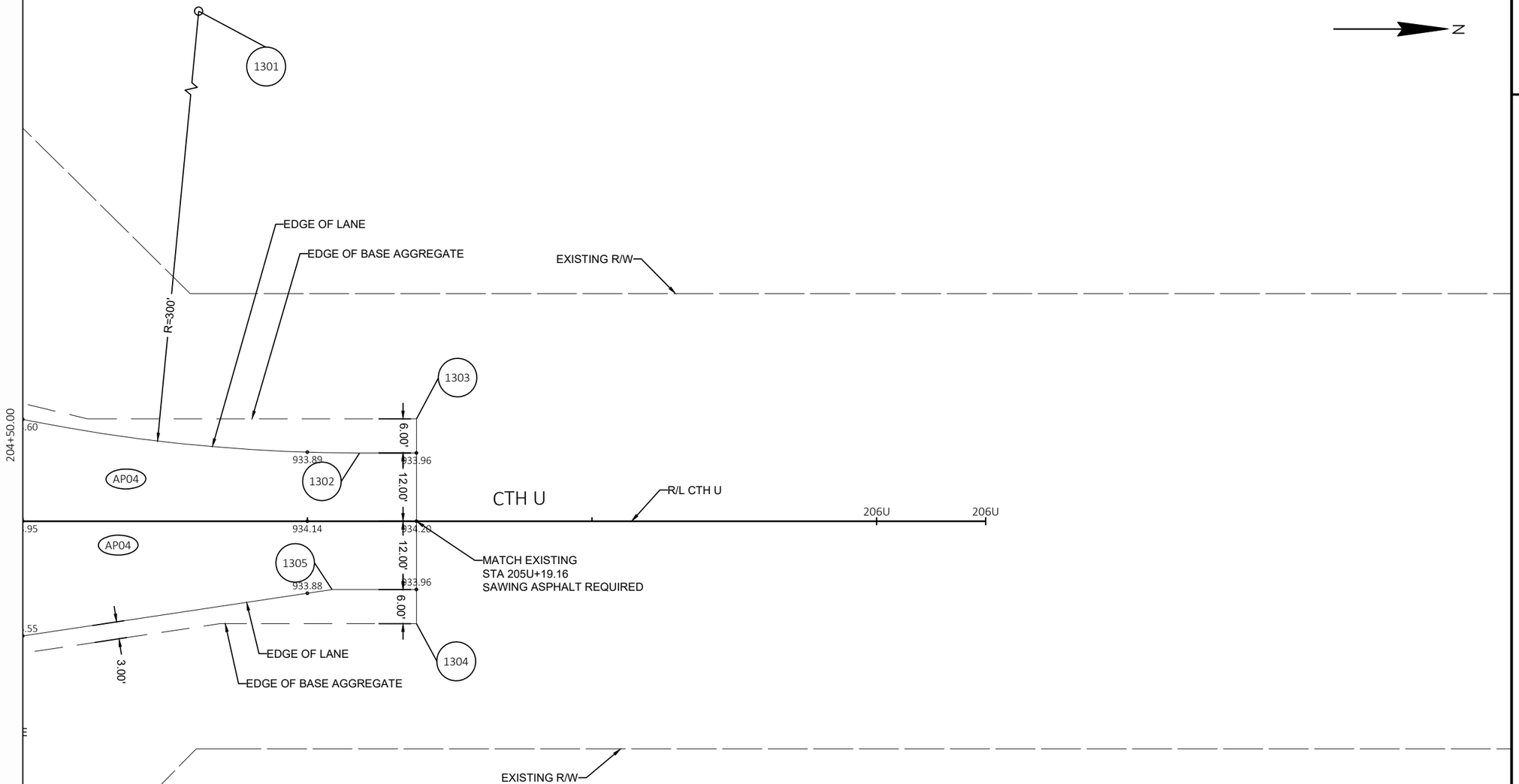
204+50.00

PLAN DETAIL LEGEND

- CP08 — CONCRETE PAVEMENT 8-INCH (DOWELED AND TINED)
- CP10 — CONCRETE PAVEMENT 10-INCH (DOWELED AND TINED)
- AG01 — AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 1-1/4 - INCH, 6-INCH
- AP04 — HMA PAVEMENT 4 MT 58-28 S, 1-3/4" UPPER LAYER, TYP
  HMA PAVEMENT 3 MT 58-28 S, 2-1/4" LOWER LAYER, TYP
- CM01 — CONCRETE MEDIAN SLOPED NOSE, TYPE 1

PROJECT NO: 1058-02-73	HWY: CTH U	COUNTY: SHAWANO	PLAN DETAILS - CTH U	SHEET 40	E

2



PLAN DETAIL LEGEND

- CP08 — CONCRETE PAVEMENT 8-INCH (DOWELED AND TINED)
- CP10 — CONCRETE PAVEMENT 10-INCH (DOWELED AND TINED)
- AG01 — AGGREGATE DRIVEWAY, BASE AGGREGATE DENSE 1-1/4 - INCH, 6-INCH
- AP04 — HMA PAVEMENT 4 MT 58-28 S, 1-3/4" UPPER LAYER, TYP
  HMA PAVEMENT 3 MT 58-28 S, 2-1/4" LOWER LAYER, TYP
- CM01 — CONCRETE MEDIAN SLOPED NOSE, TYPE 1

2

STA 98WB+00 - 100WB+85

DATA TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
101	100+21.86 WB	0.00	277359.879	815867.817	
102	100+47.71 WB	0.00	277359.868	815893.672	
103	100+47.71 WB	3.00 RT	277356.868	815893.670	
104	100+47.71 WB	5.25 RT	277354.621	815893.669	
105	100+70.00 WB	44.34 RT	277315.519	815915.941	45
106	100+25.00 WB	44.34 RT	277315.539	815870.941	
107	100+25.00 WB	60.00 RT	277299.878	815870.934	
108	100+22.01 WB	54.00 RT	277305.879	815867.948	
109	100+21.87 WB	6.00 RT	277353.879	815867.832	
110	100+73.75 WB	50.86 RT	277309.000	815919.687	
112	100+79.45 WB	60.00 RT	277299.853	815925.385	
113	100+00.00 WB	86.00 RT	277273.889	815845.923	
114	100+00.00 WB	92.00 RT	277267.889	815845.920	
115	100+74.99 WB	88.00 RT	277271.855	815920.909	
116	100+25.00 WB	102.00 RT	277257.878	815870.915	
117	100+49.99 WB	88.01 RT	277271.855	815895.916	
118	100+49.99 WB	86.00 RT	277273.866	815895.916	

STA 100WB+85 - 103WB+80

DATA TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
201	101+29.90 WB	72.00 RT	277287.830	815975.829	60
202	101+29.90 WB	12.00 RT	277347.830	815975.856	
203	101+35.00 WB	60.00 RT	277299.828	815980.934	
204	102+85.00 WB	48.00 RT	277311.760	816130.940	
205	102+85.23 WB	60.00 RT	277299.760	816131.163	
206	102+33.33 WB	86.00 RT	277273.784	816079.255	
207	101+75.00 WB	96.00 RT	277263.807	816020.918	
208	102+91.30 WB	102.00 RT	277257.757	816137.220	
209	102+93.89 WB	44.66 RT	277315.098	816139.831	
210	103+05.88 WB	44.20 RT	277315.550	816151.823	
211	103+12.58 WB	33.67 RT	277326.077	816158.527	
212	103+09.65 WB	30.95 RT	277328.797	816155.594	
213	103+12.47 WB	28.04 RT	277331.704	816158.423	
214	103+02.60 WB	15.00 RT	277344.752	816148.559	
215	102+90.60 WB	15.00 RT	277344.758	816136.558	

STA 103WB+80 - 106WB+75

DATA TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
301	105+83.26 WB	-32.00 LT	277391.626	816429.235	
302	105+83.26 WB	-26.00 LT	277385.626	816429.233	
303	105+83.26 WB	0.00	277359.626	816429.221	
304	106+35.76 WB	-31.97 LT	277391.602	816481.662	
305	106+09.47 WB	-28.00 LT	277387.614	816455.447	
306	106+49.46 WB	46.18 RT	277313.486	816495.563	
307	106+71.91 WB	12.00 RT	277347.761	816517.928	
308	106+49.46 WB	56.01 RT	277303.655	816495.594	
309	105+96.37 WB	-28.00 LT	277387.620	816442.340	
310	105+96.37 WB	-26.00 LT	277385.620	816442.339	
311	106+54.44	12.00	277344.669	816495.466	
312	106+54.44	12.00	277328.509	816495.516	

STA 106WB+75 - 109WB+70

DATA TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
401	107+38.29 WB	3.89 RT	277356.401	816584.291	
402	107+41.10 WB	10.97 RT	277349.357	816587.179	
404	106+78.14 WB	-66.85 LT	277426.641	816523.720	100
405	106+81.33 WB	33.10 RT	277326.712	816527.488	
406	107+05.51 WB	44.38 RT	277315.608	816551.826	
407	107+02.44 WB	-55.48 LT	277415.439	816547.973	100
408	107+77.56 WB	10.70 RT	277350.092	816623.668	
409	107+92.47 WB	24.00 RT	277337.016	816638.802	20
410	107+92.46 WB	4.01 RT	277357.000	816638.477	
411	108+75.40 WB	4.01 RT	277358.602	816721.426	
413	108+75.40 WB	13.84 RT	277348.774	816721.652	
414	108+33.95 WB	15.34 RT	277346.402	816680.191	
415	108+37.70 WB	115.25 RT	277246.580	816685.915	100
416	107+63.19 WB	49.17 RT	277311.423	816609.788	
417	107+48.19 WB	36.00 RT	277324.408	816594.576	20
418	107+48.18 WB	56.01 RT	277304.395	816594.800	
419	108+60.49 WB	26.36 RT	277335.930	816707.006	
420	108+64.00 WB	126.30 RT	277236.093	816712.718	100
421	107+99.54 WB	50.28 RT	277310.858	816646.308	
423	108+02.49 WB	57.22 RT	277303.966	816649.385	
424	108+71.40 WB	48.00 RT	277314.536	816718.429	
425	109+49.75 WB	86.00 RT	277278.551	816797.963	
426	109+49.75 WB	92.00 RT	277272.553	816798.123	
427	108+97.01 WB	92.02 RT	277271.139	816745.228	
428	109+23.29 WB	88.00 RT	277275.845	816771.569	
429	109+36.52 WB	86.00 RT	277278.198	816784.739	
430	108+60.49	26.36	277333.781	816721.996	
431	108+60.49	26.36	277317.624	816722.367	

2

STA 109WB+70 - 112WB+65

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
452	109+69.00 WB	48.00 RT	277317.052	816816.190	
450	109+69.00 WB	-52.78 LT	277417.800	816813.501	
453	109+81.00 WB	48.01 RT	277317.367	816828.186	
451	109+81.00 WB	-52.35 LT	277417.690	816825.500	
454	109+82.19 WB	35.06 RT	277330.342	816829.031	
458	111+03.82 WB	18.80 RT	277349.843	816950.182	
455	111+04.00 WB	48.00 RT	277320.659	816951.141	
459	111+15.81 WB	18.43 RT	277350.534	816962.162	
456	111+16.00 WB	48.00 RT	277320.979	816963.137	
462	111+17.89 WB	-60.88 LT	277429.873	816962.115	
460	111+19.00 WB	-47.41 LT	277416.433	816963.590	
457	111+19.11 WB	33.02 RT	277336.036	816965.847	
461	111+31.00 WB	-46.98 LT	277416.323	816975.590	

STA 115WB+60 - 118WB+55

DATA TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
600	115+62.24 WB	-26.00 LT	277406.876	817407.244	
601	115+87.24 WB	-42.00 LT	277423.538	817431.807	
602	116+12.24 WB	-32.00 LT	277414.210	817457.066	
604	115+87.24 WB	0.00	277381.553	817432.930	
605	115+87.24 WB	3.00 RT	277378.554	817433.010	
606	115+87.24 WB	15.15 RT	277366.409	817433.334	
607	115+58.90 WB	27.27 RT	277353.532	817405.327	45
608	115+64.95 WB	54.00 RT	277326.977	817412.089	
609	115+64.95 WB	57.00 RT	277323.978	817412.169	
610	115+64.95 WB	60.00 RT	277320.979	817412.249	
611	115+90.24 WB	60.00 RT	277321.655	817437.532	
612	115+90.24 WB	54.00 RT	277327.653	817437.371	
613	115+90.24 WB	6.00 RT	277375.636	817436.089	

STA 124WB+45 - 127WB+40

DATA TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
801	127+11.96 WB	-34.00 LT	277445.594	818556.338	

STA 112WB+65 - 115WB+60

STATION & OFFSET TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
501	112+70.75 WB	-41.97 LT	277415.050	817115.427	
502	112+78.74 WB	-41.68 LT	277414.977	817123.427	
511	113+10.69 WB	-76.66 LT	277450.797	817154.422	
512	113+21.69 WB	-76.66 LT	277451.091	817165.418	
503	113+26.88 WB	0.00	277374.597	817172.657	
504	113+27.24 WB	12.00 RT	277362.611	817173.343	
505	113+81.23 WB	-26.00 LT	277402.040	817226.296	
506	114+37.24 WB	-36.00 LT	277413.533	817282.021	
507	114+77.24 WB	0.00	277378.614	817322.969	
512	114+82.34 WB	48.00 RT	277330.768	817329.350	
511	114+82.34 WB	-12.00 LT	277390.746	817327.747	60
508	115+32.79 WB	0.00	277380.098	817378.498	
509	115+37.24 WB	-28.00 LT	277408.207	817382.199	
510	115+38.49 WB	9.14 RT	277371.110	817384.442	

STA 118WB+55 - 121WB+50

DATA TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
701	120+59.37 WB	3.00 RT	277391.169	817904.967	
702	120+59.37 WB	28.00 RT	277366.178	817905.635	25
703	120+84.37 WB	28.00 RT	277366.846	817930.627	
704	120+84.37 WB	32.00 RT	277362.847	817930.733	
705	120+59.37 WB	32.00 RT	277362.179	817905.742	25
706	120+59.37 WB	57.00 RT	277337.188	817906.410	
707	121+33.37 WB	3.00 RT	277393.146	817978.941	
708	121+33.37 WB	28.00 RT	277368.155	817979.609	25
709	121+08.37 WB	28.00 RT	277367.487	817954.618	
710	121+08.37 WB	32.00 RT	277363.488	817954.725	
711	121+33.37 WB	32.00 RT	277364.156	817979.716	25
712	121+33.37 WB	57.00 RT	277339.165	817980.384	
713	120+54.24 WB	-34.00 LT	277428.019	817898.855	
714	121+25.24 WB	-34.00 LT	277429.917	817969.830	
715	120+84.24 WB	-76.00 LT	277470.805	817927.722	
716	120+95.24 WB	-76.00 LT	277471.099	817938.718	

STA 127WB+40 - 130WB+00

DATA TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
901	127+91.96 WB	-34.00 LT	277447.731	818636.310	
902	128+13.41 WB	-34.00 LT	277448.304	818657.750	
903	128+13.41 WB	6.00 RT	277408.317	818658.819	
904	127+41.96 WB	-71.66 LT	277484.040	818585.321	
905	127+61.96 WB	-71.66 LT	277484.574	818605.314	

STA 199U+00 - 201U+85

DATA TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
1101	201+79.88 U	-83.24 LT	277246.148	816528.218	
1102	201+79.75 U	-75.25 LT	277245.867	816536.206	
1103	201+29.76 U	-73.98 LT	277195.868	816536.538	50
1104	201+29.93 U	-23.98 LT	277195.096	816586.532	
1106	200+30.01 U	-12.00 LT	277094.973	816596.643	
1107	200+00.01 U	-18.00 LT	277065.087	816590.083	
1108	200+00.01 U	18.00 RT	277064.414	816626.077	
1109	200+10.73 U	12.00 RT	277075.253	816620.278	
1110	200+10.73 U	312.00 RT	277069.644	816920.226	300
1111	200+78.35 U	19.72 RT	277142.709	816629.259	
1112	201+56.36 U	39.72 RT	277220.340	816650.720	
1113	201+64.16 U	41.50 RT	277228.105	816652.643	
1114	201+10.58 U	10.78 RT	277175.104	816620.923	
1116	201+10.75 U	0.00	277175.480	816610.150	
1117	201+71.35 U	0.00	277236.066	816611.283	
1118	200+23.23 U	18.00 RT	277087.639	816626.511	
1119	200+82.74 U	23.81 RT	277147.027	816633.435	
1120	201+51.90 U	59.31 RT	277215.511	816670.216	
1121	201+55.80 U	60.20 RT	277219.394	816671.178	
1122	201+66.37 U	-79.46 LT	277232.568	816531.742	
1123	201+66.43 U	-83.46 LT	277232.709	816527.745	
1124	200+43.23 U	45.00 RT	277107.131	816653.880	
1125	200+58.23 U	45.00 RT	277122.129	816654.161	
1208	201+53.05 U	90.25 RT	277216.086	816701.176	50

STA 201U+85 - 204U+50

DATA TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
1201	201+71.41 U	99.53 RT	277234.267	816710.800	100
1202	202+00.64 U	4.38 RT	277265.265	816616.214	
1203	201+99.17 U	9.17 RT	277263.712	816620.967	5
1204	202+04.17 U	9.02 RT	277268.712	816620.913	
1205	202+04.69 U	26.08 RT	277268.908	816637.980	
1206	201+99.69 U	26.23 RT	277263.908	816638.041	5
1207	201+98.56 U	31.10 RT	277262.690	816642.891	
1209	202+03.01 U	88.15 RT	277266.072	816700.010	
1210	201+97.96 U	93.36 RT	277260.928	816705.125	
1211	203+36.34 U	-89.56 LT	277401.147	816524.459	
1212	203+31.03 U	-84.85 LT	277395.825	816529.159	
1213	203+79.18 U	-87.60 LT	277443.985	816526.477	50
1214	203+71.18 U	-36.20 LT	277435.916	816577.862	
1215	203+79.02 U	-34.63 LT	277443.757	816579.447	
1216	204+38.64 U	-20.40 LT	277503.359	816593.746	
1217	203+33.67 U	-25.38 LT	277398.392	816588.640	
1218	203+32.68 U	-20.47 LT	277397.401	816593.541	5
1219	203+27.69 U	-20.41 LT	277392.401	816593.600	
1220	203+27.90 U	-4.93 LT	277392.594	816609.082	
1221	203+32.90 U	-5.00 LT	277397.593	816609.016	5
1222	203+32.90 U	0.00	277397.587	816614.016	
1223	204+24.32 U	24.00 RT	277488.983	816638.132	
1224	204+05.63 U	-10.92 LT	277470.336	816603.188	6
1226	203+97.84 U	24.00 RT	277462.504	816638.099	
1227	203+90.09 U	26.07 RT	277454.749	816640.158	
1228	204+04.33 U	74.00 RT	277468.922	816688.107	50
1229	203+54.34 U	75.07 RT	277418.932	816689.118	
1230	203+98.97 U	42.02 RT	277463.605	816656.124	
1231	204+02.81 U	40.90 RT	277467.445	816655.002	
1232	203+79.06 U	-55.11 LT	277443.817	816558.968	
1233	203+82.98 U	-54.32 LT	277447.738	816559.760	

STA 204U+50 - 206U+00

DATA TABLE					
POINT	STATION	OFFSET	Y COORDS	X COORDS	RADIUS
1301	205+09.16 U	-312.00 LT	277574.242	816302.240	300
1302	205+09.16 U	-12.00 LT	277573.860	816602.240	
1303	205+19.16 U	-18.00 LT	277583.868	816596.253	
1304	205+19.16 U	18.00 RT	277583.822	816632.253	
1305	205+04.33 U	12.00 RT	277569.001	816626.234	

2

2

LEGEND

- EROSION MAT CLASS I, TYPE B
- SEEDING
- SILT FENCE
- RIPRAP OR STONE DITCH CHECK
- INTERCEPTING EMBANKMENT
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

N

EXISTING RIGHT OF WAY

STH 29 WB

R/L STH 29 WB

60WB

65WB

65+84.00

STH 29 EB

EXISTING RIGHT OF WAY

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	EROSION CONTROL STAGE 1	SHEET 45	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\022001-EC1.DWG
LAYOUT NAME - EC_S1 (1)

PLOT DATE : 1/29/2021 2:01 PM PLOT BY : DAN BAUMANN PLOT NAME : _____ PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

- EROSION MAT CLASS I, TYPE B
- SEEDING
- SILT FENCE
- RIPRAP OR STONE DITCH CHECK
- INTERCEPTING EMBANKMENT
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

N

EXISTING RIGHT OF WAY

65+84.00

R/L STH 29 WB

STH 29 WB

70WB

72+71.00

STH 29 EB

EXISTING RIGHT OF WAY

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	EROSION CONTROL STAGE 1	SHEET 46	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\022001-EC1.DWG
LAYOUT NAME - EC_S1 (2)

PLOT DATE : 1/29/2021 2:06 PM PLOT BY : DAN BAUMANN PLOT NAME : _____ PLOT SCALE : 1 IN:50 FT

2

2

LEGEND

- EROSION MAT CLASS I, TYPE B
- SEEDING
- SILT FENCE
- RIPRAP OR STONE DITCH CHECK
- INTERCEPTING EMBANKMENT
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

N

EXISTING RIGHT OF WAY

72+71.00

STH 29 WB

75WB

R/L STH 29 WB

80WB

STH 29 EB

EXISTING RIGHT OF WAY

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	EROSION CONTROL STAGE 1	SHEET 47	E

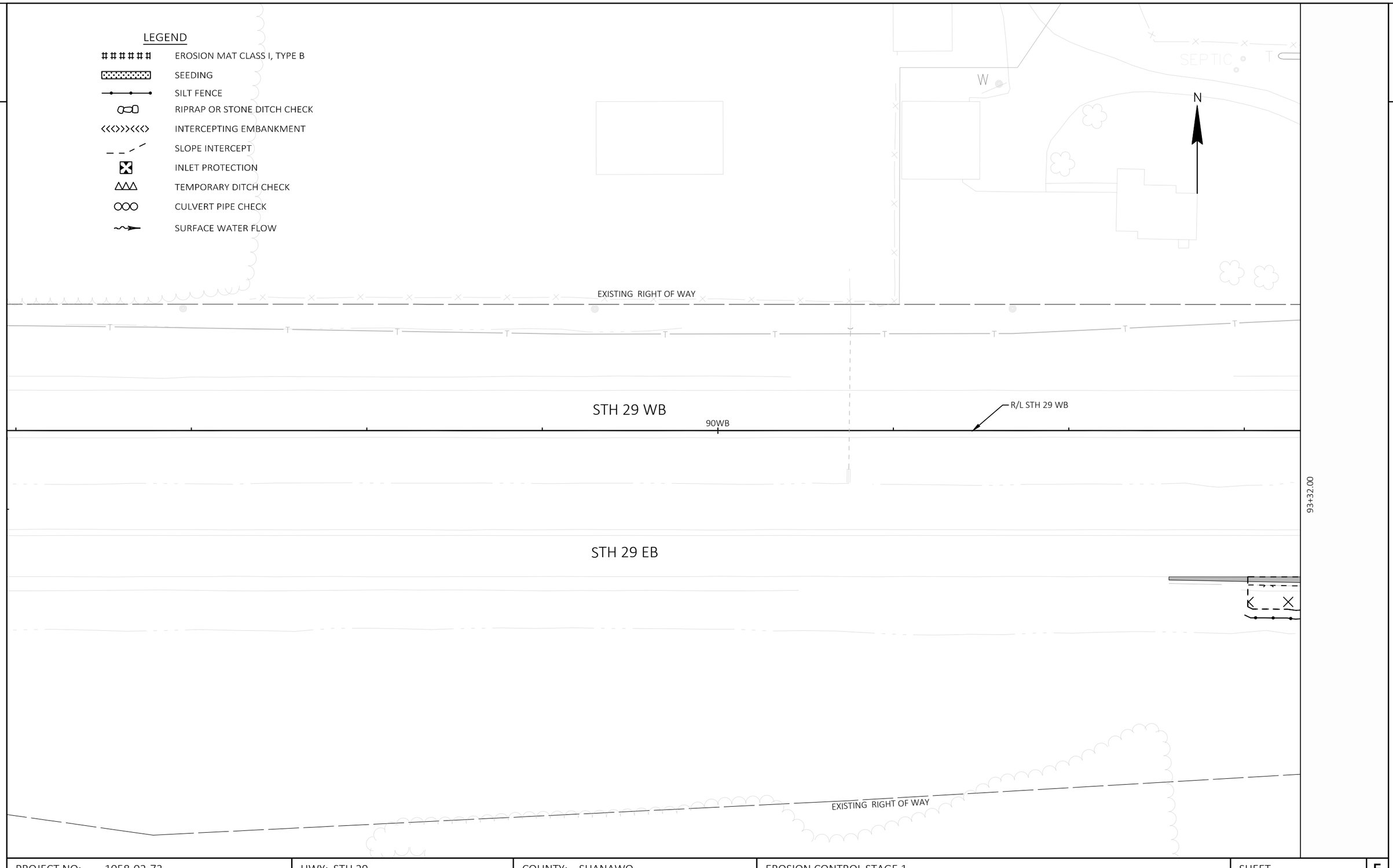
FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\022001-EC1.DWG
LAYOUT NAME - EC_S1 (3)

PLOT DATE : 1/29/2021 2:07 PM PLOT BY : DAN BAUMANN PLOT NAME : _____ PLOT SCALE : 1 IN:50 FT

2

LEGEND

- EROSION MAT CLASS I, TYPE B
- SEEDING
- SILT FENCE
- RIPRAP OR STONE DITCH CHECK
- INTERCEPTING EMBANKMENT
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW



2

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHANAWO	EROSION CONTROL STAGE 1	SHEET 48	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\022001-EC1.DWG
LAYOUT NAME - EC_S1 (5)

PLOT DATE : 1/29/2021 2:08 PM PLOT BY : DAN BAUMANN PLOT NAME : _____ PLOT SCALE : 1 IN:50 FT

2

2

LEGEND

- EROSION MAT CLASS I, TYPE B
- SEEDING
- SILT FENCE
- RIPRAP OR STONE DITCH CHECK
- INTERCEPTING EMBANKMENT
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

N

EXISTING RIGHT OF WAY

93+32.00

STH 29 WB

95WB

R/L STH 29 WB

100WB

100+19.00

STH 29 EB

EXISTING RIGHT OF WAY

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	EROSION CONTROL STAGE 1	SHEET 49	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\022001-EC1.DWG
LAYOUT NAME - EC_S1 (6)

PLOT DATE : 1/29/2021 2:09 PM PLOT BY : DAN BAUMANN PLOT NAME : _____ PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

LEGEND

- EROSION MAT CLASS I, TYPE B
- SEEDING
- SILT FENCE
- RIPRAP OR STONE DITCH CHECK
- INTERCEPTING EMBANKMENT
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

N

EXISTING RIGHT OF WAY

100+19.00

STH 29 WB

R/L STH 29 WB

105WB

107+06.00

STH 29 EB

EXISTING RIGHT OF WAY

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	EROSION CONTROL STAGE 1	SHEET 50	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\022001-EC1.DWG
LAYOUT NAME - EC_S1 (7)

PLOT DATE : 2/25/2021 2:59 PM PLOT BY : DAN BAUMANN PLOT NAME : _____ PLOT SCALE : 1 IN:50 FT

2

2

CTH U

205U

107+06.00

113+93.00

N

APPROXIMATE LOCATION
OF EXISTING SEPTIC SYSTEM

PROPOSED TLE

EXISTING RIGHT OF WAY

R/L STH 29 WB

STH 29 WB

110WB

STH 29 EB

POST

FO

T

SS

J3656
P 934.092
SGN/FO

LEGEND

- EROSION MAT CLASS I, TYPE B
- SEEDING
- SILT FENCE
- RIPRAP OR STONE DITCH CHECK
- INTERCEPTING EMBANKMENT
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	EROSION CONTROL STAGE 1	SHEET 51	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\022001-EC1.DWG
LAYOUT NAME - EC_S1 (8)

PLOT DATE : 2/25/2021 3:00 PM PLOT BY : DAN BAUMANN PLOT NAME : _____ PLOT SCALE : 1 IN:50 FT

2

2

LEGEND

- EROSION MAT CLASS I, TYPE B
- SEEDING
- SILT FENCE
- RIPRAP OR STONE DITCH CHECK
- INTERCEPTING EMBANKMENT
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

N

PROPOSED TLE

EXISTING RIGHT OF WAY

113+93.00

STH 29 WB

R/L STH 29 WB

115WB

120WB

STH 29 EB

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	EROSION CONTROL STAGE 1	SHEET 52	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\022001-EC1.DWG
LAYOUT NAME - EC_S1 (9)

PLOT DATE : 1/29/2021 2:13 PM PLOT BY : DAN BAUMANN PLOT NAME : _____ PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

N

EXISTING WETLAND

EXISTING WETLAND

EXISTING RIGHT OF WAY

STH 29 WB

R/L STH 29 WB

130WB

134+54.00

STH 29 EB

LEGEND

- EROSION MAT CLASS I, TYPE B
- SEEDING
- SILT FENCE
- RIPRAP OR STONE DITCH CHECK
- INTERCEPTING EMBANKMENT
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	EROSION CONTROL STAGE 1	SHEET 53	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\022001-EC1.DWG
LAYOUT NAME - EC_S1 (11)

PLOT DATE : 1/29/2021 2:03 PM PLOT BY : DAN BAUMANN PLOT NAME : _____ PLOT SCALE : 1 IN:50 FT

2

2

N

134+54.00

R/L STH 29 WB

EXISTING WETLAND

STH 29 WB

135WB

140WB

141+41.00

STH 29 EB

EXISTING WETLAND

LEGEND

- EROSION MAT CLASS I, TYPE B
- SEEDING
- SILT FENCE
- RIPRAP OR STONE DITCH CHECK
- INTERCEPTING EMBANKMENT
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	EROSION CONTROL STAGE 1	SHEET 54	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\022001-EC1.DWG
LAYOUT NAME - EC_S1 (12)

PLOT DATE : 1/29/2021 2:04 PM PLOT BY : DAN BAUMANN PLOT NAME : _____ PLOT SCALE : 1 IN:50 FT

2

2

N

EXISTING RIGHT OF WAY

141+41.00

EXISTING WETLAND

STH 29 WB

R/L STH 29 WB

145WB

STH 29 EB

LEGEND

- EROSION MAT CLASS I, TYPE B
- SEEDING
- SILT FENCE
- RIPRAP OR STONE DITCH CHECK
- INTERCEPTING EMBANKMENT
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	EROSION CONTROL STAGE 1	SHEET 55	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\022001-EC1.DWG
LAYOUT NAME - EC_S1 (13)

PLOT DATE : 1/29/2021 2:05 PM PLOT BY : DAN BAUMANN PLOT NAME : _____ PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EROSION MAT CLASS I, TYPE B
- SEEDING
- SILT FENCE
- RIPRAP OR STONE DITCH CHECK
- INTERCEPTING EMBANKMENT
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

N

103+87.00

EXISTING RIGHT OF WAY

R/L STH 29 WB

STH 29 WB

100WB

A B

STH 29 EB

STAGE 1 EROSION CONTROL

EXISTING RIGHT OF WAY

2

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	EROSION CONTROL STAGE 2	SHEET 56	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\022001-EC2.DWG
LAYOUT NAME - Sheet -EC2

PLOT DATE : 1/29/2021 2:21 PM PLOT BY : DAN BAUMANN PLOT NAME : _____ PLOT SCALE : 1 IN:50 FT

2

LEGEND

- EROSION MAT CLASS I, TYPE B
- SEEDING
- SILT FENCE
- RIPRAP OR STONE DITCH CHECK
- INTERCEPTING EMBANKMENT
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

EXISTING RIGHT OF WAY

205U

CTH U

110+74.00

EXISTING RIGHT OF WAY

R/L CTH U

R/L STH 29 WB

STH 29 WB

A C

A B

105WB

110WB

A C

A C

A C

A C

STH 29 EB

STAGE 1 EROSION CONTROL

CTH U

103+87.00

EXISTING RIGHT OF WAY

EXISTING RIGHT OF WAY

2

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	EROSION CONTROL STAGE 2	SHEET 57	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\022001-EC2.DWG
LAYOUT NAME - Sheet -EC2 (1)

PLOT DATE : 2/25/2021 3:45 PM PLOT BY : DAN BAUMANN PLOT NAME : _____ PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

117+61.00

APPROXIMATE LOCATION
OF EXISTING SEPTIC SYSTEM

PROPOSED TLE

EXISTING RIGHT OF WAY

STH 29 WB

A B

A C

115WB

STH 29 EB

STAGE 1 EROSION CONTROL

EXISTING RIGHT OF WAY

LEGEND

- EROSION MAT CLASS I, TYPE B
- SEEDING
- SILT FENCE
- RIPRAP OR STONE DITCH CHECK
- INTERCEPTING EMBANKMENT
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

110+74.00

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	EROSION CONTROL STAGE 2	SHEET 58	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\022001-EC2.DWG
LAYOUT NAME - Sheet -EC2 (2)

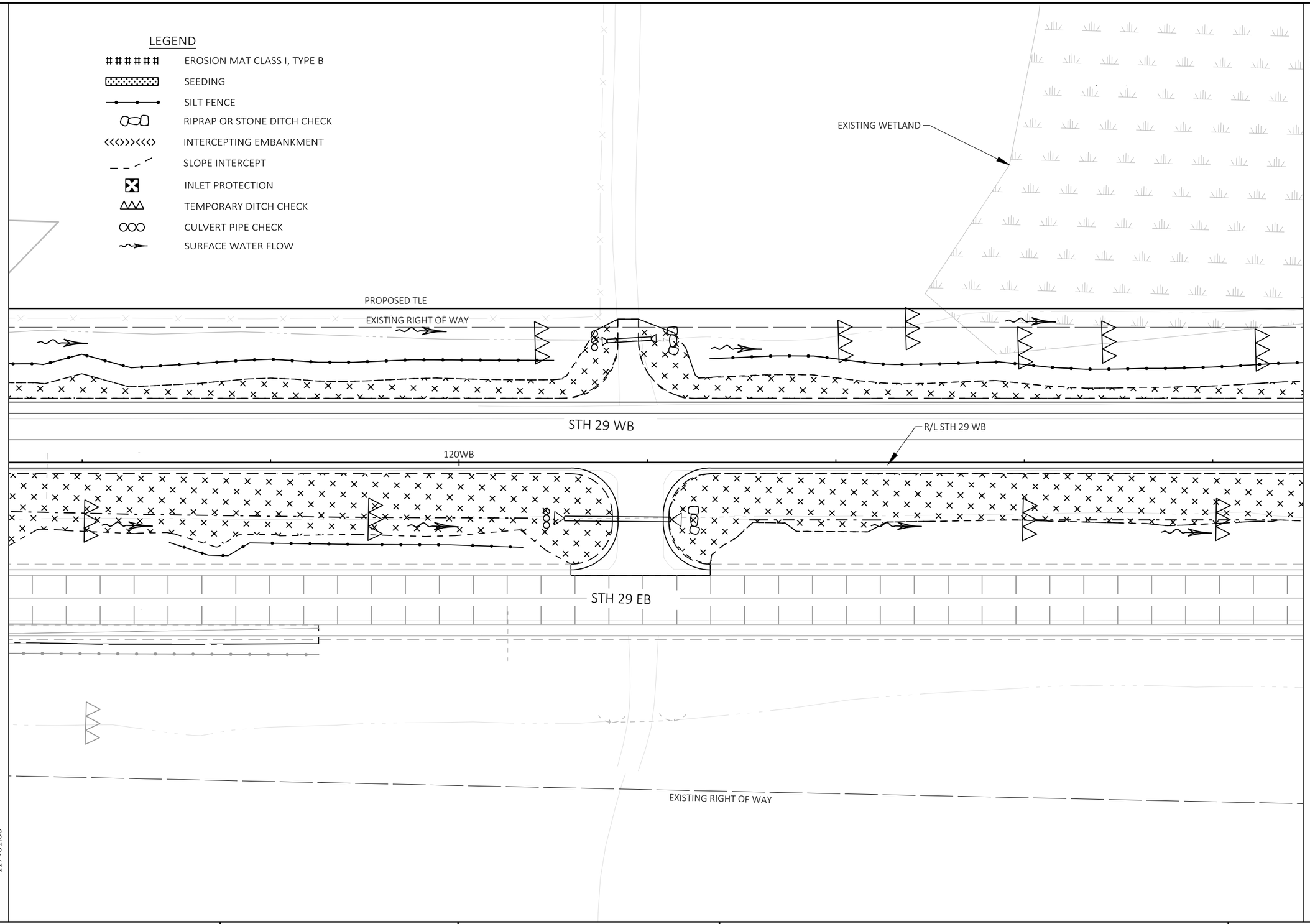
PLOT DATE : 2/25/2021 3:46 PM PLOT BY : DAN BAUMANN PLOT NAME : _____ PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- EROSION MAT CLASS I, TYPE B
- SEEDING
- SILT FENCE
- RIPRAP OR STONE DITCH CHECK
- INTERCEPTING EMBANKMENT
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW



2

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	ERONSION CONTROL STAGE 2	SHEET 59	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\022001-EC2.DWG
LAYOUT NAME - Sheet -EC2 (3)

PLOT DATE : 1/29/2021 3:28 PM PLOT BY : DAN BAUMANN PLOT NAME : _____ PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

EXISTING WETLAND

PROPOSED TLE

EXISTING RIGHT OF WAY

R/L STH 29 WB

STH 29 WB

125WB

130WB

STAGE 1 EROSION CONTROL

STH 29 EB

LEGEND

- EROSION MAT CLASS I, TYPE B
- SEEDING
- SILT FENCE
- RIPRAP OR STONE DITCH CHECK
- INTERCEPTING EMBANKMENT
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

EXISTING RIGHT OF WAY

124+48.00

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	EROSION CONTROL STAGE 2	SHEET 60	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\022001-EC2.DWG
LAYOUT NAME - Sheet -EC2 (4)

PLOT DATE : 1/29/2021 2:26 PM PLOT BY : DAN BAUMANN PLOT NAME : _____ PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

EXISTING RIGHT OF WAY

STH 29 WB

60 62 64 66

STH 29 EB

MATCH LINE STA. 67+34.00WB

LEGEND

- EROSION MAT CLASS I, TYPE B
- SEEDING
- SILT FENCE
- RIPRAP OR STONE DITCH CHECK
- INTERCEPTING EMBANKMENT
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

EXISTING RIGHT OF WAY

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	EROSION CONTROL STAGE 3	SHEET 61	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\022001-EC3.DWG
LAYOUT NAME - 01_EC S3

PLOT DATE : 1/28/2021 4:15 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

MATCH LINE STA. 67+34.00WB

EXISTING RIGHT OF WAY

68 70 72 74

STH 29 WB

STH 29 EB

EXISTING RIGHT OF WAY

MATCH LINE STA. 74+96.00WB

LEGEND

- EROSION MAT CLASS I, TYPE B
- SEEDING
- SILT FENCE
- RIPRAP OR STONE DITCH CHECK
- INTERCEPTING EMBANKMENT
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	EROSION CONTROL STAGE 3	SHEET 62	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\022001-EC3.DWG
LAYOUT NAME - 02_EC S3

PLOT DATE : 1/27/2021 4:11 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

MATCH LINE STA. 128+30.00WB

EXISTING RIGHT OF WAY

EXISTING WETLAND

STH 29 WB

130

132

134

STH 29 EB

MATCH LINE STA. 135+92.00WB

EXISTING WETLAND

EXISTING RIGHT OF WAY

LEGEND

- EROSION MAT CLASS I, TYPE B
- SEEDING
- SILT FENCE
- RIPRAP OR STONE DITCH CHECK
- INTERCEPTING EMBANKMENT
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	EROSION CONTROL STAGE 3	SHEET 63	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\022001-EC3.DWG
LAYOUT NAME - 05_EC S3

PLOT DATE : 1/27/2021 4:13 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

MATCH LINE STA. 135+92.00WB

EXISTING RIGHT OF WAY

EXISTING WETLAND

STH 29 WB

136 138 140 142

STH 29 EB

EXISTING WETLAND

EXISTING RIGHT OF WAY

MATCH LINE STA. 143+54.00WB

LEGEND

- EROSION MAT CLASS I, TYPE B
- SEEDING
- SILT FENCE
- RIPRAP OR STONE DITCH CHECK
- INTERCEPTING EMBANKMENT
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	EROSION CONTROL STAGE 3	SHEET 64	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\022001-EC3.DWG
LAYOUT NAME - 06_EC S3

PLOT DATE : 1/27/2021 4:14 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

MATCH LINE STA. 143+54.00WB

EXISTING RIGHT OF WAY

EXISTING WETLAND

144 146 148 150

STH 29 WB

STH 29 EB

MATCH LINE STA. 151+16.00WB

LEGEND

- EROSION MAT CLASS I, TYPE B
- SEEDING
- SILT FENCE
- RIPRAP OR STONE DITCH CHECK
- INTERCEPTING EMBANKMENT
- SLOPE INTERCEPT
- INLET PROTECTION
- TEMPORARY DITCH CHECK
- CULVERT PIPE CHECK
- SURFACE WATER FLOW

EXISTING RIGHT OF WAY

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	EROSION CONTROL STAGE 3	SHEET 65	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\022001-EC3.DWG
LAYOUT NAME - 07_EC S3

PLOT DATE : 1/27/2021 4:15 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

N

EXISTING R/W

R/L STH 29 WB

65WB 66WB 67WB 68WB 69WB 70WB 71WB 72WB

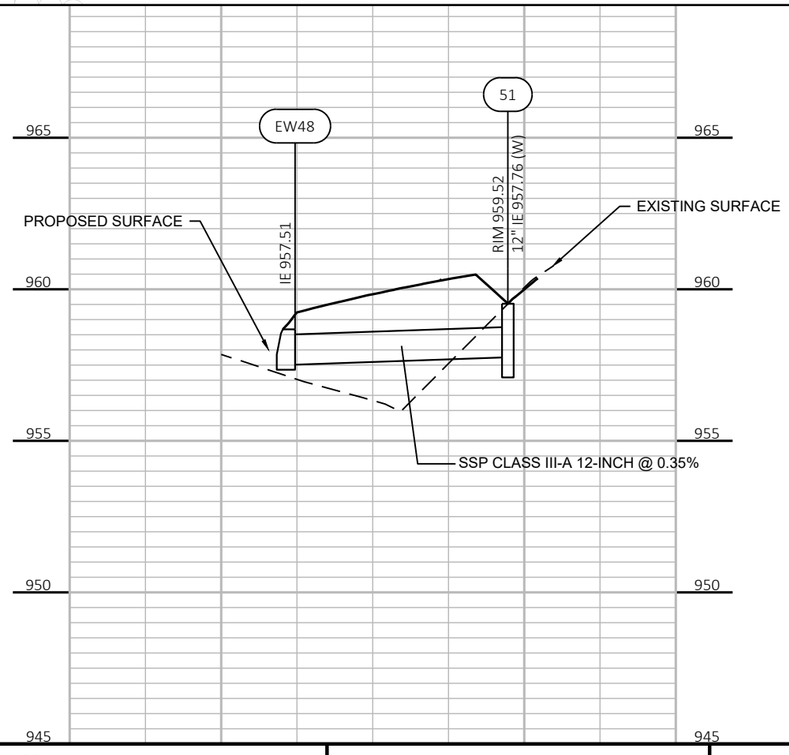
51

STH 29 WB

SLOPE INTERCEPT

EW48

STH 29 EB



PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	STORM SEWER	SHEET 66	E

FILE NAME : C:\CADDLIB\PW\APATEK\GREATLAKES\D0237721\022501-SS.DWG
LAYOUT NAME - Sheet - (17)
PLOT DATE : 1/29/2021 10:55 AM PLOT BY : ANDREW PATEK PLOT NAME : PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 41

2

N

EXISTING R/W

BEGIN PROJECT
STA 100WB+00.00
MATCH EXISTING

STH 29 WB

100WB 101WB 102WB 103WB 104WB 105WB 106WB

EW100

CONNECT TO EXISTING 30" PIPE
P103

109 101 110

R/L STH 29 WB

EW111 EW112

17

108 103 102 104 107

106+75.00

CULVERT PIPE CLASS III-A 18-INCH

CONNECT TO EXISTING 30" PIPE
P102

STH 29 EB

CONNECT TO EXISTING 30" PIPE
P101

SLOPE INTERCEPT

EW113

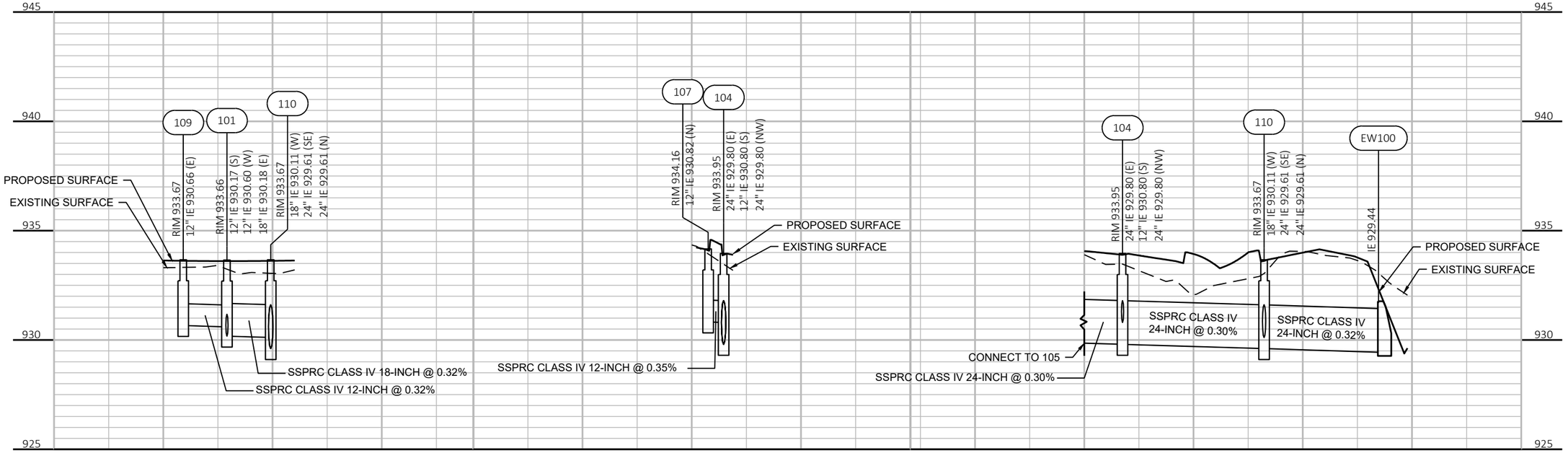
940
935
930
925
920

17
RIM 932.07
30" IE 928.76 (S)
30" IE 928.76 (N)
PROPOSED SURFACE
EXISTING SURFACE
EXISTING 30" RCCP
EXISTING 30" RCCP
CONCRETE COLLAR
IE: 928.51
CONCRETE COLLAR
IE: 929.07
SSPRC CLASS IV 30-INCH @ 0.93%
SSPRC CLASS IV 30-INCH @ 0.93%

EW113
IE 929.53
PROPOSED SURFACE
EXISTING SURFACE
EXISTING 30" RCCP
CONCRETE COLLAR
IE: 929.47
SSPRC CLASS IV 30-INCH @ 0.76%

108 102 103 101
RIM 933.47
12" IE 930.41 (E)
RIM 933.44
12" IE 930.33 (W)
12" IE 930.33 (E)
RIM 933.44
12" IE 930.25 (W)
12" IE 930.25 (N)
RIM 933.66
12" IE 930.17 (S)
12" IE 930.60 (W)
18" IE 930.18 (E)
PROPOSED SURFACE
EXISTING SURFACE
SSPRC CLASS IV 12-INCH @ 0.32%
SSPRC CLASS IV 12-INCH @ 0.32%
SSPRC CLASS IV 12-INCH @ 0.32%

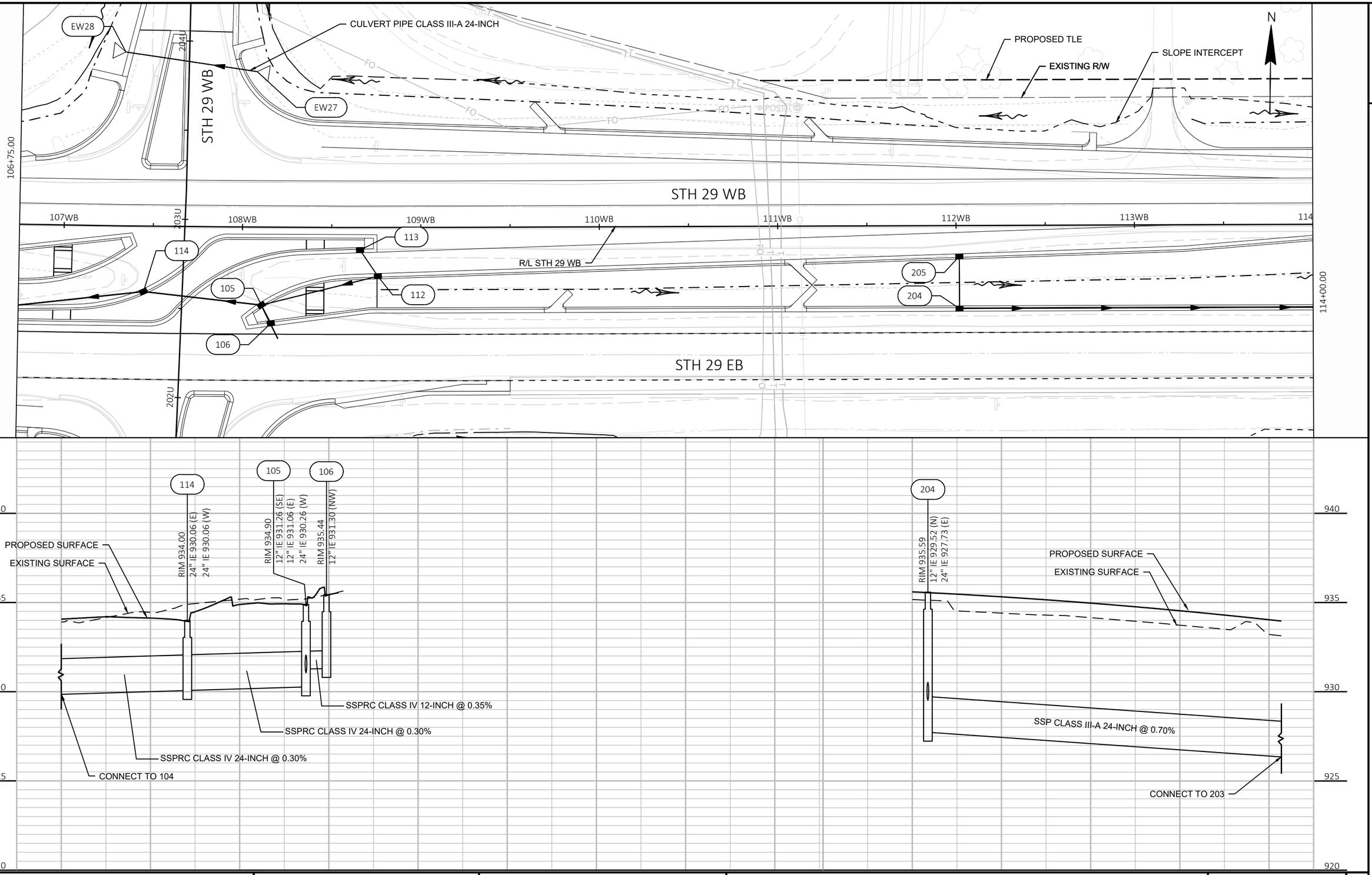
PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	STORM SEWER	SHEET 67	E



PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	STORM SEWER	SHEET 68	E

FILE NAME : C:\CADDLIB\PW\APATEK\GREATLAKES\D0237721\022501-SS.DWG
LAYOUT NAME - Sheet - (18PRO)
PLOT DATE : 1/29/2021 10:58 AM PLOT BY : ANDREW PATEK PLOT NAME : PLOT SCALE : 1 IN:50 FT

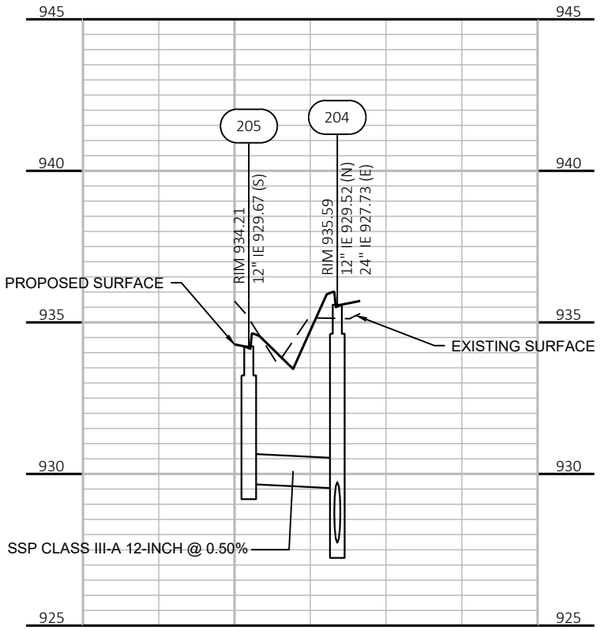
2

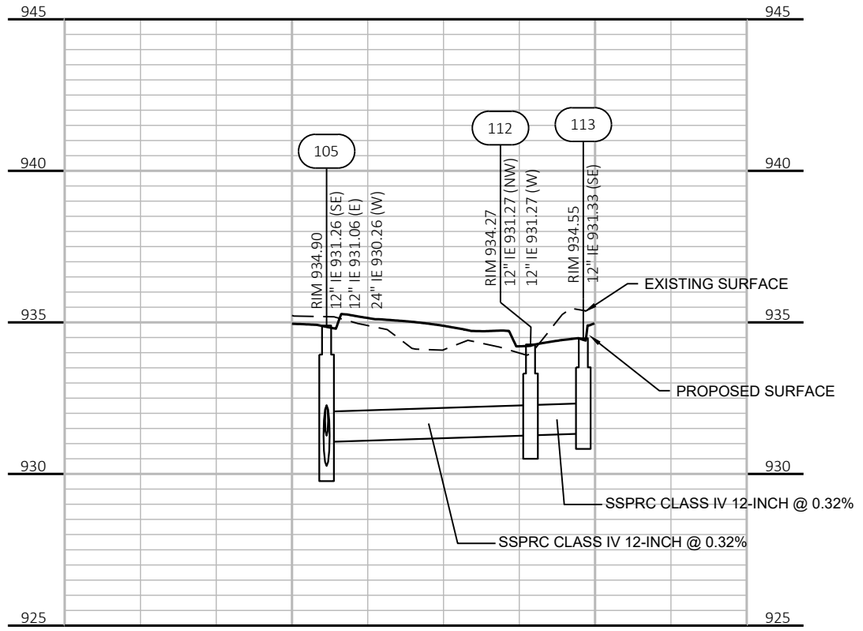


PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	STORM SEWER	SHEET 69	E

FILE NAME : C:\CADDLIB\PW\APATEK\GREATLAKES\D0237721\022501-SS.DWG
LAYOUT NAME - Sheet - (19)

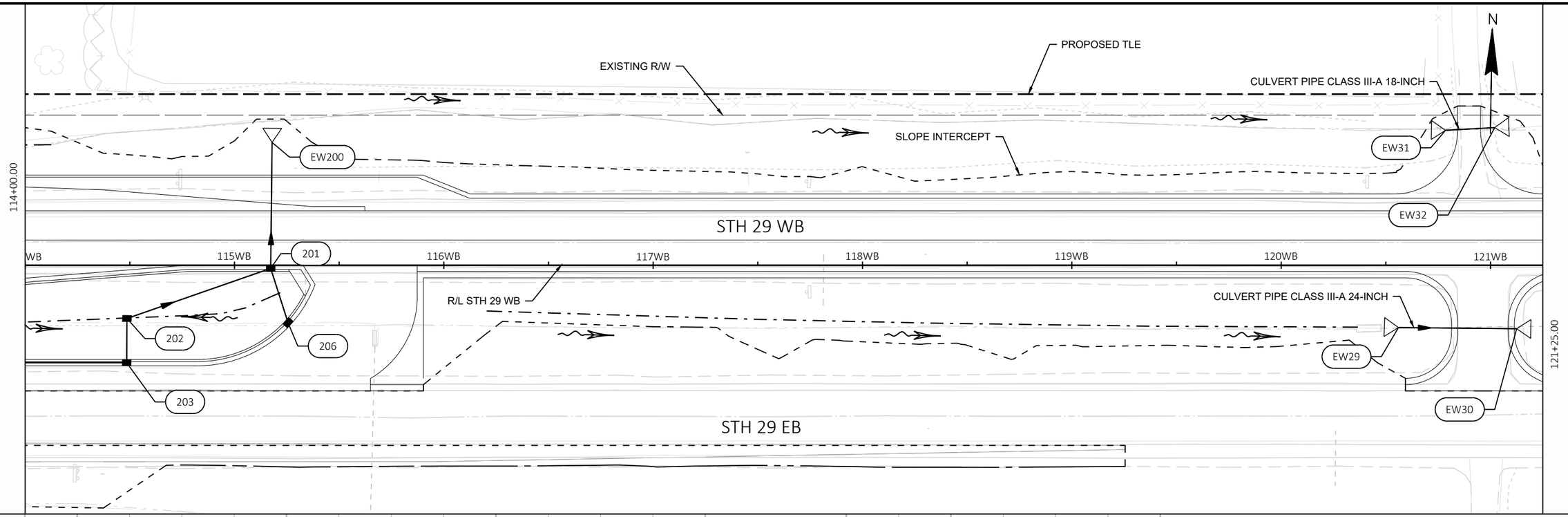
PLOT DATE : 2/24/2021 3:21 PM PLOT BY : ANDREW PATEK PLOT NAME : PLOT SCALE : 1 IN:50 FT

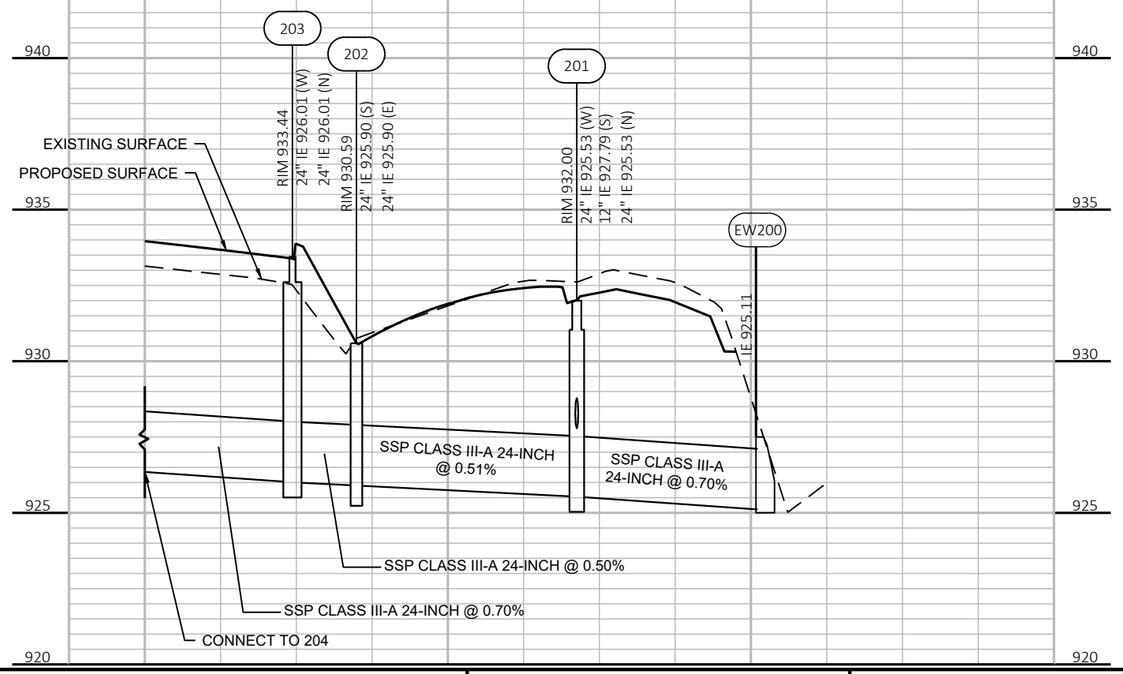

945
940
935
930
925
205
204
RIM 934.21
12" IE 929.67 (S)
RIM 935.59
12" IE 929.52 (N)
24" IE 927.73 (E)
PROPOSED SURFACE
EXISTING SURFACE
SSP CLASS III-A 12-INCH @ 0.50%

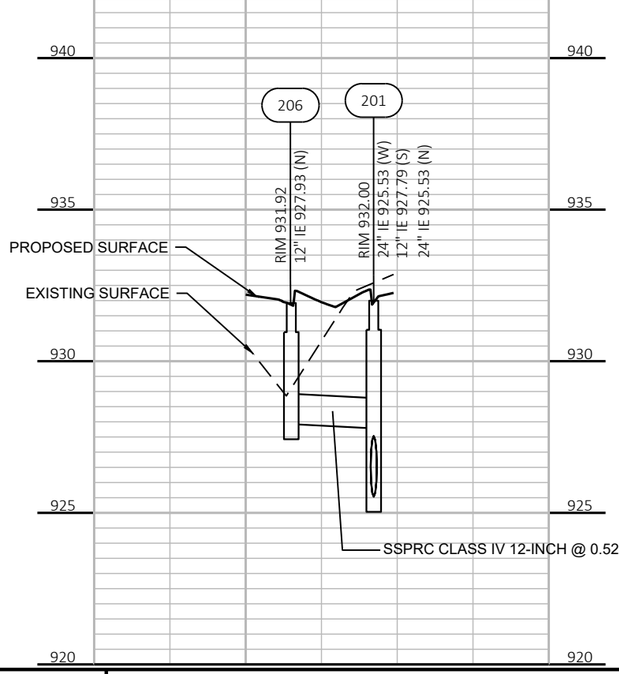

945
940
935
930
925
105
112
113
RIM 934.90
12" IE 931.26 (SE)
12" IE 931.06 (E)
24" IE 930.26 (W)
RIM 934.27
12" IE 931.27 (NW)
12" IE 931.27 (W)
RIM 934.55
12" IE 931.33 (SE)
EXISTING SURFACE
PROPOSED SURFACE
SSPRC CLASS IV 12-INCH @ 0.32%
SSPRC CLASS IV 12-INCH @ 0.32%

2

2

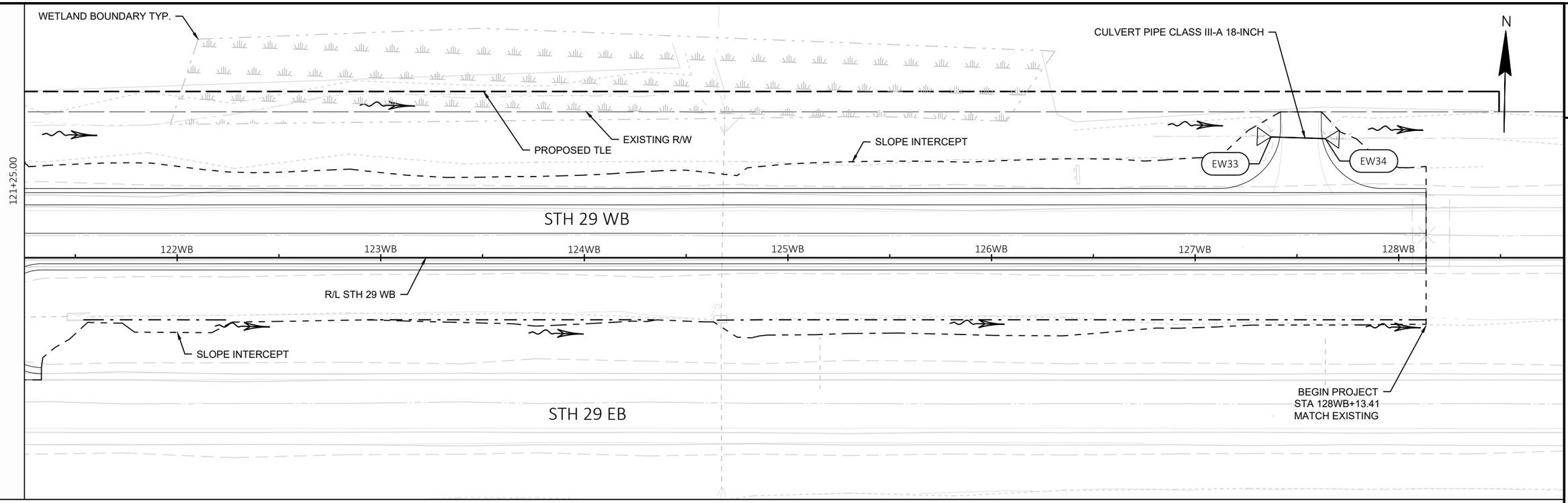






PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	STORM SEWER	SHEET 71	E

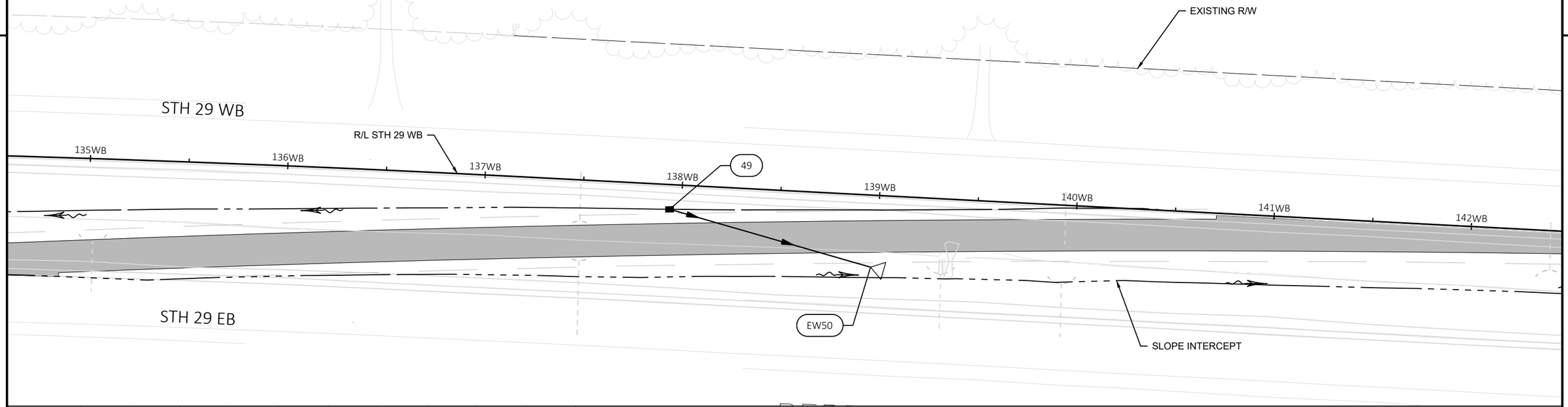
FILE NAME : C:\CADDLIB\PW\APATEK\GREATLAKES\D0237721\022501-SS.DWG
LAYOUT NAME - Sheet - (20)
PLOT DATE : 1/29/2021 11:01 AM
PLOT BY : ANDREW PATEK
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 41

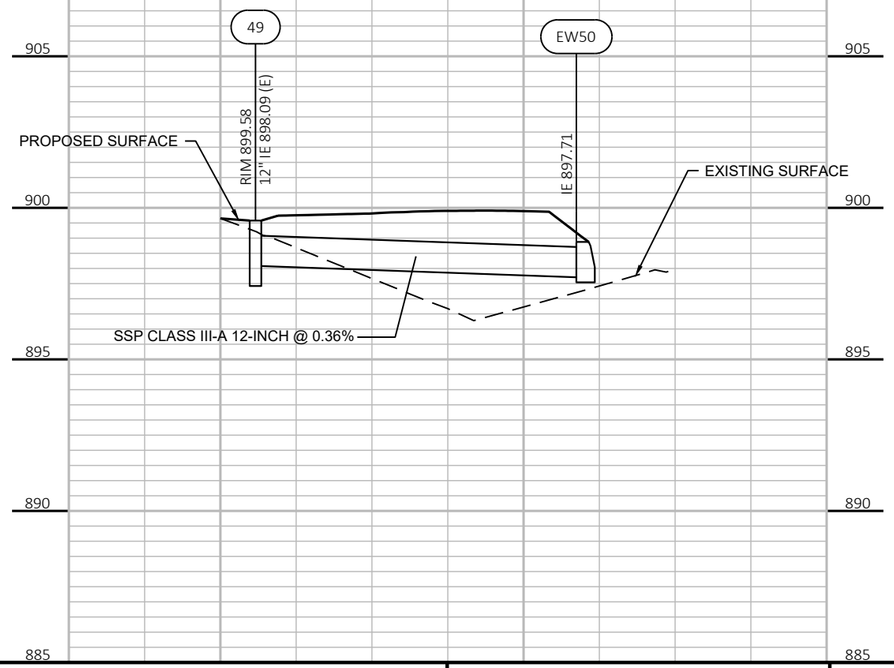


NO PROFILES THIS SHEET

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	STORM SEWER	SHEET 72	E

2

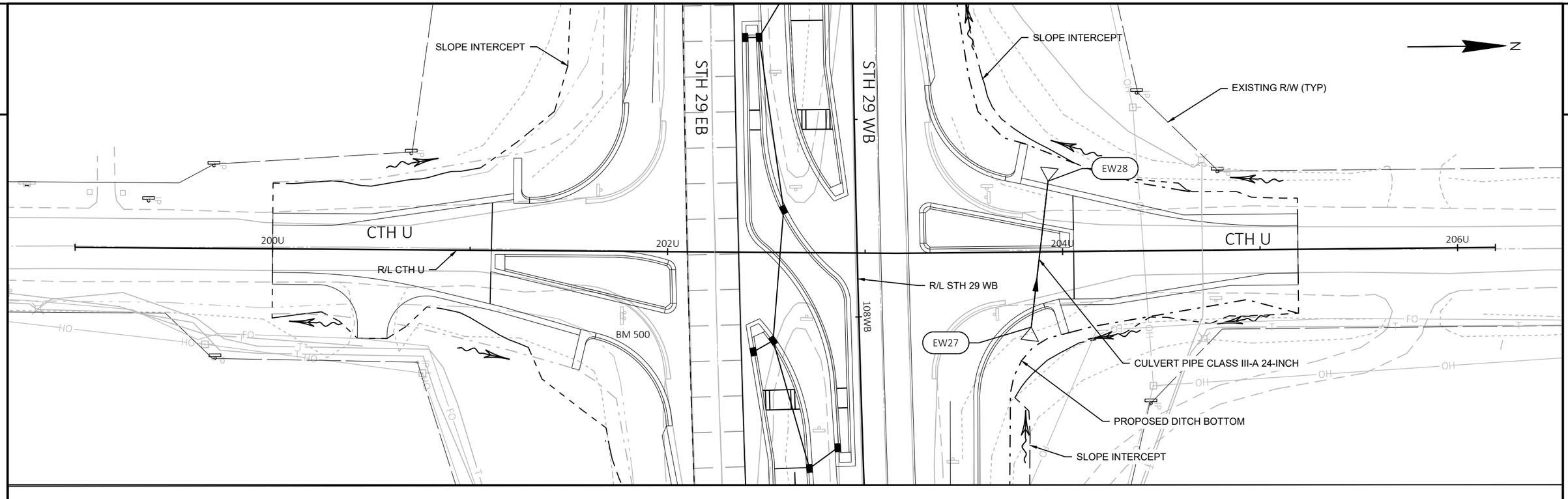




PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	STORM SEWER	SHEET 73	E

FILE NAME : C:\CADDLIB\PW\APATEK\GREATLAKES\D0237721\022501-SS.DWG
LAYOUT NAME - Sheet - (22)

PLOT DATE : 1/29/2021 11:04 AM PLOT BY : ANDREW PATEK PLOT NAME : PLOT SCALE : 1 IN:50 FT



2

NO PROFILES THIS SHEET

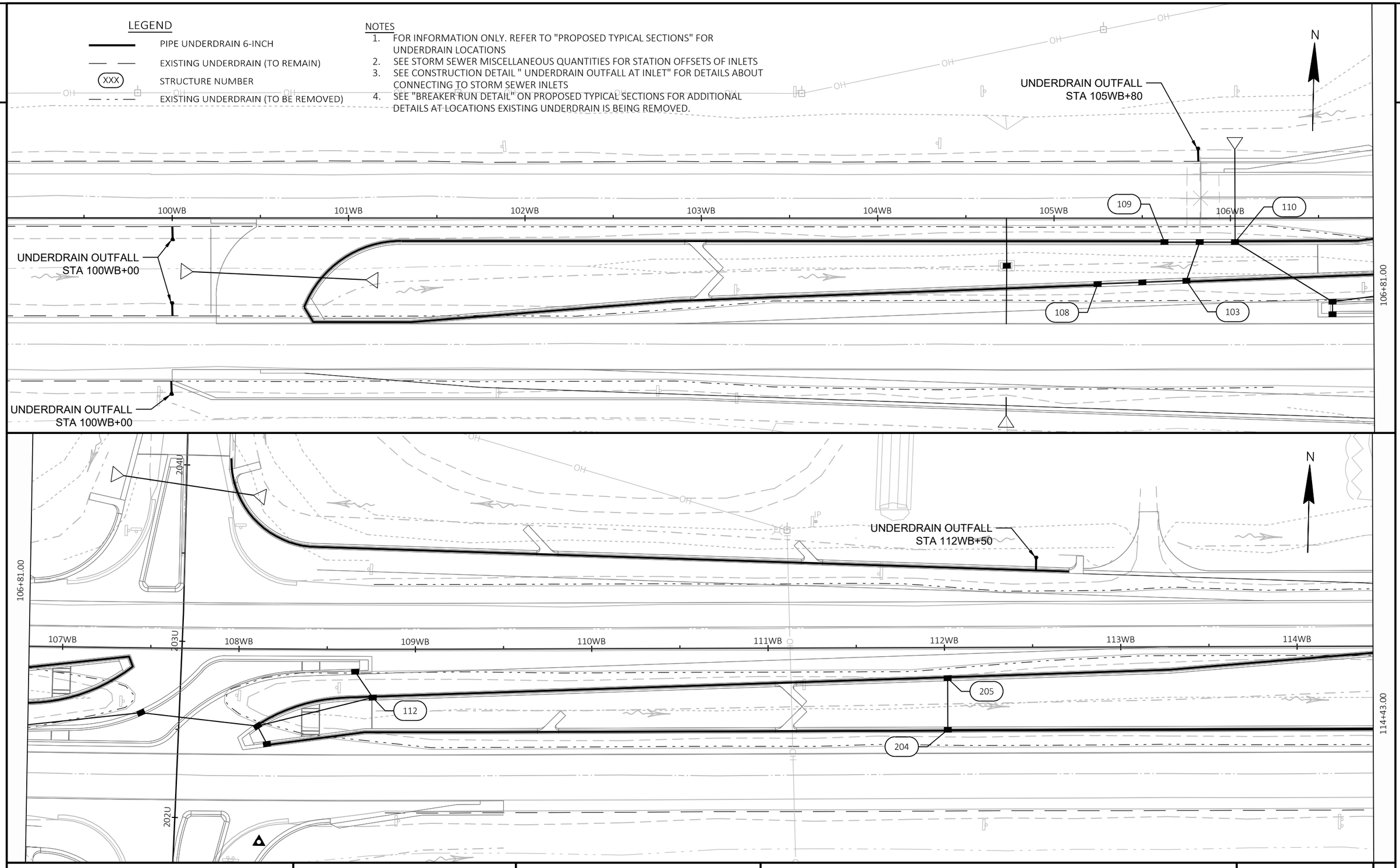
PROJECT NO: 1058-02-73	HWY: CTH U	COUNTY: SHAWANO	STORM SEWER	SHEET 74	E

LEGEND

- PIPE UNDERDRAIN 6-INCH
- EXISTING UNDERDRAIN (TO REMAIN)
- XXX STRUCTURE NUMBER
- EXISTING UNDERDRAIN (TO BE REMOVED)

NOTES

1. FOR INFORMATION ONLY. REFER TO "PROPOSED TYPICAL SECTIONS" FOR UNDERDRAIN LOCATIONS
2. SEE STORM SEWER MISCELLANEOUS QUANTITIES FOR STATION OFFSETS OF INLETS
3. SEE CONSTRUCTION DETAIL " UNDERDRAIN OUTFALL AT INLET" FOR DETAILS ABOUT CONNECTING TO STORM SEWER INLETS
4. SEE "BREAKER RUN DETAIL" ON PROPOSED TYPICAL SECTIONS FOR ADDITIONAL DETAILS AT LOCATIONS EXISTING UNDERDRAIN IS BEING REMOVED.



PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	PIPE UNDERDRAIN LAYOUT	SHEET 75	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\022601_PU.DWG
LAYOUT NAME - PU-3

PLOT DATE : 2/24/2021 3:34 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

2

LEGEND

PIPE UNDERDRAIN 6-INCH

EXISTING UNDERDRAIN (TO REMAIN)

XXX STRUCTURE NUMBER

EXISTING UNDERDRAIN (TO BE REMOVED)

NOTES

1. FOR INFORMATION ONLY. REFER TO "PROPOSED TYPICAL SECTIONS" FOR UNDERDRAIN LOCATIONS
2. SEE STORM SEWER MISCELLANEOUS QUANTITIES FOR STATION OFFSETS OF INLETS
3. SEE CONSTRUCTION DETAIL " UNDERDRAIN OUTFALL AT INLET" FOR DETAILS ABOUT CONNECTING TO STORM SEWER INLETS
4. SEE "BREAKER RUN DETAIL" ON PROPOSED TYPICAL SECTIONS FOR ADDITIONAL DETAILS AT LOCATIONS EXISTING UNDERDRAIN IS BEING REMOVED.

N

114+43.00

201

206

203

115WB 116WB 117WB 118WB 119WB 120WB 121WB 122W

UNDERDRAIN OUTFALL
STA 119WB+00

UNDERDRAIN OUTFALL
STA 122WB+00

122+05.00

2

122+05.00

N

UNDERDRAIN OUTFALL
STA 128WB+00

B 123WB 124WB 125WB 126WB 127WB 128WB 129WB

UNDERDRAIN OUTFALL
STA 125WB+00

UNDERDRAIN OUTFALL
STA 128WB+00

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	PIPE UNDERDRAIN LAYOUT	SHEET 76	E

LEGEND

- LIGHTING CONTROL CABINET 120/240V 30-INCH WITH METER BREAKER PEDESTAL
- 2" CONDUIT, NON-METALLIC (unless otherwise noted)
- LIGHTING UNIT WITH TYPE 5 ALUMINUM POLE, WITH TRANSFORMER BASE
- NON-CONDUCTIVE PULL BOX 24" X 42"
- UTILITY POLE
- E — ELECTRIC, UNDERGROUND
- OH — ELECTRIC, OVERHEAD

A-7-(1,3)
STA 865+55.00, 22.0'LT
250-7(T)-12

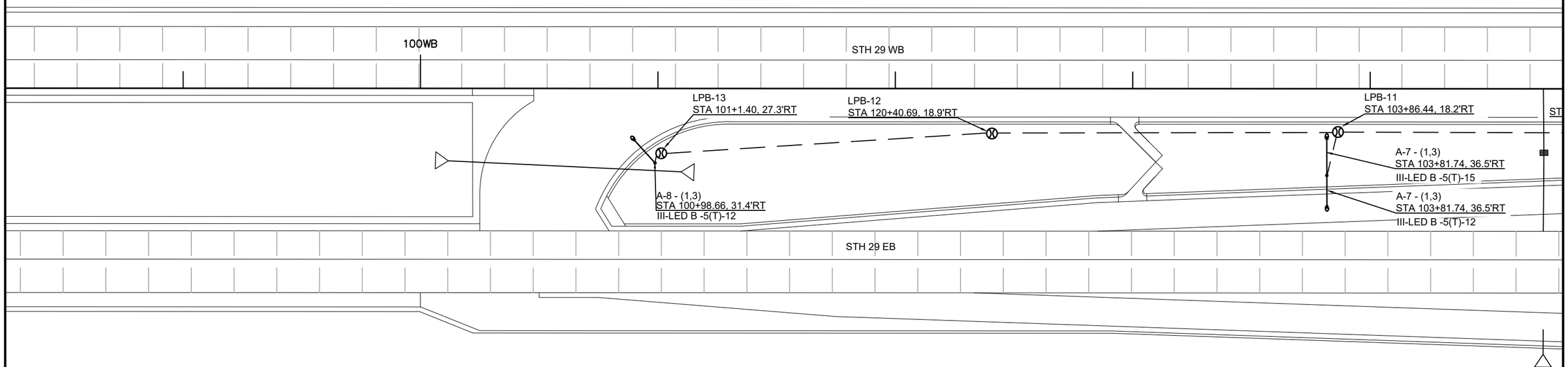
- CONTROL CABINET DESIGNATION
- POLE NUMBER
- LIGHTING CIRCUITS
- LOCATION (TO CENTER OF POLE)
- LUMINAIRE ARM LENGTH IN FEET
- POLE TYPE (T) INCLUDES TRANSFORMER BASE
- LUMINAIRE DESIGNATION

GENERAL NOTES

1. COORDINATE ALL UTILITY REQUIREMENTS WITH SETH SCHOUNARD. SETHSCHOUNARD@ALLIANTENERGY.COM OR (715)754-4331.

2. CONTACT WISDOT ELECTRICIAN, KEN RADKE (715)459-4264, FOR COORDINATION OF INSTALLATION AND INSPECTION.

N



PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	LIGHTING PLAN: STH 29/CTH U	SHEET 77	E

LEGEND

- LIGHTING CONTROL CABINET 120/240V 30-INCH WITH METER BREAKER PEDESTAL
- 2" CONDUIT, NON-METALLIC (unless otherwise noted)
- LIGHTING UNIT WITH TYPE 5 ALUMINUM POLE, WITH TRANSFORMER BASE
- NON-CONDUCTIVE PULL BOX 24" X 42"
- UTILITY POLE
- E — ELECTRIC, UNDERGROUND
- OH — ELECTRIC, OVERHEAD

A-7-(1,3)
STA 865+55.00, 22.0'LT

250-7(T)-12

- CONTROL CABINET DESIGNATION
- POLE NUMBER
- LIGHTING CIRCUITS
- LOCATION (TO CENTER OF POLE)
- LUMINAIRE ARM LENGTH IN FEET
- POLE TYPE (T) INCLUDES TRANSFORMER BASE
- LUMINAIRE DESIGNATION

GENERAL NOTES

1. COORDINATE ALL UTILITY REQUIREMENTS WITH SETH SCHOUNARD. SETHSCHOUNARD@ALLIANTENERGY.COM OR (715)754-4331.

2. CONTACT WISDOT ELECTRICIAN, KEN RADKE (715)459-4264, FOR COORDINATION OF INSTALLATION AND INSPECTION.

N

205

LPB-1
STA 107+7.89, 54.5'LT

2 - 3" CONDUIT

CONTROL CABINET "A"
STA 106+94.43, 51.4'LT

CTH U

A-1 - (5,7)
STA 108+29.13, 67.3'LT
III-LED B -5(T)-12

LPB-2
STA 108+37.33, 68.4'LT

1 - 3" CONDUIT

1 - 3" CONDUIT

1 - 3" CONDUIT

105WB

110WB

STH 29 WB

LPB-10
STA 105+38.19, 18.4'RT

A-6 - (2,4)
STA 106+86.62, 22.6'RT
III-LED B -5(T)-12

LPB-9
STA 106+90.61, 16.0'RT

LPB-3
STA 108+55.17, 32.2'RT

LPB-4
STA 110+24.10, 27.4'RT

A-2 - (5,7)
STA 108+60.25, 37.7'RT
III-LED B -5(T)-12

1 - 2" CONDUIT
SPECIAL

STH 29 EB

LPB-8
STA 106+0.31, 127.3'RT

A-5 - (2,4)
STA 107+7.80, 125.1'RT
III-LED B -5(T)-12

CTH U

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	LIGHTING PLAN: STH 29/CTH U	SHEET 78	E

FILE NAME : Q:\2020 PROJECTS\5020002 - HNTB STH 29 AND CTH U INT\ELECTRICAL1.DWG
LAYOUT NAME - 02

PLOT DATE : 2/25/2021 7:34 AM PLOT BY : KAYLA HELBIG RAKOWSKI PLOT NAME : PLOT SCALE : ##########

2

LEGEND

- LIGHTING CONTROL CABINET 120/240V 30-INCH WITH METER BREAKER PEDESTAL
- 2" CONDUIT, NON-METALLIC (unless otherwise noted)
- LIGHTING UNIT WITH TYPE 5 ALUMINUM POLE, WITH TRANSFORMER BASE
- NON-CONDUCTIVE PULL BOX 24" X 42"
- UTILITY POLE
- E — ELECTRIC, UNDERGROUND
- OH — ELECTRIC, OVERHEAD

A-7-(1,3)
STA 865+55.00, 22.0'LT

250-7(T)-12

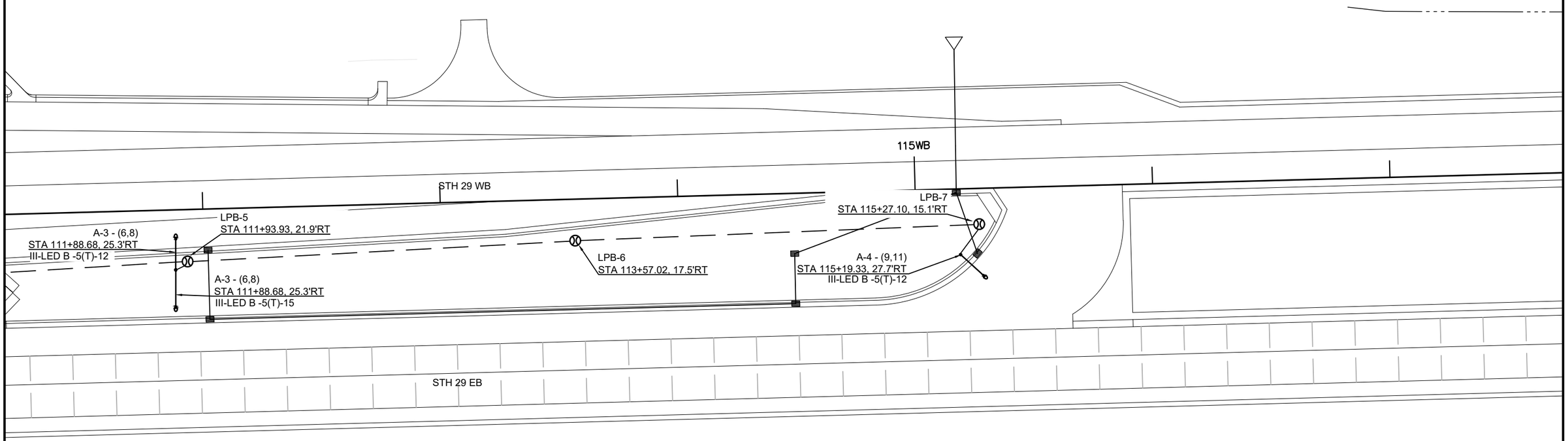
- A — CONTROL CABINET DESIGNATION
- 7 — POLE NUMBER
- (1,3) — LIGHTING CIRCUITS
- STA 865+55.00, 22.0'LT — LOCATION (TO CENTER OF POLE)
- 250 — LUMINAIRE DESIGNATION
- 7 — POLE TYPE (T) INCLUDES TRANSFORMER BASE
- 12 — LUMINAIRE ARM LENGTH IN FEET

GENERAL NOTES

1. COORDINATE ALL UTILITY REQUIREMENTS WITH SETH SCHOUNARD. SETHSCHOUNARD@ALLIANTENERGY.COM OR (715)754-4331.

2. CONTACT WISDOT ELECTRICIAN, KEN RADKE (715)459-4264, FOR COORDINATION OF INSTALLATION AND INSPECTION.

N



PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	LIGHTING PLAN: STH 29/CTH U	SHEET 79	E

FILE NAME : Q:\2020 PROJECTS\5020002 - HNTB STH 29 AND CTH U INT\ELECTRICAL1.DWG
LAYOUT NAME - 03

PLOT DATE : 2/25/2021 7:34 AM PLOT BY : KAYLA HELBIG RAKOWSKI PLOT NAME : PLOT SCALE : ##########

WISDOT/CADDS SHEET 44

2

PAVEMENT MARKING LEGEND

YSO4	PAVEMENT MARKING EPOXY 4-INCH (YELLOW SOLID)
WSO4	PAVEMENT MARKING EPOXY 4-INCH (WHITE SOLID)
WSK4	PAVEMENT MARKING EPOXY 4-INCH (WHITE SKIP, 12.5' LINE 37.5' GAP)
WSK8	PAVEMENT MARKING EPOXY 8-INCH (WHITE SKIP, 3' LINE 9' GAP)
WCH8	PAVEMENT MARKING EPOXY 8-INCH (WHITE CHANNELIZING)
YCH8	PAVEMENT MARKING EPOXY 8-INCH (YELLOW CHANNELIZING)
WSO8	PAVEMENT MARKING EPOXY 8-INCH (WHITE SOLID)
WDA12	PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (WHITE 10' SPACING)
YDA12	PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (YELLOW 7.5' SPACING)
WCC12	PAVEMENT MARKING DIAGONAL EPOXY 12-INCH (WHITE CHEVRON CROSSHATCH 30' SPACING)
WSL18	PAVEMENT MARKING STOP LINE 18-INCH EPOXY (WHITE)
WYL36	PAVEMENT MARKING YIELD LINE SYMBOLS EPOXY 36-INCH (WHITE TRIANGLES)
YIN	PAVEMENT MARKING ISLAND NOSE EPOXY (YELLOW)
WAE	PAVEMENT MARKING ARROWS EPOXY TYPE 2 (WHITE)
WWE	PAVEMENT MARKING WORDS EPOXY (WHITE)

SIGNING LEGEND

	PROPOSED SIGN MOUNTED ON POST(S)
X-X	SIGN - PLACE NEW

NOTES:
1. RE-STRIPE STH 29 EB FROM STA 59WB+73 TO STA 136WB+87
AND STH 29 WB FROM STA 57WB+25 TO STA 158WB+91.

2. SEE "PAVEMENT MARKINGS & PERMANENT SIGNING - INTERSECTIONS"
FOR ADDITIONAL DETAIL OF J-TURN LOCATIONS.

N

STH 29 WB

STH 29 EB

R/L STH 29 WB

98WB

100WB

102WB

104WB

105+34.00

WSO4 WSO8 WAE WWE YCH8 YDA12 YSO4 WSK4 WCH8 WCC12 WYL36 WSK8

004 005 R6-1L 54"X18" ONE WAY YIELD R1-2 48"X42"

002 003 R6-1L 54"X18" ONE WAY YIELD R1-2 48"X42"

010 R3-18 36"X36"

011 012 DO NOT ENTER R5-1 36"X36"

013 GRESHAM NEOPIT

015 ONE WAY R6-2L 36"X48"

016 DO NOT ENTER R5-1 36"X36"

017 M3-3 36"X18" SOUTH COUNTY U M1-5A 36"X36" M6-1 30"X30"

018 MILE 2 1 6 D10-3 12"X48"

019 M3-1 36"X18" NORTH COUNTY U M1-5A 36"X36" M6-1 30"X30"

020 WRONG WAY R5-1A 42"X30"

006 M3-2 36"X18" M3-3 36"X18" EAST SOUTH COUNTY U 29 M1-6 36"X36" M1-5A 36"X36" M5-52 30"X30" M5-52 30"X30"

007 M3-2 36"X18" M3-3 36"X18" EAST SOUTH COUNTY U 29 M1-6 36"X36" M1-5A 36"X36" M5-52 30"X30" M5-52 30"X30"

008 M3-2 36"X18" M3-3 36"X18" M3-4 36"X18" EAST SOUTH WEST COUNTY U 29 29 M1-6 36"X36" M1-6 36"X36" M1-5A 36"X36' M5-52 30"X30" M5-52 30"X30" M6-1 30"X30"

009 WRONG WAY R5-1A 42"X30"

009A M2-1 30"X21" JCT COUNTY U M1-5A 36"X36"

009B

009C TO NORTH U SOUTH U

014 COUNTY U SOUTH USE FAR RIGHT LANE 29 EAST 114"X60"

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	PAVEMENT MARKINGS & PERMANENT SIGNING - STH 29	SHEET 81	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\024501-PM.DWG
LAYOUT NAME - 024502

PLOT DATE : 1/27/2021 4:19 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

NOTE:
1. SEE CTH U SHEETS FOR ADDITIONAL PAVEMENT MARKING AND SIGNING INFORMATION
2. THE CONTRACTOR MUST RUN A FULL VISION TEST PRIOR TO THE INSTALLATION OF SIGN W12-1D. IF THE SIGN W12-1D FAILS THE FULL VISION TEST, USE FLEXIBLE DELINEATOR POSTS.
3. SEE "PAVEMENT MARKING & PERMANENT SIGNING - INTERSECTIONS" FOR ADDITIONAL DETAIL OF J-TURN LOCATIONS.

105+34.00

112+99.37

N

CTH U

STH 29 WB

STH 29 EB

R/L STH 29 WB

R/L CTH U

106WB

108WB

110WB

112WB

202U

200U

033 034 R3-2 36"X36" R4-7 36"X48"

035 036 R6-1L 54"X18" ONE WAY YIELD R1-2 48"X42"

037 R3-4 36"X36"

M3-1 36"X18" NORTH M1-5A 24"X24" COUNTY U M6-1 30"X30"

037A

038 W12-1D 36"X36" SEE NOTE 2

038A WRONG WAY R5-1A 42"X30"

039 GRESHAM NEOPIT

WSO4 WSK4 WSO8 WAE WYL36 WCC12 WCH8 YSO4 YDA12 YCH8 WWE

021 W12-1D 36"X36" SEE NOTE 2

022 M3-3 36"X18" SOUTH M1-5A 24"X24" COUNTY U M6-1 30"X30"

023 DO NOT ENTER R5-1 36"X36"

024 R3-4 36"X36"

025 026 027 028 R6-1L 54"X18" ONE WAY YIELD R1-2 48"X42"

029 030 R3-2 36"X36" R4-7 36"X48"

031 M3-4 36"X18" M3-1 36"X18" M3-2 36"X18" WEST NORTH EAST M1-6 36"X36" 29 COUNTY U 29 M1-6 36"X36" M1-5A 36"X36" M5-52 30"X30" M5-52 30"X30" M6-1 30"X30"

032 M3-4 36"X18" M3-1 36"X18" WEST NORTH M1-6 36"X36" 29 COUNTY U M1-5A 36"X36" M5-52 30"X30" M5-52 30"X30"

032A M3-2 36"X18" EAST 29 M1-6 36"X36"

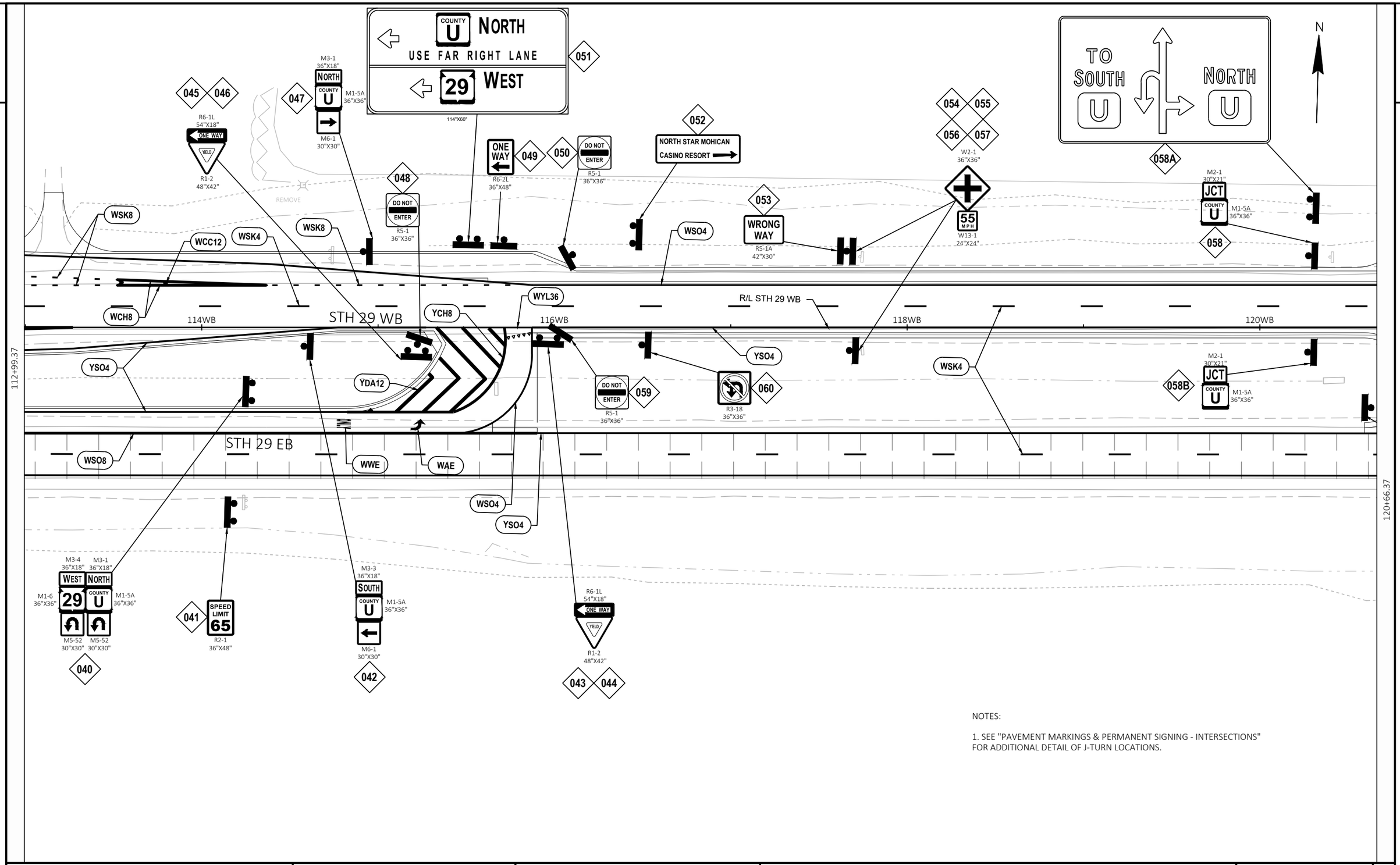
PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	PAVEMENT MARKINGS & PERMANENT SIGNING - STH 29	SHEET 82 E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\024501-PM.DWG
LAYOUT NAME - 024503

PLOT DATE : 2/24/2021 3:39 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2



NOTES:

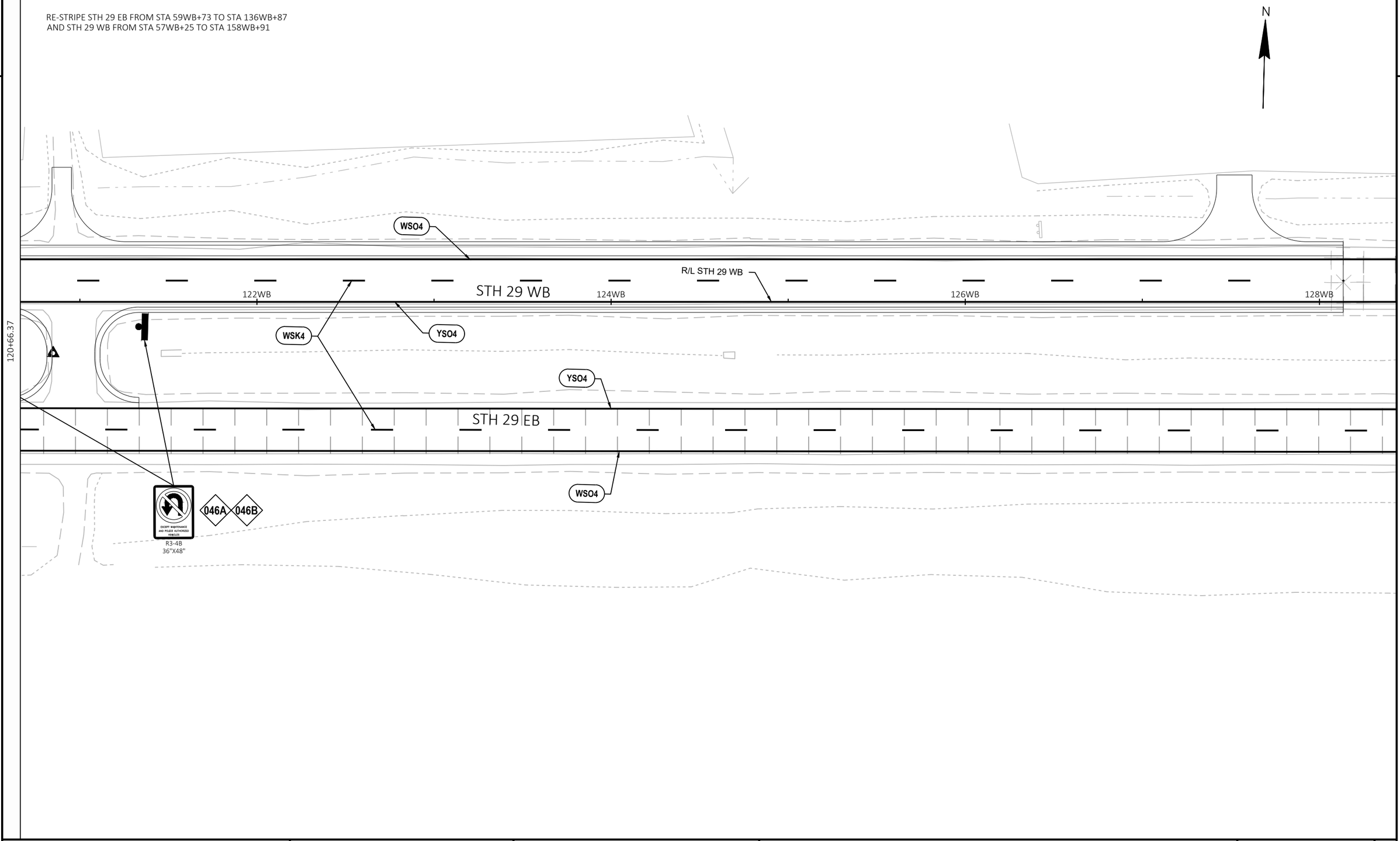
1. SEE "PAVEMENT MARKINGS & PERMANENT SIGNING - INTERSECTIONS" FOR ADDITIONAL DETAIL OF J-TURN LOCATIONS.

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	PAVEMENT MARKINGS & PERMANENT SIGNING - STH 29	SHEET 83	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\024501-PM.DWG
LAYOUT NAME - 024504
PLOT DATE : 1/27/2021 4:19 PM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

RE-STRIPE STH 29 EB FROM STA 59WB+73 TO STA 136WB+87
AND STH 29 WB FROM STA 57WB+25 TO STA 158WB+91



2

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	PAVEMENT MARKINGS & PERMANENT SIGNING - STH 29	SHEET 84	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\024501-PM.DWG
LAYOUT NAME - 024505

PLOT DATE : 1/27/2021 4:19 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

NOTE: SEE STH 29 SHEETS FOR ADDITIONAL PAVEMENT MARKING AND SIGNING INFORMATION

N

STH 29 EB

STH 29 WB

106WB

108WB

110WB

CTH U

200U

202U

206U

R/L CTH U

R/L STH 29 WB

YCH8

YDA12

WSL18

WDA12

WSO4

072 SPEED LIMIT 55 R2-1 24"X30"

073 M3-3 36"X18" SOUTH COUNTY U M1-5A 36"X36"

074 075 R6-1R 36"X12" ONE WAY STOP R1-1 36"X36"

076 ONE WAY R6-1R 36"X12"

077 078 DO NOT ENTER R5-1 36"X36"

084 EAST 29 SOUTH COUNTY U WEST 29 USE FAR LEFT LANE 132"X66"

M1-6 36"X36" 29 M6-1 30"X30"

M1-5A 36"X36" COUNTY U M6-1 30"X30"

081 R6-1R 36"X12" ONE WAY STOP R1-1 36"X36"

079 080

082 083 R6-1R 36"X12" ONE WAY STOP R1-1 36"X36"

085 RIGHT TURN ONLY R3-53R 24"X30"

086 M2-1 21"X15" JCT 29 M1-6 24"X24"

071 SPEED LIMIT 55 R2-1 24"X30"

070 M3-1 24"X12" NORTH COUNTY U M1-5A 24"X24"

069 W12-1R 30"X30"

061 M2-1 21"X15" JCT 29 M1-6 24"X24"

062 RIGHT TURN ONLY R3-53R 24"X30"

063 W12-1R 30"X30"

064 065 R6-1R 36"X12" ONE WAY STOP R1-1 36"X36"

066 M1-6 36"X36" 29 M6-1 30"X30"

M1-5A 36"X36" COUNTY U M6-1 30"X30"

067 R6-1R 36"X12" ONE WAY

068 WEST 29 NORTH COUNTY U EAST 29 USE FAR LEFT LANE 132"X66"

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	PAVEMENT MARKINGS & PERMANENT SIGNING - CTH U	SHEET 85	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\024501-PM.DWG
LAYOUT NAME - 024507

PLOT DATE : 2/24/2021 3:39 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

LEGEND

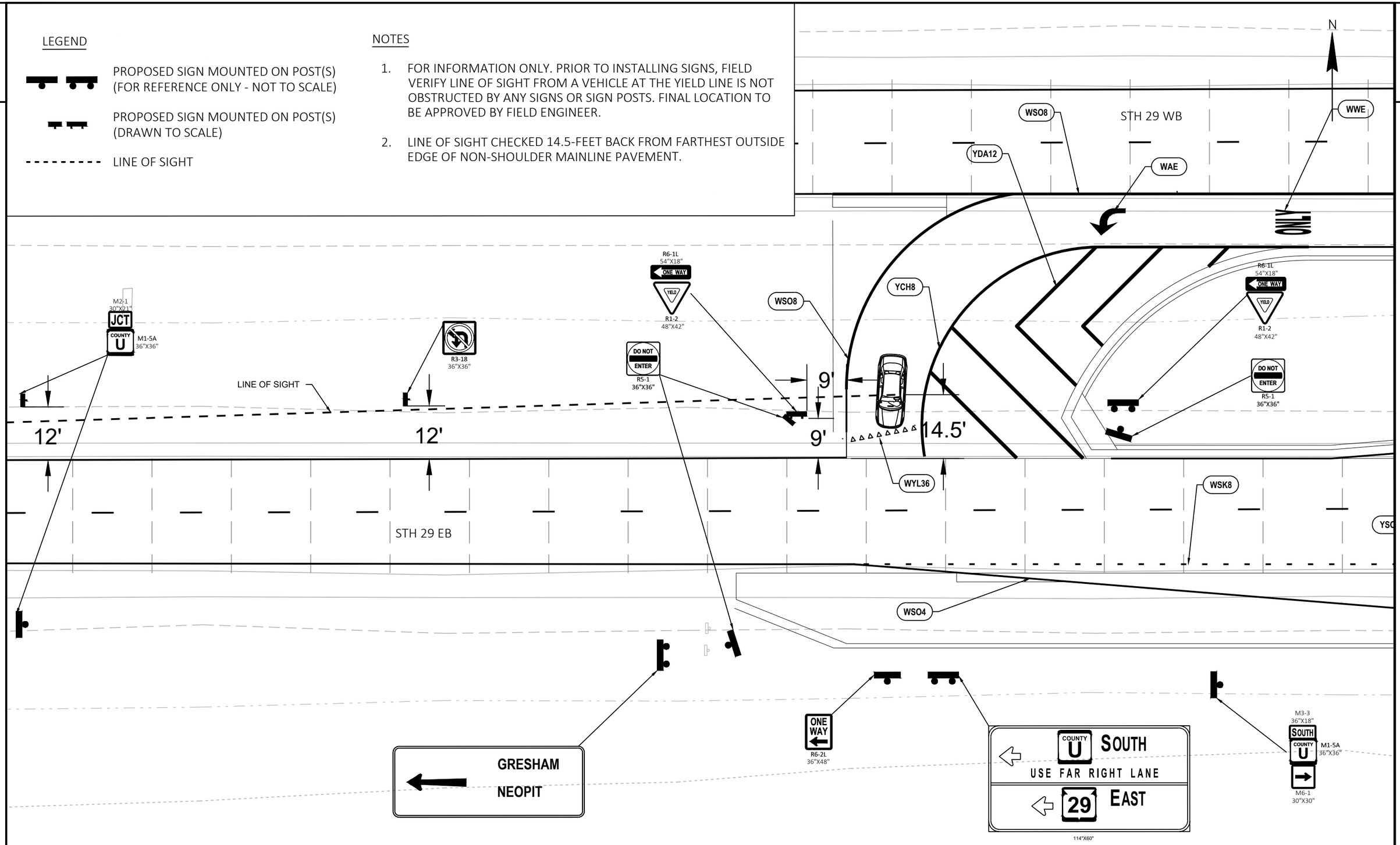
PROPOSED SIGN MOUNTED ON POST(S) (FOR REFERENCE ONLY - NOT TO SCALE)

PROPOSED SIGN MOUNTED ON POST(S) (DRAWN TO SCALE)

LINE OF SIGHT

NOTES

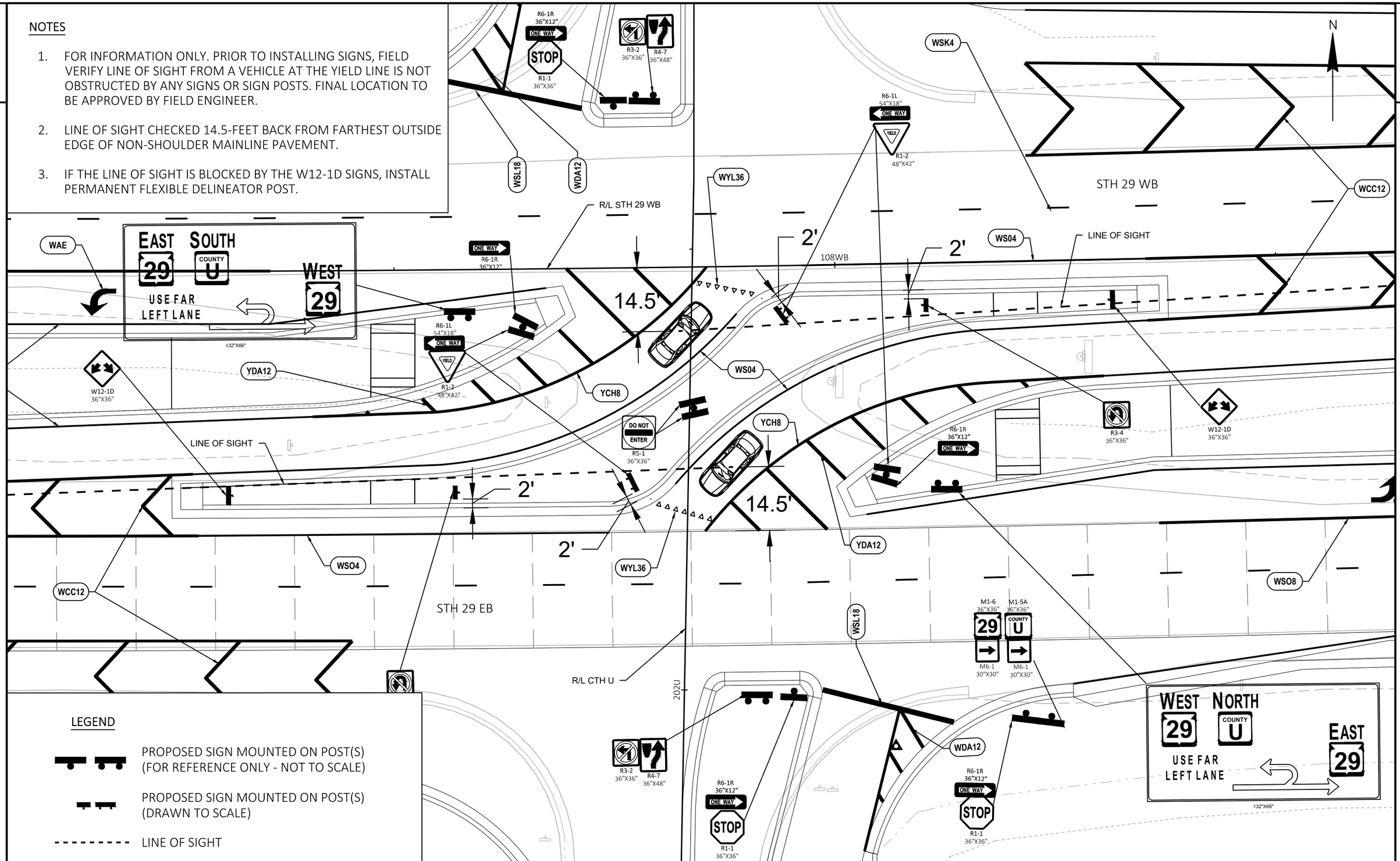
1. FOR INFORMATION ONLY. PRIOR TO INSTALLING SIGNS, FIELD VERIFY LINE OF SIGHT FROM A VEHICLE AT THE YIELD LINE IS NOT OBSTRUCTED BY ANY SIGNS OR SIGN POSTS. FINAL LOCATION TO BE APPROVED BY FIELD ENGINEER.
2. LINE OF SIGHT CHECKED 14.5-FEET BACK FROM FARTHEST OUTSIDE EDGE OF NON-SHOULDER MAINLINE PAVEMENT.



PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	PAVEMENT MARKINGS & PERMANENT SIGNING - INTERSECTIONS	SHEET 86	E

NOTES

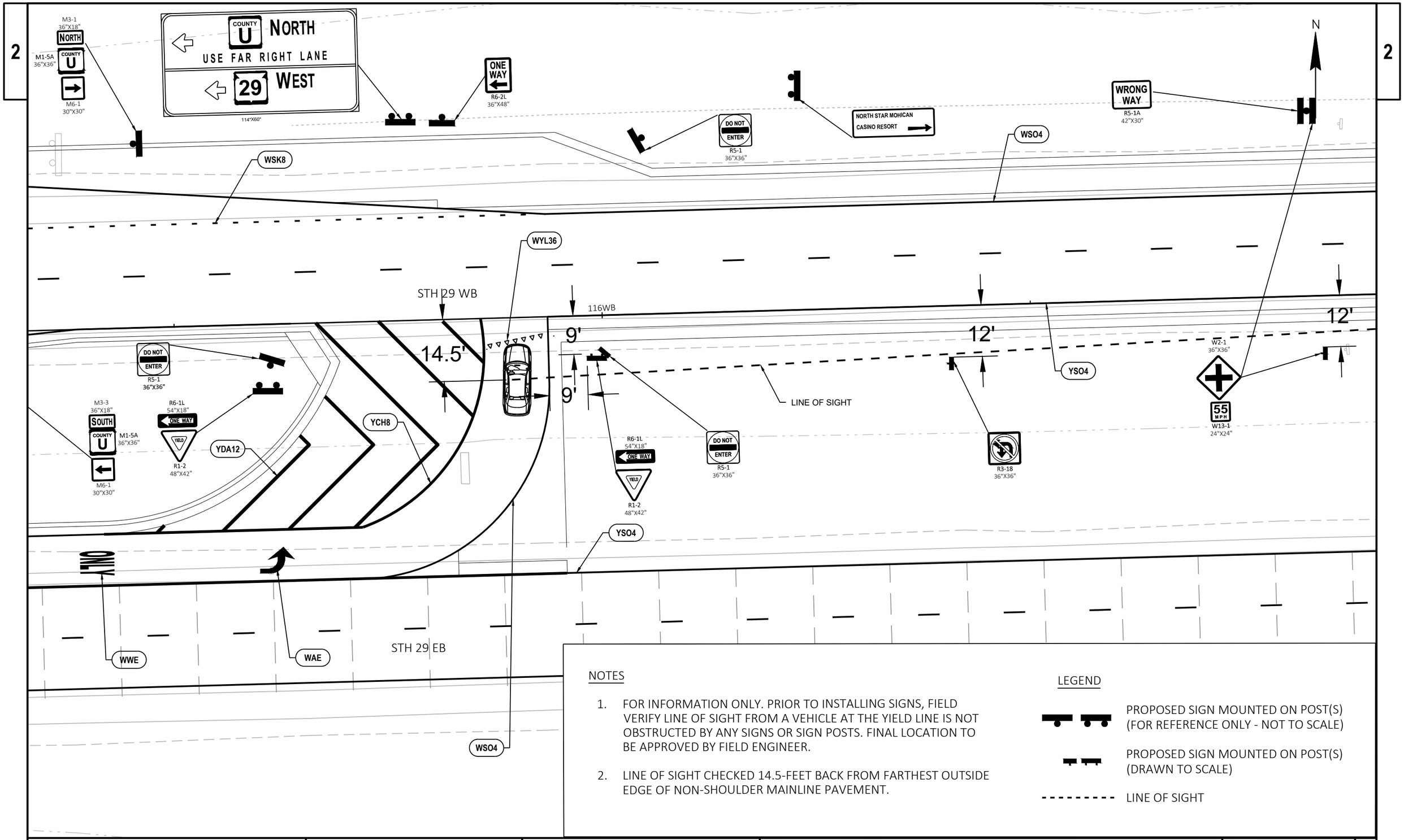
1. FOR INFORMATION ONLY. PRIOR TO INSTALLING SIGNS, FIELD VERIFY LINE OF SIGHT FROM A VEHICLE AT THE YIELD LINE IS NOT OBSTRUCTED BY ANY SIGNS OR SIGN POSTS. FINAL LOCATION TO BE APPROVED BY FIELD ENGINEER.
2. LINE OF SIGHT CHECKED 14.5-FEET BACK FROM FARTHEST OUTSIDE EDGE OF NON-SHOULDER MAINLINE PAVEMENT.
3. IF THE LINE OF SIGHT IS BLOCKED BY THE W12-1D SIGNS, INSTALL PERMANENT FLEXIBLE DELINEATOR POST.



LEGEND

- PROPOSED SIGN MOUNTED ON POST(S) (FOR REFERENCE ONLY - NOT TO SCALE)
- PROPOSED SIGN MOUNTED ON POST(S) (DRAWN TO SCALE)
- LINE OF SIGHT

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	PAVEMENT MARKINGS & PERMANENT SIGNING - INTERSECTIONS	SHEET 87	E



NOTES

1. FOR INFORMATION ONLY. PRIOR TO INSTALLING SIGNS, FIELD VERIFY LINE OF SIGHT FROM A VEHICLE AT THE YIELD LINE IS NOT OBSTRUCTED BY ANY SIGNS OR SIGN POSTS. FINAL LOCATION TO BE APPROVED BY FIELD ENGINEER.
2. LINE OF SIGHT CHECKED 14.5-FEET BACK FROM FARTHEST OUTSIDE EDGE OF NON-SHOULDER MAINLINE PAVEMENT.

LEGEND

- PROPOSED SIGN MOUNTED ON POST(S) (FOR REFERENCE ONLY - NOT TO SCALE)
- PROPOSED SIGN MOUNTED ON POST(S) (DRAWN TO SCALE)
- LINE OF SIGHT

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	PAVEMENT MARKINGS & PERMANENT SIGNING - INTERSECTIONS	SHEET 88	E

2

2

AREA OF RESTRICTED WIDTH

XXXX

STH 29

USH 45

USH 45

STH 29

USH 41 / USH 141

USH 45

USH 10

STH 441

IH 41 / US 41

IH 43

STH 29
11FT LANE WIDTH
18 MILES AHEAD
OSOW USE US-45

138" X 78"

100

STH 29
11FT LANE WIDTH
42 MILES AHEAD
OSOW USE I-41

138" X 78"

101

STH 29
11FT LANE WIDTH
45 MILES AHEAD
OSOW USE I-41

138" X 78"

102

LEGEND

WIND TOWER CORRIDOR

XXX SIGN NUMBER

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL - ADVANCED WARNING SIGNS	SHEET 89	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025301_TC.DWG
LAYOUT NAME - 025301_tc

PLOT DATE : 1/26/2021 1:25 PM PLOT BY : DAN BAUMANN PLOT NAME : _____ PLOT SCALE : Custom

WISDOT/CADDS SHEET 42

2

LEGEND

- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TYPE III BARRICADE WITH SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- CONCRETE PAVEMENT REPAIR
- (45) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
- (46) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
- (47) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
- (49) TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)

STAGE 1 CONSTRUCTION

CONSTRUCT TEMPORARY CROSSOVERS

CONSTRUCT SOUTH LEG OF CTH U

CONSTRUCT TEMPORARY WIDENING ON STH 29 AT CTH U INTERSECTION

STAGE 1 GENERAL NOTES

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS. PLACE THE SIGNS SO THE DRIVER HAS A CLEAR VIEW OF THE MESSAGE FOR A MINIMUM OF 1000 FEET.

DRAWING SHOWS TRAFFIC CONTROL FOR A TYPICAL SITUATION. ADDITIONAL TRAFFIC CONTROL DEVICES MAY BE REQUIRED AND/OR LAYOUT DETAILS MODIFIED DEPENDING ON THE CONTRACTOR METHODS OR SEQUENCE OF OPERATIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. "WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

FOR LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

TRAFFIC CONTROL DRUMS IN TAPERS SHALL BE EQUIPPED WITH WARNING LIGHTS TYPE "C" ONE-WAY LIGHTS IN TAPERS ONLY UNLESS OTHERWISE SHOWN.

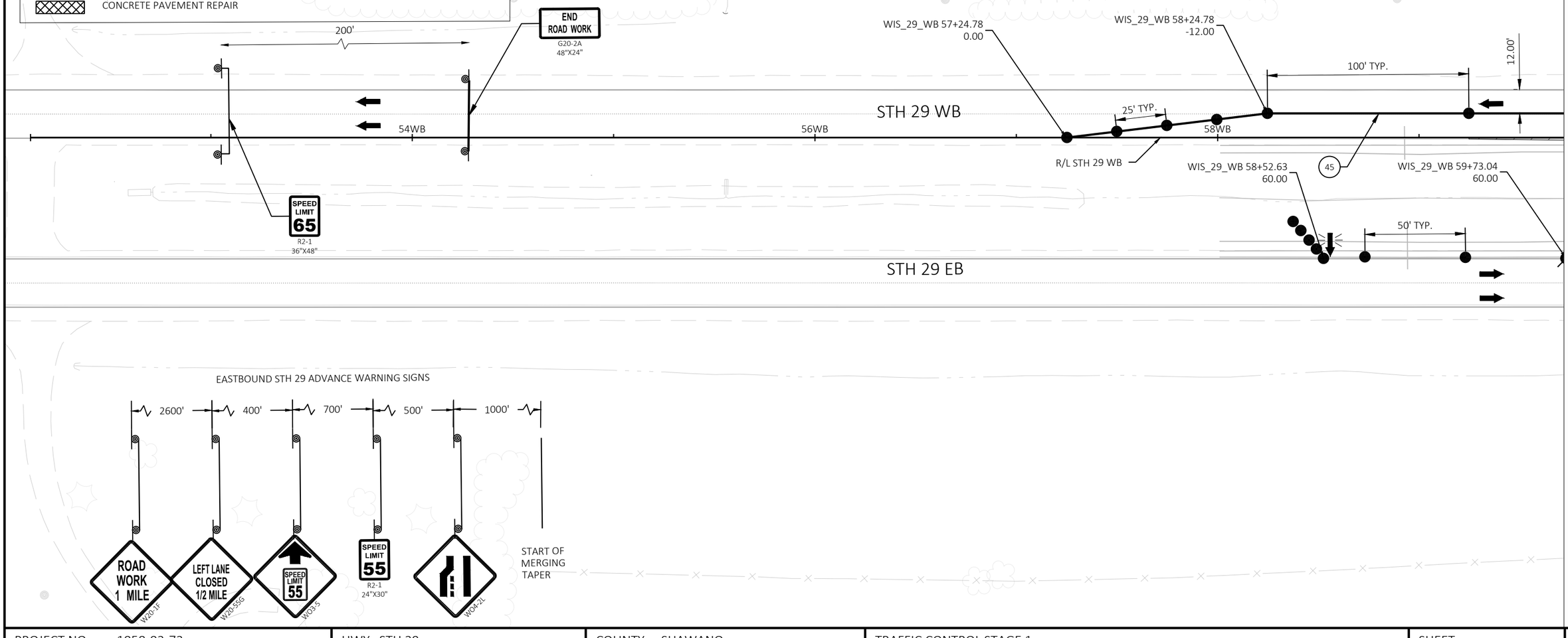
TRAFFIC CONTROL ITEMS SHOWN IN EACH STAGE SHALL BE PLACED AT THE START OF THAT STAGE, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

SEE SPECIAL PROVISIONS FOR TRAFFIC CONTROL REQUIRMENTS.

IF LANE CLOSURE IS MORE THAN 1 MILE, PLACE A TYPE III BARRICADE APPROXIMATELY EVERY 1000 FEET ACROSS THE CLOSED LANE TO HELP ENFORCE THE DRUM LINE.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKINGS, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 7 OR MORE CONTINUOUS DAYS AND NIGHTS.

N



EASTBOUND STH 29 ADVANCE WARNING SIGNS

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 1	SHEET 90	E

2

2

N

59+72.00

67+34.00

100' TYP.

12.00'

R/L STH 29 WB

60WB

62WB

64WB

STH 29 WB

66WB

A

45

50' TYP.

STH 29 EB

660 FT MERGING TAPER

WIS_29_WB 66+33.04
72.00

12.00'

A

8' 12' 12' WORK ZONE 12' 12' 8'

2' 2'

SECTION A-A

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 1	SHEET 91	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025101-TC1.DWG
LAYOUT NAME - Sheet - (2)

PLOT DATE : 1/26/2021 1:29 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

N

67+34.00

74+96.00

12.00'

R11-2L
48" x 30"
LANE CLOSED
TYPE III BARRICADE

45

WIS_29_WB 70+04.07
-12.00

A

660 FT MERGING TAPER

50.00' TYP.

68WB

100.00' TYP.

STH 29 WB

70WB

72WB

R/L STH 29 WB

74WB

1611
907.355
POST

1610
908.11
POST

STH 29 EB

100' TYP.

12.00'

W01-4L

8' 12' 12' WORK ZONE 12' 12' 8'

2' 2'

SECTION A-A

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 1	SHEET 92	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025101-TC1.DWG
LAYOUT NAME - Sheet - (3)

PLOT DATE : 1/26/2021 1:30 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

N

74+96.00

82+58.00

WIS_29_WB 76+64.05
0.00

45

76WB

STH 29 WB

78WB

80WB

82WB

R/L STH 29 WB

24.00'

50.00' TYP.

100.00' TYP.

12.00'

STH 29 EB

45

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 1	SHEET 93	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025101-TC1.DWG
LAYOUT NAME - Sheet - (4)

PLOT DATE : 1/26/2021 1:31 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

N

82+58.00

90+20.00

IP

84WB

STH 29 WB

86WB

88WB

90WB

R/L STH 29 WB

W04-2L

45

WIS_29_WB 84+27.13
72.00

WIS_29_WB 87+57.13
60.00

12.00'

50.00' TYP.

100.00' TYP.

STH 29 EB

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

WIS_29_WB 84+27.13
84.00

W01-6
48" X 24"
TYPE III BARRICADE

46

330 FT MERGING TAPER

WIS_29_WB 87+57.13
72.00

R11-2L
48" X 30"
LANE CLOSED
TYPE III BARRICADE

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 1	SHEET 94	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025101-TC1.DWG
LAYOUT NAME - Sheet - (5)

PLOT DATE : 1/26/2021 1:32 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

N

SEPTIC

W

T

90+20.00

R/L STH 29 WB

STH 29 WB

92WB

94WB

96WB

12.00'

12.00'

STH 29 EB

97+82.00

46

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 1	SHEET 95	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025101-TC1.DWG
LAYOUT NAME - Sheet - (6)

PLOT DATE : 1/26/2021 1:33 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

N

LEFT LANE CLOSED 1/2 MILE
W20-5SG

A

R/L STH 29 WB

98WB

100WB

STH 29 WB

102WB

104WB

97+82.00

105+44.00

BEGIN LEFT TURN LANE
R3-20L
24"X36"

WIS_29_WB 101+98.59
60.00

WIS_29_WB 103+48.07
48.00

WIS_29_WB 103+40.72
60.00

25.00' TYP.

12.00'

12.00'

12.00'

STH 29 EB

100' TYP.

R11-2L
48" X 36"
LANE CLOSED

TYPE III BARRICADE

46

49

A

8' 12' 12' 3'

12' 12' 10' WORK ZONE

2'

SECTION A-A

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 1	SHEET 96	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025101-TC1.DWG
LAYOUT NAME - Sheet - (7)

PLOT DATE : 1/26/2021 1:35 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

CTH U

204U

202U

200U

105+44.00

113+06.00

N

TRAFFIC CONTROL SOUTHBOUND CTH U

50' 500' VARIES 50'

WORK ZONE

WINKLE RD.

R11-2 48" X 30" ROAD CLOSED TYPE III BARRICADE

ROAD CLOSED 500 FT W20-3D

ROAD CLOSED AHEAD W20-3A

R/L CTH U

WIS_29_WB 106+84.24
48.00

WIS_29_WB 106+77.70
60.00

106WB

108WB

110WB

112WB

STH 29 WB

R/L STH 29 WB

25.00' TYP.

R3-2 36"X36"

100.00' TYP.

12.00'

45

STH 29 EB

46

R11-2L 48" X 30" LANE CLOSED TYPE III BARRICADE

B

TRAFFIC CONTROL NORTHBOUND CTH U

50' 500' VARIES 50'

WORK ZONE

WILLOW CREEK RD.

ROAD CLOSED 500 FT W20-3D

ROAD CLOSED AHEAD W20-3A

12' 12' 12' 12'

2'

3' 12' 12' WORK ZONE

2'

SECTION B-B

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 1	SHEET 97	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025101-TC1.DWG
LAYOUT NAME - Sheet - (8)

PLOT DATE : 1/26/2021 1:36 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

N

113+06.00

114WB

116WB

STH 29 WB

118WB

R/L STH 29 WB

120WB

R3-2
36"X36"

100.00' TYP.

12.00'

WIS_29_WB 120+25.70
60.00

STH 29 EB

120+68.00

R11-2L
48" x 60"
LANE CLOSED

TYPE III BARRICADE

46

WIS_29_WB 120+25.70
72.00

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 1	SHEET 98	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025101-TC1.DWG
LAYOUT NAME - Sheet - (9)

PLOT DATE : 1/26/2021 1:37 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

N

120+68.00

128+30.00

122WB

124WB

STH 29 WB

126WB

128WB

R/L STH 29 WB

W01-6
48" X 24"

TYPE III BARRICADE

12.00'

45

WIS_29_WB 123+55.70
72.00

45

STH 29 EB

R11-2L
48" X 30"

LANE CLOSED

TYPE III BARRICADE

50.00' TYP.

100.00' TYP.

330 FT MERGING TAPER

WIS_29_WB 123+55.70
84.00

46

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 1	SHEET 99	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025101-TC1.DWG
LAYOUT NAME - Sheet - (10)

PLOT DATE : 1/26/2021 1:38 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

N

128+30.00

135+92.00

A

R/L STH 29 WB

130WB

132WB

STH 29 WB

134WB

12.00'

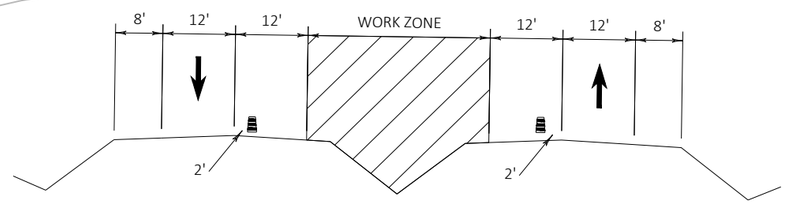
45

STH 29 EB

100.00' TYP.

WIS_29_WB 135+86.29
72.00

A



SECTION A-A

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 1	SHEET 100	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025101-TC1.DWG
LAYOUT NAME - Sheet - (11)

PLOT DATE : 1/26/2021 1:39 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

N

135+92.00

143+54.00

136WB

138WB

140WB

142WB

STH 29 WB

STH 29 EB

WIS_29_WB 138+71.14
0.00

WIS_29_WB 139+70.82
-12.00

WIS_29_WB 136+86.72
60.00

25' TYP.

25' TYP.

100' TYP.

12.00'

24.00'

45

45

A

A

R/L STH 29 WB

END
ROAD WORK
G20-2A
48"X24"

8' 12' 12' WORK ZONE 12' 12' 8'

2'

SECTION A-A

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 1	SHEET 101	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025101-TC1.DWG
LAYOUT NAME - Sheet - (12)

PLOT DATE : 1/26/2021 1:40 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

N

143+54.00

151+16.00

12.00'

100.00' TYP.

144WB

146WB

STH 29 WB

148WB

150WB

R/L STH 29 WB

45

SIGN

LANE CLOSED

TYPE III BARRICADE

STH 29 EB

SPEED LIMIT 65

R2-1
36"X48"

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 1	SHEET 102	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025101-TC1.DWG
LAYOUT NAME - Sheet - (13)

PLOT DATE : 1/26/2021 1:41 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

N

151+16.00

660 FT MERGING TAPER

SIGN

STH 29 WB

50.00' TYP.

152WB

154WB

156WB

158WB

WIS_29_WB 152+32.38
-12.00

R/L STH 29 WB

45

WIS_29_WB 158+92.38
0.00

SIGN

STH 29 EB

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 1	SHEET 103	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025101-TC1.DWG
LAYOUT NAME - Sheet - (14)

PLOT DATE : 1/26/2021 1:42 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

RUINS

RUINS

N

WM

SEPTIC

SEPTIC

158+96.10

STH 29 WB

160WB

162WB

164WB

R/L STH 29 WB

WIS_29_WB 162+42.27
0.00

WIS_29_WB 164+20.80
0.00

STH 29 EB

WESTBOUND STH 29 ADVANCE WARNING SIGNS

1000' 500' 700' 400' 2600'

START OF MERGING TAPER

W04-2L

SPEED LIMIT 55

R2-1
24"X30"

SPEED LIMIT 55

W03-5

RIGHT LANE CLOSED 1/2 MILE

W20-5G

ROAD WORK 1 MILE

W20-1P

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 1	SHEET 104	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025101-TC1.DWG
LAYOUT NAME - Sheet - (15)

PLOT DATE : 1/26/2021 1:43 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

LEGEND

- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TYPE III BARRICADE WITH SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN
- DELINEATOR FLEXIBLE/TUBULAR MARKER
- (45) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
- (46) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
- (47) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
- (49) TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)

STAGE 2 CONSTRUCTION

CONSTRUCT STH 29 WB AND MEDIAN

CONSTRUCT STH 29 EB LEFT TURN LANES

CONSTRUCT NORTH LEG OF CTH U

STAGE 2 GENERAL NOTES

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS. PLACE THE SIGNS SO THE DRIVER HAS A CLEAR VIEW OF THE MESSAGE FOR A MINIMUM OF 1000 FEET.

DRAWING SHOWS TRAFFIC CONTROL FOR A TYPICAL SITUATION. ADDITIONAL TRAFFIC CONTROL DEVICES MAY BE REQUIRED AND/OR LAYOUT DETAILS MODIFIED DEPENDING ON THE CONTRACTOR METHODS OR SEQUENCE OF OPERATIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. "WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

FOR LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

TRAFFIC CONTROL DRUMS IN TAPERS SHALL BE EQUIPPED WITH WARNING LIGHTS TYPE "C" ONE-WAY LIGHTS IN TAPERS ONLY UNLESS OTHERWISE SHOWN.

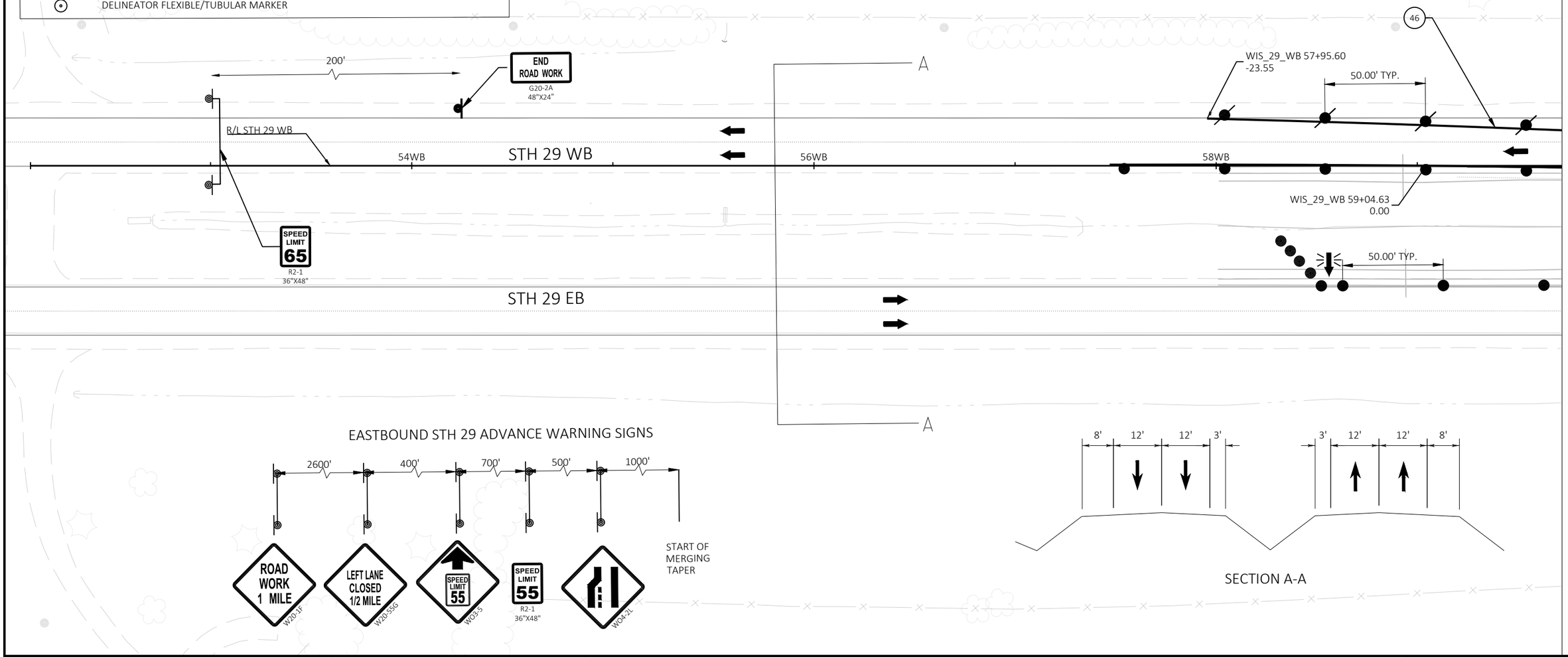
TRAFFIC CONTROL ITEMS SHOWN IN EACH STAGE SHALL BE PLACED AT THE START OF THAT STAGE, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

SEE SPECIAL PROVISIONS FOR TRAFFIC CONTROL REQUIRMENTS.

IF LANE CLOSURE IS MORE THAN 1 MILE, PLACE A TYPE III BARRICADE APPROXIMATELY EVERY 1000 FEET ACROSS THE CLOSED LANE TO HELP ENFORCE THE DRUM LINE.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKINGS, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 7 OR MORE CONTINUOUS DAYS AND NIGHTS.

N



EASTBOUND STH 29 ADVANCE WARNING SIGNS

SECTION A-A

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 2	SHEET 105	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025201-TC2.DWG
LAYOUT NAME - TC S2- (1)
PLOT DATE : 1/27/2021 4:25 PM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

N

MATCH LINE STA. 59+72.00WB

MATCH LINE STA. 67+34.00WB

50.00' TYP.

60WB

62WB

R/L STH 29 WB

64WB

66WB

STH 29 WB

STH 29 EB

46

45

45

WIS_29_WB 59+73.05
60.00

WIS_29_WB 64+42.77
0.00

WIS_29_WB 65+04.07
0.00

WIS_29_WB 66+33.05
72.00

W01-6
48" X 24"

TYPE III BARRICADE

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 2	SHEET 106	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025201-TC2.DWG
LAYOUT NAME - TC S2- (2)

PLOT DATE : 1/27/2021 4:26 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

N

MATCH LINE STA. 67+34.00WB

MATCH LINE STA. 74+96.00WB

STH 29 WB

68WB

70WB

72WB

74WB

R/L STH 29 WB

50.00' TYP.

15'

45

46

TYPE III BARRICADE

WIS_29_WB 71+94.89
60.00

STH 29 EB

100.00' TYP.

12.00'

45

R11-2L
48" X 30"
LANE CLOSED

TYPE III BARRICADE

WIS_29_WB 71+15.17
72.00

25.00' TYP.

1611
957.355
POST

1610

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 2	SHEET 107	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025201-TC2.DWG
LAYOUT NAME - TC S2- (3)

PLOT DATE : 1/27/2021 4:27 PM

PLOT BY : DAN BAUMANN

PLOT NAME :

PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

N

MATCH LINE STA. 74+96.00WB

MATCH LINE STA. 82+58.00WB

R/L STH 29 WB

76WB

78WB

STH 29 WB

80WB

82WB

A

46

50.00' TYP.

11.00'

STH 29 EB

WIS_29_WB 75+15.17
72.00

45

W06-3

NEXT
1 MILES

WO57-51
SIZE

W06-1

50.00' TYP.

W01-4R

A

3' 11' 11' 8'

SECTION A-A

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 2	SHEET 108	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025201-TC2.DWG
LAYOUT NAME - TC S2- (4)

PLOT DATE : 1/27/2021 4:28 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

MATCH LINE STA. 82+58.00WB

N

IP

R/L STH 29 WB

84WB

86WB

STH 29 WB

88WB

90WB

46

STH 29 EB

11.00'

50.00' TYP.

11.00'

45

DO NOT PASS

R4-1
36"X48"

MATCH LINE STA. 90+20.00WB

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 2	SHEET 109	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025201-TC2.DWG
LAYOUT NAME - TC S2- (5)

PLOT DATE : 1/27/2021 4:30 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

MATCH LINE STA. 90+20.00WB

MATCH LINE STA. 97+82.00WB

N

SEPTIC

T

W

R/L STH 29 WB

92WB

94WB

STH 29 WB

96WB

A

WO1-6
48" X 24"
TYPE III BARRICADE

WIS_29_WB 93+03.23
72.00

WIS_29_WB 95+87.40
77.50

46

11.00'

STH 29 EB

50.00' TYP.

45

A

10'

11'

11'

2'

SECTION A-A

TEMPORARY WIDENING

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 2	SHEET 110	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025201-TC2.DWG
LAYOUT NAME - TC S2- (6)

PLOT DATE : 1/27/2021 4:31 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

N

MATCH LINE STA. 97+82.00WB

MATCH LINE STA. 105+44.00WB

R/L STH 29 WB

98WB

100WB

102WB

STH 29 WB

104WB

WIS_29_WB 100+21.86
0.00

WIS_29_WB 100+22.01
60.00

WIS_29_WB 100+46.17
63.00

11.00'

11.00'

60.00

STH 29 EB

45

46

46

50.00' TYP.

A

A

WORK ZONE

6'

11'

11'

2'

2'

SECTION A-A

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 2	SHEET 111	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025201-TC2.DWG
LAYOUT NAME - TC S2- (7)

PLOT DATE : 1/27/2021 4:32 PM

PLOT BY : DAN BAUMANN

PLOT NAME :

PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

MATCH LINE STA. 105+44.00WB

MATCH LINE STA. 113+06.00WB

N

TRAFFIC CONTROL SOUTHBOUND CTH U

50' 500' 4,500' 50'

WORK ZONE — WINKLE RD.

R11-2 48" X 30" ROAD CLOSED TYPE III BARRICADE

ROAD CLOSED 500 FT W20-3D

ROAD CLOSED AHEAD W20-3A

WIS_29_WB 107+89.74 -222.88

WIS_29_WB 107+53.02 -223.42

204U

R/L STH 29 WB

WIS_29_WB 105+83.24 -34.00

WIS_29_WB 105+83.26 0.00

106WB 108WB 110WB 112WB

STH 29 WB

STH 29 EB

6.00'

11.00'

R/L CTH U

202U

10' TYP.

50.00' TYP.

11.00'

46 45

TRAFFIC CONTROL NORTHBOUND CTH U

50' WIS_29_WB 105+70.27 78.66 500' 5,200' 50'

WORK ZONE — WILLOW CREEK RD.

R11-2 48" X 30" ROAD CLOSED TYPE III BARRICADE

ROAD CLOSED 500 FT W20-3D

ROAD CLOSED AHEAD W20-3A

CTH U

R11-2 48" X 30" ROAD CLOSED TYPE III BARRICADE WB 108+93.37

ONE WAY R6-1R 36"X12"

R3-2 24"X24"

STOP R1-1 30"X30"

WO1-4L

R3-2 24"X24"

46

A

A

WORK ZONE 6' 11' 11' 2'

2'

TEMPORARY WIDENING

SECTION A-A

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 2	SHEET 112	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025201-TC2.DWG
LAYOUT NAME - TC S2- (8)

PLOT DATE : 2/24/2021 3:55 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

N

MATCH LINE STA. 113+06.00WB

WIS_29_WB 116+12.63
-34.00

114WB

116WB

STH 29 WB

118WB

120WB

WIS_29_WB 115+90.24
6.00

WIS_29_WB 115+90.24
60.00

11.00'

50.00' TYP.

46

WO1-6
48" X 24"

TYPE III BARRICADE

R/L STH 29 WB

WIS_29_WB 120+59.37
54.00

WIS_29_WB 120+59.37
60.00

STH 29 EB

5.00'

11.00'

WIS_29_WB 115+95.27
78.00

45

46

330 FT LANE SHIFT

WO1-6
48" X 24"

TYPE III BARRICADE

WIS_29_WB 119+25.28
72.00

MATCH LINE STA. 120+68.00WB

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 2	SHEET 113	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025201-TC2.DWG
LAYOUT NAME - TC S2- (9)

PLOT DATE : 1/27/2021 4:34 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

N

MATCH LINE STA. 120+68.00WB

MATCH LINE STA. 128+30.00WB

WIS_29_WB 128+13.41
-34.00

A

STH 29 WB

122WB

124WB

126WB

128WB

WIS_29_WB 121+33.37
54.00

WIS_29_WB 121+33.37
60.00

R/L STH 29 WB

WIS_29_WB 128+13.41
6.00

WOD-1

46

11.00'

STH 29 EB

50.00' TYP.

11.00'

45

A

WORK ZONE

3' 11' 11' 8'

SECTION A-A

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 2	SHEET 114	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025201-TC2.DWG
LAYOUT NAME - TC S2- (10)

PLOT DATE : 1/27/2021 4:35 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

N

MATCH LINE STA. 128+30.00WB

STH 29 WB

130WB

R/L STH 29 WB

132WB

134WB

WIS_29_WB 129+13.41
60.00

11.00'

46

STH 29 EB

50.00' TYP.

45

11.00'

WO1-4L

WIS_29_WB 131+93.60
72.00

WO6-3

NEXT
1 MILES

WO57-51
48"X24"

50.00' TYP.

25.00' TYP.

46

15.00'

WIS_29_WB 134+52.48
60.00

WIS_29_WB 134+85.64
60.00

45

MATCH LINE STA. 135+92.00WB

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 2	SHEET 115	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025201-TC2.DWG
LAYOUT NAME - TC S2- (11)

PLOT DATE : 1/27/2021 4:37 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

N

MATCH LINE STA. 135+92.00WB

MATCH LINE STA. 143+54.00WB

TYPE III BARRICADE

R11-2
48" X 30"
ROAD CLOSED

TYPE III BARRICADE

W01-6
48" X 24"

TYPE III BARRICADE

A

46

136WB

138WB

50.00' TYP.

5.00'

5.00'

16.00'

140WB

STH 29 WB

R/L STH 29 WB

142WB

46

WIS_29_WB 141+46.16
0.00

WIS_29_WB 140+70.82
1.09

45

STH 29 EB

A

END
ROAD WORK
G20-2A
48"X24"

15'

3'

12'

12'

8'

TEMPORARY WIDENING

SECTION A-A

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 2	SHEET 116	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025201-TC2.DWG
LAYOUT NAME - TC S2- (12)

PLOT DATE : 1/27/2021 4:38 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

N

MATCH LINE STA. 143+54.00WB

MATCH LINE STA. 151+16.00WB

R11-2L
48"x 30"

LANE CLOSED

TYPE III BARRICADE

WIS_29_WB 145+32.41
-12.00

WIS_29_WB 147+32.38
-12.00

46

50.00' TYP.

R/L STH 29 WB

144WB

146WB

148WB

STH 29 WB

150WB

WIS_29_WB 147+32.38
0.92

50.00' TYP.

45

STH 29 EB

SPEED LIMIT 65

R2-1
36"X48"

SIGN

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 2	SHEET 117	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025201-TC2.DWG
LAYOUT NAME - TC S2- (13)

PLOT DATE : 1/27/2021 4:39 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

N

MATCH LINE STA. 151+16.00WB

MATCH LINE STA. 158+78.00WB

46

660 FT MERGING TAPER

50.00' TYP.

A

WIS_29_WB 153+92.38
-22.73

WIS_29_WB 155+92.17
-24.71

R/L STH 29 WB

152WB

154WB

STH 29 WB

156WB

158WB

SIGN

SIGN

STH 29 EB

A

WESTBOUND STH 29 ADVANCE WARNING SIGNS

1000' 500' 700' 400' 2600'

START OF MERGING TAPER

W04-2R

SPEED LIMIT 55

R2-1
36"X48"

SPEED LIMIT 55

W03-5

RIGHT LANE CLOSED 1/2 MILE

W20-5G

ROAD WORK 1 MILE

W20-1F

8' 12' 12' 3'

3' 12' 12' 8'

SECTION A-A

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 2	SHEET 118	E

LEGEND

- WORK AREA
- TEMPORARY PAVEMENT
- DIRECTION OF TRAVEL
- TYPE III BARRICADE
- TYPE III BARRICADE WITH SIGN
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH C STEADY BURN LIGHT
- FLASHING ARROW BOARD
- SIGN
- DELINEATOR FLEXIBLE/TUBULAR MARKER

- (45) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (YELLOW)
- (46) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (WHITE)
- (47) TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH (DASHED WHITE) (12.5 FT LINE 37.5 FT SKIP)
- (49) TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH (WHITE)

STAGE 3 CONSTRUCTION

REMOVE CROSSOVERS

REMOVE TEMPORARY ASPHALT AT INTERSECTION OF STH 29 AND CTH U

CONSTRUCT ISLAND ON SOUTH LEG OF CTH U

STAGE 3 GENERAL NOTES

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS. PLACE THE SIGNS SO THE DRIVER HAS A CLEAR VIEW OF THE MESSAGE FOR A MINIMUM OF 1000 FEET.

DRAWING SHOWS TRAFFIC CONTROL FOR A TYPICAL SITUATION. ADDITIONAL TRAFFIC CONTROL DEVICES MAY BE REQUIRED AND/OR LAYOUT DETAILS MODIFIED DEPENDING ON THE CONTRACTOR METHODS OR SEQUENCE OF OPERATIONS.

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

ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED. "WO" IS THE SAME AS "W" EXCEPT THE BACKGROUND IS ORANGE.

FOR LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

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

TRAFFIC CONTROL DRUMS IN TAPERS SHALL BE EQUIPPED WITH WARNING LIGHTS TYPE "C" ONE-WAY LIGHTS IN TAPERS ONLY UNLESS OTHERWISE SHOWN.

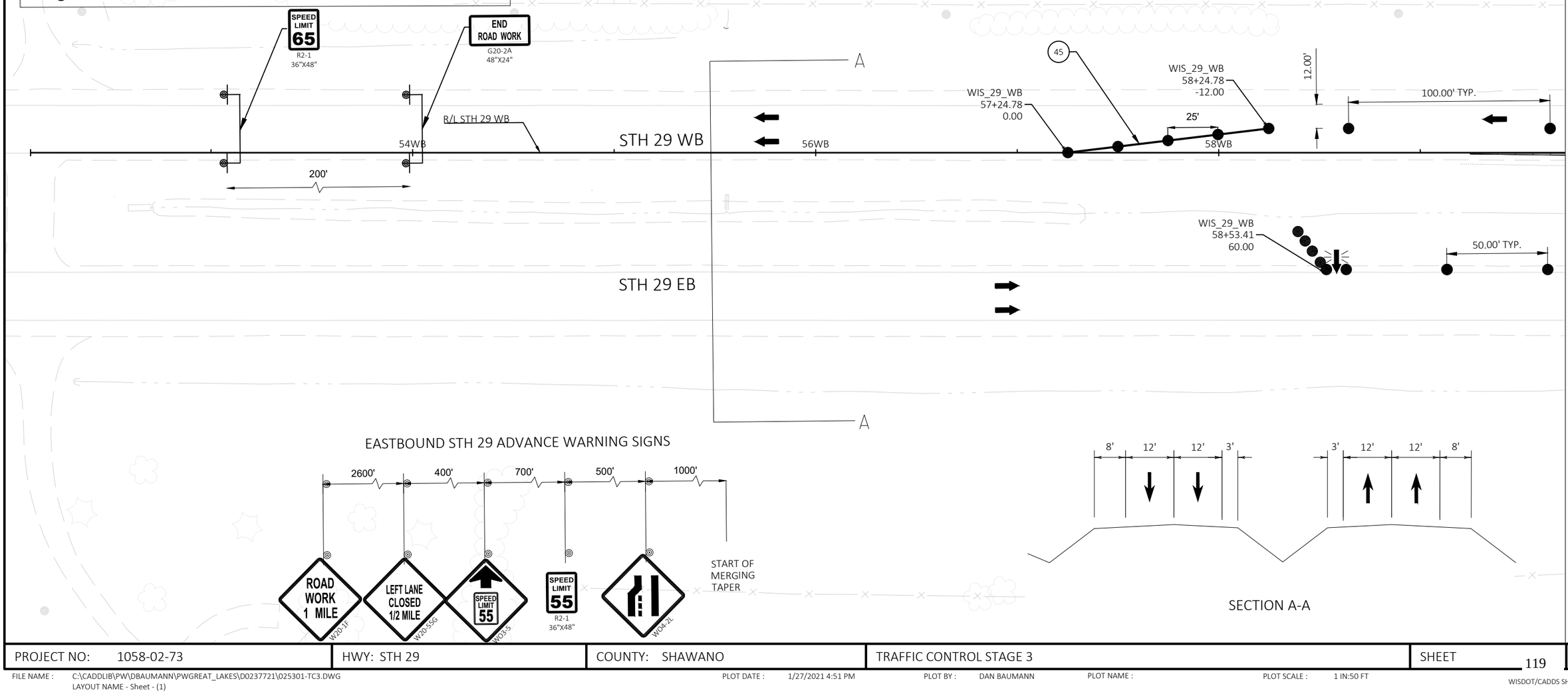
TRAFFIC CONTROL ITEMS SHOWN IN EACH STAGE SHALL BE PLACED AT THE START OF THAT STAGE, UNLESS OTHERWISE APPROVED BY THE ENGINEER.

SEE SPECIAL PROVISIONS FOR TRAFFIC CONTROL REQUIRMENTS.

IF LANE CLOSURE IS MORE THAN 1 MILE, PLACE A TYPE III BARRICADE APPROXIMATELY EVERY 1000 FEET ACROSS THE CLOSED LANE TO HELP ENFORCE THE DRUM LINE.

REMOVE PAVEMENT MARKINGS AND PLACE TEMPORARY PAVEMENT MARKINGS, REMOVABLE TAPE IF LANE CLOSURE IS TO BE IN PLACE FOR 7 OR MORE CONTINUOUS DAYS AND NIGHTS.

N



EASTBOUND STH 29 ADVANCE WARNING SIGNS

SECTION A-A

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 3	SHEET 119	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025301-TC3.DWG
LAYOUT NAME - Sheet - (1)
PLOT DATE : 1/27/2021 4:51 PM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 42

2

2

N

59+72.00

67+34.00

12.00'

100.00' TYP.

R/L STH 29 WB

60WB

62WB

STH 29 WB

64WB

66WB

WIS_29_WB
59+73.05
60.00

660 FT MERGING TAPER

45

50.00' TYP.

WIS_29_WB
66+33.06
72.00

STH 29 EB

12.00'

R11-2L
48" x 30"
LANE CLOSED

TYPE III BARRICADE

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 3	SHEET 120	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025301-TC3.DWG
LAYOUT NAME - Sheet - (2)

PLOT DATE : 1/27/2021 4:53 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

N

67+34.00

74+96.00

R11-2i
48" x 30"
LANE CLOSED
TYPE III BARRICADE

12.00'

A

WIS_29_WB
70+04.07
-12.00

660 FT MERGING TAPER

45

50.00' TYP.

R/L STH 29 WB

STH 29 WB

68WB

70WB

72WB

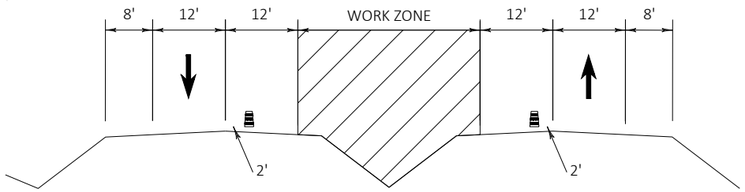
74WB

STH 29 EB

100.00' TYP.

12.00'

A



SECTION A-A

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 3	SHEET 121	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025301-TC3.DWG
LAYOUT NAME - Sheet - (3)

PLOT DATE : 1/27/2021 4:54 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

N

74+96.00

45

WIS_29_WB
76+64.07
0.00

R/L STH 29 WB

76WB

78WB

STH 29 WB

80WB

50.00' TYP.

24.00'

82WB

82+58.00

R11-2L
48" X 30"
LANE CLOSED

TYPE III BARRICADE

12.00'

STH 29 EB

100.00' TYP.

W01-4L

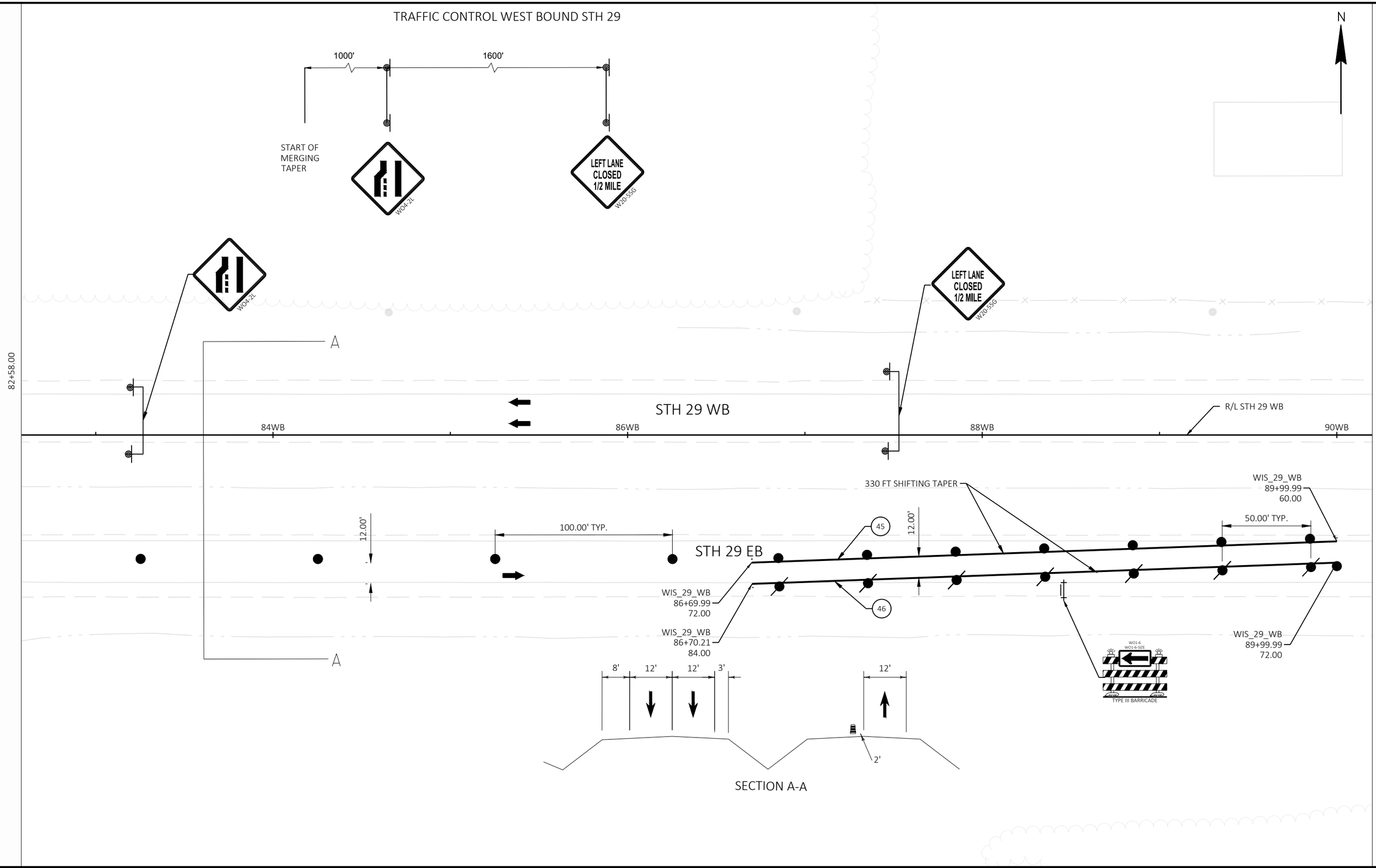
PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 3	SHEET 122	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025301-TC3.DWG
LAYOUT NAME - Sheet - (4)

PLOT DATE : 1/27/2021 4:55 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

TRAFFIC CONTROL WEST BOUND STH 29



SECTION A-A

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 3	SHEET 123	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025301-TC3.DWG
LAYOUT NAME - Sheet - (5)

PLOT DATE : 1/27/2021 4:56 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

N

SEPTIC

T

W

A

90+20.00

92WB

94WB

STH 29 WB

R/L STH 29 WB

96WB

97+82.00

12.00'

100.00' TYP.

STH 29 EB

R11-2L
48" X 30"
LANE CLOSED

TYPE III BARRICADE

8'

12'

12'

3'

3'

12'

12'

WORK ZONE

2'

TEMPORARY WIDENING

SECTION A-A

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 3	SHEET 124	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025301-TC3.DWG
LAYOUT NAME - Sheet - (6)

PLOT DATE : 1/27/2021 4:57 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

N

97+82.00

105+44.00

98WB

100WB

102WB

104WB

STH 29 WB

R/L STH 29 WB

STH 29 EB

R11-2L
48"X30"
LANE CLOSED
TYPE III BARRICADE

R3-2
24"X24"

R3-1
24"X24"

12.00'

25.00' TYP.

100.00' TYP.

WIS_29_WB
99+00.00
74.00

PROJECT NO: 1058-02-73	HWY: STH29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 3	SHEET 125	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025301-TC3.DWG
LAYOUT NAME - Sheet - (7)

PLOT DATE : 1/27/2021 4:58 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

N

105+44.00

113+06.00

R11-2L
48"X30"
LANE CLOSED
TYPE III BARRICADE

204U

R/L CTH U

R/L STH 29 WB

106WB

108WB

110WB

STH 29 WB

112WB

12.00'

12.00'

STH 29 EB

25.00' TYP.

100.00' TYP.

202U

A

A

WIS_29_WB
109+49.75
74.00

W01-4R

500'

500'

VARIES

50'

STH 29

WILLOW CREEK RD.

R11-2
48"X30"
ROAD CLOSED
TYPE III BARRICADE

ROAD CLOSED 500 FT
W20-3D

ROAD CLOSED AHEAD
W20-3A

* WIDTH VARIES (GORE)

12'

12'

12'

12'

2'

SECTION A-A

WORK ZONE

2'

2'

TEMPORARY WIDENING

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 3	SHEET 126	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025301-TC3.DWG
LAYOUT NAME - Sheet - (8)

PLOT DATE : 2/24/2021 4:01 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

2

N

113+06.00

120+68.00

R11-2L
48"X30"
LANE CLOSED
TYPE III BARRICADE

R3-2
24"X24"

R11-2L
48"X30"
LANE CLOSED
TYPE III BARRICADE

R/L STH 29 WB

114WB

116WB

STH 29 WB

118WB

120WB

12.00'

100.00' TYP.

STH 29 EB

R11-2L
48"X30"
LANE CLOSED
TYPE III BARRICADE

R11-2L
48"X30"
LANE CLOSED
TYPE III BARRICADE

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 3	SHEET 127	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025301-TC3.DWG
LAYOUT NAME - Sheet - (9)

PLOT DATE : 1/27/2021 5:01 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

N

120+68.00

R/L STH 29 WB

122WB

124WB

STH 29 WB

126WB

128WB

128+30.00

WO1-6
WO1-6 SIZE
TYPE III BARRICADE

WIS_29_WB
124+13.35
72.00

45

R11-2L
R11-2 SIZE
LANE CLOSED
TYPE III BARRICADE

STH 29 EB

WIS_29_WB
120+83.35
60.00

50.00' TYP.

WIS_29_WB
120+83.35
72.00

330 FT SHIFTING TAPER

12.00'

46

WIS_29_WB
124+08.79
84.00

100.00' TYP.

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 3	SHEET 128	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025301-TC3.DWG
LAYOUT NAME - Sheet - (10)

PLOT DATE : 1/27/2021 5:02 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

N

128+30.00

A

R/L STH 29 WB

130WB

STH 29 WB

132WB

134WB

STH 29 EB

100.00' TYP.

12.00'

135+92.00

WIS_29_WB
135+86.27
72.00

A

LANE CLOSED

TYPE III BARRICADE

8' 12' 12' WORK ZONE 12' 12' 8'

2'

SECTION A-A

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 3	SHEET 129	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025301-TC3.DWG
LAYOUT NAME - Sheet - (11)

PLOT DATE : 1/27/2021 5:03 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

N

R/L STH 29 WB

WIS_29_WB
139+70.82
-12.00

WIS_29_WB
138+70.82
0.00

45

12.00'

100.00' TYP.

135+92.00

136WB

138WB

140WB

STH 29 WB

142WB

143+54.00

STH 29 EB

24.00'

45

WIS_29_WB
136+86.70
60.00

END
ROAD WORK
G20-2A
48"X24"

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 3	SHEET 130	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025301-TC3.DWG
LAYOUT NAME - Sheet - (12)

PLOT DATE : 1/27/2021 5:04 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

2

N

143+54.00

151+16.00

12.00'

100.00' TYP.

144WB

146WB

148WB

150WB

STH 29 WB

STH 29 EB

R/L STH 29 WB

SIGN

A

A

R11-2L
R11-2-92"

LANE CLOSED

TYPE III BARRICADE

SPEED LIMIT 65

R2-1
36"X48"

8' 12' 12' 3'

3' 12' 12' 8'

2'

SECTION A-A

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 3	SHEET 131	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025301-TC3.DWG
LAYOUT NAME - Sheet - (13)

PLOT DATE : 1/27/2021 5:05 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 42

2

N

151+16.00

12.00'

WIS_29_WB
152+32.41
-12.00

SIGN

50.00' TYP.

45

R/L STH 29 WB

STH 29 WB

152WB

154WB

156WB

158WB

660 FT MERGING TAPER

158+78.00

SIGN

STH 29 EB

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 3	SHEET 132	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025301-TC3.DWG
LAYOUT NAME - Sheet - (14)

PLOT DATE : 1/27/2021 5:07 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

2

RUINS

RUINS

N

SEPTIC

WM

SEPTIC

158+78.00

WIS_29_WB
158+92.41
0.00

R/L STH 29 WB

160WB

162WB

STH 29 WB

164WB

STH 29 EB

WESTBOUND STH 29 ADVANCE WARNING SIGNS

1000'

500'

700'

400'

2600'

START OF MERGING TAPER

W04-2R

SPEED LIMIT 55

W03-5

SPEED LIMIT 55

R2-1
36"X48"

LEFT LANE CLOSED 1/2 MILE

W20-5SG

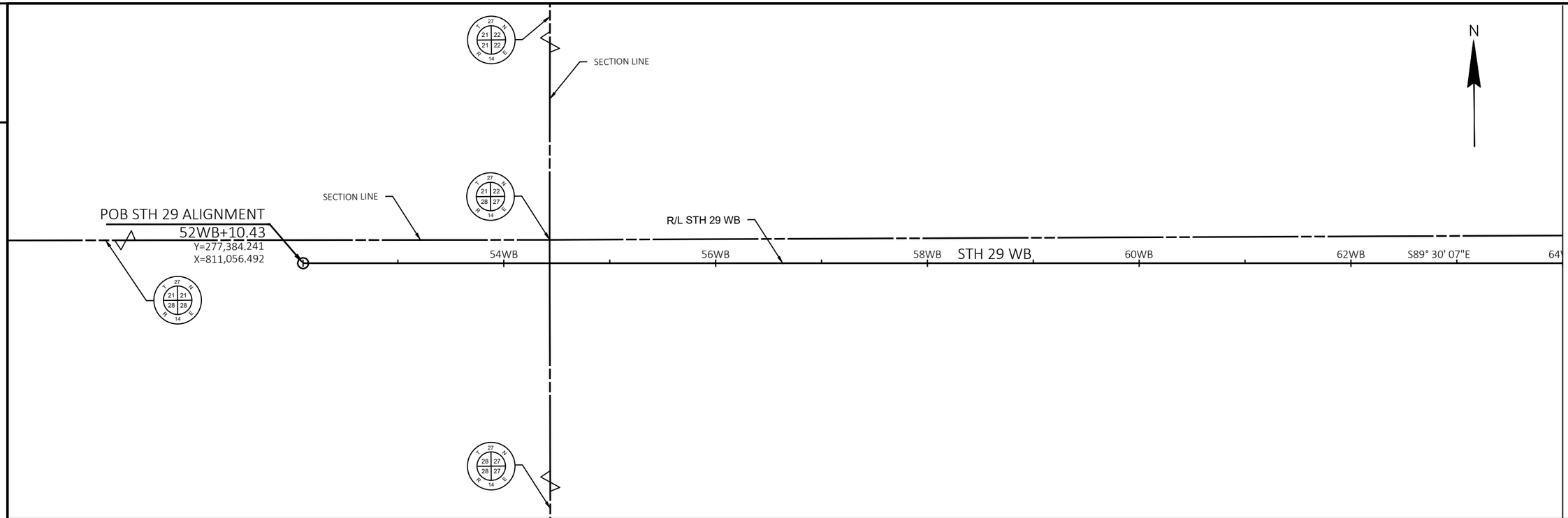
ROAD WORK 1 MILE

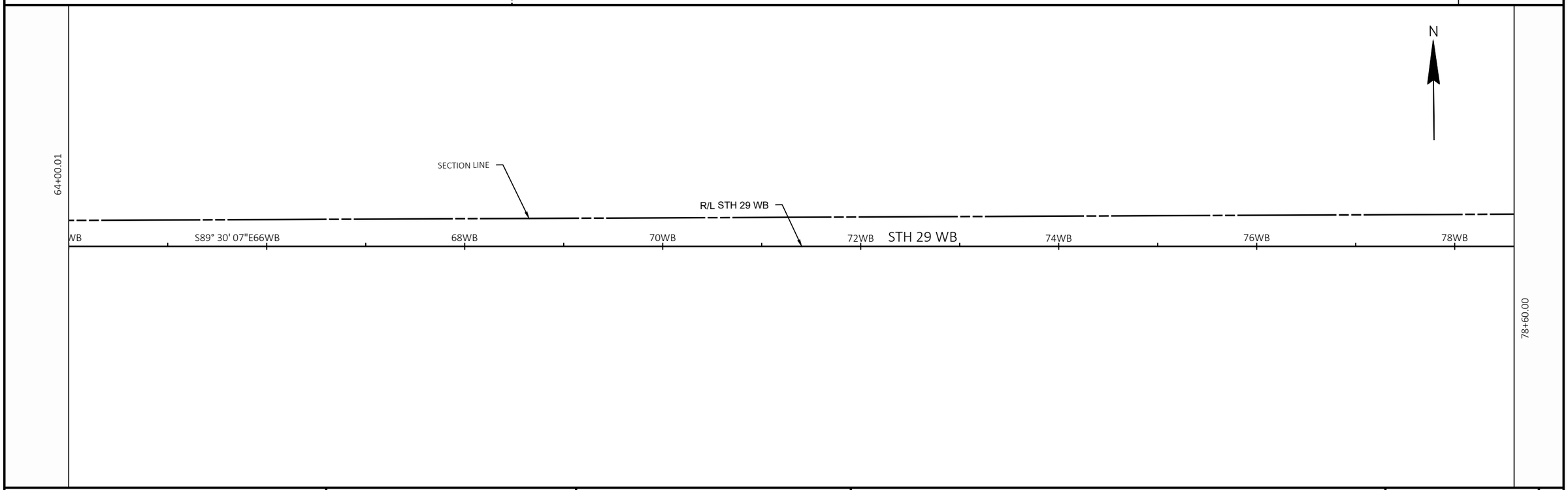
W20-1F

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	TRAFFIC CONTROL STAGE 3	SHEET 133	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\025301-TC3.DWG
LAYOUT NAME - Sheet - (15)

PLOT DATE : 1/27/2021 5:08 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT


SECTION LINE
SECTION LINE
POB STH 29 ALIGNMENT
52WB+10.43
Y=277,384.241
X=811,056.492
R/L STH 29 WB
54WB
56WB
58WB
STH 29 WB
60WB
62WB
S89° 30' 07"E
64+00.01
N


64+00.01
SECTION LINE
R/L STH 29 WB
WB
S89° 30' 07"E66WB
68WB
70WB
72WB
STH 29 WB
74WB
76WB
78WB
78+60.00
N

2

2

N

¼ SECTION LINE

PI: 79+03.66WB
Y=277360.836
X=813749.619

78+60.00

SECTION LINE

R/L STH 29 WB

80WB 82WB 84WB STH 29 WB 86WB 88WB 90WB 92WB S89° 58' 27"E

93+35.00

N

WB CURVE - 1
PI STA = 107+63.51WB
Y = 277359.544
X = 816609.482
DELTA = 1°33'25"
D = 0°30'09"
T = 154.89'
L = 309.75'
R = 11399.16'
PC STA = 106+08.63WB
Y = 277359.614
X = 816454.595
PT STA = 109+18.39WB
Y = 277363.682
X = 816764.313
BK = S89°58'26.8"E
AH = N88°28'08.3"E

CTH U

204U

X=816613.6122
Y=277360.6514
STH 29 WB STA 107+67.66
CTH U STA 202+95.96

PI: 107+63.51WB
Y=277359.544
X=816609.482

88°

93+35.00

SECTION LINE

R/L STH 29 WB

94WB S89° 58' 27"E 96WB 98WB STH 29 WB 100WB 102WB 104WB 106WB 108W

PC: 106+08.63WB
Y=277359.614
X=816454.595

202U

R/L CTH U

SECTION LINE

108+10.00

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	ALIGNMENT PLANS - STH 29	SHEET 135	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\027201_ALI_29.DWG
LAYOUT NAME - Sheet - (14)

PLOT DATE : 1/26/2021 7:24 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

WB CURVE - 1
PI STA = 107+63.51WB
Y = 277359.544
X = 816609.482
DELTA = 1°33'25"
D = 0°30'09"
T = 154.89'
L = 309.75'
R = 11399.16'
PC STA = 106+08.63WB
Y = 277359.614
X = 816454.595
PT STA = 109+18.39WB
Y = 277363.682
X = 816764.313
BK = S89°58'26.8"E
AH = N88°28'08.3"E

108+10.00

SECTION LINE

R/L STH 29 WB

B 110WB 112WB 114WB STH 29 WB 116WB 118WB 120WB N88° 28' 08"E 122WB

PT: 109+18.39WB
Y=277363.682
X=816764.313

122+85.00

N

2

122+85.00

SECTION LINE

R/L STH 29 WB

124WB N88° 28' 08"E 126WB 128WB STH 29 WB 130WB 132WB 134WB 136WB

PC: 131+20.39WB
Y=277422.517
X=818965.534

PI: 134+21.06WB
Y=277430.552
X=819266.162

PT: 137+21.73WB
Y=277422.890
X=819566.801

WB CURVE - 2
PI STA = 134+21.06WB
Y = 277430.552
X = 819266.162
DELTA = 2°59'28"
D = 0°29'51"
T = 300.74'
L = 601.34'
R = 11519.16'
PC STA = 131+20.39WB
Y = 277422.517
X = 818965.534
PT STA = 137+21.73WB
Y = 277422.890
X = 819566.801
BK = N88°28'08.3"E
AH = S88°32'24.1"E

N

1/4 SECTION LINE

137+60.00

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	ALIGNMENT PLANS - STH 29	SHEET 136	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\027201_ALI_29.DWG
LAYOUT NAME - Sheet - (15)

PLOT DATE : 1/26/2021 7:24 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:100 FT

2

2

137+60.00

N

SECTION LINE

R/L STH 29 WB

138WB 140WB 142WB 144WB STH 29 WB 146WB 148WB 150WB S88° 32' 24"E 152

152+00.00

152+00.00

N

POE STH 29 ALIGNMENT
164WB+49.99
Y=277,353.377
X=822,294.177

SECTION LINE

R/L STH 29 WB

WB 154WB S88° 32' 24"E 156WB 158WB STH 29 WB 160WB 162WB 164WB

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	ALIGNMENT PLANS - STH 29	SHEET 137	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\027201_ALI_29.DWG
LAYOUT NAME - Sheet - (16)

PLOT DATE : 1/26/2021 7:24 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:100 FT

WISDOT/CADDS SHEET 44

2

N

104WB

STH 29 WB

106WB

X=816613.6122
Y=277360.6514
STH 29 WB STA 107+67.66
CTH U STA 202+95.96

PI: 203+16.44U
X=816613.995
Y=277381.128

SECTION LINE

POB CTH U ALIGNMENT
199U+00.00
Y=276,964.762
X=816,606.211

200U

N1° 04' 16"E

202U

88°

204U

N0° 04' 22"E

206U

CTH U

R/L CTH U

108WB

POE CTH U ALIGNMENT
206U+19.16
Y=277,683.845
X=816,614.380

110WB

R/L STH 29 WB

112WB

PROJECT NO: 1058-02-73	HWY: CTH U	COUNTY: SHAWANO	ALIGNMENT PLANS - CTH U	SHEET 138	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\027202_ALI_U.DWG
LAYOUT NAME - Sheet - (1)

PLOT DATE : 1/26/2021 7:24 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:100 FT

1058-02-73

Line	Item	Item Description	Unit	Total	Qty
0002	201.0105	Clearing	STA	1.000	1.000
0004	201.0205	Grubbing	STA	1.000	1.000
0006	203.0100	Removing Small Pipe Culverts	EACH	5.000	5.000
0008	204.0100	Removing Concrete Pavement	SY	6,350.000	6,350.000
0010	204.0150	Removing Curb & Gutter	LF	279.000	279.000
0012	204.0220	Removing Inlets	EACH	2.000	2.000
0014	204.0245	Removing Storm Sewer (size) 01. 12-Inch & 18-Inch	LF	198.000	198.000
0016	204.0280	Sealing Pipes	EACH	1.000	1.000
0018	204.9090.S	Removing (item description) 01. Underdrain	LF	1,000.000	1,000.000
0020	205.0100	Excavation Common	CY	27,198.000	27,198.000
0022	208.0100	Borrow	CY	1,036.000	1,036.000
0024	208.1100	Select Borrow	CY	500.000	500.000
0026	213.0100	Finishing Roadway (project) 01. 1058-02-73	EACH	1.000	1.000
0028	305.0110	Base Aggregate Dense 3/4-Inch	TON	520.000	520.000
0030	305.0120	Base Aggregate Dense 1 1/4-Inch	TON	22,440.000	22,440.000
0032	311.0110	Breaker Run	TON	23,700.000	23,700.000
0034	312.0110	Select Crushed Material	TON	40.000	40.000
0036	415.0080	Concrete Pavement 8-Inch	SY	9,283.000	9,283.000
0038	415.0100	Concrete Pavement 10-Inch	SY	6,435.000	6,435.000
0040	415.0210	Concrete Pavement Gaps	EACH	3.000	3.000
0042	415.5110.S	Concrete Pavement Joint Layout	LS	1.000	1.000
0044	415.6000.S	Rout and Seal	LF	3,609.000	3,609.000
0046	416.0610	Drilled Tie Bars	EACH	987.000	987.000
0048	416.0620	Drilled Dowel Bars	EACH	50.000	50.000
0050	416.1010	Concrete Surface Drains	CY	15.000	15.000
0052	416.1110	Concrete Shoulder Rumble Strips	LF	1,175.000	1,175.000
0054	416.1710	Concrete Pavement Repair	SY	600.000	600.000
0056	455.0605	Tack Coat	GAL	448.000	448.000
0058	460.2000	Incentive Density HMA Pavement	DOL	840.000	840.000
0060	460.6223	HMA Pavement 3 MT 58-28 S	TON	660.000	660.000
0062	460.6224	HMA Pavement 4 MT 58-28 S	TON	512.000	512.000
0064	465.0105	Asphaltic Surface	TON	147.000	147.000
0066	465.0125	Asphaltic Surface Temporary	TON	1,948.000	1,948.000
0068	465.0315	Asphaltic Flumes	SY	53.000	53.000
0070	465.0400	Asphaltic Shoulder Rumble Strips	LF	3,676.000	3,676.000
0072	495.1000.S	Cold patch	TON	150.000	150.000
0074	520.1012	Apron Endwalls for Culvert Pipe 12-Inch	EACH	2.000	2.000
0076	520.1018	Apron Endwalls for Culvert Pipe 18-Inch	EACH	6.000	6.000
0078	520.1024	Apron Endwalls for Culvert Pipe 24-Inch	EACH	5.000	5.000
0080	520.3318	Culvert Pipe Class III-A 18-Inch	LF	149.000	149.000

1058-02-73

Line	Item	Item Description	Unit	Total	Qty
0082	520.3324	Culvert Pipe Class III-A 24-Inch	LF	130.000	130.000
0084	520.8000	Concrete Collars for Pipe	EACH	3.000	3.000
0086	522.1024	Apron Endwalls for Culvert Pipe Reinforced Concrete 24-Inch	EACH	1.000	1.000
0088	522.1030	Apron Endwalls for Culvert Pipe Reinforced Concrete 30-Inch	EACH	1.000	1.000
0090	601.0555	Concrete Curb & Gutter 6-Inch Sloped 36-Inch Type A	LF	4,410.000	4,410.000
0092	602.0410	Concrete Sidewalk 5-Inch	SF	435.000	435.000
0094	602.0505	Curb Ramp Detectable Warning Field Yellow	SF	40.000	40.000
0096	606.0200	Riprap Medium	CY	50.000	50.000
0098	608.0412	Storm Sewer Pipe Reinforced Concrete Class IV 12-Inch	LF	223.000	223.000
0100	608.0418	Storm Sewer Pipe Reinforced Concrete Class IV 18-Inch	LF	20.000	20.000
0102	608.0424	Storm Sewer Pipe Reinforced Concrete Class IV 24-Inch	LF	272.000	272.000
0104	608.0430	Storm Sewer Pipe Reinforced Concrete Class IV 30-Inch	LF	70.000	70.000
0106	608.3012	Storm Sewer Pipe Class III-A 12-Inch	LF	205.000	205.000
0108	608.3024	Storm Sewer Pipe Class III-A 24-Inch	LF	401.000	401.000
0110	611.0615	Inlet Covers Type F	EACH	18.000	18.000
0112	611.0642	Inlet Covers Type MS	EACH	8.000	8.000
0114	611.2006	Manholes 6-FT Diameter	EACH	1.000	1.000
0116	611.3004	Inlets 4-FT Diameter	EACH	17.000	17.000
0118	611.3902	Inlets Median 2 Grate	EACH	4.000	4.000
0120	611.8120.S	Cover Plates Temporary	EACH	2.000	2.000
0122	612.0106	Pipe Underdrain 6-Inch	LF	5,494.000	5,494.000
0124	612.0806	Apron Endwalls for Underdrain Reinforced Concrete 6-Inch	EACH	10.000	10.000
0126	616.0700.S	Fence Safety	LF	1,500.000	1,500.000
0128	618.0100	Maintenance And Repair of Haul Roads (project) 01. 1058-02-73	EACH	1.000	1.000
0130	619.1000	Mobilization	EACH	1.000	1.000
0132	620.0300	Concrete Median Sloped Nose	SF	722.000	722.000
0134	624.0100	Water	MGAL	530.000	530.000
0136	625.0100	Topsoil	SY	32,910.000	32,910.000
0138	627.0200	Mulching	SY	32,910.000	32,910.000
0140	628.1504	Silt Fence	LF	9,450.000	9,450.000
0142	628.1520	Silt Fence Maintenance	LF	9,450.000	9,450.000
0144	628.1905	Mobilizations Erosion Control	EACH	9.000	9.000
0146	628.1910	Mobilizations Emergency Erosion Control	EACH	4.000	4.000

1058-02-73

Line	Item	Item Description	Unit	Total	Qty
0148	628.2004	Erosion Mat Class I Type B	SY	340.000	340.000
0150	628.7005	Inlet Protection Type A	EACH	22.000	22.000
0152	628.7010	Inlet Protection Type B	EACH	4.000	4.000
0154	628.7015	Inlet Protection Type C	EACH	18.000	18.000
0156	628.7504	Temporary Ditch Checks	LF	300.000	300.000
0158	628.7555	Culvert Pipe Checks	EACH	25.000	25.000
0160	628.7560	Tracking Pads	EACH	2.000	2.000
0162	628.7570	Rock Bags	EACH	100.000	100.000
0164	629.0210	Fertilizer Type B	CWT	24.250	24.250
0166	630.0130	Seeding Mixture No. 30	LB	530.000	530.000
0168	630.0200	Seeding Temporary	LB	250.000	250.000
0170	630.0500	Seed Water	MGAL	75.000	75.000
0172	633.5200	Markers Culvert End	EACH	13.000	13.000
0174	634.0616	Posts Wood 4x6-Inch X 16-FT	EACH	122.000	122.000
0176	637.2210	Signs Type II Reflective H	SF	1,444.750	1,444.750
0178	637.2230	Signs Type II Reflective F	SF	282.250	282.250
0180	638.2602	Removing Signs Type II	EACH	31.000	31.000
0182	638.3000	Removing Small Sign Supports	EACH	25.000	25.000
0184	642.5001	Field Office Type B	EACH	1.000	1.000
0186	643.0300	Traffic Control Drums	DAY	24,882.000	24,882.000
0188	643.0420	Traffic Control Barricades Type III	DAY	3,186.000	3,186.000
0190	643.0500	Traffic Control Flexible Tubular Marker Posts	EACH	141.000	141.000
0192	643.0600	Traffic Control Flexible Tubular Marker Bases	EACH	141.000	141.000
0194	643.0705	Traffic Control Warning Lights Type A	DAY	4,752.000	4,752.000
0196	643.0715	Traffic Control Warning Lights Type C	DAY	5,628.000	5,628.000
0198	643.0800	Traffic Control Arrow Boards	DAY	468.000	468.000
0200	643.0900	Traffic Control Signs	DAY	6,240.000	6,240.000
0202	643.0920	Traffic Control Covering Signs Type II	EACH	6.000	6.000
0204	643.1050	Traffic Control Signs PCMS	DAY	84.000	84.000
0206	643.5000	Traffic Control	EACH	1.000	1.000
0208	645.0120	Geotextile Type HR	SY	245.000	245.000
0210	645.0140	Geotextile Type SAS	SY	25,600.000	25,600.000
0212	646.1020	Marking Line Epoxy 4-Inch	LF	40,069.000	40,069.000
0214	646.3020	Marking Line Epoxy 8-Inch	LF	5,975.000	5,975.000
0216	646.5020	Marking Arrow Epoxy	EACH	6.000	6.000
0218	646.5120	Marking Word Epoxy	EACH	4.000	4.000
0220	646.6120	Marking Stop Line Epoxy 18-Inch	LF	65.000	65.000
0222	646.7120	Marking Diagonal Epoxy 12-Inch	LF	1,496.000	1,496.000
0224	646.8220	Marking Island Nose Epoxy	EACH	8.000	8.000
0226	646.9010	Marking Removal Line Water Blasting 4-Inch	LF	14,819.000	14,819.000

1058-02-73

Line	Item	Item Description	Unit	Total	Qty
0228	649.0150	Temporary Marking Line Removable Tape 4-Inch	LF	43,973.000	43,973.000
0230	649.0250	Temporary Marking Line Removable Tape 8-Inch	LF	337.000	337.000
0232	649.0960	Temporary Marking Removable Mask Out Tape 6-Inch	LF	166.000	166.000
0234	650.4000	Construction Staking Storm Sewer	EACH	27.000	27.000
0236	650.4500	Construction Staking Subgrade	LF	3,203.000	3,203.000
0238	650.5000	Construction Staking Base	LF	7,700.000	7,700.000
0240	650.6000	Construction Staking Pipe Culverts	EACH	5.000	5.000
0242	650.7000	Construction Staking Concrete Pavement	LF	2,979.000	2,979.000
0244	650.8500	Construction Staking Electrical Installations (project) 01. 1058-02-73	LS	1.000	1.000
0246	650.9910	Construction Staking Supplemental Control (project) 01. 1058-02-73	LS	1.000	1.000
0248	652.0225	Conduit Rigid Nonmetallic Schedule 40 2-Inch	LF	1,393.000	1,393.000
0250	652.0235	Conduit Rigid Nonmetallic Schedule 40 3-Inch	LF	379.000	379.000
0252	652.0605	Conduit Special 2-Inch	LF	113.000	113.000
0254	653.0164	Pull Boxes Non-Conductive 24x42-Inch	EACH	13.000	13.000
0256	654.0105	Concrete Bases Type 5	EACH	8.000	8.000
0258	654.0230	Concrete Control Cabinet Bases Type L30	EACH	1.000	1.000
0260	655.0610	Electrical Wire Lighting 12 AWG	LF	870.000	870.000
0262	655.0615	Electrical Wire Lighting 10 AWG	LF	8,136.000	8,136.000
0264	657.0255	Transformer Bases Breakaway 11 1/2-Inch Bolt Circle	EACH	8.000	8.000
0266	657.0322	Poles Type 5-Aluminum	EACH	8.000	8.000
0268	657.0710	Luminaire Arms Truss Type 4 1/2-Inch Clamp 12-FT	EACH	10.000	10.000
0270	657.0715	Luminaire Arms Truss Type 4 1/2-Inch Clamp 15-FT	EACH	2.000	2.000
0272	659.1120	Luminaires Utility LED B	EACH	12.000	12.000
0274	659.2130	Lighting Control Cabinets 120/240 30-Inch	EACH	1.000	1.000
0276	690.0150	Sawing Asphalt	LF	47.000	47.000
0278	690.0250	Sawing Concrete	LF	7,468.000	7,468.000
0280	715.0415	Incentive Strength Concrete Pavement	DOL	2,599.000	2,599.000
0282	715.0710	Optimized Aggregate Gradation Incentive	DOL	19,814.000	19,814.000
0284	740.0440	Incentive IRI Ride	DOL	1,689.000	1,689.000
0286	ASP.1T0A	On-the-Job Training Apprentice at $5.00/HR	HRS	1,260.000	1,260.000
0288	ASP.1T0G	On-the-Job Training Graduate at $5.00/HR	HRS	2,000.000	2,000.000
0290	SPV.0060	Special 001. Test Pits	EACH	1.000	1.000
0292	SPV.0060	Special 002. Connect Underdrain	EACH	4.000	4.000
0294	SPV.0060	Special 003. Connect Drain Tile	EACH	5.000	5.000
0296	SPV.0060	Special 004. Reestablish Section Corner Monuments	EACH	1.000	1.000
0298	SPV.0060	Special 005. Marking Yield Line Epoxy 36-Inch	EACH	20.000	20.000
0300	SPV.0060	Special 006. Mobilizations Emergency Pavement Repair	EACH	2.000	2.000
0302	SPV.0060	Special 007. Flexible Tubular Marker Posts Left In Place	EACH	4.000	4.000

				1058-02-73	
0304	SPV.0060	Special 008. Flexible Tubular Marker Bases Left In Place	EACH	4.000	4.000

CLEARING AND GRUBBING ITEMS

CATEGORY	ROADWAY	STATION	STATION	LOCATION	201.0105 CLEARING STA	201.0205 GRUBBING STA
0010	CTH U	200+00	200+48	LT	1	1
	TOTALS				1	1

REMOVING SMALL PIPE CULVERT

CATEGORY	ROADWAY	STATION		203.0100 EACH	NOTES*
0010	STAGE1				
	CTH U	200+50	RT	1	18-INCH CMCP
	STAGE 2				
	STH 29	121+00	LT	1	18-INCH CMCP
		121+00	RT	1	24-INCH RCP
		127+50	LT	1	18-INCH CMCP
	CTH U	204+27	RL	1	24-INCH RCP
	TOTALS			5	

* FOR INFORMATION ONLY

REMOVING CONCRETE PAVEMENT

CATEGORY	ROADWAY	STATION	- STATION		204.0100 SY
0010	STAGE 2				
	STH 29	105+83	128+13	LT	6,350
	TOTALS				6,350

REMOVING CURB AND GUTTER

CATEGORY	ROADWAY	STATION	- STATION	204.0150 LF
0010	STAGE1			
	STH 29	106+99	107+40	65
		107+80	108+28	77
	STAGE 2			
	STH 29	107+02	107+52	77
		107+94	108+32	60
	TOTALS			279

FILE NAME : \\milw00\ingrproj\68977\C3D\38390373\SheetsPlan\030201_mq.ppt PLOT DATE : 2/25/2021 5:42:37 PM PLOT BY : LZIDEK PLOT NAME : 030201_mq1 PLOT SCALE : 1:1

REMOVING INLETS

CATEGORY	ROADWAY	STATION	204.0220 EACH
0010	STAGE 3		
	WEST CROSSOVER	68+44	1
	EAST CROSSOVER	137+94	1
	TOTALS		2

SELECT BORROW

CATEGORY	ROADWAY	208.1100 SELECT BORROW CY
0010	PROJECT	
	UNDISTRIBUTED	500
	TOTALS	500

3

REMOVING STORM SEWER (12-INCH & 18-INCH)

CATEGORY	ROADWAY	STATION		204.0245 LF
0010	STAGE1			
	STH 29	115+67	-	22
	STAGE 3			
	WEST CROSSOVER	67+79	68+44	70
	EAST CROSSOVER	137+94	138+97	106
	TOTALS			198

FINISHING ROADWAY

CATEGORY	LOCATION	213.0100.0001 EACH
0010	PROJECT	1
	TOTALS	1

REMOVING UNDERDRAIN

CATEGORY	ROADWAY	STATION	-	STATION	OFFSET	204.9090.S.01 LF
0010	STAGE 2					
	STH 29	118+50		123+50	RT	500
		118+50		123+50	LT	500
	TOTALS					1,000

TEST PITS

CATEGORY	LOCATION	312.0110 SELECT CRUSHED MATERIAL TON	SPV.0060.001 TEST PITS EACH
0010	UNDISTRIBUTED	40	1
	TOTAL	40	1

FILE NAME : \\milw00\ingrproj\68977\C3D\38390373\SheetsPlan\030201_mq.ppt PLOT DATE : 2/26/2021 9:26:22 AM PLOT BY : LZIDEK PLOT NAME : 030201_mq2 PLOT SCALE : 1:1

DIVISION	FROM/TO STATION	LOCATION	205.0100 COMMON EXCAVATION (1) CUT (2)	205.0100 COMMON EXCAVATION (1) EBS EXCAVATION (3)	SALVAGED/UNUSABLE PAVEMENT MATERIAL (4)	AVAILABLE MATERIAL (5)	UNEXPANDED FILL	EXPANDED FILL (13) FACTOR 1.25	MASS ORDINATE +/- (14)	WASTE	208.0100 BORROW (16)	COMMENT
DIVISION 1A												
WEST CROSSOVER	59+25 - 78+36	--	644	0	0	644	1,267	1,584	-940	0	940	
EAST CROSSOVER	129+14 - 147+32	--	744	0	0	744	672	840	-96	0	96	
DIVISION 1A SUBTOTAL			1,388	0	0	1,388	1,939	2,424	-1,036	0	1,036	
DIVISION 1B												
STH 29	100+00 - 109+50	EB	1,921	0	56	1,865	59	74	1,791	1,791	0	
CTH U	200+00 - 202+12	South Leg	1,463	0	0	1,463	22	28	1,436	1,436	0	
TEMPORARY WIDENING - WEST	93+05 - 99+99	--	81	0	42	39	0	0	39	39	0	
TEMPORARY WIDENING - EAST	109+50 - 119+25	--	834	0	59	775	10	13	763	763	0	
DIVISION 1B SUBTOTAL			4,299	0	157	4,142	91	114	4,028	4,028	0	
DIVISION 2												
STH 29	100+00 - 128+13	WB and Median	17,791	0	1,791	16,000	1,376	1,720	14,280	14,280	0	
CTH U	203+25 - 205+19	North Leg	1,297	0	0	1,297	0	0	1,297	1,297	0	
DIVISION 2 SUBTOTAL			19,088	0	1,791	17,297	1,376	1,720	15,577	15,577	0	
DIVISION 3												
REMOVING WEST CROSSOVER	59+25 - 78+36	--	1,581	0	0	1,581	0	0	1,581	1,581	0	
REMOVING EAST CROSSOVER	129+14 - 147+32	--	842	0	0	842	0	0	842	842	0	
DIVISION 3 SUBTOTAL			2,423	0	0	2,423	0	0	2,423	2,423	0	
GRAND TOTAL			27,198	0	1,948	25,250	3,406	4,258	20,993	22,028	1,036	
TOTAL COMMON EXC			27,198									

NOTES:

(1) COMMON EXCAVATION IS THE SUM OF THE CUT AND EBS EXCAVATION COLUMNS. ITEM NUMBER 205.0100

(2) SALVAGED/UNSUABLE PAVEMENT MATERIAL IS INCLUDED IN CUT.

(4) SALVAGED/UNUSABLE PAVEMENT MATERIAL

(5) AVAILABLE MATERIAL = CUT - SALVAGED/UNUSUABLE PAVEMENT MATERIAL

DEPENDING ON SELECTIONS: **EXPANDED FILL = (UNEXPANDED FILL - EXPANDED ROCK - REDUCED MARSH - REDUCED EBS) * FILL FACTOR**

OR EXPANDED FILL = (UNEXPANDED FILL - EXPANDED ROCK - REDUCED EBS) * FILL FACTOR

OR EXPANDED FILL = (UNEXPANDED FILL - EXPANDED ROCK - REDUCED MARSH) * FILL FACTOR

OR EXPANDED FILL = (UNEXPANDED FILL - EXPANDED ROCK) * FILL FACTOR

(14) THE MASS ORDINATE + OR - QTY CALCULATED FOR THE DIVISION. PLUS QUANTITY INDICATES AN EXCESS OF MATERIAL WITHIN THE DIVISION. MINUS INDICATES A SHORTAGE OF MATERIAL WITHIN THE DIVISION.

(15) FACTORS USED TO COMPUTE ANTICIPATED WASTE AND THE COMPUTED WASTE VOLUME IDENTIFIED ARE FOR GENERAL INFORMATION ONLY.

(16) BORROW AT EAST CROSSOVER AND WEST CROSSOVER ARE EQUAL TO THE TOTAL EXPANDED FILL NEEDED.

BASE AGGREGATE ITEMS

CATEGORY	ROADWAY	STATION	-	STATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	311.0110 BREAKER RUN TON	645.0140 GEOTEXTILE TYPE SAS SY
0010	STAGE 1							
	STH 29	59+25		78+47	--	1207	--	--
		59+25		71+33	--	1048	--	--
		65+04		78+47	--	1165	--	--
		92+57		100+00	--	312	--	--
		92+57		100+00	--	409	--	--
		100+00		106+86	--	257	367	367
		100+00		100+25	2	12	27	9
		100+25		106+86	31	256	55	147
		100+25		106+90	--	540	1158	1,158
		108+52		108+97	5	25	11	20
		108+97		109+50	4	25	9	18
		109+50		119+27	--	496	--	--
		109+50		119+27	--	537	--	--
		129+15		147+40	--	1106	--	--
		129+15		140+71	--	1002	--	--
		134+86		147+40	--	1080	--	--
	CTH U	201+11		202+12	--	400	856	856
		201+11		202+04	--	126	--	--
		200+00		201+11	--	287	410	410
		200+00		200+50	3	9	13	13
		200+00		200+50	3	9	13	13
		200+00		201+22	12	67	31	55
		200+00		201+56	16	86	40	71
		200+23		200+83	31	0	--	--
		201+22		201+80	--	28	37	58
		201+56		202+03	--	24	31	49
	STAGE 2							
	STH 29	100+22		100+48	--	6	9	9
		100+25		115+87	--	2240	5040	5,040
		100+75		107+40	--	421	568	909
		105+83		128+13	--	2145	6435	6,435
				SUBTOTALS	106	15325	15109	15637

CONTINUED TO NEXT PAGE

BASE AGGREGATE ITEMS (CONTINUED)

CONTINUED FROM PREVIOUS PAGE

CATEGORY	ROADWAY	STATION	-	STATION	305.0110 BASE AGGREGATE DENSE 3/4-INCH TON	305.0120 BASE AGGREGATE DENSE 1 1/4-INCH TON	311.0110 BREAKER RUN TON	645.0140 GEOTEXTILE TYPE SAS SY
0010	STAGE 2							
	STH 29	105+83		106+36	--	15	22	22
		105+83		106+36	4	23	9	17
		106+36		106+83	5	25	12	21
		106+49		108+75	--	151	203	325
		106+50		107+34	--	23	--	--
		106+95		107+05	--	8	--	--
		106+52		108+72	--	73	--	--
		108+01		115+36	--	481	649	1,039
		108+06		108+75	--	19	--	--
		108+35		108+46	--	8	--	--
		108+44		115+87	--	634	1427	1,427
		108+44		112+71	--	132	178	284
		112+79		128+14	--	726	1089	1,089
		112+79		113+52	12	--	--	--
		113+52		115+87	11	87	20	26
		115+65		115+90	--	6	8	8
		115+87		120+84	55	286	139	247
		115+87		120+55	36	220	83	166
		120+55		121+27	39	--	--	--
		121+08		128+13	75	394	191	339
		121+27		127+12	42	259	97	195
		127+12		127+92	51	--	--	--
		127+92		128+13	2	9	4	7
		115+87		128+13	--	425	637	637
		201+11		202+04	--	57	92	147
		201+13		202+01	--	49	--	--
	CTH U	203+19		204+06	--	354	796	796
		203+28		204+06	--	21	28	46
		203+31		203+72	--	57	77	123
		203+31		204+03	--	34	--	--
		204+05		205+19	--	20	33	53
		204+05		205+19	--	299	448	449
		204+05		205+19	14	73	36	63
		204+81		205+19	11	56	27	48
		204+67		205+19	3	9	13	13
		204+81		205+19	2	6	8	8
	RELIEF TRENCHES							
		-		-	--	--	46	--
				SUBTOTALS	360	5,035	6,372	7,595
				UNDISTRIBUTED	54	2,081	2,219	2,368
				TOTALS	520	22,440	23,700	25,600

CONCRETE ITEMS

CATEGORY	ROADWAY	STATION	STATION	LOCATION	415.0080 CONCRETE PAVEMENT 8-INCH SY	415.0100 CONCRETE PAVEMENT 10-INCH SY	416.1110 CONCRETE RUMBLE STRIPS LF	416.1010 CONCRETE SURFACE DRAIN CY	601.0555 CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE A LF	620.0300 CONCRETE MEDIAN SLOPED NOSE SF
0010	STAGE1									
	STH 29	100+25	106+90	RT	1,158	--	50	--	--	--
		109+37	109+50	-	--	--	13	--	--	--
	CTH U	201+11	202+12	RT	858	--	--	--	--	--
		201+30	201+78	LT	--	--	--	1	76	--
		201+64	202+01	RT	--	--	--	--	63	--
	STAGE 2									
	STH 29	100+25	115+87	RT	5,040		13	--	--	--
		100+77	107+38	RT	--	--	--	--	1,352	108
		102+98	-	RT	--	--	--	2	--	67
		103+00	-	RT	--	--	--	2	--	--
		105+83	128+13	LT	--	6,435	--	--	--	--
		106+51	108+73	RT	--	--	--	--	476	67
		106+51	-	RT	--	--	--	--	--	70
		108+03	115+35	RT	--	--	--	--	1495	108
		108+41	112+71	LT	--	--	--	--	429	--
		108+44	115+87	LT	1,431	--	--	--	--	--
		108+73	-	RT	--	--	--	--	--	69
		109+75	-	LT	--	--	--	2	--	--
		109+75	-	RT	--	--	--	2	--	--
		111+10	-	RT	--	--	--	4	--	--
		111+25	-	LT	--	--	--	2	--	--
		115+62	120+55	-	--	--	493	--	--	--
		121+27	127+12	-	--	--	585	--	--	--
		127+92	128+12	-	--	--	21	--	--	--
	CTH U	203+19	204+06	RL	796	--	--	--	--	--
		203+31	-	LT	--	--	--	--	--	17
		203+31	-	LT	--	--	--	--	--	20
		203+30	204+04	LT	--	--	--	--	66	--
		203+33	203+72	RT	--		--	--	173	--
		203+56	204+04	RT	--	--	--	--	74	--
		204+04	-	LT	--	--	--	--	--	81
	STAGE 3									
	CTH U	201+12	202+03	RT	--	--	--	--	207	--
		201+13	-	RT	--	--	--	--	--	81
		202+02	-	RT	--	--	--	--	--	14
		202+02	-	RT	--	--	--	--	--	21
TOTALS					9,283	6,435	1,175	15	4,410	722

3

CONCRETE PAVEMENT GAPS

CATEGORY		STATION	LOCATION	415.0210 EACH
0010	STH 29	113+15	RESIDENTAL DRIVE	1
		120+91	FIELD ENTRANCE	1
		127+52	FIELD ENTRANCE	1
		TOTALS		3

CONCRETE PAVEMENT JOINT LAYOUT

CATEGORY	LOCATION	415.5110.S LS
0010	PROJECT	1
	TOTALS	1

ROUT AND SEAL

CATEGORY	ROADWAY	STATION	-	STATION	OFFSET	415.6000.S ROUT AND SEAL LF
0010	STAGE1					
	STH 29	100+00		106+89	RT	692
		108+97		109+50	RT	55
	STAGE 2					
	STH 29	112+79		128+13	LT	1537
		115+65		115+90	RT	25
		115+87		128+43	RT	1,226
		120+60		121+33	RT	74
	TOTALS					3,609

CONCRETE PAVEMENT REPAIR

CATEGORY	LOCATION	416.1710 SY
0010	PROJECT	600
	TOTALS	600

DRILLED TIE AND DOWELL BARS

CATEGORY	ROADWAY	STATION	-	STATION	416.0610 DRILLED TIE BARS EACH	416.0620 DRILLED DOWEL BARS EACH
0010	STAGE1					
	STH 29	100+50		109+37	296	--
	STAGE 2					
	STH 29	100+25		115+65	513	--
		100+48		105+83	178	--
		105+83		--	--	25
		128+13		--	--	25
	TOTALS				987	50

ASPHALTIC PAVEMENT ITEMS

CATEGORY	ROADWAY	STATION			455.0605 TACK COAT GAL	460.6223 HMA PAVEMENT TYPE 3 MT 58-28 S TON	460.6224 HMA PAVEMENT TYPE 4 MT 58-28 S TON	465.0105 ASPHALTIC SURFACE TON	465.0125 ASPHALTIC SURFACE TEMPORARY TON	495.1000.S COLD PATCH TON	465.0315 ASPHALTIC FLUME SY	465.0400 ASPHALTIC SHOULDER RUMBLE STRIPS LF
0010	STAGE1											
	STH 29	59+25	78+47	RT	--	--	--	--	724	--	--	--
		92+57	100+00	RT	--	--	--	--	187	--	--	--
		100+00	106+86	RT	22	46	36	--	--	--	--	--
		108+97	109+50	RT	1	3	2	--	--	--	--	--
		109+50	119+27	RT	--	--	--	--	298	--	--	--
		129+15	147+40	RT	--	--	--	--	664	--	--	--
	CTH U	200+00	201+11	RL	25	52	40	--	--	--	--	--
		201+11	202+04	RT	--	--	--	--	76	--	--	--
		201+78	-	-	--	--	--	--	--	--	13	--
		201+64	-	-	--	--	--	--	--	--	11	--
	STAGE 2											
	STH 29	100+22	100+48	RT	1	1	1	--	--	--	--	--
		105+86	106+36	LT	1	3	2	--	--	--	--	--
		106+49	107+34	RT	--	--	--	26	--	--	--	--
		106+52	108+72	RT	--	--	--	46	--	--	--	--
		108+06	108+75	RT	--	--	--	21	--	--	--	--
		112+71	-	-	--	--	--	--	--	--	6	--
		112+79	128+14	LT	65	137	106	--	--	--	--	--
		115+90	115+90	RT	1	1	1	--	--	--	--	--
		115+87	128+13	RT	38	80	62	--	--	--	--	--
		115+90	120+55	-	--	--	--	--	--	--	--	469
		121+33	128+13	-	--	--	--	--	--	--	--	680
	CTH U	203+31	204+03	LT	--	--	--	22	--	--	--	--
		203+72	-	-	--	--	--	--	--	--	11	--
		204+04	-	-	--	--	--	--	--	--	12	--
		204+05	205+19	RL	27	57	44	--	--	--	--	--
	STAGE 3											
	STH 29	59+25	65+04	RT	23	24	19	--	--	--	--	579
		71+33	78+47	RT	29	30	23	--	--	--	--	714
		92+57	100+00	RT	64	67	52	--	--	--	--	--
		109+50	119+27	RT	102	107	83	--	--	--	--	--
		129+13	134+86	RT	23	24	19	--	--	--	--	573
		140+71	147+32	RT	26	28	22	--	--	--	--	661
	CTH U	201+13	202+01	RT	--	--	--	32	--	--	--	--
	UNDISTRIBUTED									150		
	TOTALS				448	660	512	147	1,948	150	53	3,676

3

3

STORM SEWER GENERAL NOTES

1) STATIONS AND OFFSETS ARE TO THE CENTER OF STRUCTURES UNLESS OTHERWISE NOTED. ALL STUCTURES ARE BASED OFF THE WI_29_WB ALIGNMENT.

2) SEE CONSTRUCTION DETAIL FOR STRUCTURE RIM ELEVATION.

3) STRUCTURE DEPTH = RIM ELEVATION - INVERT - CASTING - 0.5 FT (ADJUSTMENT), EXCEPT MEDIAN INLETS.

4) STATIONS, OFFSETS, AND ELEVATIONS FOR ALL ENDWALL LOCATIONS ARE TO THE END OF PIPE UNLESS OTHERWISE NOTED.

5) LOCATIONS AND DEPTHS OF EXISTING STRUCTURES AND PIPES SHALL BE VERIFIED IN THE FIELD

6) PRIOR TO ORDERING DRAINAGE AND STRUCTURES, THE CONTRACTOR SHALL VERIFY RELATED DRAINAGE INFORMATION IN THE PLAN AND PROVIDE DOCUMENTATION TO THE ENGINEER IN ACCORDANCE WITH THE SPECIFCATIONS.

7) INLET AND DISCHARGE ELEVATIONS FOR DRAINAGE STRUCTURES MAY BE ADJUSTED BY THE ENGINEER TO FIT FIELD CONDITIONS.

STORM SEWER PIPES

FROM	TO	INLET ELEVATION	DISCHARGE ELEVATION	SLOPE FT/FT	520.3318 CULVERT PIPE CLASS III-A 18-INCH	520.3324 CULVERT PIPE CLASS III-A 24-INCH LF	520.8000 CONCRETE COLLARS FOR PIPE EACH	608.0412 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 12-INCH LF	608.0418 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 18-INCH LF	608.0424 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 24-INCH LF	608.0430 STORM SEWER PIPE REINFORCED CONCRETE CLASS IV 30-INCH LF	608.3012 STORM SEWER PIPE CLASS III-A 12-INCH LF	608.3024 STORM SEWER PIPE CLASS III-A 24-INCH LF	COMMENTS
PROJECT 1058-02-73 STAGE 1														
51	EW48	957.76	957.51	0.0036	--	--	--	--	--	--	--	70	--	--
49	EW50	898.09	897.71	0.0036	--	--	--	--	--	--	--	106	--	--
EW113	P101	929.53	929.45	0.0080	--	--	1	--	--	--	10	--	--	--
PROJECT 1058-02-73 STAGE 1 TOTALS					--	--	1	--	--	--	10	176	--	--
PROJECT 1058-02-73 STAGE 2														
201	202	925.90	925.53	0.0051	--	--	--	--	--	--	--	--	73	--
110	EW100	929.61	929.44	0.0032	--	--	--	--	--	53	--	--	--	--
106	105	931.30	931.26	0.0036	--	--	--	11	--	--	--	--	--	--
105	114	930.26	930.07	0.0029	--	--	--	--	--	66	--	--	--	--
104	110	929.80	929.61	0.0029	--	--	--	--	--	65	--	--	--	--
107	104	930.82	930.80	0.0029	--	--	--	7	--	--	--	--	--	--
201	EW200	925.53	925.11	0.0070	--	--	--	--	--	--	--	--	60	--
203	202	926.01	925.90	0.0052	--	--	--	--	--	--	--	--	21	--
204	205	929.67	929.52	0.0052	--	--	--	--	--	--	--	29	--	--
P102	17	929.07	928.76	0.0094	--	--	1	--	--	--	33	--	--	--
17	P103	928.76	928.51	0.0093	--	--	1	--	--	--	27	--	--	--
EW27	EW28	930.20	929.92	0.0038	--	74	--	--	--	--	--	--	--	--
EW29	EW30	917.36	917.15	0.0038	--	56	--	--	--	--	--	--	--	--
EW31	EW32	915.65	914.66	0.0413	24	--	--	--	--	--	--	--	--	--
EW33	EW34	905.43	905.28	0.0056	27	--	--	--	--	--	--	--	--	--
206	201	927.93	927.79	0.0052	--	--	--	27	--	--	--	--	--	--
EW111	EW112	936.21	935.32	0.0091	98	--	--	--	--	--	--	--	--	--
108	102	930.41	930.33	0.0032	--	--	--	25	--	--	--	--	--	--
102	103	930.33	930.25	0.0032	--	--	--	25	--	--	--	--	--	--
103	101	930.25	930.17	0.0035	--	--	--	23	--	--	--	--	--	--
101	110	930.18	930.11	0.0035	--	--	--	--	20	--	--	--	--	--
109	101	930.66	930.60	0.0030	--	--	--	20	--	--	--	--	--	--
204	203	927.73	926.01	0.0070	--	--	--	--	--	--	--	--	247	--
113	112	931.33	931.27	0.0033	--	--	--	18	--	--	--	--	--	--
112	105	931.27	931.06	0.0031	--	--	--	67	--	--	--	--	--	--
114	104	930.06	929.80	0.0030	--	--	--	--	--	88	--	--	--	--
PROJECT 1058-02-73 STAGE 2 TOTALS					149	130	2	223	20	272	60	29	401	--
PROJECT 1058-02-73 TOTALS					149	130	3	223	20	272	70	205	401	

STORM SEWER STRUCTURES

STRUCTURE	STATION	OFFSET	RIM ELEVATION	INVERT ELEVATION	DEPTH FT	520.1012 APRON ENDWALLS FOR CULVERT PIPE 12-INCH EACH	520.1018 APRON ENDWALLS FOR CULVERT PIPE 18-INCH EACH	520.1024 APRON ENDWALLS FOR CULVERT PIPE 24-INCH EACH	522.1024 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 24-INCH EACH	522.1030 APRON ENDWALLS FOR CULVERT PIPE REINFORCED CONCRETE 30-INCH EACH	611.0615 INLET COVERS TYPE F EACH	611.0642 INLET COVERS TYPE MS EACH	611.2006 MANHOLES 6-FT DIAMETER EACH	611.3004 INLETS 4-FT DIAMETER EACH	611.3902 INLETS MEDIAN 2 GRATE EACH	633.5200 MARKERS CULVERT END EACH	COMMENTS
PROJECT 1058-02-73 STAGE 1																	
EW48	67+78.86	40.46' RT	--	957.51	--	1	--	--	--	--	--	--	--	--	--	1	--
49	137+94.17	12.50' RT	899.58	898.09	1.66	--	--	--	--	--	--	2	--	--	1	--	--
EW50	138+97.28	36.43' RT	--	897.71	--	1	--	--	--	--	--	--	--	--	--	1	--
51	68+44.01	14.30' RT	959.52	957.76	1.93	--	--	--	--	--	--	2	--	--	1	--	--
EW113	104+72.86	111.79' RT	--	929.53	--	--	--	--	--	1	--	--	--	--	--	1	--
PROJECT 1058-02-73 STAGE 1 TOTALS						2	--	--	--	1	--	4	--	--	2	3	
PROJECT 1058-02-73 STAGE 2																	
EW111	100+11.72	30.52' RT	--	936.21	--	--	1	--	--	--	--	--	--	--	--	--	--
EW112	101+09.78	35.08' RT	--	935.32	--	--	1	--	--	--	--	--	--	--	--	--	--
204	112+01.79	46.50' RT	935.59	927.73	7.15	--	--	--	--	--	1	--	--	1	--	--	--
106	108+16.14	53.84' RT	935.44	931.30	3.34	--	--	--	--	--	1	--	--	1	--	--	--
105	108+10.76	43.69' RT	934.90	930.26	3.92	--	--	--	--	--	1	--	--	1	--	--	--
113	108+65.89	12.67' RT	934.48	931.33	2.36	--	--	--	--	--	1	--	--	1	--	--	--
112	108+75.84	27.32' RT	934.27	931.27	2.21	--	--	--	--	--	1	--	--	1	--	--	--
205	112+01.74	17.32' RT	934.21	929.67	3.75	--	--	--	--	--	1	--	--	1	--	--	--
107	106+57.66	54.51' RT	934.16	930.82	2.54	--	--	--	--	--	1	--	--	1	--	--	--
114	107+44.87	36.68' RT	934.00	930.06	3.23	--	--	--	--	--	1	--	--	1	--	--	--
104	106+57.68	47.40' RT	933.95	929.80	3.45	--	--	--	--	--	1	--	--	1	--	--	--
110	106+02.62	13.50' RT	933.67	929.61	3.35	--	--	--	--	--	1	--	--	1	--	--	--
109	105+62.60	13.50' RT	933.67	930.66	2.21	--	--	--	--	--	1	--	--	1	--	--	--
101	105+82.59	13.50' RT	933.66	930.17	2.69	--	--	--	--	--	1	--	--	1	--	--	--
108	105+24.75	37.35' RT	933.47	930.41	2.27	--	--	--	--	--	1	--	--	1	--	--	--
203	114+48.52	46.50' RT	933.44	926.01	6.85	--	--	--	--	--	1	--	1	--	--	--	--
103	105+75.04	35.43' RT	933.44	930.25	2.40	--	--	--	--	--	1	--	--	1	--	--	--
102	105+50.06	36.38' RT	933.44	930.33	2.32	--	--	--	--	--	1	--	--	1	--	--	--
EW27	108+07.66	87.17' LT	--	930.20	--	--	--	1	--	--	--	--	--	--	--	1	--
EW28	107+33.39	97.50' LT	--	929.92	--	--	--	1	--	--	--	--	--	--	--	1	--
17	104+73.19	26.95' RT	932.07	928.76	3.60	--	--	--	--	--	--	2	--	--	1	--	--
201	115+17.32	1.50' RT	932.00	925.53	5.76	--	--	--	--	--	1	--	--	1	--	--	--
206	115+25.59	27.40' RT	931.92	927.93	3.20	--	--	--	--	--	1	--	--	1	--	--	--
EW100	106+02.48	39.03' LT	--	929.44	--	--	--	--	1	--	--	--	--	--	--	1	--
202	114+48.64	25.39' RT	930.59	925.90	4.95	--	--	--	--	--	--	2	--	--	1	--	--
EW200	115+17.97	58.62' LT	--	925.11	--	--	--	1	--	--	--	--	--	--	--	1	--
EW29	120+56.02	29.74' RT	--	917.36	--	--	--	1	--	--	--	--	--	--	--	1	--
EW30	121+12.48	30.29' RT	--	917.15	--	--	--	1	--	--	--	--	--	--	--	1	--
EW31	120+78.50	64.40' LT	--	915.65	--	--	1	--	--	--	--	--	--	--	--	1	--
EW32	121+02.00	65.69' LT	--	914.66	--	--	1	--	--	--	--	--	--	--	--	1	--
EW33	127+37.26	59.32' LT	--	905.43	--	--	1	--	--	--	--	--	--	--	--	1	--
EW34	127+63.91	58.50' LT	--	905.28	--	--	1	--	--	--	--	--	--	--	--	1	--
PROJECT 1058-02-73 STAGE 2 TOTALS						--	6	5	1	--	18	4	1	17	2	10	
PROJECT 1058-02-73 TOTALS						2	6	5	1	1	18	8	1	17	4	13	

TEMPORARY COVER PLATE

STATION	OFFSET	611.8120.S COVER PLATES TEMPORARY EACH
69+83.43	21.25' RT	1
139+32.86	37.90' RT	1
PROJECT 1058-02-73 TOTALS		2

SEALING PIPES

STATION	OFFSET	204.0280 SEALING PIPES EACH
115+66.54	60.00' RT	1
PROJECT 1058-02-73 TOTALS		1

3

CONCRETE SIDEWALK

CATEGORY	ROADWAY	STATION	- STATION	LOCATION	602.0410 CONCRETE SIDEWALK 5-INCH SF	602.0505 CURB RAMP DETECTABLE WARNING FIELD YELLOW SF
0010	STAGE 2					
	STH 29	106+95	107+05	RT	162	20
		106+94	107+04	RT	54	
		108+35	108+46	RT	168	20
		108+36	108+46	RT	51	
	TOTALS				435	40

3

EROSION CONTROL ITEMS

CATEGORY	LOCATION	606.0200 RIPRAP MEDIUM CY	628.2004 EROSION MAT CLASS I TYPE B SY	628.7005 INLET PROTECTION TYPE A EACH	628.7010 INLET PROTECTION TYPE B EACH	628.7015 INLET PROTECTION TYPE C EACH	628.7504 TEMPORARY DITCH CHECK LF	628.7555 CULVERT PIPE CHECKS EACH	628.7570 ROCK BAGS EACH	645.0120 GEOTEXTILE FABRIC TYPE HR SY
0010	STAGE1									
	STH 29	6	58	2	2	--	156	10	--	25
	CTH U	3	--	--	--	--	4	--	--	35
	STAGE 2									
	STH 29	34	247	20	2	18	100	15	--	123
	CTH U	5	--	--	--	--	8	--	--	42
	UNDISTRIBUTED	2	31	--	--	--	32	--	100	20
	TOTALS	50	340	22	4	18	300	25	100	245

FILE NAME : \\milw00\ingrproj\68977\C3D\38390373\SheetsPlan\030201_mq.ppt PLOT DATE : 2/25/2021 5:42:37 PM PLOT BY : LZIDEK PLOT NAME : 030201_mq9 PLOT SCALE : 1:1

PIPE UNDERDRAIN ITEMS

CATEGORY	ROADWAY	STATION	-	STATION	612.0620 PIPE UNDERDRAIN 6-INCH LF	612.0806 APRON ENDWALLS FOR UNDERDRAIN REINFORCED CONCRETE 6-INCH EACH
0010	STAGE 1					
	West Crossover	-		-	120	--
	East Crossover	-		-	160	--
	STAGE 2					
	STH 29	100+77		107+38	1,351	4
		106+51		108+73	476	--
		108+03		115+35	1,495	1
		108+41		112+71	429	--
		115+87		128+13	1,226	4
		126+50		128+13	163	1
	CTH U	203+56		204+04	74	--
	TOTALS				5,494	10

MAINTANENCE AND REPAIR OF HAUL ROADS

CATEGORY	ROADWAY	618.0100.01 EACH
0010	PROJECT	
	1058-02-73	1
	TOTALS	1

FENCE ITEMS

CATEGORY	ROADWAY	616.0700.S FENCE SAFETY LF
0010	PROJECT	
	UNDISTRIBUTED	1,500
	TOTALS	1,500

MOBILIZATION

CATEGORY	LOCATION	619.1000 EACH
0010	PROJECT	1
	TOTAL	1

RESTORATION ITEMS

CATEGORY	LOCATION	625.0100 TOPSOIL SY	627.0200 MULCHING SY	629.0210 FERTILIZER TYPE B CWT	630.0130 SEEDING MIX NO. 30 LB	630.0200 SEEDING TEMPORARY LB	630.0500 SEED WATER MGAL
0010	STAGE1						
	STH 29/CTH U	8,161	8,161	6.75	87	219	18
	STAGE 2						
	STH 29/CTH U	11,576	11,576	8.75	208	--	25
	STAGE 3						
	STH 29/CTH U	10,179	10,179	6.75	183	--	23
	UNDISTRIBUTED	2,994	2,994	2.00	52	31	9
	TOTALS	32,910	32,910	24.25	530	250	75

WATER ITEMS

CATEGORY	LOCATION	624.0100 WATER MGAL
0010	PROJECT	
	BASE AGGREGATE	413
	EARTHWORK COMPACTION	68
	UNDISTRIBUTED	48
	TOTALS	530

SILT FENCE ITEMS

CATEGORY	LOCATION	STATION	-	STATION	628.1504 SILT FENCE LF	628.1520 SILT FENCE MAINTENANCE LF
0010	STAGE1					
	STH 29	00+00		00+00	3,808	3,808
	STAGE 2					
	STH 29	00+00		00+00	4,780	4,780
	UNDISTRIBUTED				862	862
	TOTALS				9,450	9,450

FILE NAME : \\milw00\ingrproj\68977\C3D\38390373\SheetsPlan\030201_mq.ppt PLOT DATE : 2/25/2021 5:42:37 PM PLOT BY : LZIDEK PLOT NAME : 030201_mq11 PLOT SCALE : 1:1

EROSION CONTROL MOBILIZATIONS

CATEGORY	LOCATION	628.1905 MOBILIZATION EACH	628.1910 EMERGENCY MOBILIZATION EACH
0010	PROJECT	9	4
	TOTALS	9	4

TRACKING PADS

CATEGORY	STAGE		628.756 EACH
0010	ALL	PROJECT	2
	TOTAL		2

FIELD OFFICE TYPE B

CATEGORY	STAGE		642.5001 EACH
0010	ALL	PROJECT	1
	TOTAL		1

PERMANENT SIGNING ITEMS

CATEGORY	SIGN NUMBER	SIGN CODE	SIGN MESSAGE	MESSAGE LINE 1	MESSAGE LINE 2	MESSAGE LINE 3	SIGN SIZE INCH	X	INCH	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	STATION	LOCATION	SIGN MOUNTED ON SAME POST AS SIGN #	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH
0010	002	R6-1L	ONE WAY	--	--	--	54	X	18	6.75	--		RT	--	2
	003	R1-2	YIELD	--	--	--	48	X	42	7.00	--		RT	002	--
	004	R6-1L	ONE WAY	--	--	--	54	X	18	6.75	--		RT	--	2
	005	R1-2	YIELD	--	--	--	48	X	42	7.00	--		RT	004	--
	006	J3-2	DIRECTIONAL ASSEMBLY	EAST / SOUTH	29 / COUNTY U	[U-TURN] / [U-TURN]	72	X	84	42.00	--		RT	--	2
	007	J3-2	DIRECTIONAL ASSEMBLY	EAST / SOUTH	29 / COUNTY U	[U-TURN] / [U-TURN]	72	X	84	42.00	--		RT	--	2
	008	J2-3	ROUTE TURN ASSEMBLY	EAST / SOUTH / WEST	29 / COUNTY U / 29	[U-TURN] / [U-TURN] / [UA]	108	X	84	63.00	--		LT	--	2
	009	R5-1A	WRONG WAY	--	--	--	42	X	30	8.75	--		RT	--	1
	009A	J4-1	JUNCTION ASSEMBLY	JCT	COUNTY U	--	36	X	57	14.25	--		RT	--	1
	009B	J4-1	JUNCTION ASSEMBLY	JCT	COUNTY U	--	36	X	57	14.25	--		RT	--	1
	009C	--	SPECIAL SIGN	TO/NORTH/U	[J-TURN]	SOUTH/U	120	X	72	60.00	--		RT	--	2
	010	R3-18	NO LEFT / U-TURN	--	--	--	36	X	36	9.00	--		RT	--	1
	011	R5-1	DO NOT ENTER	--	--	--	36	X	36	9.00	--		RT	--	2
	012	R5-1	DO NOT ENTER	--	--	--	36	X	36	9.00	--		RT	--	2
	013		TWO DESTINATIONS (ARROW)	GRESHAM	[LEFT ARROW]	NEOPIT	96	X	36	24.00	--		RT	--	2
	014	--	SPECIAL SIGN	COUNTY U / SOUTH	USE FAR RIGHT LANE	29 / EAST	114	X	60	47.50	--		RT	--	2
	015	R6-2L	ONE WAY LEFT	--	--	--	36	X	48	12.00	--		RT	--	1
	016	R5-1	DO NOT ENTER	--	--	--	36	X	36	9.00	--		RT	--	2
	017	J3-1	DIRECTIONAL ASSEMBLY	SOUTH	COUNTY U	[LA]	36	X	84	21.00	--		RT	--	2
	018	D10-3	MILE POST	MILE	216		12	X	48	4.00	--		RT	--	1
	019	J3-1	DIRECTIONAL ASSEMBLY	NORTH	COUNTY U	[LA]	36	X	84	21.00	--		RT	--	2
	020	R5-1A	WRONG WAY	--	--	--	42	X	30	8.75	--		RT	--	1
	021	W12-1D	DOUBLE ARROW	--	--	--	36	X	36	9.00	--		RT	--	1
	022	J3-1	DIRECTIONAL ASSEMBLY	SOUTH	COUNTY U	[RA]	36	X	84	21.00	--		RT	--	2
	023	R5-1	DO NOT ENTER	--	--	--	36	X	36	9.00	--		RT	--	1
	024	R3-4	NO U-TURN	--	--	--	36	X	36	9.00	--		RT	--	1
	025	R6-1L	ONE WAY	--	--	--	54	X	18	6.75	--		RT	--	2
	026	R1-2	YIELD	--	--	--	48	X	42	7.00	--		RT	025	--
	027	R6-1L	ONE WAY	--	--	--	54	X	18	6.75	--		RT	--	2
	028	R1-2	YIELD	--	--	--	48	X	42	7.00	--		RT	027	--
	029	R3-2	NO LEFT TURN	--	--	--	36	X	36	9.00	--		RT	--	1
	030	R4-7	KEEP RIGHT	--	--	--	36	X	48	12.00	--		RT	074, 075	--
	031	J2-3	ROUTE TURN ASSEMBLY	WEST / NORTH / EAST	29 / COUNTY U / 29	[U-TURN] / [U-TURN] / [UA]	108	X	84	63.00	--		RT	--	2
	032	J3-2	DIRECTIONAL ASSEMBLY	WEST / NORTH	29 / COUNTY U	[U-TURN] / [U-TURN]	72	X	84	42.00	--		RT	--	2
	032A	J4-1	REASSURANCE ASSEMBLY	EAST	29	--	36	X	54	13.50	--		RT	--	1

CONTINUED FROM PREVIOUS SHEET

PERMANENT SIGNING ITEMS (CONTINUED)

CATEGORY	SIGN NUMBER	SIGN CODE	SIGN MESSAGE	MESSAGE LINE 1	MESSAGE LINE 2	MESSAGE LINE 3	SIGN SIZE INCH	X	INCH	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	STATION	LOCATION	SIGN MOUNTED ON SAME POST AS SIGN #	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH
0010	033	R3-2	NO LEFT TURN	--	--	--	36	X	36	9.00	--		LT	--	1
	034	R4-7	KEEP RIGHT	--	--	--	36	X	48	12.00	--		LT	082, 083	--
	035	R6-1L	ONE WAY	--	--	--	54	X	18	6.75	--		RT	--	2
	036	R1-2	YIELD	--	--	--	48	X	42	7.00	--		RT	035	--
	037	R3-4	NO U-TURN	--	--	--	36	X	36	9.00	--		RT	--	1
	037A	J3-1	DIRECTIONAL ASSEMBLY	NORTH	COUNTY U	[RA]	36	X	84	21.00	--		LT	--	2
	038	W12-1D	DOUBLE ARROW	--	--	--	36	X	36	9.00	--		RT	--	1
	038A	R5-1A	WRONG WAY	--	--	--	42	X	30	8.75	--		LT	--	1
	039		TWO DESTINATIONS (ARROW)	GRESHAM	[LEFT ARROW]	NEOPIT	96	X	36	24.00	--		LT	--	2
	040	J3-2	DIRECTIONAL ASSEMBLY	WEST / NORTH	29 / COUNTY U	[U-TURN] / [U-TURN]	72	X	84	42.00	--		RT	--	2
	041	R2-1	SPEED LIMIT 65	--	--	--	48	X	60	20.00	--		RT	--	2
	042	J3-1	DIRECTIONAL ASSEMBLY	SOUTH	COUNTY U	[LA]	36	X	84	21.00	--		RT	--	2
	043	R6-1L	ONE WAY	--	--	--	54	X	18	6.75	--		RT	--	2
	044	R1-2	YIELD	--	--	--	48	X	42	7.00	--		RT	043	--
	045	R6-1L	ONE WAY	--	--	--	54	X	18	6.75	--		RT	--	2
	046	R1-2	YIELD	--	--	--	48	X	42	7.00	--		RT	045	--
	046A	R3-4B	NO U-TURN EXCEPT AUTH. VEHICLES	--	--	--	36	X	48	12.00	--		RT	--	1
	046B	R3-4B	NO U-TURN EXCEPT AUTH. VEHICLES	--	--	--	36	X	48	12.00	--		RT	--	1
	047	J3-1	DIRECTIONAL ASSEMBLY	NORTH	COUNTY U	[RA]	36	X	84	21.00	--		LT	--	2
	048	R5-1	DO NOT ENTER	--	--	--	36	X	36	9.00	--		RT	--	1
	049	R6-2L	ONE WAY LEFT	--	--	--	36	X	48	12.00	--		LT	--	1
	050	R5-1	DO NOT ENTER	--	--	--	36	X	36	9.00	--		LT	--	1
	051	---	SPECIAL SIGN	COUNTY U / NORTH	USE FAR RIGHT LANE	29 / WEST	114	X	60	47.50	--		LT	--	2
	052		TWO DESTINATIONS (ARROW)	NORTH STAR MOHICAN	[RIGHT ARROW]	CASINO RESORT	132	X	48	44.00	--		LT	--	2
	053	R5-1A	WRONG WAY	--	--	--	42	X	30	8.75	--		LT	--	1
	054	W2-1	CROSS ROAD	--	--	--	48	X	48	--	16.00		LT	053	--
	055	W13-1	55 MPH	--	--	--	36	X	36	--	9.00		LT	053	--
	056	W2-1	CROSS ROAD	--	--	--	48	X	48	--	16.00		RT	--	2
	057	W13-1	55 MPH	--	--	--	36	X	36	--	9.00		RT	056	--
	058	J4-1	JUNCTION ASSEMBLY	JCT	COUNTY U	--	36	X	57	14.25	--		LT	--	1
	058A	--	SPECIAL SIGN	TO/SOUTH/U	[J-TURN]	NORTH/U	120	X	72	60.00	--		LT	--	2
	058B	J4-1	JUNCTION ASSEMBLY	JCT	COUNTY U	--	36	X	57	14.25	--		RT	--	1
	059	R5-1	DO NOT ENTER	--	--	--	36	X	36	9.00	--		RT	--	1
	060	R3-18	NO LEFT / U-TURN	--	--	--	36	X	36	9.00	--		RT	--	1
	061	J4-1	JUNCTION ASSEMBLY	JCT	29	--	24	X	39	6.50	--		RT	--	1

CONTINUED ON NEXT SHEET

CONTINUED FROM PREVIOUS SHEET

PERMANENT SIGNING ITEMS (CONTINUED)

CATEGORY	SIGN NUMBER	SIGN CODE	SIGN MESSAGE	MESSAGE LINE 1	MESSAGE LINE 2	MESSAGE LINE 3	SIGN SIZE INCH	X	INCH	637.2210 SIGNS TYPE II REFLECTIVE H SF	637.2230 SIGNS TYPE II REFLECTIVE F SF	STATION	LOCATION	SIGN MOUNTED ON SAME POST AS SIGN #	634.0616 POSTS WOOD 4X6-INCH X 16-FT EACH
0010	062	R3-53R	RIGHT TURN ONLY	--	--	--	24	X	30	5.00	--		RT	--	1
	063	W12-1R	DIAGONAL ARROW (RIGHT)	--	--	--	24	X	24	--	4.00		RT	--	1
	064	R6-1R	ONE WAY	--	--	--	36	X	12	3.00	--		RT	--	1
	065	R1-1	STOP	--	--	--	36	X	36	13.25	--		RT	064	--
	066	J12-2	ROUTE TURN WITHOUT CARDINAL	29 / COUNTY U	[RA] / [RA]	--	48	X	45	15.00	--		RT	--	2
	067	R6-1R	ONE WAY	--	--	--	36	X	12	3.00	--		RT	035, 036	--
	068	--	SPECIAL SIGN	--	--	--	132	X	66	60.50	--		RT	--	3
	069	W12-1R	DIAGONAL ARROW (RIGHT)	--	--	--	24	X	24	--	4.00		RT	--	1
	070	J4-1	REASSURANCE ASSEMBLY	NORTH	COUNTY U	--	24	X	36	6.00	--		RT	--	1
	071	R2-1	SPEED LIMIT 55	--	--	--	24	X	30	5.00	--		RT	--	1
	072	R2-1	SPEED LIMIT 55	--	--	--	24	X	30	5.00	--		LT	--	1
	073	J4-1	REASSURANCE ASSEMBLY	SOUTH	COUNTY U	--	24	X	36	6.00	--		LT	--	1
	074	R6-1R	ONE WAY	--	--	--	36	X	12	3.00	--		RT	--	1
	075	R1-1	STOP	--	--	--	36	X	36	13.25	--		RT	074	--
	076	R6-1R	ONE WAY	--	--	--	36	X	12	3.00	--		RT	025, 026	--
	077	R5-1	DO NOT ENTER	--	--	--	36	X	36	9.00	--		RT	--	1
	078	R5-1	DO NOT ENTER	--	--	--	36	X	36	9.00	--		RT	077	--
	079	R6-1R	ONE WAY	--	--	--	36	X	12	3.00	--		LT	--	1
	080	R1-1	STOP	--	--	--	36	X	36	13.25	--		LT	079	--
	081	J12-2	ROUTE TURN WITHOUT CARDINAL	29 / COUNTY U	[RA] / [RA]	--	48	X	45	15.00	--		LT	--	2
	082	R6-1R	ONE WAY	--	--	--	36	X	12	3.00	--		LT	--	1
	083	R1-1	STOP	--	--	--	36	X	36	13.25	--		LT	083	--
	084	--	SPECIAL SIGN	--	--	--	132	X	66	60.50	--		RT	--	3
	085	R3-53R	RIGHT TURN ONLY	--	--	--	24	X	30	5.00	--		LT	--	1
	086	J4-1	JUNCTION ASSEMBLY	JCT	29	--	24	X	39	6.50	--		LT	--	1
	100	--	SPECIAL SIGN	11 FT LANE WIDTH	18 MILES AHEAD	OSOW USE US-45	138	X	78	--	74.75		--	--	3
	101	--	SPECIAL SIGN	11 FT LANE WIDTH	42 MILES AHEAD	OSOW USE I-41	138	X	78	--	74.75		--	--	3
	102	--	SPECIAL SIGN	11 FT LANE WIDTH	45 MILES AHEAD	OSOW USE I-41	138	X	78	--	74.75		--	--	3
PROJECT 1058-02-73 TOTAL										1,444.75	282.25				122

CONTINUED ON NEXT SHEET

3

SIGN REMOVAL ITEMS

CATEGORY	SIGN NUMBER	STATION	LOCATION	638.2602 REMOVING SIGNS TYPE II EACH	638.3000 REMOVING SMALL SIGN SUPPORT EACH	SIGN MOUNTED ON SAME POST AS SIGN #	REMARKS
0010	001			1	2	--	GRESHAM / NEOPIT / ARROW
	002			1	1	--	MILE 216
	003			1	1	--	COUNTY U / DOUBLE ARROW
	004			1	1	--	WRONG WAY
	005			1	1	--	DO NOT ENTER
	006			1	1	--	KEEP RIGHT
	007			1	1	--	STOP
	008			1	1	--	ONE WAY
	009			1	--	008, 010, 013	STOP
	010			1	--	008, 009, 013	DIVIDED HIGHWAY
	011			1	1	--	29 / DOUBLE ARROW
	012			1	--	011	EAST / 29 / LEFT ARROW
	013			1	--	008, 009, 010	ONE WAY
	014			1	1	--	EAST / 29
	015			1	1	--	29 / DOUBLE ARROW
	016			1	1	--	ONE WAY
	017			1	--	016, 018, 019	ONE WAY
	018			1	--	016, 017, 019	STOP
	019			1	--	016, 017, 018	DIVIDED HIGHWAY
	020			1	1	--	STOP
	021			1	1	--	KEEP RIGHT
	022			1	1	--	COUNTY U / DOUBLE ARROW
	023			1	1	--	DO NOT ENTER
	024			1	1	--	WRONG WAY
	025			1	2	--	GRESHAM / NEOPIT / ARROW
	026			1	2	--	NORTHSTAR MOHICAN CASINO RESORT / ARROW
	027			1	1	--	CROSS ROAD
	028			1	--	027	55 MPH
	029			1	1	--	CROSS ROAD
	030			1	--	029	55 MPH
	031			1	1	--	JCT / CTH U
	TOTALS			31	25		

FILE NAME : \\milw00\ingrproj\68977\C3D\38390373\SheetsPlan\030201_mq.ppt PLOT DATE : 2/25/2021 5:42:37 PM PLOT BY : LZIDEK PLOT NAME : 030201_mq16 PLOT SCALE : 1:1

3

TRAFFIC CONTROL ITEMS

CATEGORY	ROADWAY	STAGE DURATION	643.0300 TRAFFIC CONTROL DRUMS EACH**	643.0300 TRAFFIC CONTROL DRUMS DAYS	643.0420 TRAFFIC CONTROL BARRICADES TYPE III EACH**	643.0420 TRAFFIC CONTROL BARRICADES TYPE III DAYS	643.0500* TRAFFIC CONTROL FLEXIBLE TUBULAR MARKERS POSTS EACH**	643.0600* TRAFFIC CONTROL FLEXIBLE TUBULAR MARKERS BASES EACH**	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A EACH**	643.0705 TRAFFIC CONTROL WARNING LIGHTS TYPE A DAYS	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C EACH**	643.0715 TRAFFIC CONTROL WARNING LIGHTS TYPE C DAYS	643.0800 TRAFFIC CONTROL ARROW BOARDS EACH**	643.0800 TRAFFIC CONTROL ARROW BOARDS DAYS	643.0900 TRAFFIC CONTROL SIGNS EACH**	643.0900 TRAFFIC CONTROL SIGNS DAYS
0010	STAGE 1	30	255	7,650	19	570	--	--	34	1,020	59	1,770	6	180	59	1,770
		SUBTOTAL		7,650		570	--	--		1,020		1,770		180		1,770
	STAGE 2	66	230	15,180	36	2,376	141	141	51	3,366	53	3,498	4	264	62	4,092
		SUBTOTAL		15,180		2,376	141	141		3,366		3,498		264		4,092
	STAGE 3	6	342	2,052	40	240	--	--	61	366	60	360	4	24	63	378
		SUBTOTAL		2,052		240	--	--		366		360		24		378
		TOTALS		24,882		3,186	141	141		4,752		5,628		468		6,240

** FOR INFORMATION ONLY

FILE NAME : \\milw00\ingrproj\68977\C3D\38390373\SheetsPlan\030201_mq.ppt PLOT DATE : 2/25/2021 5:42:37 PM PLOT BY : LZIDEK PLOT NAME : 030201_mq17 PLOT SCALE : 1:1

TRAFFIC CONTROL

CATEGORY			643.5000 TRAFFIC CONTROL EACH
0010	PROJECT		
	UNDISTRIBUTED		1
	TOTALS		1

TRAFFIC CONTROL COVERING SIGNS

CATEGORY	STAGE	STATION	643.0920 TRAFFIC CONTROL COVERING SIGNS TYPE II # SIGNS	# CYCLES	EACH
0010	STAGE1				
	STH 29	98+80	1	1	1
	UNDISTRIBUTED		--	--	5
	TOTALS				6

TRAFFIC CONTROL SIGNS PCMS

CATEGORY	STAGE	643.1050 TRAFFIC CONTROL SIGNS PCMS DAYS	EACH	TOTAL
0010	STAGE 1	7	4	28
	STAGE 2	7	4	28
	STAGE 3	7	4	28
	TOTALS			84

FILE NAME : \\milw00\ingrproj\68977\C3D\38390373\SheetsPlan\030201_mq.ppt PLOT DATE : 2/25/2021 5:42:38 PM PLOT BY : LZIDEK PLOT NAME : 030201_mq18 PLOT SCALE : 1:1

3

PAVEMENT MARKING ITEMS

CATEGORY	LOCATION	STATION	-	STATION	646.1020 MARKING LINE EPOXY 4-INCH 12.5 FT LINE, 37.5 FT SKIP WHITE LF	646.1020 MARKING LINE EPOXY 4-INCH SOLID WHITE LF	646.1020 MARKING LINE EPOXY 4-INCH SOLID YELLOW LF	646.3020 MARKING LINE EPOXY 8-INCH 3 FT LINE, 9 FT SKIP WHITE LF	646.3020 MARKING LINE EPOXY 8-INCH SOLID WHITE LF	646.3020 MARKING LINE EPOXY 8-INCH SOLID YELLOW LF	646.7105 MARKING DIAGONAL EPOXY 12-INCH SOLID WHITE LF	646.7105 MARKING DIAGONAL EPOXY 12-INCH SOLID YELLOW LF
0100												
	STH 29 EB	59+73		136+87	2,105	7,861	7,437	37	2,489	221	413	257
	STH 29 WB	57+25		158+91	2,581	10,212	9,873	74	2,496	219	509	220
	CTH U - SOUTH	200+00		202+10	--	--	--	--	33	179	18	26
	CTH U - NORTH	203+22		205+19	--	--	--	--	36	190	22	30
				SUBTOTALS	4,686	18,073	17,310	111	5,055	809	963	533
				TOTALS		40,069			5,975		1,496	

CONTINUED ON NEXT SHEET

CONTINUED FROM PREVIOUS SHEET

3

PAVEMENT MARKING ITEMS (CONTINUED)

CATEGORY	LOCATION	STATION	STATION	646.6120 MARKING STOP LINE EPOXY 18-INCH WHITE LF	SPV.0060.005 MARKING YIELD LINE EPOXY 36-INCH WHITE EACH	646.8220 MARKING ISLAND NOSE EPOXY YELLOW EACH	646.5020 MARKING ARROW EPOXY EACH	646.5120 MARKING WORDS EPOXY EACH
0100								
	STH 29 EB	59+73	136+87	--	10	3	3	2
	STH 29 WB	57+25	158+91	--	10	3	3	2
	CTH U - SOUTH	200+00	202+10	31	--	1	--	--
	CTH U - NORTH	203+22	205+19	34	--	1	--	--
			SUBTOTALS	65	20	8	6	4
			TOTALS	65	20	8	6	4

TEMPORARY PAVEMENT MARKINGS

CATEGORY	ROADWAY	STATION	-	STATION		649.0150 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH WHITE LF	649.0150 TEMPORARY MARKING LINE REMOVABLE TAPE 4-INCH YELLOW LF	645.0250 TEMPORARY MARKING LINE REMOVABLE TAPE 8-INCH WHITE LF	649.0960 TEMPORARY MARKING REMOVABLE MASK OUT TAPE 6-INCH LF	646.9010 MARKING REMOVAL LINE WATER BLASTING 4-INCH LF
	STAGE 1									
0010	STH 29	57+25		76+64	LT	--	1,940	--	--	--
		59+73		87+57	RT	--	2,785	--	--	--
		59+73		100+00	RT	--	--	--	--	8,054
		59+73		136+88	RT	--	--	--	--	1,929
		84+27		123+56	RT	3,931	--	--	--	--
		103+41		106+78	RT	--	--	337	--	--
		109+50		136+88	RT	--	--	--	--	2,738
		115+90		136+88	RT	--	--	--	--	2,098
		120+26		136+87	RT	--	1,658	--	--	--
		138+71		158+92	LT	--	2,022	--	--	--
	STAGE 2									
	STH 29	57+47		75+15	RT	--	1,770	--	--	--
		57+96		145+32	RT/LT	8,743	--	--	--	--
		59+73		75+15	LT	--	1,542	--	--	--
		75+15		131+94	RT	--	11,362	--	--	--
		93+03		106+89	RT	1,387	--	--	--	--
		108+93		119+26	RT	1,032	--	--	--	--
		131+94		147+32	RT	--	1,538	--	--	--
		147+32		153+92	LT	660	--	--	--	--
	STAGE 3									
	STH 29	57+25		58+25	LT	--	101	--	--	--
		59+73		66+33	RT	--	660	--	--	--
		70+04		76+64	LT	--	660	--	--	--
		86+70		90+00	RT	330	330	--	83	--
		120+83		124+13	RT	330	330	--	83	--
		135+86		136+87	RT	--	101	--	--	--
		138+71		139+71	LT	--	101	--	--	--
		152+32		158+92	LT	--	660	--	--	--
SUBTOTALS						16,413	27,560	337	166	14,819
TOTALS						43,973		337	166	14,819

3

CONSTRUCTION STAKING ITEMS

CATEGORY	ROADWAY	STATION	-	STATION	650.4000 CONSTRUCTION STAKING STORM SEWER (EACH)	650.4500 CONSTRUCTION STAKING SUBGRADE (LF)	650.5000 CONSTRUCTION STAKING BASE (LF)	650.6000 CONSTRUCTION STAKING PIPE CULVERTS (EACH)	650.7000 CONSTRUCTION STAKING CONCRETE PAVEMENT (LF)	650.8500.01 CONSTRUCTION STAKING ELECTRICAL INSTALLATIONS (1058-02-73) (LS)	650.9910.01 CONSTRUCTION STAKING SUPPLEMENTAL CONTROL (1058-02-73) (LS)
0010	STH 29	59+22		78+52	--	--	1,930	--	--	--	--
		92+57		100+00	--	--	743	--	--	--	--
		100+00		128+13	--	2,813	2,813	--	2,813	--	--
		129+13.00		147+37	--	--	1,824	--	--	--	--
	CTH U	200+00.00		201+11	--	111	111	--	--	--	--
		201+11.00		201+99	--	88	88	--	88	--	--
		203+28.00		204+06	--	78	78	--	78	--	--
		204+06		205+19	--	113	113	--		--	--
	UNDISTRIBUTED				27	--	--	5	--	1	1
				TOTALS	27	3,203	7,700	5	2,979	1	1

3

3

LIGHTING - LINEAR FOOT ITEMS

FROM	STATION	LOCATION	TO	STATION	LOCATION	LINEAR DISTANCE	CABLE SLACK	652.0225 CONDUIT RIGID NONMETALLIC SCHEDULE 40 2-INCH	652.0235 CONDUIT RIGID NONMETALLIC SCHEDULE 40 3-INCH	652.0605 CONDUIT SPECIAL 2-INCH	655.0610 ELECTRICAL WIRE LIGHTING 12 AWG	655.0615 ELECTRICAL WIRE LIGHTING 10 AWG
						LF	LF	LF		LF	LF	LF
A-8			LPB-9			675	36	675	-	-	145	2844
LPB-9			A-5			120	18	7	-	113	145	552
LPB-9			LPB-1			90	16	-	90	-	145	424
LPB-1			CONTROL CABINET "A"			15	16	-	30	-	-	124
LPB-1			A-1			160	20	11	149	-	145	720
A-1			LPB-3			110	18	-	110	-	145	512
LPB-3			A-4			700	40	700	-	-	145	2960
							TOTALS	1393	379	113	870	8136

LIGHTING - EACH ITEMS

ID	STATION	LOCATION	653.0164 PULL BOXES NON-CONDUCTIVE 24X42-INCH	654.0105 CONCRETE BASES TYPE 5	654.0230 CONCRETE CONTROL CABINET BASES TYPE L30	657.0255 TRANSFORMER BASES BREAKAWAY 11 1/2-INCH BOLT CIRCLE	657.0322 POLES TYPE 5 ALUMINUM	657.0710 LUMINAIRE ARMS TRUSS TYPE 4 1/2-INCH CLAMP 12-FT	657.0715 LUMINAIRE ARMS TRUSS TYPE 4 1/2-INCH CLAMP 15-FT	659.1120 LUMINAIRES UTILITY LED B	659.2130 LIGHTING CONTROL CABINETS 120/240 30-INCH
			EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH
CONTROL CABINET "A"			1	-	1	-	-	-	-	-	1
A-1			1	1	-	1	1	1	-	1	-
A-2			1	1	-	1	1	2	-	2	-
A-3			2	1	-	1	1	1	1	2	-
A-4			2	1	-	1	1	1	-	1	-
A-5			1	1	-	1	1	1	-	1	-
A-6			1	1	-	1	1	2	-	2	-
A-7			2	1	-	1	1	1	1	2	-
A-8			2	1	-	1	1	1	-	1	-
		TOTALS	13	8	1	8	8	10	2	12	1

3

SAWING ITEMS

CATEGORY	ROADWAY	STATION	- STATION	690.0150 SAWING ASPHALT LF	690.0250 SAWING CONCRETE LF
0010	STAGE1				
	STH 29	59+23	65+03	--	579
		71+31	78+46		714
		92+55	119+24		2,671
		129+12	134+84		570
		140+69	147+31		662
	CTH U	200+00	-	24	--
	STAGE 2				
	STH 29	100+22	105+83	--	561
		100+24	115+90	--	1,567
		105+83	-	--	31
		120+59	121+33	--	80
		128+13	-	--	32
	CTH U	205+19	-	23	--
	TOTALS			47	7,468

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3

CONNECT DRAINAGE ITEMS

CATEGORY	LOCATION	SPV.0060.002 CONNECT UNDERDRAIN EACH	SPV.0060.003 CONNECT DRAIN TILE EACH
0010	UNDISTRIBUTED	4	5
	TOTAL	4	5

MOBILIZATION EMERGENCY PAVEMENT REPAIR

CATEGORY	ROADWAY	SPV.0060.007 EACH
0010	PROJECT 1058-02-73	2
	TOTAL	2

3

REESTABLISH SECTION CORNER MONUMENT

CATEGORY	STAGE	POINT NAME	SPV.0060.004 EACH
0010	ALL	S289	1
	TOTAL		1

FLEXIBLE TUBULAR MARKER

CATEGORY	STATION	LOCATION	SPV.0060.007 POSTS LEFT IN PLACE EACH	SPV.0060.008 BASES LEFT IN PLACE EACH
0010	106WB+56	RT	2	2
	108WB+68	RT	2	2
	TOTAL		4	4

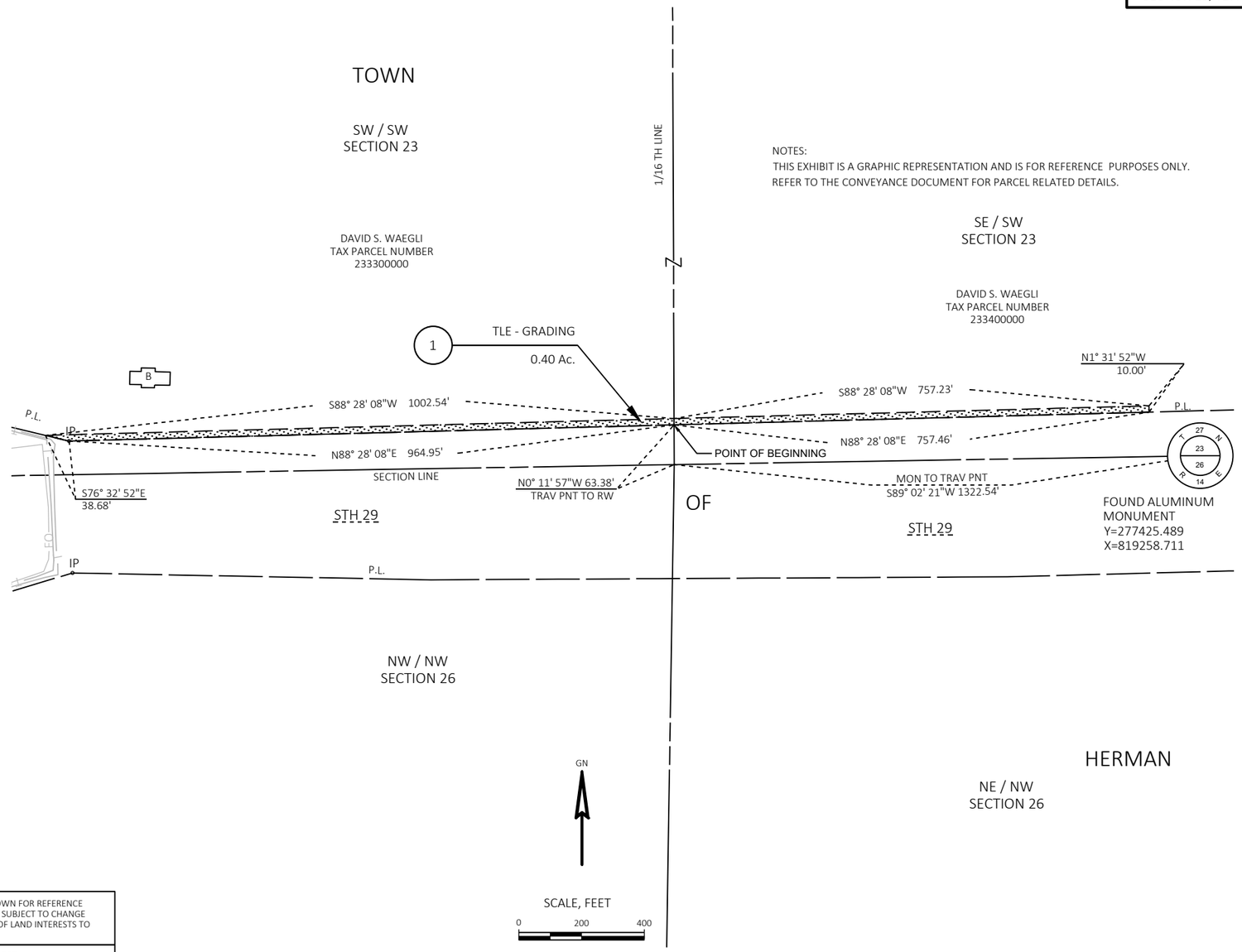
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R/W PROJECT NUMBER: 1058-02-23	SHEET NUMBER: 1

TLE ACQUISITION EXHIBIT
TOWN OF HERMAN / STH 29
STH 29 / CTH U INTERSECTION

STH 29 — SHAWANO COUNTY

PART OF THE SW 1/4 OF THE SW 1/4 AND THE SE 1/4 OF THE SW 1/4 IN
SECTION 23, T27N, R14E, TOWN OF HERMAN, SHAWANO COUNTY, WISCONSIN



SCHEDULE OF LANDS & INTERESTS REQUIRED

OWNERS NAMES ARE SHOWN FOR REFERENCE PURPOSES ONLY AND ARE SUBJECT TO CHANGE PRIOR TO THE TRANSFER OF LAND INTERESTS TO THE DEPARTMENT

PARCEL NUMBER	OWNER(S)	INTEREST REQUIRED	TLE ACRES
1	DAVID S WAEGLI	TLE	0.40

UTILITY INTERESTS REQUIRED

UTILITY NUMBER	UTILITY OWNER(S)	INTEREST REQUIRED
NA	NA	NA

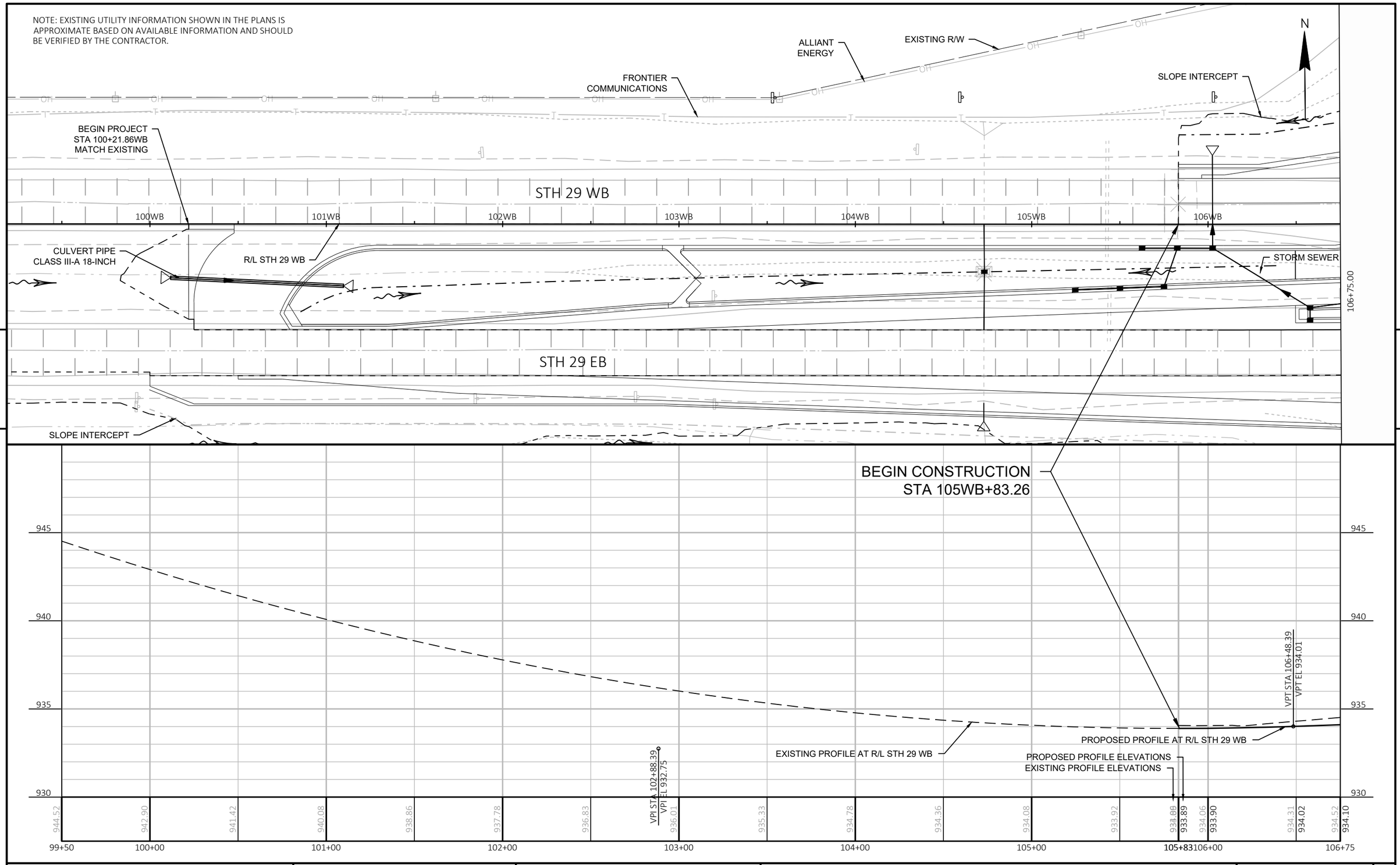
THIS MAP IS APPROVED FOR THE DEPARTMENT OF TRANSPORTATION
NORTH CENTRAL REGION - WISCONSIN RAPIDS

SIGNATURE: _____ DATE: _____

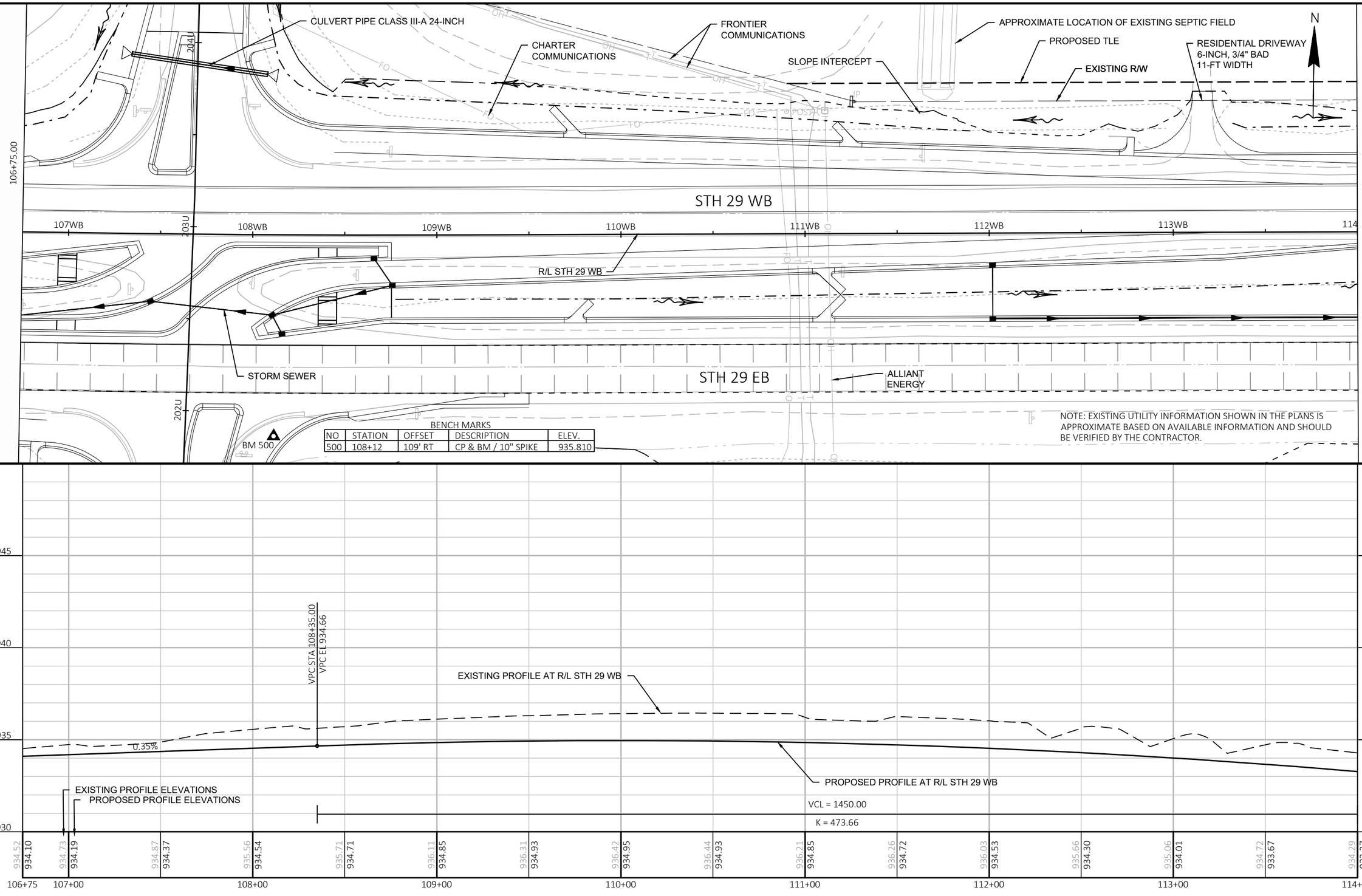
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NOTE: EXISTING UTILITY INFORMATION SHOWN IN THE PLANS IS APPROXIMATE BASED ON AVAILABLE INFORMATION AND SHOULD BE VERIFIED BY THE CONTRACTOR.

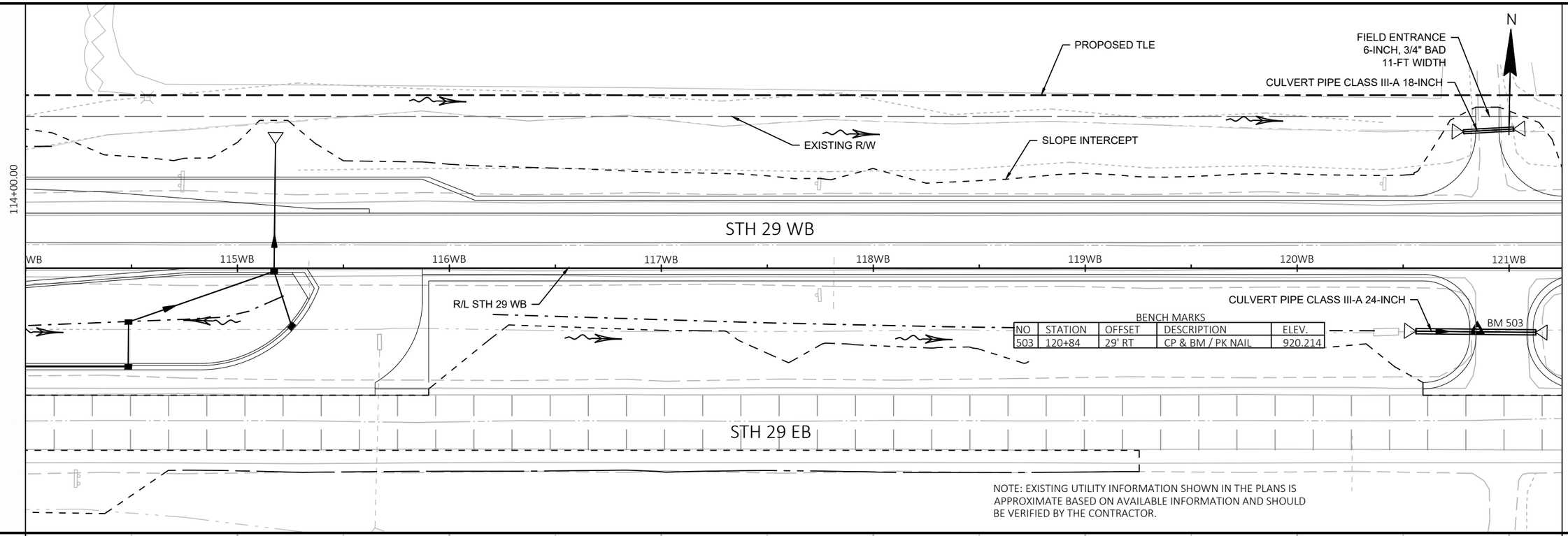


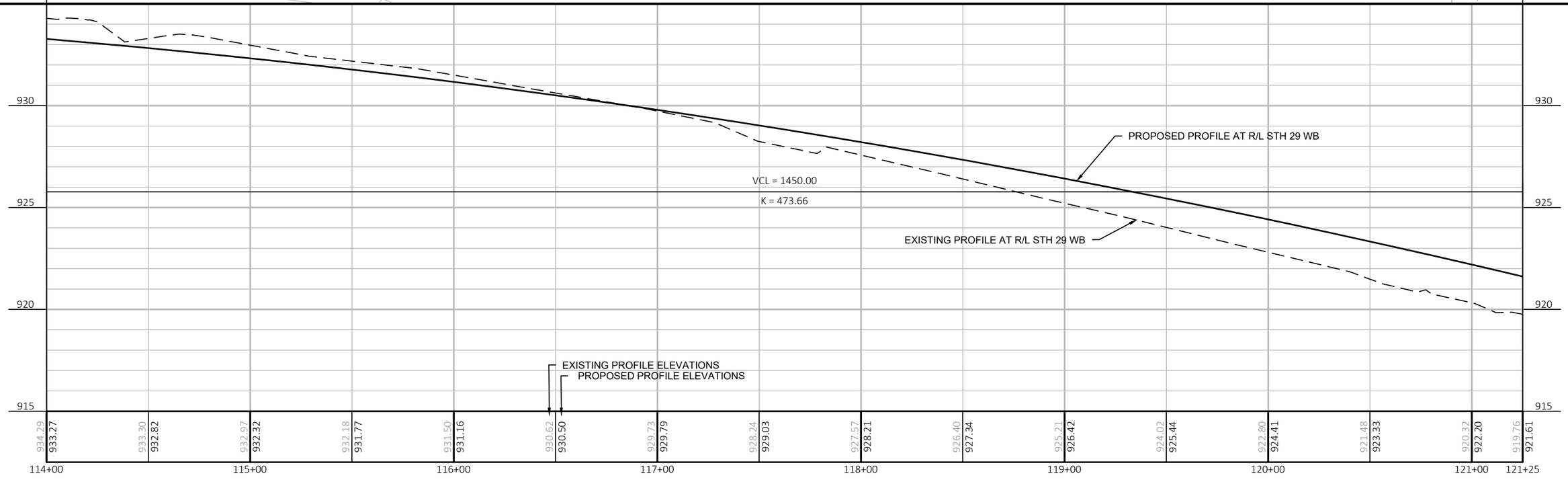
PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	PLAN AND PROFILE: STH 29 WB	SHEET 174	E



PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	PLAN AND PROFILE: STH 29 WB	SHEET 175	E

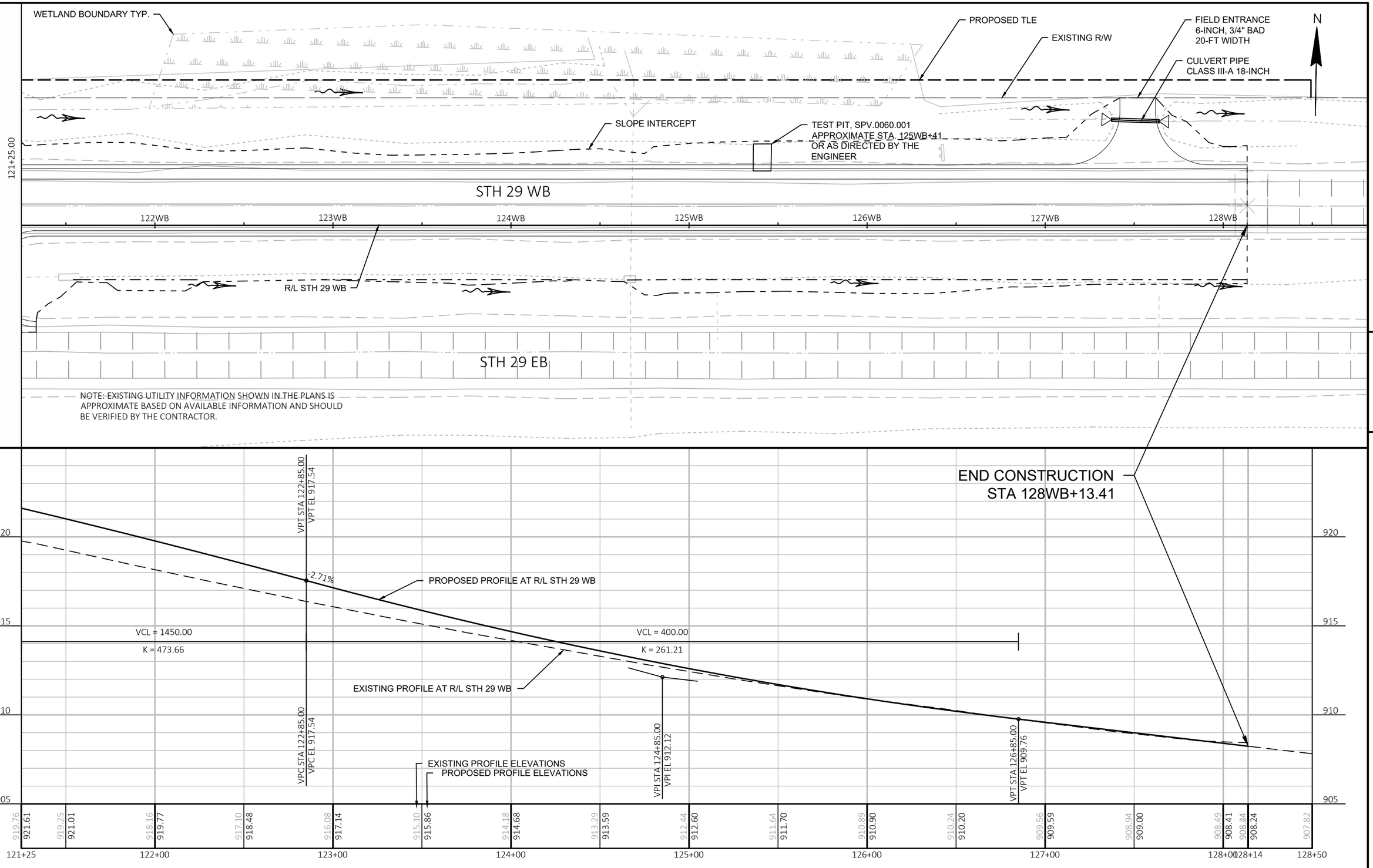
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LAYOUT NAME - Sheet - (19)
PLOT DATE : 2/24/2021 4:05 PM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44





PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	PLAN AND PROFILE: STH 29 WB	SHEET 176	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\050102_PP_29WB.DWG
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PLOT DATE : 1/29/2021 2:35 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT



5

5

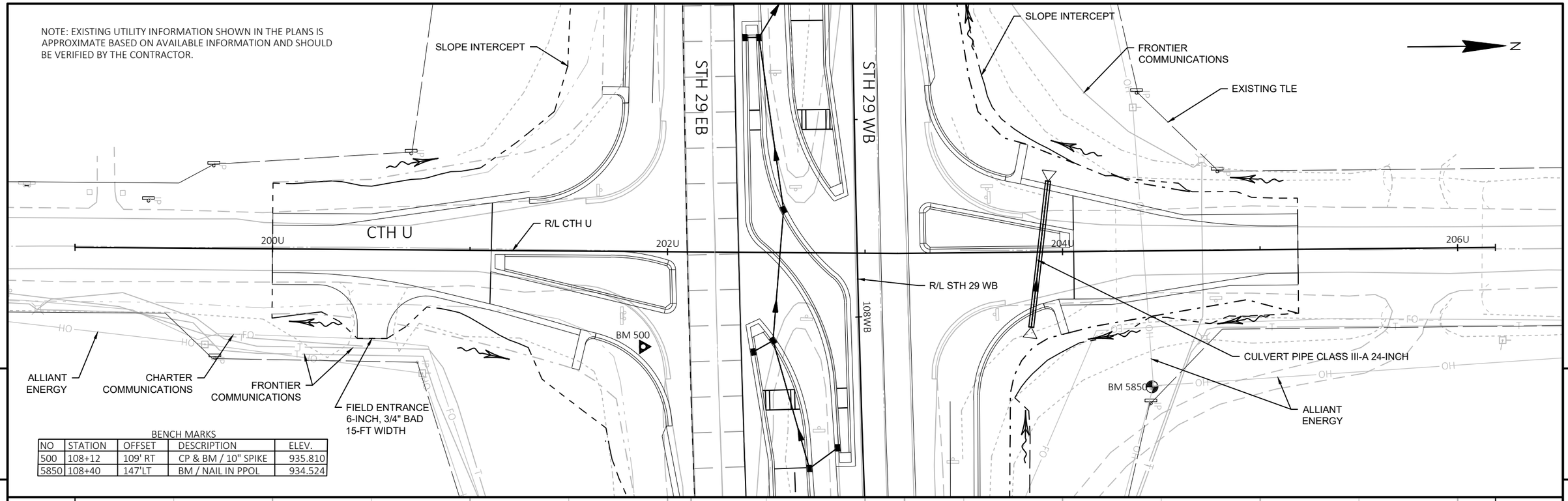
PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	PLAN AND PROFILE: STH 29 WB	SHEET 177	E

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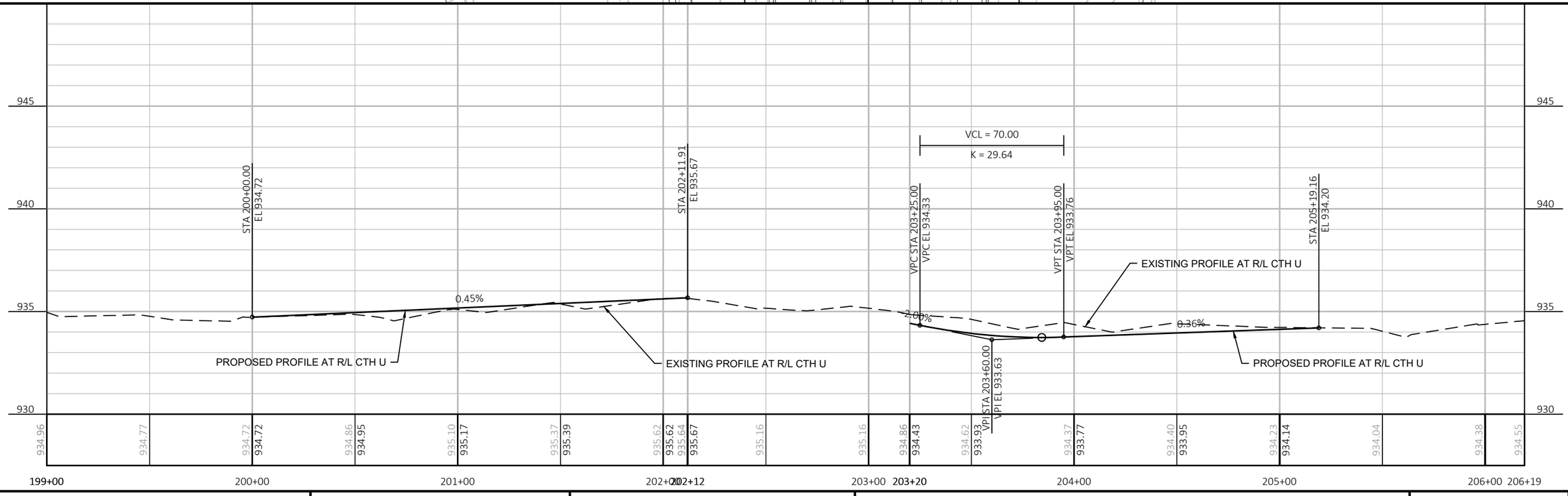
WISDOT/CADDS SHEET 44

NOTE: EXISTING UTILITY INFORMATION SHOWN IN THE PLANS IS APPROXIMATE BASED ON AVAILABLE INFORMATION AND SHOULD BE VERIFIED BY THE CONTRACTOR.



BENCH MARKS

NO	STATION	OFFSET	DESCRIPTION	ELEV.
500	108+12	109' RT	CP & BM / 10" SPIKE	935.810
5850	108+40	147'LT	BM / NAIL IN PPOL	934.524



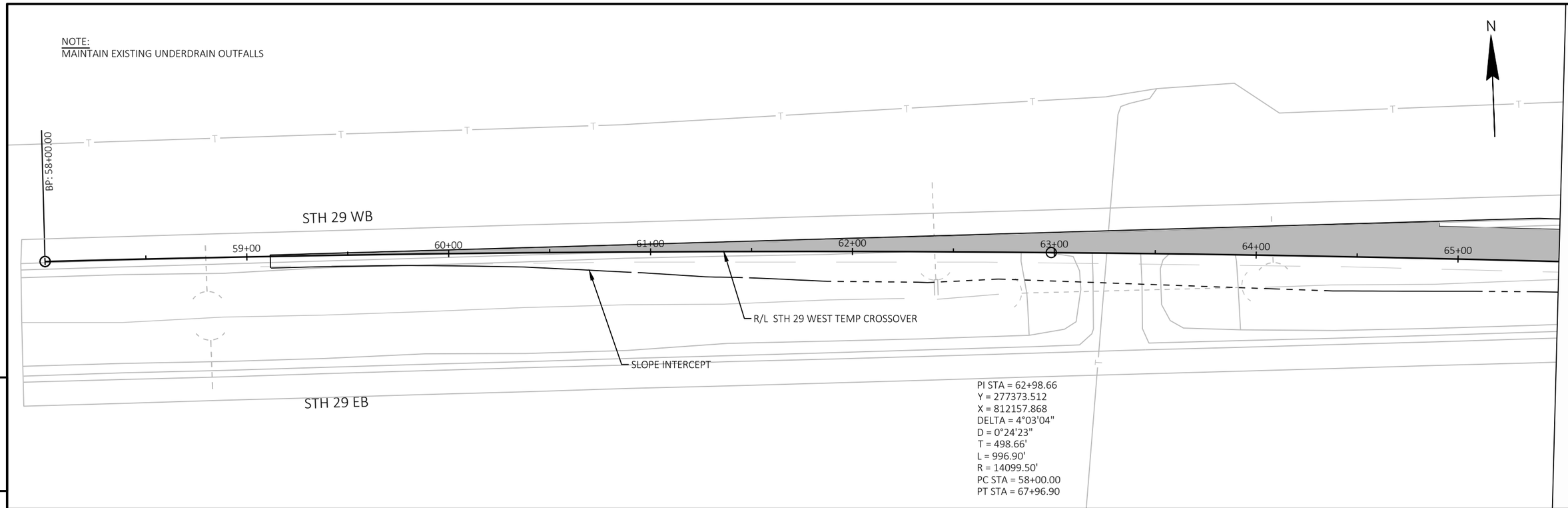
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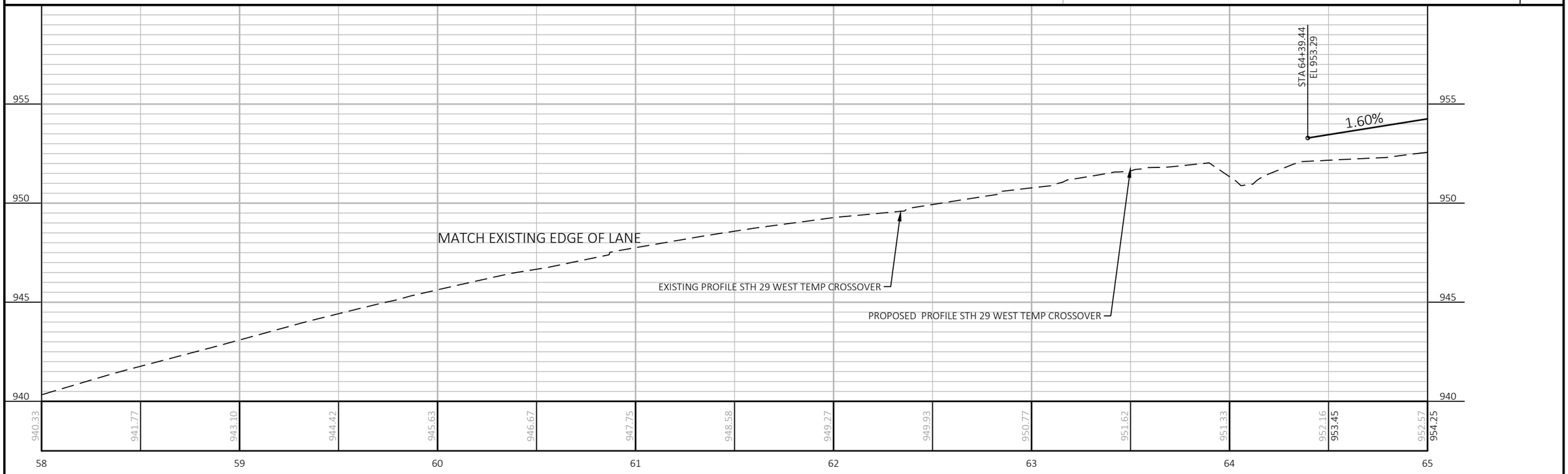
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LAYOUT NAME - Sheet - (1)

PLOT DATE : 2/24/2021 4:09 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

WISDOT/CADDS SHEET 44

NOTE:
MAINTAIN EXISTING UNDERDRAIN OUTFALLS

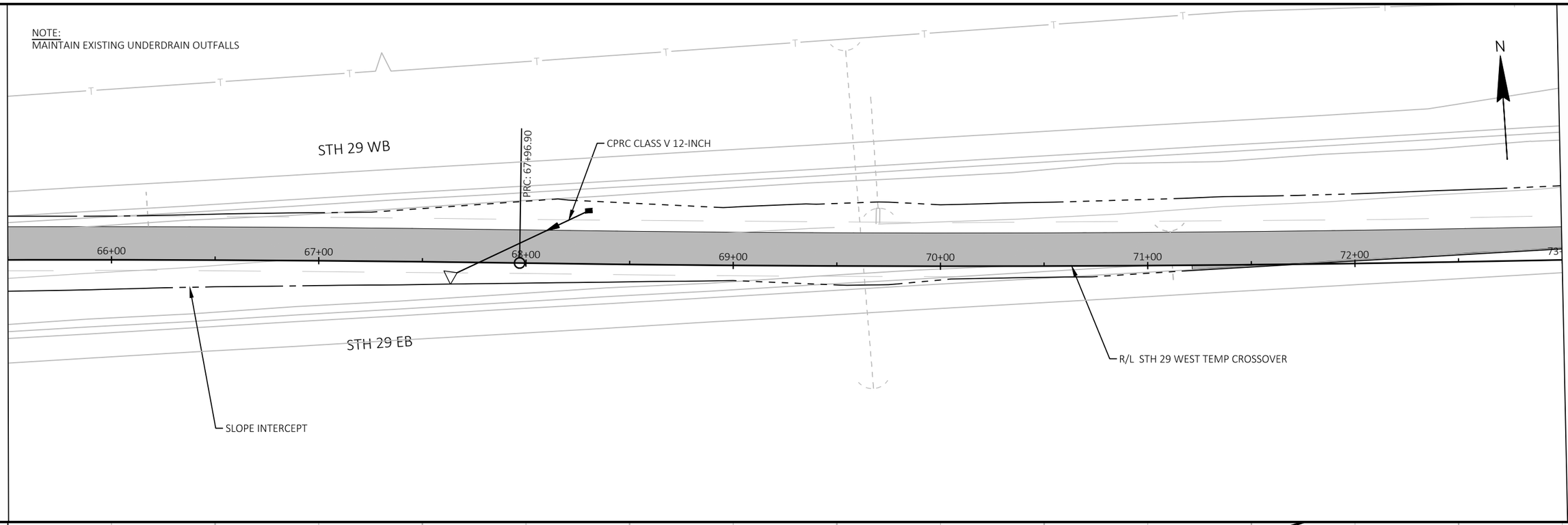


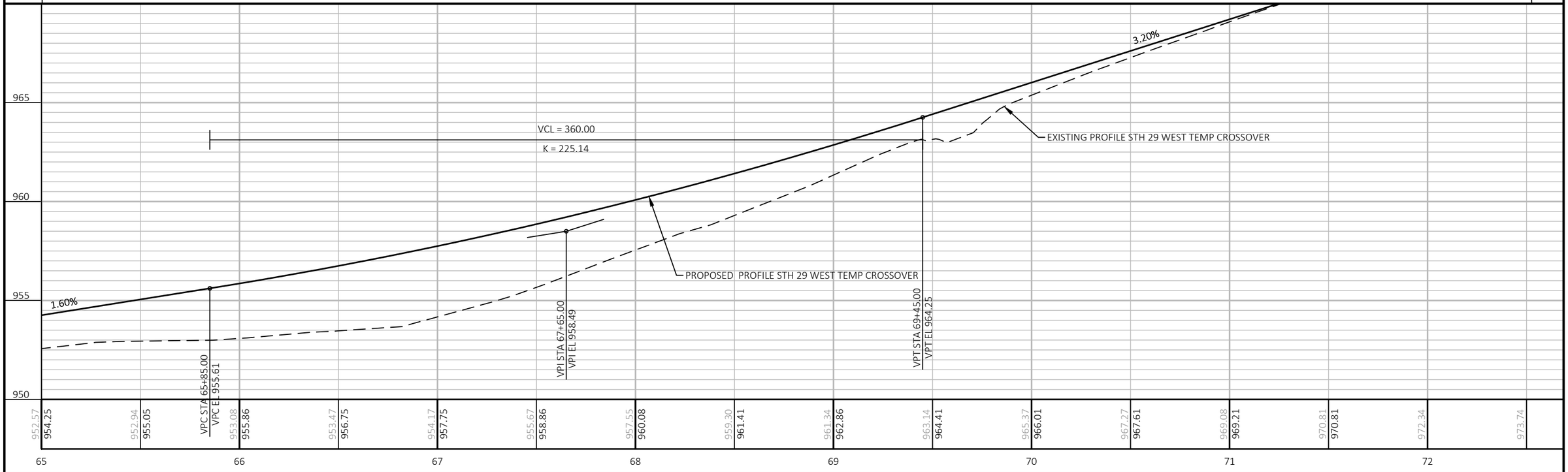


PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	PLAN AND PROFILE: STH 29 - TEMPORARY CROSSOVERS	SHEET 179	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\050104_PP_TEMPCROSSOVER.DWG
LAYOUT NAME - Sheet - (30)
PLOT DATE : 1/29/2021 2:36 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

NOTE:
MAINTAIN EXISTING UNDERDRAIN OUTFALLS

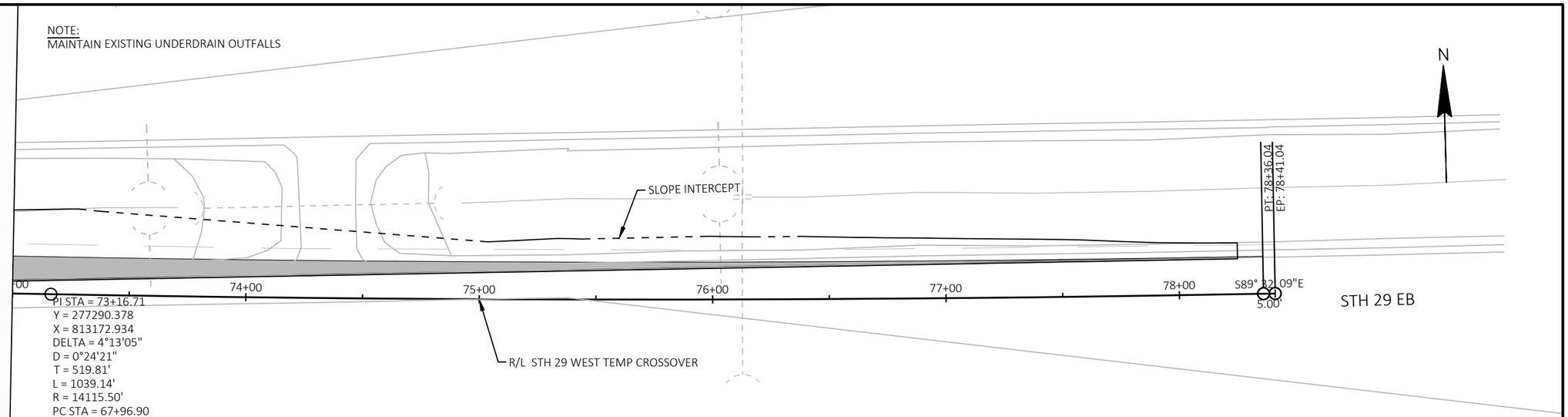


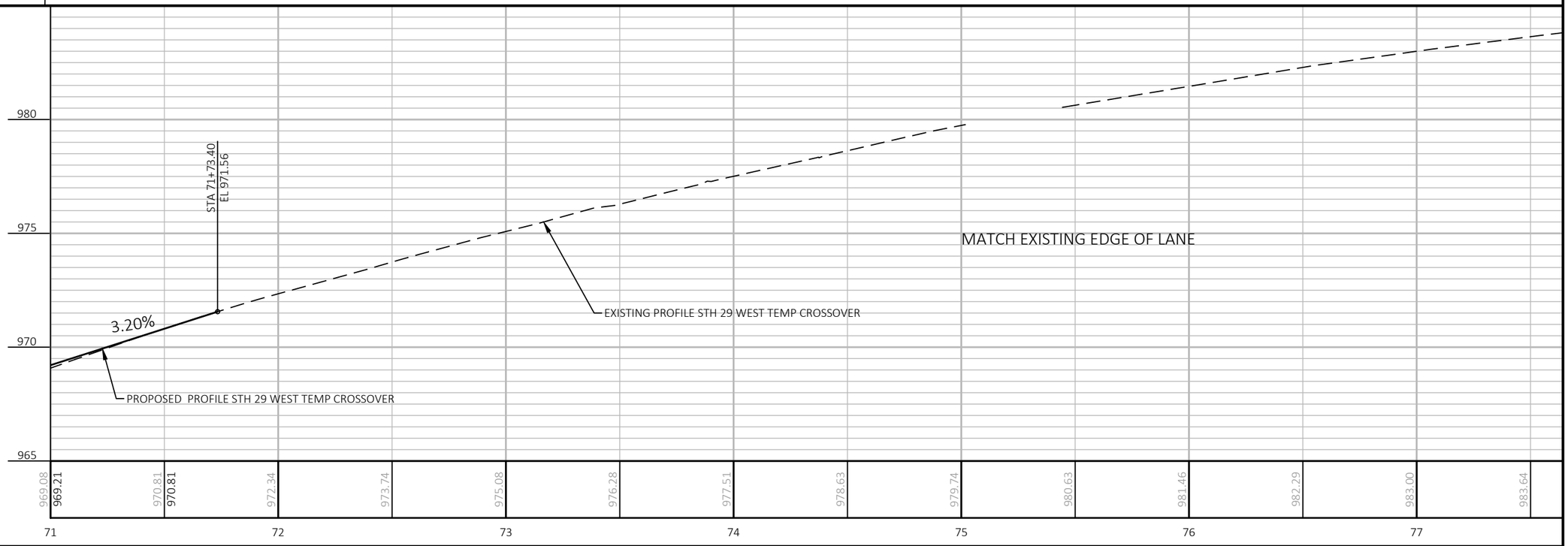


PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	PLAN AND PROFILE: STH 29 - TEMPORARY CROSSOVERS	SHEET 180	E

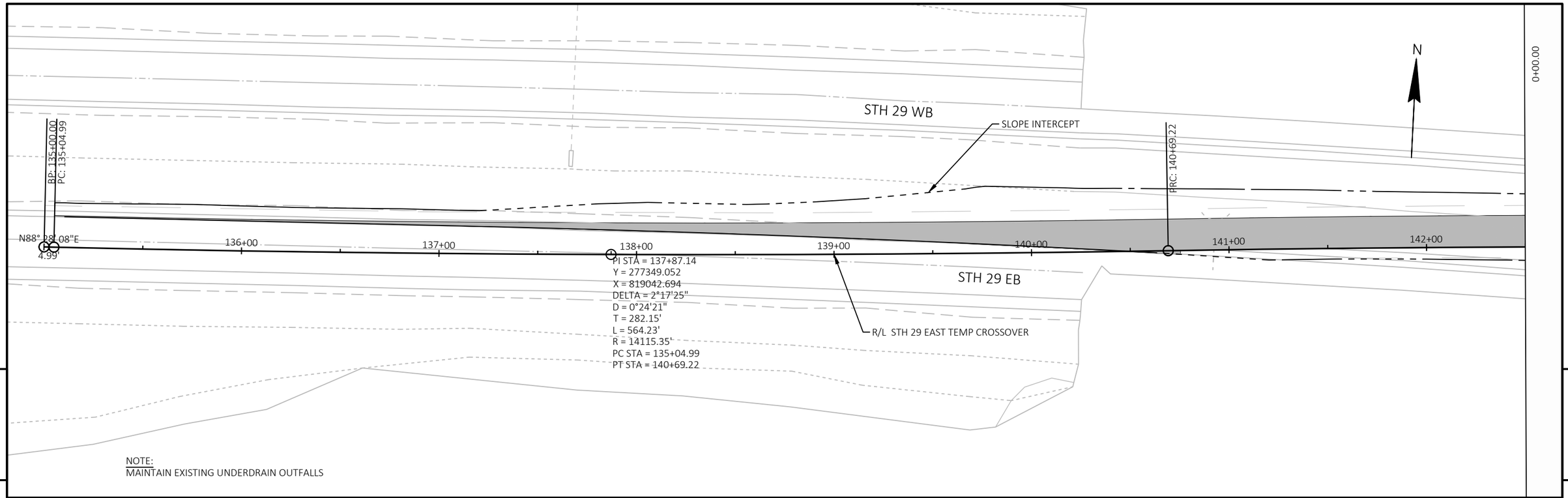
FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\050104_PP_TEMPCROSSOVER.DWG
LAYOUT NAME - Sheet - (31)
PLOT DATE : 1/29/2021 2:36 PM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:50 FT
WISDOT/CADDS SHEET 44

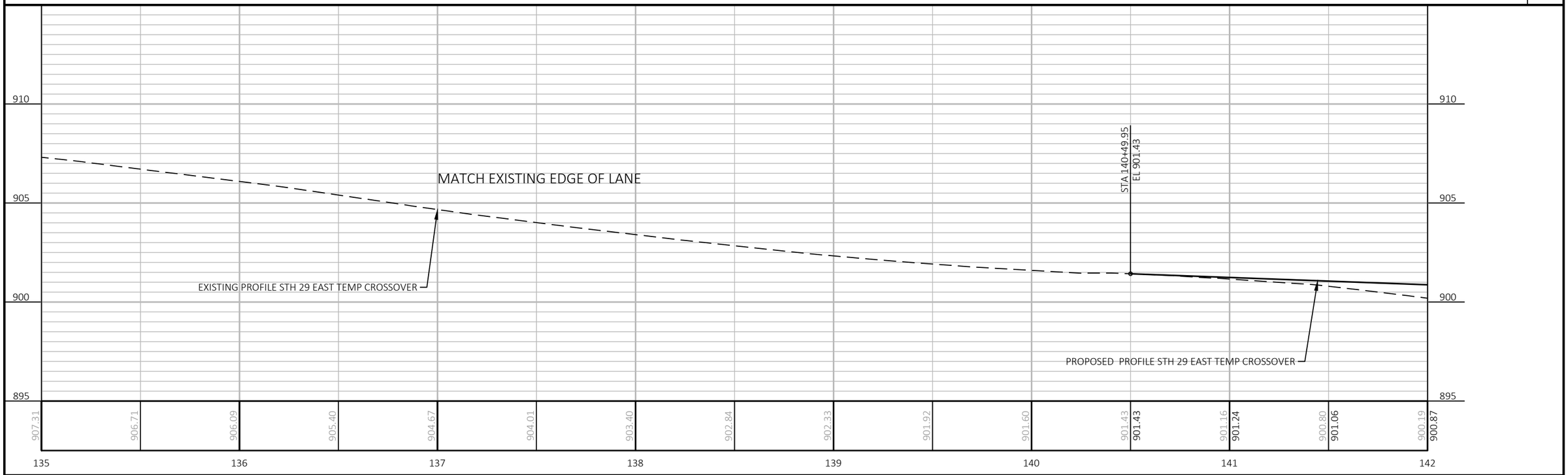
NOTE:
MAINTAIN EXISTING UNDERDRAIN OUTFALLS





PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	PLAN AND PROFILE: STH 29 - TEMPORARY CROSSOVERS	SHEET 181	E

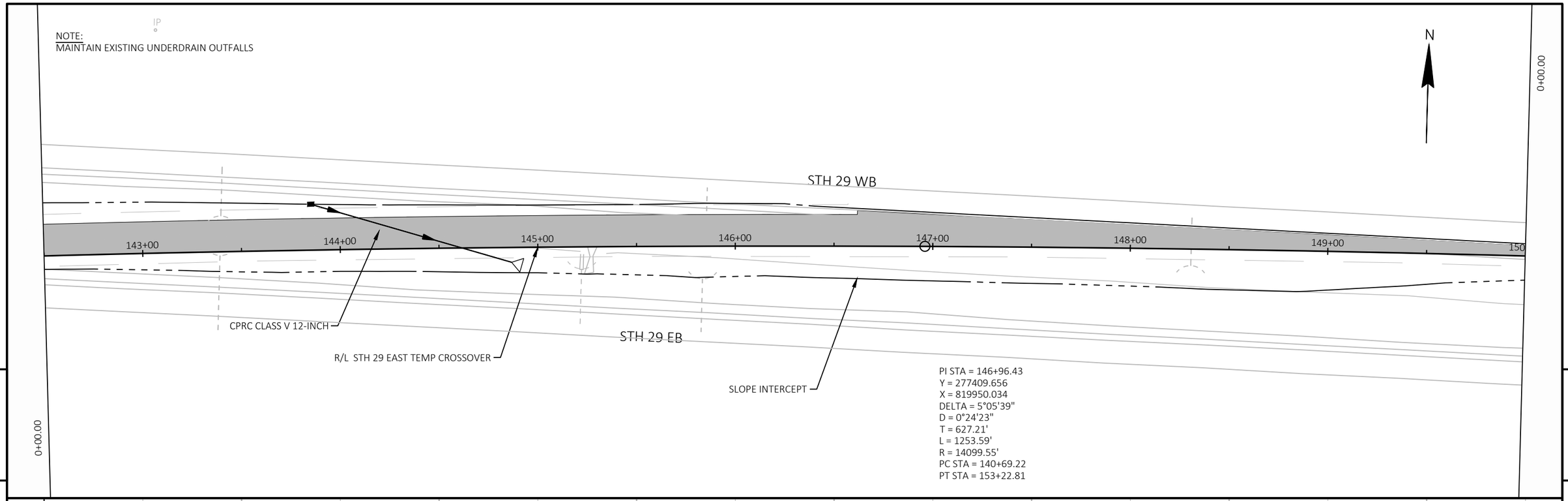


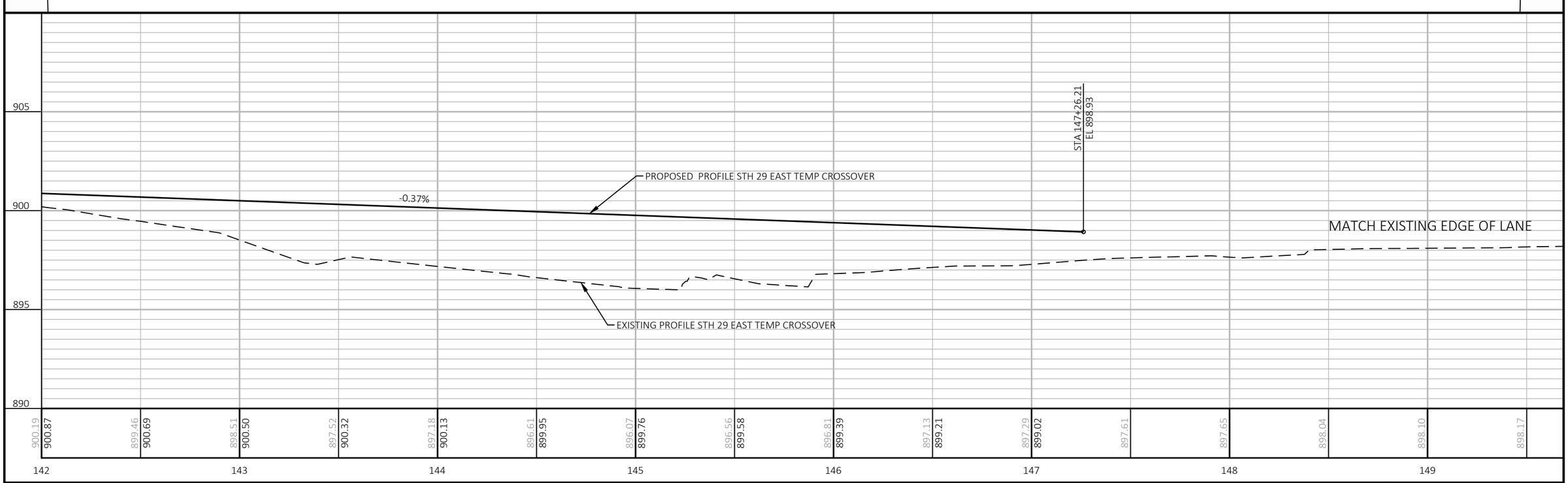


PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	PLAN AND PROFILE: STH 29 - TEMPORARY CROSSOVERS	SHEET 182	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\050104_PP_TEMPCROSSOVER.DWG
LAYOUT NAME - Sheet - (33)
PLOT DATE : 1/29/2021 2:36 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:50 FT

NOTE:
MAINTAIN EXISTING UNDERDRAIN OUTFALLS

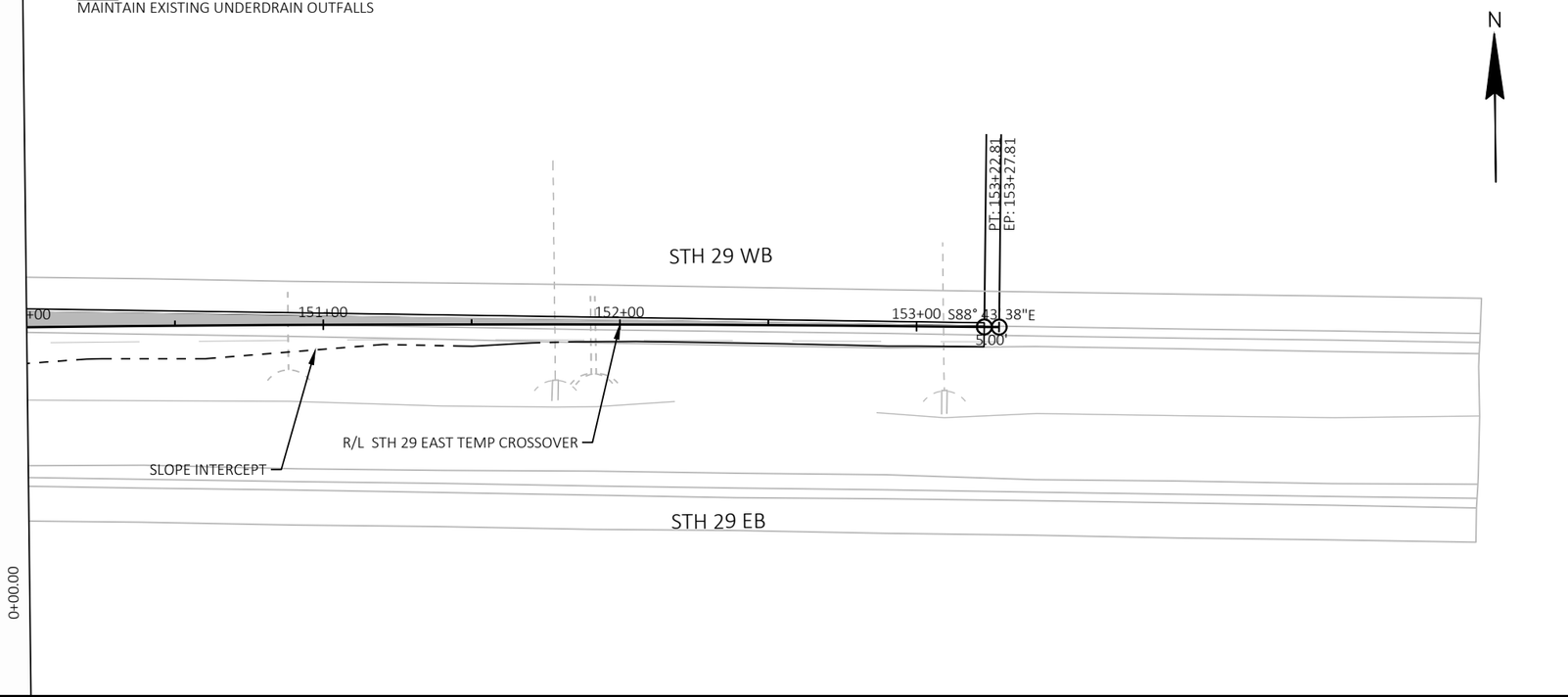


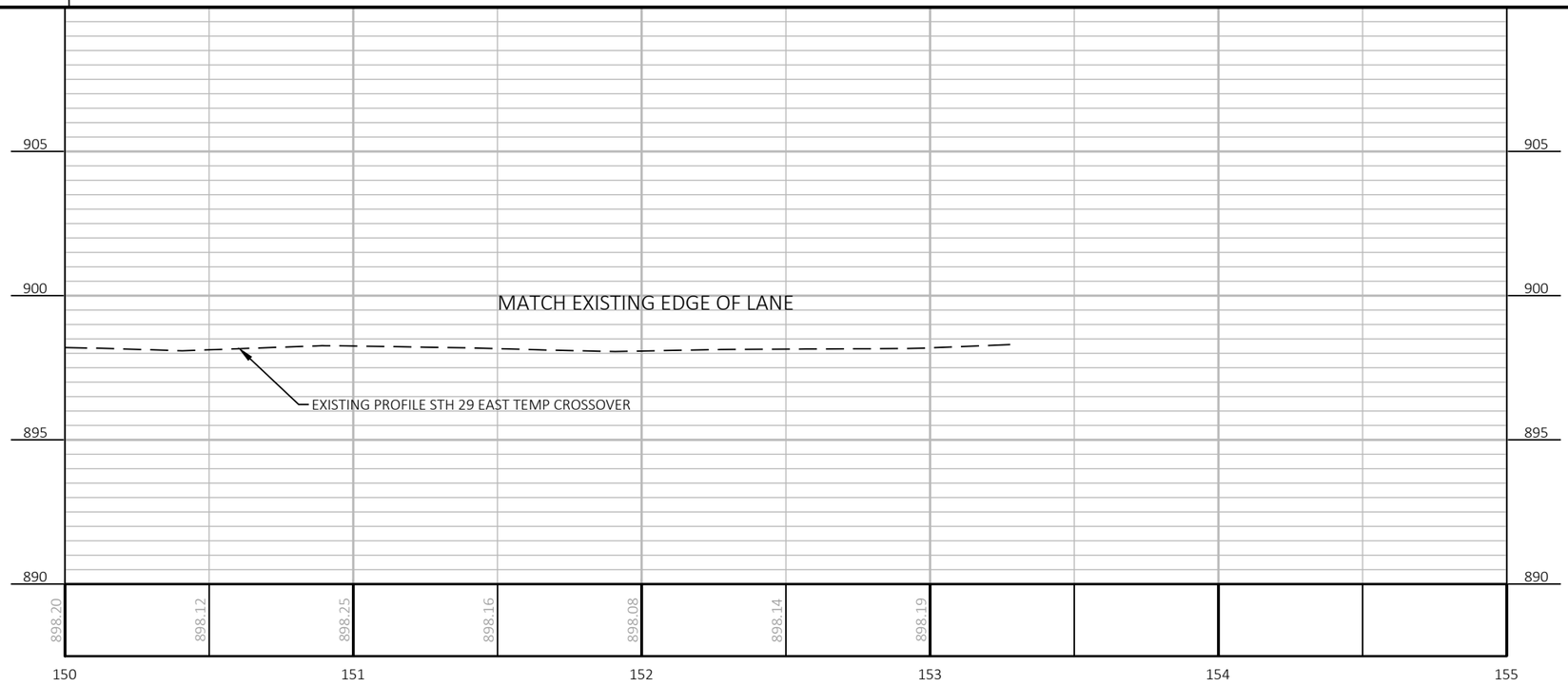


PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	PLAN AND PROFILE: STH 29 - TEMPORARY CROSSOVERS	SHEET 183 E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\050104_PP_TEMPCROSSOVER.DWG
LAYOUT NAME - Sheet - (34)
PLOT DATE : 1/29/2021 2:36 PM
PLOT BY : DAN BAUMANN
PLOT NAME :
PLOT SCALE : 1 IN:50 FT

NOTE:
MAINTAIN EXISTING UNDERDRAIN OUTFALLS





PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	PLAN AND PROFILE: STH 29 - TEMPORARY CROSSOVERS	SHEET 184	E

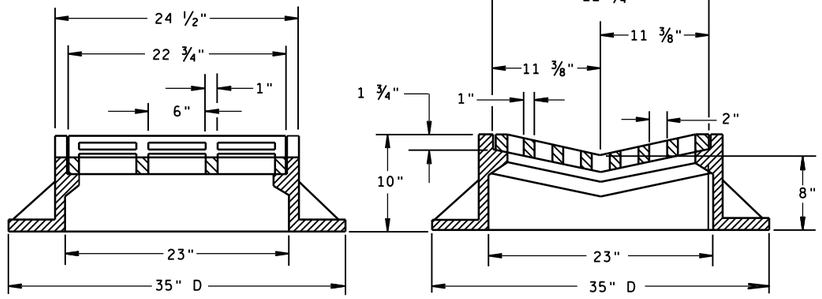
Standard Detail Drawing List

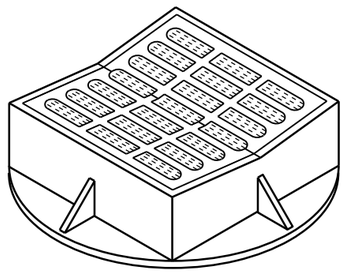
08A05-19B	INLET COVERS TYPE B, B-A, C, MS, MS-A, & WM
08A05-19C	INLET COVERS TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S
08B09-02	MANHOLES 3-FT, 4-FT, 5-FT, 6-FT, 7-FT AND 8-FT DIAMETER
08C06-02	INLETS 3-FT AND 4-FT DIAMETER
08C08-02	INLETS MEDIAN 1 AND 2 GRATE
08D01-21A	CONCRETE CURB & GUTTER
08D01-21B	CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS
08D04-05	CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES
08D05-20A	CURB RAMPS TYPES 1 AND 1-A
08D05-20B	CURB RAMPS TYPES 2 AND 3
08D05-20C	CURB RAMPS TYPES 4A AND 4A1
08D05-20D	CURB RAMPS TYPE 4B AND 4B1
08D05-20E	CURB RAMPS TYPES 5, 6, 7A, 7B & 8
08D05-20F	CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS
08D05-20G	CURB RAMPS RECTANGULAR AND RADIAL DETECTABLE WARNING PLATES
08D15-05A	EDGEDRAIN OUTLET AND OUTFALL MARKERS
08D21-01	DRIVEWAYS WITHOUT CURB & GUTTER
08E08-03	TYPICAL INSTALLATIONS OF EROSION BALES / TEMPORARY DITCH CHECKS
08E09-06	SILT FENCE
08E10-02	INLET PROTECTION TYPE A, B, C AND D
08E15-01	CULVERT PIPE CHECK
08F01-11	APRON ENDWALLS FOR CULVERT PIPE
08F04-07	JOINT TIES FOR CONCRETE PIPE AND CONCRETE COLLAR DETAIL
08F06-04	REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN
09B02-10	CONDUIT
09B16-01	PULL BOX NON-CONDUCTIVE
09C02-09	CONCRETE BASES, TYPES 1, 2, 5, & 6
09C03-04	TRANSFORMER/PEDESTAL BASES
09C05-10	CONCRETE CONTROL CABINET BASES
09C14-03	CONCRETE CONTROL CABINET BASE, TYPE L
09D02-03	SIGNAL CONTROL CABINET
09D04-03	LIGHTING CONTROL CABINET 120/240 VOLT
09D05-02	L30 LIGHTING CONTROL CABINET 240/480 VOLT
09E01-15D	POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)
10A01-03	ELECTRICAL HANDHOLE WIRING
11A01-06	MAINTENANCE CROSSOVER FOR FREEWAYS
11B02-02	CONCRETE MEDIAN NOSE
13A05-05A	SHOULDER RUMBLE STRIP, MILLING
13A05-05B	SHOULDER RUMBLE STRIP, MILLING
13C01-19	CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES
13C09-15A	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-15B	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C09-15C	CONCRETE PAVEMENT REPAIR AND REPLACEMENT
13C11-12A	RURAL DOWELED CONCRETE PAVEMENT
13C11-12B	RURAL DOWELED CONCRETE PAVEMENT
13C18-07A	CONCRETE PAVEMENT JOINTING
13C18-07B	CONCRETE PAVEMENT STEEL REINFORCEMENT
13C18-07C	CONCRETE PAVEMENT JOINT TYPES
13C18-07D	CONCRETE PAVEMENT JOINT TYPES AT UTILITY FIXTURES
13C18-07E	CONCRETE PAVEMENT JOINTING AND STEEL REINFORCEMENT IN ROUNDABOUTS
15A03-02A	FLEXIBLE MARKER POST FOR CULVERT END
15A03-02B	FLEXIBLE MARKER POST FOR CULVERT END
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
15C07-15B	PAVEMENT MARKING WORDS
15C07-15C	PAVEMENT MARKING ARROWS
15C08-20A	LONGITUDINAL MARKING (MAINLINE)
15C08-20B	PAVEMENT MARKING (TURN LANES)
15C11-08A	CHANNELIZING DEVICES FLEXIBLE TUBULAR MARKER POST
15C11-08B	CHANNELIZING DEVICES DRUMS, CONES, BARRICADES AND VERTICAL PANELS
15C18-04	MEDIAN ISLAND MARKING
15C27-03A	DOUBLE ARROW WARNING SIGN PLACEMENT
15C27-03B	PAVEMENT MARKING (ISLANDS)
15C33-04	STOP LINE AND CROSSWALK PAVEMENT MARKING
15C35-04A	PAVEMENT MARKING (INTERSECTIONS)
15D06-04	TRAFFIC CONTROL, TWO LANE TWO WAY OPERATION

6

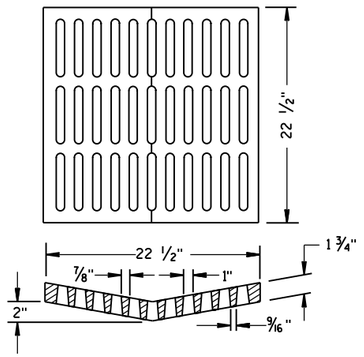
Standard Detail Drawing List

15D11-07	TRAFFIC CONTROL, SINGLE LANE CROSSOVER
15D12-09B	TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION
15D21-07A	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D21-07B	TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LANE CLOSURE
15D38-02A	TEMPORARY TRAFFIC CONTROL SIGN MOUNTING
15D38-02B	ATTACHMENT OF SIGNS TO POSTS
15D40-01	TRAFFIC CONTROL, LANE SHIFT, MULTILANE DIVIDED OR ONE WAY ROAD
15D41-01	TRAFFIC CONTROL, MULTIPLE LANE SHIFT, MULTILANE DIVIDED ROAD
15D46-01	TRAFFIC CONTROL, ONE - WAY SIGNING



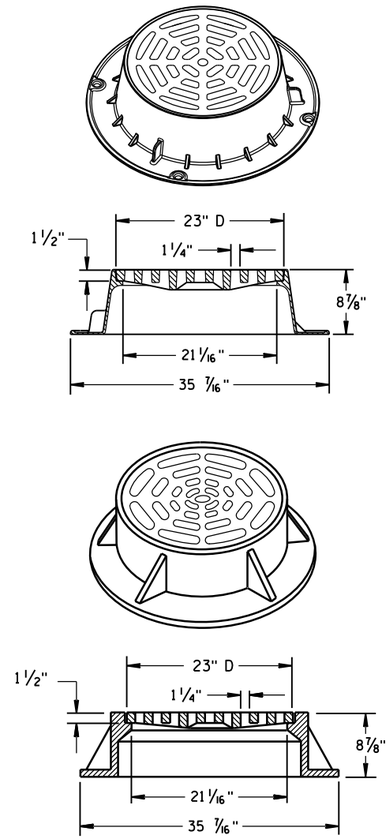


TYPE "B"



ALTERNATIVE GRATE FOR TYPE "B" COVER

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS POSSIBLE.
NOTED AS TYPE B-A ON THE DRAINAGE TABLE



TYPE "C"

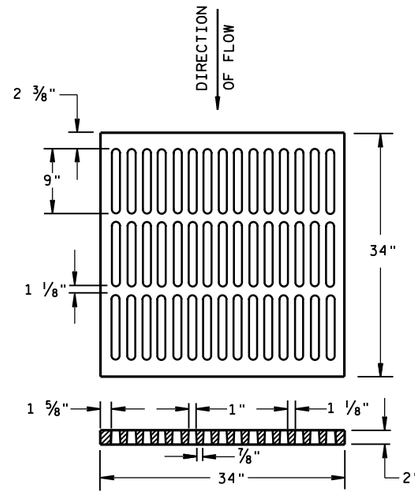
NOTE: EITHER CASTING IS ACCEPTABLE

GENERAL NOTES

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

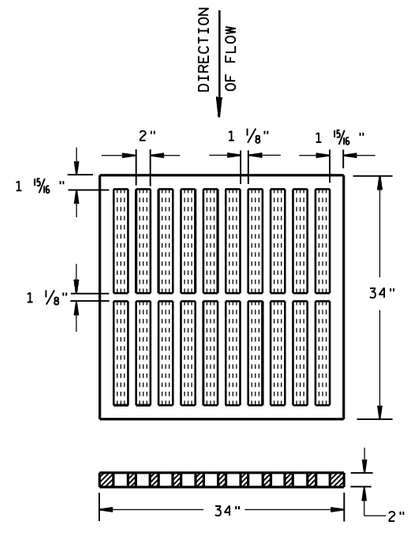
DETAIL DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR CATCH BASIN, MANHOLE AND INLET COVERS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

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



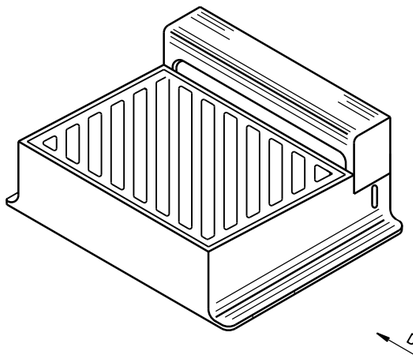
ALTERNATIVE TYPE "MS"

USE WHERE PEDESTRIAN OR BICYCLE TRAFFIC IS PERMITTED
NOTED AS TYPE MS-A ON THE DRAINAGE TABLE

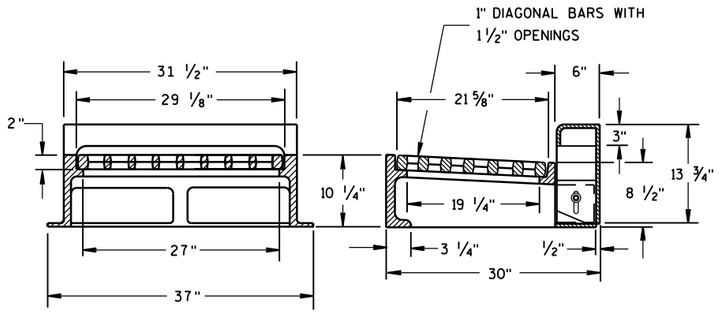


TYPE "MS"

USE ON FREEWAYS AND EXPRESSWAYS
NOTED AS TYPE MS ON DRAINAGE TABLE



DIAGONAL SLOTS, SHALL BE ORIENTED TO THE DIRECTION OF FLOW AS ILLUSTRATED. GRATES ARE MANUFACTURED TO BE REVERSIBLE.



NOTE: CURB BOX HEIGHT ADJUSTABLE 6" TO 9"

TYPE "WM"

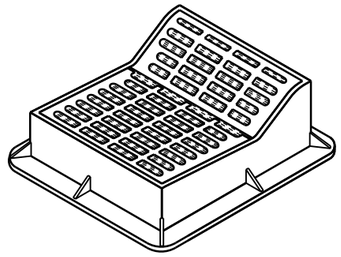
INLET COVERS
TYPE B, B-A, C,
MS, MS-A, & WM

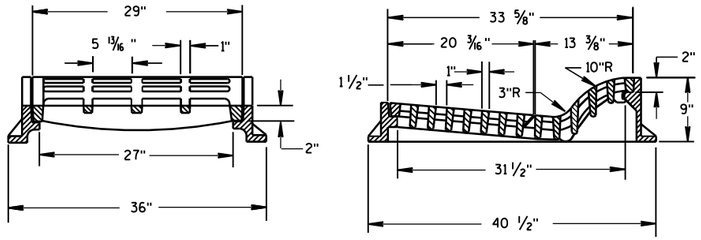
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/27/2013 — DATE
/S/ Jerry H. Zogg — ROADWAY STANDARDS ENGINEER
FHWA

6

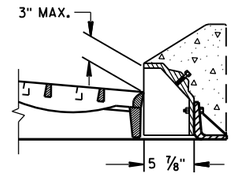
S.D.D. 8 A 5-19b





TYPE "F"

USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.



ALTERNATIVE CURB BOX FOR TYPE "HM" COVER

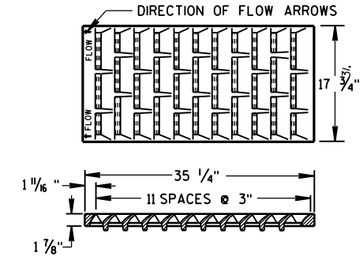
USE WITH TYPES G & J CONCRETE CURB & GUTTER, 30 INCH
NOTED AS TYPE HM-GJ ON DRAINAGE TABLE

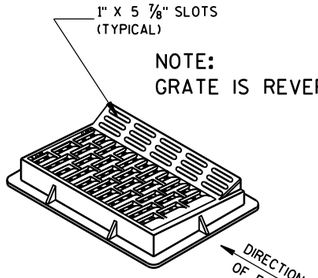
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM-GJ" COVER
NOTED AS TYPE HM-GJ-S ON DRAINAGE TABLE

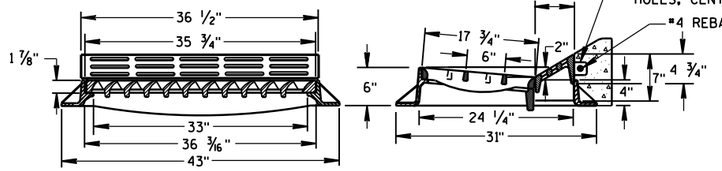
GENERAL NOTES

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

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



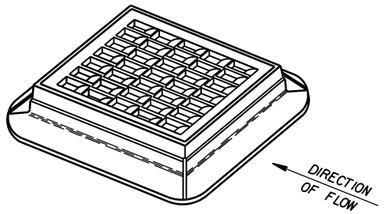


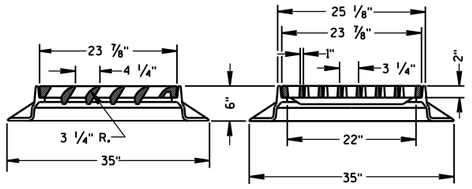


TYPE "HM"

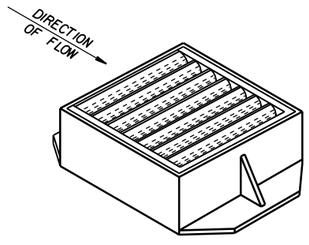
USE WITH TYPES A & D CONCRETE CURB & GUTTER, 36 INCH.

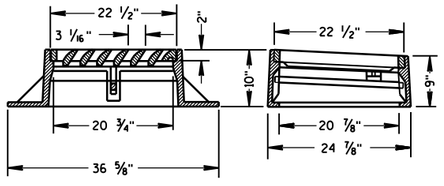
NOTE:
SPECIAL GRATE FOR THE
TYPE "H" COVER MAY ALSO BE
USED FOR THE TYPE "HM" COVER
NOTED AS TYPE HM-S ON DRAINAGE TABLE



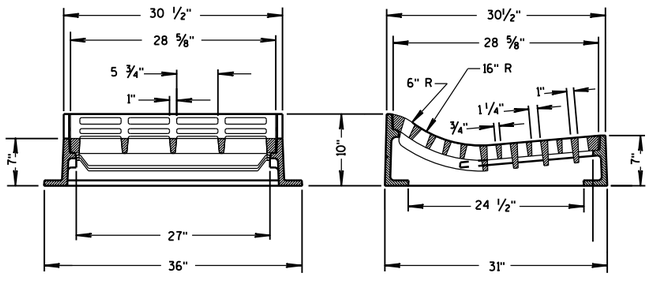


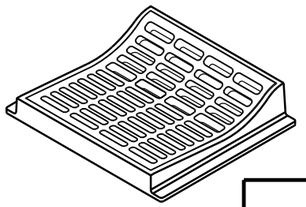
TYPE "S"





TYPE "V"





TYPE "T"

USE WITH TYPES R & T CONCRETE CURB & GUTTER, 36 INCH.

INLET COVERS
TYPE F, HM, HM-S, S, T, V, HM-GJ, & HM-GJ-S

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

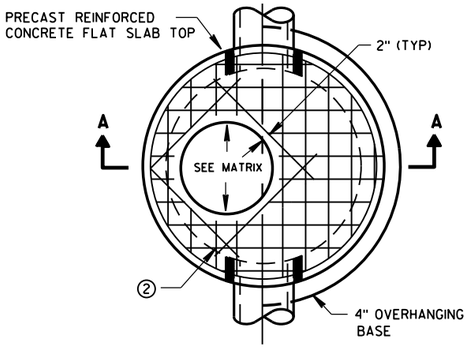
APPROVED
11/27/2013
DATE

/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER

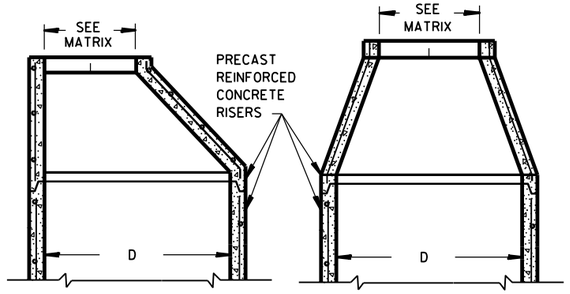
FHWA

6

S.D.D. 8 A 5-19c

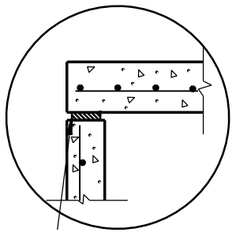


PLAN VIEW CIRCULAR OPENING

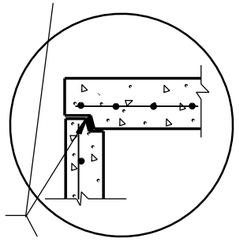


OPTIONAL PRECAST REINFORCED CONCRETE ECCENTRIC TOP

OPTIONAL PRECAST REINFORCED CONCRETE CONCENTRIC TOP

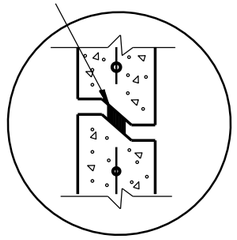


TOP WITH PLAIN END JOINT



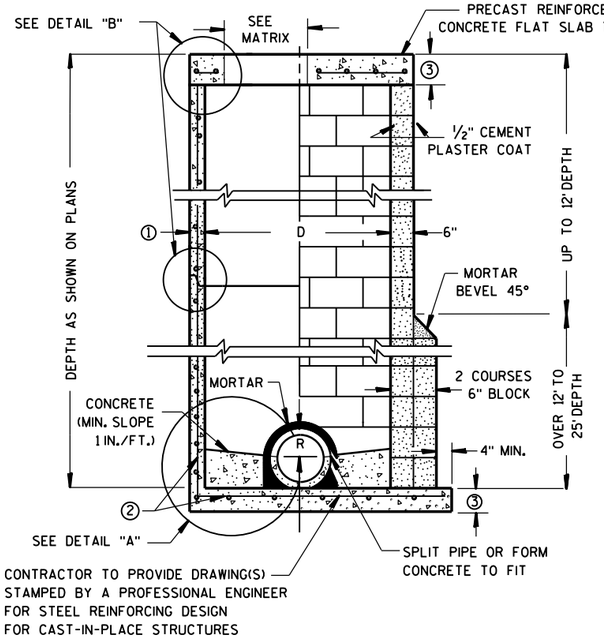
JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C990 (TYP)

TOP WITH TONGUE AND GROOVE JOINT



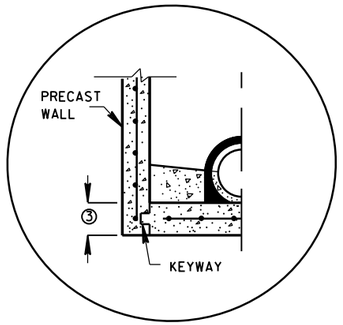
RISER WITH TONGUE AND GROOVE JOINT

DETAIL "B"

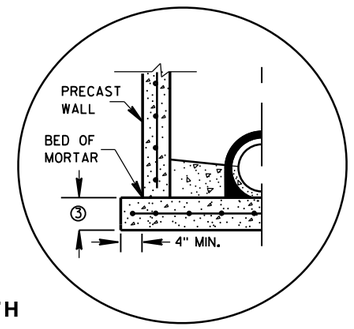


PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

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

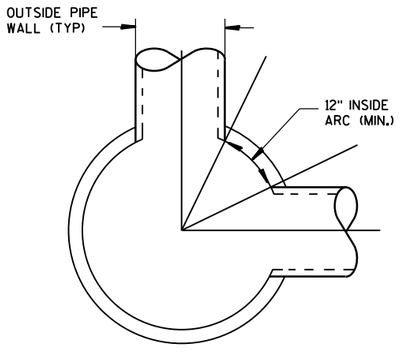


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "C"

GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST MANHOLE UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

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

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

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

PRECAST REINFORCED CONE TOPS (ECCENTRIC OR CONCENTRIC) OR PRECAST REINFORCED FLAT SLAB TOPS MAY BE USED ON CONCRETE BLOCK STRUCTURES.

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

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

STEPS OF APPROVED POLYPROPYLENE PLASTIC COATED REINFORCEMENT BAR ARE ACCEPTABLE. REINFORCING BAR MUST BE A MINIMUM OF ½" AND MEET THE REQUIREMENTS OF ASTM A615.

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

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

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

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

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

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

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

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

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

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

MANHOLE COVER OPENING MATRIX

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

PIPE MATRIX

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

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

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

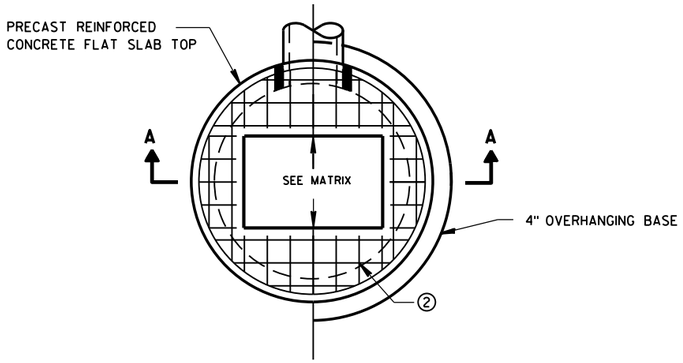
APPROVED

Sept., 2016
DATE

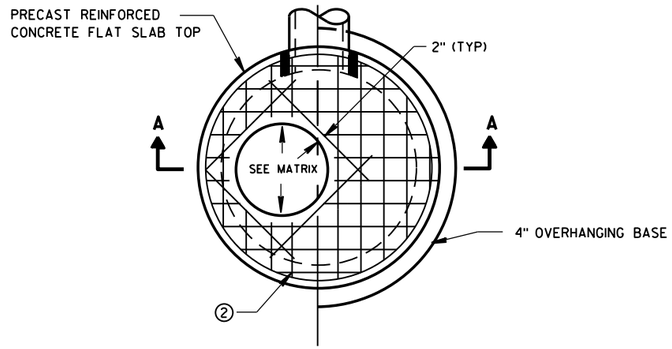
/S/ Rodney Taylor
ROADWAY STANDARDS DEVELOPMENT
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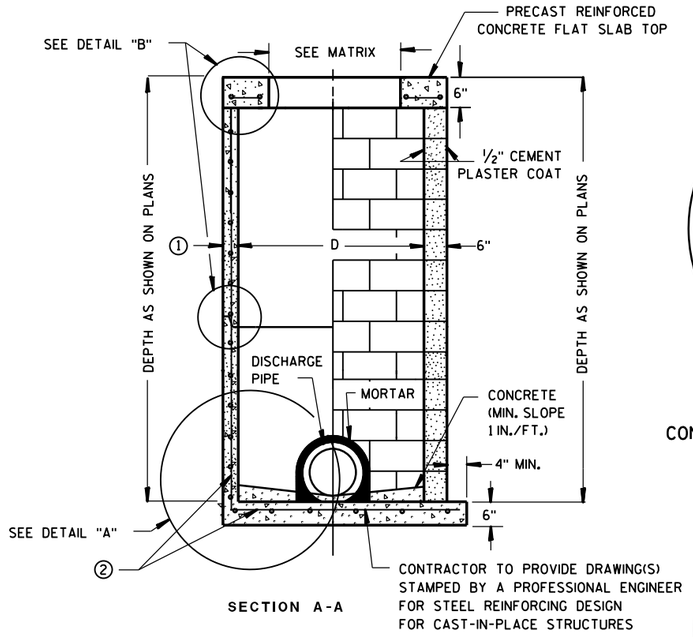
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S.D.D. 8 B 9-2



PLAN VIEW RECTANGULAR OPENING



PLAN VIEW CIRCULAR OPENING

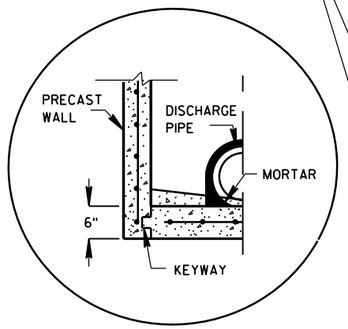


SECTION A-A

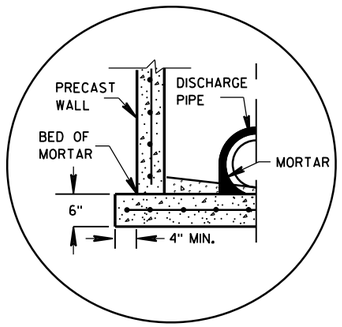
PRECAST REINFORCED CONCRETE WITH MONOLITHIC BASE

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

CIRCULAR INLETS W/ FLAT TOP

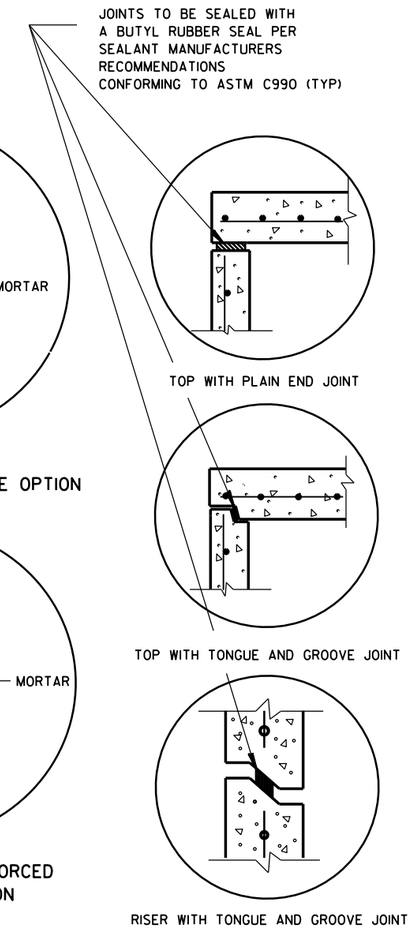


PRECAST REINFORCED CONCRETE WITH INTEGRAL BASE OPTION



SEPARATE PRECAST REINFORCED CONCRETE BASE OPTION

DETAIL "A"



DETAIL "B"

GENERAL NOTES

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

UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

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

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

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

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

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF AASHTO DESIGNATION M199.

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

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

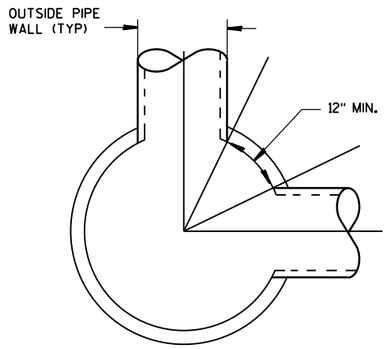
FOR ADDITIONAL CONFIGURATIONS, MAINTAIN A MINIMUM OF 12 INCHES AS MEASURED FROM THE INSIDE OF THE STRUCTURE WALL BETWEEN THE OUTSIDE PIPE WALLS OF ADJACENT PIPES. SEE DETAIL "C".

① MINIMUM WALL THICKNESS SHALL BE 4-IN FOR 3-FT DIAMETER AND 5-IN FOR 4-FT DIAMETER PRECAST INLETS.

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

INLET COVER OPENING MATRIX

	INLET COVER TYPE	ALL A'S	ALL B'S	BW	C	F	ALL H'S	S	T	V	WM	Z
INLET SIZE	OPENING SIZE (FT)											
3-FT	2 DIA.				X							X
	2X2	X	X					X		X		
4-FT	2 DIA.				X							X
	2X2	X	X					X		X		
	2X2.5			X				X	X	X	X	
	2X3						X					
	2.5X3					X						



DETAIL "C"

PIPE MATRIX

INLET SIZE	MAXIMUM INSIDE PIPE DIAMETER FOR TWO PIPES	
	180° SEPARATION (IN)	90° SEPARATION (IN)
3-FT	15	12
4-FT	24	18

INLETS 3-FT AND 4-FT DIAMETER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

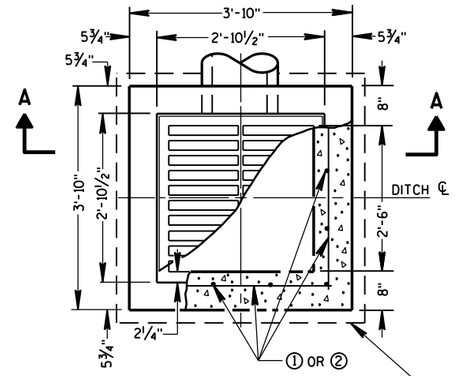
APPROVED
Sept., 2016 — /S/ Rodney Taylor
DATE — ROADWAY STANDARDS | UNIT SUPERVI ENT
FHWA

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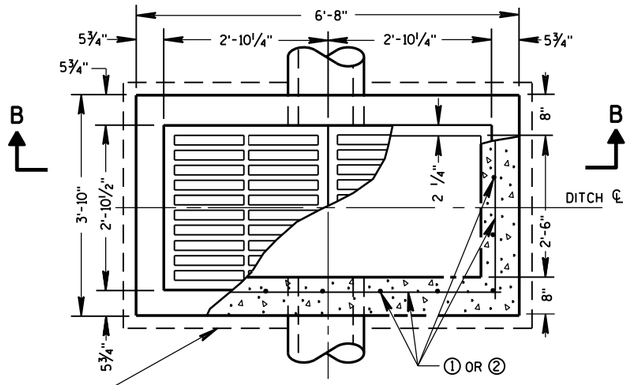
S.D.D. 8 C 6-2

6

S.D.D. 8 C 6-2

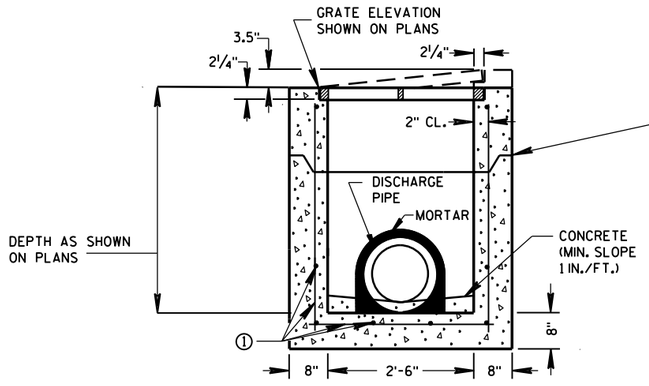


PLAN VIEW

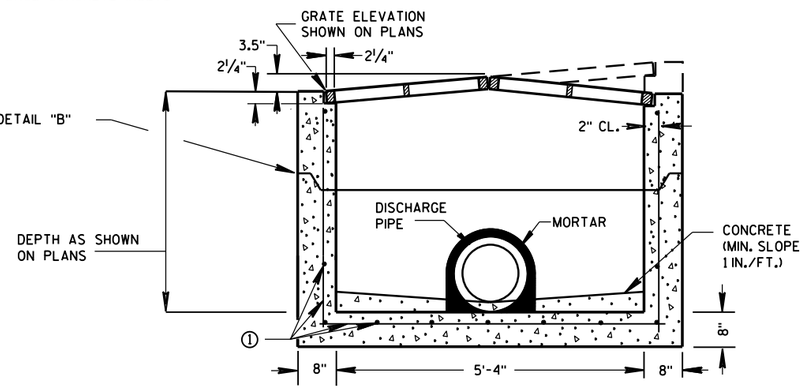


PLAN VIEW

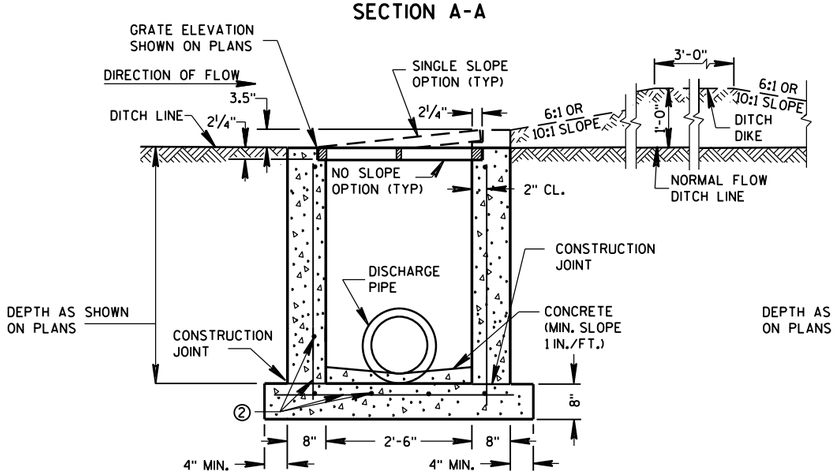
4" OVERHANGING BASE ON REINFORCED CAST-IN-PLACE CONCRETE INLETS



PRECAST REINFORCED CONCRETE SECTION A-A

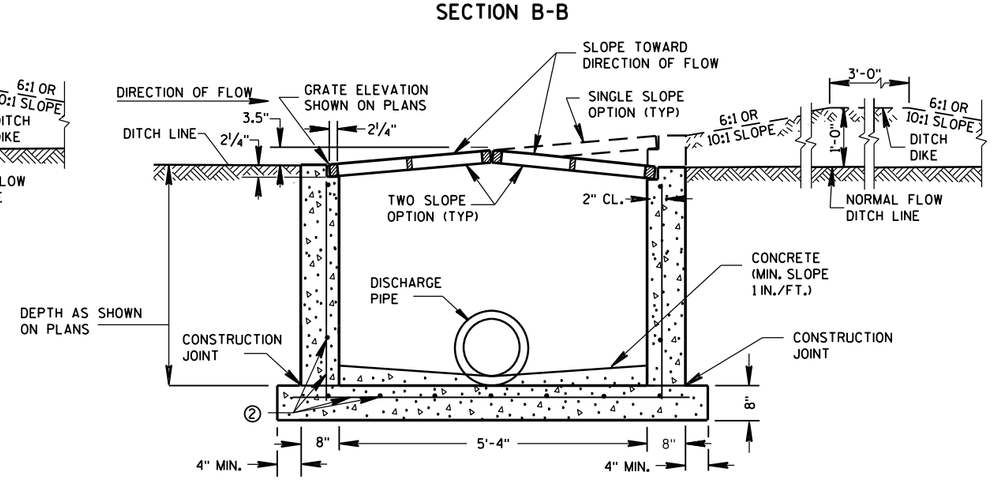


PRECAST REINFORCED CONCRETE SECTION B-B



REINFORCED CAST-IN-PLACE CONCRETE SECTION A-A

INLETS MEDIAN 1 GRATE



REINFORCED CAST-IN-PLACE CONCRETE SECTION B-B

INLETS MEDIAN 2 GRATE

GENERAL NOTES

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UNLESS OTHERWISE AUTHORIZED IN WRITING BY THE ENGINEER, THE CONTRACTOR SHALL NOT ORDER AND DELIVER PRECAST INLET UNITS REQUIRED FOR THE PROJECT UNTIL A LIST OF SIZES IS FURNISHED BY THE ENGINEER.

DETAILED DRAWINGS FOR PROPOSED ALTERNATE DESIGNS FOR INLETS WHICH MAY INCLUDE PRECAST REINFORCED CONCRETE INLETS, SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PROVIDING THAT SUCH ALTERNATE DESIGNS MAKE PROVISION FOR EQUIVALENT CAPACITY AND STRENGTH.

ALL MEDIAN INLETS ARE DESIGNATED ON THE PLANS AS "INLETS, 1G-MS", ETC. THE FIRST NUMBER AND LETTER DESIGNATE THE TYPE OF STRUCTURE, AND THE FOLLOWING LETTERS DESIGNATE THE TYPE OF COVER TO BE USED TO COMPRISE THE COMPLETE UNIT.

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

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

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

ALL PRECAST INLET UNITS SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF ASTM C 913.

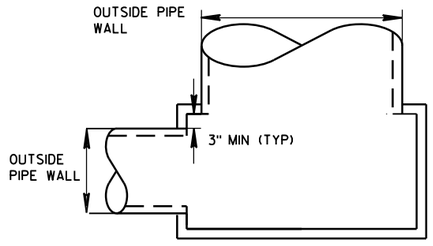
MAXIMUM INSIDE PIPE DIAMETER DETERMINED BY 3" CLEARANCE ON EACH SIDE OF THE OUTSIDE WALL OF THE PIPE. SEE DETAIL "A". ASSUMES PIPE ENTERS PERPENDICULAR TO THE STRUCTURE.

① FOR PRECAST INLETS PROVIDE REINFORCING STEEL IN ACCORDANCE TO ASTM C 913.

② CONTRACTOR TO PROVIDE DRAWING(S) STAMPED BY A PROFESSIONAL ENGINEER FOR STEEL REINFORCING DESIGN FOR CAST-IN-PLACE STRUCTURES.

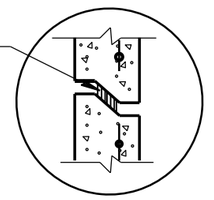
PIPE MATRIX

	MAXIMUM INSIDE PIPE DIAMETER	
INLET SIZE	WIDTH (IN)	LENGTH (IN)
1 GRATE	18	18
2 GRATE	18	42



DETAIL "A"

JOINTS TO BE SEALED WITH A BUTYL RUBBER SEAL PER SEALANT MANUFACTURERS RECOMMENDATIONS CONFORMING TO ASTM C 990 (TYP)



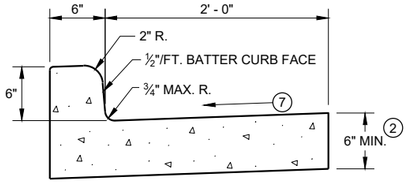
DETAIL "B"

INLETS MEDIAN 1 AND 2 GRATE

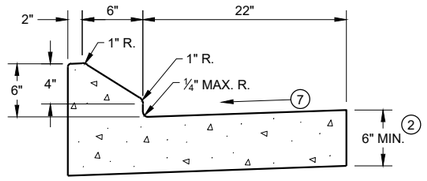
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
Sept., 2016 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS UNIT SUPERVI ENT
FHWA

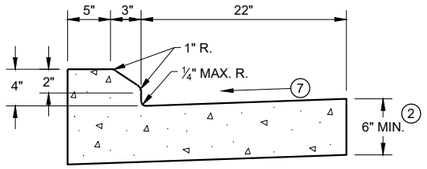
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S.D.D. 8 C 8-2



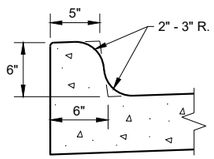
TYPES A[1] & D



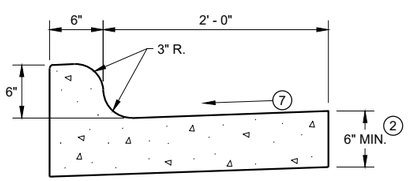
6" SLOPED CURB TYPES G[1] & J



4" SLOPED CURB TYPES G[1] & J

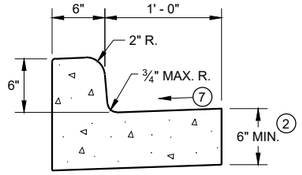


TYPES K[1] & L
(OPTIONAL CURB SHAPE)



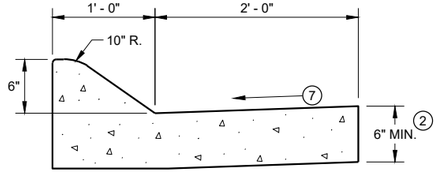
TYPES K[1] & L

CONCRETE CURB AND GUTTER 30"

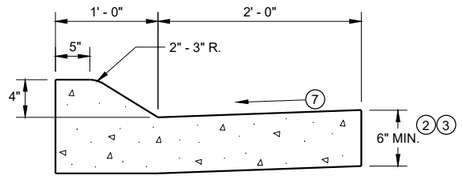


TYPES A[1] & D

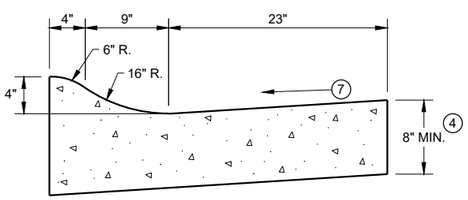
CONCRETE CURB AND GUTTER 18"



6" SLOPED CURB TYPES A[1] & D



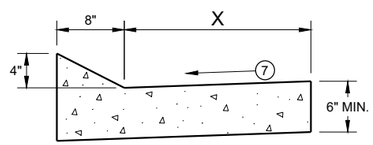
4" SLOPED CURB TYPES A[1] & D



4" SLOPED CURB TYPES R[1] & T[5]

CONCRETE CURB AND GUTTER 36"

TBT & TBTT	X
30"	22"
36"	28"

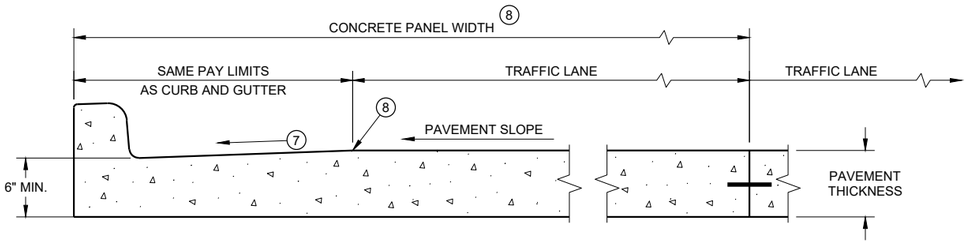


TYPES TBT & TBTT[1]

CONCRETE CURB AND GUTTER

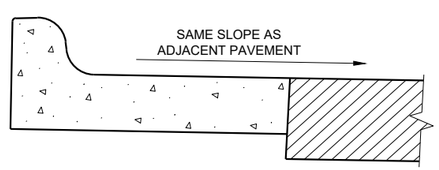
PAVEMENT THICKNESS AND MAXIMUM CONCRETE PANEL WIDTH TABLE

PAVEMENT THICKNESS	MAXIMUM PANEL WIDTH
LESS THAN 10"	12'
10" & ABOVE	15'



PARTIAL SECTION OF PAVEMENT * WITH INTEGRAL CURB AND GUTTER

* BIKE LANE IS NOT SHOWN



REVERSE SLOPE GUTTER[6]
(TYPICAL FOR ALL CURB & GUTTER TYPES)

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

INTEGRAL CURB AND GUTTER SHALL CONFORM TO THE DETAILS SHOWN FOR CONCRETE CURB AND GUTTER INCLUDING THE TRANSVERSE GUTTER SLOPE.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

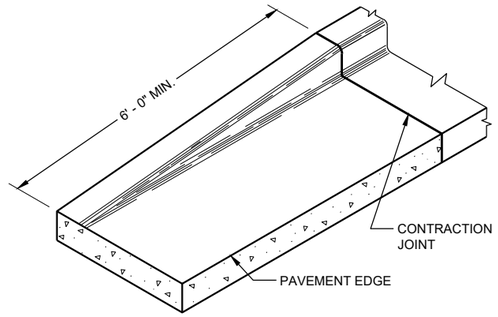
1. TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.
2. THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.
3. USE 8" MINIMUM GUTTER THICKNESS WHEN USED WITH AN ADJACENT CONCRETE TRUCK APRON PLACED BEHIND BACK OF CURB.
4. THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 8" MINIMUM GUTTER THICKNESS IS MAINTAINED.
5. THE FACE OF CURB IS 6" FROM THE BACK OF CURB.
6. WHEN REVERSE SLOPE GUTTER IS REQUIRED, THE LOCATION(S) WILL BE SHOWN ELSEWHERE IN THE PLAN.
7. USE 4% GUTTER CROSS SLOPE UNLESS OTHERWISE NOTED IN THE PLANS.
8. INCLUDE LONGITUDINAL JOINT AND TIE BARS ALONG LANE EDGE WHEN CONCRETE PANEL WIDTH EXCEEDS THE MAXIMUM WIDTH PER TABLE BELOW. LONGITUDINAL JOINT(S) ARE NOT ALLOWED WITHIN TRAFFIC LANES AND BIKE LANES. LONGITUDINAL JOINT MAY BE SAWED.

CONCRETE CURB AND GUTTER

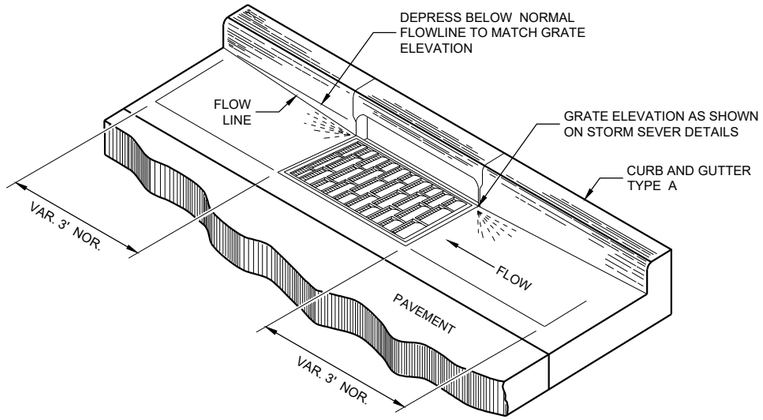
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D01 - 21a
SDD 08D01 - 21a



END SECTIONCURB AND GUTTER



DETAIL OF CURB AND GUTTER AT INLETS
(TYPICAL H INLET COVER SHOWN)

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

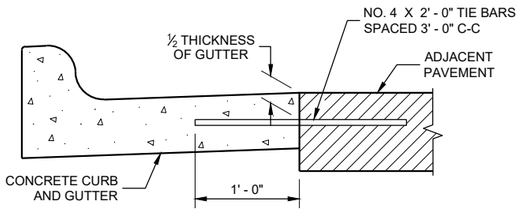
PAVEMENT TIES AND TIE BARS SHALL BE EPOXY COATED IN CONFORMANCE WITH SUBSECTION 505.2.6.2 OF THE STANDARD SPECIFICATIONS.

UNLESS OTHERWISE SHOWN ON THE TYPICAL CROSS SECTIONS, THE BASE AGGREGATE AND COMMON EXCAVATION LIMITS ARE 2' - 0" BEHIND THE BACK OF CURBS.

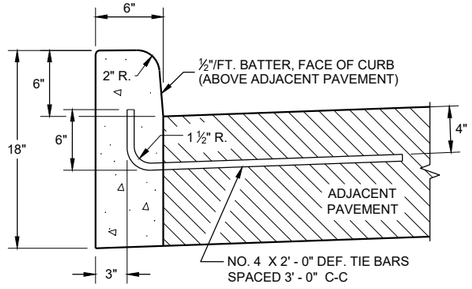
(1) TIE BARS ARE REQUIRED FOR CURB AND GUTTERS TYPES A, G, K, R, AND TBTT.

(2) THE BOTTOM OF CURB AND GUTTER MAY BE CONSTRUCTED EITHER LEVEL OR PARALLEL TO THE SLOPE OF THE SUBGRADE OR BASE AGGREGATE PROVIDED A 6" MINIMUM GUTTER THICKNESS IS MAINTAINED.

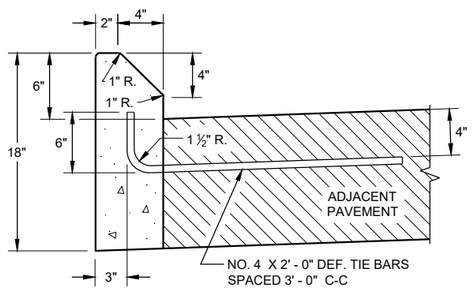
(9) REFER TO SDD 08D18 AND 08D19 FOR ADDITIONAL DRIVEWAY ENTRANCE CURB DETAILS.



TYPICAL TIE BAR LOCATION (1)

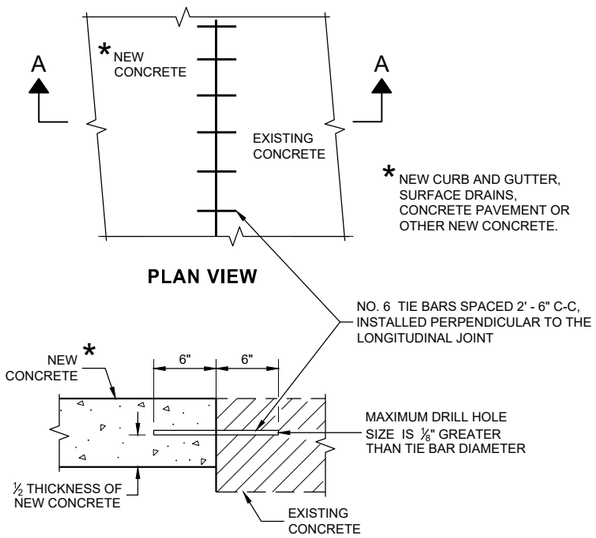


TYPES A (1) & D



TYPES G (1) & J

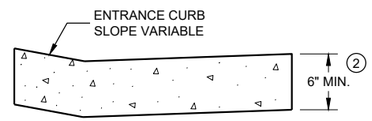
CONCRETE CURB



PLAN VIEW

SECTION A - A

TIE BARS DRILLED INTO EXISTING PAVEMENT



DRIVEWAY ENTRANCE CURB (9)
(WHEN DIRECTED BY THE ENGINEER)

CONCRETE CURB, TIES AND CURB AND GUTTER APPLICATIONS

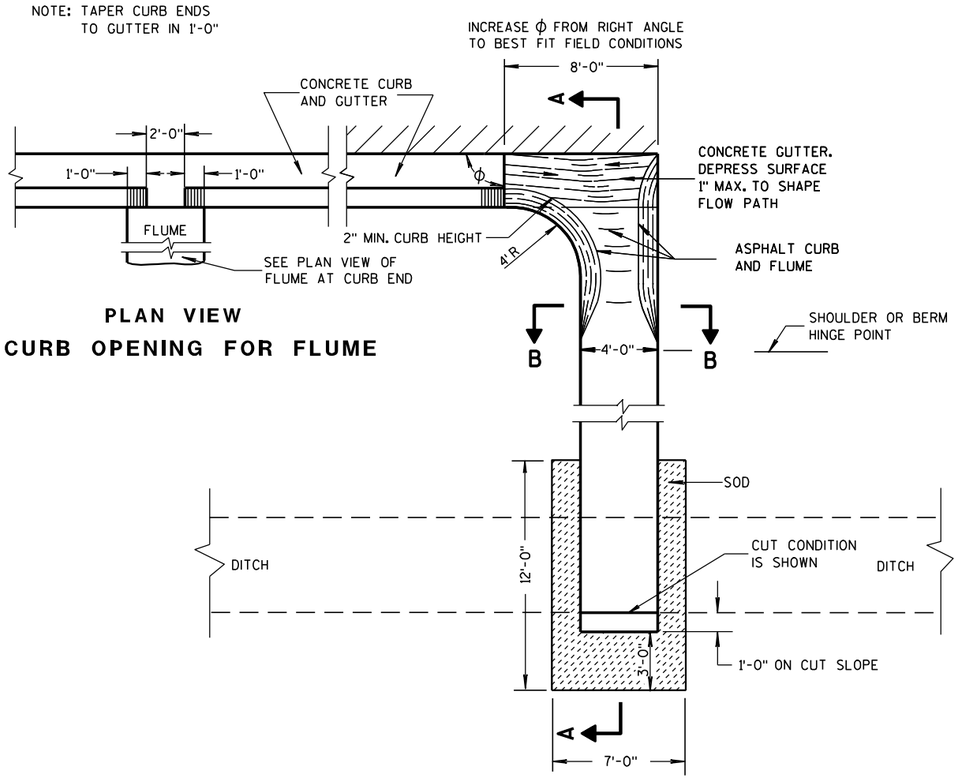
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER
FHWA

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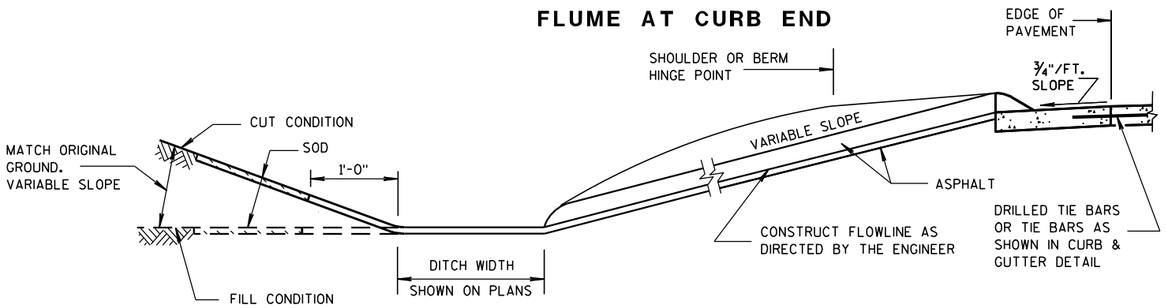
SDD08D01 - 21b

ASPHALTIC FLUME

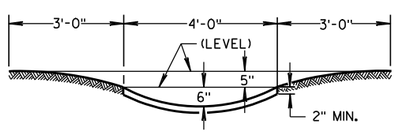


PLAN VIEW
CURB OPENING FOR FLUME

PLAN VIEW
FLUME AT CURB END



SECTION A-A



SECTION B-B

GENERAL NOTES

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

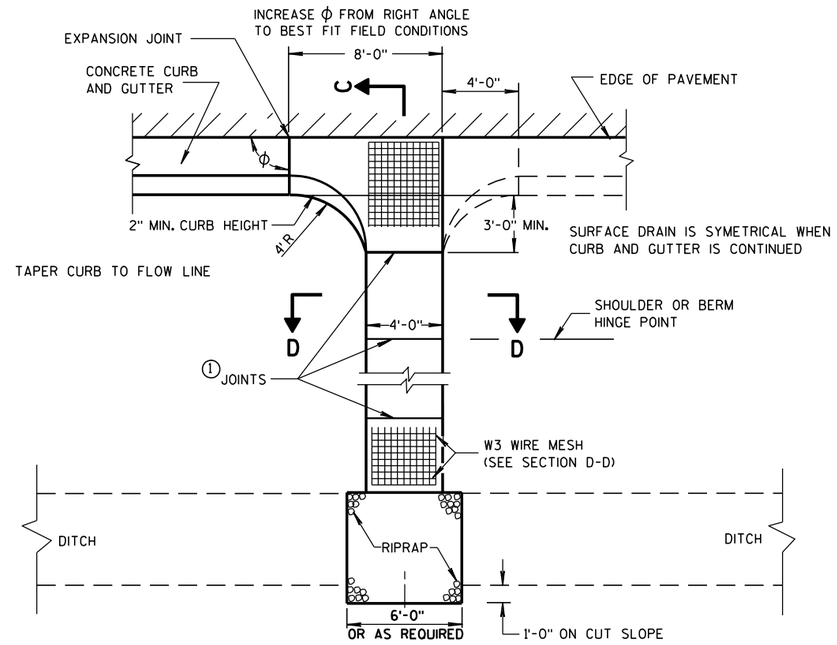
WELDED STEEL WIRE FABRIC SHALL BE IN ACCORDANCE WITH AASHTO SPECIFICATION M55.

① JOINTS SHALL BE ⅛ TO ¼ INCH WIDE BY 1½ INCHES DEEP AND SPACED AT UNIFORM INTERVALS OF APPROXIMATELY 4 FEET.

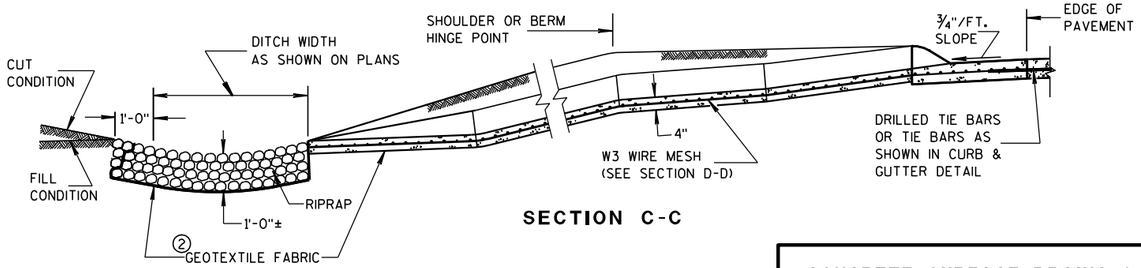
② GEOTEXTILE FABRIC TYPE "R" SHALL UNDERLAY THE FULL LENGTH AND WIDTH OF THE CONCRETE SURFACE DRAIN AND RIPRAP.

③ CONCRETE SURFACE DRAIN WITHOUT CURB AND GUTTER MAY BE USED ON BACKSLOPES WHEN SPECIFIED

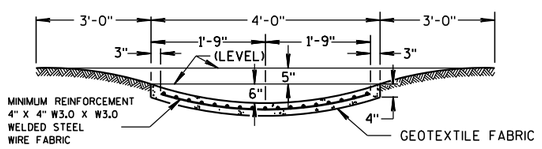
③ CONCRETE SURFACE DRAIN



PLAN VIEW



SECTION C-C



SECTION D-D

CONCRETE SURFACE DRAINS & ASPHALTIC FLUMES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

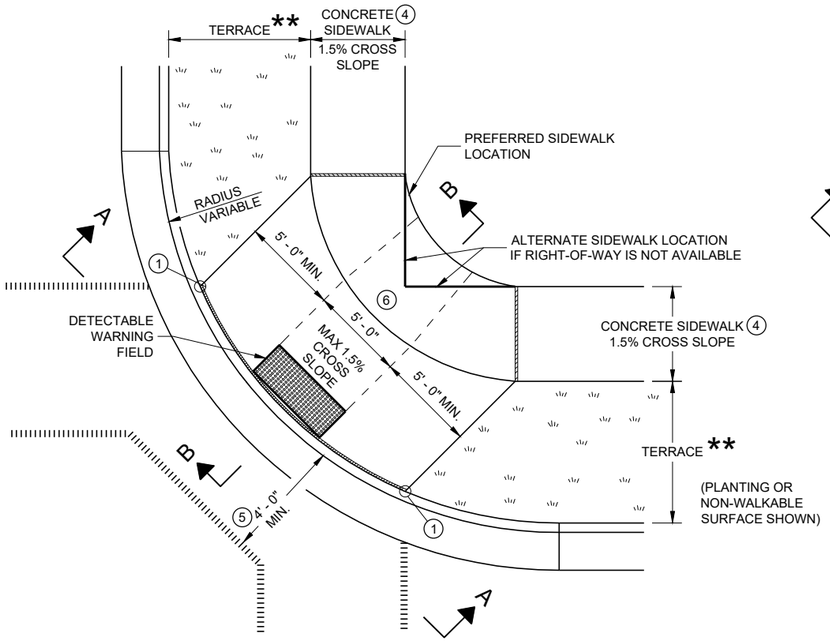
APPROVED
9-4-08 DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS ENGINEER
FHWA

6

S.D.D. 8 D 4-5

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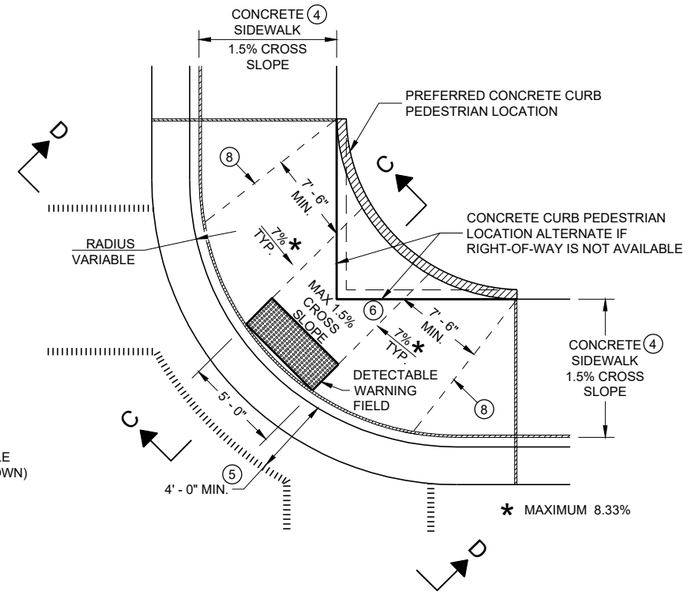
S.D.D. 8 D 4-5



PLAN VIEW

CURB RAMP TYPE 1

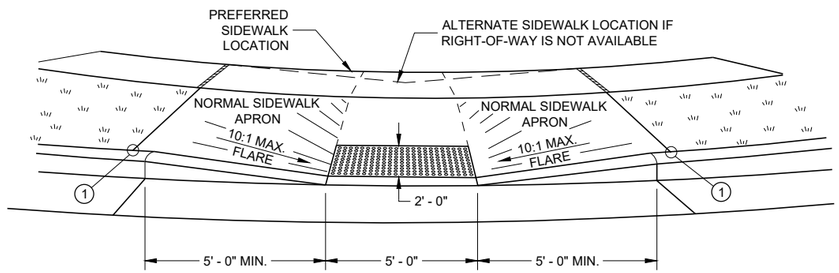
(CENTER OF CORNER RADIUS)



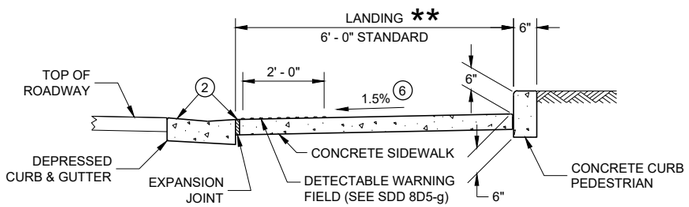
PLAN VIEW

CURB RAMP TYPE 1 - A

(NO TERRACE)

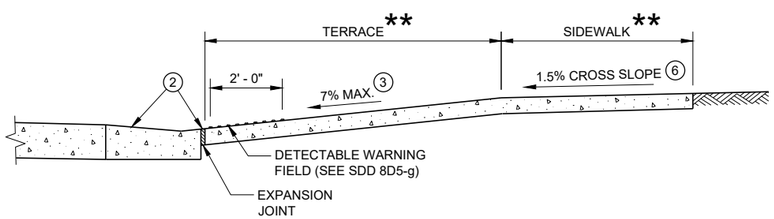


VIEW A - A FOR TYPE 1

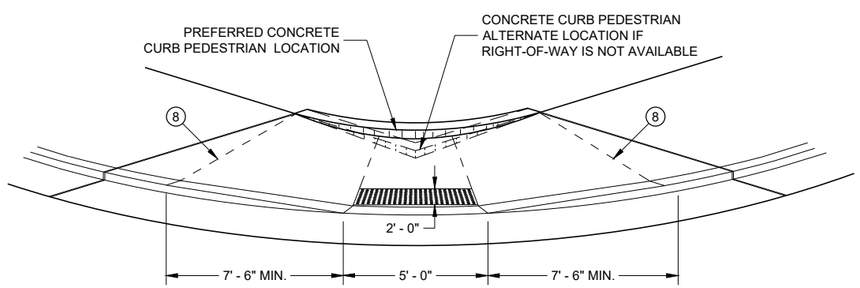


SECTION C - C FOR TYPE 1 - A

** WIDTH SHOWN ELSEWHERE IN THE PLANS



SECTION B - B FOR TYPE 1



VIEW D - D FOR TYPE 1 - A

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

WHEN NECESSARY, THE SIDEWALK ELEVATION MAY BE LOWERED TO MEET THE HIGH POINT ON THE RAMP.

TYPE 1 CURB RAMPS SHALL HAVE A NORMAL SIDEWALK APRON AND CURB ON BOTH SIDES OF RAMP.

DETECTABLE WARNING FILED SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS "CURB RAMP DETECTABLE WARNING FIELD". THE CONCRETE PEDESTRIAN CURB, IF NEEDED, SHALL BE MEASURED AND PAID BY THE LINEAR FOOT AS "CONCRETE CURB PEDESTRIAN". CONCRETE SIDEWALK IN THE CURB RAMP AREA SHALL BE MEASURED AND PAID BY THE SQUARE FOOT AS CONCRETE SIDEWALK, INCLUDING THE AREA UNDER THE DETECTABLE WARNING FIELD.

SELECT CURB RAMP DETECTABLE WARNING FIELD MATERIALS AND DEVICES FROM THE DEPARTMENT'S APPROVED MATERIALS LIST. THE COLOR OF THE DETECTABLE WARNING FIELD IS SPECIFIED ELSEWHERE AND IS INCIDENTAL TO THE BID ITEM OF "CURB RAMP DETECTABLE WARNING FIELD"

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

SURFACE TEXTURE OF THE RAMP SHALL BE OBTAINED BY COARSE BROOMING TRANSVERSE TO THE SLOPE OF THE RAMP.

(1) THIS POINT IS AN EXTENSION OF OUTSIDE EDGE OF APPROACHING SIDEWALK WHERE IT MEETS THE BACK OF CONCRETE CURB. POINT LOCATION MAY BE ADJUSTED TO ALIGN WITH BEGINNING OF FULL-HEIGHT CURB IF THIS DISTANCE IS SHORT.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) MAXIMUM 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(5) PROVIDE A LEVEL LANDING IN THE STREET AND GUTTER AREA (2% MAXIMUM SLOPE IN ANY DIRECTION). WHEN THE GUTTER SLOPE EXCEEDS 2%, CONSTRUCT THE LEVEL LANDING IN THE STREET AREA.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

LEGEND

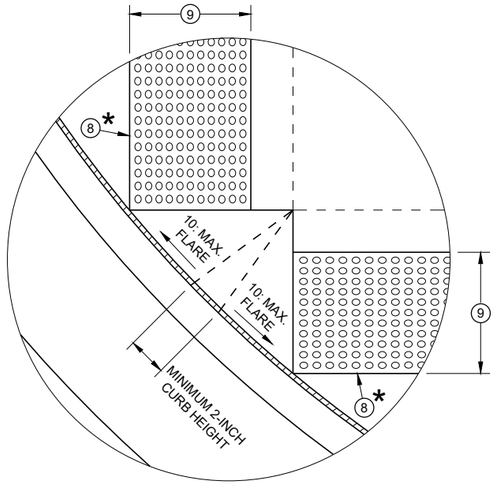
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS
TYPE 1 AND 1-A

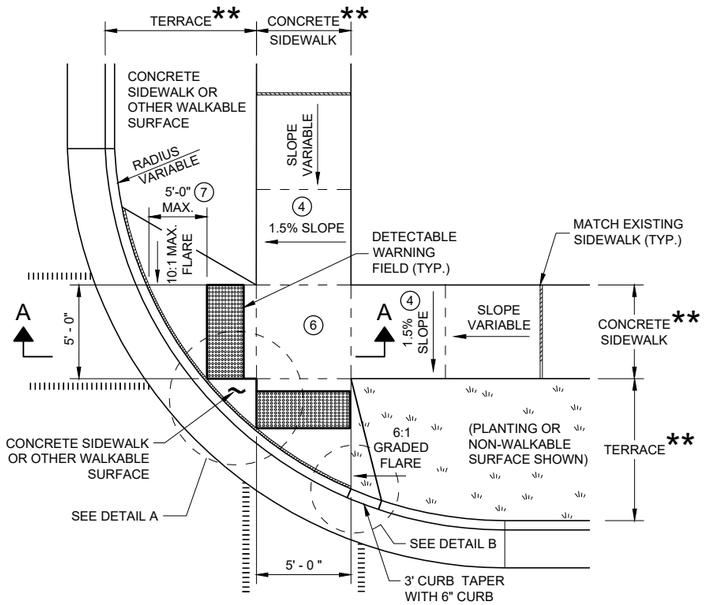
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 08D05 - 20a



DETAIL A



PLAN VIEW
CURB RAMP TYPE 2
(CENTER OF CORNER RADIUS)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE (2.67% OR LESS) AND NOT TO EXCEED 11% GRADE CHANGE.

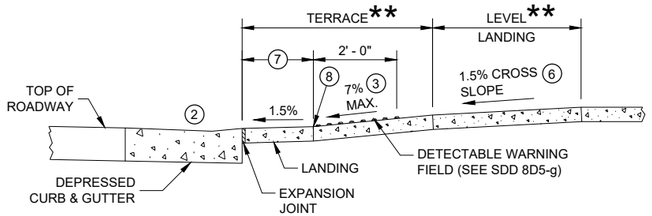
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET X 5 FEET.

(7) WHEN GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

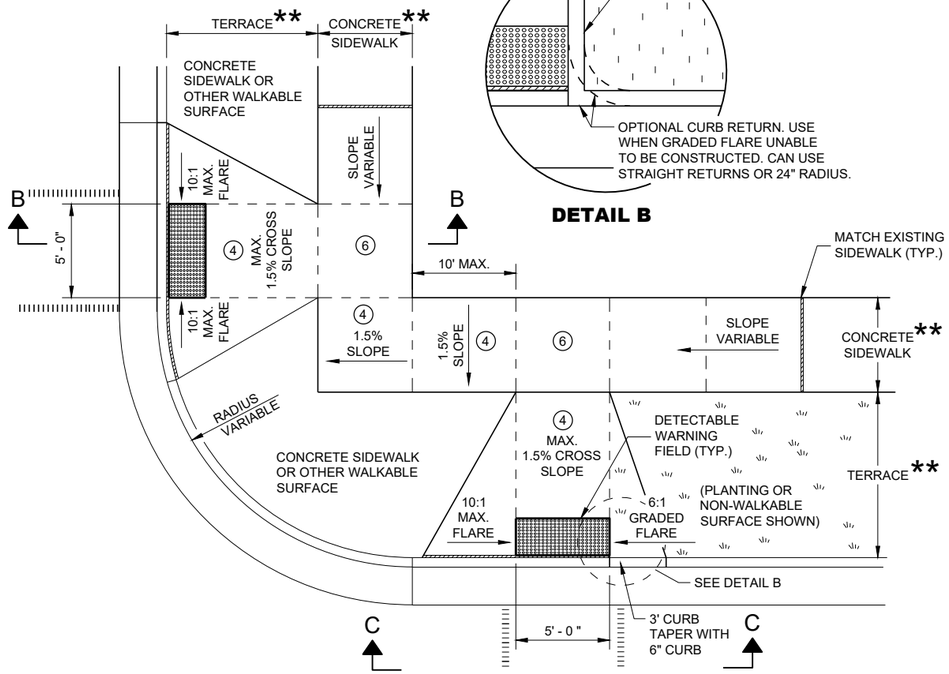
(9) WHEN DISTANCE IS LESS THAN 6' - 0", IT MAY BE DIFFICULT TO ACHIEVE A 7% SLOPE OR FLATTER ALONG THE RAMP. REDUCE CURB HEIGHT IN TRIANGLE AREA TO ACHIEVE 7% SLOPE OR FLATTER ON RAMP. CONSTRUCT 2-INCH MINIMUM CURB HEIGHT BETWEEN 10:1 FLARES.



SECTION A - A FOR TYPE 2

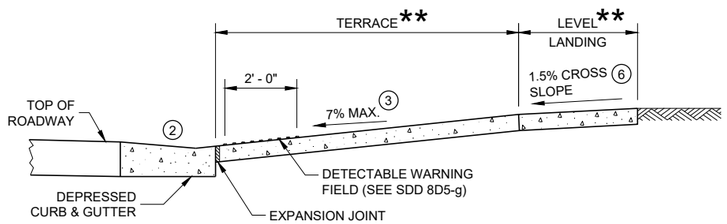
* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

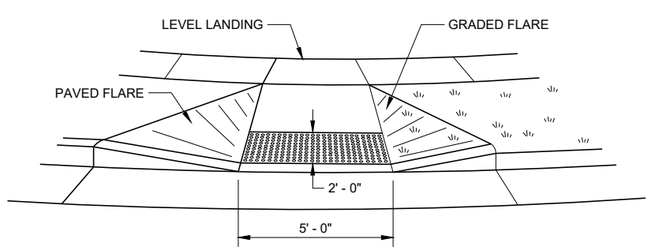


DETAIL B

PLAN VIEW
CURB RAMP TYPE 3
(OUTSIDE OF CROSSWALK AREA)



SECTION B - B FOR TYPE 3



VIEW C - C FOR TYPE 3

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

CURB RAMPS TYPE 2 AND 3

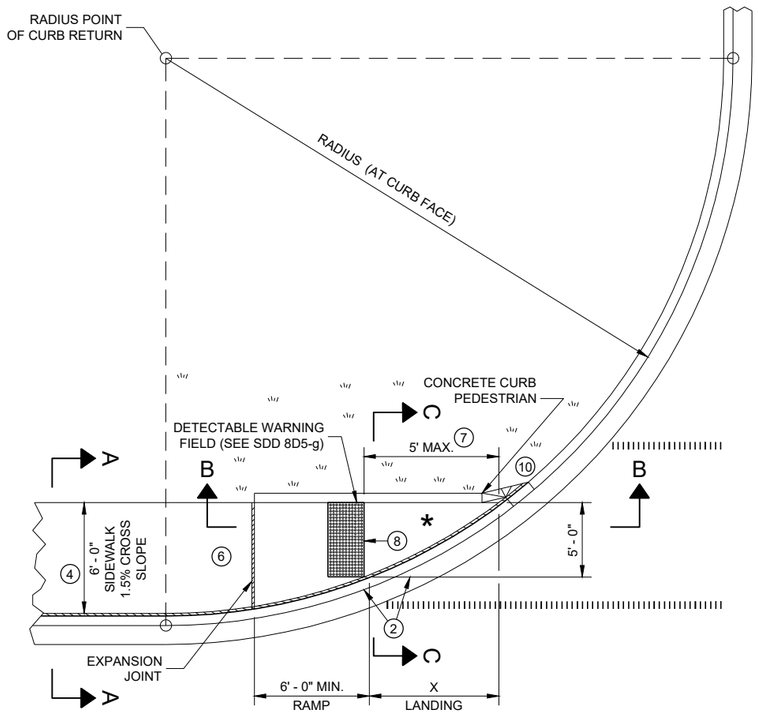
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 08D05 - 20b

6

SDD 08D05 - 20b

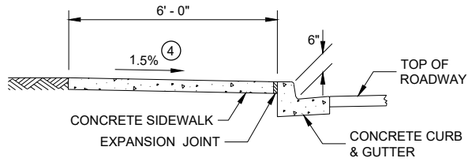


PLAN VIEW

CURB RAMP TYPE 4A

RADIUS (AT CURB FACE)	X
10 FEET	4' - 7"
15 FEET	6' - 5½"

INTERMEDIATE RADII CAN BE INTERPOLATED



SECTION A - A FOR TYPE 4A

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

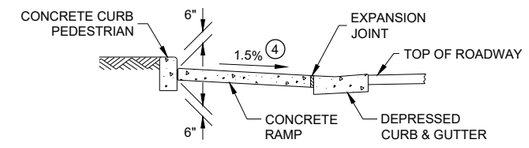
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

LEGEND

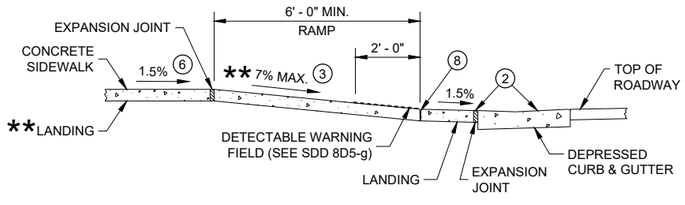
½" EXPANSION JOINT SIDEWALK

CONTRACTION JOINT SIDEWALK

PAVEMENT MARKING CROSSWALK (WHITE)



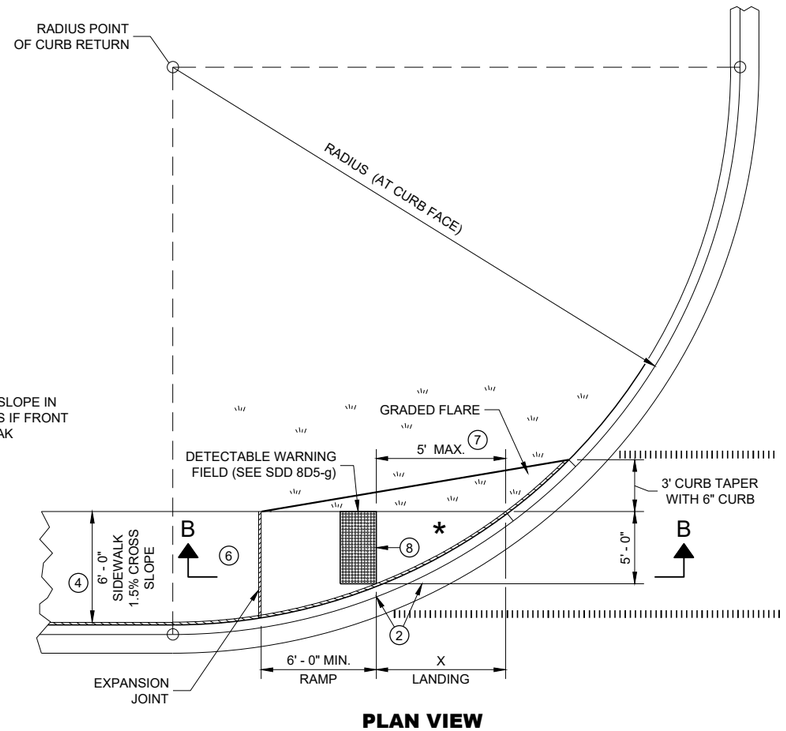
SECTION C - C FOR TYPE 4A



SECTION B - B FOR TYPE 4A AND TYPE 4A1

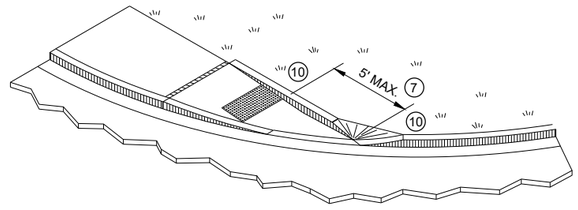
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK

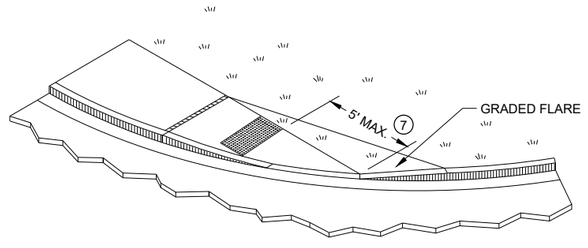


PLAN VIEW

CURB RAMP TYPE 4A1



ISOMETRIC VIEW FOR TYPE 4A



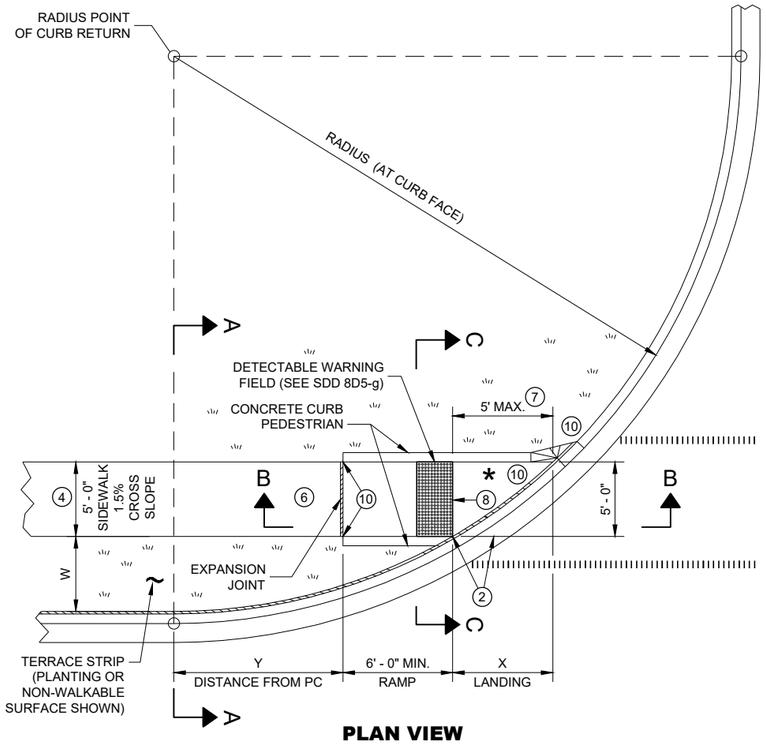
ISOMETRIC VIEW FOR TYPE 4A1

CURB RAMPS
TYPE 4A AND 4A1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 08D05 - 20c



PLAN VIEW

CURB RAMP TYPE 4B

RADIUS (AT CURB FACE)	W = 3' - 0"		W = 4' - 0"		W = 5' - 0"		W = 6' - 0"		W = 7' - 0"		W = 8' - 0"		W = 9' - 0"		W = 10' - 0"	
	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y	X	Y
10 FEET	2' - 10 ¼"	0' - 5"	2' - 1"	1' - 4 ½"	1' - 5"	2' - 1"	0' - 10"	2' - 7 ½"	0' - 3 ¼"	3' - 0 ¼"						
15 FEET	4' - 6 ¾"	2' - 1 ¾"	3' - 9"	3' - 5 ¾"	3' - 1 ¼"	4' - 6"	2' - 6 ¾"	5' - 4 ½"	2' - 1"	6' - 1"	1' - 8"	6' - 8 ½"	1' - 3 ¼"	7' - 2 ½"	0' - 10 ¾"	7' - 7 ¼"
20 FEET	5' - 9 ¾"	3' - 6 ½"	4' - 11 ½"	5' - 1 ¾"	4' - 3 ¼"	6' - 5 ½"	3' - 8 ¾"	7' - 7"	3' - 3"	8' - 6 ½"	2' - 10"	9' - 4 ½"	2' - 5 ½"	10' - 1 ¼"	2' - 1 ¼"	10' - 9"
30 FEET			6' - 9 ¼"	7' - 11 ¼"	6' - 0 ¼"	9' - 8"	5' - 5"	11' - 1 ¾"	4' - 10 ¾"	12' - 5 ¾"	4' - 5 ½"	13' - 7 ¾"	4' - 0 ¾"	14' - 8 ½"	3' - 8 ½"	15' - 8 ¼"
40 FEET									6' - 1 ¾"	15' - 8 ½"	5' - 8"	17' - 2"	5' - 3"	18' - 5 ¾"	4' - 10 ¾"	19' - 8 ¼"
50 FEET															5' - 10 ¼"	23' - 2"

INTERMEDIATE RADII CAN BE INTERPOLATED
DIMENSION "Y" IS CALCULATED BASED ON 6'-0" RAMP LENGTH
DIMENSION "X" IS CALCULATED BASED ON 5'-0" SIDEWALK WIDTH

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

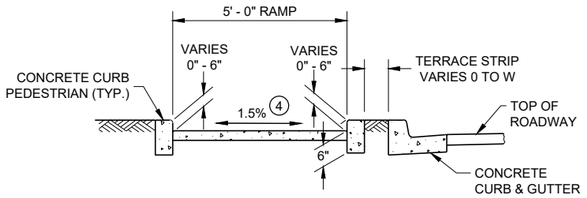
(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

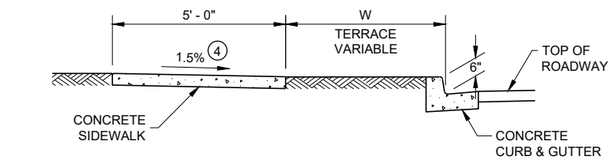
(7) WHEN THIS GRADE BREAK DISTANCE EXCEEDS 5 FEET, USE RADIAL DETECTABLE WARNING FIELD PER SDD 8D5-f.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

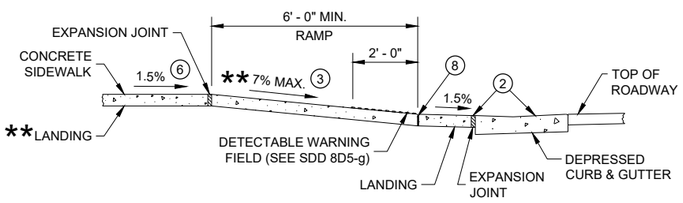
(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.



SECTION C - C FOR TYPE 4B

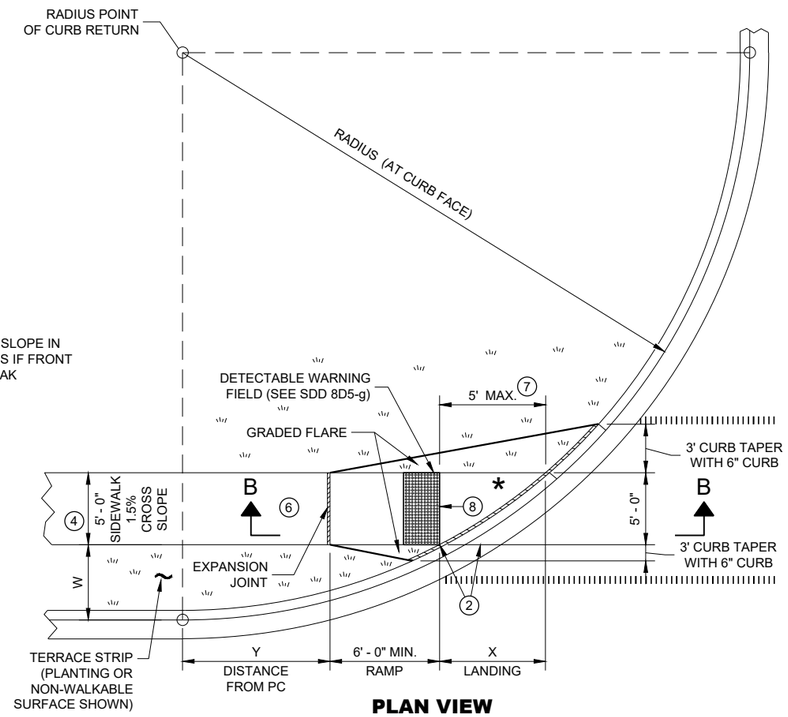


SECTION A - A FOR TYPE 4B



SECTION B - B FOR TYPE 4B AND TYPE 4B1

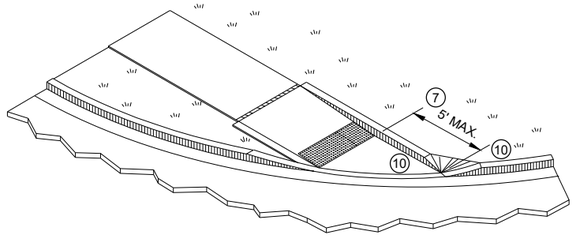
** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED



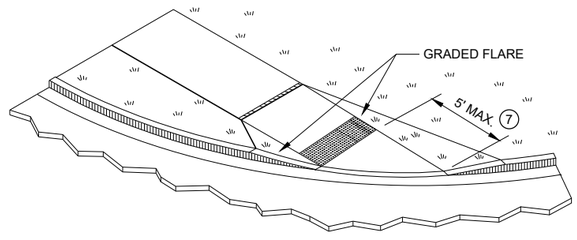
PLAN VIEW

CURB RAMP TYPE 4B1

* MAXIMUM 2.0% SLOPE IN ALL DIRECTIONS IF FRONT OF GRADE BREAK



ISOMETRIC VIEW FOR TYPE 4B



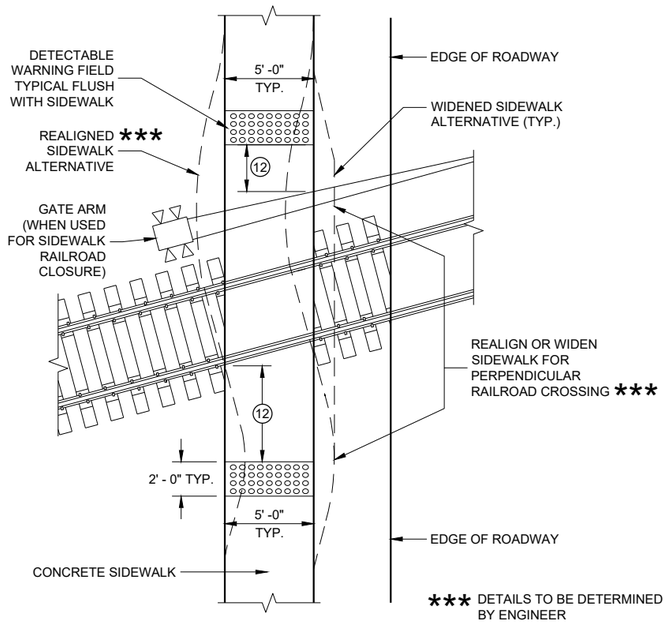
ISOMETRIC VIEW FOR TYPE 4B1

CURB RAMPS TYPE 4B AND 4B1

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

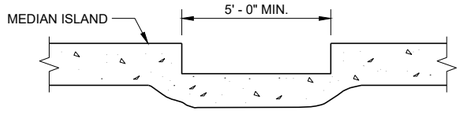
6

SDD 08D05 - 20d

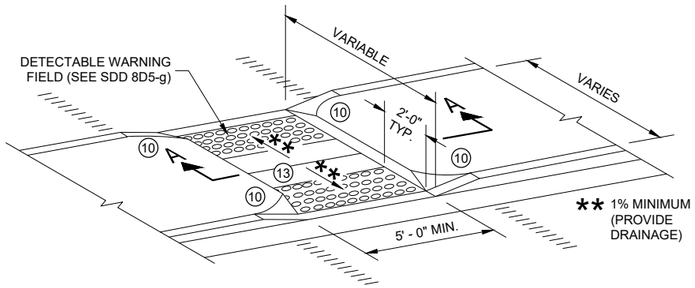


CURB RAMP TYPE 8

DETECTABLE WARNINGS AT RAILROAD CROSSING



SECTION A - A FOR TYPE 5



CURB RAMP TYPE 5

MEDIAN ISLAND NON-ELEVATED PEDESTRIAN CROSSING

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ½ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LEVEL LANDING SIZE IS 5 FEET BY 5 FEET.

(10) INSTALL TRANSITION NOSE (INCIDENTAL TO OTHER PAY ITEMS). DO NOT MARK TRANSITION NOSE.

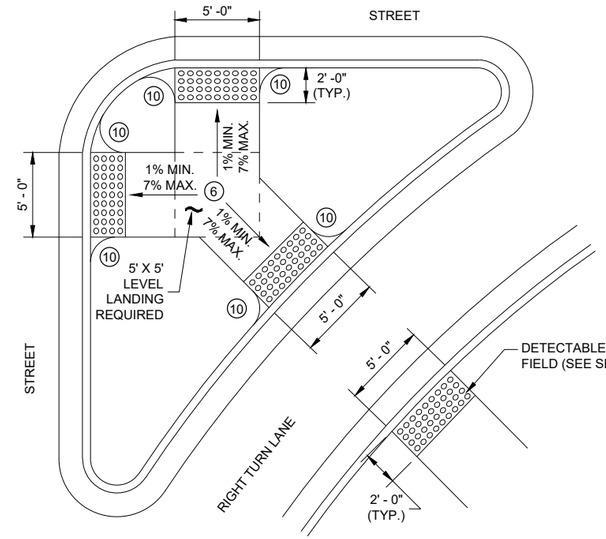
(11) SLOPE SIDEWALK TOWARD LANDING AS SHOWN WHERE THERE IS NO TERRACE OR WHERE THE TERRACE WIDTH IS LESS THAN 6 FEET WIDE.

(12) THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO A RAILROAD CROSSING SHALL BE 1.5 FEET ±0.1' FROM THE FACE OF THE GATE ARM IF THE GATE ARM EXTENDS ACROSS THE SIDEWALK. WHERE THERE IS NO PEDESTRIAN GATE, THE EDGE OF THE DETECTABLE WARNING FIELD NEAREST TO THE RAILROAD CROSSING SHALL BE 15 FEET FROM THE NEAREST RAIL.

(13) DO NOT INSTALL DETECTABLE WARNING FIELDS AT THE EDGES OF STEET-LEVEL PEDESTRIAN REFUGE ISLANDS IF A MINIMUM 2 FOOT CONCRETE SURFACE WITHOUT DETECTABLE WARNINGS (MEASURED IN THE DIRECTION OF PEDESTRIAN TRAVEL) CANNOT BE ACHIEVED.

LEGEND

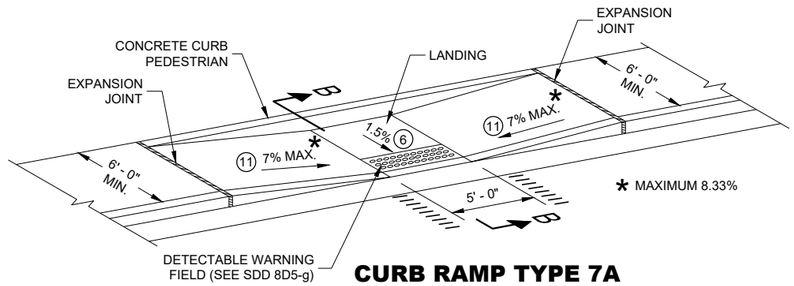
- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT FIELD LOCATED
- PAVEMENT MARKING CROSSWALK (WHITE)



CURB RAMP TYPE 6

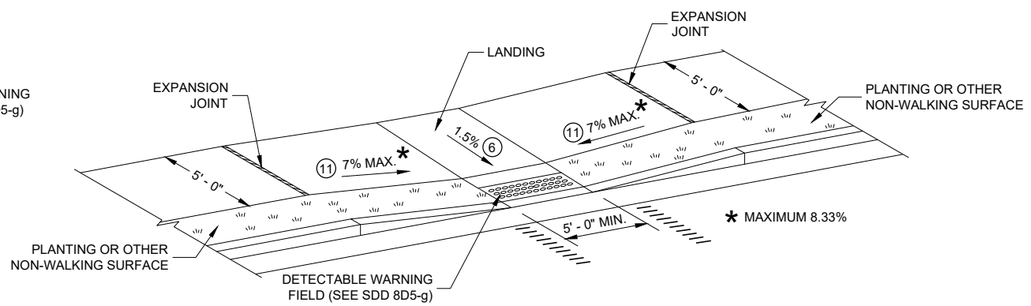
DETECTABLE WARNING AT ISLANDS

REFER TO GENERAL NOTES (2) AND (3) FOR ALL ISLAND CURB RAMPS



CURB RAMP TYPE 7A

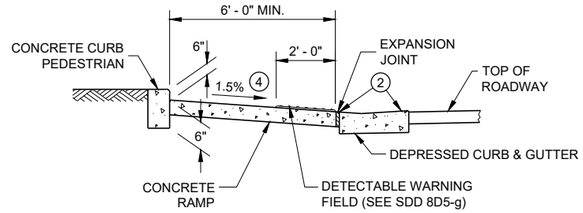
MID BLOCK CROSSING



CURB RAMP TYPE 7B

MID BLOCK CROSSING

NOTE: THESE PARALLEL AND PARALLEL/PERPENDICULAR CURB RAMPS MAY BE USED AT INTERSECTIONS AND MID BLOCK LOCATIONS.



SECTION B - B FOR TYPE 7A

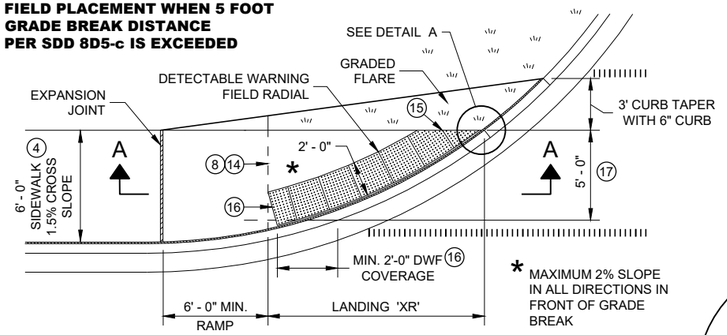
CURB RAMPS TYPE 5, 6, 7A, 7B & 8

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

SDD 08D05 - 20e

SDD 08D05 - 20e

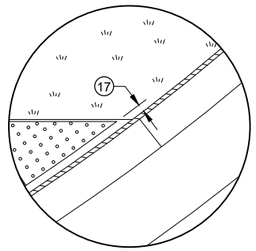
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-c IS EXCEEDED



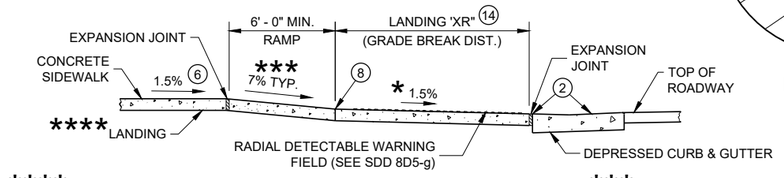
PLAN VIEW

CURB RAMP TYPE 4A1

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL A

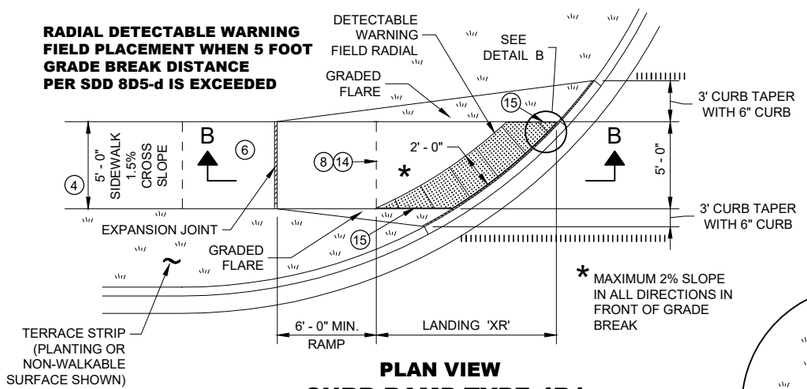


**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

SECTION A - A FOR TYPE 4A1

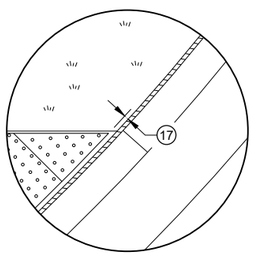
RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-d IS EXCEEDED



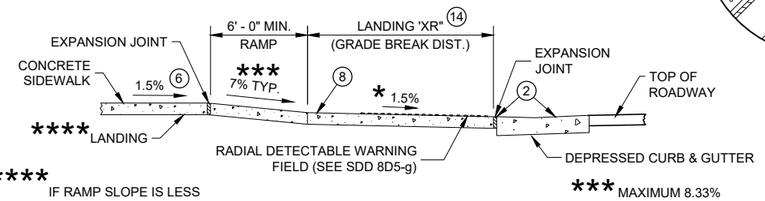
PLAN VIEW

CURB RAMP TYPE 4B1

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)



DETAIL B



**** IF RAMP SLOPE IS LESS THAN 5.0%, THEN NO ADJACENT UPHILL LANDING IS REQUIRED

*** MAXIMUM 8.33%

SECTION B - B FOR TYPE 4B1

LEGEND

- ½" EXPANSION JOINT SIDEWALK
- CONTRACTION JOINT SIDEWALK
- PAVEMENT MARKING CROSSWALK (WHITE)

GENERAL NOTES

AVOID PLACING DRAINAGE STRUCTURES, JUNCTION BOXES OR OTHER OBSTRUCTIONS IN FRONT OF RAMP ACCESS AREAS.

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.

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AS A GROUP OR SIDE BY SIDE, SHALL BE FROM THE SAME MANUFACTURER.

APPLY RADIAL DETECTABLE WARNING PLACEMENT SIMILARLY FOR TYPE 4A AND 4A1 CURB RAMPS AND SIMILARLY FOR TYPE 4B AND 4B1 CURB RAMPS. TYPE 4A AND 4B CURB RAMPS ARE NOT SHOWN.

REFER TO SDD 8D5-g FOR ADDITIONAL RADIAL PLATE REQUIREMENTS.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AD ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

(2) GRADE CHANGE BETWEEN GUTTER FLAG SLOPE AND THE CURB RAMP SLOPE SHALL NOT EXCEED 11%. MAXIMUM GUTTER FLAG SLOPE IS 4%. PROVIDE LONGITUDINAL DRAINAGE AROUND CURB AND AWAY FROM CURB RAMP. NO VERTICAL LIPS OR DISCONTINUITIES GREATER THAN ¼ - INCH ARE ALLOWED. SLOPE OF CURB HEAD OPENING SHALL MATCH THE RAMP SLOPE, MINIMALLY 1.5% AND NOT TO EXCEED 7%. WHEN ADJACENT TO 1.5% LANDING, CONSTRUCT CURB HEAD OPENING AT 1.5% IN THE DIRECTION OF PEDESTRIAN TRAVEL.

(3) AN 8.33% CURB RAMP SLOPE IS ALLOWABLE WITH FLATTENED GUTTER FLAG SLOPE AND NOT TO EXCEED 11% GRADE CHANGE.

(4) ±0.5% CONSTRUCTION TOLERANCE IN SIDEWALK CROSS SLOPE. THE SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2% WITHOUT PRIOR APPROVAL FROM THE ENGINEER.

(6) PROVIDE A LEVEL LANDING (MAXIMUM 2% SLOPE) IN ANY DIRECTION OF PEDESTRIAN TRAVEL. STANDARD LANDING SIZE IS 5 FEET BY 5 FEET.

(8) PROVIDE GRADE BREAK PERPENDICULAR TO DIRECTION OF WHEELCHAIR TRAVEL.

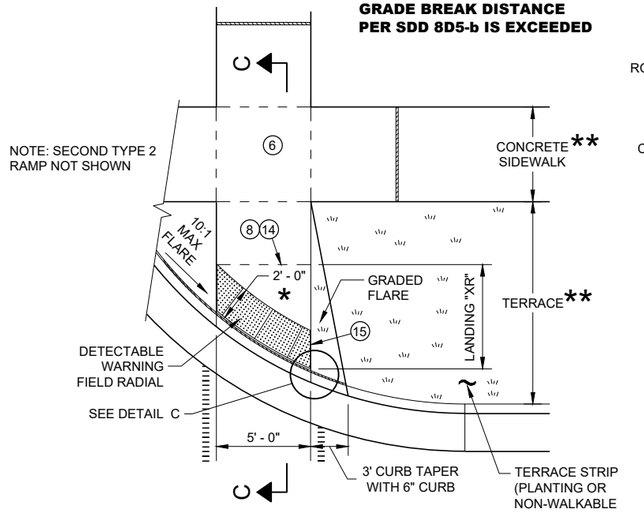
(14) CONSULT ENGINEER IF GRADE BREAK LOCATION (END OF LANDING DIMENSION "XR") REQUIRES FIELD ADJUSTMENT WHEN ESTABLISHING FINAL RADIAL DETECTABLE WARNING FIELD LOCATION.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.

(16) USE 1' X 2" RECTANGULAR END PLATE AT END OF TYPE 4A1 RAMP AND PROVIDE MINIMUM 2' - 0" DETECTABLE WARNING FIELD COVERAGE (IN DIRECTION OF PEDESTRIAN TRAVEL) ALONG THE ENTIRE CURB RAMP WIDTH.

(17) A MAXIMUM 3 INCH CONCRETE BORDER WITH IS ALLOWABLE IN FROM OF RADIAL DETECTABLE WARNING FIELD FOR CONSTRUCTABILITY PURPOSES. CONCRETE BORDER WIDTH MAY VARY UP TO 1 INCH.

RADIAL DETECTABLE WARNING FIELD PLACEMENT WHEN 5 FOOT GRADE BREAK DISTANCE PER SDD 8D5-b IS EXCEEDED

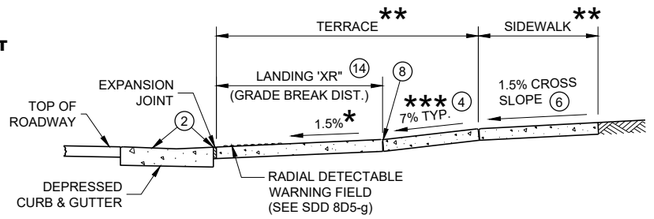


PLAN VIEW

CURB RAMP TYPE 2

(GRADE BREAK DISTANCE GREATER THAN 5 FEET)

(ON LINE WITH SIDEWALK)

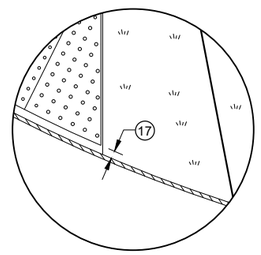


SECTION C - C FOR TYPE 2

* MAXIMUM 2% SLOPE IN ALL DIRECTIONS IN FRONT OF GRADE BREAK

** WIDTH SHOWN ELSEWHERE IN THE PLANS

*** MAXIMUM 8.33%



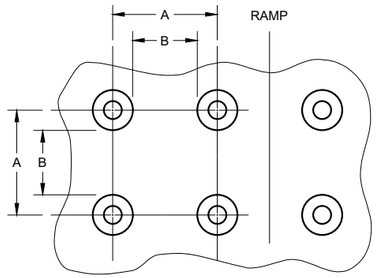
DETAIL C

CURB RAMPS RADIAL DETECTABLE WARNING FIELD APPLICATIONS

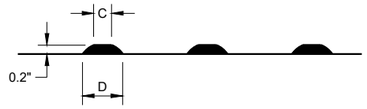
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

	MIN.	MAX.
A	1.6"	2.4"
B	0.65"	1.5"
C	*	*
D	0.9"	1.4"

* THE C DIMENSION IS 50% TO 65% OF THE D DIMENSION.

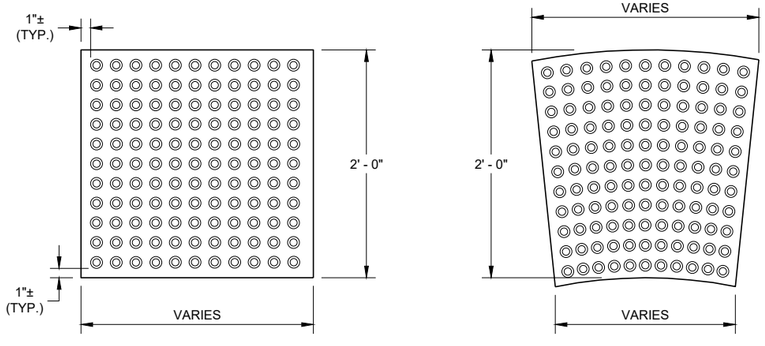


PLAN VIEW



ELEVATION VIEW

TRUNCATED DOMES
DETECTABLE WARNING PATTERN DETAIL



RECTANGULAR PLATES

RADIAL PLATES

PLAN VIEW
DETECTABLE WARNING FIELDS (TYPICAL)

GENERAL NOTES

DETECTABLE WARNING FIELDS THAT ARE INSTALLED AT A CURB RAMP SHALL BE FROM THE SAME MANUFACTURER.

PLACE ALL DETECTABLE WARNING FIELD SYSTEMS IN ACCORDANCE TO THE MANUFACTURER'S RECOMMENDATION.

FIELD CUTS AT INTERMEDIATE JOINTS WITHIN THE RADIAL DETECTABLE WARNING FILED ARE PROHIBITED.

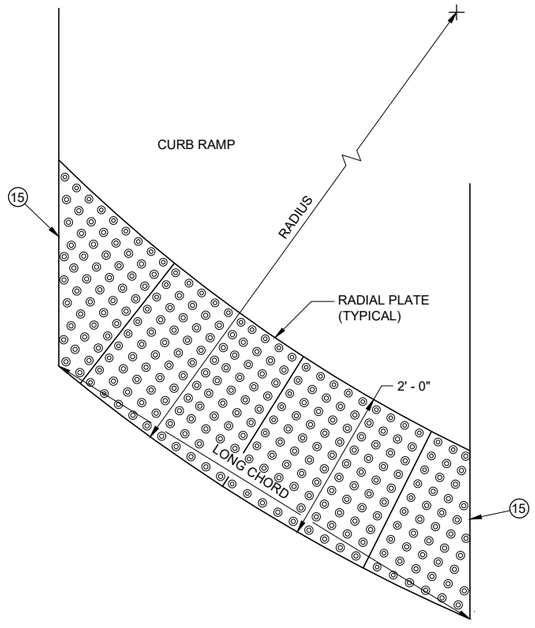
DETERMINE FINAL RADIAL WARNING FIELD CONFIGURATION AND ITS INDIVIDUAL PLATE LOCATIONS. PERFORM PRE-LAYOUT PRIOR TO PLACEMENT IN PLASTIC CONCRETE. FOLLOW MANUFACTURER'S PRODUCT LIST AND INSTALLATION RECOMMENDATIONS.

FOR RADIAL DETECTABLE WARNING FIELD APPLICATIONS WHERE STANDARD RADIAL PLATES ARE NOT AVAILABLE AT AN INTERSECTION CURB RADIUS, A COMBINATION OF SQUARE OR RECTANGULAR PLATES AND RADIAL PLATES MAY BE USED TO FORM RADIAL CONFIGURATION. RADIAL WEDGE PLATES IN COMBINATION WITH SQUARE PLATES ARE ALSO ACCEPTABLE. FOLLOW MANUFACTURER'S RECOMMENDATIONS.

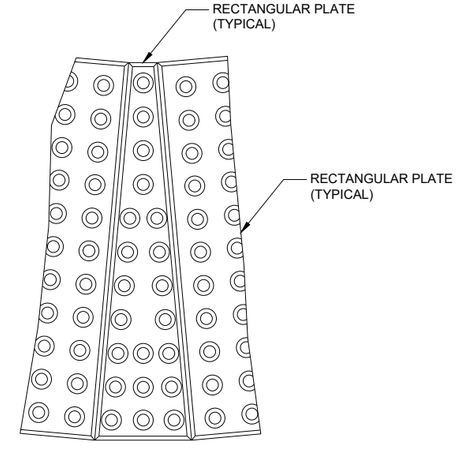
REFER TO CONTRACT AND STANDARD SPECIFICATIONS FOR FIELD CUTTING REQUIREMENTS.

DO NOT EMBED IN CONCRETE ANY FIELD-CUT PLATES WITH CUT EDGES SHORTER THAN 6 INCHES. CONSULT WITH MANUFACTURER FOR RE-DRILLING AND ANCHORING REQUIREMENTS OF FIELD-CUT PLATES.

(15) FIELD SAW CUTS ALONG RADIAL DETECTABLE WARNING PLATES WILL BE NECESSARY TO MATCH EACH CURB RAMP EDGE. AVOID CUTTING THROUGH DOMES WHENEVER POSSIBLE. MAKE FIELD CUTS TRUE TO LINE AND WITHIN ⅛" DEVIATION. SMOOTH EDGES OF FIELD CUT PLATES.



PLAN VIEW
RADIAL DETECTABLE WARNING FIELD ATTRIBUTES



PLAN VIEW
RADIAL WEDGE PLATE CONNECTION DETAIL

CURB RAMPS
RECTANGULAR AND RADIAL
DETECTABLE WARNING PLATES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE

/S/ Rodney Taylor
ROADWAY STANDARDS DEVE
UNIT SUPERVISOR

FHWA

6

SDD 08D05 - 20g

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) UNPERFORATED PIPE UNDERDRAIN AND FITTINGS FURNISHED FOR OUTFALL PIPE SHALL MEET THE REQUIREMENTS OF ONE OF THE FOLLOWING SPECIFICATIONS:

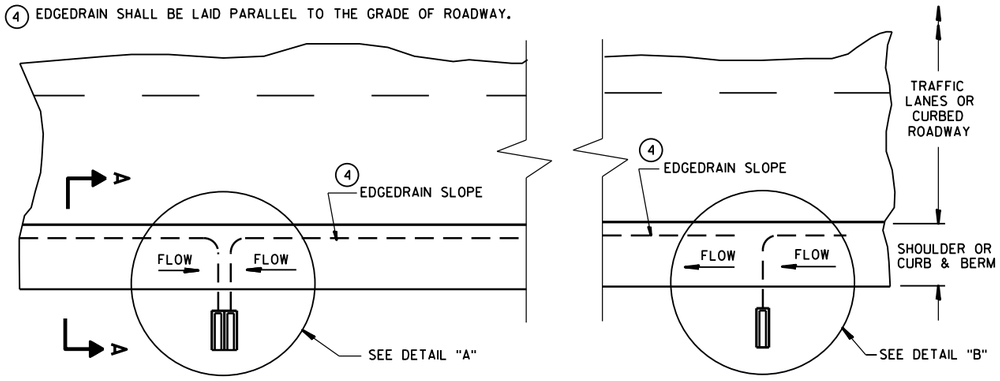
POLYVINYL CHLORIDE (PVC) PLASTIC DRAIN, WASTE, AND VENT PIPE AND FITTINGS, ASTM D 2665, SCHEDULE 40 PVC.

TYPE PSM POLYVINYL CHLORIDE (PVC) SEWER PIPE AND FITTINGS, ASTM D 3034, SDR 23.5 PVC SEWER PIPE.

(2) MAXIMUM SPACING OF EDGEDRAIN OUTLETS SHALL BE 250 FEET UNLESS OTHERWISE SPECIFIED IN THE CONTRACT OR DIRECTED BY THE ENGINEER.

(3) EDGEDRAIN SHALL BE CONNECTED TO INLETS REGARDLESS OF FLOW DIRECTION FOR DRAINAGE AND MAINTENANCE ACCESS.

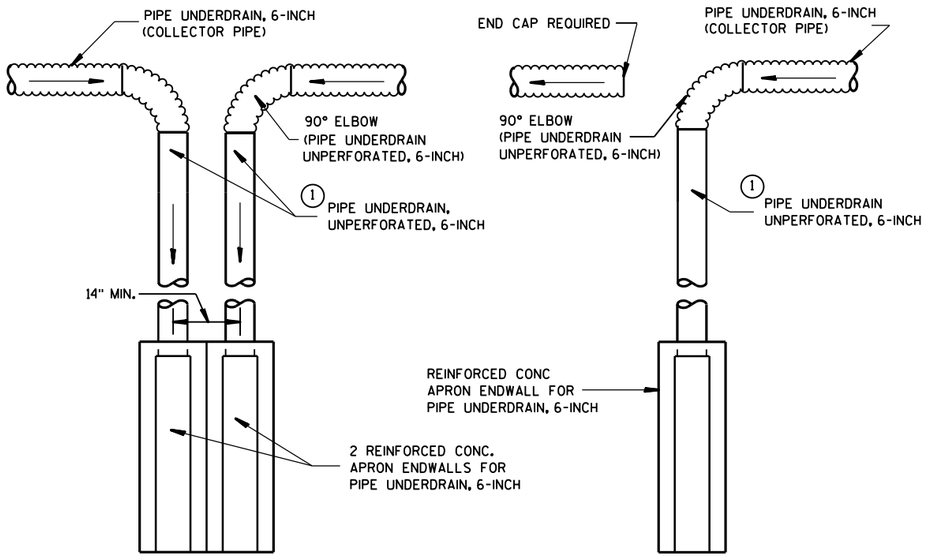
(4) EDGEDRAIN SHALL BE LAID PARALLEL TO THE GRADE OF ROADWAY.



PLAN VIEW

ROADWAY WITH SHOULDERS OR CURBS

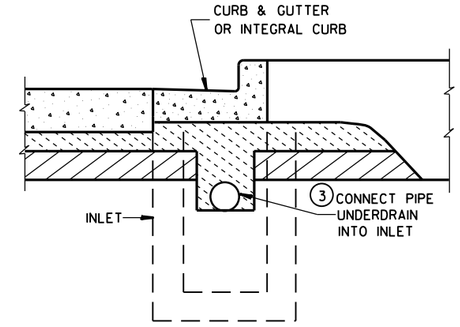
(EDGEDRAIN OUTLETS TO ROADSIDE)(2)



DETAIL "A"
TO BE USED AT LOW POINT LOCATIONS

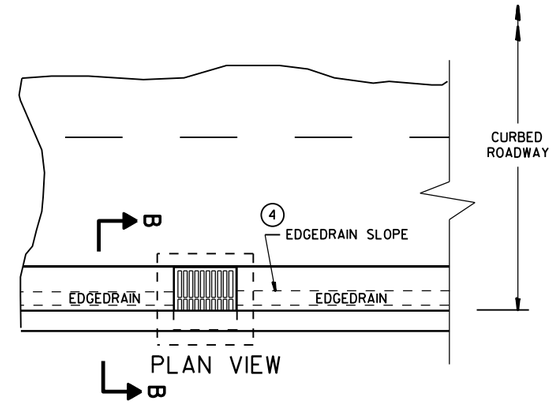
DETAIL "B"
TO BE USED AT INTERMEDIATE LOCATIONS

TYPICAL DRAIN OUT DETAILS



SECTION B-B

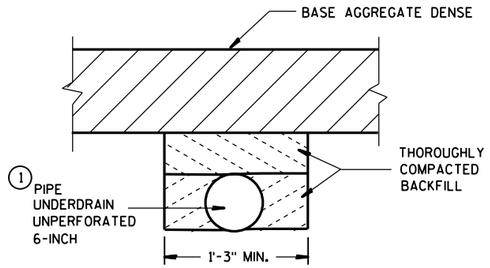
URBAN CROSS SECTION



PLAN VIEW

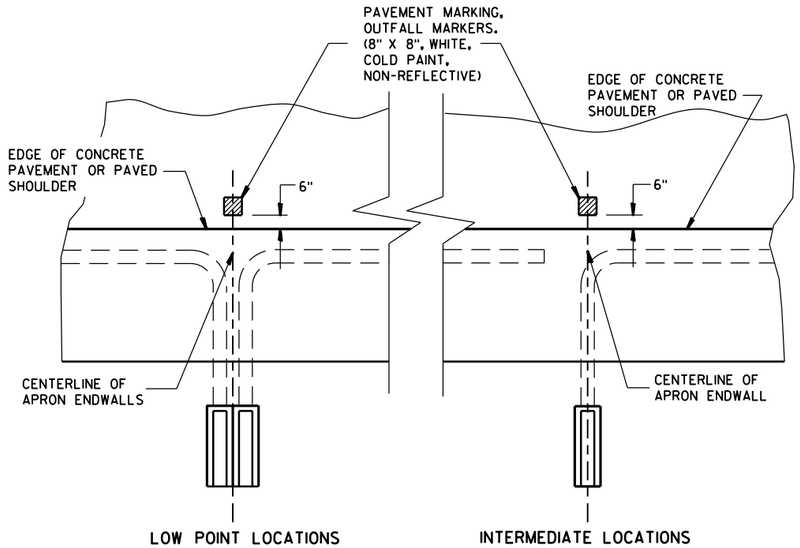
ROADWAY WITH CURBS

(EDGEDRAIN CONNECTS INTO INLET STRUCTURE)



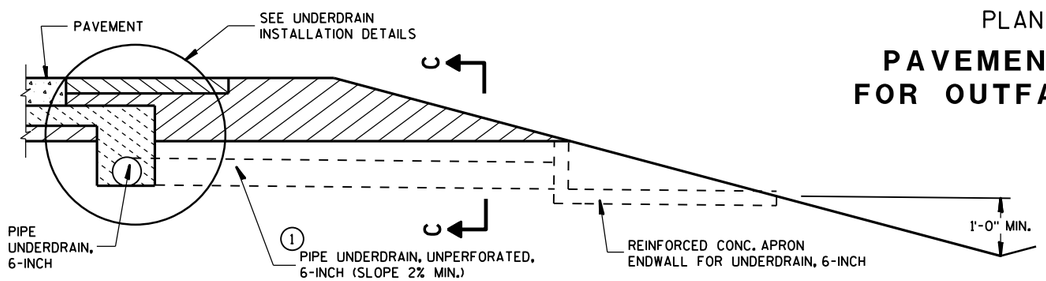
SECTION C-C

(TRENCH FOR OUTFALL PIPE)



PLAN VIEW

PAVEMENT MARKING FOR OUTFALL MARKERS



SECTION A-A

RURAL CROSS SECTION

EDGEDRAIN OUTLET AND OUTFALL MARKERS

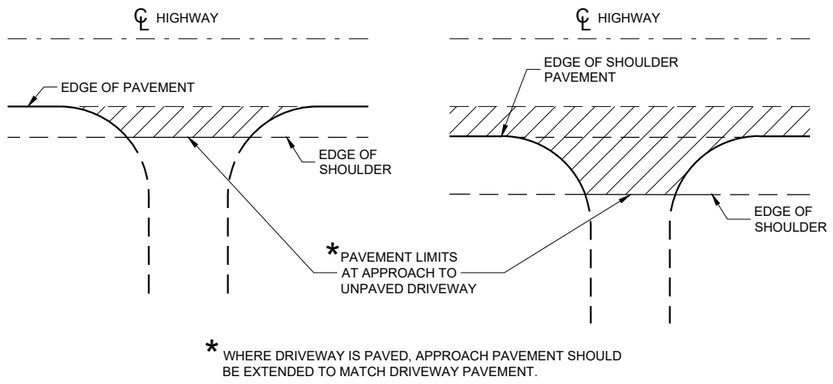
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOR

6

S.D.D. 8 D 15-5a

6

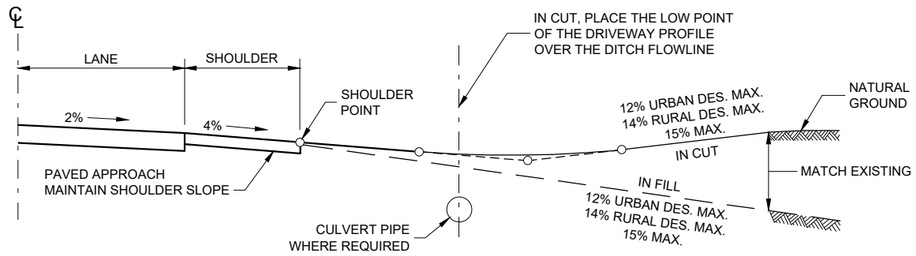
S.D.D. 8 D 15-5a



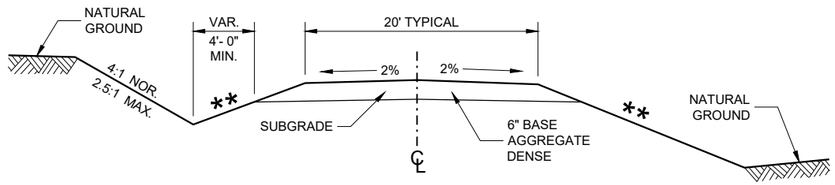
PLAN VIEW
(UNPAVED SHOULDER ON HIGHWAY)

PLAN VIEW
(PAVED SHOULDER ON HIGHWAY)

RURAL DRIVEWAY INTERSECTION DETAIL
(NO CURB AND GUTTER OR SIDEWALK)



TYPICAL DRIVEWAY PROFILES

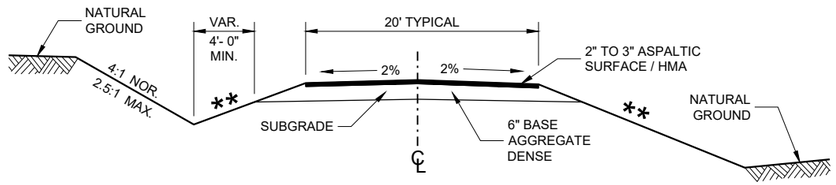


IN CUT **IN FILL**

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE AGGREGATE SURFACE

** SLOPE CAN VARY WITH SPEED. SEE 11-45-30.6.2

POSTED SPEED MPH	MAX. SLOPE
<35	4:1
≥ 35 TO < 60	6:1
≥60	10:1



IN CUT **IN FILL**

TYPICAL CROSS SECTION FOR PRIVATE DRIVE OR FIELD ENTRANCE ASPHALTIC SURFACE

DRIVEWAYS WITHOUT CURB AND GUTTER

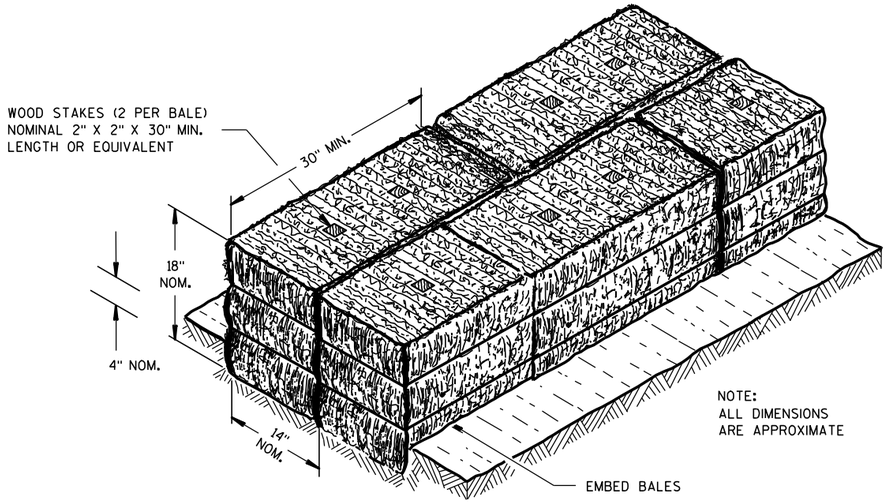
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
December 2017 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE UNIT SUPERVISOR

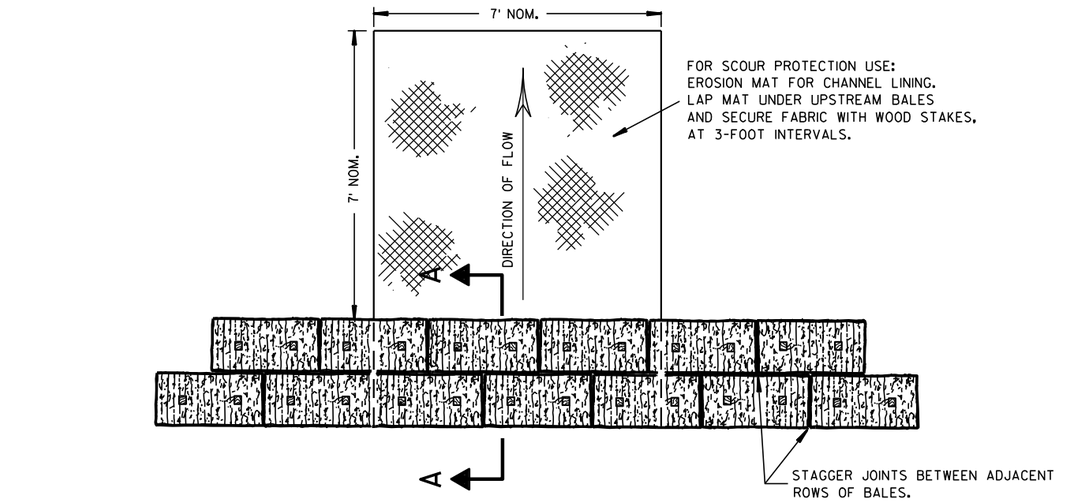
FHWA

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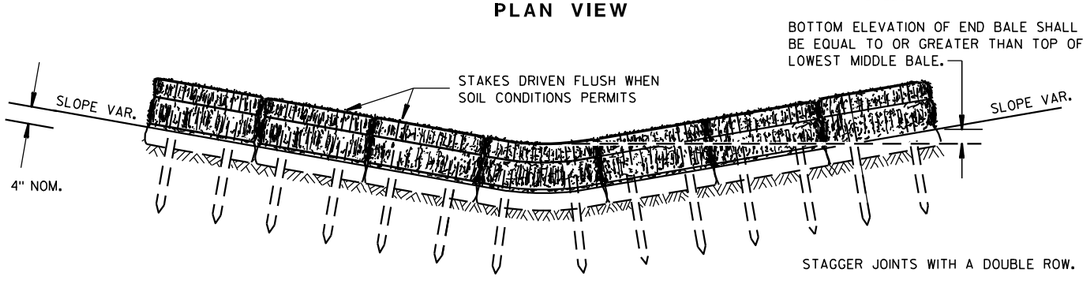
SDD 08D21 - 01



SECTION A-A



PLAN VIEW



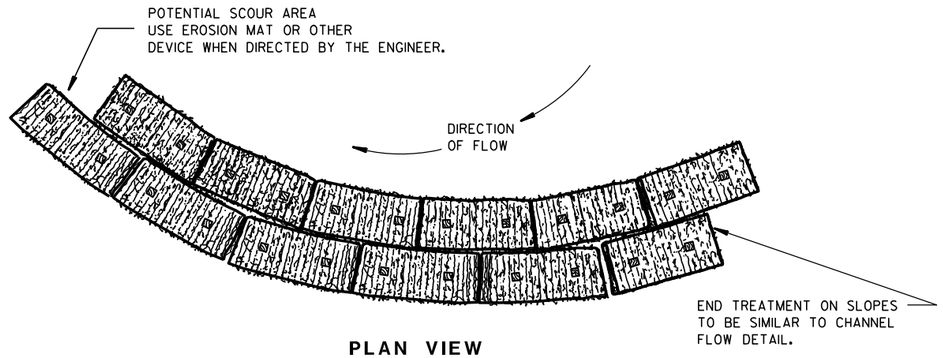
FRONT ELEVATION

TEMPORARY DITCH CHECK USING EROSION BALES ①

GENERAL NOTES

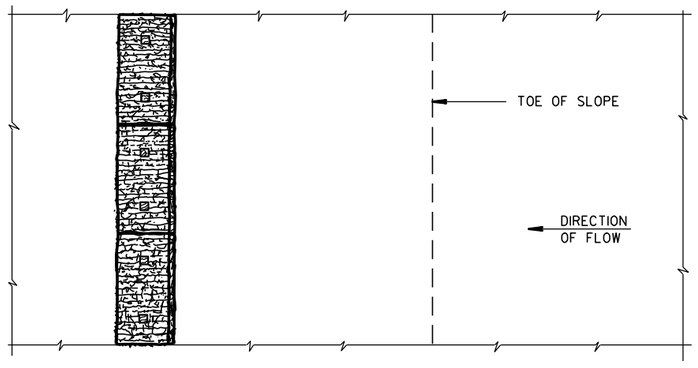
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.

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.

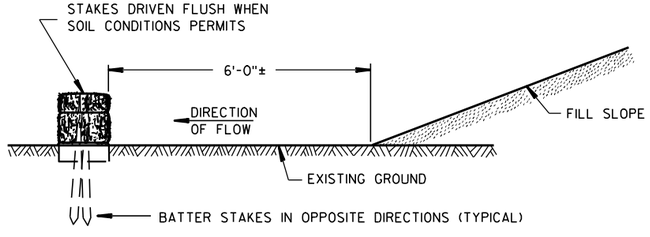


PLAN VIEW

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

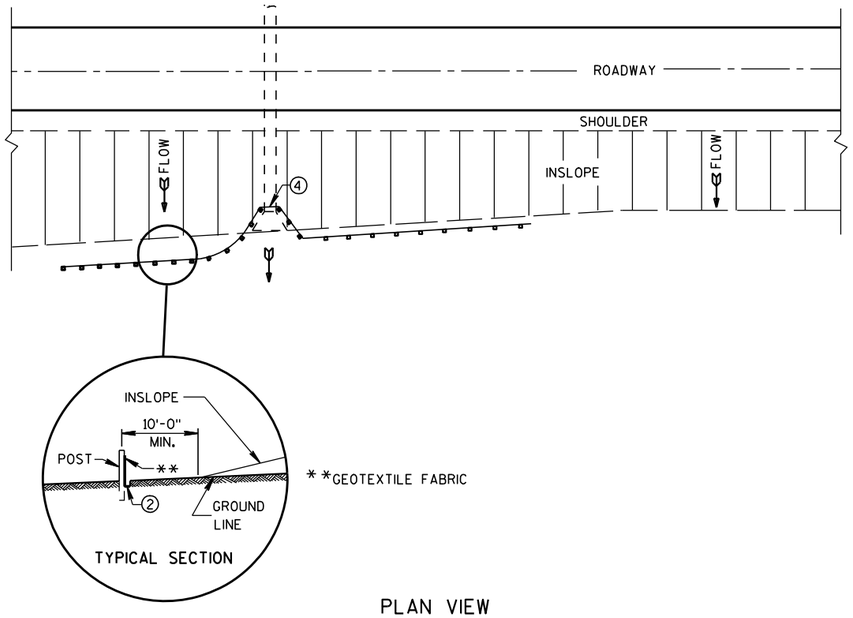
APPROVED
6/04/02 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6

S.D.D. 8 E 8-3

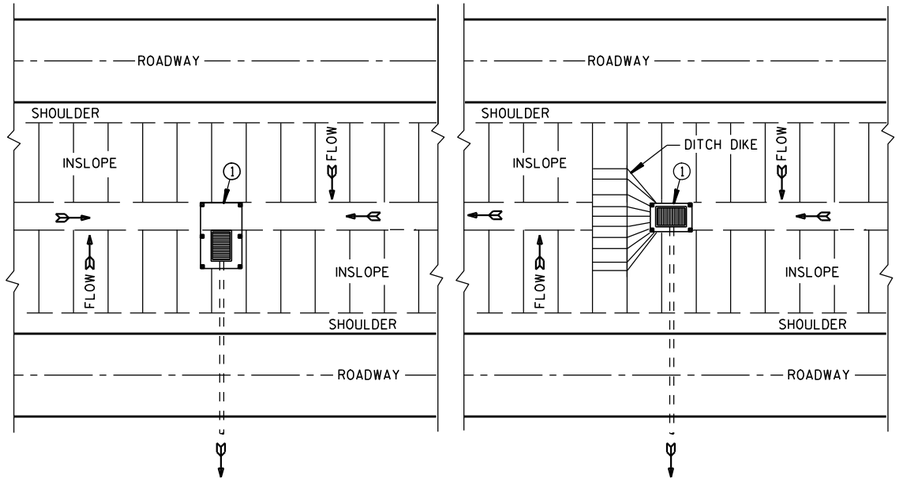
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S.D.D. 8 E 8-3



PLAN VIEW

TYPICAL APPLICATION OF SILT FENCE



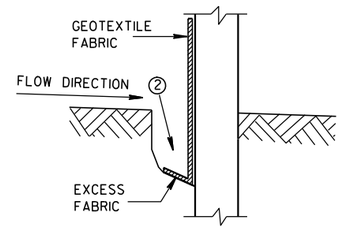
PLAN VIEW

SILT FENCE AT MEDIAN SURFACE DRAINS

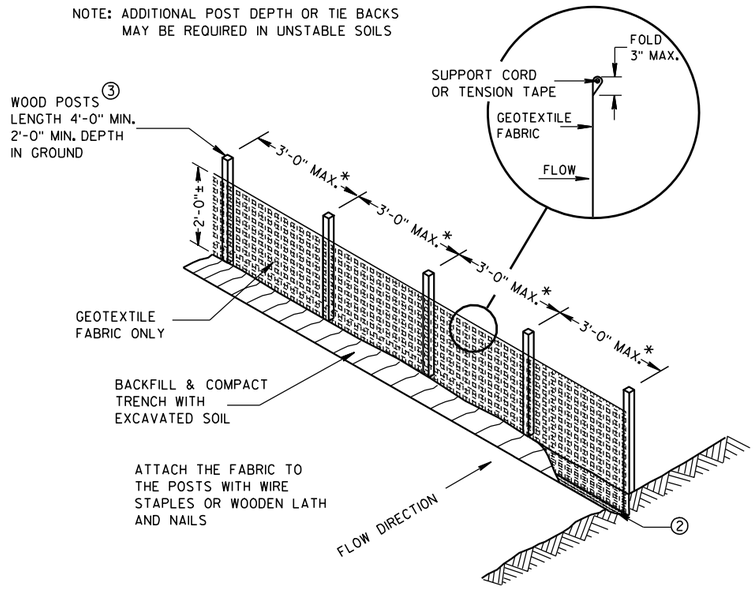
GENERAL NOTES

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

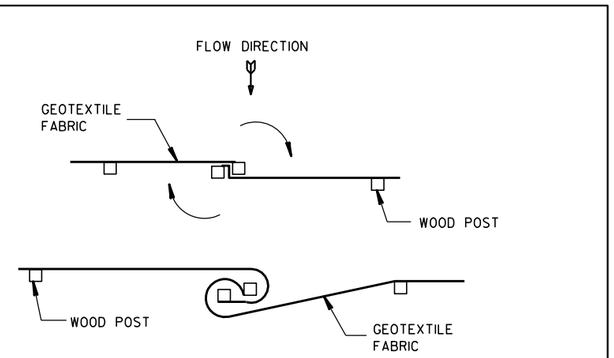
1. HORIZONTAL BRACE REQUIRED WITH 2" X 4" WOODEN FRAME OR EQUIVALENT AT TOP OF POSTS.
2. FOR MANUAL INSTALLATIONS THE TRENCH SHALL BE A MINIMUM OF 4" WIDE & 6" DEEP TO BURY AND ANCHOR THE GEOTEXTILE FABRIC. FOLD MATERIAL TO FIT TRENCH AND BACKFILL & COMPACT TRENCH WITH EXCAVATED SOIL.
3. WOOD POSTS SHALL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



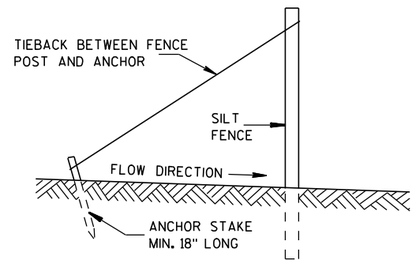
TRENCH DETAIL



SILT FENCE



JOINING TWO LENGTHS OF SILT FENCE 5



SILT FENCE TIE BACK

(WHEN REQUIRED BY THE ENGINEER)

SILT FENCE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

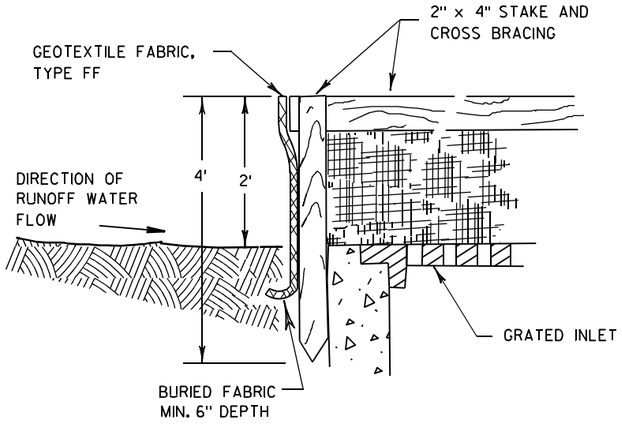
APPROVED
4-29-05 DATE
/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

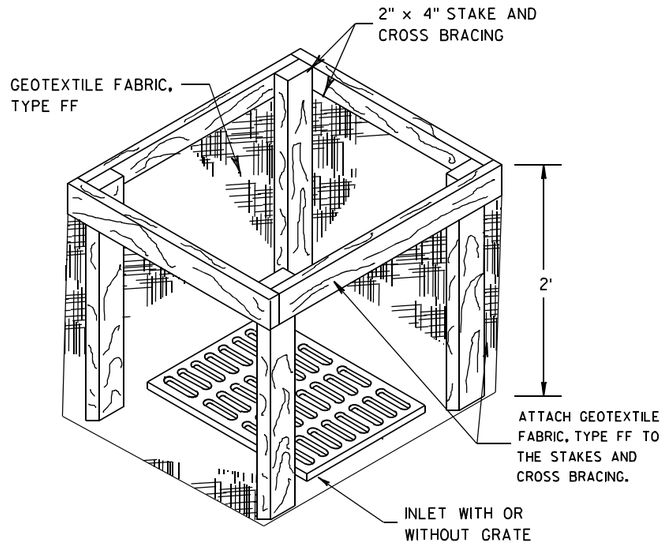
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S.D.D. 8 E 9-6

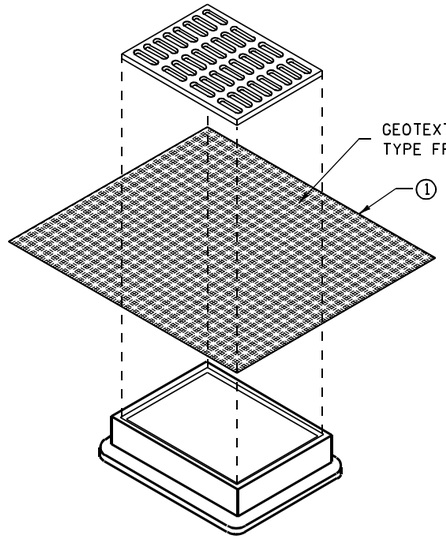
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S.D.D. 8 E 9-6



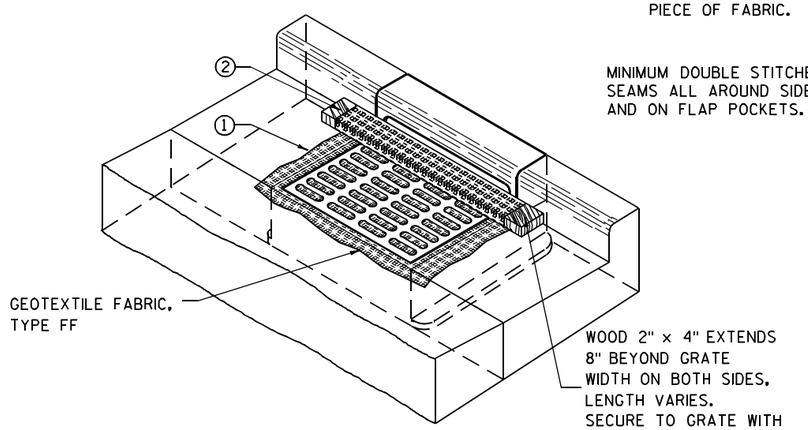


INLET PROTECTION, TYPE A

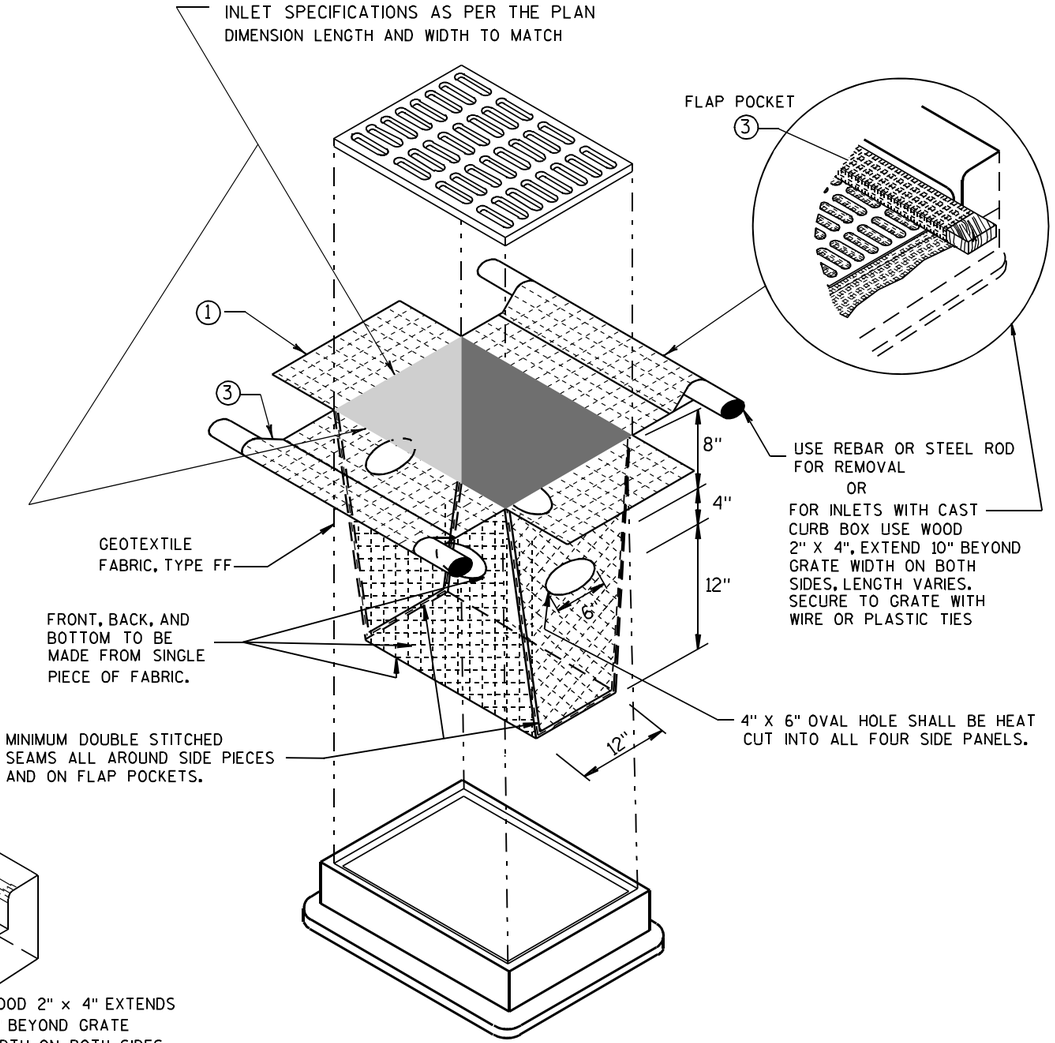


INLET PROTECTION, TYPE B
(WITHOUT CURB BOX)

(CAN BE INSTALLED IN ANY INLET WITHOUT A CURB BOX)



INLET PROTECTION, TYPE C (WITH CURB BOX)



INLET PROTECTION, TYPE D

(CAN BE INSTALLED IN ANY INLET TYPE WITH
OR WITHOUT A CURB BOX AS PER NOTE ②)

GENERAL NOTES

INLET PROTECTION DEVICES SHALL BE MAINTAINED OR REPLACED AT THE DIRECTION OF THE ENGINEER.

MANUFACTURED ALTERNATIVES APPROVED AND LISTED ON THE DEPARTMENT'S EROSION CONTROL PRODUCT ACCEPTABILITY LIST MAY BE SUBSTITUTED.

WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.

① FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.

② FOR INLET PROTECTION, TYPE C (WITH CURB BOX), AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.

③ FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2X4.

INSTALLATION NOTES

TYPE B & C

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

TYPE D

DO NOT INSTALL INLET PROTECTION TYPE D IN INLETS SHALLOWER THAN 30", MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE.

TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.

THE INSTALLED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE, BETWEEN THE INLET WALLS AND THE BAG, MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES, OF 3". WHERE NECESSARY THE CONTRACTOR SHALL CINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" CLEARANCE. THE TIES SHALL BE PLACED AT A MAXIMUM OF 4" FROM THE BOTTOM OF THE BAG.

INLET PROTECTION
TYPE A, B, C, AND D

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

10/16/02
DATE

/S/ Beth Cannestra
CHIEF ROADWAY DEVELOPMENT ENGINEER

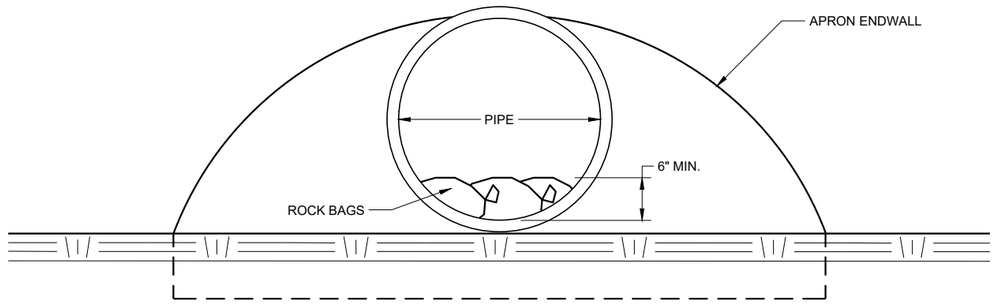
FHWA

6

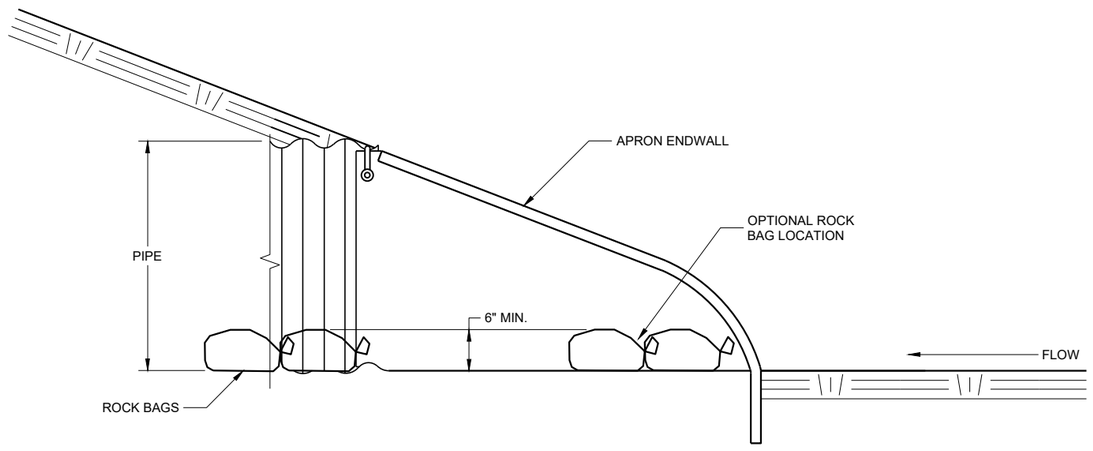
S.D.D. 8 E 10-2

6

S.D.D. 8 E 10-2



END VIEW



SIDE VIEW

CULVERT PIPE CHECK

(INSTALL ON INLET END ONLY)

CULVERT PIPE CHECK

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Daniel Schave
EROSION CONTROL ENGI

FHWA

6

SDD 08E15 - 01

6

SDD 08E15 - 01

METAL APRON ENDWALLS

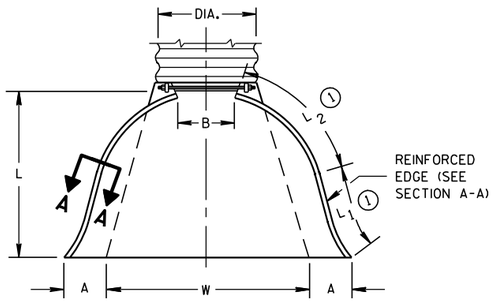
PIPE DIA. (IN.)	MIN. THICK. (Inches) STEEL	MIN. THICK. (Inches) ALUM.	DIMENSIONS (Inches) A (±1")	B (MAX.)	H (±1")	L (±1 1/2")	L1 ①	L2 ①	W (±2")	APPROX. SLOPE	BODY
12	.064	.060	6	6	6	21	12	17 1/2	24	2 1/2 to 1	1 Pc.
15	.064	.060	7	8	6	26	14	21 3/4	30	2 1/2 to 1	1 Pc.
18	.064	.060	8	10	6	31	15	28 1/4	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

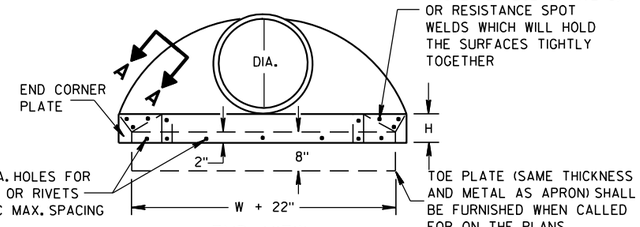
REINFORCED CONCRETE APRON ENDWALLS

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

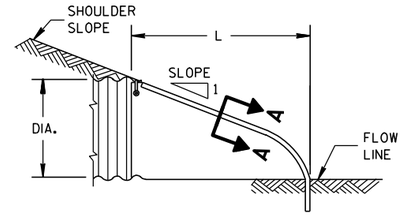
*MINIMUM
**MAXIMUM



PLAN VIEW

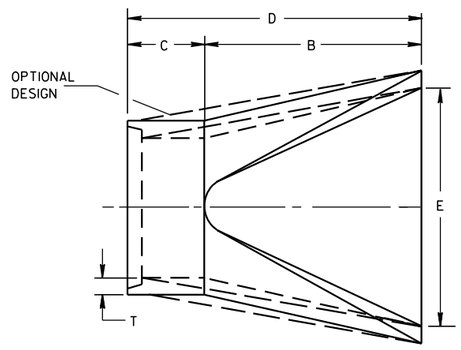


END VIEW

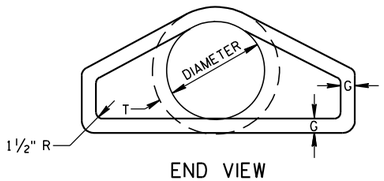


SIDE ELEVATION

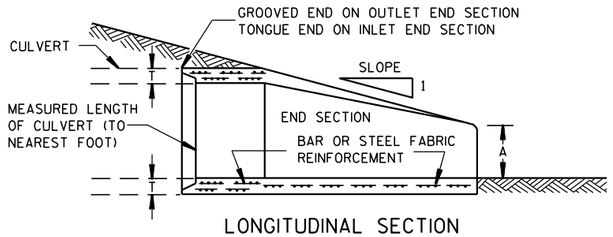
METAL ENDWALLS



PLAN

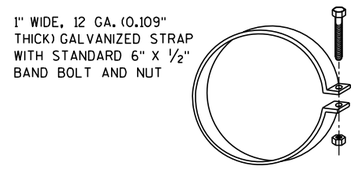


END VIEW



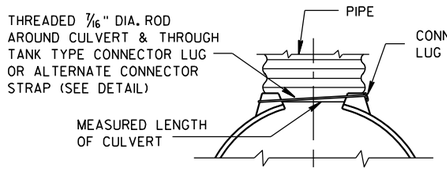
LONGITUDINAL SECTION

CONCRETE ENDWALLS

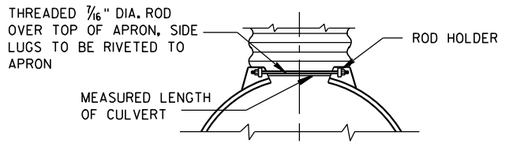


ALTERNATE FOR TYPE 1 CONNECTION

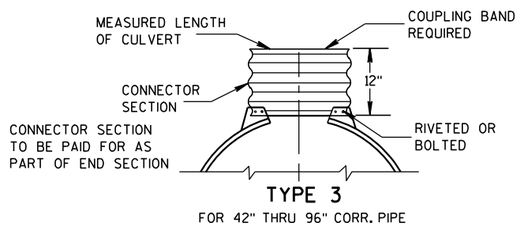
END SECTION CONNECTOR STRAP



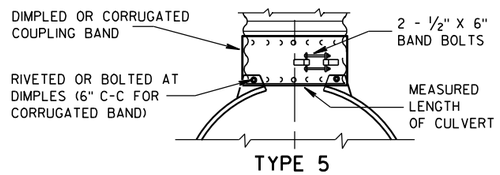
TYPE 1
FOR 12" THRU 24" CORR. PIPE



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

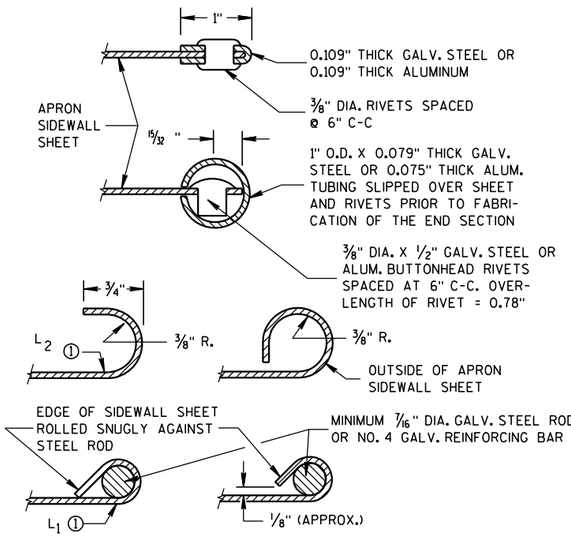
NOTE: DIMPLED BAND FITS OVER OUTSIDE OF ENDWALL. AND CORRUGATED BAND FITS INSIDE ENDWALL. DIMPLED BAND MAY BE USED WITH HELICALLY CORRUGATED PIPE.

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.

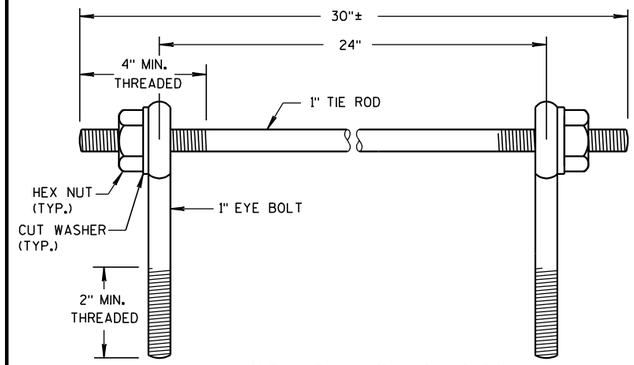
① FOR PIPE SIZES UP TO 60" DIAMETER, A 180° ROLLED EDGE MAY BE USED INSTEAD OF STEEL ROD REINFORCEMENT. SEE SECTION A-A.

APRON ENDWALLS FOR CULVERT PIPE

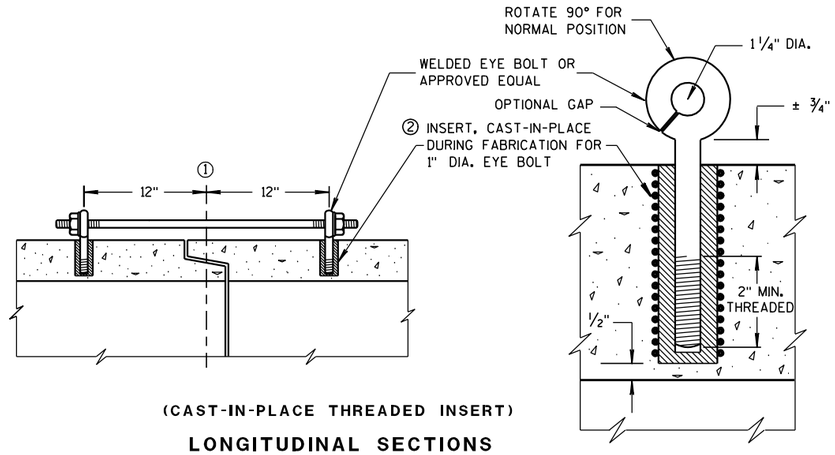
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
11/30/94 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 8 F 1-11



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.

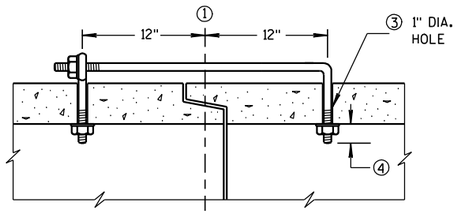
② THE INSIDE OF THE THREADED INSERTS SHALL BE CLEAN TO ALLOW THE INSERTION OF THREADED EYE BOLTS.

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

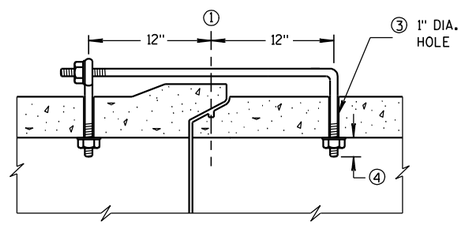
④ BOLT PROJECTION INSIDE OF PIPE SHALL NOT EXCEED 2 INCHES.

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)

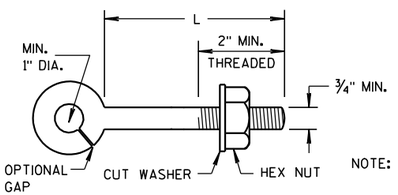


(MODIFIED BELL PIPE)

LONGITUDINAL SECTION

EYE BOLT DIMENSION TABLE

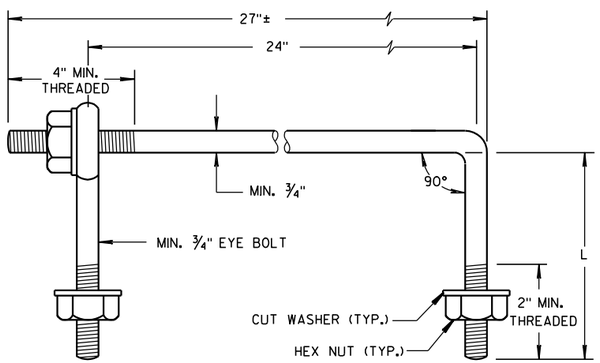
PIPE SIZE	L = LENGTH	
	TONGUE & GROOVE PIPE	MODIFIED BELL PIPE
18" TO 24"	4 1/2"	6 1/4"
30"	5"	7"
36"	5 1/2"	7"
42"	6"	
48"	6 1/2"	
60"	7 1/2"	
66"	8"	



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

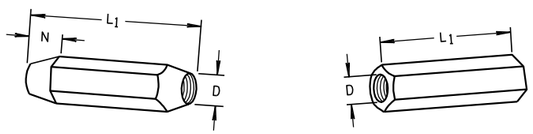
(JOINT TIES FOR 18" TO 66" DIA. CONCRETE PIPE)

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

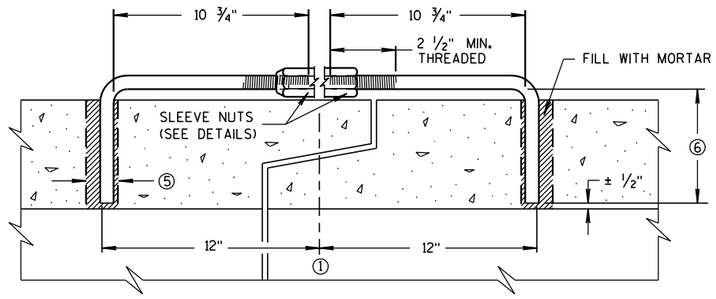
DIMENSIONS SHOWN ARE IN INCHES



TAPERED PLAIN

RIGHT AND LEFT THREADS

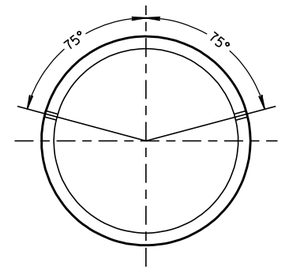
SLEEVE NUTS



LONGITUDINAL SECTION

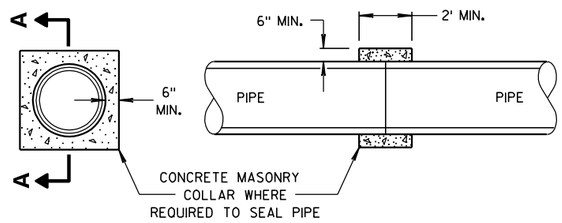
(JOINT TIES FOR 12" TO 108" DIA. CONCRETE PIPE)

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

6

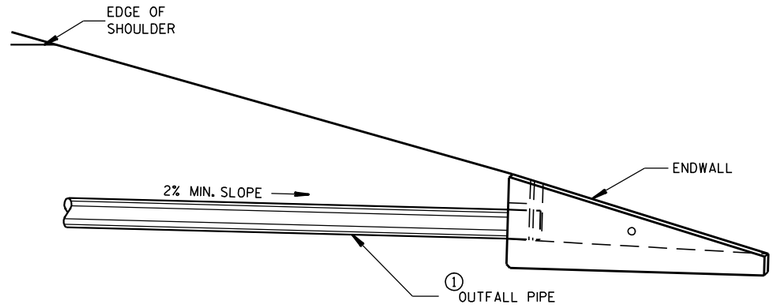
S.D.D. 8 F 4-7

6

S.D.D. 8 F 4-7

DIMENSIONS IN INCHES											
PIPE DIA.	A	B	C	D	E	F	G	H	J	L	Z
**4	6	12	5 1/4	9	8	32	36	11	2 3/8	6 1/2	4
6	8	14	7 1/4	11	10	42	44	13	3 5/8	8 1/2	6

**APRON ENDWALL FOR 6 INCH DIAMETER PIPE MAY BE SUBSTITUTED FOR THIS SIZE PROVIDED THE HOLE IN THE HEADWALL IS SIZED AND LOCATED TO CONFORM TO THE 4 INCH DIAMETER PIPE DIMENSIONS (C & J)



INSTALLATION DETAIL

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.

ALTERNATIVE DESIGNS WHICH PROVIDE EQUIVALENT CAPACITY AND STRENGTH MAY BE USED WHEN APPROVED BY THE ENGINEER. ENDWALL MAY BE EITHER PRECAST OR CAST-IN-PLACE CONCRETE.

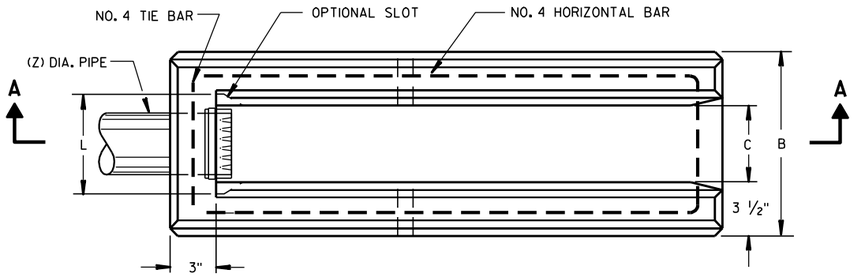
THE UNDERDRAIN PIPE SHALL BE FULLY INSERTED AND SEALED INTO THE ENDWALL WITH CEMENT MORTAR PRIOR TO BACKFILLING AROUND THE STRUCTURE.

THE UPPERMOST POINT OF THE ENDWALL SHALL BE PLACED FLUSH WITH THE ROADWAY SLOPE. ADJACENT EMBANKMENT SLOPES SHALL BE SHAPED TO FIT THE SIDES AND TOE OF THE ENDWALL. EXACT PLACEMENT OF THE OUTFALL PIPE AND ENDWALL SHALL BE DETERMINED BY THE ENGINEER TO MATCH THE ELEVATIONS AND FLOW DIRECTION OF THE ROADSIDE DITCH.

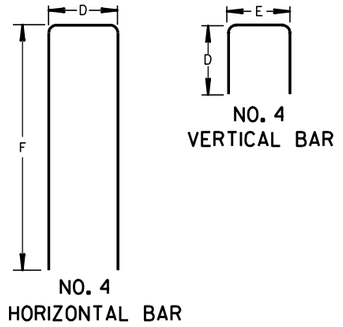
① THE OUTFALL PIPE UNDERDRAIN AND FITTINGS SHALL CONFORM TO THE REQUIREMENTS OF THE SPECIFICATION FOR POLY (VINYL CHORIDE) (PVC) PLASTIC DRAIN, WASTE AND VENT PIPE AND FITTINGS, ASTM DESIGNATION: D 2665, SCHEDULE 40 PVC OR THE STANDARD SPECIFICATION FOR TYPE PSM POLY (VINYL CHORIDE) (PVC) SEWER PIPE AND FITTINGS, ASTM DESIGNATION: D 3034, TYPE PSM SDR 23.5 PVC SEWER PIPE, ALL JOINTS SHALL BE SOLVENT WELDED.

THE OUTFALL PIPE INCLUDING ALL FITTINGS AND THE RODENT SHIELD SHALL BE MEASURED AND PAID FOR AS PIPE UNDERDRAIN UNPERFORATED.

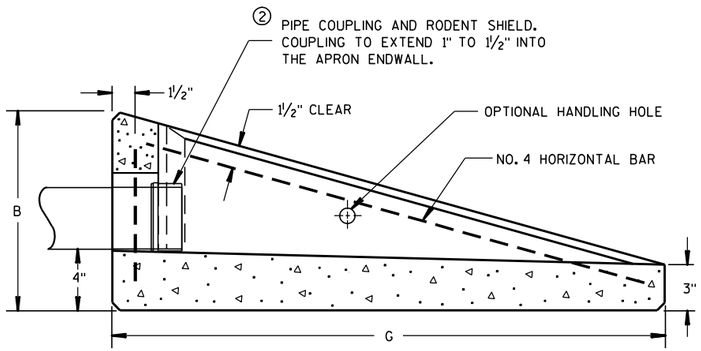
② THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE OUTFALL PIPE. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.



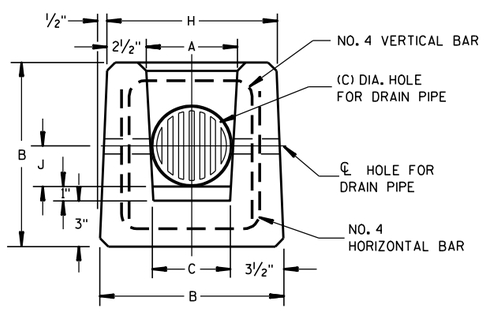
PLAN VIEW



BAR STEEL REINFORCEMENT DETAILS

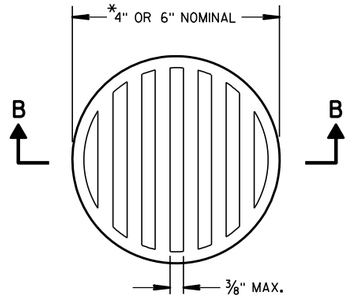


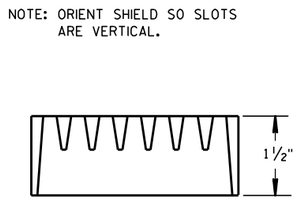
SECTION A-A



END VIEW

CONCRETE APRON ENDWALL FOR UNDERDRAIN





SECTION B-B

② RODENT SHIELD

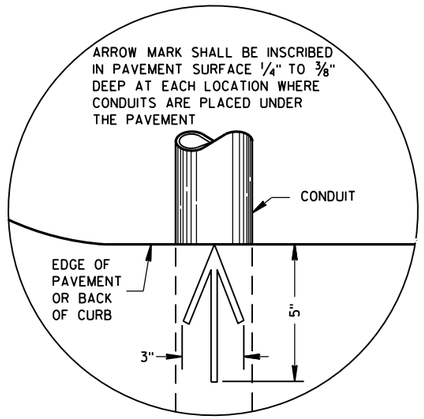
*NOTE: DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING.

REINFORCED CONCRETE APRON ENDWALL FOR PIPE UNDERDRAIN

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

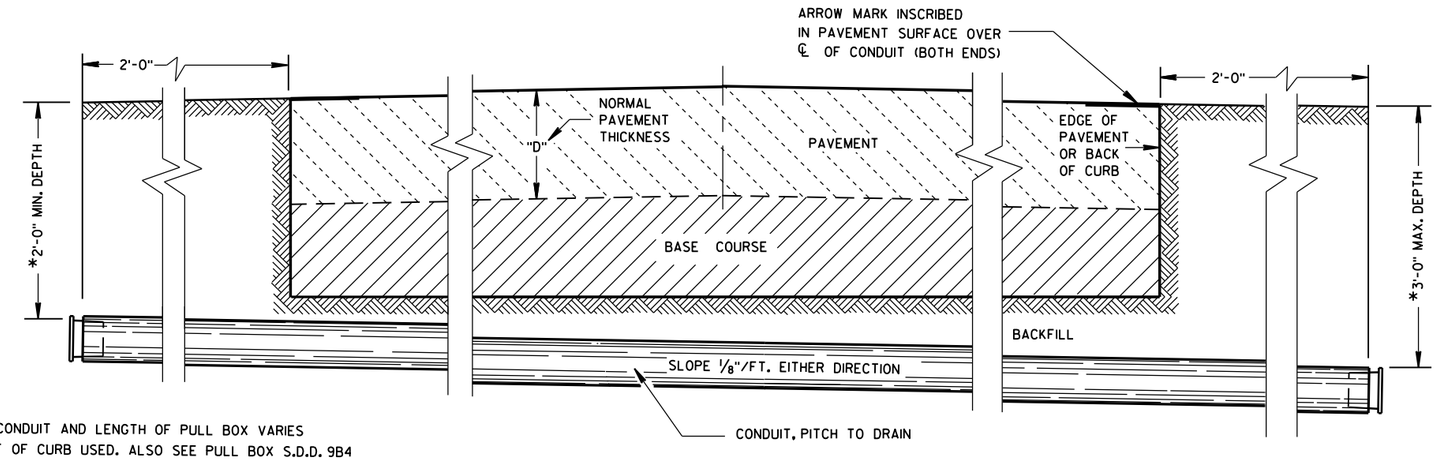
APPROVED
3/10/98 DATE
/S/ Rory L. Rhinesmith
CHIEF ROADWAY DEVELOPMENT ENGINEER
FHWA

6
S.D.D. 8 F 6-4



PLAN VIEW

ARROW MARK



*DEPTH OF CONDUIT AND LENGTH OF PULL BOX VARIES WITH HEIGHT OF CURB USED. ALSO SEE PULL BOX S.D.D. 9B4

SIDE ELEVATION

DETAIL FOR CONDUIT UNDER PAVED HIGHWAYS

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

METALLIC (STANDARD SPECIFICATION 652.2.2) OR NONMETALLIC (STANDARD SPECIFICATION 652.2.3) CONDUIT SHALL BE FURNISHED AND PLACED AS SHOWN.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

THE TRENCH SHALL NOT BE BACKFILLED PRIOR TO INSPECTION OF THE CONDUIT.

ALL METALLIC CONDUIT RACEWAY ENDS SHALL BE REAMED AND THREADED.

ALL METALLIC CONDUIT IN WHICH WIRE OR CABLE IS TO BE INSTALLED SHALL BE BUSHED WITH APPROVED THREADED BUSHINGS BEFORE INSTALLATION OF THE WIRE OR CABLE.

ALL METALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT TO BE INSTALLED SHALL BE CAPPED WITH THREADED PROTECTIVE CAPS, AS APPROVED BY THE ENGINEER.

ALL NONMETALLIC CONDUIT SHALL BE CAPPED OR PLUGGED IMMEDIATELY AFTER INSTALLATION AND SHALL REMAIN CAPPED OR PLUGGED UNTIL WIRE/CABLES ARE INSTALLED.

NONMETALLIC CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BENDING OF PVC ELECTRICAL CONDUIT SHALL BE ACCOMPLISHED BY USING A BLANKET OR EMERSION TYPE TANK DESIGNED FOR THE PURPOSE OF BENDING PVC ELECTRICAL CONDUIT.

ALL CUT ENDS SHALL BE TRIMMED INSIDE AND OUTSIDE TO REMOVE ALL ROUGH EDGES ON NONMETALLIC CONDUIT. (SEE NEC 347.5)

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY U.L. LISTED ADAPTER FITTINGS SHALL BE USED.

PRIOR TO CONDUIT ACCEPTANCE, CONDUIT CAPS OR PLUGS SHALL BE REMOVED, AND THE CAPS, PLUGS AND CONDUIT ENDS SHALL BE THOROUGHLY CLEANED AND THEN THE CAPS OR PLUGS REINSTALLED TO ENSURE THAT THE CAPS OR PLUGS CAN BE EASILY REMOVED IN THE FUTURE.

ALL CONDUIT BEING FURNISHED AND INSTALLED SHALL HAVE THE U.L. LABEL FIRMLY ATTACHED.

CONDUIT RUNS SHALL BE THE SAME SIZE OF CONDUIT FROM ONE END TO THE OTHER (FROM PULL BOX TO PULL BOX-OR-JUNCTION BOX TO JUNCTION BOX-OR-BASE TO BASE, ETC.).

TRACER WIRE SHALL BE INSTALLED AS STATED IN THE STANDARD SPECIFICATION, ITEM 652.3.1.1.

ALL CONDUIT RUNS SHALL BE STRAIGHT (WITHOUT BENDS) FROM PULL BOX TO PULL BOX, PULL BOX TO BASE AND BASE TO BASE AS SHOWN ON THE PLANS.

CONDUIT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March, 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

S.D.D. 9 B 2-10

TABLE OF NOMINAL DIMENSIONS AND WEIGHTS

DIMENSION IN INCHES		NON-CONDUCTIVE PULL BOX	
BOX DIAMETER ** (INSIDE)	A	24	24
BOX OVERALL OUTSIDE DIAMETER	B	27	27
BOX LENGTH	C	36	42
FRAME OPENING	D	22 1/2	22 1/2
WEIGHT IN POUNDS *			
COVER		50	50
BOX ONLY		75	85

* THE ACTUAL WEIGHT OF THE COVER OR BOX ONLY MAY VARY NOT TO EXCEED 100 LBS INDIVIDUALLY.

** DIAMETER VARIES FROM TOP TO BOTTOM WITH THE DIAMETER LARGER AT THE BOTTOM TO PREVENT FROST HEAVE

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

ALL BOXES, FRAMES AND COVERS SHALL BE SUITABLE FOR TIER 15 LOADING AS SPECIFIED IN ANSI/SCTE 77.

PROVIDE AN OPENING FOR TOOL ASSISTED COVER REMOVAL NOT LARGE ENOUGH TO PERMIT PASSAGE OF A SPHERE MORE THAN 1/2" DIAMETER

ENSURE COVER SURFACE IS SKID RESISTANT WITH A COEFFICIENT OF FRICTION OF AT LEAST 0.5 AND VERTICAL SURFACE DICONTINUITIES LESS THAN 1/4".

COVER SHALL BE MAGNETICALLY LOCATABLE.

BOXES AND EXTENSIONS ARE TRIMMABLE FOR CUSTOM LENGTHS. TRIMMED PIECES SHALL MAINTAIN A UNIFORM LENGTH.

ENTRANCE HOLES INTO PULL BOXES SHALL BE CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC CONDUIT PUNCH. HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4".

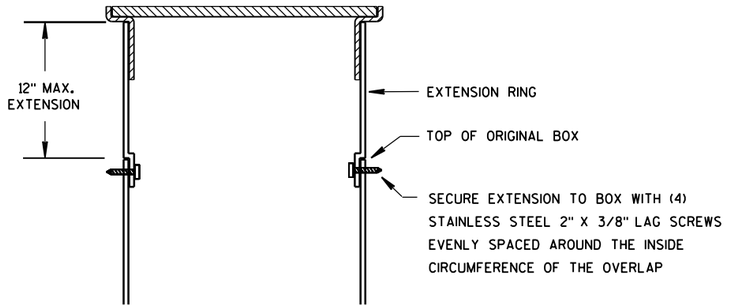
THE CONTRACTOR SHALL NOT INSTALL WIRE IN ANY PULL BOX UNTIL ITS INSTALLATION HAS BEEN INSPECTED AND ACCEPTED BY THE ENGINEER.

ALL METALLIC CONDUIT IN WHICH WIRE AND/OR CABLE IS TO BE INSTALLED, SHALL BE BUSHED BEFORE INSTALLATION OF THE WIRE AND/OR CABLE.

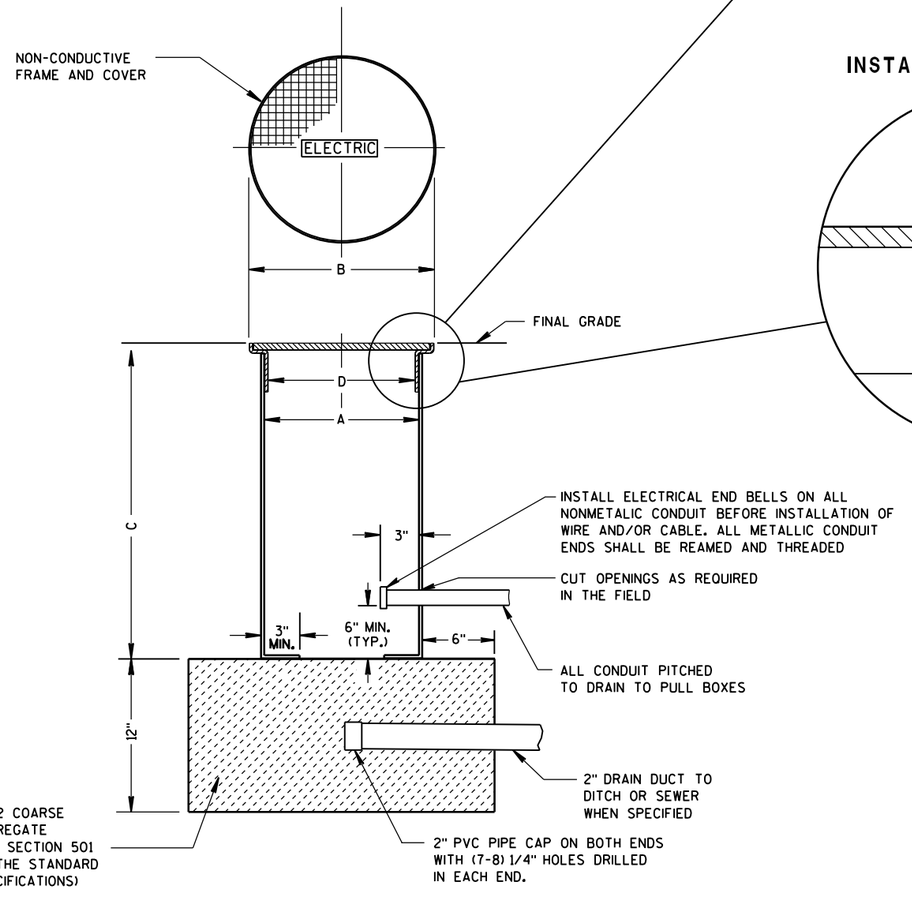
ENTIRE BOX MUST BE CONSTRUCTED OF NON-CONDUCTIVE MATERIALS WITH THE EXCEPTION OF STAINLESS STEEL FASTENERS AND MAGNETIC LOCATABLE DEVICE.

WHEN A PULL BOX IS INSTALLED IN CRUSHED AGGREGATE SHOULDERS, PLACE IT 2-3 INCHES BELOW GRADE AND COVER IT WITH 2-3 INCHES OF CRUSHED AGGREGATE

LABEL ON COVER SHALL READ "ELECTRIC" FOR SIGNAL AND LIGHTING SYSTEMS, "WISDOT ITS" FOR COMMUNICATIONS AND ITS EQUIPMENT SYSTEMS.

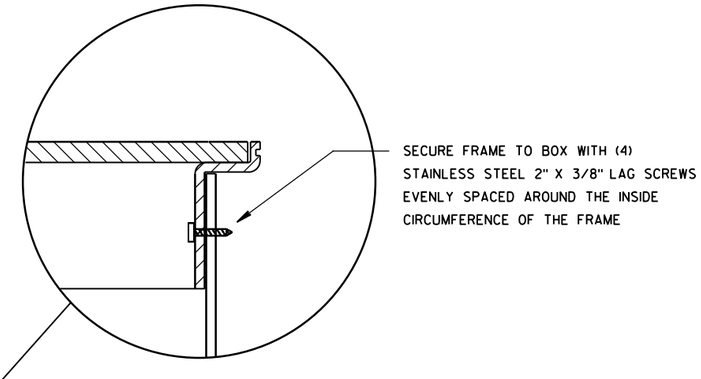


BOX EXTENSION

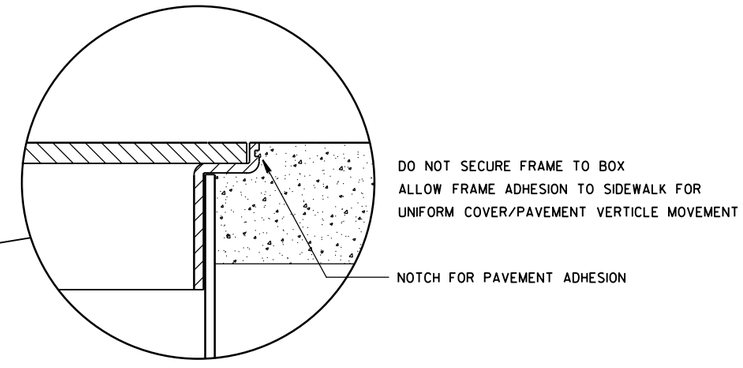


NON-CONDUCTIVE PULL BOX

INSTALLED IN SOD OR CRUSHED AGGREGATE



INSTALLED IN SIDEWALK



PULL BOX NON-CONDUCTIVE

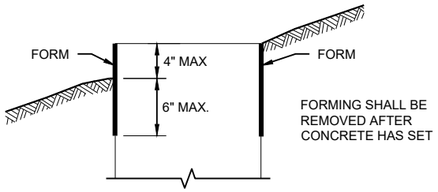
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2017 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

6

S.D.D. 9 B 16-1

FORM DEPTH SHALL BE NO MORE THAN 6" BELOW GRADE ON THE LOWER SIDE OF BASE



FORMING DETAIL

QUANTITY REQUIREMENTS	CONCRETE BASE TYPE		
	1	2	5 & 6
APPROX. CUBIC YARDS OF CONCRETE	0.40	0.57	0.40
LBS. OF HOOP BAR STEEL	NONE	23	16
LBS. OF VERTICAL BAR STEEL	NONE	60	18

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWINGSHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

BASES SHALL BE EXCAVATED BY USE OF A CIRCULAR AUGER.

TOP SURFACES OF CONCRETE BASES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

CONDUIT SIZES AND LOCATIONS SHALL BE SHOWN ON THE PLANS

THE FINAL OR TERMINATING CONCRETE BASE IN A CONDUIT RUN SHALL HAVE A 6" EXIT STUB INSTALLED FOR FUTURE CABLING USE. THE EXIT STUB SHALL BE SIZED AS USED THROUGHOUT THE CONDUIT RUN AS SHOWN A THE ENTRANCE OF THE BASE.

ENDS OF CONDUIT INSTALLED BELOW GRADE FRO FUTURE USE SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC.

MINIMUM BENDING RADIUS OF CONDUIT IS EQUAL TO 6X THE DIAMETER.

CONDUIT HEIGHT ABOVE CONCRETE BASES SHALL BE 1 INCH. ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON-METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF CONCRETE BASES BEFORE INSTALLATION.

WHEN REQUIRED TO CONNECT NON-METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

IF A BASE REQUIRES A DEEP FORM BECAUSE OF LOOSE DIRT OR FILL, THE FORM SHALL BE REMOVED BEFORE BACKFILLING AROUND THE BASE. BACKFILL SHALL BE TAMPED TIGHT AGAINST THE BARE CONCRETE BASE IN LAYERS OF 1 FOOT OR LESS.

A NO. 4 AWG STRANDED COPPER EQUIPMENT GROUNDING CONDUCTOR SHALL BE EXOTHERMICALLY WELDED TO THE EQUIPMENT GROUNDING ELECTRODE (GROUND ROD) FOR TYPE 2, TYPE 5 AND TYPE 6 BASES.

THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE FURNISHED AND INSTALLED TO ENTER ALL BASE TYPES THROUGH A 1 INCH CONDUIT INSTALLED FOR GROUNDING PURPOSES, LEAVING A 4 FOOT COIL OF WIRE ABOVE THE CONCRETE BASE. THE EQUIPMENT GROUNDING CONDUCTOR SHALL BE NEATLY COILED AND THE COILS TIED TOGETHER.

ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD. ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

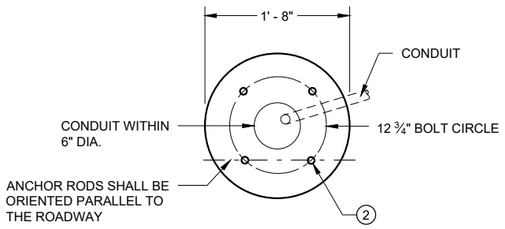
WASHERS AND LOCK WASHERS ARE REQUIRED ON ALL ANCHOR RODS.

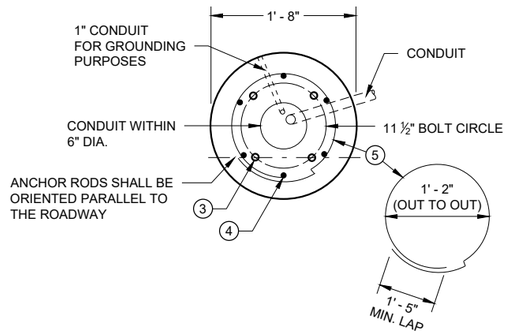
WHEN ANCHOR RODS USING THE ALTERNATE "L" BEND ARE FURNISHED, THE 4 INCH"L" BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH. THE "L" BEND SHALL NOT BE THREADED.

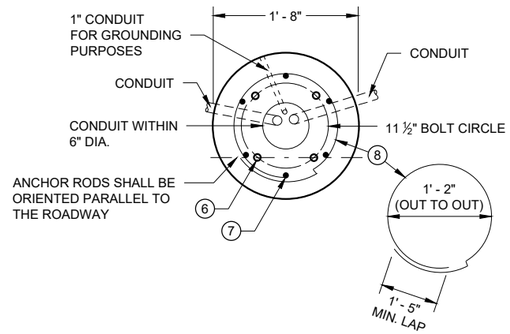
ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

WELDING OF THE ANCHOR RODS TO THE CAGE IS UNACCEPTABLE. TIE WIRES SHALL BE USED.

BAR STEEL REINFORCEMENT SHALL BE COATED WITH POWDERED EPOXY RESIN IN ACCORDANCE WITH SECTION 505 OF THE STANDARD SPECIFICATIONS (LATEST EDITION).







① THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE AND INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES. THE MINIMUM DEPTH OF CONDUIT EXITING THE CONCRETE BASE THAT IS NOT INSTALLED BELOW THE TRAVELED WAY SHALL BE 18 INCHES. THE MAXIMUM DEPTH OF ALL CONDUIT SHALL BE 36 INCHES EXCEPT WITH WRITTEN APPROVAL OF THE ENGINEER.

② (4) 1" DIA. X 3' - 6" ANCHOR RODS.

③ (4) 1" DIA. X 5' - 0" ANCHOR RODS.

④ (6) NO. 6 X 6' - 8" BAR STEEL REINFORCEMENT.

⑤ (7) NO. 4 X 5' - 1" BAR STEEL REINFORCEMENT @ 1' - 0" C - C.

⑥ (4) 1" DIA. X 3' - 6" ANCHOR RODS.

⑦ (6) NO. 4 X 4' - 8" BAR STEEL REINFORCEMENT.

⑧ (5) NO. 4 X 5' - 1" BAR STELL REINFORCEMENT @ 1' - 0" C -C.

⑨ EXOTHERMIC CONNECTION TO EUIPMENT GROUNDING CONDUCTOR

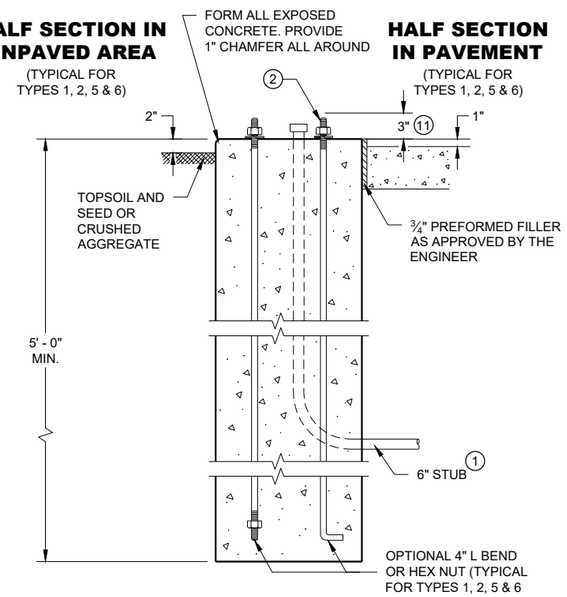
⑩ ⅝" DIA. X 8' -0" COPPERCLAD EQUIPMENT GROUNDING ELECTRODE REQUIRED

⑪ ANY ANCHOR ROD PROJECTION SHORTER THAN 2 ¾" OR LONGER THAN 3 ¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

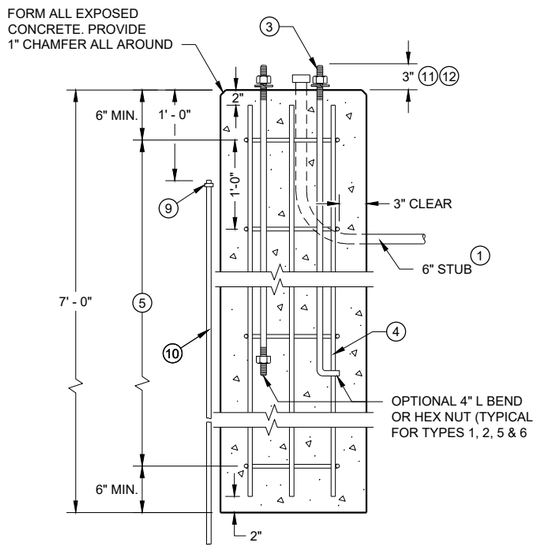
⑫ FOR NON - BREAKAWAY INSTALLATIONS, 4 ½" ± ANCHOR ROD PROJECTION WITH THE USE OF LEVELING NUTS. RODENT SCREEN REQUIRED.

HALF SECTION IN UNPAVED AREA
(TYPICAL FOR TYPES 1, 2, 5 & 6)

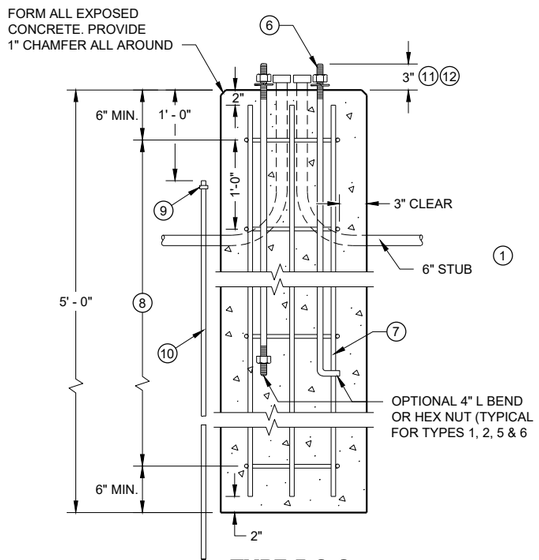
HALF SECTION IN PAVEMENT
(TYPICAL FOR TYPES 1, 2, 5 & 6)



TYPE 1



TYPE 2



TYPE 5 & 6

CONCRETE BASES

CONCRETE BASES
TYPES 1, 2, 5, & 6

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
May 2019
DATE
/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

FHWA

6
SDD 09C02 - 09

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

FOUR (4) BOLTS SHALL BE FURNISHED WITH EACH TRANSFORMER BASE. BOLTS SHALL BE 1" DIAMETER, 4" IN LENGTH, WITH WASHERS, LOCK WASHERS AND NUTS. BOLTS, NUTS AND WASHERS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 531.2.2 OF THE STANDARD SPECIFICATIONS.

LEVELING SHIMS, IF NEEDED, SHALL BE DESIGNED FOR THE PURPOSE AND USED UNDER CAST BASES WHEN PLUMBING POLES OR STANDARDS DURING INSTALLATION. THE USE OF WASHERS IN LIEU OF PROPER LEVELING SHIMS IS NOT ACCEPTABLE.

SHIM LENGTH SHALL BE LONG ENOUGH TO COMPLETELY COVER THE AREA UNDER THE LENGTH AND WIDTH OF THE BASE MOUNTING FLANGE.

DOUBLE NUTTING IS NOT ACCEPTABLE FOR LEVELING OR MOUNTING PURPOSES.

A NEMA APPROVED, U.L. LISTED, COPPER WITH BRASS OR STAINLESS STEEL SET SCREW, DIRECT BURY RATED, MECHANICAL CONNECTOR (LUG), SIZED TO ACCEPT AWG. #10 TO #4 COPPER STRANDED WIRE SHALL BE FURNISHED AND INSTALLED IN THE PEDESTAL AND TRANSFORMER BASES.

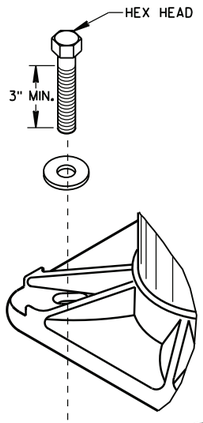
THE MECHANICAL CONNECTOR SHALL BE INSTALLED USING A 1/4" - 20 (TPI) STAINLESS STEEL HEX HEAD BOLT OF SUFFICIENT LENGTH TO FIRMLY ATTACH THE LUG TO THE BASE.

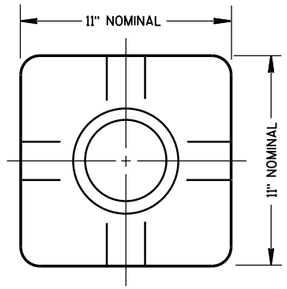
SHOULD THE MANNER OF ATTACHMENT OF THE LUG REQUIRE WASHERS, HEX NUTS, LOCK WASHER - THEY SHALL BE STAINLESS STEEL AS IS THE BOLT. THE MANNER OF ATTACHMENT SHALL NOT BLOCK ACCESSIBILITY TO WIRE PLACEMENT IN THE CONNECTOR.

PEDESTAL BASE COLLAR THREADING SHALL BE TAPERED AND IN ACCORDANCE WITH NATIONAL PIPE THREADING DIMENSIONS.

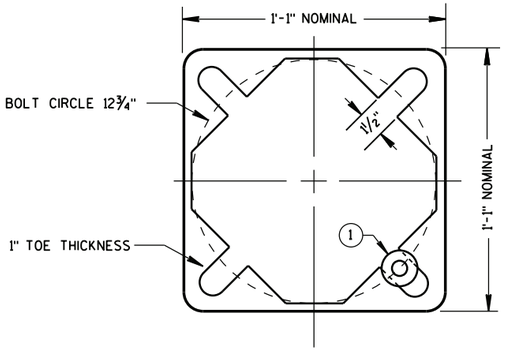
BASE COLLAR THREADING SHALL EXTEND INTO THE BASE COLLAR WITH SUFFICIENT DEPTH TO ACCEPT THE INSTALLATION OF TRAFFIC SIGNAL STANDARDS TO A DEPTH OF 1 1/2", THEN TIGHTENING TO A POINT OF BEING IMMOVABLE.

THE ACCESS DOOR SHALL BE OF THE SAME MATERIAL AS THE BASE.

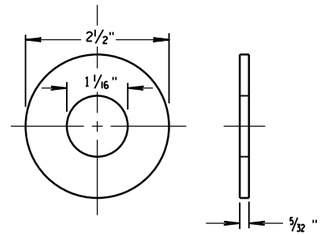




TOP VIEW
(PEDESTAL BASE)

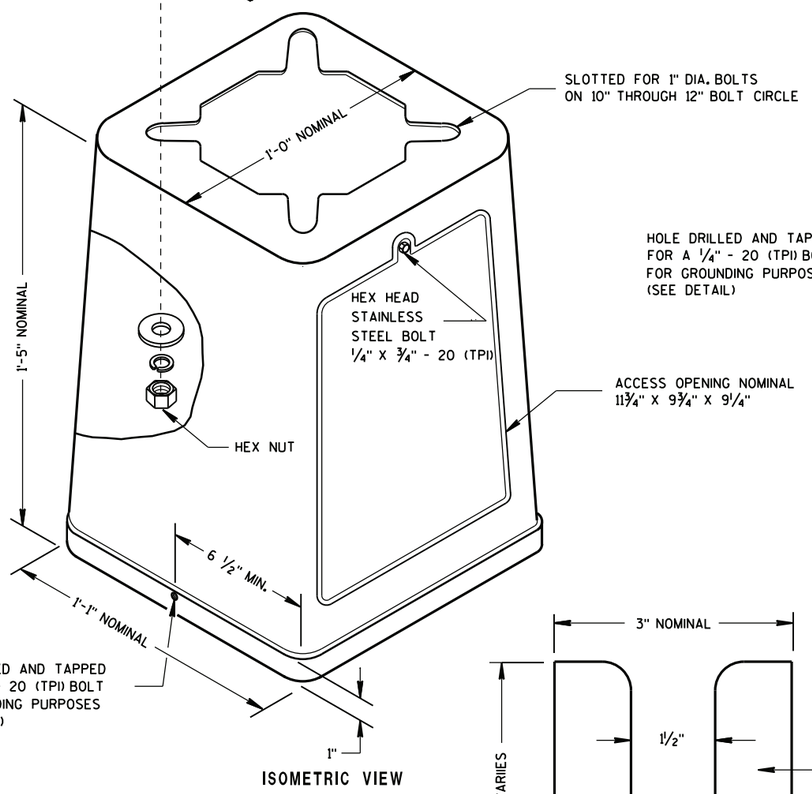


BOTTOM VIEW
(PEDESTAL BASE)

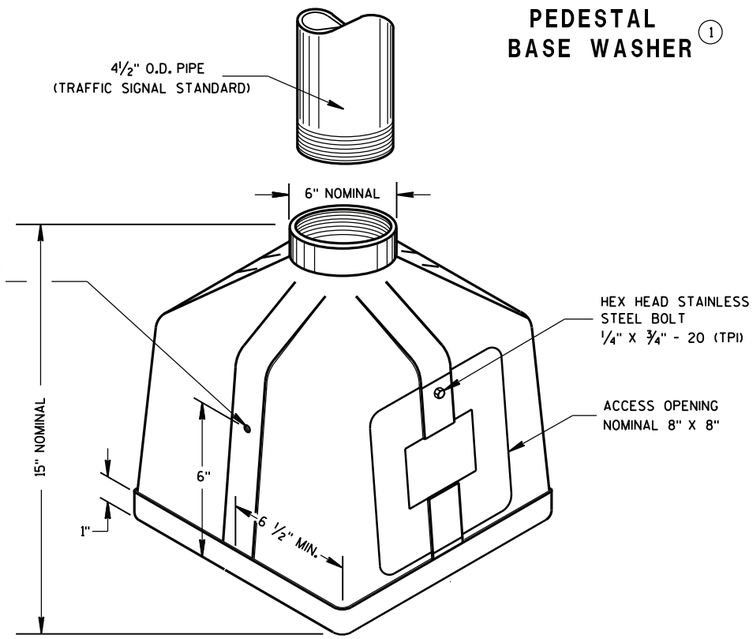


ZINC COATED STEEL WASHER
TO BE PROVIDED BY THE CONTRACTOR

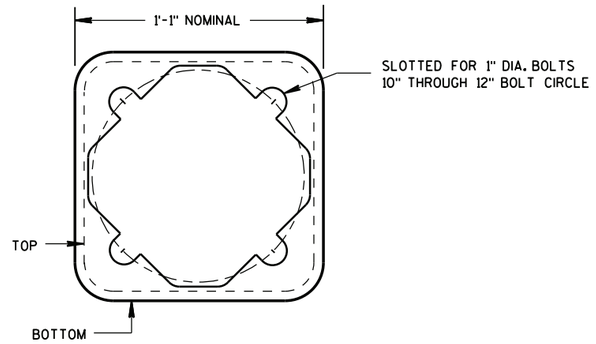
PEDESTAL BASE WASHER (1)



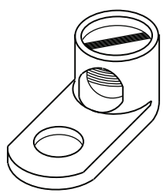
ISOMETRIC VIEW



ISOMETRIC VIEW
PEDESTAL BASE



BOTTOM VIEW
(TRANSFORMER BASE)

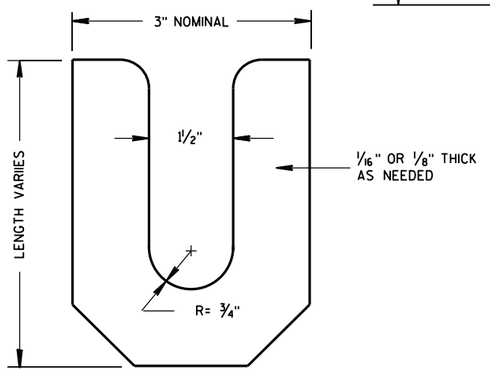


TYPICAL MECHANICAL CONNECTOR LUG

TO BE FURNISHED WITH EACH BASE

TRANSFORMER BASE

INTENDED FOR USE WITH TYPE 2, 3, 4, 5 & 6 POLES



LEVELING SHIM

TRANSFORMER/PEDESTAL BASES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED Sept. 2014 DATE	/S/ Ahmet Demirbilek STATE ELECTRICAL 214
FHWA	

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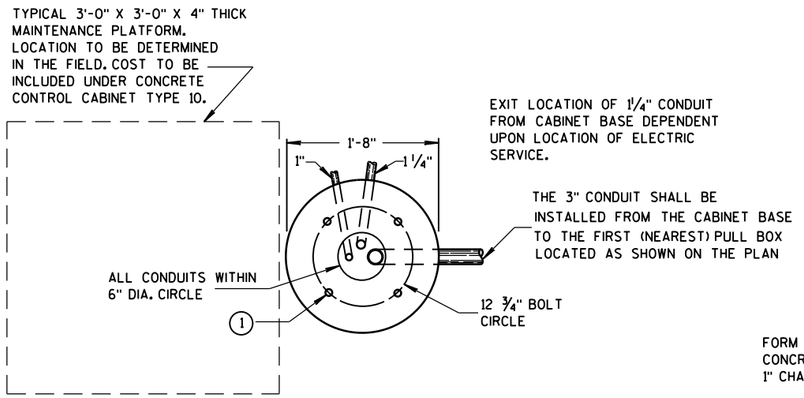
S.D.D. 9 C 3-4

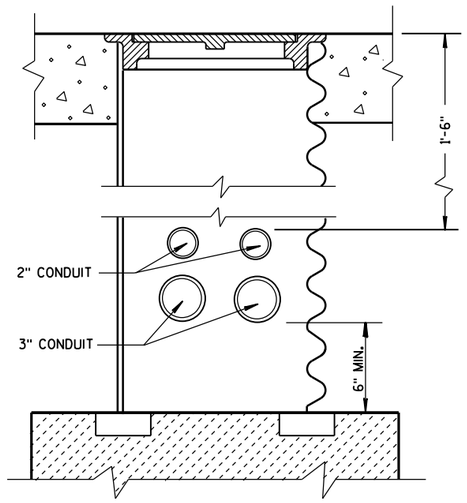
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S.D.D. 9 C 3-4

CONTROL CABINET BASE TYPE	DIMENSIONS				C.Y. CONCRETE (APPROX.)
	H	I	J	K	
TYPE 6 - 30" CABINET	34"	60"	10"	17"	.64
TYPE 7 - 38" CABINET	42"	60"	10"	21"	.93
TYPE 8 - 38" CABINET	42"	72"	12"	21"	1.29
TYPE 9 - VARIABLE	54"	72"	14"	27"	1.56
TYPE 10 - POST MOUNT	AS SHOWN				.65 *

* INCLUDES MAINTENANCE PLATFORM.





CONDUIT LOCATIONS IN 24" X 36" PULL BOX

(LEADING TO CONTROLLER CABINET BASE TYPE 6, 7, 8 AND 9)

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

INSTALL FOUR ½ INCH MINIMUM DIAMETER X 4 INCH MINIMUM LENGTH APPROVED CONCRETE MASONRY ANCHORS WITH A PULLOUT STRENGTH OF 9,000 LBS. TO ANCHOR THE CABINET TO TYPE 6, 7, 8, AND 9 BASES. THE ANCHOR STUDS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NONMETALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U.L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

CONTROL CABINET BASE TOP SURFACES SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

WHEN A TYPE 10 CONTROL CABINET BASE IS USED TO POST MOUNT A CONTROL CABINET, A 36" SQUARE 4" THICK CONCRETE MAINTENANCE PLATFORM SHALL BE REQUIRED ON THE DOOR SIDE OF THE CABINET. THE TOP 1 INCH SHALL BE ABOVE FINISHED GRADE AND BE BROOM FINISHED AND LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT = 6 X THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NONMETALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

ALL FOUR (TWO INCH AND THREE INCH) CONDUIT SHALL BE INSTALLED FROM THE CABINET BASE TO THE FIRST (NEAREST PULL BOX LOCATED AS SHOWN ON THE PLANS.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6" MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

WHEN ANCHOR RODS USING THE ALTERNATE L BEND ARE FURNISHED FOR THE TYPE 10 BASE, THE 4" L BEND SHALL BE IN ADDITION TO THE SPECIFIED ANCHOR ROD BAR LENGTH.

THE "L" BEND SHALL NOT BE THREADED.

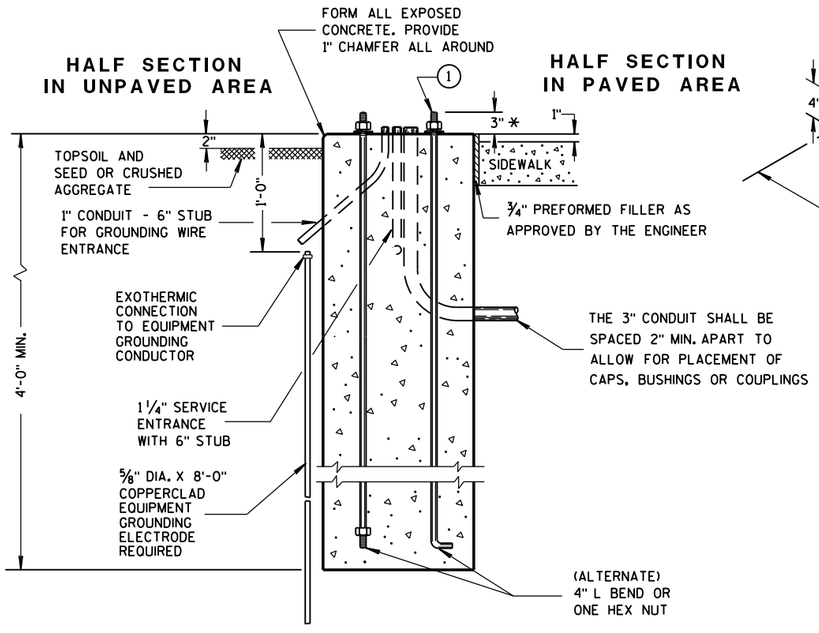
STRAIGHT ANCHOR RODS SHALL BE THREADED 12" IN LENGTH ON EACH END OF THE ROD.

ANCHOR RODS SHALL BE INSTALLED WITH MISALIGNMENTS OF LESS THAN 1:40 FROM VERTICAL.

(1) FOUR (4) ANCHOR RODS, 1" DIA. X 3'-6". ANCHOR RODS SHALL BE MANUFACTURED IN ACCORDANCE WITH SECTION 654.2.1 OF THE STANDARD SPECIFICATIONS.

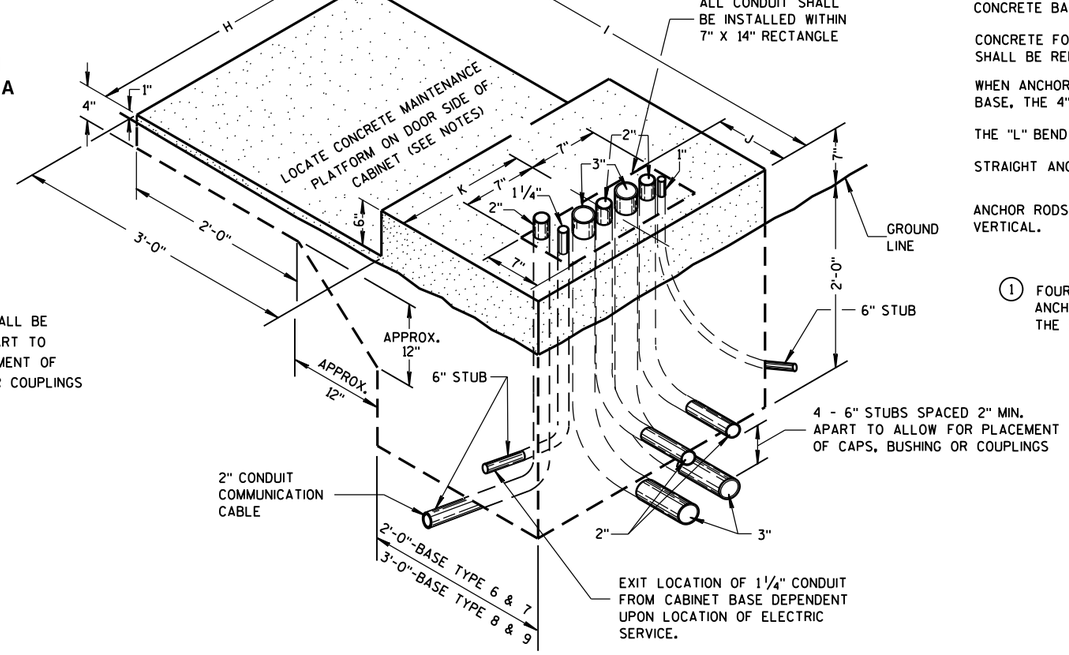
HALF SECTION IN UNPAVED AREA

HALF SECTION IN PAVED AREA



TYPE 10

* ANY ANCHOR ROD PROJECTION SHORTER THAN 2¾" OR LONGER THAN 3¼" SHALL REQUIRE THE BASE TO BE REMOVED AND REPLACED AT THE CONTRACTORS EXPENSE.

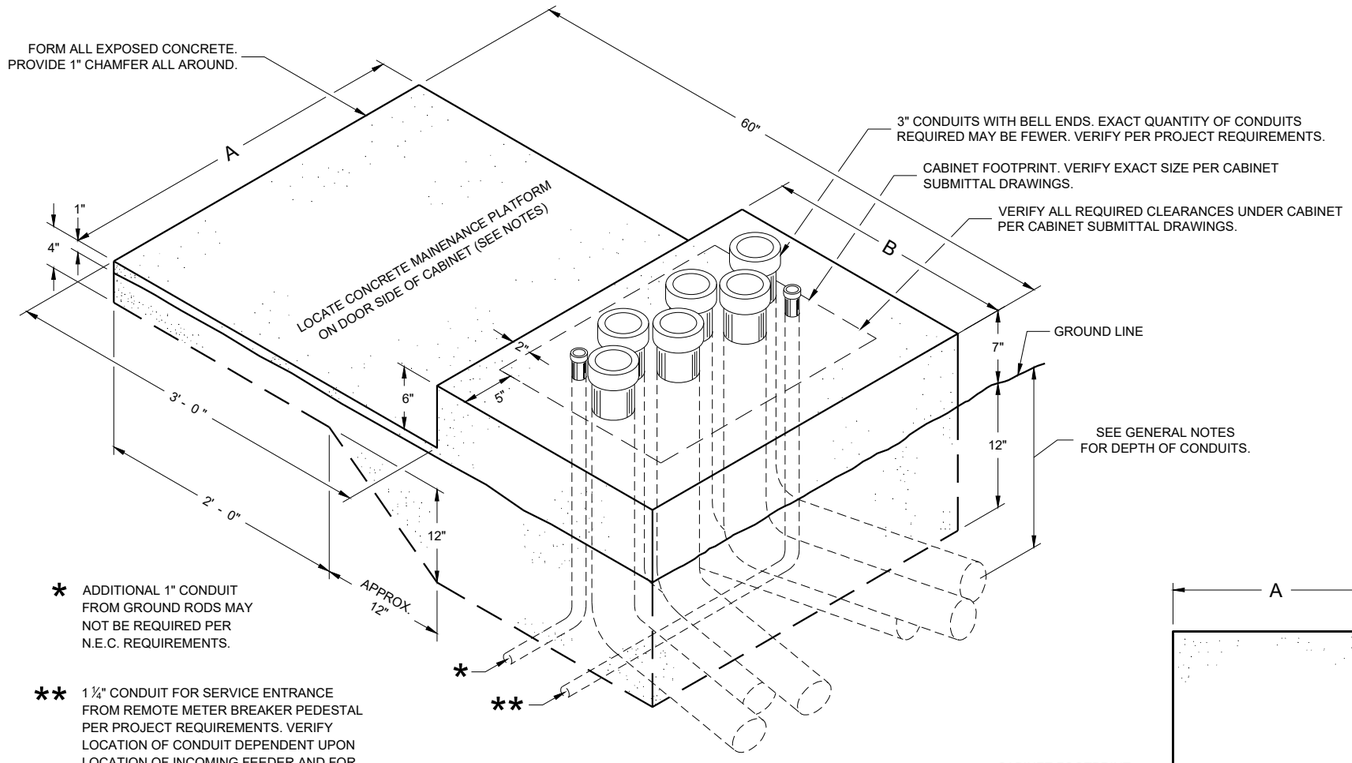


TYPE 6,7,8 AND 9 (ISOMETRIC VIEW)

CONCRETE CONTROL CABINET BASES

CONCRETE CONTROL CABINET BASES	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED	
Sept. 2016 (DATE)	/S/ Ahmet Demirbilek (STATE ELECTRICAL)
FHWA	

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* ADDITIONAL 1" CONDUIT FROM GROUND RODS MAY NOT BE REQUIRED PER N.E.C. REQUIREMENTS.

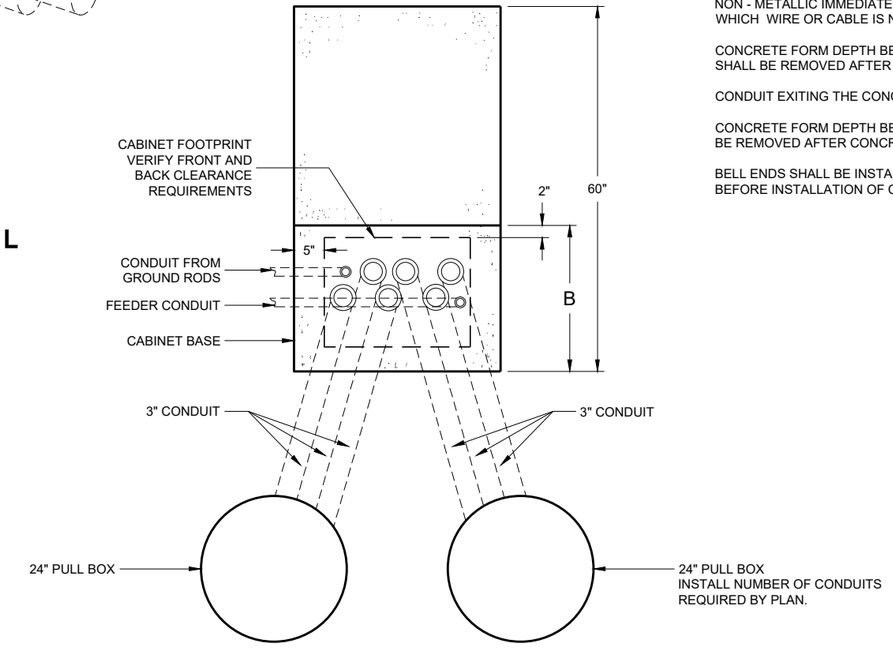
** 1 ¼" CONDUIT FOR SERVICE ENTRANCE FROM REMOTE METER BREAKER PEDESTAL PER PROJECT REQUIREMENTS. VERIFY LOCATION OF CONDUIT DEPENDENT UPON LOCATION OF INCOMING FEEDER AND FOR EASE OF CONNECTION TO LOAD CENTER.

ISOMETRIC VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

(C.Y. CONCRETE = APPROX. 0.4)

CONCRETE BASE TYPE	CABINET WIDTH	DIMENSIONS		MAXIMUM 3" CONDUITS
		A	B	
L24	24"	34"	24"	4
L30	30"	40"	24"	6



PLAN VIEW

CONCRETE CONTROL CABINET BASE, TYPE L

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

INSTALL FOUR STAINLESS STEEL APPROVED CONCRETE MASONRY ANCHORS TO ANCHOR THE CABINET BASES. THE ANCHORS SHALL BE LOCATED AS DIRECTED BY THE ENGINEER TO PROPERLY ANCHOR THE CONTROL CABINET TO THE BASE.

WHEN REQUIRED TO CONNECT NON - METALLIC CONDUIT TO METALLIC CONDUIT, ONLY ADAPTER FITTINGS, U. L. LISTED FOR ELECTRICAL USE, SHALL BE USED.

CONDUIT HEIGHT ABOVE THE CONCRETE BASE SHALL BE 1 INCH.

DEPTH OF CONDUIT INSTALLED BELOW THE TRAVELED WAY SHALL BE 24 INCHES MINIMUM AND 36 INCHES MAXIMUM.

DEPTH OF CONDUIT INSTALLED THAT IS NOT BELOW THE TRAVELED WAY SHALL BE 18 INCHES MINIMUM AND 36 INCHES MAXIMUM.

ANY EXCEPTION TO THE MAXIMUM DEPTH SHALL BE ONLY WITH THE WRITTEN APPROVAL OF THE ENGINEER.

LOCATIONS SHALL BE AS SHOWN ON THE PLANS UNLESS DETERMINED BY THE ENGINEER IN THE FIELD.

CONTROL CABINET BASE TOP SURFACE SHALL BE TROWEL FINISHED SMOOTH AND LEVEL.

MAINTENANCE PLATFORM SHALL BE FLOAT OR BROOM FINISHED AND LEVEL.

MAINTENANCE PLATFORMS ARE NOT REQUIRED WHEN THE SURROUNDING AREA IS PAVED.

MINIMUM BENDING RADIUS OF CONDUIT EQUALS 6 TIMES THE DIAMETER.

ALL METALLIC CONDUIT ENDS SHALL BE REAMED AND THREADED.

CAP ALL BELOW GRADE METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

PLUG ALL BELOW GRADE NON - METALLIC CONDUIT ENDS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED.

ALL CONDUIT ENDS AT THE TOP OF CONCRETE BASES SHALL BE CAPPED IF METALLIC OR PLUGGED IF NON - METALLIC IMMEDIATELY AFTER PLACEMENT AND BEFORE CONCRETE IS POURED. CONDUITS IN WHICH WIRE OR CABLE IS NOT BEING INSTALLED SHALL REMAIN CAPPED OR PLUGGED.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6 INCHES MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

CONDUIT EXITING THE CONCRETE BASE SHALL TERMINATE IN PULL BOXES AS SHOWN ON THE PLANS.

CONCRETE FORM DEPTH BELOW FINISHED GRADE SHALL BE 6 INCH MAXIMUM. CONCRETE FORMS SHALL BE REMOVED AFTER CONCRETE HAS SET.

BELL ENDS SHALL BE INSTALLED ON ALL PVC CONDUIT EXPOSED AT THE TOP OF THE CONCRETE BASE BEFORE INSTALLATION OF CABLE OR WIRE.

CONCRETE CONTROL CABINET BASE, TYPE L

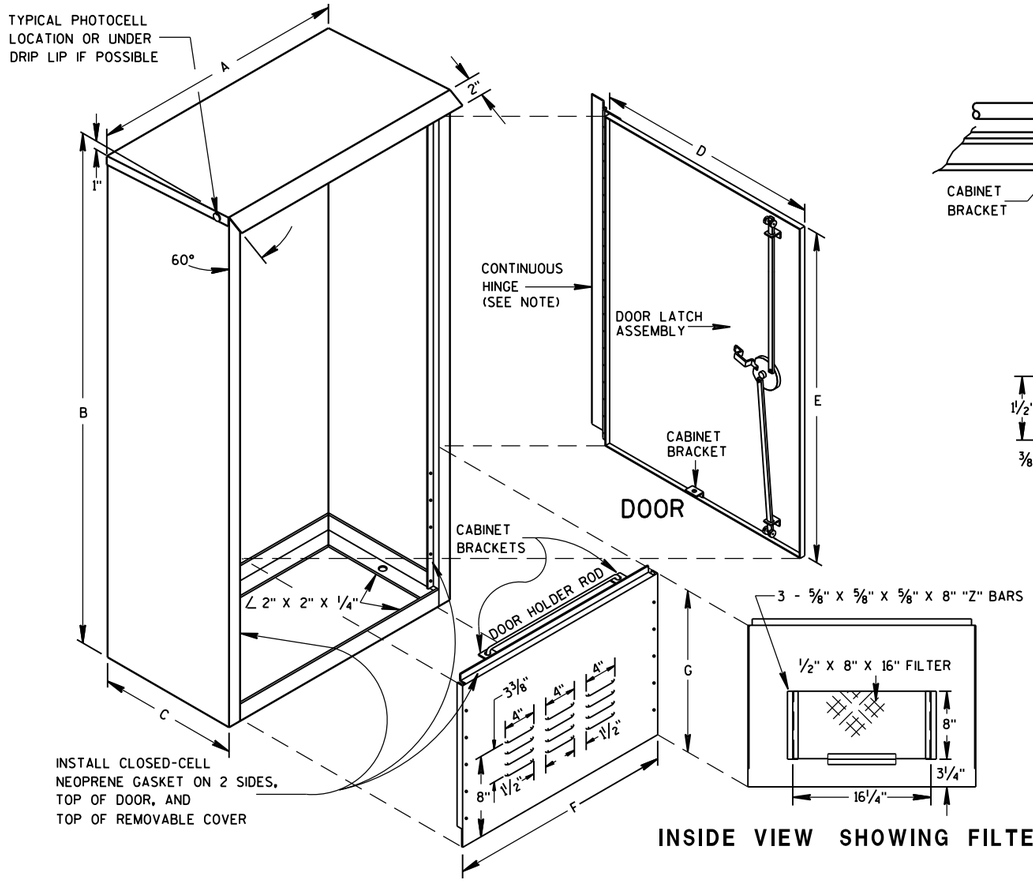
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI

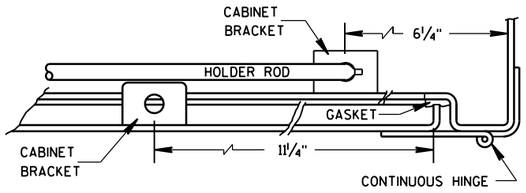
FHWA

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SDD 09C14 - 03

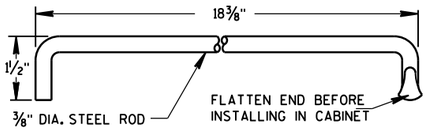


REMOVABLE COVER

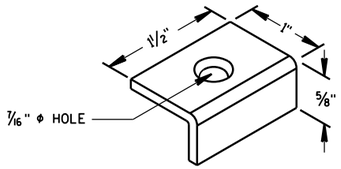
INSIDE VIEW SHOWING FILTER



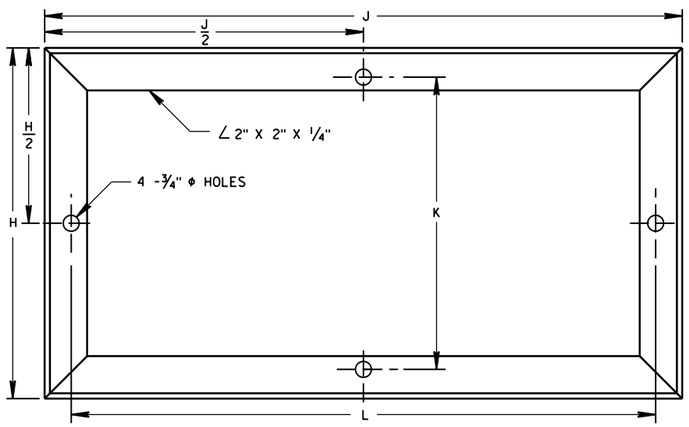
HINGE & DOOR HOLDER



HOLDER ROD



CABINET BRACKET



MOUNTING BASE

TABLE OF DIMENSIONS (INCHES)

MARK	CABINET TYPE		
	3060	3860	3866
A	30	38	38
B	60	60	66
C	16 1/2	16 1/2	24
D	26 1/2	34 3/4	33 3/4
E	38 3/4	38 3/4	38 3/4
F	26 1/2	34 3/4	33 3/4
G	19	19	25
H	16 1/2	16 1/2	24
H/2	8 1/4	8 1/4	12
J	30	38	38
J/2	15	19	19
K	13 3/4	13 3/4	21 1/4
L	27 1/2	35 1/2	35 1/2

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.

PRIME WITH PHOSPHATE TREATMENT AND PRIMER.

FINISH EXTERIOR SURFACES WITH RUSTOLEUM #906 SILVER GRAY OR APPROVED EQUAL.

FINISH INTERIOR WITH RUSTOLEUM #2766 HIGH GLOSS WHITE ENAMEL OR APPROVED EQUAL.

ALL SHEET METAL PARTS SHALL BE .125 INCH THICK ALUMINUM.

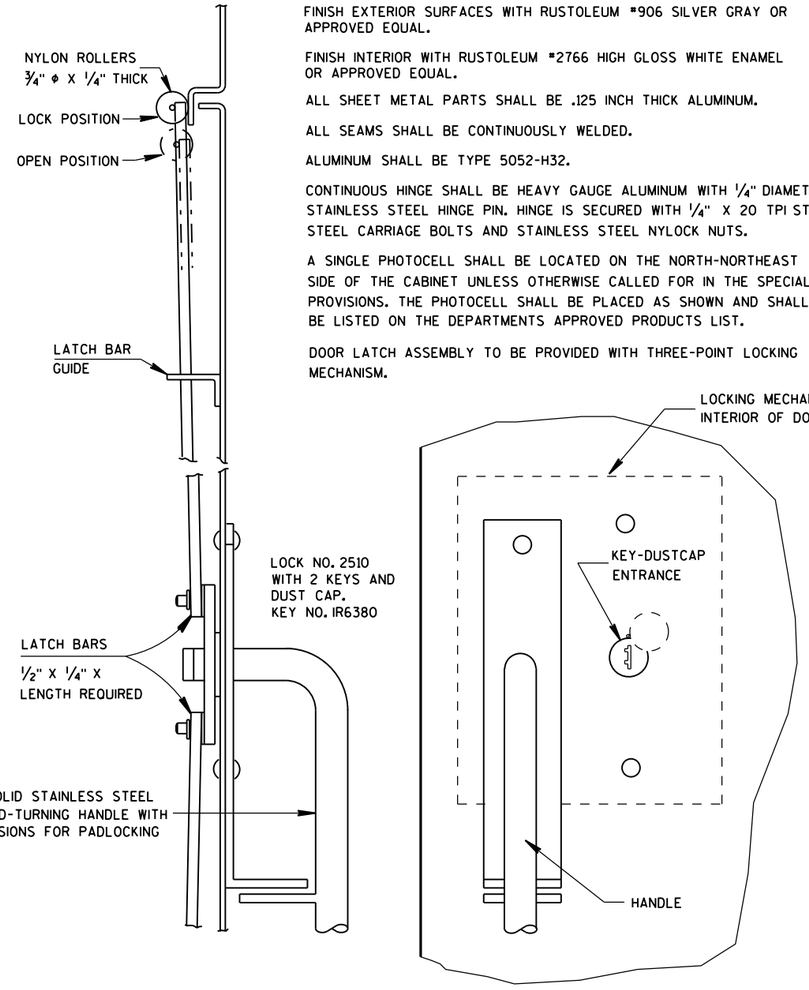
ALL SEAMS SHALL BE CONTINUOUSLY WELDED.

ALUMINUM SHALL BE TYPE 5052-H32.

CONTINUOUS HINGE SHALL BE HEAVY GAUGE ALUMINUM WITH 1/4" DIAMETER STAINLESS STEEL HINGE PIN. HINGE IS SECURED WITH 1/4" X 20 TPI STAINLESS STEEL CARRIAGE BOLTS AND STAINLESS STEEL NYLOCK NUTS.

A SINGLE PHOTOCELL SHALL BE LOCATED ON THE NORTH-NORTHEAST SIDE OF THE CABINET UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISIONS. THE PHOTOCELL SHALL BE PLACED AS SHOWN AND SHALL BE LISTED ON THE DEPARTMENTS APPROVED PRODUCTS LIST.

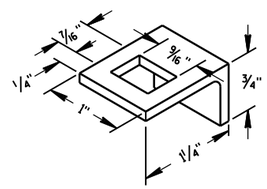
DOOR LATCH ASSEMBLY TO BE PROVIDED WITH THREE-POINT LOCKING MECHANISM.



SIDE VIEW

FRONT VIEW

LATCH ASSEMBLY



LATCH BAR GUIDE

SIGNAL CONTROL CABINET

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

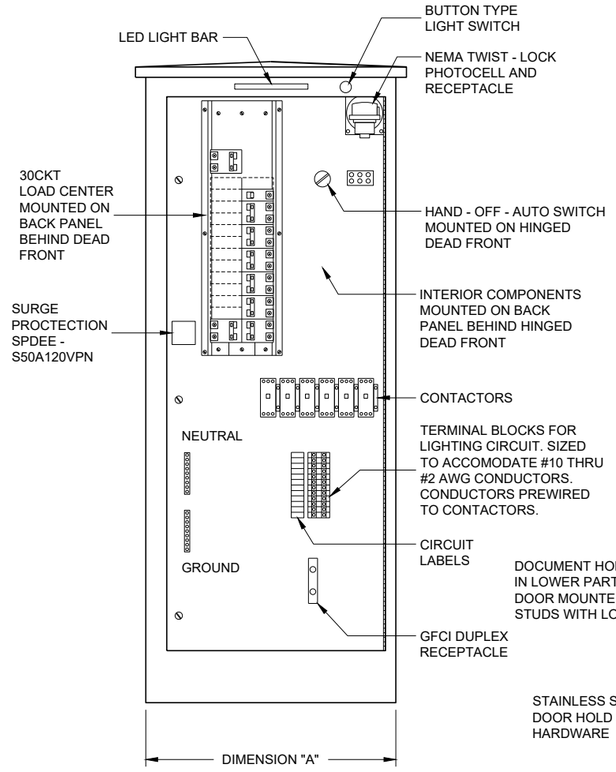
APPROVED
Sept. 2014
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL

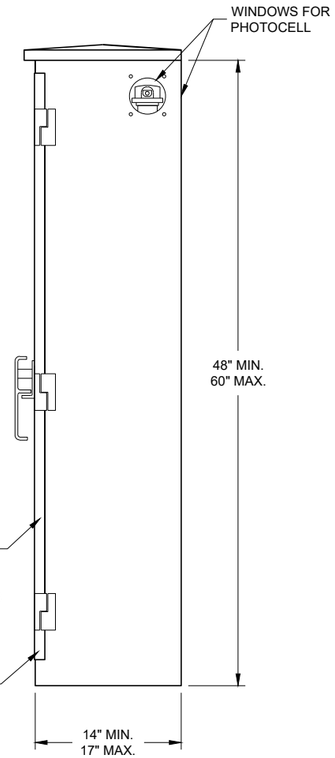
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S.D.D. 9 D 2-3

FRONT INTERIOR ELEVATION



SIDE VIEW



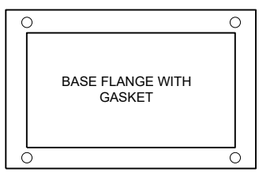
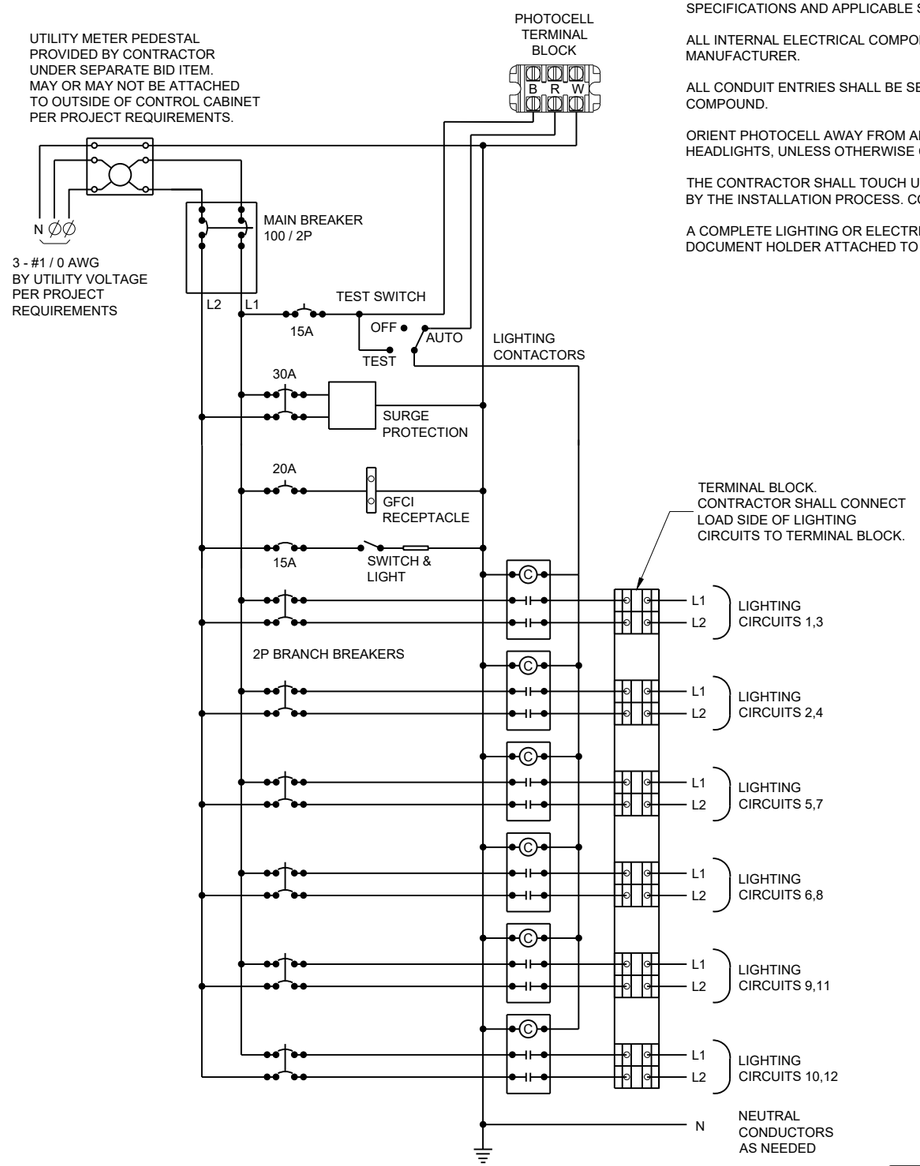


TABLE OF DIMENSIONS (INCHES)		
CONCRETE BASE TYPE	CABINET WIDTH	DIMENSION "A"
L24	24"	24"
L30	30"	30"

LIGHTING CONTROL CABINET



CONTROL CABINET SCHEMATIC

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.

ALL INTERNAL ELECTRICAL COMPONENTS WILL BE PRE - WIRED BY THE CABINENT MANUFACTURER.

ALL CONDUIT ENTRIES SHALL BE SEALED WITH AN APPROPRIATE DUCT SEALING COMPOUND.

ORIENT PHOTOCELL AWAY FROM AMBIENT LIGHT SOURCES AND ONCOMING TRAFFIC HEADLIGHTS, UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISION.

THE CONTRACTOR SHALL TOUCH UP ANY DAMAGE TO THE ANODIZED FINISH CAUSED BY THE INSTALLATION PROCESS. COLOR MATCH PAINT SHALL BE USED.

A COMPLETE LIGHTING OR ELECTRICAL PLAN SHALL BE SECURELY PLACED IN THE DOCUMENT HOLDER ATTACHED TO THE DOOR.

LIGHTING CONTROL CABINET
120 / 240 VOLT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

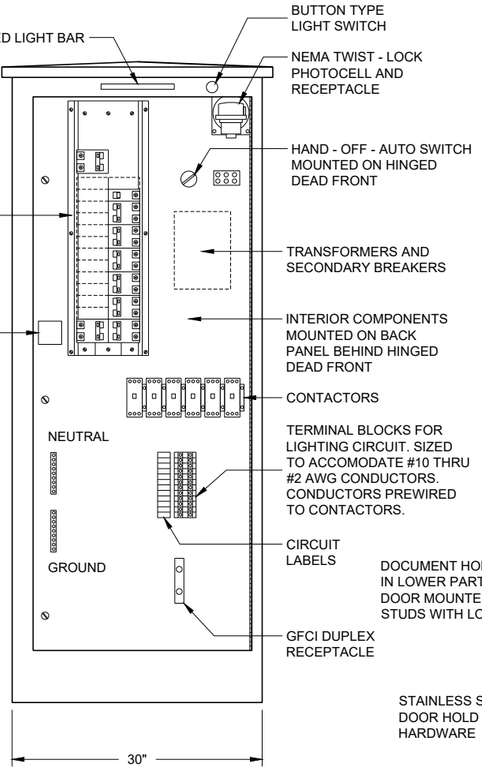
APPROVED
November 2018
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 218

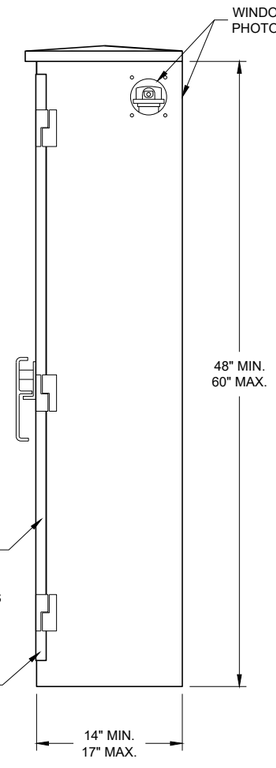
FHWA

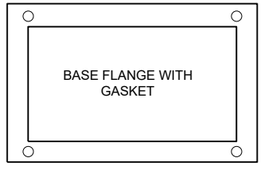
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SDD 09D04 - 03

FRONT INTERIOR ELEVATION

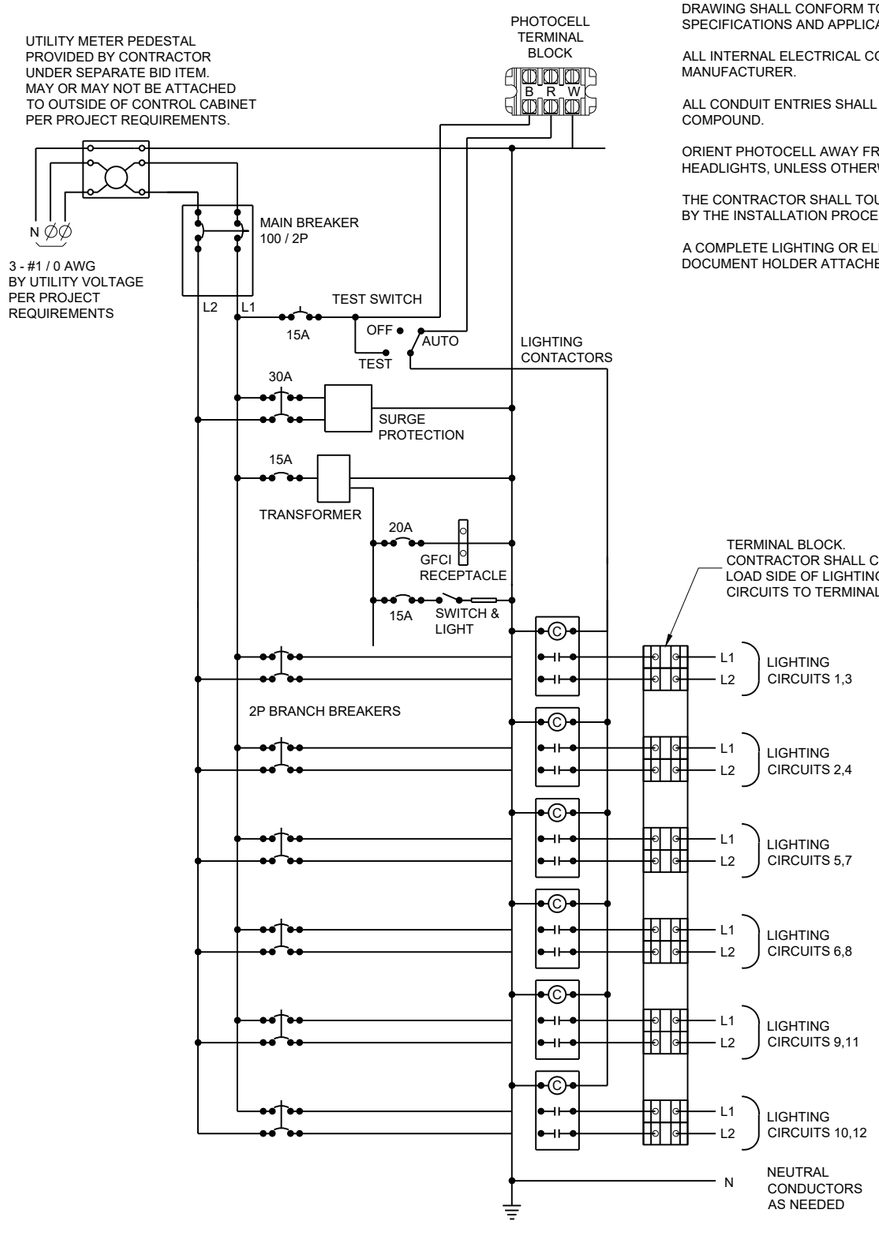


SIDE VIEW





LIGHTING CONTROL CABINET



CONTROL CABINET SCHEMATIC

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.

ALL INTERNAL ELECTRICAL COMPONENTS WILL BE PRE - WIRED BY THE CABINENT MANUFACTURER.

ALL CONDUIT ENTRIES SHALL BE SEALED WITH AN APPROPRIATE DUCT SEALING COMPOUND.

ORIENT PHOTOCELL AWAY FROM AMBIENT LIGHT SOURCES AND ONCOMING TRAFFIC HEADLIGHTS, UNLESS OTHERWISE CALLED FOR IN THE SPECIAL PROVISION.

THE CONTRACTOR SHALL TOUCH UP ANY DAMAGE TO THE ANODIZED FINISH CAUSED BY THE INSTALLATION PROCESS. COLOR MATCH PAINT SHALL BE USED.

A COMPLETE LIGHTING OR ELECTRICAL PLAN SHALL BE SECURELY PLACED IN THE DOCUMENT HOLDER ATTACHED TO THE DOOR.

L30
LIGHTING CONTROL CABINET 240 / 480 VOLT

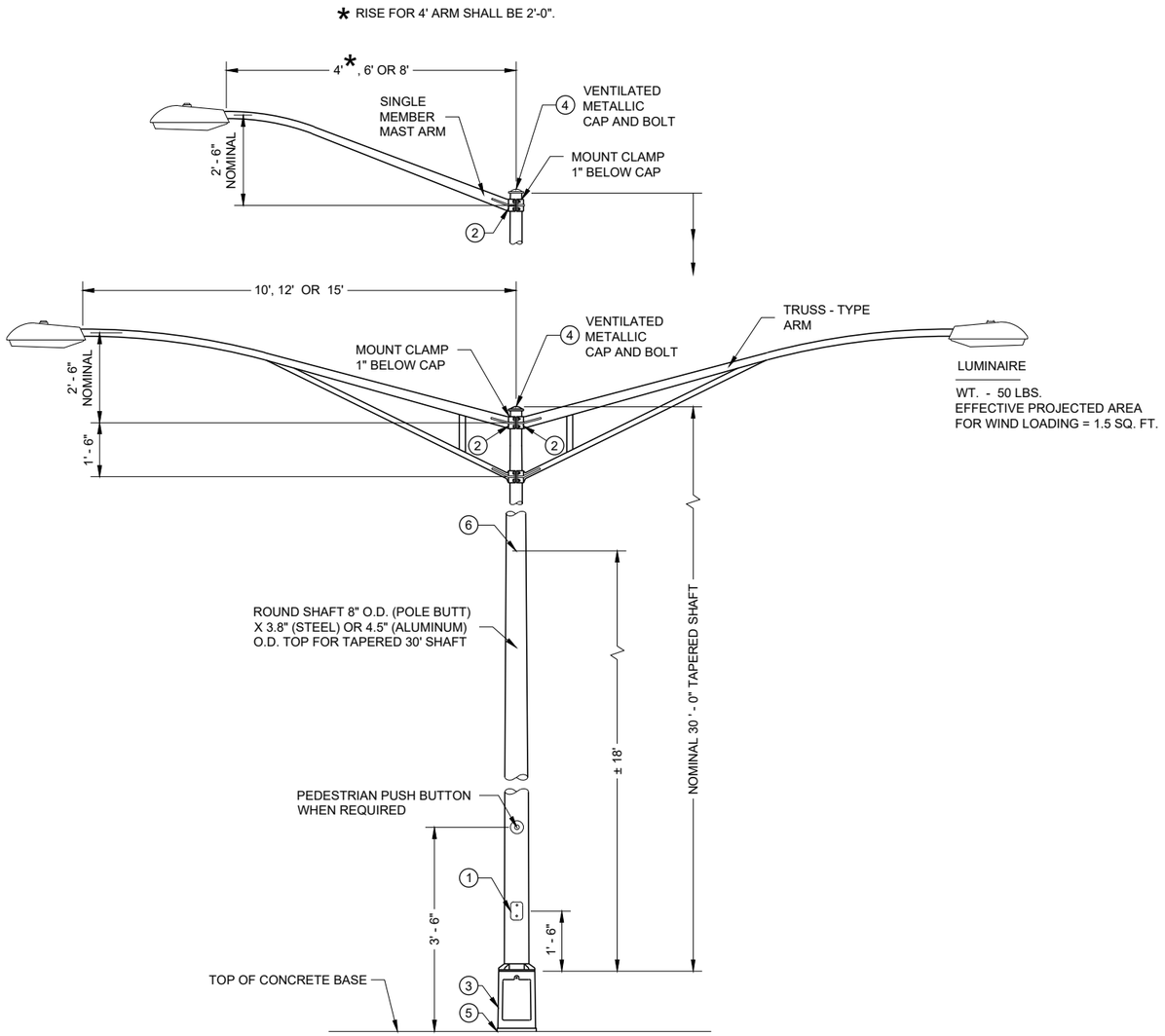
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Ahmet Demirbilek
STATE ELECTRICAL ENGI 219

FHWA

6
SDD 09D05 - 02



TYPE 5 POLE MOUNTING CONFIGURATION
(MAXIMUM LOAD)
LIGHTING ONLY

GENERAL NOTES

DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

SECTION 657, POLES, OF THE STANDARD SPECIFICATIONS SHALL APPLY TO THIS DRAWING.

ALL TYPE 5 POLE MOUNTINGS SHALL BE DESIGNED TO INCLUDE TWIN 15' ARMS WITH LUMINAIRES.

POLES SHALL BE GALVANIZED STEEL OR ALUMINUM, AS CALLED FOR IN THE CONTRACT.

TYPE 5 ALUMINUM POLES SHALL BE CONSTRUCTED OF 6063 - T6 ALUMINUM ALLOY. SLEEVING INSIDE THE POLE IS NOT ACCEPTABLE.

TYPE 5 ALUMINUM POLES SHALL HAVE A MINIMUM WALL THICKNESS OF 0.1888".

TYPE 5 STEEL POLES SHALL HAVE A MINIMUM WALL THICKNESS OF U.S. STANDARD 11 GAGE (0.1196").

THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 2 ⅜ INCHES IN OUTSIDE DIAMETER. THE STRAIGHT PORTION OF THE SLIPFITTER END OF THE LUMINAIRE MAST ARM SHALL BE A NOMINAL 12 INCHES IN LENGTH.

WHEN TRANSFORMER BASES ARE USED, WIRE CONNECTIONS SHALL BE MADE IN THE TRANSFORMER BASE.

(1) 4" X 6" REINFORCED HANDHOLE AND COVER ASSEMBLY WITH TWO (2) ¼" X ¾" - 20 TPI , STAINLESS STEEL, HEX HEAD BOLTS.

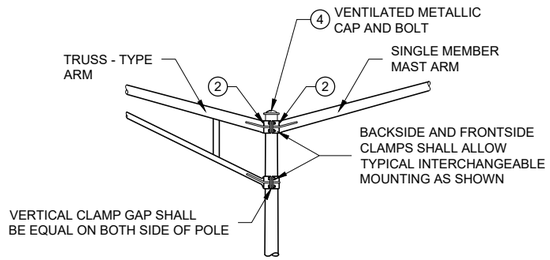
(2) GROMMETS. 1" CHASE NIPPLES OR 1" CLOSE CONDUIT NIPPLES WITH BUSHINGS SHALL BE PROVIDED FOR 1 ⅜" HOLE IN POLE SHAFT FOR WIRING.

(3) CAST ALUMINUM TRANSFORMER BASE, WHEN REQUIRED.

(4) FURNISH AND INSTALL VENTILATED, CAST METALLIC (ALUMINUM ALLOY) CAPS. FASTEN CAPS WITH ONE (1) ¼" X ¾" - 20 TPI STAINLESS STEEL, HEX HEAD BOLT.

(5) SHIMMING, IF NEEDED, SHALL BE LOCATED BETWEEN THE CONCRETE FOUNDATION AND POLE.

(6) INTERNAL DUMBBELL - TYPE VIBRATION DAMPER.

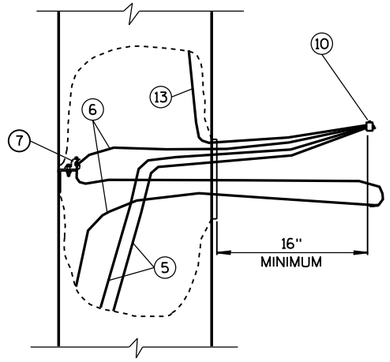


INTERCHANGEABLE MOUNTING DETAIL

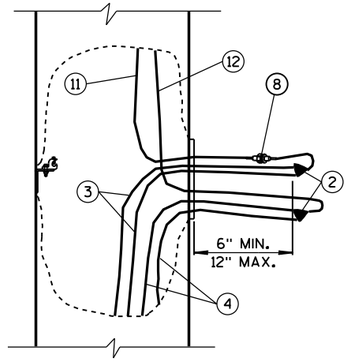
POLE MOUNTINGS FOR LIGHTING UNITS, TYPE 5 (30 FEET)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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SDD 09E01 - 15d

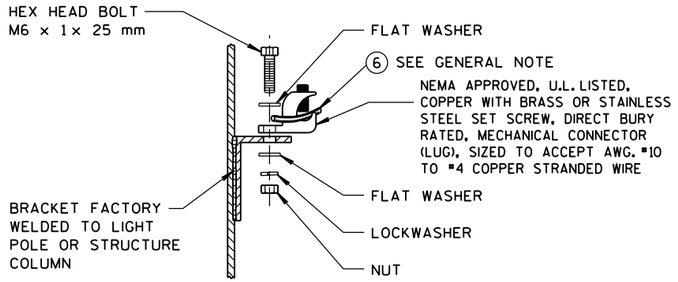


EQUIPMENT GROUNDING CONDUCTOR SLACK



UNGROUNDED CONDUCTOR SLACK (AND GROUNDED NEUTRAL SLACK IN GROUNDED NEUTRAL SYSTEM)

TYPICAL CONDUCTOR SLACK AT HANDHOLES



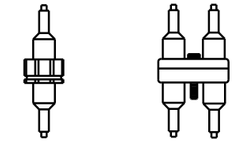
HANDHOLE GROUNDING LUG

(NUT, BOLT, WASHERS, AND LOCK WASHERS SHALL BE STAINLESS STEEL)

CONDUCTOR COLOR CODES

KEY	CONDUCTOR	COLOR
3	UNGROUNDED LINE WIRE	*
4	GROUNDED LINE WIRE	WHITE
5	SYSTEM GROUNDING LINE WIRE	GREEN
6	GROUNDING ELECTRODE CONDUCTOR	BARE
11	UNGROUNDED POLE WIRE	*
12	GROUNDED POLE WIRE	WHITE
13	EQUIPMENT GROUNDING POLE WIRE	GREEN

* FOLLOW COLOR CODING SHOWN IN THE PLANS. WHERE THE PLANS DO NOT SHOW COLOR CODING, USE BLACK FOR SINGLE LUMINAIRE POLES; BLACK AND RED FOR TWIN LUMINAIRE POLES.



1 POLE (1P) 2 POLE (2P)

FUSE ASSEMBLIES

GENERAL NOTES

DETAILS OF CONSTRUCTION AND WORKMANSHIP NOT SHOWN IN THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE CONTRACT.

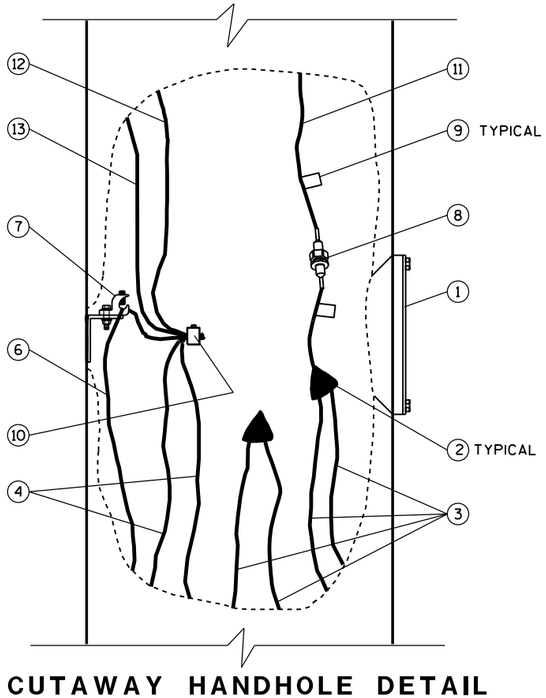
USE THIS DETAIL IN CONJUNCTION WITH THE ELECTRICAL DETAILS FOR THE APPLICATION, WHICH MAY BE A LIGHT POLE, SIGN BRIDGE, ETC.

THE GROUNDING ELECTRODE CONDUCTOR SHALL BE CONTINUOUS WITHOUT SPLICES FROM THE GROUNDING ELECTRODE THROUGH THE HANDHOLE GROUNDING LUG TO THE CONNECTOR.

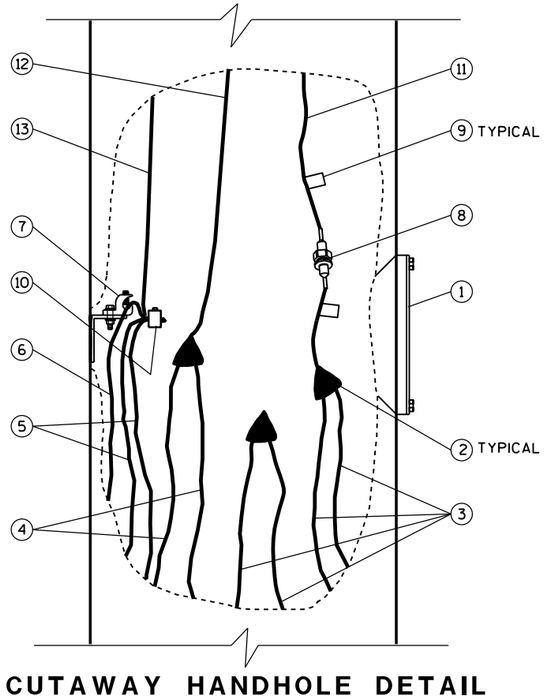
THREE POLE WIRES ARE SHOWN FOR A SINGLE LUMINAIRE LIGHT POLE. THREE ADDITIONAL POLE WIRES REQUIRED FOR TWIN LUMINAIRE LIGHT POLES ARE OMITTED FROM THE DRAWING FOR CLARITY. IN THE TWIN POLE CASE, BUNDLE EACH SET OF THREE WIRES WITH A NYLON CABLE TIE.

IN 3-PHASE SYSTEMS, THERE WILL BE ONE MORE UNGROUNDED LINE WIRE, WHICH IS OMITTED FROM THE DRAWING FOR CLARITY.

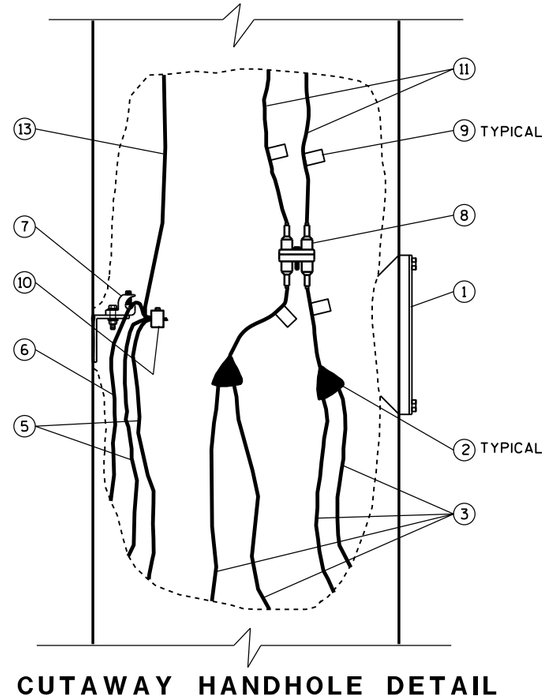
CIRCUIT TAGS SHALL BE INSTALLED ONLY WHERE REQUIRED IN THE SPECIAL PROVISIONS.



CUTAWAY HANDHOLE DETAIL
GROUNDED NEUTRAL SYSTEMS
1-Φ



CUTAWAY HANDHOLE DETAIL
ISOLATED NEUTRAL SYSTEMS
1-Φ SHOWN; 3-Φ WYE SIMILAR
(SEE GENERAL NOTE)



CUTAWAY HANDHOLE DETAIL
PHASE-TO-PHASE SYSTEMS
1-Φ SHOWN; 3-Φ DELTA SIMILAR
(SEE GENERAL NOTE)

NOTE: REQUIRED CONDUCTOR SLACK NOT SHOWN ON "CUTAWAY HAND HOLE" DETAILS FOR DRAWING CLARITY, SEE "TYPICAL CONDUCTOR SLACK AT HANDHOLES" ON THIS SHEET.

1. HANDHOLE AND COVER
2. INSULATED SPLICE
3. UNGROUNDED LINE WIRE
4. GROUNDED LINE WIRE
5. SYSTEM GROUNDING LINE WIRE
6. GROUNDING ELECTRODE CONDUCTOR
7. HANDHOLE GROUNDING LUG
8. FUSE ASSEMBLY, 1P OR 2P AS REQUIRED
9. CIRCUIT TAG (SEE GENERAL NOTE)
10. REVERSIBLE PRESSURE OR COMPRESSION GROUNDING CONNECTOR (NOT INSULATED)
11. UNGROUNDED POLE WIRE
12. GROUNDED POLE WIRE
13. EQUIPMENT GROUNDING POLE WIRE

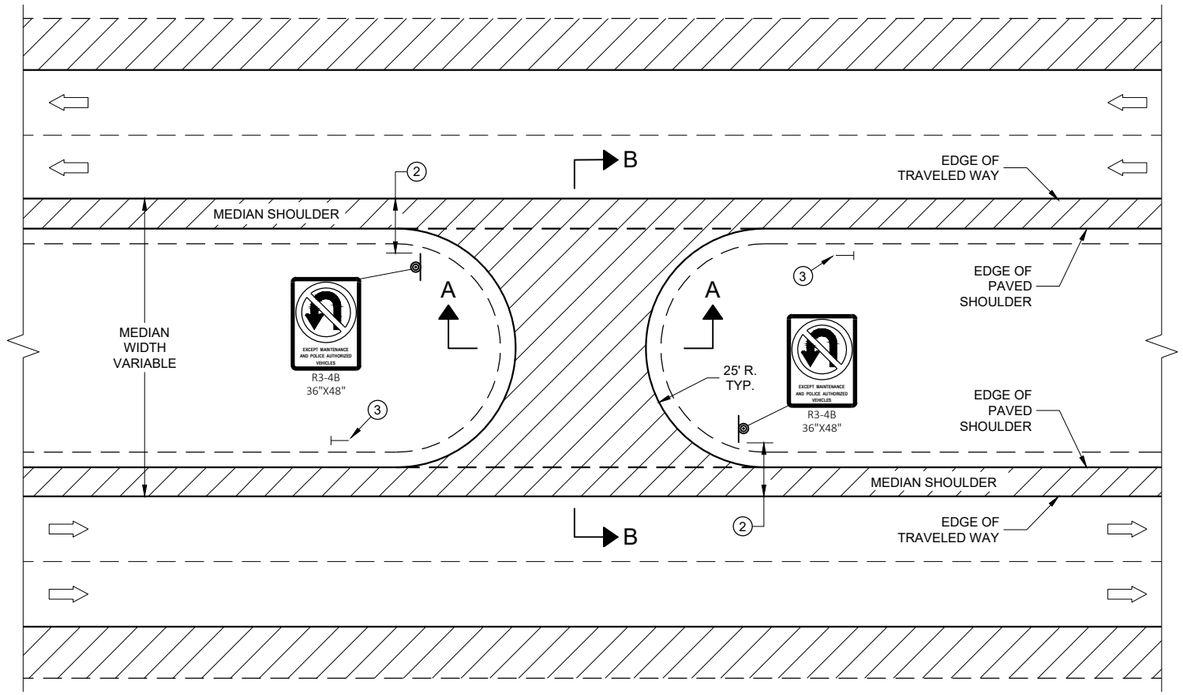
ELECTRICAL HANDHOLE WIRING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

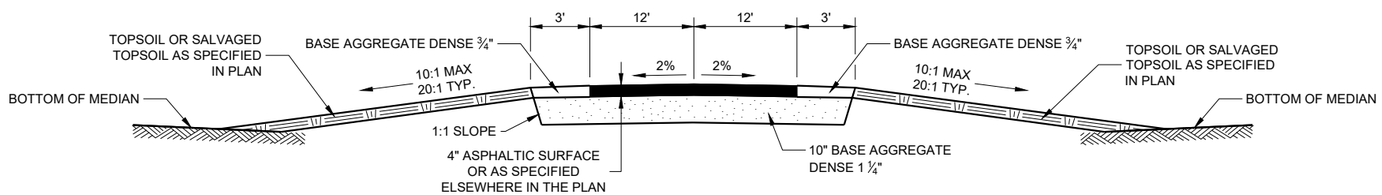
APPROVED
Sept. 2014 — DATE
/S/ Ahmet Demirbilek — STATE ELECTRICAL
FHWA

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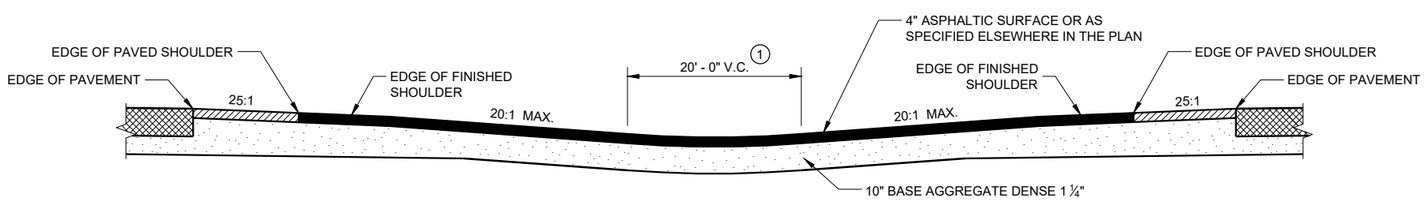
S.D.D. 10 A 1-3



PLAN VIEW



SECTION A-A



SECTION B-B

GENERAL NOTES

1. ADJUST VERTICAL CURVE LOCATION LATERALLY TO MAINTAIN 20:1 MAX.
2. SIGNING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.
3. INSTALL DELINEATOR. SEE STANDARD DETAIL DRAWING 15A4.

LEGEND

- SIGN ON PERMANENT SUPPORT
- DELINEATOR
- DIRECTION OF TRAFFIC

MAINTENANCE CROSSOVER FOR FREEWAYS

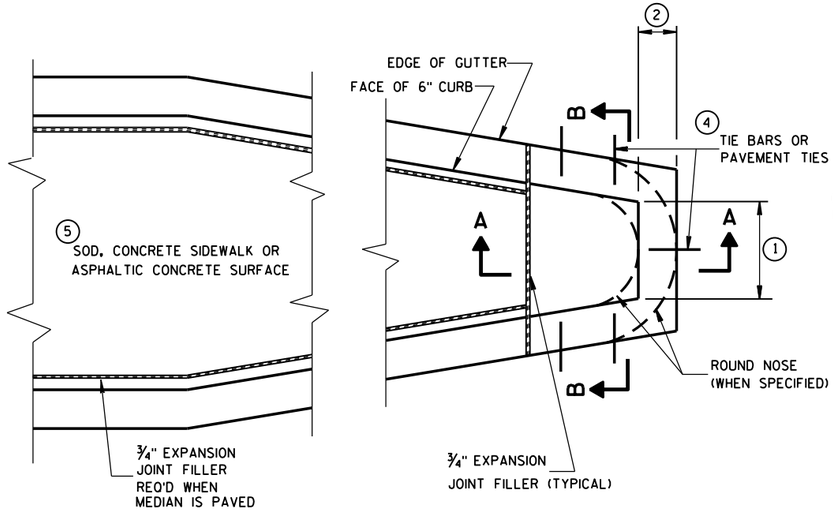
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

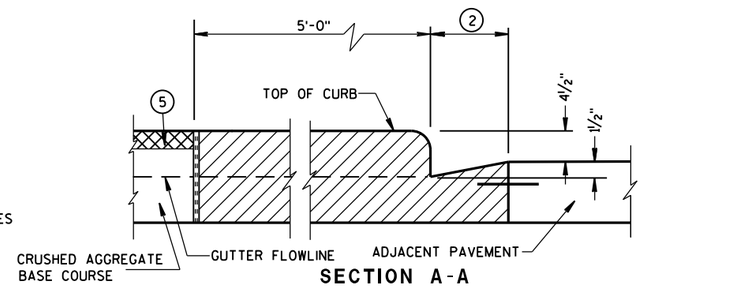
APPROVED
November 2019 — DATE
/S/ Rodney Taylor — ROADWAY STANDARDS DEVE ENGINEER

FHWA

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SDD 11A01 - 06





CONCRETE MEDIAN BLUNT NOSE DETAIL

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) SEE PLAN FOR MEDIAN NOSE WIDTH AND RADIUS (FOR ROUND NOSE ALTERNATE).

(2) WIDTH OF GUTTER TO MATCH EXISTING ADJACENT GUTTER OR AS SPECIFIED ELSEWHERE IN THE PLAN.

(3) DEPTH EQUAL TO ADJACENT PAVEMENT. ADJACENT PAVEMENT STRUCTURE DETAILS ARE SHOWN ON THE PLAN. TYPICAL OPTIONS ARE:

(1) NEW OR EXISTING CONCRETE PAVEMENT.

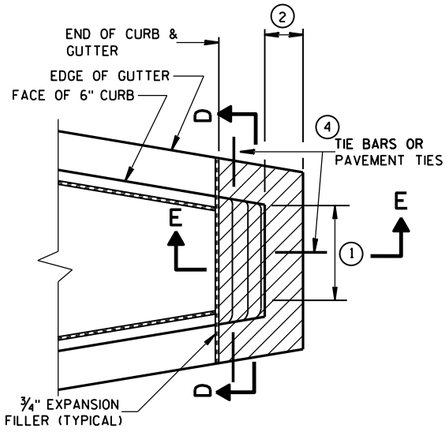
(2) ASPHALTIC CONCRETE PAVEMENT OVER NEW OR EXISTING CONCRETE BASE COURSE.

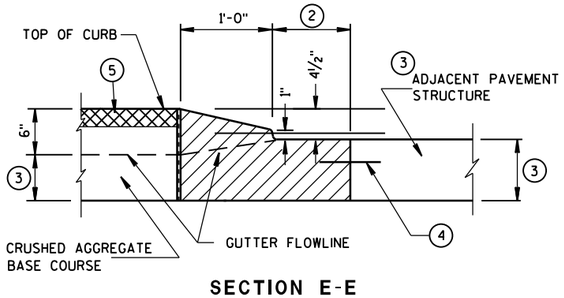
(3) ASPHALTIC CONCRETE PAVEMENT OVER CRUSHED AGGREGATE BASE COURSE.

(4) TIE BARS OR PAVEMENT TIES REQUIRED IN NEW CONCRETE PAVEMENT OR CONCRETE BASE COURSE. TIE BARS SHALL BE NO. 4 X 2'-0" SPACED AT 2'-0" C-C.

PAVEMENT TIES REQUIRED IN EXISTING CONCRETE BASE COURSE. PAVEMENT TIES SHALL BE NO. 6 X 1'-0" SPACED AT 3'-0" C-C INSTALLED ON A HORIZONTAL SKEW OF 6:1. THE DIRECTION OF SKEW SHALL ALTERNATE AFTER EVERY ONE OR TWO BARS.

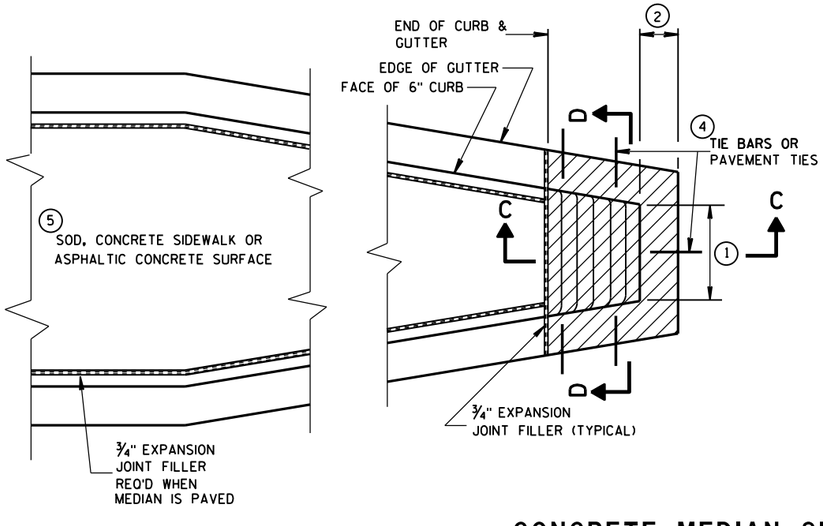
(5) SURFACE TYPE AND DETAILS ARE SHOWN ELSEWHERE IN THE PLAN.

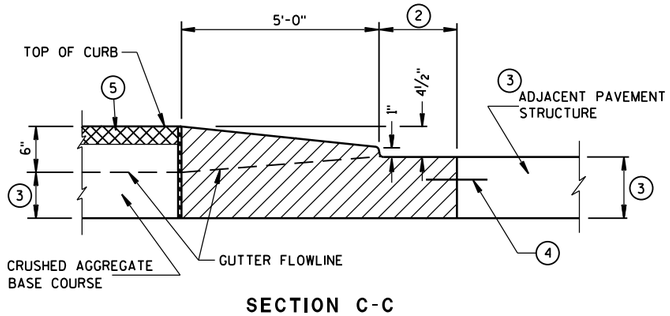




SECTION E-E

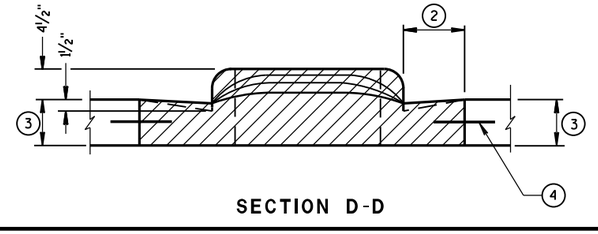
CONCRETE MEDIAN SLOPED NOSE TYPE 2





SECTION C-C

CONCRETE MEDIAN SLOPED NOSE TYPE 1



SECTION D-D

CONCRETE MEDIAN NOSE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
6/8/2006
DATE
/S/ Jerry H. Zogg
ROADWAY STANDARDS DEVELOPMENT ENGINEER

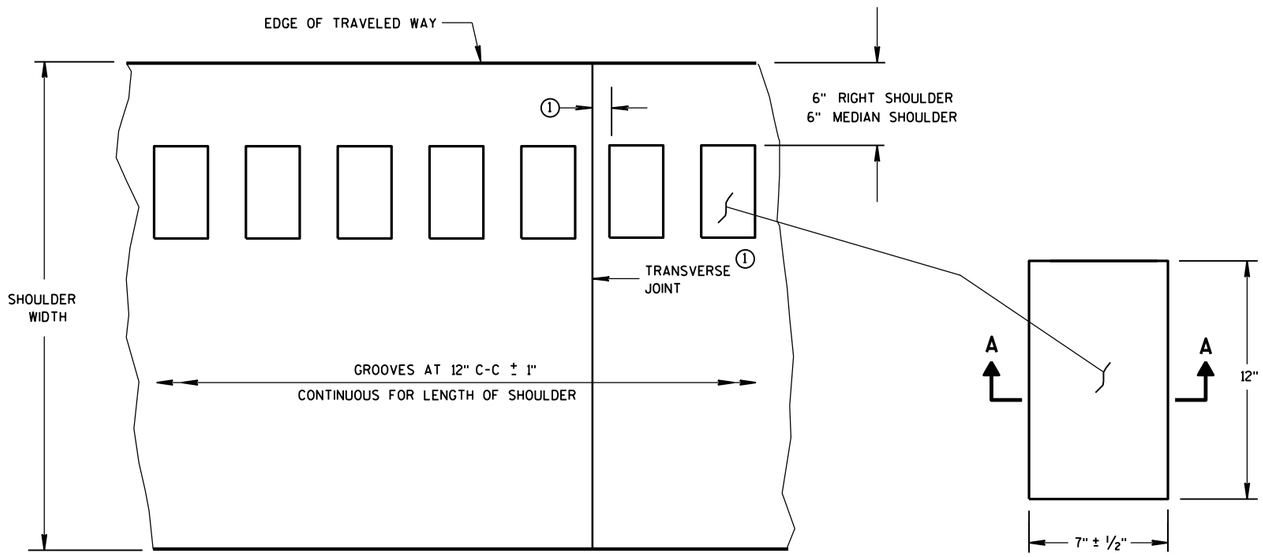
FHWA

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S.D.D. 11 B 2-2

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S.D.D. 11 B 2-2



PLAN VIEW
SHOULDER WITH GROOVES

PLAN VIEW
(SINGLE GROOVE)

PLACEMENT DETAIL FOR MILLED RUMBLE STRIP

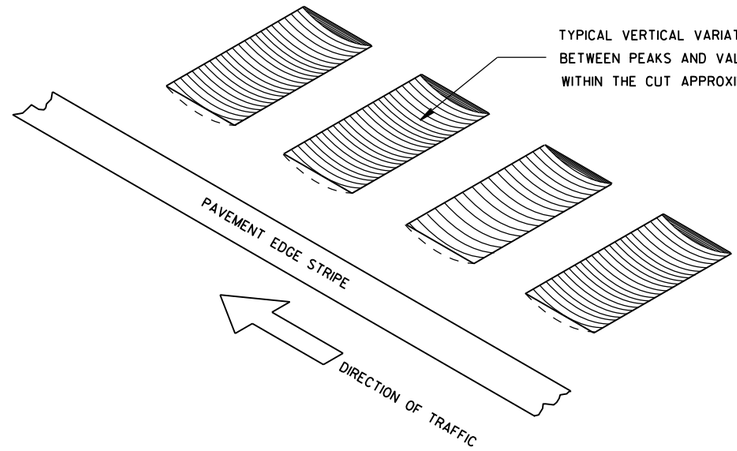
GENERAL NOTES

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

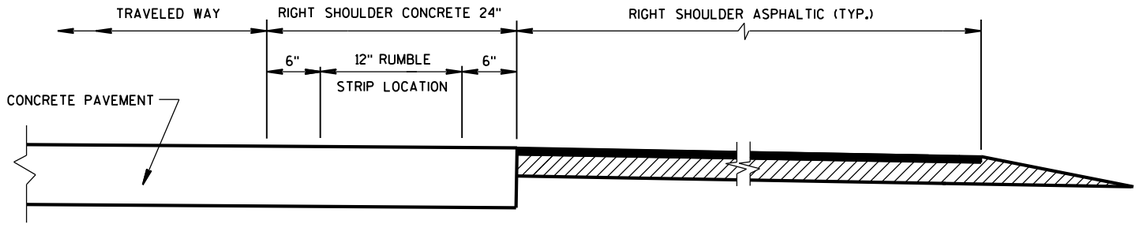
RUMBLE STRIPS ON EXPRESSWAYS

DO NOT INSTALL RUMBLE STRIPS ACROSS SIDE ROAD INTERSECTIONS, COMMERCIAL DRIVEWAYS, PRIVATE DRIVEWAYS OR ADJACENT TO RIGHT TURN LANES, LEFT TURN LANES, TURN LANE TAPERS, BRIDGE DECKS, BRIDGE APPROACHES, OR 100 FEET IN ADVANCE OF RAILROAD CROSSING. THE ATTACHED STANDARD DETAIL DRAWING SHOWS THE LOCATION OF THE RUMBLE STRIPS AT INTERCHANGE AREAS.

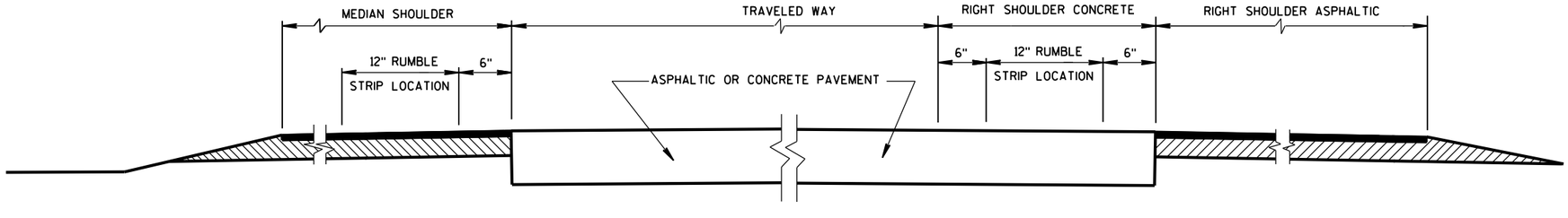
(1) CONCRETE PAVEMENT - RUMBLE STRIPS SHALL BE A MINIMUM OF 6" AWAY FROM TRANSVERSE JOINTS.



ISOMETRIC



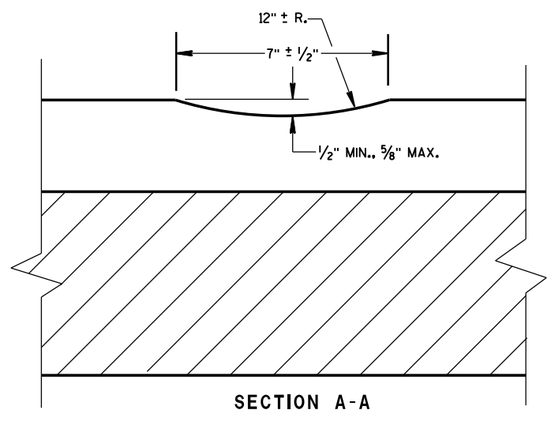
SECTION VIEW
CONCRETE PAVEMENT EXTENDS INTO RIGHT SHOULDER)



SECTION VIEW

TYPICAL LOCATIONS OF SHOULDER RUMBLE STRIPS IN RURAL DIVIDED HIGHWAYS

(ONE ROADWAY IS SHOWN)



SECTION A-A

SHOULDER RUMBLE STRIP, MILLING

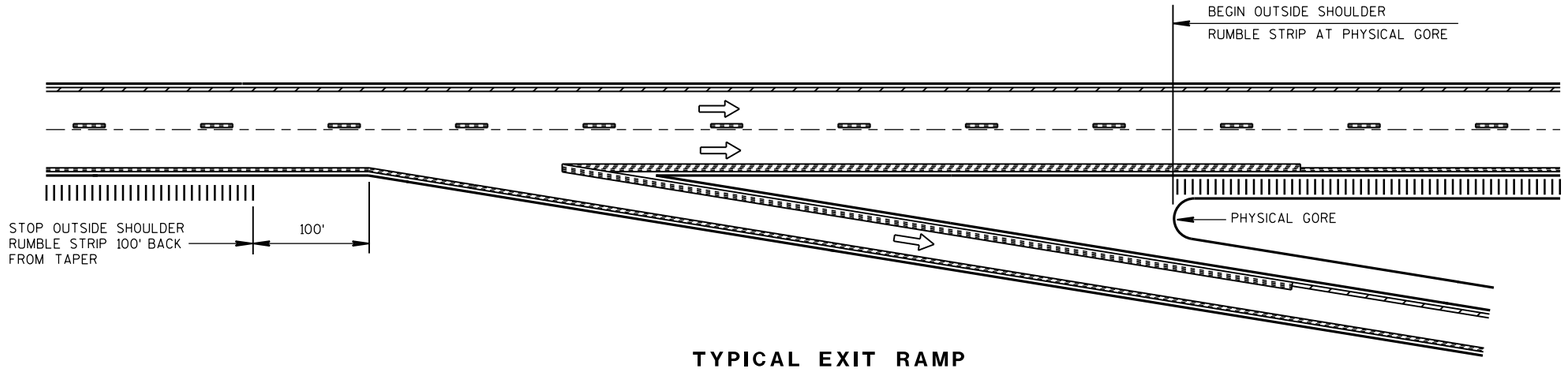
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

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S.D.D. 13 A 5-5a

6

S.D.D. 13 A 5-5a



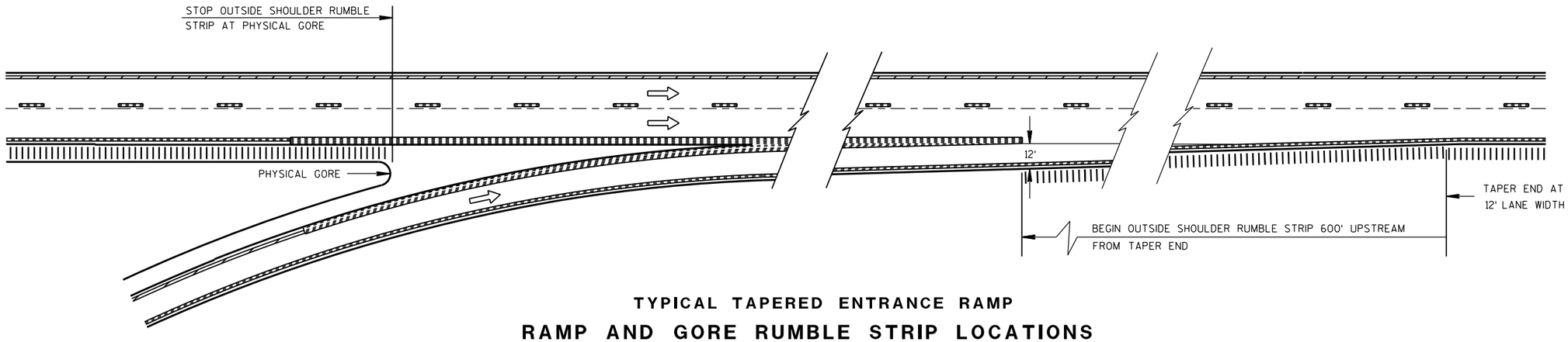
TYPICAL EXIT RAMP

NOTES:

NO RUMBLE STRIP ON EXIT, DIRECTIONAL, OR ENTRANCE RAMPS, EXCEPT NEAR THE ENTRANCE TAPER END AND ALONG THE PARALLEL RAMP AREA AS SHOWN.

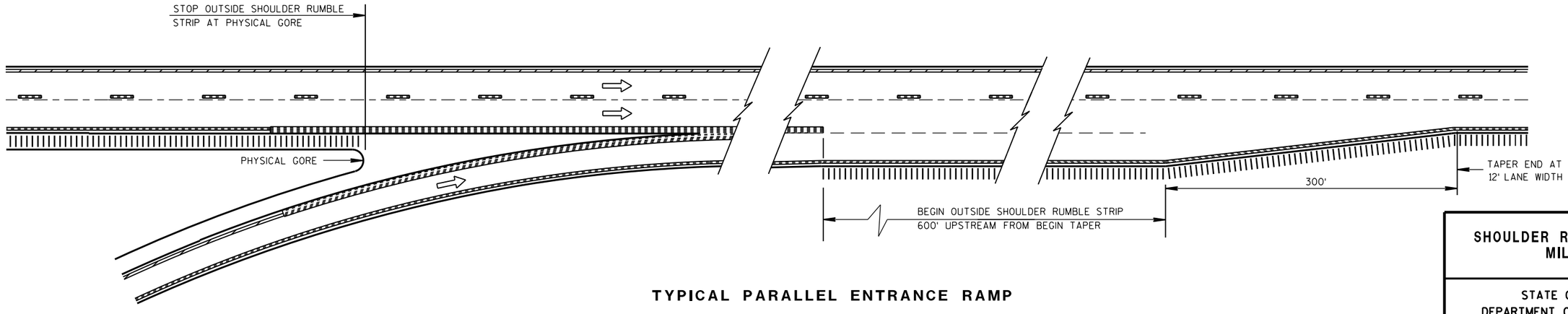
PAVEMENT MARKING DETAILS AND SPECIFICATIONS ARE PROVIDED ELSEWHERE IN THE CONTRACT.

NOTE:
ARROW SYMBOL (⇨)
SHOWS DIRECTION OF TRAVEL



TYPICAL TAPERED ENTRANCE RAMP

RAMP AND GORE RUMBLE STRIP LOCATIONS



TYPICAL PARALLEL ENTRANCE RAMP

RAMP AND GORE RUMBLE STRIP LOCATIONS

SHOULDER RUMBLE STRIP, MILLING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

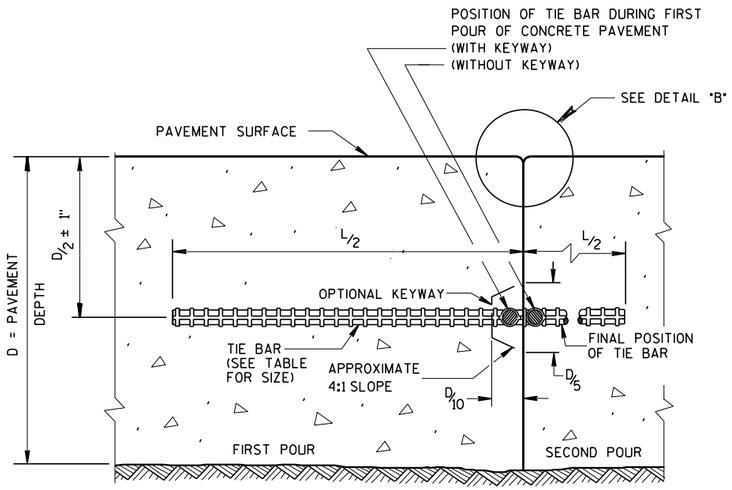
APPROVED
12/17/2012 — DATE
/S/ Jerry H. Zoga — ROADWAY STANDARDS ENGINEER
FHWA

6

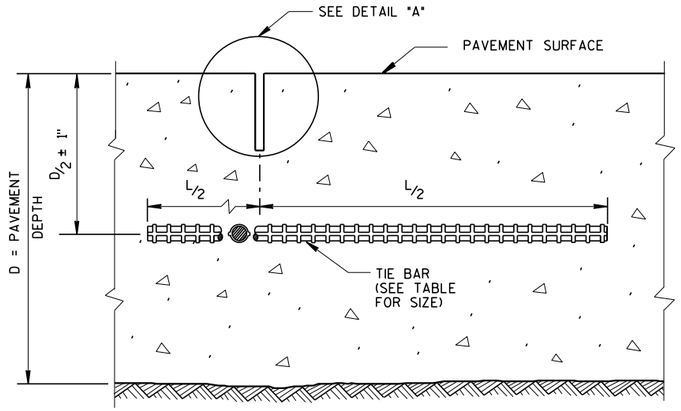
S.D.D. 13 A 5-5b

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S.D.D. 13 A 5-5b



CONSTRUCTION JOINT



SAWED JOINT

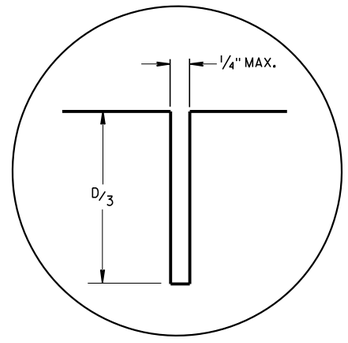
GENERAL NOTES

CREATE A LONGITUDINAL JOINT FOR PAVEMENT WIDTHS GREATER THAN 15 FEET.

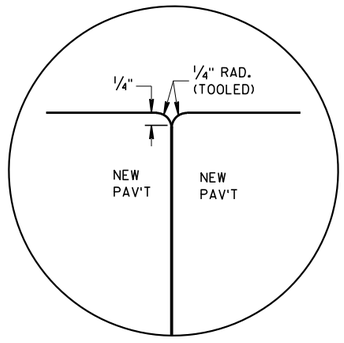
CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

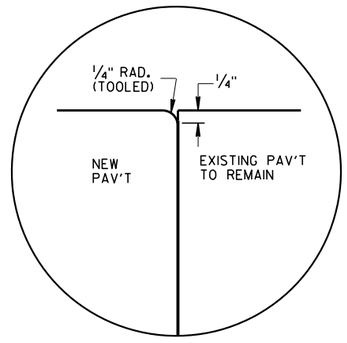
(2) PAVEMENT THAT WAS IN PLACE PRIOR TO THE CONTRACT.



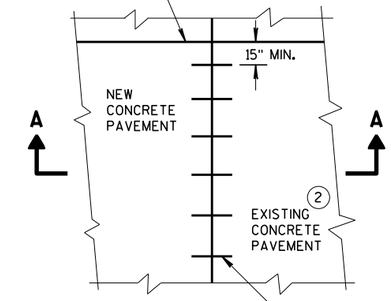
DETAIL "A"



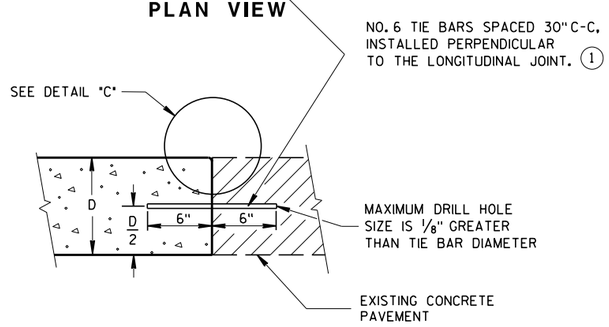
DETAIL "B"



DETAIL "C"



PLAN VIEW



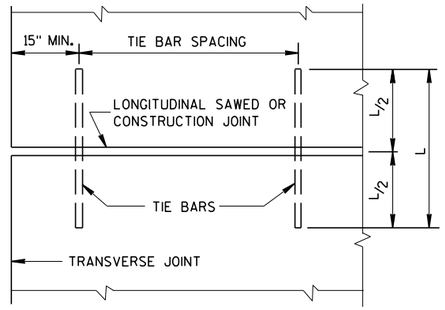
SECTION A-A
LONGITUDINAL CONSTRUCTION JOINT TIE BARS ANCHORED INTO EXISTING PAVEMENT

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



PLAN VIEW
SHOWING LOCATION OF TIE BARS

CONCRETE PAVEMENT LONGITUDINAL JOINTS AND TIES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018 — DATE
/S/ Peter Kemp P.E. — PAVEMENT SUPE
FHWA

6

S.D.D. 13 C 1-19

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S.D.D. 13 C 1-19

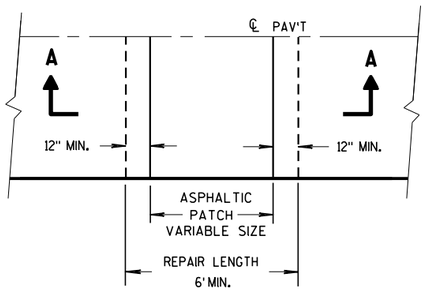
GENERAL NOTES

SAW CUT, DRILL, AND LIFT OUT EXISTING CONCRETE PAVEMENT WITHIN THE BOUNDARIES OF CONCRETE REPAIR AREAS. THE CONTRACTOR MAY MAKE ADDITIONAL SAW CUTS INSIDE THE REPAIR LIMITS TO REDUCE WEIGHT AND SIZE OF CONCRETE PIECES.

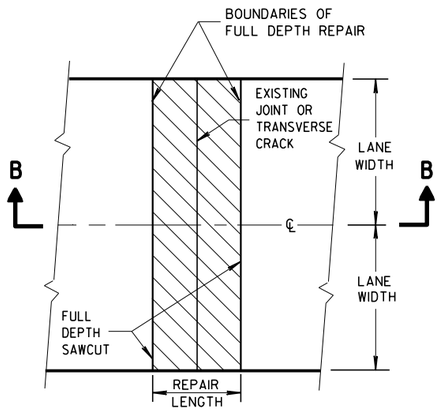
PROVIDE A 6-FOOT MINIMUM DISTANCE FROM BOUNDARIES OF CONCRETE REPAIR AREAS TO ADJACENT TRANSVERSE JOINT OR CRACK IN THE SAME LANE.

THE LENGTH OF THE REPAIRS MAY VARY FROM THE DIMENSIONS SHOWN IF THE EXISTING CONCRETE PAVEMENT IS NONDOWELED AND THE PAVEMENT IS TO BE OVERLAID AFTER REPAIRING.

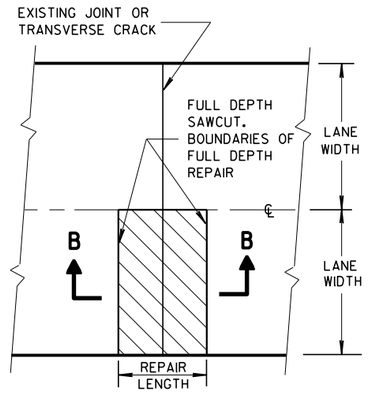
(1) DOWEL BARS MIGHT NOT EXIST.



PLAN VIEW

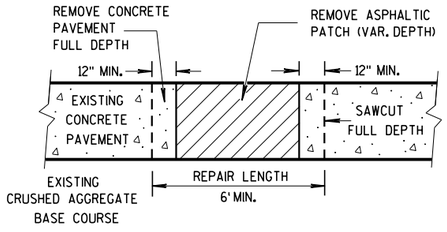


PLAN VIEW
(DOUBLE LANE REPAIR)



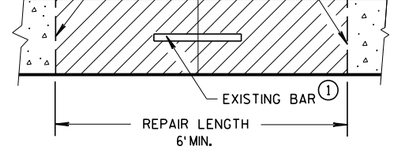
PLAN VIEW
(SINGLE LANE REPAIR)

FULL DEPTH CONCRETE PAVEMENT REMOVAL



SECTION A-A

HMA PATCH REMOVAL



SECTION B-B

CONCRETE REMOVAL

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

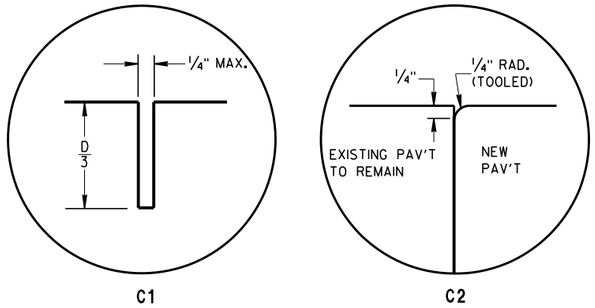
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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S.D.D. 13 C 9-15a

6

S.D.D. 13 C 9-15a



C1 C2

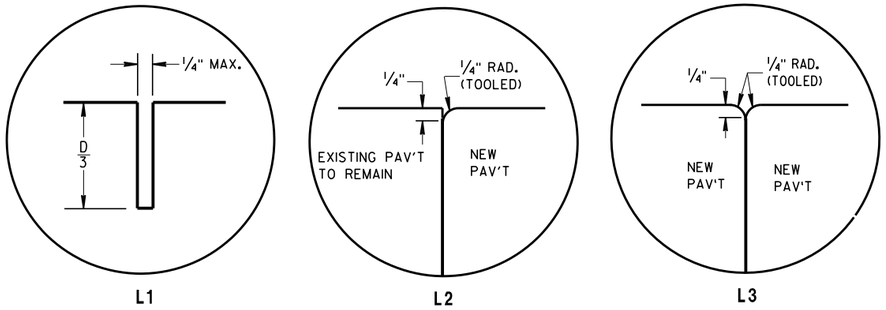
TRANSVERSE JOINTS

TIE BAR TABLE

PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 1/2"	NO. 4	30"	36"
≥ 10 1/2"	NO. 5	36"	36"
	NO. 4 *	30"	24" **

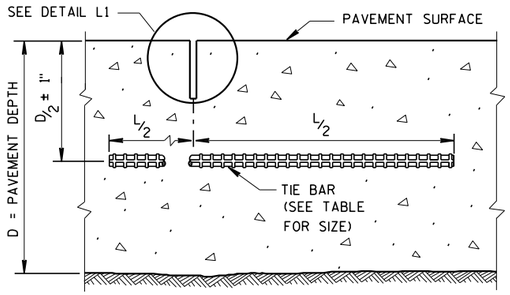
* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

** CONFORM TO 15" MINUMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.



L1 L2 L3

LONGITUDINAL JOINTS



SECTION C-C

SAWED LONGITUDINAL JOINT

GENERAL NOTES

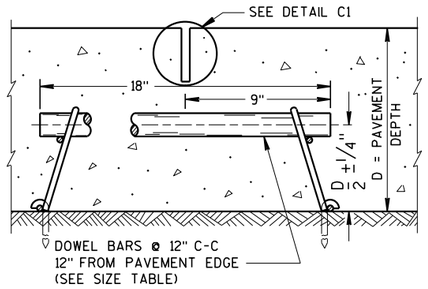
INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

CONCRETE PAVEMENT REPAIRS OF EXISTING NONDOWELED CONCRETE PAVEMENTS DO NOT NEED TO BE DOWELED.

ANCHOR DOWEL BARS AND TIE BARS INTO DRILLED HOLES WITH AN EPOXY.

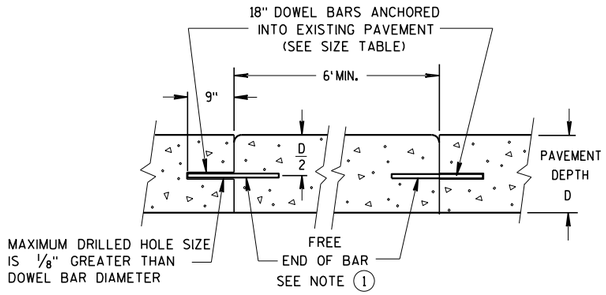
FOR MULTI-LANE CONCRETE PAVEMENT REPLACEMENTS, PROVIDE A MINIMUM DISTANCE OF 15 INCHES FROM ALL TRANSVERSE JOINTS OR EDGES OF REPLACEMENT TO THE CENTER OF THE TIE BAR NEAREST THAT JOINT OR EDGE.

(1) APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

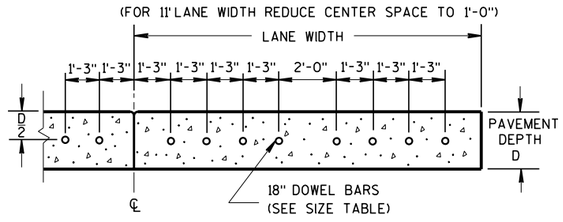


SECTION F-F

CONTRACTION JOINT



SECTION D-D

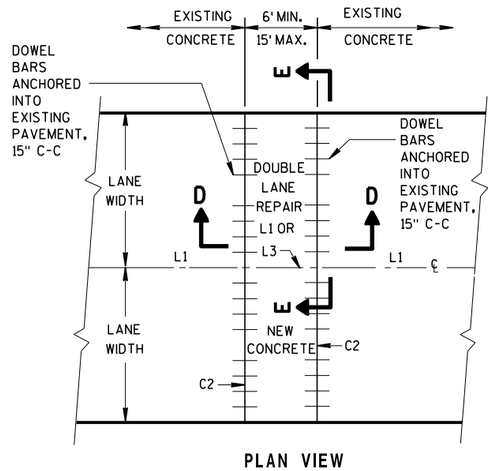


SECTION E-E

DRILLED DOWEL BAR CONSTRUCTION JOINT

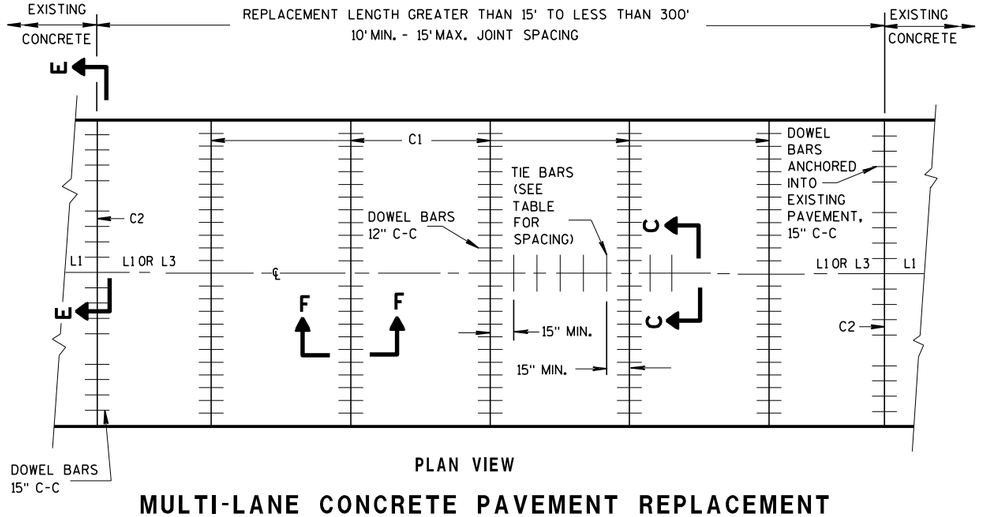
PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	DRILLED DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 1/2", 6", 6 1/2"	NONE	NONE	12'
7", 7 1/2"	1"	1"	14'
8", 8 1/2"	1 1/4"	1 1/4"	15'
9", 9 1/2"	1 1/4"	1 1/4"	15'
10" & ABOVE	1 1/2"	1 1/4"	15'



PLAN VIEW

MULTI-LANE CONCRETE PAVEMENT REPAIR



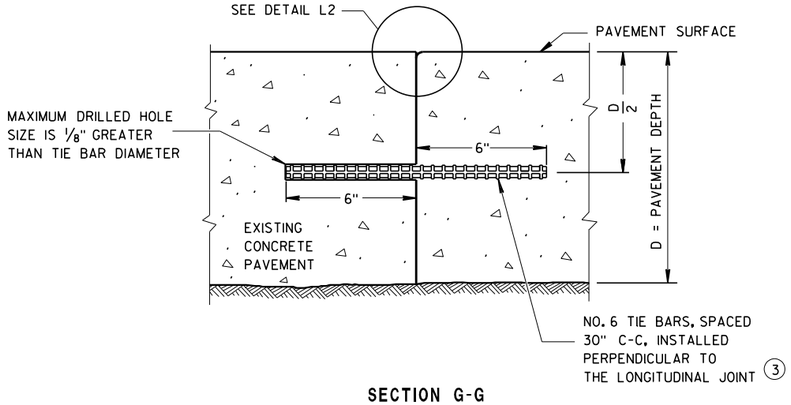
PLAN VIEW

MULTI-LANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

6

S.D.D. 13 C 9-15b



SECTION G-G

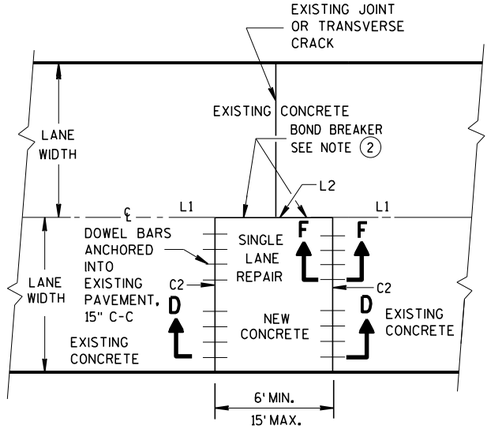
TIE BARS ANCHORED INTO EXISTING PAVEMENT

GENERAL NOTES

(1) WITH THE APPROVAL OF THE ENGINEER, FOR SINGLE LANE PAVEMENT REPLACEMENTS LESS THAN 30 FEET IN LENGTH, THE CONTRACTOR MAY INSTALL DRILLED TIE BARS ON 6:1 SKEW HORIZONTALLY, DIRECTION OF SKEW ALTERNATING WITH EACH SUCCESSIVE BAR. DRIVE SKEWED TIE BARS TO A DEPTH OF 6 INCHES IN A HOLE OF SUCH A DIAMETER AS TO PROVIDE A TIGHT DRIVEN FIT.

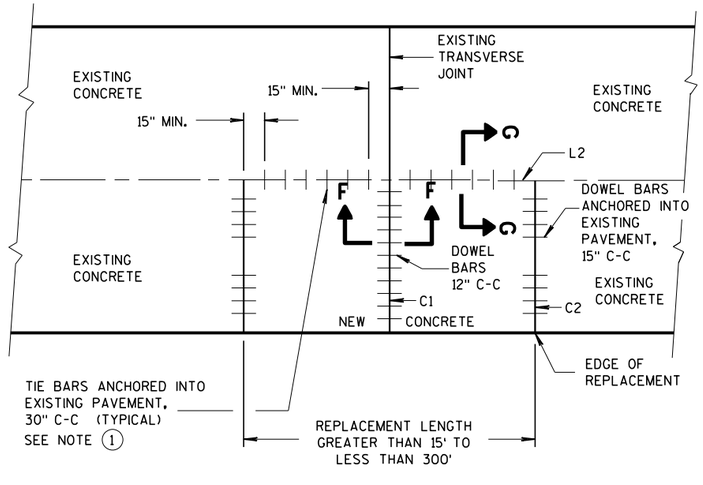
(2) USE AN ENGINEER-APPROVED BOND BREAKER (E.G. RELEASE AGENT, CURING COMPOUND) FOR SINGLE LANE REPAIRS UP TO 15 FEET IN LENGTH.

(3) ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



PLAN VIEW

SINGLE LANE CONCRETE PAVEMENT REPAIR



PLAN VIEW

SINGLE LANE CONCRETE PAVEMENT REPLACEMENT

CONCRETE PAVEMENT REPAIR AND REPLACEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

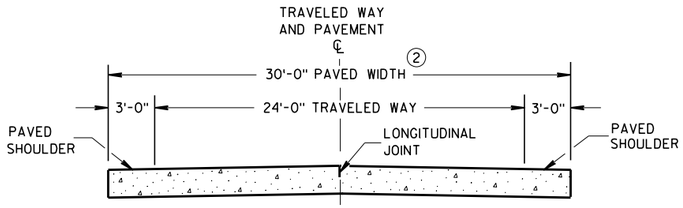
APPROVED

March 2018 — DATE

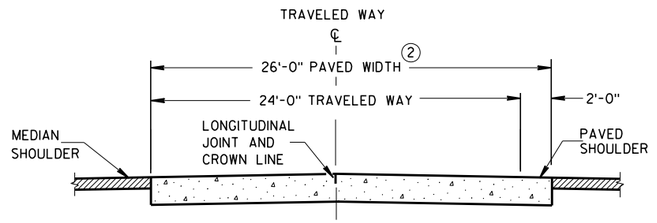
/S/ Peter Ken... — PAVEMENT SUPE...

FHWA

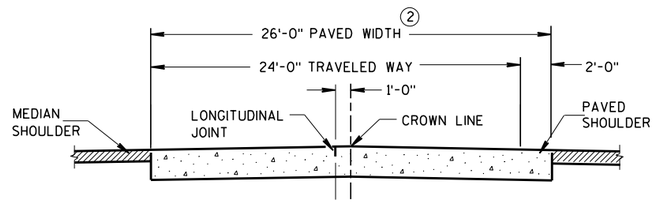
S.D.D. 13 C 9-15c



SECTION A-A
TWO-LANE TWO-WAY HIGHWAY (1)



SECTION B-B



ALTERNATIVE SECTION B-B
(1)
DIVIDED HIGHWAY

GENERAL NOTES

CONTRACTION JOINTS

CONSTRUCT TRANSVERSE CONTRACTION JOINTS NORMAL TO THE CENTERLINE. SHOW THE LOCATION OF CONTRACTION JOINTS THROUGH INTERSECTIONS ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

INSTALL DOWEL BARS PARALLEL TO THE PAVEMENT CENTERLINE AND PAVEMENT SURFACE.

FOR PAVEMENT SLABS OF VARYING WIDTHS, LOCATE THE OUTER MOST DOWEL BAR SO THAT THE CENTER OF THE BAR IS A MINIMUM OF 6 INCHES AND A MAXIMUM OF 18 INCHES FROM THE FREE EDGE OF PAVEMENT.

CONSTRUCTION JOINTS

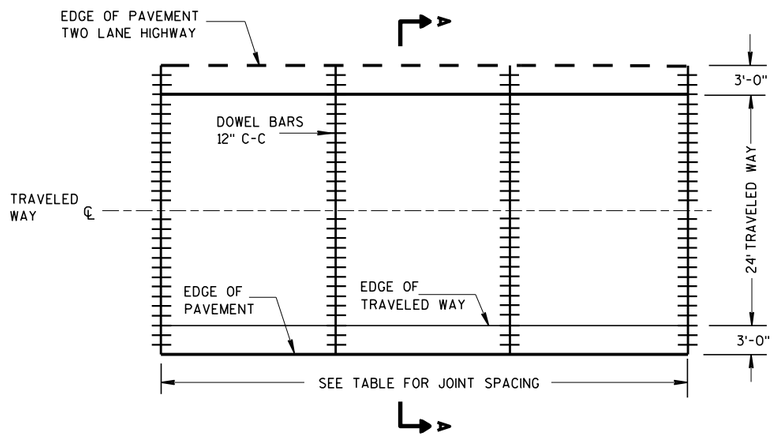
LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.

(1) REFER TO TYPICAL CROSS SECTIONS FOR ADDITIONAL DETAILS.

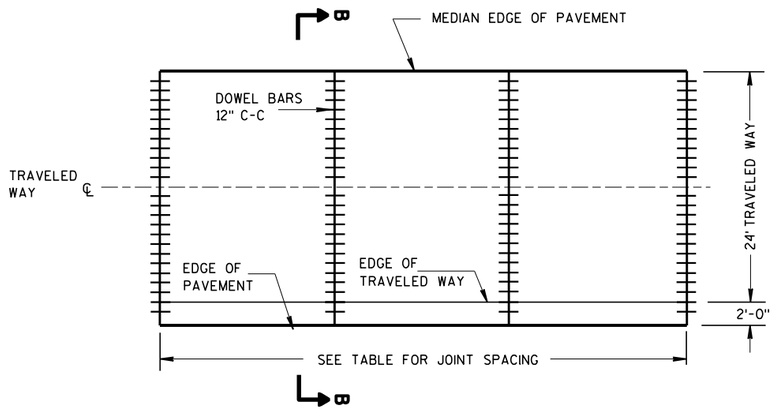
(2) MEASURE THE ENTIRE PAVED WIDTH INCLUDING THE PORTION(S) LABELED PAVED SHOULDER AS CONCRETE PAVEMENT.

PAVEMENT DEPTH, DOWEL BAR SIZE AND JOINT SPACING TABLE

PAVEMENT DEPTH (D)	DOWEL BAR DIAMETER	CONTRACTION JOINT SPACING
5 ½", 6", 6 ½"	NONE	12'
7", 7 ½"	1"	14'
8", 8 ½"	1 ¼"	15'
9", 9 ½"	1 ¼"	15'
10" & ABOVE	1 ½"	15'



CONTRACTION JOINT LAYOUT
FOR TWO-LANE TWO-WAY HIGHWAY



CONTRACTION JOINT LAYOUT
FOR DIVIDED HIGHWAY

RURAL DOWELED CONCRETE PAVEMENT

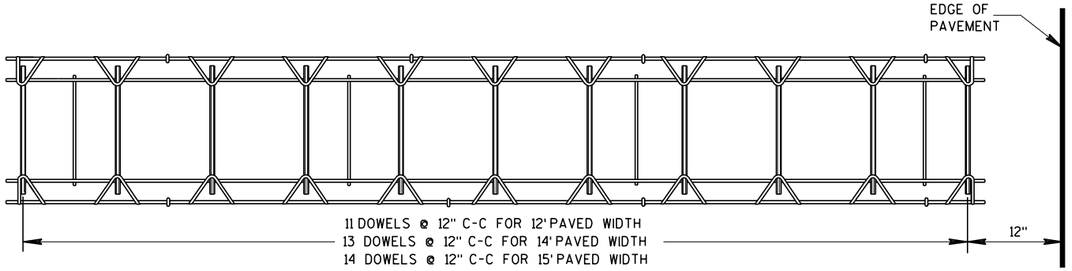
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

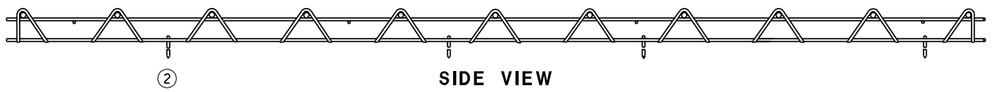
S.D.D. 13 C 11-12a

6

S.D.D. 13 C 11-12a



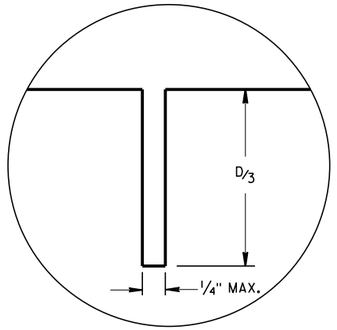
PLAN VIEW



SIDE VIEW

(NORMAL TO CENTERLINE)

CONTRACTION JOINT DOWEL ASSEMBLY ①



JOINT DETAIL

GENERAL NOTES

① OBTAIN THE ENGINEER'S APPROVAL FOR THE USE OF ALTERNATIVE DESIGNS OF THE DOWEL ASSEMBLY. USE MECHANICAL DOWEL BAR INSERTERS OR DOWEL ASSEMBLIES WHEN CONSTRUCTING CONTRACTION JOINTS.

② SECURE BASKETS WITH ANCHORS TO HOLD DOWEL BARS IN THE CORRECT POSITION AND ALIGNMENT. TYPE, LOCATION, NUMBER AND LENGTH OF ANCHORS ARE DEPENDENT UPON FIELD CONDITIONS.

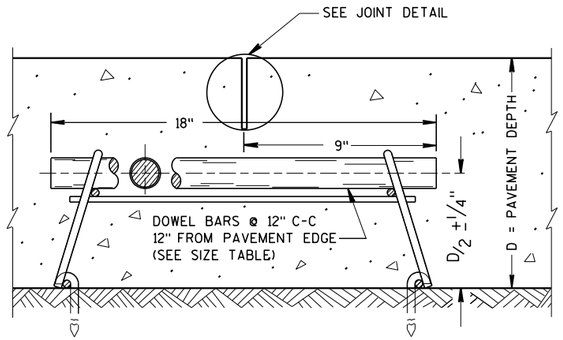
③ FORM OR SAW CONSTRUCTION JOINTS. PROVIDE A 1/4-INCH RADIUS AT FORMED JOINTS.

④ PROVIDE A SMOOTH VERTICAL FACE FOR THE ENTIRE DEPTH OF THE PAVEMENT WHEN FORMING CONSTRUCTION JOINTS.

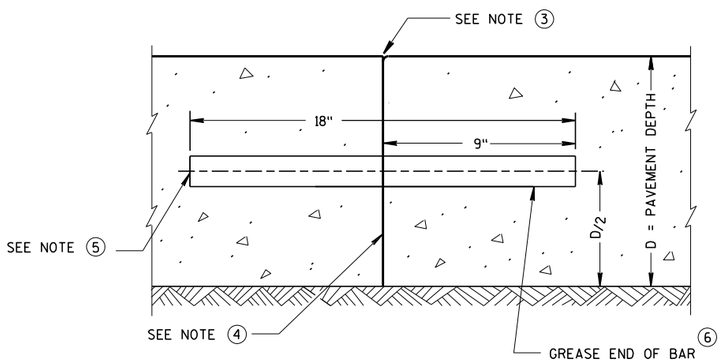
⑤ INSTALL DOWEL BARS AT CONSTRUCTION JOINTS BY FORMING OR DRILLING. INSTALL FORMED DOWEL BARS 12 INCHES C-C AND 12 INCHES FROM PAVEMENT EDGE. REMOVE EXCESS CONCRETE FROM THE FREE END OF THE DOWEL BAR IF DOWEL BARS ARE FORMED THROUGH A HEADER BOARD. INSTALL DRILLED DOWEL BARS ACCORDING TO *DRILLED DOWEL BAR CONSTRUCTION JOINT* DETAIL.

⑥ APPLY A THIN UNIFORM COATING OF SURFACE TREATMENT TO THE FREE END OF DOWEL BARS TO PREVENT BONDING.

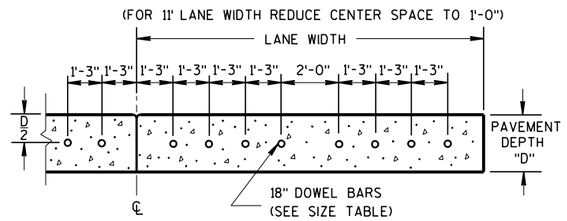
⑦ ANCHOR DOWEL BARS INTO DRILLED HOLES WITH AN EPOXY. MAXIMUM DRILLED HOLE SIZE IS 1/8-INCH GREATER THAN DOWEL BAR DIAMETER, 9 INCHES IN LENGTH.



DOWELED CONTRACTION JOINT



TRANSVERSE CONSTRUCTION JOINT



DRILLED DOWEL BAR CONSTRUCTION JOINT ⑦

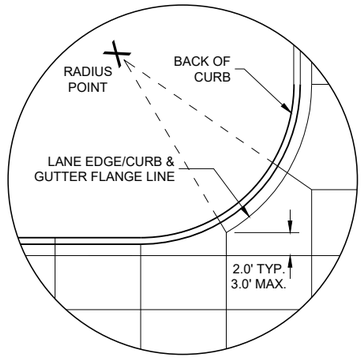
RURAL DOWELED CONCRETE PAVEMENT

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

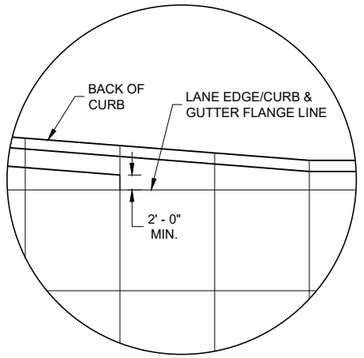
APPROVED
March 2018 — DATE
/S/ Peter Kemp P.E. — PAVEMENT SUP
FHWA

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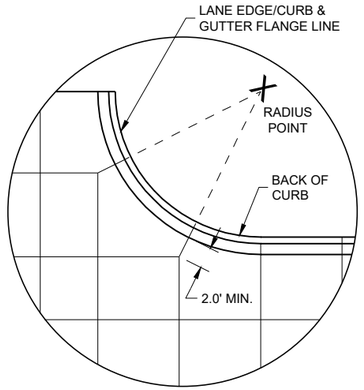
S.D.D. 13 C 11-12b



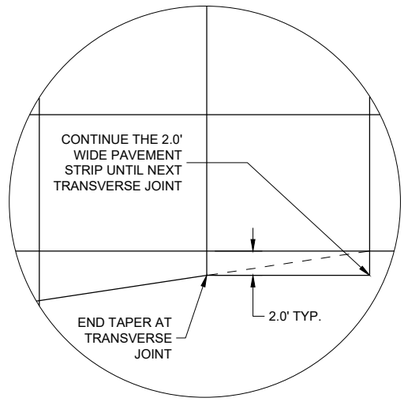
DETAIL "A"



DETAIL "B"



DETAIL "C"



DETAIL "D"

GENERAL NOTES

THE PRIMARY ROADWAY CONTROLS THE TRANSVERSE JOINT PATTERN.

ALIGN NEW JOINTS WITH EXISTING JOINTS OR CRACKS.

CONSTRUCT TRANSVERSE JOINTS PERPENDICULAR TO THE ROADWAY.

ADJUST TRANSVERSE JOINTS TO ALIGN WITH UTILITY FIXTURES (E.G MANHOLES AND INLETS) IN THE PAVEMENT STRUCTURE WHEN POSSIBLE. WATER VALVES DO NOT REQUIRE JOINT ADJUSTMENT.

AVOID SLABS LESS THAN 2 FEET WIDE OR GREATER THAN 15 FEET WIDE.

SEE TABLE FOR TRANSVERSE JOINT SPACING. JOINT SPACING SPECIFIED IS MAXIMUM AND ACTUAL SPACING CAN BE ADJUSTED TO ACCOMMODATE INTERSECTIONS.

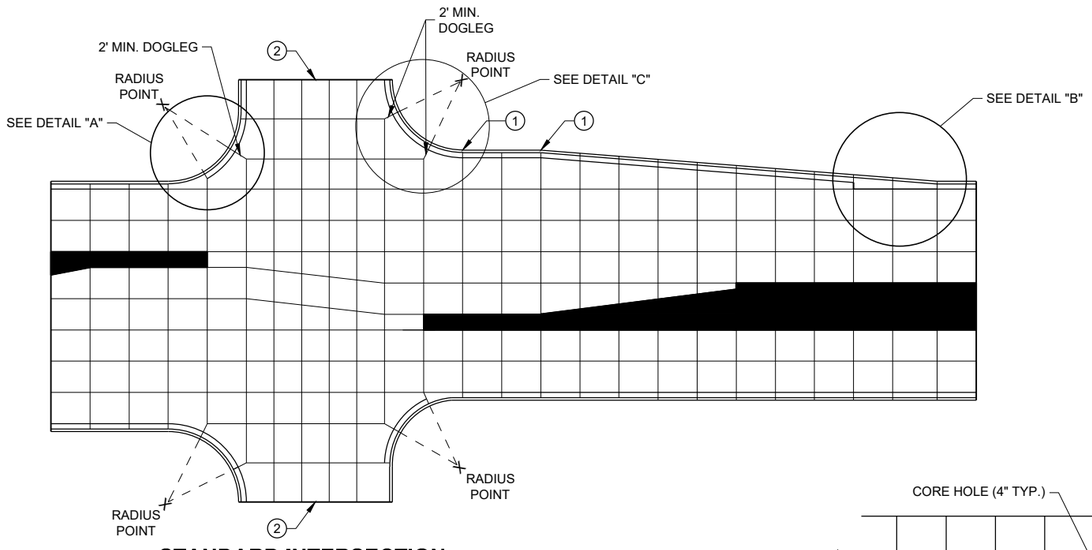
AVOID ANGLES LESS THAN 60° BY DOGLEGGING JOINTS THROUGH CURVE RADIUS POINTS. USE 90° ANGLES WHEN POSSIBLE.

CORRELATE LONGITUDINAL JOINTS WITH LANE LINES WHEN POSSIBLE.

(1) PROVIDE TRANSVERSE JOINTS AT ALL PAVEMENT WIDTH CHANGES.

(2) CONSTRUCT DOWELED EXPANSION JOINT ON THE SIDE ROAD OF AN INTERSECTION IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH. ALIGN EXPANSION JOINT WITHEDGE OF RADIUS.

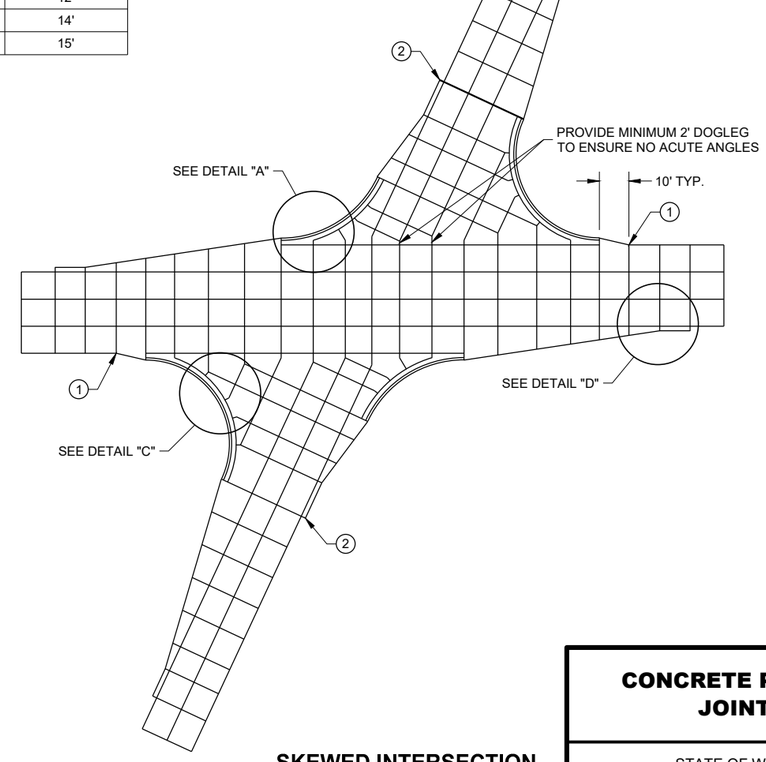
(3) THE ENGINEER MAY APPROVE SLIGHT VARIATIONS FROM THESE JOINTING DETAILS.



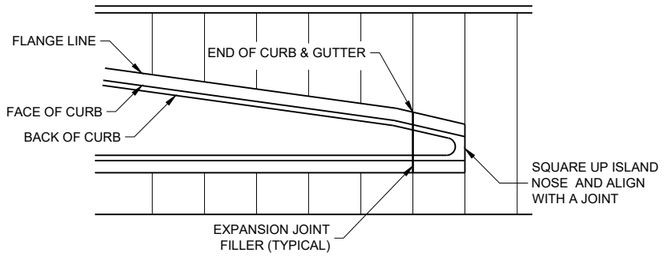
STANDARD INTERSECTION

PAVEMENT DEPTH AND JOINT SPACING TABLE

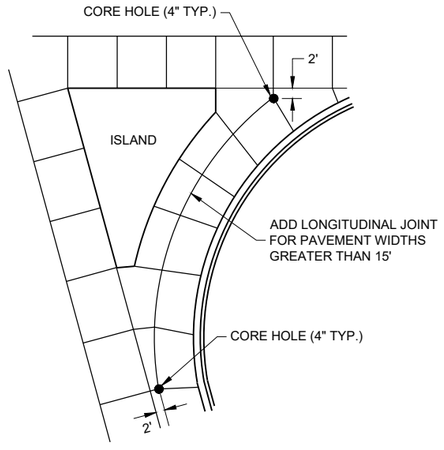
PAVEMENT DEPTH (D)	CONTRACTION JOINT SPACING
6", 6 ½"	12'
7", 7 ½"	14'
8" & ABOVE	15'



SKEWED INTERSECTION



APPROACH TO MEDIAN



LARGE RIGHT TURN

CONCRETE PAVEMENT JOINTING

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 13C18 - 07a

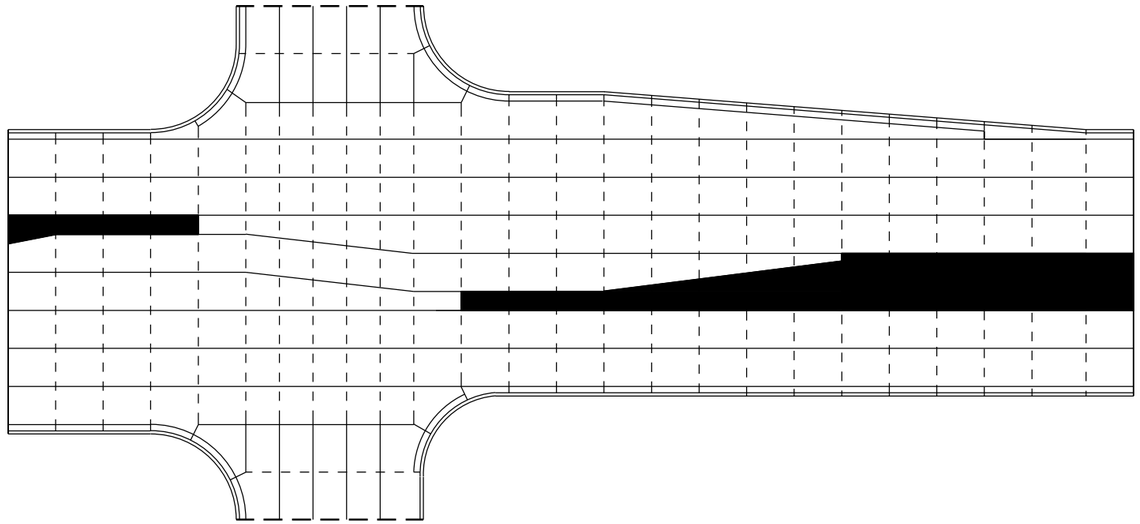
SDD 13C18 - 07a

LEGEND

POTENTIAL DOWELED EXPANSION JOINT

DOWELED JOINT

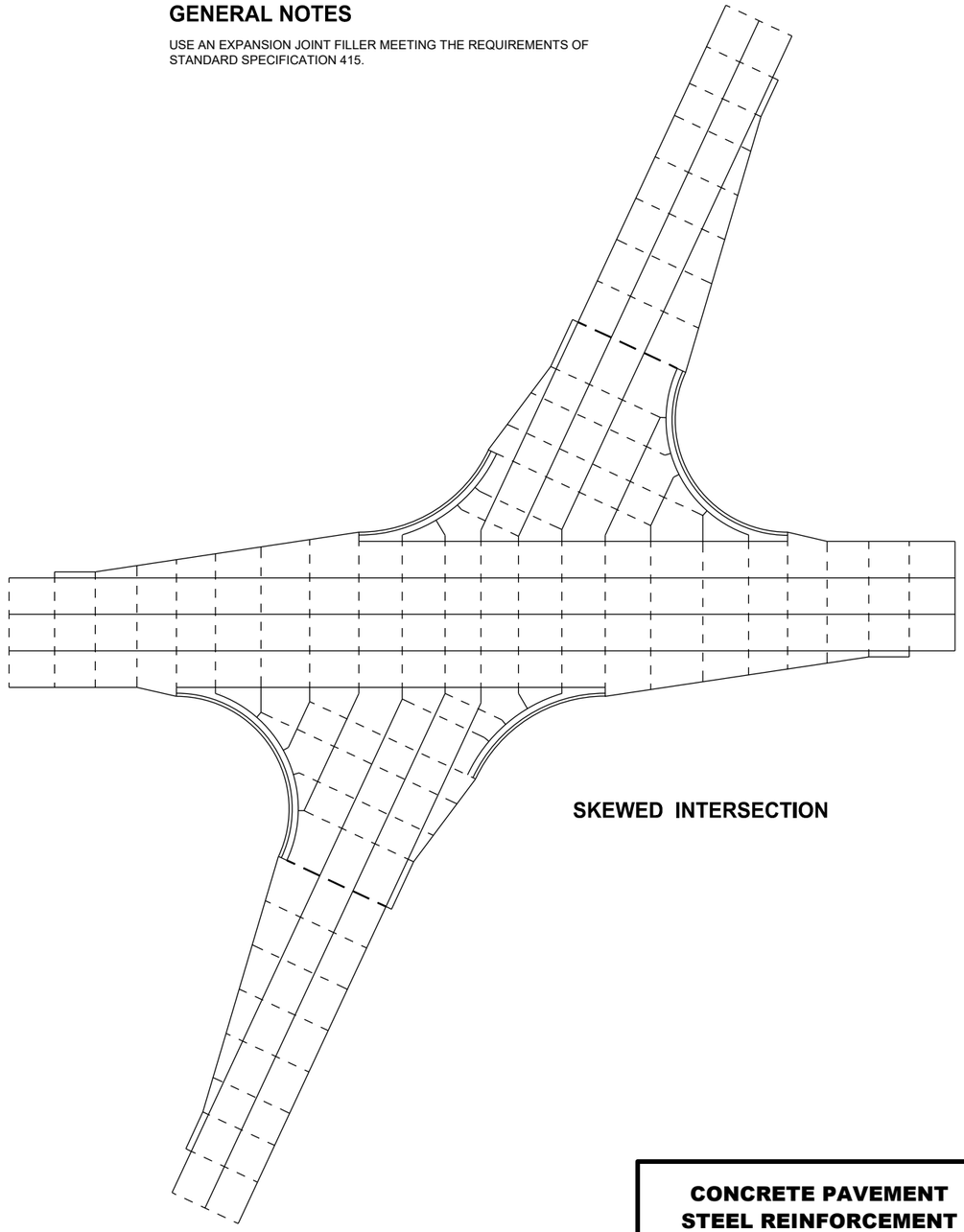
TIED JOINT



STANDARD INTERSECTION

GENERAL NOTES

USE AN EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.



SKEWED INTERSECTION

6

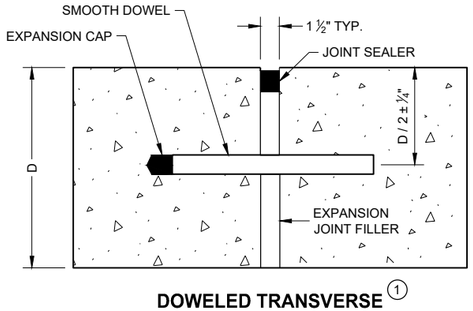
SDD 13C18 - 07b

CONCRETE PAVEMENT STEEL REINFORCEMENT

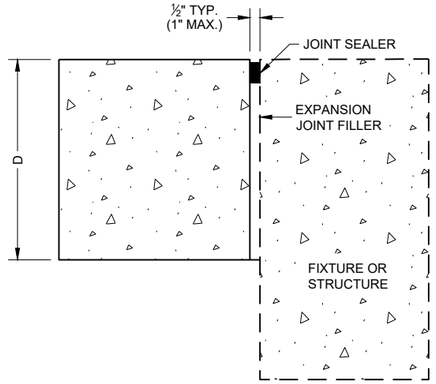
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 13C18 - 07b



DOWELED TRANSVERSE (1)



UNTIED - LONGITUDINAL

EXPANSION JOINTS

TIE BAR TABLE

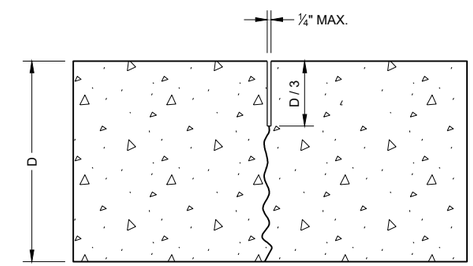
PAVEMENT DEPTH (D)	TIE BAR SIZE	TIE BAR LENGTH (L)	MAX. TIE BAR SPACING
< 10 ½"	NO. 4	30"	36"
≥ 10 ½"	NO. 5	36"	36"
	NO. 4*	30"	24"**

* SUBSTITUTE BENT BARS AT LONGITUDINAL JOINTS WHEN EQUIPMENT LIMITATIONS DURING CONSTRUCTION WARRANT (e.g. AUXILIARY LANES OR TURN LANES)

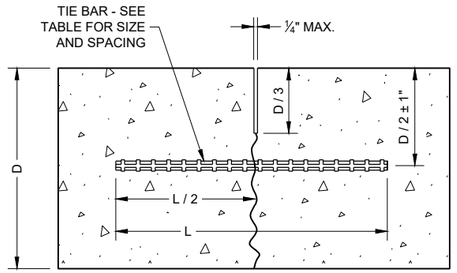
** CONFORM TO 15" MINIMUM SPACING FROM TRANSVERSE JOINTS; SPACING BETWEEN TIE BARS WILL BE 30" AT TRANSVERSE JOINTS.

GENERAL NOTES

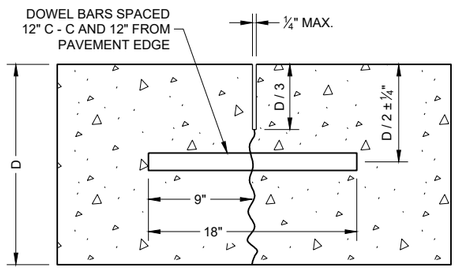
1. USE DOWELED EXPANSION JOINTS ON SIDE ROADS AT INTERSECTIONS (TO ISOLATETHE SIDE ROAD FROM THE THROUGH STREET) IF THE SIDE ROAD IS CONCRETE PAVEMENT AND GREATER THAN 300 FEET IN LENGTH.
2. SPACE CONTRACTION JOINTS IN ACCORDANCE WITH SDD 13C4, 13C11 OR 13C13.
3. LOCATE CONSTRUCTION JOINTS A MINIMUM OF 6 FEET FROM THE NEAREST CONTRACTION JOINT AND ALIGN PARALLEL TO CONTRACTION JOINTS.
4. CONSTRUCTION JOINTS CAN BE FORMED OR SAWED.
5. IF JOINT IS FORMED, PROVIDE A ¼" RADIUS.
6. ANCHOR TIE BARS INTO DRILLED HOLES WITH AN EPOXY.



UNDOWELED TRANSVERSE

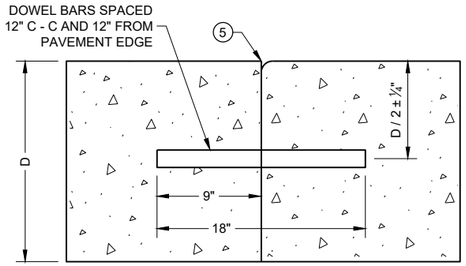


TIED LONGITUDINAL

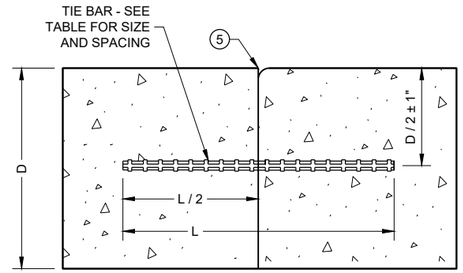


DOWELED TRANSVERSE

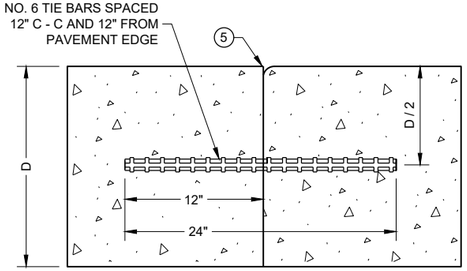
CONTRACTION JOINTS (2)



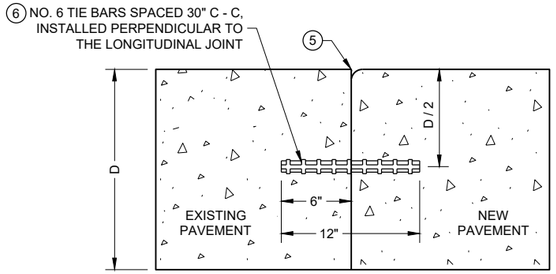
DOWELED TRANSVERSE (3)



TIED LONGITUDINAL



TIED TRANSVERSE (3)
(FOR USE ON NON-DOWELED PAVEMENTS ONLY)



TIED LONGITUDINAL TO EXISTING

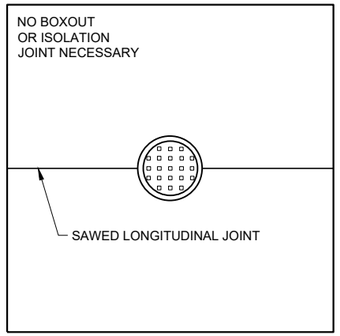
CONSTRUCTION JOINTS (4)

CONCRETE PAVEMENT JOINT TYPES

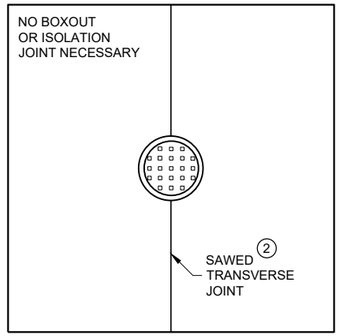
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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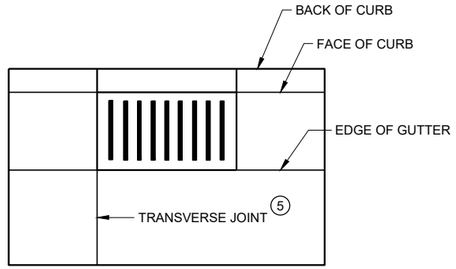
SDD 13C18 - 07c



MANHOLE WITH LONGITUDINAL JOINT



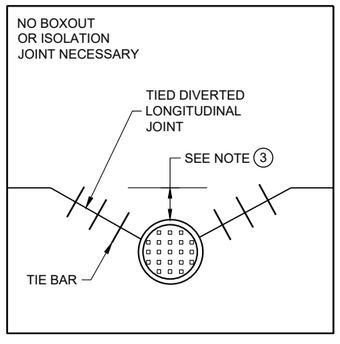
MANHOLE WITH TRANSVERSE JOINT



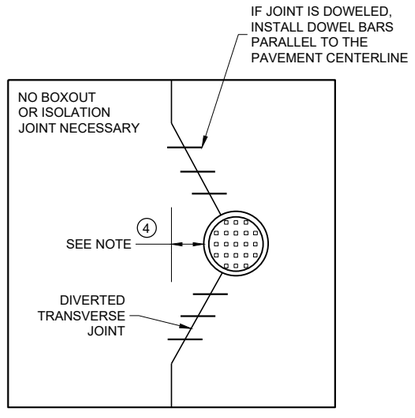
INLET WITH TRANSVERSE JOINT

GENERAL NOTES

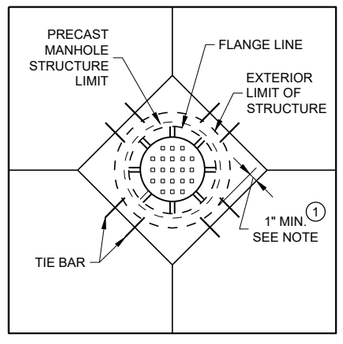
1. USE BOXOUTS WHEN UTILITY STRUCTURE IS IN THE PATH OF CONSTRUCTION JOINTS. PROVIDE A 1 FOOT MINIMUM CLEARANCE BETWEEN THE EXTERIOR LIMIT OF THE STRUCTURE TO THE DIAMOND BOXOUT.
2. ADJUST TRANSVERSE JOINT TO INTERSECT MANHOLE IF POSSIBLE.
3. IF DISTANCE BETWEEN THE LONGITUDINAL JOINT AND THE EDGE OF MANHOLE IS 2 FEET OR LESS, DIVERT THE LONGITUDINAL JOINT AT A 2:1 TAPER RATE TO THE CENTER OF THE MANHOLE. IF THE DISTANCE IS GREATER THAN 2 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
4. IF THE DISTANCE FROM THE EDGE OF THE MANHOLE TO THE NEAREST TRANSVERSE JOINT IS LESS 4 FEET OR LESS, REDIRECT JOINT TO INTERSECT THE CENTER OF THE MANHOLE. IF DISTANCE IS GREATER THAN 4 FEET, DO NOT DIVERT THE JOINT AND SAW AS NORMAL. PLACE REINFORCEMENT REBAR AROUND THE MANHOLE.
5. ALIGN TRANSVERSE JOINT WITH ONE EDGE OF INLET WHEN PRACTICAL.



MANHOLE WITH DIVERTED LONGITUDINAL CONTRACTION JOINT



MANHOLE WITH DIVERTED TRANSVERSE CONTRACTION JOINT



DIAGONAL MANHOLE BOXOUT FOR CONSTRUCTION JOINTS

CONCRETE PAVEMENT JOINTING AT UTILITY FIXTURES

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVISO

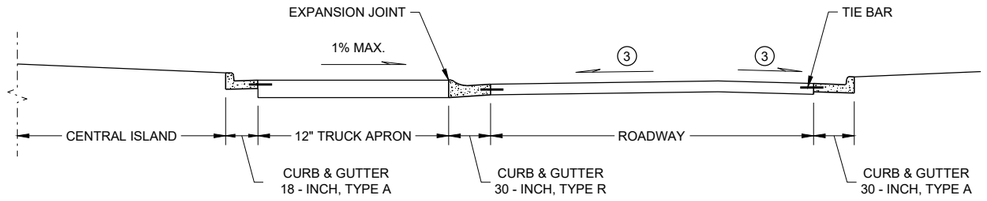
FHWA

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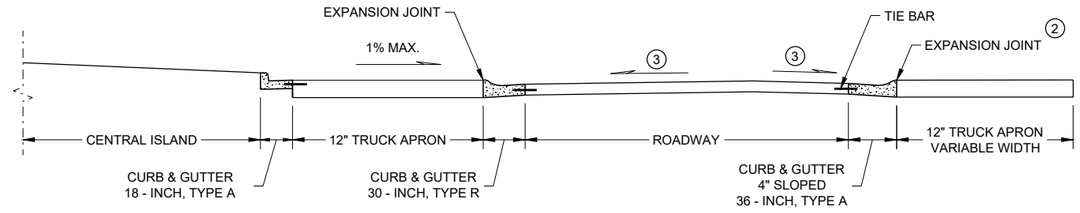
SDD13C18 - 07d

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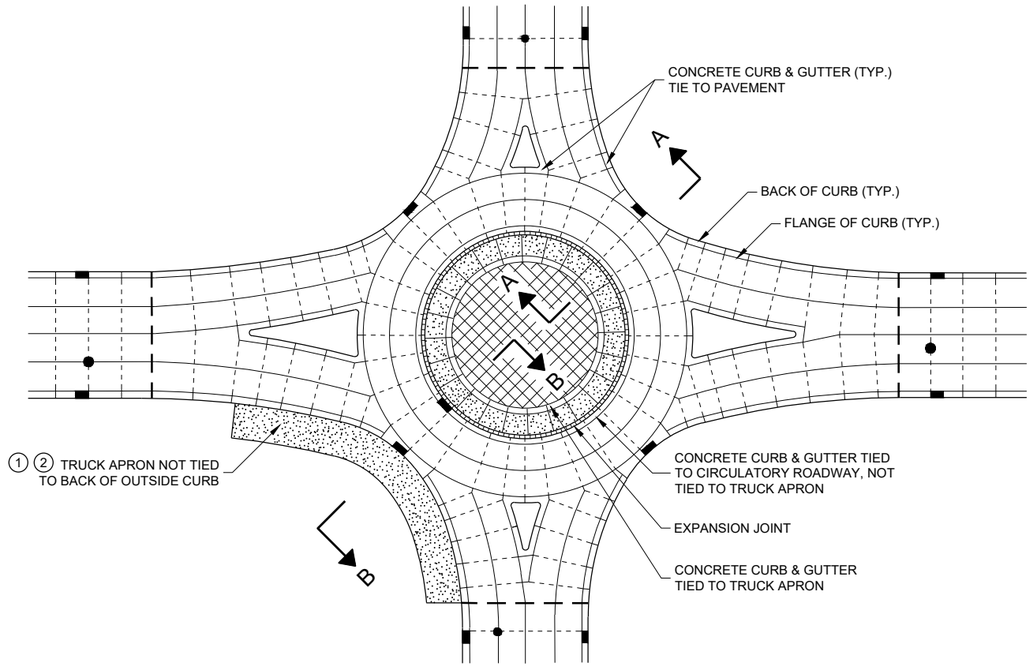
SDD13C18 - 07d



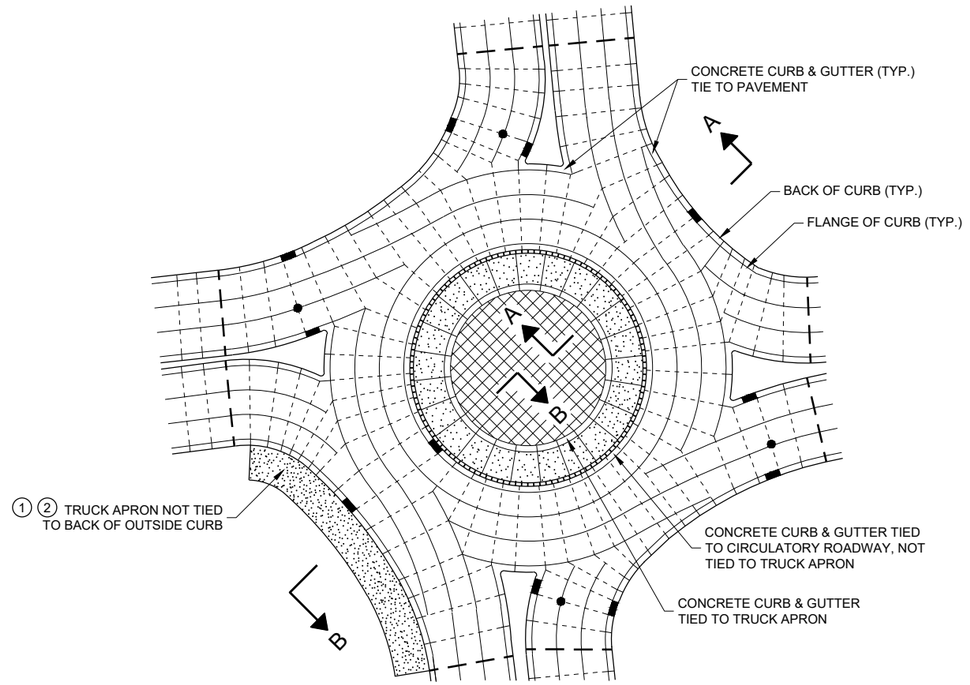
SECTION A - A



SECTION B - B



ISOLATED CIRCLE JOINT LAYOUT FOR ROUNDABOUTS



PINWHEEL JOINT LAYOUT FOR ROUNDABOUTS

GENERAL NOTES

MAXIMUM JOINT SPACING IS IN ACCORDANCE WITH THE TABLE SHOWN ON SDD 13C18 - SHEET "a"

USE EXPANSION JOINT FILLER MEETING THE REQUIREMENTS OF STANDARD SPECIFICATION 415.

DO NOT DOWEL OR TIE THE TRUCK APRON TRANSVERSE JOINTS.

(1) DESIGNER DETERMINES SIZE AND LOCATION(S) OF TRUCK APRON TO ACCOMODATE TRACKING OF OVERSIZE / OVERWEIGHT VEHICLES.

(2) TIE THE OUTSIDE TRUCK APRON TO THE BACK SIDE OF CURB ONLY WHEN ENTIRE TRUCK APRON IS LESS THAN 3 FEET.

(3) CONFORM TO PLAN CONSTRUCTION DETAILS FOR CIRCULATORY ROADWAY CROSS SLOPE.

LEGEND

- DOWELED JOINT
- TIED JOINT
- EXPANSION JOINT
- POTENTIAL DOWELED EXPANSION JOINT
- TRUCK APRON
- CENTRAL ISLAND
- UTILITY STRUCTURES

CONCRETE PAVEMENT JOINTING AND STEEL REINFORCEMENT IN ROUNDABOUTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

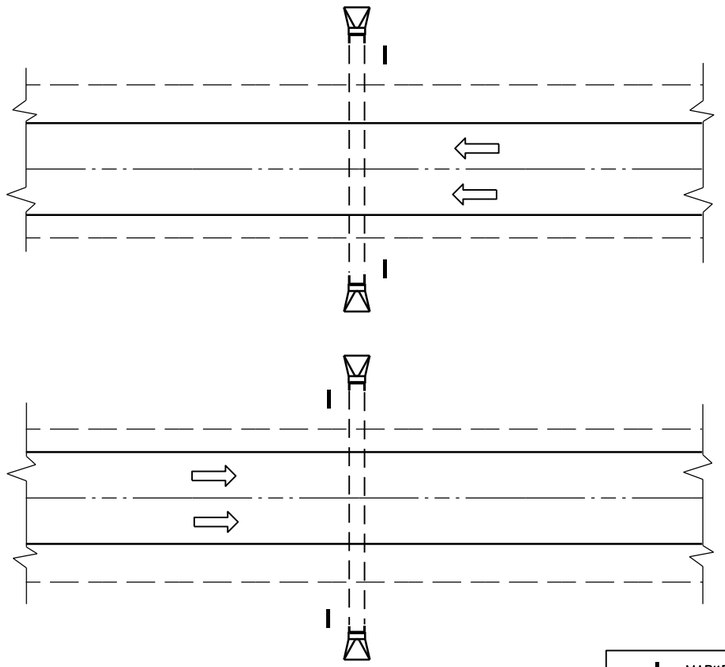
APPROVED
November 2018
DATE

/S/ Peter Kemp P.E.
PAVEMENT SUPERVIS

FHWA

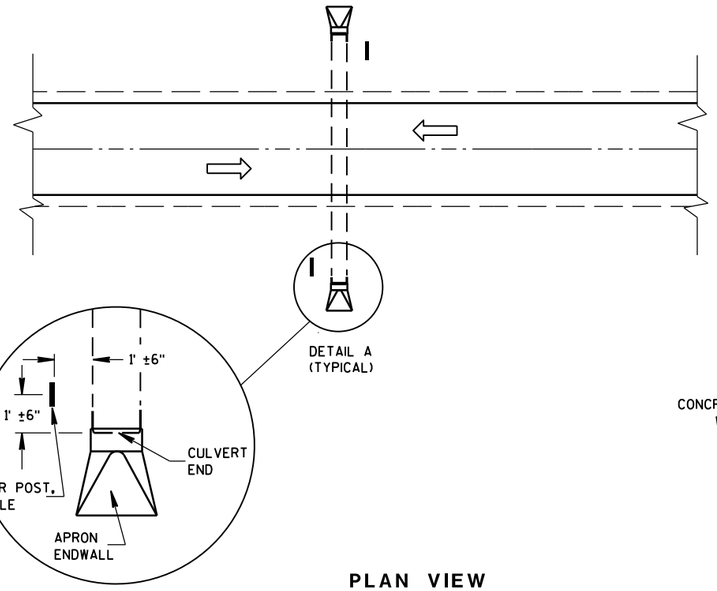
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SDD 13C18 - 07e



PLAN VIEW

DIVIDED HIGHWAY



DETAIL A
(TYPICAL)

PLAN VIEW

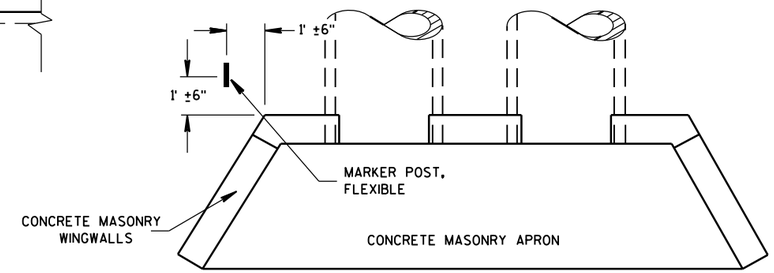
UNDIVIDED HIGHWAY

MARKER POST, FLEXIBLE

DIRECTION OF TRAFFIC FLOW

GENERAL NOTES

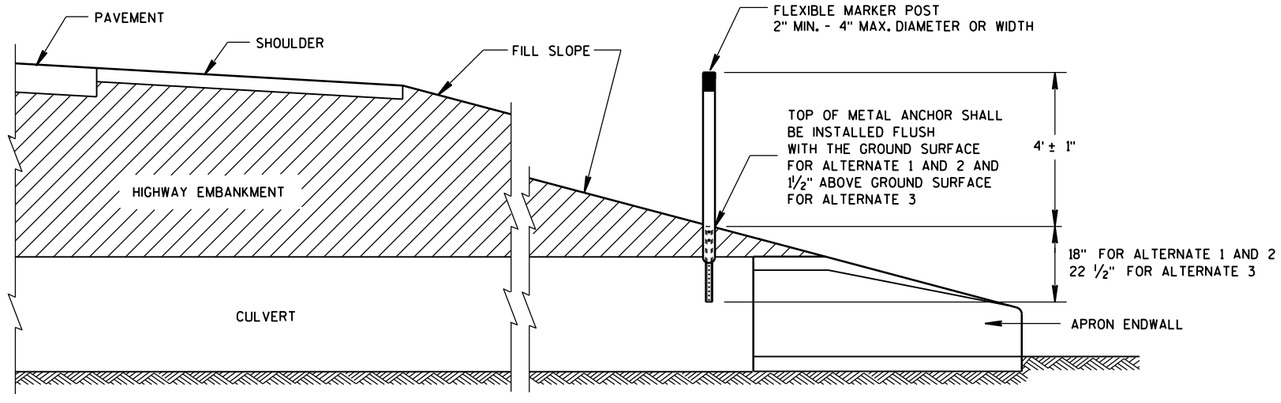
DETAILS OF CONSTRUCTION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND THE APPLICABLE SPECIAL PROVISIONS.



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

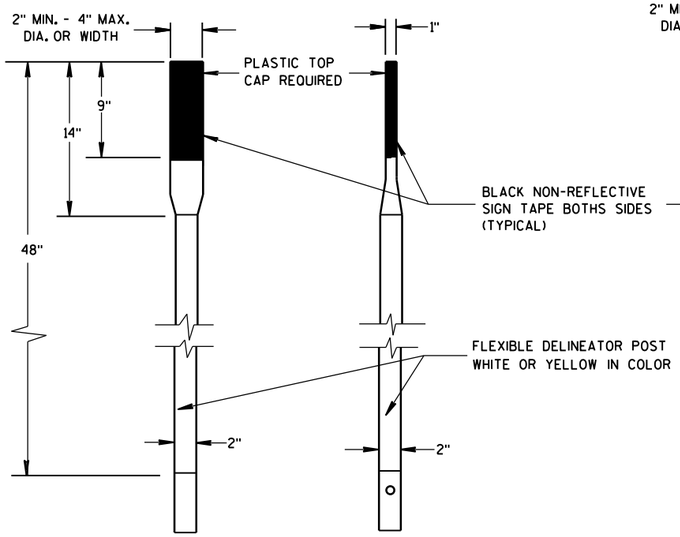
STATE OF WISCONSIN
DEPARTMENT OF TRANSPOI

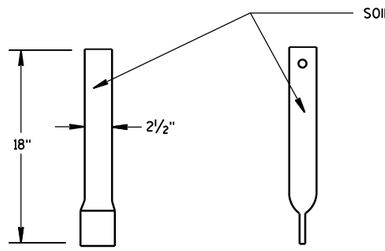
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S.D.D. 15 A 3-2a

6

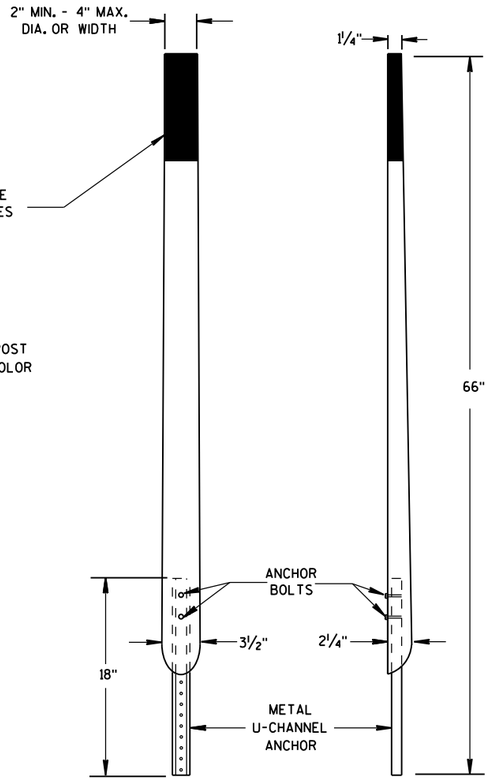
S.D.D. 15 A 3-2a





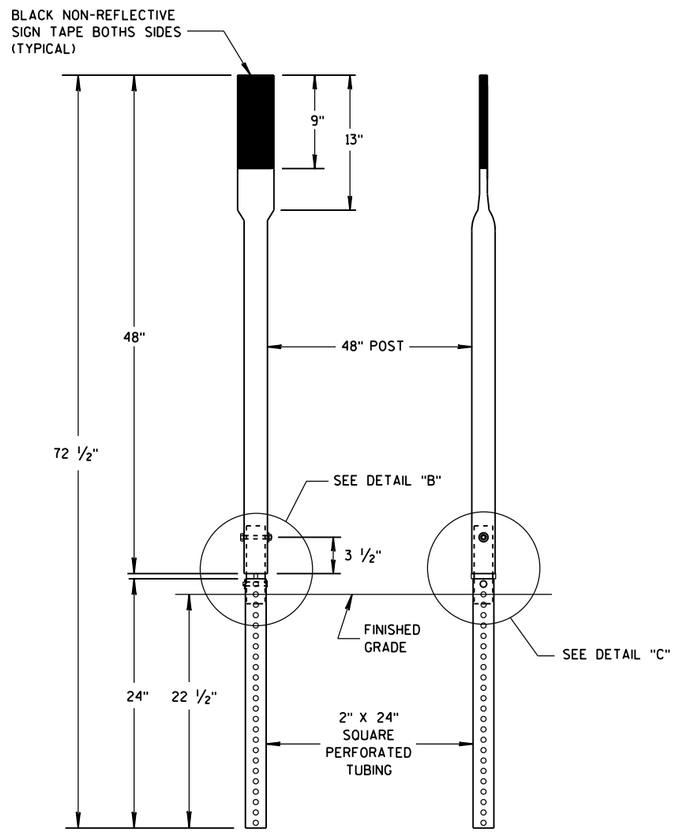
FRONT VIEW SIDE VIEW

ALTERNATE 1



FRONT VIEW SIDE VIEW

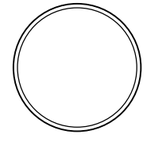
ALTERNATE 2



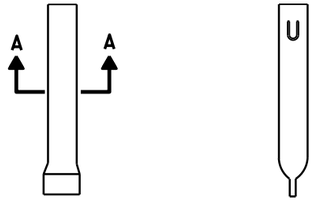
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POSTS

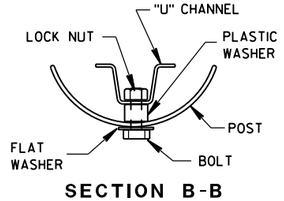


SECTION A-A

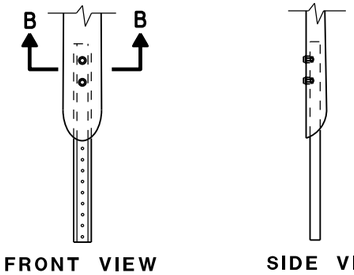


FRONT VIEW SIDE VIEW

ALTERNATE 1

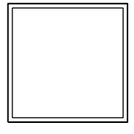


SECTION B-B

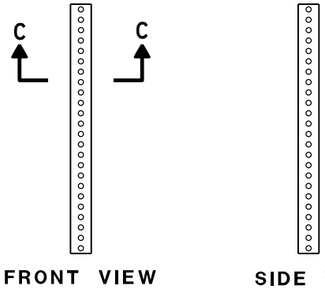


FRONT VIEW SIDE VIEW

ALTERNATE 2



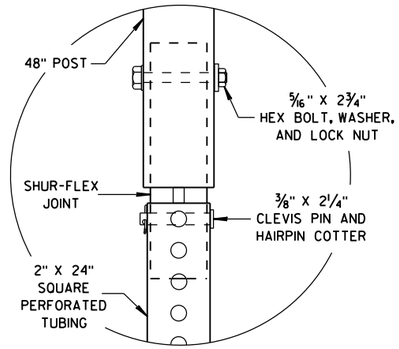
SECTION C-C



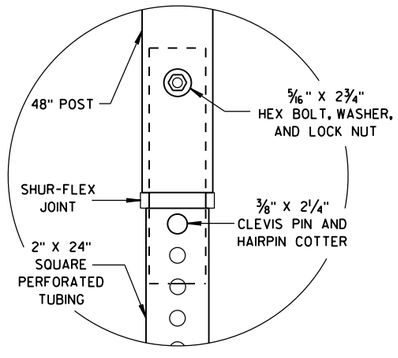
FRONT VIEW SIDE VIEW

ALTERNATE 3

FLEXIBLE MARKER POST ANCHORS



DETAIL B



DETAIL C

FLEXIBLE MARKER POST
FOR CULVERT END

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

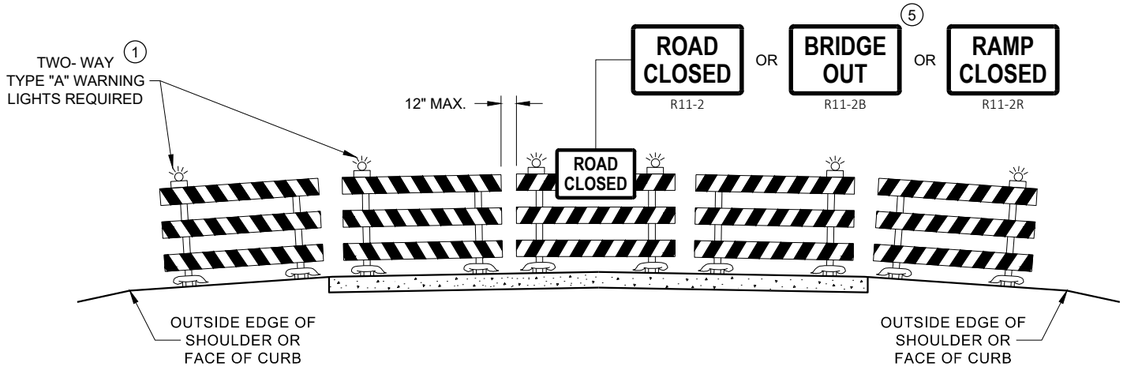
APPROVED
10/1/2012
DATE
/S/ Travis Feltes
STATE TRAFFIC ENGINEER
FHWA

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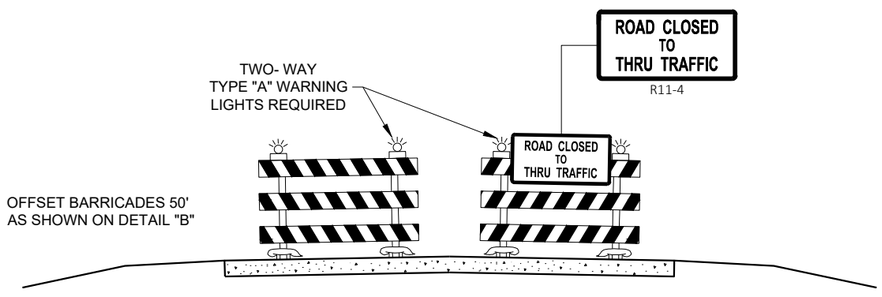
S.D.D. 15 A 3-2b

6

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



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

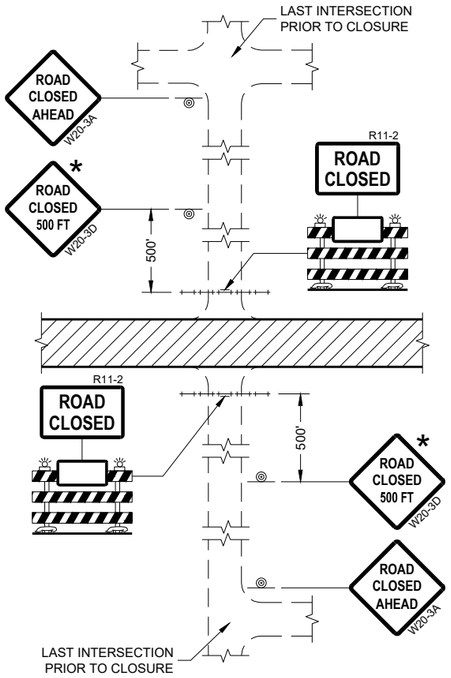
APPROVED
February 2020
DATE
/S/ Andrew Heidtke
WORK ZONE ENGINEE
FHWA

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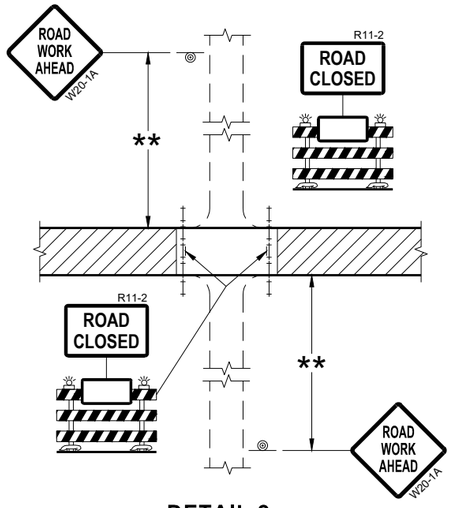
SDD 15C02 - 08b

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SDD 15C02 - 08b



DETAIL 1
(NO ACCESS TO PROJECT)



DETAIL 2
(PUBLIC CROSS-TRAFFIC MAINTAINED.
NO 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.

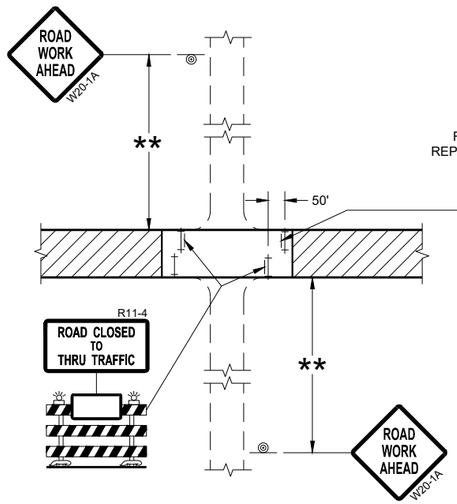
TYPE "A" LOW-INTENSITY FLASHING WARNING LIGHTS SHALL BE VISIBLE ON BOTH SIDES OF THE BARRICADE.

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.

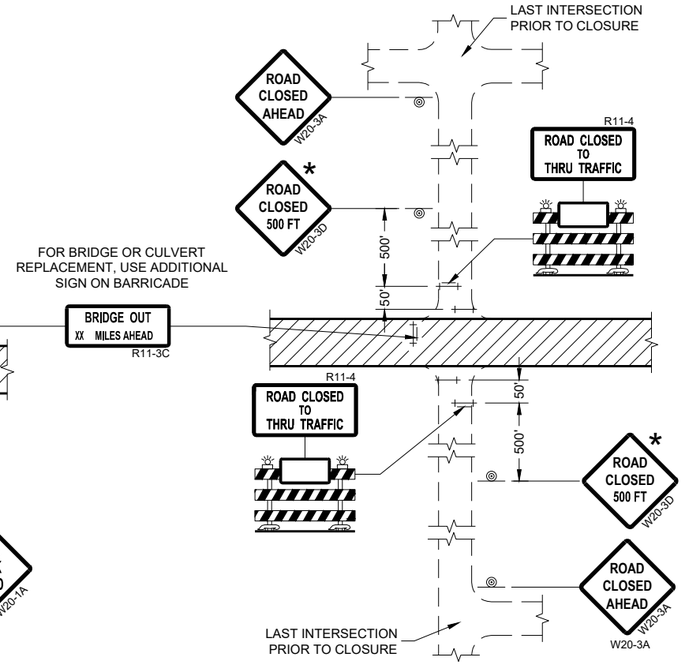
ALL SIGNS SHALL BE 48" X 48" UNLESS OTHERWISE NOTED BELOW:
R11-2 SHALL BE 48" X 30".
R11-4 AND R11-3 SHALL BE 60" X 30".

* 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.



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



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

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 ENGINEE 240

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.

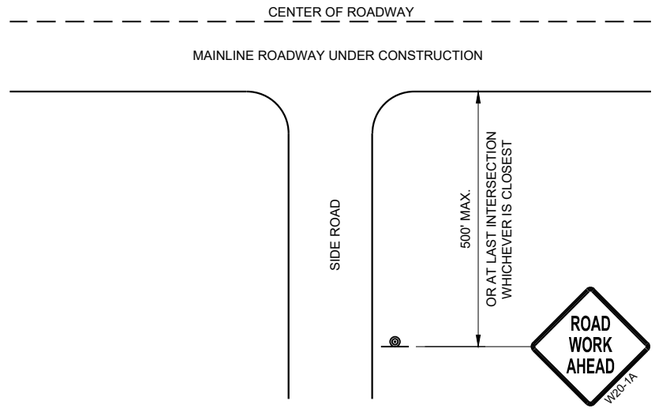
ALL SIGNS ARE 48" X 48" UNLESS OTHERWISE NOTED.

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

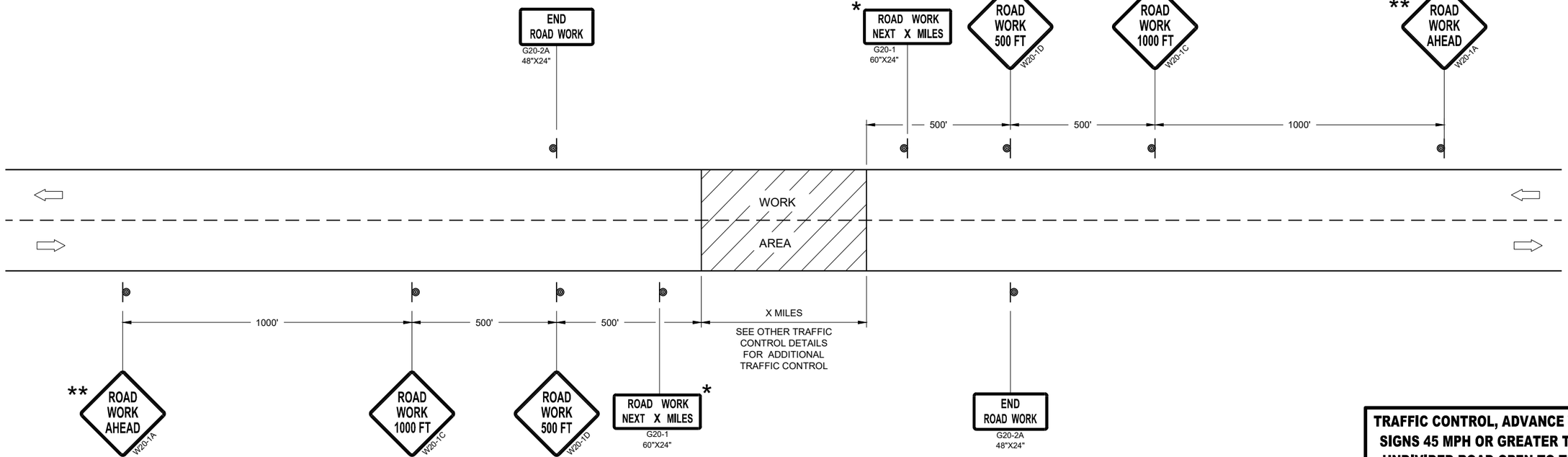
** PLACE AN ADDITIONAL W20-1A "ROAD WORK AHEAD" SIGN IF WORK AREA WITHIN THE PROJECT IS SEPARATED BY MORE THAN 2 MILES FROM PREVIOUS WORK AREA.



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

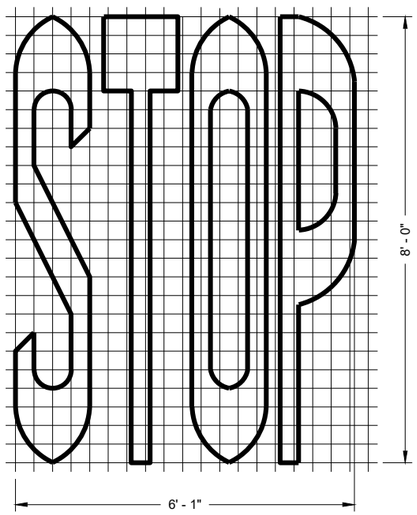
APPROVED
July 2018
DATE

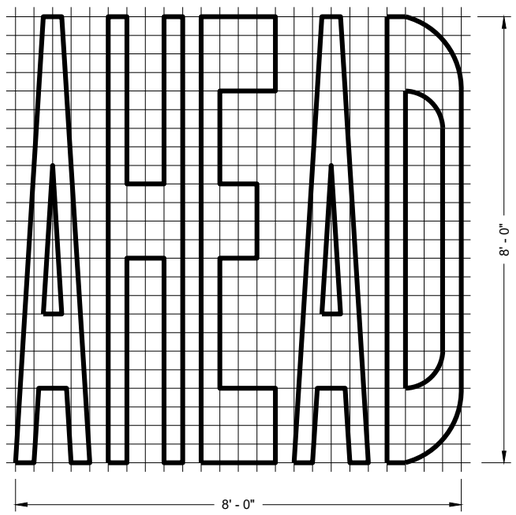
/S/ Andrew Heidtke
WORK ZONE ENGINEE

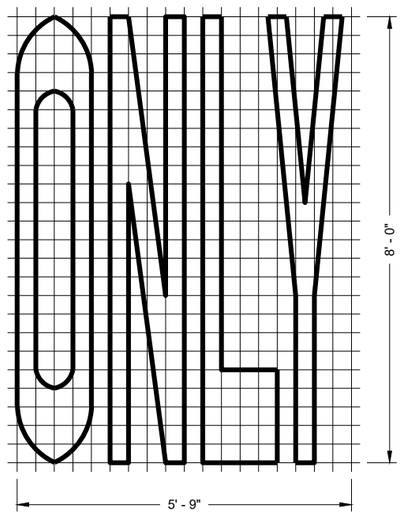
FHWA

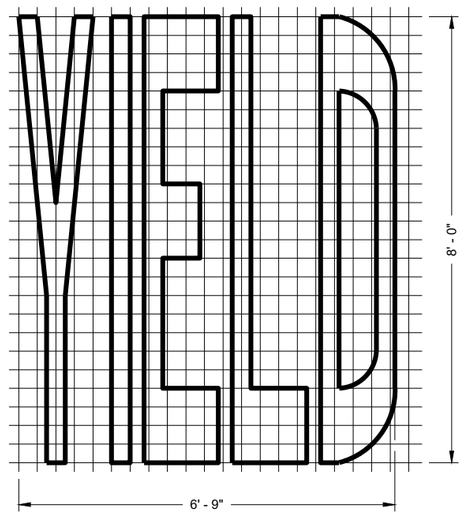
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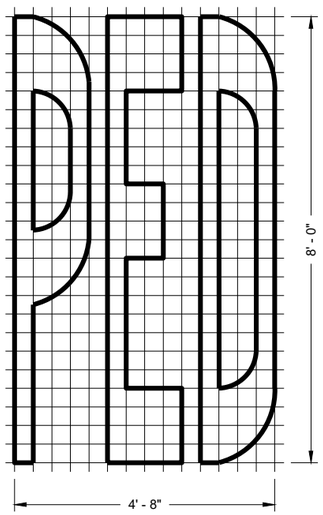
SDD 15C04 - 05

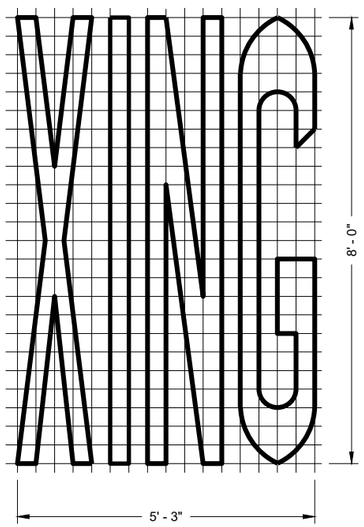


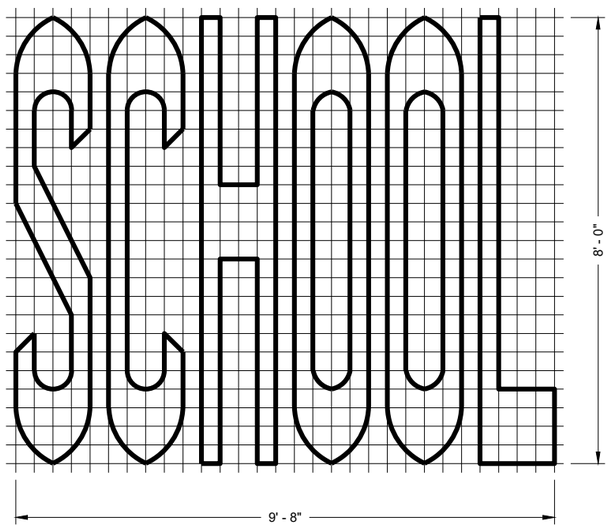




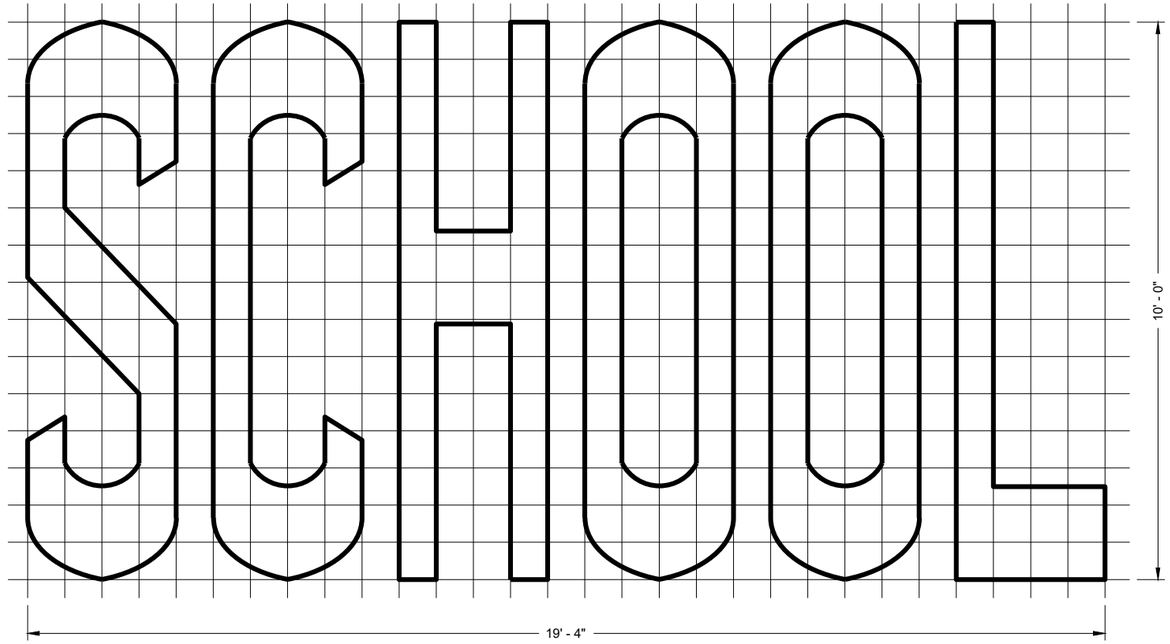








SINGLE LANE



TWO - LANE

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.

PAVEMENT MARKING WORDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019
DATE

/S/ Matthew Rauch
STATE SIGNING AND MAF ENGINEER

FHWA

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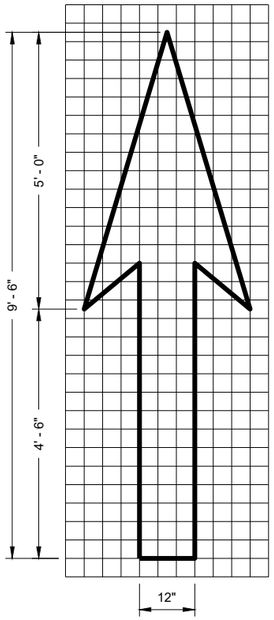
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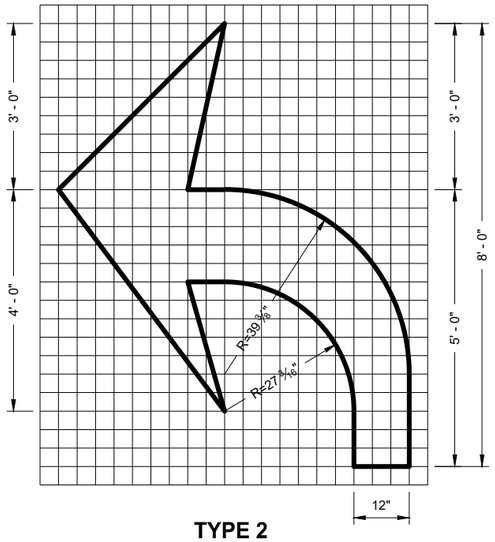
SDD 15C07 - 15b

GENERAL NOTES

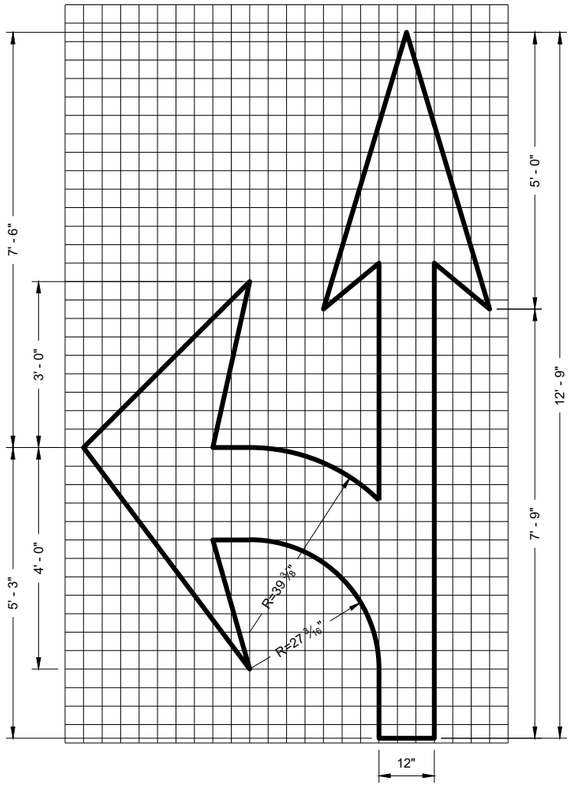
DETAILS OF INSTALLATION, MATERIALS AND WORKMANSHIP NOT SHOWN ON THIS DRAWING SHALL CONFORM TO THE PERTINENT REQUIREMENTS OF THE STANDARD SPECIFICATIONS AND APPLICABLE SPECIAL PROVISIONS.



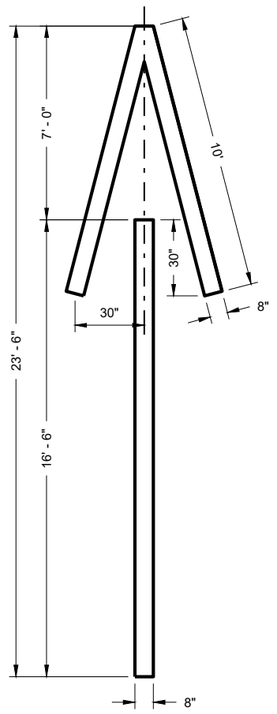
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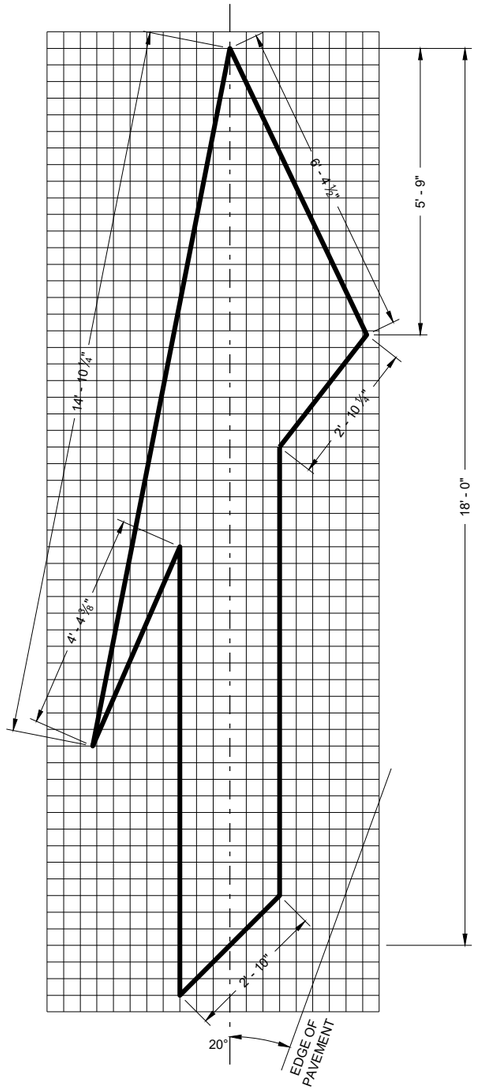
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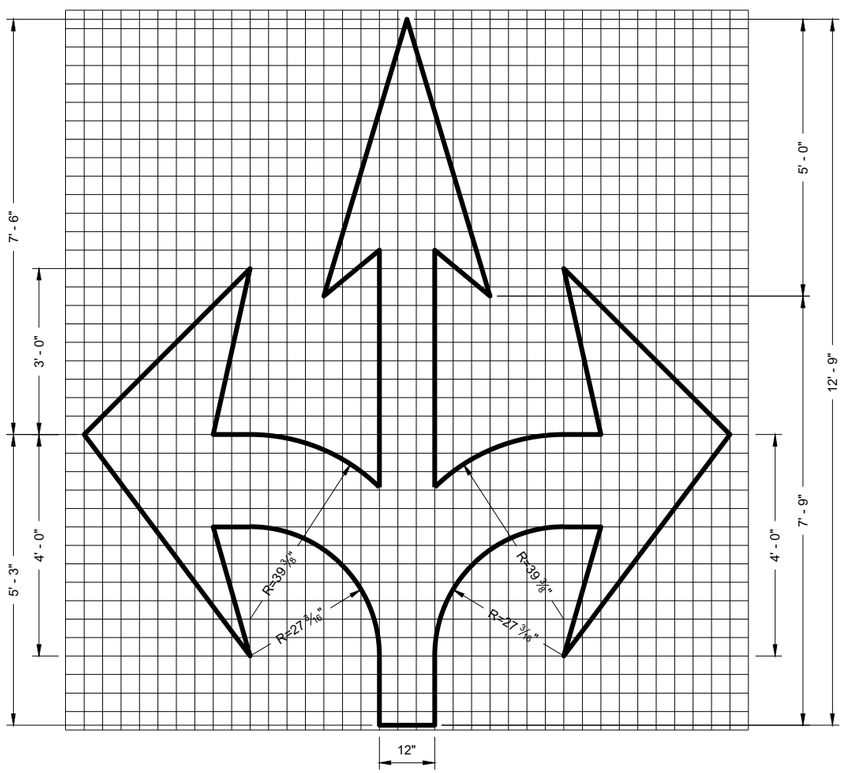
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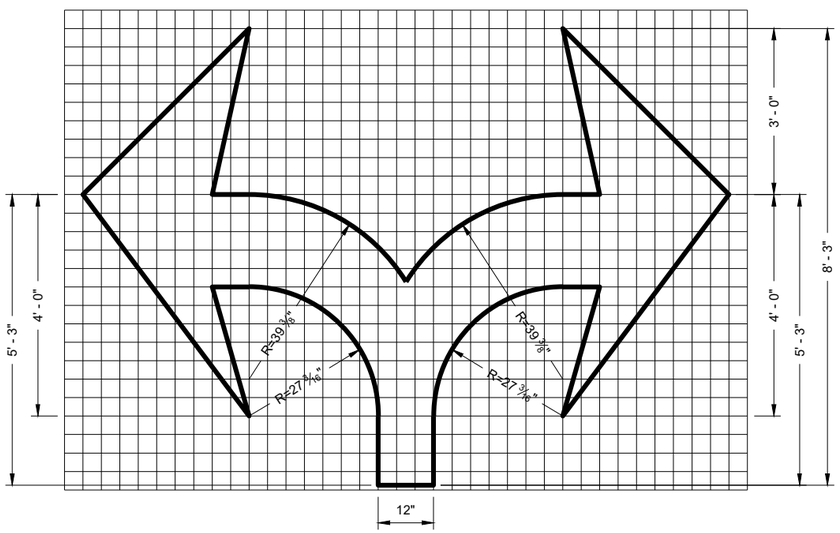
TYPE 4



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

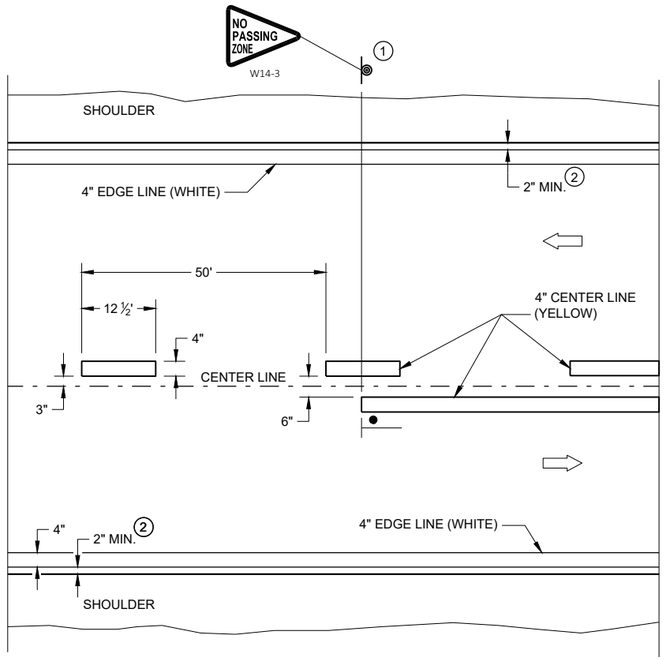
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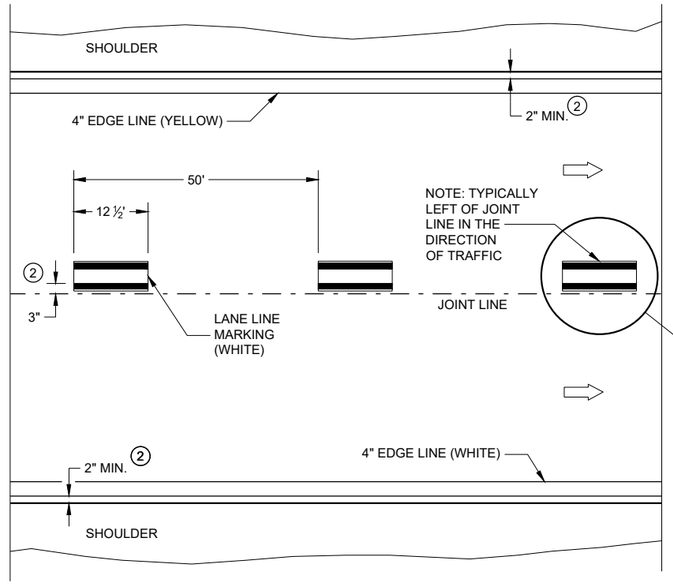
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SDD 15C07 - 15c

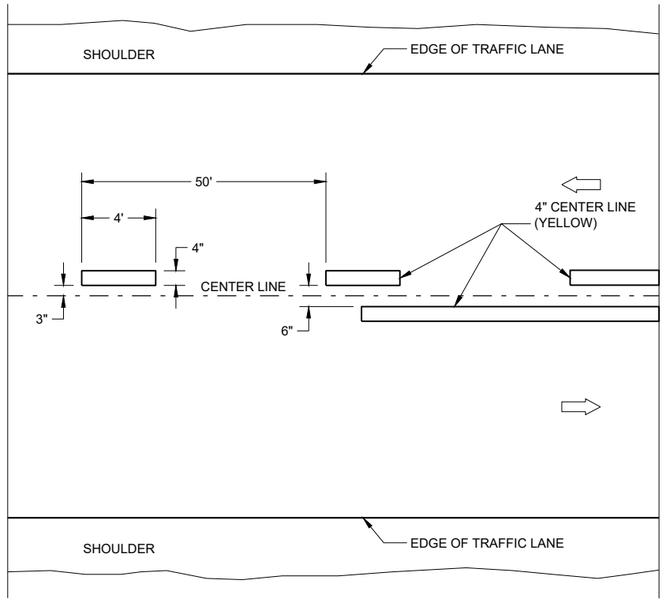


TWO WAY TRAFFIC

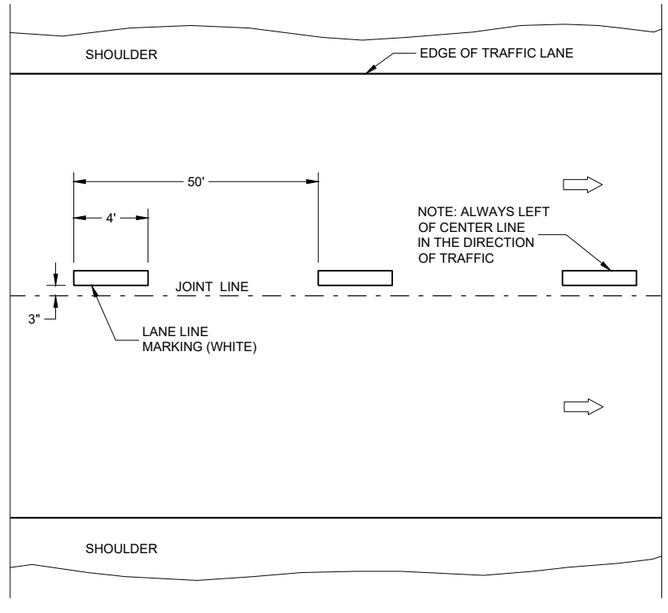


ONE WAY TRAFFIC

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.

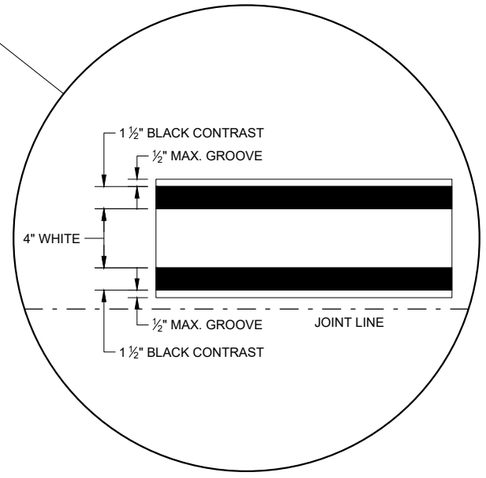
1. LOCATE THE NO PASSING ZONE W14-3 SIGN WITH 50 FEET OF THE "T" MARKING
2. MEASURE FROM EDGE OF MARKING TO JOINT LINE. THIS DOES NOT INCLUDE SPACE NEEDED FOR GROOVING OPERATIONS.

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

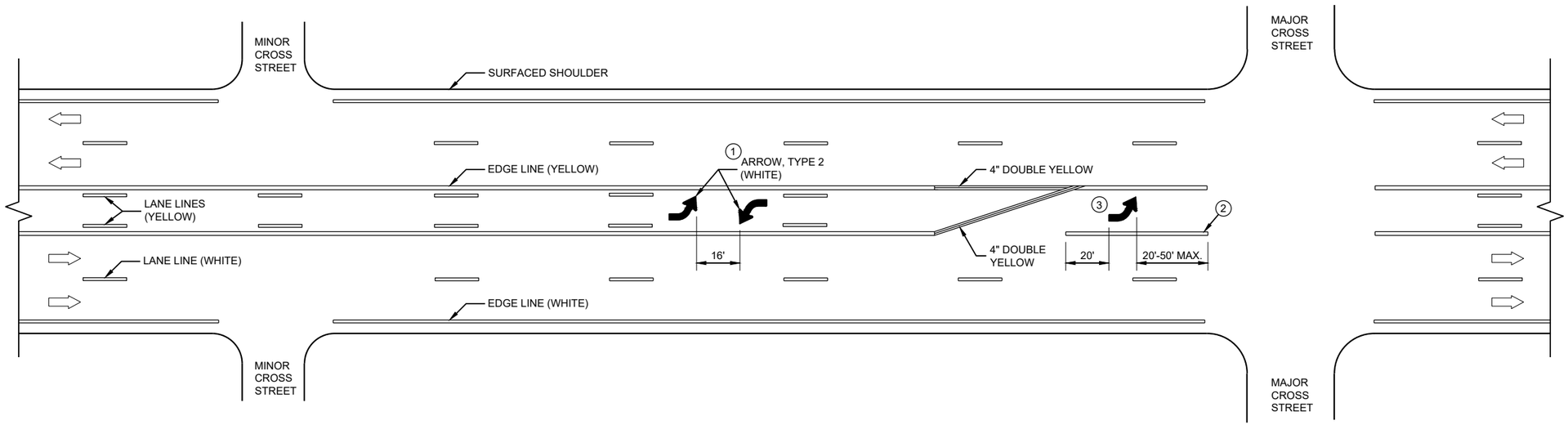
SDD 15C08 - 20a

SDD 15C08 - 20a

GENERAL NOTES

1. A SET OF ARROWS IS REQUIRED EVERY 400 FEET OR NEAR INTERSECTIONS OR DRIVEWAYS WITH TURNING TRAFFIC.
2. 8" WHITE
3. TURN BAY LENGTH OF LESS THAN 48' DOES NOT REQUIRE PAVEMENT ARROWS OR TEXT.

DIRECTION OF TRAFFIC



TWO WAY LEFT TURN LANE

6

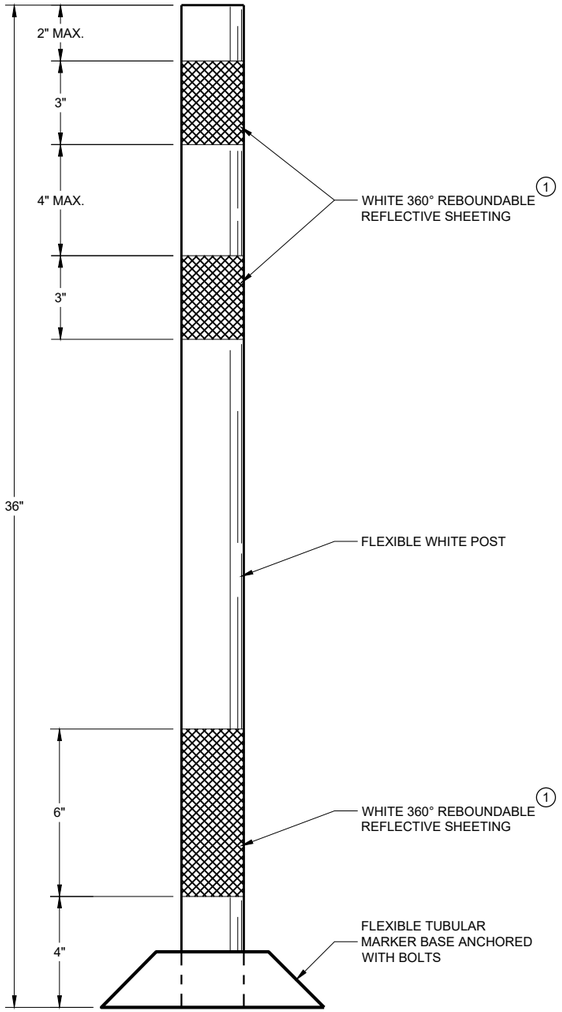
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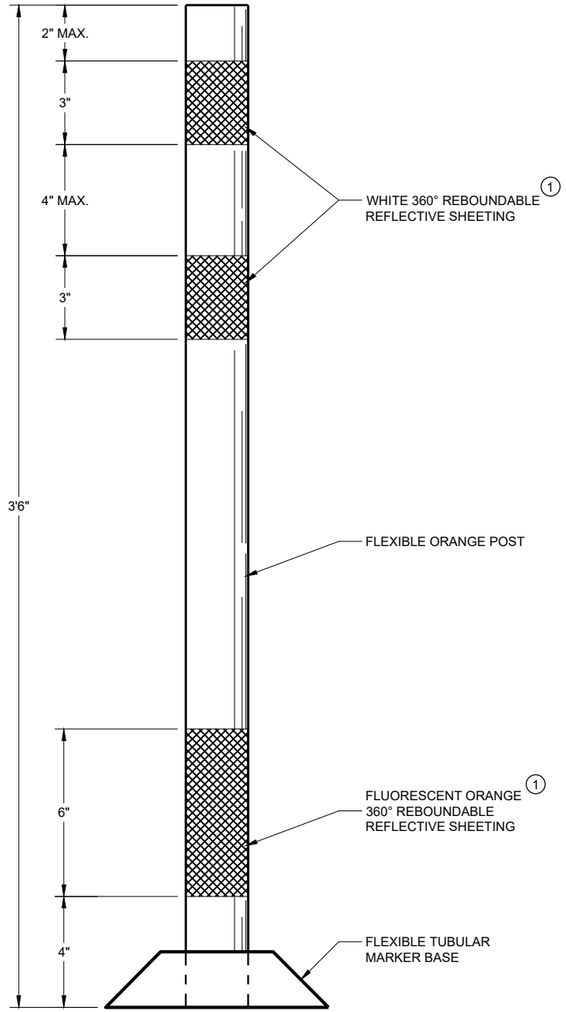
SDD 15C08 - 20b

PAVEMENT MARKING (TURN LANES)

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION



FLEXIBLE TUBULAR MARKER POST PERMANENT CROSSOVER



FLEXIBLE TUBULAR MARKER POST WORK ZONE

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.

SURFACE MOUNTED BASES SHALL BE FURNISHED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS TO BE COMPATIBLE WITH FLEXIBLE TUBULAR MARKER POSTS TO A SIZE AND SHAPE THAT WILL PROVIDE A STABLE POST FOUNDATION WHEN SECURED TO THE PAVEMENT.

THE ASPHALTIC ADHESIVE OR BUTYL PAD FURNISHED SHALL BE IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS, UNLESS DIRECTED BY THE ENGINEER TO USE BOLTS.

(1) REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.

6

SDD 15C11 - 08a

CHANNELIZING DEVICES
FLEXIBLE TUBULAR MARKER POST

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

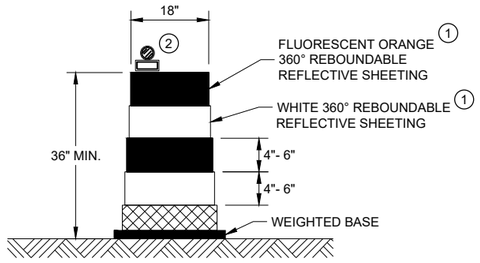
FHWA

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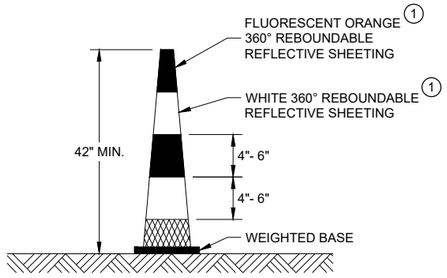
SDD 15C11 - 08a

GENERAL NOTES

1. REFLECTIVE SHEETING SHALL FOLLOW THE REQUIREMENTS IN THE APPROVED PRODUCTS LISTING FOR SIGN SHEETING.
2. LOCATION OF WARNING LIGHTS WHEN SHOWN ON THE PLAN.

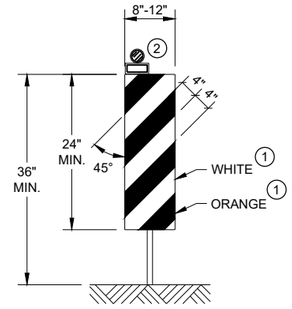


DRUM



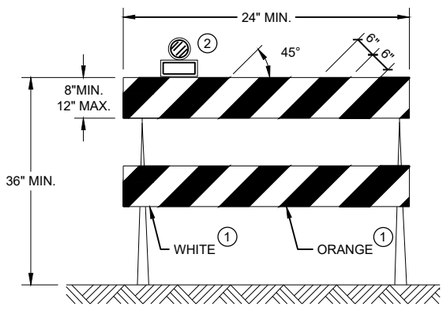
42" CONE

DO NOT USE IN TAPERS
½ SPACING OF DRUMS



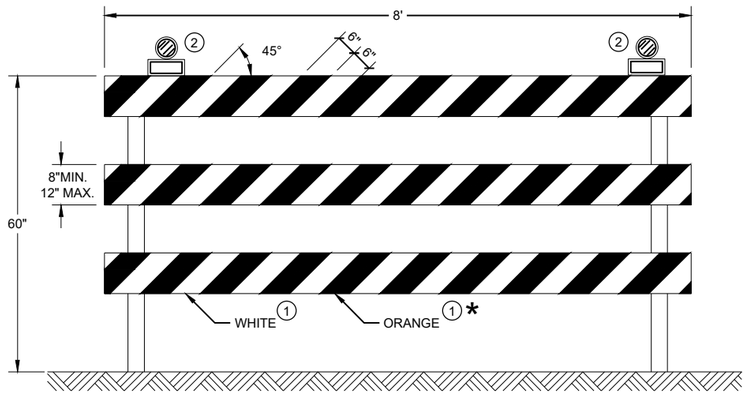
VERTICAL PANEL

THE STRIPES SHALL SLOPE DOWNWARD TO
THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE II BARRICADE

FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES
MAY BE USED. ALL STRIPES SHALL SLOPE DOWNWARD
TO THE TRAFFIC SIDE FOR CHANNELIZATION.



TYPE III BARRICADE

IF SIGN MOUNTED, DO NOT COVER MORE THAN 50% OF THE TOP
TWO RAILS OR 33% OF THE TOTAL AREA OF THE THREE RAILS.

* IF USED FOR A PERMANENT APPLICATION USE RED SHEETING.

CHANNELIZING DEVICES
DRUMS, CONES, BARRICADES
AND VERTICAL PANELS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

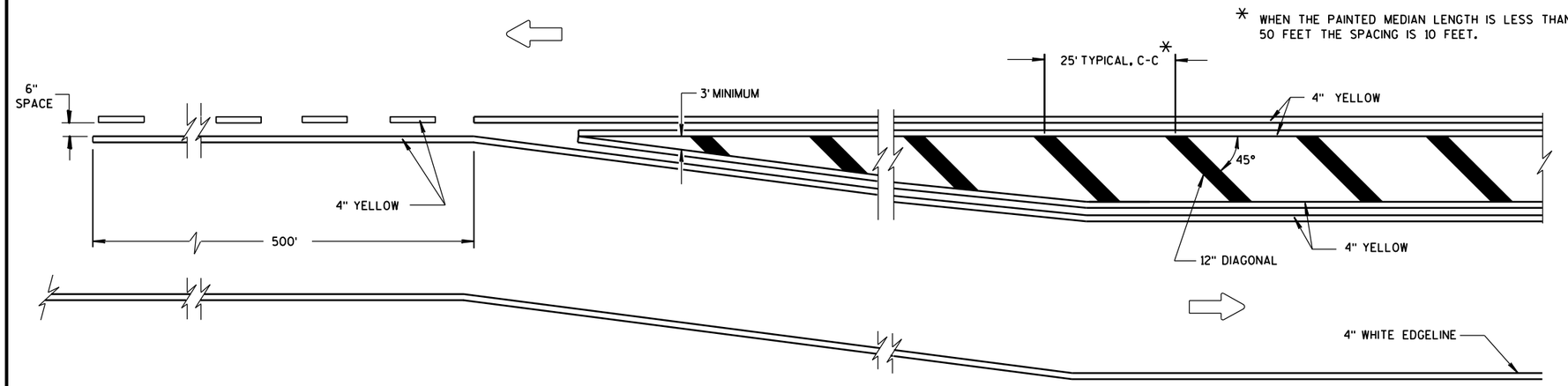
FHWA

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SDD15C11 - 08b

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SDD15C11 - 08b

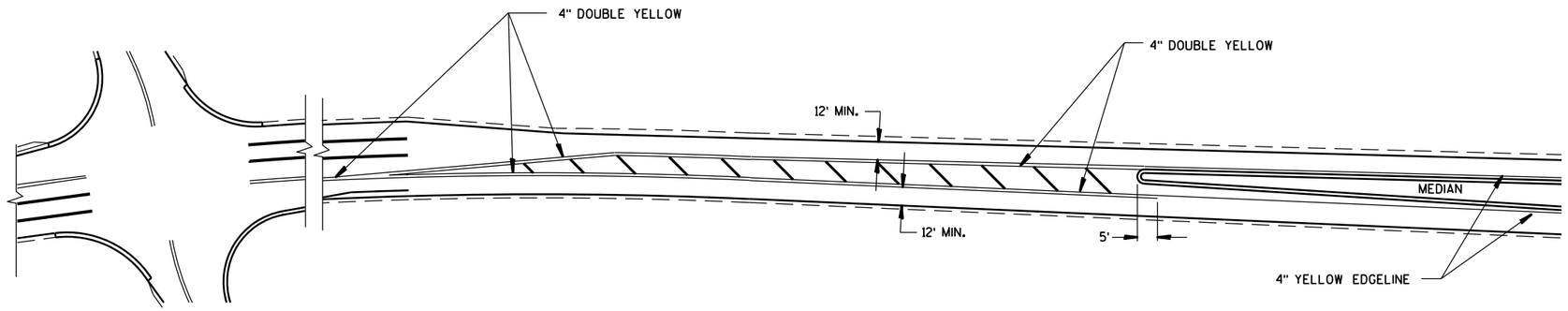


MEDIAN ISLAND DETAIL

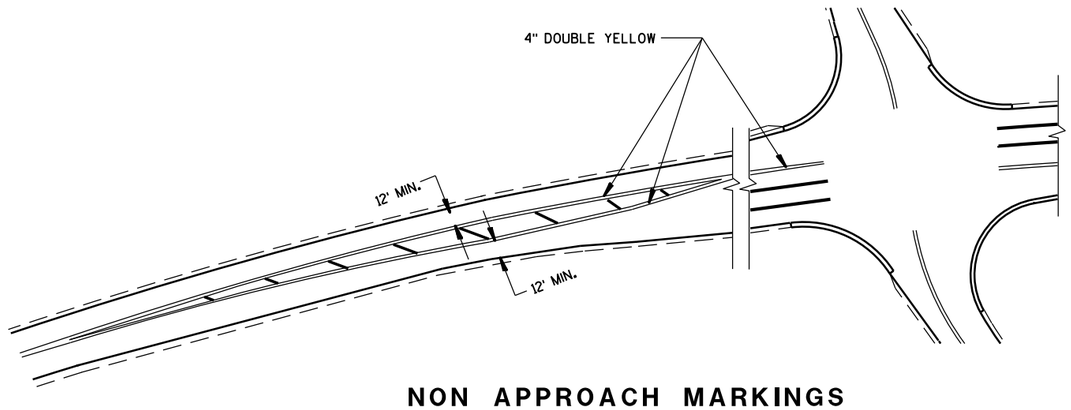
GENERAL NOTE

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 FHWA	/S/ Matthew Rauch STATE SIGNING AND MARK ... EER

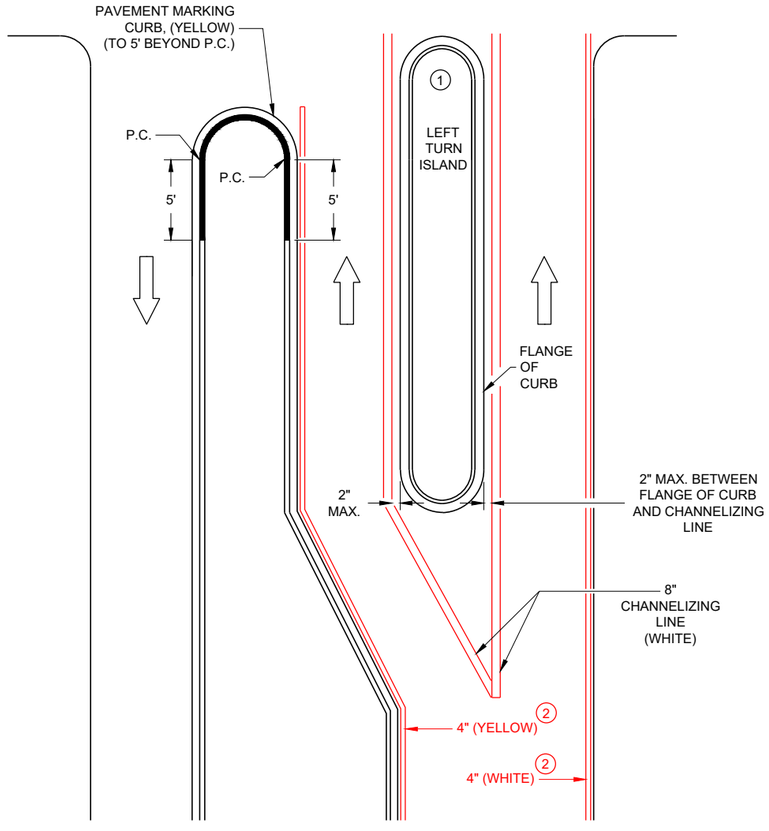
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S.D.D. 15 C 18-4

6

S.D.D. 15 C 18-4

REQUIREMENTS FOR EDGE LINES		
POSTED SPEED	IS THERE CONTINUOUS LIGHTING?	
	YES	NO
≤ 30 MPH	NO	OPTIONAL
35 OR 40 MPH	OPTIONAL	RECOMMENDED
≥ 45 MPH	RECOMMENDED	REQUIRED



LEFT TURN & MEDIAN ISLAND

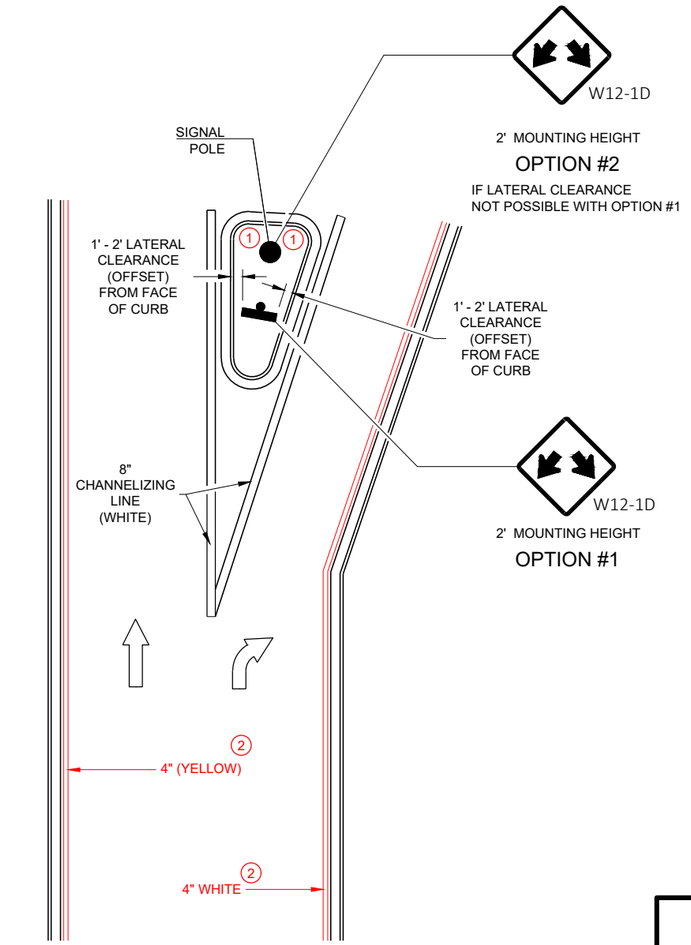
GENERAL NOTES

APPLIES TO ISLANDS AT LEFT TURNS AT ONE WAY ROADWAYS AS WELL.

SEE MISCELLANEOUS QUANTITIES FOR SIGN SIZE.

1. MARK CURB NOSES YELLOW.
2. MARK ACCORDING TO TABLE.

DIRECTION OF TRAVEL



RIGHT TURN ISLAND

DOUBLE ARROW
WARNING SIGN PLACEMENT

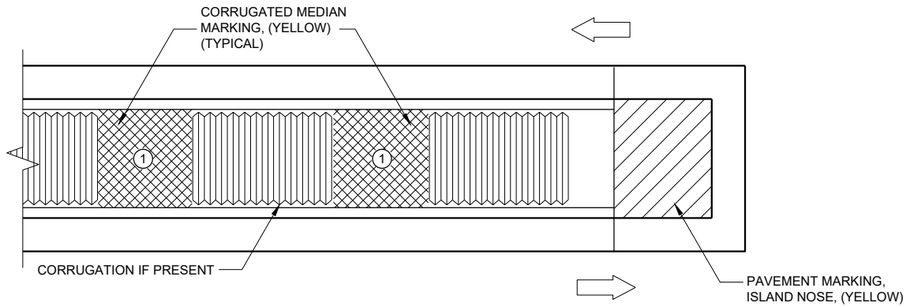
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
7/2018
DATE
/S/ Matthew R. Rauch
STATE SIGNING AND MAF ENGINEER

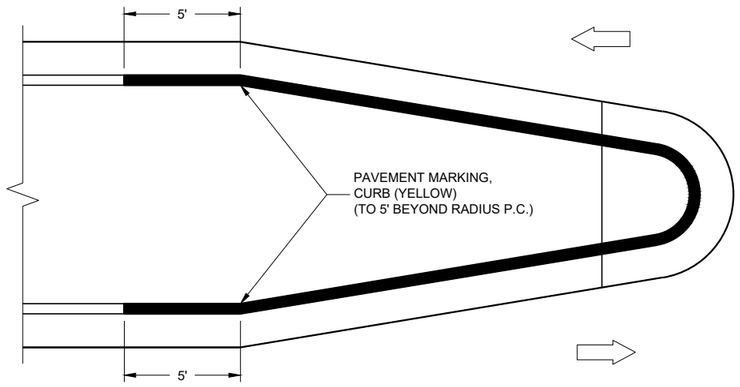
FHWA

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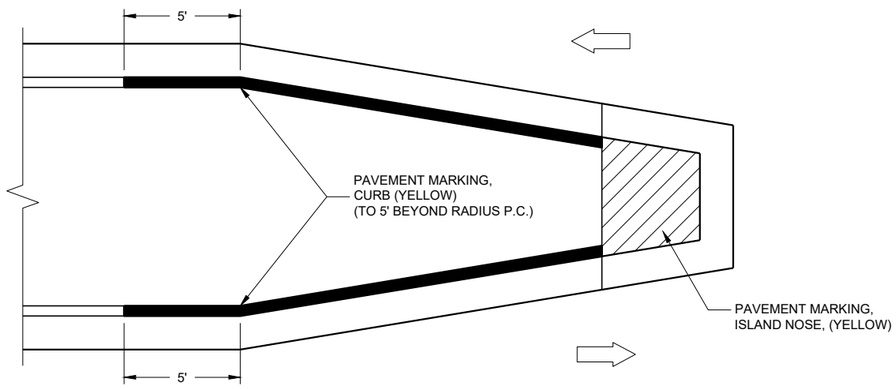
SDD 15C27 - 03a



MEDIAN ISLAND WITH SQUARE BLUNT NOSE



MEDIAN ISLAND WITH ROUND BLUNT NOSE



MEDIAN ISLAND WITH SLOPED NOSE

**TYPICAL PLACEMENT OF
PAVEMENT MARKING ON MEDIAN ISLANDS**

GENERAL NOTES

WHEN CONCRETE CORRUGATED MEDIAN IS CONSTRUCTED TO SEPARATE TRAFFIC OPERATING IN THE OPPOSING DIRECTION, YELLOW PAVEMENT MARKING SHALL BE APPLIED TO THE FLAT PORTION OF THE CONCRETE CORRUGATED MEDIAN. THE ITEM OF PAVEMENT MARKING, CONCRETE CORRUGATED MEDIAN, WILL BE MEASURED IN PLACE AND ACCEPTED IN ACCORDANCE WITH THE CONTRACT AND PAID FOR AT THE CONTRACT UNIT PRICE PER SQUARE FOOT.

ISLAND NOSE MARKING

CURB MARKING

CORRUGATED MEDIAN MARKING

DIRECTION OF TRAVEL

**PAVEMENT MARKINGS
(ISLANDS)**

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED

7/2018
DATE

/S/ Matthew R. Rauch
STATE SIGNING AND MAF
ENGINEER

FHWA

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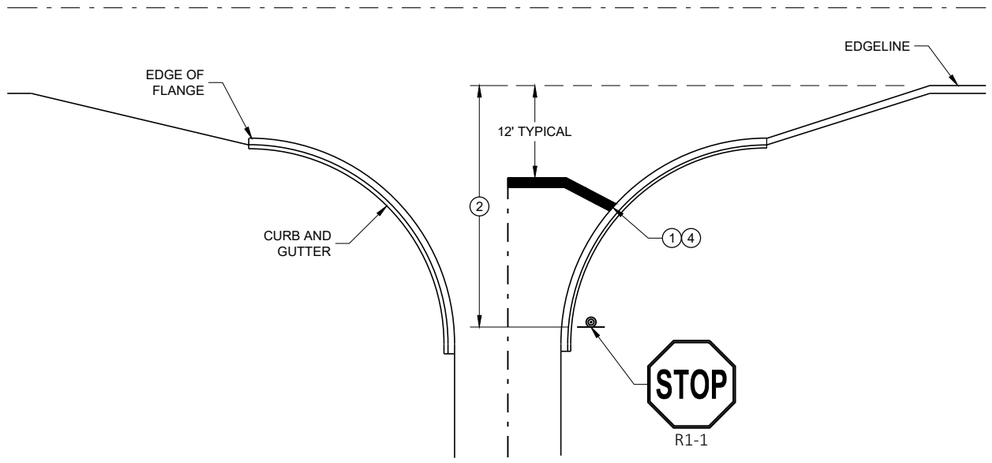
SDD 15C27 - 03b

SDD15C27 - 03b

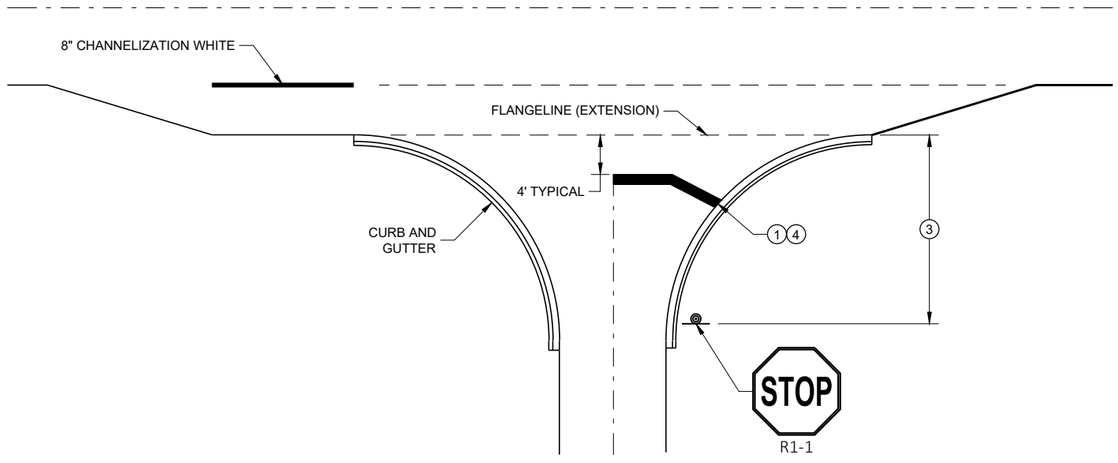
GENERAL NOTES

STOP SIGN SHALL BE PLACED A MINIMUM OF 6 FEET TO A MAXIMUM OF 50 FEET FROM THE EDGELINE LOCATION.

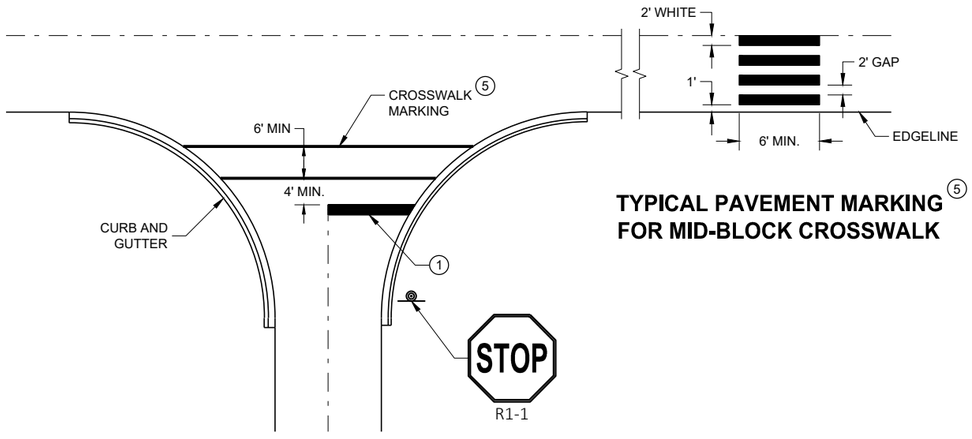
1. 18-INCH STOP LINES MAY BE DELETED OR ADDED BY THE REGION MARKING ENGINEER BASED ON VISIBILITY AND SIGHT LINES.
2. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 40 FEET FROM THE EDGELINE.
3. NO STOP LINE IS REQUIRED IF STOP SIGN IS LESS THAN OR EQUAL TO 30 FEET FROM THE FLANGELINE EXTENSION.
4. MOVE CLOSER TO THE EDGE OF TRAVEL LINE AS NEEDED FOR VISIBILITY AND SIGHT LINES (NO CLOSER THAN 4 FEET).
5. LADDER BAR CROSSWALKS SHOULD ONLY BE USED FOR MID BLOCK CROSSINGS. USE 2 - 6" TRANSVERSE LINES INSTEAD.



TYPICAL STOP LINE PAVEMENT MARKING WITH CURB AND GUTTER

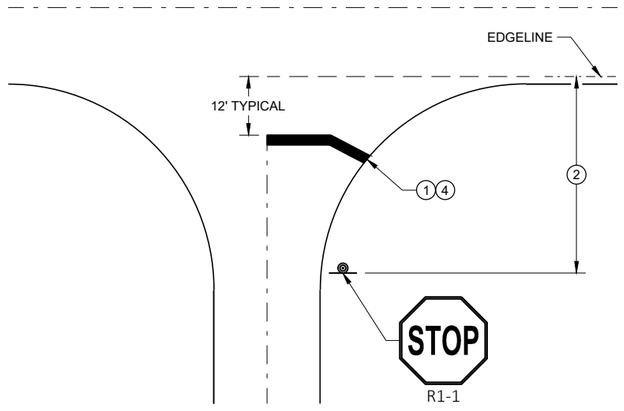


TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH RIGHT TURN LANE



TYPICAL PAVEMENT MARKING FOR MID-BLOCK CROSSWALK 5

TYPICAL STOP LINE PAVEMENT MARKING FOR SIDEROADS WITH CROSSWALK MARKING



TYPICAL STOP LINE PAVEMENT MARKING WITHOUT CURB AND GUTTER

STOP LINE AND CROSSWALK PAVEMENT MARKING

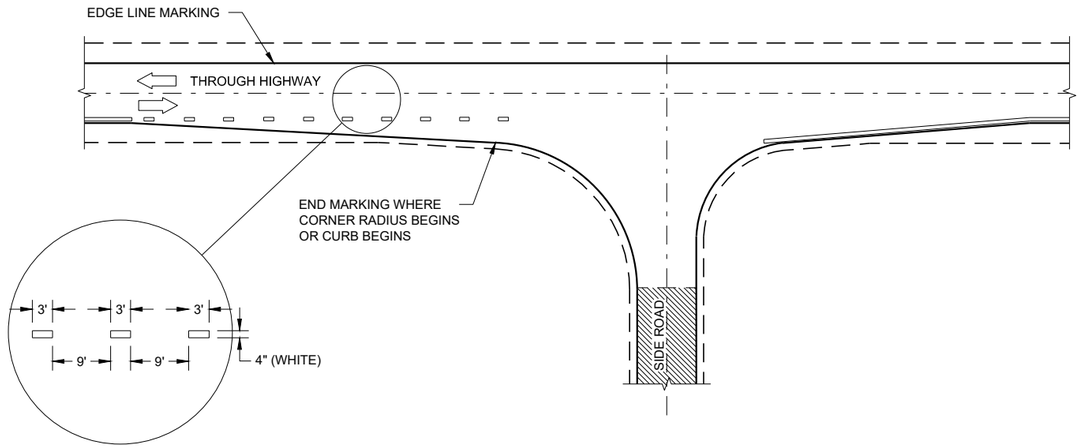
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2019 — DATE
/S/ Matthew Rauch — STATE SIGNING AND MARKING ENGINEER

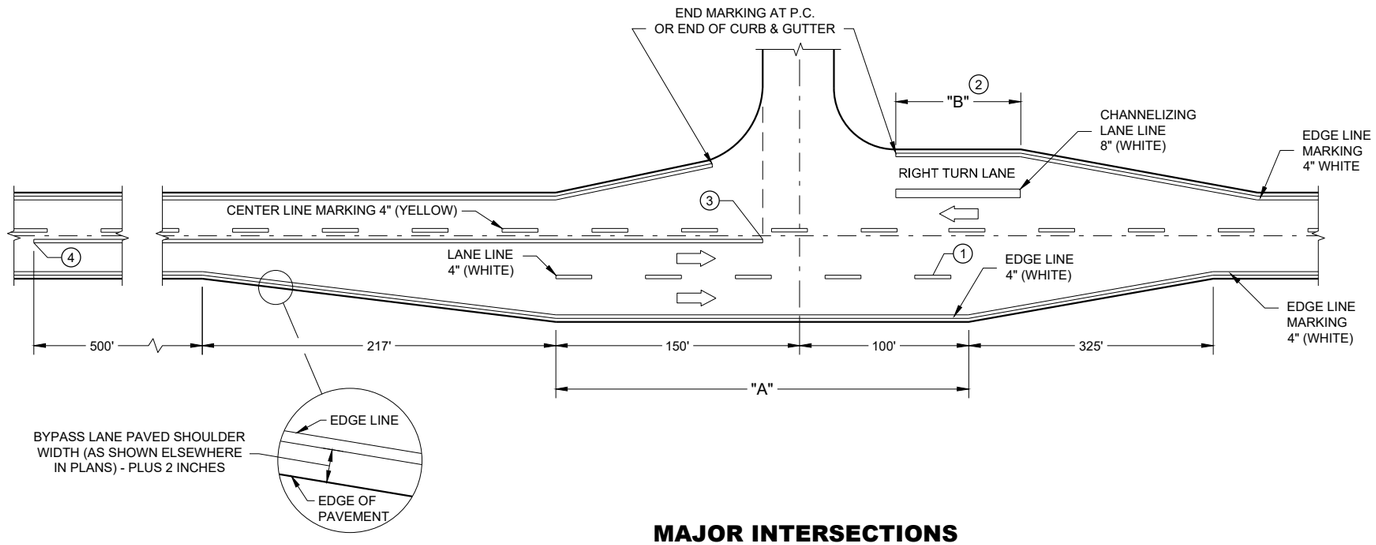
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SDD 15C33 - 04



MINOR INTERSECTION



MAJOR INTERSECTIONS

(INTERSECTION WITH FULL RIGHT TURN LANE OR BYPASS LANE)

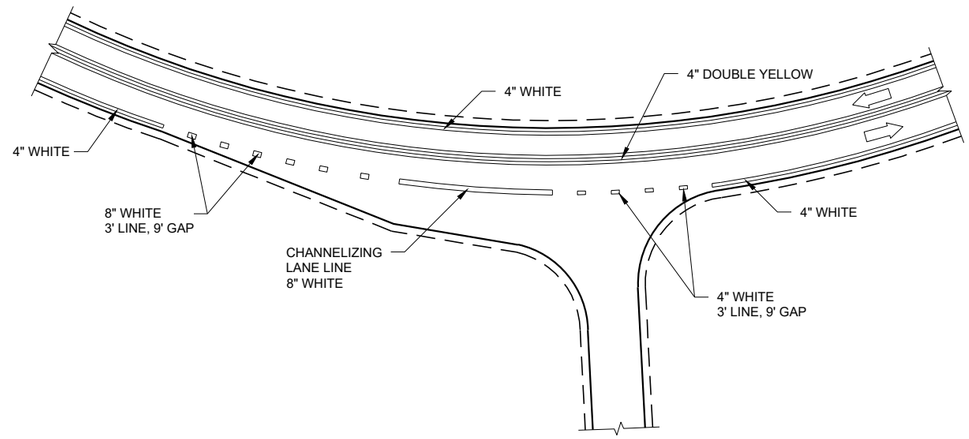
GENERAL NOTES

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

LEGEND

SIGN ON PERMANENT SUPPORT

DELINEATOR, FLEXIBLE/TUBULAR MARKER

DIRECTION OF TRAFFIC

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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) DISTANCE TO EXISTING SIGNS.

A SINGLE ROW OF FLEXIBLE TUBULAR MARKERS ON CENTERLINE EXTEND FOR THE ENTIRE LENGTH OF TWO-WAY TRAFFIC AT 50 FOOT SPACING.

COVER EXISTING CENTERLINE STRIPE WITH TEMPORARY PAVEMENT MARKING, 4 INCH DOUBLE YELLOW.



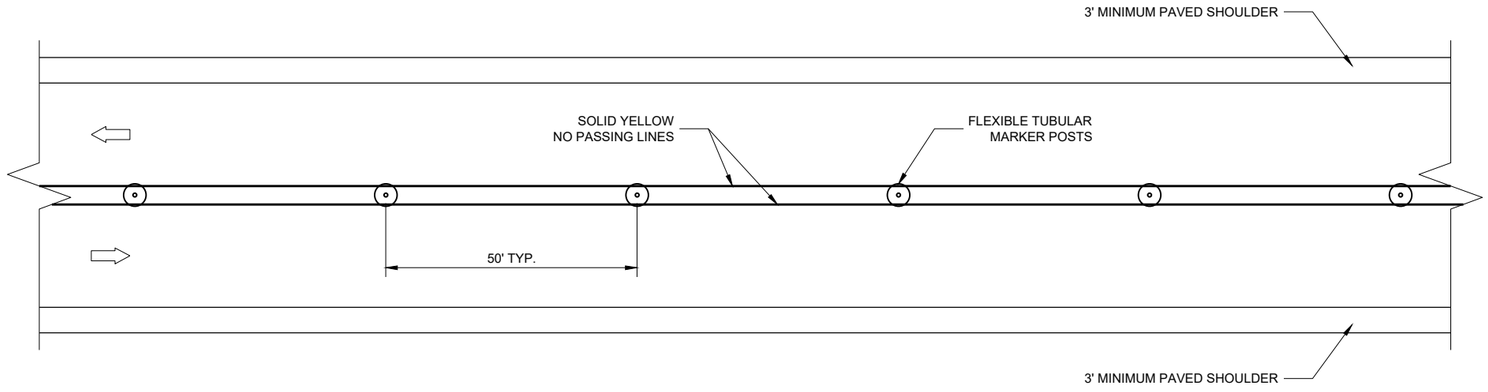
(1)



(2)

(1) THE WO6-3 AND WO57-51 SHALL BE LOCATED 200 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP AND / OR 500 FEET BEYOND ANY SIDE ROAD. THE R4-1 SHALL BE LOCATED 1000 FEET BEYOND THE WO6-3 AND THE WO57-51 AND THE SIGNS SHALL BE ALTERNATED WITH ONE MILE INTERVALS BETWEEN THE SIGNS.

(2) CONVENTIONAL: 24" X 30"
FREEWAY AND EXPRESSWAY: 36" X 48"



TWO LANE, TWO WAY OPERATION

TRAFFIC CONTROL
TWO LANE TWO WAY
OPERATION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
February 2020
DATE

/S/ Andrew Heidtke
STATE TRAFFIC ENGINEER

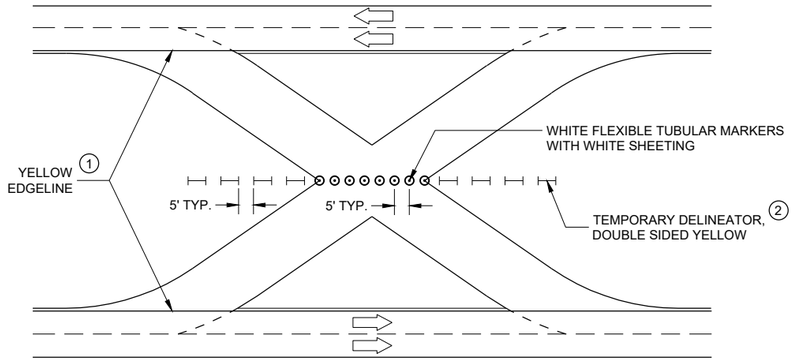
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SDD 15D06 - 04

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- DELINEATOR FLEXIBLE / TUBULAR MARKER
- TEMPORARY DELINEATOR (STEEL POST WITH SINGLE DELINEATOR) COLOR OF DELINEATOR SHALL MATCH THE COLOR OF THE RESPECTIVE EDGELINE MARKING
- TEMPORARY DELINEATOR (DOUBLE SIDED)
- TYPE "A" WARNING LIGHT (FLASHING)
- TYPE III BARRICADE
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- REMOVE PAVEMENT MARKINGS
- WORK AREA



TRAFFIC CONTROL FOR CROSSOVER THAT IS NOT IN USE

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

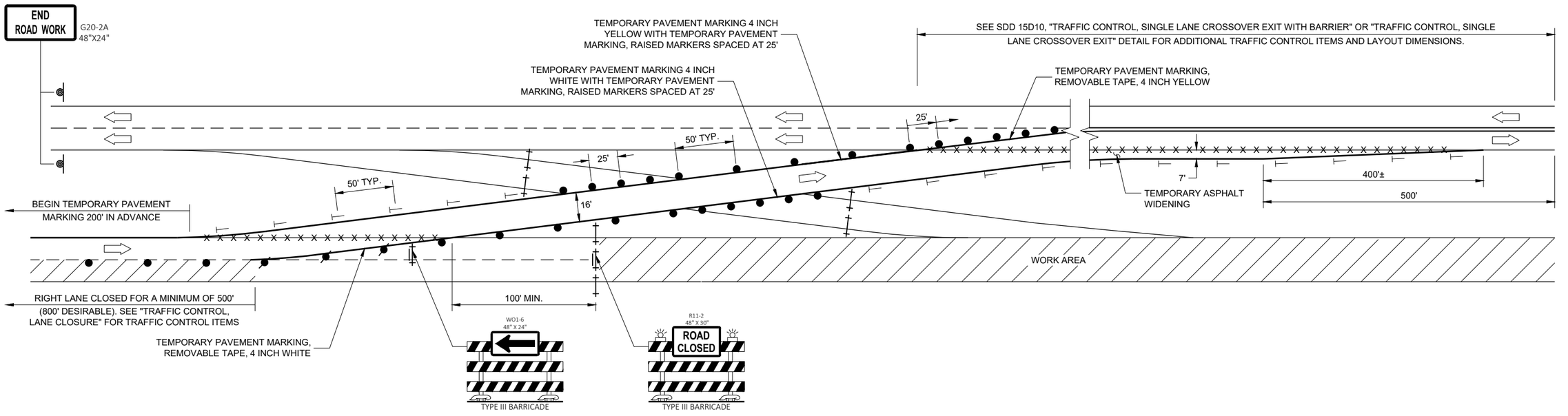
THE EXACT NUMBER, LOCATION, AND SPACING OF ALL SIGNS AND DEVICES SHALL BE ADJUSTED TO FIT FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

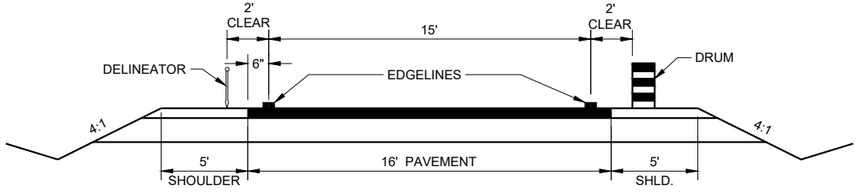
THE SPACING BETWEEN PROPOSED SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS.

TEMPORARY PAVEMENT MARKING REMOVABLE TAPE SHALL BE USED WHEN CROSSING PERMANENT ROADWAY SURFACES THAT WILL REMAIN AFTER USED OF CROSSOVER AND TEMPORARY PAVEMENT MARKING WHERE USED.

REVERSE DEVICES WHEN OTHER LEG OF CROSSOVER IS IN USE.

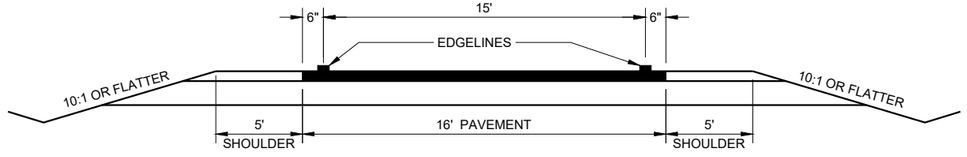
1. FOR PERMANENT CROSSOVER, PAVEMENT MARKING SHOULD CONFORM TO SECTION 646 OF THE STANDARD SPECIFICATIONS.
2. FOR PERMANENT CROSSOVER, INSTALL PERMANENT DELINEATORS ACCORDING TO SECTION 633 OF THE STANDARD SPECIFICATIONS.





TYPICAL TEMPORARY CROSSOVER ROADWAY DIMENSIONS

(SEE PLAN FOR ROADWAY DESIGN ELEMENTS)



TYPICAL CROSSOVER TO REMAIN IN PLACE ROADWAY DIMENSIONS

(SEE PLAN FOR ROADWAY DESIGN ELEMENTS)

TRAFFIC CONTROL, SINGLE LANE CROSSOVER

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
September 2017
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

SDD 15D11 - 07

SDD 15D11 - 07

GENERAL 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 FEET DESIRABLE) CLEARANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR CLOSING RIGHT LANE - REVERSE FOR CLOSING LEFT LANE.

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

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

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

CONSIDER ROADWAY GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS.

FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE 4 OR MORE CONTINUOUS DAYS AND NIGHTS.

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

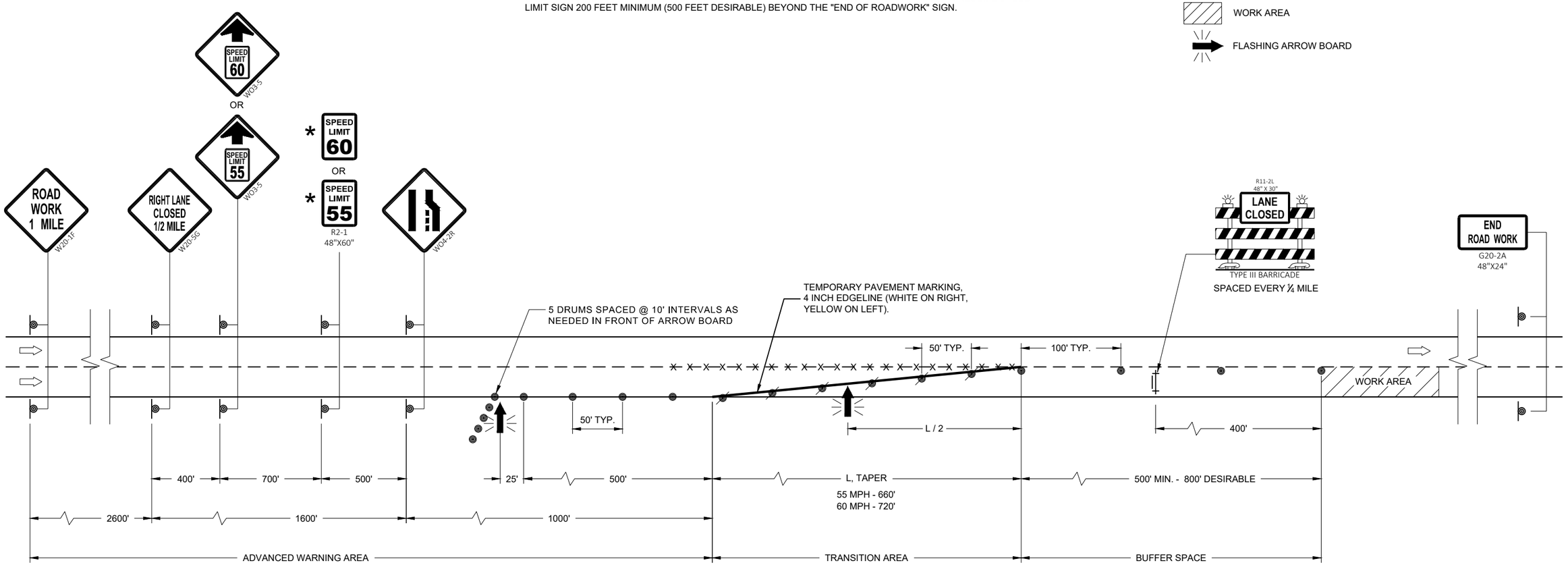
IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP OR INTERSECTION. THE LANE CLOSURE MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE ONE HALF THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

* A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. PLACE A SPEED LIMIT SIGN A MINIMUM OF EVERY 3 MILES. INCLUDE A RESUME SPEED LIMIT SIGN 200 FEET MINIMUM (500 FEET DESIRABLE) BEYOND THE "END OF ROADWORK" SIGN.

LEGEND

- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- REMOVING PAVEMENT MARKINGS
- DIRECTION OF TRAFFIC
- WORK AREA
- FLASHING ARROW BOARD



TRAFFIC CONTROL, LANE CLOSURE, SPEED REDUCTION

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

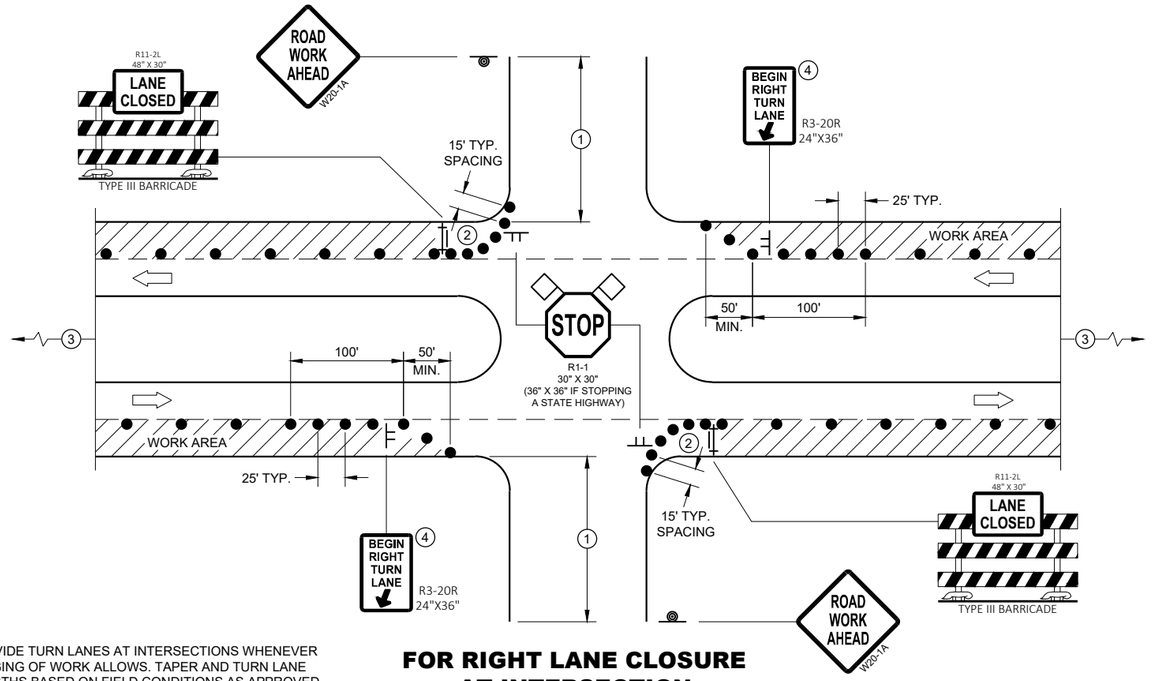
APPROVED
August 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEE

FHWA

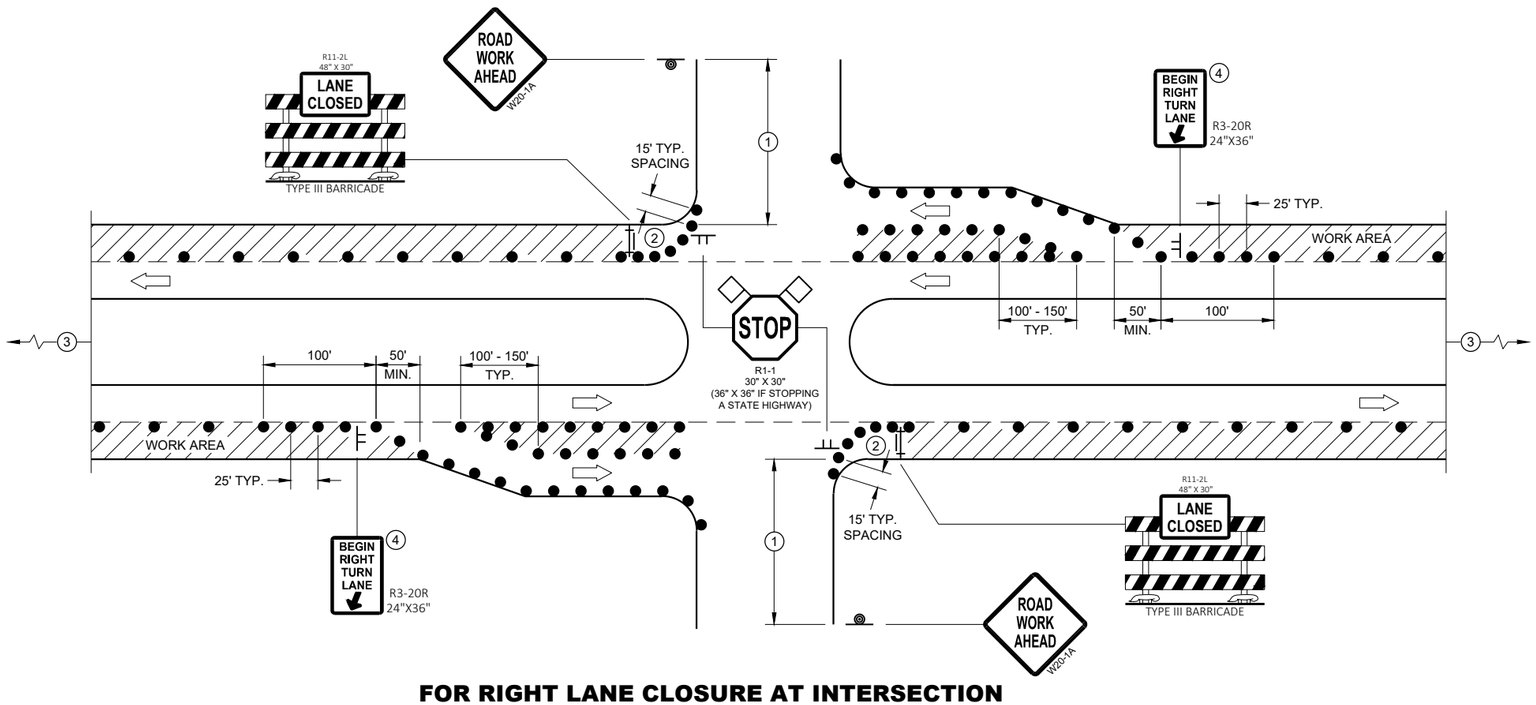
SDD 15D12 - 09b

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SDD 15D12 - 09b



PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

FOR RIGHT LANE CLOSURE AT INTERSECTION



FOR RIGHT LANE CLOSURE AT INTERSECTION (WITH RIGHT TURN BAY OPEN)

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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 TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL REMAIN IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON PORTABLE SUPPORTS.

BARRICADES IN A CLOSED LANE 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.

CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

(1) 500' TYPICAL OR AT LAST INTERSECTION, WHICHEVER IS CLOSER.
350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.

(2) ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS

(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE RIGHT LANE CLOSURE

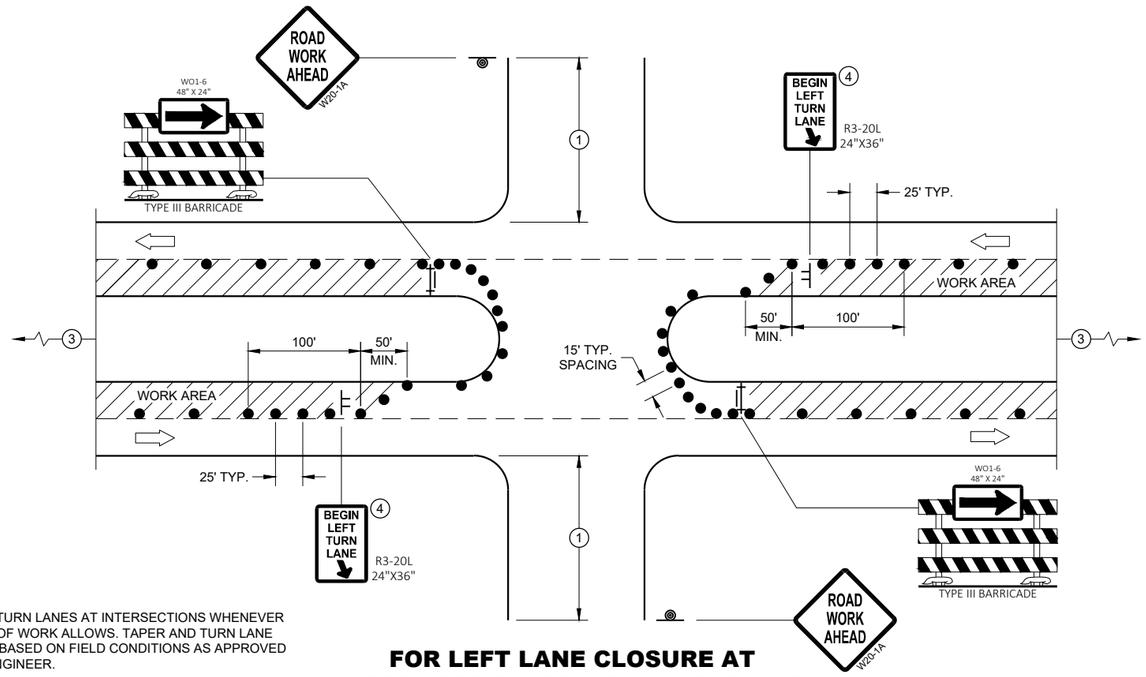
STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

6

SDD 15D21 - 07a

6

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PROVIDE TURN LANES AT INTERSECTIONS WHENEVER STAGING OF WORK ALLOWS. TAPER AND TURN LANE LENGTHS BASED ON FIELD CONDITIONS AS APPROVED BY THE ENGINEER.

FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING

GENERAL NOTES

ALL SIGNS ARE 48"X48" UNLESS OTHERWISE NOTED. IF NECESSARY DUE TO SPACE CONSTRAINTS IN URBAN AREAS, 36" X 36" MAY BE USED IF APPROVED BY THE DISTRICT TRAFFIC UNIT.

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

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 TRAFFIC CONTROL SIGNS SHOULD BE ADJUSTED TO NOT CONFLICT WITH AND TO PROVIDE A MINIMUM OF 200 FEET (500' DESIRABLE) DISTANCE TO EXISTING SIGNS THAT WILL REMAIN IN PLACE

SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE FHWA'S MANUAL OF STANDARD HIGHWAY SIGNS OR THE WISCONSIN STANDARD SIGN PLATES.

SIGNS THAT WILL REMAIN IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS OR THAT WILL BE PLACED IN A CLOSED LANE MAY BE MOUNTED ON PORTABLE SUPPORTS.

BARRICADES IN A CLOSED LANE 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.

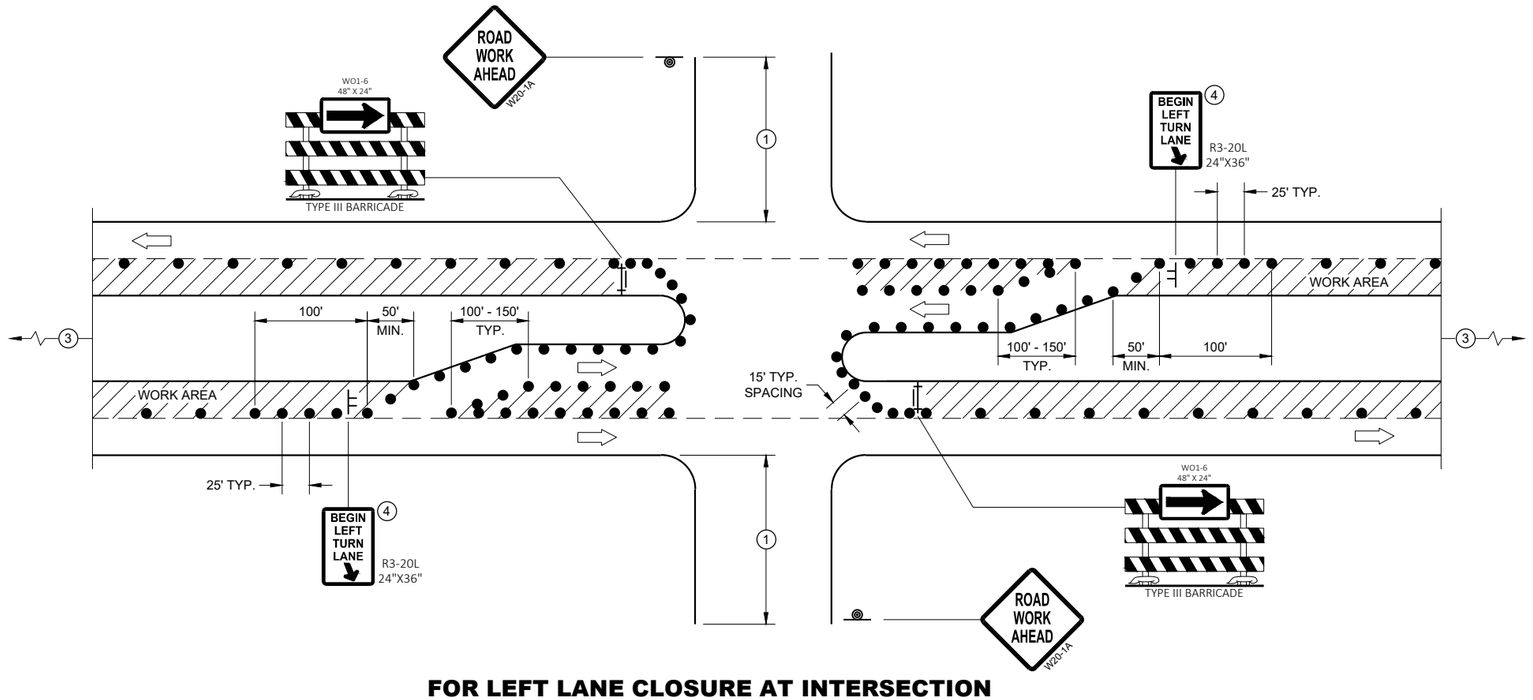
CHANNELIZING DEVICES PLACED ADJACENT TO WORK AREA SHALL BE PULLED BACK FROM THE TRAVEL LANE WHEN WORK IS NOT IN PROGRESS.

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350' IF 35 - 40 MPH.
200' IF 25 - 30 MPH.

(2) ALSO USE BARRICADE AND 15 FOOT TYPICAL DRUM SPACING AT COMMERCIAL DRIVEWAYS

(3) SEE SEPARATE LANE CLOSURE DETAIL FOR ADDITIONAL TRAFFIC CONTROL.

(4) MINIMUM MOUNTING HEIGHT OF 5 FEET FROM EDGE OF PAVEMENT (AT EDGE LINE LOCATION) TO BOTTOM OF SIGN.



FOR LEFT LANE CLOSURE AT INTERSECTION OR MEDIAN OPENING (WITH LEFT TURN BAY OPEN)

LEGEND

- SIGN ON TEMPORARY SUPPORT
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- DIRECTION OF TRAFFIC
- FLAGS, 16" X 16" MIN., ORANGE
- WORK AREA

TRAFFIC CONTROL, INTERSECTION WITHIN SINGLE LEFT LANE CLOSURE

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

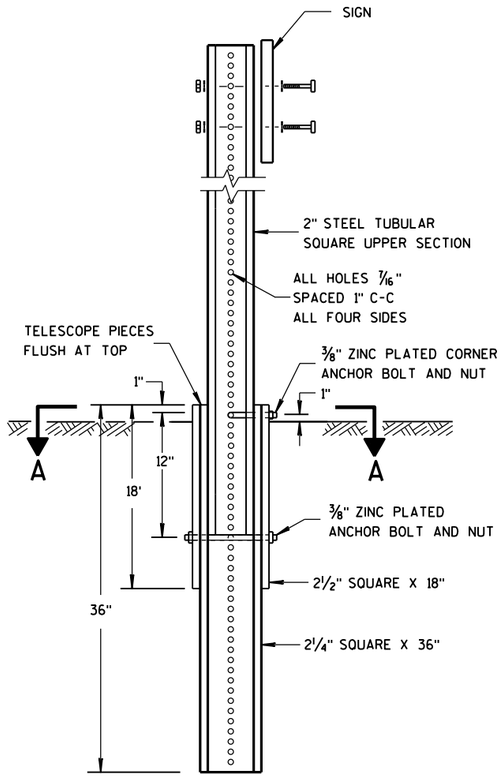
APPROVED
August 2020
DATE

/S/ Andrew Heidtke
WORK ZONE ENGINEER

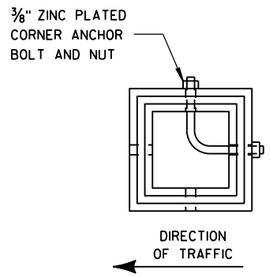
FHWA

SDD 15D21 - 07b

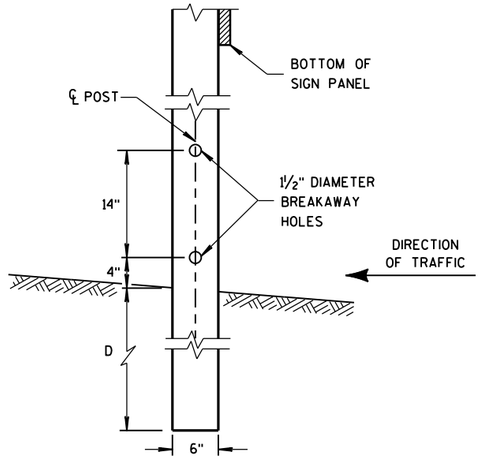
SDD 15D21 - 07b



DETAIL OF TUBULAR STEEL SIGN POST



SECTION A-A



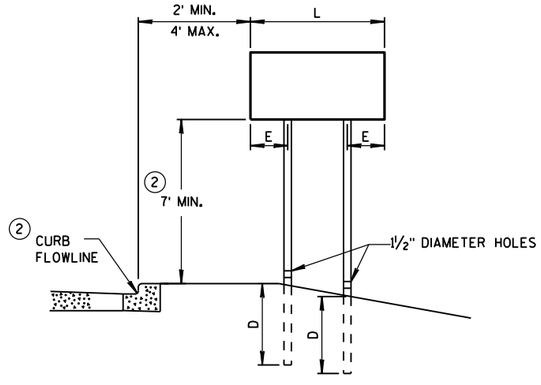
4"x6" WOOD POST MODIFICATION

GENERAL NOTES

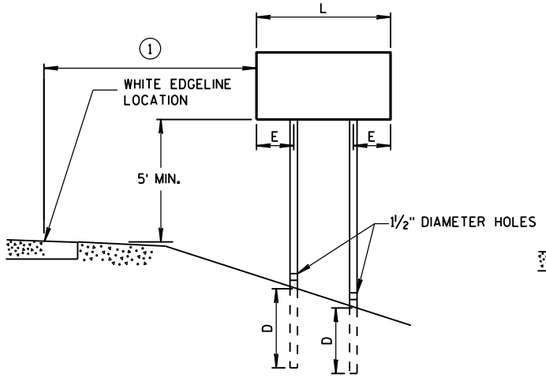
(1) 6 FEET FROM THE EDGE OF PAVEMENT (EDGE LINE LOCATION) UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER. LATERAL OFFSET SHOULD BE ADJUSTED TO AVOID THE DITCH FLOWLINE.

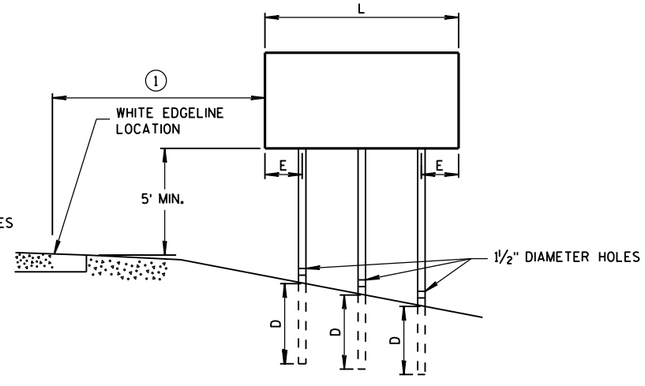
(2) THE EXISTENCE OF CURB AND GUTTER DOES NOT IN ITSELF MANDATE THE VERTICAL CLEARANCE ILLUSTRATED. THAT HEIGHT IS TYPICALLY MEASURED WHERE THERE IS SIDEWALK ADJACENT TO THE ROADWAY OR PARKING IS PERMITTED. IN THE ABSENCE OF SIDEWALK, VERTICAL CLEARANCE IS MEASURED FROM THE TOP OF THE CURB. IF NO SIDEWALK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

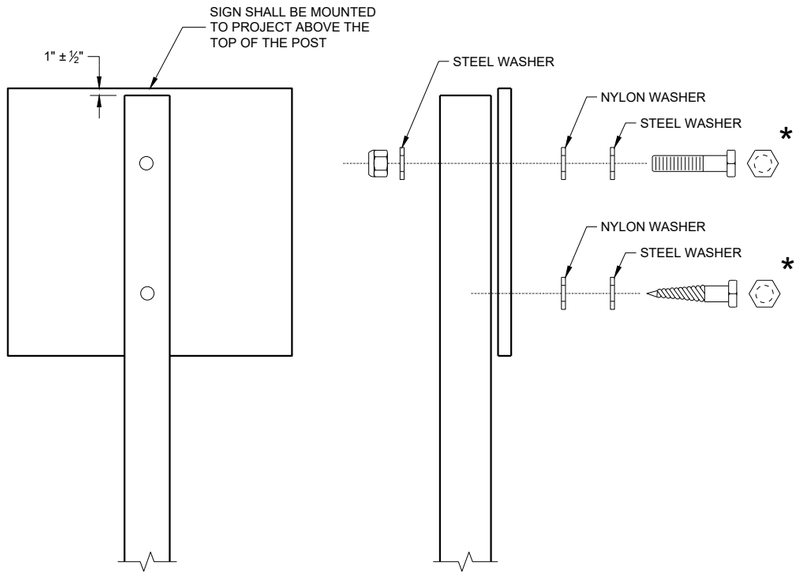
SEE NOTE (3)

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 - $\frac{3}{8}$" x 3"
MACHINE BOLTS - $\frac{5}{16}$" x 6 $\frac{1}{2}$" OR 7" LENGTH W/NUTS

SQUARE STEEL POST (2" x 2")
MACHINE BOLTS - $\frac{3}{8}$" x 3 $\frac{1}{4}$" LENGTH W/NUTS
RIVETS - $\frac{9}{32}$" (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 $\frac{1}{4}$" O.D. x $\frac{3}{8}$" I.D. x $\frac{1}{16}$" STEEL
1 $\frac{1}{4}$" O.D. x $\frac{3}{8}$" 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

SDD15D38 - 02b

ATTACHMENT OF SIGNS TO POSTS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

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

FHWA

LEGEND

- TYPE III BARRICADE WITH ATTACHED SIGN
- SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TRAFFIC CONTROL DRUM WITH TYPE "C" STEADY BURN LIGHT
- (A) TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK AREA
- REMOVING PAVEMENT MARKING (SEE GENERAL NOTES)

GENERAL 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 FEET DESIREABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR SHIFTING RIGHT LANE - REVERSE FOR SHIFTING LEFT LANE.

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

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

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON "COVERED" OR "DOWNED" SIGNS.

CONSIDER GEOMETRICS WHEN LOCATING SIGNS AND ARROW BOARD SO THE DRIVER HAS A CLEAR VIEW OF THE ARROW BOARD AND LANE CLOSURE DRUMS FOR A MINIMUM 1500 FEET IN FRONT OF DRUMS.

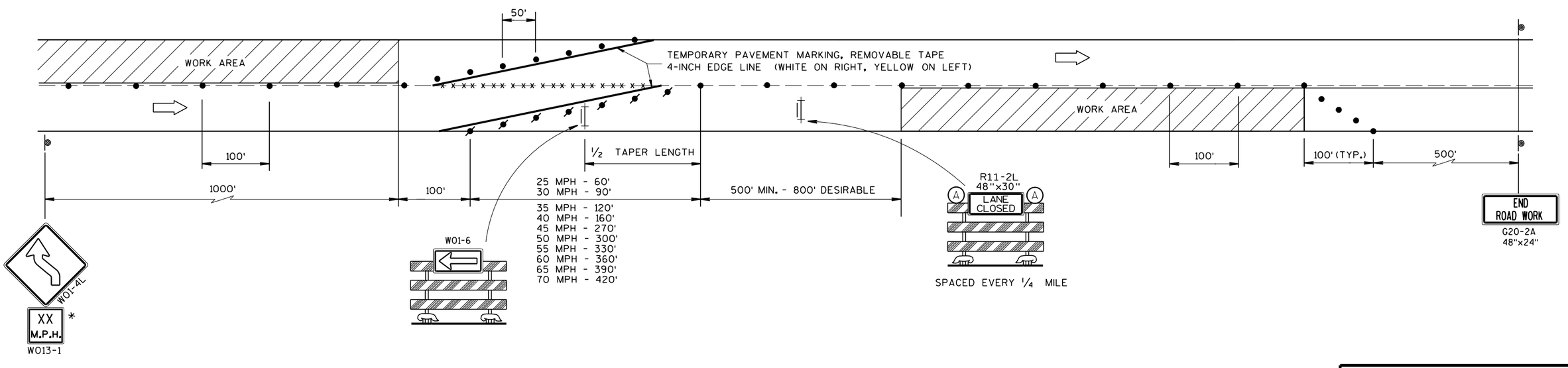
FOR A LANE CLOSURE THAT IS IN PLACE LESS THAN 7 CONTINUOUS DAYS AND NIGHTS, THE ADVANCED WARNING SIGNS MAY BE MOUNTED ON PORTABLE SUPPORTS.

REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

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

IF THE HORIZONTAL ALIGNMENT IS SUCH THAT A CURVE MAY REQUIRE ADDITIONAL DELINEATION, THE DEVICE SPACING MAY BE DECREASED TO 50 FEET.

ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE CLOSURE OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE CLOSURE MUST MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.



* USE ONLY IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED

LANE SHIFT MULTI-LANE DIVIDED OR ONE WAY ROAD

TRAFFIC CONTROL, LANE SHIFT, MULTI-LANE DIVIDED OR ONE WAY ROAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
March 2018
DATE
FHWA

/S/ Andrew I
WORK ZONE E

6

S.D.D. 15 D 40-1

LEGEND

TYPE III BARRICADE WITH ATTACHED SIGN

SIGN ON PERMANENT SUPPORT

TRAFFIC CONTROL DRUM

DIRECTION OF TRAFFIC

CONCRETE BARRIER TEMPORARY PRECAST

TYPE "A" WARNING LIGHT (FLASHING)

WORK AREA

L, TAPER LENGTH (MPH)							
SPEED (MPH)	W, LATERAL OFFSET (FT)						
	10	11	12	13	14	15	16
45	450	495	540	585	630	675	720
50	500	550	600	650	700	750	800
55	550	605	660	715	770	825	880
60	600	660	720	780	840	900	960
65	650	715	780	845	910	975	1040
70	700	770	840	910	980	1050	1120



OR



LOCATED 3000 FEET BEYOND THE "ROAD WORK 1 MILE" (W20-1F) SIGN



R2-1
48"X60"

OR



R2-1
48"X60"

(BLACK AND WHITE) LOCATED 700 FEET BEYOND THE W03-5 SIGN

IF THE REGULATORY SPEED HAS BEEN REDUCED, A SPEED LIMIT SIGN SHALL BE LOCATED 1500 FEET BEYOND THE END OF THE ACCELERATION LANE OF EACH ENTRANCE RAMP. PLACE A SPEED LIMIT SIGN INCORPORATED A MINIMUM OF EVERY 3 MILES.

GENERAL 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 FEET DESIREABLE) DISTANCE TO EXISTING SIGNS.

THIS LANE CLOSURE IS TYPICAL FOR LANE SHIFT RIGHT - REVERSE FOR SHIFTING LEFT.

ALL SIGNS ARE 48"x48" UNLESS OTHERWISE NOTED.

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

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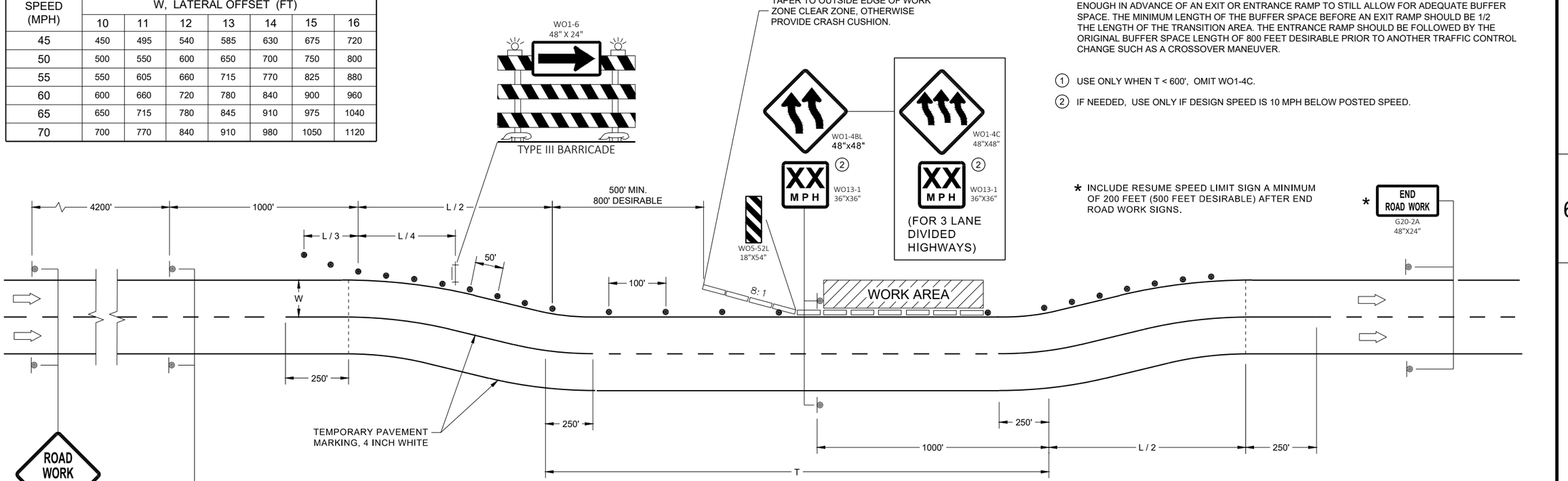
REMOVE PAVEMENT MARKINGS IF LANE CLOSURE IS TO BE IN PLACE FOR LONGER THAN 4 OR MORE DAYS AND NIGHTS.

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ADJUSTMENTS IN BUFFER SPACE NEED TO BE INCORPORATED WHEN THE LANE SHIFT OCCURS NEAR AN INTERCHANGE EXIT OR ENTRANCE RAMP. THE LANE SHIFT MUST TAKE PLACE FAR ENOUGH IN ADVANCE OF AN EXIT OR ENTRANCE RAMP TO STILL ALLOW FOR ADEQUATE BUFFER SPACE. THE MINIMUM LENGTH OF THE BUFFER SPACE BEFORE AN EXIT RAMP SHOULD BE 1/2 THE LENGTH OF THE TRANSITION AREA. THE ENTRANCE RAMP SHOULD BE FOLLOWED BY THE ORIGINAL BUFFER SPACE LENGTH OF 800 FEET DESIRABLE PRIOR TO ANOTHER TRAFFIC CONTROL CHANGE SUCH AS A CROSSOVER MANEUVER.

(1) USE ONLY WHEN T < 600', OMIT WO1-4C.

(2) IF NEEDED, USE ONLY IF DESIGN SPEED IS 10 MPH BELOW POSTED SPEED.



MULTIPLE LANE SHIFT MULTILANE DIVIDED ROAD

TRAFFIC CONTROL
MULTIPLE LANE SHIFT
MULTILANE DIVIDED ROAD

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

APPROVED
November 2018 — DATE
/S/ Andrew Heidtke — WORK ZONE ENGINEER

FHWA

SDD 15D41 - 01

SDD 15D41 - 01

LEGEND

- EXISTING SIGN ON PERMANENT SUPPORT
- NEW SIGN ON PERMANENT SUPPORT
- TRAFFIC CONTROL DRUM
- TYPE III BARRICADE WITH ATTACHED SIGN
- TYPE "A" WARNING LIGHT (FLASHING)
- DIRECTION OF TRAFFIC
- WORK ZONE

GENERAL NOTES

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

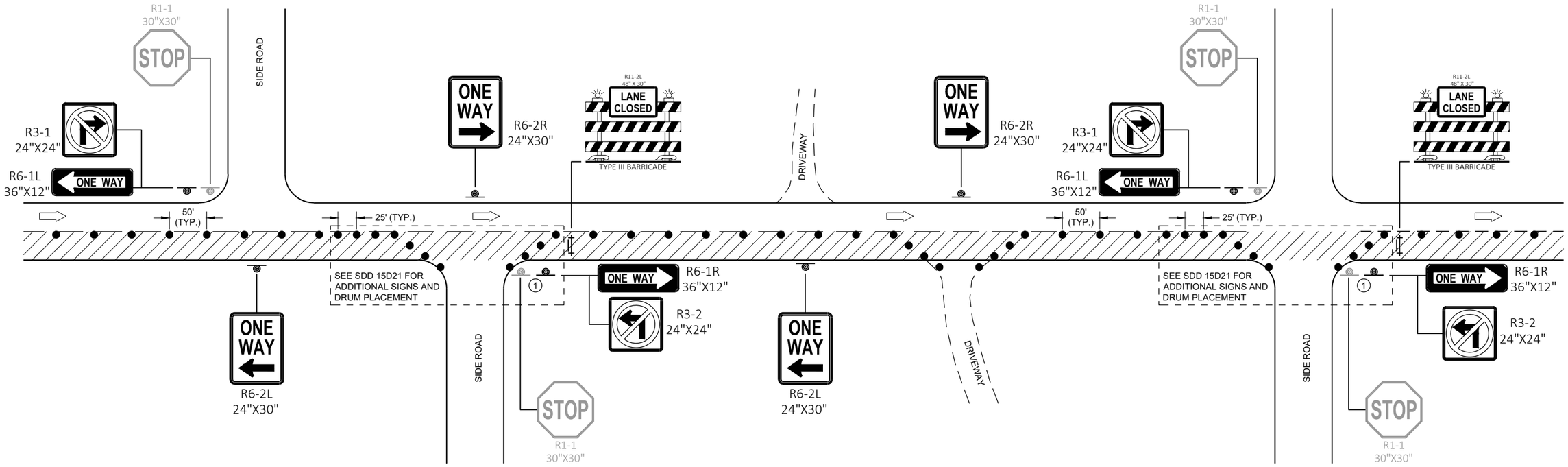
ALL SIGNS AND DEVICES SHALL BE IN CONFORMANCE WITH THE WISCONSIN MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (WMUTCD). SIGN LAYOUTS SHALL BE IN ACCORDANCE WITH THE WISDOT STANDARD SIGN PLATES.

ANY SIGNS TEMPORARY OR EXISTING, WHICH CONFLICT WITH THE TRAFFIC CONTROL "IN USE" SHALL BE REMOVED OR COVERED AS NEEDED AND AS APPROVED BY THE ENGINEER. NO WARNING LIGHTS SHALL BE WORKING ON COVERED OR "DOWNED" SIGNS.

BARRICADES IN A CLOSED LANE 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.

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

(1) IF WORK OPERATIONS ALLOWS, MOVE R1-1, R6-1R, AND R3-2 CLOSER TO INTERSECTION.

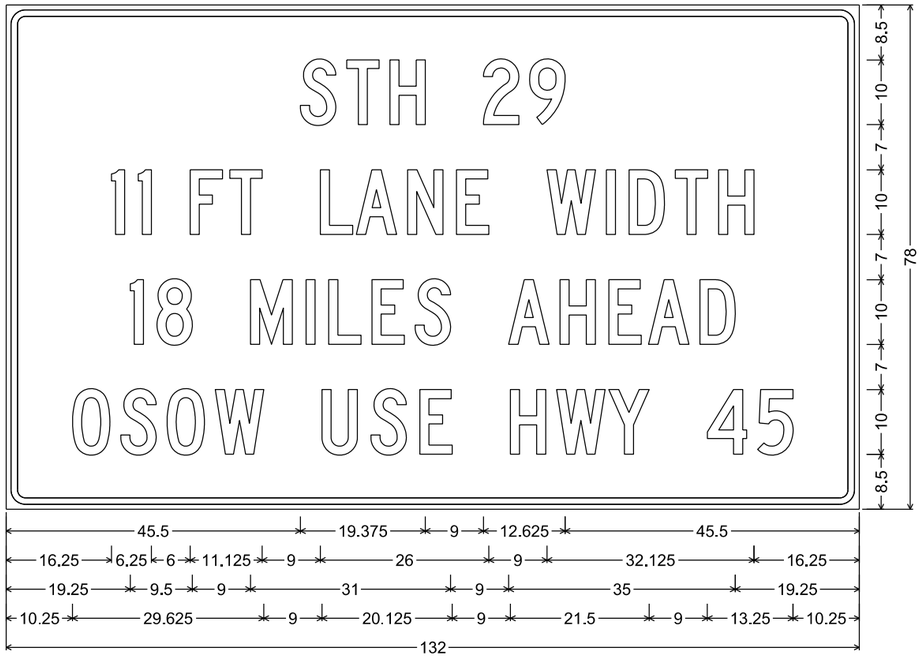


TRAFFIC CONTROL
ONE - WAY SIGNING

TRAFFIC CONTROL ONE-WAY SIGNING	
STATE OF WISCONSIN DEPARTMENT OF TRANSPORTATION	
APPROVED May 2020 DATE	/S/ Andrew Heidtke WORK ZONE ENGINEE
FHWA	262

SDD 15D46 - 01

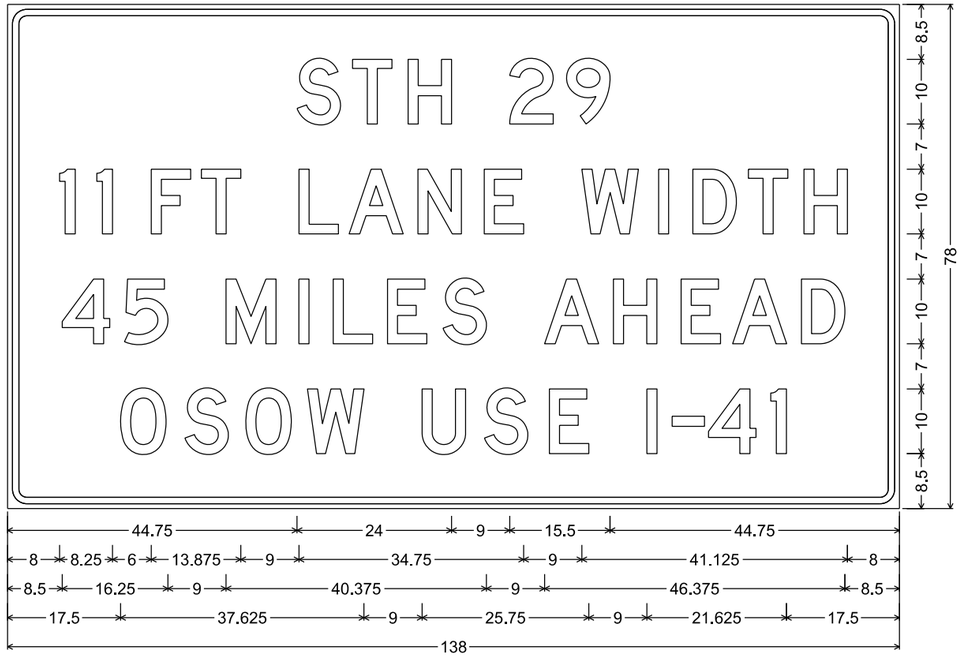
SDD 15D46 - 01



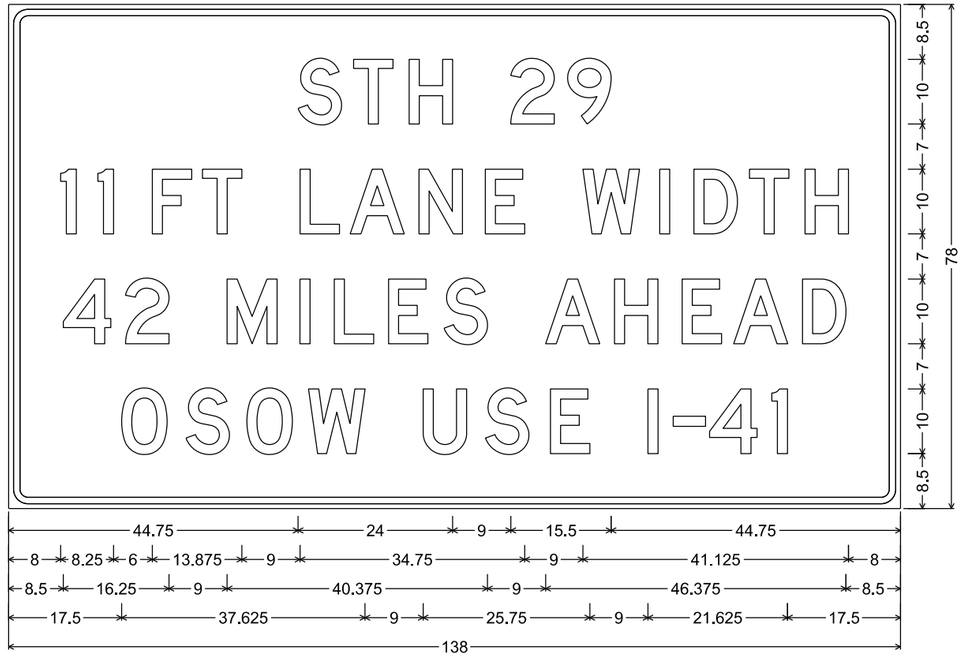
3.000" Radius, 1.000" Border, 0.750" Indent,
"STH", C; "29", C; "11", C; "FT", C; "LANE", C; "WIDTH", C; "18", C; "MILES", C; "AHEAD", C;
"OSOW", C; "USE", C; "HWY", C; "45", C;

NOTES

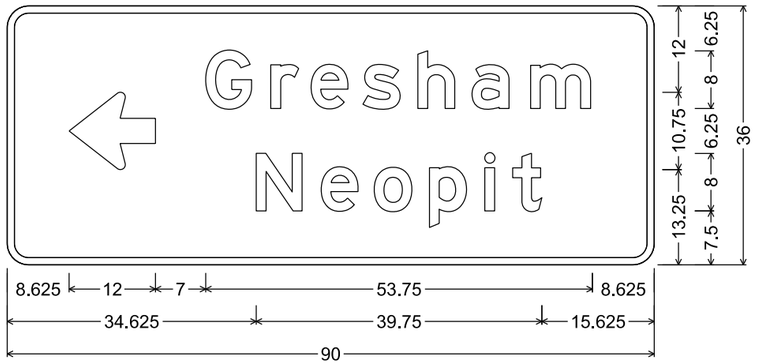
1. Fixed Message Type II Signs - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - D except as noted



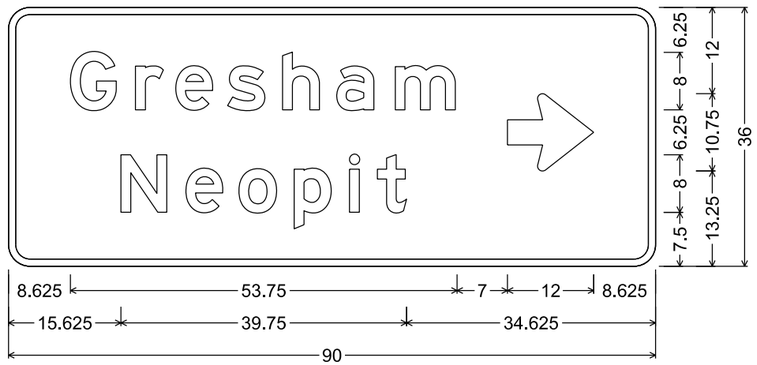
3.000" Radius, 1.000" Border, 0.750" Indent



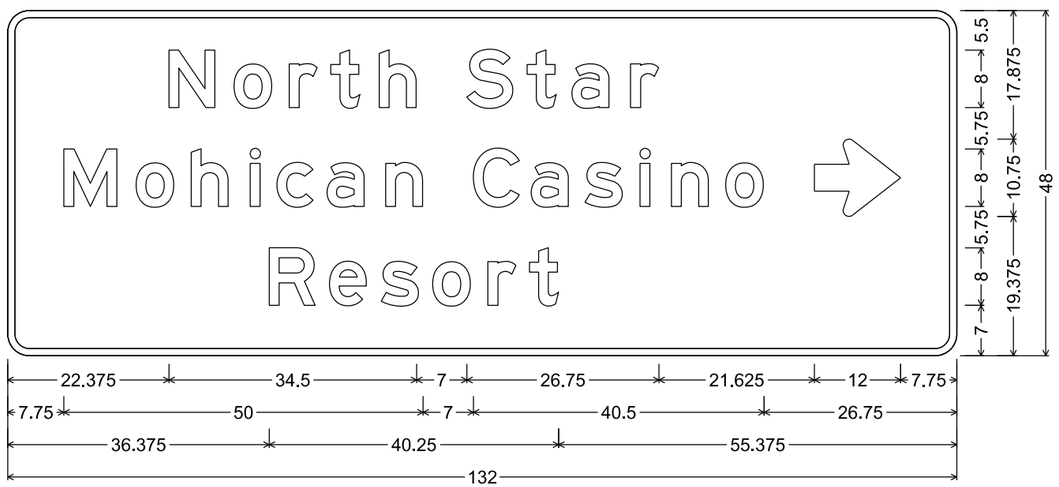
3.000" Radius, 1.000" Border, 0.750" Indent



D1-2; 3.000" Radius, 1.000" Border



D1-2; 3.000" Radius, 1.000" Border



D1-3; 3.000" Radius, 1.000" Border

NOTES

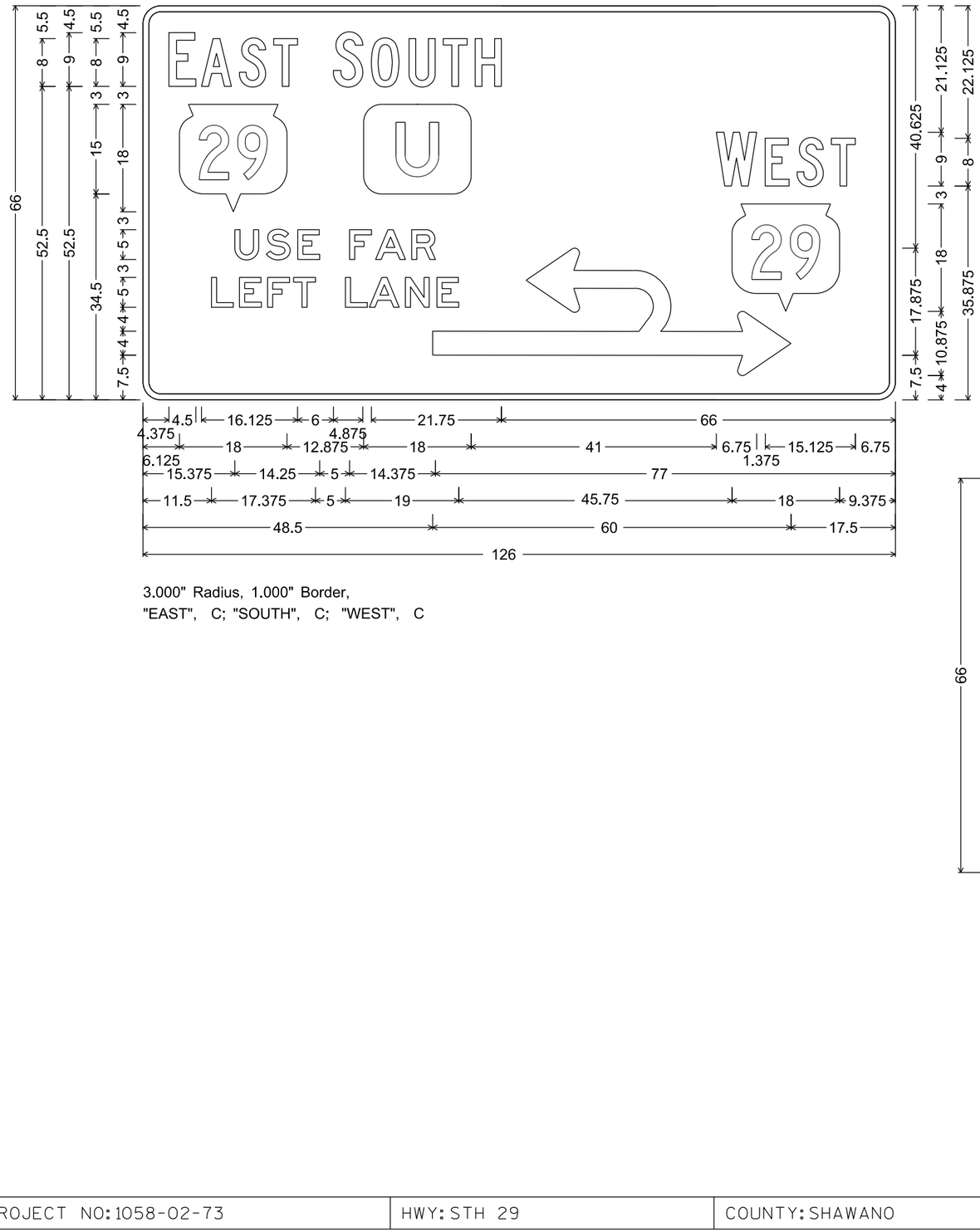
1. Signs are Type II - Type H Reflective
2. Color:
   Background - Green
   Message - White
3. Message Series - E except as noted

7

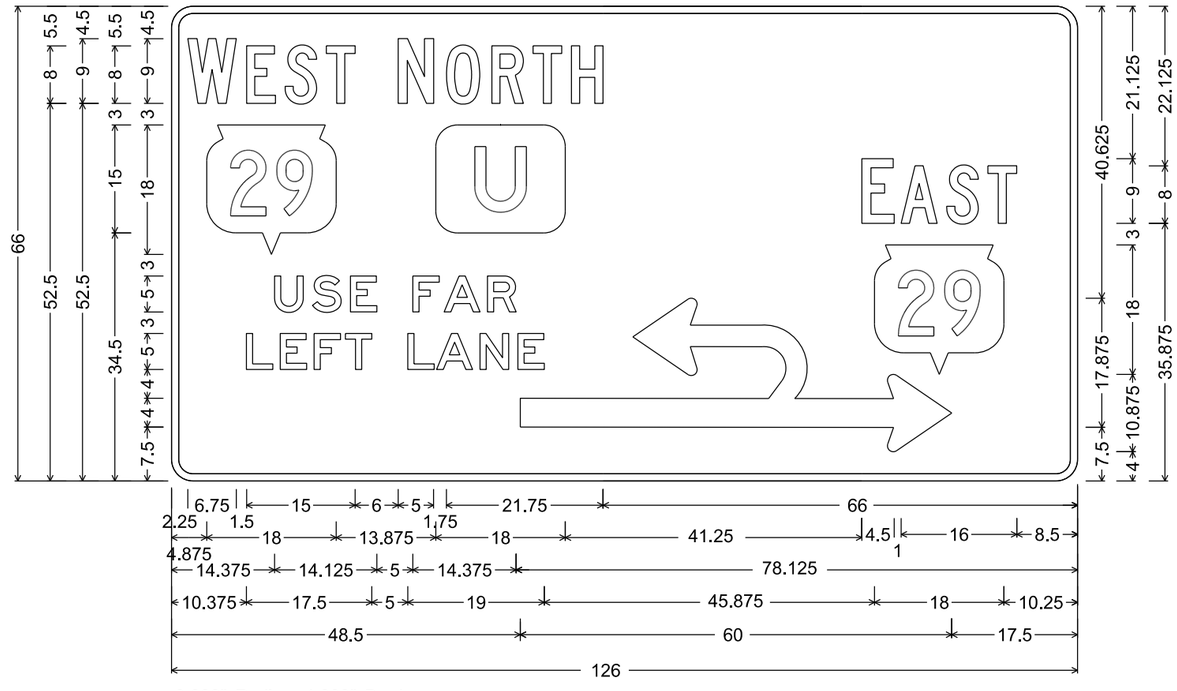
7

NOTES

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



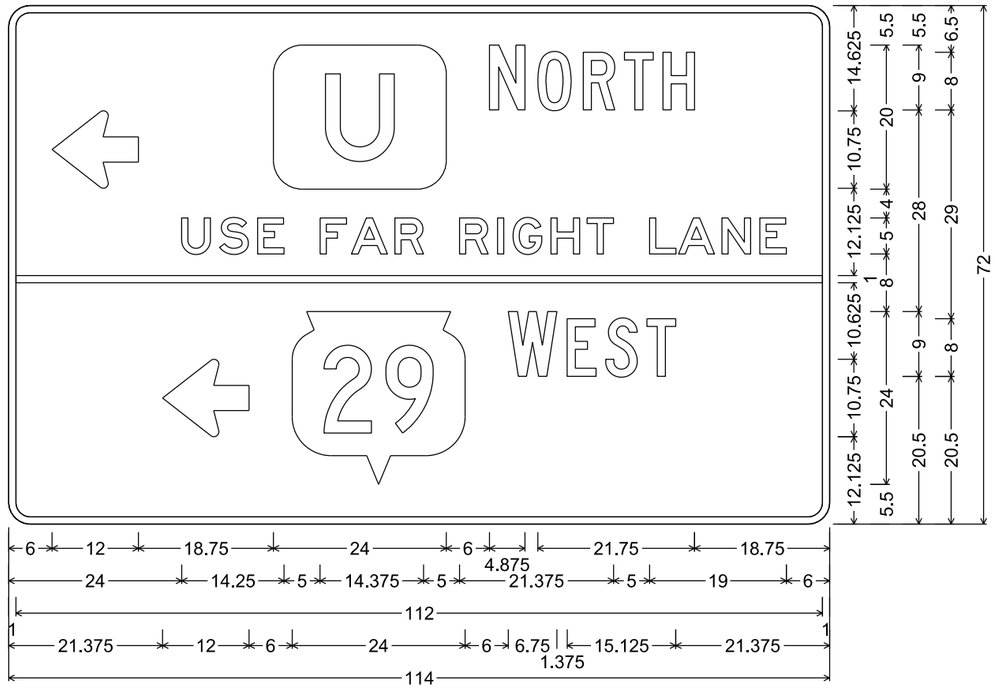
3.000" Radius, 1.000" Border,
"EAST", C; "SOUTH", C; "WEST", C



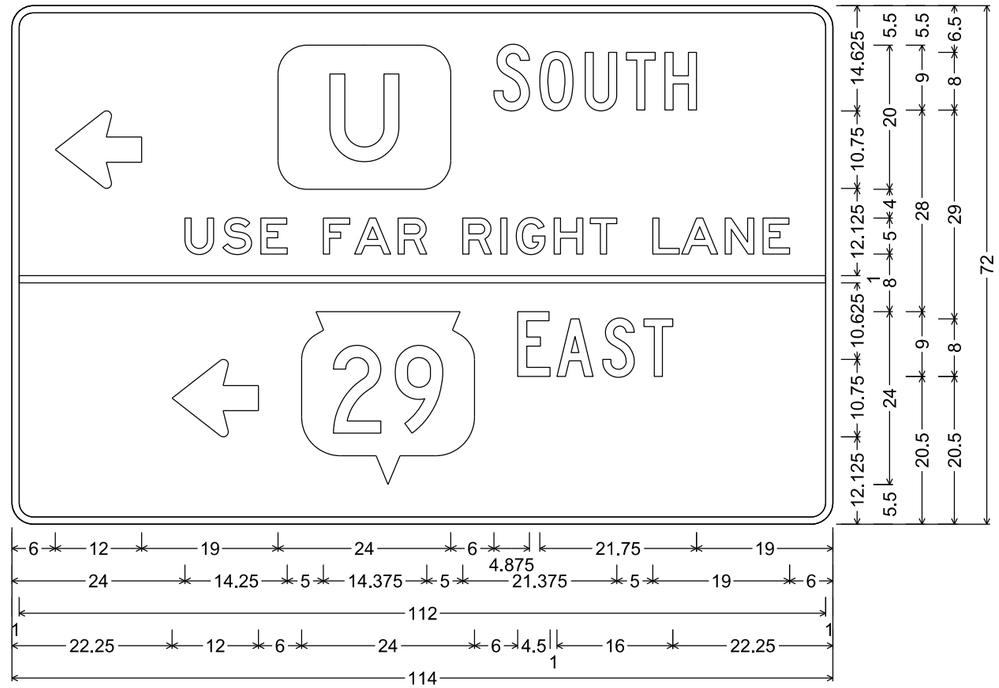
3.000" Radius, 1.000" Border,
"WEST", C; "NORTH", C; "EAST", C

NOTES

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



3.000" Radius, 1.000" Border
"NORTH", C; "WEST", C

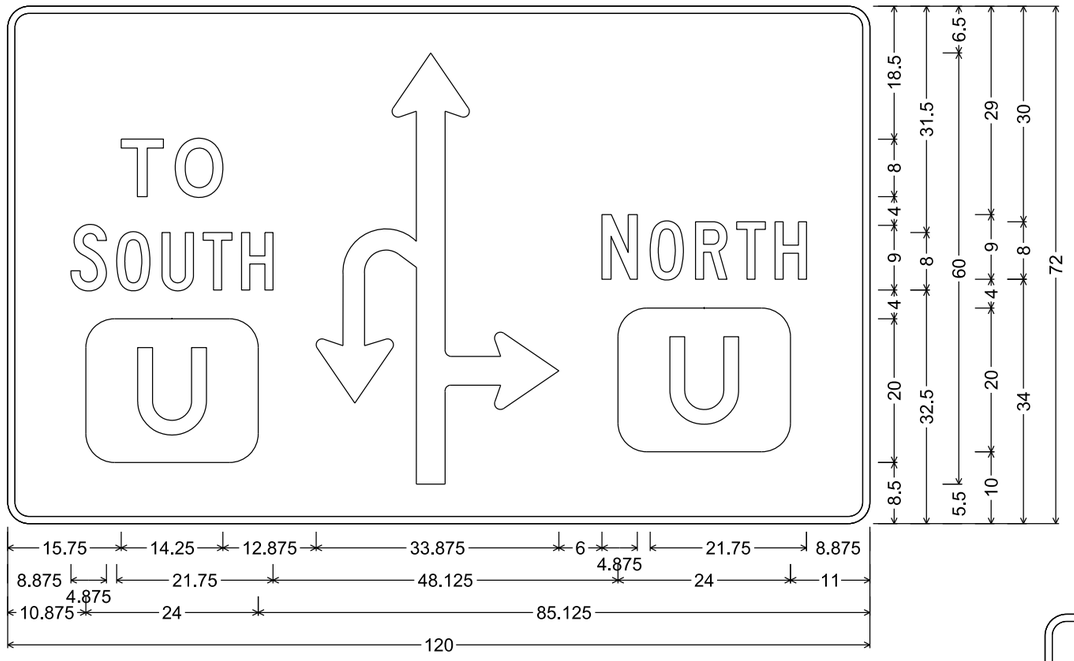


3.000" Radius, 1.000" Border
"SOUTH", C; "EAST", C

7

7

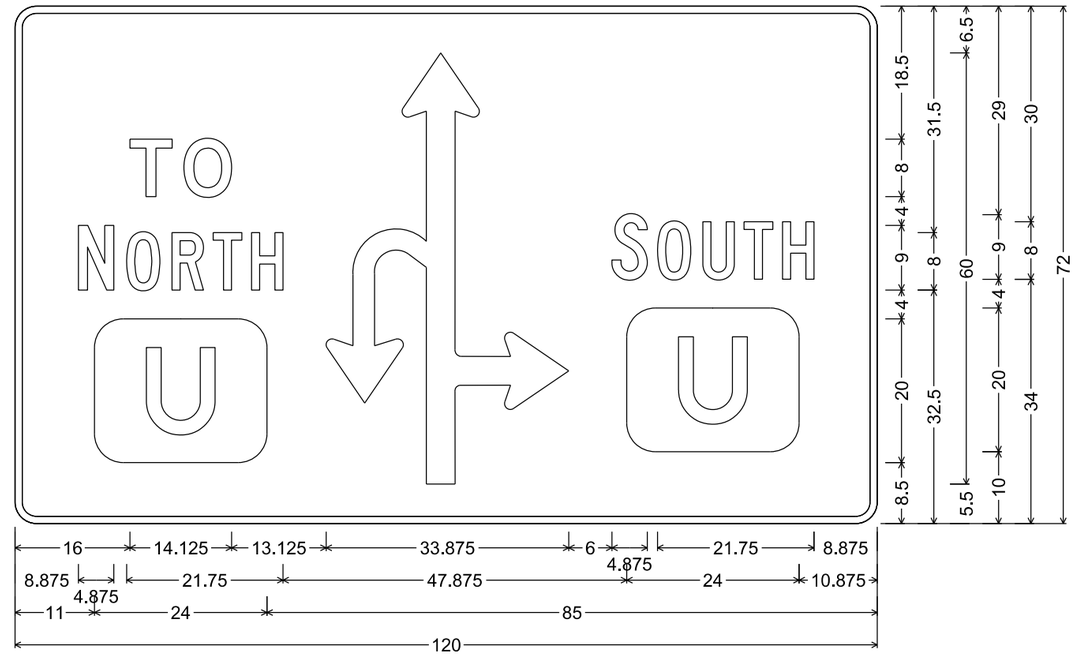
PROJECT NO:1058-02-73	HWY:STH 29	COUNTY:SHAWANO	PERMANENT SIGNING	SHEET NO: 266	E



3.000" Radius, 1.000" Border,
"TO", E; "SOUTH", C; "NORTH", C

NOTES

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



3.000" Radius, 1.000" Border,
"TO", E; "NORTH", C; "SOUTH", C

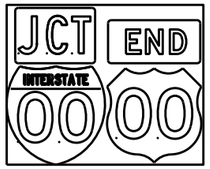
7

7

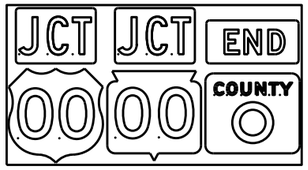
TYPICAL ASSEMBLIES



J1-1



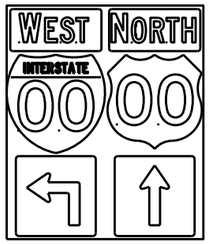
J1-2



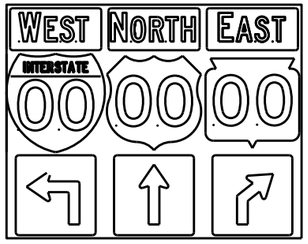
J1-3



J2-1



J2-2

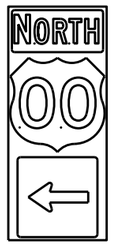


J2-3

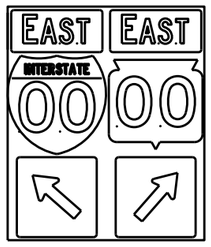


JV

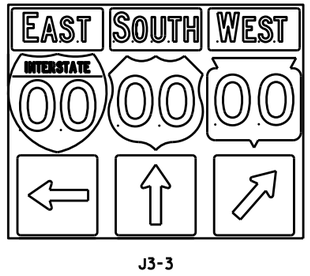
(Typical Vertical J-Assembly
See Note 10 and 11)



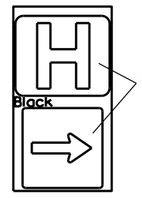
J3-1



J3-2



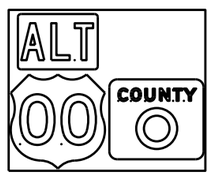
J3-3



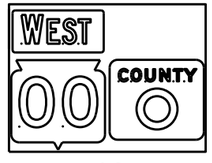
JH-1



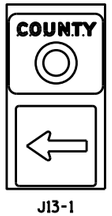
J4-1



J4-2



J4-2



J13-1



J12-1



J32-1



J33-1

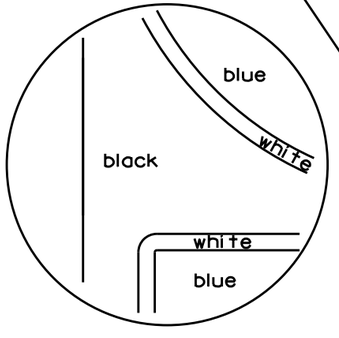


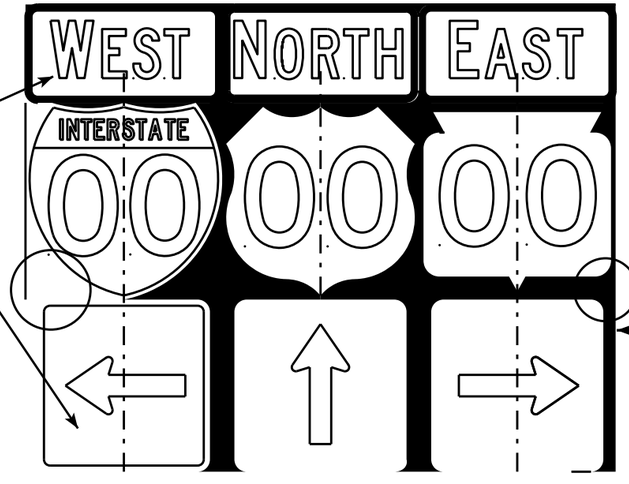
J23-1

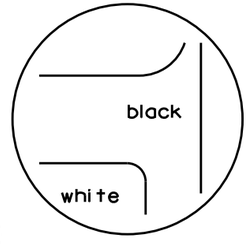


J22-1

[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

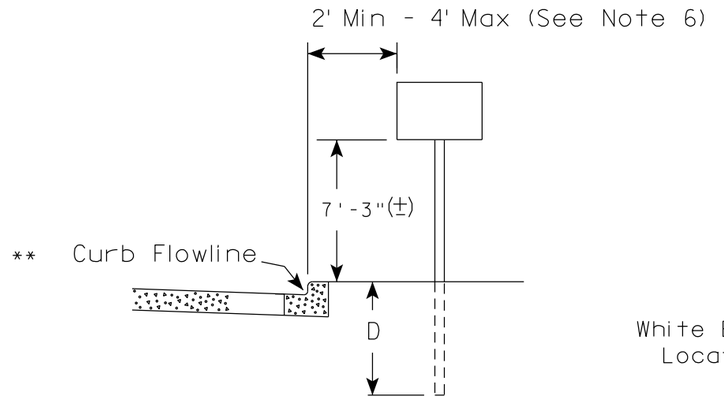
DATE 2/06/14 PL... A2-1S.8

PROJECT NO: | SHEET NO: E

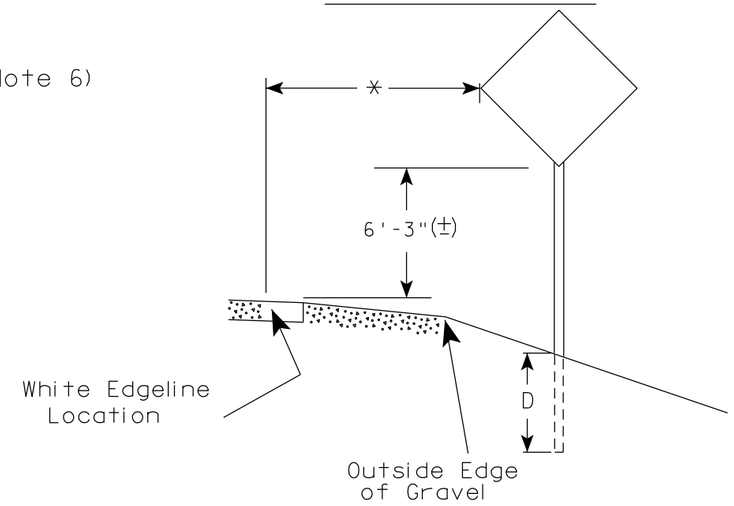
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A21S.DGN PLOT DATE : 06-FEB-2014 14:10 PLOT BY : mscsja PLOT NAME :

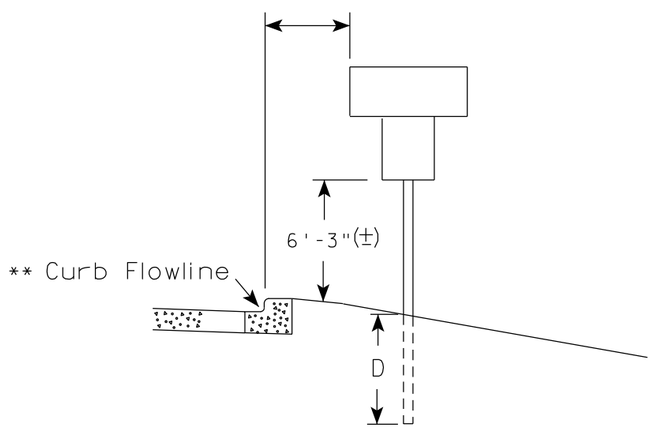
WISDOT/CADDS SHEET 42

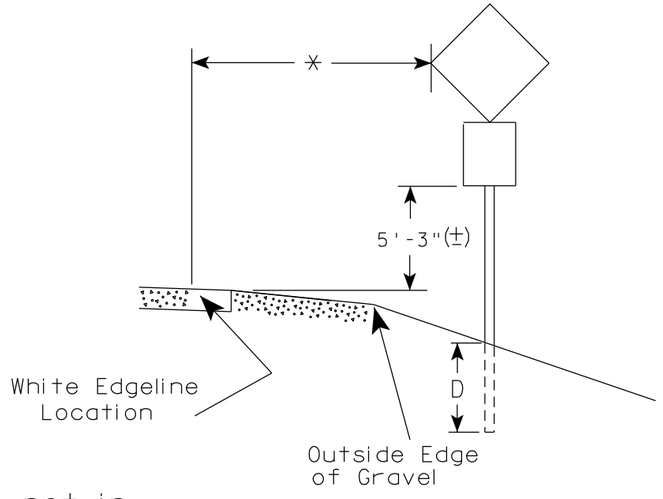
URBAN AREA



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.

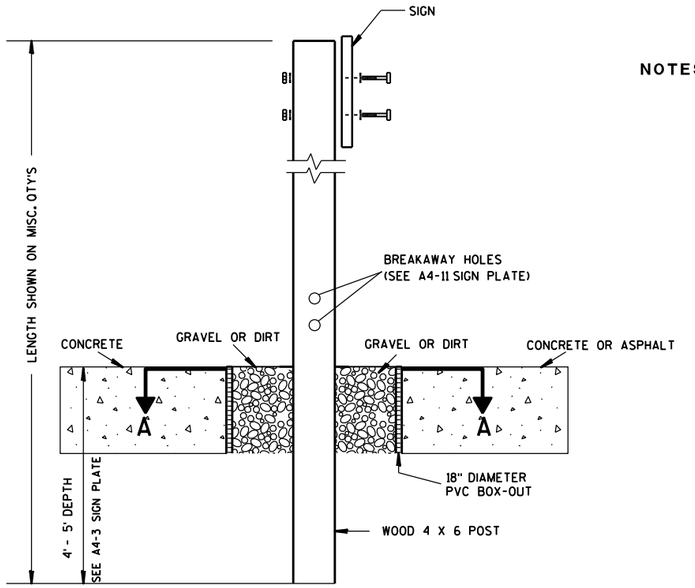
TYPICAL INSTALLATION OF PERMANENT TYPE II SIGNS ON SINGLE POSTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

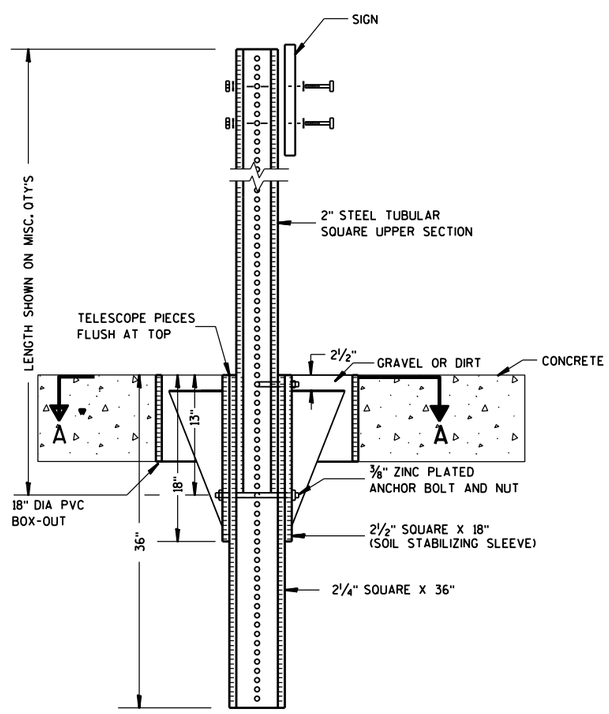
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 269	E



ELEVATION VIEW

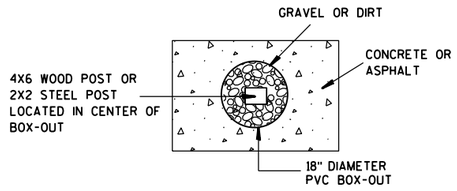
DETAIL OF WOOD 4 X 6 SIGN POST IN BOX-OUT

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

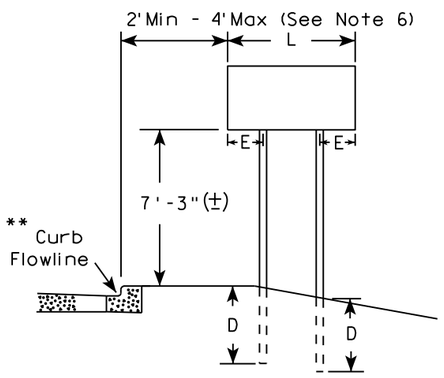
APPROVED Matthew R Rauch
for State Traffic Engineer

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

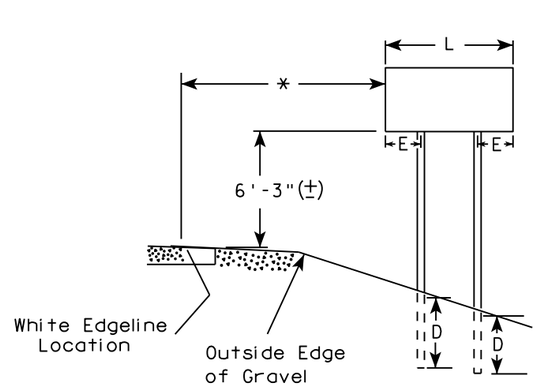
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

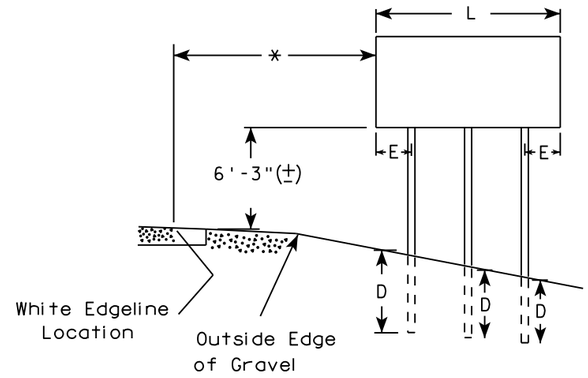
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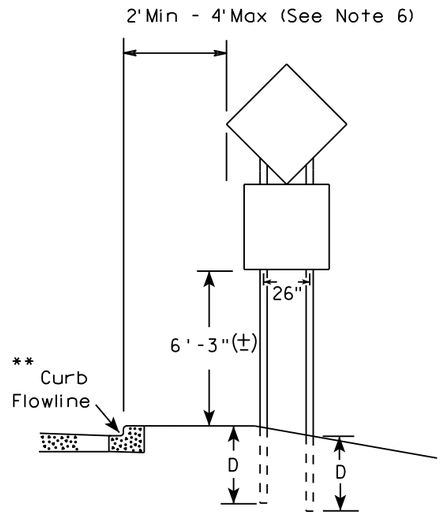
URBAN AREA



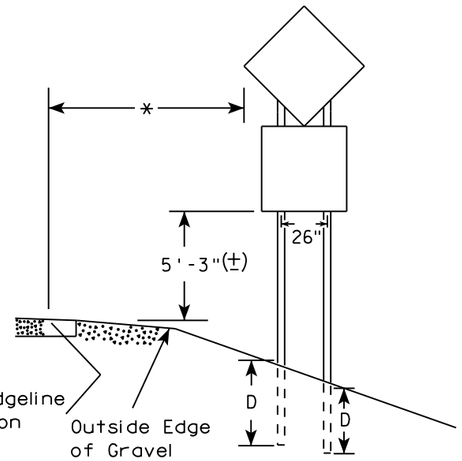
RURAL AREA (See Note 3)







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'

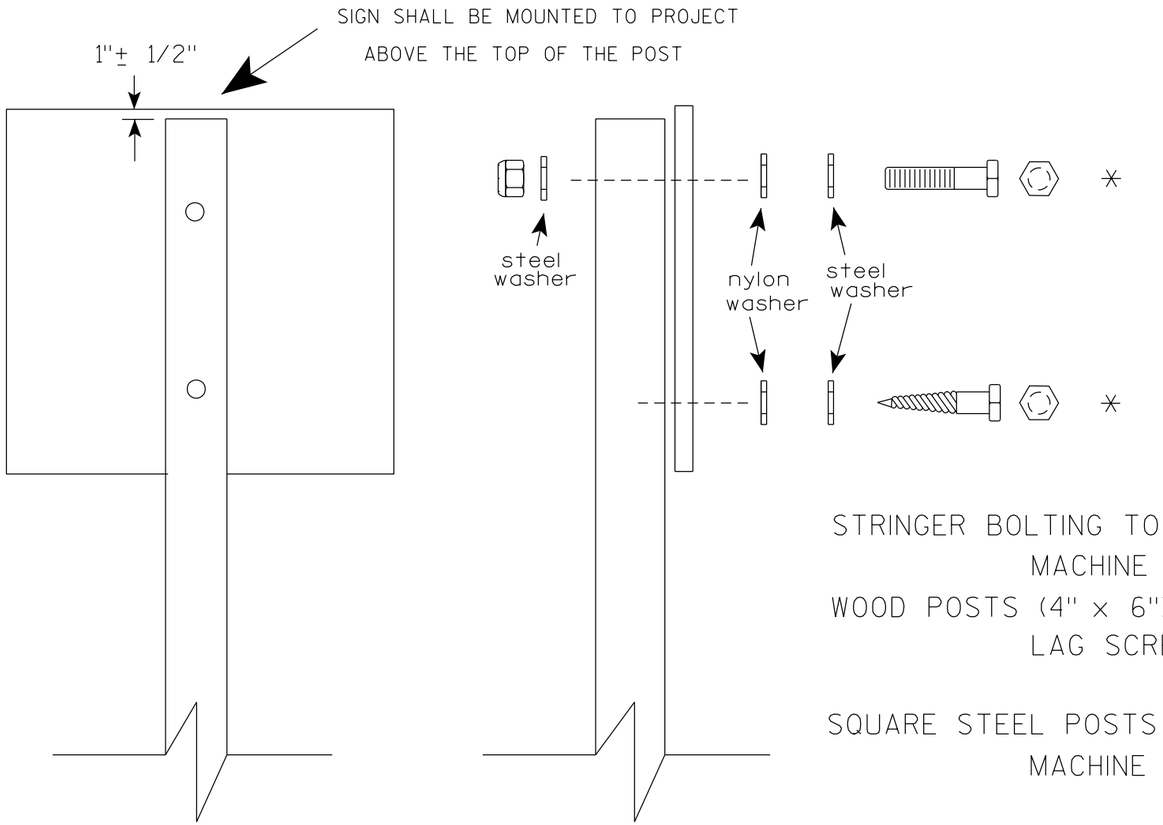
TYPICAL INSTALLATION OF TYPE II SIGNS ON MULTIPLE POSTS

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: 271	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

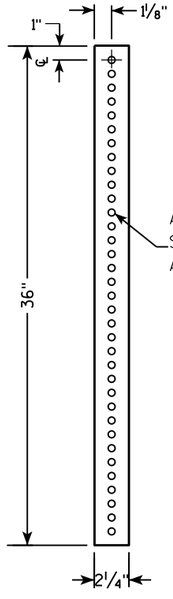
DATE 4/1/2020 PLATE NO. A4-8.9

PROJECT NO:

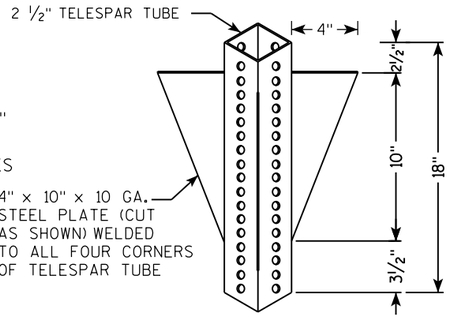
SHEET NO: 272 E

TELESCOPIC TUBING ANCHORS
TWO PIECE SYSTEM

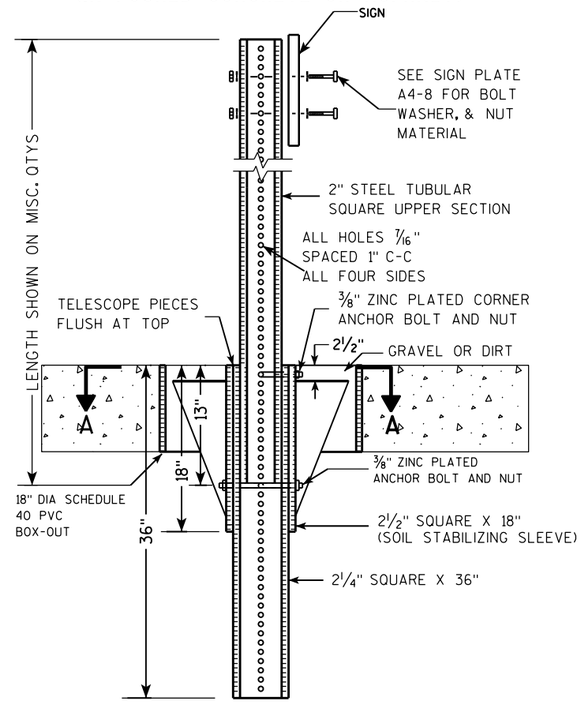
2 1/4 " SQUARE
12 GAUGE
PERFORATED
GALVANIZED FINISH



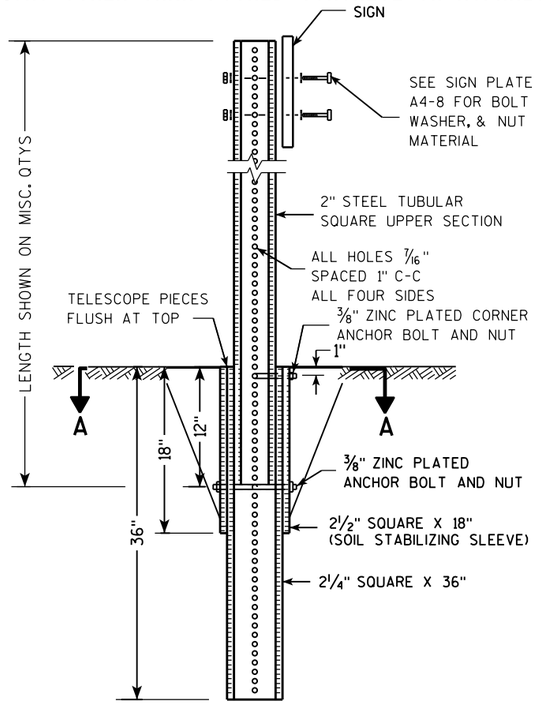
2 1/2 " SQUARE
12 GAUGE
OMNI-DIRECTIONAL
PERFORATED
SOIL STABILIZING SLEEVE
GALVANIZED FINISH

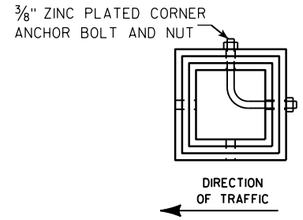


DETAIL OF TUBULAR STEEL SIGN POST
(IN POURED CONCRETE OR ASPHALT)



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

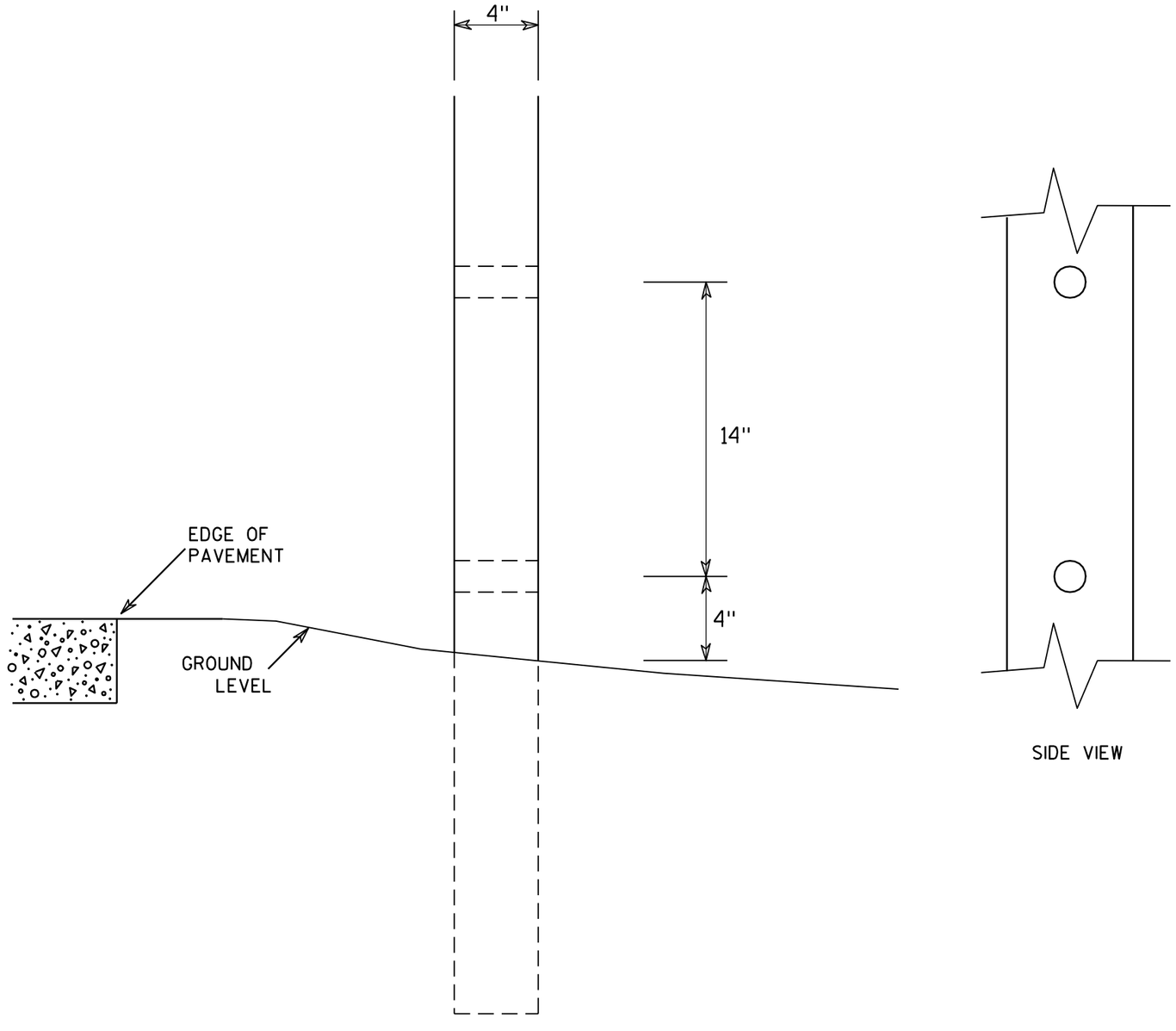
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 2/05/15 PLATE 273 A4-9.9

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\A49.DGN PLOT DATE : 05-FEB-2015 17:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 13.659812:1.000000

WISDOT/CADDS SHEET 42



SIDE VIEW

GENERAL NOTES

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

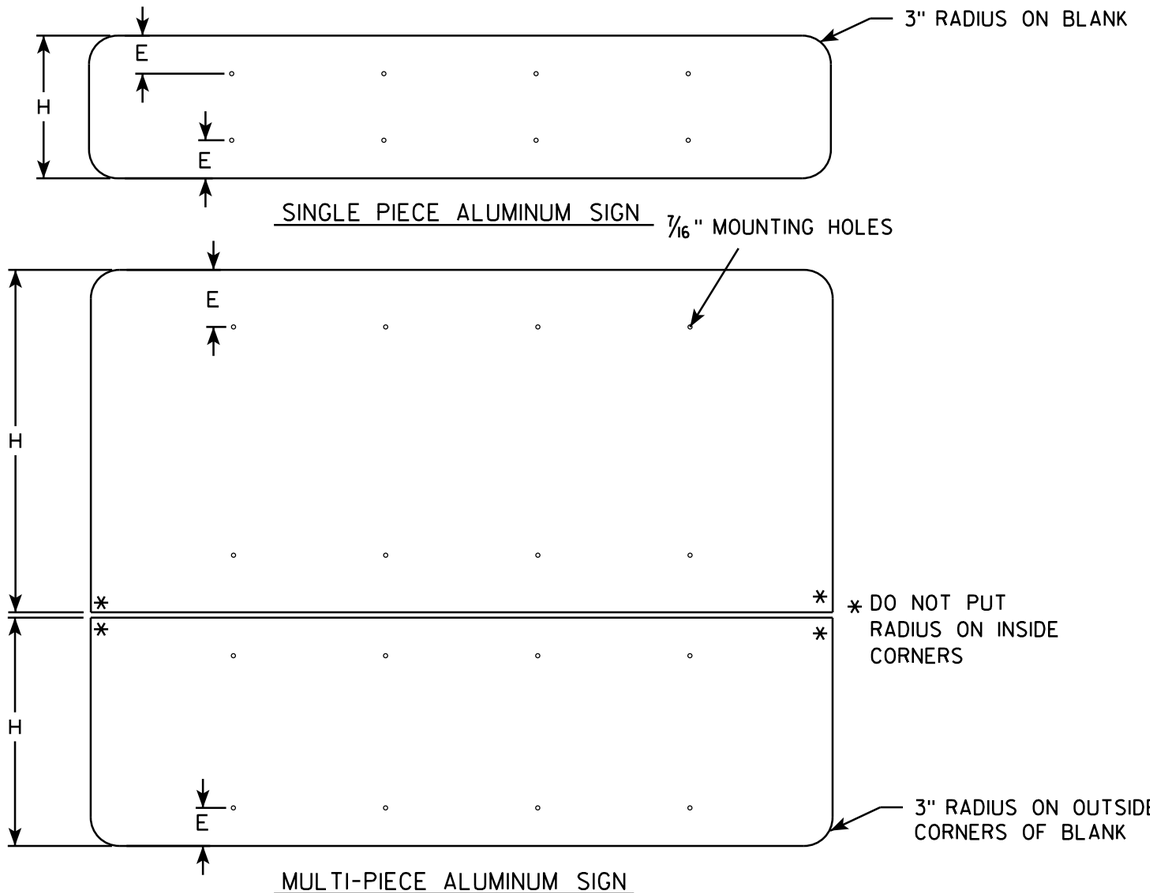
4 X 6 WOOD POST MODIFICATIONS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for State Traffic Engineer

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

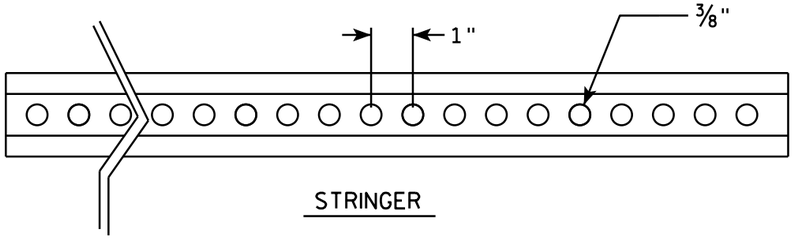
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 274	E



GENERAL NOTES

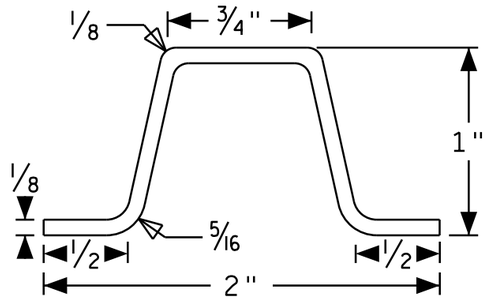
- ALL SIGNS OVER 60" IN WIDTH SHALL HAVE A 3" RADIUS ON THE OUTSIDE CORNERS OF THE ALUMINUM BLANK.
- MOUNTING HOLES SHALL BE 7/16" DIAMETER.
- SEE CHART FOR HOLE SPACING REQUIREMENTS
- FOR SIGN PANELS WITH DIMENSION (H) 36" AND OVER, DIMENSION E SHALL BE 6"
- FOR SIGN PANELS WITH DIMENSION (H) UNDER 36", DIMENSION E SHALL BE 4"
- SIGN STRINGER MATERIAL SHALL CONSIST OF STEEL CHANNEL POST SECTIONS, WEIGHING 1.12 LBS/FT IN ACCORDANCE WITH SECTION 633.2.1 OF THE STANDARD SPECIFICATIONS FOR HIGHWAY AND STRUCTURE CONSTRUCTION.
- SEE SIGN PLATE A4-8 FOR SIGN STRINGER BOLTING REQUIREMENTS.

SIGN WIDTH	STRINGER WIDTH	POSTS	HOLE SPACING	MOUNTING HOLES
78"	72"	2	16"	15" 31" 47" 63"
84"	72"	2	17"	16½" 33½" 50½" 67½"
90"	72"	2	18"	18" 36" 54" 72"
96"	90"	2	19"	19½" 38½" 57½" 76½"
102"	90"	2	20"	21" 41" 61" 81"
108"	90"	2	21"	22½" 43½" 64½" 85½"
114"	108"	3	15"	12" 27" 42" 57" 72" 87" 102"
120"	108"	3	16"	12" 28" 44" 60" 76" 92" 108"
126"	108"	3	17"	12" 29" 46" 63" 80" 97" 114"
132"	126"	3	18"	12" 30" 48" 66" 84" 102" 120"
138"	126"	3	19"	12" 31" 50" 69" 88" 107" 126"
144"	126"	3	20"	12" 32" 52" 72" 92" 112" 132"

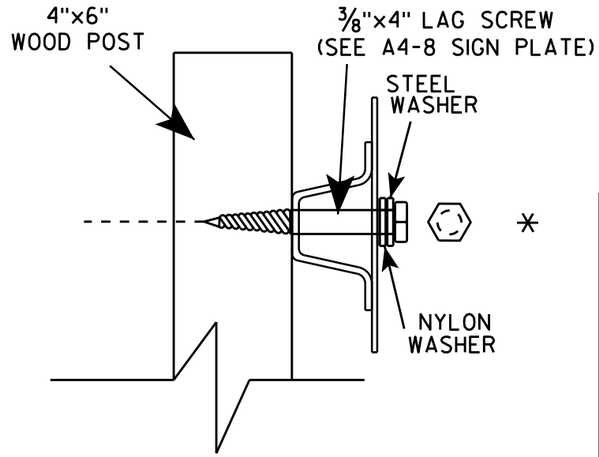


STRINGER

CROSS SECTION VIEW OF CHANNEL



POST MOUNTING



SIGN STRINGER MOUNTING REQUIREMENTS

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch

for State Traffic Engineer

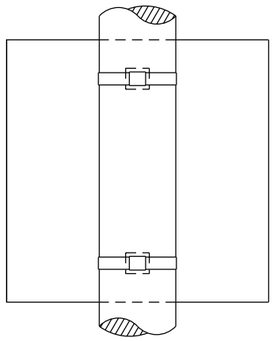
DATE 4/26/16 PLATE NO A4-18.1

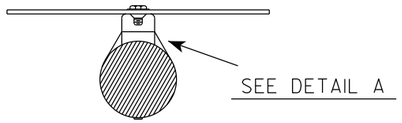
PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

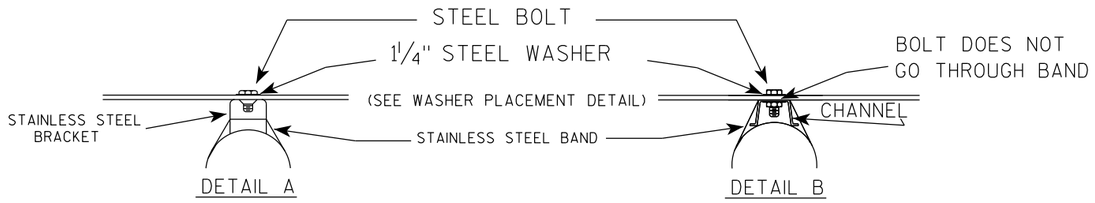
FILE NAME : C:\CAEfiles\Projects\tr_stdplate\A418.dgn PLOT DATE : 27-APR-2016 13:56 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 41.805205:1.000000 WISDOT/CADDS SHEET 42

BANDING

SINGLE SIGN



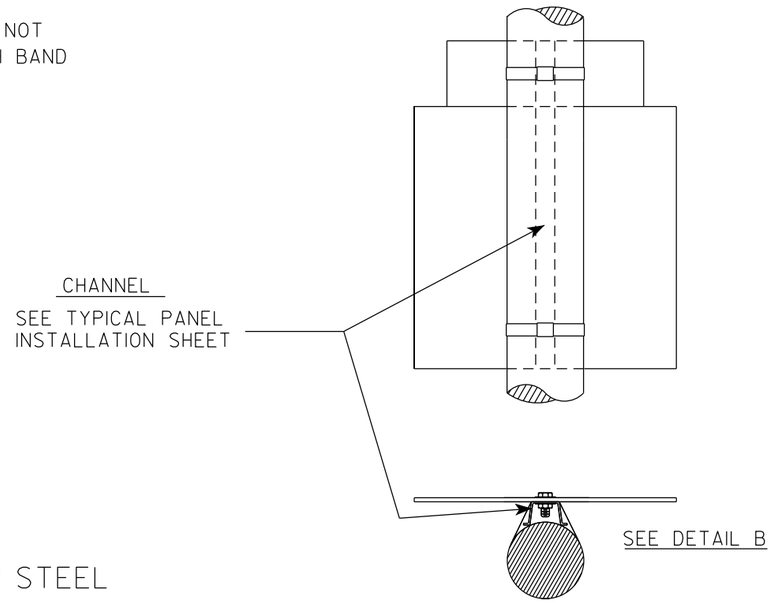




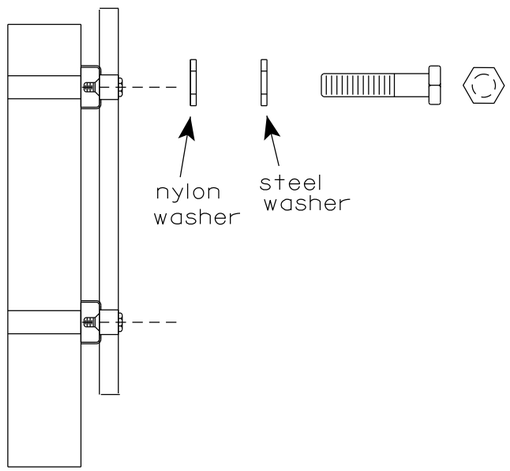
GENERAL NOTES

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



WASHER PLACEMENT



WASHERS (ALL POSTS) -
1-1/4" O.D. X ⅜" I.D. X 1/16" STEEL
1-1/4" O.D. X ⅜" I.D. X .080 NYLON
FOR ALL TYPE H SIGNS

STANDARD SIGN
SIGN BANDING DETAILS

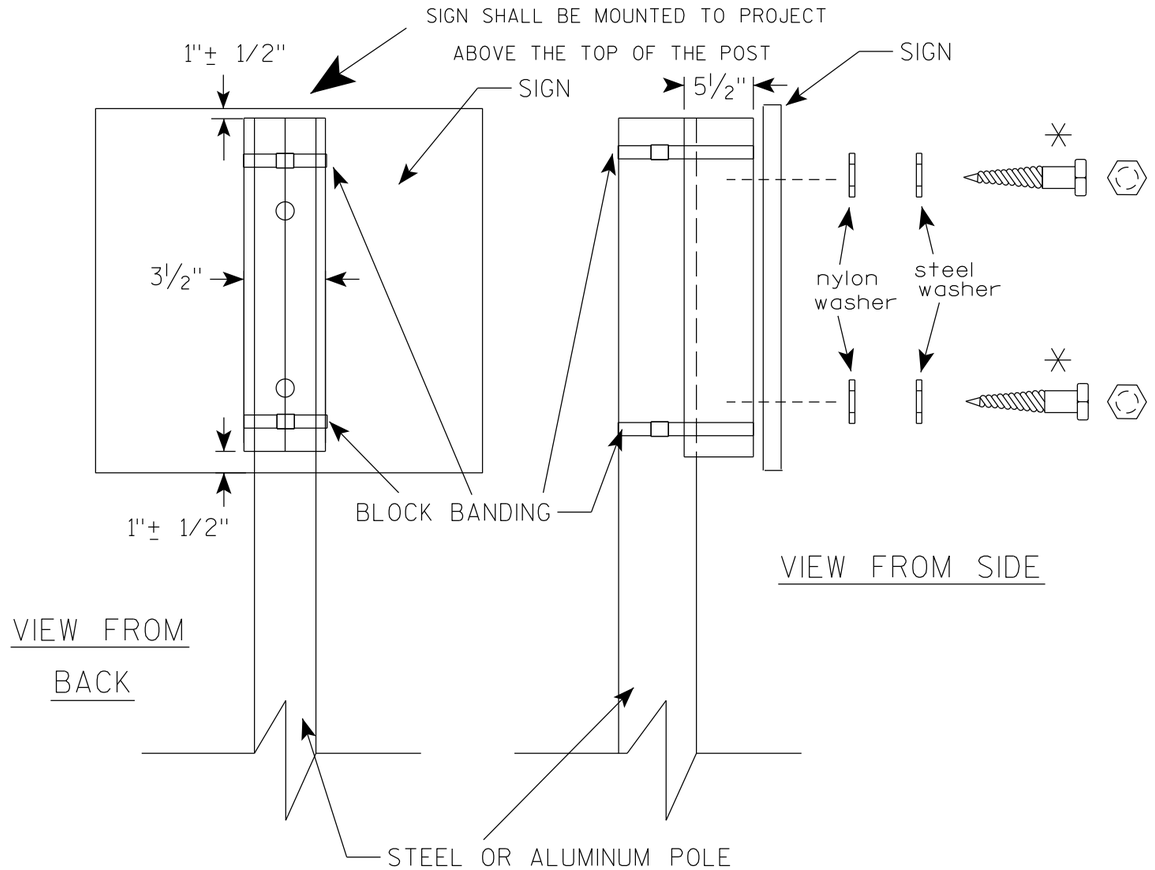
WISCONSIN DEPT OF TRANSPORTATION

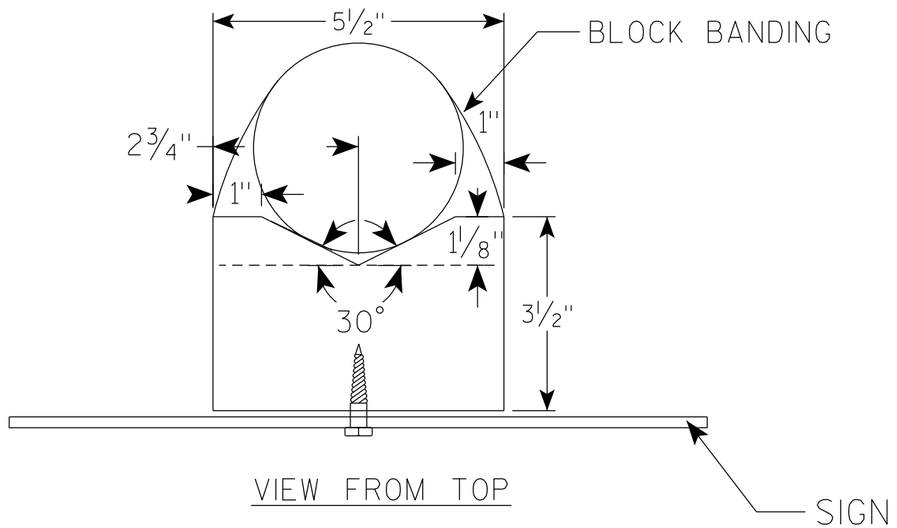
APPROVED Matthew R Rauch
for State Traffic Engineer

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

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 276	E

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





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"

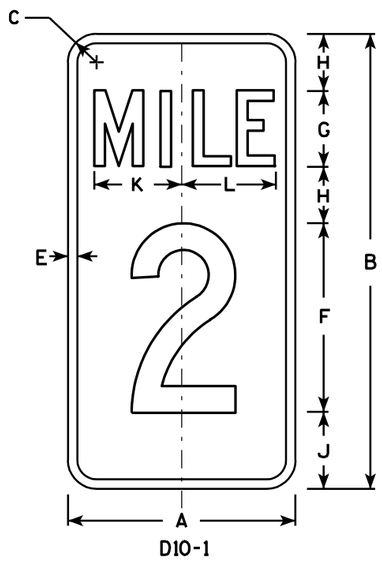
BLOCK BANDING DETAIL (V-BLOCK OPTION)

WISCONSIN DEPT OF TRANSPORTATION

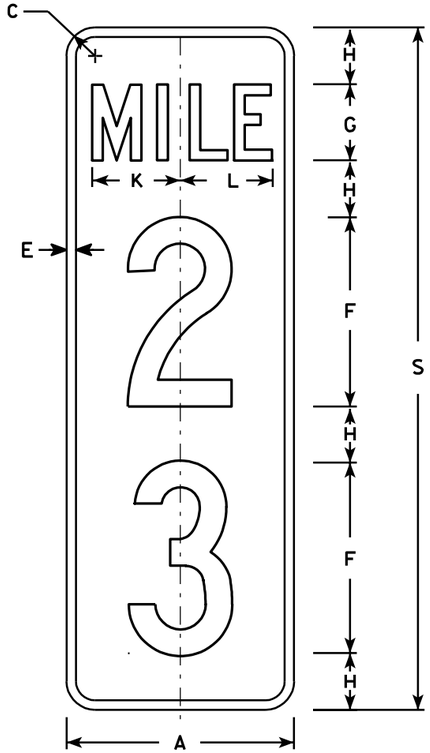
APPROVED Matthew R Rauch
For State Traffic Engineer

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

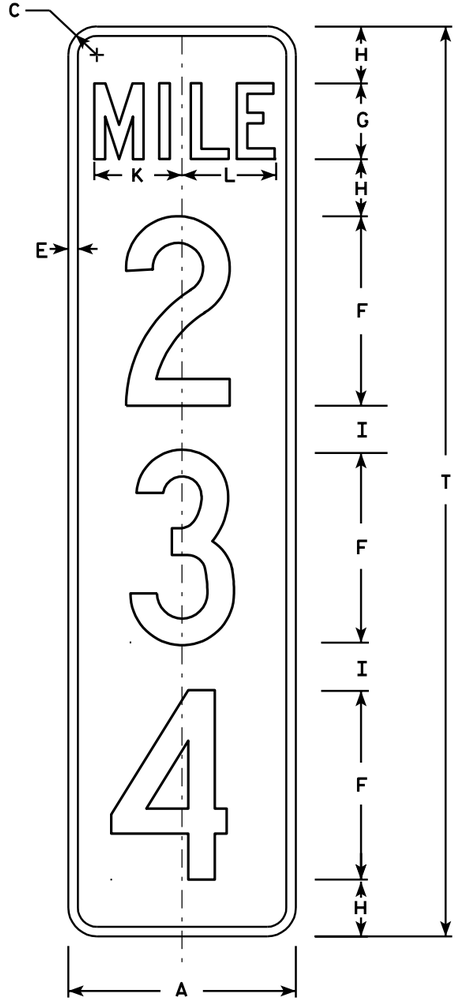
PROJECT NO: | SHEET NO: 277 | E



D10-1



D10-2



D10-3

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - Green
   Message - White - Type H Reflective
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. Optically adjust numerals about the centerline of the sign to achieve proper balance.

Metric equivalent for this sign is:

PHY. SIZE	
12 X 24	300 mm X 600 mm
12 X 36	300 mm X 900 mm
12 X 48	300 mm X 1200 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
1																										
2																										
3																										
4	12	24	1 ½		½	10	4	3	2 ½	4	4 ⅝	4 ⅞							36	48						
5	12	24	1 ½		½	10	4	3	2 ½	4	4 ⅝	4 ⅞							36	48						

D10-1	D10-2	D10-3
Area sq. ft.	Area sq. ft.	Area sq. ft.
2.0	3.0	4.0
Area m2	Area m2	Area m2
.19	.28	.38

STANDARD SIGN
D10-1 , D10-2 & D10-3

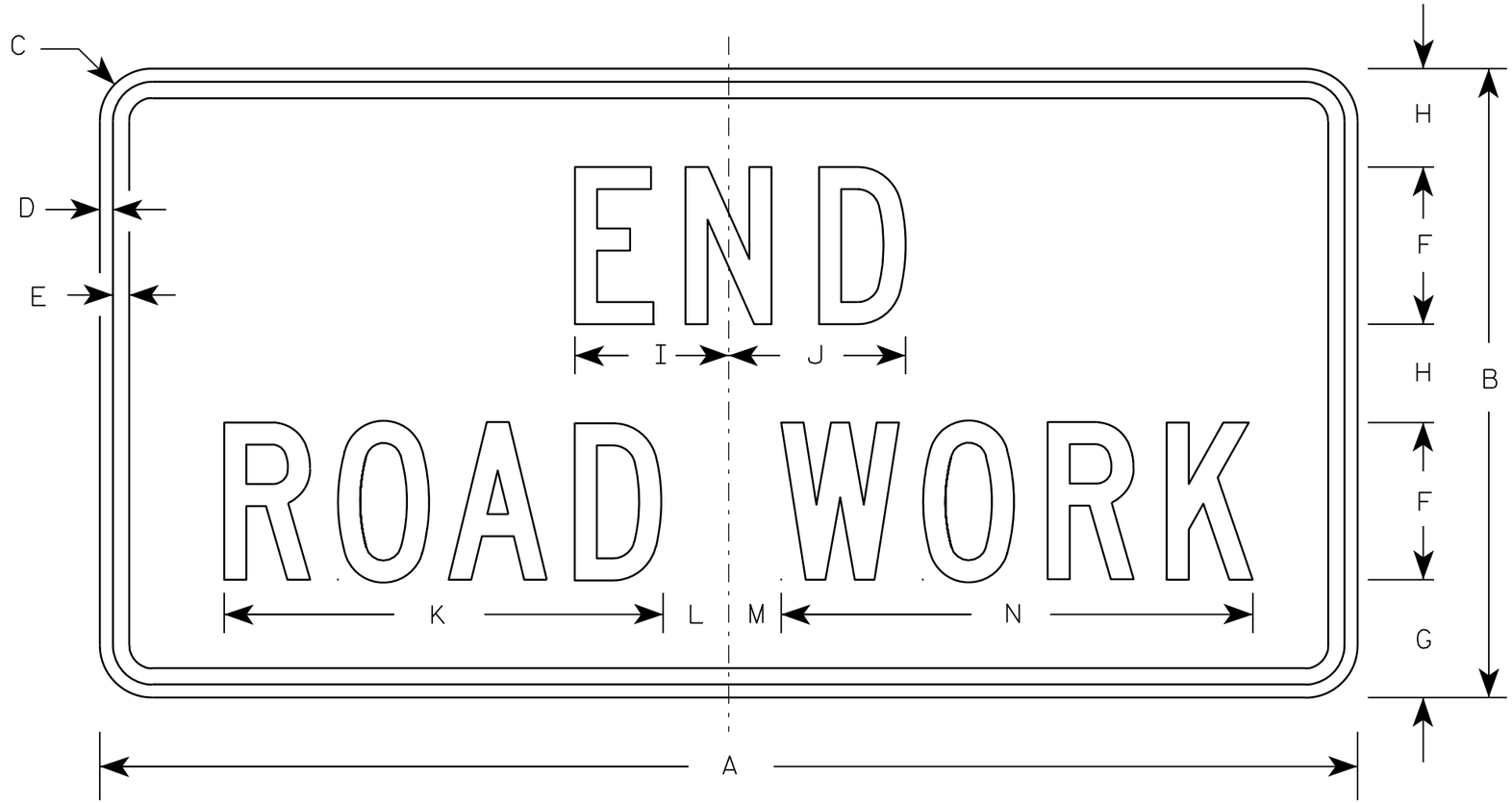
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Chester J Spang for Director, Office of Traffic

DATE 1/16/02 PLATE NO. D10-3.2

PROJECT NO:

SHEET NO: 278 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

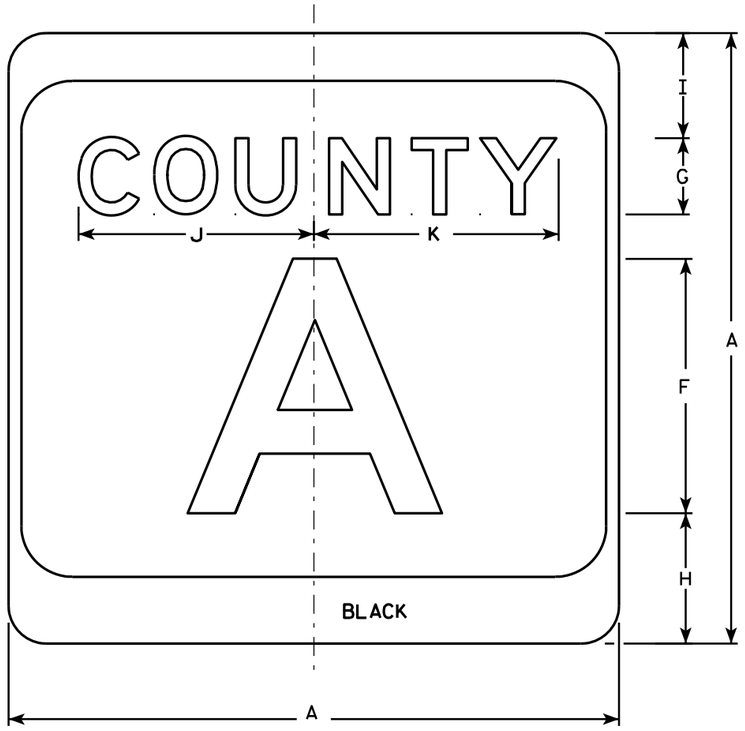
STANDARD SIGN
G20-2A

WISCONSIN DEPT OF TRANSPORTATION

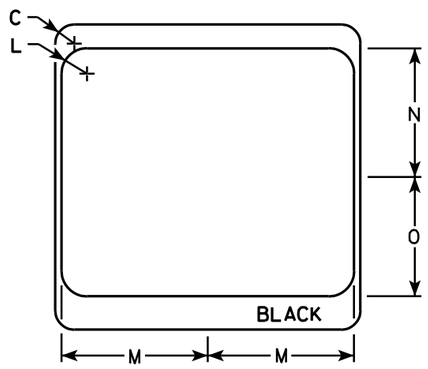
APPROVED Matthew R Rauch
for State Traffic Engineer

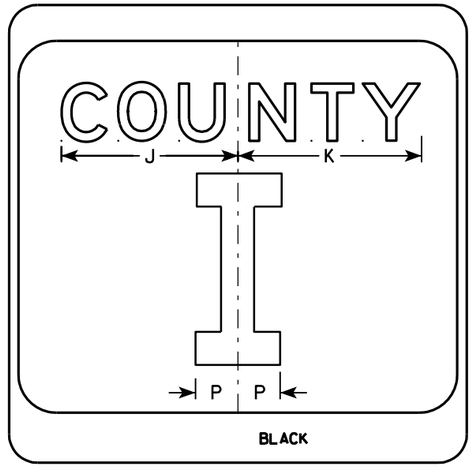
DATE 9/30/09 PLATE NO. G20-2A.8

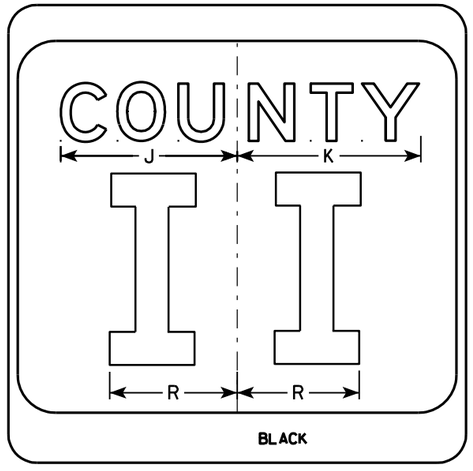
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 279	E



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

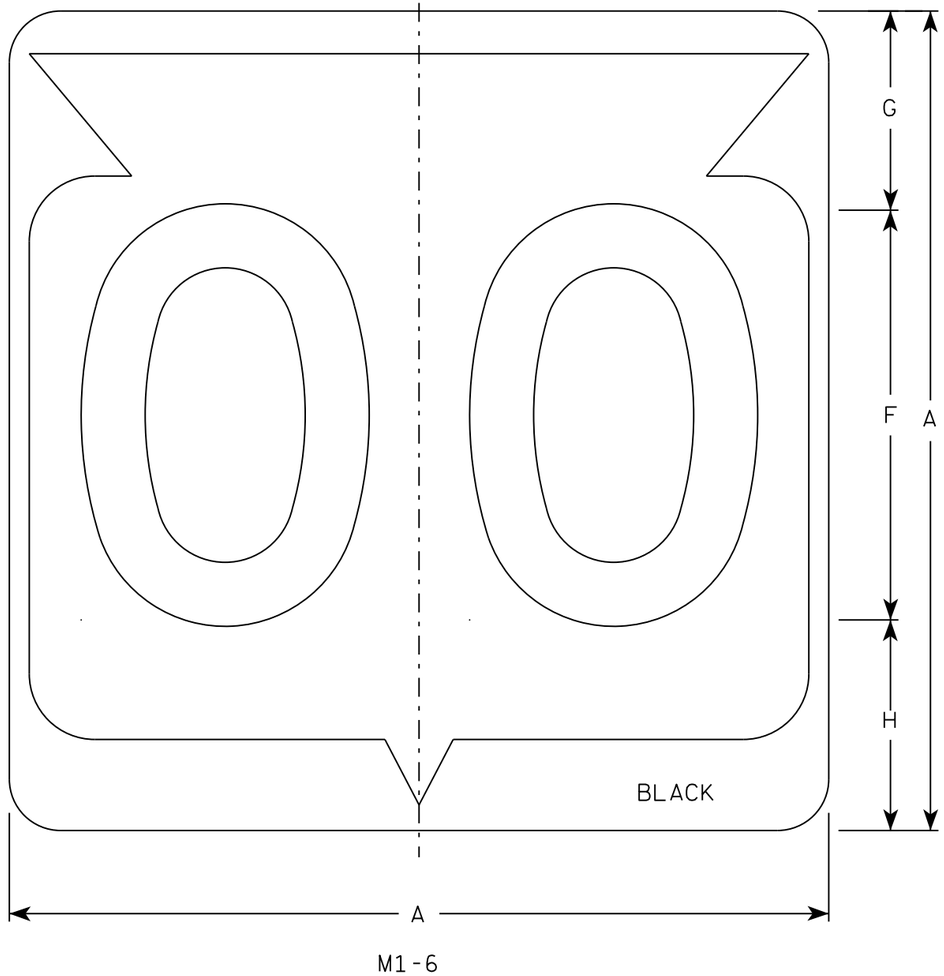
CTH MARKER
M1-5A FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

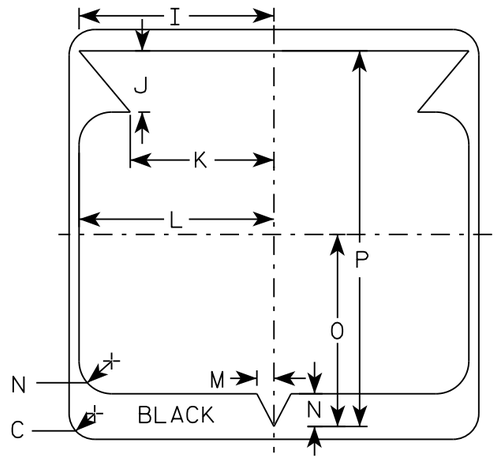
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 280	E



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

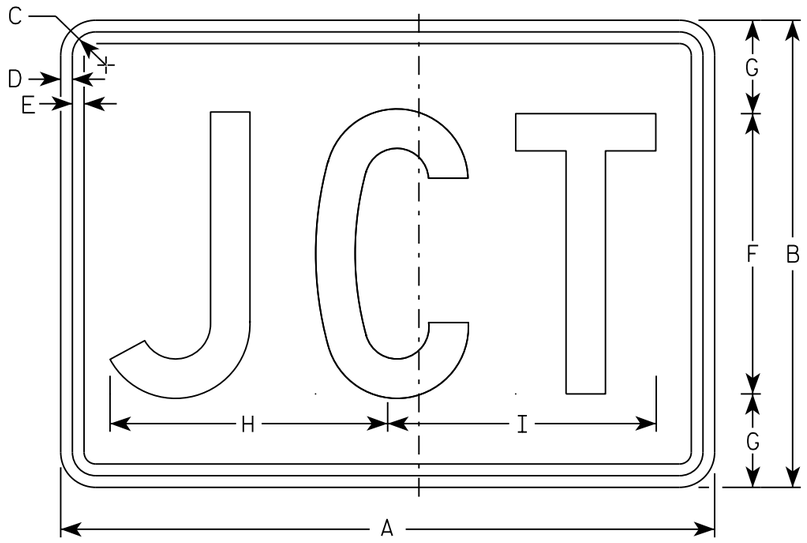
STATE ROUTE MARKER M1-6 FOR ASSEMBLIES

WISCONSIN DEPT OF TRANSPORTATION

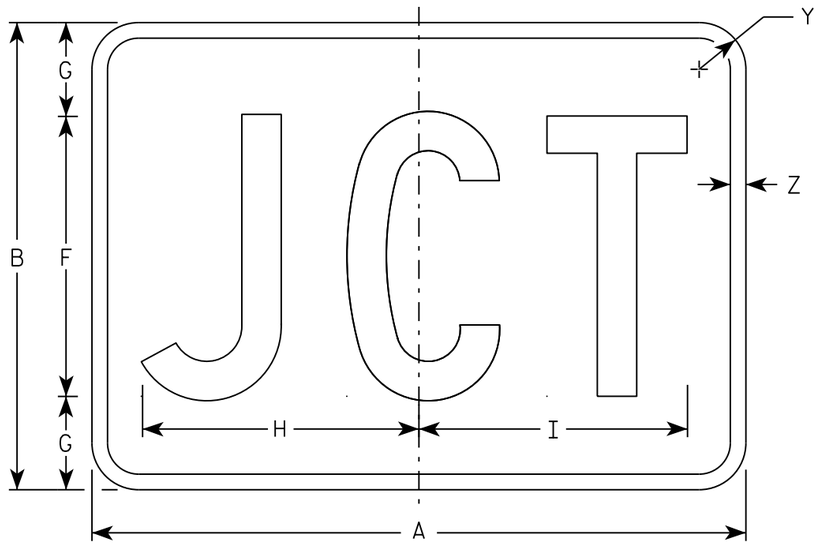
APPROVED Matthew R Rauch for State Traffic Engineer

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

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 281 E



M2-1
MM2-1
MP2-1



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

NOTES

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

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

STANDARD SIGN
M2-1

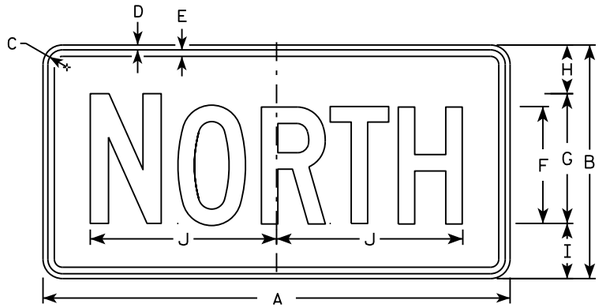
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

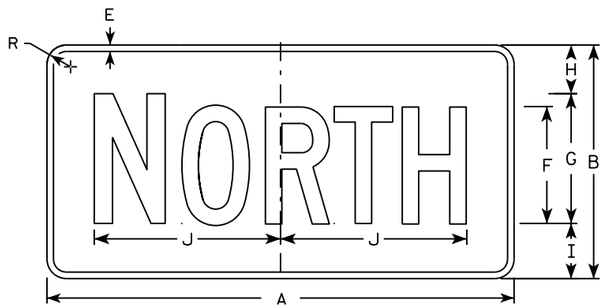
DATE 10/15/15 PLATE 282 12-1.12

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M21.DGN PLOT DATE : 01-DEC-2015 17:54 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 4.864603:1.000000



M3-1
MM3-1
MP3-1



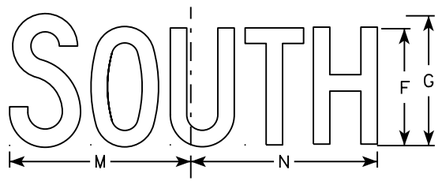
MB3-1
MK3-1
MN3-1



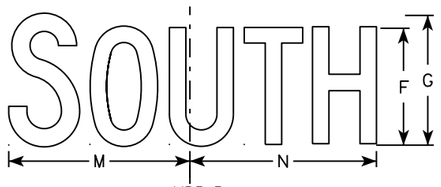
M3-2
MM3-2
MP3-2



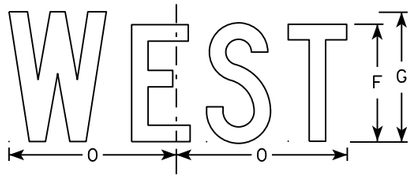
MB3-2
MK3-2
MN3-2



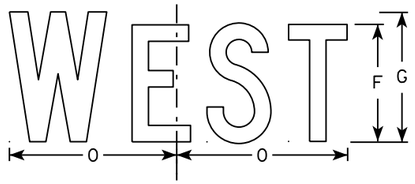
M3-3
MM3-3
MP3-3



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

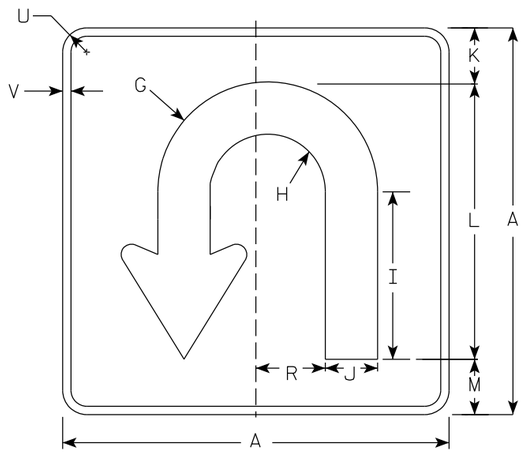
APPROVED Matthew P Rauch for State Traffic Engineer

DATE 10/15/15 PLATE NO M3-1.14

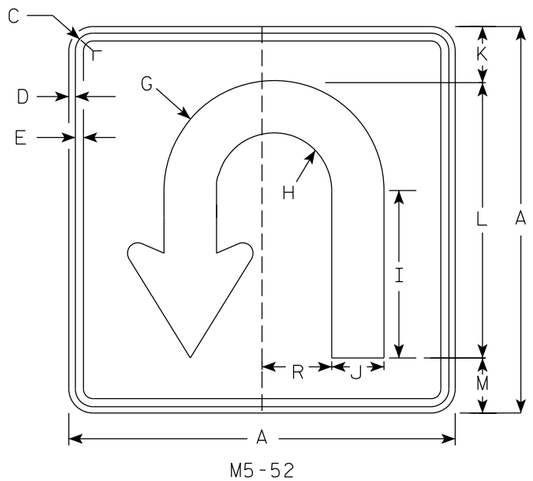
PROJECT NO: | HWY: | COUNTY: | SHEET NO: E

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

7



M5-52



M5-52

NOTES

1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See Note 4
   Message - See note 4
3. M5-52 Background - White
   Message - Black

   MB5-52 Background - Blue
   Message - White

   MK5-52 Background - Green
   Message - White

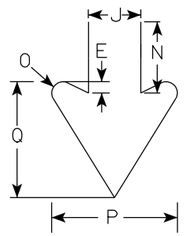
   MM5-52 Background - White
   Message - Green

   MN5-52 Background - Brown
   Message - White

   M05-52 Background - Orange - Type F Reflective
   Message - Black

   MP5-52 Background - White
   Message - Blue

   MR5-52 Background - Brown
   Message - Yellow



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2	21		1 1/8	3/8	3/8		6	3 1/8	9 1/8	2 7/8	3	15	3	3 7/8	5/8	6 7/8	6 3/4	3 3/4			1 1/2	1/2					3.06
3	30		1 3/8	1/2	5/8		8 1/2	4 1/2	13	4 1/8	4 3/8	21 3/8	4 1/4	5 1/2	7/8	9 3/4	8 1/8	5 1/4			2 1/2	5/8					6.25
4																											
5																											

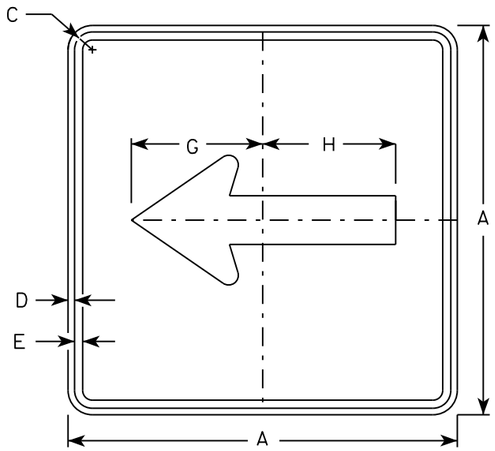
STANDARD SIGN
M5-52
SERIES

WISCONSIN DEPT OF TRANSPORTATION

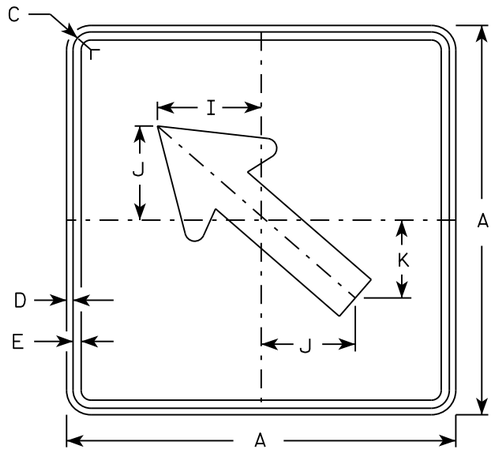
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/21/19 PLATE NO. M5-52.1

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 284	E



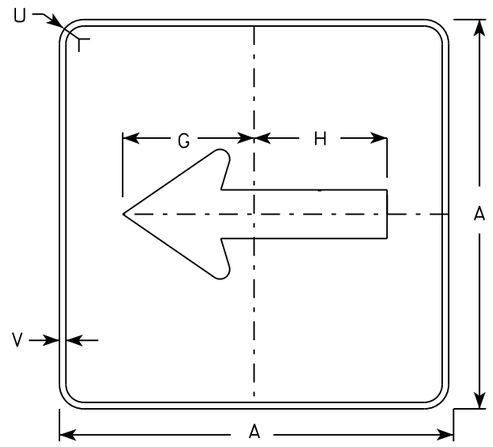
M6-1
MM6-1
MO6-1
MP6-1



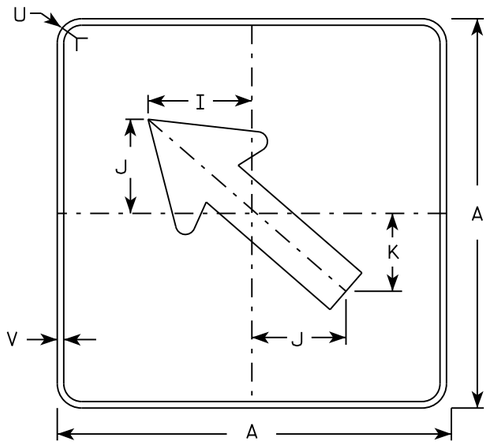
M6-2
MM6-2
MO6-2
MP6-2

NOTES

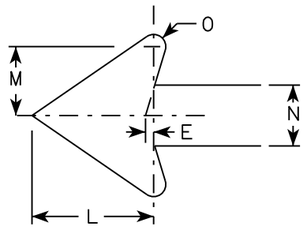
1. Signs are Type II - Type H except as Shown
2. Color:
   Background - See note 4
   Message - See note 4
3. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.
4. M6-1 and M6-2 Background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

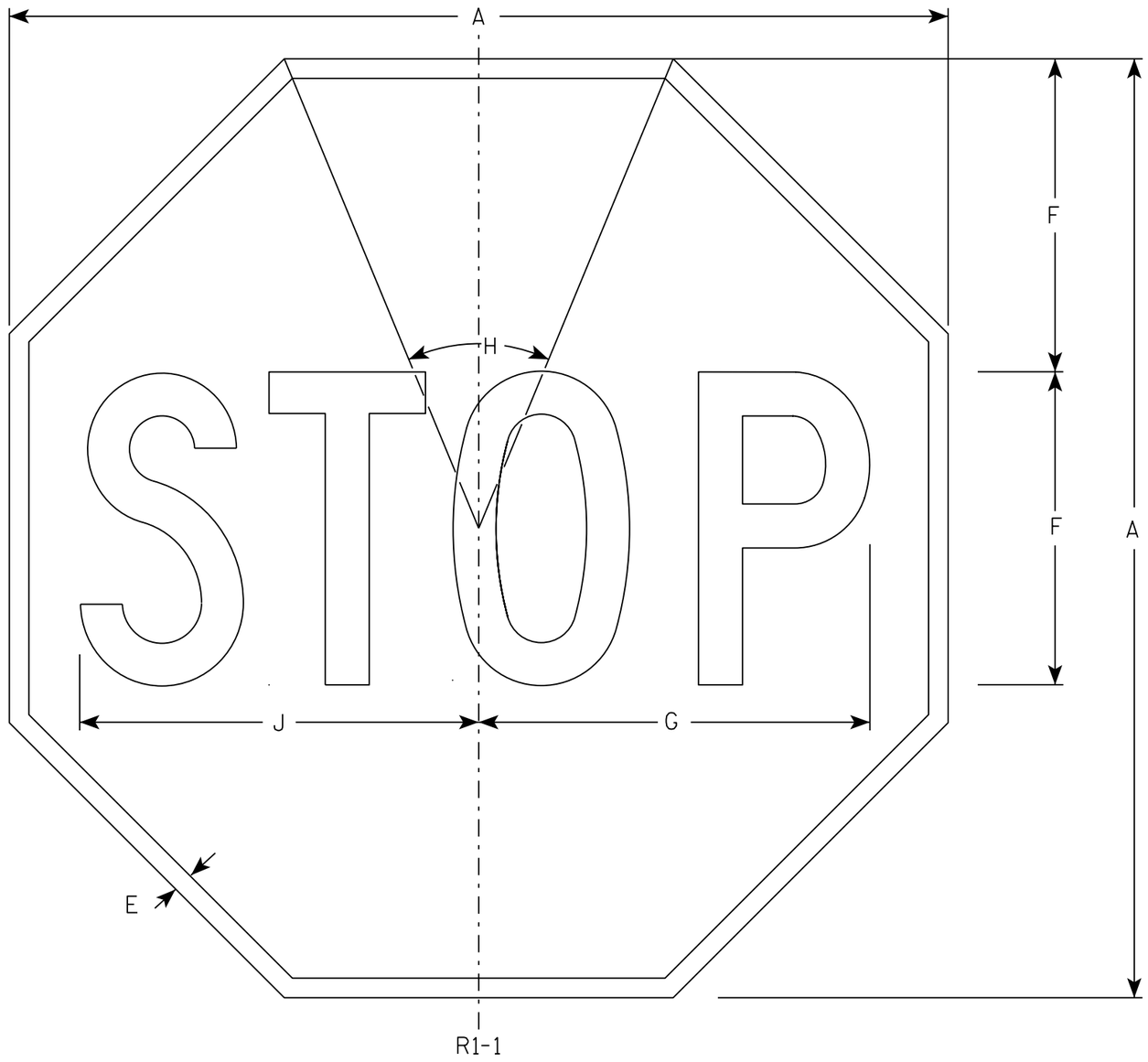
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/15/15 PLATE 285 M6-1.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO:	E

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\M61.DGN PLOT DATE : 01-DEC-2015 17:57 PLOT BY : $$ plotuser $$ PLOT NAME : PLOT SCALE : 11.675051:1.000000



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

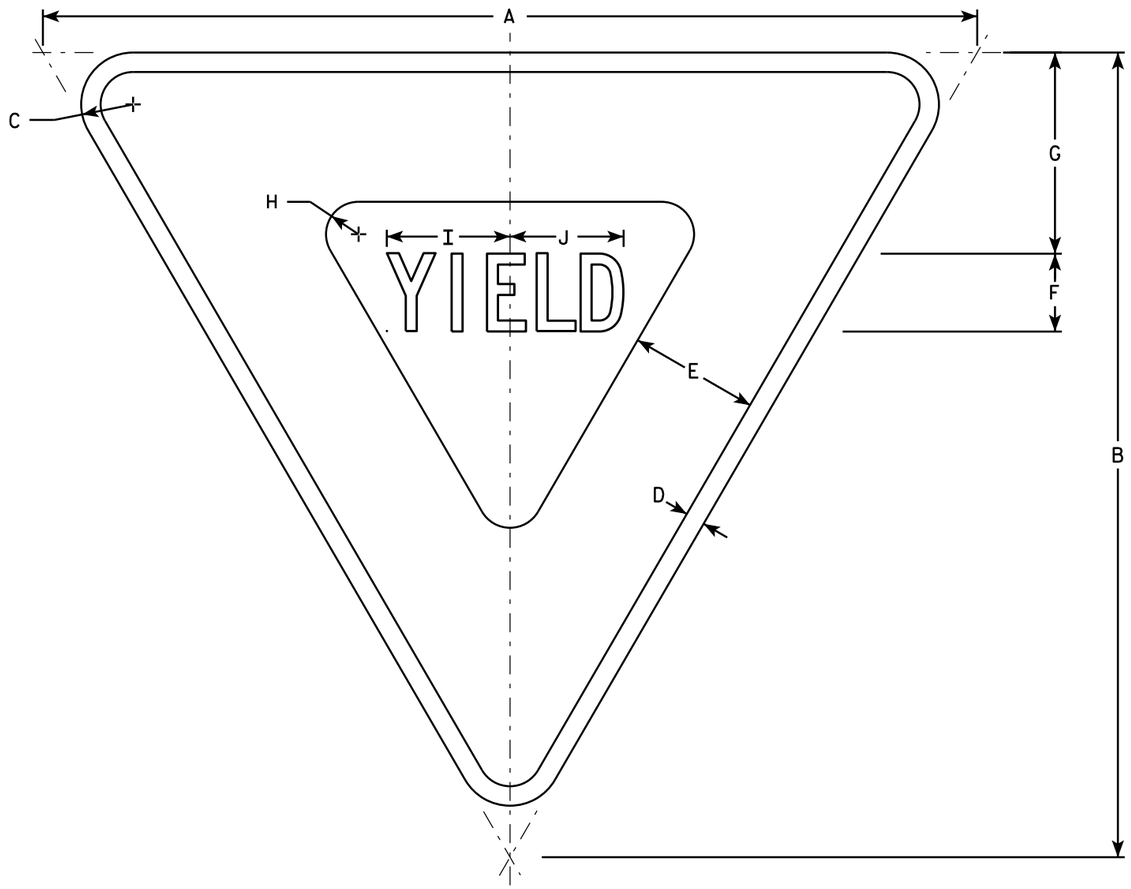
STANDARD SIGN
R1-1

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: 286	E



R1-2

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 - 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. The border strip and word message are reflectorized red.

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	26	1 1/2	5/8	4	2 1/2	6 3/8	7/8	4	3 5/8																	2.71
2S	36	31	2	3/4	5	3	7 3/4	1 1/4	4 3/4	4 3/8																	3.88
2M	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
3	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
4	48	42	3	1	6	4	9 3/4	2	6 1/4	5 7/8																	7.00
5	60	52	3	1 1/2	8	5	13	2 1/2	7 7/8	7 1/4																	10.83
6																											
7	18	15 1/2	1	3/8	2 1/2	1 1/2	3 7/8	5/8	2 3/8	2 1/4																	0.97

STANDARD SIGN
R1-2

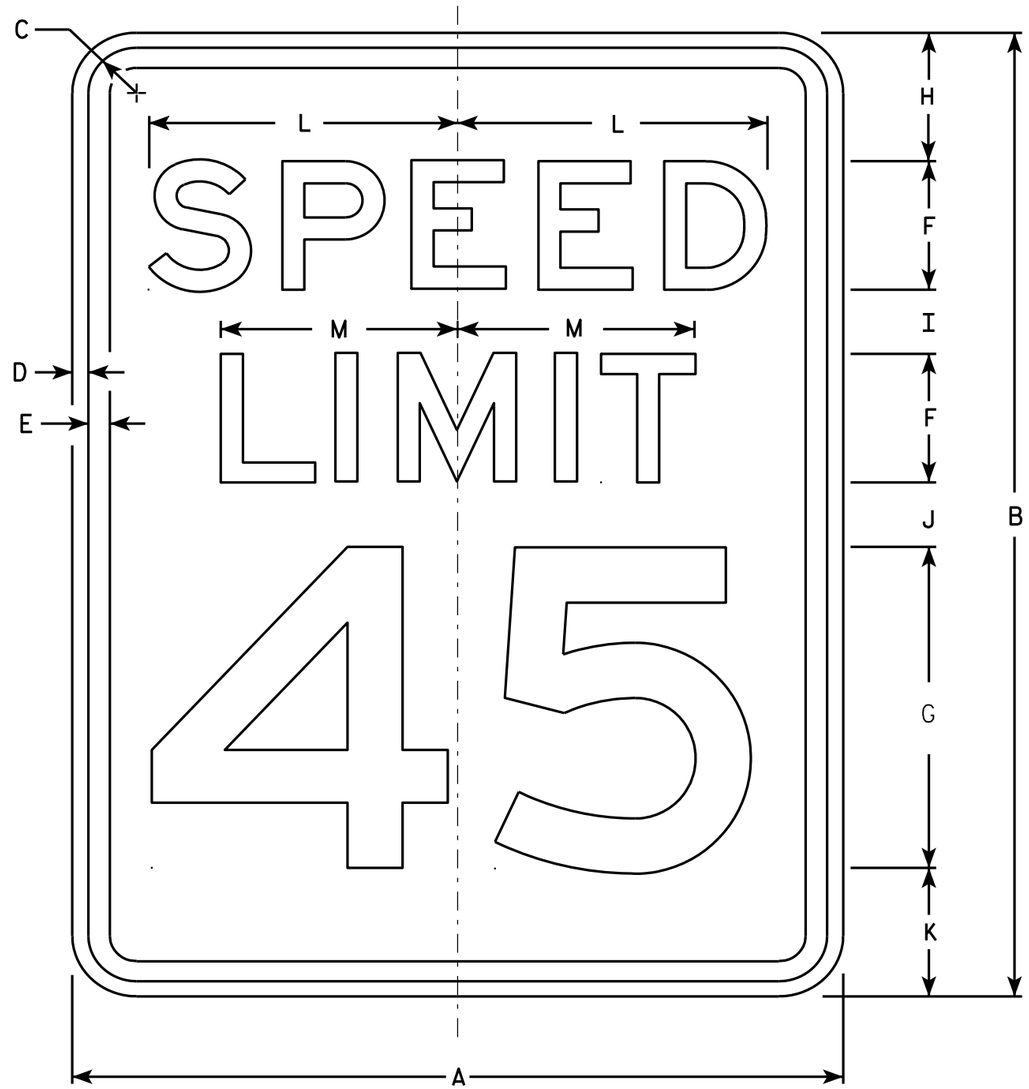
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/13/14 PLATE R1-2.12

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

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\R12.DGN PLOT DATE : 13-OCT-2014 15:12 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 5.837526:1.000000
WISDOT/CADDS SHEET 42



R2-1

NOTES

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

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

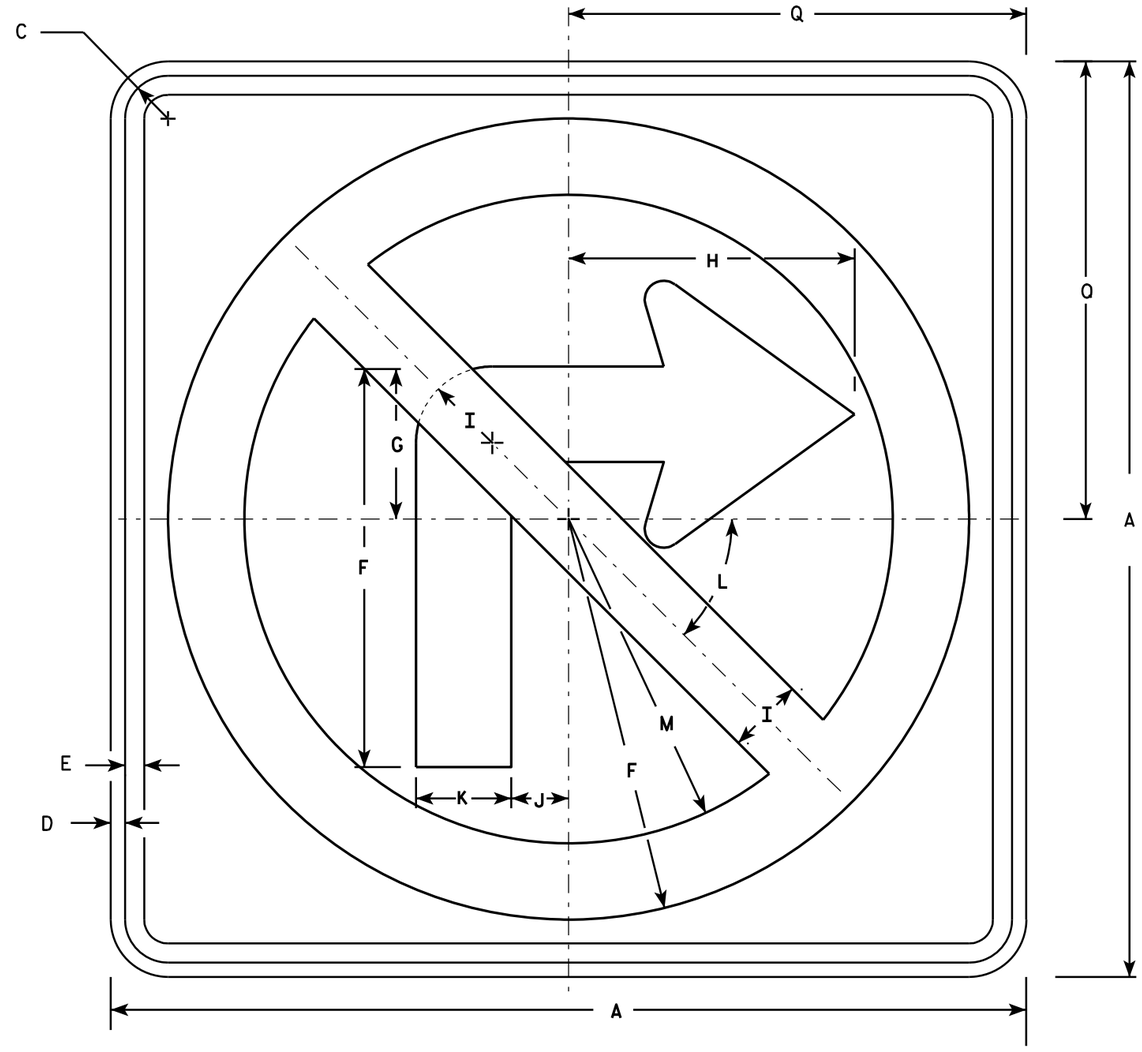
STANDARD SIGN
R2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/26/10 PLATE NO. R2-1.13

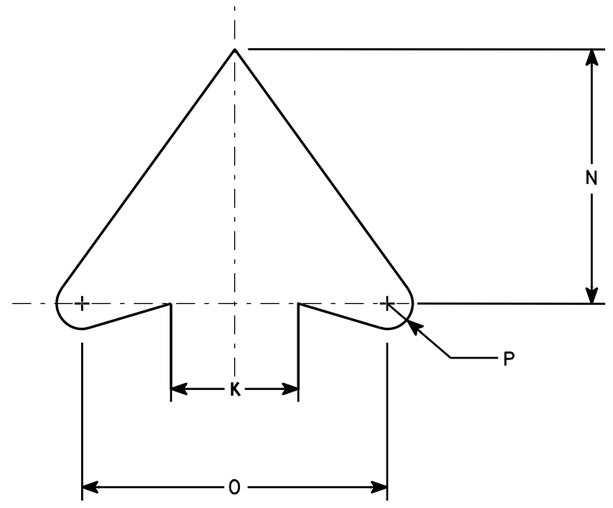
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 288	E



R3-1

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - 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. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45	8 1/2	5	6	1/2	12										4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2	12										4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45	12 3/4	7 1/2	9	3/4	18										9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4	18										9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1	24										16.0

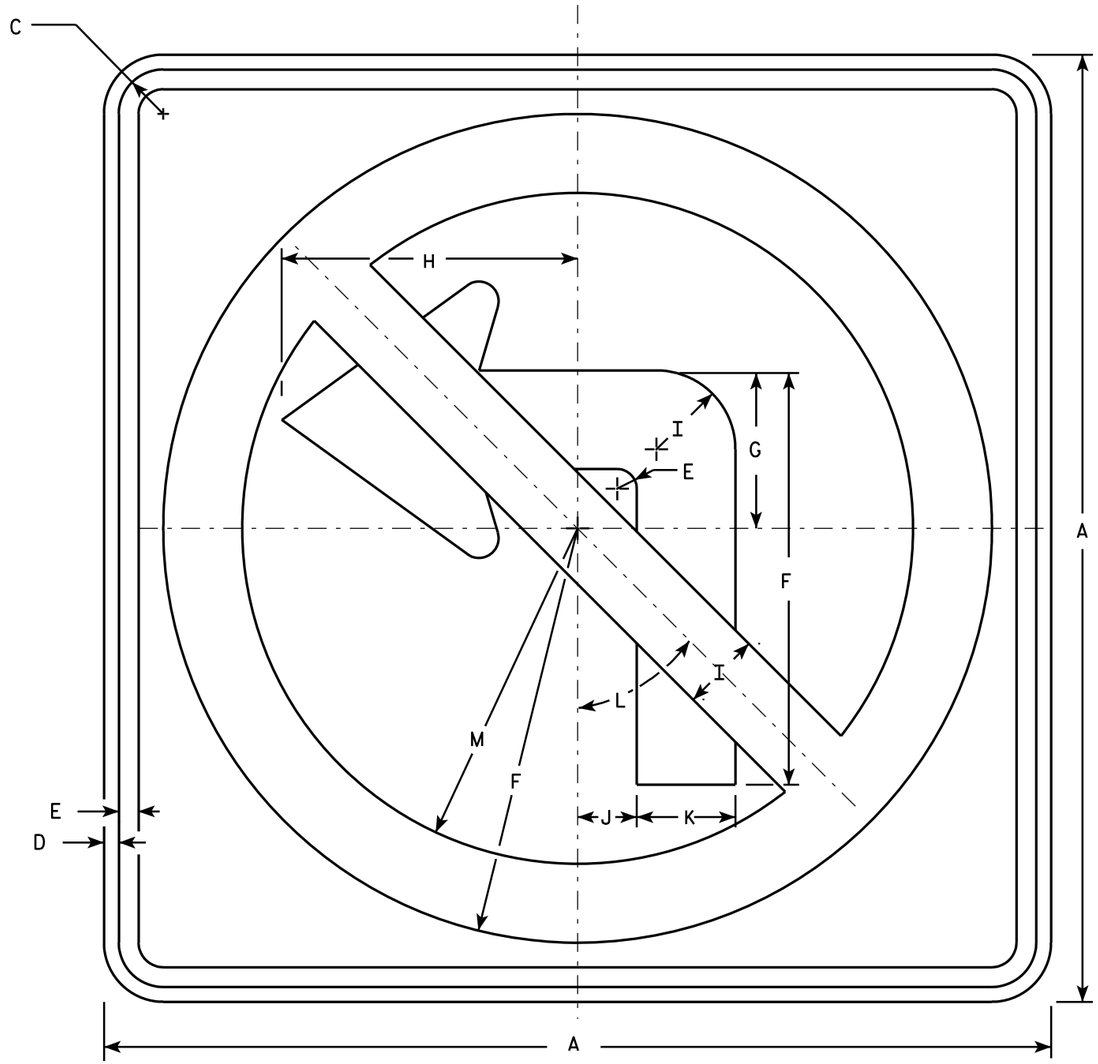
STANDARD SIGN
R3-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-1.5

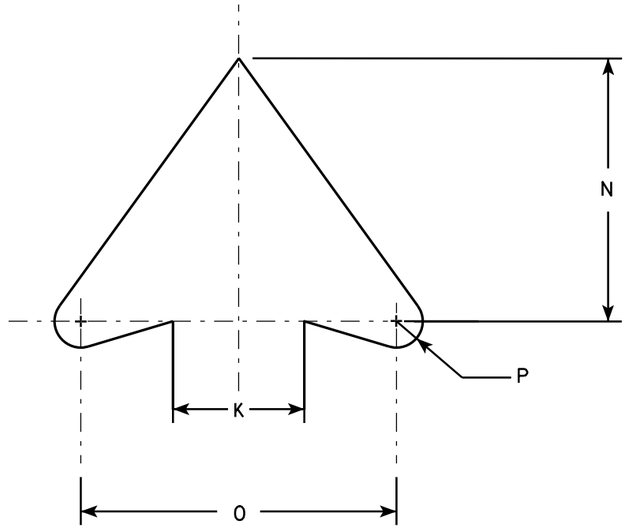
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 289	E



R3-2

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 - 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. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2S	24		1 1/8	3/8	1/2	10 1/2	4	7 1/2	2	1 1/2	2 1/2	45°	8 1/2	5	6	1/2											4.0
2M	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
3	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
4	36		1 5/8	5/8	3/4	15 3/4	6	11 1/4	3	2 1/4	3 3/4	45°	12 3/4	7 1/2	9	3/4											9.0
5	48		2 1/4	3/4	1	21	8	15	4	3	5	45°	17	10	12	1											16.0

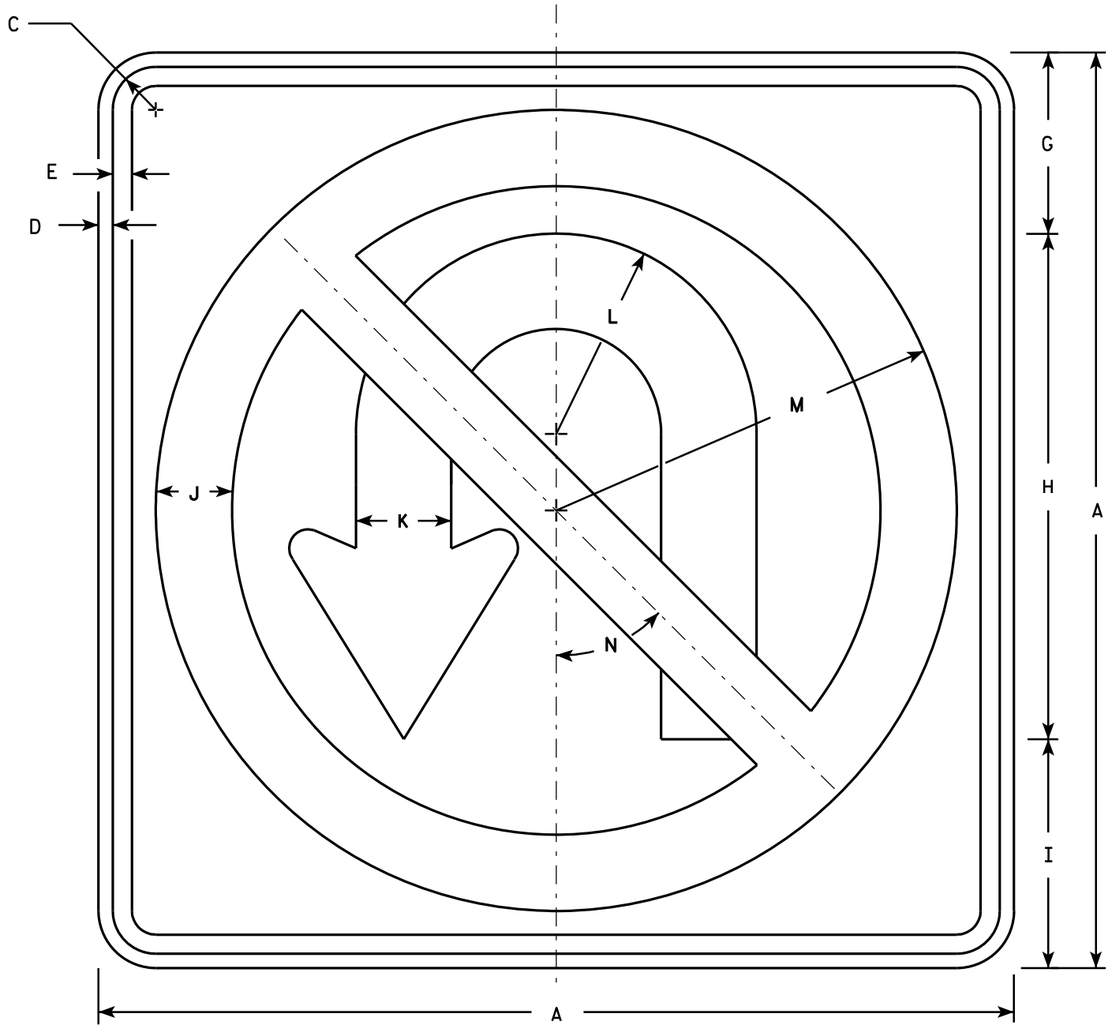
STANDARD SIGN
R3-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-2.10

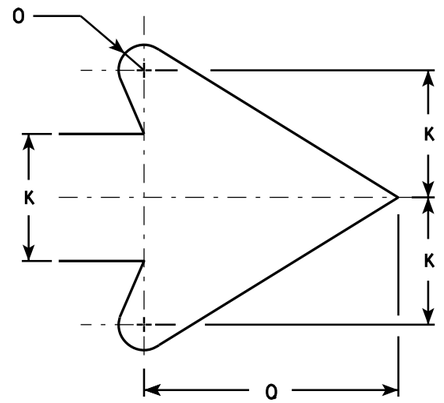
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 290 | E



R3-4

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 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. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	3/8	1/2		4 3/4	13 1/4	6	2	2 1/2	5 1/4	10 1/2	45°	1/2		5										4.0
2M	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0
3	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0
4	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0
5	36		1 5/8	5/8	3/4		7 1/8	19 7/8	9	3	3 3/4	7 7/8	15 3/4	45°	3/4		7 5/8										9.0

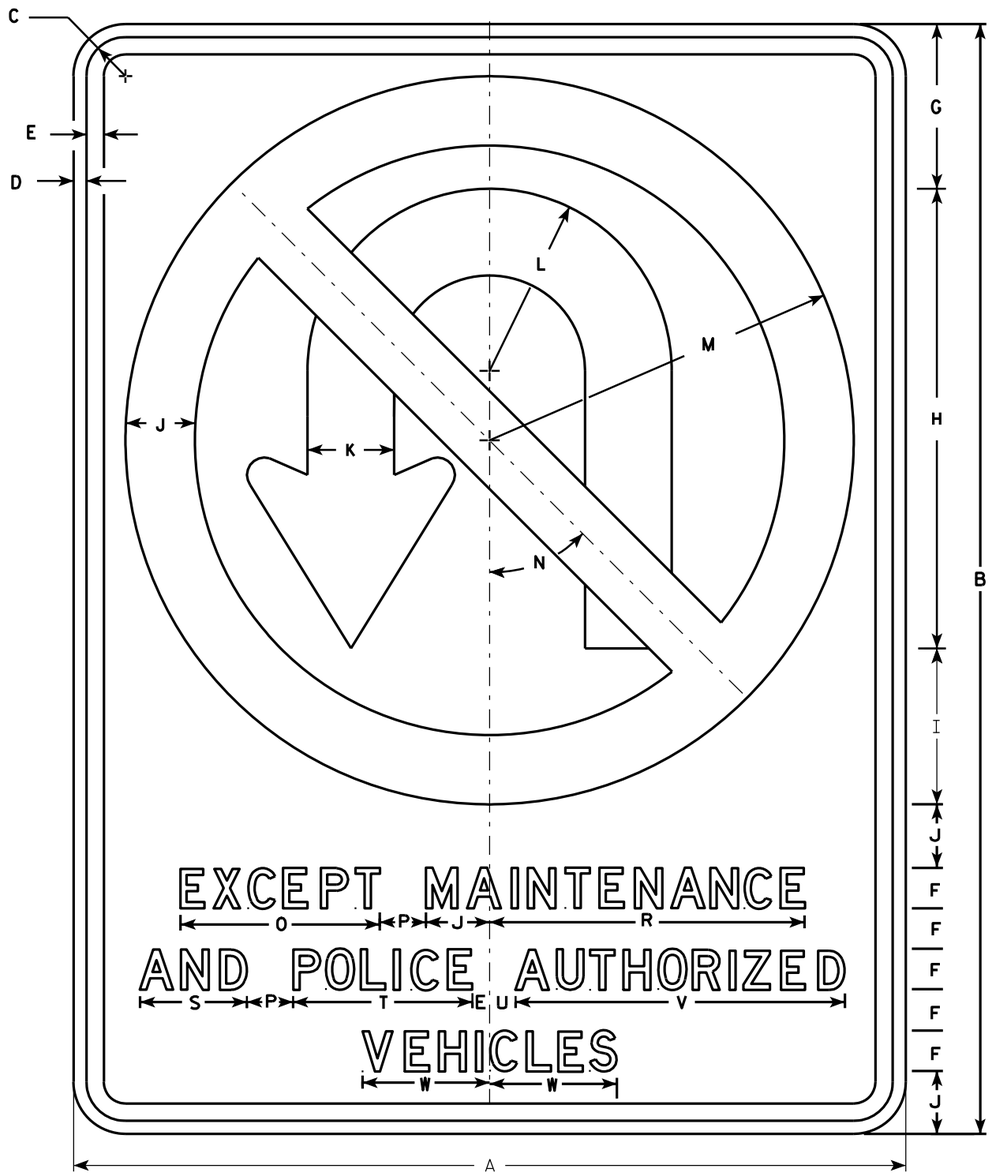
STANDARD SIGN
R3-4

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/08/10 PLATE NO. R3-4.11

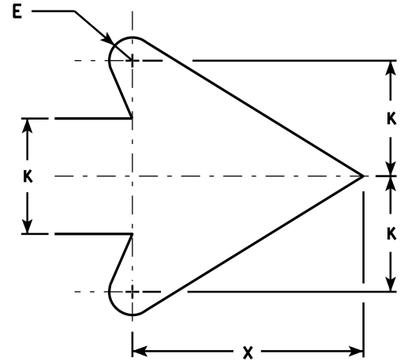
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 291	E



R3-4B

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 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. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S																											
2M																											
3																											
4	36	48	1 5/8	5/8	3/4	1 3/4	7 1/8	19 7/8	6 3/4	2 3/4	3 3/4	7 7/8	15 3/4	45°	8 5/8	2		13 5/8	4 5/8	7 3/4	1 1/8	14 1/4	5 1/2	7 5/8			12.0
5	36	48	1 5/8	5/8	3/4	1 3/4	7 1/8	19 7/8	6 3/4	2 3/4	3 3/4	7 7/8	15 3/4	45°	8 5/8	2		13 5/8	4 5/8	7 3/4	1 1/8	14 1/4	5 1/2	7 5/8			12.0

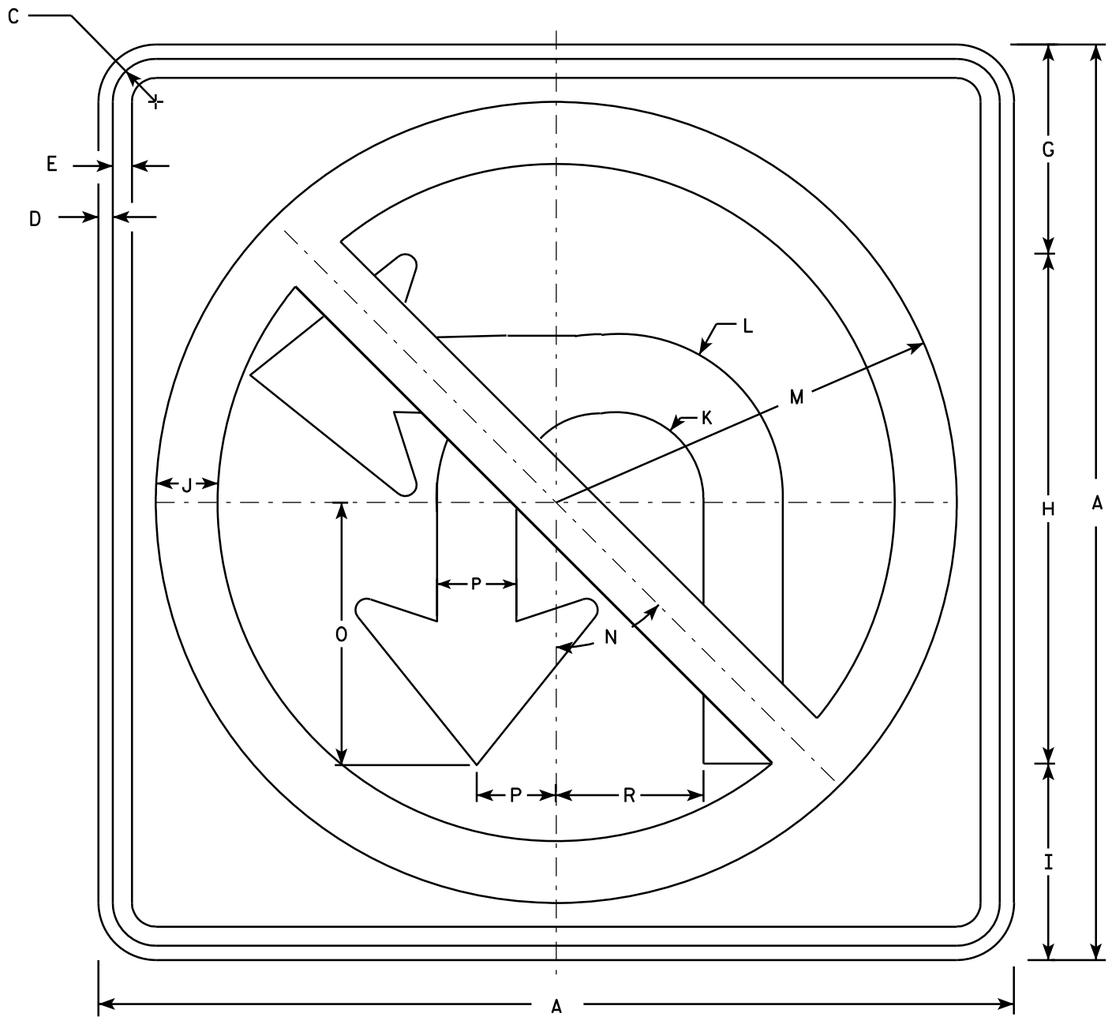
STANDARD SIGN
R3-4B

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/17/2011 PLATE NO. R3-4B.2

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 292	E



R3-18

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - White
   Message - See note 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. Border & Arrow are non reflective black, the circle with diagonal bar is reflective red.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	3/8	1/2		5 1/2	13 3/8	5 1/8	1 5/8	2 1/4	4 1/4	10 1/2	45°	6 7/8	2 1/8		3 7/8									4.0
2M	36		1 5/8	5/8	3/4		8 1/4	20	7 3/4	2 1/2	3 3/8	6 1/2	15 3/4	45°	10 3/8	3 1/8		5 3/4									9.0
3	36		1 5/8	5/8	3/4		8 1/4	20	7 3/4	2 1/2	3 3/8	6 1/2	15 3/4	45	10 3/8	3 1/8		5 3/4									9.0
4	36		1 5/8	5/8	3/4		8 1/4	20	7 3/4	2 1/2	3 3/8	6 1/2	15 3/4	45	10 3/8	3 1/8		5 3/4									9.0
5	48		2 1/4	3/4	1		11	26 3/4	10 1/4	3 1/4	4 5/8	8 5/8	21	45°	13 3/4	4 1/8		7 3/4									16.0

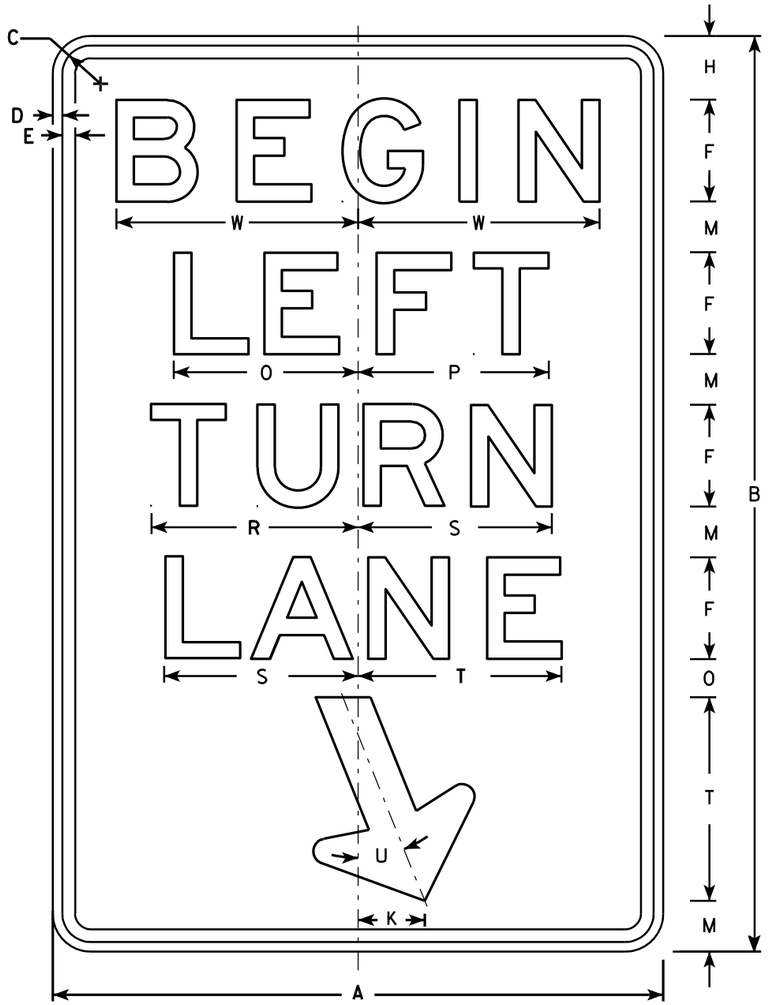
STANDARD SIGN
R3-18

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/21/10 PLATE NO. R3-18.2

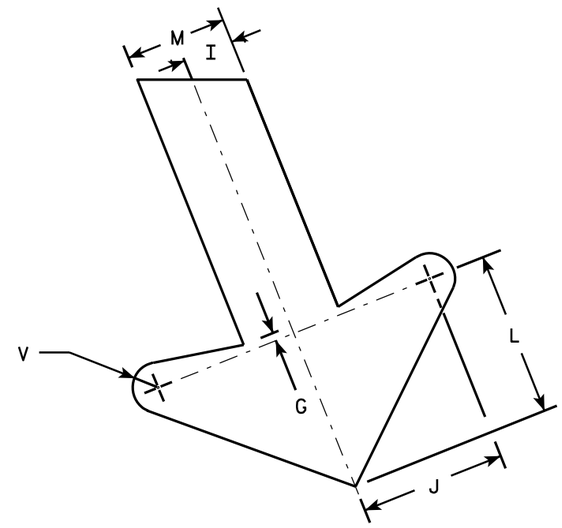
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 293	E



R3-20L

NOTES

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



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
2M	24	36	1 1/8	3/8	1/2	4	1/4	2 1/2	1	2 7/8	2 5/8	3 1/4	2	1 1/2	7 1/4	7 1/2		8 1/8	7 5/8	8	22°	1/2	9 1/2				6.0
3	36	54	1 3/4	1/2	5/8	6	3/8	3 3/4	1 1/2	4 1/4	4	4 7/8	3	2 1/4	10 7/8	11 1/4		12 1/4	11 1/2	12	22°	3/4	13 1/4				13.5
4																											
5																											

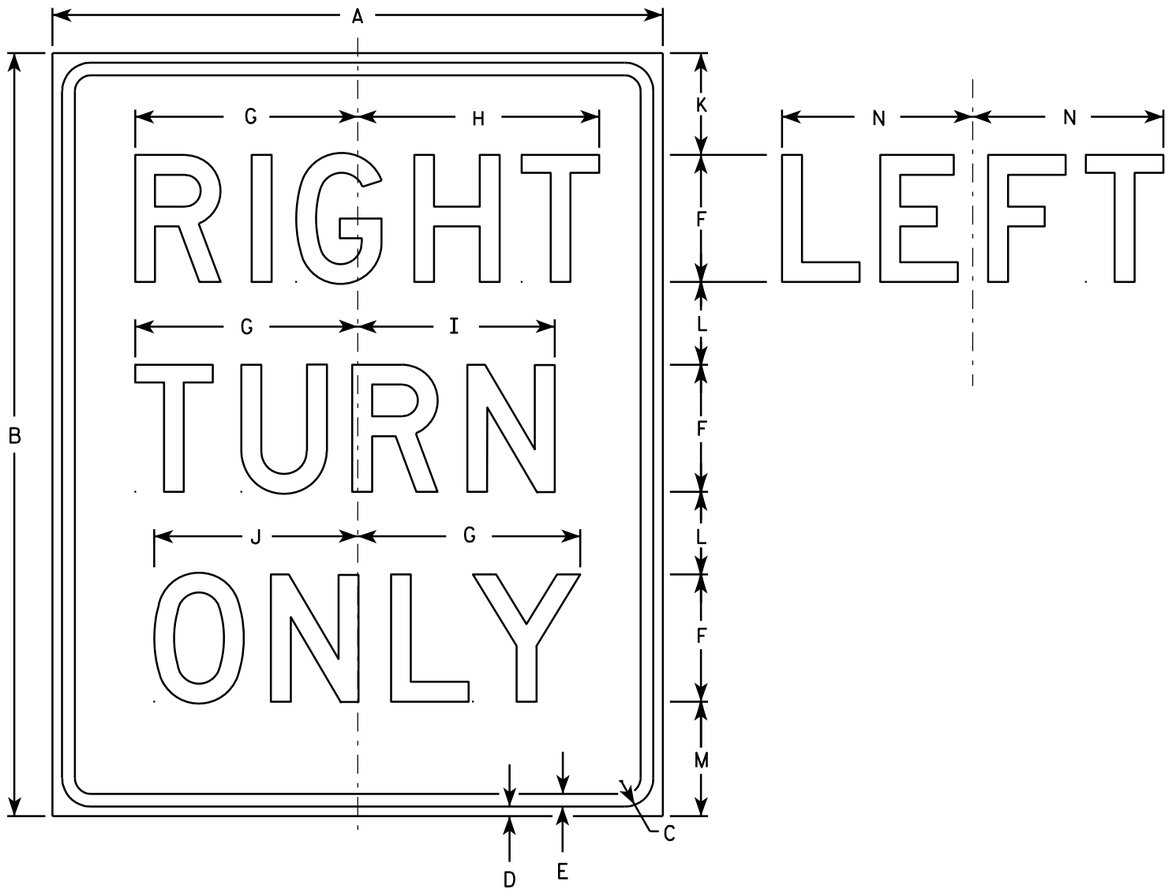
STANDARD SIGN
R3-20L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 10/18/10 PLATE NO. R3-20L.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 294 | E



R3-53R

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. R3-53L same as R3-53R except LEFT is substituted for RIGHT.

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

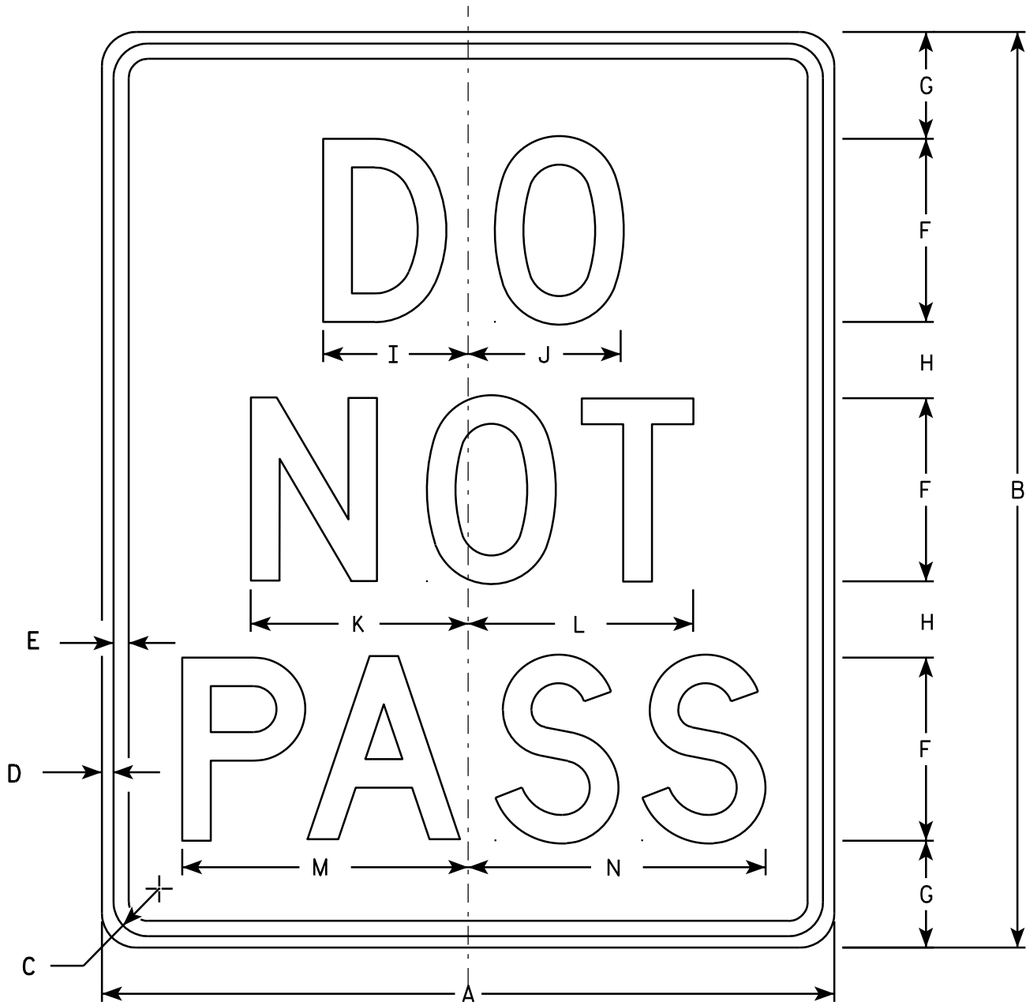
STANDARD SIGN
R3-53

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/24/2011 PLATE NO. R3-53.8

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 295	E



R4-1

NOTES

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

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	4	3 1/2	2 1/2	3 1/8	3 1/4	4 3/4	4 7/8	6 1/4	6 1/2													3.0
2S	24	30	1 1/8	3/8	1/2	6	3 1/2	2 1/2	4 3/4	5	7 1/8	7 3/8	9 3/8	9 3/4													5.0
2M	24	30	1 1/8	3/8	1/2	6	3 1/2	2 1/2	4 3/4	5	7 1/8	7 3/8	9 3/8	9 3/4													5.0
3																											
4	36	48	1 5/8	5/8	3/4	8	7	5	6 1/4	6 5/8	9 1/2	9 3/4	12 1/2	13													12.0
5	48	60	2 1/4	3/4	1	10	8	7	7 3/4	8 3/8	11 7/8	12 1/4	15 5/8	16 1/4													20.0

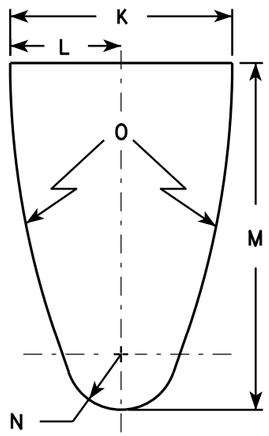
STANDARD SIGN
R4-1

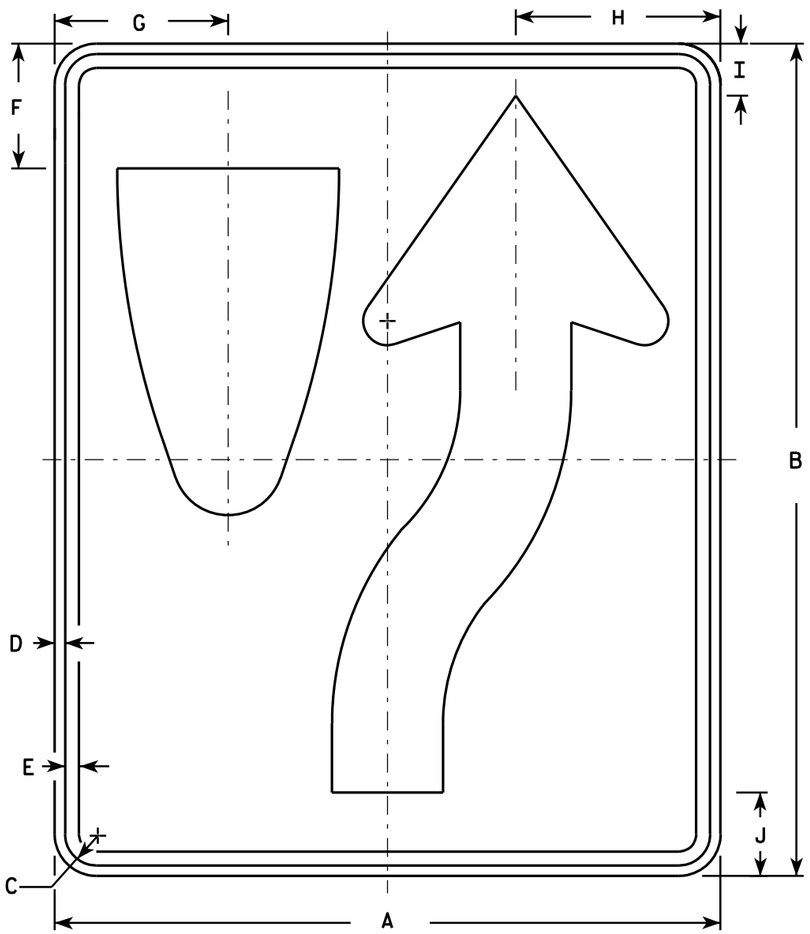
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-1.7

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 296 | E

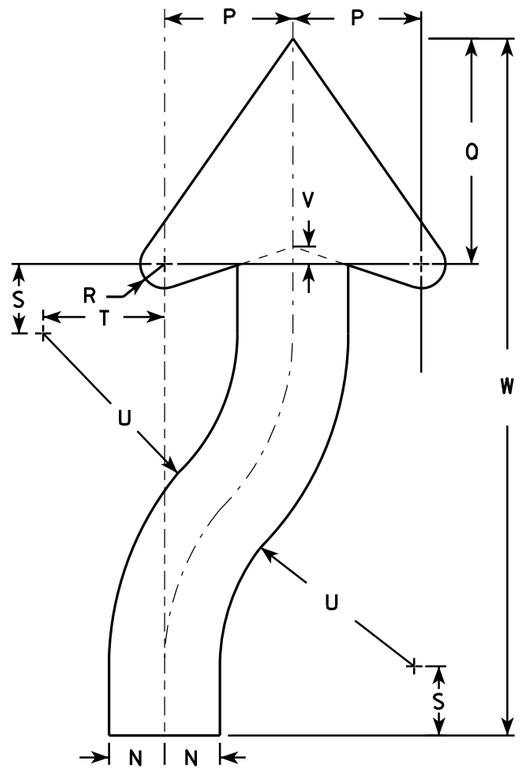




R4-7

NOTES

1. Sign is Type II - Type H Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition. material is plywood but borders shall be rounded
2. Color:
   Background - White
   Message - Black
3. Corners may be square or rounded when base as shown. When base material is metal, the corners and borders shall be rounded.
4. R4-8 is the same as R4-7 except Legend is reversed.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	18	24	1 1/8	3/8	1/2	3 3/8	4 3/4	5 1/2	1 3/8	2 1/4	6	3	9 3/8	1 1/2	22 1/2	3 1/2	6 1/8	5/8	1 7/8	3 1/4	6 3/4	1/2	20 3/8				3.0
2S	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
2M	24	30	1 1/8	3/8	1/2	4 1/2	6 1/4	7 3/8	1 7/8	3	8	4	12 1/2	2	30	4 5/8	8 1/8	7/8	2 1/2	4 3/8	9	5/8	25 1/8				5.0
3	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
4	36	48	1 3/4	1/2	5/8	6 3/4	9 3/8	11 1/8	2 7/8	4 1/2	12	6	18 3/4	3	45	6 7/8	12 1/4	1 1/4	3 3/4	6 5/8	13 1/2	1	40 3/4				12.0
5	48	60	2 1/4	3/4	1	9	12 1/2	14 3/4	3 3/4	6	16	8	25	4	60	9 1/4	16 1/4	1 5/8	5	8 3/4	18	1 1/4	50 1/4				20.0

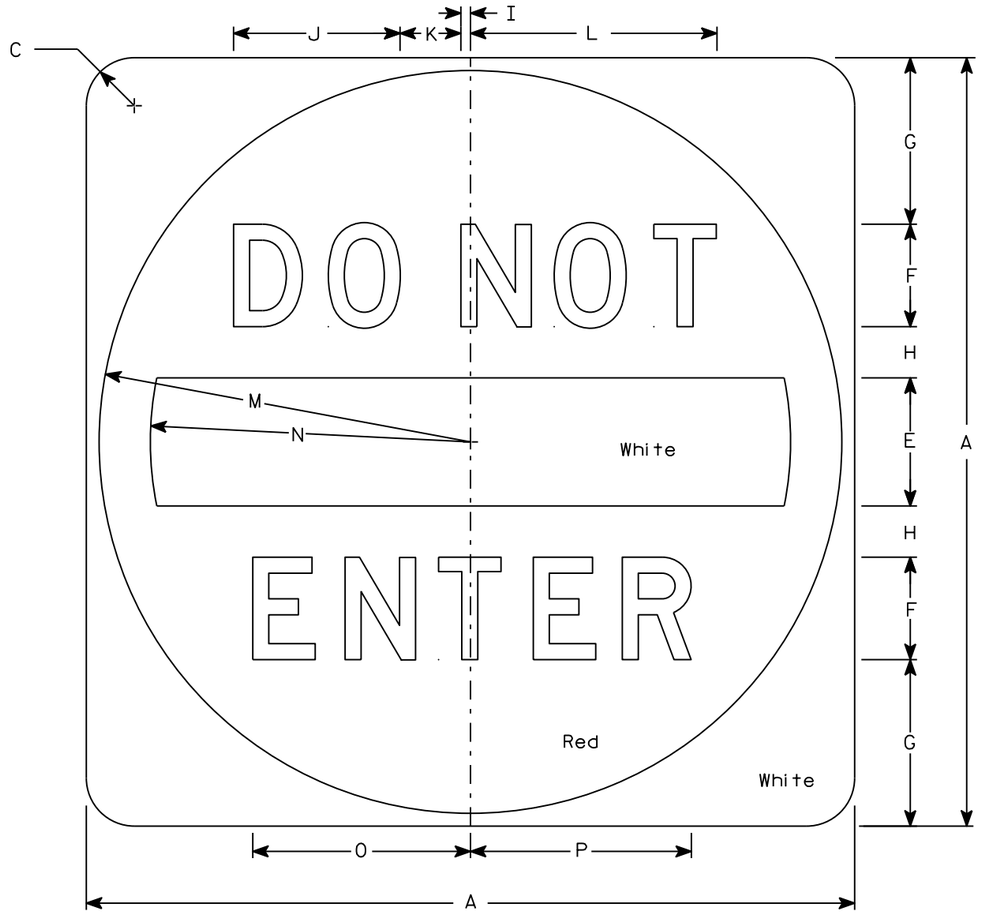
STANDARD SIGN
R4-7 & R4-8

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch for State Traffic Engineer

DATE 3/25/2011 PLATE NO. R4-7.8

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 297 | E



R5-1

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - See detail
   Message - White
3. Message Series - D

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	30		1 7/8		5	4	6 1/2	2	3/8	6 1/2	2 3/8	9 5/8	14 1/2	12 1/2	8 1/2	8 5/8											6.25
2M	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
3	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
4	36		2 1/4		6	5	7 1/2	2 1/2	1/2	8 1/8	3	12 1/8	17 1/2	15	10 5/8	10 3/4											9.0
5	48		3		8	6	11	3	5/8	9 3/4	3 5/8	14 1/2	23 1/2	20	12 3/4	12 7/8											16.0

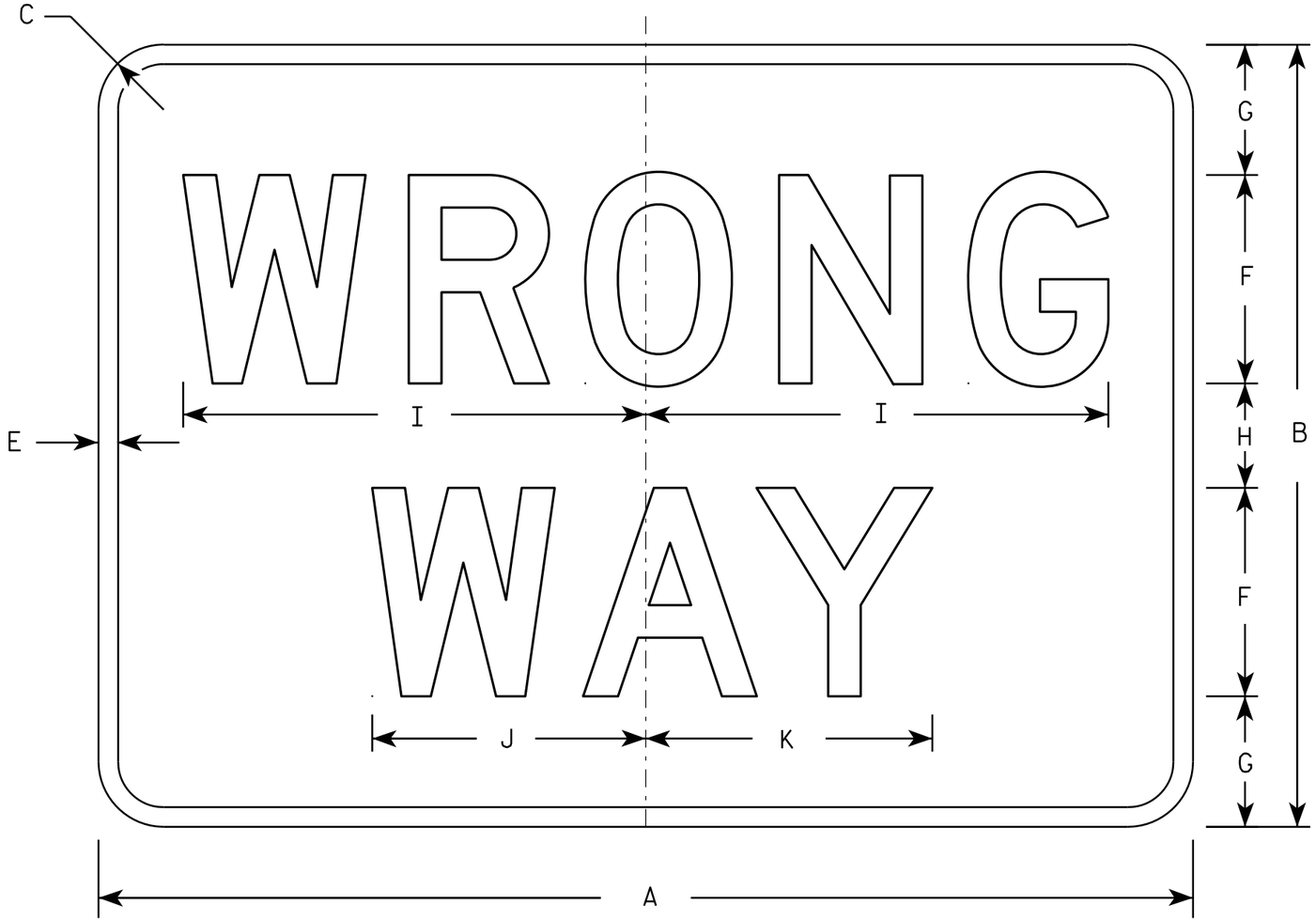
STANDARD SIGN
R5-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/15/18 PLATE NO. R5-1.16

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 298 | E



R5-1A

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 - 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.

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	18	1 1/2		1/2	5	3	2	11	6 1/2	6 7/8																3.75
2S	36	24	2		5/8	6	4 1/2	3	13 1/4	7 7/8	8 1/4																6.00
2M	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
3	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
4	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75
5	42	30	2 1/2		3/4	8	5	4	17 3/4	10 1/2	11																8.75

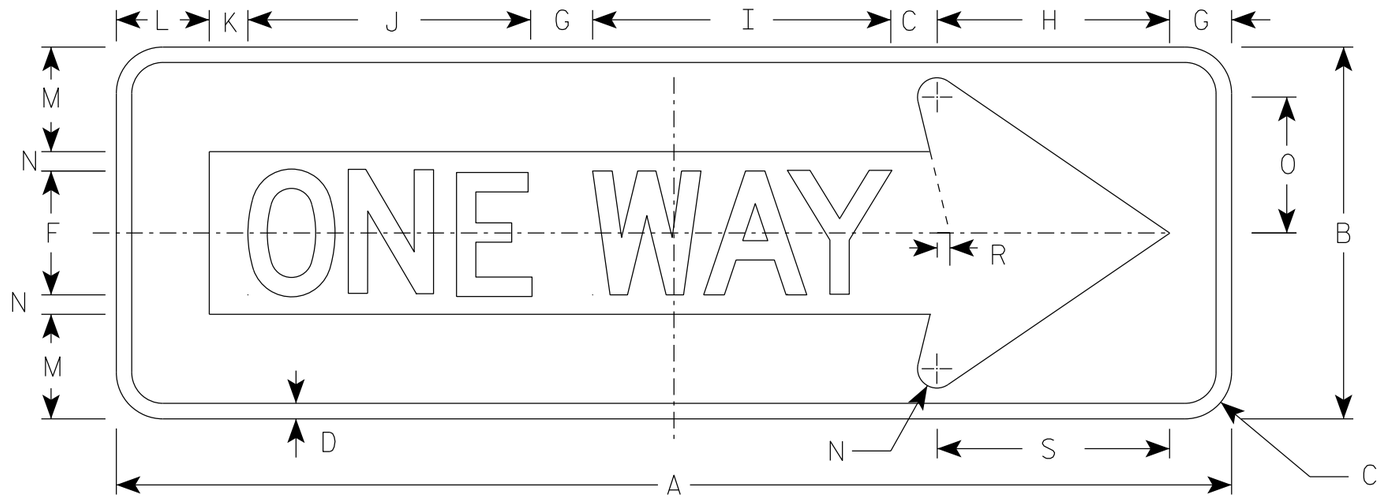
STANDARD SIGN
R5-1A

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 12/17/10 PLATE NO. R5-1A.2

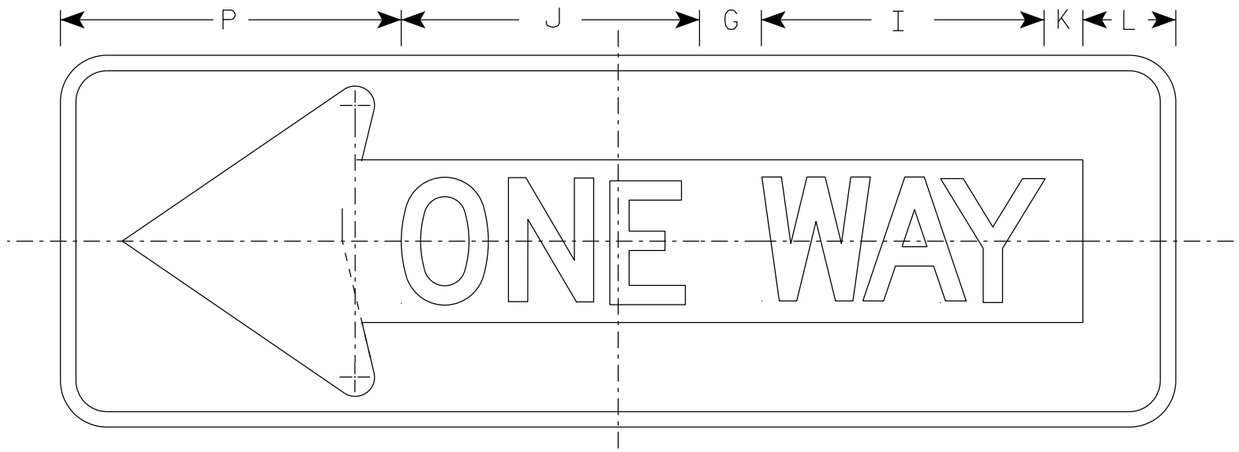
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 299	E



R6-1R

NOTES

1. Sign is Type II - Type H Reflective
2. Color:
   Background - BLACK
   Message - BLACK LEGEND & WHITE ARROW & BORDER
3. Message Series - D



R6-1L

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	36	12	1 1/2	1/2		4	2	7 1/2	9 5/8	9 1/8	1 1/4	3	3 3/8	5/8	4 3/8	11		3/8	7 1/2								3.0
2M	54	18	2 1/4	3/4		6	3	11 1/4	13 5/8	14 1/2	1 7/8	4 1/2	5	1	6 1/2	16 1/2		5/8	11 1/4								6.75
3	54	18	2 1/4	3/4		6	3	11 1/4	13 5/8	14 1/2	1 7/8	4 1/2	5	1	6 1/2	16 1/2		5/8	11 1/4								6.75
4	54	18	2 1/4	3/4		6	3	11 1/4	13 5/8	14 1/2	1 7/8	4 1/2	5	1	6 1/2	16 1/2		5/8	11 1/4								6.75
5																											

STANDARD SIGN
R6-1 L & R

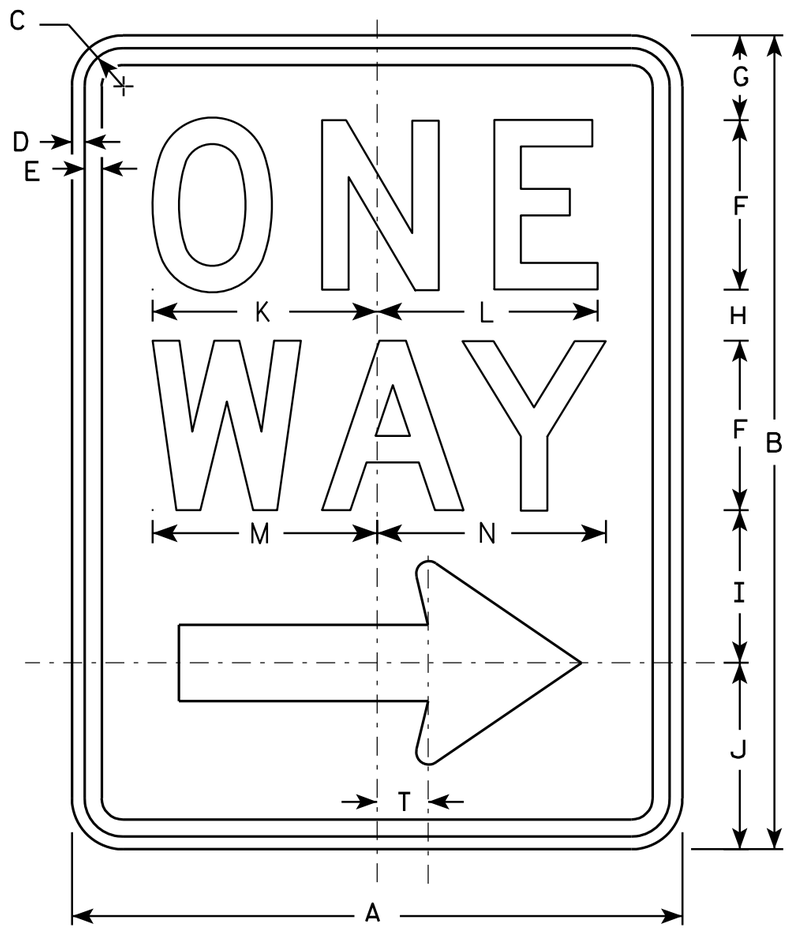
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 07/11/18 PLATE NO. R6-1.3

PROJECT NO:

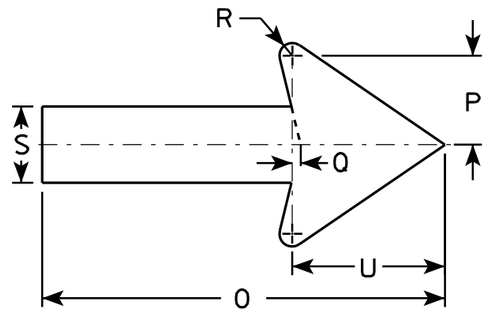
SHEET NO: 300 E



R6-2R

NOTES

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



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

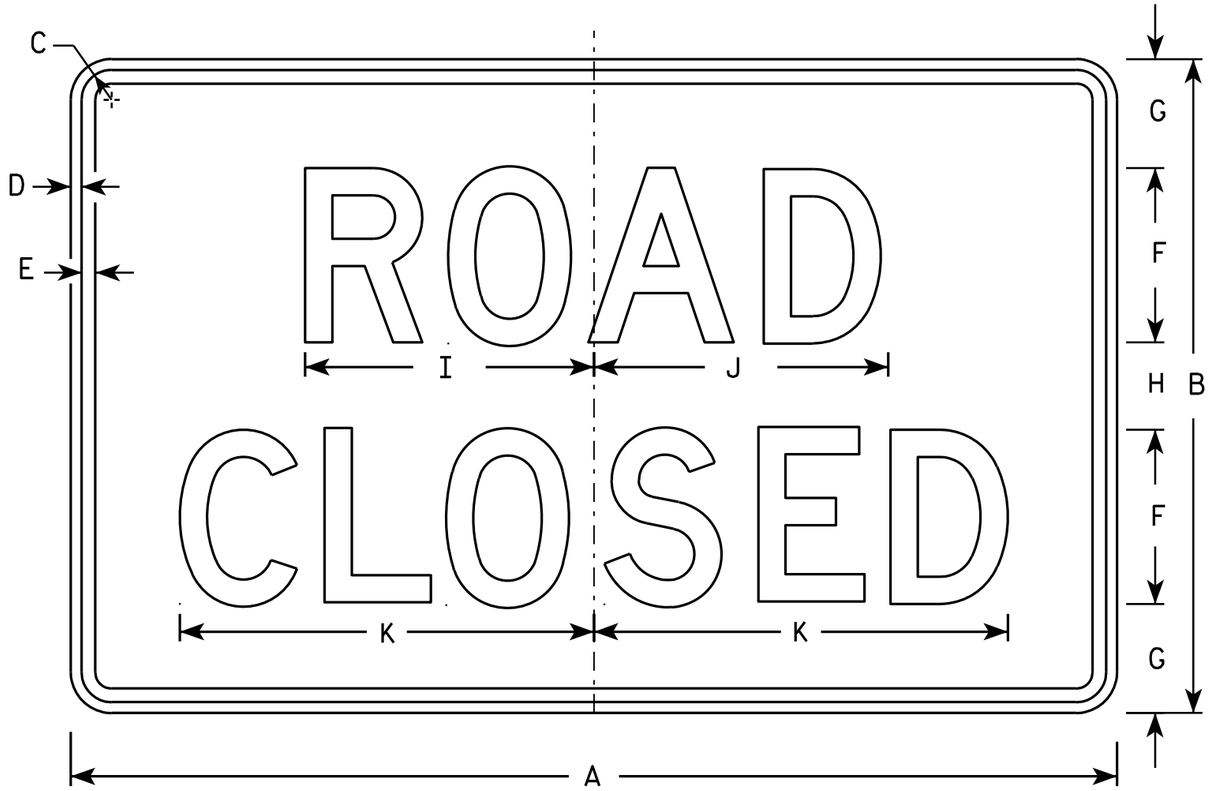
STANDARD SIGN
R6-2 R&L

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

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

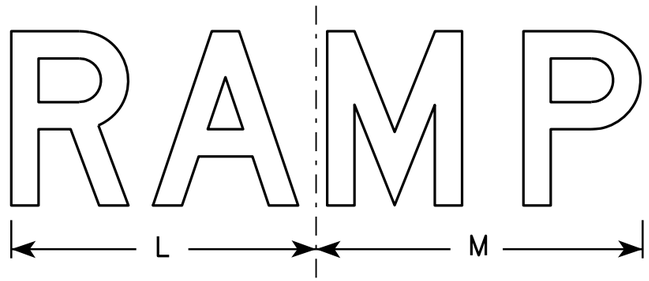
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 301	E



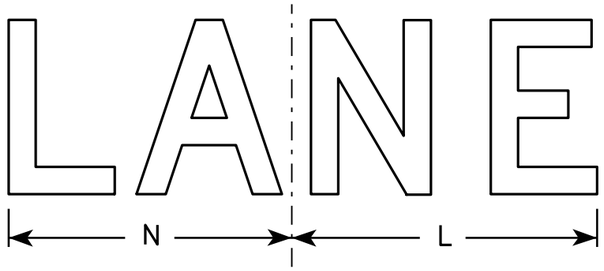
R11-2

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

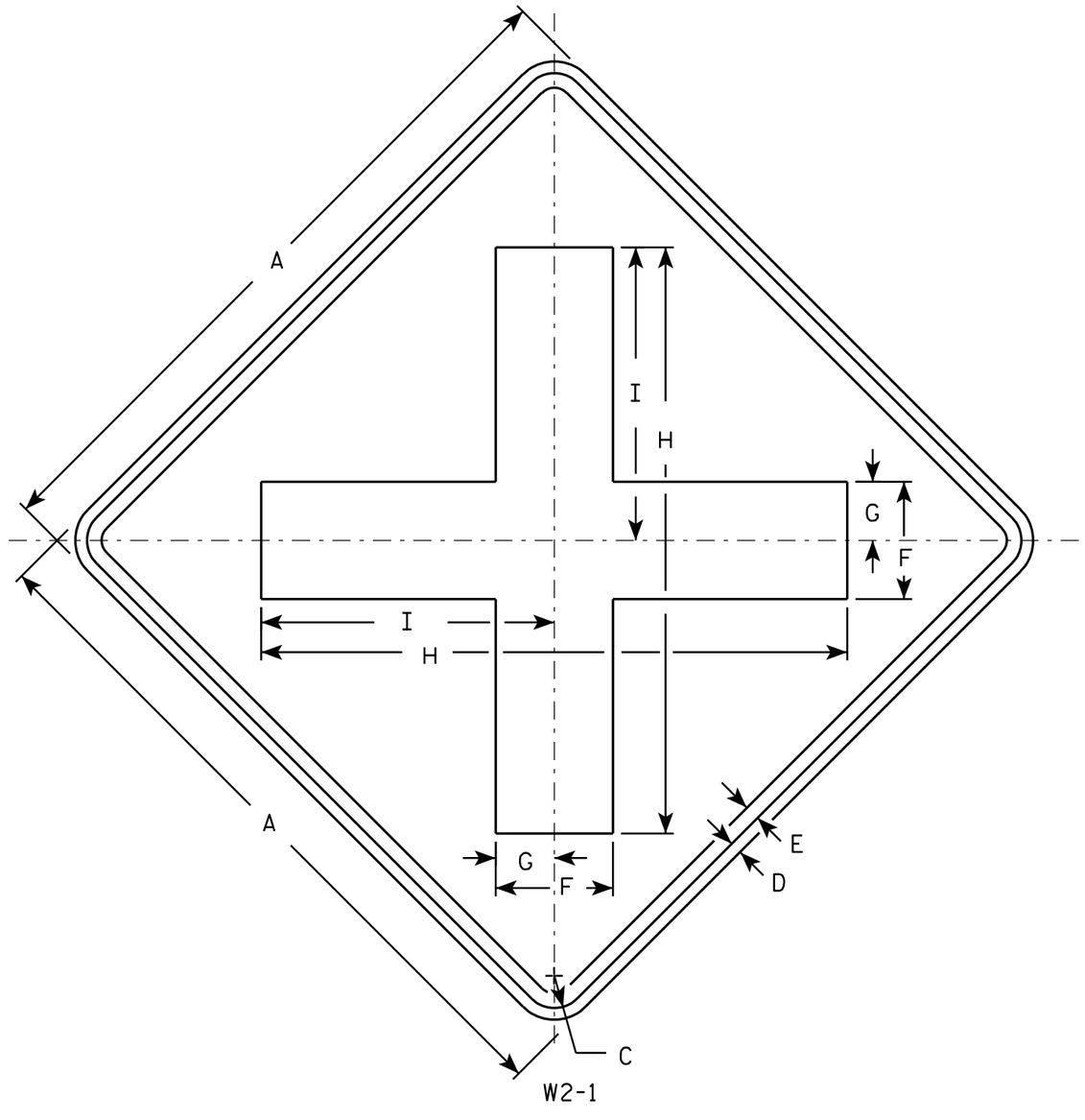
STANDARD SIGN
R11-2

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: 302 | E



NOTES

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

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

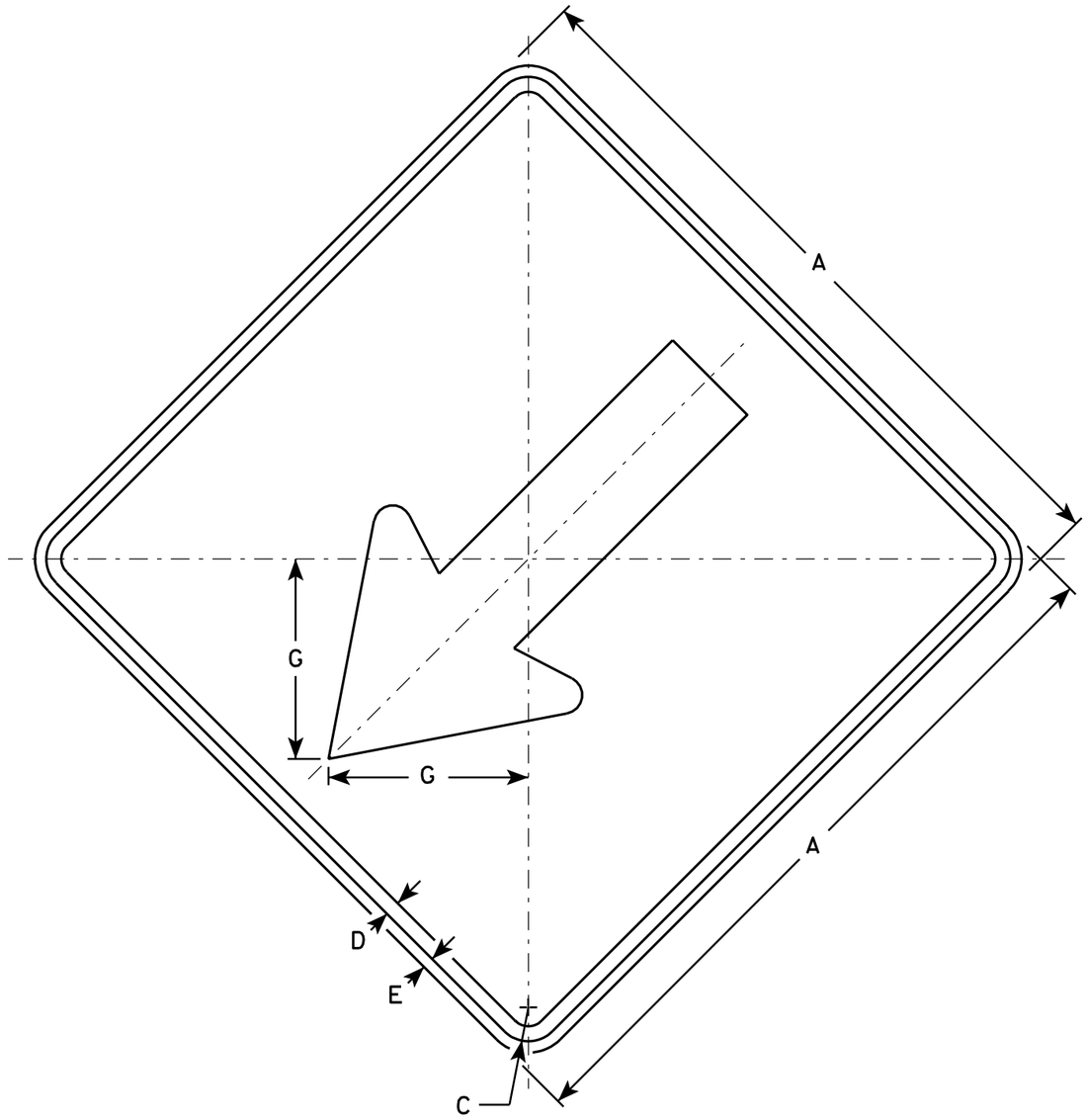
STANDARD SIGN
W2-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/29/12 PLATE NO. W2-1.9

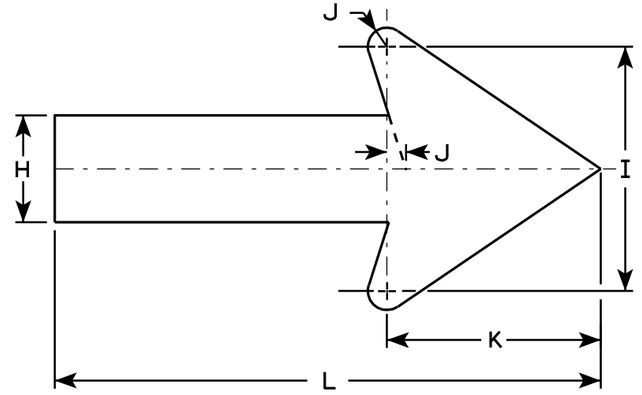
PROJECT NO:	HWY:	COUNTY:		SHEET NO: 303	E



W12-1

NOTES

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



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	1/2	3/8		6 5/8	3 1/2	8	5/8	7	18															4
2M	24		1 1/8	1/2	3/8		6 5/8	3 1/2	8	5/8	7	18															4
3	30		1 3/8	5/8	1/2		8 1/4	4 3/8	10	3/4	8 3/4	22 3/8															6.25
4	36		1 3/4	3/4	5/8		10 3/8	5 1/2	12 1/2	1	11	27 7/8															9.0
5	48		2 1/4	3/4	1		12 1/2	6 5/8	15	1 1/4	13 1/4	33 1/2															16

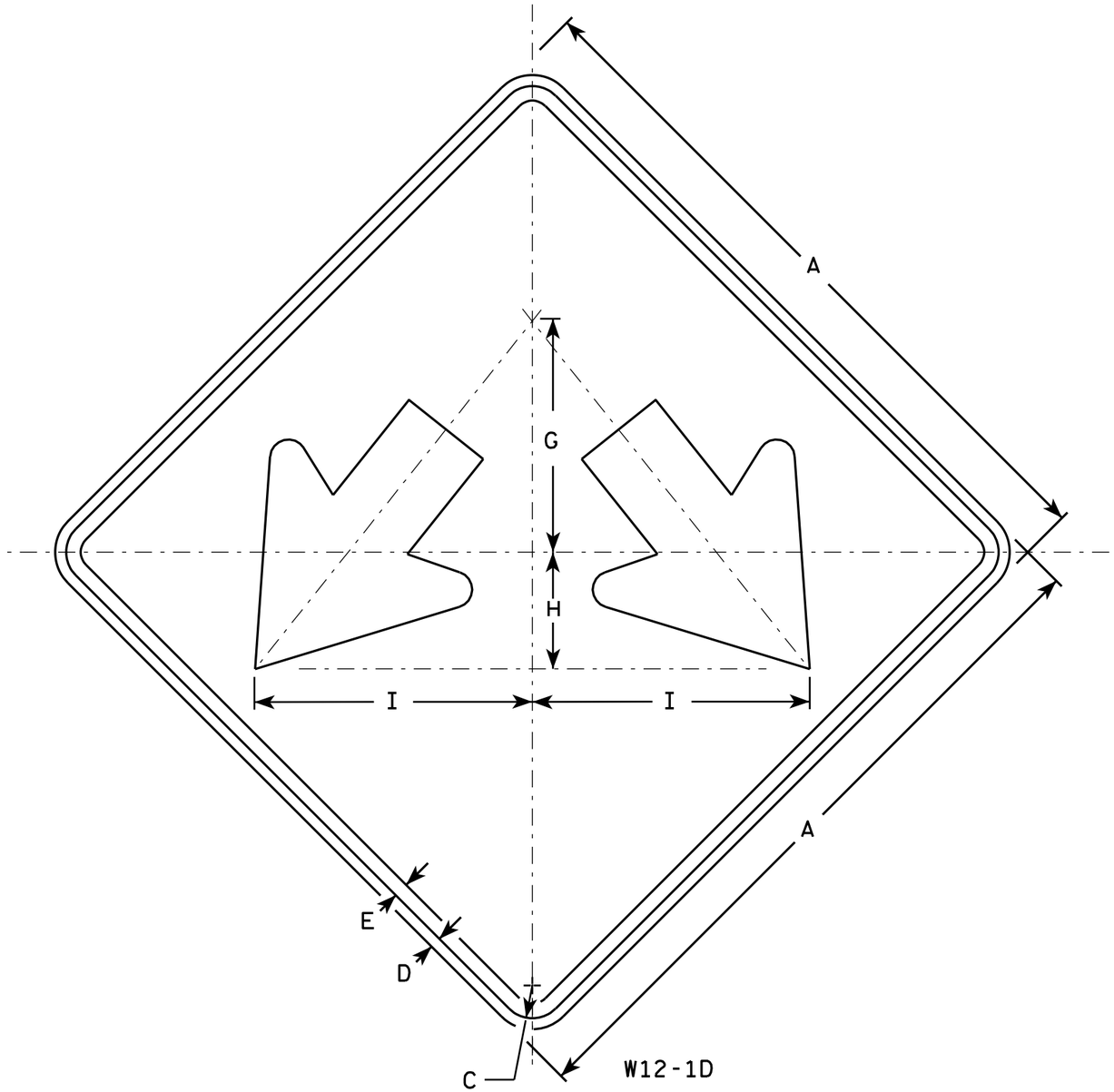
STANDARD SIGN
W12-1

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

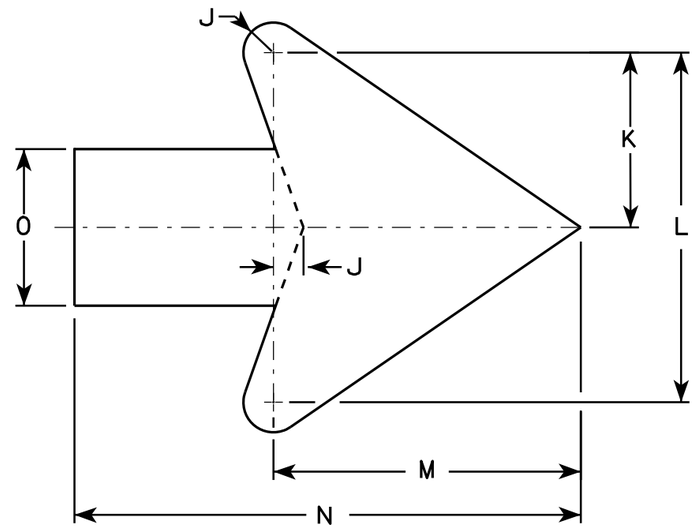
DATE 3/13/13 PLATE NO. W12-1.12

PROJECT NO: | HWY: | COUNTY: | SHEET NO: 304 | E



NOTES

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



Arrow Detail

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1																											
2S	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
2M	24		1 1/8	1/2	3/8		8	4	9 1/2	3/8	3 3/8	7 1/4	6 3/8	10 3/8	3 1/4												4.0
3	30		1 3/8	1/2	5/8		10	5	11 7/8	3/4	4 1/2	9	7 7/8	13	4												6.25
4	36		1 3/8	1/2	5/8		12	6	14 1/4	1	5 1/2	10 7/8	9 5/8	15 3/4	4 3/4												9.0
5	48		2 1/4	3/4	1		16	8	19	1 1/4	7 1/4	14 1/2	12 3/4	21	6 1/4												16.0

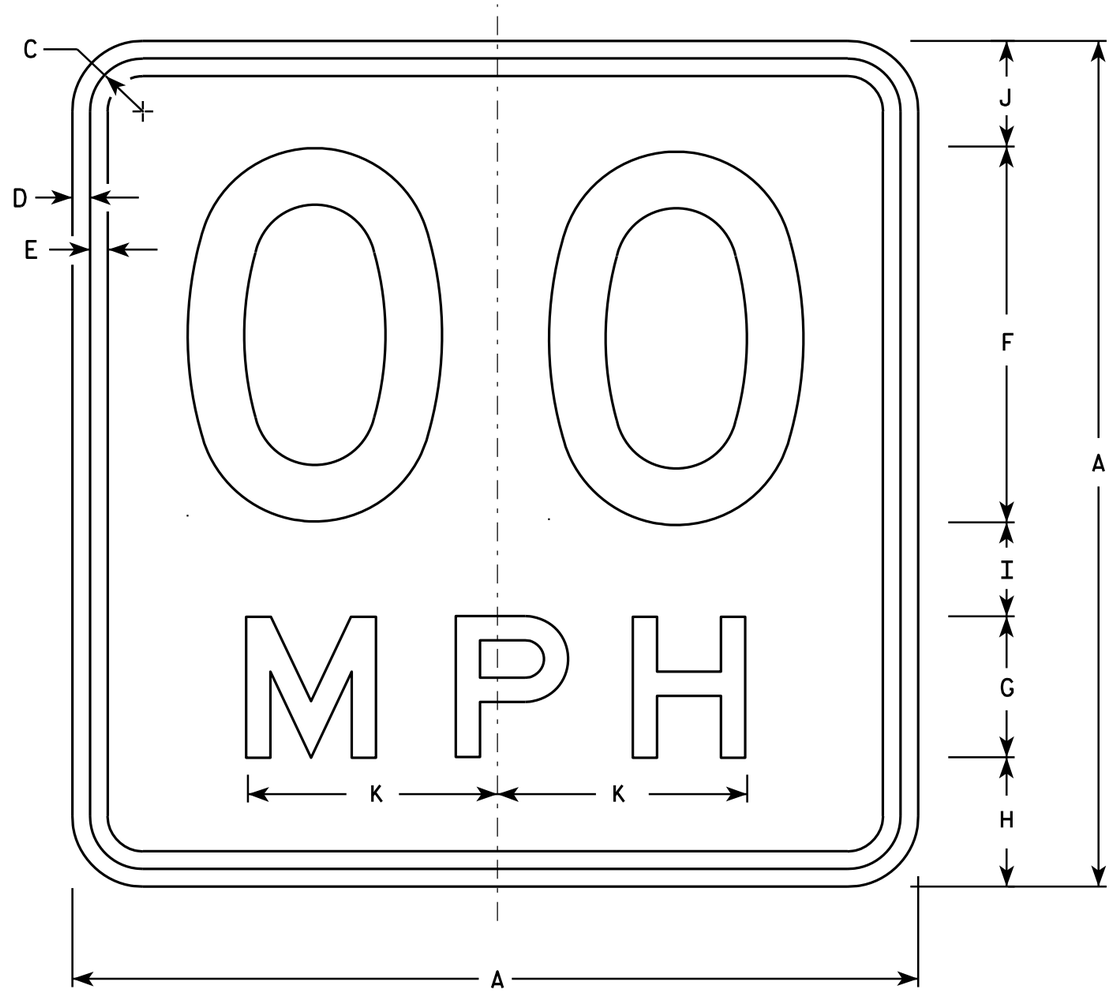
STANDARD SIGN
W12-1D

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/13/13 PLATE NO. W12-1D.15

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 305	E



W13-1

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

NOTES

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

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

STANDARD SIGN
W13-1

WISCONSIN DEPT OF TRANSPORTATION

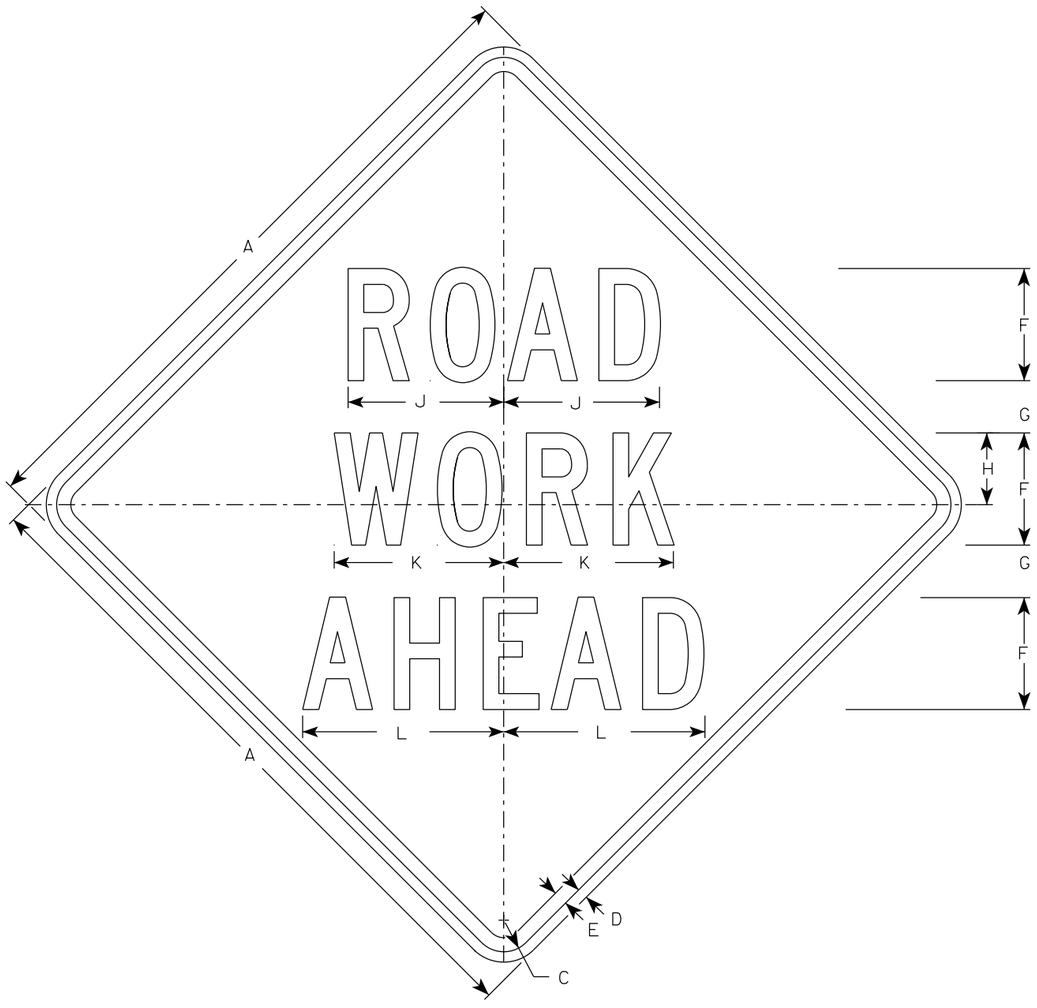
APPROVED Matthew R Rauch
For State Traffic Engineer

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

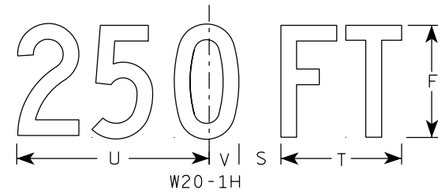
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 306 | E

NOTES

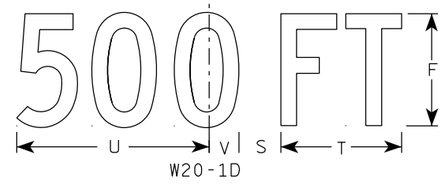
1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   Message - Black
3. Message Series - C
4. Corners may be square or rounded when base material is plywood but borders shall be rounded as shown. When base material is metal, the corners and borders shall be rounded.



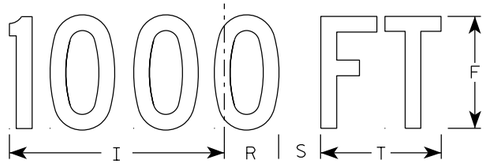
W20-1A



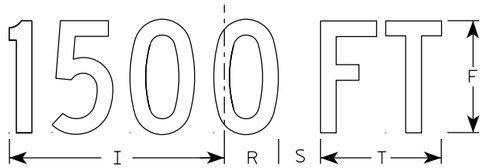
W20-1H



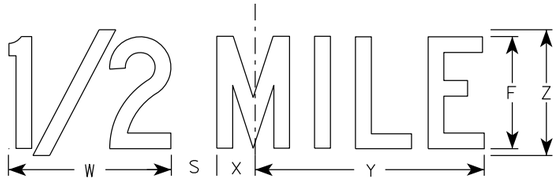
W20-1D



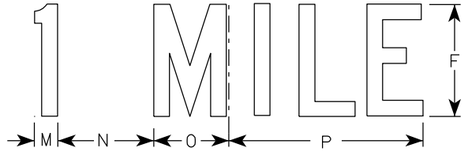
W20-1C



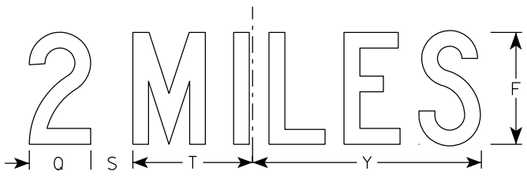
W20-1B



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:

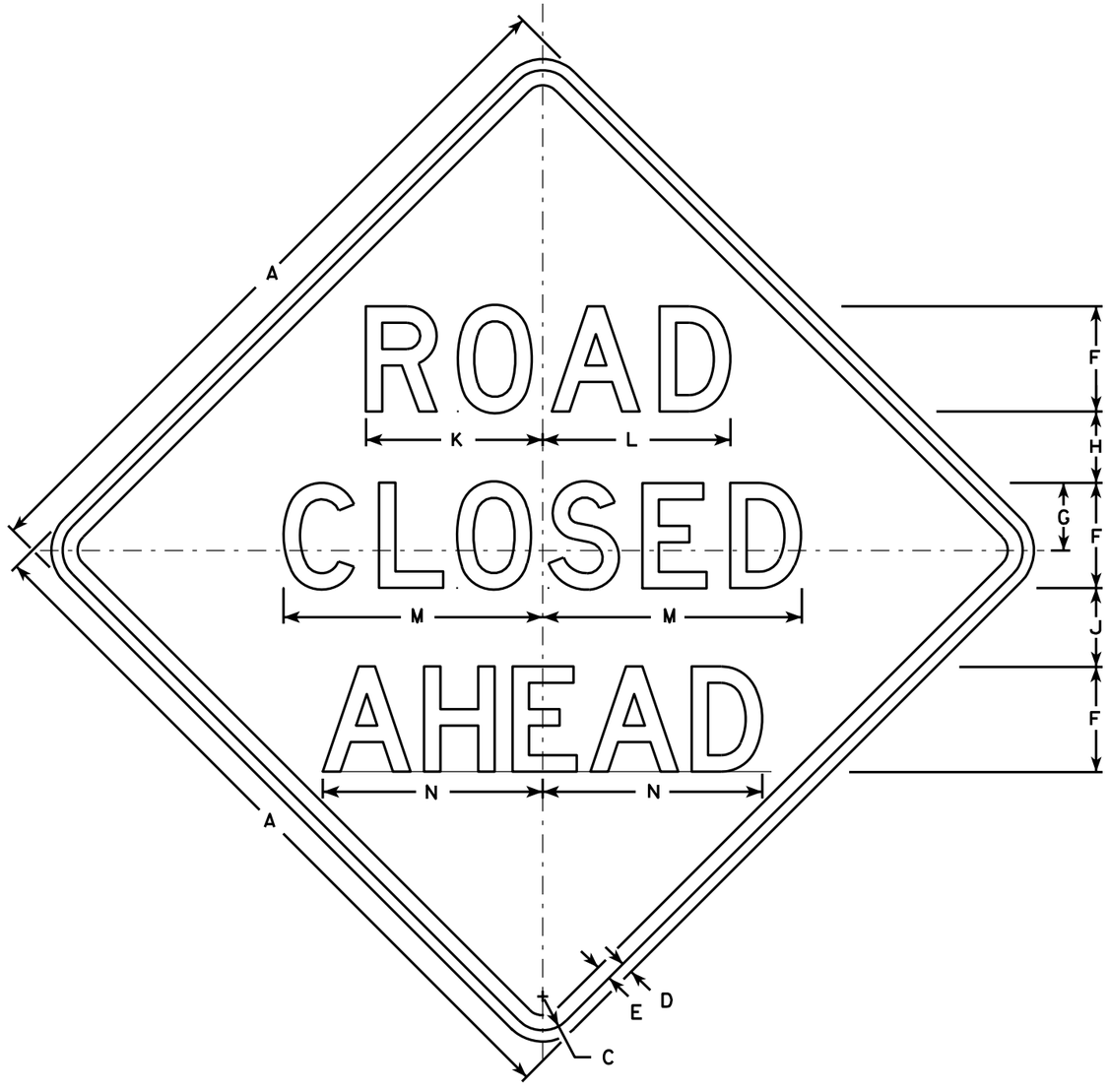
SHEET NO: E

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

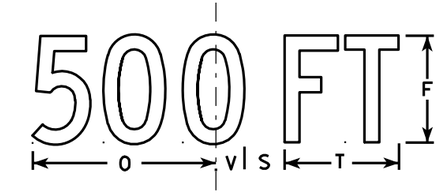
WISDOT/CADDS SHEET 42

7

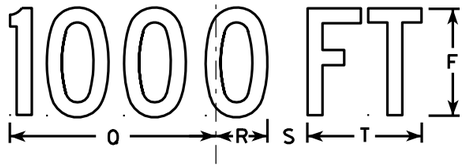
7



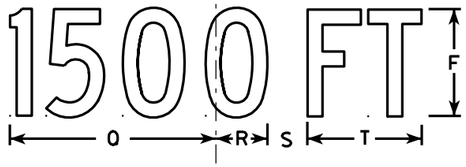
W20-3A



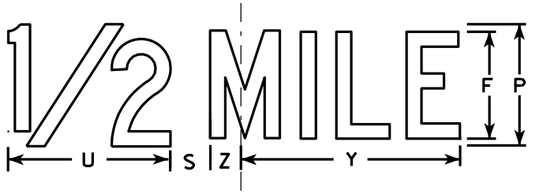
W20-3D



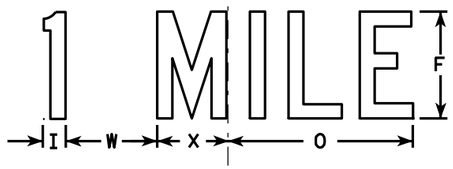
W20-3C



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

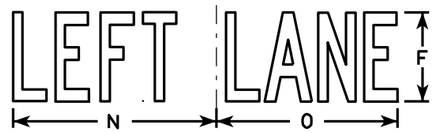
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer
DATE 3/18/11 PLATE NO. W20-3.7

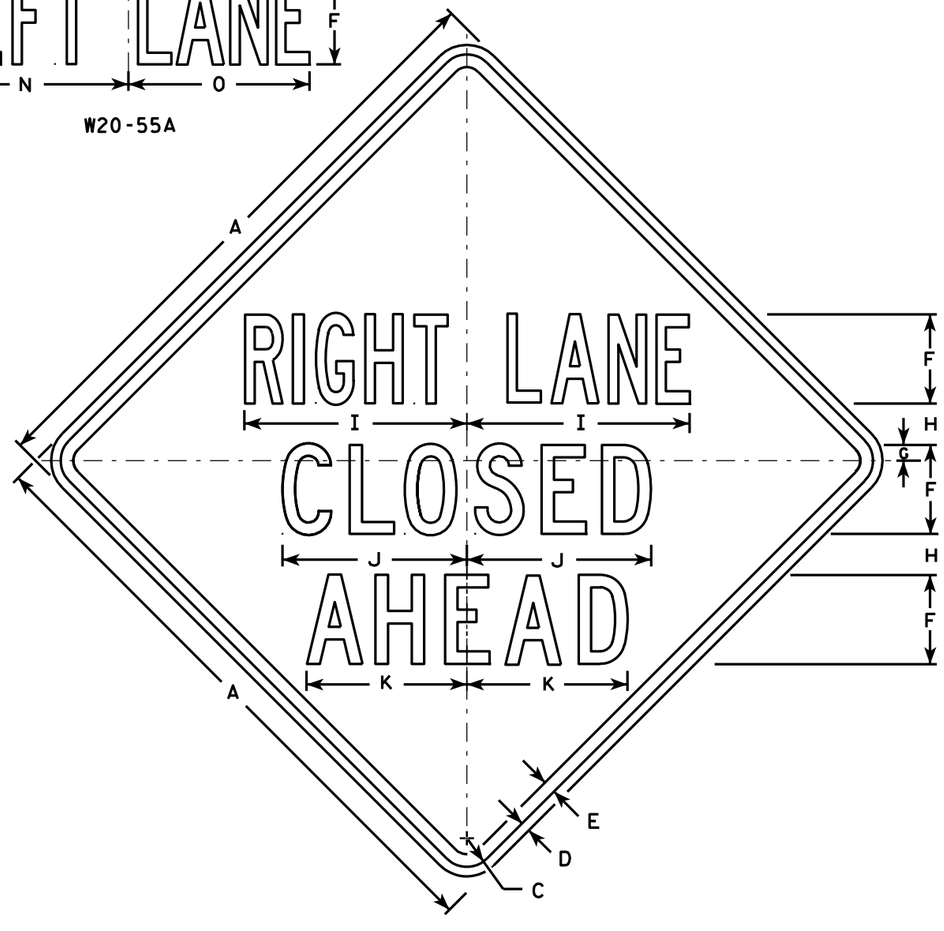
PROJECT NO: | HWY: | COUNTY: | SHEET NO: 308 | E



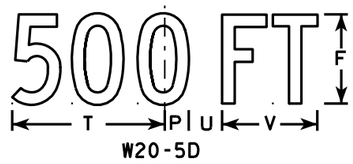
W20-56A



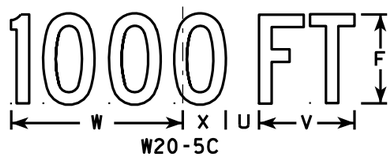
W20-55A



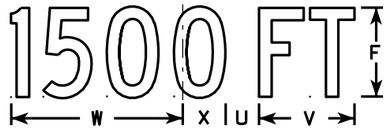
W20-5A



W20-5D



W20-5C



W20-5B



W20-5G



W20-5F

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. " _____ LANE" is Series B.
   All other copy is 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	36	6	1 5/8	5/8	3/4	5	1/8	2 1/2	13 1/8	10 3/4	9 1/2	14 1/4	13 5/8	12	12	1 3/8	1 1/8	4 1/2	3 1/2	9	1 1/8	5 5/8	10 1/8	2 1/2	1 3/4	8	9.0
2S	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
2M	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
3	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
4	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0
5	48	8	2 1/4	3/4	1	7	1 1/4	3 1/4	17 1/2	14 3/8	12 5/8	19	18 3/8	16	14 1/4	1 7/8	1 1/2	6	4 5/8	12	2 5/8	7 1/2	13 1/2	3 3/8	2 3/8	10 5/8	16.0

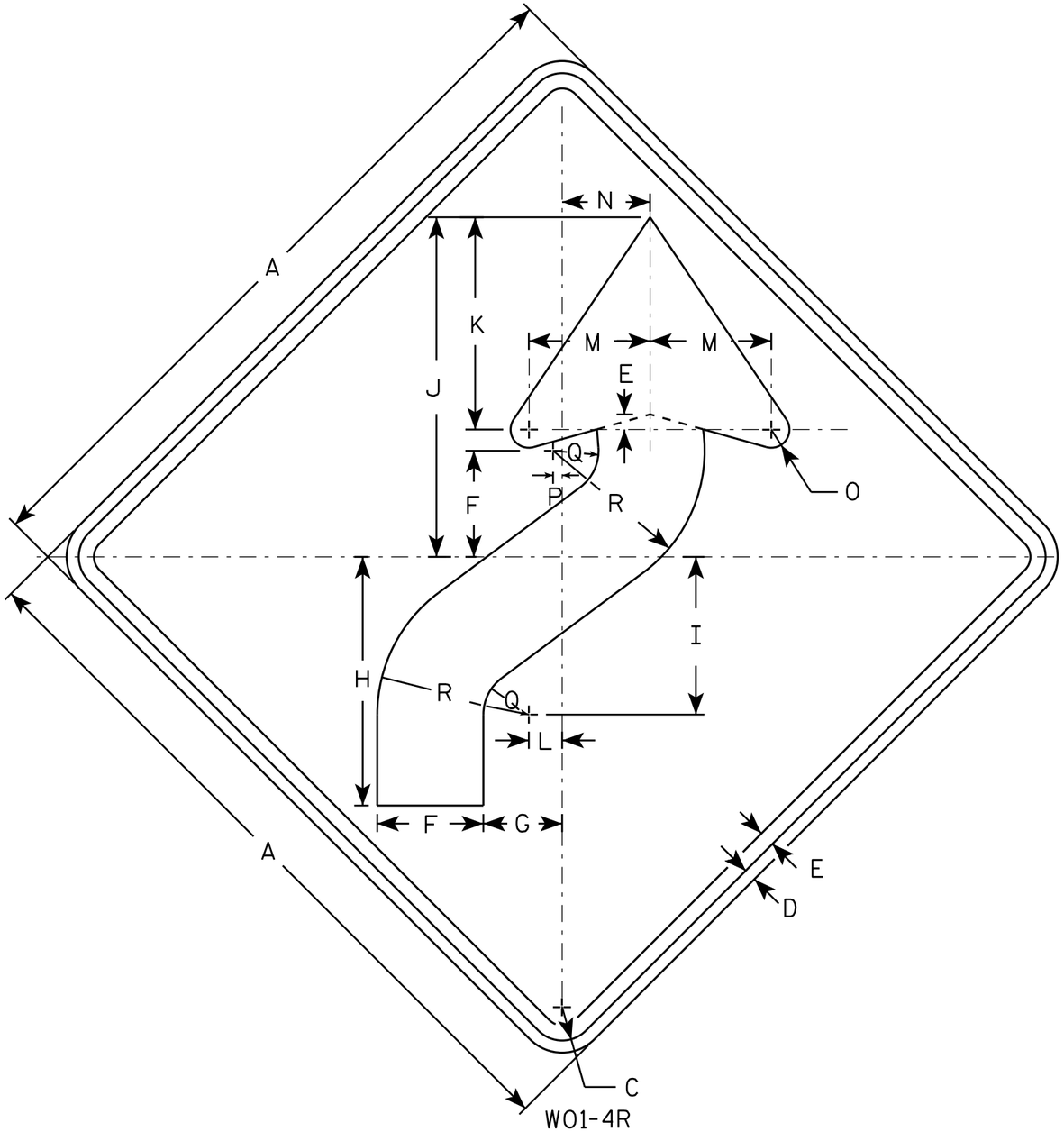
STANDARD SIGN
W20-5A, B, C, D, F & G

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 3/18/11 PLATE NO. W20-5.11

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 309	E



W01-4R

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. W01-4L is the same as W01-4R 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
W01-4

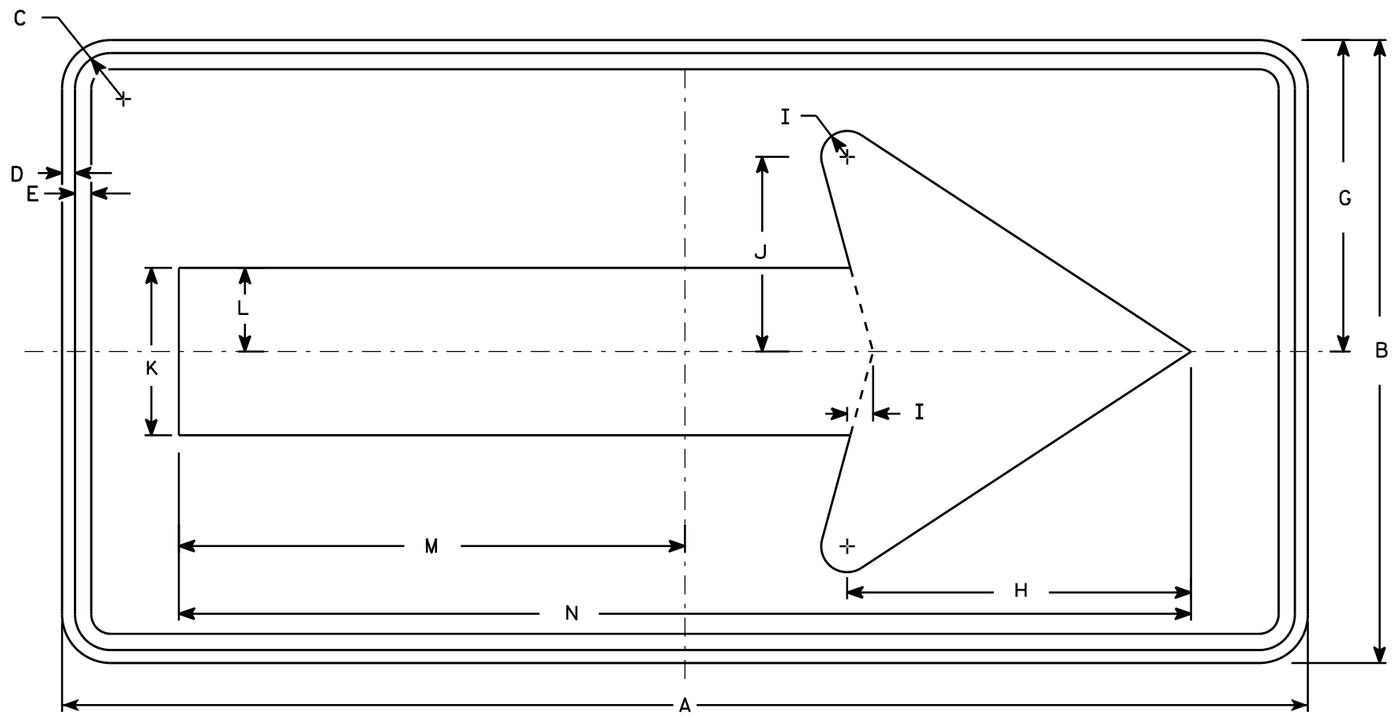
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO W01-4.1

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W014.DGN PLOT DATE : 28-FEB-2014 11:35 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 6.755110:1.000000 WISDOT/CADDS SHEET 42



W01-6

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.

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	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
2M	48	24	1 3/8	1/2	5/8		12	13 1/4	1	7 1/2	6 1/2	3 1/4	19 1/2	39													8.0
3	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
4	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5
5	60	30	1 3/8	1/2	5/8		15	16 1/4	1 1/4	9 1/4	8	4	24 3/8	48 3/4													12.5

STANDARD SIGN
W01-6

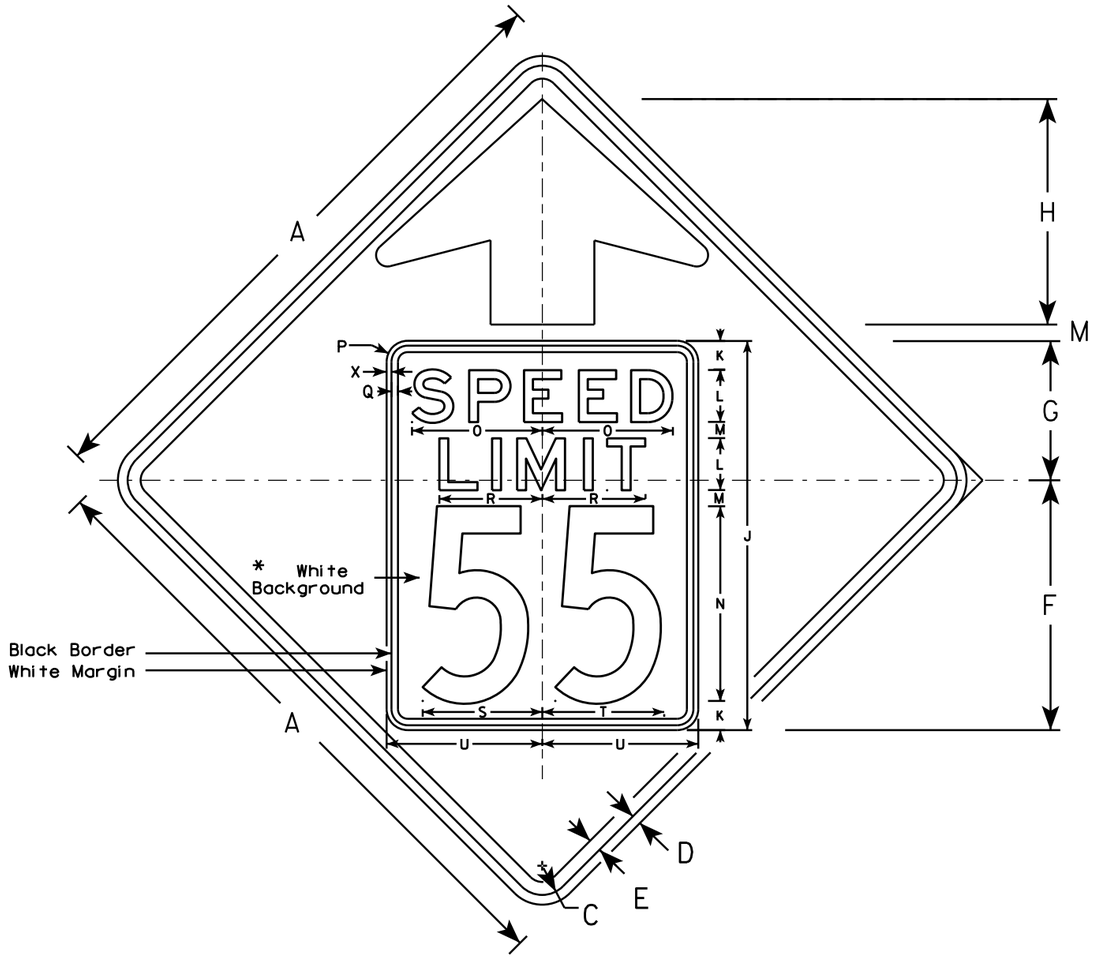
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/18/13 PLATE NO. W01-6.1

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

FILE NAME : C:\CAEfiles\Projects\tr_stdplate\W016.DGN PLOT DATE : 28-FEB-2014 11:37 PLOT BY : mscj9h PLOT NAME : PLOT SCALE : 5.837526:1.000000 WISDOT/CADDS SHEET 42

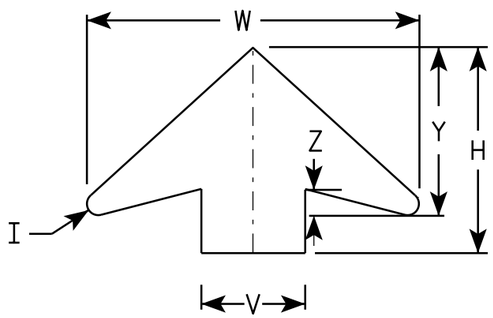


W03-5

NOTES

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

*Speed Limit Sign shall have a White Background



ARROW DETAIL

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

STANDARD SIGN
W03-5

WISCONSIN DEPT OF TRANSPORTATION

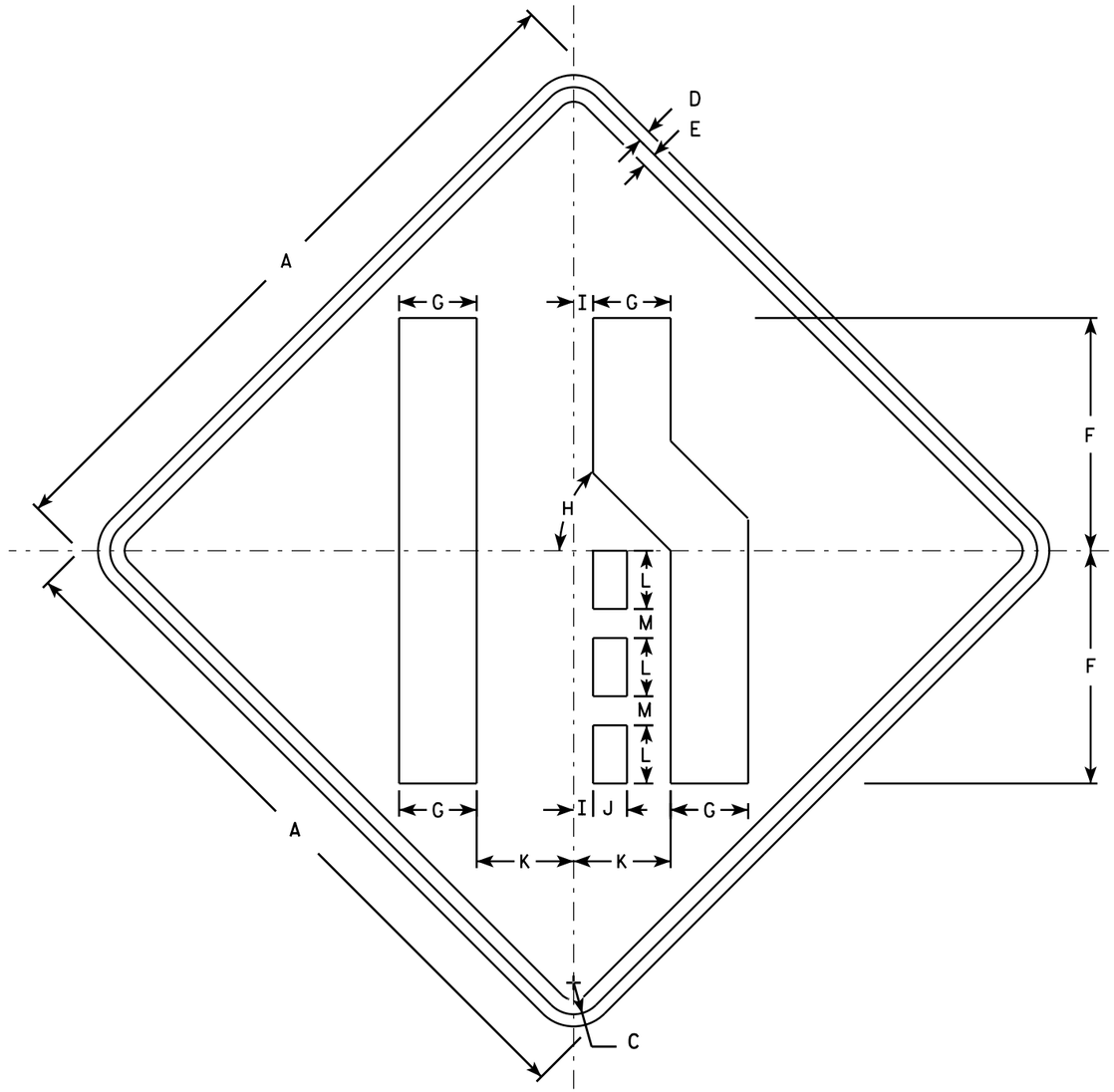
APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE W03-5.1

PROJECT NO: SHEET NO: E

FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W035.DGN PLOT DATE : 20-NOV-2013 11:32 PLOT BY : mscsja

WISDOT/CADDS SHEET 42



W04-2R

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. W04-2L is the same as W04-2R except the symbol 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	12	4	45°	1	1 3/4	5	3	1 1/2														9.0
2S	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
2M	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
3	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
4	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0
5	48		2 1/4	3/4	1	16	5 3/8	45°	1 1/4	2 3/8	6 3/4	4	2														16.0

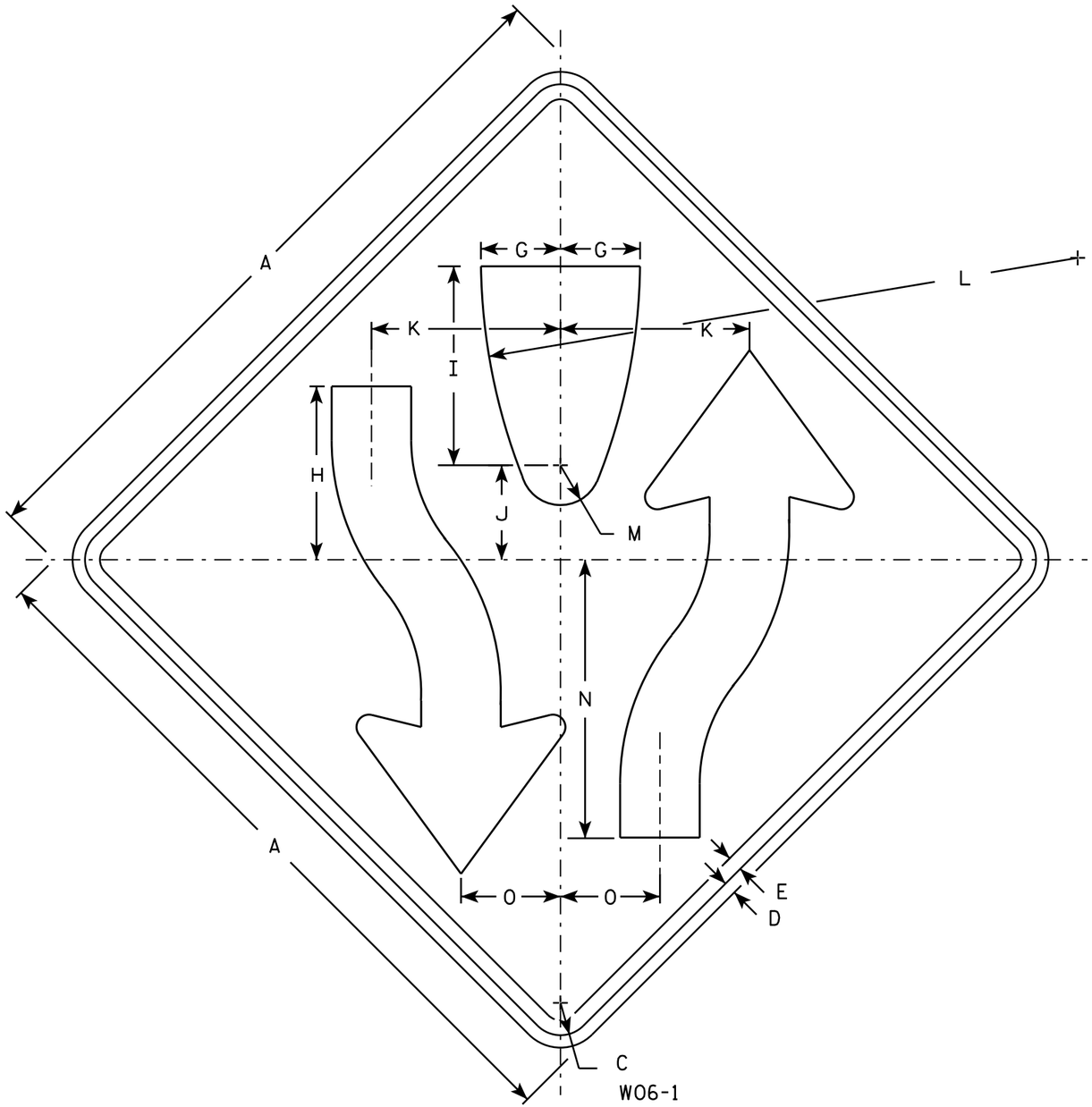
STANDARD SIGN
W04-2

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 313 W04-2.1

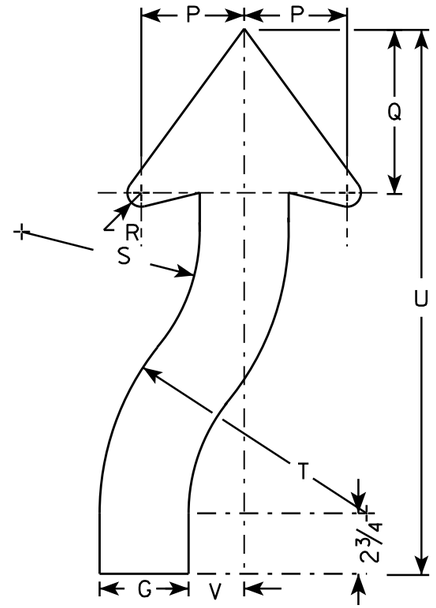
PROJECT NO: | SHEET NO: E



W06-1

NOTES

1. Sign is Type II - Type F Reflective - reference WIS DOT Standard Specification for HIGHWAY and STRUCTURE CONSTRUCTION latest edition.
2. Color:
   Background - 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. W06-2 same as W06-1 but is rotated 180° when mounted.



ARROW DETAIL

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36		1 5/8	5/8	3/4		4	8 3/4	10	4 3/4	9 1/2	30	2	14	5	4 5/8	7 3/8	7/8	8	12	24 1/2	2 1/2					9.0
2S	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0
2M	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0
3	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0
4	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0
5	48		2 1/4	3/4	1		5 3/8	11 5/8	13 3/8	6 3/8	12 5/8	40	2 5/8	18 5/8	6 5/8	6 1/4	9 7/8	1 1/4	10 5/8	16	32 5/8	3 3/8					16.0

STANDARD SIGN
W06-1 & W06-2

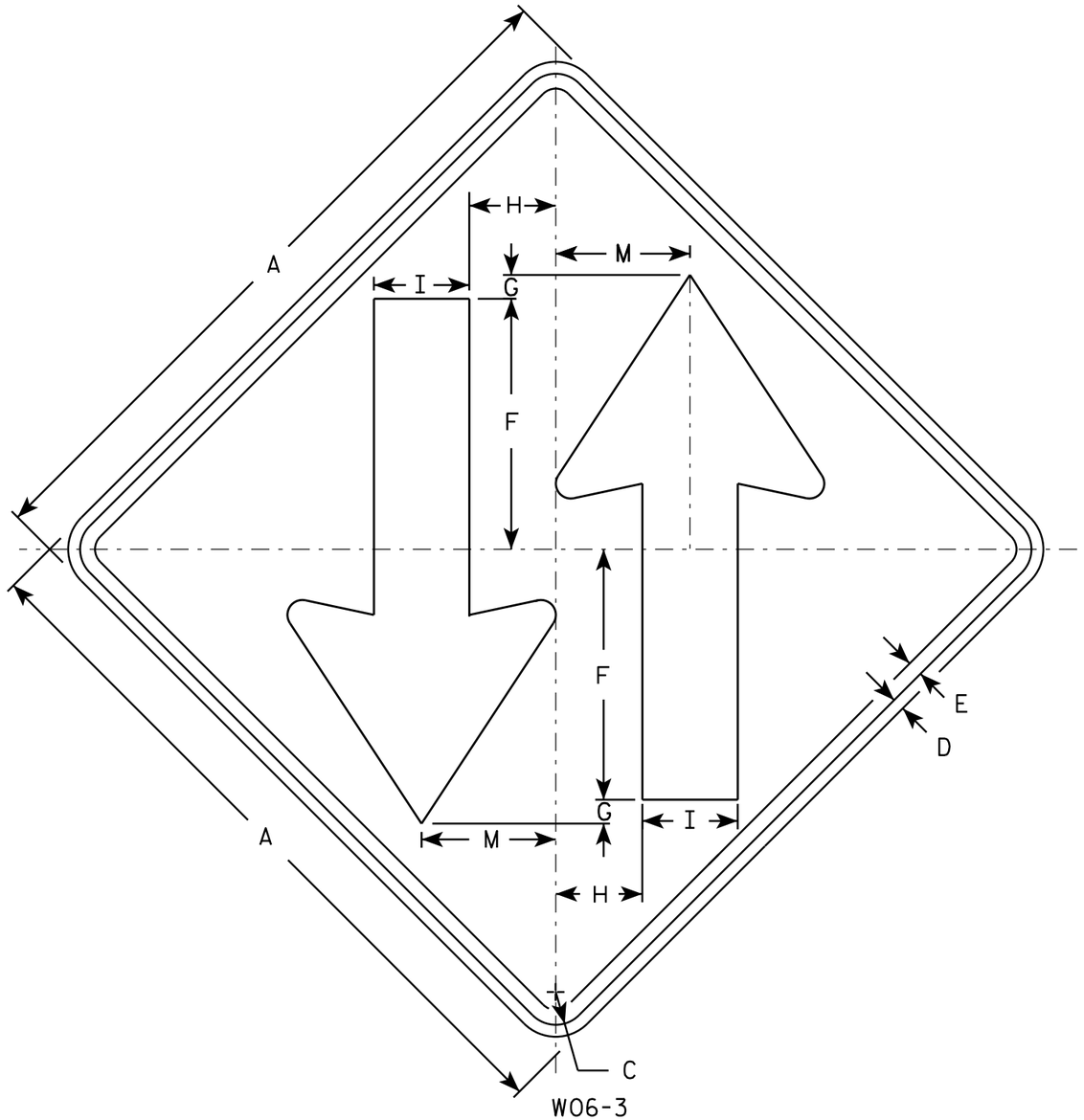
WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE NO W06-1.1

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

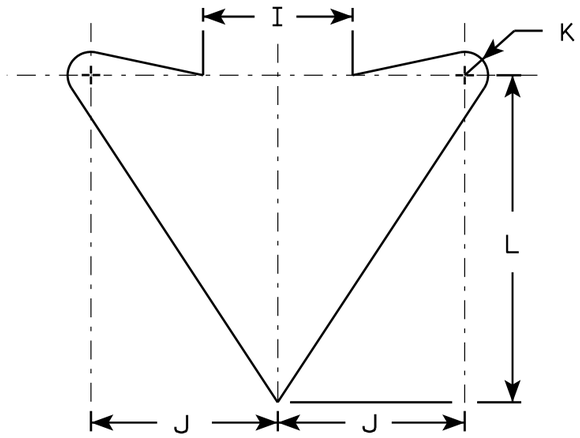
FILE NAME : C:\CAEFiles\Projects\tr_stdplate\W061.DGN PLOT DATE : 20-NOV-2013 12:09 PLOT BY : mscsja PLOT NAME : PLOT SCALE : 6.810449:1.000000
WISDOT/CADDS SHEET 42



W06-3

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.



ARROW DETAIL

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

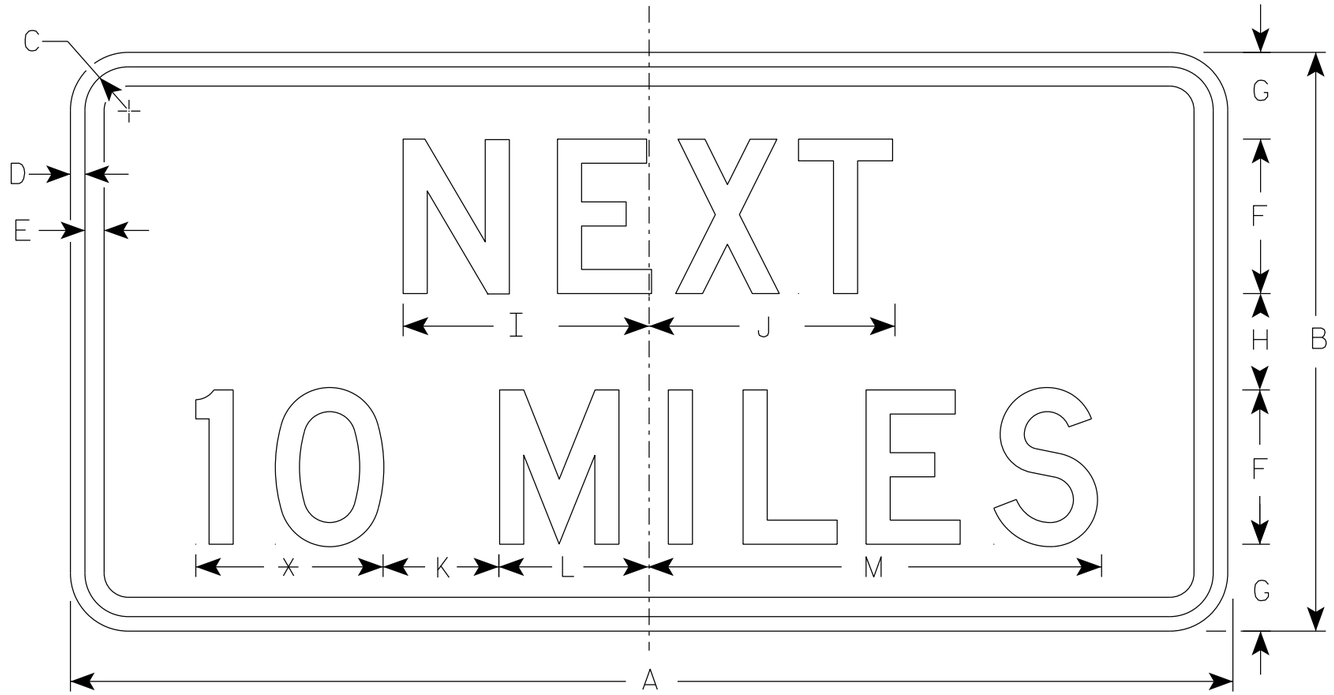
STANDARD SIGN
W06-3

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 11/20/13 PLATE 315 W06-3.1

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



W057-51

* See note 5

NOTES

1. Sign is Type II - Type F Reflective
2. Color:
   Background - Orange
   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. Round distance to the nearest whole Mile and substitute appropriate numerals and optically adjust spacing to achieve proper balance.

SIZE	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	Area sq. ft.
1	36	18	1 1/8	3/8	1/2	5	2 3/4	2 1/2	7 7/8	8	5	4 1/8	15 3/8														4.5
2S	48	24	1 3/8	1/2	5/8	6	4	4	10	10 1/8	6	5 5/8	19														8.0
2M	48	24	1 3/8	1/2	5/8	6	4	4	10	10 1/8	6	5 5/8	19														8.0
3	48	24	1 3/8	1/2	5/8	6	4	4	10	10 1/8	6	5 5/8	19														8.0
4	48	24	1 3/8	1/2	5/8	6	4	4	10	10 1/8	6	5 5/8	19														8.0
5	48	24	1 3/8	1/2	5/8	6	4	4	10	10 1/8	6	5 5/8	19														8.0

STANDARD SIGN
W057-51

WISCONSIN DEPT OF TRANSPORTATION

APPROVED Matthew R Rauch
for State Traffic Engineer

DATE 5/1/19 PLATE NO. W057-51.3

PROJECT NO:	HWY:	COUNTY:		SHEET NO: 316	E

DIVISION 1A - West Crossover

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
									1.00	1.00	
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
59+25	5925.00	0.00	4.31	0.00	0.07	0	0	0	0	0	0
59+50	5950.00	25.00	4.61	0.00	0.04	4	0	0	4	0	4
60+00	6000.00	50.00	5.51	0.00	0.05	9	0	0	13	0	13
60+50	6050.00	50.00	6.66	0.00	0.24	11	0	0	24	0	24
61+00	6100.00	50.00	7.52	0.00	1.40	13	0	2	37	2	35
61+50	6150.00	50.00	8.59	0.00	3.08	15	0	4	52	6	46
62+00	6200.00	50.00	9.59	0.00	5.46	17	0	8	69	14	55
62+50	6250.00	50.00	10.44	0.00	6.42	19	0	11	88	25	63
63+00	6300.00	50.00	19.04	0.00	0.81	27	0	7	115	32	83
63+50	6350.00	50.00	29.52	0.00	0.15	45	0	1	160	33	127
64+00	6400.00	50.00	28.00	0.00	1.41	53	0	1	213	34	179
64+50	6450.00	50.00	15.14	0.00	19.84	40	0	20	253	54	199
65+00	6500.00	50.00	14.88	0.00	23.12	28	0	40	281	94	187
65+50	6550.00	50.00	15.59	0.00	26.26	28	0	46	309	140	169
66+00	6600.00	50.00	6.44	0.00	35.66	20	0	57	329	197	132
66+50	6650.00	50.00	1.75	0.00	38.53	8	0	69	337	266	71
67+00	6700.00	50.00	0.00	0.00	47.34	2	0	80	339	346	-7
67+50	6750.00	50.00	0.00	0.00	54.42	0	0	94	339	440	-101
68+00	6800.00	50.00	0.00	0.00	56.58	0	0	103	339	543	-204
68+50	6850.00	50.00	0.22	0.00	55.20	0	0	104	339	647	-308
69+00	6900.00	50.00	0.05	0.00	50.70	0	0	98	339	745	-406
69+50	6950.00	50.00	1.15	0.00	48.14	1	0	92	340	837	-497
70+00	7000.00	50.00	3.32	0.00	34.82	4	0	77	344	914	-570
70+50	7050.00	50.00	6.35	0.00	35.11	9	0	65	353	979	-626
71+00	7100.00	50.00	13.50	0.00	29.07	18	0	59	371	1,038	-667
71+50	7150.00	50.00	13.58	0.00	28.16	25	0	53	396	1,091	-695
72+00	7200.00	50.00	13.23	0.00	22.50	25	0	47	421	1,138	-717
72+50	7250.00	50.00	12.85	0.00	19.46	24	0	39	445	1,177	-732
73+00	7300.00	50.00	11.55	0.00	16.00	23	0	33	468	1,210	-742
73+50	7350.00	50.00	10.66	0.00	10.53	21	0	25	489	1,235	-746
74+00	7400.00	50.00	16.48	0.00	3.64	25	0	13	514	1,248	-734
74+50	7450.00	50.00	18.83	0.00	0.05	33	0	3	547	1,251	-704
75+00	7500.00	50.00	8.91	0.00	1.03	26	0	1	573	1,252	-679
75+50	7550.00	50.00	7.05	0.00	2.01	15	0	3	588	1,255	-667
76+00	7600.00	50.00	7.00	0.00	0.79	13	0	3	601	1,258	-657
76+50	7650.00	50.00	5.54	0.00	1.51	12	0	2	613	1,260	-647
77+00	7700.00	50.00	4.17	0.00	1.93	9	0	3	622	1,263	-641
77+50	7750.00	50.00	4.14	0.00	1.10	8	0	3	630	1,266	-636
78+00	7800.00	50.00	4.21	0.00	0.27	8	0	1	638	1,267	-629
78+36	7836.00	36.00	4.10	0.00	0.16	6	0	0	644	1,267	-623
				COLUMN TOTALS		644	0	1267			

DIVISION 1A - East Crossover

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
									1.00	1.00	
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
129+14	12914.00	0.00	7.62	0.00	0.00	0	0	0	0	0	0
129+50	12950.00	36.00	7.82	0.00	0.00	10	0	0	10	0	10
130+00	13000.00	50.00	8.05	0.00	0.00	15	0	0	25	0	25
130+50	13050.00	50.00	8.61	0.00	0.00	15	0	0	40	0	40
131+00	13100.00	50.00	9.41	0.00	0.00	17	0	0	57	0	57
131+50	13150.00	50.00	10.51	0.00	0.00	18	0	0	75	0	75
132+00	13200.00	50.00	12.12	0.00	0.00	21	0	0	96	0	96
132+50	13250.00	50.00	15.63	0.00	0.00	26	0	0	122	0	122
133+00	13300.00	50.00	18.34	0.00	0.00	31	0	0	153	0	153
133+50	13350.00	50.00	20.61	0.00	0.05	36	0	0	189	0	189
134+00	13400.00	50.00	16.61	0.00	0.30	34	0	0	223	0	223
134+50	13450.00	50.00	18.76	0.00	3.63	33	0	4	256	4	252
135+00	13500.00	50.00	15.82	0.00	10.72	32	0	13	288	17	271
135+50	13550.00	50.00	13.20	0.00	16.94	27	0	26	315	43	272
136+00	13600.00	50.00	7.81	0.00	21.55	19	0	36	334	79	255
136+50	13650.00	50.00	3.63	0.00	24.60	11	0	43	345	122	223
137+00	13700.00	50.00	1.09	0.00	26.89	4	0	48	349	170	179
137+50	13750.00	50.00	0.00	0.00	44.80	1	0	66	350	236	114
138+00	13800.00	50.00	1.32	0.00	33.03	1	0	72	351	308	43
138+50	13850.00	50.00	2.97	0.00	32.28	4	0	60	355	368	-13
139+00	13900.00	50.00	5.37	0.00	31.66	8	0	59	363	427	-64
139+50	13950.00	50.00	8.25	0.00	23.88	13	0	51	376	478	-102
140+00	14000.00	50.00	10.10	0.00	27.48	17	0	48	393	526	-133
140+50	14050.00	50.00	13.78	0.00	22.29	22	0	46	415	572	-157
141+00	14100.00	50.00	11.83	0.00	19.13	24	0	38	439	610	-171
141+50	14150.00	50.00	14.40	0.00	12.92	24	0	30	463	640	-177
142+00	14200.00	50.00	14.36	0.00	7.52	27	0	19	490	659	-169
142+50	14250.00	50.00	13.79	0.00	3.43	26	0	10	516	669	-153
143+00	14300.00	50.00	14.39	0.00	0.00	26	0	3	542	672	-130
143+50	14350.00	50.00	15.89	0.00	0.00	28	0	0	570	672	-102
144+00	14400.00	50.00	16.49	0.00	0.00	30	0	0	600	672	-72
144+50	14450.00	50.00	13.88	0.00	0.00	28	0	0	628	672	-44
145+00	14500.00	50.00	13.35	0.00	0.00	25	0	0	653	672	-19
145+50	14550.00	50.00	11.52	0.00	0.00	23	0	0	676	672	4
146+00	14600.00	50.00	10.16	0.00	0.00	20	0	0	696	672	24
146+50	14650.00	50.00	9.93	0.00	0.00	19	0	0	715	672	43
147+00	14700.00	50.00	9.73	0.00	0.00	18	0	0	733	672	61
147+32	14732.00	32.00	9.34	0.00	0.00	11	0	0	744	672	72
				COLUMN TOTALS		744	0	672			

DIVISION 1B - STH 29

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	1.00 NOTE 1	1.00	NOTE 8
100+22	10021.86	0.00	43.63	1.67	5.92	0	0	0	0	0	0
100+50	10050.00	28.14	45.08	1.67	6.74	46	2	7	46	7	37
101+00	10100.00	50.00	50.73	1.67	2.61	89	3	9	135	16	114
101+50	10150.00	50.00	48.79	1.67	2.53	92	3	5	227	21	198
102+00	10200.00	50.00	75.29	1.67	0.00	115	3	2	342	23	308
102+50	10250.00	50.00	62.27	1.67	0.21	127	3	0	469	23	432
103+00	10300.00	50.00	61.50	1.67	0.28	115	3	0	584	23	544
103+50	10350.00	50.00	53.27	1.67	1.38	106	3	2	690	25	645
104+00	10400.00	50.00	59.95	1.67	0.24	105	3	2	795	27	745
104+50	10450.00	50.00	66.51	1.67	0.00	117	3	0	912	27	859
105+00	10500.00	50.00	67.50	1.67	6.23	124	3	6	1,036	33	974
105+50	10550.00	50.00	71.65	1.67	6.26	129	3	12	1,165	45	1,088
106+00	10600.00	50.00	79.48	1.67	4.65	140	3	10	1,305	55	1,215
106+50	10650.00	50.00	107.01	1.67	0.03	173	3	4	1,478	59	1,381
107+00	10700.00	50.00	29.30	1.67	0.00	126	3	0	1,604	59	1,504
107+50	10750.00	50.00	29.44	1.67	0.00	54	3	0	1,658	59	1,555
108+00	10800.00	50.00	29.81	1.67	0.00	55	3	0	1,713	59	1,607
108+50	10850.00	50.00	28.01	1.67	0.00	54	3	0	1,767	59	1,658
109+00	10900.00	50.00	53.62	1.67	0.00	76	3	0	1,843	59	1,731
109+50	10950.00	50.00	30.62	1.67	0.03	78	3	0	1,921	59	1,806
				COLUMN TOTALS		1921	56	59			

DIVISION 1B - CTH U

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
						NOTE 1	NOTE 2	NOTE 3	1.00 NOTE 1	1.00	NOTE 8
200+00	20000.00	0.00	91.09	0.00	0.15	0	0	0	0	0	0
200+50	20050.00	50.00	117.79	0.00	0.27	193	0	0	193	0	193
201+00	20100.00	50.00	144.19	0.00	3.21	243	0	3	436	3	433
201+50	20150.00	50.00	250.51	0.00	8.55	365	0	11	801	14	787
202+00	20200.00	50.00	464.11	0.00	0.00	662	0	8	1,463	22	1,441
				COLUMN TOTALS		1463	0	22			

9

9

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	EARTHWORK	SHEET:	E

FILE NAME : \\milw00\ingrproj\68977\C3D\38390373\SheetsPlan\090101_ew.ppt
PLOT DATE : 1/29/2021 5:53:31 PM PLOT BY : LZIDEK PLOT NAME : 090101_ew3 PLOT SCALE : 1:1

DIVISION 1B - West Temporary Widening

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
									1.00	1.00	
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
93+05	9304.79	0.00	3.33	1.67	0.00	0	0	0	0	0	0
93+50	9350.00	45.21	5.92	1.67	0.00	8	3	0	8	0	5
94+00	9400.00	50.00	7.59	1.67	0.00	13	3	0	21	0	15
94+50	9450.00	50.00	13.88	1.67	0.00	20	3	0	41	0	32
95+00	9500.00	50.00	7.81	1.67	0.00	20	3	0	61	0	49
95+50	9550.00	50.00	2.61	1.67	0.00	10	3	0	71	0	56
96+00	9600.00	50.00	0.69	1.67	0.00	3	3	0	74	0	56
96+50	9650.00	50.00	2.19	1.67	0.00	3	3	0	77	0	56
97+00	9700.00	50.00	0.69	1.67	0.00	3	3	0	80	0	56
97+50	9750.00	50.00	0.09	1.67	0.00	1	3	0	81	0	54
98+00	9800.00	50.00	0.15	1.67	0.00	0	3	0	81	0	51
98+50	9850.00	50.00	0.11	1.67	0.00	0	3	0	81	0	48
99+00	9900.00	50.00	0.17	1.67	0.00	0	3	0	81	0	45
99+50	9950.00	50.00	0.04	1.67	0.00	0	3	0	81	0	42
99+99	9999.00	49.00	0.17	1.67	0.00	0	3	0	81	0	39
				COLUMN TOTALS		81	42	0			

DIVISION 1B - East Temporary Widening

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
									1.00	1.00	
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
109+50	10950.00	0.00	30.62	1.67	0.03	0	0	0	0	0	0
110+00	11000.00	50.00	34.24	1.67	0.07	60	3	0	60	0	57
110+50	11050.00	50.00	37.46	1.67	0.16	66	3	0	126	0	120
111+00	11100.00	50.00	33.93	1.67	0.24	66	3	0	192	0	183
111+50	11150.00	50.00	37.11	1.67	0.24	66	3	0	258	0	246
112+00	11200.00	50.00	56.95	1.67	0.01	87	3	0	345	0	330
112+50	11250.00	50.00	45.86	1.67	0.17	95	3	0	440	0	422
113+00	11300.00	50.00	37.02	1.67	1.21	77	3	1	517	1	495
113+50	11350.00	50.00	28.08	1.67	0.17	60	3	1	577	2	551
114+00	11400.00	50.00	22.32	1.67	0.68	47	3	1	624	3	594
114+50	11450.00	50.00	9.96	1.67	0.24	30	3	1	654	4	620
115+00	11500.00	50.00	10.08	1.67	0.21	19	3	0	673	4	636
115+50	11550.00	50.00	10.09	1.67	0.35	19	3	1	692	5	651
116+00	11600.00	50.00	10.32	1.67	0.26	19	3	1	711	6	666
116+50	11650.00	50.00	10.33	1.67	0.24	19	3	0	730	6	682
117+00	11700.00	50.00	10.37	1.67	0.31	19	3	1	749	7	697
117+50	11750.00	50.00	10.41	1.67	0.19	19	3	0	768	7	713
118+00	11800.00	50.00	10.23	1.67	0.35	19	3	1	787	8	728
118+50	11850.00	50.00	10.11	1.67	0.40	19	3	1	806	9	743
119+00	11900.00	50.00	10.21	1.67	0.34	19	3	1	825	10	758
119+25	11925.00	25.00	10.25	1.67	0.30	9	2	0	834	10	765
				COLUMN TOTALS		834	59	10			

DIVISION 2 - STH 29

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
									1.00	1.00	
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
100+22	10021.86	0.00	0.26	0.00	37.75	0	0	0	0	0	0
100+50	10050.00	28.14	107.60	0.00	0.00	56	0	20	56	20	36
101+00	10100.00	50.00	60.88	0.00	31.16	156	0	29	212	49	163
101+50	10150.00	50.00	68.65	0.00	18.56	120	0	46	332	95	237
102+00	10200.00	50.00	72.94	0.00	21.26	131	0	37	463	132	331
102+50	10250.00	50.00	76.67	0.00	24.10	139	0	42	602	174	428
103+00	10300.00	50.00	76.57	0.00	26.73	142	0	47	744	221	523
103+50	10350.00	50.00	81.87	0.00	23.18	147	0	46	891	267	624
104+00	10400.00	50.00	82.75	0.00	20.93	152	0	41	1,043	308	735
104+50	10450.00	50.00	92.85	0.00	17.44	163	0	36	1,206	344	862
105+00	10500.00	50.00	108.42	0.00	13.31	186	0	28	1,392	372	1,020
105+50	10550.00	50.00	114.50	0.00	12.87	206	0	24	1,598	396	1,202
106+00	10600.00	50.00	254.78	21.67	12.42	342	20	23	1,940	419	1,501
106+50	10650.00	50.00	243.66	21.67	20.28	462	40	30	2,402	449	1,893
107+00	10700.00	50.00	208.70	21.67	5.04	419	40	23	2,821	472	2,249
107+50	10750.00	50.00	254.76	21.67	0.00	429	40	5	3,250	477	2,633
108+00	10800.00	50.00	268.00	21.67	0.00	484	40	0	3,734	477	3,077
108+50	10850.00	50.00	361.37	21.67	18.81	583	40	17	4,317	494	3,603
109+00	10900.00	50.00	375.31	21.67	25.43	682	40	41	4,999	535	4,204
109+50	10950.00	50.00	361.69	21.67	29.81	682	40	51	5,681	586	4,795
110+00	11000.00	50.00	382.48	21.67	9.22	689	40	36	6,370	622	5,408
110+50	11050.00	50.00	383.17	21.67	6.60	709	40	15	7,079	637	6,062
111+00	11100.00	50.00	399.07	21.67	0.87	724	40	7	7,803	644	6,739
111+50	11150.00	50.00	345.79	21.67	21.30	690	40	21	8,493	665	7,368
112+00	11200.00	50.00	331.44	21.67	3.85	627	40	23	9,120	688	7,932
112+50	11250.00	50.00	299.65	21.67	21.44	584	40	23	9,704	711	8,453
113+00	11300.00	50.00	296.59	21.67	19.32	552	40	38	10,256	749	8,927
113+50	11350.00	50.00	308.03	21.67	10.56	560	40	28	10,816	777	9,419
114+00	11400.00	50.00	315.37	21.67	4.24	577	40	14	11,393	791	9,942
114+50	11450.00	50.00	230.19	21.67	23.95	505	40	26	11,898	817	10,381
115+00	11500.00	50.00	218.78	21.67	42.70	416	40	62	12,314	879	10,695
115+50	11550.00	50.00	238.46	21.67	2.32	423	40	42	12,737	921	11,036
116+00	11600.00	50.00	154.33	21.67	39.17	364	40	38	13,101	959	11,322
116+50	11650.00	50.00	150.63	21.67	0.00	282	40	36	13,383	995	11,528
117+00	11700.00	50.00	139.81	21.67	0.00	269	40	0	13,652	995	11,757
117+50	11750.00	50.00	129.76	21.67	0.00	250	40	0	13,902	995	11,967
118+00	11800.00	50.00	102.91	21.67	1.89	215	40	2	14,117	997	12,044
118+50	11850.00	50.00	89.53	21.67	2.65	178	40	4	14,295	1,001	11,986
119+00	11900.00	50.00	73.99	21.67	7.90	151	40	10	14,446	1,011	10,777
119+50	11950.00	50.00	64.50	21.67	8.79	128	40	15	14,574	1,026	8,885
120+00	12000.00	50.00	56.94	21.67	12.91	112	40	20	14,686	1,046	4,537
120+50	12050.00	50.00	54.02	21.67	15.43	103	40	26	14,789	1,072	-1,146
120+90	12090.00	40.00	145.22	21.67	38.21	148	32	40	14,937	1,112	-13,350
121+00	12100.00	10.00	136.75	21.67	34.45	52	8	13	14,989	1,125	-17,310
121+50	12150.00	50.00	44.09	21.67	30.88	167	40	60	15,156	1,185	-39,503
122+00	12200.00	50.00	61.32	21.67	16.70	98	40	44	15,254	1,229	-55,813
122+50	12250.00	50.00	58.02	21.67	23.25	111	40	37	15,365	1,266	-71,245
123+00	12300.00	50.00	69.49	21.67	17.63	118	40	38	15,483	1,304	-87,089
123+50	12350.00	50.00	84.07	21.67	12.74	142	40	28	15,625	1,332	-100,203

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DIVISION 2 - STH 29 (CONTINUED)

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
									1.00	1.00	
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
124+00	12400.00	50.00	96.11	21.67	8.93	167	40	20	15,792	1,352	-109,516
124+50	12450.00	50.00	106.84	21.67	8.35	188	40	16	15,980	1,368	-117,000
125+00	12500.00	50.00	129.80	21.67	0.00	219	40	8	16,199	1,376	-120,637
125+50	12550.00	50.00	133.23	21.67	0.00	244	40	0	16,443	1,376	-120,433
126+00	12600.00	50.00	139.01	21.67	0.00	252	40	0	16,695	1,376	-120,221
126+50	12650.00	50.00	145.17	21.67	0.00	263	40	0	16,958	1,376	-119,998
127+00	12700.00	50.00	142.70	21.67	0.00	267	40	0	17,225	1,376	-119,771
127+50	12750.00	50.00	126.81	21.67	0.00	250	40	0	17,475	1,376	-119,561
128+00	12800.00	50.00	139.05	21.67	0.00	246	40	0	17,721	1,376	-119,355
128+13	12813.41	13.41	142.17	21.67	0.00	70	11	0	17,791	1,376	-119,296
				COLUMN TOTALS		17791	1791	1376			

DIVISION 2 - CTH U

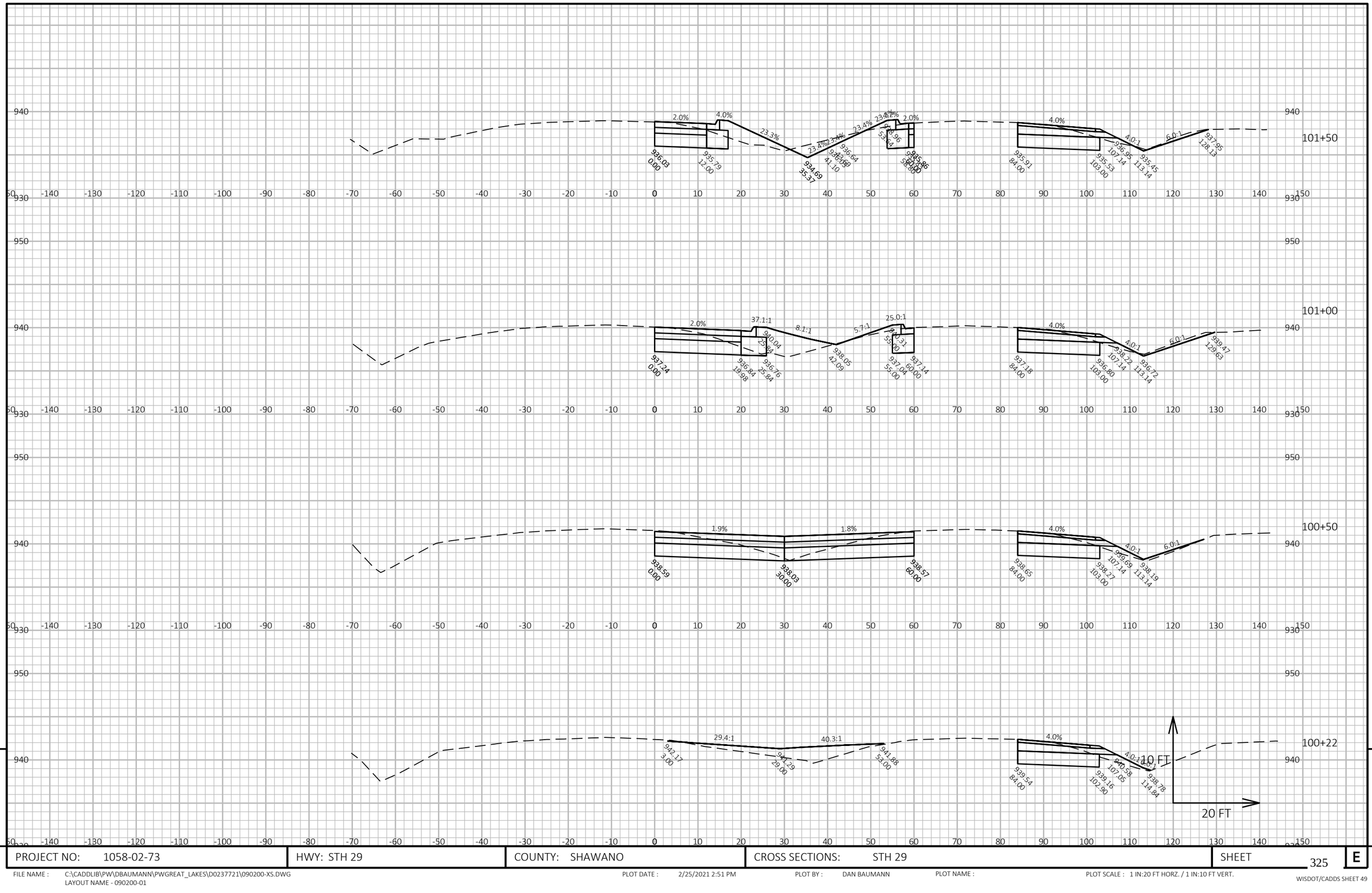
STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
									1.00	1.00	
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
203+50	20350.00	0.00	444.47	0.00	0.28	0	0	0	0	0	0
204+00	20400.00	50.00	235.34		0.00	629	0	0	629	0	629
204+50	20450.00	50.00	146.15	0.00	0.00	353	0	0	982	0	982
205+00	20500.00	50.00	110.45	0.00	0.00	238	0	0	1,220	0	1,220
205+19	20519.16	19.16	106.06	0.00	0.00	77	0	0	1,297	0	1,297
				COLUMN TOTALS		1297	0	0			

DIVISION 3 - Remove West Crossover

STATION	REAL STATION	DISTANCE				INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
									1.00	1.00	
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
59+25	5925.00	0.00	0.09	0.00	0.00	0	0	0	0	0	0
59+50	5950.00	25.00	0.05	0.00	0.00	0	0	0	0	0	0
60+00	6000.00	50.00	0.06	0.00	0.00	0	0	0	0	0	0
60+50	6050.00	50.00	0.30	0.00	0.00	0	0	0	0	0	0
61+00	6100.00	50.00	1.75	0.00	0.00	2	0	0	2	0	2
61+50	6150.00	50.00	3.85	0.00	0.00	5	0	0	7	0	7
62+00	6200.00	50.00	6.83	0.00	0.00	10	0	0	17	0	17
62+50	6250.00	50.00	8.03	0.00	0.00	14	0	0	31	0	31
63+00	6300.00	50.00	1.01	0.00	0.00	8	0	0	39	0	39
63+50	6350.00	50.00	0.19	0.00	0.00	1	0	0	40	0	40
64+00	6400.00	50.00	1.76	0.00	0.00	2	0	0	42	0	42
64+50	6450.00	50.00	24.80	0.00	0.00	25	0	0	67	0	67
65+00	6500.00	50.00	28.90	0.00	0.00	50	0	0	117	0	117
65+50	6550.00	50.00	32.83	0.00	0.00	57	0	0	174	0	174
66+00	6600.00	50.00	44.58	0.00	0.00	72	0	0	246	0	246
66+50	6650.00	50.00	48.16	0.00	0.00	86	0	0	332	0	332
67+00	6700.00	50.00	59.18	0.00	0.00	99	0	0	431	0	431
67+50	6750.00	50.00	68.03	0.00	0.00	118	0	0	549	0	549
68+00	6800.00	50.00	70.73	0.00	0.00	128	0	0	677	0	677
68+50	6850.00	50.00	69.00	0.00	0.00	129	0	0	806	0	806
69+00	6900.00	50.00	63.38	0.00	0.00	123	0	0	929	0	929
69+50	6950.00	50.00	60.18	0.00	0.00	114	0	0	1,043	0	1,043
70+00	7000.00	50.00	43.53	0.00	0.00	96	0	0	1,139	0	1,139
70+50	7050.00	50.00	43.89	0.00	0.00	81	0	0	1,220	0	1,220
71+00	7100.00	50.00	36.34	0.00	0.00	74	0	0	1,294	0	1,294
71+50	7150.00	50.00	35.20	0.00	0.00	66	0	0	1,360	0	1,360
72+00	7200.00	50.00	28.13	0.00	0.00	59	0	0	1,419	0	1,419
72+50	7250.00	50.00	24.33	0.00	0.00	49	0	0	1,468	0	1,468
73+00	7300.00	50.00	20.00	0.00	0.00	41	0	0	1,509	0	1,509
73+50	7350.00	50.00	13.16	0.00	0.00	31	0	0	1,540	0	1,540
74+00	7400.00	50.00	4.55	0.00	0.00	16	0	0	1,556	0	1,556
74+50	7450.00	50.00	0.06	0.00	0.00	4	0	0	1,560	0	1,560
75+00	7500.00	50.00	1.29	0.00	0.00	1	0	0	1,561	0	1,561
75+50	7550.00	50.00	2.51	0.00	0.00	4	0	0	1,565	0	1,565
76+00	7600.00	50.00	0.99	0.00	0.00	3	0	0	1,568	0	1,568
76+50	7650.00	50.00	1.89	0.00	0.00	3	0	0	1,571	0	1,571
77+00	7700.00	50.00	2.41	0.00	0.00	4	0	0	1,575	0	1,575
77+50	7750.00	50.00	1.38	0.00	0.00	4	0	0	1,579	0	1,579
78+00	7800.00	50.00	0.34	0.00	0.00	2	0	0	1,581	0	1,581
78+36	7836.00	36.00	0.20	0.00	0.00	0	0	0	1,581	0	1,581
						1581	0	0			

DIVISION 3 - Remove East Crossover

STATION	REAL STATION	DISTANCE	AREA (SF)			INCREMENTAL VOL (CY) (UNADJUSTED)			CUMULATIVE VOL (CY)		
			CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	SALVAGED/UNUSABLE PAVEMENT MATERIAL	FILL	CUT	EXPANDED FILL	MASS ORDINATE
									1.00	1.00	
						NOTE 1	NOTE 2	NOTE 3	NOTE 1		NOTE 8
129+14	12914.00	0.00	0.00	0.00	0.00	0	0	0	0	0	0
129+50	12950.00	36.00	0.00	0.00	0.00	0	0	0	0	0	0
130+00	13000.00	50.00	0.00	0.00	0.00	0	0	0	0	0	0
130+50	13050.00	50.00	0.00	0.00	0.00	0	0	0	0	0	0
131+00	13100.00	50.00	0.00	0.00	0.00	0	0	0	0	0	0
131+50	13150.00	50.00	0.00	0.00	0.00	0	0	0	0	0	0
132+00	13200.00	50.00	0.00	0.00	0.00	0	0	0	0	0	0
132+50	13250.00	50.00	0.00	0.00	0.00	0	0	0	0	0	0
133+00	13300.00	50.00	0.00	0.00	0.00	0	0	0	0	0	0
133+50	13350.00	50.00	0.06	0.00	0.00	0	0	0	0	0	0
134+00	13400.00	50.00	0.38	0.00	0.00	0	0	0	0	0	0
134+50	13450.00	50.00	4.54	0.00	0.00	5	0	0	5	0	5
135+00	13500.00	50.00	13.40	0.00	0.00	17	0	0	22	0	22
135+50	13550.00	50.00	21.18	0.00	0.00	32	0	0	54	0	54
136+00	13600.00	50.00	26.94	0.00	0.00	45	0	0	99	0	99
136+50	13650.00	50.00	30.75	0.00	0.00	53	0	0	152	0	152
137+00	13700.00	50.00	33.61	0.00	0.00	60	0	0	212	0	212
137+50	13750.00	50.00	56.00	0.00	0.00	83	0	0	295	0	295
138+00	13800.00	50.00	41.29	0.00	0.00	90	0	0	385	0	385
138+50	13850.00	50.00	40.35	0.00	0.00	76	0	0	461	0	461
139+00	13900.00	50.00	39.58	0.00	0.00	74	0	0	535	0	535
139+50	13950.00	50.00	29.85	0.00	0.00	64	0	0	599	0	599
140+00	14000.00	50.00	34.35	0.00	0.00	59	0	0	658	0	658
140+50	14050.00	50.00	27.86	0.00	0.00	58	0	0	716	0	716
141+00	14100.00	50.00	23.91	0.00	0.00	48	0	0	764	0	764
141+50	14150.00	50.00	16.15	0.00	0.00	37	0	0	801	0	801
142+00	14200.00	50.00	9.40	0.00	0.00	24	0	0	825	0	825
142+50	14250.00	50.00	4.29	0.00	0.00	13	0	0	838	0	838
143+00	14300.00	50.00	0.00	0.00	0.00	4	0	0	842	0	842
143+50	14350.00	50.00	0.00	0.00	0.00	0	0	0	842	0	842
144+00	14400.00	50.00	0.00	0.00	0.00	0	0	0	842	0	842
144+50	14450.00	50.00	0.00	0.00	0.00	0	0	0	842	0	842
145+00	14500.00	50.00	0.00	0.00	0.00	0	0	0	842	0	842
145+50	14550.00	50.00	0.00	0.00	0.00	0	0	0	842	0	842
146+00	14600.00	50.00	0.00	0.00	0.00	0	0	0	842	0	842
146+50	14650.00	50.00	0.00	0.00	0.00	0	0	0	842	0	842
147+00	14700.00	50.00	0.00	0.00	0.00	0	0	0	842	0	842
147+32	14732.00	32.00	0.00	0.00	0.00	0	0	0	842	0	842
				COLUMN TOTALS		842	0	0			

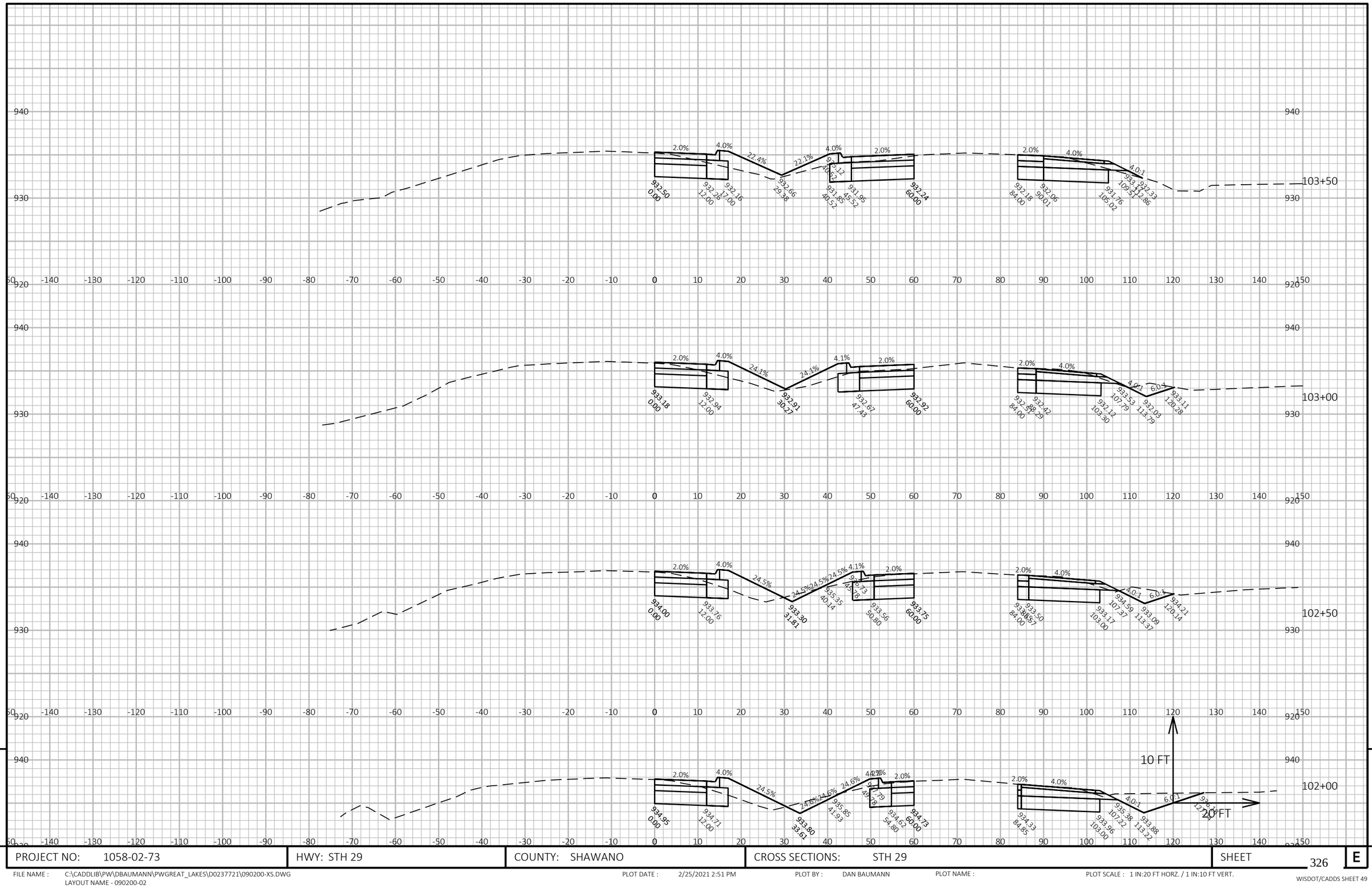


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WISDOT/CADDS SHEET 49



9

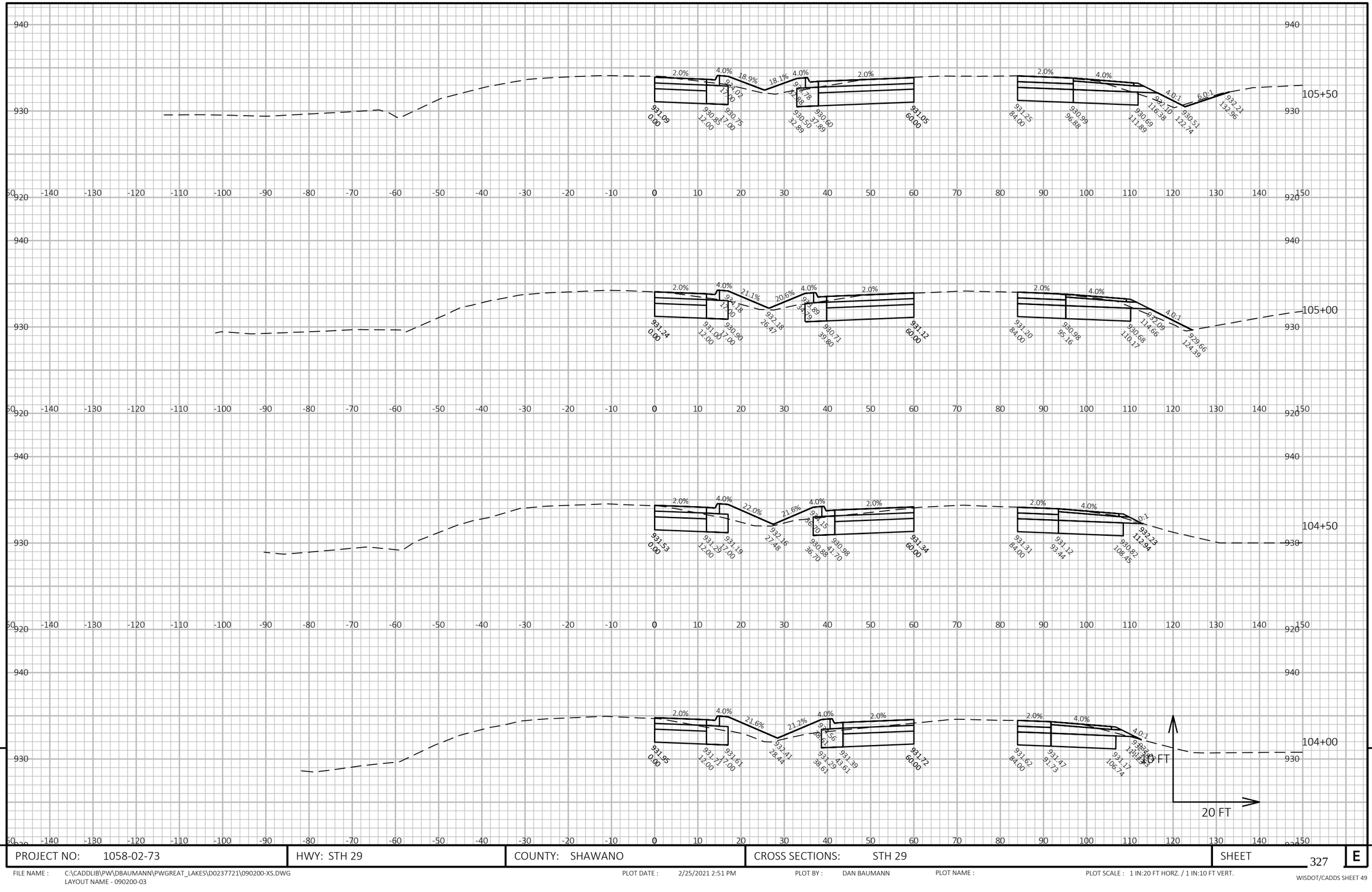
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LAYOUT NAME - 090200-02

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WISDOT/CADDS SHEET 49

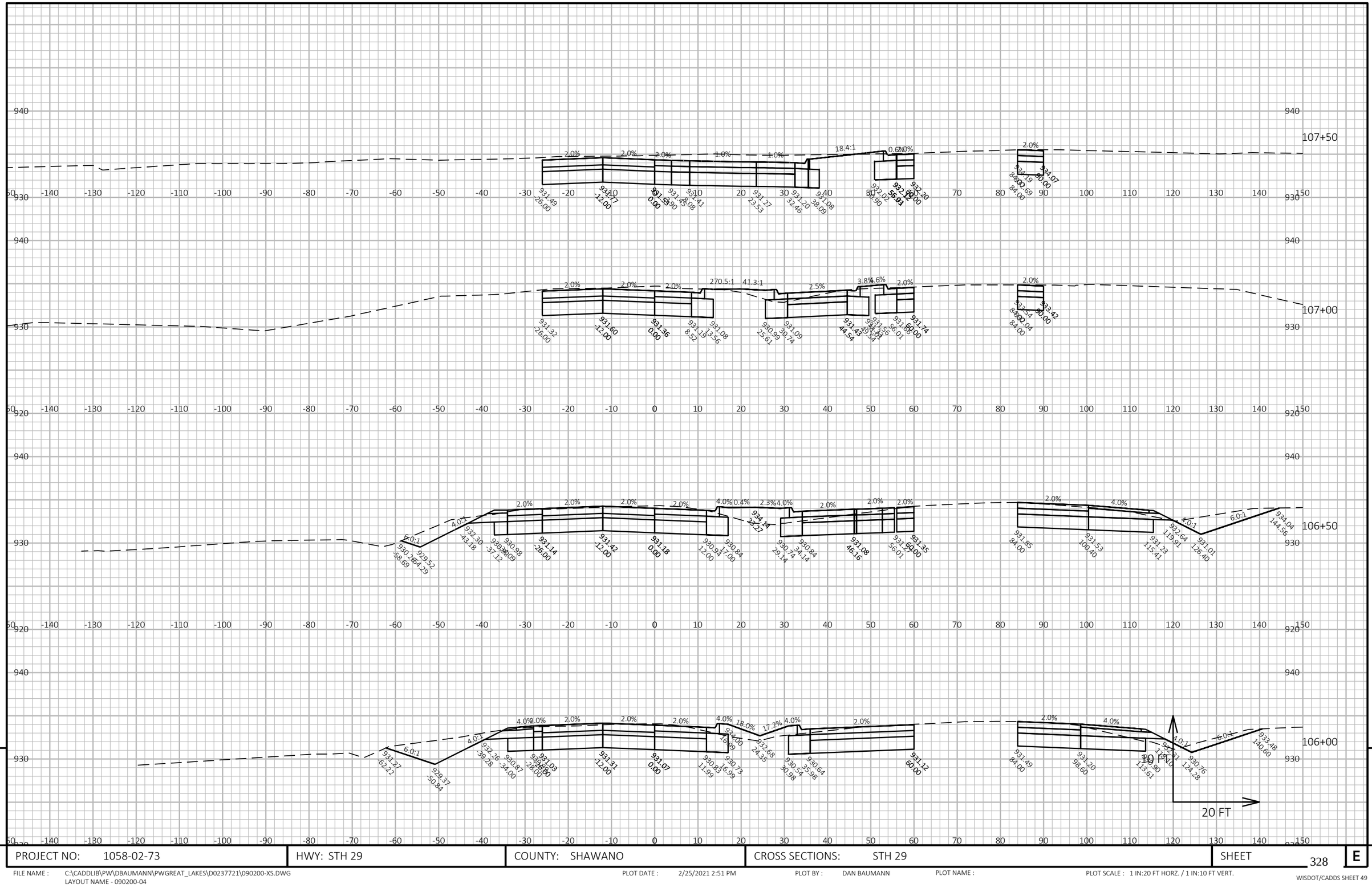


PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: STH 29	SHEET 327	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\090200-XS.DWG
LAYOUT NAME - 090200-03

PLOT DATE : 2/25/2021 2:51 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

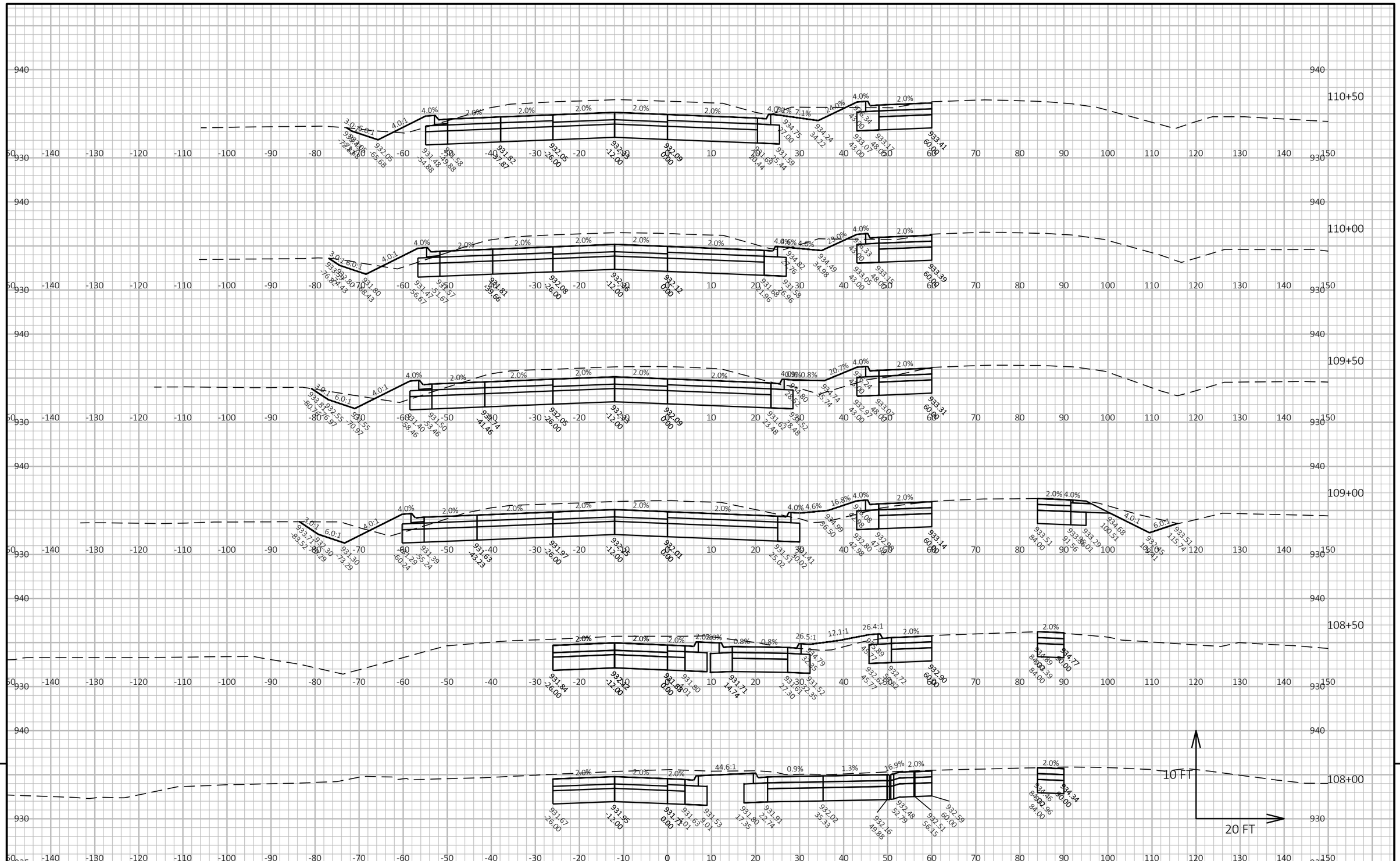
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PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: STH 29	SHEET 328	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\090200-XS.DWG
LAYOUT NAME - 090200-04

PLOT DATE : 2/25/2021 2:51 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

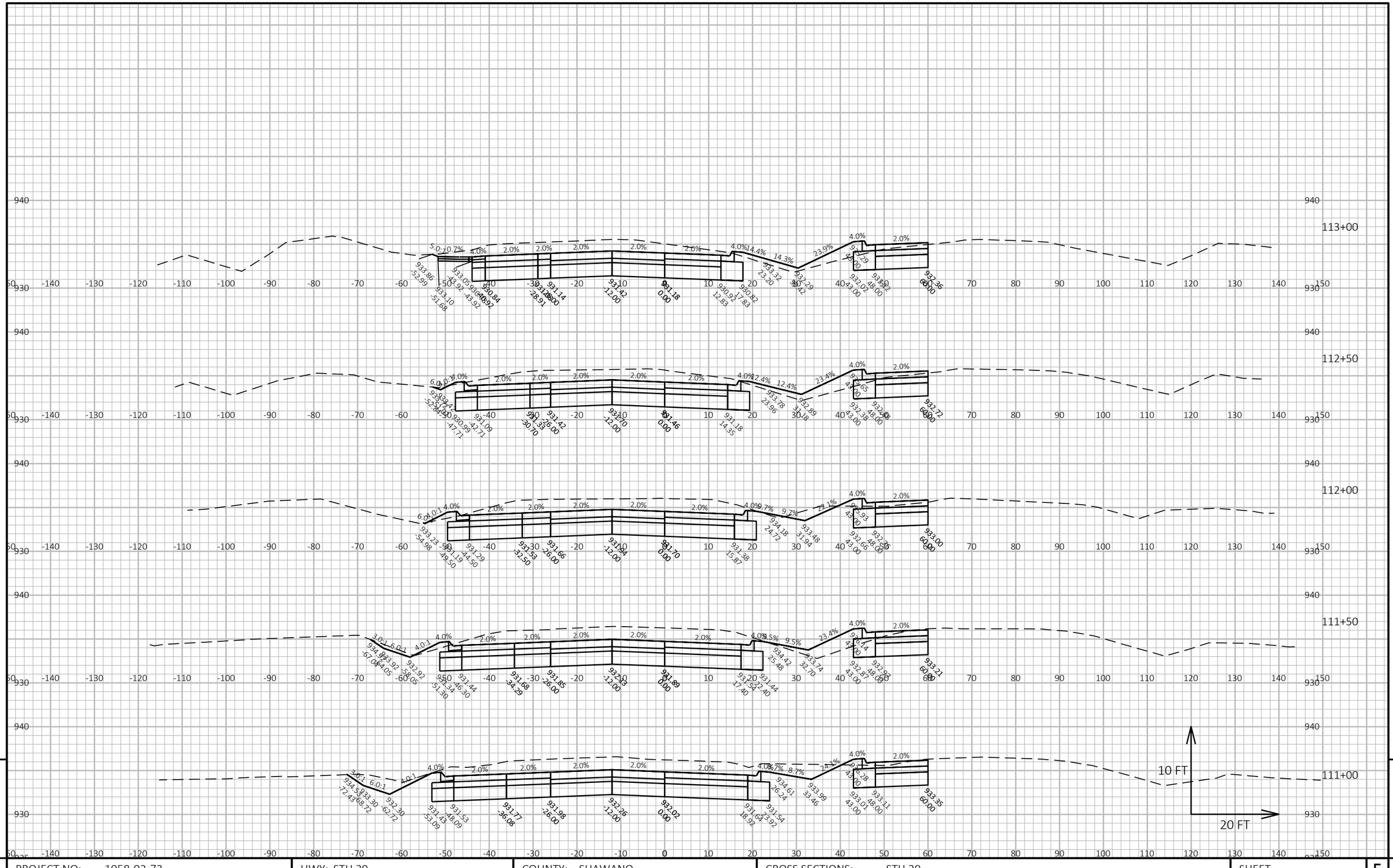


PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: STH 29	SHEET 329 E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\090200-XS.DWG
LAYOUT NAME - 090200-05

PLOT DATE : 2/25/2021 2:52 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

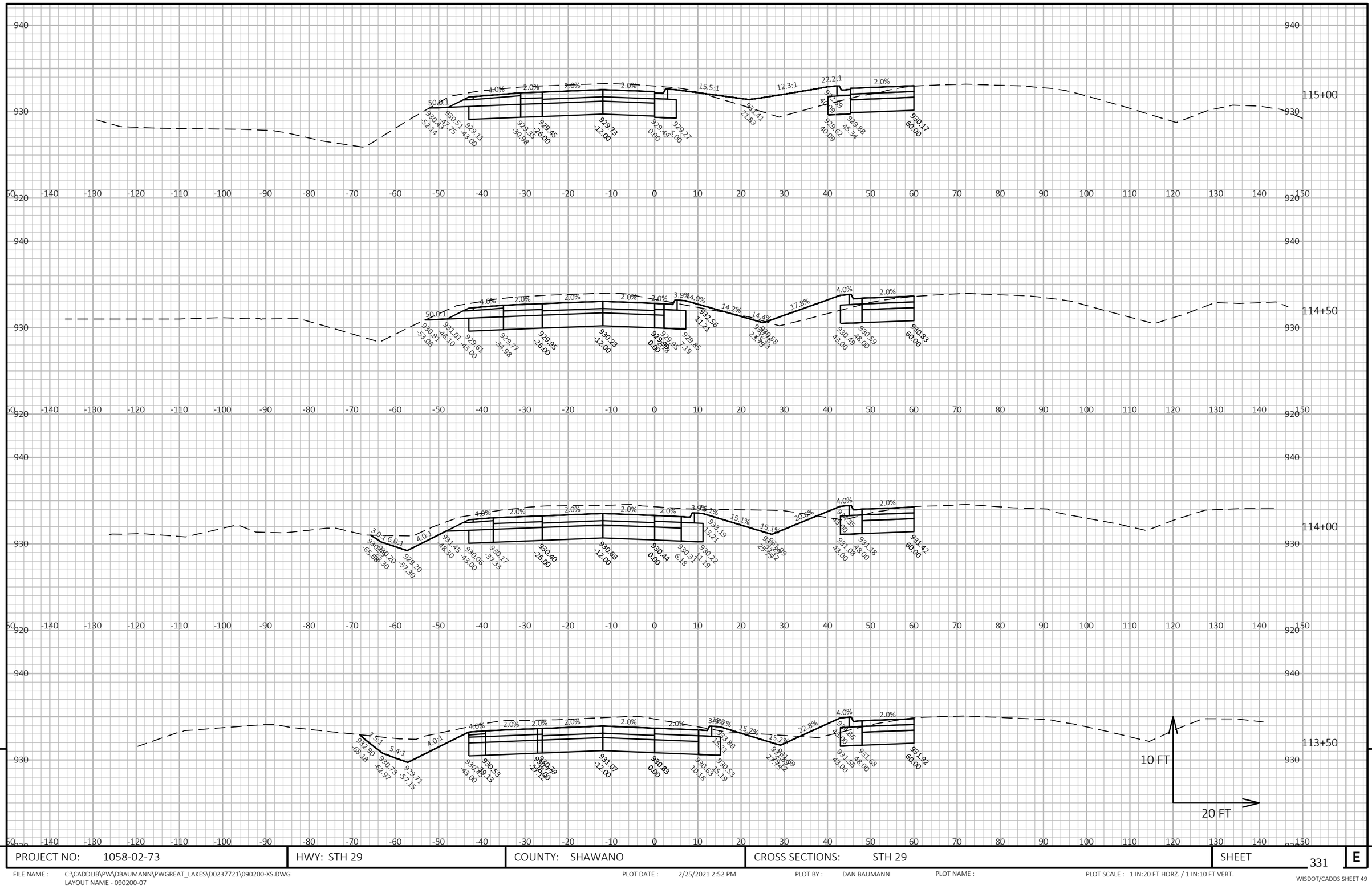
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PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: STH 29	SHEET 330	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\090200-XS.DWG
LAYOUT NAME - 090200-06

PLOT DATE : 2/25/2021 2:52 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

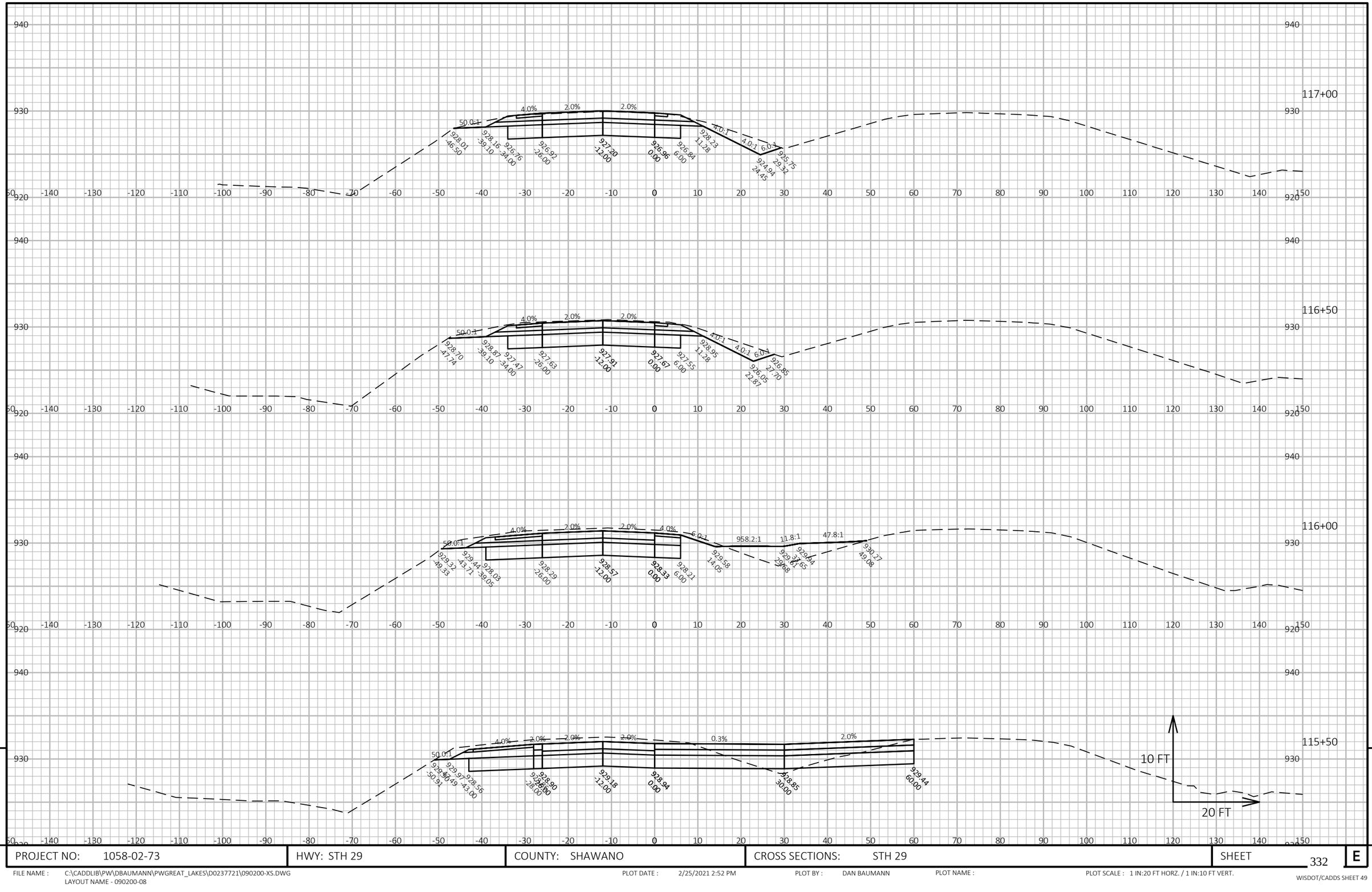


PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: STH 29	SHEET 331 E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\090200-XS.DWG
LAYOUT NAME - 090200-07

PLOT DATE : 2/25/2021 2:52 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

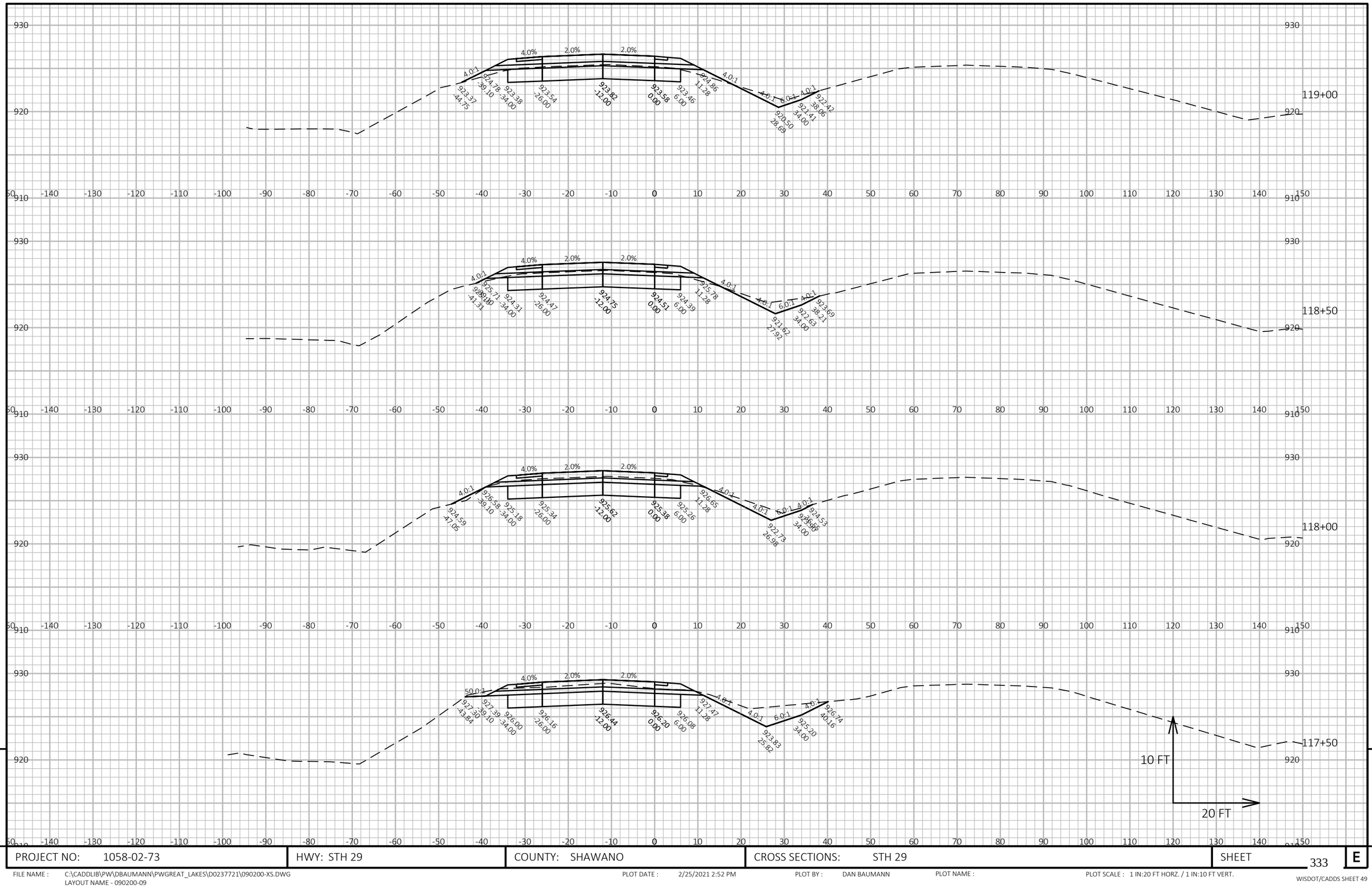


PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: STH 29	SHEET 332 E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\090200-XS.DWG
LAYOUT NAME - 090200-08

PLOT DATE : 2/25/2021 2:52 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

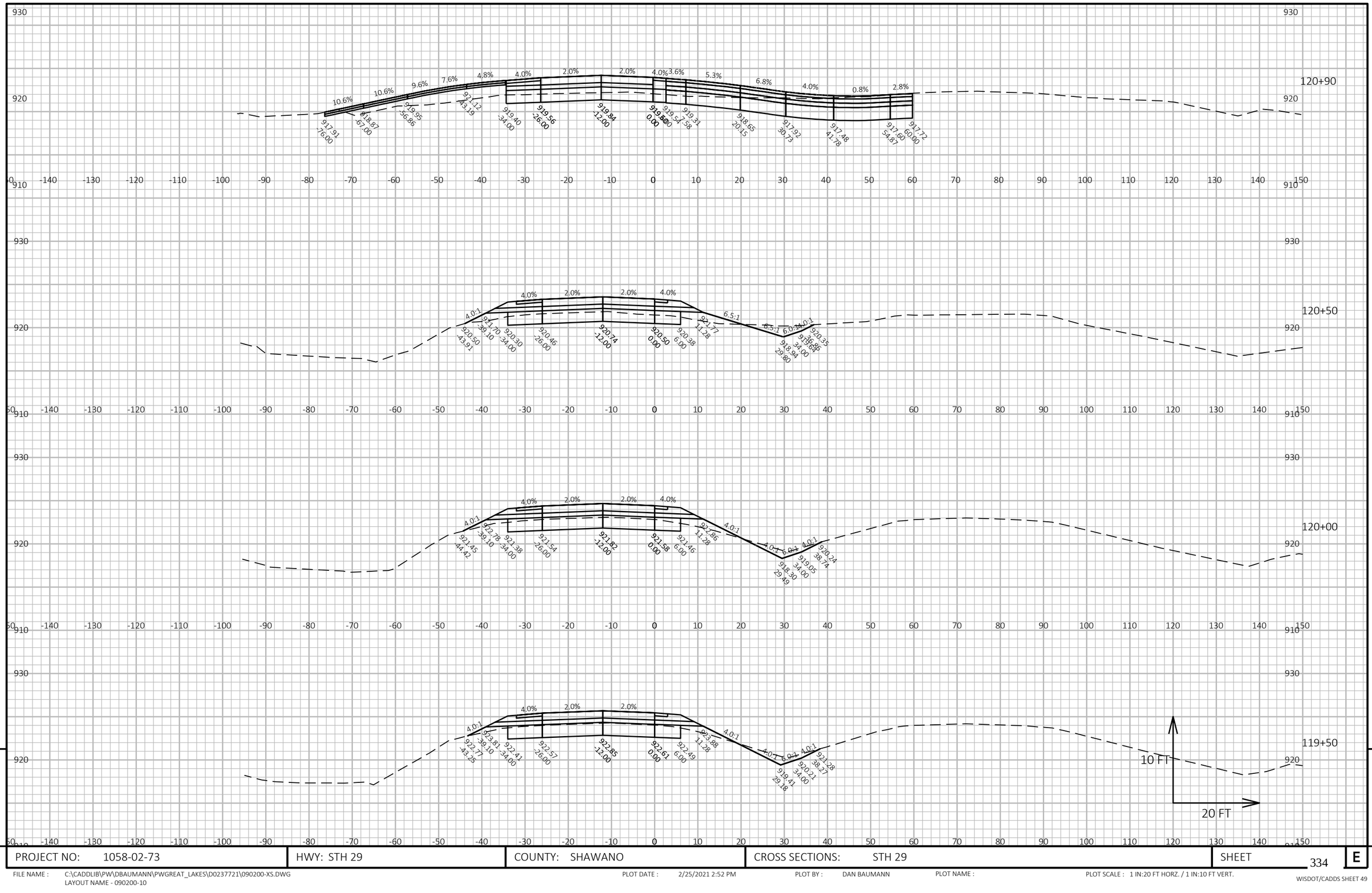


PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: STH 29	SHEET 333	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\090200-XS.DWG
LAYOUT NAME - 090200-09

PLOT DATE : 2/25/2021 2:52 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

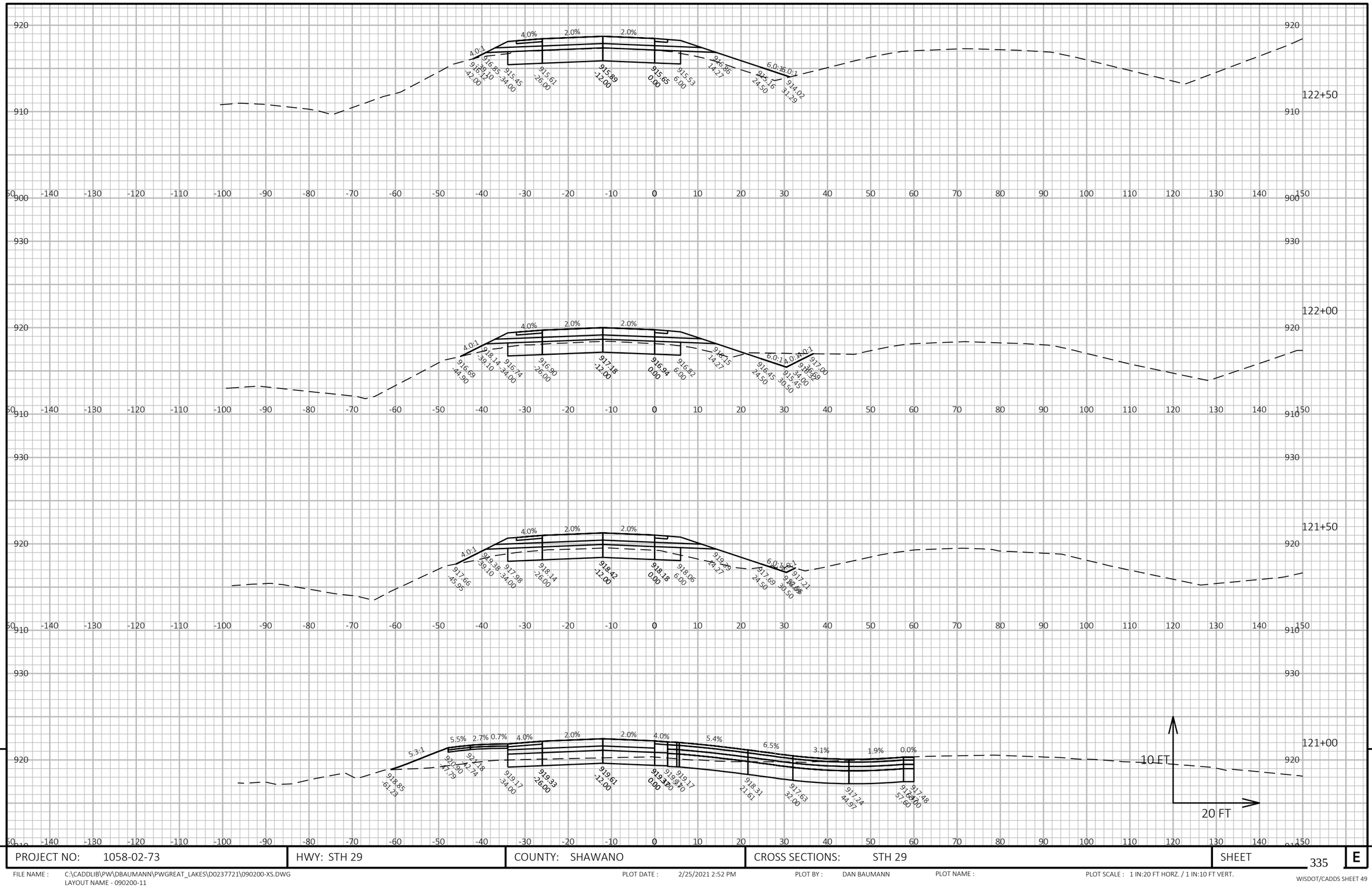
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PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: STH 29	SHEET 334	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\090200-XS.DWG
LAYOUT NAME - 090200-10

PLOT DATE : 2/25/2021 2:52 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

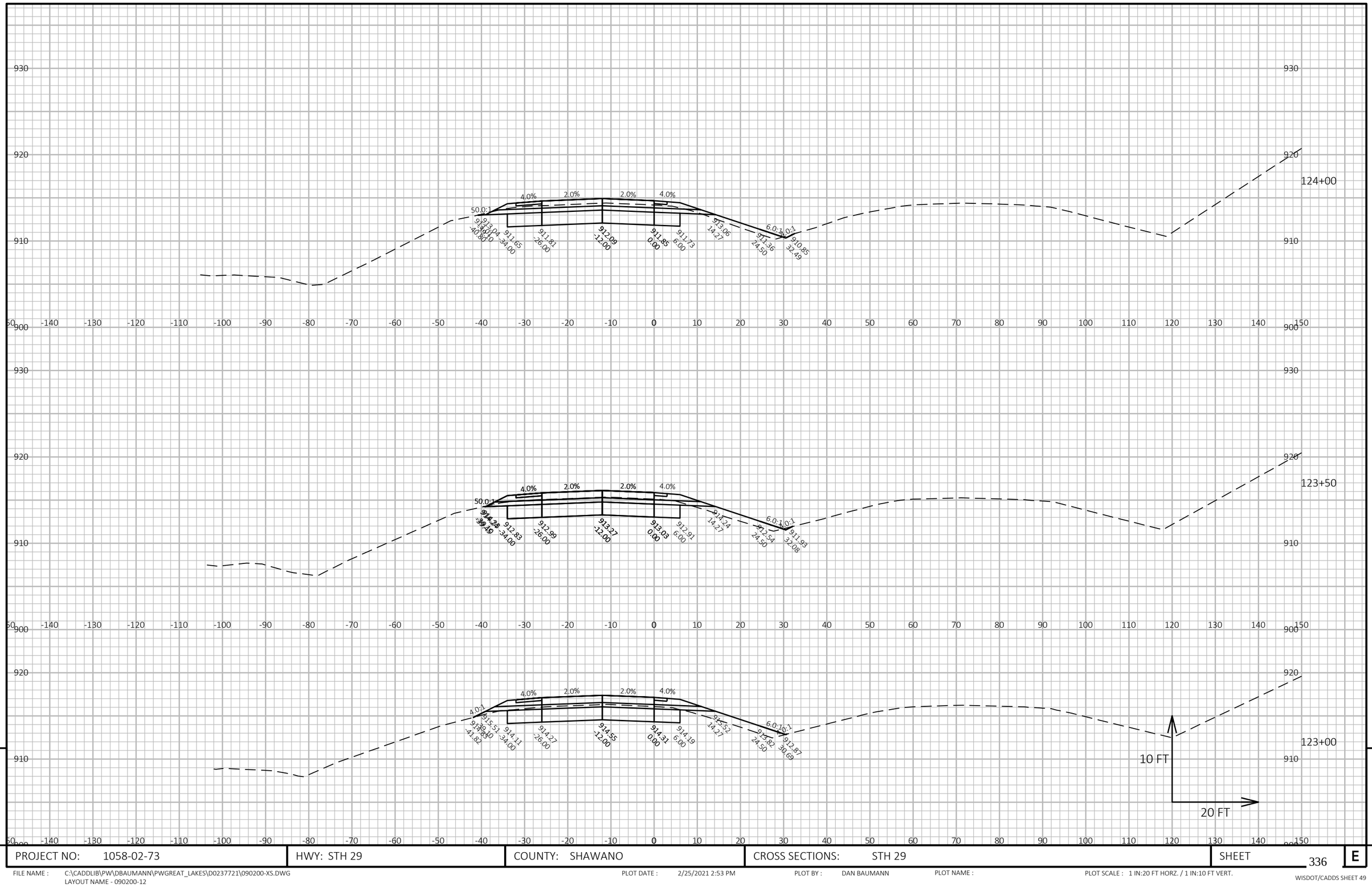


PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: STH 29	SHEET 335 E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\090200-XS.DWG
LAYOUT NAME - 090200-11

PLOT DATE : 2/25/2021 2:52 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

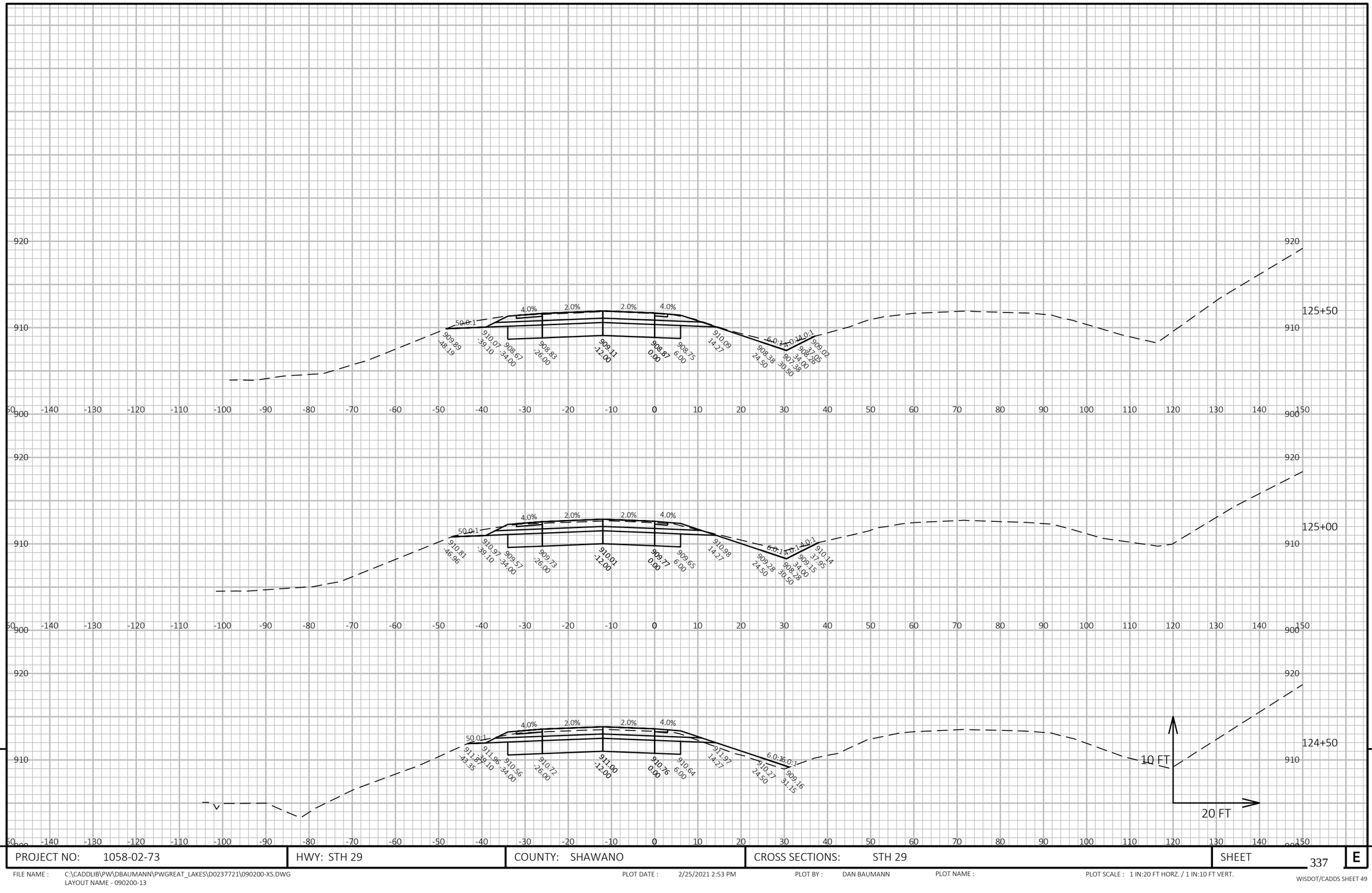


PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: STH 29	SHEET 336 E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\090200-XS.DWG
LAYOUT NAME - 090200-12

PLOT DATE : 2/25/2021 2:53 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

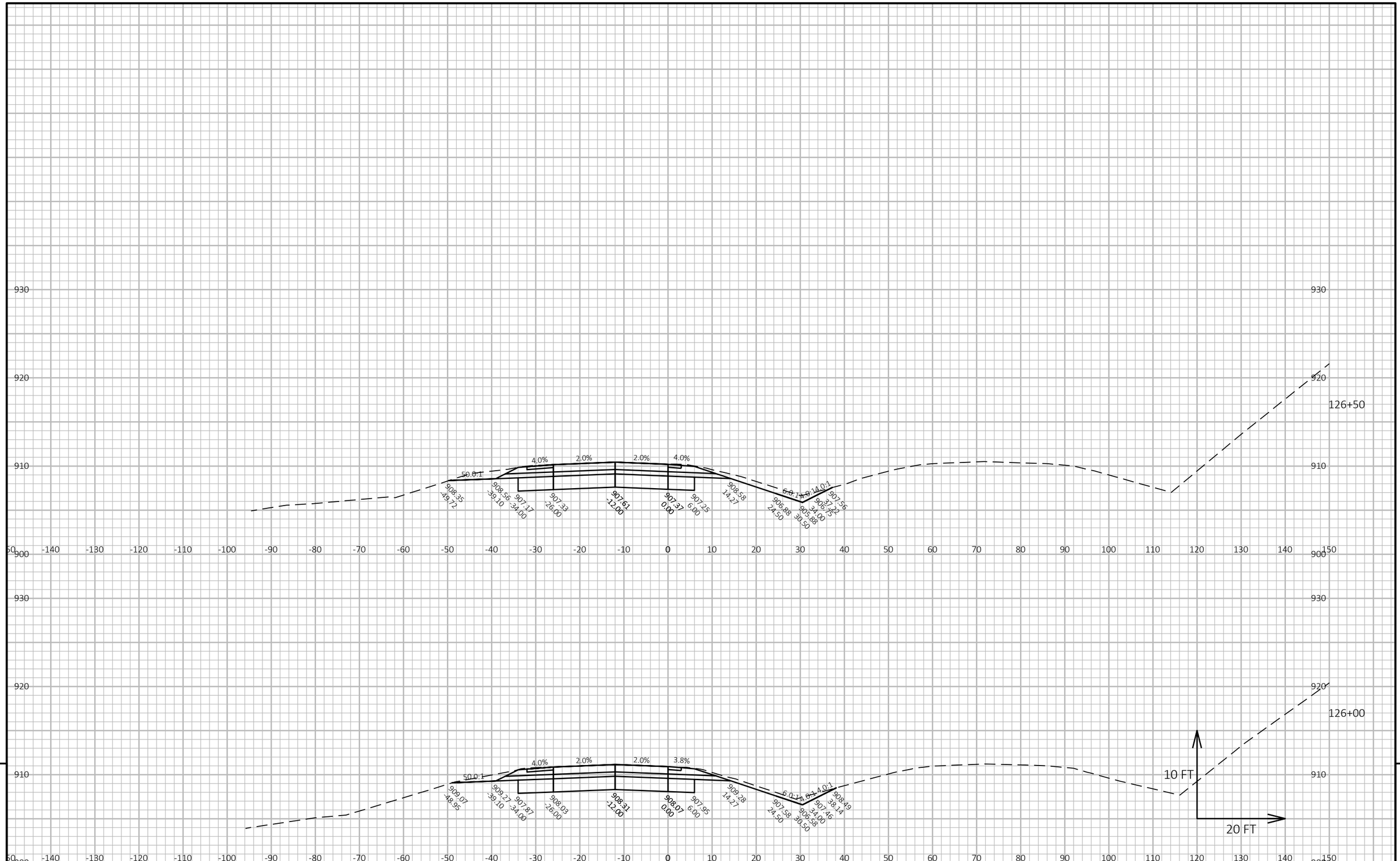
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PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: STH 29	SHEET 337	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\090200-XS.DWG
LAYOUT NAME - 090200-13

PLOT DATE : 2/25/2021 2:53 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

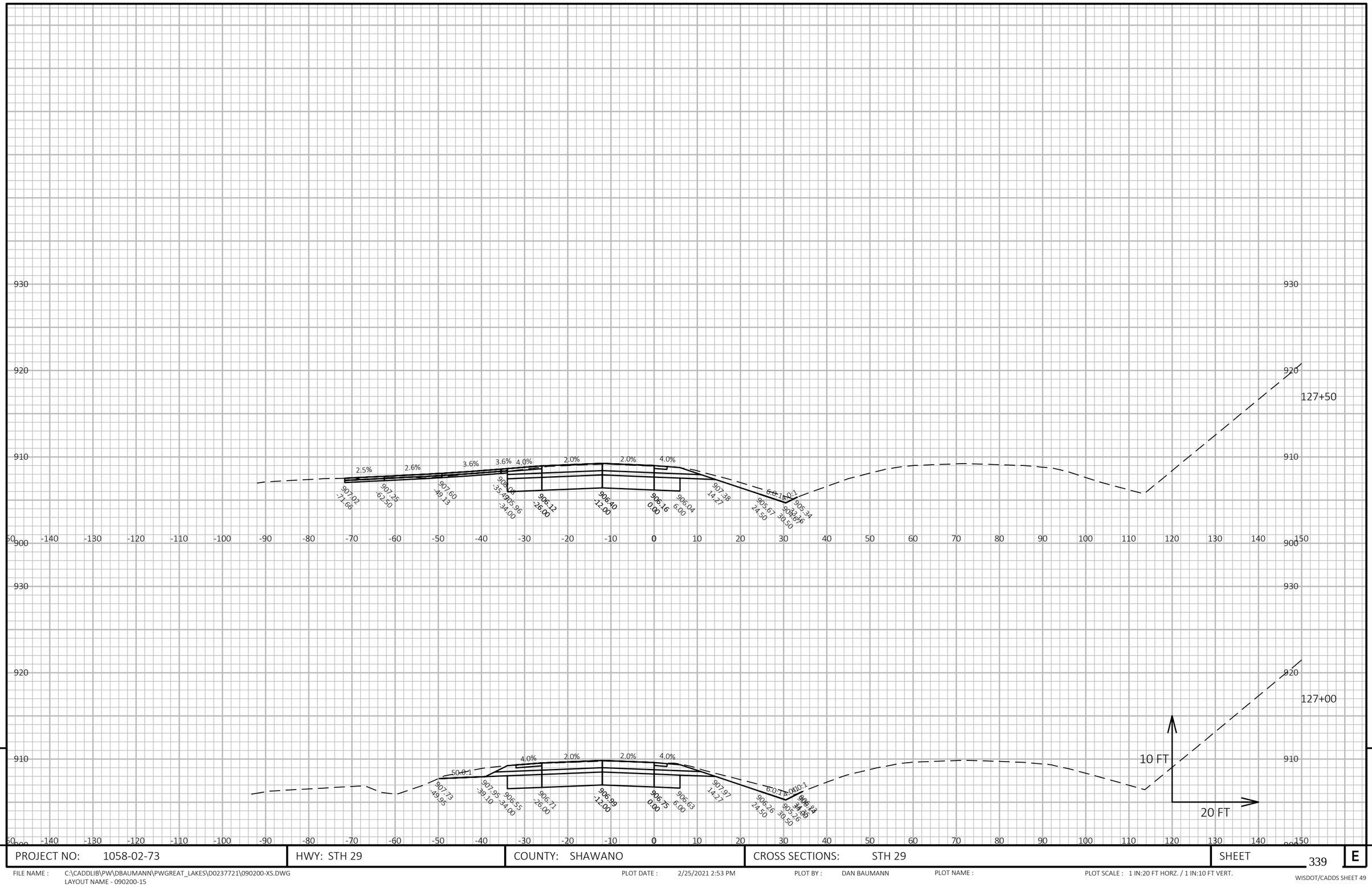


PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: STH 29	SHEET 338	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\090200-XS.DWG
LAYOUT NAME - 090200-14

PLOT DATE : 2/25/2021 2:53 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

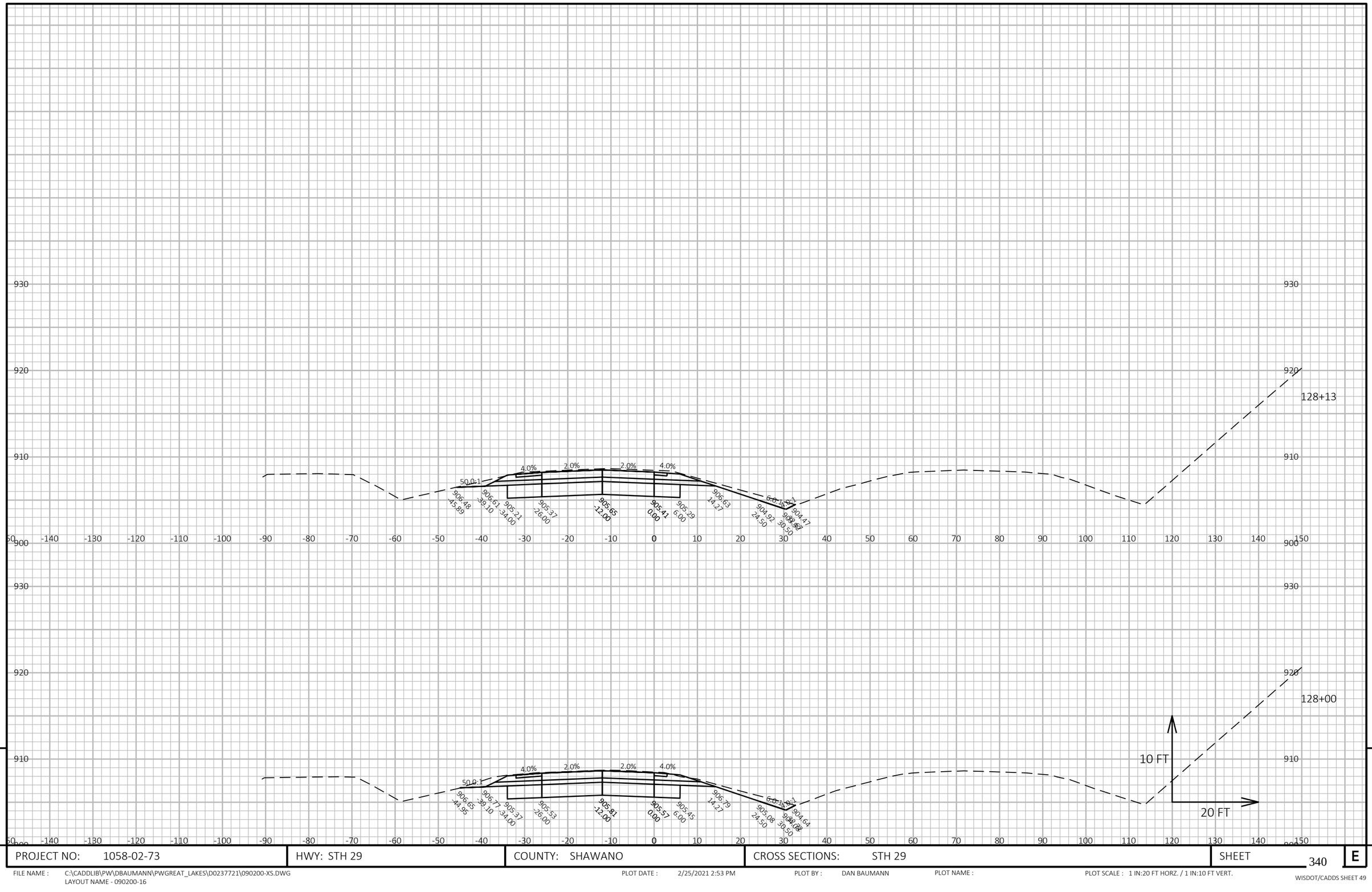
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PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: STH 29	SHEET 339	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\090200-XS.DWG
LAYOUT NAME - 090200-15

PLOT DATE : 2/25/2021 2:53 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

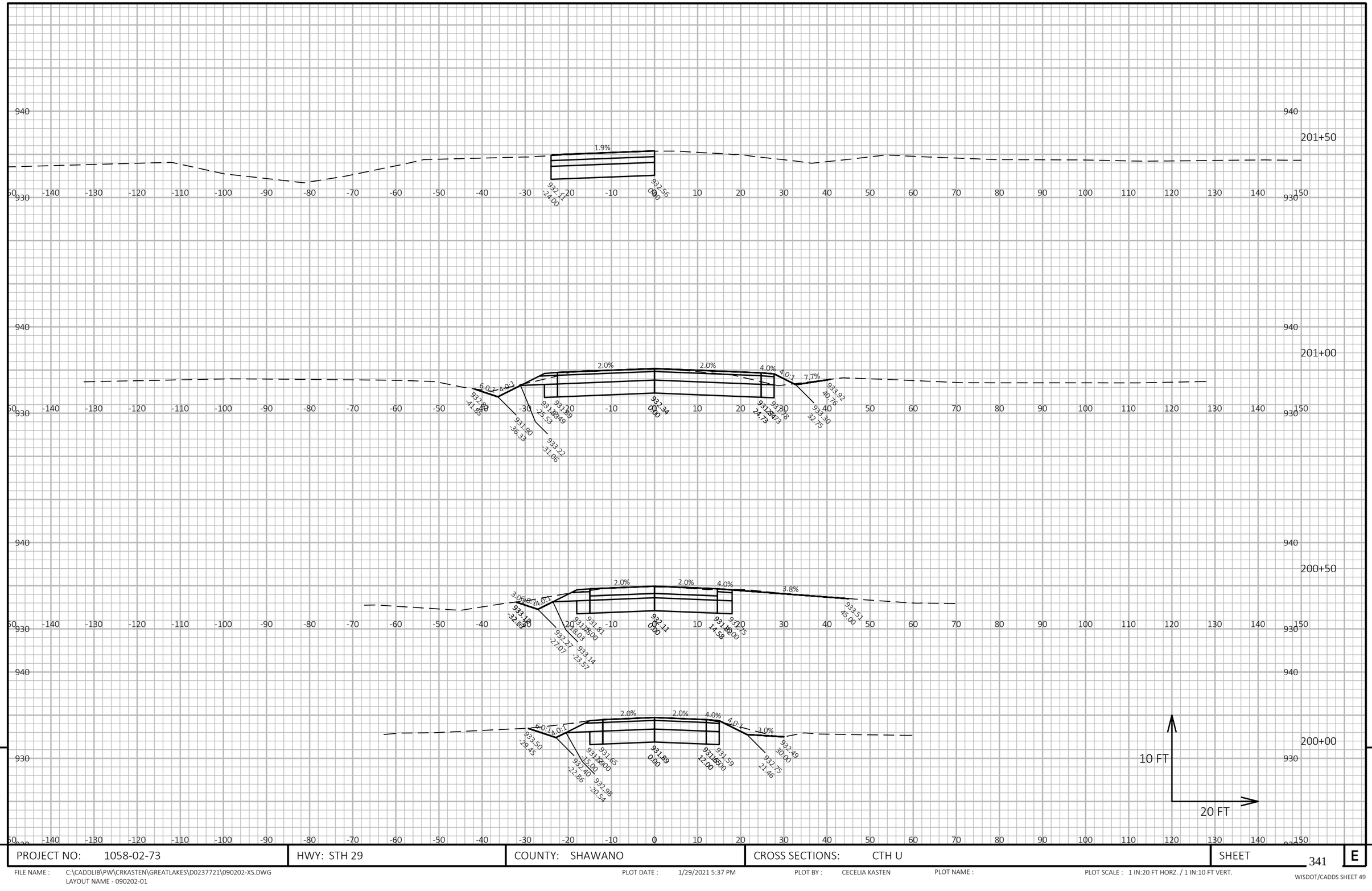
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PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: STH 29	SHEET 340	E

FILE NAME : C:\CADDLIB\PW\DBAUMANN\PWGREAT_LAKES\D0237721\090200-XS.DWG
LAYOUT NAME - 090200-16

PLOT DATE : 2/25/2021 2:53 PM PLOT BY : DAN BAUMANN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

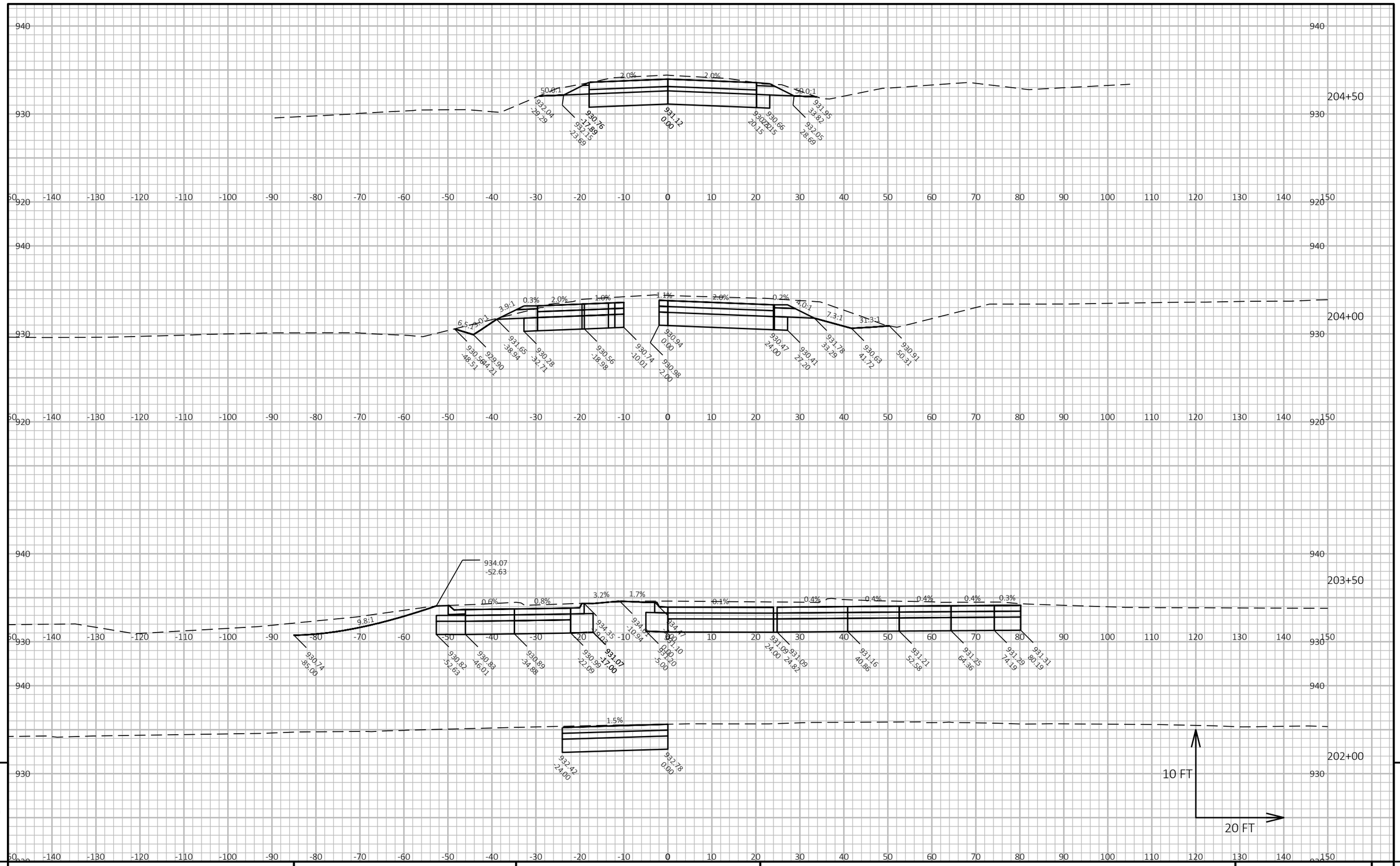


PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: CTH U	SHEET 341	E

FILE NAME : C:\CADDLIB\PW\CRKASTEN\GREATLAKES\D0237721\090202-XS.DWG
LAYOUT NAME - 090202-01

PLOT DATE : 1/29/2021 5:37 PM PLOT BY : CECELIA KASTEN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

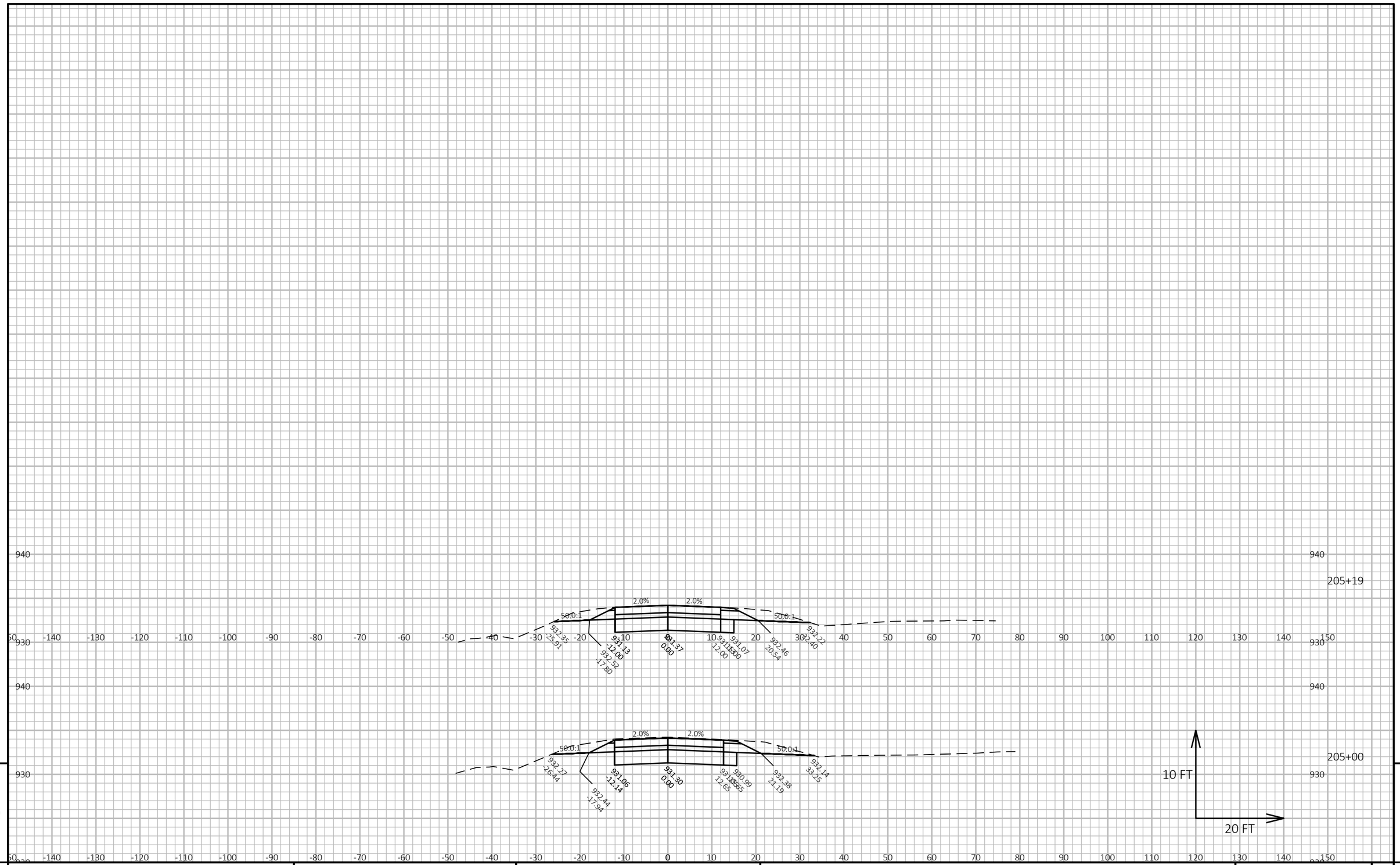
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PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: CTH U	SHEET 342	E

FILE NAME : C:\CADDLIB\PW\CRKASTEN\GREATLAKES\D0237721\090202-XS.DWG
LAYOUT NAME - 090202-02

PLOT DATE : 1/29/2021 5:37 PM PLOT BY : CECELIA KASTEN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

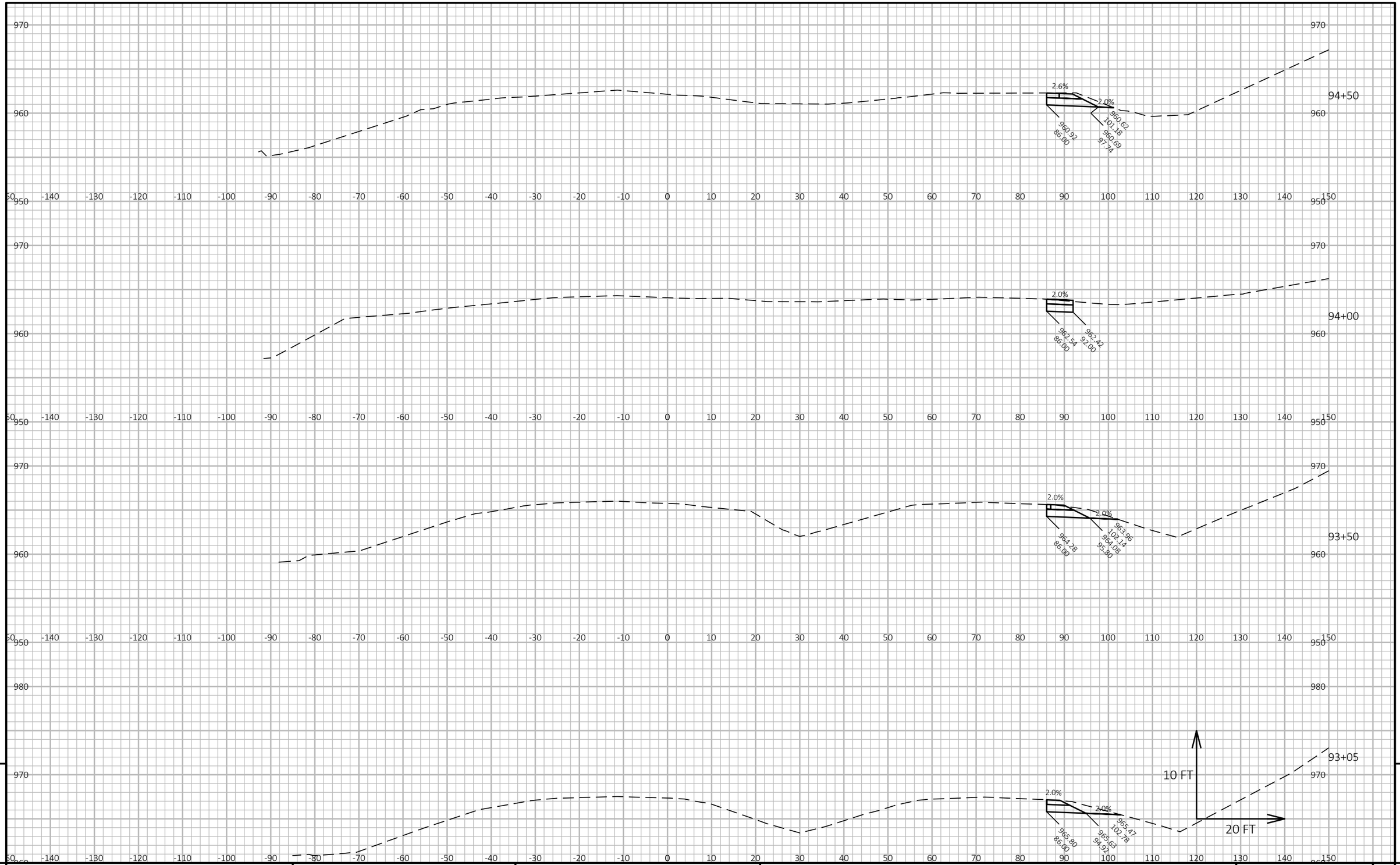
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PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: CTH U	SHEET 343	E

FILE NAME : C:\CADDLIB\PW\CRKASTEN\GREATLAKES\D0237721\090202-XS.DWG
LAYOUT NAME - 090202-03

PLOT DATE : 1/29/2021 5:37 PM PLOT BY : CECELIA KASTEN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



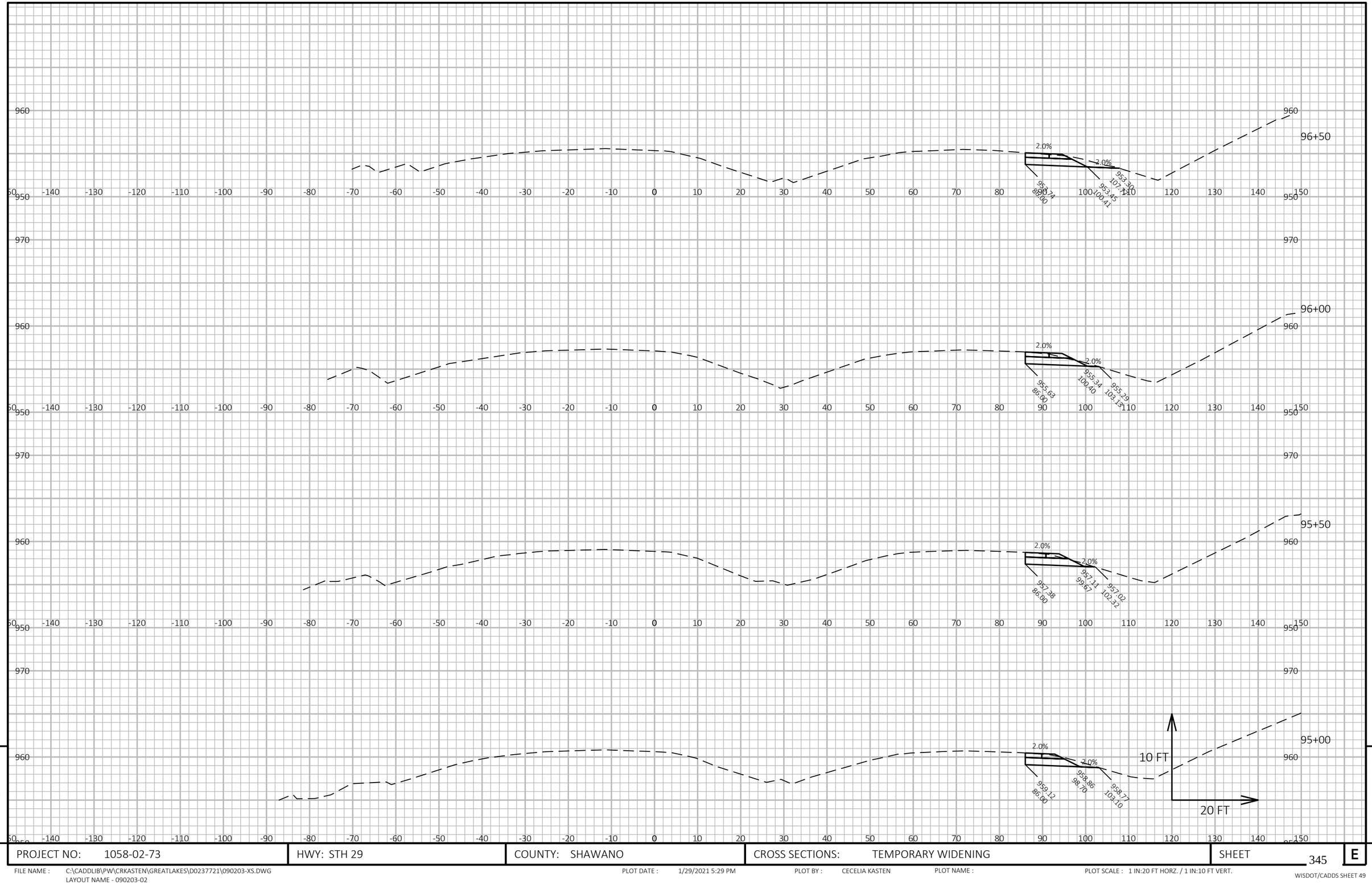
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9

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: TEMPORARY WIDENING	SHEET 344	E

FILE NAME : C:\CADDLIB\PW\CRKASTEN\GREATLAKES\D0237721\090203-XS.DWG
LAYOUT NAME - 090203-01

PLOT DATE : 1/29/2021 5:29 PM PLOT BY : CECELIA KASTEN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



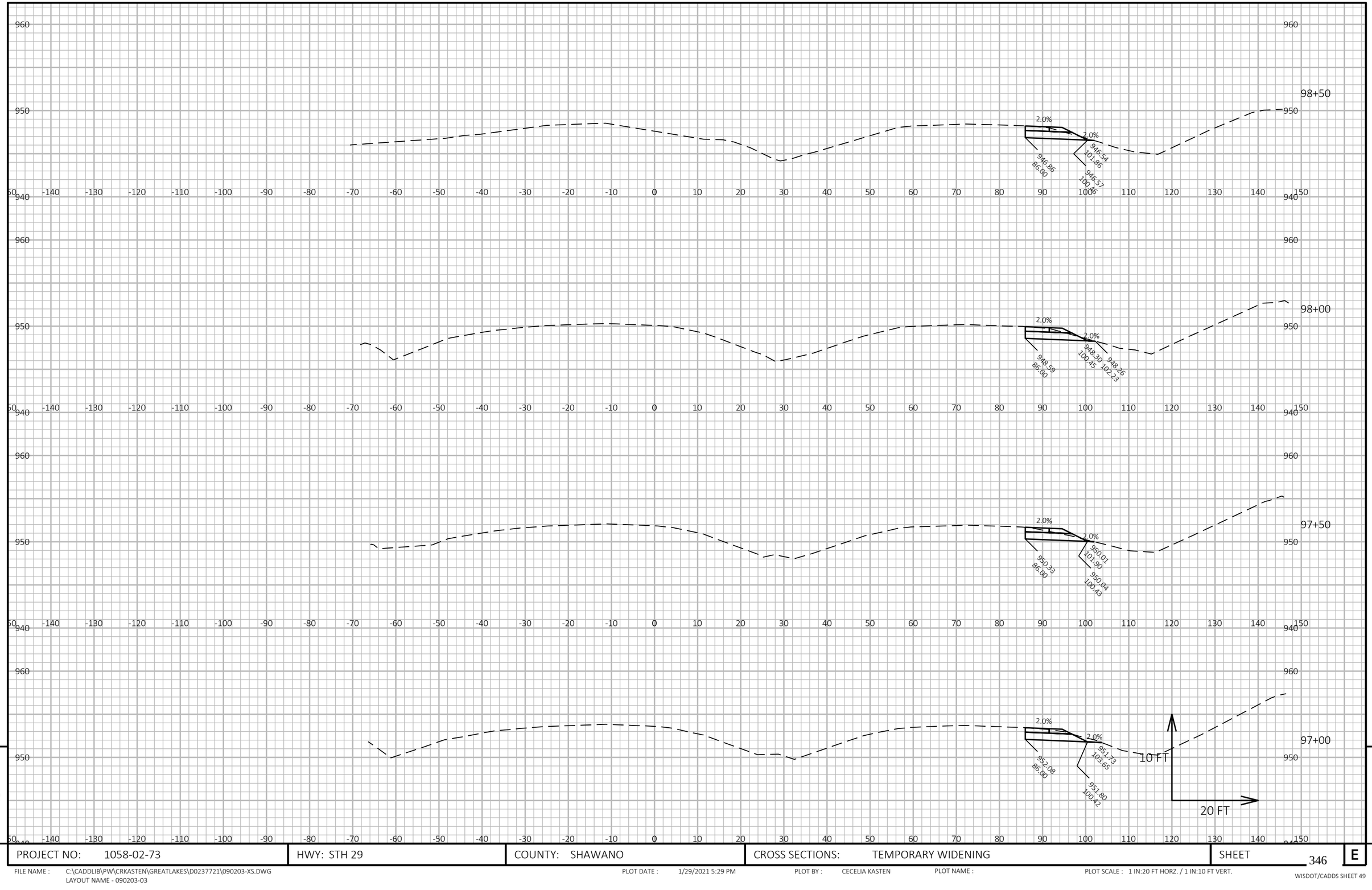
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9

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: TEMPORARY WIDENING	SHEET 345	E

FILE NAME : C:\CADDLIB\PW\CRKASTEN\GREATLAKES\D0237721\090203-XS.DWG
LAYOUT NAME - 090203-02

PLOT DATE : 1/29/2021 5:29 PM PLOT BY : CECELIA KASTEN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



9

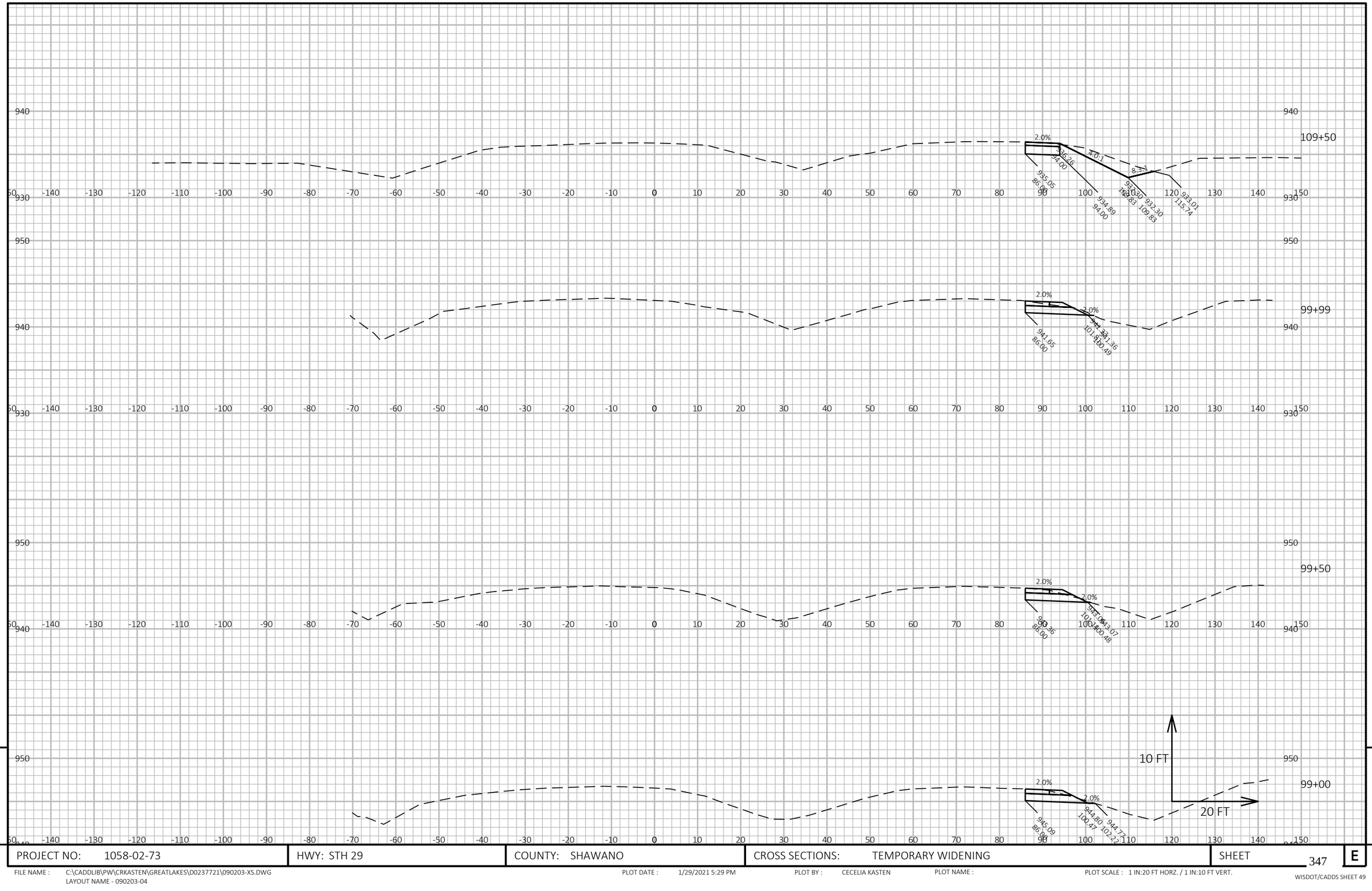
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PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: TEMPORARY WIDENING	SHEET 346	E

FILE NAME : C:\CADDLIB\PW\CRKASTEN\GREATLAKES\D0237721\090203-XS.DWG
LAYOUT NAME - 090203-03

PLOT DATE : 1/29/2021 5:29 PM PLOT BY : CECELIA KASTEN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

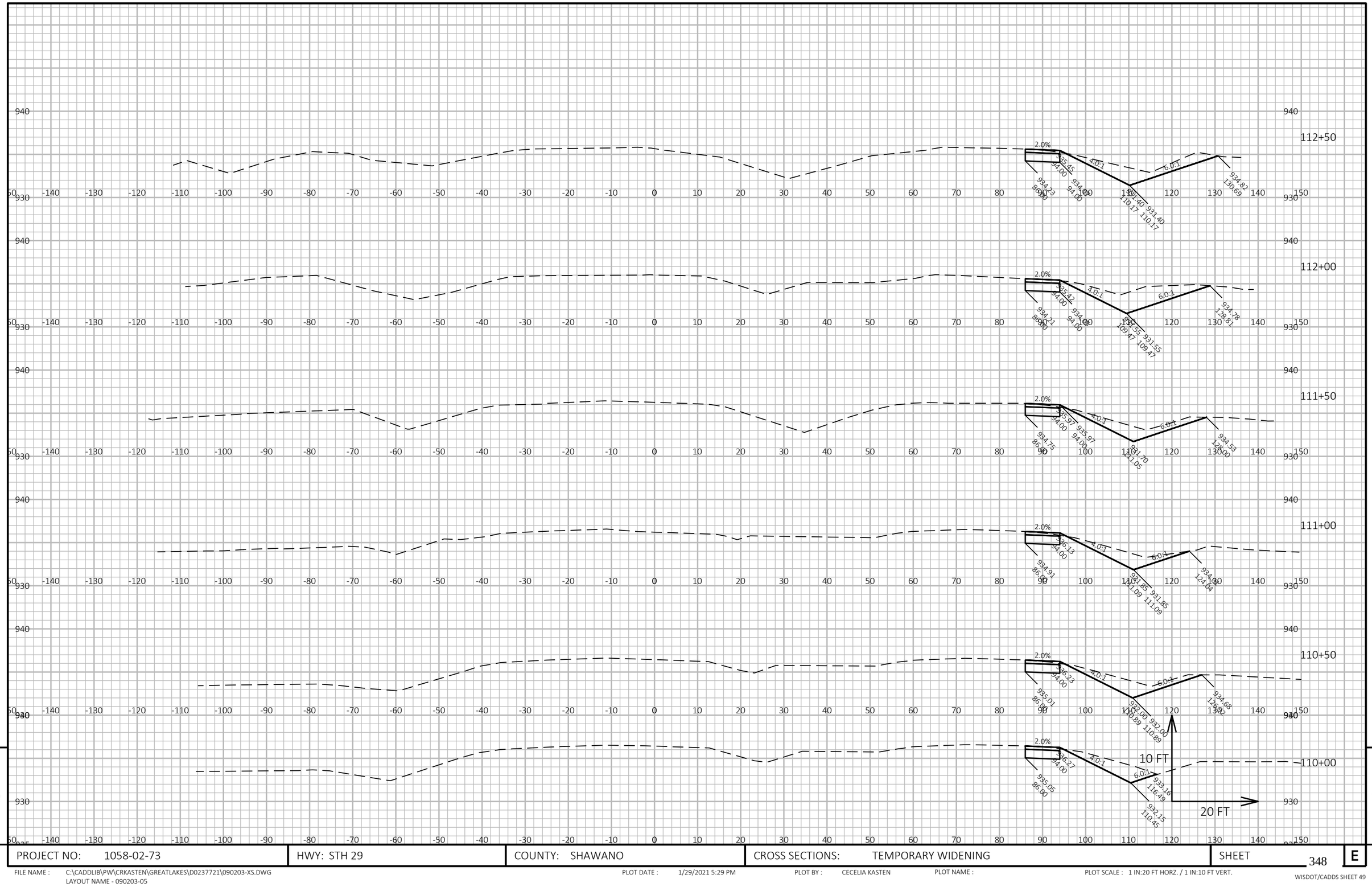


PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: TEMPORARY WIDENING	SHEET 347	E

FILE NAME : C:\CADDLIB\PW\CRKASTEN\GREATLAKES\D0237721\090203-XS.DWG
LAYOUT NAME - 090203-04

PLOT DATE : 1/29/2021 5:29 PM PLOT BY : CECELIA KASTEN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

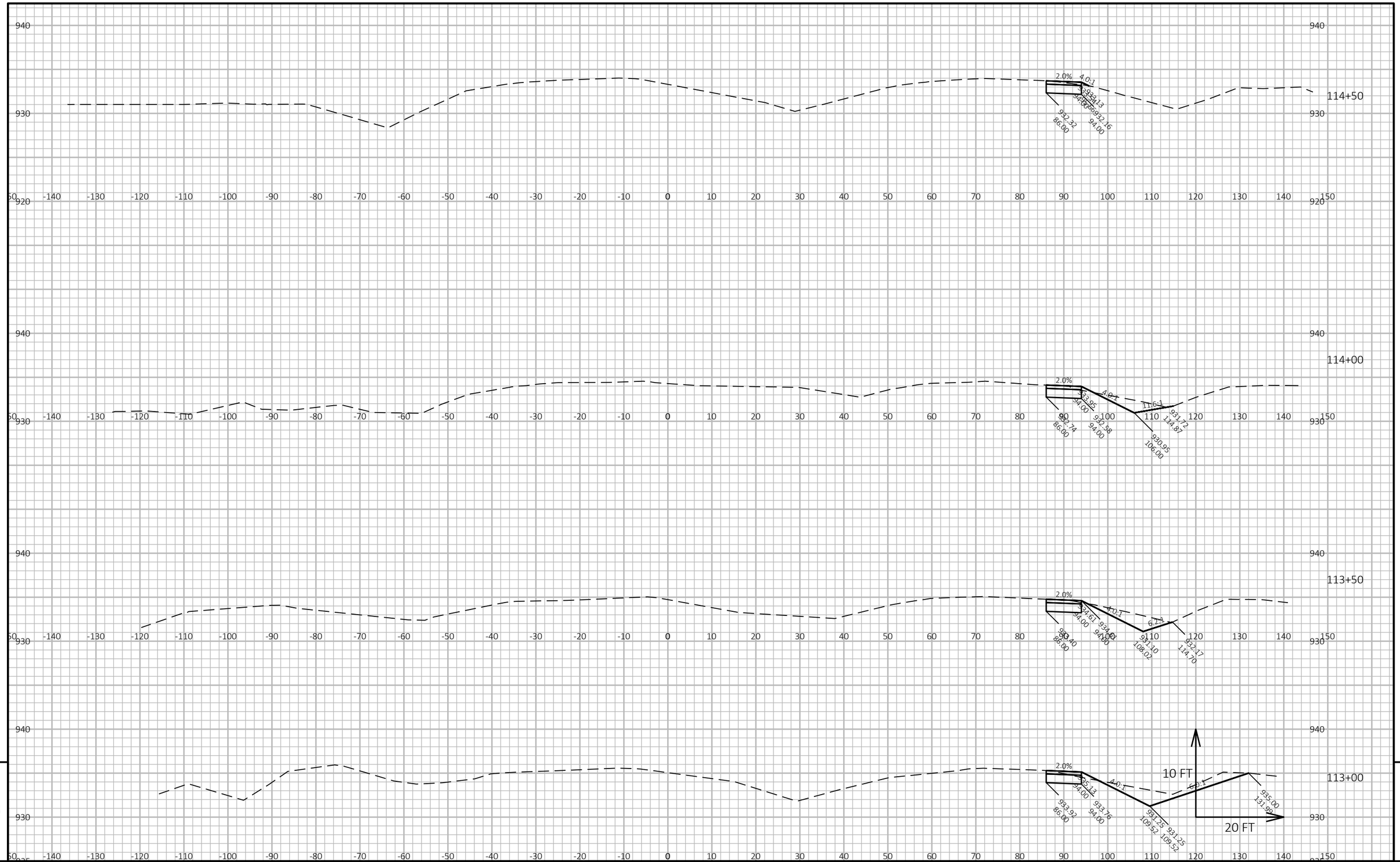
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PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: TEMPORARY WIDENING	SHEET 348	E

FILE NAME : C:\CADDLIB\PW\CRKASTEN\GREATLAKES\D0237721\090203-XS.DWG
LAYOUT NAME - 090203-05

PLOT DATE : 1/29/2021 5:29 PM PLOT BY : CECELIA KASTEN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: TEMPORARY WIDENING	SHEET 349	E

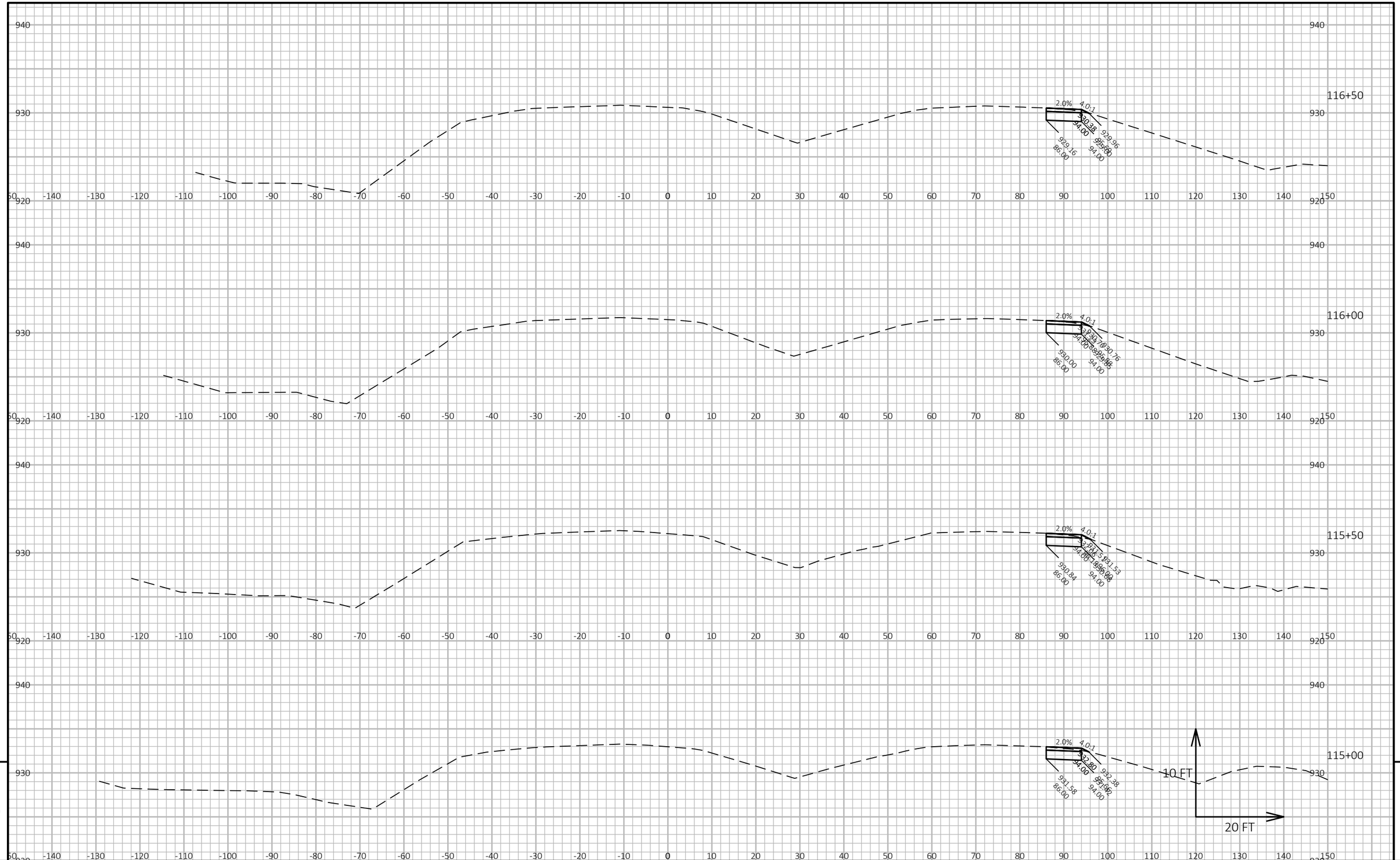
FILE NAME : C:\CADDLIB\PW\CRKASTEN\GREATLAKES\D0237721\090203-XS.DWG
LAYOUT NAME - 090203-06

PLOT DATE : 1/29/2021 5:29 PM

PLOT BY : CECELIA KASTEN

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



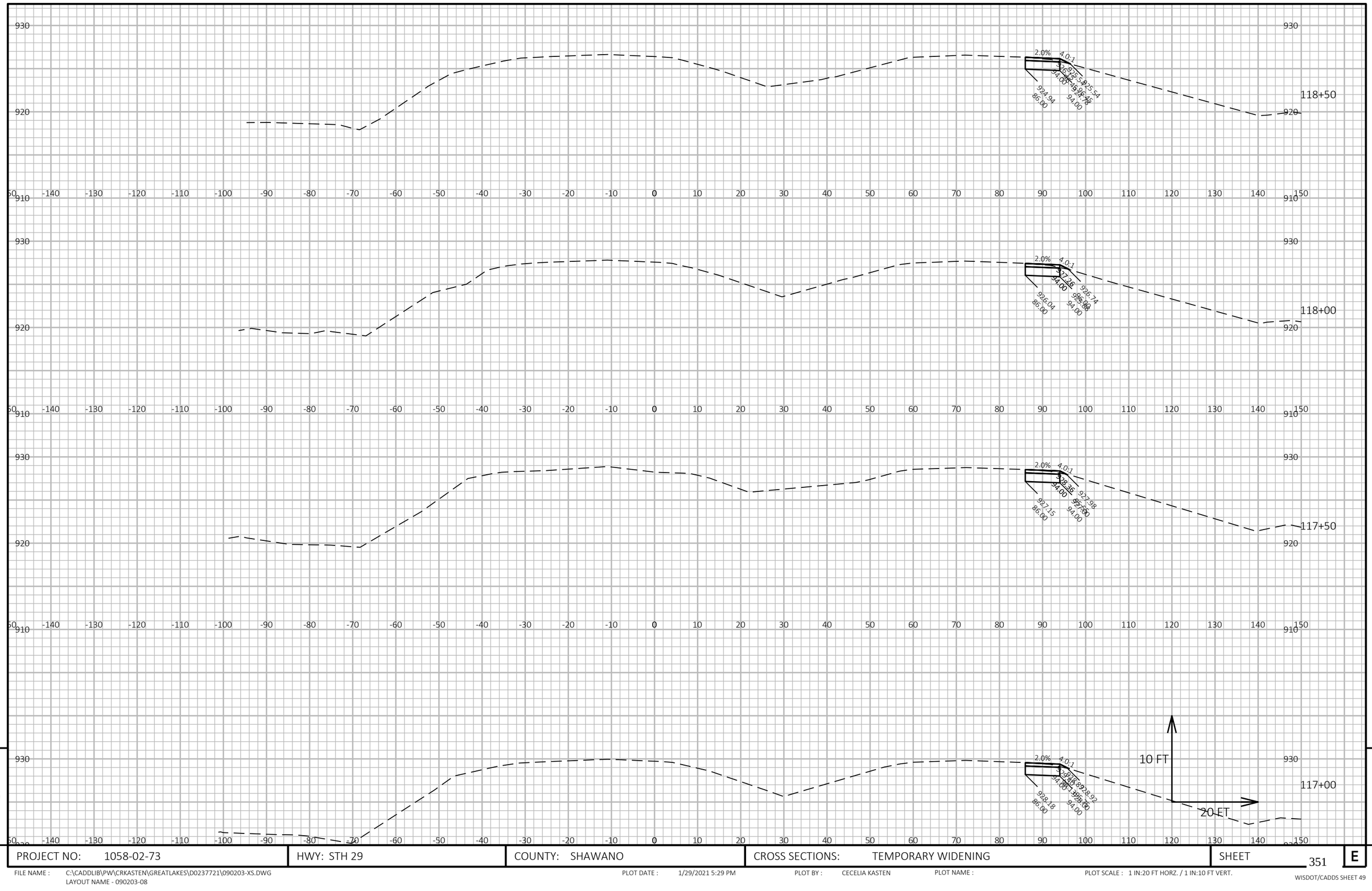
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PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: TEMPORARY WIDENING	SHEET 350	E

FILE NAME : C:\CADDLIB\PW\CRKASTEN\GREATLAKES\D0237721\090203-XS.DWG
LAYOUT NAME - 090203-07

PLOT DATE : 1/29/2021 5:29 PM PLOT BY : CECELIA KASTEN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



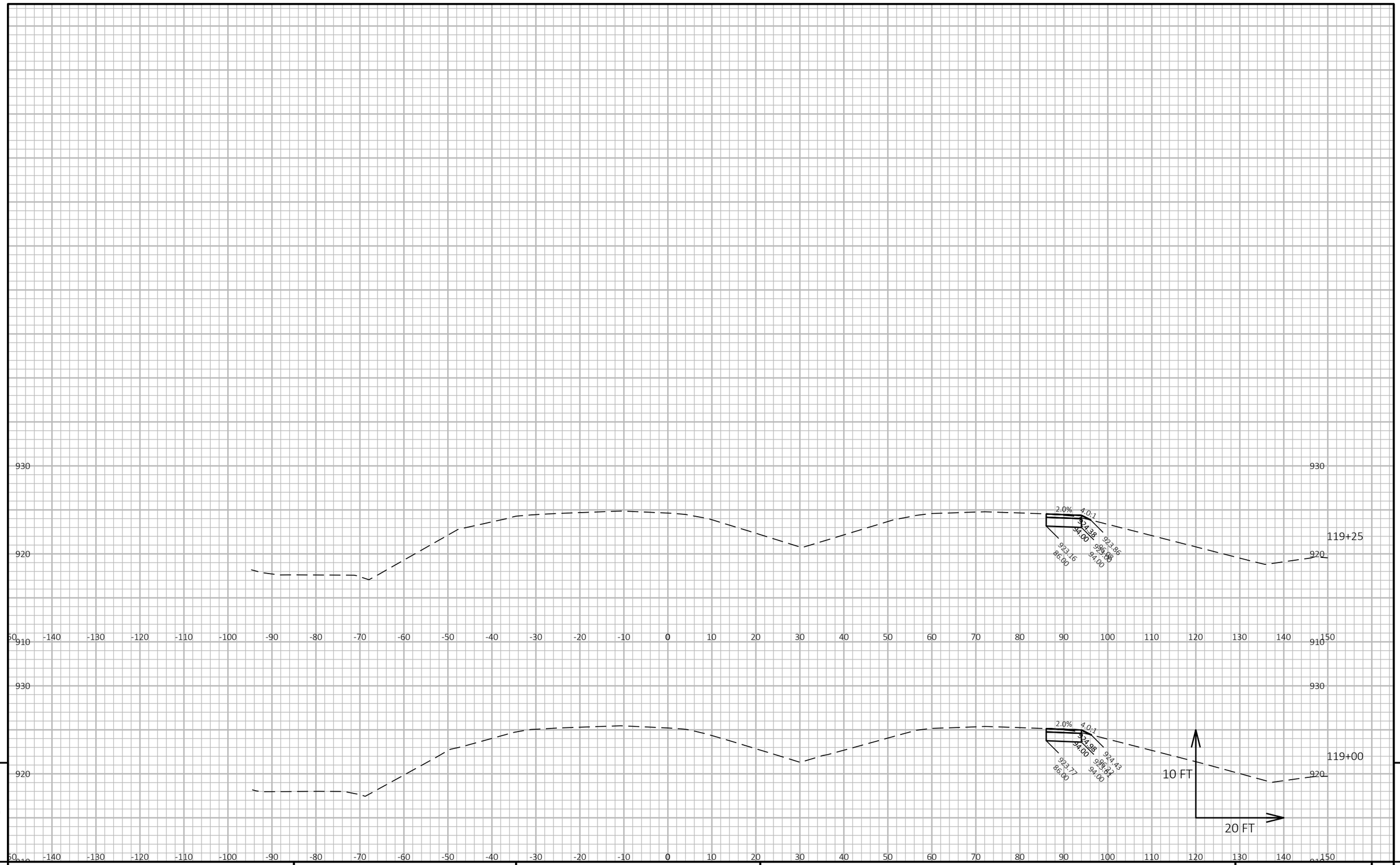
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9

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: TEMPORARY WIDENING	SHEET 351	E

FILE NAME : C:\CADDLIB\PW\CRKASTEN\GREATLAKES\D0237721\090203-XS.DWG
LAYOUT NAME - 090203-08

PLOT DATE : 1/29/2021 5:29 PM PLOT BY : CECELIA KASTEN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.



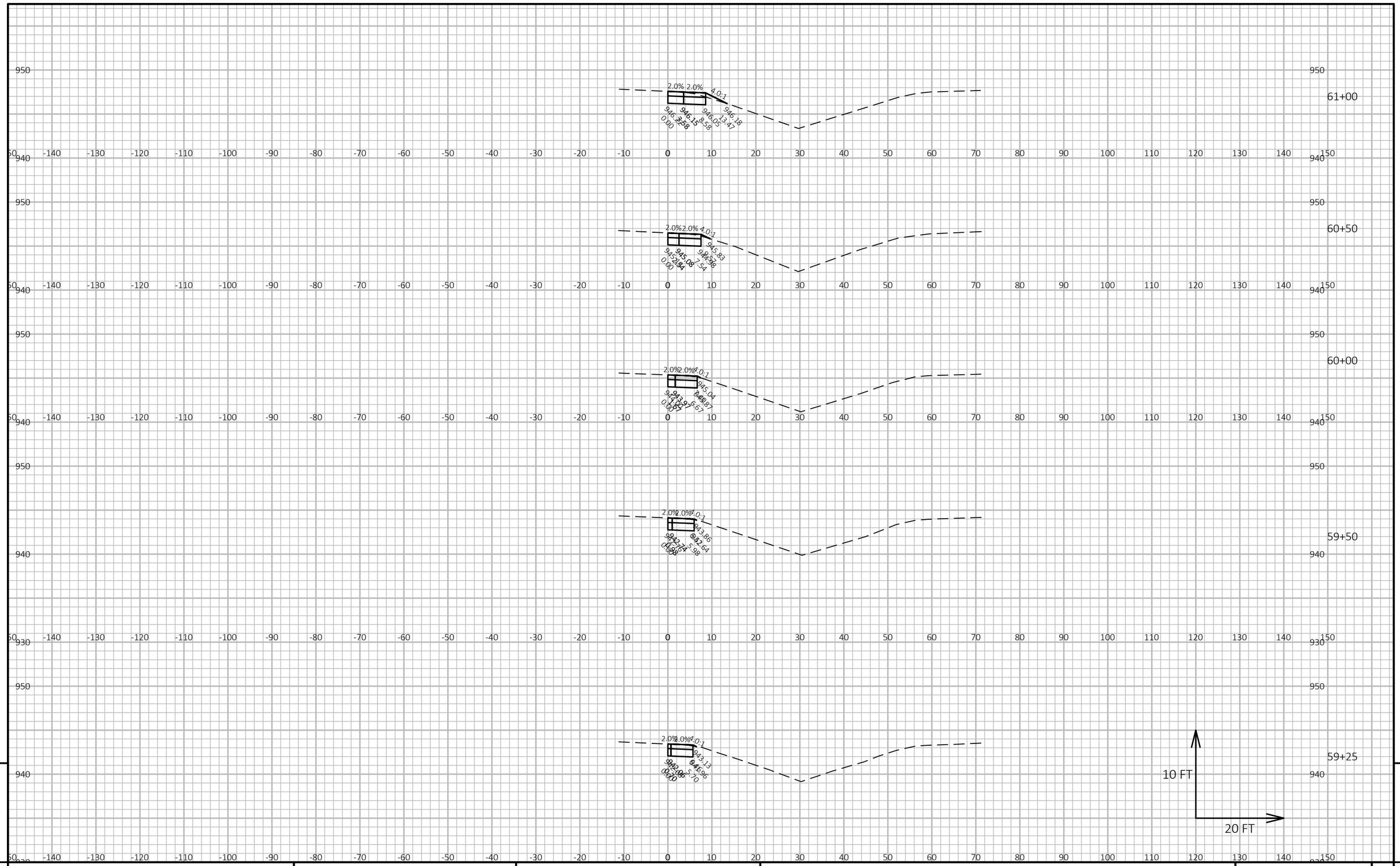
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PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: TEMPORARY WIDENING	SHEET 352	E

FILE NAME : C:\CADDLIB\PW\CRKASTEN\GREATLAKES\D0237721\090203-XS.DWG
LAYOUT NAME - 090203-09

PLOT DATE : 1/29/2021 5:29 PM PLOT BY : CECELIA KASTEN PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

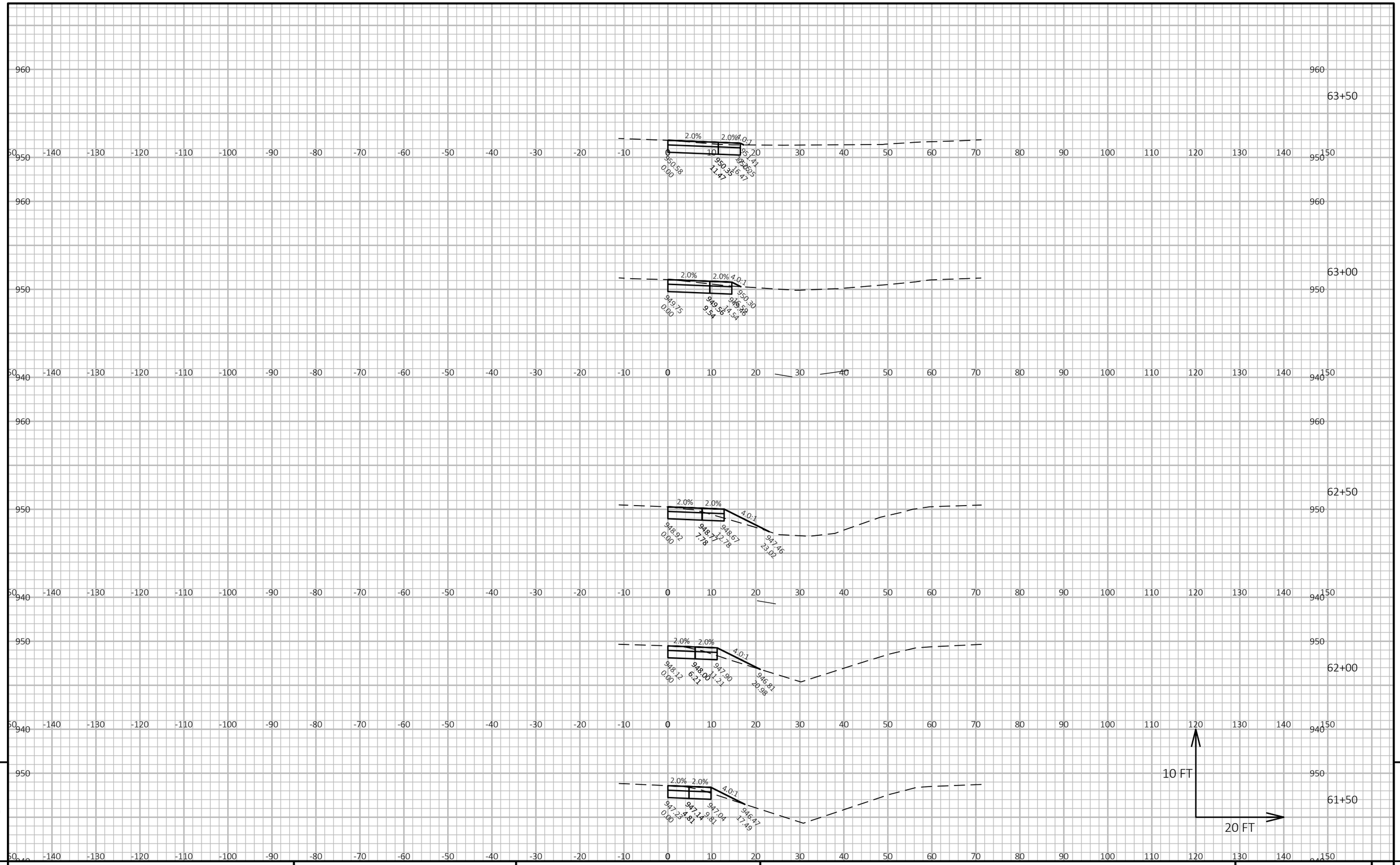


PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: TEMPORARY CROSSOVERS	SHEET 353 E

FILE NAME : C:\CADDLIB\PW\LZIDEK\PWGREAT_LAKES\D0237721\090230-XS-TEMPCROSSOVER.DWG
LAYOUT NAME - 30

PLOT DATE : 1/28/2021 7:18 PM PLOT BY : LAUREN ZIDEK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

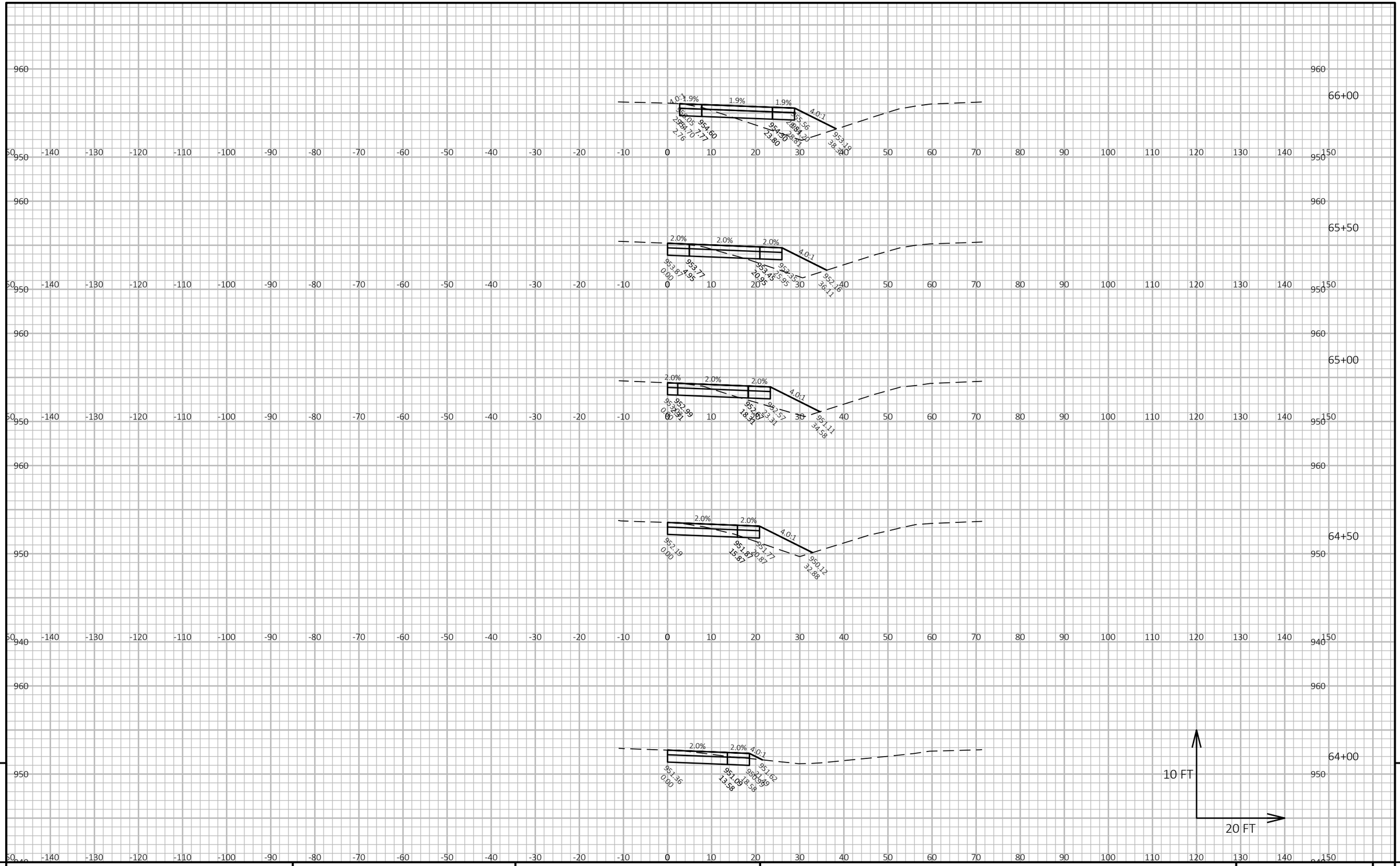
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PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: TEMPORARY CROSSOVERS	SHEET 354	E

FILE NAME : C:\CADDLIB\PW\LZIDEK\PWGREAT_LAKES\D0237721\090230-XS-TEMPCROSSOVER.DWG
LAYOUT NAME - 31

PLOT DATE : 1/28/2021 7:18 PM PLOT BY : LAUREN ZIDEK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

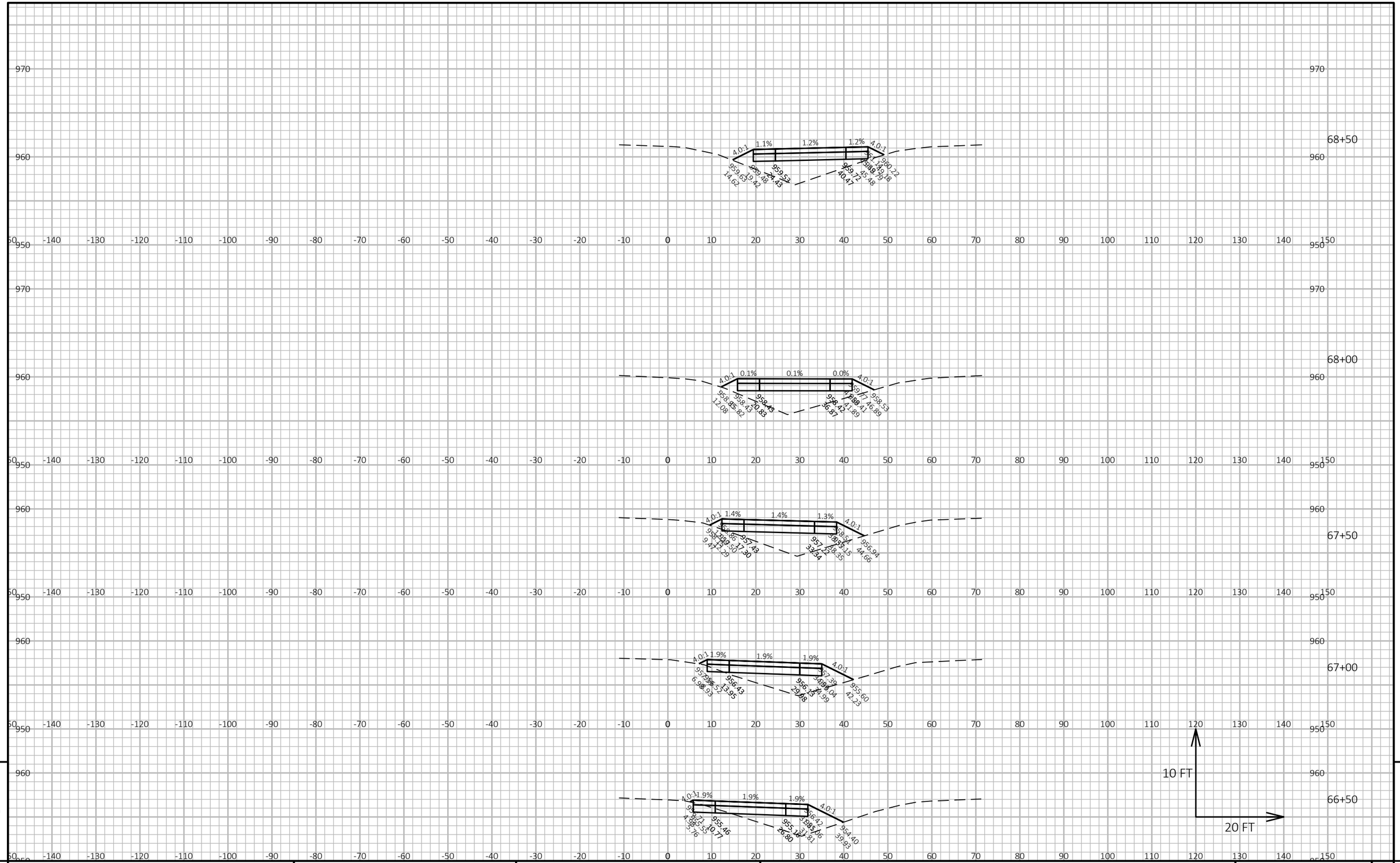
9

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: TEMPORARY CROSSOVERS	SHEET 355	E

FILE NAME : C:\CADDLIB\PW\LZIDEK\PWGREAT_LAKES\D0237721\090230-XS-TEMPCROSSOVER.DWG
LAYOUT NAME - 32

PLOT DATE : 1/28/2021 7:18 PM PLOT BY : LAUREN ZIDEK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

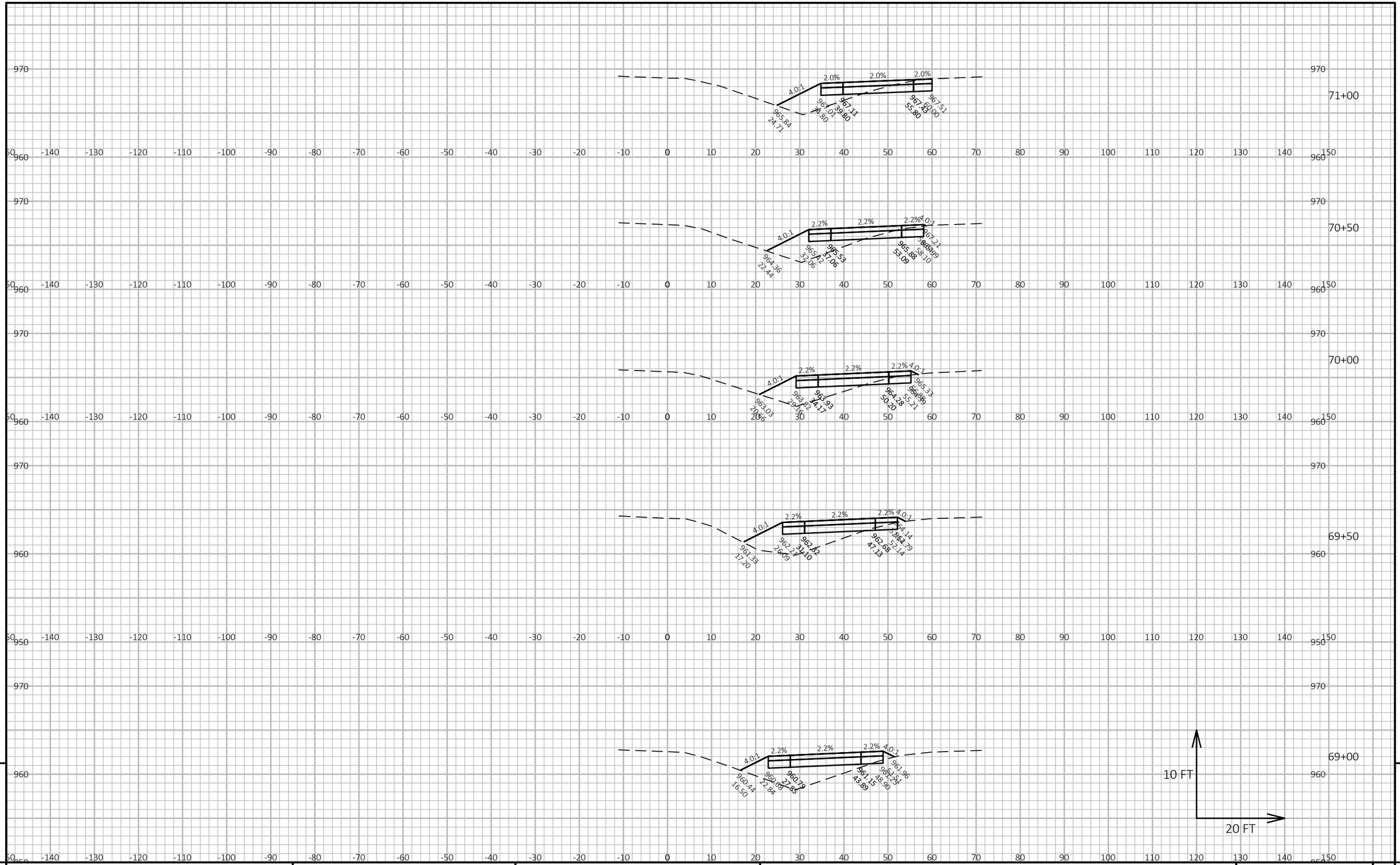
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PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: TEMPORARY CROSSOVERS	SHEET 356	E

FILE NAME : C:\CADDLIB\PW\LZIDEK\PWGREAT_LAKES\D0237721\090230-XS-TEMPCROSSOVER.DWG
LAYOUT NAME - 33

PLOT DATE : 1/28/2021 7:18 PM PLOT BY : LAUREN ZIDEK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

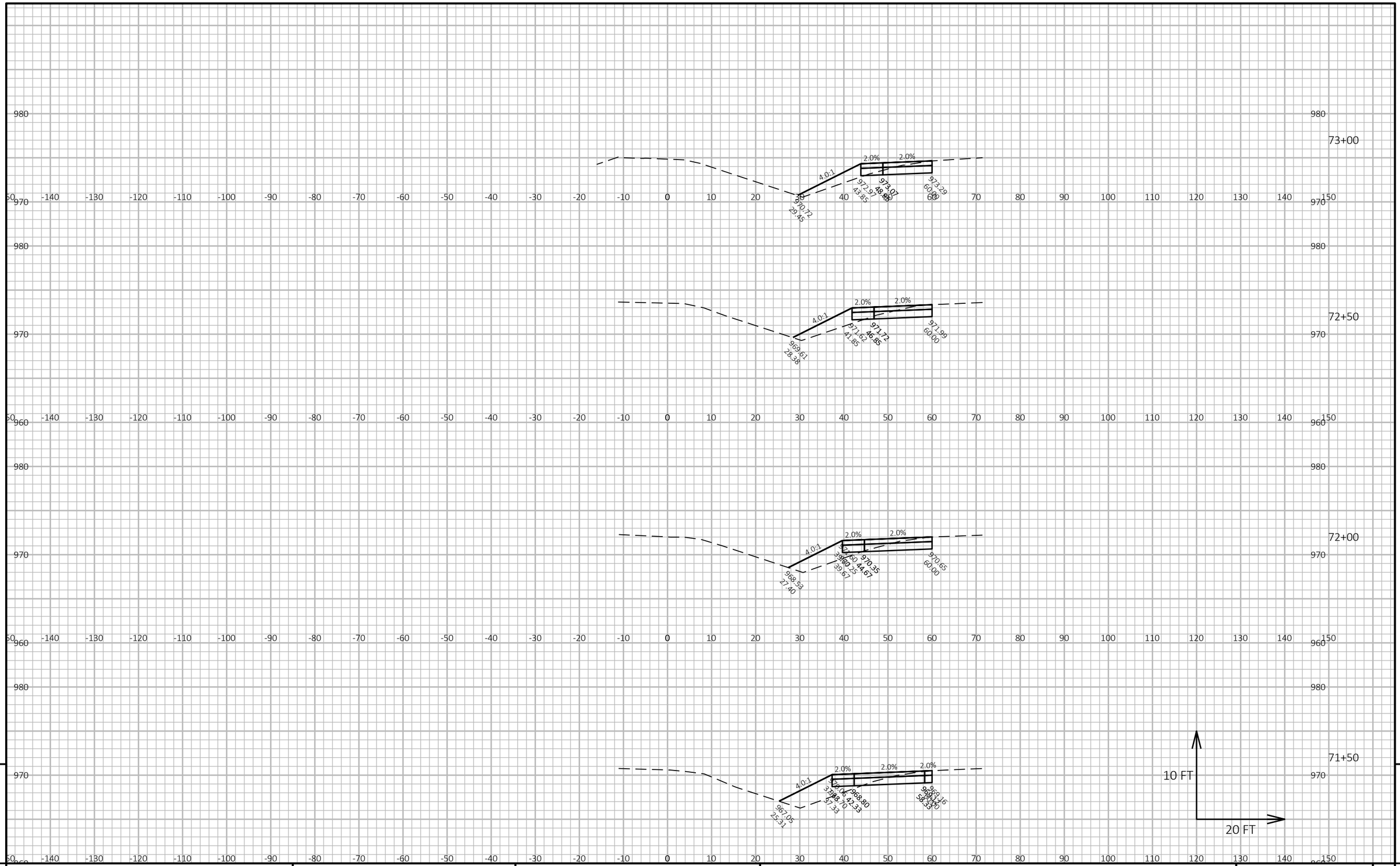


PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: TEMPORARY CROSSOVERS	SHEET 357 E

FILE NAME : C:\CADDLIB\PW\LZIDEK\PWGREAT_LAKES\D0237721\090230-XS-TEMPCROSSOVER.DWG
LAYOUT NAME - 34

PLOT DATE : 1/28/2021 7:18 PM PLOT BY : LAUREN ZIDEK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

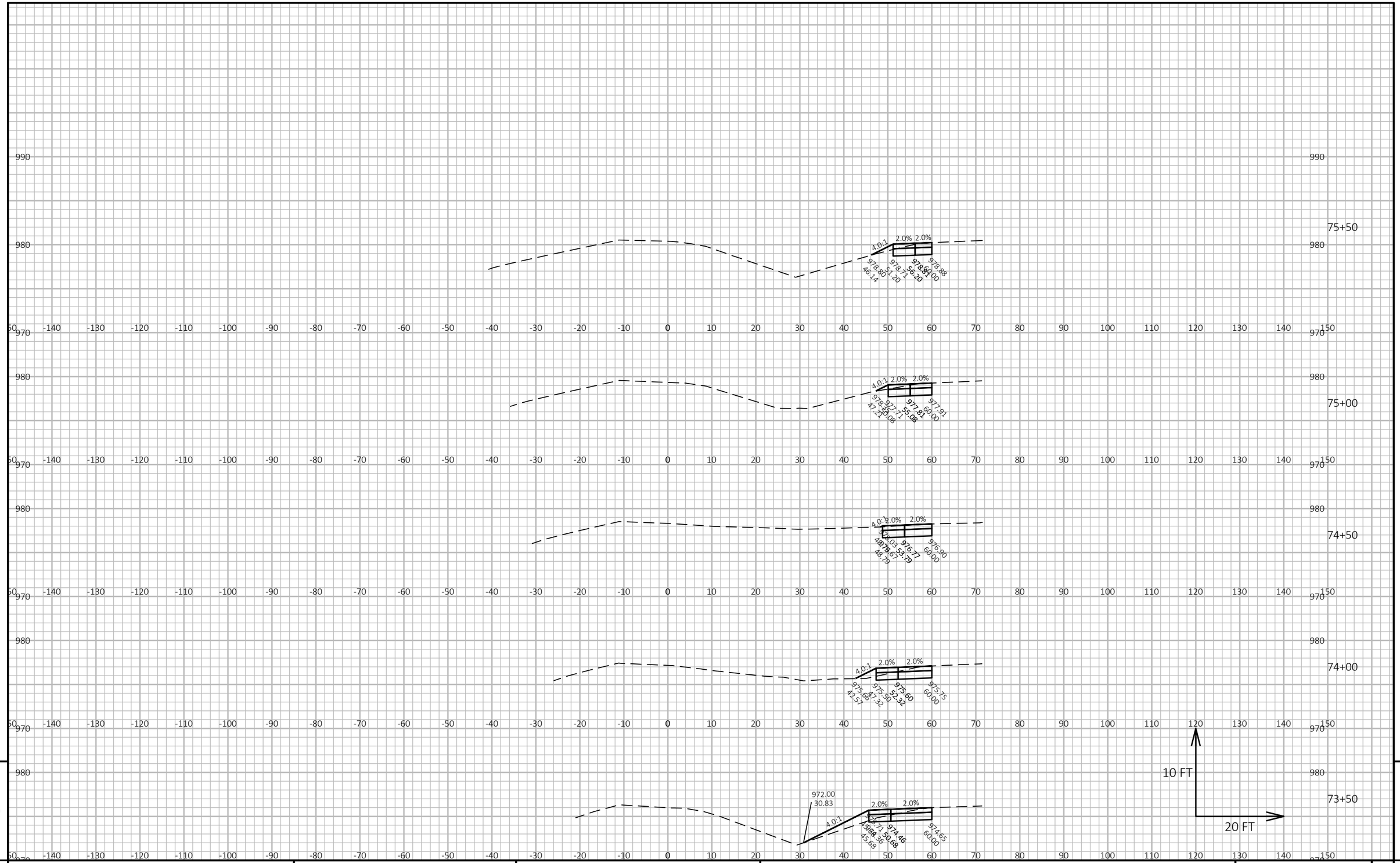
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PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: TEMPORARY CROSSOVERS	SHEET 358	E

FILE NAME : C:\CADDLIB\PW\LZIDEK\PWGREAT_LAKES\D0237721\090230-XS-TEMPCROSSOVER.DWG
LAYOUT NAME - 35

PLOT DATE : 1/28/2021 7:18 PM PLOT BY : LAUREN ZIDEK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



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9

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: TEMPORARY CROSSOVERS	SHEET 359	E

FILE NAME : C:\CADDLIB\PW\LZIDEK\PWGREAT_LAKES\D0237721\090230-XS-TEMPCROSSOVER.DWG
LAYOUT NAME - 36

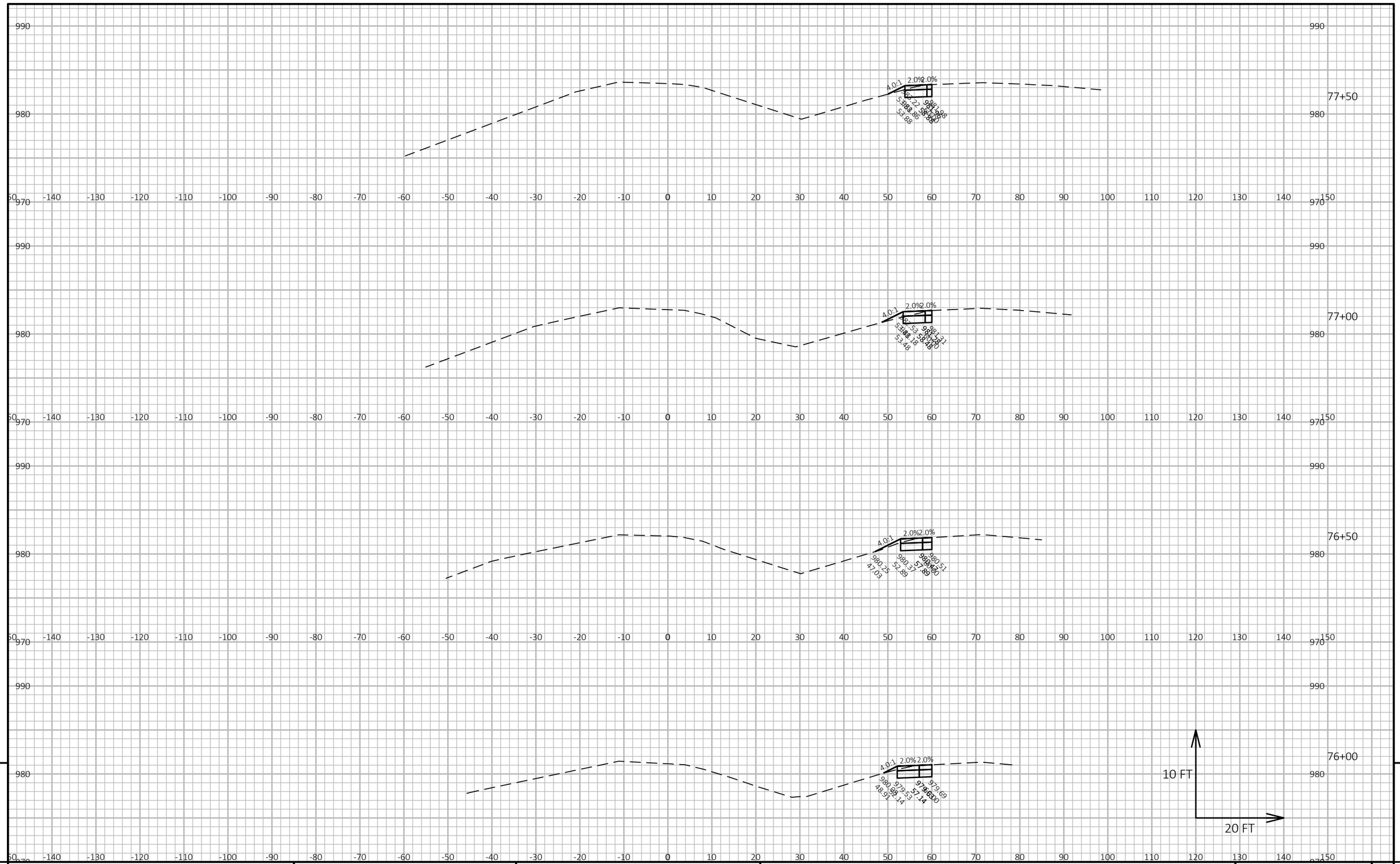
PLOT DATE : 1/28/2021 7:18 PM

PLOT BY : LAUREN ZIDEK

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

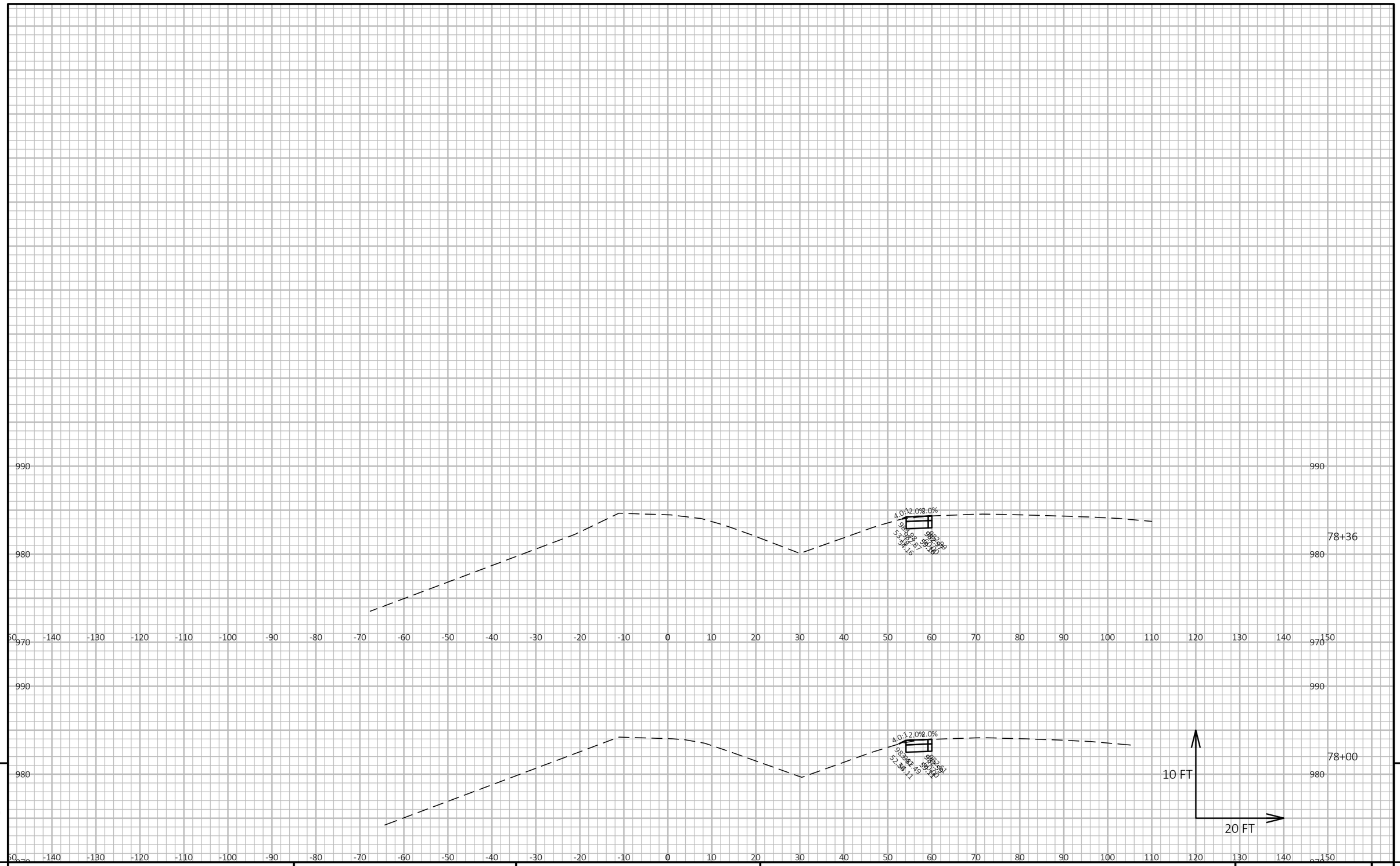


PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: TEMPORARY CROSSOVERS	SHEET 360 E

FILE NAME : C:\CADDLIB\PW\LZIDEK\PWGREAT_LAKES\D0237721\090230-XS-TEMPCROSSOVER.DWG
LAYOUT NAME - 37

PLOT DATE : 1/28/2021 7:18 PM PLOT BY : LAUREN ZIDEK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

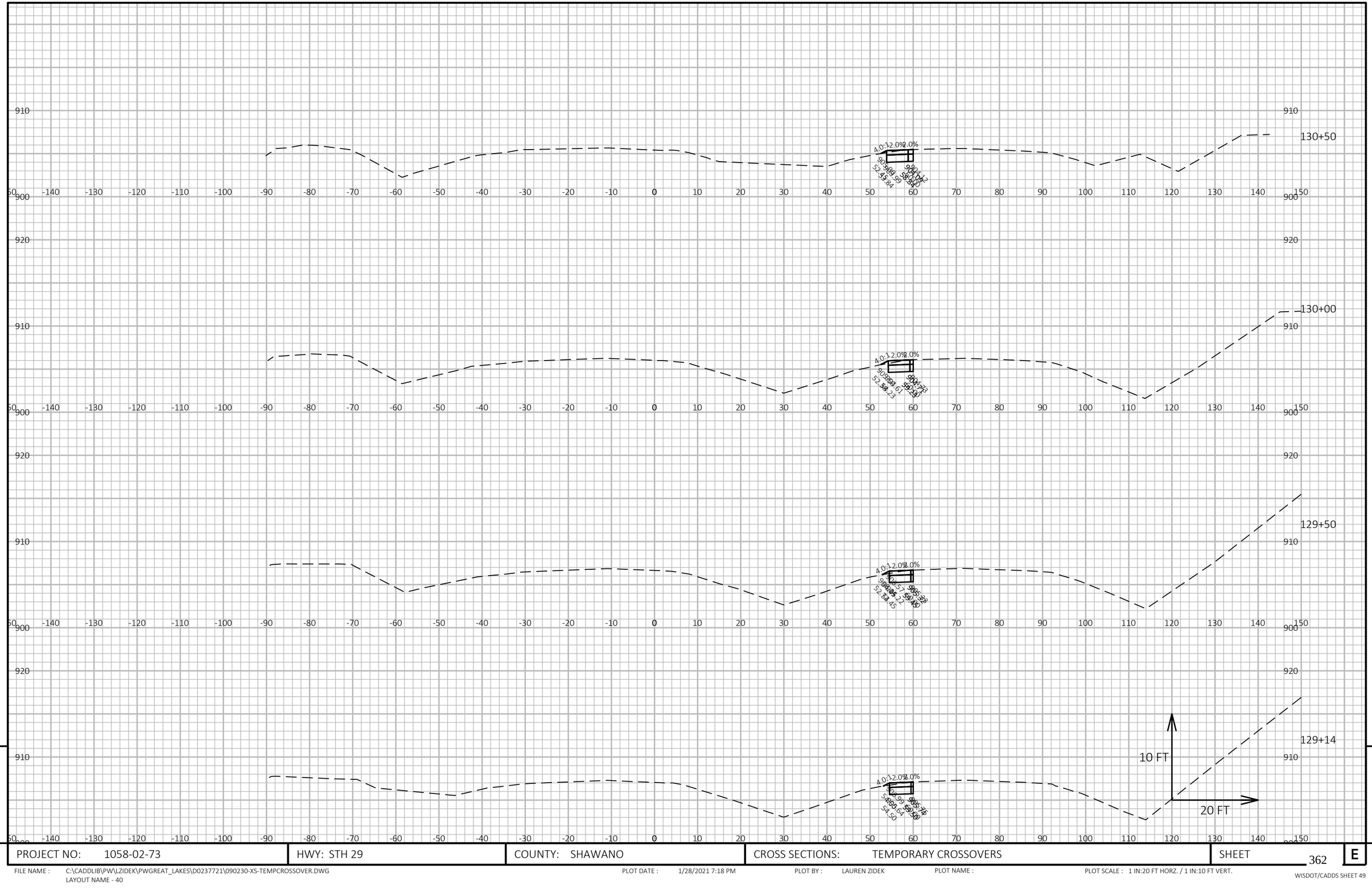
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PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: TEMPORARY CROSSOVERS	SHEET 361	E

FILE NAME : C:\CADDLIB\PW\LZIDEK\PWGREAT_LAKES\D0237721\090230-XS-TEMPCROSSOVER.DWG
LAYOUT NAME - 38

PLOT DATE : 1/28/2021 7:18 PM PLOT BY : LAUREN ZIDEK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

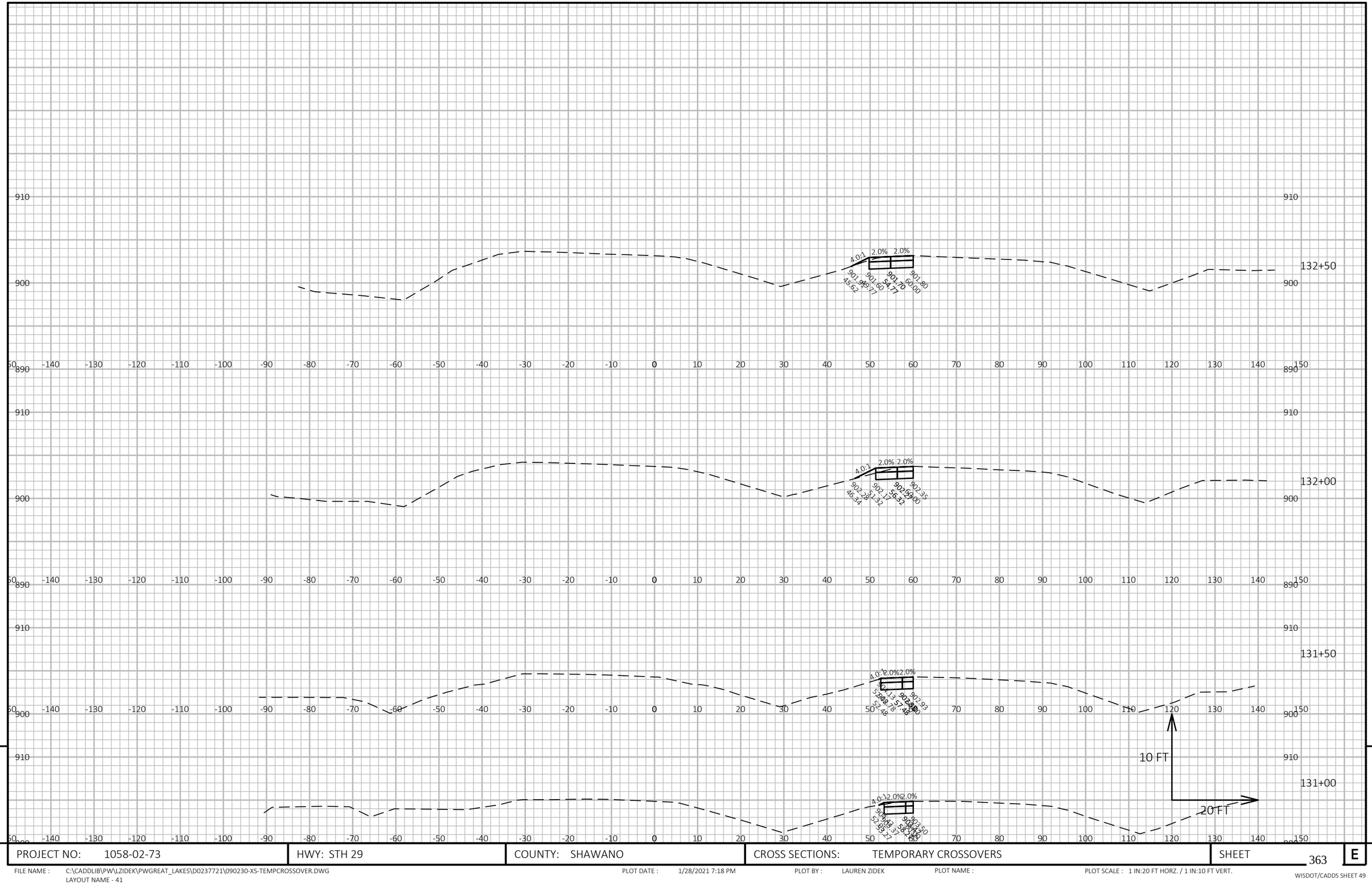
9

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: TEMPORARY CROSSOVERS	SHEET 362	E

FILE NAME : C:\CADDLIB\PW\LZIDEK\PWGREAT_LAKES\D0237721\090230-XS-TEMPCROSSOVER.DWG
LAYOUT NAME - 40

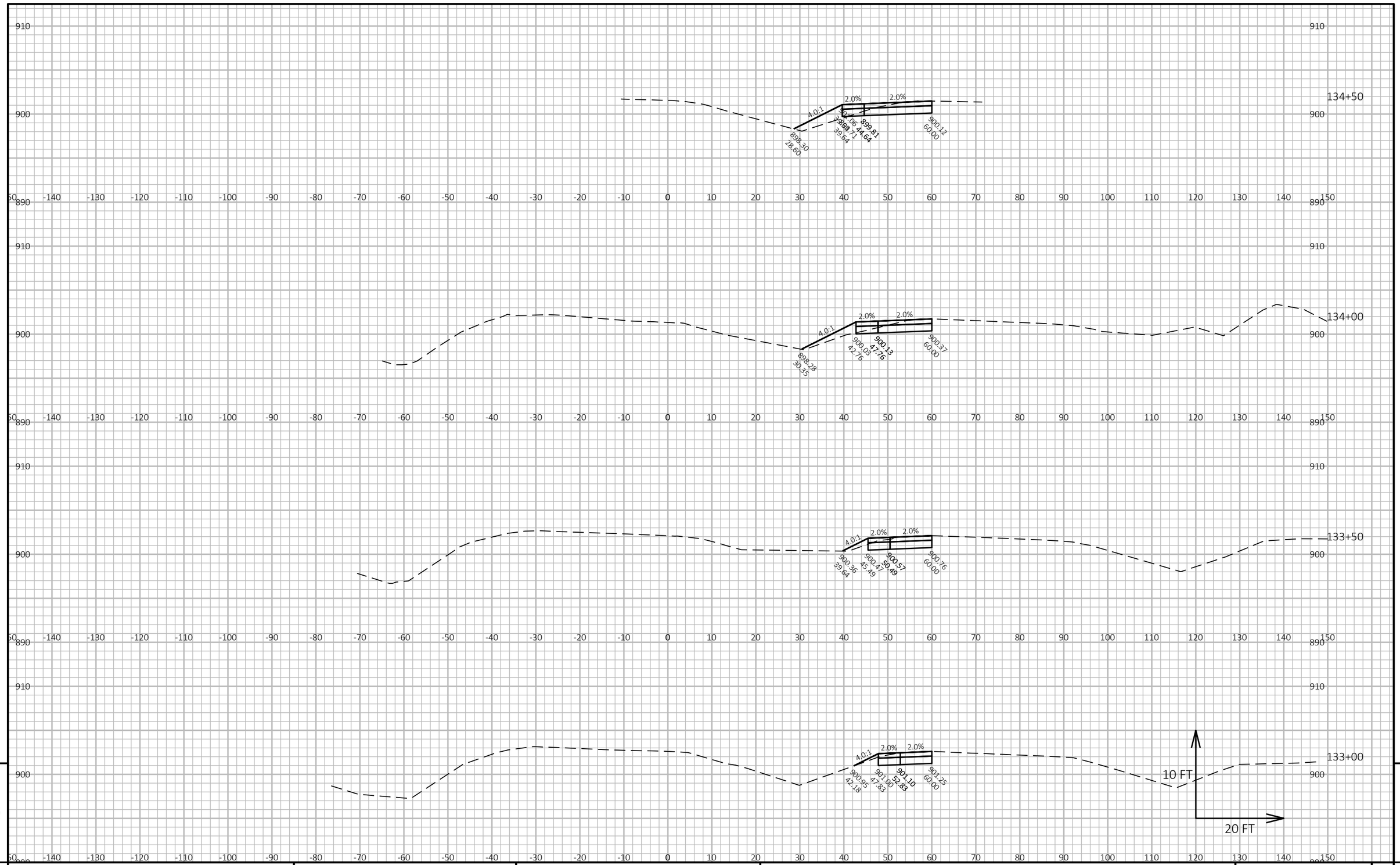
PLOT DATE : 1/28/2021 7:18 PM PLOT BY : LAUREN ZIDEK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9	PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: TEMPORARY CROSSOVERS	SHEET 363 E

FILE NAME : C:\CADDLIB\PW\LZIDEK\PWGREAT_LAKES\D0237721\090230-XS-TEMPCROSSOVER.DWG
LAYOUT NAME - 41
PLOT DATE : 1/28/2021 7:18 PM
PLOT BY : LAUREN ZIDEK
PLOT NAME :
PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.
WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: TEMPORARY CROSSOVERS	SHEET 364	E

FILE NAME : C:\CADDLIB\PW\LZIDEK\PWGREAT_LAKES\D0237721\090230-XS-TEMPCROSSOVER.DWG
LAYOUT NAME - 42

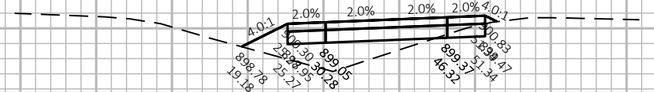
PLOT DATE : 1/28/2021 7:18 PM

PLOT BY : LAUREN ZIDEK

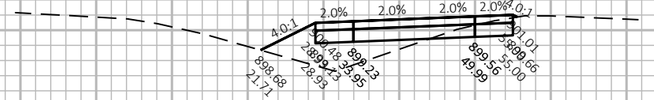
PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

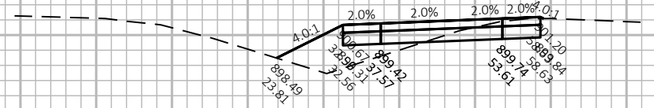
WISDOT/CADDS SHEET 49



136+50



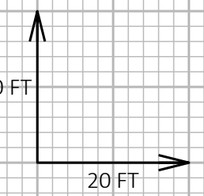
136+00



135+50



135+00



9

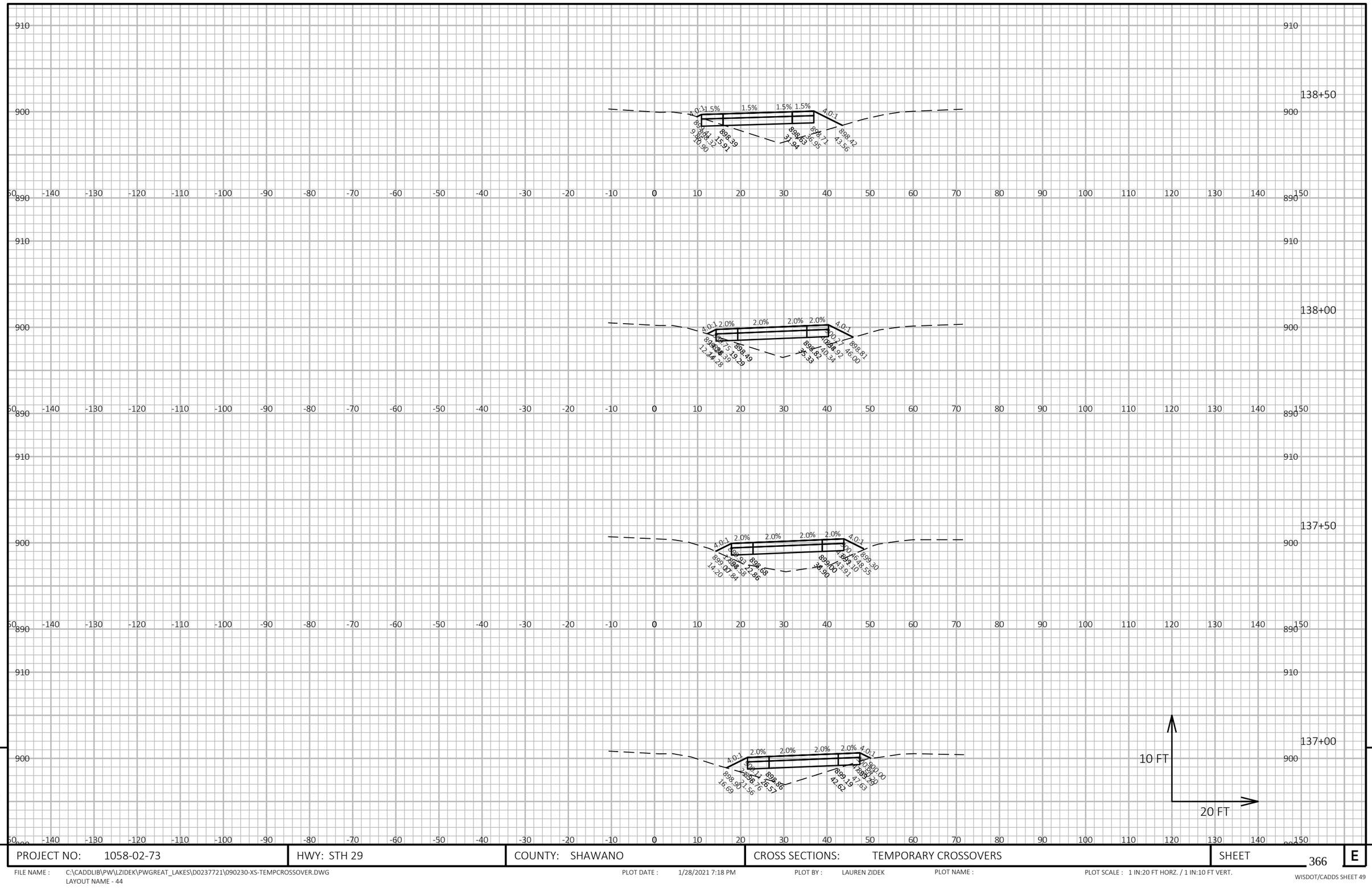
9

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: TEMPORARY CROSSOVERS	SHEET 365	E

FILE NAME : C:\CADDLIB\PW\LZIDEK\PWGREAT_LAKES\D0237721\090230-XS-TEMPCROSSOVER.DWG
LAYOUT NAME - 43

PLOT DATE : 1/28/2021 7:18 PM PLOT BY : LAUREN ZIDEK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

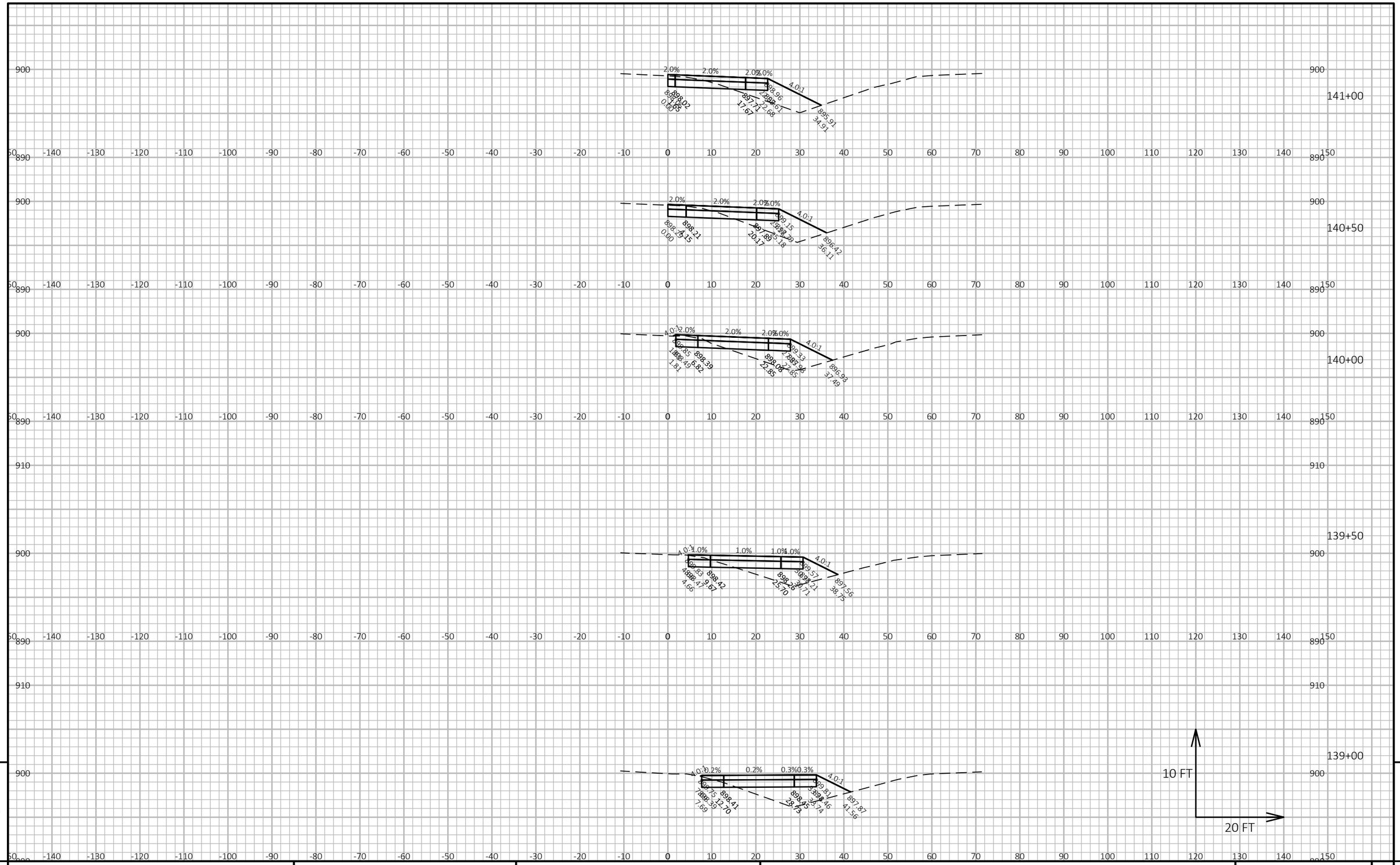


PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: TEMPORARY CROSSOVERS	SHEET 366 E

FILE NAME : C:\CADDLIB\PW\LZIDEK\PWGREAT_LAKES\D0237721\090230-XS-TEMPCROSSOVER.DWG
LAYOUT NAME - 44

PLOT DATE : 1/28/2021 7:18 PM PLOT BY : LAUREN ZIDEK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

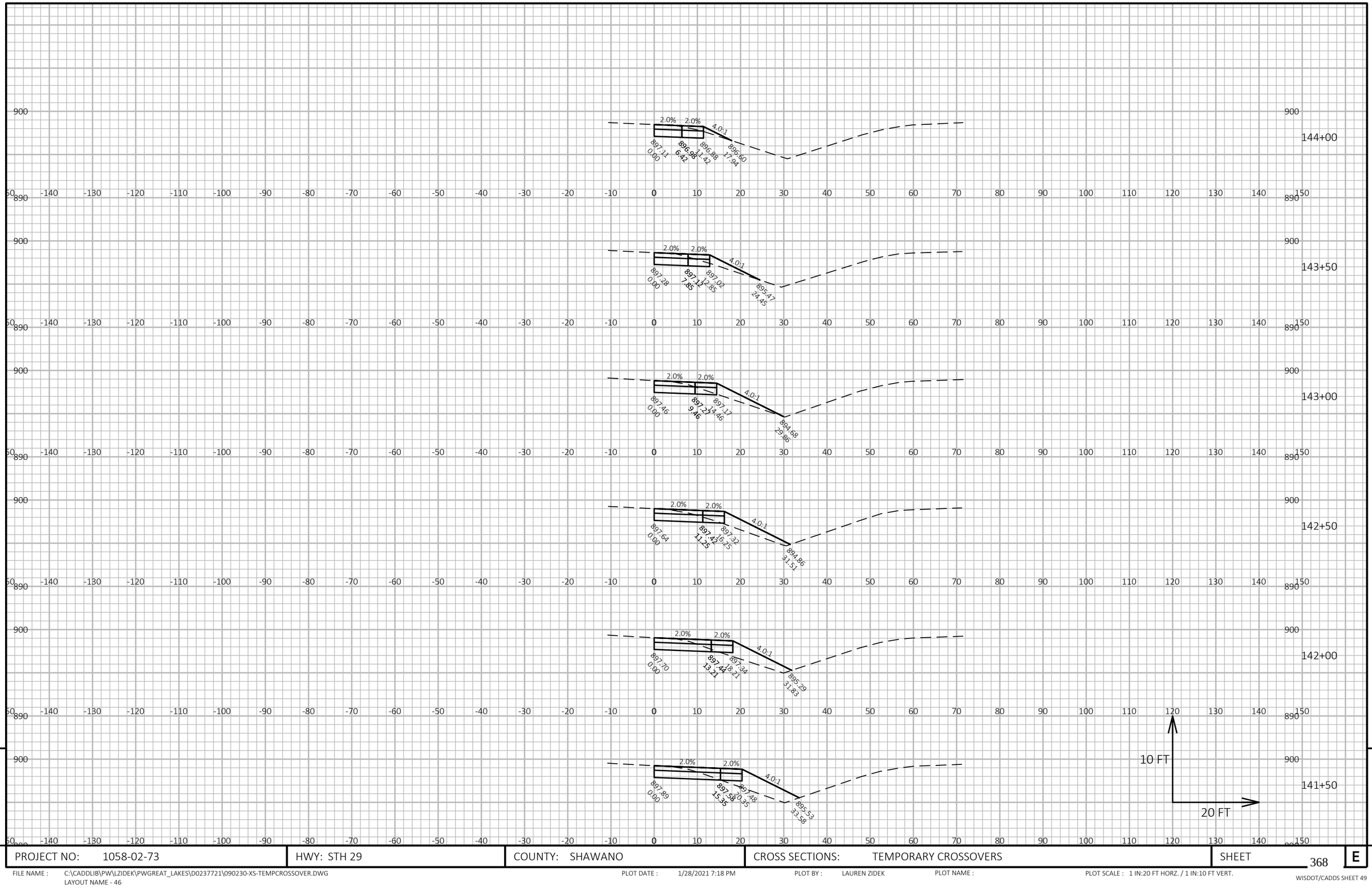
9

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: TEMPORARY CROSSOVERS	SHEET 367	E

FILE NAME : C:\CADDLIB\PW\LZIDEK\PWGREAT_LAKES\D0237721\090230-XS-TEMPCROSSOVER.DWG
LAYOUT NAME - 45

PLOT DATE : 1/28/2021 7:18 PM PLOT BY : LAUREN ZIDEK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

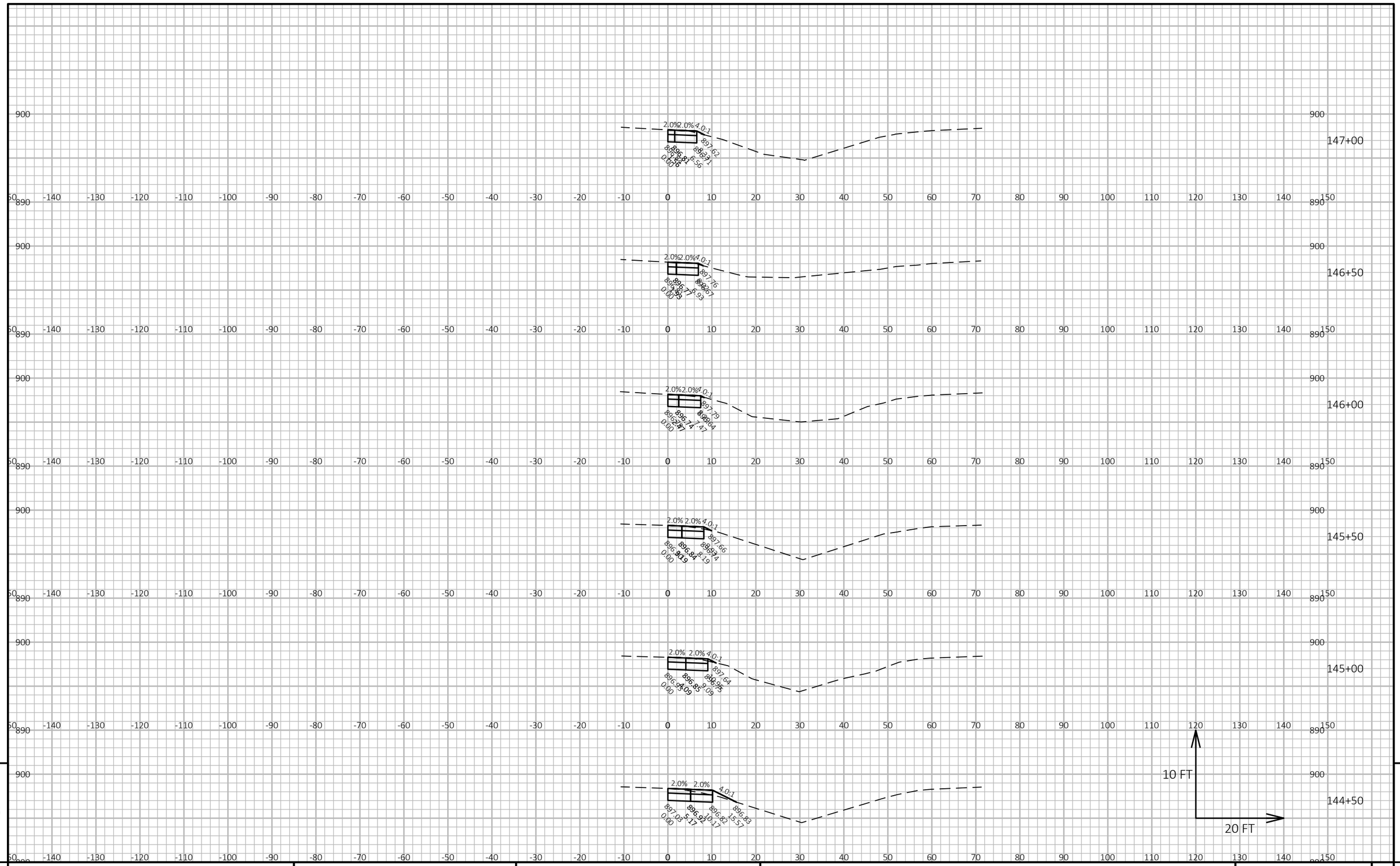
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PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: TEMPORARY CROSSOVERS	SHEET 368	E

FILE NAME : C:\CADDLIB\PW\LZIDEK\PWGREAT_LAKES\D0237721\090230-XS-TEMPCROSSOVER.DWG
LAYOUT NAME - 46

PLOT DATE : 1/28/2021 7:18 PM PLOT BY : LAUREN ZIDEK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: TEMPORARY CROSSOVERS	SHEET 369	E

FILE NAME : C:\CADDLIB\PW\LZIDEK\PWGREAT_LAKES\D0237721\090230-XS-TEMPCROSSOVER.DWG
LAYOUT NAME - 47

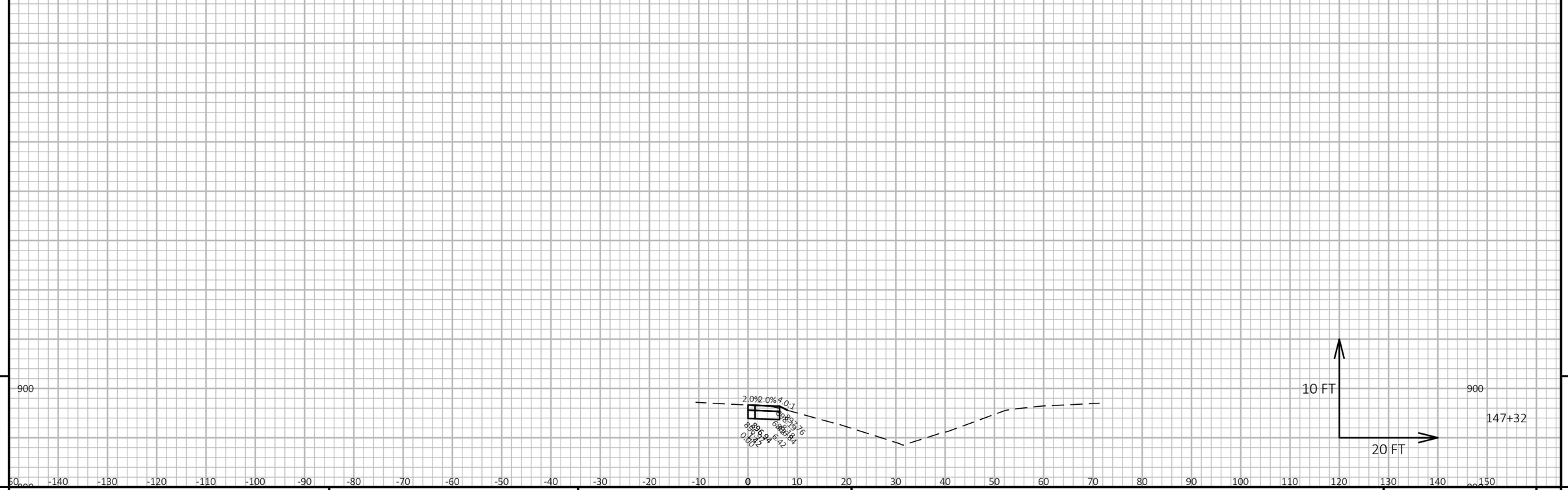
PLOT DATE : 1/28/2021 7:18 PM

PLOT BY : LAUREN ZIDEK

PLOT NAME :

PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49



9

9

PROJECT NO: 1058-02-73	HWY: STH 29	COUNTY: SHAWANO	CROSS SECTIONS: TEMPORARY CROSSOVERS	SHEET 370	E

FILE NAME : C:\CADDLIB\PW\LZIDEK\PWGREAT_LAKES\D0237721\090230-XS-TEMPCROSSOVER.DWG
LAYOUT NAME - 48

PLOT DATE : 1/28/2021 7:18 PM PLOT BY : LAUREN ZIDEK PLOT NAME : PLOT SCALE : 1 IN:20 FT HORZ. / 1 IN:10 FT VERT.

WISDOT/CADDS SHEET 49

Notes

Wisconsin Department of Transportation

Dedicated people creating transportation solutions
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